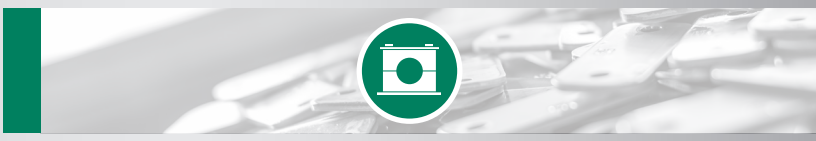
STAUFF®

STAUFF Clamps

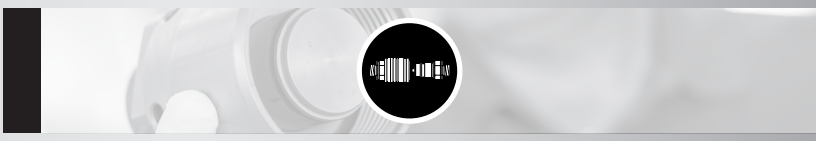


STAUFF Connect

STAUFF Tube

STAUFF Flanges

STAUFF Quick Release Couplings



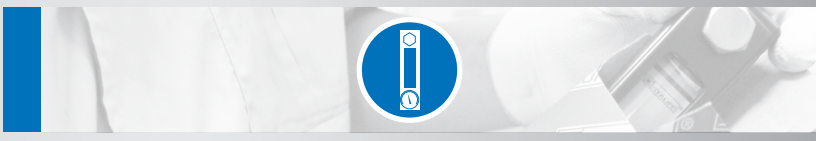
STAUFF Valves

STAUFF Test

STAUFF Diagtronics

STAUFF Filtration Technology

STAUFF Hydraulic Accessories



STAUFF Accumulators

Price List 2023

Australia

Effective 27th February 2023

	Introduction	1 - 9
	STAUFF Clamps	A1 - A85
STAUFF Connect - Sections B - G	STAUFF Connect: Tube Connectors - Steel	B1 - B64
	STAUFF Connect: Tube Connectors - Stainless Steel	C1 - C27
	STAUFF Connect: JIC 37° Adaptors	D1 - D29
	STAUFF Connect: Instrumentation Fittings	E1 - E22
	STAUFF Connect: Assembly Tools / Devices	F1 - F22
	STAUFF Technology Centre	G1 - G7
	STAUFF Tube	H1 - H11
	STAUFF Flanges	I 1 - I 23
	STAUFF Quick Release Couplings	J1 - J21
	STAUFF Valves	K1 - K43
	STAUFF Test	L1 - L53
	STAUFF Diagtronics	M1 - M67
	STAUFF Filtration Technology	N1 - N175
	STAUFF Hydraulic Accessories	O1 - O55
	STAUFF Accumulators	P1 - P41
	Appendix	Q1 - Q12
	Terms and Conditions	R1 - R3

Section A
STAUFF Clamps

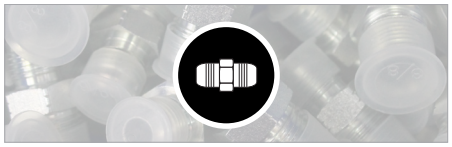
- Standard Series according to DIN 3015, Part 1
- Heavy Series according to DIN 3015, Part 2
- Twin Series according to DIN 3015, Part 3
- Heavy Twin Series
- STAUFF ACT Clamps: Anti-Corrosion Technology
- Saddle / Piggyback Clamps / Light Series
- Other Types of Clamps
- Custom-Designed Special Clamps

Section B
STAUFF Connect: Tube Connectors - Steel

- Steel - Connecting Parts
- Steel - Male Stud Fittings
- Steel - Tube Fittings / Unions
- Steel - Bulkhead Fittings
- Steel - Weld Fittings
- Steel - Female Stud / Gauge Fittings
- Steel - Fittings with 24° Taper / O-Ring (DKO)
- Steel - Standpipe Fittings / Fittings with Lock Nut
- Steel - Banjo Fittings / Swivel Fittings
- Steel - Hydraulic Valves
- Steel - Spare Parts / Accessories

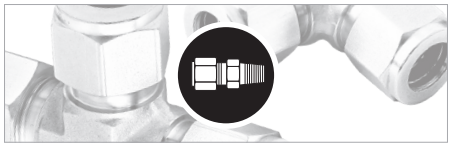
Section C
STAUFF Connect: Tube Connectors - Stainless Steel

- Stainless Steel - Connecting Parts
- Stainless Steel - Male Stud Fittings
- Stainless Steel - Tube Fittings / Unions
- Stainless Steel - Bulkhead Fittings
- Stainless Steel - Weld Fittings
- Stainless Steel - Female Stud / Gauge Fittings
- Stainless Steel - Fittings with 24° Taper / O-Ring (DKO)
- Stainless Steel - Spare Parts / Accessories



Section D
STAUFF Connect: JIC 37° Adaptors

- JIC - Connectors
- JIC - Bulkhead Adaptors
- JIC - Elbow / Tee Adaptors
- JIC - Swivel Adaptors
- JIC - Spare Parts / Accessories



Section E
STAUFF Connect: Instrumentation Fittings

- LOK - Twin Ferrule Fittings
- LOK - Adapter Fittings

Section F
STAUFF Connect: Assembly Tools / Devices

- Assembly Tools / Devices
- Tube and Fittings Accessories

Section G
STAUFF Technology Centre

- Tube Design, Bending and End Forming
- STAUFF Hose Production
- Repair and Calibration Services
- Engineered Hydraulic Solutions, Fluid System Design, Manufacturing and Fabrication

Section H
STAUFF Tube

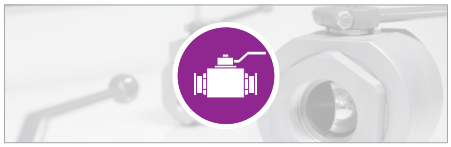
- STAUFF Tube - Steel
- STAUFF Tube - Stainless Steel

Section I
STAUFF Flanges

- SAE Split Flange Halves / Flange Clamps
- SAE Flange / Counterflange Adaptors
- SAE Single-Part Flanges / Counterflanges
- Accessories for SAE Flanges

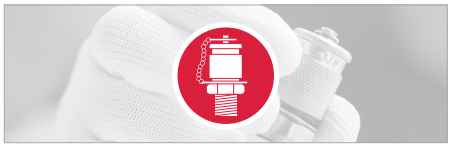
Section J
STAUFF Quick Release Couplings

- Push-to-Connect Couplings
- Multi Couplings
- Screw-to-Connect Couplings



Section K
STAUFF Valves

- Two-Way Ball Valves
- Multi-Way Ball Valves
- Flow Control Valves
- Gauge Isolator Valves
- Spare Parts / Accessories / Options



Section L
STAUFF Test

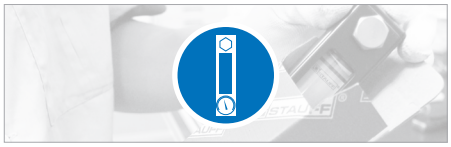
- Test Couplings - SMK-20
- Test Couplings - SKK-20
- Test Couplings - SMK-15
- Test Couplings - SKK-12
- Test Adaptors
- Test Hoses and Connectors

Section M
STAUFF Diagtronics

- Pressure Gauges
- Pressure Switches
- Hydraulic Testers
- Oil Analysis Equipment

Section N
STAUFF Filtration Technology

- Pressure Filters
- Filter Elements
- Return-Line Filters
- Spin-On Filters
- Filtration Systems

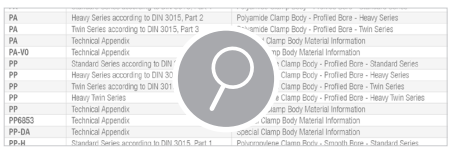


Section O
STAUFF Hydraulic Accessories

- Fluid Level and Temperature Indicators
- Tank Filler Breathers
- Giant and Desiccant Air Breathers
- Suction Strainers
- Diffusers
- Bell Housings and Couplings

Section P
STAUFF Accumulators

- Bladder Accumulators
- Diaphragm Accumulators
- Accumulator Accessories
- Pre-charging and Testing Equipment



Section Q
Appendix

- Product-Specific Abbreviations

Section R
STAUFF Terms and Conditions

- Terms and Conditions

Section A - What's New

STAUFF Clamps

A18 Angled Weld Plate - Type WSP
A18 Aluminium Weld Plate - Type SP-...-W85
A19 Aluminium Cover Plate - Type DP-...-W85
A19 Safety Washer (DIN463) - Type SI
A20-A21 Noise Reduction Clamps - Type NRC
A22 Multi-Group Clamps - Type MGR
A22 Multi-Group Weld Plates - Type RAP-MGR
A53 Heavy Twin Series - Clamps Body with RI rubber inserts
A60 ACT Double Weld Plate - Type SPD-…-W55
A61 ACT Twin Series - Stacking Components
A61 ACT Twin Series - Channel Rail Adaptor
A72 Enquiry Form for Custom-Designed Special Clamps
A74 STAUFF SWG - Stud Welding System
A74 STAUFF Bond - Adhesive Bonded Fastening

Section B - What's New

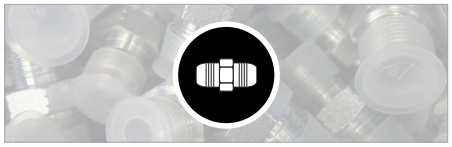
STAUFF Connect: Tube Connectors - Steel

B16 Straight Male Stud Fittings - Type FI-GE-…-M…-WD Additional sizes added
B16 Straight Male Stud Fittings - Type FI-GE-…-R-DF
B17 Straight Male Stud Fittings - Type FI-GE-…-Rk Additional sizes added
B26 Bulkhead Fittings - Type FI-GS / FI-ES / FI-WS Barrel diameter (OD mm) added
B28 Straight Weld Fittings - Type FI-AS Weld size (OD mm) added
B45 Blanking Screw for Ports - Type FI-VS-R…-WD New PN for sizes R1-1/4 & R1-1/2
All DKO Series - Seal ring upgraded to FKM (Viton)

Section C - What's New

STAUFF Connect: Tube Connectors - Stainless Steel

C6 Straight Male Stud Fittings - Type FI-GE-…-R Additional sizes added
C6 Straight Male Stud Fittings - Type FI-GE-…-R-WD Additional sizes added
C7 Straight Male Stud Fittings - Type FI-GE-…-N Additional sizes added
C10 Straight Reducer - Type FI-G-../.. - Additional sizes added
C11 Equal Cross - Type FI-K - Additional sizes added
C16 Straight Weld Fittings - Type FI-AS-...-W5E-MS Additional sizes added
C18 Straight Female Stud Fittings - Type FI-GA-…-R Additional sizes added
C18 Gauge Fittings - Type FI-EMAD-…-R Additional sizes added
C18 Gauge Fittings - Type FI-MA-…-R - Additional sizes added
C20 Straight Male Stud Fitting with 24° Taper / O-Ring (DKO) Type FI-EGED-...-M-WD - Additional sizes added
C20 Straight Male Stud Fitting with 24° Taper / O-Ring (DKO) Type FI-EGED-...-R-WD - Additional sizes added
C21 Straight Reducer for Tube Ends with 24° Taper / O-Ring (DKO) - Type FI-REDSD - Additional sizes added



Section D - What's New

STAUFF Connect: JIC 37° Adaptors

D8-D11 JIC - Connectors
D12-D15 JIC - Bulkhead Adaptors
D16-D19 JIC - Elbow / Tee Adaptors
D20-D22 JIC - Swivel Adaptors
D23-D27 JIC - Spare Parts / Accessories
D28-D29 JIC - Assembly Instructions

Section E - What's New

STAUFF Connect: Instrumentation Fittings

E13 Inspection Gap Gauge - Type LOK-T-IGG
E14-E18 LOK - Adapter Fittings
E19 LOK - Assembly Instructions
E20-E22 LOK - Technical Appendix

Section F - What's New

STAUFF Connect: Assembly Tools / Devices

F6-F7 Portable Cutting Ring assembly machine, tooling and accessories - Type SPR-PRC-H-SET
F10 STAUFF Press Tooling head for cutting ring assembly Automatic Pressure sensing - Type SPR-PRC-TH-C-A
F10 Tooling Magazine for Cutting Ring Tools - Type SPR-TM
F16 Thread Identification Board - Type FI-TIB
F19 STAUFF Serviceline Plugs - Additional sizes added (80mm & 130mm)
F19 STAUFF Aqualine Plugs - Type SSP-...-BL
F19 STAUFF Foodline Plugs - Type SSP-...-WH
F21 Manual Tube Deburring Tool - Type TUD-T / TUD-A

Section G - What's New

STAUFF Technology Centre

G3-G4 Tube Design, Bending and End Forming
G5 STAUFF Hose Production
G6 Repair and Calibration Services
G7 Engineered Hydraulic Solutions, Fluid System Design, Manufacturing and Fabrication

Section H - What's New

STAUFF Tube

H3 - H11 STAUFF Tube - Technical specification updated

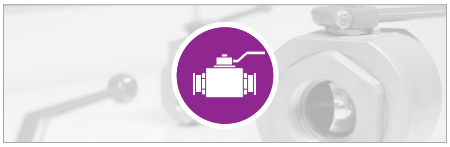
Section I - What's New

STAUFF Flanges

I 4 SAE Split Flange Halves (Flat Style) - Type DB-FL 6000 PSI Series
I 6 SAE Socket-Weld Flange Adaptor - Type CAG-ES 3000 PSI Series
I 7 SAE Flange Adaptor with Male Metric Thread and 24° Conical Bore (acc. to ISO 8434-1) - Type CAG-L/S 6000 PSI Series
I 14 SAE 90° Single-Part Socket-Weld Flange Type BFX90-ES - 6000 PSI Series
I 17 SAE Sandwich Plate with Female BSPP Port Type SPL-...-G04-L - Version A & B options shown
I 17 SAE Cover Plate - Type CPL - 3000 & 6000 PSI

Section J - What's New
STAUFF Quick Release Couplings

J6-J11 Push-to-Connect Couplings
J12-J13 Multi Couplings
J14-J19 Screw-to-Connect Couplings



Section K - What's New
STAUFF Valves

K9 High-Pressure Block Body Ball Valve
Two-Way Ball Valves - Type HBV-2-N
Pressure range - 800 bar / 12000 PSI
K19 Compact High-Pressure Block Body Ball Valve with pressure inlet possible from all ports - Type MCBVSL-3

Section L - What's New
STAUFF Test

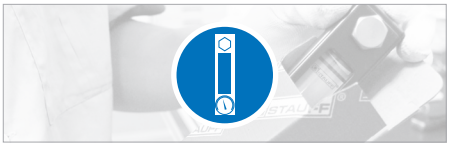
L8 Swivel Run Tee with 60° BSPP Connection
SGV-BSPP Body FM - Type SGV-G..BSPP-FM-W66
L38 STAUFF Test Hose Assemblies - New order code structure to select & assemble test hose with same hose ends or different both ends
L39 STAUFF Test Hose Assemblies - Complete list of hose ends
L44 Hose End Protector for DN2 & DN4 test hose
Type - Bending-protection-HE
L45 STAUFF Hose End - New order code structure
L49 Sampling Hose Adaptor - Type SHA
L51 Hose end with integrated check valve - Type RV

Section M - What's New
STAUFF Diagtronics

M12-M14 Pressure Test Kit (analogue) - Type SMB-20-063
predetermined pressure gauge combinations
M15 Pressure Test Kit (analogue) - Type SMB-20/100
predetermined pressure gauge combinations
M16-M19 Pressure Test Kit (analogue) Metal Case
Type SMBM-20 - predetermined pressure gauge combinations
M20-M21 Digital Pressure Gauge with USB Data recording capability - Type SPG-DIGI-USB
predetermined pressure gauge combinations
M30-M31 Pressure Switches - Diaphragm & Piston Type
Type SPW-DM / SPW-PI
M43 CAN Flow Turbine
Type Flow-Meter-PPC-CAN-SFM
M51 Complete Systems - Type PPC-04-CAN-SET
M54-M55 Pressure Transmitter & Reader - Type PT-RF
M56 Complete system - Type PT-RF-SET
M66 Oil Sampling Kit - Type KIT-SFS

Section N - What's New
STAUFF Filtration Technology

N14-N69 High Pressure Filters (In-Line) - Type SF
Complete Filter Assemblies added including housing, element & indicator
N70-N88 High Pressure Filters (Top-mounted) - Type SF-TM
Complete Filter Assemblies added including housing, element & indicator
N90-N99 Medium Pressure Filters (In-Line) - Type SFA
Complete Filter Assemblies added including housing, element & indicator
N101 Double Visual-electrical Clogging Indicator
Type HI-D-024-B-B5.5
N103 Filter Bowl SF-TL - Two-Piece - Top Load
Filter Bowl SFA - Aluminium
N129 Return-Line Filters - Type RFS
Complete Filter Assemblies added including element
N142 Custom designed and manufactured in-line filter housing

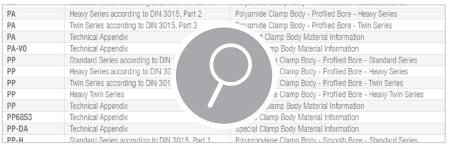


Section O - What's New
STAUFF Hydraulic Accessories

O14 Oil Level Gauge - Type OLG - Technical data updated
O30 Extended Bayonet Flange - Type EBF
O31 SGB Air Breather (3µm) and BA Filler Breather Adaptor
Type SGB-120-03-BA-06-S-150
O37 Desiccant Air Breather (Economy Version) - Type SVDB
O54 Motor Couplings / Gear Coupling - Complete Set
Type SMCG-..-SET-PB

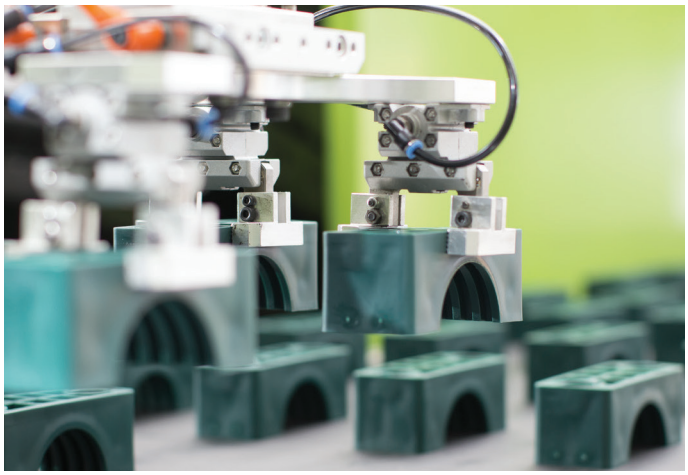
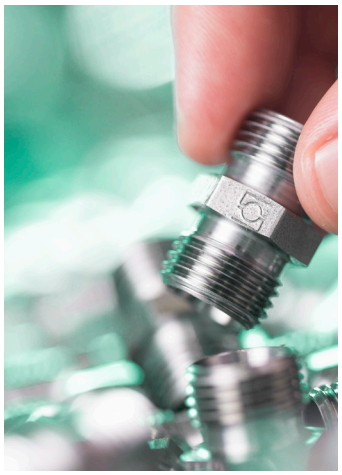
Section P - What's New
STAUFF Accumulators

P13 Bladder Accumulators Assemblies
for Special Applications -
Suitable for Oil and Gas Industry
Suitable for Water Service
P24-P25 Permanent Charging Heads - Bladder Accumulators with 19 mm A/F - Type STBA-A-CV
P26 Permanent Charging Heads - Bladder Accumulators with 16 mm A/F - Type STBA-A-FV
P27 Permanent Charging Heads - Diaphragm Accumulators - Type STDA-A
P34-P35 Direct Accumulator Charging Kit for USA Gas Valve
Type STA-CK-SKK-20-305
P41 Safety Pattern Pressure Gauges in accordance with AS1349 - Stem and Panel Mount
Dual scale - bar / PSI
Type SPG-063-...-B04-490179



Section Q - What's New
Appendix

Q1-Q12 Product-Specific Abbreviations
Indexed to aid mapping and navigation of product items by their abbreviation

For more than 50 years, the STAUFF Group companies have been developing, manufacturing and distributing pipework equipment and hydraulic components for mechanical and plant engineering and for service and industrial maintenance.

In addition to mobile and industrial hydraulic machinery, typical applications also include commercial and special purpose vehicles, rail transportation and energy technology. Likewise, STAUFF products are used in marine, oil and gas applications and in the process, food and chemical industries.

The overall range currently includes about 40,000 standard products as well as numerous special and system solutions according to customer's specifications or based on our in-house development.

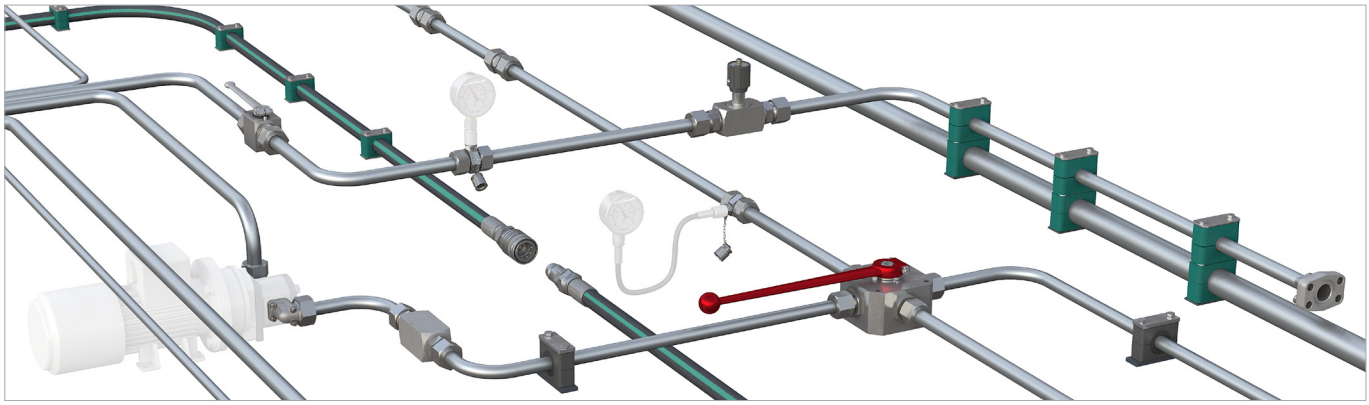
All STAUFF products undergo rigorous testing in accordance with international regulations and are governed by the high standards of the in-house quality management system. Furthermore, many items have received certifications and approvals from various international institutes, organisations and authorities who have independently confirmed the quality and performance of the products.

Wholly-owned manufacturing, sales and service facilities in 18 countries and a tight global network of authorised partners ensure high presence and service paired with a maximum of availability.

Lloyd's Register LRQA

Quality Management – ISO 9001:2015
Environmental Management – ISO 14001:2015
Safety Management OHSAS – 18001:2007

STAUFF LINE Components



With the seven dedicated **STAUFF Line** product groups

- **STAUFF Clamps**
- **STAUFF Connect**
- **STAUFF Flanges**
- **STAUFF Hose Connectors**
- **STAUFF Quick Release Couplings**
- **STAUFF Valves**
- **STAUFF Test**

from own, in-house development and manufacturing, the companies of the STAUFF Group provide a comprehensive range of components for fastening and connecting pipes, tubes and hoses for mobile and industrial hydraulic applications and many other industries.

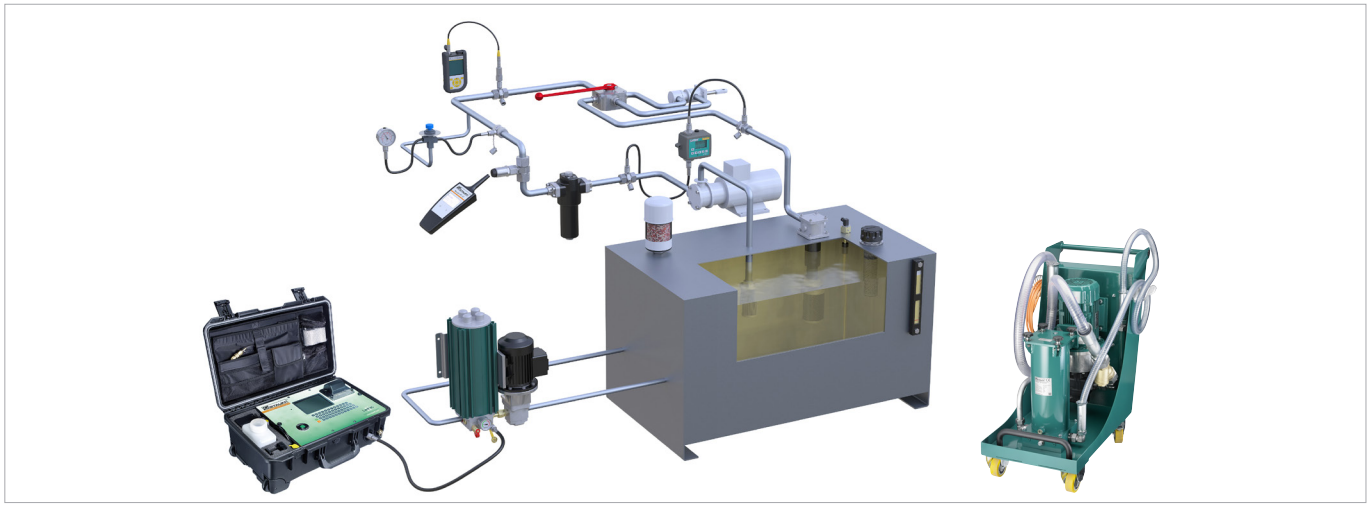
The portfolio is completed by components for shutting-off, regulating, throttling and measuring fluid media.

In order to perfectly match each other, STAUFF Line products are designed and offered on a high, uniform level of quality. A large proportion of the range made from steel comes as standard with the premium STAUFF Zinc/Nickel surface coating, which is also optionally available for many of the other components.

This coating offers the most reliable surface protection far beyond the previous market standards – even after transport, handling and assembly of the components – and meets all current legal requirements.

If desired, Original Equipment Manufacturers can be supported with value-added services, from **technical consultation** to **pre-assembly, assembly and kitting** as well as **logistics services**:

- Support with the **selection of suitable standard components** and ordering options; provision of **customised solutions** according to customer's specifications or based on our in-house development – from prototyping to large scale production
- **Analysis and optimisation** of existing and design and developments of new systems aimed at increasing the efficiency and performance of machines and equipment and creating value for customers by reducing the total cost
- **Pre-assembly, assembly and kitting** of individual components to customer-specific system modules
- Individually coordinated **procurement solutions** (e.g. web shop and electronic data interchange) and **supply models** (e.g. from warehousing of customised components to Kanban logistics and just-in-time delivery of pre-fabricated system modules to the assembly lines of the customers) aimed at optimising material flows



Aligned with the needs of the market, the product groups

- **STAUFF Test**
- **STAUFF Diagtronics**
- **STAUFF Filtration Technology**
- **STAUFF Hydraulic Accessories**

include a comprehensive range of analogue and digital measuring equipment, filtration systems and replacement filter elements as well as accessories for the construction of tanks, reservoirs, power packs and gear boxes in mobile and industrial hydraulics.

The offer is completed by relevant value-added services:

- Support with the **selection of suitable components** and ordering options; provision of **customised solutions** according to customer's specifications or based on our in-house development – from prototyping to large scale production
- Analysis of existing hydraulic circuits aimed at filtration systems, tank components and monitoring devices that perfectly match to the specific requirements, and developing integrated concepts to increase the efficiency and performance of machines and equipment
- Individually coordinated **procurement solutions** and **supply models**

STAUFF Australia

New South Wales

Wollongong (Head Office)
24-26 Doyle Ave,
Unanderra NSW 2526
Tel.: (02) 4271 9000
E-Mail: una.sales@stauff.com.au

Sydney
27B Davis Road,
Wetherill Park NSW 2164
Tel.: (02) 8787 8000
E-Mail: nsw.sales@stauff.com.au

Queensland

Brisbane
83 Bluestone Circuit,
Seventeen Mile Rocks QLD 4073
Tel.: (07) 3716 1000
E-Mail: qld.sales@stauff.com.au

South Australia

Adelaide
1/3 Endeavour Drive,
Port Adelaide SA 5015
Tel.: (08) 8415 1000
E-Mail: sant.sales@stauff.com.au

Victoria

Melbourne
3B 14-16 White Street,
Oakleigh East VIC 3166
Tel.: (03) 8542 5400
E-Mail: vic.sales@stauff.com.au

Western Australia

Perth
E-Mail: wa.sales@stauff.com.au

STAUFF New Zealand

Auckland

Unit D, 103 Harris Road
East Tamaki, AUCKLAND
Tel.: (09) 912 1530
E-Mail: sales@stauff.co.nz

STAUFF Line System Partners

New South Wales

Bomaderry
Broken Hill
Brookvale
Coffs Harbour
Dubbo
Goulburn
Griffith
Mascot
Murwillumbah
Narrabri
Newcastle
Queanbeyan
Somersby
South Windsor
Wetherill Park

Tasmania

Devonport
Hobart

Northern Territory

Alice Springs

Victoria

Bairnsdale
Ballarat
Bayswater
Bendigo
Horsham
Sale
Thomastown
Wodonga

Queensland

Bundaberg
Carole Park
Dalby
Emerald
Geebung
Gladstone
Goondiwindi
Mackay
Mount Isa
Murarrie
Roma
Toowoomba
Townsville

Western Australia

Bibra Lake
Kalgoorlie
Malaga
Newman

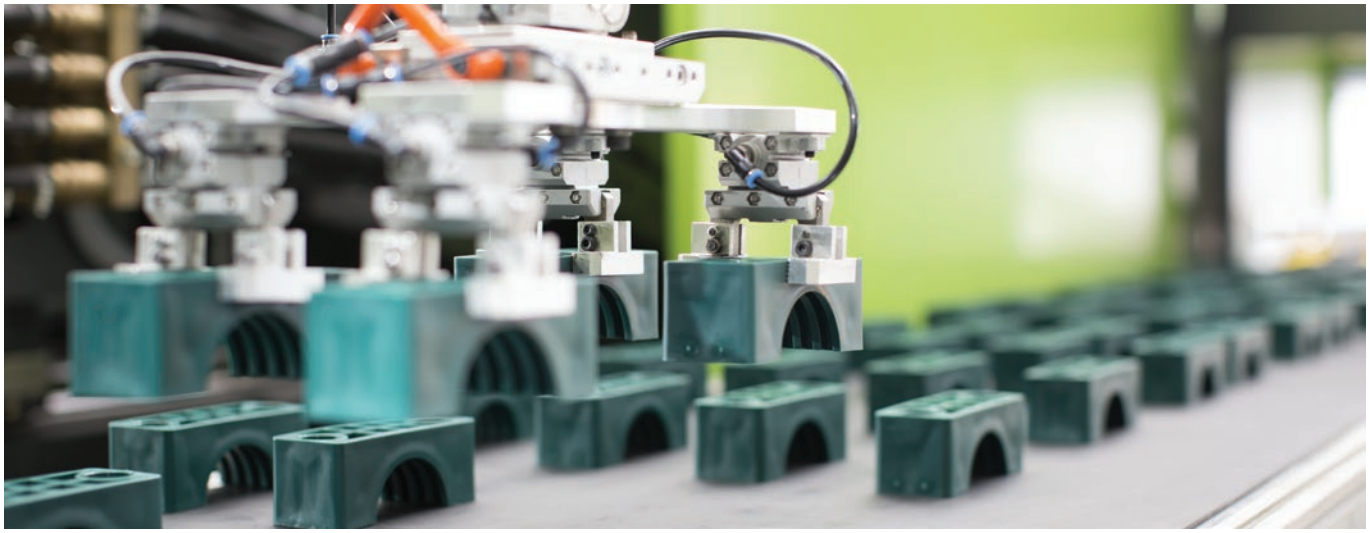
South Australia

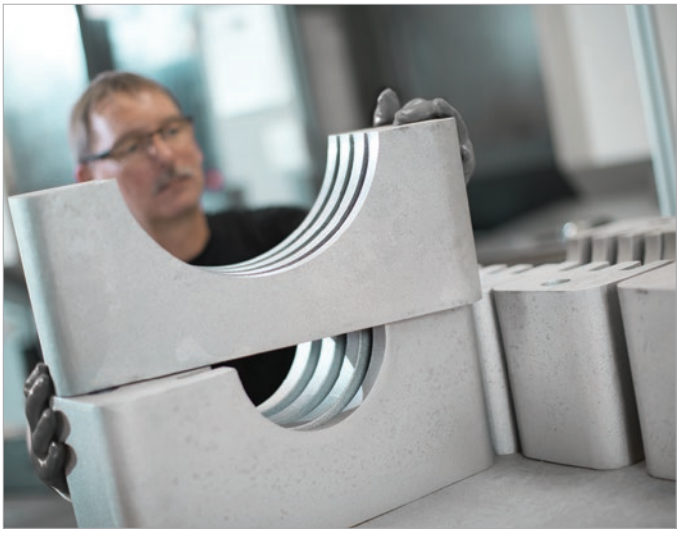
Edinburgh North
Kadina
Olympic Dam
Port Pirie
Regency Park

New Zealand

Auckland
Christchurch
New Plymouth
Port Nelson
Rotorua
Timaru
Whangarei

Introduction	A2 - A3
Standard Series according to DIN 3015, Part 1	A4 - A22
Heavy Series according to DIN 3015, Part 2	A23 - A39
Twin Series according to DIN 3015, Part 3	A40 - A49
Heavy Twin Series	A50 - A54
STAUFF ACT Clamps: Anti-Corrosion Technology	A55 - A61
Saddle / Piggyback Clamps / Light Series	A62 - A65
Other Types of Clamps	A66 - A69
Custom-Designed Special Clamps	A70 - A74
Technical Appendix	A75 - A85





STAUFF Clamps

For more than 50 years, STAUFF Clamps symbolise quick, easy and secure installation of pipes, tubes, hoses, cables and other flexible and rigid components with outside diameters up to 1016 mm / 40 in.

Their vibration and noise reducing features are appreciated as being an important contribution to environmental protection and workplace health and safety.

The availability of fire-proof clamp body materials tested and approved according to several international fire-protection standards (such as BS 6853, EN 45545-2, UL 94) is only one of the many unique strengths of STAUFF.

STAUFF guarantees prompt service, even for customised solutions according to customer's specifications.

For selected types and series, independent certificates and approvals can be provided:

- American Bureau of Shipping
- Bureau Veritas
- Department of the Navy, New York
- Germanischer Lloyd
- Lloyd's Register of Shipping
- Registro Italiano Navale
- Technischer Überwachungsverein
- United States Coast Guard

For the finishing of the range of pipe, tube, hose and cable clamps as well as metal hardware in carbon steel, STAUFF relies on the STAUFF Zinc/Nickel surface coating which has proven successful for many years. It provides reliable surface protection – even after transport, handling and assembly – and meets all current legal requirements.

Versions in stainless steel W4 and W5 are generally available from stock. Alternative materials and surfaces are available on request.

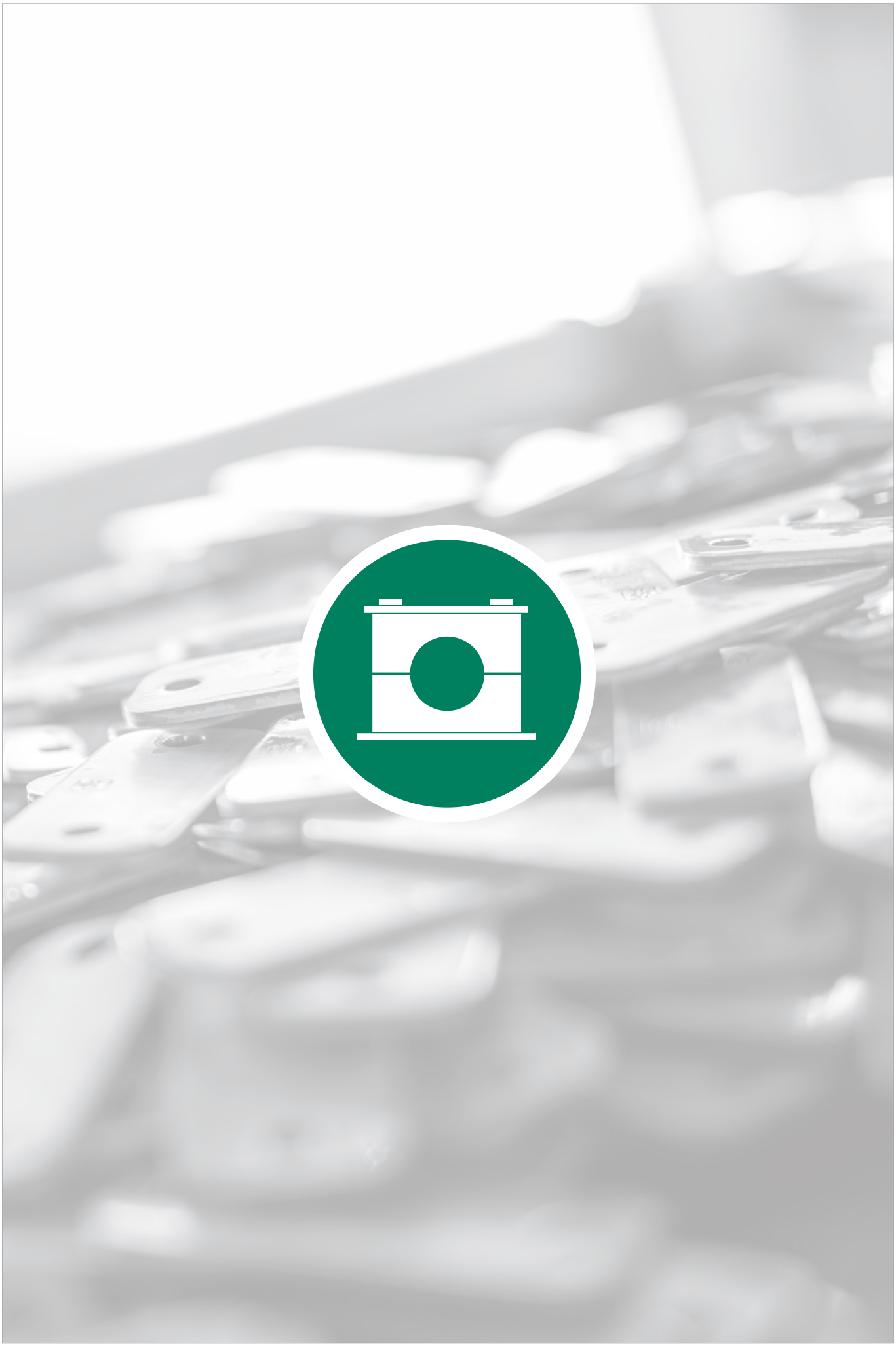
STAUFF Zinc/Nickel Coating

Layers
- Sealing
- Passivation
- Zinc/Nickel
- Steel

Up to 1200 hours resistance against red rust, the STAUFF Zinc/Nickel surface coating offers excellent surface protection – even after transport, handling and assembly. These results are confirmed by testing in the salt-spray chamber according to DIN EN ISO 9227.

This advanced coating technology benefits all industries and applications, which has been developed for and used by the automotive industry for many years and is already a proven coating standard for a large proportion of STAUFF components since 2007.

- Up to 1200 hours resistance to red rust / base metal corrosion under practical conditions in the salt-spray chamber according to DIN EN ISO 9227
- White rust occurs only by way of a slight grey haze
- Surpassing the requirements of the corrosion protection class K5 as defined by the VDMA, the German Engineering Association (360 hours resistance to white rust / 720 hours resistance to red rust)
- Free of hexavalent chrome Cr(VI)
- ELV compliant according to 2000/53/EC (End of Life Vehicles Directive)
- REACH compliant according to 1907/2006/EC (Registration, Evaluation, Authorisation and Restriction of Chemicals)
- RoHS compliant according to 2002/95/EC (Restrictions of the Use of Hazardous Substances)
- Appealing colour scheme with a bright semi-gloss surface finish – comparable to Stainless Steel
- Significantly reduced tendency to corrosion by contact with other metals (such as Aluminium and Stainless Steel)
- Improved abrasion resistance due to the ductility / plastic deformability of the coating
- Little to no risk of triggering allergies – nickel release is down to only a fraction of the statutory limits relating to objects which come into direct and prolonged contact with the skin (independent results of the reference test method according to DIN EN 1811 are available on request)
- Good paint adhesion properties
- Resistance against all commonly used hydraulic media



	Clamp Assemblies	**A6 - A15**
	Clamp Body Profiled Inside Surface with Tension Clearance	**A16**
	Clamp Body Smooth Inside Surface without Tension Clearance	**A16**
	Clamp Body with Elastomer Insert	**A17**
	Clamp Body Rectangular Design for Proximity Switches	**A17**
	Weld Plate SP	**A18**
	Elongated Weld Plate SPV	**A18**
	Twin Weld Plate DSP	**A18**
	Group Weld Plate RAP	**A18**
	Angled Weld Plate WSP	**A18**
	Bridge Weld Plate BSP	**A18**
	Hexagon Rail Nut SM / SMG	**A18**
	Mounting Rail TS	**A18**
	Channel Rail Adaptor CRA	**A18**
	Fastening Adaptor for Mounting Rails SWG-MRA	**A18**
	Cover Plate DP	**A19**
	Hexagon Head Bolt for use with Cover Plate DP AS	**A19**
	Safety Washer (DIN 93) SI	**A19**
	Safety Washer (DIN 463) SI	**A19**
	Socket Cap Screw IS	**A19**
	Slotted Head Screw LI	**A19**
	Hexagon Head Bolt for use with Insert ES / EP AS - (EP / ES)	**A19**
	Insert EP / ES	**A19**
	Safety Locking Plate SIG	**A19**
	Stacking Bolt AF	**A19**
	Noise Reduction Clamp	**A20 - A21**
	Clamp Body for Multi-Group Weld Plates	**A22**
	Multi-Group Weld Plate RAP-MGR	**A22**

SP - **106A** - **PP** - **DP-AS** - **M** - **W3**
① ② ③ ④ ⑤ ⑥

① Type of Installation

Please select the type of installation (e.g. Weld Plates, Rail Nuts etc.) and add the corresponding Code to position ① of the order code for your clamp assembly.

Without Installation Equipment
Code: **none**

Installation on Weld Plate

Single Weld Plate
Code: **SP**

Elongated Weld Plate
Code: **SPV**

Twin Weld Plate (for STAUFF Group 1 to 6 only)
Code: **DSP**

Group Weld Plate (for STAUFF Group 1 to 6 only)
Code: **RAP**

Angled Weld Plate (for STAUFF Group 1 to 6 only)
Code: **WSP**

Bridge Weld Plate (for STAUFF Group 1A to 6 only)
Code: **BSP**

Installation on Mounting / Channel Rail

Hexagon Rail Nut
Code: **SM** (Carbon Steel)
Code: **SMG** (Stainless Steel)

Channel Rail Adaptor
Code: **CRA**

② Group Size & Diameter

Please select the required group size and diameter and add the corresponding Code to position ② of the order code for your clamp assembly.

Group STAUFF (DIN)	Outside Diameter P / T / H (mm)	Availability of Clamp Body Materials & Designs Profiled Design	Type H	Type RI	Code
1 (0)	6	●	●	○	106
	6.4	●	●	○	106.4
	8	●	●	○	108
	9.5	●	●	○	109.5
	10	●	●	○	110
	12	●	●	○	112
1A (1)	6	●	●	○	106A
	6.4	●	●	○	106.4A
	8	●	●	○	108A
	9.5	●	●	○	109.5A
	10	●	●	○	110A
	12	●	●	○	112A
2 (2)	12.7	●	●	○	212.7
	13.5	●	●	○	213.5
	14	●	●	○	214
	15	●	●	○	215
	16	●	●	○	216
	17.2	●	●	○	217.2
	18	●	●	○	218
3 (3)	19	●	●	○	319
	20	●	●	○	320
	21.3	●	●	○	321.3
	22	●	●	○	322
	25	●	●	○	325
	25.4	●	●	○	325.4
4 (4)	6	○	○	●	406
	8	○	○	●	408
	10	○	○	●	410
	12	○	○	●	412
	12.7	○	○	●	412.7
	14	○	○	●	414
	15	○	○	●	415
	16	○	○	●	416
	17.2	○	○	●	417.2
	18	○	○	●	418
	19	○	○	●	419
	26.9	●	●	○	426.9
	28	●	●	○	428
	28.6	●	○	○	428.6
	30	●	●	○	430
	32	●	●	○	432

Group STAUFF (DIN)	Outside Diameter P / T / H (mm)	Availability of Clamp Body Materials & Designs Profiled Design	Type H	Type RI	Code
5 (5)	32	●	●	○	532
	33.7	●	●	○	533.7
	35	●	●	○	535
	38	●	●	○	538
	40	●	●	○	540
	41.3	●	○	○	541.3
	42	●	●	○	542
6 (6)	20	○	○	●	620
	21.3	○	○	●	621.3
	22	○	○	●	622
	25	○	○	●	625
	26.9	○	○	●	626.9
	28	○	○	●	628
	30	○	○	●	630
	32	○	○	●	632
	44.5	●	●	○	644.5
	48.3	●	●	○	648.3
	50.8	●	●	○	650.8
	54	●	●	○	654
7 (7)	57.2	●	●	○	757.2
	60.3	●	●	○	760.3
	63.5	●	●	○	763.5
	70	●	●	○	770
	73	●	●	○	773
	76.1	●	●	○	776.1
8 (8)	88.9	●	●	○	888.9
	102	●	●	○	8102L

● Standard Option

NEW Achieve a reduction in weight of clamps using Aluminium **W85** material components: **DP** - Cover Plate **SP** - Weld Plates **Refer to pages A18 - A19**

Refer to pages A8 and A9 with detailed order codes for the most popular Standard Series clamp assemblies.

③ Clamp Body Design & Material

Please select the design and material of your clamp body and add the corresponding Code to position ③ of the order code for your clamp assembly.

Please check the availability of the selected clamp body design and material according to the matrix table in ②.

Profiled Design

Polypropylene
Code: **PP**

Polypropylene (Colour: Black)
Code: **PP-BK**

Polyamide
Code: **PA**

Thermoplastic Elastomer (87 Shore-A)
Code: **SA**

Aluminium
Code: **AL** (for STAUFF Group 1A to 6 only)

Type H (Smooth)

Polypropylene
Code: **PP-H**

Polypropylene (Colour: Black)
Code: **PP-H-BK**

Polyamide
Code: **PA-H**

Thermoplastic Elastomer (87 Shore-A)
Code: **SA-H**

Type RI (with Elastomer Insert)

Polypropylene
Code: **PP-R** (for STAUFF Group 4 and 6 only)

Polyamide
Code: **PA-R** (for STAUFF Group 4 and 6 only)

Type NRC (Noise Reduction)

Polypropylene Shell
Elastomer Insert
Thermoplastic Elastomer (73 Shore-A)
Material code: **PP-NRC**

Refer to pages A76 - A77 for material properties and technical information.

Contact STAUFF for further details on fire-proof clamp body materials, tested and approved according to several international fire-protection standards.

④ Mounting & Fitting Combination

Please select the mounting and fitting combination (e.g. bolts, screws, cover plates etc.) and add the corresponding Code to position ④ of the order code for your clamp assembly.

Installation with Cover Plate and Bolts

Cover Plate DP with
Hexagon Head Bolts AS
Code: **DP-AS**

Cover Plate DP with
Socket Cap Screws IS*
Code: **DP-IS**

Installation with Locking Plate and Bolts

Safety Locking Plate SIG with
Stacking Bolts AF
Code: **SIG-AF**

Installation with Inserts and Bolts

Inserts EP (Plastic) with
Hexagon Head Bolts AS
Code: **EP-AS**

Inserts ES (Steel) with
Hexagon Head Bolts AS
Code: **ES-AS**

Installation with Bolts only

Socket Cap Screws IS (Washers US included)
Code: **IS**

Slotted Head Screws LI (Washers US included)
Code: **LI** (for STAUFF Group 1 to 6 only)

* Special lengths of Socket Cap Screws IS required. For exact lengths of Hexagon Head Bolt, type AS (for use with Cover Plates DP) refer to page A19.

⑤ Thread Type

Please select the required thread type and add the corresponding Code to position ⑤ of the order code for your clamp assembly.

Metric ISO thread
Code: **M**

All threaded parts are available with Metric ISO thread according to dimension table.

⑥ Material & Surface Finishing

Please select the required material & surface finishing of the metal parts and add the corresponding Code to position ⑥ of the order code for your clamp assembly.

Metal parts made of Carbon Steel, zinc/nickel-plated	**W3**
Metal parts made of Stainless Steel V2A 1.4301 / 1.4305 (AISI 304 / 303)	**W4**
Metal parts made of Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti)	**W5**
Weld Plate made of Carbon Steel, phosphated; Other metal parts made of Carbon Steel, zinc/nickel-plated	**W10**
Metal parts made of Aluminium (only applies to components DP & SP)	**W85**

Individual combinations of alternative materials and surface finishing are available upon request. Contact STAUFF for more information.

2x **Hexagon Head Bolt**
Surface: W3
Thread: Metric

1x **Cover Plate**
Surface: W3

1x **Clamp Body** (two halves)
STAUFF Group 2 (DIN 2)
O.D. 12.7 mm / .50 in
Material: Polypropylene
Profiled inside surface
with tension clearance

1x **Single Weld Plate**
Surface: W3
Thread: Metric

Order Code

SP-212.7-PP-DP-AS-M-W3

W3 is the standard option for this type of installation.

2x **Socket Cap Screw**
with Washer
Surface: W3
Thread: Metric

1x **Clamp Body** (two halves)
STAUFF Group 2 (DIN 2)
O.D. 12.7 mm / .50 in
Material: Polypropylene
Profiled inside surface
with tension clearance

1x **Single Weld Plate**
Surface: W3
Thread: Metric

Order Code

SP-212.7-PP-IS-M-W3

W3 is the standard option for this type of installation.

2x **Slotted Head Screw**
with Washer
Surface: W3
Thread: Metric

1x **Clamp Body** (two halves)
STAUFF Group 2 (DIN 2)
O.D. 12.7 mm / .50 in
Material: Polypropylene
Profiled inside surface
with tension clearance

1x **Single Weld Plate**
Surface: W3
Thread: Metric

Order Code

SP-212.7-PP-LI-M-W3

W3 is the standard option for this type of installation.

2x **Hexagon Head Bolt**
Surface: W3
Thread: Metric

1x **Cover Plate**
Surface: W3

1x **Clamp Body** (two halves)
STAUFF Group 2 (DIN 2)
O.D. 12.7 mm / .50 in
Material: Polypropylene
Profiled inside surface
with tension clearance

1x **Elongated Weld Plate**
Surface: W3
Thread: Metric

Order Code

SPV-212.7-PP-DP-AS-M-W3

W3 is the standard option for this type of installation.

2x **Socket Cap Screw**
with Washer
Surface: W3
Thread: Metric

1x **Clamp Body** (two halves)
STAUFF Group 2 (DIN 2)
O.D. 12.7 mm / .50 in
Material: Polypropylene
Profiled inside surface
with tension clearance

1x **Elongated Weld Plate**
Surface: W3
Thread: Metric

Order Code

SPV-212.7-PP-IS-M-W3

W3 is the standard option for this type of installation.

2x **Slotted Head Screw**
with Washer
Surface: W3
Thread: Metric

1x **Clamp Body** (two halves)
STAUFF Group 2 (DIN 2)
O.D. 12.7 mm / .50 in
Material: Polypropylene
Profiled inside surface
with tension clearance

1x **Elongated Weld Plate**
Surface: W3
Thread: Metric

Order Code

SPV-212.7-PP-LI-M-W3

W3 is the standard option for this type of installation.

2x **Hexagon Head Bolt**
Surface: W3
Thread: Metric

1x **Cover Plate**
Surface: W3

1x **Clamp Body** (two halves)
STAUFF Group 2 (DIN 2)
O.D. 12.7 mm / .50 in
Material: Polypropylene
Profiled inside surface
with tension clearance

2x **Hexagon Rail Nut**
Surface: W3
Thread: Metric

Order Code (Mounting Rail TS not included.)

SM-212.7-PP-DP-AS-M-W3

W3 is the standard option for this type of installation.

2x **Socket Cap Screw**
with Washer
Surface: W3
Thread: Metric

1x **Clamp Body** (two halves)
STAUFF Group 2 (DIN 2)
O.D. 12.7 mm / .50 in
Material: Polypropylene
Profiled inside surface
with tension clearance

2x **Hexagon Rail Nut**
Surface: W3
Thread: Metric

Order Code (Mounting Rail TS not included.)

SM-212.7-PP-IS-M-W3

W3 is the standard option for this type of installation.

2x **Slotted Head Screw**
with Washer
Surface: W3
Thread: Metric

1x **Clamp Body** (two halves)
STAUFF Group 2 (DIN 2)
O.D. 12.7 mm / .50 in
Material: Polypropylene
Profiled inside surface
with tension clearance

2x **Hexagon Rail Nut**
Surface: W3
Thread: Metric

Order Code (Mounting Rail TS not included.)

SM-212.7-PP-LI-M-W3

W3 is the standard option for this type of installation.
Available up to STAUFF Group 6 (DIN Group 6) only.

2x **Hexagon Head Bolt**
Surface: W3
Thread: Metric

1x **Cover Plate**
Surface: W3

1x **Clamp Body** (two halves)
STAUFF Group 2 (DIN 2)
O.D. 12.7 mm / .50 in
Material: Polypropylene
Profiled inside surface
with tension clearance

Order Code

212.7-PP-DP-AS-M-W3

W3 is the standard option for this type of installation.

2x **Socket Cap Screw**
with Washer
Surface: W3
Thread: Metric

1x **Clamp Body** (two halves)
STAUFF Group 2 (DIN 2)
O.D. 12.7 mm / .50 in
Material: Polypropylene
Profiled inside surface
with tension clearance

Order Code

212.7-PP-IS-M-W3

W3 is the standard option for this type of installation.

2x **Slotted Head Screw**
with Washer
Surface: W3
Thread: Metric

1x **Clamp Body** (two halves)
STAUFF Group 2 (DIN 2)
Tube-O.D. 12.7 mm / .50 in
Material: Polypropylene
Profiled inside surface
with tension clearance

Order Code

212.7-PP-LI-M-W3

W3 is the standard option for this type of installation.

2x **Stacking Bolt**
Surface: W3
Thread: Metric

1x **Safety Locking Plate**
Surface: W3

1x **Clamp Body** (two halves)
STAUFF Group 2 (DIN 2)
O.D. 12.7 mm / .50 in
Material: Polypropylene
Profiled inside surface
with tension clearance

Order Code

212.7-PP-SIG-AF-M-W3

W3 is the standard option for this type of installation.

1x **Socket Cap Screw**
with Washer
Surface: W3
Thread: Metric

1x **Clamp Body** (two halves)
STAUFF Group 1 (DIN 0)
O.D. 6 mm / .24 in
Material: Polypropylene
Profiled inside surface
with tension clearance
Thread: Metric

1x **Single Weld Plate**
Surface: W3
Thread: Metric

Order Code*

SP-106-PP-IS-M-W3

W3 is the standard option for this type of installation.

2x **Hexagon Head Bolt**
Surface: W3
Thread: Metric

2x **Insert**
Material: Plastic

1x **Clamp Body** (two halves)
STAUFF Group 2 (DIN 2)
O.D. 12.7 mm / .50 in
Material: Polypropylene
Profiled inside surface
with tension clearance

1x **Single Weld Plate**
Surface: W3
Thread: Metric

Order Code

SP-212.7-PP-EP-AS-M-W3

W3 is the standard option for this type of installation.

2x **Hexagon Head Bolt**
Surface: W3
Thread: Metric

2x **Insert**
Material: Plastic

1x **Clamp Body** (two halves)
STAUFF Group 2 (DIN 2)
O.D. 12.7 mm / .50 in
Material: Polypropylene
Profiled inside surface
with tension clearance

1x **Elongated Weld Plate**
Surface: W3
Thread: Metric

Order Code

SPV-212.7-PP-EP-AS-M-W3

W3 is the standard option for this type of installation.

Thread codes

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table.

Metric ISO thread	**M**

Material codes

The below listed material codes describe the materials and surface finishing of metal parts that are most relevant for Standard Series clamp assemblies. Individual combinations of alternative materials and surface finishing are available upon request. Contact STAUFF for more information.

Metal parts made of Carbon Steel, zinc/nickel-plated	**W3**
Metal parts made of Stainless Steel V2A 1.4301 / 1.4305 (AISI 304 / 303)	**W4**
Metal parts made of Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti)	**W5**
Weld Plate made of Carbon Steel, phosphated; Other metal parts made of Carbon Steel, zinc/nickel-plated	**W10**
Metal parts made of Aluminium (only applies to components DP & SP)	**W85**

Technical Notes

* Because of their design, STAUFF Group 1 (DIN Group 0) clamp assemblies only include one single bolt / screw.

Polypropylene Clamp Body (PP) Profiled Bore

W3 - Carbon Steel, zinc/nickel-plated
Temperature Range (Clamp Body) -30°C ... +90°C

Group 1A

Item No.	Designation	Price
1110000834	SP-106A-PP-DP-AS-M-W3	6.30
1110025015	SP-106.4A-PP-DP-AS-M-W3	6.30
1110000835	SP-108A-PP-DP-AS-M-W3	6.30
1110031983	SP-109.5A-PP-DP-AS-M-W3	6.30
1110000836	SP-110A-PP-DP-AS-M-W3	6.30
1110000837	SP-112A-PP-DP-AS-M-W3	6.30

Group 2

Item No.	Designation	Price
1110031984	SP-212-PP-DP-AS-M-W3	6.75
1110027948	SP-212.7-PP-DP-AS-M-W3	6.75
1110000838	SP-213.5-PP-DP-AS-M-W3	6.75
1110026930	SP-214-PP-DP-AS-M-W3	6.75
1110000839	SP-215-PP-DP-AS-M-W3	6.75
1110000840	SP-216-PP-DP-AS-M-W3	6.75
1110000841	SP-217.2-PP-DP-AS-M-W3	6.75
1110000842	SP-218-PP-DP-AS-M-W3	6.75

Group 3

Item No.	Designation	Price
1110031986	SP-309.5-PP-DP-AS-M-W3	7.25
1110007084	SP-312.7-PP-DP-AS-M-W3	7.25
1110031987	SP-316-PP-DP-AS-M-W3	7.25
1110031988	SP-317.2-PP-DP-AS-M-W3	7.25
1110031381	SP-318-PP-DP-AS-M-W3	7.25
1110027949	SP-319-PP-DP-AS-M-W3	7.25
1110000843	SP-320-PP-DP-AS-M-W3	7.25
1110000844	SP-321.3-PP-DP-AS-M-W3	7.25
1110000845	SP-322-PP-DP-AS-M-W3	7.25
1110000846	SP-325-PP-DP-AS-M-W3	7.25
1110025016	SP-325.4-PP-DP-AS-M-W3	7.25

Group 4

Item No.	Designation	Price
1110000847	SP-426.9-PP-DP-AS-M-W3	8.00
1110025594	SP-428-PP-DP-AS-M-W3	8.00
1110000848	SP-430-PP-DP-AS-M-W3	8.00

Group 5

Item No.	Designation	Price
1110026938	SP-532-PP-DP-AS-M-W3	9.95
1110000850	SP-533.7-PP-DP-AS-M-W3	9.95
1110000851	SP-535-PP-DP-AS-M-W3	9.95
1110000852	SP-538-PP-DP-AS-M-W3	9.95
1110029911	SP-540-PP-DP-AS-M-W3	9.95
1110000853	SP-542-PP-DP-AS-M-W3	9.95

Group 6

Item No.	Designation	Price
1110031990	SP-644.5-PP-DP-AS-M-W3	13.05
1110000854	SP-648.3-PP-DP-AS-M-W3	13.05
1110027941	SP-650.8-PP-DP-AS-M-W3	13.05
1110030480	SP-654-PP-DP-AS-M-W3	13.05

Group 7

Item No.	Designation	Price
1110031991	SP-755-PP-DP-AS-M-W3	18.20
1110031992	SP-757.2-PP-DP-AS-M-W3	18.20
1110006784	SP-760.3-PP-DP-AS-M-W3	18.20
1110029910	SP-763.5-PP-DP-AS-M-W3	18.20
1110031993	SP-765-PP-DP-AS-M-W3	18.20
1110024999	SP-770-PP-DP-AS-M-W3	18.20
1110031681	SP-773-PP-DP-AS-M-W3	18.20
1110014767	SP-776.1-PP-DP-AS-M-W3	18.20

Group 8

Item No.	Designation	Price
1110026890	SP-888.9-PP-DP-AS-M-W3	31.00
1110031994	SP-8102L-PP-DP-AS-M-W3	31.00
1110030488	SP-8108L-PP-DP-AS-M-W3	31.00

Additional sizes available on request

W5 - Stainless Steel
Temperature Range (Clamp Body) -30°C ... +90°C

Group 1A

Item No.	Designation	Price
1110000888	SP-106A-PP-DP-AS-M-W5	29.10
1110021161	SP-106.4A-PP-DP-AS-M-W5	29.10
1110000889	SP-108A-PP-DP-AS-M-W5	29.10
1110014297	SP-109.5A-PP-DP-AS-M-W5	29.10
1110000890	SP-110A-PP-DP-AS-M-W5	29.10
1110000891	SP-112A-PP-DP-AS-M-W5	29.10

Group 2

Item No.	Designation	Price
1110031377	SP-212-PP-DP-AS-M-W5	31.90
1110000892	SP-212.7-PP-DP-AS-M-W5	31.90
1110015883	SP-213.5-PP-DP-AS-M-W5	31.90
1110000893	SP-214-PP-DP-AS-M-W5	31.90
1110000894	SP-215-PP-DP-AS-M-W5	31.90
1110000895	SP-216-PP-DP-AS-M-W5	31.90
1110007378	SP-217.2-PP-DP-AS-M-W5	31.90
1110000896	SP-218-PP-DP-AS-M-W5	31.90

Group 3

Item No.	Designation	Price
1110030444	SP-309.5-PP-DP-AS-M-W5	35.10
1110030446	SP-312.7-PP-DP-AS-M-W5	35.10
1110030447	SP-316-PP-DP-AS-M-W5	35.10
1110030448	SP-317.2-PP-DP-AS-M-W5	35.10
1110031382	SP-318-PP-DP-AS-M-W5	35.10
1110008065	SP-319-PP-DP-AS-M-W5	35.10
1110000897	SP-320-PP-DP-AS-M-W5	35.10
1110000898	SP-321.3-PP-DP-AS-M-W5	35.10
1110000899	SP-322-PP-DP-AS-M-W5	35.10
1110000900	SP-325-PP-DP-AS-M-W5	35.10
1110021163	SP-325.4-PP-DP-AS-M-W5	35.10

Group 4

Item No.	Designation	Price
1110000901	SP-426.9-PP-DP-AS-M-W5	37.45
1110000902	SP-428-PP-DP-AS-M-W5	37.45
1110000903	SP-430-PP-DP-AS-M-W5	37.45

Group 5

Item No.	Designation	Price
1110008066	SP-532-PP-DP-AS-M-W5	43.20
1110000904	SP-533.7-PP-DP-AS-M-W5	43.20
1110000905	SP-535-PP-DP-AS-M-W5	43.20
1110007721	SP-538-PP-DP-AS-M-W5	43.20
1110000906	SP-540-PP-DP-AS-M-W5	43.20
1110000907	SP-542-PP-DP-AS-M-W5	43.20

Group 6

Item No.	Designation	Price
1110015895	SP-644.5-PP-DP-AS-M-W5	49.80
1110000908	SP-648.3-PP-DP-AS-M-W5	49.80
1110015897	SP-650.8-PP-DP-AS-M-W5	49.80
1110007846	SP-654-PP-DP-AS-M-W5	49.80

Group 7

Item No.	Designation	Price
1110032286	SP-755-PP-DP-AS-M-W5	82.05
1110007041	SP-757.2-PP-DP-AS-M-W5	82.05
1110000910	SP-760.3-PP-DP-AS-M-W5	82.05
1110021811	SP-763.5-PP-DP-AS-M-W5	82.05
1110032287	SP-765-PP-DP-AS-M-W5	82.05
1110026350	SP-770-PP-DP-AS-M-W5	82.05
1110007042	SP-773-PP-DP-AS-M-W5	82.05
1110021810	SP-776.1-PP-DP-AS-M-W5	82.05

Group 8

Item No.	Designation	Price
1110020974	SP-888.9-PP-DP-AS-M-W5	125.05
1110029106	SP-8102L-PP-DP-AS-M-W5	125.05
1110030489	SP-8108L-PP-DP-AS-M-W5	125.05

Additional sizes available on request

Group 1 Assembly (one bolt)

Refer to page A16, A18 & A19 for components.

Clamp Bore

	Outside Diameter Pipe / Tube Ø D1		Nominal Bore	
			Pipe	Copper Tube
Group 1A	mm	in	in	in
	6			
	6.4	1/4		
	8	5/16		
	9.5	3/8		1/4
	10		1/8	
	12			
Group 2	mm	in	in	in
	12			
	12.7	1/2		3/8
	13.5		1/4	
	14			
	15			
	16	5/8		1/2
	17.2		3/8	
	18			
Group 3	mm	in	in	in
	9.5	3/8		
	12.7	1/2		
	16			
	17.2			
	18			
	19	3/4		
	20			
	21.3		1/2	
	22			3/4
	25			
	25.4	1		
Group 4	mm	in	in	in
	26.9		3/4	
	28			
	30			
Group 5	mm	in	in	in
	32	1-1/4		
	33.7		1	
	35			1-1/4
	38	1-1/2		
	40			
	42		1-1/4	
Group 6	mm	in	in	in
	44.5	1-3/4		
	48.3		1-1/2	
	50.8	2		
	54			2
Group 7	mm	in	in	in
	55			
	57.2	2-1/4		
	60.3		2	
	63.5	2-1/2		
	65			
	70	2-3/4		
	73		2-1/2 (ANSI B 36-10)	
	76.1	3	2-1/2 (DIN EN 10220)	
Group 8	mm	in	in	in
	88.9		3	
	102	4	3-1/2	
	108			

Polyamide Clamp Body (PA) Profiled Bore

W3 - Carbon Steel, zinc/nickel-plated
Temperature Range (Clamp Body) -40°C ... +120°C

Group 1A

Item No.	Designation	Price
1110032004	SP-106A-PA-DP-AS-M-W3	7.40
1110029459	SP-106.4A-PA-DP-AS-M-W3	7.40
1110032005	SP-108A-PA-DP-AS-M-W3	7.40
1110032006	SP-109.5A-PA-DP-AS-M-W3	7.40
1110000990	SP-110A-PA-DP-AS-M-W3	7.40
1110000991	SP-112A-PA-DP-AS-M-W3	7.40

Group 2

Item No.	Designation	Price
1110031153	SP-212-PA-DP-AS-M-W3	7.80
1110032007	SP-212.7-PA-DP-AS-M-W3	7.80
1110032008	SP-213.5-PA-DP-AS-M-W3	7.80
1110000992	SP-214-PA-DP-AS-M-W3	7.80
1110032009	SP-215-PA-DP-AS-M-W3	7.80
1110006140	SP-216-PA-DP-AS-M-W3	7.80
1110032010	SP-217.2-PA-DP-AS-M-W3	7.80
1110031815	SP-218-PA-DP-AS-M-W3	7.80

Group 3

Item No.	Designation	Price
1110031154	SP-312.7-PA-DP-AS-M-W3	8.20
1110032011	SP-319-PA-DP-AS-M-W3	8.20
1110000993	SP-320-PA-DP-AS-M-W3	8.20
1110000994	SP-321.3-PA-DP-AS-M-W3	8.20
1110031652	SP-322-PA-DP-AS-M-W3	8.20
1110028149	SP-325-PA-DP-AS-M-W3	8.20
1110030881	SP-325.4-PA-DP-AS-M-W3	8.20

Group 4

Item No.	Designation	Price
1110004952	SP-426.9-PA-DP-AS-M-W3	9.95
1110006859	SP-428-PA-DP-AS-M-W3	9.95
1110031155	SP-430-PA-DP-AS-M-W3	9.95

Group 5

Item No.	Designation	Price
1110031651	SP-532-PA-DP-AS-M-W3	11.90
1110000995	SP-533.7-PA-DP-AS-M-W3	11.90
1110032012	SP-535-PA-DP-AS-M-W3	11.90
1110027271	SP-538-PA-DP-AS-M-W3	11.90
1110032013	SP-540-PA-DP-AS-M-W3	11.90
1110000996	SP-542-PA-DP-AS-M-W3	11.90

Group 6

Item No.	Designation	Price
1110032014	SP-644.5-PA-DP-AS-M-W3	18.90
1110000997	SP-648.3-PA-DP-AS-M-W3	18.90
1110026889	SP-650.8-PA-DP-AS-M-W3	18.90
1110032015	SP-654-PA-DP-AS-M-W3	18.90

Group 7

Item No.	Designation	Price
1110032016	SP-755-PA-DP-AS-M-W3	34.25
1110031156	SP-760.3-PA-DP-AS-M-W3	34.25
1110032017	SP-763.5-PA-DP-AS-M-W3	34.25
1110030483	SP-770-PA-DP-AS-M-W3	34.25
1110030484	SP-773-PA-DP-AS-M-W3	34.25
1110032019	SP-776.1-PA-DP-AS-M-W3	34.25

Group 8

Item No.	Designation	Price
1110031386	SP-888.9-PA-DP-AS-M-W3	45.35
1110030486	SP-8102L-PA-DP-AS-M-W3	45.35

Additional sizes available on request

W5 - Stainless Steel
Temperature Range (Clamp Body) -40°C ... +120°C

Group 1A

Item No.	Designation	Price
1110001019	SP-106A-PA-DP-AS-M-W5	30.20
1110006121	SP-106.4A-PA-DP-AS-M-W5	30.20
1110001020	SP-108A-PA-DP-AS-M-W5	30.20
1110006826	SP-109.5A-PA-DP-AS-M-W5	30.20
1110001021	SP-110A-PA-DP-AS-M-W5	30.20
1110001022	SP-112A-PA-DP-AS-M-W5	30.20

Group 2

Item No.	Designation	Price
1110031376	SP-212-PA-DP-AS-M-W5	32.95
1110001023	SP-212.7-PA-DP-AS-M-W5	32.95
1110015882	SP-213.5-PA-DP-AS-M-W5	32.95
1110008670	SP-214-PA-DP-AS-M-W5	32.95
1110006338	SP-215-PA-DP-AS-M-W5	32.95
1110001024	SP-216-PA-DP-AS-M-W5	32.95
1110009254	SP-217.2-PA-DP-AS-M-W5	32.95
1110001025	SP-218-PA-DP-AS-M-W5	32.95

Group 3

Item No.	Designation	Price
1110030445	SP-312.7-PA-DP-AS-M-W5	36.05
1110006120	SP-319-PA-DP-AS-M-W5	36.05
1110008880	SP-320-PA-DP-AS-M-W5	36.05
1110001026	SP-321.3-PA-DP-AS-M-W5	36.05
1110001027	SP-322-PA-DP-AS-M-W5	36.05
1110008200	SP-325-PA-DP-AS-M-W5	36.05
1110006827	SP-325.4-PA-DP-AS-M-W5	36.05

Group 4

Item No.	Designation	Price
1110001028	SP-426.9-PA-DP-AS-M-W5	39.40
1110001029	SP-428-PA-DP-AS-M-W5	39.40
1110008881	SP-430-PA-DP-AS-M-W5	39.40

Group 5

Item No.	Designation	Price
1110015893	SP-532-PA-DP-AS-M-W5	45.15
1110001030	SP-533.7-PA-DP-AS-M-W5	45.15
1110001031	SP-535-PA-DP-AS-M-W5	45.15
1110001032	SP-538-PA-DP-AS-M-W5	45.15
1110011947	SP-540-PA-DP-AS-M-W5	45.15
1110001033	SP-542-PA-DP-AS-M-W5	45.15

Group 6

Item No.	Designation	Price
1110008415	SP-644.5-PA-DP-AS-M-W5	55.65
1110001034	SP-648.3-PA-DP-AS-M-W5	55.65
1110001035	SP-650.8-PA-DP-AS-M-W5	55.65
1110007855	SP-654-PA-DP-AS-M-W5	55.65

Group 7

Item No.	Designation	Price
1110030481	SP-755-PA-DP-AS-M-W5	98.10
1110001036	SP-760.3-PA-DP-AS-M-W5	98.10
1110020769	SP-763.5-PA-DP-AS-M-W5	98.10
1110011945	SP-770-PA-DP-AS-M-W5	98.10
1110030485	SP-773-PA-DP-AS-M-W5	98.10
1110001037	SP-776.1-PA-DP-AS-M-W5	98.10

Group 8

Item No.	Designation	Price
1110008553	SP-888.9-PA-DP-AS-M-W5	139.40
1110030487	SP-8102L-PA-DP-AS-M-W5	139.40

Additional sizes available on request

Group 1 Assembly (one bolt)

Refer to page A16, A18 & A19 for components.

Clamp Bore

	Outside Diameter Pipe / Tube Ø D1		Nominal Bore	
			Pipe	Copper Tube
	mm	in	in	in
Group 1A	6			
	6.4	1/4		
	8	5/16		
	9.5	3/8		1/4
	10		1/8	
	12			
Group 2	12			
	12.7	1/2		3/8
	13.5		1/4	
	14			
	15			
	16	5/8		1/2
	17.2		3/8	
	18			
Group 3	12.7	1/2		
	19	3/4		
	20			
	21.3		1/2	
	22			3/4
	25			
	25.4	1		
Group 4	26.9		3/4	
	28			
	30			
Group 5	32	1-1/4		
	33.7		1	
	35			1-1/4
	38	1-1/2		
	40			
	42		1-1/4	
Group 6	44.5	1 3/4		
	48.3		1-1/2	
	50.8	2		
	54			2
Group 7	55			
	60.3		2	
	63.5	2-1/2		
	70	2-3/4		
	73		2-1/2 (ANSI B 36-10)	
	76.1	3	2-1/2 (DIN EN 10220)	
Group 8	88.9		3	
	102	4	3-1/2	

Polypropylene Clamp Body (PP-H) Smooth Bore

W3 - Carbon Steel, zinc/nickel-plated
Temperature Range (Clamp Body) -30°C ... +90°C

Group 1A

Item No.	Designation	Price
1110031182	SP-106A-PP-H-DP-AS-M-W3	6.65
1110031962	SP-106.4A-PP-H-DP-AS-M-W3	6.65
1110031183	SP-108A-PP-H-DP-AS-M-W3	6.65
1110031963	SP-109.5A-PP-H-DP-AS-M-W3	6.65
1110031184	SP-110A-PP-H-DP-AS-M-W3	6.65
1110031964	SP-112A-PP-H-DP-AS-M-W3	6.65

Group 2

Item No.	Designation	Price
1110031966	SP-212.7-PP-H-DP-AS-M-W3	6.95
1110030430	SP-213.5-PP-H-DP-AS-M-W3	6.95
1110031185	SP-214-PP-H-DP-AS-M-W3	6.95
1110031378	SP-215-PP-H-DP-AS-M-W3	6.95
1110031968	SP-216-PP-H-DP-AS-M-W3	6.95
1110031969	SP-217.2-PP-H-DP-AS-M-W3	6.95

Group 3

Item No.	Designation	Price
1110031379	SP-316-PP-H-DP-AS-M-W3	7.45
1110031970	SP-319-PP-H-DP-AS-M-W3	7.45
1110031971	SP-320-PP-H-DP-AS-M-W3	7.45
1110031186	SP-321.3-PP-H-DP-AS-M-W3	7.45
1110027270	SP-322-PP-H-DP-AS-M-W3	7.45
1110031187	SP-323-PP-H-DP-AS-M-W3	7.45
1110030452	SP-325-PP-H-DP-AS-M-W3	7.45
1110031972	SP-325.4-PP-H-DP-AS-M-W3	7.45

Group 4

Item No.	Designation	Price
1110031973	SP-426.9-PP-H-DP-AS-M-W3	8.60
1110026931	SP-428-PP-H-DP-AS-M-W3	8.60
1110031974	SP-430-PP-H-DP-AS-M-W3	8.60
1110030464	SP-432-PP-H-DP-AS-M-W3	8.60

Group 5

Item No.	Designation	Price
1110031975	SP-532-PP-H-DP-AS-M-W3	10.30
1110030468	SP-533.7-PP-H-DP-AS-M-W3	10.30
1110031976	SP-535-PP-H-DP-AS-M-W3	10.30
1110027224	SP-538-PP-H-DP-AS-M-W3	10.30
1110031977	SP-542-PP-H-DP-AS-M-W3	10.30

Group 6

Item No.	Designation	Price
1110026933	SP-644.5-PP-H-DP-AS-M-W3	13.65
1110031384	SP-647-PP-H-DP-AS-M-W3	13.65
1110030478	SP-648.3-PP-H-DP-AS-M-W3	13.65
1110031979	SP-650.8-PP-H-DP-AS-M-W3	13.65

Group 7

Item No.	Designation	Price
1110031188	SP-757.2-PP-H-DP-AS-M-W3	22.40
1110031189	SP-760.3-PP-H-DP-AS-M-W3	22.40
1110031190	SP-776.1-PP-H-DP-AS-M-W3	22.40

Additional sizes available on request

W5 - Stainless Steel
Temperature Range (Clamp Body) -30°C ... +90°C

Group 1A

Item No.	Designation	Price
1110022104	SP-106A-PP-H-DP-AS-M-W5	29.45
1110025857	SP-106.4A-PP-H-DP-AS-M-W5	29.45
1110030426	SP-108A-PP-H-DP-AS-M-W5	29.45
1110026843	SP-109.5A-PP-H-DP-AS-M-W5	29.45
1110015537	SP-110A-PP-H-DP-AS-M-W5	29.45
1110015346	SP-112A-PP-H-DP-AS-M-W5	29.45

Group 2

Item No.	Designation	Price
1110026202	SP-212.7-PP-H-DP-AS-M-W5	32.10
1110021091	SP-213.5-PP-H-DP-AS-M-W5	32.10
1110030433	SP-214-PP-H-DP-AS-M-W5	32.10
1110020834	SP-215-PP-H-DP-AS-M-W5	32.10
1110015533	SP-216-PP-H-DP-AS-M-W5	32.10
1110032284	SP-217.2-PP-H-DP-AS-M-W5	32.10

Group 3

Item No.	Designation	Price
1110031380	SP-316-PP-H-DP-AS-M-W5	35.30
1110026543	SP-319-PP-H-DP-AS-M-W5	35.30
1110015534	SP-320-PP-H-DP-AS-M-W5	35.30
1110026201	SP-321.3-PP-H-DP-AS-M-W5	35.30
1110015535	SP-322-PP-H-DP-AS-M-W5	35.30
1110031383	SP-323-PP-H-DP-AS-M-W5	35.30
1110015538	SP-325-PP-H-DP-AS-M-W5	35.30
1110027960	SP-325.4-PP-H-DP-AS-M-W5	35.30

Group 4

Item No.	Designation	Price
1110015726	SP-426.9-PP-H-DP-AS-M-W5	38.05
1110015536	SP-428-PP-H-DP-AS-M-W5	38.05
1110028302	SP-430-PP-H-DP-AS-M-W5	38.05
1110030465	SP-432-PP-H-DP-AS-M-W5	38.05

Group 5

Item No.	Designation	Price
1110030467	SP-532-PP-H-DP-AS-M-W5	43.55
1110009183	SP-533.7-PP-H-DP-AS-M-W5	43.55
1110030472	SP-535-PP-H-DP-AS-M-W5	43.55
1110027494	SP-538-PP-H-DP-AS-M-W5	43.55
1110020011	SP-542-PP-H-DP-AS-M-W5	43.55

Group 6

Item No.	Designation	Price
1110028260	SP-644.5-PP-H-DP-AS-M-W5	50.40
1110031385	SP-647-PP-H-DP-AS-M-W5	50.40
1110029945	SP-648.3-PP-H-DP-AS-M-W5	50.40
1110030479	SP-650.8-PP-H-DP-AS-M-W5	50.40

Group 7

Item No.	Designation	Price
1110030482	SP-757.2-PP-H-DP-AS-M-W5	86.25
1110009184	SP-760.3-PP-H-DP-AS-M-W5	86.25
1110032285	SP-776.1-PP-H-DP-AS-M-W5	86.25

Additional sizes available on request

Smooth Bore
Recommended for use on Hydraulic Hose

	Clamp Bore			
	Outside Diameter Pipe / Tube Ø D1		Nominal Bore	
			Pipe	Copper Tube
Group 1A	mm	in	in	in
	6			
	6.4	1/4		
	8	5/16		
	9.5	3/8		1/4
	10		1/8	
	12			
Group 2	mm	in	in	in
	12.7	1/2		3/8
	13.5		1/4	
	14			
	15			
	16	5/8		1/2
	17.2		3/8	
Group 3	mm	in	in	in
	16			
	19	3/4		
	20			
	21.3		1/2	
	22			3/4
	23			
	25			
	25.4	1		
Group 4	mm	in	in	in
	26.9		3/4	
	28			
	30			
	32			
Group 5	mm	in	in	in
	32	1-1/4		
	33.7		1	
	35			1-1/4
	38	1-1/2		
	42		1-1/4	
Group 6	mm	in	in	in
	44.5	1-3/4		
	47			
	48.3		1-1/2	
	50.8	2		
Group 7	mm	in	in	in
	57.2	2-1/4		
	60.3		2	
	76.1	3	2-1/2 (DIN EN 10220)	

Refer to page A13 for Hydraulic Hose Clamp assembly selection Guide

Standard Series Clamps - Selection Guide for Hydraulic Hose

PP-H - Smooth Bore

			Hose Type				
			EN 853 1SN	EN 853 2SN	EN 854 R6	EN 855 R7	
	Hose I.D	Hose O.D	SAE 100 R1AT	SAE 100 R2AT	SAE 100 R6 1TE	SAE 100 R7 PL 7 / ZL 7	
Dash No.	in	mm	Designation	Designation	Designation	Designation	Price
-4	1/4	13.4	SP-213.5-PP-H-DP-AS-M-W3				6.95
			SP-213.5-PP-H-DP-AS-M-W5				32.10
-4	1/4	15		SP-215-PP-H-DP-AS-M-W3			6.95
				SP-215-PP-H-DP-AS-M-W5			32.10
-4	1/4	12.7			SP-212.7-PP-H-DP-AS-M-W3		6.95
					SP-212.7-PP-H-DP-AS-M-W5		32.10
-4	1/4	12.9				SP-212.7-PP-H-DP-AS-M-W3	6.95
						SP-212.7-PP-H-DP-AS-M-W5	32.10
-5	5/16	15	SP-215-PP-H-DP-AS-M-W3				6.95
			SP-215-PP-H-DP-AS-M-W5				32.10
-5	5/16	17.2		SP-217.2-PP-H-DP-AS-M-W3			6.95
				SP-217.2-PP-H-DP-AS-M-W5			32.10
-5	5/16	14.0			SP-214-PP-H-DP-AS-M-W3		6.95
					SP-214-PP-H-DP-AS-M-W5		32.10
-5	5/16	15.1				SP-215-PP-H-DP-AS-M-W3	6.95
						SP-215-PP-H-DP-AS-M-W5	32.10
-6	3/8	17.4	SP-217.2-PP-H-DP-AS-M-W3				6.95
			SP-217.2-PP-H-DP-AS-M-W5				32.10
-6	3/8	19.1		SP-319-PP-H-DP-AS-M-W3			7.45
				SP-319-PP-H-DP-AS-M-W5			35.30
-6	3/8	15.9			SP-216-PP-H-DP-AS-M-W3		6.95
					SP-216-PP-H-DP-AS-M-W5		32.10
-6	3/8	16.7				SP-316-PP-H-DP-AS-M-W3	7.45
						SP-316-PP-H-DP-AS-M-W5	35.30
-8	1/2	20.3	SP-320-PP-H-DP-AS-M-W3				7.45
			SP-320-PP-H-DP-AS-M-W5				35.30
-8	1/2	22.2		SP-322-PP-H-DP-AS-M-W3			7.45
				SP-322-PP-H-DP-AS-M-W5			35.30
-8	1/2	19.8			SP-320-PP-H-DP-AS-M-W3		7.45
					SP-320-PP-H-DP-AS-M-W5		35.30
-8	1/2	20.7				SP-320-PP-H-DP-AS-M-W3	7.45
						SP-320-PP-H-DP-AS-M-W5	35.30
-10	5/8	23.7	SP-323-PP-H-DP-AS-M-W3				7.45
			SP-323-PP-H-DP-AS-M-W5				35.30
-10	5/8	25.4		SP-325.4-PP-H-DP-AS-M-W3			7.45
				SP-325.4-PP-H-DP-AS-M-W5			35.30
-10	5/8	23.0			SP-323-PP-H-DP-AS-M-W3		7.45
					SP-323-PP-H-DP-AS-M-W5		35.30
-10	5/8	N/A					#N/A
							#N/A
-12	3/4	27.7	SP-426.9-PP-H-DP-AS-M-W3				8.60
			SP-426.9-PP-H-DP-AS-M-W5				38.05
-12	3/4	29.4		SP-430-PP-H-DP-AS-M-W3			8.60
				SP-430-PP-H-DP-AS-M-W5			38.05
-12	3/4	31.8			SP-430-PP-H-DP-AS-M-W3		8.60
					SP-430-PP-H-DP-AS-M-W5		38.05
-12	3/4	26.0				SP-426.9-PP-H-DP-AS-M-W3	8.60
						SP-426.9-PP-H-DP-AS-M-W5	38.05
-16	1	36.2	SP-535-PP-H-DP-AS-M-W3				10.30
			SP-535-PP-H-DP-AS-M-W5				43.55
-16	1	38.5		SP-538-PP-H-DP-AS-M-W3			10.30
				SP-538-PP-H-DP-AS-M-W5			43.55
-16	1	32.5			SP-532-PP-H-DP-AS-M-W3		10.30
					SP-532-PP-H-DP-AS-M-W5		43.55
-16	1	34.0				SP-533.7-PP-H-DP-AS-M-W3	10.30
						SP-533.7-PP-H-DP-AS-M-W5	43.55
-20	1-1/4	47.6	SP-647-PP-H-DP-AS-M-W3				13.65
			SP-647-PP-H-DP-AS-M-W5				50.40
-20	1-1/4	49.6		SP-648.3-PP-H-DP-AS-M-W3			13.65
				SP-648.3-PP-H-DP-AS-M-W5			50.40

W3 - Carbon Steel, zinc/nickel-plated
W5 - Stainless Steel

Refer to page A12 for Standard Series PP-H Clamp Assembly Item No.
e.g. 1110031378 - SP-215-PP-H-DP-AS-M-W3

Sizes may vary between hydraulic hose brands; check hose O.D. before selecting clamp assembly.

Contact STAUFF for more information.

Polypropylene Clamp Body with Elastomer Insert (PP-R)

W3 - Carbon Steel, zinc/nickel-plated
Temperature Range (Clamp Body) -40°C ... +125°C

Group 4

Item No.	Designation	Price
1110029512	SP-406-PP-R-DP-AS-M-W3	18.45
1110029513	SP-408-PP-R-DP-AS-M-W3	18.45
1110029514	SP-410-PP-R-DP-AS-M-W3	18.45
1110029515	SP-412-PP-R-DP-AS-M-W3	18.45
1110029516	SP-412.7-PP-R-DP-AS-M-W3	18.45
1110029517	SP-414-PP-R-DP-AS-M-W3	18.45
1110029518	SP-415-PP-R-DP-AS-M-W3	18.45
1110027544	SP-416-PP-R-DP-AS-M-W3	18.45
1110027545	SP-417.2-PP-R-DP-AS-M-W3	18.45
1110027546	SP-418-PP-R-DP-AS-M-W3	18.45
1110027547	SP-419-PP-R-DP-AS-M-W3	18.45

Group 6

Item No.	Designation	Price
1110027548	SP-620-PP-R-DP-AS-M-W3	28.05
1110031998	SP-621.3-PP-R-DP-AS-M-W3	28.05
1110029520	SP-622-PP-R-DP-AS-M-W3	28.05
1110029521	SP-625-PP-R-DP-AS-M-W3	28.05
1110029522	SP-626.9-PP-R-DP-AS-M-W3	28.05
1110029524	SP-632-PP-R-DP-AS-M-W3	28.05

Additional sizes available on request

W5 - Stainless Steel
Temperature Range (Clamp Body) -40°C ... +125°C

Group 4

Item No.	Designation	Price
1110029526	SP-406-PP-R-DP-AS-M-W5	47.90
1110012165	SP-408-PP-R-DP-AS-M-W5	47.90
1110008109	SP-410-PP-R-DP-AS-M-W5	47.90
1110008110	SP-412-PP-R-DP-AS-M-W5	47.90
1110029527	SP-412.7-PP-R-DP-AS-M-W5	47.90
1110008111	SP-414-PP-R-DP-AS-M-W5	47.90
1110008112	SP-415-PP-R-DP-AS-M-W5	47.90
1110008113	SP-416-PP-R-DP-AS-M-W5	47.90
1110029528	SP-417.2-PP-R-DP-AS-M-W5	47.90
1110012824	SP-418-PP-R-DP-AS-M-W5	47.90
1110029529	SP-419-PP-R-DP-AS-M-W5	47.90

Group 6

Item No.	Designation	Price
1110008114	SP-620-PP-R-DP-AS-M-W5	64.80
1110029530	SP-621.3-PP-R-DP-AS-M-W5	64.80
1110008115	SP-622-PP-R-DP-AS-M-W5	64.80
1110008116	SP-625-PP-R-DP-AS-M-W5	64.80
1110029531	SP-626.9-PP-R-DP-AS-M-W5	64.80
1110029532	SP-632-PP-R-DP-AS-M-W5	64.80

Additional sizes available on request

Reduces Shock & Vibration

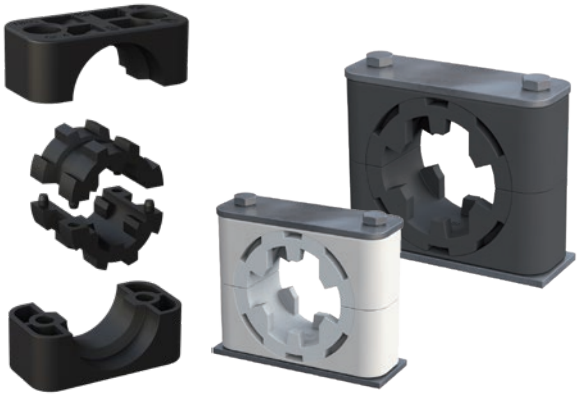
RI - Elastomer Insert
Thermoplastic Elastomer
Temperature Range -40°C ... +125°C
Shore Hardness 73A

Clamp Bore

Outside Diameter
Pipe / Tube / Hose
Ø D

	mm	in	NB
Group 4	6		
	8	5/16	
	10		
	12		
	12.7	1/2	
	14		
	15		
	16	5/8	
	17.2		3/8
	18		
	19	3/4	

	mm	in	in
Group 6	20		
	21.3		1/2
	22	7/8	
	25		
	26.9		3/4
	32		



NRC - Noise Reduction Clamp

STAUFF NRC type clamps are designed for reducing noise and vibration of pipe and tubes in installations. Diameters between 6 and 42 mm and 1/4 to 1-1/2 inch respectively.

Thermoplastic Elastomer

Temperature Range -40°C ... +125°C

Shore Hardness 73A

Refer to pages A20 - A21 for more information.

Aluminium Clamp Body (AL) Profile Bore

W3 - Carbon Steel, zinc/nickel-plated
Temperature Range (Clamp Body) up to 300°C

Group 1A

Item No.	Designation	Price
1110028401	SP-106A-AL-DP-AS-M-W3	11.85
1110031149	SP-106.4A-AL-DP-AS-M-W3	11.85
1110032020	SP-108A-AL-DP-AS-M-W3	11.85
1110027947	SP-109.5A-AL-DP-AS-M-W3	11.85
1110001110	SP-110A-AL-DP-AS-M-W3	11.85
1110001111	SP-112A-AL-DP-AS-M-W3	11.85

Group 2

Item No.	Designation	Price
1110022211	SP-212.7-AL-DP-AS-M-W3	12.25
1110032021	SP-213.5-AL-DP-AS-M-W3	12.25
1110031150	SP-214-AL-DP-AS-M-W3	12.25
1110029174	SP-215-AL-DP-AS-M-W3	12.25
1110009164	SP-216-AL-DP-AS-M-W3	12.25
1110012969	SP-217.2-AL-DP-AS-M-W3	12.25
1110001112	SP-218-AL-DP-AS-M-W3	12.25

Group 3

Item No.	Designation	Price
1110013448	SP-319-AL-DP-AS-M-W3	13.90
1110028759	SP-320-AL-DP-AS-M-W3	13.90
1110001113	SP-321.3-AL-DP-AS-M-W3	13.90
1110009257	SP-322-AL-DP-AS-M-W3	13.90
1110007340	SP-325-AL-DP-AS-M-W3	13.90
1110032022	SP-325.4-AL-DP-AS-M-W3	13.90

Group 4

Item No.	Designation	Price
1110030284	SP-426.9-AL-DP-AS-M-W3	15.45
1110001115	SP-428-AL-DP-AS-M-W3	15.45
1110031151	SP-430-AL-DP-AS-M-W3	15.45

Group 5

Item No.	Designation	Price
1110004958	SP-532-AL-DP-AS-M-W3	21.05
1110032023	SP-533.7-AL-DP-AS-M-W3	21.05
1110026934	SP-535-AL-DP-AS-M-W3	21.05
1110014110	SP-538-AL-DP-AS-M-W3	21.05
1110028758	SP-540-AL-DP-AS-M-W3	21.05
1110030361	SP-542-AL-DP-AS-M-W3	21.05

Group 6

Item No.	Designation	Price
1110027596	SP-648.3-AL-DP-AS-M-W3	27.85
1110031152	SP-650.8-AL-DP-AS-M-W3	27.85

Additional sizes available on request

W5 - Stainless Steel
Temperature Range (Clamp Body) up to 300°C

Group 1A

Item No.	Designation	Price
1110008603	SP-106A-AL-DP-AS-M-W5	34.65
1110030424	SP-106.4A-AL-DP-AS-M-W5	34.65
1110024991	SP-108A-AL-DP-AS-M-W5	34.65
1110015227	SP-109.5A-AL-DP-AS-M-W5	34.65
1110009017	SP-110A-AL-DP-AS-M-W5	34.65
1110008158	SP-112A-AL-DP-AS-M-W5	34.65

Group 2

Item No.	Designation	Price
1110008213	SP-212.7-AL-DP-AS-M-W5	37.40
1110015404	SP-213.5-AL-DP-AS-M-W5	37.40
1110030432	SP-214-AL-DP-AS-M-W5	37.40
1110030435	SP-215-AL-DP-AS-M-W5	37.40
1110029587	SP-216-AL-DP-AS-M-W5	37.40
1110030438	SP-217.2-AL-DP-AS-M-W5	37.40
1110007892	SP-218-AL-DP-AS-M-W5	37.40

Group 3

Item No.	Designation	Price
1110024118	SP-319-AL-DP-AS-M-W5	41.75
1110013788	SP-320-AL-DP-AS-M-W5	41.75
1110008504	SP-321.3-AL-DP-AS-M-W5	41.75
1110008157	SP-322-AL-DP-AS-M-W5	41.75
1110006279	SP-325-AL-DP-AS-M-W5	41.75
1110024119	SP-325.4-AL-DP-AS-M-W5	41.75

Group 4

Item No.	Designation	Price
1110007893	SP-426.9-AL-DP-AS-M-W5	44.90
1110009026	SP-428-AL-DP-AS-M-W5	44.90
1110008177	SP-430-AL-DP-AS-M-W5	44.90

Group 5

Item No.	Designation	Price
1110030466	SP-532-AL-DP-AS-M-W5	54.30
1110007894	SP-533.7-AL-DP-AS-M-W5	54.30
1110013211	SP-535-AL-DP-AS-M-W5	54.30
1110024185	SP-538-AL-DP-AS-M-W5	54.30
1110030474	SP-540-AL-DP-AS-M-W5	54.30
1110013212	SP-542-AL-DP-AS-M-W5	54.30

Group 6

Item No.	Designation	Price
1110007895	SP-648.3-AL-DP-AS-M-W5	64.60
1110013214	SP-650.8-AL-DP-AS-M-W5	64.60

Additional sizes available on request

Suitable for High Temperature Installations

Clamp Bore

	Outside Diameter Pipe / Tube Ø D1		Nominal Bore	
			Pipe	Copper Tube
Group 1A	mm	in	in	in
	6			
	6.4	1/4		
	8	5/16		
	9.5	3/8		1/4
	10		1/8	
	12			
Group 2	mm	in	in	in
	12.7	1/2		3/8
	13.5		1/4	
	14			
	15			
	16	5/8		1/2
	17.2		3/8	
	18			
Group 3	mm	in	in	in
	19	3/4		
	20			
	21.3		1/2	
	22			3/4
	25			
	25.4	1		
Group 4	mm	in	in	in
	26.9		3/4	
	28			
	30			
Group 5	mm	in	in	in
	32	1-1/4		
	33.7		1	
	35			1-1/4
	38	1-1/2		
	40			
	42		1-1/4	
Group 6	mm	in	in	in
	48.3		1-1/2	
	50.8	2		

Standard Series Components

PP Clamp Body

(PP) Polypropylene - Smooth Bore
Temperature Range (Clamp Body) -30°C ... +90°C
Single Bolt Fixing

Item No.	Designation	Price
1130002984	106-PP	1.90
1130002987	106.4-PP	1.90
1130002990	108-PP	1.90
1130002993	109.5-PP	1.90
1130002996	110-PP	1.90
1130003000	112-PP	1.90

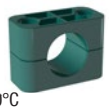
PA Clamp Body

Protected against UV

(PA) Polyamide - Smooth Bore
Temperature Range (Clamp Body) -40°C ... +120°C
Single Bolt Fixing

Item No.	Designation	Price
1130002985	106-PA	2.45
1130002988	106.4-PA	2.45
1130002991	108-PA	2.45
1130002994	109.5-PA	2.45
1130002997	110-PA	2.45
1130003001	112-PA	2.45

PP-H Clamp Body

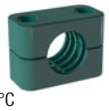


(PP-H) Polypropylene - Smooth Bore
Temperature Range (Clamp Body) -30°C ... +90°C

Item No.	Designation	Price
1130005076	106A-PP-H	2.25
1130009629	106.4A-PP-H	2.25
1130003446	108A-PP-H	2.25
1130003511	109.5A-PP-H	2.25
1130003692	110A-PP-H	2.25
1130005195	112A-PP-H	2.25
1130005239	212.7-PP-H	2.25
1130005261	213.5-PP-H	2.25
1130005275	214-PP-H	2.25
1130005297	215-PP-H	2.25
1130005335	216-PP-H	2.25
1130005370	217.2-PP-H	2.25
1130005389	218-PP-H	2.25
1130005509	316-PP-H	2.65
1130003374	318-PP-H	2.65
1130003273	319-PP-H	2.65
1130003276	320-PP-H	2.65
1130003279	321.3-PP-H	2.65
1130003282	322-PP-H	2.65
1130003377	323-PP-H	2.65
1130003285	325-PP-H	2.65
1130003380	325.4-PP-H	2.65
1130005766	426.9-PP-H	3.25
1130005790	428-PP-H	3.25
1130005824	430-PP-H	3.25
1130029091	432-PP-H	3.25
1130005956	532-PP-H	4.85
1130005982	533.7-PP-H	4.85
1130005999	535-PP-H	4.85
1130006028	538-PP-H	4.85
1130006346	542-PP-H	4.85
1130003572	644.5-PP-H	7.05
1130010744	647-PP-H	7.05
1130003575	648.3-PP-H	7.05
1130003578	650.8-PP-H	7.05
1130006217	757.2-PP-H	12.20
1130006222	760.3-PP-H	12.20
1130006235	776.1-PP-H	12.20
1130006263	888.9-PP-H	20.50
1130009400	8102L-PP-H	20.50

PP-H Clamps are recommended for Hydraulic Hose Installations.
Refer to page A13 for PP-H Hydraulic Hose selection table.

PP Clamp Body



(PP) Polypropylene - Profiled Bore
Temperature Range (Clamp Body) -30°C ... +90°C

Item No.	Designation	Price
1130005074	106A-PP	1.90
1130005065	106.4A-PP	1.90
1130005104	108A-PP	1.90
1130005118	109.5A-PP	1.90
1130005148	110A-PP	1.90
1130005192	112A-PP	1.90
1130005231	212-PP	2.05
1130005237	212.7-PP	2.05
1130005259	213.5-PP	2.05
1130005274	214-PP	2.05
1130005294	215-PP	2.05
1130005333	216-PP	2.05
1130005368	217.2-PP	2.05
1130005386	218-PP	2.05
1130033008	306.4-PP	2.45
1130018495	309.5-PP	2.45
1130005497	312.7-PP	2.45
1130005508	316-PP	2.45
1130012494	317.2-PP	2.45
1130005512	318-PP	2.45
1130005518	319-PP	2.45
1130005534	320-PP	2.45
1130005562	321.3-PP	2.45
1130005579	322-PP	2.45
1130005630	325-PP	2.45
1130005639	325.4-PP	2.45
1130005754	422-PP	2.65
1130003765	426.9-PP	2.65
1130003768	428-PP	2.65
1130003771	430-PP	2.65
1130009355	432-PP	2.65
1130010566	512.7-PP	4.50
1130006337	525-PP	4.50
1130005953	532-PP	4.50
1130005980	533.7-PP	4.50
1130005997	535-PP	4.50
1130006026	538-PP	4.50
1130006051	540-PP	4.50
1130006069	542-PP	4.50
1130003551	644.5-PP	6.45
1130003554	648.3-PP	6.45
1130003560	650.8-PP	6.45
1130003563	654-PP	6.45
1130008668	755-PP	8.00
1130006216	757.2-PP	8.00
1130006221	760.3-PP	8.00
1130006226	763.5-PP	8.00
1130006375	765-PP	8.00
1130006230	770-PP	8.00
1130008666	773-PP	8.00
1130006234	776.1-PP	8.00
1130006262	888.9-PP	13.90
1130006249	8102L-PP	13.90
1130020677	8108L-PP	13.90

PA Clamp Body

Protected against UV

(PA) Polyamide - Profiled Bore
Temperature Range (Clamp Body) -40°C ... +120°C

Item No.	Designation	Price
1130005072	106A-PA	3.00
1130005064	106.4A-PA	3.00
1130005100	108A-PA	3.00
1130005117	109.5A-PA	3.00
1130005145	110A-PA	3.00
1130005187	112A-PA	3.00
1130005229	212-PA	3.10
1130005234	212.7-PA	3.10
1130005257	213.5-PA	3.10
1130005272	214-PA	3.10
1130005290	215-PA	3.10
1130005329	216-PA	3.10
1130005366	217.2-PA	3.10
1130005383	218-PA	3.10
1130007833	312.7-PA	3.40
1130005517	319-PA	3.40
1130005533	320-PA	3.40
1130005560	321.3-PA	3.40
1130005577	322-PA	3.40
1130005628	325-PA	3.40
1130005638	325.4-PA	3.40
1130003766	426.9-PA	4.60
1130003769	428-PA	4.60
1130003772	430-PA	4.60
1130005951	532-PA	6.45
1130005977	533.7-PA	6.45
1130005993	535-PA	6.45
1130006023	538-PA	6.45
1130006049	540-PA	6.45
1130006066	542-PA	6.45
1130003552	644.5-PA	12.30
1130003555	648.3-PA	12.30
1130003561	650.8-PA	12.30
1130003564	654-PA	12.30
1130020418	755-PA	24.05
1130006214	757.2-PA	24.05
1130006219	760.3-PA	24.05
1130006224	763.5-PA	24.05
1130006228	770-PA	24.05
1130008621	773-PA	24.05
1130006232	776.1-PA	24.05
1130006260	888.9-PA	28.25
1130008341	8102L-PA	28.25

Order Codes

Clamp Body ***2*12.7-*PP**

One clamp body consists of two clamp halves.

* STAUFF Group	**2**
* Exact outside diameter Ø D1 (mm)	**12.7**
* Material code	**Polypropylene - PP**
	Polyamide - PA

Order Codes

Clamp Body ***2*12.7-*PP-H**

One clamp body consists of two clamp halves.

* STAUFF Group	**2**
* Exact outside diameter Ø D1 (mm)	**12.7**
* Material code	**PP-H**

Standard Series Components

PP-R Clamp Body

(PP-R) Polypropylene Clamp Body & Insert
Temperature Range (Clamp Body) -30°C ... +90°C
Temperature Range (Insert) -40°C ... +125°C

Item No.	Designation	Price
1110029485	406-PP-R	13.10
1110025649	408-PP-R	13.10
1110002331	410-PP-R	13.10
1110002332	412-PP-R	13.10
1110002333	412.7-PP-R	13.10
1110002334	414-PP-R	13.10
1110002335	415-PP-R	13.10
1110002336	416-PP-R	13.10
1110002337	417.2-PP-R	13.10
1110002338	418-PP-R	13.10
1110002339	419-PP-R	13.10
1110002340	620-PP-R	21.45
1110002341	621.3-PP-R	21.45
1110002342	622-PP-R	21.45
1110002343	625-PP-R	21.45
1110002347	632-PP-R	21.45

RI - Elastomer Insert

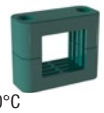
Thermoplastic Elastomer
Temperature Range -40°C ... +125°C
Shore Hardness 73A

AL Clamp Body

(AL) Aluminium - Profiled Bore
Temperature Range (Clamp Body) up to 300°C

Item No.	Designation	Price
1130005071	106A-AL	7.45
1130005063	106.4A-AL	7.45
1130005096	108A-AL	7.45
1130005115	109.5A-AL	7.45
1130005142	110A-AL	7.45
1130005183	112A-AL	7.45
1130005232	212.7-AL	7.55
1130005255	213.5-AL	7.55
1130005269	214-AL	7.55
1130005286	215-AL	7.55
1130005326	216-AL	7.55
1130005364	217.2-AL	7.55
1130005379	218-AL	7.55
1130005515	319-AL	9.10
1130005529	320-AL	9.10
1130005557	321.3-AL	9.10
1130005573	322-AL	9.10
1130005624	325-AL	9.10
1130005637	325.4-AL	9.10
1130005761	426.9-AL	10.10
1130005781	428-AL	10.10
1130005817	430-AL	10.10
1130005948	532-AL	15.60
1130005974	533.7-AL	15.60
1130005990	535-AL	15.60
1130006020	538-AL	15.60
1130006048	540-AL	15.60
1130006062	542-AL	15.60
1130010723	544.5-AL	15.60
1130003591	644.5-AL	21.25
1130003592	648.3-AL	21.25
1130003593	650.8-AL	21.25

PP-VK Clamp Body



(PP-VK) Polypropylene; Profiled Bore
Temperature Range (Clamp Body) -30°C ... +90°C

Item No.	Designation	Hole Size (mm)	Price
1130009637	540-36-PP-VK	40 x 36	5.00
1130006056	540-40-PP-VK	40 x 40	5.00

PP-VK shells used for the installation of proximity switches, sensors & pressure switches.

PP-VK

Typical Installation of mounting pressure and proximity switches

Proximity Switch Mounted

Pressure Switch Mounted

Order Codes

Clamp Assembly *4*06-*PP-R

One assembly consists of one clamp body and one insert.

* STAUFF Group	4
* Exact outside diameter Ø D (mm)	06
* Material code	PP-R

Clamp Body *4-*PP-R

One clamp body consists of two clamp halves.

* STAUFF Group	4
* Material code	PP-R

Elastomer Insert *RI-*06-*4/4S

* Elastomer Insert		RI
* Exact outside diameter Ø D (mm)		06
* STAUFF Group	4 (Standard) and 4S (Heavy)	4/4S
	6 (Standard) and 5S (Heavy)	6/5S

Order Codes

Clamp Body *2*12.7-*AL

One clamp body consists of two clamp halves.

* STAUFF Group	2
* Exact outside diameter Ø D1 (mm)	12.7
* Material code	Aluminium - AL

Order Codes

One clamp body consists of two clamp halves.

Clamp Body 540-40-PP-VK

Rectangular design with a square of 40 mm x 40 mm / 1.57 in x 1.57 in

Clamp Body 540-36-PP-VK

Rectangular design with a square of 40 mm x 36 mm / 1.57 in x 1.42 in

Standard Series Components

Weld Plate
Type SP

Item No.	Designation		Price
1120000850	SP-1-M-W3		1.55
1120001184	SP-1A-M-W3		2.25
1120001186	SP-2-M-W3		2.45
1120001188	SP-3-M-W3		2.55
1120001190	SP-4-M-W3	Steel	2.65
1120001192	SP-5-M-W3		2.75
1120001194	SP-6-M-W3		3.60
1120001196	SP-7-M-W3		4.50
1120001197	SP-8-M-W3		5.00
1120001001	SP-1-M-W5		13.30
1120001002	SP-1A-M-W5		19.80
1120000993	SP-2-M-W5		21.25
1120000994	SP-3-M-W5		22.60
1120001212	SP-4-M-W5	S/S	24.05
1120000598	SP-5-M-W5		24.05
1120001005	SP-6-M-W5		25.45
1120001216	SP-7-M-W5		42.20
1120001218	SP-8-M-W5		56.25

W3 = Carbon Steel, zinc/nickel-plated
W5 = Stainless Steel

SP-1 = One bolt required per clamp (Group 1)
SP-1A-8 = Two bolts required per clamp (Groups 1A-8)

Weld Plate
Elongated
Type SPV

Item No.	Designation		Price
1120001247	SPV-1-M-W3		2.45
1120001248	SPV-1A-M-W3		2.65
1120001249	SPV-2-M-W3		2.75
1120001250	SPV-3-M-W3		3.00
1120001251	SPV-4-M-W3	Steel	3.25
1120001252	SPV-5-M-W3		3.40
1120001253	SPV-6-M-W3		4.20
1120003968	SPV-7-M-W3		5.35
1120001254	SPV-8-M-W3		5.45
1120001261	SPV-1-M-W5		16.25
1120001263	SPV-1A-M-W5		16.95
1120001265	SPV-2-M-W5		19.80
1120001267	SPV-3-M-W5		21.25
1120001269	SPV-4-M-W5	S/S	26.80
1120001271	SPV-5-M-W5		31.00
1120001273	SPV-6-M-W5		33.80
1120001275	SPV-7-M-W5		49.20
1120001276	SPV-8-M-W5		75.85

W3 = Carbon Steel, zinc/nickel-plated
W5 = Stainless Steel

SPV-1 = One bolt required per clamp (Group 1)
SPV-1A-8 = Two bolts required per clamp (Groups 1A-8)

Group Weld Plate
Type RAP

Item No.	Designation	Spacing / Qty	Price
1120001336	RAP-1-31-10-M-W3	31/10	18.35
1120000474	RAP-1A-37-10-M-W3	37/10	25.45
1120001338	RAP-2-44-10-M-W3	44/10	21.25
1120001339	RAP-3-52-10-M-W3	52/10	24.05
1120001340	RAP-4-60-5-M-W3	60/5	25.45
1120001341	RAP-5-75-5-M-W3	75/5	28.25
1120001342	RAP-6-90-5-M-W3	90/5	31.00
1120000470	RAP-1A-37-10-M-W5	35/10	210.70
1120001351	RAP-2-44-10-M-W5	44/10	238.60
1120001352	RAP-3-52-10-M-W5	52/10	273.20
1120001353	RAP-4-60-5-M-W5	60/5	POA
1120001354	RAP-5-75-5-M-W5	75/5	POA
1120001355	RAP-6-90-5-M-W5	90/5	408.15

W3 = Carbon Steel, zinc/nickel-plated
W5 = Stainless Steel

RAP-1 = One bolt required per clamp (Group 1)
RAP-1A-6 = Two bolts required per clamp (Groups 1A-6)

Spacing /Qty e.g. 31/10
31 mm - Spacing (Tube centres)
10 - Quantity of Clamps

Aluminium Weld Plate
Type SP-...-W85

30% lighter than steel

Item No.	Designation	Price
1120023898	SP-1-M-W85	29.55
1120023899	SP-1A-M-W85	38.75
1120023900	SP-2-M-W85	39.55
1120023901	SP-3-M-W85	40.35
1120023902	SP-4-M-W85	41.05
1120023903	SP-5-M-W85	41.85
1120023904	SP-6-M-W85	42.65
1120023905	SP-7-M-W85	47.50
1120023921	SP-8-M-W85	48.80

W85 = Aluminium

SP-1 = One bolt required per clamp (Group 1)
SP-1A-8 = Two bolts required per clamp (Groups 1A-8)

Twin Weld Plate
Type DSP

Item No.	Designation		Price
1120001291	DSP-1-40-M-W3		3.25
1120001314	DSP-1A-40-M-W3		5.35
1120001293	DSP-2-44-M-W3		5.45
1120001294	DSP-3-52-M-W3	Steel	5.65
1120001295	DSP-4-60-M-W3		6.20
1120001296	DSP-5-75-M-W3		6.45
1120001297	DSP-6-90-M-W3		8.45
1120001319	DSP-1A-40-M-W5		36.60
1120001306	DSP-2-44-M-W5		45.00
1120001307	DSP-3-52-M-W5	S/S	47.80
1120001308	DSP-4-60-M-W5		49.20
1120001309	DSP-5-75-M-W5		52.05
1120001310	DSP-6-90-M-W5		59.00

W3 = Carbon Steel, zinc/nickel-plated
W5 = Stainless Steel

Two clamp mount per base plate clamp 1/40 e.g. Group/spacing between clamps in mm

DSP-1 = One bolt required per clamp (Group 1)
DSP-1A-6 = Two bolts required per clamp (Groups 1A-6)

Angled Weld Plate
Type WSP

Item No.	Designation		Price
1120001185	WSP-1A-M-W3		11.35
1120001187	WSP-2-M-W3		16.45
1120001189	WSP-3-M-W3	Steel	22.40
1120001191	WSP-4-M-W3		24.65
1120001193	WSP-5-M-W3		26.10

W3 = Carbon Steel, zinc/nickel-plated

WSP-1A-5 = Two bolts required per clamp (Groups 1A-5)

Hexagon Rail Nut
(for use with Mounting Rail TS)
Type SM / SMG

Item No.	Designation	Size		Price
1120001932	SM-1-8/1D-M-W3/3	M6	Steel	1.10
1120001941	SM-1-8/1D-M-W5	M6	S/S	18.35

W3 = Carbon Steel, zinc/nickel-plated
W5 = Stainless Steel

One required per clamp (Group 1)
Two required per clamp (Groups 1A-8)

Bridge Weld Plate
Type BSP

Item No.	Designation		Price
1120001148	BSP-1A-M-W3		24.05
1120001149	BSP-2-M-W3		25.45
1120001150	BSP-3-M-W3	Steel	28.25
1120003400	BSP-4-M-W3		32.40
1120003401	BSP-5-M-W3		35.20

W3 = Carbon Steel, zinc/nickel-plated

BSP-1A-5 = Two bolts required per clamp (Groups 1A-5)

Fastening Adaptor for Mounting Rails
(for use with Mounting Rail TS-14)
Type SWG-MRA

Item No.	Designation	Size	Price
6100024790	SWG-MRA-TS14-S-A	M6	4.75
6100024791	SWG-MRA-TS14-D-A	M6	7.85

S = End Piece
D = Intermediate Piece/Connector

Mounting Rail
(for use with Hexagon Rail Nut SM / SMG)
Type TS

Item No.	Designation	Profile Height		Price
1130004084	TS-11-2M-W98	11mm		22.60
1130004099	TS-14-2M-W98	14mm	Steel	24.05
1130004107	TS-30-2M-W98	30mm		26.80
1130004087	TS-11-2M-W5	11mm		175.45
1130004101	TS-14-2M-W5	14mm	S/S	217.35
1130019506	TS-30-1M-W5	30mm		140.30

W98 = Carbon Steel, hot-dip galvanised
W5 = Stainless Steel

Note: Order separate when ordering clamps with GMV rail nuts
Sold in 1 or 2 metre lengths, price is per length

Channel Rail Adapter
(for use with Various Channel Rails)
Type CRA

Item No.	Designation	Size		Price
1120000111	CRA-1-8/1D-M-W3	M6	Steel	5.75
1120000114	CRA-1-8/1D-M-W5	M6	S/S	26.80

W3 = Carbon Steel, zinc/nickel-plated
W5 = Stainless Steel

One required per clamp (Group 1)
Two required per clamp (Groups 1A-8)

Refer to page A38 for compatibility with types of channel rails and recommended bolt lengths

Standard Series Components

Cover Plate
Type DP

Item No.	Designation	Price
1130000255	DP-1-W3	0.85
1130000258	DP-1A-W3	0.85
1130000261	DP-2-W3	0.95
1130000264	DP-3-W3	0.95
1130000267	DP-4-W3	1.10
1130000269	DP-5-W3	1.10
1130000273	DP-6-W3	1.20
1130001501	DP-7-W3	3.60
1130001505	DP-8-W3	4.50
1130000256	DP-1-W5	2.55
1130000259	DP-1A-W5	4.20
1130000262	DP-2-W5	5.00
1130000265	DP-3-W5	5.95
1130000268	DP-4-W5	6.05
1130000271	DP-5-W5	7.75
1130000274	DP-6-W5	9.00
1130001498	DP-7-W5	16.25
1130001504	DP-8-W5	33.80

Steel / S/S

W3 = Carbon Steel, zinc/nickel-plated W5 = Stainless Steel

DP-1 = One bolt required per clamp (Group 1)
DP-1A-8 = Two bolts required per clamp (Groups 1A-8)

Safety Locking Plate
(for use with Stacking Bolt AF)
Type SIG

Item No.	Designation	Price
1130000480	SIG-1-W3	0.60
1130000438	SIG-1A-W3	0.60
1130000439	SIG-2-W3	0.60
1130000440	SIG-3-W3	0.60
1130000441	SIG-4-W3	0.70
1130000442	SIG-5-W3	0.85
1130000443	SIG-6-W3	0.95
1130004065	SIG-7-W3	2.45
1130004066	SIG-8-W3	3.25
1130000348	SIG-1A-W5	2.05
1130000351	SIG-2-W5	2.25
1130000354	SIG-3-W5	2.45
1130000357	SIG-4-W5	2.55
1130000360	SIG-5-W5	2.75
1130000363	SIG-6-W5	3.10
1130003810	SIG-7-W5	7.25
1130004068	SIG-8-W5	POA

Steel / S/S

W3 = Carbon Steel, zinc/nickel-plated W5 = Stainless Steel

SIG-1 = One bolt required per clamp (Group 1)
SIG-1A-8 = Two bolts required per clamp (Groups 1A-8)

Safety Washer
(for use with Hexagon Head Bolt AS)
Type SI (DIN 93 / 463)

Item No.	Designation	Grp	Price
1130004115	SI-6.4-DIN93-W3	1-8	0.60
1130031606	SI-6.4-DIN463-W3	1-8	1.40

W3 = Carbon Steel, zinc/nickel-plated

Safety washers are designed to lock Hexagon head bolts in place to prevent any movement (unscrewing) due to vibration or any other extreme conditions.

Slotted Head Screw
Type LI (with Washer)

Item No.	Designation	Grp	Price
1130003951	LI-M6x20-ISO1207-4.8-W3	1/1A	0.60
1130003952	LI-M6x25-ISO1207-4.8-W3	2	0.60
1130003953	LI-M6x30-ISO1207-4.8-W3	3	0.60
1130003954	LI-M6x35-ISO1207-4.8-W3	4	0.60
1130003955	LI-M6x50-ISO1207-4.8-W3	5	0.70
1130003956	LI-M6x60-ISO1207-4.8-W3	6	0.70

W3 = Carbon Steel, zinc/nickel-plated

One bolt required per clamp (Group 1)
Two bolts required per clamp (Groups 1A-6)

NEW

30% lighter than steel

Aluminium Cover Plate
Type DP-...-W85

Item No.	Designation	Price
1130032633	DP-1-W85	5.50
1130032634	DP-1A-W85	5.55
1130032635	DP-2-W85	5.70
1130032636	DP-3-W85	5.75
1130032637	DP-4-W85	5.95
1130032638	DP-5-W85	6.10
1130032639	DP-6-W85	6.25
1130032640	DP-7-W85	6.60
1130032641	DP-8-W85	7.20

W85 = Aluminium

DP-1 = One bolt required per clamp (Group 1)
DP-1A-8 = Two bolts required per clamp (Groups 1A-8)

Socket Head Cap Screw
Type IS (with Washer)

Item No.	Designation	Size	Price
1110032266	IS-1/1A/US-M-W3	M6x20	1.10
1110032268	IS-2/US-M-W3	M6x25	1.10
1110032270	IS-3/US-M-W3	M6x30	1.10
1110032272	IS-4/US-M-W3	M6x35	1.10
1110032274	IS-5/US-M-W3	M6x50	1.35
1110032276	IS-6/US-M-W3	M6x60	1.25
1110032278	IS-7/US-M-W3	M6x90	1.60
1110032280	IS-8/US-M-W3	M6x110	2.65
1110032267	IS-1/1A/US-M-W5	M6x20	3.45
1110032269	IS-2/US-M-W5	M6x25	3.70
1110032271	IS-3/US-M-W5	M6X30	3.80
1110032273	IS-4/US-M-W5	M6X35	5.20
1110032275	IS-5/US-M-W5	M6X50	5.05
1110032277	IS-6/US-M-W5	M6X60	6.35
1110032279	IS-7/US-M-W5	M6x90	9.00
1110032281	IS-8/US-M-W5	M6x110	6.35

W3 = Carbon Steel, zinc/nickel-plated W5 = Stainless Steel

One bolt required per clamp (Group 1)
Two bolts required per clamp (Groups 1A-8)

Hexagon Head Bolt
(for use with Cover Plate DP)
Type AS

Item No.	Designation	Grp	Price
1130004020	AS-M6x30-DIN931/933-8.8-W3	1/1A	0.65
1130004021	AS-M6x35-DIN931/933-8.8-W3	2	0.65
1130004022	AS-M6x40-DIN931/933-8.8-W3	3	0.65
1130004023	AS-M6x45-DIN931/933-8.8-W3	4	0.80
1130004024	AS-M6x60-DIN931/933-8.8-W3	5	0.80
1130004025	AS-M6x70-DIN931/933-8.8-W3	6	0.90
1130004026	AS-M6x100-DIN931/933-8.8-W3	7	1.05
1130004027	AS-M6x125-DIN931/933-8.8-W3	8	3.80
1130004035	AS-M6x30-DIN931/933-70-W5	1/1A	1.60
1130004036	AS-M6x35-DIN931/933-70-W5	2	1.80
1130004037	AS-M6x40-DIN931/933-70-W5	3	2.05
1130004038	AS-M6x45-DIN931/933-70-W5	4	2.35
1130004039	AS-M6x60-DIN931/933-70-W5	5	3.45
1130004040	AS-M6x70-DIN931/933-70-W5	6	4.45
1130004041	AS-M6x100-DIN931/933-70-W5	7	7.80
1130004042	AS-M6x125-DIN931/933-70-W5	8	10.55

W3 = Carbon Steel, zinc/nickel-plated W5 = Stainless Steel

AS-1 = One bolt required per clamp (Group 1)
AS-1A-8 = Two bolts required per clamp (Groups 1A-8)

Stacking Bolt
(use with Safety Locking Plate SIG)
Type AF

Item No.	Designation	Size	Price
1120003535	AF-1/1A/1D-M-W3	M6x20	1.70
1120003536	AF-2-M-W3	M6x25	1.90
1120003537	AF-3-M-W3	M6x30	2.15
1120003538	AF-4-M-W3	M6x35	2.25
1120003539	AF-5-M-W3	M6x50	2.75
1120003540	AF-6-M-W3	M6x60	4.35
1120003541	AF-7-M-W3	M6x65	4.60
1120003542	AF-8-M-W3	M6x110	5.35
1120003551	AF-1/1A/1D-M-W5	M6x20	13.75
1120003552	AF-2-M-W5	M6x25	13.90
1120003553	AF-3-M-W5	M6x30	14.25
1120003554	AF-4-M-W5	M6x35	14.85
1120003555	AF-5-M-W5	M6x50	14.85
1120003556	AF-6-M-W5	M6x60	16.25
1120003557	AF-7-M-W5	M6x65	22.60
1120003558	AF-8-M-W5	M6x110	POA

W3 = Carbon Steel, zinc/nickel-plated W5 = Stainless Steel

One bolt required per clamp (Group 1)
Two bolts required per clamp (Groups 1A-8)

Hexagon Head Bolt
(for EP & ES Inserts)
Type AS

Item No.	Designation	Grp	Price
1130004014	AS-M6x27-DIN931/933-8.8-W3	1/1A	0.55
1130004015	AS-M6x32-DIN931/933-8.8-W3	2	0.55
1130004021	AS-M6x35-DIN931/933-8.8-W3	3	0.65
1130004017	AS-M6x42-DIN931/933-8.8-W3	4	0.70
1130004018	AS-M6x57-DIN931/933-8.8-W3	5	0.80
1130004019	AS-M6x65-DIN931/933-8.8-W3	6	0.80

W3 = Carbon Steel, zinc/nickel-plated

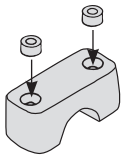
One bolt required per clamp (Group 1)
Two bolts required per clamp (Groups 1A-6)

Insert
(used in place of DP Cover Plates)
Type EP / ES

Item No.	Designation	Price
1130004114	EP	0.50
1130004113	ES-W3	0.60

Recommended with AS and IS SHCS

One bolt required per clamp (Group 1)
Two Bolts required per clamp (Groups 1A-8)
Suitable for all M6 Bolts



Example of EP & ES Inserts
EP = Plastic
ES-W3 = Carbon Steel, zinc/nickel-plated

Noise Reduction Clamp
Type NRC

Product Features

STAUFF NRC type clamps are designed for the noise and vibration reducing installation of pipes and tubes with the most common outside diameters between 6 and 42 mm and 1/4 to 1-1/2 inch respectively.

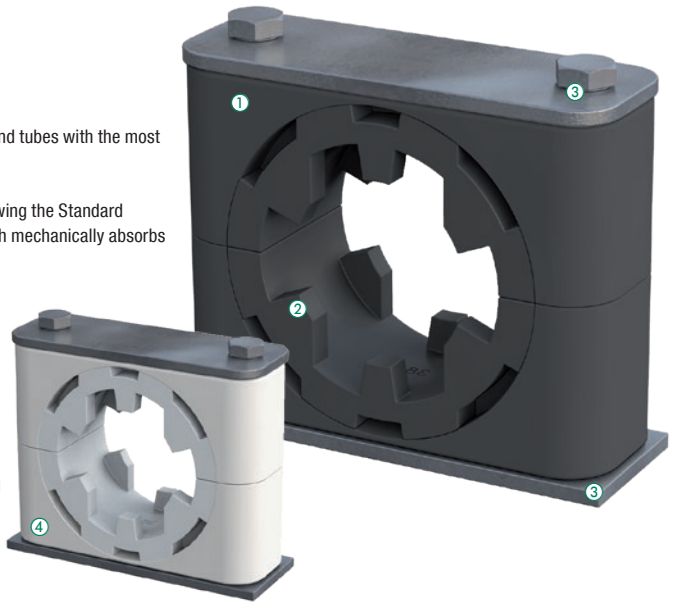
The working principle is based on clamp bodies ① made from Polypropylene (colour: black) following the Standard Series according to DIN 3015 (part 1) with a specially shaped, two-part elastomer insert ②, which mechanically absorbs vibrations in the pipe and as a result reduces noises arising to a minimum.

The insert is in particular distinguished by how little of its surface is in contact with the pipe and clamp body, and as a result is far more effective than the previously known solutions.

The tongue-groove contour of the insert and body, which is reversed and thus diverges from DIN 3015, enables the system to be used for the widest possible range of pipe diameters per clamp size, which contributes to flexibility and versatility.

STAUFF NRC Clamps are completely compatible with the commonly used steel and stainless steel mounting hardware ③, and if necessary can simply be replaced or retrofitted.

STAUFF also provides an alternative version ④ especially for use in safety-critical areas, which is made completely out of flame resistant materials according to international standards and directives, and meets the demanding requirements with regards to preventive fire protection.



Product Features

- Designed for the noise and vibration reducing installation of pipes and tubes
- Suitable for the most common outside diameters from 6 to 42 mm and from 1/4 to 1-1/2 inch respectively
- Working principle based on a specially shaped, two-part elastomer insert, which mechanically absorbs vibration in the pipe or tube and as a result, reduces noises arising to a minimum
- Elastomer insert is in particular distinguished by how little of its surface is in contact with the pipe or tube as well as with the clamp body
- Light tension of the elastomer insert in mounted condition provides the necessary clamping force
- Tongue-groove contour of the elastomer insert and the clamp body (which is reversed and thus diverges from standard DIN 3015 clamps with elastomer insert) enables the system to be used for the maximum range of outside diameters per clamp size, which contributes to flexibility, versatility and optimisation of the required installation space

Standard Materials

Polypropylene
Colour: Black
Material code: **PP-NRC**

Elastomer Insert
Thermoplastic Elastomer (73 Shore-A)
Colour: Black

Refer to pages A76 - A77 for material properties and technical information.

Typical Applications

Mobile and stationary machines in harbour and loading areas as well as municipal and commercial vehicles

- Reducing the overall level of noise emissions, especially in urban areas
- Improving occupational health and safety
- Contributing to building machinery that conforms to the Machinery Directive 2006/42/EC and the Outdoor Directive 2000/14/EC of the European Parliament and of the Council

Civil shipping, i.e. on cruise ships as well as yachts and sport boats

- Maximising flexibility with the design, layout and positioning of noise-intensive pipes and tubes (e.g. in close proximity to cabins or crew quarters)
- Making a great contribution to comfort and facilitating communication on board (e.g. for engine and control rooms)
- Reducing of underwater noise in order to protect the maritime environment

Noise Reduction Clamp
Type NRC

PP-NRC Clamp Body with Insert

(PP-NRC) Polypropylene Clamp Body & Insert
Temperature Range (Clamp Body) -40°C ... +125°C

Item No.	Designation	Price
6100056011	206-PP-NRC	27.70
6100056010	208-PP-NRC	27.70
6100056009	210-PP-NRC	27.70
6100056008	212-PP-NRC	27.70
6100056007	212.7-PP-NRC	27.70
6100056001	314-PP-NRC	29.05
6100056000	315-PP-NRC	29.05
6100055995	316-PP-NRC	29.05
6100055990	418-PP-NRC	31.00
6100055988	420-PP-NRC	31.00
6100055980	521.3-PP-NRC	31.95
6100055979	522-PP-NRC	31.95
6100055978	525-PP-NRC	31.95
6100055973	526.9-PP-NRC	31.95
6100055970	528-PP-NRC	31.95
6100055958	530-PP-NRC	31.95
6100055880	532-PP-NRC	31.95
6100055879	633.7-PP-NRC	32.95
6100055877	635-PP-NRC	32.95
6100055874	638-PP-NRC	32.95
6100055872	640-PP-NRC	32.95
6100055870	642-PP-NRC	32.95

PP-NRC Clamp Body

(PP-NRC) Polypropylene Clamp Body
Temperature Range (Clamp Body) -40°C ... +125°C

Item No.	Designation	Price
6100009980	2-PP-NRC	12.40
6100009981	3-PP-NRC	13.30
6100009982	4-PP-NRC	13.90
6100009983	5-PP-NRC	14.25
6100009984	6-PP-NRC	14.85

Order Codes

Clamp Assembly ***2*12-*PP-NRC**

One assembly consists of one clamp body and one insert.

* STAUFF Group	2
* Exact outside diameter Ø D1 (mm)	12
* Material code	PP-NRC

NRC Clamp Body ***2-*PP-NRC**

One NRC clamp body consists of two clamp halves.

* STAUFF Group	2
* Material code	PP-NRC

NRC Elastomer Insert ***RI-NRC-*12-*2**

One NRC elastomer insert consists of two insert halves.

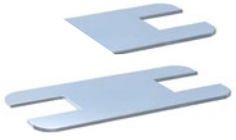
* NRC Elastomer Insert	RI-NRC
* Exact outside diameter ØD1 (mm)	12
* STAUFF Group	2

RI-NRC Elastomer Inserts

(RI-NRC) Elastomer Insert
Temperature Range (Insert) -40°C ... +125°C

Item No.	Designation	Price
1130033033	RI-NRC-6-2-SA73	15.30
1130033034	RI-NRC-8-2-SA73	15.30
1130033035	RI-NRC-10-2-SA73	15.30
1130033036	RI-NRC-12-2-SA73	15.30
1130033037	RI-NRC-12.7-2-SA73	15.30
1130033038	RI-NRC-14-3-SA73	15.75
1130033039	RI-NRC-15-3-SA73	15.75
1130033040	RI-NRC-16-3-SA73	15.75
1130033041	RI-NRC-18-4-SA73	17.10
1130033042	RI-NRC-20-4-SA73	17.10
6100025684	RI-NRC-21.3-5-SA73	17.70
1130033044	RI-NRC-22-5-SA73	17.70
1130033045	RI-NRC-25-SA73-5-SA73	17.70
1130033046	RI-NRC-26.9-5-SA73	17.70
1130033047	RI-NRC-28-5-SA73	17.70
1130033048	RI-NRC-30-5-SA73	17.70
1130033049	RI-NRC-32-5-SA73	17.70
1130033050	RI-NRC-33.7-6-SA73	18.10
1130033051	RI-NRC-35-6-SA73	18.10
1130033052	RI-NRC-38-6-SA73	18.10
1130033053	RI-NRC-40-6-SA73	18.10
1130033054	RI-NRC-42-6-SA73	18.10

Refer to pages A18 - A19 for Standard duty metal components

Type SP Weld Plate	**Type DP** Cover Plate	**Type AS** Hexagon Head Bolt	**Type SIG** Safety Locking Plate	**Type AF** Stacking Bolt
				
Page A18	Page A19	Page A19	Page A19	Page A19

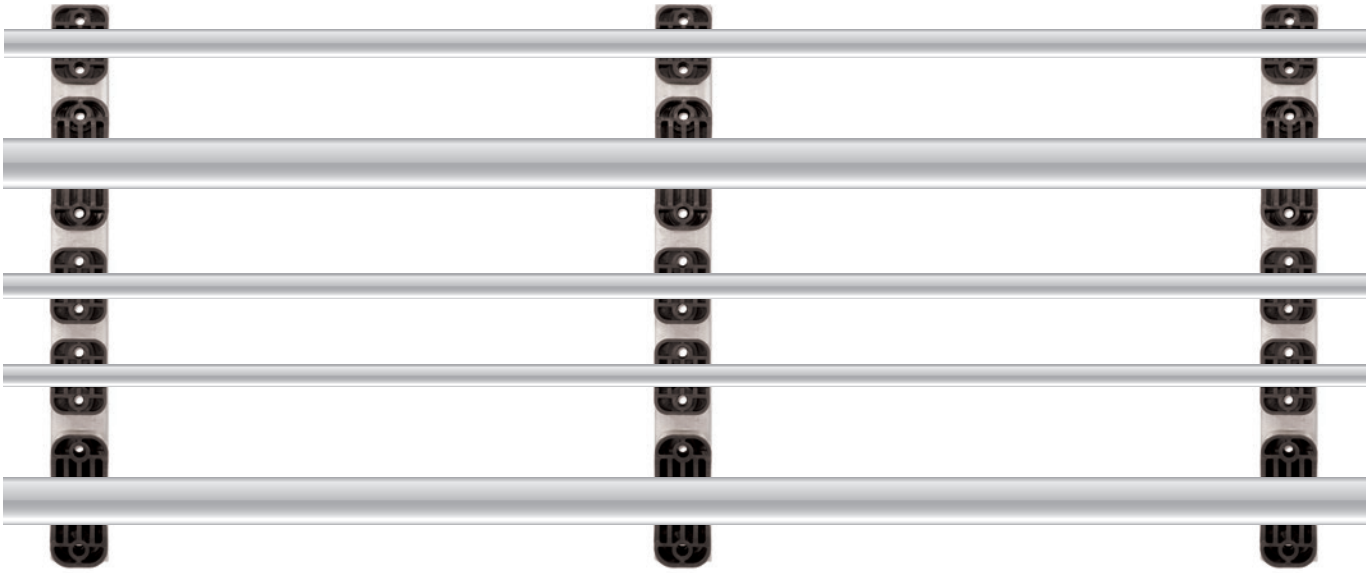
Example - Assembly Order Code

SP - 206 - PP-NRC - DP-AS - M - W3

Multi-Group Clamps and Weld Plates
Type MGR Clamp Body
Type RAP-MGR Weld Plates

Multi-Group Weld Plates (type RAP-MGR) are designed to be used in combination with Standard Series clamp bodies, STAUFF Group 2 (regular types - refer to page A16) covering a diameter range from 8 mm to 18 mm, as well as Standard Series clamp bodies, STAUFF Group 5 (type MGR) covering a diameter range from 20 mm to 42 mm. Thus, all Standard Series metal parts (bolts, cover plates) of these groups can be used.

Typical Installation



Multi-Group Weld Plate RAP-MGR-25-312-M-W1

Order Codes

Clamp Body *5*20-*PP-BK-MGR

One clamp body consists of two clamp halves.

* STAUFF Group		5
* Exact outside diameter Ø D1 (mm)		20
* Material code		PP-BK-MGR

Weld Plate *RAP-MGR-*25-*156-*M-*W1

* Multi-Group Weld Plate		RAP-MGR
* Suitable for STAUFF Group 2 and 5 (only type MGR)		25
* Length L4 (mm)	156 (with 6 weld nuts)	156
	234 (with 9 weld nuts)	234
	312 (with 12 weld nuts)	312
	390 (with 15 weld nuts)	390
	520 (with 20 weld nuts)	520
	700 (with 27 weld nuts)	700
* Thread code	Metric ISO thread	M
* Material code	Carbon Steel, uncoated	W1
	Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti)	W5

PP-BK-MGR Clamp Body

(PP-BK-MGR) Polypropylene Clamp Body
Temperature Range (Clamp Body) -40°C ... +125°C

Item No.	Designation	Price
1130022089	520-PP-BK-MGR	14.80
1130022091	522-PP-BK-MGR	46.45
1130022093	525-PP-BK-MGR	14.80
6100072879	526.9-PP-BK-MGR	46.45
1130022095	528-PP-BK-MGR	14.80
1130026948	530-PP-BK-MGR	46.45
1130022097	532-PP-BK-MGR	46.45
6100039036	533.7-PP-BK-MGR	46.45
1130022099	535-PP-BK-MGR	46.45
1130026931	538-PP-BK-MGR	46.45
1130022101	540-PP-BK-MGR	46.45
1130022102	542-PP-BK-MGR	46.45

Multi-Group Weld Plate Type RAP-MGR

Item No.	Designation	Price
1120020675	RAP-MGR-25-156-M-W1	129.80
1120020676	RAP-MGR-25-234-M-W1	194.15
1120020678	RAP-MGR-25-312-M-W1	204.70
1120020679	RAP-MGR-25-390-M-W1	302.80
1120020680	RAP-MGR-25-520-M-W1	337.60
1120020681	RAP-MGR-25-700-M-W1	390.35
6100104268	RAP-MGR-25-156-M-W5	410.40
6100104269	RAP-MGR-25-234-M-W5	448.40
1120023410	RAP-MGR-25-520-M-W5	582.40
1120023415	RAP-MGR-25-700-M-W5	675.20

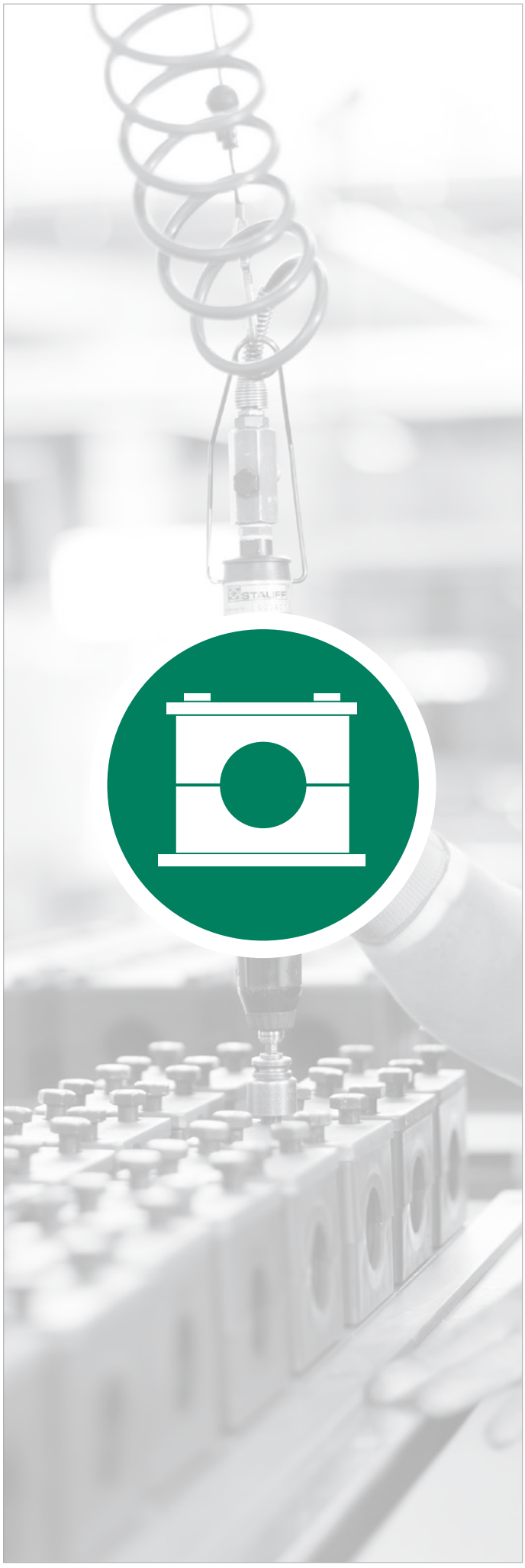
W1 = Carbon Steel, uncoated
W5 = Stainless Steel

Clamp Bore

	Outside Diameter Pipe / Tube Ø D1	Nominal Bore Pipe	Nominal Bore Copper Tube
	mm	in	in	in
Group 2 PP Shells	12			
	12.7	1/2		3/8
	13.5		1/4	
	14			
	15			
	16	5/8		1/2
	17.2		3/8	
	18			

Refer to page A16 for STAUFF Group 2 Clamp Body

	mm	in	in	in
Group 5 MGR Shells	20			
	22			3/4
	25			
	26.9		3/4	
	30			
	32	1-1/4		
	33.7		1	
	35			1-1/4
	38	1-1/2		
	40			
	42		1-1/4	



	Clamp Assemblies	**A24 - A35**
	Clamp Body Profiled Inside Surface with Tension Clearance	**A36**
	Clamp Body Smooth Inside Surface without Tension Clearance	**A36**
	Clamp Body with Elastomer Insert	**A37**
	Weld Plate for Single Clamps SPAL	**A38**
	Elongated Weld Plate for Single Clamps SPAL-DUEB	**A38**
	Weld Plate for Double Clamps SPAS	**A38**
	Mounting Rail Nut GMV	**A38**
	Channel Rail Adaptor CRA	**A38**
	Mounting Rail STSV	**A38**
	Cover Plate for Single Clamps DPAL	**A39**
	Cover Plate for Double Clamps DPAS	**A39**
	Safety Locking Plate SIP	**A39**
	Safety Washer (DIN 93) SI	**A39**
	Safety Washer (DIN 463) SI	**A39**
	Hexagon Head Bolt AS	**A39**
	Stacking Bolt AF	**A39**

SPAL - **3006** - **PP** - **DPAL-AS** - **M** - **W3**

① ② ③ ④ ⑤ ⑥

① Type of Installation

Please select the type of installation (e.g. Weld Plates, Rail Nuts etc.) and add the corresponding Code to position ① of the order code for your clamp assembly.

Without Installation Equipment
Code: **none**

Installation on Weld Plate

Weld Plate for Single Clamps
Code: **SPAL**

Weld Plate for Double Clamps
Code: **SPAS**

Elongated Weld Plate for Single Clamps
Code: **SPAL-DUEB**

Elongated Weld Plate for Double Clamps
Code: **SPAS-DUEB**

Installation on Mounting / Channel Rail

Mounting Rail Nut
Code: **GMV** (for STAUFF Group 3S to 6S only)

Channel Rail Adaptor
Code: **CRA** (for STAUFF Group 3S to 6S only)

② Group Size & Diameter

Please select the required group size and diameter and add the corresponding Code to position ② of the order code for your clamp assembly.

Group STAUFF (DIN)	Outside Diameter P / T / H (mm)	Availability of Clamp Body Materials & Designs Profiled Design	Type H	Type RI	Code
3S (1)	6	●	●	○	3006
	6.4	●	●	○	3006.4
	8	●	●	○	3008
	9.5	●	●	○	3009.5
	10	●	●	○	3010
	12	●	●	○	3012
	12.7	●	●	○	3012.7
	13.5	●	●	○	3013.5
	14	●	●	○	3014
	15	●	●	○	3015
	16	●	●	○	3016
	17.2	●	●	○	3017.2
	18	●	●	○	3018
	20	●	○	○	3020

② Group Size & Diameter
CONTINUATION

Group STAUFF (DIN)	Outside Diameter P / T / H (mm)	Availability of Clamp Body Materials & Designs Profiled Design	Type H	Type RI	Code
4S (2)	6	○	○	●	4006
	8	○	○	●	4008
	10	○	○	●	4010
	12	○	○	●	4012
	12.7	○	○	●	4012.7
	14	○	○	●	4014
	15	○	○	●	4015
	16	○	○	●	4016
	17.2	○	○	●	4017.2
	18	○	○	●	4018
	19	●	●	●	4019
	20	●	●	○	4020
	21.3	●	●	○	4021.3
	22	●	●	○	4022
	25	●	●	○	4025
	25.4	●	●	○	4025.4
	26.9	●	●	○	4026.9
	28	●	●	○	4028
	30	●	●	○	4030
5S (3)	20	○	○	●	5020
	21.3	○	○	●	5021.3
	22	○	○	●	5022
	25	○	○	●	5025
	26.9	○	○	●	5026.9
	28	○	○	●	5028
	30	●	●	●	5030
	32	●	●	●	5032
	33.7	●	●	○	5033.7
	35	●	●	○	5035
	38	●	●	○	5038
	40	●	●	○	5040
	41.3	●	●	○	5041.3
	42	●	●	○	5042
6S (4)	32	○	○	●	6032
	33.7	○	○	●	6033.7
	35	○	○	●	6035
	38	●	●	○	6038
	38.7	○	○	●	6038.7
	40	○	○	●	6040
	42	●	●	●	6042
	44.5	●	●	○	6044.5
	45.5	○	○	●	6045.5
	48	○	○	●	6048
	48.3	●	●	○	6048.3
	50.8	●	●	○	6050.8
	51	○	○	●	6051
	53.4	○	○	●	6053.4
	54	●	○	○	6054

② Group Size & Diameter
CONTINUATION

Group STAUFF (DIN)	Outside Diameter P / T / H (mm)	Availability of Clamp Body Materials & Designs Profiled Design	Type H	Type RI	Code
6S (4)	55	●	●	○	6055
	56.4	○	○	●	6056.4
	57	●	●	○	6057
	57.2	●	●	○	6057.2
	60.3	●	●	○	6060.3
	63.5	●	●	○	6063.5
	65	●	●	○	6065
	70	●	●	○	6070
7S (5)	55	○	○	●	7055
	57	○	○	●	7057
	60	○	○	●	7060
	60.3	●	○	○	7060.3
	63.5	○	○	●	7063.5
	65	●	○	●	7065
	70	●	○	●	7070
	72	○	○	●	7072
	73	●	○	○	7073
	75	●	○	○	7075
	76	○	○	●	7076
	76.1	●	○	○	7076.1
	80	●	○	○	7080
	82.5	●	○	○	7082.5
	88.9	●	○	○	7088.9
8S (6)	80	○	○	●	8080
	88.9	●	○	●	8088.9
	100	●	○	○	8100
	102	●	○	●	8102
	108	●	○	○	8108
	114	●	○	○	8114
	127	●	○	○	8127
	133	●	○	○	8133
9S (7)	114	○	○	●	9114
	127	●	○	○	9127
	133	●	○	●	9133
	140	●	○	●	9140
	152	●	○	○	9152
	159	●	○	○	9159
	165	●	○	○	9165
	168	●	○	○	9168
10S (8)	150	○	○	●	10150
	165	○	○	●	10165
	168	●	○	●	10168
	172	○	○	●	10172
	177.8	●	○	○	10177.8
	193.7	●	○	○	10193.7
	203	●	○	○	10203
	216	●	○	○	10216
	219	●	○	○	10219
11S (9)	219	●	○	○	11219
	273	●	○	○	11273
	324	●	○	○	11324
12S (10)	356	●	○	○	12356
	406	●	○	○	12406

● Standard Option

NEW Achieve a reduction in weight of clamps using Aluminium **W85** material components: **DPAL** - Cover Plate **Refer to page A39**

Refer to pages A26 and A27 with detailed order codes for the most popular Heavy Series clamp assemblies.

③ Clamp Body Design & Material

Please select the design and material of your clamp body and add the corresponding Code to position ③ of the order code for your clamp assembly.

Please check the availability of the selected clamp body design and material according to the matrix table in ②.

Profiled Design

Polypropylene
Code: **PP**

Polypropylene (Colour: Black)
Code: **PP-BK**

Polyamide
Code: **PA**

Thermoplastic Elastomer (87 Shore-A)
Code: **SA** (for STAUFF Group 3S to 6S only)

Aluminium
Code: **AL**

Type H (Smooth)

Polypropylene
Code: **PP-H** (for STAUFF Group 3S to 6S only)

Polypropylene (Colour: Black; 3S to 6S only)
Code: **PP-H-BK**

Polyamide
Code: **PA-H** (for STAUFF Group 3S to 6S only)

Thermoplastic Elastomer (87 Shore-A)
Code: **SA-H** (for STAUFF Group 3S to 6S only)

Type RI (with Elastomer Insert)

Polypropylene
Code: **PP-R** (for STAUFF Group 4S to 10S only)

Polyamide
Code: **PA-R** (for STAUFF Group 4S to 10S only)

Refer to pages A76 - A77 for material properties and technical information.

Contact STAUFF for further details on fire-proof clamp body materials, tested and approved according to several international fire-protection standards.

④ Mounting & Fitting Combination

Please select the mounting and fitting combination (e.g. bolts, screws, cover plates etc.) and add the corresponding Code to position ④ of the order code for your clamp assembly.

Installation with Cover Plate and Bolts

Cover Plate for Single Clamps DPAL with
Hexagon Head Bolts AS
Code: **DPAL-AS**

Cover Plate for Double Clamps DPAS with
Hexagon Head Bolts AS
Code: **DPAS-AS**

Installation with Locking Plate and Bolts

Safety Locking Plate SIP with
Stacking Bolts AF
Code: **SIP-AF**

⑤ Thread Type

Please select the required thread type and add the corresponding Code to position ⑤ of the order code for your clamp assembly.

Metric ISO thread
Code: **M**

All threaded parts are available with Metric ISO thread according to dimension table.

⑥ Material & Surface Finishing

Please select the required material & surface finishing of the metal parts and add the corresponding Code to position ⑥ of the order code for your clamp assembly.

Metal parts made of Carbon Steel, uncoated	**W1**
Metal parts made of Carbon Steel, phosphated	**W2**
Metal parts made of Carbon Steel, zinc/nickel-plated	**W3**
Metal parts made of Stainless Steel V2A 1.4301 / 1.4305 (AISI 304 / 303)	**W4**
Metal parts made of Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti)	**W5**
Weld Plate made of Carbon Steel, phosphated; Other metal parts made of Carbon Steel, zinc/nickel-plated	**W10**
Weld Plate and Cover Plate made of Carbon Steel, phosphated; Bolts made of Carbon Steel, uncoated	**W12**
Mounting Rail Nuts made of Carbon Steel, zinc/nickel-plated; Cover Plate made of Carbon Steel, phosphated; Bolts made of Carbon Steel, uncoated	**W13**
Weld Plate / Cover Plate made of Carbon Steel, phosphated; Bolts made of Carbon Steel, zinc/nickel-plated	**W15**
Mounting Rail Nuts made of Carbon Steel, zinc/nickel-plated; Cover Plate made of Carbon Steel, phosphated; Bolts made of Carbon Steel, zinc/nickel-plated	**W16**
Safety Locking Plate made of Carbon Steel, phosphated; Stacking Bolts made of Carbon Steel, zinc/nickel-plated	**W17**
Safety Locking Plate made of Carbon Steel, uncoated; Stacking Bolts made of Carbon Steel, phosphated	**W18**
Cover Plate made of Carbon Steel, phosphated; Bolts made of Carbon Steel, uncoated	**W19**
Metal parts made of Aluminium (only applies to components DPAL)	**W85**

Individual combinations of alternative materials and surface finishing are available upon request. Contact STAUFF for more information.

2x **Hexagon Head Bolt**
Surface: W1
Thread: Metric

1x **Cover Plate for Single Clamps**
Surface: W2

1x **Clamp Body** (two halves)
STAUFF Group 3S (DIN 1)
O.D. 6 mm / .24 in
Material: Polypropylene
Profiled inside surface with tension clearance

1x **Weld Plate for Single Clamps**
Surface: W2
Thread: Metric

Order Code

SPAL-3006-PP-DPAL-AS-M-W12

W12 (STAUFF Group 3S to 7S) and **W1** (STAUFF Group 8S to 12S)
are the standard options for this type of installation.

4x **Hexagon Head Bolt**
Surface: W1
Thread: Metric

1x **Cover Plate for Double Clamps**
Surface: W2

2x **Clamp Body** (four halves)
STAUFF Group 3S (DIN 1)
O.D. 6 mm / .24 in
Material: Polypropylene
Profiled inside surface with tension clearance

1x **Weld Plate for Double Clamps**
Surface: W2
Thread: Metric

Order Code

SPAS-3006-PP-DPAS-AS-M-W12

W12 (STAUFF Group 3S to 7S) and **W1** (STAUFF Group 8S to 12S)
are the standard options for this type of installation.

2x **Hexagon Head Bolt**
Surface: W1
Thread: Metric

1x **Cover Plate for Single Clamps**
Surface: W2

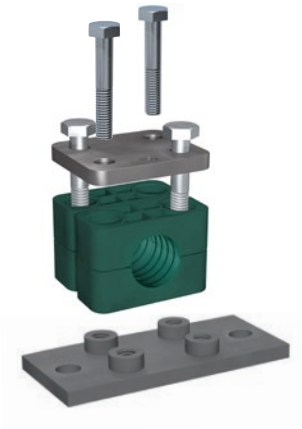
1x **Clamp Body** (two halves)
STAUFF Group 3S (DIN 1)
O.D. 6 mm / .24 in
Material: Polypropylene
Profiled inside surface with tension clearance

1x **Elongated Weld Plate for Single Clamps**
Surface: W2
Thread: Metric

Order Code

SPAL-DUEB-3006-PP-DPAL-AS-M-W12

W12 (STAUFF Group 3S to 7S) and **W1** (STAUFF Group 8S to 12S)
are the standard options for this type of installation.



4x **Hexagon Head Bolt**
Surface: W1
Thread: Metric

1x **Cover Plate for Double Clamps**
Surface: W2

2x **Clamp Body** (four halves)
STAUFF Group 3S (DIN 1)
O.D. 6 mm / .24 in
Material: Polypropylene
Profiled inside surface with tension clearance

1x **Elongated Weld Plate for Double Clamps**
Surface: W2
Thread: Metric

NEW

Order Code

SPAS-DUEB-3006-PP-DPAS-AS-M-W12

W12 (STAUFF Group 3S to 7S) and **W1** (STAUFF Group 8S to 12S)
are the standard options for this type of installation.

2x **Socket Cap Screw**
Surface: W1
Thread: Metric

1x **Clamp Body** (two halves)
STAUFF Group 3S (DIN 1)
O.D. 6 mm / .24 in
Material: Polypropylene
Profiled inside surface with tension clearance

1x **Weld Plate for Single Clamps**
Surface: W2
Thread: Metric

Order Code

SPAL-3006-PP-IS-M-W12

W12 is the standard option for this type of installation.
Available up to STAUFF Group 6S (DIN Group 4) only.

2x **Socket Cap Screw**
Surface: W1
Thread: Metric

1x **Clamp Body** (two halves)
STAUFF Group 3S (DIN 1)
O.D. 6 mm / .24 in
Material: Polypropylene
Profiled inside surface with tension clearance

1x **Elongated Weld Plate for Single Clamps**
Surface: W2
Thread: Metric

Order Code

SPAL-DUEB-3006-PP-IS-M-W12

W12 is the standard option for this type of installation.
Available up to STAUFF Group 6S (DIN Group 4) only.

2x **Hexagon Head Bolt**
Surface: W1
Thread: Metric

1x **Cover Plate for Single Clamps**
Surface: W2

1x **Clamp Body** (two halves)
STAUFF Group 3S (DIN 1)
O.D. 6 mm / .24 in
Material: Polypropylene
Profiled inside surface with tension clearance

2x **Mounting Rail Nut**
Surface: W3
Thread: Metric

Order Code (Mounting Rail STSV not included.)

GMV-3006-PP-DPAL-AS-M-W13

W13 is the standard option for this type of installation.
Available up to STAUFF Group 6S (DIN Group 4) only.

2x **Socket Cap Screw**
Surface: W1
Thread: Metric

1x **Clamp Body** (two halves)
STAUFF Group 3S (DIN 1)
O.D. 6 mm / .24 in
Material: Polypropylene
Profiled inside surface with tension clearance

2x **Mounting Rail Nut**
Surface: W3
Thread: Metric

Order Code (Mounting Rail STSV not included.)

GMV-3006-PP-IS-M-W13

W13 is the standard option for this type of installation.
Available up to STAUFF Group 6S (DIN Group 4) only.

2x **Hexagon Head Bolt**
Surface: W1
Thread: Metric

1x **Cover Plate for Single Clamps**
Surface: W2

1x **Clamp Body** (two halves)
STAUFF Group 3S (DIN 1)
O.D. 6 mm / .24 in
Material: Polypropylene
Profiled inside surface with tension clearance

Order Code

3006-PP-DPAL-AS-M-W19

W19 (STAUFF Group 3S to 7S) and **W1** (STAUFF Group 8S to 12S)
are the standard options for this type of installation.

2x **Stacking Bolt**
Surface: W2
Thread: Metric

1x **Safety Locking Plate**
Surface: W2

1x **Clamp Body** (two halves)
STAUFF Group 3S (DIN 1)
O.D. 6 mm / .24 in
Material: Polypropylene
Profiled inside surface with tension clearance

Order Code

3006-PP-SIP-AF-M-W2

W2 (STAUFF Group 3S to 7S) and **W18** (STAUFF Group 8S to 10S) are the standard options for this type of installation. Available up to STAUFF Group 10S (DIN Group 8) only.

Thread codes

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table.

Metric ISO thread	**M**

Material codes

The below listed material codes describe the materials and surface finishing of metal parts that are most relevant for Heavy Series clamp assemblies. Individual combinations of alternative materials and surface finishing are available upon request. Contact STAUFF for more information.

Metal parts made of Carbon Steel, uncoated	**W1**
Metal parts made of Carbon Steel, phosphated	**W2**
Metal parts made of Carbon Steel, zinc/nickel-plated	**W3**
Metal parts made of Stainless Steel V2A: 1.4301 / 1.4305 (AISI 304 / 303)	**W4**
Metal parts made of Stainless Steel V4A: 1.4401 / 1.4571 (AISI 316 / 316 Ti)	**W5**
Weld Plate made of Carbon Steel, phosphated; Other metal parts made of Carbon Steel, zinc/nickel-plated	**W10**
Weld Plate and Cover Plate made of Carbon Steel, phosphated; Bolts made of Carbon Steel, uncoated	**W12**
Mounting Rails Nut made of Carbon Steel, zinc/nickel-plated; Cover Plate made of Carbon Steel, phosphated; Bolts made of Carbon Steel, uncoated	**W13**
Weld Plate and Cover Plate made of Carbon Steel, phosphated; Bolts made of Carbon Steel, zinc/nickel-plated	**W15**
Mounting Rail Nuts made of Carbon Steel, zinc/nickel-plated; Cover Plate made of Carbon Steel, phosphated; Bolts made of Carbon Steel, zinc/nickel-plated	**W16**
Safety Locking Plate made of Carbon Steel, phosphated; Bolts made of Carbon Steel, zinc/nickel-plated	**W17**
Safety Locking Plate made of Carbon Steel, uncoated; Bolts made of Carbon Steel, phosphated	**W18**
Cover Plate made of Carbon Steel, phosphated; Bolts made of Carbon Steel, uncoated	**W19**
Metal parts made of Aluminium (only applies to components DP & SP)	**W85**

Polypropylene Clamp Body (PP) Profile Bore

W3 - Carbon Steel, zinc/nickel-plated
W1 - Unplated
Temperature Range (Clamp Body) -30°C ... +90°C

Group 3S

Item No.	Designation	Price
1110002665	SPAL-3006-PP-DPAL-AS-M-W3	12.60
1110027945	SPAL-3006.4-PP-DPAL-AS-M-W3	12.60
1110002666	SPAL-3008-PP-DPAL-AS-M-W3	12.60
1110027946	SPAL-3009.5-PP-DPAL-AS-M-W3	12.60
1110002667	SPAL-3010-PP-DPAL-AS-M-W3	12.60
1110002668	SPAL-3012-PP-DPAL-AS-M-W3	12.60
1110025013	SPAL-3012.7-PP-DPAL-AS-M-W3	12.60
1110033430	SPAL-3013.5-PP-DPAL-AS-M-W3	12.60
1110012787	SPAL-3014-PP-DPAL-AS-M-W3	12.60
1110002669	SPAL-3015-PP-DPAL-AS-M-W3	12.60
1110002670	SPAL-3016-PP-DPAL-AS-M-W3	12.60
1110006767	SPAL-3017.2-PP-DPAL-AS-M-W3	12.60
1110002671	SPAL-3018-PP-DPAL-AS-M-W3	12.60

Group 4S

Item No.	Designation	Price
1110002672	SPAL-4019-PP-DPAL-AS-M-W3	15.05
1110002673	SPAL-4020-PP-DPAL-AS-M-W3	15.05
1110002674	SPAL-4021.3-PP-DPAL-AS-M-W3	15.05
1110002675	SPAL-4022-PP-DPAL-AS-M-W3	15.05
1110002676	SPAL-4025-PP-DPAL-AS-M-W3	15.05
1110025014	SPAL-4025.4-PP-DPAL-AS-M-W3	15.05
1110002677	SPAL-4026.9-PP-DPAL-AS-M-W3	15.05
1110002678	SPAL-4028-PP-DPAL-AS-M-W3	15.05
1110002679	SPAL-4030-PP-DPAL-AS-M-W3	15.05

Group 5S

Item No.	Designation	Price
1110002680	SPAL-5030-PP-DPAL-AS-M-W3	17.50
1110002681	SPAL-5032-PP-DPAL-AS-M-W3	17.50
1110002682	SPAL-5033.7-PP-DPAL-AS-M-W3	17.50
1110002683	SPAL-5035-PP-DPAL-AS-M-W3	17.50
1110002684	SPAL-5038-PP-DPAL-AS-M-W3	17.50
1110002685	SPAL-5040-PP-DPAL-AS-M-W3	17.50
1110002686	SPAL-5042-PP-DPAL-AS-M-W3	17.50

Group 6S

Item No.	Designation	Price
1110005931	SPAL-6038-PP-DPAL-AS-M-W3	39.45
1110002687	SPAL-6042-PP-DPAL-AS-M-W3	39.45
1110026894	SPAL-6044.5-PP-DPAL-AS-M-W3	39.45
1110002688	SPAL-6048.3-PP-DPAL-AS-M-W3	39.45
1110002689	SPAL-6050.8-PP-DPAL-AS-M-W3	39.45
1110002690	SPAL-6055-PP-DPAL-AS-M-W3	39.45
1110026895	SPAL-6057-PP-DPAL-AS-M-W3	39.45
1110002691	SPAL-6060.3-PP-DPAL-AS-M-W3	39.45
1110002692	SPAL-6063.5-PP-DPAL-AS-M-W3	39.45
1110026814	SPAL-6065-PP-DPAL-AS-M-W3	39.45
1110028469	SPAL-6070-PP-DPAL-AS-M-W3	39.45

Group 7S

Item No.	Designation	Price
6100001261	SPAL-7065-PP-DPAL-AS-M-W3	92.00
1110009206	SPAL-7070-PP-DPAL-AS-M-W3	92.00
1110006483	SPAL-7073-PP-DPAL-AS-M-W3	92.00
1110002693	SPAL-7075-PP-DPAL-AS-M-W3	92.00
1110002694	SPAL-7076.1-PP-DPAL-AS-M-W3	92.00
1110002695	SPAL-7080-PP-DPAL-AS-M-W3	92.00
1110033431	SPAL-7082.5-PP-DPAL-AS-M-W3	92.00
1110002696	SPAL-7088.9-PP-DPAL-AS-M-W3	92.00

Group 8S

Item No.	Designation	Price
1110002594	SPAL-8088.9-PP-DPAL-AS-M-W1	197.15
1110002599	SPAL-8102-PP-DPAL-AS-M-W1	197.15
1110002600	SPAL-8108-PP-DPAL-AS-M-W1	197.15
1110002605	SPAL-8114-PP-DPAL-AS-M-W1	197.15
1110002610	SPAL-8127-PP-DPAL-AS-M-W1	197.15
1110002611	SPAL-8133-PP-DPAL-AS-M-W1	197.15

Additional sizes available on request

W5 - Stainless Steel
Temperature Range (Shell) -30°C ... +90°C

Group 3S

Item No.	Designation	Price
1110007543	SPAL-3006-PP-DPAL-AS-M-W5	92.60
1110015830	SPAL-3006.4-PP-DPAL-AS-W5	92.60
1110007793	SPAL-3008-PP-DPAL-AS-M-W5	92.60
1110033644	SPAL-3009.5-PP-DPAL-AS-M-W5	92.60
1110007435	SPAL-3010-PP-DPAL-AS-M-W5	92.60
1110006862	SPAL-3012-PP-DPAL-AS-M-W5	92.60
1110008085	SPAL-3012.7-PP-DPAL-AS-M-W5	92.60
1110026388	SPAL-3013.5-PP-DPAL-AS-M-W5	92.60
1110033645	SPAL-3014-PP-DPAL-AS-M-W5	92.60
1110007544	SPAL-3015-PP-DPAL-AS-M-W5	92.60
1110006413	SPAL-3016-PP-DPAL-AS-M-W5	92.60
1110014682	SPAL-3017.2-PP-DPAL-AS-M-W5	92.60
1110007794	SPAL-3018-PP-DPAL-AS-M-W5	92.60

Group 4S

Item No.	Designation	Price
1110008494	SPAL-4019-PP-DPAL-AS-M-W5	100.65
1110006472	SPAL-4020-PP-DPAL-AS-M-W5	100.65
1110008077	SPAL-4021.3-PP-DPAL-AS-M-W5	100.65
1110007436	SPAL-4022-PP-DPAL-AS-M-W5	100.65
1110005988	SPAL-4025-PP-DPAL-AS-M-W5	100.65
1110027522	SPAL-4025.4-PP-DPAL-AS-M-W5	100.65
1110006101	SPAL-4026.9-PP-DPAL-AS-M-W5	100.65
1110006102	SPAL-4028-PP-DPAL-AS-M-W5	100.65
1110006749	SPAL-4030-PP-DPAL-AS-M-W5	100.65

Group 5S

Item No.	Designation	Price
1110006809	SPAL-5030-PP-DPAL-AS-M-W5	112.55
1110007622	SPAL-5032-PP-DPAL-AS-M-W5	112.55
1110006863	SPAL-5033.7-PP-DPAL-AS-M-W5	112.55
1110006895	SPAL-5035-PP-DPAL-AS-M-W5	112.55
1110006971	SPAL-5038-PP-DPAL-AS-M-W5	112.55
1110015851	SPAL-5040-PP-DPAL-AS-W5	112.55
1110007795	SPAL-5042-PP-DPAL-AS-M-W5	112.55

Group 6S

Item No.	Designation	Price
1110015854	SPAL-6038-PP-DPAL-AS-M-W5	212.25
1110006195	SPAL-6042-PP-DPAL-AS-M-W5	212.25
1110033646	SPAL-6044.5-PP-DPAL-AS-M-W5	212.25
1110005989	SPAL-6048.3-PP-DPAL-AS-M-W5	212.25
1110013340	SPAL-6050.8-PP-DPAL-AS-M-W5	212.25
1110020128	SPAL-6055-PP-DPAL-AS-M-W5	212.25
1110007780	SPAL-6057-PP-DPAL-AS-M-W5	212.25
1110005842	SPAL-6060.3-PP-DPAL-AS-M-W5	212.25
1110006907	SPAL-6063.5-PP-DPAL-AS-M-W5	212.25
1110033647	SPAL-6065-PP-DPAL-AS-M-W5	212.25
1110007957	SPAL-6070-PP-DPAL-AS-M-W5	212.25

Group 7S

Item No.	Designation	Price
1110015747	SPAL-7065-PP-DPAL-AS-M-W5	418.50
1110007722	SPAL-7070-PP-DPAL-AS-M-W5	418.50
1110024400	SPAL-7073-PP-DPAL-AS-M-W5	418.50
1110025930	SPAL-7075-PP-DPAL-AS-M-W5	418.50
1110006999	SPAL-7076.1-PP-DPAL-AS-M-W5	418.50
1110015143	SPAL-7080-PP-DPAL-AS-M-W5	418.50
1110033648	SPAL-7082.5-PP-DPAL-AS-M-W5	418.50
1110005990	SPAL-7088.9-PP-DPAL-AS-M-W5	418.50

Group 8S

Item No.	Designation	Price
1110012999	SPAL-8088.9-PP-DPAL-AS-M-W5	1016.10
1110007448	SPAL-8102-PP-DPAL-AS-M-W5	1016.10
1110033649	SPAL-8108-PP-DPAL-AS-M-W5	1016.10
1110008072	SPAL-8114-PP-DPAL-AS-M-W5	1016.10
1110026380	SPAL-8127-PP-DPAL-AS-M-W5	1016.10
1110007692	SPAL-8133-PP-DPAL-AS-M-W5	1016.10

Additional sizes available on request

Clamp Bore

Outside Diameter Pipe / Tube Ø D1		Nominal Bore	
		Pipe	Copper Tube
mm	in	in	in
6			
6.4	1/4		
8	5/16		
9.5	3/8		1/4
10		1/8	
12			
12.7	1/2		3/8
13.5		1/4	
14			
15			
16	5/8		1/2
17.2		3/8	
18			

Group 3S

mm	in	in	in
19	3/4		
20			
21.3		1/2	
22			3/4
25			
25.4	1		
26.9		3/4	
28			
30			

Group 4S

mm	in	in	in
30			
32	1-1/4		
33.7		1	
35			1-1/4
38	1-1/2		
40			
42		1-1/4	

Group 5S

mm	in	in	in
38	1-1/2		
42		1-1/4	
44.5	1-3/4		
48.3		1-1/2	
50.8	2		
55			
57			
60.3		2	
63.5	2-1/2		
65			
70	2-3/4		

Group 6S

mm	in	in	in
65			
70	2-3/4		
73		2-1/2 (ANSI B 36-10)	
75			
76.1	3	2-1/2 (DIN EN 10220)	
80			
82.5			
88.9	3-1/2	3	

Group 7S

mm	in	in	in
88.9	3-1/2	3	
102	4	3-1/2	
108			
114	4-1/2	4	
127	5		
133			

Group 8S

Polyamide Clamp Body (PA) Profile Bore

W3 - Carbon Steel, zinc/nickel-plated
W1 - Unplated
Temperature Range (Clamp Body) -40°C ... +120°C

Group 3S

Item No.	Designation	Price
1110033444	SPAL-3006-PA-DPAL-AS-M-W3	16.25
1110033445	SPAL-3006.4-PA-DPAL-AS-M-W3	16.25
1110033446	SPAL-3008-PA-DPAL-AS-M-W3	16.25
1110033447	SPAL-3009.5-PA-DPAL-AS-M-W3	16.25
1110002841	SPAL-3010-PA-DPAL-AS-M-W3	16.25
1110002842	SPAL-3012-PA-DPAL-AS-M-W3	16.25
1110033448	SPAL-3012.7-PA-DPAL-AS-M-W3	16.25
1110033449	SPAL-3013.5-PA-DPAL-AS-M-W3	16.25
1110033450	SPAL-3014-PA-DPAL-AS-M-W3	16.25
1110033451	SPAL-3015-PA-DPAL-AS-M-W3	16.25
1110002843	SPAL-3016-PA-DPAL-AS-M-W3	16.25
1110033452	SPAL-3017.2-PA-DPAL-AS-M-W3	16.25
1110033453	SPAL-3018-PA-DPAL-AS-M-W3	16.25

Group 4S

Item No.	Designation	Price
1110033454	SPAL-4016-PA-DPAL-AS-M-W3	19.45
1110033455	SPAL-4019-PA-DPAL-AS-M-W3	19.45
1110002844	SPAL-4020-PA-DPAL-AS-M-W3	19.45
1110002845	SPAL-4021.3-PA-DPAL-AS-M-W3	19.45
1110033456	SPAL-4022-PA-DPAL-AS-M-W3	19.45
1110002846	SPAL-4025-PA-DPAL-AS-M-W3	19.45
1110033457	SPAL-4025.4-PA-DPAL-AS-M-W3	19.45
1110002848	SPAL-4026.9-PA-DPAL-AS-M-W3	19.45
1110002849	SPAL-4028-PA-DPAL-AS-M-W3	19.45
1110026900	SPAL-4030-PA-DPAL-AS-M-W3	19.45

Group 5S

Item No.	Designation	Price
1110002850	SPAL-5030-PA-DPAL-AS-M-W3	25.20
1110028991	SPAL-5032-PA-DPAL-AS-M-W3	25.20
1110002852	SPAL-5033.7-PA-DPAL-AS-M-W3	25.20
1110002853	SPAL-5035-PA-DPAL-AS-M-W3	25.20
1110002854	SPAL-5038-PA-DPAL-AS-M-W3	25.20
1110033458	SPAL-5040-PA-DPAL-AS-M-W3	25.20
1110002855	SPAL-5042-PA-DPAL-AS-M-W3	25.20

Group 6S

Item No.	Designation	Price
1110002857	SPAL-6042-PA-DPAL-AS-M-W3	56.55
1110002858	SPAL-6048.3-PA-DPAL-AS-M-W3	56.55
1110033459	SPAL-6050.8-PA-DPAL-AS-M-W3	56.55
1110002859	SPAL-6055-PA-DPAL-AS-M-W3	56.55
1110030533	SPAL-6057-PA-DPAL-AS-M-W3	56.55
1110002860	SPAL-6060.3-PA-DPAL-AS-M-W3	56.55
1110007088	SPAL-6063.5-PA-DPAL-AS-M-W3	56.55
1110002861	SPAL-6065-PA-DPAL-AS-M-W3	56.55

Group 7S

Item No.	Designation	Price
1110033460	SPAL-7070-PA-DPAL-AS-M-W3	119.95
1110005901	SPAL-7073-PA-DPAL-AS-M-W3	119.95
1110002862	SPAL-7076.1-PA-DPAL-AS-M-W3	119.95
1110002863	SPAL-7088.9-PA-DPAL-AS-M-W3	119.95

Group 8S

Item No.	Designation	Price
1110002817	SPAL-8088.9-PA-DPAL-AS-M-W1	270.00
1110002824	SPAL-8114-PA-DPAL-AS-M-W1	270.00

Additional sizes available on request

W5 - Stainless Steel
Temperature Range (Clamp Body) -40°C ... +120°C

Group 3S

Item No.	Designation	Price
1110008894	SPAL-3006-PA-DPAL-AS-M-W5	96.25
1110015829	SPAL-3006.4-PA-DPAL-AS-M-W5	96.25
1110008212	SPAL-3008-PA-DPAL-AS-M-W5	96.25
1110015832	SPAL-3009.5-PA-DPAL-AS-M-W5	96.25
1110008895	SPAL-3010-PA-DPAL-AS-M-W5	96.25
1110006063	SPAL-3012-PA-DPAL-AS-M-W5	96.25
1110015835	SPAL-3012.7-PA-DPAL-AS-W5	96.25
1110015836	SPAL-3013.5-PA-DPAL-AS-M-W5	96.25
1110015839	SPAL-3014-PA-DPAL-AS-M-W5	96.25
1110007852	SPAL-3015-PA-DPAL-AS-M-W5	96.25
1110007853	SPAL-3016-PA-DPAL-AS-M-W5	96.25
1110015841	SPAL-3017.2-PA-DPAL-AS-M-W5	96.25
1110015842	SPAL-3018-PA-DPAL-AS-M-W5	96.25

Group 4S

Item No.	Designation	Price
1110030507	SPAL-4016-PA-DPAL-AS-M-W5	105.05
1110015844	SPAL-4019-PA-DPAL-AS-M-W5	105.05
1110008896	SPAL-4020-PA-DPAL-AS-M-W5	105.05
1110021231	SPAL-4021.3-PA-DPAL-AS-M-W5	105.05
1110008897	SPAL-4022-PA-DPAL-AS-M-W5	105.05
1110008898	SPAL-4025-PA-DPAL-AS-M-W5	105.05
1110030077	SPAL-4025.4-PA-DPAL-AS-M-W5	105.05
1110020812	SPAL-4026.9-PA-DPAL-AS-M-W5	105.05
1110008899	SPAL-4028-PA-DPAL-AS-M-W5	105.05
1110007854	SPAL-4030-PA-DPAL-AS-M-W5	105.05

Group 5S

Item No.	Designation	Price
1110015848	SPAL-5030-PA-DPAL-AS-M-W5	120.25
1110015849	SPAL-5032-PA-DPAL-AS-M-W5	120.25
1110007693	SPAL-5033.7-PA-DPAL-AS-M-W5	120.25
1110007799	SPAL-5035-PA-DPAL-AS-M-W5	120.25
1110008900	SPAL-5038-PA-DPAL-AS-M-W5	120.25
1110015850	SPAL-5040-PA-DPAL-AS-M-W5	120.25
1110007694	SPAL-5042-PA-DPAL-AS-M-W5	120.25

Group 6S

Item No.	Designation	Price
1110014864	SPAL-6042-PA-DPAL-AS-M-W5	229.35
1110006647	SPAL-6048.3-PA-DPAL-AS-M-W5	229.35
1110006958	SPAL-6050.8-PA-DPAL-AS-M-W5	229.35
1110012530	SPAL-6055-PA-DPAL-AS-M-W5	229.35
1110015857	SPAL-6057-PA-DPAL-AS-M-W5	229.35
1110005900	SPAL-6060.3-PA-DPAL-AS-M-W5	229.35
1110015384	SPAL-6063.5-PA-DPAL-AS-M-W5	229.35
1110015858	SPAL-6065-PA-DPAL-AS-M-W5	229.35

Group 7S

Item No.	Designation	Price
1110030543	SPAL-7070-PA-DPAL-AS-M-W5	446.45
1110030545	SPAL-7073-PA-DPAL-AS-M-W5	446.45
1110007370	SPAL-7076.1-PA-DPAL-AS-M-W5	446.45
1110006953	SPAL-7088.9-PA-DPAL-AS-M-W5	446.45

Group 8S

Item No.	Designation	Price
1110006646	SPAL-8088.9-PA-DPAL-AS-M-W5	1088.95
1110006400	SPAL-8114-PA-DPAL-AS-M-W5	1088.95

Additional sizes available on request

PA material offers extended protection against UV

Clamp Bore

	Outside Diameter Pipe / Tube Ø D1	Nominal Bore	
		Pipe	Copper Tube
Group 3S	mm	in	in	in
	6			
	6.4	1/4		
	8	5/16		
	9.5	3/8		1/4
	10		1/8	
	12			
	12.7	1/2		3/8
	13.5		1/4	
	14			
	15			
	16	5/8		1/2
	17.2		3/8	
	18			
Group 4S	mm	in	in	in
	16			
	19	3/4		
	20			
	21.3		1/2	
	22			3/4
	25			
	25.4	1		
	26.9		3/4	
	28			
	30			
Group 5S	mm	in	in	in
	30			
	32	1-1/4		
	33.7		1	
	35			1-1/4
	38	1-1/2		
	40			
	42		1-1/4	
Group 6S	mm	in	in	in
	42		1-1/4	
	48.3		1-1/2	
	50.8	2		
	55			
	57			
	60.3		2	
	63.5	2-1/2		
	65			
Group 7S	mm	in	in	in
	70	2-3/4		
	73		2-1/2 (ANSI B 36-10)	
	76.1	3	2-1/2 (DIN EN 10220)	
	88.9	3-1/2	3	
Group 8S	mm	in	in	in
	88.9	3-1/2	3	
	114	4-1/2	4	

Polypropylene Clamp Body (PP-H) Smooth Bore

W3 - Carbon Steel, zinc/nickel-plated
Temperature Range (Clamp Body) -30°C ... +90°C

Group 3S

Item No.	Designation	Price
1110031170	SPAL-3006-PP-H-DPAL-AS-M-W3	17.10
1110031171	SPAL-3006.4-PP-H-DPAL-AS-M-W3	17.10
1110031172	SPAL-3008-PP-H-DPAL-AS-M-W3	17.10
1110031173	SPAL-3009.5-PP-H-DPAL-AS-M-W3	17.10
1110013733	SPAL-3012-PP-H-DPAL-AS-M-W3	17.10
1110031174	SPAL-3012.7-PP-H-DPAL-AS-M-W3	17.10
6100063512	SPAL-3013.5-PP-H-DPAL-AS-M-W3	17.10
1110031387	SPAL-3014-PP-H-DPAL-AS-M-W3	17.10
1110030501	SPAL-3015-PP-H-DPAL-AS-M-W3	17.10
1110009008	SPAL-3016-PP-H-DPAL-AS-M-W3	17.10
1110031389	SPAL-3017.2-PP-H-DPAL-AS-M-W3	17.10
1110030505	SPAL-3018-PP-H-DPAL-AS-M-W3	17.10

Group 4S

Item No.	Designation	Price
1110033432	SPAL-4019-PP-H-DPAL-AS-M-W3	20.40
1110022065	SPAL-4020-PP-H-DPAL-AS-M-W3	20.40
1110033433	SPAL-4021.3-PP-H-DPAL-AS-M-W3	20.40
1110031175	SPAL-4022-PP-H-DPAL-AS-M-W3	20.40
1110031391	SPAL-4023.3-PP-H-DPAL-AS-M-W3	20.40
1110008933	SPAL-4025-PP-H-DPAL-AS-M-W3	20.40
1110033434	SPAL-4025.4-PP-H-DPAL-AS-M-W3	20.40
1110033435	SPAL-4026.9-PP-H-DPAL-AS-M-W3	20.40
1110030516	SPAL-4028-PP-H-DPAL-AS-M-W3	20.40
1110033436	SPAL-4030-PP-H-DPAL-AS-M-W3	20.40

Group 5S

Item No.	Designation	Price
1110008975	SPAL-5030-PP-H-DPAL-AS-M-W3	24.15
1110033437	SPAL-5032-PP-H-DPAL-AS-M-W3	24.15
1110033438	SPAL-5033.7-PP-H-DPAL-AS-M-W3	24.15
1110033439	SPAL-5035-PP-H-DPAL-AS-M-W3	24.15
1110008974	SPAL-5038-PP-H-DPAL-AS-M-W3	24.15
6100044176	SPAL-5040-PP-H-DPAL-AS-M-W3	24.15
1110033440	SPAL-5042-PP-H-DPAL-AS-M-W3	24.15

Group 6S

Item No.	Designation	Price
1110031177	SPAL-6044.5-PP-H-DPAL-AS-M-W3	41.15
1110031393	SPAL-6047-PP-H-DPAL-AS-M-W3	41.15
1110031178	SPAL-6048.3-PP-H-DPAL-AS-M-W3	41.15
1110033441	SPAL-6050.8-PP-H-DPAL-AS-M-W3	41.15
1110031395	SPAL-6055-PP-H-DPAL-AS-M-W3	41.15
1110031179	SPAL-6057-PP-H-DPAL-AS-M-W3	41.15
1110013734	SPAL-6060.3-PP-H-DPAL-AS-M-W3	41.15
1110031180	SPAL-6063.5-PP-H-DPAL-AS-M-W3	41.15
1110033442	SPAL-6065-PP-H-DPAL-AS-M-W3	41.15
1110031181	SPAL-6070-PP-H-DPAL-AS-M-W3	41.15

Additional sizes available on request

W5 - Stainless Steel
Temperature Range (Clamp Body) -30°C ... +90°C

Group 3S

Item No.	Designation	Price
1110030490	SPAL-3006-PP-H-DPAL-AS-M-W5	97.10
1110030492	SPAL-3006.4-PP-H-DPAL-AS-M-W5	97.10
1110030494	SPAL-3008-PP-H-DPAL-AS-M-W5	97.10
1110030496	SPAL-3009.5-PP-H-DPAL-AS-M-W5	97.10
1110030497	SPAL-3012-PP-H-DPAL-AS-M-W5	97.10
1110030498	SPAL-3012.7-PP-H-DPAL-AS-M-W5	97.10
6100063513	SPAL-3013.5-PP-H-DPAL-AS-M-W5	97.10
1110031388	SPAL-3014-PP-H-DPAL-AS-M-W5	97.10
1110030502	SPAL-3015-PP-H-DPAL-AS-M-W5	97.10
1110030503	SPAL-3016-PP-H-DPAL-AS-M-W5	97.10
1110031390	SPAL-3017.2-PP-H-DPAL-AS-M-W5	97.10
1110030506	SPAL-3018-PP-H-DPAL-AS-M-W5	97.10

Group 4S

Item No.	Designation	Price
1110030509	SPAL-4019-PP-H-DPAL-AS-M-W5	106.00
1110030510	SPAL-4020-PP-H-DPAL-AS-M-W5	106.00
1110030511	SPAL-4021.3-PP-H-DPAL-AS-M-W5	106.00
1110030512	SPAL-4022-PP-H-DPAL-AS-M-W5	106.00
1110031392	SPAL-4023.3-PP-H-DPAL-AS-M-W5	106.00
1110029657	SPAL-4025-PP-H-DPAL-AS-M-W5	106.00
1110030514	SPAL-4025.4-PP-H-DPAL-AS-M-W5	106.00
1110030515	SPAL-4026.9-PP-H-DPAL-AS-M-W5	106.00
1110030517	SPAL-4028-PP-H-DPAL-AS-M-W5	106.00
1110030518	SPAL-4030-PP-H-DPAL-AS-M-W5	106.00

Group 5S

Item No.	Designation	Price
1110029658	SPAL-5030-PP-H-DPAL-AS-M-W5	119.20
1110030520	SPAL-5032-PP-H-DPAL-AS-M-W5	119.20
1110030521	SPAL-5033.7-PP-H-DPAL-AS-M-W5	119.20
1110030522	SPAL-5035-PP-H-DPAL-AS-M-W5	119.20
1110029659	SPAL-5038-PP-H-DPAL-AS-M-W5	119.20
1110030524	SPAL-5040-PP-H-DPAL-AS-M-W5	119.20
1110030525	SPAL-5042-PP-H-DPAL-AS-M-W5	119.20

Group 6S

Item No.	Designation	Price
1110030529	SPAL-6044.5-PP-H-DPAL-AS-M-W5	213.95
1110031394	SPAL-6047-PP-H-DPAL-AS-M-W5	213.95
1110030530	SPAL-6048.3-PP-H-DPAL-AS-M-W5	213.95
1110030532	SPAL-6050.8-PP-H-DPAL-AS-M-W5	213.95
1110031396	SPAL-6055-PP-H-DPAL-AS-M-W5	213.95
1110028914	SPAL-6057-PP-H-DPAL-AS-M-W5	213.95
1110030534	SPAL-6060.3-PP-H-DPAL-AS-M-W5	213.95
1110030536	SPAL-6063.5-PP-H-DPAL-AS-M-W5	213.95
1110030539	SPAL-6065-PP-H-DPAL-AS-M-W5	213.95
1110030540	SPAL-6070-PP-H-DPAL-AS-M-W5	213.95

Additional sizes available on request

Smooth Bore
Recommended for use on Hydraulic Hose

Clamp Bore

	Outside Diameter Pipe / Tube Ø D1		Nominal Bore	
			Pipe	Copper Tube
Group 3S	mm	in	in	in
	6			
	6.4	1/4		
	8	5/16		
	9.5	3/8		1/4
	12			
	12.7	1/2		3/8
	13.5			
	14			
	15			
	16	5/8		1/2
	17.2			
	18			
Group 4S	mm	in	in	in
	19	3/4		
	20			
	21.3		1/2	
	22			3/4
	23.3			
	25			
	25.4	1		
	26.9		3/4	
	28			
	30			
Group 5S	mm	in	in	in
	30			
	32	1-1/4		
	33.7		1	
	35			1-1/4
	38	1-1/2		
	40			
	42		1-1/4	
Group 6S	mm	in	in	in
	44.5	1-3/4		
	47			
	48.3		1-1/2	
	50.8	2		
	55			
	57			
	60.3		2	
	63.5	2-1/2		
	65			
	70	2-3/4		

Refer to pages A32 - A33 for Hydraulic Hose Clamp Assembly selection Guide

Heavy Series Clamps - Selection Guide for Hydraulic Hose

PP-H - Smooth Bore

			Hose Type				
			EN 853 1SN	EN 853 2SN	EN 854 R6	EN 855 R7	
	Hose I.D	Hose O.D	SAE 100 R1AT	SAE 100 R2AT	SAE 100 R6 1TE	SAE 100 R7 PL 7 / ZL 7	
Dash No.	in	mm	Designation	Designation	Designation	Designation	Price
-4	1/4	13.4	SPAL-3013.5-PP-H-DPAL-AS-M-W3				17.10
			SPAL-3013.5-PP-H-DPAL-AS-M-W5				97.10
-4	1/4	15		SPAL-3015-PP-H-DPAL-AS-M-W3			17.10
				SPAL-3015-PP-H-DPAL-AS-M-W5			97.10
-4	1/4	12.7			SPAL-3012.7-PP-H-DPAL-AS-M-W3		17.10
					SPAL-3012.7-PP-H-DPAL-AS-M-W5		97.10
-4	1/4	12.9				SPAL-3012.7-PP-H-DPAL-AS-M-W3	17.10
						SPAL-3012.7-PP-H-DPAL-AS-M-W5	97.10
-5	5/16	15	SPAL-3015-PP-H-DPAL-AS-M-W3				17.10
			SPAL-3015-PP-H-DPAL-AS-M-W5				97.10
-5	5/16	17.2		SPAL-3017.2-PP-H-DPAL-AS-M-W3			17.10
				SPAL-3017.2-PP-H-DPAL-AS-M-W5			97.10
-5	5/16	14.0			SPAL-3014-PP-H-DPAL-AS-M-W3		17.10
					SPAL-3014-PP-H-DPAL-AS-M-W5		97.10
-5	5/16	15.1				SPAL-3015-PP-H-DPAL-AS-M-W3	17.10
						SPAL-3015-PP-H-DPAL-AS-M-W5	97.10
-6	3/8	17.4	SPAL-3017.2-PP-H-DPAL-AS-M-W3				17.10
			SPAL-3017.2-PP-H-DPAL-AS-M-W5				97.10
-6	3/8	19.1		SPAL-4019-PP-H-DPAL-AS-M-W3			20.40
				SPAL-4019-PP-H-DPAL-AS-M-W5			106.00
-6	3/8	15.9			SPAL-3016-PP-H-DPAL-AS-M-W3		17.10
					SPAL-3016-PP-H-DPAL-AS-M-W5		97.10
-6	3/8	16.7				SPAL-3016-PP-H-DPAL-AS-M-W3	17.10
						SPAL-3016-PP-H-DPAL-AS-M-W5	97.10
-8	1/2	20.3	SPAL-4020-PP-H-DPAL-AS-M-W3				20.40
			SPAL-4020-PP-H-DPAL-AS-M-W5				106.00
-8	1/2	22.2		SPAL-4022-PP-H-DPAL-AS-M-W3			20.40
				SPAL-4022-PP-H-DPAL-AS-M-W5			106.00
-8	1/2	19.8			SPAL-4019-PP-H-DPAL-AS-M-W3		20.40
					SPAL-4019-PP-H-DPAL-AS-M-W5		106.00
-8	1/2	20.7				SPAL-4020-PP-H-DPAL-AS-M-W3	20.40
						SPAL-4020-PP-H-DPAL-AS-M-W5	106.00
-10	5/8	23.7	SPAL-4023.3-PP-H-DPAL-AS-M-W3				20.40
			SPAL-4023.3-PP-H-DPAL-AS-M-W5				106.00
-10	5/8	25.4		SPAL-4025.4-PP-H-DPAL-AS-M-W3			20.40
				SPAL-4025.4-PP-H-DPAL-AS-M-W5			106.00
-10	5/8	23.0			SPAL-4023.3-PP-H-DPAL-AS-M-W3		20.40
					SPAL-4023.3-PP-H-DPAL-AS-M-W5		106.00
-12	3/4	27.7	SPAL-4026.9-PP-H-DPAL-AS-M-W3				20.40
			SPAL-4026.9-PP-H-DPAL-AS-M-W5				106.00
-12	3/4	29.4		SPAL-4028-PP-H-DPAL-AS-M-W3			20.40
				SPAL-4028-PP-H-DPAL-AS-M-W5			106.00
-12	3/4	31.8			SPAL-5030-PP-H-DPAL-AS-M-W3		24.15
					SPAL-5030-PP-H-DPAL-AS-M-W5		119.20
-12	3/4	26.0				SPAL-4026.9-PP-H-DPAL-AS-M-W3	20.40
						SPAL-4026.9-PP-H-DPAL-AS-M-W5	106.00
-16	1	36.2	SPAL-5035-PP-H-DPAL-AS-M-W3				24.15
			SPAL-5035-PP-H-DPAL-AS-M-W5				119.20
-16	1	38.5		SPAL-5038-PP-H-DPAL-AS-M-W3			24.15
				SPAL-5038-PP-H-DPAL-AS-M-W5			119.20
-16	1	38			SPAL-5038-PP-H-DPAL-AS-M-W3		24.15
					SPAL-5038-PP-H-DPAL-AS-M-W5		119.20
-16	1	34.0				SPAL-5033.7-PP-H-DPAL-AS-M-W3	24.15
						SPAL-5033.7-PP-H-DPAL-AS-M-W5	119.20
-20	1-1/4	47.6	SPAL-6047-PP-H-DPAL-AS-M-W3				41.15
			SPAL-6047-PP-H-DPAL-AS-M-W5				213.95
-20	1-1/4	49.6		SPAL-6048.3-PP-H-DPAL-AS-M-W3			41.15
				SPAL-6048.3-PP-H-DPAL-AS-M-W5			213.95

W3 - Carbon Steel, zinc/nickel-plated
W5 - Stainless Steel

Refer to page A30 for Heavy Series PP-H Clamp Assembly Item No.
e.g. 1110030501 - SPAL-3015-PP-H-DPAL-AS-M-W3

Sizes may vary between hydraulic hose brands; check hose O.D. before selecting clamp assembly.

Heavy Series Clamps - Selection Guide for Hydraulic Hose

PP-H - Smooth Bore

Hose Type						
			EN 853 1SN	EN 853 2SN	EN 854 R6	
	Hose I.D	Hose O.D	SAE 100 R1AT	SAE 100 R2AT	SAE 100 R6 1TE	
Dash No.	in	mm	Designation	Designation	Designation	Price
-6	3/8	20.2	SPAL-4020-PP-H-DPAL-AS-M-W3			20.40
			SPAL-4020-PP-H-DPAL-AS-M-W5			106.00
-8	1/2	23.8	SPAL-4023.3-PP-H-DPAL-AS-M-W3			20.40
			SPAL-4023.3-PP-H-DPAL-AS-M-W5			106.00
-10	5/8	27.2	SPAL-4026.9-PP-H-DPAL-AS-M-W3			20.40
			SPAL-4026.9-PP-H-DPAL-AS-M-W5			106.00
-12	3/4	30.7	SPAL-5030-PP-H-DPAL-AS-M-W3			24.15
			SPAL-5030-PP-H-DPAL-AS-M-W5			119.20
-12	3/4	32.1		SPAL-5032-PP-H-DPAL-AS-M-W3		24.15
				SPAL-5032-PP-H-DPAL-AS-M-W5		119.20
-12	3/4	32			SPAL-5032-PP-H-DPAL-AS-M-W3	24.15
					SPAL-5032-PP-H-DPAL-AS-M-W5	119.20
-16	1	38	SPAL-5038-PP-H-DPAL-AS-M-W3			24.15
			SPAL-5038-PP-H-DPAL-AS-M-W5			119.20
-16	1	38.7		SPAL-5038-PP-H-DPAL-AS-M-W3		24.15
				SPAL-5038-PP-H-DPAL-AS-M-W5		119.20
-16	1	38.2			SPAL-5038-PP-H-DPAL-AS-M-W3	24.15
					SPAL-5038-PP-H-DPAL-AS-M-W5	119.20
-20	1-1/4	47	SPAL-6048.3-PP-H-DPAL-AS-M-W3			41.15
			SPAL-6048.3-PP-H-DPAL-AS-M-W5			213.95
-20	1-1/4	49.8		SPAL-6048.3-PP-H-DPAL-AS-M-W3		41.15
				SPAL-6048.3-PP-H-DPAL-AS-M-W5		213.95
-20	1-1/4	49.8			SPAL-6048.3-PP-H-DPAL-AS-M-W3	41.15
					SPAL-6048.3-PP-H-DPAL-AS-M-W5	213.95
-24	1-1/2	53.5	SPAL-6065-PP-H-DPAL-AS-M-W3			41.15
			SPAL-6065-PP-H-DPAL-AS-M-W5			213.95
-24	1-1/2	57.3		SPAL-6057-PP-H-DPAL-AS-M-W3		41.15
				SPAL-6057-PP-H-DPAL-AS-M-W5		213.95
-24	1-1/2	57.2			SPAL-6057-PP-H-DPAL-AS-M-W3	41.15
					SPAL-6057-PP-H-DPAL-AS-M-W5	213.95
-40	2	66.7	SPAL-6065-PP-H-DPAL-AS-M-W3			41.15
			SPAL-6065-PP-H-DPAL-AS-M-W5			213.95
-40	2	71.1		SPAL-6070-PP-H-DPAL-AS-M-W3		41.15
				SPAL-6070-PP-H-DPAL-AS-M-W5		213.95
-40	2	71.8			SPAL-6070-PP-H-DPAL-AS-M-W3	41.15
					SPAL-6070-PP-H-DPAL-AS-M-W5	213.95

W3 - Carbon Steel, zinc/nickel-plated
W5 - Stainless Steel

Refer to page A30 for Heavy Series PP-H Clamp Assembly Item No.
e.g. 1110030501 - SPAL-3015-PP-H-DPAL-AS-M-W3

Sizes may vary between hydraulic hose brands; check hose O.D. before selecting clamp assembly.
Contact STAUFF for more information.

Polypropylene Clamp Body with Elastomer Insert (PP-R)

W3 - Carbon Steel, zinc/nickel-plated
W1 - Unplated
Temperature Range (Clamp Body) -40°C ... +125°C

Group 4S

Item No.	Designation	Price
1110029452	SPAL-4006-PP-R-DPAL-AS-M-W3	25.30
1110029454	SPAL-4008-PP-R-DPAL-AS-M-W3	25.30
1110009205	SPAL-4010-PP-R-DPAL-AS-M-W3	25.30
1110006028	SPAL-4012-PP-R-DPAL-AS-M-W3	25.30
1110029534	SPAL-4012.7-PP-R-DPAL-AS-M-W3	25.30
1110029535	SPAL-4014-PP-R-DPAL-AS-M-W3	25.30
1110029536	SPAL-4015-PP-R-DPAL-AS-M-W3	25.30
1110006029	SPAL-4016-PP-R-DPAL-AS-M-W3	25.30
1110029537	SPAL-4017.2-PP-R-DPAL-AS-M-W3	25.30
1110006030	SPAL-4018-PP-R-DPAL-AS-M-W3	25.30
1110029538	SPAL-4019-PP-R-DPAL-AS-M-W3	25.30

Group 5S

Item No.	Designation	Price
1110006031	SPAL-5020-PP-R-DPAL-AS-M-W3	33.10
1110007158	SPAL-5021.3-PP-R-DPAL-AS-M-W3	33.10
1110006032	SPAL-5022-PP-R-DPAL-AS-M-W3	33.10
1110006033	SPAL-5025-PP-R-DPAL-AS-M-W3	33.10
1110033415	SPAL-5026.9-PP-R-DPAL-AS-M-W3	33.10
1110006034	SPAL-5028-PP-R-DPAL-AS-M-W3	33.10
1110009204	SPAL-5030-PP-R-DPAL-AS-M-W3	33.10
1110007803	SPAL-5032-PP-R-DPAL-AS-M-W3	33.10

Group 6S

Item No.	Designation	Price
1110029541	SPAL-6032-PP-R-DPAL-AS-M-W3	74.30
1110007159	SPAL-6033.7-PP-R-DPAL-AS-M-W3	74.30
1110033417	SPAL-6035-PP-R-DPAL-AS-M-W3	74.30
1110029544	SPAL-6038.7-PP-R-DPAL-AS-M-W3	74.30
1110029545	SPAL-6040-PP-R-DPAL-AS-M-W3	74.30
1110006036	SPAL-6042-PP-R-DPAL-AS-M-W3	74.30
1110029546	SPAL-6045.5-PP-R-DPAL-AS-M-W3	74.30
1110012788	SPAL-6048-PP-R-DPAL-AS-M-W3	74.30
1110033421	SPAL-6051-PP-R-DPAL-AS-M-W3	74.30
1110033422	SPAL-6053.4-PP-R-DPAL-AS-M-W3	74.30
1110029551	SPAL-6056.4-PP-R-DPAL-AS-M-W3	74.30

Group 7S

Item No.	Designation	Price
1110029553	SPAL-7057.2-PP-R-DPAL-AS-M-W3	139.70
1110009203	SPAL-7060-PP-R-DPAL-AS-M-W3	139.70
1110007180	SPAL-7065-PP-R-DPAL-AS-M-W3	139.70
1110029554	SPAL-7070-PP-R-DPAL-AS-M-W3	139.70
1110029555	SPAL-7072-PP-R-DPAL-AS-M-W3	139.70
1110009209	SPAL-7076-PP-R-DPAL-AS-M-W3	139.70

Group 8S

Item No.	Designation	Price
1110005975	SPAL-8080-PP-R-DPAL-AS-M-W1	449.25
1110003062	SPAL-8088.9-PP-R-DPAL-AS-M-W1	449.25

Additional sizes available on request

W5 - Stainless Steel

Temperature Range (Clamp Body) -40°C ... +125°C

Group 4S

Item No.	Designation	Price
1110029453	SPAL-4006-PP-R-DPAL-AS-M-W5	110.90
1110014663	SPAL-4008-PP-R-DPAL-AS-M-W5	110.90
1110014664	SPAL-4010-PP-R-DPAL-AS-M-W5	110.90
1110006038	SPAL-4012-PP-R-DPAL-AS-M-W5	110.90
1110031157	SPAL-4012.7-PP-R-DPAL-AS-M-W5	110.90
1110020438	SPAL-4014-PP-R-DPAL-AS-M-W5	110.90
1110014665	SPAL-4015-PP-R-DPAL-AS-M-W5	110.90
1110006039	SPAL-4016-PP-R-DPAL-AS-M-W5	110.90
1110031158	SPAL-4017.2-PP-R-DPAL-AS-M-W5	110.90
1110006040	SPAL-4018-PP-R-DPAL-AS-M-W5	110.90
1110031159	SPAL-4019-PP-R-DPAL-AS-M-W5	110.90

Group 5S

Item No.	Designation	Price
1110006186	SPAL-5020-PP-R-DPAL-AS-M-W5	128.15
1110024759	SPAL-5021.3-PP-R-DPAL-AS-M-W5	128.15
1110024712	SPAL-5022-PP-R-DPAL-AS-M-W5	128.15
1110006185	SPAL-5025-PP-R-DPAL-AS-M-W5	128.15
1110031161	SPAL-5026.9-PP-R-DPAL-AS-M-W5	128.15
1110014226	SPAL-5028-PP-R-DPAL-AS-M-W5	128.15
1110014666	SPAL-5030-PP-R-DPAL-AS-M-W5	128.15
1110031162	SPAL-5032-PP-R-DPAL-AS-M-W5	128.15

Group 6S

Item No.	Designation	Price
1110031163	SPAL-6032-PP-R-DPAL-AS-M-W5	247.10
1110014667	SPAL-6033.7-PP-R-DPAL-AS-M-W5	247.10
1110014668	SPAL-6035-PP-R-DPAL-AS-M-W5	247.10
1110031164	SPAL-6038.7-PP-R-DPAL-AS-M-W5	247.10
1110031165	SPAL-6040-PP-R-DPAL-AS-M-W5	247.10
1110013755	SPAL-6042-PP-R-DPAL-AS-M-W5	247.10
1110031166	SPAL-6045.5-PP-R-DPAL-AS-M-W5	247.10
1110014669	SPAL-6048-PP-R-DPAL-AS-M-W5	247.10
1110014670	SPAL-6051-PP-R-DPAL-AS-M-W5	247.10
1110013757	SPAL-6053.4-PP-R-DPAL-AS-M-W5	247.10
1110031167	SPAL-6056.4-PP-R-DPAL-AS-M-W5	247.10

Group 7S

Item No.	Designation	Price
1110031168	SPAL-7057.2-PP-R-DPAL-AS-M-W5	466.20
1110015569	SPAL-7060-PP-R-DPAL-AS-M-W5	466.20
1110022234	SPAL-7065-PP-R-DPAL-AS-M-W5	466.20
1110029558	SPAL-7070-PP-R-DPAL-AS-M-W5	466.20
1110031169	SPAL-7072-PP-R-DPAL-AS-M-W5	466.20
1110014118	SPAL-7076-PP-R-DPAL-AS-M-W5	466.20

Group 8S

Item No.	Designation	Price
1110029458	SPAL-8080-PP-R-DPAL-AS-M-W5	1268.20
1110028349	SPAL-8088.9-PP-R-DPAL-AS-M-W5	1268.20

Additional sizes available on request

Reduces Shock & Vibration

RI - Elastomer Insert
Thermoplastic Elastomer
Temperature Range -40°C ... +125°C
Shore Hardness 73A

Clamp Bore

Outside Diameter
Pipe / Tube / Hose
Ø D

	mm	in	NB
Group 4S	6		
	8	5/16	
	10		
	12		
	12.7	1/2	
	14		
	15		
	16	5/8	
	17.2		3/8
	18		
	19	3/4	

	mm	in	NB
Group 5S	20		
	21.3		1/2
	22	7/8	
	25		
	26.9		3/4
	28		
	30		
	32	1-1/4	

	mm	in	NB
Group 6S	32	1-1/4	
	33.7		1
	35		
	38.7		
	40		
	42		1-1/4
	45.5		
	48		
	51	2	
	53.4		
	56.4		

	mm	in	NB
Group 7S	57.2	2-1/4	
	60		2
	65		
	70		
	72		
	76	3	2-1/2

	mm	in	NB
Group 8S	80		
	88.9	3-1/2	3

Aluminium Clamp Body (AL) Profile Bore

W3 - Carbon Steel, zinc/nickel-plated
Temperature Range (Clamp Body) up to 300°C

Group 3S

Item No.	Designation	Price
1110033461	SPAL-3006.4-AL-DPAL-AS-M-W3	24.05
1110028450	SPAL-3008-AL-DPAL-AS-M-W3	24.05
1110033462	SPAL-3009.5-AL-DPAL-AS-M-W3	24.05
1110002989	SPAL-3010-AL-DPAL-AS-M-W3	24.05
1110006296	SPAL-3012-AL-DPAL-AS-M-W3	24.05
1110033463	SPAL-3012.7-AL-DPAL-AS-M-W3	24.05
1110033464	SPAL-3013.5-AL-DPAL-AS-M-W3	24.05
1110028297	SPAL-3015-AL-DPAL-AS-M-W3	24.05
1110002991	SPAL-3016-AL-DPAL-AS-M-W3	24.05
1110027870	SPAL-3017.2-AL-DPAL-AS-M-W3	24.05
1110006295	SPAL-3018-AL-DPAL-AS-M-W3	24.05

Group 4S

Item No.	Designation	Price
1110025007	SPAL-4019-AL-DPAL-AS-M-W3	30.35
1110006300	SPAL-4020-AL-DPAL-AS-M-W3	30.35
1110002992	SPAL-4021.3-AL-DPAL-AS-M-W3	30.35
1110006294	SPAL-4022-AL-DPAL-AS-M-W3	30.35
1110006297	SPAL-4025-AL-DPAL-AS-M-W3	30.35
1110025008	SPAL-4025.4-AL-DPAL-AS-M-W3	30.35
1110023771	SPAL-4026.9-AL-DPAL-AS-M-W3	30.35
1110025009	SPAL-4028-AL-DPAL-AS-M-W3	30.35
1110002993	SPAL-4030-AL-DPAL-AS-M-W3	30.35

Group 5S

Item No.	Designation	Price
1110025010	SPAL-5030-AL-DPAL-AS-M-W3	35.35
1110028502	SPAL-5032-AL-DPAL-AS-M-W3	35.35
1110002994	SPAL-5033.7-AL-DPAL-AS-M-W3	35.35
1110028503	SPAL-5035-AL-DPAL-AS-M-W3	35.35
1110006299	SPAL-5038-AL-DPAL-AS-M-W3	35.35
1110028452	SPAL-5040-AL-DPAL-AS-M-W3	35.35
1110007311	SPAL-5042-AL-DPAL-AS-M-W3	35.35

Group 6S

Item No.	Designation	Price
1110027869	SPAL-6038-AL-DPAL-AS-M-W3	90.20
1110007983	SPAL-6042-AL-DPAL-AS-M-W3	90.20
1110030527	SPAL-6044.5-AL-DPAL-AS-M-W3	90.20
1110006053	SPAL-6048.3-AL-DPAL-AS-M-W3	90.20
1110033465	SPAL-6050.8-AL-DPAL-AS-M-W3	90.20
1110031147	SPAL-6057-AL-DPAL-AS-M-W3	90.20
1110002995	SPAL-6060.3-AL-DPAL-AS-M-W3	90.20
1110033466	SPAL-6063.5-AL-DPAL-AS-M-W3	90.20
1110030537	SPAL-6065-AL-DPAL-AS-M-W3	90.20

Group 7S

Item No.	Designation	Price
1110030541	SPAL-7065-AL-DPAL-AS-M-W3	190.10
1110033468	SPAL-7073-AL-DPAL-AS-M-W3	190.10
1110007772	SPAL-7075-AL-DPAL-AS-M-W3	190.10
1110006298	SPAL-7076.1-AL-DPAL-AS-M-W3	190.10
1110002996	SPAL-7080-AL-DPAL-AS-M-W3	190.10
1110033469	SPAL-7085-AL-DPAL-AS-M-W3	190.10
1110002997	SPAL-7088.9-AL-DPAL-AS-M-W3	190.10

Additional sizes available on request

W5 - Stainless Steel
Temperature Range (Clamp Body) up to 300°C

Group 3S

Item No.	Designation	Price
1110030491	SPAL-3006.4-AL-DPAL-AS-M-W5	104.05
1110030493	SPAL-3008-AL-DPAL-AS-M-W5	104.05
1110030495	SPAL-3009.5-AL-DPAL-AS-M-W5	104.05
1110005790	SPAL-3010-AL-DPAL-AS-M-W5	104.05
1110003012	SPAL-3012-AL-DPAL-AS-M-W5	104.05
1110003013	SPAL-3012.7-AL-DPAL-AS-M-W5	104.05
1110030499	SPAL-3013.5-AL-DPAL-AS-M-W5	104.05
1110030500	SPAL-3015-AL-DPAL-AS-M-W5	104.05
1110005791	SPAL-3016-AL-DPAL-AS-M-W5	104.05
1110030504	SPAL-3017.2-AL-DPAL-AS-M-W5	104.05
1110008002	SPAL-3018-AL-DPAL-AS-M-W5	104.05

Group 4S

Item No.	Designation	Price
1110030508	SPAL-4019-AL-DPAL-AS-M-W5	115.95
1110005792	SPAL-4020-AL-DPAL-AS-M-W5	115.95
1110026464	SPAL-4021.3-AL-DPAL-AS-M-W5	115.95
1110005793	SPAL-4022-AL-DPAL-AS-M-W5	115.95
1110003014	SPAL-4025-AL-DPAL-AS-M-W5	115.95
1110030513	SPAL-4025.4-AL-DPAL-AS-M-W5	115.95
1110008376	SPAL-4026.9-AL-DPAL-AS-M-W5	115.95
1110015483	SPAL-4028-AL-DPAL-AS-M-W5	115.95
1110006970	SPAL-4030-AL-DPAL-AS-M-W5	115.95

Group 5S

Item No.	Designation	Price
1110005794	SPAL-5030-AL-DPAL-AS-M-W5	130.40
1110030519	SPAL-5032-AL-DPAL-AS-M-W5	130.40
1110006802	SPAL-5033.7-AL-DPAL-AS-M-W5	130.40
1110006155	SPAL-5035-AL-DPAL-AS-M-W5	130.40
1110005795	SPAL-5038-AL-DPAL-AS-M-W5	130.40
1110030523	SPAL-5040-AL-DPAL-AS-M-W5	130.40
1110008159	SPAL-5042-AL-DPAL-AS-M-W5	130.40

Group 6S

Item No.	Designation	Price
1110030526	SPAL-6038-AL-DPAL-AS-M-W5	263.00
1110005797	SPAL-6042-AL-DPAL-AS-M-W5	263.00
1110030528	SPAL-6044.5-AL-DPAL-AS-M-W5	263.00
1110003015	SPAL-6048.3-AL-DPAL-AS-M-W5	263.00
1110030531	SPAL-6050.8-AL-DPAL-AS-M-W5	263.00
1110023235	SPAL-6057-AL-DPAL-AS-M-W5	263.00
1110005798	SPAL-6060.3-AL-DPAL-AS-M-W5	263.00
1110030535	SPAL-6063.5-AL-DPAL-AS-M-W5	263.00
1110030538	SPAL-6065-AL-DPAL-AS-M-W5	263.00

Group 7S

Item No.	Designation	Price
1110030542	SPAL-7065-AL-DPAL-AS-M-W5	516.60
1110030544	SPAL-7073-AL-DPAL-AS-M-W5	516.60
1110030546	SPAL-7075-AL-DPAL-AS-M-W5	516.60
1110005799	SPAL-7076.1-AL-DPAL-AS-M-W5	516.60
1110030547	SPAL-7080-AL-DPAL-AS-M-W5	516.60
1110030548	SPAL-7085-AL-DPAL-AS-M-W5	516.60
1110003016	SPAL-7088.9-AL-DPAL-AS-M-W5	516.60

Additional sizes available on request

Suitable for High Temperature Installations

Clamp Bore

	Outside Diameter Pipe / Tube Ø D1		Nominal Bore	
			Pipe	Copper Tube
Group 3S	mm	in	in	in
	6.4	1/4		
	8	5/16		
	9.5	3/8		1/4
	10		1/8	
	12			
	12.7	1/2		3/8
	13.5		1/4	
	15			
	16	5/8		1/2
	17.2		3/8	
	18			
Group 4S	mm	in	in	in
	19	3/4		
	20			
	21.3		1/2	
	22			3/4
	25			
	25.4	1		
	26.9		3/4	
	28			
	30			
Group 5S	mm	in	in	in
	30			
	32	1-1/4		
	33.7		1	
	35			1-1/4
	38	1-1/2		
	40			
	42		1-1/4	
Group 6S	mm	in	in	in
	38	1-1/2		
	42		1-1/4	
	44.5	1-3/4		
	48.3		1-1/2	
	50.8	2		
	57			
	60.3		2	
	63.5	2-1/2		
	65			
Group 7S	mm	in	in	in
	65			
	73		2-1/2 (ANSI B 36-10)	
	75			
	76.1	3	2-1/2 (DIN EN 10220)	
	80			
	85			
	88.9	3-1/2	3	

Heavy Series Components

PP Clamp Body

(PP) Polypropylene - Profiled Bore
Temperature Range (Clamp Body) -30°C ... +90°C

Item No.	Designation	Price
1130005430	3006-PP	3.40
1130005433	3006.4-PP	3.40
1130005436	3008-PP	3.40
1130005439	3009.5-PP	3.40
1130005442	3010-PP	3.40
1130005447	3012-PP	3.40
1130005453	3012.7-PP	3.40
1130005459	3013.5-PP	3.40
1130005466	3014-PP	3.40
1130005471	3015-PP	3.40
1130005479	3016-PP	3.40
1130005485	3017.2-PP	3.40
1130005491	3018-PP	3.40
1130005680	4019-PP	4.50
1130005688	4020-PP	4.50
1130005699	4021.3-PP	4.50
1130005707	4022-PP	4.50
1130005718	4025-PP	4.50
1130005726	4025.4-PP	4.50
1130005733	4026.9-PP	4.50
1130005741	4028-PP	4.50
1130005748	4030-PP	4.50
1130005866	5030-PP	6.20
1130005875	5032-PP	6.20
1130005887	5033.7-PP	6.20
1130005897	5035-PP	6.20
1130005911	5038-PP	6.20
1130005925	5040-PP	6.20
1130005933	5042-PP	6.20
1130003097	6038-PP	13.90
1130003098	6040-PP	13.90
1130003101	6042-PP	13.90
1130003102	6044.5-PP	13.90
1130003103	6048.3-PP	13.90
1130003106	6050.8-PP	13.90
1130003108	6055-PP	13.90
1130003109	6057-PP	13.90
1130003113	6060.3-PP	13.90
1130003114	6063.5-PP	13.90
1130003115	6065-PP	13.90
1130003116	6070-PP	13.90
1130006183	7065-PP	40.85
1130006187	7070-PP	40.85
1130006191	7073-PP	40.85
1130006192	7075-PP	40.85
1130006196	7076.1-PP	40.85
1130006200	7080-PP	40.85
1130006203	7082.5-PP	40.85
1130006211	7088.9-PP	40.85
1130006240	8088.9-PP	67.45
1130006248	8102-PP	67.45
1130006252	8108-PP	67.45
1130006255	8114-PP	67.45
1130006659	8127-PP	67.45
1130006258	8133-PP	67.45
1130017542	9125-PP	108.10
1130006271	9127-PP	108.10
1130006274	9133-PP	108.10
1130006277	9140-PP	108.10
1130006278	9152-PP	108.10
1130006280	9159-PP	108.10
1130006284	9165-PP	108.10
1130006287	9168-PP	108.10
1130005046	10168-PP	185.45
1130006502	10177.8-PP	185.45
1130006510	10193.7-PP	185.45
1130005049	10216-PP	185.45
1130005052	10219-PP	185.45
1130005178	11219-PP	1580.80
1130005182	11273-PP	1580.80
1130005205	11324-PP	1580.80
1130005210	12356-PP	2437.45

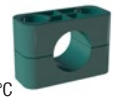
PA Clamp Body

Protected against UV

(PA) Polyamide - Profiled Bore
Temperature Range (Clamp Body) -40°C ... +120°C

Item No.	Designation	Price
1130005429	3006-PA	7.05
1130005432	3006.4-PA	7.05
1130005435	3008-PA	7.05
1130005438	3009.5-PA	7.05
1130005441	3010-PA	7.05
1130005446	3012-PA	7.05
1130005452	3012.7-PA	7.05
1130005457	3013.5-PA	7.05
1130005464	3014-PA	7.05
1130005469	3015-PA	7.05
1130005477	3016-PA	7.05
1130005484	3017.2-PA	7.05
1130005490	3018-PA	7.05
1130009554	4016-PA	8.90
1130005679	4019-PA	8.90
1130005685	4020-PA	8.90
1130005698	4021.3-PA	8.90
1130005705	4022-PA	8.90
1130005715	4025-PA	8.90
1130005725	4025.4-PA	8.90
1130005731	4026.9-PA	8.90
1130005739	4028-PA	8.90
1130005746	4030-PA	8.90
1130005864	5030-PA	13.90
1130005873	5032-PA	13.90
1130005886	5033.7-PA	13.90
1130005894	5035-PA	13.90
1130005907	5038-PA	13.90
1130005923	5040-PA	13.90
1130005932	5042-PA	13.90
1130003123	6042-PA	31.00
1130003125	6048.3-PA	31.00
1130003128	6050.8-PA	31.00
1130003130	6055-PA	31.00
1130003131	6057-PA	31.00
1130003135	6060.3-PA	31.00
1130003136	6063.5-PA	31.00
1130003137	6065-PA	31.00
1130006185	7070-PA	68.80
1130006190	7073-PA	68.80
1130006195	7076.1-PA	68.80
1130006210	7088.9-PA	68.80
1130006239	8088.9-PA	140.30
1130006254	8114-PA	140.30
1130006270	9127-PA	206.05
1130006276	9140-PA	206.05
1130009156	9152-PA	206.05
1130006286	9168-PA	206.05
1130005045	10168-PA	568.10
1130005051	10219-PA	568.10
1130005181	11273-PA	4117.70
1130005209	12356-PA	6933.65

PP-H Clamp Body



(PP-H) Polypropylene - Smooth Bore
Temperature Range (Clamp Body) -30°C ... +90°C

Item No.	Designation	Price
1130006536	3006-PP-H	7.90
1130019916	3006.4-PP-H	7.90
1130006537	3008-PP-H	7.90
1130019917	3009.5-PP-H	7.90
1130005443	3010-PP-H	7.90
1130005449	3012-PP-H	7.90
1130006539	3012.7-PP-H	7.90
1130005461	3013.5-PP-H	7.90
1130006540	3014-PP-H	7.90
1130005473	3015-PP-H	7.90
1130005481	3016-PP-H	7.90
1130005487	3017.2-PP-H	7.90
1130006542	3018-PP-H	7.90
1130009085	4019-PP-H	9.85
1130005691	4020-PP-H	9.85
1130005700	4021.3-PP-H	9.85
1130005709	4022-PP-H	9.85
1130032658	4023.3-PP-H	9.85
1130005722	4025-PP-H	9.85
1130012705	4025.4-PP-H	9.85
1130005734	4026.9-PP-H	9.85
1130005742	4028-PP-H	9.85
1130005750	4030-PP-H	9.85
1130005870	5030-PP-H	12.85
1130005879	5032-PP-H	12.85
1130005889	5033.7-PP-H	12.85
1130005901	5035-PP-H	12.85
1130005915	5038-PP-H	12.85
1130005928	5040-PP-H	12.85
1130005934	5042-PP-H	12.85
1130006104	6044.5-PP-H	15.60
1130006115	6048.3-PP-H	15.60
1130006125	6050.8-PP-H	15.60
1130006604	6055-PP-H	15.60
1130006138	6057-PP-H	15.60
1130006145	6060.3-PP-H	15.60
1130006613	6063.5-PP-H	15.60
1130006617	6065-PP-H	15.60
1130006160	6070-PP-H	15.60

Larger sizes are available on request.

PP-H Clamps are recommended for Hydraulic Hose Installations.
Refer to pages A32 - A33 for PP-H Hydraulic Hose selection table.

Order Codes

Clamp Body ***3*006.4-*PP**

One clamp body consists of two clamp halves.

* STAUFF Group	**3**
* Exact outside diameter Ø D1 (mm)	**006.4**
* Material code	**Polypropylene - PP** **Polyamide - PA**

Order Codes

Clamp Body ***3*006.4-*PP-H**

One clamp body consists of two clamp halves.

* STAUFF Group	**3**
* Exact outside diameter Ø D1 (mm)	**006.4**
* Material code	**PP-H**

Heavy Series Components

PP-R Clamp Body

(PP-R) Polypropylene Clamp Body & Insert
Temperature Range (Clamp Body) -40°C ... +125°C

Item No.	Designation	Price
1110008634	4006-PP-R	14.75
1110015234	4008-PP-R	14.75
1110003563	4010-PP-R	14.75
1110003564	4012-PP-R	14.75
1110003565	4012.7-PP-R	14.75
1110003566	4014-PP-R	14.75
1110003567	4015-PP-R	14.75
1110003568	4016-PP-R	14.75
1110003569	4017.2-PP-R	14.75
1110003570	4018-PP-R	14.75
1110003571	4019-PP-R	14.75
1110003572	5020-PP-R	21.80
1110003573	5021.3-PP-R	21.80
1110003574	5022-PP-R	21.80
1110003575	5025-PP-R	21.80
1110003576	5026.9-PP-R	21.80
1110003577	5028-PP-R	21.80
1110003578	5030-PP-R	21.80
1110003579	5032-PP-R	21.80
1110003581	6032-PP-R	48.75
1110003582	6033.7-PP-R	48.75
1110003583	6035-PP-R	48.75
1110003586	6038.7-PP-R	48.75
1110003587	6040-PP-R	48.75
1110003588	6042-PP-R	48.75
1110003589	6045.5-PP-R	48.75
1110003591	6048-PP-R	48.75
1110003593	6051-PP-R	48.75
1110003595	6053.4-PP-R	48.75
1110003597	6056.4-PP-R	48.75
1110003600	7057-PP-R	88.55
1110003601	7060-PP-R	88.55
1110003602	7065-PP-R	88.55
1110003605	7070-PP-R	88.55
1110003606	7072-PP-R	88.55
1110003608	7076-PP-R	88.55
1110003609	8080-PP-R	319.55
1110003610	8088.9-PP-R	319.55

RI - Elastomer Insert

Thermoplastic Elastomer
Temperature Range -40°C ... +125°C
Shore Hardness 73A

AL Clamp Body

(AL) Aluminium - Profiled Bore
Temperature Range (Clamp Body) up to 300°C

Item No.	Designation	Price
1130005431	3006.4-AL	14.85
1130005434	3008-AL	14.85
1130005437	3009.5-AL	14.85
1130005440	3010-AL	14.85
1130005444	3012-AL	14.85
1130005451	3012.7-AL	14.85
1130005455	3013.5-AL	14.85
1130005468	3015-AL	14.85
1130005476	3016-AL	14.85
1130005482	3017.2-AL	14.85
1130005489	3018-AL	14.85
1130005678	4019-AL	19.80
1130005683	4020-AL	19.80
1130005696	4021.3-AL	19.80
1130005704	4022-AL	19.80
1130005713	4025-AL	19.80
1130005724	4025.4-AL	19.80
1130005729	4026.9-AL	19.80
1130005738	4028-AL	19.80
1130005744	4030-AL	19.80
1130005862	5030-AL	24.05
1130005872	5032-AL	24.05
1130005884	5033.7-AL	24.05
1130005893	5035-AL	24.05
1130005906	5038-AL	24.05
1130005922	5040-AL	24.05
1130005931	5042-AL	24.05
1130006092	6038-AL	64.65
1130006097	6042-AL	64.65
1130006100	6044.5-AL	64.65
1130006113	6048.3-AL	64.65
1130006121	6050.8-AL	64.65
1130006136	6057-AL	64.65
1130006140	6060.3-AL	64.65
1130006148	6063.5-AL	64.65
1130006154	6065-AL	64.65
1130006158	6070-AL	64.65
1130011715	7065-AL	138.95
1130006189	7073-AL	138.95
1130006628	7075-AL	138.95
1130006193	7076.1-AL	138.95
1130006198	7080-AL	138.95
1130006632	7085-AL	138.95
1130006208	7088.9-AL	138.95
1130006238	8088.9-AL	363.40
1130006246	8102-AL	363.40
1130010303	8102.5-AL	363.40
1130006250	8108-AL	363.40
1130006253	8114-AL	363.40
1130006657	8127-AL	363.40
1130006272	9133-AL	429.25
1130012535	9141-AL	429.25
1130006285	9168-AL	429.25
1130010710	10190-AL	911.35
1130005050	10219-AL	911.35

Order Codes

Clamp Assembly — *4*006-*PP-R

One assembly consists of one clamp body and one insert.

* STAUFF Group	4
* Exact outside diameter Ø D (mm)	006
* Material code	PP-R

Clamp Body — *4-*PP-R

One clamp body consists of two clamp halves.

* STAUFF Group	4
* Material code	PP-R

Elastomer Insert — *RI-*06-*4/4S

* Elastomer Insert		RI
* Exact outside diameter Ø D (mm)		06
* STAUFF Group	4 (Standard) and 4S (Heavy)	4/4S
	6 (Standard) and 5S (Heavy)	6/5S

Order Codes

Clamp Body — *3*006.4-*AL

One clamp body consists of two clamp halves.

* STAUFF Group	3
* Exact outside diameter Ø D1 (mm)	006.4
* Material code	Aluminium - AL

Clamp Bore				
	Outside Diameter Pipe / Tube Ø D1		Nominal Bore	
			Pipe	Copper Tube
	mm	in	in	in
Group 3S	6			
	6.4	1/4		
	8	5/16		
	9.5	3/8		1/4
	10		1/8	
	12			
	12.7	1/2		3/8
	13.5		1/4	
	14			
	15			
	16	5/8		1/2
	17.2		3/8	
	18			
Group 4S	19	3/4		
	20			
	21.3		1/2	
	22			3/4
	25			
	25.4	1		
	26.9		3/4	
	28			
	30			
Group 5S	30			
	32	1-1/4		
	33.7		1	
	35			1-1/4
	38	1-1/2		
	40			
	42		1-1/4	
Group 6S	38	1-1/2		
	42		1-1/4	
	44.5	1-3/4		
	48.3		1 1/2	
	50.8	2		
	55			
	57			
	60.3		2	
	63.5	2-1/2		
	65			
	70	2-3/4		
Group 7S	65			
	70	2-3/4		
	73		2-1/2 (ANSI B 36-10)	
	75			
	76.1	3	2-1/2 (DIN EN 10220)	
	80			
	82.5			
	88.9	3-1/2	3	
Group 8S	88.9	3-1/2	3	
	102	4	3-1/2	
	108			
	114	4-1/2	4	
	127	5		
	133			
Group 9S	127	5		
	133			
	140		5	
	152	6		
	159			
	165			
	168		6	
Group 10S	168		6	
	177.8			
	193.7			
	216			
	219		8	
11S	219		8	
	273		10	
	324		12	
12S	356		14	

Heavy Series Components

Weld Plate for Single Clamps Type SPAL

Item No.	Designation		Price
1120001957	SPAL-3S-M-W3		5.35
1120001958	SPAL-4S-M-W3		6.20
1120001960	SPAL-5S-M-W3		6.45
1120001961	SPAL-6S-M-W3		15.60
6100212754	SPAL-7S-M-W3/2	Steel	28.25
1120022866	SPAL-8S-M-W1/2		61.80
1120022877	SPAL-9S-M-W1/2		84.30
1120000803	SPAL-10S-M-W1		257.85
1120000811	SPAL-11S-M-W1		1361.65
1120000819	SPAL-12S-M-W1		1653.90
1120001980	SPAL-3S-M-W5		60.35
1120001982	SPAL-4S-M-W5		63.25
1120001984	SPAL-5S-M-W5		67.45
1120001986	SPAL-6S-M-W5		108.10
1120001988	SPAL-7S-M-W5	S/S	180.60
1120022870	SPAL-8S-M-W5/2		434.55
1120022881	SPAL-9S-M-W5/2		967.10
1120000809	SPAL-10S-M-W5		2331.25
1120000817	SPAL-11S-M-W5		3590.20
1120000825	SPAL-12S-M-W5		POA

W3 = Carbon Steel, zinc/nickel-plated
W1 = Unplated Steel
W5 = Stainless Steel

Two bolts required per clamp (Groups 3S-12S)

Elongated Weld Plate for Single Clamps Type SPAL/DUEB

Item No.	Designation		Price
1120002012	SPAL-DUEB-3S-M-W3		11.50
1120002013	SPAL-DUEB-4S-M-W3		12.30
1120002014	SPAL-DUEB-5S-M-W3		14.25
1120002015	SPAL-DUEB-6S-M-W3		25.45
1120002016	SPAL-DUEB-7S-M-W3	Steel	42.20
1120000865	SPAL-DUEB-8S-M-W1		98.25
1120000885	SPAL-DUEB-9S-M-W1		126.30
1120000827	SPAL-DUEB-10S-M-W1		273.20
1120020848	SPAL-DUEB-11S-M-W1		1060.35
1120009161	SPAL-DUEB-12S-M-W1		POA
1120003693	SPAL-DUEB-3S-M-W5		98.25
1120003694	SPAL-DUEB-4S-M-W5		116.65
1120003695	SPAL-DUEB-5S-M-W5		137.10
1120003696	SPAL-DUEB-6S-M-W5		154.20
1120003697	SPAL-DUEB-7S-M-W5	S/S	266.50
1120000869	SPAL-DUEB-8S-M-W5		422.55
1120010031	SPAL-DUEB-9S-M-W5		626.45
1120000833	SPAL-DUEB-10S-M-W5		POA
6100014591	SPAL-DUEB-11S-M-W5		POA

W3 = Carbon Steel, zinc/nickel-plated
W1 = Unplated Steel
W5 = Stainless Steel

Two bolts required per clamp (Groups 3S-12S)

Weld Plate for Double Clamps Type SPAS

Item No.	Designation		Price
1120002000	SPAS-3S-M-W3		17.70
1120002001	SPAS-4S-M-W3		19.80
1120002002	SPAS-5S-M-W3		21.25
1120002003	SPAS-6S-M-W3		45.00
1120002004	SPAS-7S-M-W3	Steel	78.75
1120000860	SPAS-8S-M-W1		179.55
1120000880	SPAS-9S-M-W1		207.35
1120000778	SPAS-10S-M-W1		475.05
1120000786	SPAS-11S-M-W1		1726.95
1120000794	SPAS-12S-M-W1		2437.45
1120003928	SPAS-3S-M-W5		116.50
1120004815	SPAS-4S-M-W5		120.75
1120004833	SPAS-5S-M-W5		185.45
1120004858	SPAS-6S-M-W5		260.45
1120004206	SPAS-7S-M-W5	S/S	329.60
1120000864	SPAS-8S-M-W5		1592.65
1120000884	SPAS-9S-M-W5		POA
1120000784	SPAS-10S-M-W5		POA
1120000792	SPAS-11S-M-W5		POA

W3 = Carbon Steel, zinc/nickel-plated
W1 = Unplated Steel
W5 = Stainless Steel

Four bolts required per clamp (Groups 3S-12S)

Mounting Rail Nut
(for use with Mounting Rail STSV)
Type GMV

Item No.	Designation		Price
1130000075	GMV-3-5S-M-W3/2	Steel	5.75
1130000076	GMV-6S-M-W3/2		7.25
1130000600	GMV-3-5S-M-W5/2	S/S	28.25
1130000601	GMV-6S-M-W5/2		31.00

W3 = Carbon Steel, zinc/nickel-plated
W5 = Stainless Steel

Two bolts required per clamp (Groups 3S-12S)

Channel Rail Adaptor
(for use with Various Channel Rails)
Type CRA

Item No.	Designation	Size		Price
1120000235	CRA-3-5S-M-W3	M10	Steel	11.35
1120000962	CRA-6S-M-W3	M12		17.70
1120003383	CRA-3-5S-M-W5	M10	S/S	95.55
1120000238	CRA-6S-M-W5	M12		98.25

W3 = Carbon Steel, zinc/nickel-plated
W5 = Stainless Steel

Two bolts required per clamp (Groups 3S-12S)

Mounting Rail
(for use with Rail Nut GMV)
Type STSV

Item No.	Designation	Profile Height	Price
1130004264	STSV-2M-W32	22mm	81.60
1130004265	STSV-2M-W5	22mm	532.80

W32 = Carbon Steel, zinc-plated, blue-chromated
W5 = Stainless Steel

Note: Order separate when ordering clamps with GMV rail nuts
Sold in 2 metre lengths, price is per length

Recommended Bolt Lengths when using the Channel Rail Adaptor, Type CRA

Group STAUFF	Group DIN	Hexagon Head Bolts AS (used with Cover Plates DPAL or DPAS) Metric ISO thread	Socket Cap Screws IS (used without Cover Plates DPAL or DPAS) Metric ISO thread
3S	1	M10 x 40	M10 x 25
4S	2	M10 x 55	M10 x 40
5S	3	M10 x 65	M10 x 50
6S	4	M12 x 100	M12 x 75

Clamp assemblies including Channel Rail Adaptors, type CRA are supplied with the recommended bolt lengths by default. Refer to page A24 for more information on ordering.

Compatibility with Channel Rails

The STAUFF Channel Rail Adaptor, type CRA is suitable for various channel rails, including the following types:

HALFEN	HILTI	UNISTRUT®	STAUFF (Cushion Clamp Series)
HM 41/41	MQ-21, MQ-41, MQ-52, MQ-72	P1000, P1000T, P1000V, P1000VT, P1001	SCS-048-1-PL, SCS-048-1-GR
HZA 41/22	MQ-21U, MQ-41U, MQ-72U	P2000, P2000T	SCS-120-1-PL, SCS-120-1-GR
HZM 41/41	MQ-21D, MQ-41D, MQ-52-72D	P3003, P3003T, P3300V, P3300VT, P3301	
HZM 41/22		P4000, P4000T	
HL 41/41, HL 41/B2		P5000, P5000T, P5001, P5500, P5500T, P5501	

Contact STAUFF to check compatibility with additional types of channel rails.

Heavy Series Components

Cover Plate for Single Clamps Type DPAL

Item No.	Designation	Price
1130002873	DPAL-3S-W3	2.25
1130000711	DPAL-4S-W3	2.55
1130002875	DPAL-5S-W3	2.75
1130002876	DPAL-6S-W3	6.35
1130001877	DPAL-7S-W3	13.10
1130000726	DPAL-8S-W1	33.80
1130000730	DPAL-9S-W1	75.85
1130000734	DPAL-10S-W1	140.30
1130000738	DPAL-11S-W1	1005.00
1130000742	DPAL-12S-W1	1205.50
1130000709	DPAL-3S-W5	16.25
1130000713	DPAL-4S-W5	19.80
1130000717	DPAL-5S-W5	22.60
1130000721	DPAL-6S-W5	52.05
1130000725	DPAL-7S-W5	131.85
1130000729	DPAL-8S-W5	326.90
1130000733	DPAL-9S-W5	583.30
1130000737	DPAL-10S-W5	856.90
1130000741	DPAL-11S-W5	2191.40
1130000745	DPAL-12S-W5	POA

Steel / S/S

W3 = Carbon Steel, zinc/nickel-plated
W1 = Unplated Steel
W5 = Stainless Steel

Two bolts required per clamp (Groups 3S-12S)

Cover Plate for Double Clamps Type DPAS

Item No.	Designation	Price
1130000796	DPAS-3S-W3	5.35
1130000800	DPAS-4S-W3	6.45
1130000804	DPAS-5S-W3	7.05
1130000808	DPAS-6S-W3	19.10
1130000812	DPAS-7S-W3	38.05
1130000815	DPAS-8S-W1	81.60
1130000819	DPAS-9S-W1	124.90
1130000798	DPAS-3S-W5	94.60
1130000802	DPAS-4S-W5	101.60
1130000806	DPAS-5S-W5	118.40
1130000810	DPAS-6S-W5	136.95
1130000814	DPAS-7S-W5	182.10
1130000818	DPAS-8S-W5	1133.10
1130000822	DPAS-9S-W5	737.35

Steel / S/S

W3 = Carbon Steel, zinc/nickel-plated
W1 = Unplated Steel
W5 = Stainless Steel

Four bolts required per clamp (Groups 3S-12S)

Group 10S-12S sizes available on request

Safety Locking Plate

(for use with Stacking Bolt AF)

Item No.	Designation	Price
1130000077	SIP-3S-W3	4.50
1130000078	SIP-4S-W3	5.00
1130000079	SIP-5S-W3	5.35
1130000080	SIP-6S-W3	14.25
1130000847	SIP-7S-W3	26.80
1130000851	SIP-8S-W1	61.80
1130000854	SIP-9S-W1	77.25
1130000837	SIP-3S-W5	16.25
1130000840	SIP-4S-W5	24.05
1130000843	SIP-5S-W5	26.80
1130000846	SIP-6S-W5	40.85
1130000850	SIP-7S-W5	49.20
1130000853	SIP-8S-W5	652.10

Steel / S/S

W3 = Carbon Steel, zinc/nickel-plated
W1 = Unplated Steel
W5 = Stainless Steel

Two stacking bolts required per clamp (Groups 3S-12S)

Group 10S-12S sizes available on request

Aluminium Cover Plate Type DPAL-...-W85

30% lighter than steel

Item No.	Designation	Price
1130032592	DPAL-3S-W85	20.25
1130032593	DPAL-4S-W85	20.90
1130032594	DPAL-5S-W85	21.05

W85 = Aluminium

Two bolts required per clamp (Groups 3S-5S)

Safety Washer

(for use with Hexagon Head Bolt AS)

Type SI (DIN 93 / 463)

Item No.	Designation	Grp	Price
1130004266	SI-10.5-DIN93-W3	3S-5S	0.85
1130004267	SI-13-DIN93-W3	6S	0.75
1130004268	SI-17-DIN93-W3	7S	2.05
1130010336	SI-10.5-DIN463-W3	3S-5S	1.70
1130010529	SI-13-DIN463-W3	6S	2.15
1130010337	SI-17-DIN463-W3	7S	2.65

W3 = Carbon Steel, zinc/nickel-plated

STAUFF Advantage

Safety washers are designed to lock Hexagon head bolts in place to prevent any movement (unscrewing) due to vibration or any other extreme conditions.

Hexagon Head Bolt Type AS

Item No.	Designation	Grp	Price
1130004169	AS-M10x45-DIN931/933-8.8-W3	3S	0.80
1130004170	AS-M10x60-DIN931/933-8.8-W3	4S	0.90
1130004171	AS-M10x70-DIN931/933-8.8-W3	5S	1.05
1130004173	AS-M12x100-DIN931/933-8.8-W3	6S	1.80
1130004174	AS-M16x130-DIN931/933-8.8-W3	7S	4.90
1130004175	AS-M20x190-DIN931/933-8.8-W3	8S	17.05
1130004176	AS-M24x220-DIN931/933-8.8-W3	9S	28.55
1130004177	AS-M30x300-DIN931/933-8.8-W3	10S	63.75
1130004178	AS-M30x450-DIN931/933-8.8-W3	11S	185.60
1130004191	AS-M30x560-DIN931/933-8.8-W1	12S	206.05
1130004199	AS-M10x45-DIN931/933-70-W5	3S	6.30
1130004200	AS-M10x60-DIN931/933-70-W5	4S	6.55
1130004201	AS-M10x70-DIN931/933-70-W5	5S	8.15
1130004202	AS-M12x100-DIN931/933-70-W5	6S	19.10
1130004203	AS-M16x130-DIN931/933-70-W5	7S	32.60
1130004204	AS-M20x190-DIN931/933-70-W5	8S	93.60
1130004205	AS-M24x220-DIN931/933-70-W5	9S	109.80
1130007426	AS-M30x300-DIN931/933-70-W5	10S	212.70
1130008336	AS-M30x450-DIN931/933-70-W5	11S	850.60
1130017397	AS-M30x560-DIN931/933-70-W5	12S	POA

W3 = Carbon Steel, zinc/nickel-plated
W1 = Unplated Steel
W5 = Stainless Steel

Two bolts required per clamp (Groups 3S-12S)

Stacking Bolt

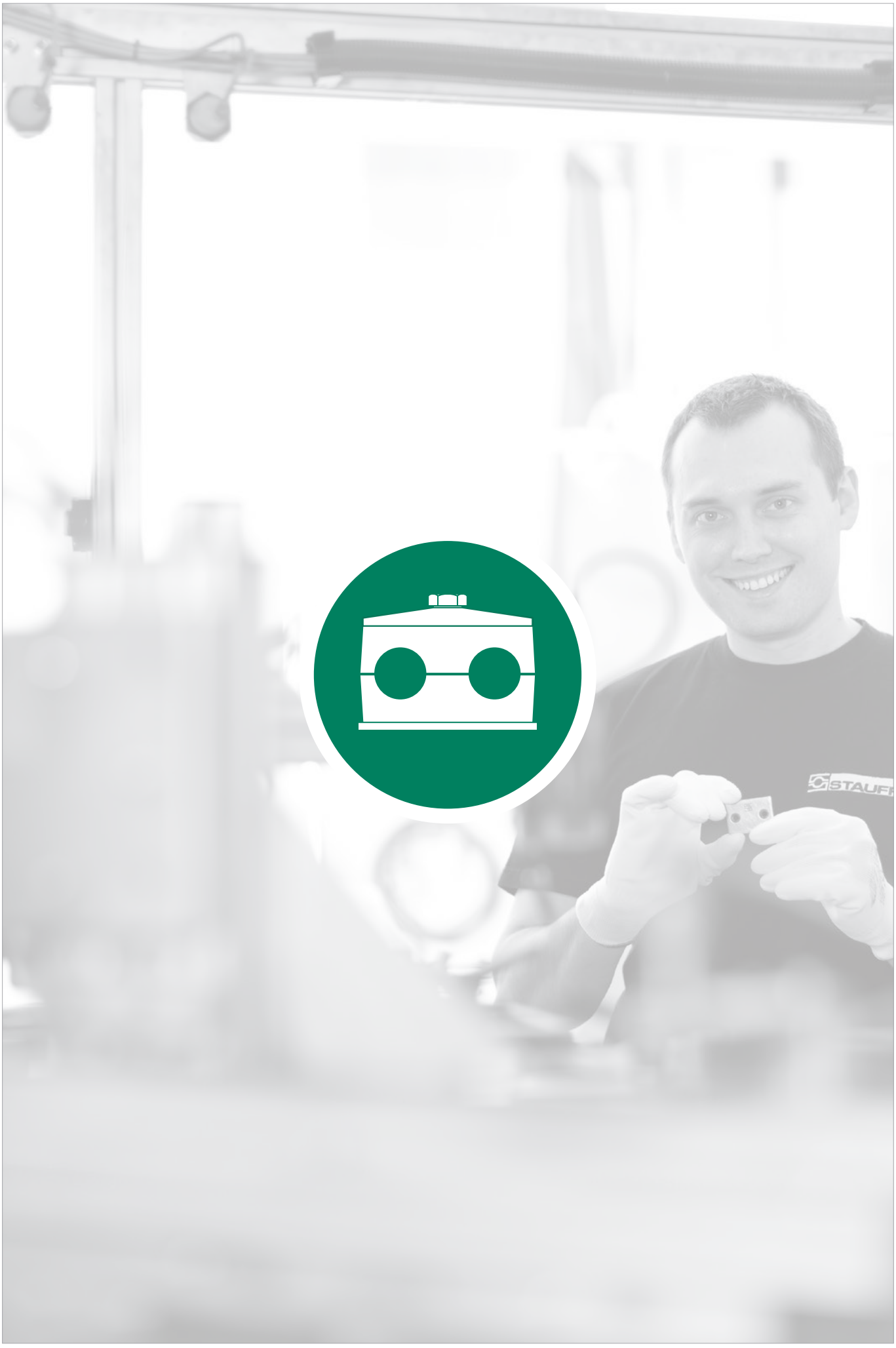
(for use with Safety Locking Plate SIP)

Type AF

Item No.	Designation	Size	Price/ea
1120003632	AF-3S-M-W3	M10x25	8.45
1120003633	AF-4S-M-W3	M10x40	8.60
1120003634	AF-5S-M-W3	M10x51	8.90
1120003635	AF-6S-M-W3	M12x82	10.90
1120003636	AF-7S-M-W3	M16x110	19.80
1120003637	AF-8S-M-W3	M20x150	52.05
1120003499	AF-9S-M-W2	M24x180	81.60
1120003507	AF-3S-M-W5	M10x25	40.85
1120003508	AF-4S-M-W5	M10x40	42.20
1120003509	AF-5S-M-W5	M10x51	45.00
1120003510	AF-6S-M-W5	M12x82	52.05
1120003511	AF-7S-M-W5	M16x110	105.90
1120003512	AF-8S-M-W5	M20x150	278.80
1120003513	AF-9S-M-W5	M24x180	POA

W3 = Carbon Steel, zinc/nickel-plated
W2 = Phosphated Steel
W5 = Stainless Steel

Two bolts required per clamp (Groups 3S-9S)



	Clamp Assemblies	**A42 - A47**
	Clamp Body Profiled Inside Surface with Tension Clearance	**A48**
	Clamp Body Smooth Inside Surface without Tension Clearance	**A48**
	Single Weld Plate SP	**A49**
	Group Weld Plate RAP	**A49**
	Hexagon Rail Nut SM / SMG	**A49**
	Channel Rail Adaptor CRA	**A49**
	Mounting Rail TS	**A49**
	Fastening Adaptor for Mounting Rails SWG-MRA	**A49**
	Cover Plate GD	**A49**
	Safety Locking Plate SI	**A49**
	Safety Locking Plate SIV	**A49**
	Hexagon Head Bolt AS	**A49**
	Stacking Bolt AF	**A49**

SP - **106/06** - **PP** - **GD-AS** - **M** - **W3**

① ② ③ ④ ⑤ ⑥

Refer to page A43 with detailed order codes for the most popular Twin Series clamp assemblies.

① Type of Installation

Please select the type of installation (e.g. weld plates, rail nuts, etc.) and add the corresponding Code to position ① of the order code for your clamp assembly.

Without Installation Equipment
Code: **none**

Installation on Weld Plate

Single Weld Plate
Code: **SP**

Group Weld Plate
Code: **RAP**

Installation on Mounting / Channel Rail

Mounting Rail Nut
Code: **SM** (Carbon Steel)
Code: **SMG** (Stainless Steel)

Channel Rail Adaptor
Code: **CRA**

② Group Size & Diameters

Please select the required group size and diameter and add the corresponding Code to position ② of the order code for your clamp assembly.

Group STAUFF (DIN)	Outside Diameter P / T / H (mm)	Availability of Clamp Body Materials & Designs: Profiled Design	Type H	Code
1D (1)	6	●	●	106/06
	6.4	●	●	106.4/06.4
	8	●	●	108/08
	9.5	●	●	109.5/09.5
	10	●	●	110/10
	12	●	●	112/12
2D (2)	12.7	●	●	212.7/12.7
	13.5	●	●	213.5/13.5
	14	●	●	214/14
	15	●	●	215/15
	16	●	●	216/16
	17.2	●	●	217.2/17.2
	18	●	●	218/18
3D (3)	19	●	●	319/19
	20	●	●	320/20
	21.3	●	●	321.3/21.3
	22	●	●	322/22
	25	●	●	325/25
	25.4	●	●	325.4/25.4
4D (4)	26.9	●	●	426.9/26.9
	28	●	●	428/28
	30	●	●	430/30
5D (5)	32	●	●	532/32
	33.7	●	●	533.7/33.7
	35	●	●	535/35
	38	●	●	538/38
	40	●	●	540/40
	42	●	●	542/42

● Standard Option

③ Clamp Body Design & Material

Please select the design and material of your clamp body and add the corresponding Code to position ③ of the order code for your clamp assembly.

Please check the availability of the selected clamp body design and material according to the matrix table in ②.

Profiled Design

Polypropylene
Code: **PP**

Polypropylene (Colour: Black)
Code: **PP-BK**

Polyamide
Code: **PA**

Type H (Smooth)

Polypropylene
Code: **PP-H**

Polypropylene (Colour: Black)
Code: **PP-H-BK**

Polyamide
Code: **PA-H**

Refer to pages A76 - A77 for material properties and technical information.

Contact STAUFF for further details on fire-proof clamp body materials, tested and approved according to several international fire-protection standards.

④ Mounting & Fitting Combination

Please select the mounting and fitting combination (e.g. Bolts, Cover Plates, etc.) and add the corresponding Code to position ④ of the order code for your clamp assembly.

Installation with Cover Plate and Bolt

Cover Plate GD with
Hexagon Head Bolt AS
Code: **GD-AS**

Cover Plate GD with
Socket Cap Screw IS
Code: **GD-IS**

Installation with Locking Plate and Bolt

Safety Locking Plate SI with
Stacking Bolt AF
Code: **SI-AF**

Safety Locking Plate SIV with
Stacking Bolt AF
Code: **SIV-AF** (for STAUFF Group 1D to 3D only)

⑤ Thread Type

Please select the required thread type and add the corresponding Code to position ⑤ of the order code for your clamp assembly.

Metric ISO thread
Code: **M**

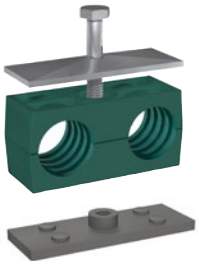
All threaded parts are available with Metric ISO thread according to dimension table.

⑥ Material & Surface Finishing

Please select the required material & surface finishing of the metal parts and add the corresponding Code to position ⑥ of the order code for your clamp assembly.

Metal parts made of Carbon Steel, zinc/nickel-plated	**W3**
Metal parts made of Stainless Steel V2A 1.4301 / 1.4305 (AISI 304 / 303)	**W4**
Metal parts made of Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti)	**W5**
Weld Plate made of Carbon Steel, phosphated; Other metal parts made of Carbon Steel, zinc/nickel-plated	**W10**

Individual combinations of alternative materials and surface finishing are available upon request. Contact STAUFF for more information.



1x **Hexagon Head Bolt**
Surface: W3
Thread: Metric

1x **Cover Plate**
Surface: W3

1x **Clamp Body** (two halves)
STAUFF Group 1D (DIN 1)
both O.D. 6 mm / .24 in
Material: Polypropylene
Profiled inside surface
with tension clearance

1x **Weld Plate**
Surface: W2
Thread: Metric

Order Code

SP-106/06-PP-GD-AS-M-W10

W10 is the standard option for this type of installation.

1x **Hexagon Head Bolt**
Surface: W3
Thread: Metric

1x **Cover Plate**
Surface: W3

1x **Clamp Body** (two halves)
STAUFF Group 1D (DIN 1)
both O.D. 6 mm / .24 in
Material: Polypropylene
Profiled inside surface
with tension clearance

Order Code

106/06-PP-GD-AS-M-W3

W3 is the standard option for this type of installation.

1x **Stacking Bolt**
Surface: W3
Thread: Metric

1x **Safety Locking Plate (Type SI)**
Surface: W3
Thread: Metric

1x **Clamp Body** (two halves)
STAUFF Group 1D (DIN 1)
both O.D. 6 mm / .24 in
Material: Polypropylene
Profiled inside surface
with tension clearance

Order Code

106/06-PP-SI-AF-M-W3

W3 is the standard option for this type of installation.

1x **Stacking Bolt**
Surface: W3
Thread: Metric

1x **Safety Locking Plate** (Prevents Axial Movement) **(Type SIV)**
Surface: W3
Thread: Metric

1x **Clamp Body** (two halves)
STAUFF Group 1D (DIN 1)
both O.D. 6 mm / .24 in
Material: Polypropylene
Profiled inside surface
with tension clearance

Order Code

106/06-PP-SIV-AF-M-W3

W3 is the standard option for this type of installation.
This type of installation is available up to STAUFF Group 3D only.

1x **Hexagon Head Bolt**
Surface: W3
Thread: Metric

1x **Cover Plate**
Surface: W3

1x **Clamp Body** (two halves)
STAUFF Group 1D (DIN 1)
both O.D. 6 mm / .24 in
Material: Polypropylene
Profiled inside surface
with tension clearance

1x **Hexagon Rail Nut**
Surface: W3
Thread: Metric

Order Code (Mounting Rail TS not included.)

SM-106/06-PP-GD-AS-M-W3

W3 is the standard option for this type of installation.

Thread Codes

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table.

Metric ISO thread	**M**

Material Codes

The below listed material codes describe the materials and surface finishing of metal parts that are most relevant for Twin Series clamp assemblies. Individual combinations of alternative materials and surface finishing are available upon request. Contact STAUFF for more information.

Metal parts made of Carbon Steel, zinc/nickel-plated	**W3**
Metal parts made of Stainless Steel V2A: 1.4301 / 1.4305 (AISI 304 / 303)	**W4**
Metal parts made of Stainless Steel V4A: 1.4401 / 1.4571 (AISI 316 / 316 Ti)	**W5**
Weld Plate made of Carbon Steel, phosphated Other metal parts made of Carbon Steel, zinc/nickel-plated	**W10**

Polypropylene Clamp Body (PP) Profile Bore

W3 - Carbon Steel, zinc/nickel-plated
Temperature Range (Clamp Body) -30°C ... +90°C

Group 1D

Item No.	Designation	Price
1110025017	SP-106/06-PP-GD-AS-M-W3	6.35
1110025018	SP-106.4/06.4-PP-GD-AS-M-W3	6.35
1110029332	SP-108/08-PP-GD-AS-M-W3	6.35
1110033754	SP-109.5/09.5-PP-GD-AS-M-W3	6.35
1110025019	SP-110/10-PP-GD-AS-M-W3	6.35
1110025020	SP-112/12-PP-GD-AS-M-W3	6.35

Group 2D

Item No.	Designation	Price
1110031191	SP-209.5/09.5-PP-GD-AS-M-W3	7.90
1110030240	SP-212.7/12.7-PP-GD-AS-M-W3	7.90
1110033763	SP-213.5/13.5-PP-GD-AS-M-W3	7.90
1110026968	SP-214/14-PP-GD-AS-M-W3	7.90
1110026885	SP-215/15-PP-GD-AS-M-W3	7.90
1110024895	SP-216/16-PP-GD-AS-M-W3	7.90
1110029488	SP-217.2/17.2-PP-GD-AS-M-W3	7.90
1110026886	SP-218/18-PP-GD-AS-M-W3	7.90

Group 3D

Item No.	Designation	Price
1110027950	SP-319/19-PP-GD-AS-M-W3	8.60
1110028311	SP-320/20-PP-GD-AS-M-W3	8.60
1110026939	SP-321.3/21.3-PP-GD-AS-M-W3	8.60
1110024896	SP-322/22-PP-GD-AS-M-W3	8.60
1110033800	SP-323/23-PP-GD-AS-M-W3	8.60
1110007277	SP-325/25-PP-GD-AS-M-W3	8.60
1110027952	SP-325.4/25.4-PP-GD-AS-M-W3	8.60

Group 4D

Item No.	Designation	Price
1110031192	SP-420/20-PP-GD-AS-M-W3	9.90
1110031019	SP-426.9/26.9-PP-GD-AS-M-W3	9.90
1110033811	SP-428/28-PP-GD-AS-M-W3	9.90
1110026888	SP-430/30-PP-GD-AS-M-W3	9.90

Group 5D

Item No.	Designation	Price
1110033820	SP-532/32-PP-GD-AS-M-W3	12.25
1110033825	SP-533.7/33.7-PP-GD-AS-M-W3	12.25
1110033826	SP-535/35-PP-GD-AS-M-W3	12.25
1110028248	SP-538/38-PP-GD-AS-M-W3	12.25
1110033832	SP-540/40-PP-GD-AS-M-W3	12.25
1110033836	SP-542/42-PP-GD-AS-M-W3	12.25

Additional sizes available on request

W5 - Stainless Steel
Temperature Range (Clamp Body) -30°C ... +90°C

Group 1D

Item No.	Designation	Price
1110005866	SP-106/06-PP-GD-AS-M-W5	27.00
1110021162	SP-106.4/06.4-PP-GD-AS-M-W5	27.00
1110020037	SP-108/08-PP-GD-AS-M-W5	27.00
1110014298	SP-109.5/09.5-PP-GD-AS-M-W5	27.00
1110008829	SP-110/10-PP-GD-AS-M-W5	27.00
1110011943	SP-112/12-PP-GD-AS-M-W5	27.00

Group 2D

Item No.	Designation	Price
1110030429	SP-209.5/09.5-PP-GD-AS-M-W5	38.00
1110014299	SP-212.7/12.7-PP-GD-AS-M-W5	38.00
1110033764	SP-213.5/13.5-PP-GD-AS-M-W5	38.00
1110015916	SP-214/14-PP-GD-AS-M-W5	38.00
1110014473	SP-215/15-PP-GD-AS-M-W5	38.00
1110020647	SP-216/16-PP-GD-AS-M-W5	38.00
1110031516	SP-217.2/17.2-PP-GD-AS-M-W5	38.00
1110007179	SP-218/18-PP-GP-AS-M-W5	38.00

Group 3D

Item No.	Designation	Price
1110021164	SP-319/19-PP-GD-AS-M-W5	41.00
1110009255	SP-320/20-PP-GD-AS-M-W5	41.00
1110015931	SP-321.3/21.3-PP-GD-AS-M-W5	41.00
1110008379	SP-322/22-PP-GD-AS-M-W5	41.00
1110015938	SP-323/23-PP-GD-AS-M-W5	41.00
1110015941	SP-325/25-PP-GD-AS-M-W5	41.00
1110029645	SP-325.4/25.4-PP-GD-AS-M-W5	41.00

Group 4D

Item No.	Designation	Price
1110030456	SP-420/20-PP-GD-AS-M-W5	45.50
1110014653	SP-426.9/26.9-PP-GD-AS-M-W5	45.50
1110015946	SP-428/28-PP-GD-AS-M-W5	45.50
1110015949	SP-430/30-PP-GD-AS-M-W5	45.50

Group 5D

Item No.	Designation	Price
1110015953	SP-532/32-PP-GD-AS-M-W5	54.20
1110031236	SP-533.7/33.7-PP-GD-AS-M-W5	54.20
1110015959	SP-535/35-PP-GD-AS-M-W5	54.20
1110015963	SP-538/38-PP-GD-AS-W5	54.20
1110015966	SP-540/40-PP-GD-AS-M-W5	54.20
1110021917	SP-542/42-PP-GD-AS-M-W5	54.20

Additional sizes available on request

Clamp Bore

	Outside Diameter Pipe / Tube Ø D1		Nominal Bore	
			Pipe	Copper Tube
Group 1A	mm	in	in	in
	6			
	6.4	1/4		
	8	5/16		
	9.5	3/8		1/4
	10		1/8	
	12			
Group 2D	mm	in	in	in
	9.5			
	12.7	1/2		3/8
	13.5		1/4	
	14			
	15			
	16	5/8		1/2
	17.2		3/8	
	18			
Group 3D	mm	in	in	in
	19	3/4		
	20			
	21.3		1/2	
	22			3/4
	23			
	25			
	25.4	1		
Group 4D	mm	in	in	in
	20			
	26.9		3/4	
	28			
	30			
Group 5D	mm	in	in	in
	32	1-1/4		
	33.7		1	
	35			1-1/4
	38	1-1/2		
	40			
	42		1-1/4	

Polyamide Clamp Body (PA) Profile Bore

W3 - Carbon Steel, zinc/nickel-plated
Temperature Range (Clamp Body) -40°C ... +120°C

Group 1D

Item No.	Designation	Price
6100031659	SP-106/06-PA-GD-AS-M-W3	7.90
1110033749	SP-106.4/06.4-PA-GD-AS-M-W3	7.90
1110033751	SP-108/08-PA-GD-AS-M-W3	7.90
1110033753	SP-109.5/09.5-PA-GD-AS-M-W3	7.90
1110029946	SP-110/10-PA-GD-AS-M-W3	7.90
1110020389	SP-112/12-PA-GD-AS-M-W3	7.90

Group 2D

Item No.	Designation	Price
1110033761	SP-212.7/12.7-PA-GD-AS-M-W3	9.95
1110024619	SP-213.5/13.5-PA-GD-AS-M-W3	9.95
1110033769	SP-215/15-PA-GD-AS-M-W3	9.95
1110033772	SP-216/16-PA-GD-AS-M-W3	9.95
1110033775	SP-217.2/17.2-PA-GD-AS-M-W3	9.95
1110030441	SP-218/18-PA-GD-AS-M-W3	9.95

Group 3D

Item No.	Designation	Price
1110031235	SP-319/19-PA-GD-AS-M-W3	11.05
1110033790	SP-320/20-PA-GD-AS-M-W3	11.05
1110027037	SP-321.3/21.3-PA-GD-AS-M-W3	11.05
1110030451	SP-322/22-PA-GD-AS-M-W3	11.05
1110033808	SP-325/25-PA-GD-AS-M-W3	11.05
1110033805	SP-325.4/25.4-PA-GD-AS-M-W3	11.05

Group 4D

Item No.	Designation	Price
1110030457	SP-426.9/26.9-PA-GD-AS-M-W3	13.35
1110031197	SP-428/28-PA-GD-AS-M-W3	13.35
1110030462	SP-430/30-PA-GD-AS-M-W3	13.35

Group 5D

Item No.	Designation	Price
1110031198	SP-532/32-PA-GD-AS-M-W3	17.00
1110031199	SP-533.7/33.7-PA-GD-AS-M-W3	17.00
1110031200	SP-535/35-PA-GD-AS-M-W3	17.00
1110031201	SP-538/38-PA-GD-AS-M-W3	17.00
1110031202	SP-540/40-PA-GD-AS-M-W3	17.00
1110031203	SP-542/42-PA-GD-AS-M-W3	17.00

Additional sizes available on request

W5 - Stainless Steel
Temperature Range (Shell) -40°C ... +120°C

Group 1D

Item No.	Designation	Price
1110015903	SP-106/06-PA-GD-AS-W5	28.55
1110020714	SP-106.4/06.4-PA-GD-AS-M-W5	28.55
1110006904	SP-108/08-PA-GD-AS-M-W5	28.55
1110026480	SP-109.5/09.5-PA-GD-AS-M-W5	28.55
1110024145	SP-110/10-PA-GD-AS-M-W5	28.55
1110006371	SP-112/12-PA-GD-AS-M-W5	28.55

Group 2D

Item No.	Designation	Price
1110020715	SP-212.7/12.7-PA-GD-AS-M-W5	40.05
1110030431	SP-213.5/13.5-PA-GD-AS-M-W5	40.05
1110015918	SP-215/15-PA-GD-AS-M-W5	40.05
1110013679	SP-216/16-PA-GD-AS-M-W5	40.05
1110030439	SP-217.2/17.2-PA-GD-AS-M-W5	40.05
1110006372	SP-218/18-PA-GD-AS-M-W5	40.05

Group 3D

Item No.	Designation	Price
1110015926	SP-319/19-PA-GD-AS-M-W5	43.45
1110024824	SP-320/20-PA-GD-AS-M-W5	43.45
1110015930	SP-321.3/21.3-PA-GD-AS-M-W5	43.45
1110015933	SP-322/22-PA-GD-AS-M-W5	43.45
1110015940	SP-325/25-PA-GD-AS-M-W5	43.45
1110030453	SP-325.4/25.4-PA-GD-AS-M-W5	43.45

Group 4D

Item No.	Designation	Price
1110015942	SP-426.9/26.9-PA-GD-AS-M-W5	48.95
1110015945	SP-428/28-PA-GD-AS-M-W5	48.95
1110015947	SP-430/30-PA-GD-AS-M-W5	48.95

Group 5D

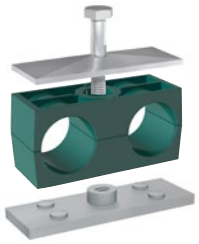
Item No.	Designation	Price
1110015951	SP-532/32-PA-GD-AS-M-W5	58.95
1110015954	SP-533.7/33.7-PA-GD-AS-M-W5	58.95
1110015958	SP-535/35-PA-GD-AS-M-W5	58.95
1110015961	SP-538/38-PA-GD-AS-M-W5	58.95
1110015965	SP-540/40-PA-GD-AS-M-W5	58.95
1110014450	SP-542/42-PA-GD-AS-M-W5	58.95

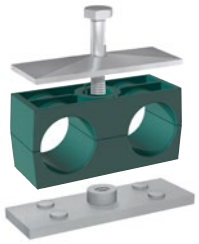
Additional sizes available on request

PA material offers extended protection against UV

	Clamp Bore			
	Outside Diameter Pipe / Tube Ø D1		Nominal Bore	
			Pipe	Copper Tube
Group 1D	mm	in	in	in
	6			
	6.4	1/4		
	8	5/16		
	9.5	3/8		1/4
	10		1/8	
	12			
Group 2D	mm	in	in	in
	12.7	1/2		3/8
	13.5		1/4	
	15			
	16	5/8		1/2
	17.2		3/8	
	18			
Group 3D	mm	in	in	in
	19	3/4		
	20			
	21.3		1/2	
	22			3/4
	25			
	25.4	1		
Group 4D	mm	in	in	in
	26.9		3/4	
	28			
	30			
Group 5D	mm	in	in	in
	32	1-1/4		
	33.7		1	
	35			1-1/4
	38	1-1/2		
	40			
	42		1-1/4	

Polypropylene Clamp Body (PP-H) Smooth Bore





W3 - Carbon Steel, zinc/nickel-plated
Temperature Range (Clamp Body) -30°C ... +90°C

Group 1D

Item No.	Designation	Price
1110031193	SP-106/06-PP-H-GD-AS-M-W3	6.95
6100031683	SP-106.4/06.4-PP-H-GD-AS-M-W3	6.95
1110033756	SP-109.5/09.5-PP-H-GD-AS-M-W3	6.95
1110033757	SP-110/10-PP-H-GD-AS-M-W3	6.95
1110030427	SP-112/12-PP-H-GD-AS-M-W3	6.95

Group 2D

Item No.	Designation	Price
1110031828	SP-212.7/12.7-PP-H-GD-AS-M-W3	8.20
6100063511	SP-213.5/13.5-PP-H-GD-AS-M-W3	8.20
1110033766	SP-214/14-PP-H-GD-AS-M-W3	8.20
1110030436	SP-215/15-PP-H-GD-AS-M-W3	8.20
1110033773	SP-216/16-PP-H-GD-AS-M-W3	8.20
1110033776	SP-217.2/17.2-PP-H-GD-AS-M-W3	8.20
1110030442	SP-218/18-PP-H-GD-AS-M-W3	8.20

Group 3D

Item No.	Designation	Price
1110033781	SP-319/19-PP-H-GD-AS-M-W3	9.35
1110027465	SP-320/20-PP-H-GD-AS-M-W3	9.35
1110031194	SP-321.3/21.3-PP-H-GD-AS-M-W3	9.35
1110033799	SP-322/22-PP-H-GD-AS-M-W3	9.35
6100063776	SP-323/23-PP-H-GD-AS-M-W3	9.35
1110030455	SP-325/25-PP-H-GD-AS-M-W3	9.35
1110033806	SP-325.4/25.4-PP-H-GD-AS-M-W3	9.35

Group 4D

Item No.	Designation	Price
1110030459	SP-426.9/26.9-PP-H-GD-AS-M-W3	10.50
1110026887	SP-428/28-PP-H-GD-AS-M-W3	10.50
1110033815	SP-430/30-PP-H-GD-AS-M-W3	10.50

Group 5D

Item No.	Designation	Price
1110033821	SP-532/32-PP-H-GD-AS-M-W3	13.95
1110030470	SP-533.7/33.7-PP-H-GD-AS-M-W3	13.95
1110033828	SP-535/35-PP-H-GD-AS-M-W3	13.95
1110031195	SP-538/38-PP-H-GD-AS-M-W3	13.95
1110031196	SP-542/42-PP-H-GD-AS-M-W3	13.95

Additional sizes available on request

W5 - Stainless Steel
Temperature Range (Clamp Body) -30°C ... +90°C

Group 1D

Item No.	Designation	Price
1110030425	SP-106/06-PP-H-GD-AS-M-W5	27.60
1110026142	SP-106.4/06.4-PP-H-GD-AS-M-W5	27.60
1110026144	SP-109.5/09.5-PP-H-GD-AS-M-W5	27.60
1110027506	SP-110/10-PP-H-GD-AS-M-W5	27.60
1110030428	SP-112/12-PP-H-GD-AS-M-W5	27.60

Group 2D

Item No.	Designation	Price
1110026143	SP-212.7/12.7-PP-H-GD-AS-M-W5	38.30
1110031237	SP-213.5/13.5-PP-H-GD-AS-M-W5	38.30
1110030434	SP-214/14-PP-H-GD-AS-M-W5	38.30
1110030437	SP-215/15-PP-H-GD-AS-M-W5	38.30
1110030228	SP-216/16-PP-H-GD-AS-M-W5	38.30
1110030440	SP-217.2/17.2-PP-H-GD-AS-M-W5	38.30
1110030443	SP-218/18-PP-H-GD-AS-M-W5	38.30

Group 3D

Item No.	Designation	Price
1110028916	SP-319/19-PP-H-GD-AS-M-W5	41.75
1110031227	SP-320/20-PP-H-GD-AS-M-W5	41.75
1110030450	SP-321.3/21.3-PP-H-GD-AS-M-W5	41.75
1110028917	SP-322/22-PP-H-GD-AS-M-W5	41.75
1110031228	SP-323/23-PP-H-GD-AS-M-W5	41.75
1110027320	SP-325/25-PP-H-GD-AS-M-W5	41.75
1110030454	SP-325.4/25.4-PP-H-GD-AS-M-W5	41.75

Group 4D

Item No.	Designation	Price
1110030460	SP-426.9/26.9-PP-H-GD-AS-M-W5	46.10
1110030461	SP-428/28-PP-H-GD-AS-M-W5	46.10
1110030463	SP-430/30-PP-H-GD-AS-M-W5	46.10

Group 5D

Item No.	Designation	Price
1110028376	SP-532/32-PP-H-GD-AS-M-W5	55.90
1110030471	SP-533.7/33.7-PP-H-GD-AS-M-W5	55.90
1110030473	SP-535/35-PP-H-GD-AS-M-W5	55.90
1110028915	SP-538/38-PP-H-GD-AS-M-W5	55.90
1110030475	SP-542/42-PP-H-GD-AS-M-W5	55.90

Additional sizes available on request

Smooth Bore
Recommended for use on Hydraulic Hose

Clamp Bore

	Outside Diameter Pipe / Tube Ø D1		Nominal Bore	
			Pipe	Copper Tube
Group 1D	mm	in	in	in
	6			
	6.4	1/4		
	9.5	3/8		1/4
	10		1/8	
	12			
Group 2D	mm	in	in	in
	12.7	1/2		3/8
	13.5		1/4	
	14			
	15			
	16	5/8		1/2
	17.2		3/8	
	18			
Group 3D	mm	in	in	in
	19	3/4		
	20			
	21.3		1/2	
	22			3/4
	25			
	25.4	1		
Group 4D	mm	in	in	in
	26.9		3/4	
	28			
	30			
Group 5D	mm	in	in	in
	32	1-1/4		
	33.7		1	
	35			1-1/4
	38	1-1/2		
	42		1-1/4	

Refer to page A47 for Hydraulic Hose Clamp assembly selection Guide

Twin Series Clamps - Selection Guide for Hydraulic Hose

PP-H - Smooth Bore

			Hose Type				
			EN 853 1SN	EN 853 2SN	EN 854 R6	EN 855 R7	
	Hose I.D	Hose O.D	SAE 100 R1AT	SAE 100 R2AT	SAE 100 R6 1TE	SAE 100 R7 PL 7 / ZL 7	
Dash No.	in	mm	Designation	Designation	Designation	Designation	Price
-4	1/4	13.4	SP-213.5/13.5-PP-H-GD-AS-M-W3				8.20
			SP-213.5/13.5-PP-H-GD-AS-M-W5				38.30
-4	1/4	15		SP-215/15-PP-H-GD-AS-M-W3			8.20
				SP-215/15-PP-H-GD-AS-M-W5			38.30
-4	1/4	12.7			SP-212.7/12.7-PP-H-GD-AS-M-W3		8.20
					SP-212.7/12.7-PP-H-GD-AS-M-W5		38.30
-4	1/4	12.9				SP-212.7/12.7-PP-H-GD-AS-M-W3	8.20
						SP-212.7/12.7-PP-H-GD-AS-M-W5	38.30
-5	5/16	15	SP-215/15-PP-H-GD-AS-M-W3				8.20
			SP-215/15-PP-H-GD-AS-M-W5				38.30
-5	5/16	17.2		SP-217.2/17.2-PP-H-GD-AS-M-W3			8.20
				SP-217.2/17.2-PP-H-GD-AS-M-W5			38.30
-5	5/16	14.0			SP-214/14-PP-H-GD-AS-M-W3		8.20
					SP-214/14-PP-H-GD-AS-M-W5		38.30
-5	5/16	15.1				SP-215/15-PP-H-GD-AS-M-W3	8.20
						SP-215/15-PP-H-GD-AS-M-W5	38.30
-6	3/8	17.4	SP-217.2/17.2-PP-H-GD-AS-M-W3				8.20
			SP-217.2/17.2-PP-H-GD-AS-M-W5				38.30
-6	3/8	19.1		SP-319/19-PP-H-GD-AS-M-W3			9.35
				SP-319/19-PP-H-GD-AS-M-W5			41.75
-6	3/8	15.9			SP-216/16-PP-H-GD-AS-M-W3		8.20
					SP-216/16-PP-H-GD-AS-M-W5		38.30
-6	3/8	16.7				SP-216/16-PP-H-GD-AS-M-W3	8.20
						SP-216/16-PP-H-GD-AS-M-W5	38.30
-8	1/2	20.3	SP-320/20-PP-H-GD-AS-M-W3				9.35
			SP-320/20-PP-H-GD-AS-M-W5				41.75
-8	1/2	22.2		SP-322/22-PP-H-GD-AS-M-W3			9.35
				SP-322/22-PP-H-GD-AS-M-W5			41.75
-8	1/2	19.8			SP-319/19-PP-H-GD-AS-M-W3		9.35
					SP-319/19-PP-H-GD-AS-M-W5		41.75
-8	1/2	20.7				SP-320/20-PP-H-GD-AS-M-W3	9.35
						SP-320/20-PP-H-GD-AS-M-W5	41.75
-10	5/8	23.7	SP-323/23-PP-H-GD-AS-M-W3				9.35
			SP-323/23-PP-H-GD-AS-M-W5				41.75
-10	5/8	25.4		SP-325.4/25.4-PP-H-GD-AS-M-W3			9.35
				SP-325.4/25.4-PP-H-GD-AS-M-W5			41.75
-10	5/8	23.0			SP-323/23-PP-H-GD-AS-M-W3		9.35
					SP-323/23-PP-H-GD-AS-M-W5		41.75
-12	3/4	27.7	SP-426.9/26.9-PP-H-GD-AS-M-W3				10.50
			SP-426.9/26.9-PP-H-GD-AS-M-W5				46.10
-12	3/4	29.4		SP-430/30-PP-H-GD-AS-M-W3			10.50
				SP-430/30-PP-H-GD-AS-M-W5			46.10
-12	3/4	31.8			SP-430/30-PP-H-GD-AS-M-W3		10.50
					SP-430/30-PP-H-GD-AS-M-W5		46.10
-12	3/4	26.0				SP-426.9/26.9-PP-H-GD-AS-M-W3	10.50
						SP-426.9/26.9-PP-H-GD-AS-M-W5	46.10
-16	1	36.2	SP-535/35-PP-H-GD-AS-M-W3				13.95
			SP-535/35-PP-H-GD-AS-M-W5				55.90
-16	1	38.5		SP-538/38-PP-H-GD-AS-M-W3			13.95
				SP-538/38-PP-H-GD-AS-M-W5			55.90
-16	1	32.5			SP-532/32-PP-H-GD-AS-M-W3		13.95
					SP-532/32-PP-H-GD-AS-M-W5		55.90
-16	1	34.0				SP-533.7/33.7-PP-H-GD-AS-M-W3	13.95
						SP-533.7/33.7-PP-H-GD-AS-M-W5	55.90

W3 - Carbon Steel, zinc/nickel-plated
W5 - Stainless Steel

Refer to page A46 for Twin Series PP-H Clamp Assembly Item No.
e.g. 1110030436 - SP-215/15-PP-H-DP-AS-M-W3

Sizes may vary between hydraulic hose brands; check hose O.D. before selecting clamp assembly.

Contact STAUFF for more information.

Twin Series Components

PP Clamp Body (Even)

(PP) Polypropylene - Profiled Bore

Temperature Range (Clamp Body) -30°C ... +90°C

Item No.	Designation	Price
1130005070	106/06-PP	2.05
1130005062	106.4/06.4-PP	2.05
1130005092	108/08-PP	2.05
1130005113	109.5/09.5-PP	2.05
1130005139	110/10-PP	2.05
1130005173	112/12-PP	2.05
1130007072	209.5/09.5-PP	2.45
1130005227	210/10-PP	2.45
1130005243	212.7/12.7-PP	2.45
1130005265	213.5/13.5-PP	2.45
1130005284	214/14-PP	2.45
1130005322	215/15-PP	2.45
1130005360	216/16-PP	2.45
1130005376	217.2/17.2-PP	2.45
1130005410	218/18-PP	2.45
1130005526	319/19-PP	2.65
1130005554	320/20-PP	2.65
1130005570	321.3/21.3-PP	2.65
1130005603	322/22-PP	2.65
1130005616	323/23-PP	2.65
1130005659	325/25-PP	2.65
1130005644	325.4/25.4-PP	2.65
1130027063	420/20-PP	3.60
1130005775	426.9/26.9-PP	3.60
1130005811	428/28-PP	3.60
1130005840	430/30-PP	3.60
1130005971	532/32-PP	5.35
1130005988	533.7/33.7-PP	5.35
1130006016	535/35-PP	5.35
1130006042	538/38-PP	5.35
1130006059	540/40-PP	5.35
1130006078	542/42-PP	5.35

PA Shells (Even)

(PA) Polyamide - Profiled Bore

Temperature Range (Clamp Body) -40°C ... +120°C

Item No.	Designation	Price
1130005067	106/06-PA	3.60
1130005060	106.4/06.4-PA	3.60
1130005088	108/08-PA	3.60
1130005111	109.5/09.5-PA	3.60
1130005134	110/10-PA	3.60
1130005170	112/12-PA	3.60
1130005240	212.7/12.7-PA	4.50
1130005264	213.5/13.5-PA	4.50
1130005282	214/14-PA	4.50
1130005318	215/15-PA	4.50
1130005357	216/16-PA	4.50
1130005374	217.2/17.2-PA	4.50
1130005408	218/18-PA	4.50
1130005525	319/19-PA	5.10
1130005552	320/20-PA	5.10
1130005567	321.3/21.3-PA	5.10
1130005602	322/22-PA	5.10
1130005658	325/25-PA	5.10
1130005643	325.4/25.4-PA	5.10
1130005773	426.9/26.9-PA	7.05
1130005808	428/28-PA	7.05
1130005837	430/30-PA	7.05
1130005968	532/32-PA	10.10
1130005987	533.7/33.7-PA	10.10
1130006013	535/35-PA	10.10
1130006040	538/38-PA	10.10
1130006058	540/40-PA	10.10
1130006077	542/42-PA	10.10

PP Clamp Body (Odd Size Bores)

(PP) Polypropylene - Profiled Bore

Temperature Range (Clamp Body) -30°C ... +90°C

Item No.	Designation	Price
1130005110	109.5/06.4-PP	2.45
1130011328	212.7/06.4-PP	3.00
1130005246	212.7/09.5-PP	3.00
1130005309	215/10-PP	3.00
1130005346	216/08-PP	3.00
1130005363	216/09.5-PP	3.00
1130005353	216/12.7-PP	3.00
1130006870	217.2/13.5-PP	3.00
1130005521	319/12.7-PP	3.25
1130005524	319/16-PP	3.25
1130018377	320/10-PP	3.25
1130005546	320/16-PP	3.25
1130005548	320/18-PP	3.25
1130010996	321.3/13.5-PP	3.25
1130010628	321.3/17.2-PP	3.25
1130033345	322/09.5-PP	3.25
1130005588	322/10-PP	3.25
1130005593	322/15-PP	3.25
1130005595	322/16-PP	3.25
1130005596	322/18-PP	3.25
1130006762	322/19-PP	3.25
1130005600	322/20-PP	3.25
1130005653	325/20-PP	3.25
1130012040	325/21.3-PP	3.25
1130025155	325.4/12.7-PP	3.25
1130005641	325.4/16-PP	3.25
1130005642	325.4/19-PP	3.25
1130024656	325.4/21.3-PP	3.25
1130026782	426.9/12.7-PP	4.00
1130006876	426.9/21.3-PP	4.00
1130023456	426.9/25.4-PP	4.00
1130009768	428/19-PP	4.00
1130005803	428/22-PP	4.00
1130016142	532/12.7-PP	5.45
1130015537	532/20-PP	5.45
1130024578	532/21.3-PP	5.45
1130005964	532/25-PP	5.45
1130019157	538/25.4-PP	5.45
1130019153	533.7/26.9-PP	5.45
1130006450	538/30-PP	5.45
1130006037	538/32-PP	5.45
1130025083	542/21.3-PP	5.45
1130033349	542/26.9-PP	5.45
1130007845	542/33.7-PP	5.45

PA Shells (Odd Size Bores)

(PA) Polyamide - Profiled Bore

Temperature Range (Clamp Body) -40°C ... +120°C

Item No.	Designation	Price
1130005245	212.7/06.4-PA	4.85
1130008934	218/12-PA	4.85
1130008443	319/16-PA	5.35
1130009138	322/12.7-PA	5.35
1130006787	322/18-PA	5.35

PP-H Clamp Body (Even)

(PP-H) Polypropylene - Smooth Bore

Temperature Range (Clamp Body) -30°C ... +90°C

Item No.	Designation	Price
1130003776	106/06-PP-H	2.65
1130011016	106.4/06.4-PP-H	2.65
1130003779	109.5/09.5-PP-H	2.65
1130005141	110/10-PP-H	2.65
1130005175	112/12-PP-H	2.65
1130006802	112.7/12.7-PP-H	2.65
1130005244	212.7/12.7-PP-H	2.75
1130005267	213.5/13.5-PP-H	2.75
1130005285	214/14-PP-H	2.75
1130005324	215/15-PP-H	2.75
1130005362	216/16-PP-H	2.75
1130005378	217.2/17.2-PP-H	2.75
1130005412	218/18-PP-H	2.75
1130003258	319/19-PP-H	3.40
1130003246	320/20-PP-H	3.40
1130003231	321.3/21.3-PP-H	3.40
1130003213	322/22-PP-H	3.40
1130003191	323/23-PP-H	3.40
1130003167	325/25-PP-H	3.40
1130003140	325.4/25.4-PP-H	3.40
1130005776	426.9/26.9-PP-H	4.20
1130005813	428/28-PP-H	4.20
1130001706	430/30-PP-H	4.20
1130005973	532/32-PP-H	7.05
1130007521	533.7/33.7-PP-H	7.05
1130006017	535/35-PP-H	7.05
1130006043	538/38-PP-H	7.05
1130008825	542/42-PP-H	7.05

PP-H Clamps are recommended for Hydraulic Hose Installations.
Refer to page A47 for PP-H Hydraulic Hose selection table.

Order Codes

Clamp Body ***1*06/06-*PP**

One clamp body consists of two clamp halves.

* STAUFF Group	**1**
* Exact outside diameter Ø D1 / Ø D2 (mm)	**06/06**
* Material code	**Polypropylene - PP** **Polyamide - PA**

Order Codes

Clamp Body ***1*06/06-*PP-H**

One clamp body consists of two clamp halves.

* STAUFF Group	**1**
* Exact outside diameter Ø D1 / Ø D2 (mm)	**06/06**
* Material code	**PP-H**

Twin Series Components

Single Weld Plate
Type SP

Item No.	Designation		Price
1120002546	SP-1D-M-W3		2.55
1120002547	SP-2D-M-W3		3.40
1120002548	SP-3D-M-W3	Steel	3.60
1120002549	SP-4D-M-W3		3.80
1120002550	SP-5D-M-W3		4.10
1120000955	SP-1D-M-W5		17.70
1120002562	SP-2D-M-W5		25.45
1120002564	SP-3D-M-W5	S/S	26.80
1120001003	SP-4D-M-W5		28.25
1120002567	SP-5D-M-W5		32.40

W3 = Carbon Steel, zinc/nickel-plated W5 = Stainless Steel

One bolt required per clamp (Groups 1D-5D)

Group Weld Plate for 5 Clamp Bodies
Type RAP

Item No.	Designation		Price
1120002579	RAP-1D-40-5-M-W3		14.25
1120002580	RAP-2D-58-5-M-W3		16.95
1120002581	RAP-3D-72-5-M-W3	Steel	19.80
1120002582	RAP-4D-90-5-M-W3		21.25
1120002583	RAP-5D-112-5-M-W3		25.45
1120002589	RAP-1D-40-5-M-W5		91.30
1120002590	RAP-2D-58-5-M-W5		120.75
1120002591	RAP-3D-72-5-M-W5	S/S	133.00
1120002592	RAP-4D-90-5-M-W5		POA
1120002593	RAP-5D-112-5-M-W5		POA

W3 = Carbon Steel, zinc/nickel-plated W5 = Stainless Steel

One bolt required per clamp (Groups 1D-5D)

Hexagon Rail Nut
(for use with Mounting Rail TS)
Type SM / SMG

Item No.	Designation	Size	Price
1120001932	SM-1-8/1D-M-W3/3	M6	1.10
1120003014	SM-2-5D-M-W3	M8	2.65
1120001941	SM-1-8/1D-M-W5	M6	18.35
1120003019	SM-2-5D-M-W5	M8	19.80

W3 = Carbon Steel, zinc/nickel-plated W5 = Stainless Steel

One bolt required per clamp (Groups 1D-8D)

Channel Rail Adaptor
(for use with Various Channel Rails)
Type CRA

Item No.	Designation	Size		Price
1120000111	CRA-1-8/1D-M-W3	M6		5.75
1120000342	CRA-2-3D-M-W3	M8	Steel	11.35
1120000344	CRA-4-5D-M-W3	M8		19.10
1120000114	CRA-1-8/1D-M-W5	M6		26.80
1120003381	CRA-2-3D-M-W5	M8	S/S	78.75
1120003385	CRA-4-5D-M-W5	M8		POA

W3 = Carbon Steel, zinc/nickel-plated W5 = Stainless Steel

One bolt required per clamp (Groups 1D-5D)

Refer to page A38 for compatibility with types of channel rails and recommended bolt lengths

Mounting Rail
(for use with Hexagon Nut SM / SMG)
Type TS

Item No.	Designation	Profile Height	Price
1130004084	TS-11-2M-W98	11mm	22.60
1130004099	TS-14-2M-W98	14mm	24.05
1130004107	TS-30-2M-W98	30mm	26.80
1130004087	TS-11-2M-W5	11mm	175.45
1130004101	TS-14-2M-W5	14mm	217.35
1130019506	TS-30-1M-W5	30mm	140.30

W98 = Carbon Steel, hot-dip galvanised W5 = Stainless Steel

Note: Order separate when ordering clamps with SM / SMG rail nuts. Sold in 1 or 2 metre lengths, price is per length

Fastening Adaptor for Mounting Rails
(for use with Mounting Rail TS-14)
Type SWG-MRA

Item No.	Designation	Size	Price
6100024790	SWG-MRA-TS14-S-A	M6	4.75
6100024791	SWG-MRA-TS14-D-A	M6	7.85

S = End Piece
D = Intermediate Piece/Connector

Cover Plate
Type GD

Item No.	Designation		Price
1130000763	GD-1D-W3		1.10
1130000764	GD-2D-W3		1.40
1130000765	GD-3D-W3	Steel	1.55
1130000766	GD-4D-W3		1.70
1130000767	GD-5D-W3		1.90
1130000159	GD-1D-W5		5.45
1130000160	GD-2D-W5		6.85
1130000161	GD-3D-W5	S/S	8.10
1130000162	GD-4D-W5		9.85
1130000163	GD-5D-W5		11.70

W3 = Carbon Steel, zinc/nickel-plated W5 = Stainless Steel

One bolt required per clamp (Groups 1D-5D)

Safety Locking Plate
(for use with Stacking Bolt AF)
Type SI

Item No.	Designation		Price
1130000243	SI-1D-W3	Steel	0.70
1130000242	SI-2-5D-W3		0.70
1130000152	SI-1D-W5	S/S	3.25
1130000153	SI-2-5D-W5		4.20

W3 = Carbon Steel, zinc/nickel-plated W5 = Stainless Steel

One bolt required per clamp (Groups 1D-5D)

Safety Locking Plate
(for use with Stacking Bolt AF)
Type SIV

Item No.	Designation		Price
1130002540	SIV-1D-W3	Steel	0.95
1130002278	SIV-2-3D-W3		1.70

W3 = Carbon Steel, zinc/nickel-plated

One bolt required per clamp (Groups 1D-3D)
Prevents twisting of multi stacked assembly

Hexagon Head Bolt
Type AS

Item No.	Designation	Grp	Price
1130004021	AS-M6x35-DIN931/933-8.8-W3	1D	0.65
1130004280	AS-M8x35-DIN931/933-8.8-W3	2D	0.65
1130004281	AS-M8x45-DIN931/933-8.8-W3	3D	0.80
1130004282	AS-M8x50-DIN931/933-8.8-W3	4D	0.80
1130004283	AS-M8x60-DIN931/933-8.8-W3	5D	0.90
1130004036	AS-M6x35-DIN931/933-70-W5	1D	1.80
1130004290	AS-M8x35-DIN931/933-70-W5	2D	3.25
1130004291	AS-M8x45-DIN931/933-70-W5	3D	3.45
1130004292	AS-M8x50-DIN931/933-70-W5	4D	3.80
1130004293	AS-M8x60-DIN931/933-70-W5	5D	4.75

W3 = Steel Zinc Nickel Plated W5 = Stainless Steel

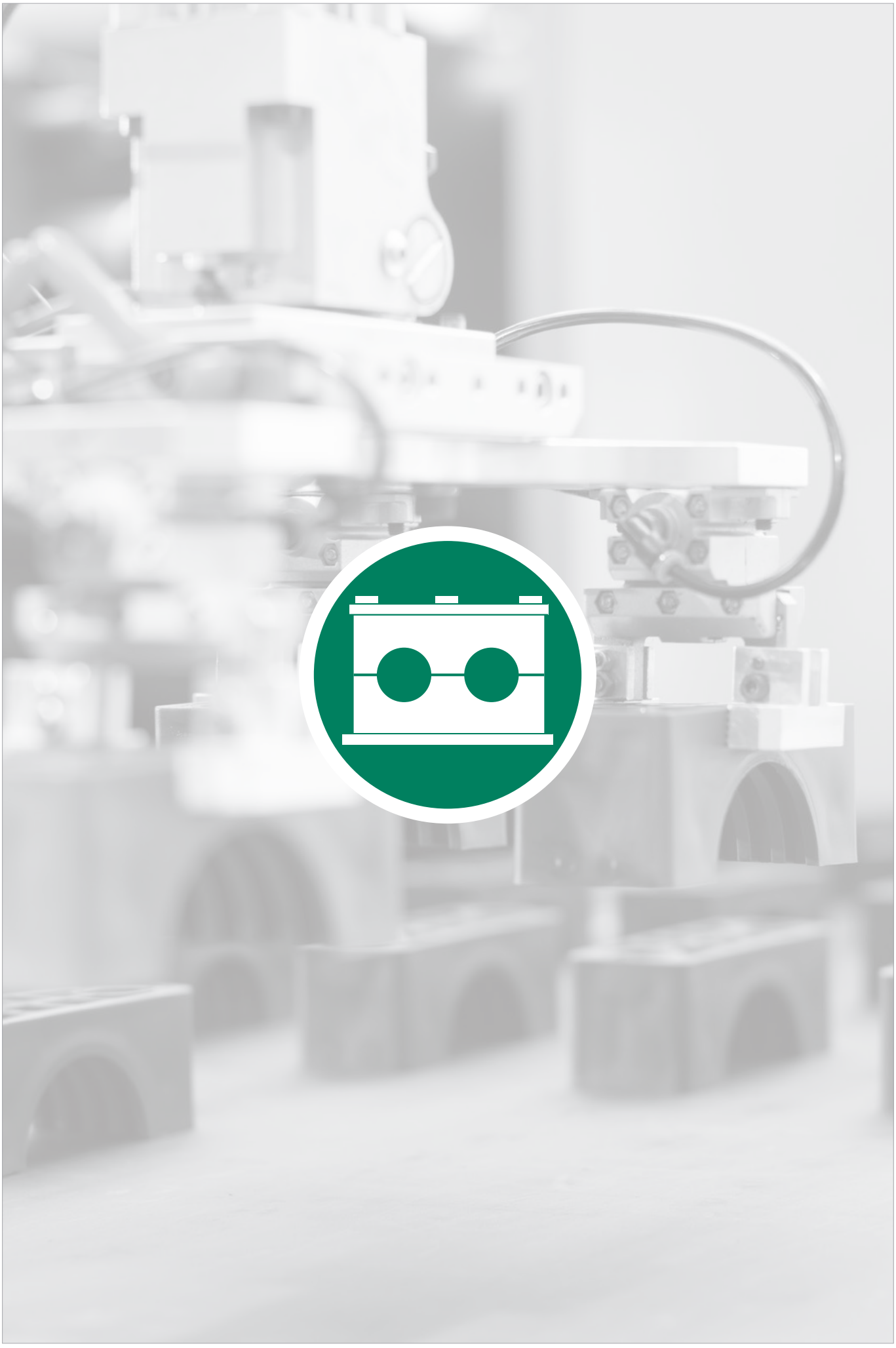
One bolt required per clamp (Groups 1D-5D)

Stacking Bolt
(for use with Safety Locking Plate SI / SIV)
Type AF

Item No.	Designation		Price
1120003535	AF-1/1A/1D-M-W3		1.70
1120003584	AF-2D-M-W3		2.55
1120003585	AF-3D-M-W3	Steel	2.75
1120003586	AF-4D-M-W3		3.25
1120003587	AF-5D-M-W3		3.40
1120003551	AF-1/1A/1D-M-W5		13.75
1120003594	AF-2D-M-W5		28.25
1120003595	AF-3D-M-W5	S/S	32.40
1120003596	AF-4D-M-W5		33.80
1120003597	AF-5D-M-W5		33.80

W3 = Steel Zinc Nickel Plated W5 = Stainless Steel

One bolt required per clamp (Groups 1D-5D)



	Clamp Assemblies	**A52 - A53**
	Clamp Body with Elastomer Inserts	**A53**
	Clamp Body Profiled Inside Surface with Tension Clearance	**A54**
	Weld Plate SPAD	**A54**
	Cover Plate DPAD	**A54**
	Mounting Rail Nut GMV	**A54**
	Channel Rail Adaptor CRA	**A54**
	Mounting Rail STSV	**A54**
	Safety Locking Plate SIP	**A54**
	Hexagon Head Bolt AS	**A54**
	Stacking Bolt AF	**A54**

SPAD - **4012.7/12.7** - **PP** - **DPAD-AS** - **M** - **W3**

① ② ③ ④ ⑤ ⑥

① Type of Installation

Please select the type of installation (e.g. Weld Plates, Rail Nuts etc.) and add the corresponding Code to position ① of the order code for your clamp assembly.

Without Installation Equipment
Code: **none**

Installation on Weld Plate

Single Weld Plate
Code: **SPAD**

Installation on Mounting / Channel Rail

Mounting Rail Nut
Code: **GMV**

Channel Rail Adaptor
Code: **CRA**

② Group Size & Diameters

Please select the required group size and diameter and add the corresponding Code to position ② of the order code for your clamp assembly.

Group STAUFF	Outside Diameter P / T / H (mm)	Availability of Clamp Body Materials & Designs Profiled Design	Type RI	Code
4S-D	6	○	●	4006/06
	8	○	●	4008/08
	10	○	●	4010/10
	12	○	●	4012/12
	12.7	●	●	4012.7/12.7
	14	○	●	4014/14
	15	○	●	4015/15
	16	○	●	4016/16
	17.2	○	●	4017.2/17.2
	18	○	●	4018/18
	19	●	●	4019/19
	20	●	○	4020/20
	21.3	●	○	4021.3/21.3
	22	●	○	4022/22
	25.4	●	○	4025.4/25.4
	26.9	●	○	4026.9/26.9
5S-D	20	○	●	5020/20
	21.3	○	●	5021.3/21.3
	22	○	●	5022/22
	25	○	●	5025/25
	26.9	○	●	5026.9/26.9
	28	○	●	5028/28
	30	○	●	5030/30
	32	●	●	5032/32
	33.7	●	○	5033.7/33.7
	38	●	○	5038/38
	42	●	○	5042/42

● Standard Option

③ Clamp Body Design & Material

Please select the design and material of your clamp body and add the corresponding Code to position ③ of the order code for your clamp assembly.

Please check the availability of the selected clamp body design and material according to the matrix table in ②.

Profiled Design

Polypropylene
Code: **PP**

Polyamide
Code: **PA**

Type RI (with Elastomer Insert)

Polypropylene
Code: **PP-R**

Polyamide
Code: **PA-R**

Clamp Bodies, Type H (smooth Inside surface without tension clearance) are available upon request. Contact STAUFF for more information.

④ Mounting & Fitting Combination

Please select the mounting and fitting combination (e.g. Bolts, Cover Plates etc.) and add the corresponding Code to position ④ of the order code for your clamp assembly.

Installation with Cover Plate and Bolts

Cover Plate DPAD with
Hexagon Head Bolt AS
Code: **DPAD-AS**

Installation with Locking Plate and Bolts

Safety Locking Plate SIPD with
Stacking Bolt AF
Code: **SIPD-AF**

⑤ Thread Type

Please select the required thread type and add the corresponding Code to position ⑤ of the order code for your clamp assembly.

Metric ISO thread
Code: **M**

All threaded parts are available with Metric ISO thread according to dimension table.

⑥ Material & Surface Finishing

Please select the required material & surface finishing of the metal parts and add the corresponding Code to position ⑥ of the order code for your clamp assembly.

Metal parts made of Carbon Steel, uncoated	**W1**
Metal parts made of Carbon Steel, phosphated	**W2**
Metal parts made of Carbon Steel, zinc/nickel-plated	**W3**
Metal parts made of Stainless Steel V2A 1.4301 / 1.4305 (AISI 304 / 303)	**W4**
Metal parts made of Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti)	**W5**
Weld Plate made of Carbon Steel, phosphated; Other metal parts made of Carbon Steel, zinc/nickel-plated	**W10**
Weld Plate and Cover Plate made of Carbon Steel, phosphated; Bolts made of Carbon Steel, uncoated	**W12**
Mounting Rail Nuts made of Carbon Steel, zinc/nickel-plated; Cover Plate made of Carbon Steel, phosphated; Bolts made of Carbon Steel, uncoated	**W13**
Weld Plate / Cover Plate made of Carbon Steel, phosphated; Bolts made of Carbon Steel, zinc/nickel-plated	**W15**
Mounting Rail Nuts made of Carbon Steel, zinc/nickel-plated; Cover Plate made of Carbon Steel, phosphated; Bolts made of Carbon Steel, zinc/nickel-plated	**W16**
Safety Locking Plate made of Carbon Steel, phosphated; Bolts made of Carbon Steel, zinc/nickel-plated	**W17**
Safety Locking Plate made of Carbon Steel, uncoated; Bolts made of Carbon Steel, phosphated	**W18**
Cover Plate made of Carbon Steel, phosphated; Bolts made of Carbon Steel, uncoated	**W19**

Individual combinations of alternative materials and surface finishing are available upon request. Contact STAUFF for more information.

Polypropylene Clamp Body (PP) Profile Bore

W3 - Carbon Steel, zinc/nickel-plated
Temperature Range (Clamp Body) -30°C ... +90°C

Group 4S-D

Item No.	Designation	Price
1110029460	SPAD-4012/12-PP-DPAD-AS-M-W3	49.50
1110029461	SPAD-4012.7/12.7-PP-DPAD-AS-M-W3	49.50
1110029462	SPAD-4019/19-PP-DPAD-AS-M-W3	49.50
1110029464	SPAD-4020/20-PP-DPAD-AS-M-W3	49.50
1110029465	SPAD-4021.3/21.3-PP-DPAD-AS-M-W3	49.50
1110029466	SPAD-4022/22-PP-DPAD-AS-M-W3	49.50
1110029467	SPAD-4025.4/25.4-PP-DPAD-AS-M-W3	49.50
1110029463	SPAD-4026.9/26.9-PP-DPAD-AS-M-W3	49.50

Group 5S-D

Item No.	Designation	Price
1110029468	SPAD-5032/32-PP-DPAD-AS-M-W3	56.20
1110029469	SPAD-5033.7/33.7-PP-DPAD-AS-M-W3	56.20
1110029470	SPAD-5038/38-PP-DPAD-AS-M-W3	56.20
1110029471	SPAD-5042/42-PP-DPAD-AS-M-W3	56.20

Additional sizes available on request

W5 - Stainless Steel
Temperature Range (Clamp Body) -30°C ... +90°C

Group 4S-D

Item No.	Designation	Price
1110029472	SPAD-4012/12-PP-DPAD-AS-M-W5	202.35
1110029473	SPAD-4012.7/12.7-PP-DPAD-AS-M-W5	202.35
1110029474	SPAD-4019/19-PP-DPAD-AS-M-W5	202.35
1110029476	SPAD-4020/20-PP-DPAD-AS-M-W5	202.35
1110029477	SPAD-4021.3/21.3-PP-DPAD-AS-M-W5	202.35
1110029478	SPAD-4022/22-PP-DPAD-AS-M-W5	202.35
1110029479	SPAD-4025.4/25.4-PP-DPAD-AS-M-W5	202.35
1110029475	SPAD-4026.9/26.9-PP-DPAD-AS-M-W5	202.35

Group 5S-D

Item No.	Designation	Price
1110029480	SPAD-5032/32-PP-DPAD-AS-M-W5	210.60
1110029481	SPAD-5033.7/33.7-PP-DPAD-AS-M-W5	210.60
1110029482	SPAD-5038/38-PP-DPAD-AS-M-W5	210.60
1110029483	SPAD-5042/42-PP-DPAD-AS-M-W5	210.60

Additional sizes available on request

Clamp Bore

	Outside Diameter Pipe / Tube Ø D1	Nominal Bore	
		Pipe	Copper Tube
Group 4S-D	mm	in	in	in
	12			
	12.7	1/2		3/8
	19	3/4		
	20			
	21.3		1/2	
	22			3/4
	25.4	1		
	26.9		3/4	
Group 5S-D	mm	in	in	in
	32	1-1/4		
	33.7		1	
	38	1-1/2		
	42		1-1/4	

Clamp Body with Elastomer Inserts Type RI

Available on request

Standard Materials

Polypropylene
Colour: Black
Material code: **PP-R**

Polyamide
Colour: Black
Material code: **PA-R**

Elastomer Inserts
Thermoplastic Elastomer (73 Shore-A)
Colour: Black

Refer to pages A76 - A77 for properties and technical information.

Heavy Twin Series Components

Heavy PP Shells

(PP) Polypropylene - Profiled Bore

Temperature Range (Clamp Body) -30°C ... +90°C

Item No.	Designation	Price
1130015676	4012/12-PP	15.60
1130005675	4012.7/12.7-PP	15.60
1130005682	4019/19-PP	15.60
1130005695	4020/20-PP	15.60
1130005703	4021.3/21.3-PP	15.60
1130005712	4022/22-PP	15.60
1130005728	4025.4/25.4-PP	15.60
1130005737	4026.9/26.9-PP	15.60
1130005882	5032/32-PP	16.25
1130005892	5033.7/33.7-PP	16.25
1130005921	5038/38-PP	16.25
1130005939	5042/42-PP	16.25

Weld Plate
Type SPAD

Item No.	Designation		Price
1120002021	SPAD-4S-M-W3	Steel	22.60
1120002022	SPAD-5S-M-W3		26.80
1120002025	SPAD-4S-M-W5	S/S	101.10
1120002026	SPAD-5S-M-W5		102.45

W3 = Carbon Steel, zinc/nickel-plated
W5 = Stainless Steel

Three bolts required per clamp (Groups 4S-5S)

Cover Plate
Type DPAD

Item No.	Designation		Price
1130004206	DPAD-4S-W3	Steel	8.60
1130004207	DPAD-5S-W3		10.00
1130004210	DPAD-4S-M-W5	S/S	66.00
1130004211	DPAD-5S-W5		67.45

W3 = Carbon Steel, zinc/nickel-plated
W5 = Stainless Steel

Three bolts required per clamp (Groups 4S-5S)

Mounting Rail Nut
(for use with Mounting Rail STSV)
GMV

Item No.	Designation		Price
1130000075	GMV-3-5S-M-W3/2	Steel	5.75
1130000076	GMV-6S-M-W3/2		7.25
1130000600	GMV-3-5S-M-W5/2	S/S	28.25
1130000601	GMV-6S-M-W5/2		31.00

W3 = Carbon Steel, zinc/nickel-plated
W5 = Stainless Steel

Three bolts required per clamp (Groups 4S-5S)

Channel Rail Adaptor
(for use with Various Channel Rails)
CRA

Item No.	Designation	Size		Price
1120000235	CRA-3-5S-M-W3	M10	Steel	11.35
1120000962	CRA-6S-M-W3	M12		17.70
1120003383	CRA-3-5S-M-W5	M10	S/S	95.55
1120000238	CRA-6S-M-W5	M12		98.25

W3 = Carbon Steel, zinc/nickel-plated
W5 = Stainless Steel

Three bolts required per clamp (Groups 4S-5S)

Refer to page A38 for compatibility with types of channel rails and recommended bolt lengths

Mounting Rail
(for use with Rail Nut GMV)
STSV

Item No.	Designation	Profile Height	Price
1130004264	STSV-2M-W32	22mm	81.60
1130004265	STSV-2M-W5	22mm	532.80

W32 = Carbon Steel, zinc-plated, blue-chromated
W5 = Stainless Steel

Note: Order separate when ordering clamps with GMV rail nuts
Sold in 2 metre lengths, price is per length

Safety Locking Plate
(for use with Stacking Bolt AF)
Type SIPD

Item No.	Designation		Price
1130032545	SIPD-4S-W3	Steel	168.15
1130032547	SIPD-5S-W3		174.15
1130032546	SIPD-4S-W5	S/S	179.55
1130032548	SIPD-5S-W5		182.10

W3 = Carbon Steel, zinc/nickel-plated
W5 = Stainless Steel

Three stacking bolts required per clamp (Groups 4S-5S)

Hexagon Head Bolt
Type AS

Item No.	Designation	Grp	Price
1130004170	AS-M10x60-DIN931/933-8.8-W3	4S	0.90
1130004171	AS-M10x70-DIN931/933-8.8-W3	5S	1.05
1130004200	AS-M10x60-DIN931/933-70-W5	4S	6.55
1130004201	AS-M10x70-DIN931/933-70-W5	5S	8.15

W3 = Carbon Steel, zinc/nickel-plated
W5 = Stainless Steel

Three bolts required per clamp (Groups 4S-5S)

Stacking Bolt
(for use with Safety Locking Plate SIPD)
Type AF

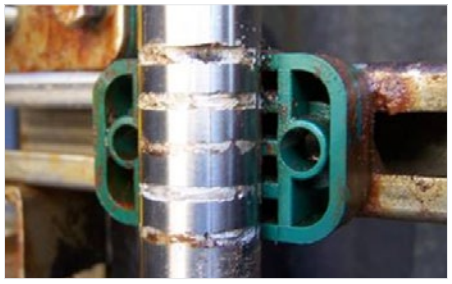
Item No.	Designation		Price
1120003633	AF-4S-M-W3	Steel	8.60
1120003634	AF-5S-M-W3		8.90
1120003508	AF-4S-M-W5	S/S	42.20
1120003509	AF-5S-M-W5		45.00

W3 = Carbon Steel, zinc/nickel-plated
W5 = Stainless Steel

Three bolts required per clamp (Groups 4S-5S)

	Introduction	A56
	ACT Clamp Assemblies	A57 - A59
	ACT Standard Series Components	A60
	ACT Twin Series Components	A61

STAUFF ACT
Anti-Corrosion Technology



Crevice corrosion formed under a regular plastic clamp

Crevice corrosion formed under a regular plastic clamp

Designed for the ultimate protection and prevention against corrosion

Main Features

Efficient Prevention of Crevice Corrosion under Pipe Clamps on Stainless Steel Pipework
Middle- and Long-Term Cost Savings due to Extended Service and Maintenance Intervals

Technology protected by utility model patent

MP READERS' CHOICE Corrosion Innovation OF THE YEAR AWARD

Construction based on STAUFF Clamps

- Design based on Original STAUFF Clamps according to DIN 3015, Parts 1 and 3 (Standard Series and Twin Series), the tried and tested industry standard for several decades
- Covering the most commonly used metric and imperial pipe diameters from 6 mm to 42 mm (from 1/4 inch to 1-1/2 inch)
- Alternative configurations and pipe diameters on request
- Installation time reduction (compared to alternative designs)

Independent Testing and Approval

- Subject to stringent testing at the STAUFF in-house laboratories located in Werdohl (Germany)
- Salt spray tests according to ASTM B117 applied in controlled laboratory environments
- Long-term field tested on a rig in the Dutch sector of the North Sea
- Tests results independently assessed by Centre for Corrosion Technology at Sheffield Hallam University
- Fully detailed, independent test reports available on request

Innovative Design and Materials

- Material and design in compliance with section 7.3 (Tubing Installation) of the Norwegian offshore standard Norsok Z-010 (Revision 3, published in October 2000), API RP 552 and NACE SP 0108-2008 (section 13)
- ❶ Clamp body made of flame-retardant PP-V0 plastic material; tested and V0 classified according to UL 94
- ❷ Integrated ACE anti-corrosion elastomer strips avoid the accumulation of seawater between clamp body and pipe
- ❸ Drainage channels aid the dispersal of seawater (self-draining)
- ❹ ACT Mounting Hardware is made of Stainless Steel V4A (Material Code: W55) with enhanced corrosion resistance by practically excluding metallic and non-metallic impurities during production, processing and handling (delivered in hermetically-sealed quality storage bags with 25 pieces each to avoid contamination during transport)
- High UV stability of the clamp body material; resistant against seawater, rain and oil
- Suitable for continuous exposure to temperatures from -25 °C to +80 °C (from -13 °F to +176 °F)
- To be used in sub-sea and top-side environments; alleviating the requirement for two different products

Salt-spray testing of ACT Mounting Hardware (top of the picture) compared to contaminated hardware made of Stainless Steel V4A (bottom of the picture)

Installation on Weld Plate

Required components:

2 Hexagon Head Bolts AS-...-W55
1 Cover Plate DP-...-W55
1 ACT Clamp Body (2 Clamp Halves)
1 Single Weld Plate SP-...-W55

Before welding, always make sure that the designated position of the weld plate is suitable for the expected loads.

Order Code

SP-110A-ACT-DP-AS-M-W55

W55 is the recommended option for metal hardware to be used with STAUFF ACT Clamps.

Multi-Level Installation (with Weld Plate)

Required components (for each level) for a maximum of two levels in total:

2 Stacking Bolt AF-...-W55
1 Safety Locking Plate SIG-...-ACT-W55
1 ACT Clamp Body (2 Clamp Halves)

The upper layer has to be secured by a cover plate and hexagon head bolts. The lower level has to be mounted to a weld plate.

Order Code

110A-ACT-SIG-AF-M-W55

W55 is the recommended option for metal hardware to be used with STAUFF ACT Clamps.

Installation with Channel Rail Adaptors

Required components:

2 Hexagon Head Bolts AS-...-W55
1 Cover Plate DP-...-W55
1 Clamp Body (2 Clamp Halves)
2 Channel Rail Adaptors CRA-...-W55

Suitable for various brands and types of channel rails (including Halfen, Hilti, Unistrut® etc.).

Order Code

CRA-110A-ACT-DP-AS-M-W55

W55 is the recommended option for metal hardware to be used with STAUFF ACT Clamps.

Installation in Field Trays / Cable Ladders

Required components:

2 Self-Locking Nuts MUS-HKS-...-W55
1 Cover Plate DP-...-W55
1 Clamp Body (2 Clamp Halves)
2 Hammerhead Bolts HKS-...-W55

Suitable for commonly used field trays and cable ladders with diagonal, lengthwise and/or crosswise slots and perforations.

Order Code

HKS-110A-ACT-DP-MUS-M-W55

W55 is the recommended option for metal hardware to be used with STAUFF ACT Clamps.

Multi-Level Installation in Field Trays / Cable Ladders

Required components (for a maximum of two levels in total):

2 Self-Locking Nuts MUS-HKS -...-W55
1 Cover Plate DP-...-W55
1 ACT Clamp Body (2 Clamp Halves)
1 Safety Locking Plate SIG-...-ACT-W55
2 Stacking Bolts AF-HKSK-...-W55
1 ACT Clamp Body (2 Clamp Halves)
2 Hammerhead Bolts HKSK-...-W55

Suitable for commonly used field trays and cable ladders with diagonal, lengthwise and/or crosswise slots and perforations.

Order Codes

Upper Level: **HKSK-212.7-ACT-DP-MUS-M-W55**
Lower Level: **212.7-ACT-SIG-AF-HKSK-M-W55**

W55 is the recommended option for metal hardware to be used with STAUFF ACT Clamps.

Multi-Level Installation in Field Trays / Cable Ladders

Required components (for a maximum of two levels in total):

2 Self-Locking Nuts MUS-HKS-...-W55
1 Cover Plate DP-...-W55
1 ACT Clamp Body (2 Clamp Halves)
1 ACT Clamp Body (2 Clamp Halves)
2 Hammerhead Bolts HKSV-...-W55

Suitable for commonly used field trays and cable ladders with diagonal, lengthwise and/or crosswise slots and perforations.

Order Codes

Upper Level: **HKSV-212.7-ACT-DP-MUS-M-W55**
Lower Level: **212.7-ACT** (Clamp Body only)

W55 is the recommended option for metal hardware to be used with STAUFF ACT Clamps.

Installation on Weld Plate

Required components:

1 Hexagon Head Bolt AS-...-W55
1 Cover Plate GD-...-W55
1 ACT Clamp Body (2 Clamp Halves)
1 Single Weld Plate SP-...-W55

Before welding, always make sure that the designated position of the weld plate is suitable for the expected loads.

Order Code

SP-110/10-ACT-GD-AS-M-W55

W55 is the recommended option for metal hardware to be used with STAUFF ACT Clamps.

Multi-Level Installation (with Weld Plate)

Required components (for each level) for a maximum of two levels in total:

1 Stacking Bolt AF-...-W55
1 Safety Locking Plate SIG-...-W55
1 ACT Clamp Body (2 Clamp Halves)

The upper layer has to be secured by a cover plate and hexagon head bolts. The lower level has to be mounted to a weld plate.

Order Code

110/10-ACT-SIV-ACT-AF-M-W55

W55 is the recommended option for metal hardware to be used with STAUFF ACT Clamps.

Installation with Channel Rail Adaptors

Required components:

1 Hexagon Head Bolt AS-...-W55
1 Cover Plate GD-...-W55
1 ACT Clamp Body (2 Clamp Halves)
1 Channel Rail Adaptor CRA-...-W55

Suitable for various brands and types of channel rails (including Halfen, Hilti, Unistrut® etc.).

Order Code

CRA-110/10-ACT-GD-AS-M-W55

W55 is the recommended option for metal hardware to be used with STAUFF ACT Clamps.

Installation in Field Trays / Cable Ladders

Required components:

1 Self-Locking Nut MUS-HKS-...-W55
1 Cover Plate GD-...-W55
1 ACT Clamp Body (2 Clamp Halves)
1 Hammerhead Bolt HKS-...-W55

Suitable for commonly used field trays and cable ladders with diagonal, lengthwise and/or crosswise slots and perforations.

Order Code

HKS-110/10-ACT-GD-MUS-M-W55

W55 is the recommended option for metal hardware to be used with STAUFF ACT Clamps.

Multi-Level Installation in Field Trays / Cable Ladders

Required components (for a maximum of two levels in total):

1 Self-Locking Nut MUS-HKS-...-W55
1 Cover Plate GD-...-W55
1 ACT Clamp Body (2 Clamp Halves)
1 Stacking Bolt AF-HKSK-...-W55
1 Safety Locking Plate SIV-...-ACT
1 ACT Clamp Body (2 Clamp Halves)
1 Hammerhead Bolt HKSK-...-W55

Suitable for commonly used field trays and cable ladders with diagonal, lengthwise and/or crosswise slots and perforations.

Order Codes

Upper Level: **HKSK-212.7/12.7-ACT-GD-MUS-M-W55**
Lower Level: **212.7/12.7-ACT-SIV-ACT-AF-HKSK-M-W55**

W55 is the recommended option for metal hardware to be used with STAUFF ACT Clamps.

Multi-Level Installation in Field Trays / Cable Ladders

Required components (for a maximum of two levels in total):

1 Self-Locking Nut MUS-HKS-...-W55
1 Cover Plate GD-...-W55
1 ACT Clamp Body (2 Clamp Halves)
1 Safety Locking Plate SIV-...-ACT
1 ACT Clamp Body (2 Clamp Halves)
1 Hammerhead Bolt HKSV-...-W55

Suitable for commonly used field trays and cable ladders with diagonal, lengthwise and/or crosswise slots and perforations.

Order Codes

Upper Level: **HKSV-212.7/12.7-ACT-GD-MUS-M-W55**
Lower Level: **212.7/12.7-ACT-SIV-ACT**

W55 is the recommended option for metal hardware to be used with STAUFF ACT Clamps.

Anti-Corrosion Technology Clamp Body (ACT)

W55 - Stainless Steel V4A
Temperature Range (Clamp Body) -25°C ... +80°C

Group 1A

Item No.	Designation	Price
1110030223	SP-106A-ACT-DP-AS-M-W55	39.70
1110030226	SP-106.4A-ACT-DP-AS-M-W55	39.70
6100141687	SP-108A-ACT-DP-AS-M-W55	39.70
1110031245	SP-109.5A-ACT-DP-AS-M-W55	39.70
1110030224	SP-110A-ACT-DP-AS-M-W55	39.70
1110030225	SP-112A-ACT-DP-AS-M-W55	39.70

Group 2

Item No.	Designation	Price
1110031862	SP-212.7-ACT-DP-AS-M-W55	40.35
6100054719	SP-214-ACT-DP-AS-M-W55	40.35
1110033267	SP-214.3-ACT-DP-AS-M-W55	40.35
6100141688	SP-215-ACT-DP-AS-M-W55	40.35
1110030227	SP-216-ACT-DP-AS-M-W55	40.35
1110033296	SP-218-ACT-DP-AS-M-W55	40.35

Group 3

Item No.	Designation	Price
6100039523	SP-319-ACT-DP-AS-M-W55	42.65
1110030222	SP-320-ACT-DP-AS-M-W55	42.65
6100076165	SP-321.3-ACT-DP-AS-M-W55	42.65
1110033297	SP-325-ACT-DP-AS-M-W55	42.65
1110031863	SP-325.4-ACT-DP-AS-M-W55	42.65

Group 4

Item No.	Designation	Price
6100076176	SP-426.9-ACT-DP-AS-M-W55	56.95
6100141689	SP-428-ACT-DP-AS-M-W55	56.95
6100137692	SP-430-ACT-DP-AS-M-W55	56.95

Group 5

Item No.	Designation	Price
6100057728	SP-532-ACT-DP-AS-M-W55	52.60
6100076155	SP-535-ACT-DP-AS-M-W55	52.60
6100141690	SP-538-ACT-DP-AS-M-W55	52.60
6100141691	SP-542-ACT-DP-AS-M-W55	52.60

W55 - Stainless Steel V4A
Temperature Range (Clamp Body) -25°C ... +80°C

Group 1D

Item No.	Designation	Price
1110030235	SP-106/06-ACT-GD-AS-M-W55	36.95
1110032380	SP-106.4/06.4-ACT-GD-AS-M-W55	36.95
6100007078	SP-109.5/09.5-ACT-GD-AS-M-W55	36.95
1110030236	SP-110/10-ACT-GD-AS-M-W55	36.95
6100135012	SP-112/12-ACT-GD-AS-M-W55	36.95

Group 2D

Item No.	Designation	Price
1110031595	SP-212.7/12.7-ACT-GD-AS-M-W55	44.75
6100072677	SP-214/14-ACT-GD-AS-M-W55	44.75

Group 3D

Item No.	Designation	Price
6100142727	SP-318/18-ACT-GD-AS-M-W55	49.70
1110031578	SP-319/19-ACT-GD-AS-M-W55	49.70
6100011464	SP-320/20-ACT-GD-AS-M-W55	49.70
6100142732	SP-321.3/21.3-ACT-GD-AS-M-W55	49.70
6100138117	SP-325.4/25.4-ACT-GD-AS-M-W55	49.70

Clamp Bore

Outside Diameter
Pipe / Tube
Ø D1

	mm	in
Group 1A / 1D	6	
	6.4	1/4
	8	
	9.5	3/8
	10	
	12	
Group 2 / 2D	12.7	1/2
	14	
	14.3	9/16
	15	
	16	5/8
	18	
Group 3 / 3D	19	3/4
	20	
	21.3	
	25	
	25.4	1
Group 4	26.9	
	28	
	30	
Group 5	32	1-1/4
	35	
	38	1-1/2
	42	

Standard Series according to DIN 3015, Part 1
ACT Standard Series Components

Integrated Rubber Strips
made of Anti-Corrosion Elastomer (ACE)

Order Codes

Clamp Body ***2-*12.7-*ACT**
Clamp Body, STAUFF Group 1A ***1-*06.4A-*ACT**

One clamp body consists of two identical clamp halves, each with two integrated rubber strips.

* STAUFF Group	**2**
* Exact outside diameter Ø D1 (mm)	**12.7**
* Material code	**ACT**

ACT Clamp Body
Temperature Range (Clamp Body) -25°C ... +80°C

Item No.	Designation	Price
1130029112	106A-ACT	9.00
1130029113	106.4A-ACT	9.00
1130031766	108A-ACT	9.00
1130029114	109.5A-ACT	9.00
1130029115	110A-ACT	9.00
1130029116	112A-ACT	9.00
1130029117	212.7-ACT	9.45
1130029118	214-ACT	9.45
1130031013	214.3-ACT	9.45
1130033126	215-ACT	9.45
1130031455	216-ACT	9.45
1130029119	218-ACT	9.45
1130029120	319-ACT	10.30
1130029121	320-ACT	10.30
1130029122	321.3-ACT	10.30
1130030925	325-ACT	10.30
1130029123	325.4-ACT	10.30
1130032567	426.9-ACT	10.75
1130032450	428-ACT	10.75
1130032451	430-ACT	10.75
1130032452	532-ACT	11.25
1130032453	535-ACT	11.25
1130032454	538-ACT	11.25
1130032455	542-ACT	11.25

ACT Single Weld Plate
Type SP-...-W55

Item No.	Designation	Price
1120023234	SP-1A-M-W55	18.35
1120023235	SP-2-M-W55	18.35
1120023236	SP-3-M-W55	19.10
1120023237	SP-4-M-W55	25.30
1120023238	SP-5-M-W55	25.80

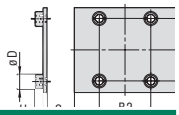
W55 = Stainless Steel V4A (Enhanced Corrosion Resistance)

ACT Cover Plate
Type DP-...-W55

Item No.	Designation	Price
1130030398	DP-1A-W55	7.25
1130030399	DP-2-W55	7.45
1130030400	DP-3-W55	7.75
1130030401	DP-4-W55	14.60
1130030402	DP-5-W55	8.75

W55 = Stainless Steel V4A (Enhanced Corrosion Resistance)

ACT Double Weld Plate
Type SPD-...-W55



Item No.	Designation	Price
1120023695	SPD-1A-M-W55	29.20
1120023696	SPD-2-M-W55	29.45
1120023697	SPD-3-M-W55	29.70

W55 = Stainless Steel V4A (Enhanced Corrosion Resistance)

ACT Safety Locking Plate
Type SIG-...-W55

Item No.	Designation	Price
1130032043	SIG-1A-ACT-W55	5.10
1130032045	SIG-2-ACT-W55	5.10
1130032047	SIG-3-ACT-W55	5.10
6100007914	SIG-4-ACT-W55	6.00
6100007916	SIG-5-ACT-W55	6.05

W55 = Stainless Steel V4A (Enhanced Corrosion Resistance)

ACT Hexagon Head Bolt
Type AS-...-W55 (according to DIN 931 / 933)

Item No.	Designation	Grp	Price
1130030403	AS-M6x30-DIN931/933-70-W55	1a	2.55
1130030404	AS-M6x35-DIN931/933-70-W55	2	2.55
1130030405	AS-M6x40-DIN931/933-70-W55	3	2.75
1130030406	AS-M6x45-DIN931/933-70-W55	4	3.15
1130030407	AS-M6x60-DIN931/933-70-W55	5	3.40

W55 = Stainless Steel V4A (Enhanced Corrosion Resistance)

ACT Stacking Bolt
(use with Safety Locking Plate SIG)
Type AF-...-W55

Item No.	Designation	Size	Price
1120023605	AF-1/1A/1D-M-W55	M6x20	11.25
1120023606	AF-2-M-W55	M6x25	11.70
1120023607	AF-3-M-W55	M6x30	20.70
6100007918	AF-4-M-W55	M6x35	13.60
6100007919	AF-5-M-W55	M6x50	14.35

W55 = Stainless Steel V4A (Enhanced Corrosion Resistance)

ACT Single Weld Plate
Type SPV-...-W55

Item No.	Designation	Price
1120023972	SPV-1A-M-W55	25.95
1120023963	SPV-2-M-W55	27.00
1120023983	SPV-3-M-W55	27.40
1120023984	SPV-4-M-W55	27.80
1120023985	SPV-5-M-W55	28.10

W55 = Stainless Steel V4A (Enhanced Corrosion Resistance)

ACT Channel Rail Adaptor
(for use with Various Channel Rails)
Type CRA-...-W55

Item No.	Designation	Size	Price
1120023702	CRA-1-8/1D-M-W55	M6	18.35

W55 = Stainless Steel V4A (Enhanced Corrosion Resistance)

Refer to page A38 for compatibility with types of channel rails and recommended bolt lengths

All-Metal Self-Locking ACT Nut
(for use with ACT Hammerhead Bolts)
Type MUS-HKS-...-W55

Item No.	Designation	Grp	Price
1130030998	MUS-HKS-M6-W55	1a-5	1.20

W55 = Stainless Steel V4A (Enhanced Corrosion Resistance)

2 pcs required for Single Clamp
1 pc required for Twin Clamp

ACT Hammerhead Bolt
Type HKS-...-W55

Item No.	Designation	Grp	Price
1130030408	HKS-M6x40-W55	1a	2.75
1130030409	HKS-M6x45-W55	2	3.10
1130030410	HKS-M6x50-W55	3	3.40
1130030411	HKS-M6x55-W55	4	3.70
1130030412	HKS-M6x70-W55	5	4.00

W55 = Stainless Steel V4A (Enhanced Corrosion Resistance)

2 pcs required for Single Clamp
1 pc required for Twin Clamp

Material Code
W55

ACT Mounting Hardware
Material Properties and Handling Instructions

ACT Mounting Hardware is made of Stainless Steel V4A (Material Code: W55) with enhanced corrosion resistance by practically excluding metallic and non-metallic impurities during production, processing and handling.

ACT Mounting Hardware is always delivered in hermetically-sealed quality storage bags with 25 pieces each to avoid contamination during transport.

Always make sure that ACT Mounting Hardware is stored separately from carbon steel and any other metals, and that appropriate tools are used to assemble the clamps. Details: www.stauff.com.au/act/assembly

Twin Series according to DIN 3015, Part 3
ACT Twin Series Components

Integrated Rubber Strips
made of Anti-Corrosion Elastomer (ACE)

Order Codes

Clamp Body ***2*12.7/12.7-*ACT**

One clamp body consists of two identical clamp halves, each with four integrated rubber strips.

* 1st Part of STAUFF Group	**2**
* Exact outside diameters Ø D1 / Ø D2 (mm)	**12.7/12.7**
* Material code	**ACT**

ACT Clamp Body
Temperature Range (Clamp Body) -25°C ... +80°C

Item No.	Designation	Price
1130029765	106/06-ACT	11.25
1130029766	106.4/06.4-ACT	11.25
1130029767	109.5/09.5-ACT	11.25
1130029768	110/10-ACT	11.25
1130029769	112/12-ACT	11.25
1130029771	212.7/12.7-ACT	11.80
1130029772	214/14-ACT	11.80
1130029747	318/18-ACT	12.85
1130029748	319/19-ACT	12.85
1130029749	320/20-ACT	12.85
1130029750	321.3/21.3-ACT	12.85
1130029751	325.4/25.4-ACT	12.85

ACT Single Weld Plate
Type SP-...-W55

Item No.	Designation	Price
1120023239	SP-1D-M-W55	15.60
1120023240	SP-2D-M-W55	21.25
1120023241	SP-3D-M-W55	24.05

W55 = Stainless Steel V4A (Enhanced Corrosion Resistance)

ACT Cover Plate
Type GD-...-W55

Item No.	Designation	Price
1130030413	GD-1D-W55	7.55
1130030414	GD-2D-W55	8.30
1130030415	GD-3D-W55	9.00

W55 = Stainless Steel V4A (Enhanced Corrosion Resistance)

ACT Hexagon Head Bolt
Type AS-...-W55 (according to DIN 931 / 933)

Item No.	Designation	Grp	Price
1130030404	AS-M6x35-DIN931/933-70-W55	1D	2.55
1130030419	AS-M8x35-DIN931/933-70-W55	2D	3.40
1130030420	AS-M8x45-DIN931/933-70-W55	3D	3.80

W55 = Stainless Steel V4A (Enhanced Corrosion Resistance)

ACT Stacking Bolt
(use with Safety Locking Plate SIV)
Type AF-...-W55

Item No.	Designation	Size	Price
1120023605	AF-1/1A/1D-M-W55	M6X20	11.25
6100002554	AF-2D-M-W55	M8X20	14.35
6100002555	AF-3D-M-W55	M8X30	15.60

W55 = Stainless Steel V4A (Enhanced Corrosion Resistance)

ACT Safety Locking Plate
Type SIV-...-ACT

Item No.	Designation	Price
1130033131	SIV-1D-PP-V0-ACT	8.75
1130033132	SIV-2D-PP-V0-ACT	8.75
1130033133	SIV-3D-PP-V0-ACT	8.75

W55 = Stainless Steel V4A (Enhanced Corrosion Resistance)

ACT Channel Rail Adaptor
(for use with Various Channel Rails)
Type CRA-...-W55

Item No.	Designation	Size	Price
1120023702	CRA-1-8/1D-M-W55	M6	18.35
1120023783	CRA-2-3D-M-W55	M8	69.70

W55 = Stainless Steel V4A (Enhanced Corrosion Resistance)

Refer to page A38 for compatibility with types of channel rails and recommended bolt lengths

All-Metal Self-Locking ACT Nut
(for use with ACT Hammerhead Bolts)
Type MUS-HKS-...-W55

Item No.	Designation	Grp	Price
1130030998	MUS-HKS-M6-W55	1D	1.20
1130031210	MUS-HKS-M8-W55	2D-3D	10.95

W55 = Stainless Steel V4A (Enhanced Corrosion Resistance)

2 pcs required for Single Clamp
1 pc required for Twin Clamp

ACT Hammerhead Bolt
Type HKS-...-W55

Item No.	Designation	Grp	Price
1130030409	HKS-M6x45-W55	1D	3.10
1130030423	HKS-M8x45-W55	2D	15.20
1130030424	HKS-M8x55-W55	3D	10.95

W55 = Stainless Steel V4A (Enhanced Corrosion Resistance)

2 pcs required for Single Clamp
1 pc required for Twin Clamp

Material Code **W55**

ACT Mounting Hardware
Material Properties and Handling Instructions

ACT Mounting Hardware is made of Stainless Steel V4A (Material Code: W55) with enhanced corrosion resistance by practically excluding metallic and non-metallic impurities during production, processing and handling.

ACT Mounting Hardware is always delivered in hermetically-sealed quality storage bags with 25 pieces each to avoid contamination during transport.

Always make sure that ACT Mounting Hardware is stored separately from carbon steel and any other metals, and that appropriate tools are used to assemble the clamps. Details: www.stauff.com.au/act/assembly

Saddle / Piggyback Clamp
ZR — **A64**

Clamp Body ▪ Single Design
LB — **A64**

Clamp Body ▪ Twin Design
LBG — **A64**

Clamp Body ▪ Single Design
LN — **A65**

Clamp Body ▪ Twin Design
LNGF / LNUF — **A65**

Cover Plate
DPL — **A65**

Saddle / Piggyback Clamps

Saddle / Piggyback Clamps Type ZR

Item No.	Designation	Price
1130007897	ZR-518-SA73	11.35

Type ZR saddle clamps from STAUFF allow direct fixing and safe guiding of pipes, tubes and hoses on hydraulic cylinders and other round or oval structures, without causing damage to their strength or integrity as with screw-fixing or welding and without preparation or reworking of the surface coating. The simple system also allows a pipe, tube or hose with a small outer diameter to be installed on top of a significantly larger one.

The position can be adjusted at any time thanks to free axial and radial positioning of the clamps on the structure. This also makes the system suitable for retrofitting.

The standard version ZR-518 made of thermoplastic elastomer material covers diameters in a range from 50 to 200 mm / 1.96 to 7.87 in for the cylinder and from 10 to 22 mm / .39 to .87 in for the attached tube or hose.

The diameters to be covered are used to calculate the overall length of the required tightening straps or the dimensions of the steel strap or worm drive hose clamp, e.g. according to DIN 3017.
STAUFF meets deviating requirements with numerous other variants which were implemented in the past and can be manufactured again at any time.

If required, customised clamps can be developed for specific requirements or manufactured based on drawings and models provided.

Contact STAUFF for more information.

Standard Material

Thermoplastic Elastomer (73 Shore-A)
Colour: Black

Refer to pages A76 - A77 for properties and technical information.

Light Series Components

Clamp Body - Single Design Type LB-...-PP

(PP) Polypropylene - Profiled Bore

Item No.	Designation	Price
1130004839	LB-103.2-PP	0.60
1130004841	LB-104.8-PP	0.60
1130004843	LB-106-PP	0.60
1130004844	LB-106.4-PP	0.60
1130004845	LB-108-PP	0.60
1130004846	LB-209.5-PP	0.70
1130004847	LB-210-PP	0.70
1130032667	LB-210.3-PP	0.70
1130004848	LB-211.1-PP	0.70
1130004849	LB-212-PP	0.70
1130004850	LB-312.7-PP	0.85
1130004851	LB-313.5-PP	0.85
1130032668	LB-313.7-PP	0.85
1130004853	LB-315-PP	0.85
1130004854	LB-316-PP	0.85
1130004855	LB-317.2-PP	0.85
1130004856	LB-318-PP	0.85
1130004857	LB-419-PP	1.20
1130004858	LB-420-PP	1.20
1130004859	LB-421.3-PP	1.20
1130004860	LB-422-PP	1.20
1130004862	LB-425-PP	1.20
1130004863	LB-425.4-PP	1.20

Clamp Body - Twin Design Type LBG-...-PP

(PP) Polypropylene - Profiled Bore

Item No.	Designation	Price
1130004890	LBG-103.2/03.2-PP	0.70
1130004892	LBG-104.8/04.8-PP	0.70
1130004894	LBG-106/06-PP	0.70
1130004896	LBG-106.4/06.4-PP	0.70
1130004898	LBG-108/08-PP	0.70
1130004901	LBG-209.5/09.5-PP	0.85
1130004903	LBG-210/10-PP	0.85
1130004907	LBG-211.1/11.1-PP	0.85
1130004909	LBG-212/12-PP	0.85
1130004914	LBG-312.7/12.7-PP	1.10
1130004917	LBG-313.5/13.5-PP	1.10
1130032673	LBG-313.7/13.7-PP	1.10
1130004918	LBG-314/14-PP	1.10
1130004921	LBG-315/15-PP	1.10
1130004926	LBG-316/16-PP	1.10
1130004929	LBG-317.2/17.2-PP	1.10
1130004930	LBG-318/18-PP	1.10
1130004936	LBG-419/19-PP	1.40
1130004940	LBG-420/20-PP	1.40
1130004946	LBG-421.3/21.3-PP	1.40
1130004947	LBG-422/22-PP	1.40
1130004952	LBG-425/25-PP	1.40
1130004956	LBG-425.4/25.4-PP	1.40

Clamp Body - Single Design Type LB-...-PA

(PA) Polyamide - Profiled Bore

Item No.	Designation	Price
1130004868	LB-103.2-PA	0.85
1130004870	LB-106-PA	0.85
1130004871	LB-106.4-PA	0.85
1130004872	LB-108-PA	0.85
1130004873	LB-209.5-PA	0.95
1130004877	LB-312.7-PA	1.40
1130032669	LB-313.7-PA	1.40
1130004881	LB-316-PA	1.40
1130004883	LB-318-PA	1.40
1130004884	LB-419-PA	1.90
1130004886	LB-421.3-PA	1.90
1130004887	LB-422-PA	1.90
1130004888	LB-425-PA	1.90
1130004889	LB-425.4-PA	1.90

Clamp Body - Twin Design Type LBG-...-PA

(PA) Polyamide - Profiled Bore

Item No.	Designation	Price
1130004964	LBG-106/06-PA	0.85
1130004965	LBG-106.4/06.4-PA	0.85
1130004974	LBG-312.7/12.7-PA	2.05
1130004979	LBG-316/16-PA	2.05
1130004984	LBG-419/19-PA	3.25
1130004988	LBG-422/22-PA	3.25
1130004993	LBG-425.4/25.4-PA	3.25

Order Codes

Clamp Body ***LB-*1*03.2-*PP**

* Light Series:	Clamp Body / Single Design	**LB**
* STAUFF Group		**1**
* Exact outside diameter Ø D1 (mm)		**03.2**
* Material code		**Polypropylene - PP**
		Polyamide - PA

Order Codes

Clamp Body ***LBG-*1*03.2/03.2-*PP**

* Light Series:	Clamp Body / Twin Design with identical diameters	**LBG**
* STAUFF Group		**1**
* Exact outside diameter Ø D1 (mm)		**03.2/03.2**
* Material code		**Polypropylene - PP**
		Polyamide - PA

Light Series Components

Clamp Body - Single Design
Type LN-...-PP

(PP) Polypropylene - Profiled Bore

Item No.	Designation	Price
1130018288	LN-104-PP	0.70
1130004783	LN-106-PP	0.70
1130004784	LN-106.4-PP	0.70
1130004785	LN-108-PP	0.70
1130004786	LN-208-PP	0.85
1130004787	LN-209.5-PP	0.85
1130004788	LN-210-PP	0.85
1130004790	LN-212-PP	0.85
1130004791	LN-212.7-PP	0.85
1130004792	LN-310-PP	0.95
1130004794	LN-312-PP	0.95
1130004795	LN-312.7-PP	0.95
1130004796	LN-313.5-PP	0.95
1130004797	LN-314-PP	0.95
1130004798	LN-315-PP	0.95
1130004799	LN-316-PP	0.95
1130004800	LN-414-PP	1.10
1130004801	LN-415-PP	1.10
1130004802	LN-416-PP	1.10
1130004803	LN-417.2-PP	1.10
1130004804	LN-418-PP	1.10
1130004805	LN-419-PP	1.10
1130004806	LN-420-PP	1.10
1130004807	LN-421.3-PP	1.10
1130004808	LN-422-PP	1.10

Clamp Body - Twin Design
Type LNGF-...-PP

(PP) Polypropylene - Profiled Bore

Item No.	Designation	Price
1130032670	LNGF-104/04-PP	0.85
1130017219	LNGF-106/06-PP	0.85
1130017220	LNGF-106.4/06.4-PP	0.85
1130017221	LNGF-108/08-PP	0.85
1130017222	LNGF-208/08-PP	0.95
1130017223	LNGF-209.5/09.5-PP	0.95
1130017224	LNGF-210/10-PP	0.95
1130017227	LNGF-212/12-PP	0.95
1130017229	LNGF-212.7/12.7-PP	0.95
1130017230	LNGF-310/10-PP	1.90
1130017231	LNGF-312/12-PP	1.90
1130017232	LNGF-312.7/12.7-PP	1.90
1130017233	LNGF-313.5/13.5-PP	1.90
1130017234	LNGF-314/14-PP	1.90
1130017235	LNGF-315/15-PP	1.90
1130017237	LNGF-316/16-PP	1.90
1130017240	LNGF-414/14-PP	2.15
1130017241	LNGF-415/15-PP	2.15
1130017242	LNGF-416/16-PP	2.15
1130017243	LNGF-417.2/17.2-PP	2.15
1130017244	LNGF-418/18-PP	2.15
1130017245	LNGF-419/19-PP	2.15
1130017247	LNGF-420/20-PP	2.15
1130017250	LNGF-421.3/21.3-PP	2.15
1130017251	LNGF-422/22-PP	2.15

Two DPL Cover Plates recommended per Saddle

Clamp Body - Twin Design
Type LNUF-...-PP

(PP) Polypropylene - Profiled Bore

Item No.	Designation	Price
1130017329	LNUF-108/06.4-PP	2.15
1130020654	LNUF-212.7/06.4-PP	2.15
1130017294	LNUF-212.7/09.5-PP	2.15
1130032671	LNUF-418/14-PP	5.95
1130032672	LNUF-421.3/17.2-PP	5.95

Two DPL Cover Plates recommended per Saddle

Cover Plate
Type DPL

Item No.	Designation	Price
1130001958	DPL-1-W3	0.85
1130001959	DPL-2-W3	0.95
1130001960	DPL-3-W3	1.10
1130001961	DPL-4-W3	2.15
1130002142	DPL-1-W5	3.80
1130002141	DPL-2-W5	4.10
1130002140	DPL-3-W5	5.00
1130002139	DPL-4-W5	5.25

W3 = Carbon Steel, zinc/nickel-plated
W5 = Stainless Steel

Clamp Body - Single Design
Type LN-...-PA

(PA) Polyamide - Profiled Bore

Item No.	Designation	Price
1130004812	LN-106-PA	0.85
1130004813	LN-106.4-PA	0.85
1130004814	LN-108-PA	0.85
1130004815	LN-208-PA	0.95
1130004816	LN-209.5-PA	0.95
1130004817	LN-210-PA	0.95
1130004819	LN-212-PA	0.95
1130004820	LN-212.7-PA	0.95
1130004824	LN-312.7-PA	1.90
1130004825	LN-313.5-PA	1.90
1130004826	LN-314-PA	1.90
1130004827	LN-315-PA	1.90
1130004828	LN-316-PA	1.90
1130004831	LN-416-PA	2.15
1130004832	LN-417.2-PA	2.15
1130004833	LN-418-PA	2.15
1130004834	LN-419-PA	2.15
1130004835	LN-420-PA	2.15
1130004836	LN-421.3-PA	2.15
1130004837	LN-422-PA	2.15

Clamp Body - Single Design
Type LNGF-...-PA

(PA) Polyamide - Profiled Bore

Item No.	Designation	Price
1130017254	LNGF-106/06-PA	1.20
1130017255	LNGF-106.4/06.4-PA	1.20
1130017256	LNGF-108/08-PA	1.20
1130017258	LNGF-208/08-PA	2.05
1130017259	LNGF-209.5/09.5-PA	2.05
1130017261	LNGF-210/10-PA	2.05
1130017262	LNGF-212/12-PA	2.05
1130017263	LNGF-212.7/12.7-PA	2.05
1130017267	LNGF-312.7/12.7-PA	2.15
1130017271	LNGF-314/14-PA	2.15
1130017272	LNGF-315/15-PA	2.15
1130017273	LNGF-316/16-PA	2.15
1130017276	LNGF-415/15-PA	3.40
1130017277	LNGF-416/16-PA	3.40
1130017278	LNGF-417.2/17.2-PA	3.40
1130017279	LNGF-418/18-PA	3.40
1130017281	LNGF-419/19-PA	3.40
1130017284	LNGF-420/20-PA	3.40
1130017289	LNGF-422/22-PA	3.40

Two DPL Cover Plates recommended per Saddle

Clamp Body - Single Design
Type LNUF-...-PA

(PA) Polyamide - Profiled Bore

Item No.	Designation	Price
1130017260	LNUF-209.5/06.4-PA	5.95
1130020222	LNUF-210/08-PA	5.95
1130017264	LNUF-212.7/06.4-PA	5.95

Two DPL Cover Plates recommended per Saddle

Order Codes

Clamp Body ***LN-*1*06-*PP**

* Light Series:	Clamp Body / Single Design	**LN**
* STAUFF Group		**1**
* Exact outside diameter Ø D1 (mm)		**06**
* Material code		**Polypropylene - PP**
		Polyamide - PA

Order Codes

Clamp Body ***LNGF-*1*06/06-*PP**

* Light Series:	Clamp Body / Twin Design with identical diameters	**LNGF**
	Clamp Body / Twin Design with different diameters	**LNUF**
* STAUFF Group		**1**
* Exact outside diameters Ø D1 / Ø D2 (mm)		**06/06**
* Material code		**Polypropylene - PP**
		Polyamide - PA

Construction Series
(for Anchor Bolt Fastening)
KSV / DKSV — **A68**

Construction Series
KS / DKS — **A68**

Round Steel U-Bolt
with Plastic Pipe Saddle (Short)
RB / RUK — **A68**

Round Steel U-Bolt
with Plastic Pipe Saddle (Long)
RB / RUL — **A68**

Round Steel U-Bolt (DIN 3570, Type A)
without Plastic Pipe Saddle
RBD — **A68**

Flat Steel U-Bolt
with Plastic Pipe Saddle (Short) and U-Profile
FB / RUK — **A69**

Metal Pipe Clamp with Tension Clearance
Two-Bolt Design
DIN 3567-A — **A69**

Metal Pipe Clamp with Tension Clearance
Three-Bolt Design (Extended to One Side)
DIN 3567-B — **A69**

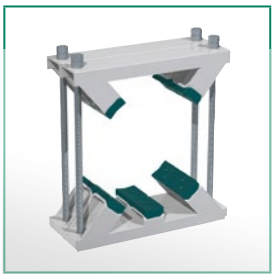
Light Saddle with Tension Clearance
Single-Bolt Design
DIN 1596 — **A69**

Light Saddle with Tension Clearance
Two-Bolt Design
DIN 1597 — **A69**

Heavy Saddle with Tension Clearance
Single-Bolt Design
DIN 1592 — **A69**

Heavy Saddle with Tension Clearance
Two-Bolt Design
DIN 1593 — **A69**

Construction Clamps



STAUFF Clamp Type KSV / DKSV

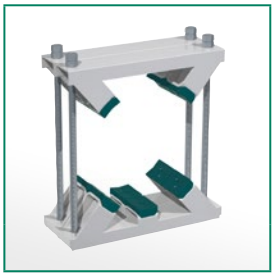
Outside diameter:
220 - 800 mm

Design
- Two-part-weld-construction with plastic pads for anchor bolt fastening

Materials & Surface Finishing of Weld Construction
- W7 - carbon steel St 37 (prime painted)
- W40 - carbon steel St 37 (hot-dip zinc galvanised)

Alternative materials and surface finishing in addition to the above stated standard are available upon request.

Materials of Plastic Pads
- Polypropylene (Colour: Green)
- Polyamide (Colour: Black)



STAUFF Clamp Type KS / DKS

Outside diameter:
220 - 800 mm

Design
- Two-part-weld-construction with plastic pads

Materials & Surface Finishing of Weld Construction
- W7 - carbon steel St 37 (prime painted)
- W40 - carbon steel St 37 (hot-dip zinc galvanised)

Alternative materials and surface finishing in addition to the above stated standard are available upon request.

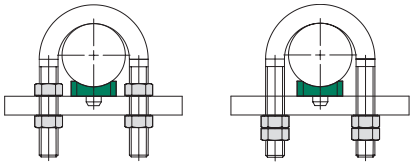
Materials of Plastic Pads
- Polypropylene (Colour: Green)
- Polyamide (Colour: Black)

Round Steel U-Bolt Clamps

Round Steel U-Bolt Clamps Type RB + RUK

Outside diameter:
25 - 521 mm
DN 20 - DN 500

Design
- Round Steel U-Bolt Clamp with Plastic Pipe Saddle - Short



Recommended Installation

Round Steel U-Bolt Type RB

Steel Zinc Plated c/w Nuts

Item No.	Designation	Price
1120003203	RB-A-30-W32-COMPL-A	7.55
1120003205	RB-A-38-W32-COMPL-A	8.60
1120003207	RB-A-46-W32-COMPL-A	8.60
1120003209	RB-A-52-W32-COMPL-A	8.60
1120003211	RB-A-64-W32-COMPL-A	10.00
1120003213	RB-A-82-W32-COMPL-A	12.85
1120003215	RB-A-94-W32-COMPL-A	14.25
1120003217	RB-A-120-W32-COMPL-A	24.05
1120003219	RB-A-148-W32-COMPL-A	28.25
1120003221	RB-A-176-W32-COMPL-A	31.00
1120003225	RB-A-228-W32-COMPL-A	56.25
1120003227	RB-A-282-W32-COMPL	68.80

Plastic Pipe Saddle (short) Type RUK

(PP) Polypropylene

Item No.	Designation	Price
1130004455	RUK-38-PP	4.60
1130004458	RUK-48.3-PP	4.60
1130004459	RUK-57-PP	4.60
1130004460	RUK-60.3-PP	4.60
1130004461	RUK-76.1-PP	4.60
1130004462	RUK-88.9-PP	7.55
1130004465	RUK-114-PP	10.00
1130004467	RUK-139.7-PP	10.00
1130004469	RUK-168.3-PP	33.80
1130004473	RUK-219.1-PP	33.80
1130004476	RUK-273-PP	33.80
1130008824	RUK-457-PP	56.25
1130004485	RUK-521-PP	56.25

Type RB + RUL

Outside diameter:
25 - 521 mm
DN 20 - DN 500

Design
- Round Steel U-Bolt Clamp with Plastic Pipe Saddle - Long

Materials & Surface Finishing of Round Steel U-Bolt Clamp
- W1 - carbon steel St 37 (untreated)
- W3 - carbon steel St 37 (zinc/nickel coated)
- W5 - stainless steel A4 - 1.4401 / 1.4571 (AISI 316 / 316Ti)
- W6 - carbon steel St 37 (plastic coated)

Alternative materials and surface finishing in addition to the above stated standard are available upon request.

Materials of Plastic Pipe Saddle
- Polypropylene (Colour: Green)
- Polyamide (Colour: Black)

Type RBD

Outside diameter:
25 - 521 mm
DN 20 - DN 500

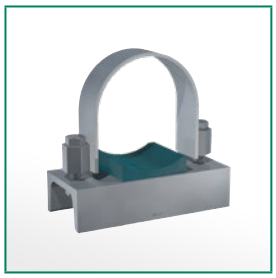
Design
- Round Steel U-Bolt Clamp according to DIN 3570, Type A

Materials & Surface Finishing of Round Steel U-Bolt Clamp
- W1 - carbon steel St 37 (untreated)
- W3 - carbon steel St 37 (zinc/nickel coated)

Alternative materials and surface finishing in addition to the above stated standard are available upon request.

Contact STAUFF for more information.

Flat Steel U-Bolt Clamps



Flat Steel U-Bolt Clamps Type FB + RUK

Outside diameter:
48,3 - 521 mm
DN 40 - DN 500

Design

- Flat Steel U-Bolt Clamps with Plastic Pipe Saddle and U-Profile
- To be used as fixed point clamps only

Materials & Surface Finishing of Flat Steel U-Bolt Clamp

- W1 - carbon steel St 37 (untreated)

Alternative materials and surface finishing in addition to the above stated standard are available upon request.

Materials & Surface Finishing of U-Profile

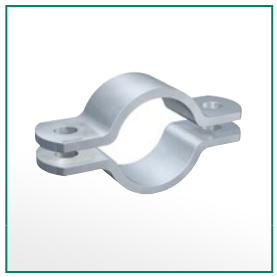
- W1 - carbon steel St 37 (untreated)

Alternative materials and surface finishing in addition to the above stated standard are available upon request.

Materials of Plastic Pipe Saddle

- Polypropylene (Colour: Green)
- Polyamide (Colour: Black)

Metal Clamps



Metal Clamps according to DIN 3567, Type A

Outside diameter:
15 - 521 mm
DN 20 - DN 500

Materials & Surface Finishing

- W1 - carbon steel St 37 (untreated)

Alternative materials and surface finishing in addition to the above stated standard are available upon request.

Metal Clamps according to DIN 3567, Type B

Outside diameter:
15 - 521 mm
DN 20 - DN 500

Materials & Surface Finishing

- W1 - carbon steel St 37 (untreated)

Alternative materials and surface finishing in addition to the above stated standard are available upon request.

Light Saddles according to DIN 1596 and DIN 1597

Outside diameter:
15 - 521 mm
DN 20 - DN 500

Materials & Surface Finishing

- W66 - carbon steel St 37
  (zinc plated + thick film passivated)

Alternative materials and surface finishing in addition to the above stated standard are available upon request.

Heavy Saddles according to DIN 1592 and DIN 1593

Outside diameter:
15 - 521 mm
DN 20 - DN 500

Materials & Surface Finishing

- W1 - carbon steel St 37 (untreated)
- W66 - carbon steel ST 37
  (zinc plated + thick film passivated)

Alternative materials and surface finishing in addition to the above stated standard are available upon request.

Contact STAUFF for more information.

	Enquiry Form for Custom-Designed Special Clamps	A72
	Machined Versions	A73
	Injection Moulded Version	A73
	Metal Versions and Accessories	A73
	STAUFF SWG: Stud Welding System	A74
	STAUFF Bond: Adhesive Bonded Fastening	A74

STAUFF

Enquiry Form for Custom-Designed Special Clamps

Please use the following form as a guideline when preparing an enquiry for a custom-designed special clamp. Copy and print this page and complete it with as much information as possible and send it to STAUFF by email or fax.

When possible, please also let STAUFF know the quantities required, and if the enquiry is for a one-time or recurring demand.
Contact STAUFF for more information or to book a consultation.

Application Information

Complete > Scan > Email to marketing@stauff.com.au

Area of use ☐ Indoor ☐ Outdoor

Ambient temperature Lowest _____ ☐ °C / ☐ °F Highest _____ ☐ °C / ☐ °F

Resistance against particular media ☐ No ☐ Yes
- ☐ Mineral oils
- ☐ Other oils _____
- ☐ Benzine
- ☐ Weak acids
- ☐ Solvents
- ☐ Alcohols
- ☐ Seawater
- ☐ Other media _____

Fire protection requirements ☐ No ☐ Yes
- ☐ UL94
- ☐ BS 6853
- ☐ Other standard _____

Material preference for the clamp body
- ☐ Polypropylene
- ☐ Aluminium
- ☐ Stainless Steel ☐ V2A ☐ V4A
- ☐ Polyamide
- ☐ Steel
- ☐ Other material _____

Design Information

Type of line
- ☐ Pipe / tube (fixed installation)
- ☐ Hose
- ☐ Cable
- ☐ Other components _____
- ☐ Pipe / tube (sliding installation)
- ☐ Conduit Hose
- ☐ Mix of different types of lines

Maximum dimensions of clamp body Length _____ x Width _____ x Height _____ ☐ mm / ☐ inch

Total number of lines _____

Diameters per line

Line 1 _____	☐ mm / ☐ inch	Further comments _____
Line 2 _____	☐ mm / ☐ inch	Further comments _____
Line 3 _____	☐ mm / ☐ inch	Further comments _____
Line 4 _____	☐ mm / ☐ inch	Further comments _____
Line 5 _____	☐ mm / ☐ inch	Further comments _____
Line 6 _____	☐ mm / ☐ inch	Further comments _____
Line 7 _____	☐ mm / ☐ inch	Further comments _____
Line 8 _____	☐ mm / ☐ inch	Further comments _____

Preferred centre distance of the lines _____ ☐ mm / ☐ inch

Preferred number of screw holes _____

Information on Mounting Hardware

Preferred type of bolts

☐ Hexagon head bolts (with cover plate)	☐ with metric threads	☐ with UNC threads
☐ Socket cap crews (with cover plate)	☐ with metric threads	☐ with UNC threads
☐ Socket cap crews (w/o cover plate)	☐ with metric threads	☐ with UNC threads

Preferred type of installation
- ☐ Welding (using a weld plate)
- ☐ Welding (using weld studs)
- ☐ Direct screw-fastening
- ☐ Adhesive bonded fastening
- ☐ Mounting rail (using a rail nut / adaptor)

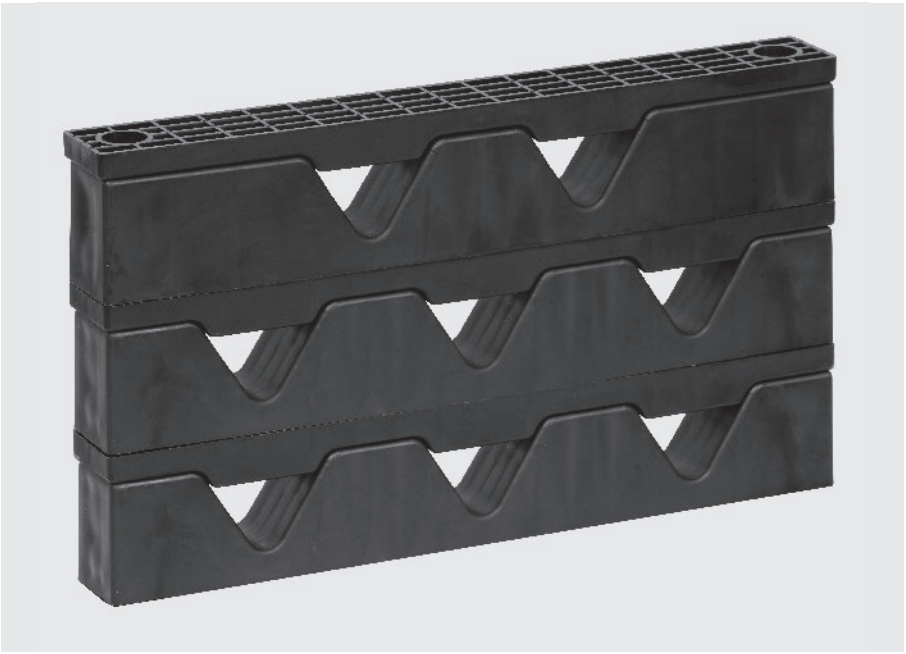
Material preference for the hardware ☐ Steel ☐ Stainless Steel ☐ V2A ☐ V4A

Machined Versions

Custom-designed clamping systems for pipes, tubes, hoses, cables and other components according to customer`s specifications or based on STAUFF developments, made of thermoplastics, metals and non-ferrous metals.

Injection Moulded Versions

Custom-designed clamping systems for pipes, tubes, hoses, cables and other components according to customer`s specifications or based on STAUFF developments, made of Polypropylene, Polyamide and other thermoplastics.



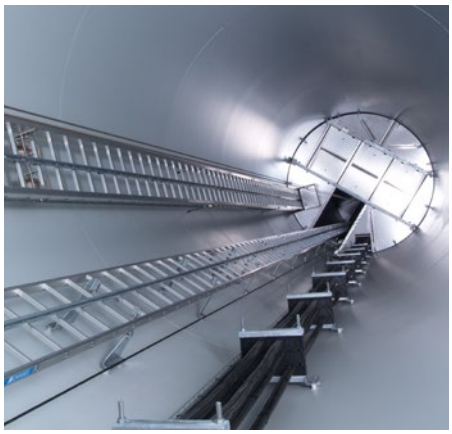
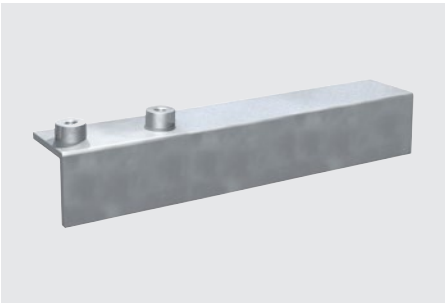


Photo Source: mm-fotowerbung.de

Metal Versions and Accessories

Metal versions of custom-designed clamping systems for pipes, tubes, hoses, cables and other components as well as accessories such as weld plates, cover plates, bolts as well as elastomer inserts.



STAUFF SWG
Stud Welding System

In many areas, stud welding is considered to be the most economic fastening method for components and is sometimes even the only technically feasible solution. Because the stud is joined with the substructure over the entire surface of the stud, high strength of the joint can be achieved.

STAUFF is now using this proven principle for the installation of pipe, tube, hose and cable clamps in the Standard Series (according to DIN 3015, part 1) as well as in the Twin Series (according to DIN 3015, part 3) with M6 mounting thread, where female threaded weld studs replace the regular weld plates; distance plates made from plastic provide the necessary spacing between the clamp bodies and the substructure.

If required, the system can also be adapted for alternative fastening methods, e.g. for clamping belts, cable ties or conduit hoses.

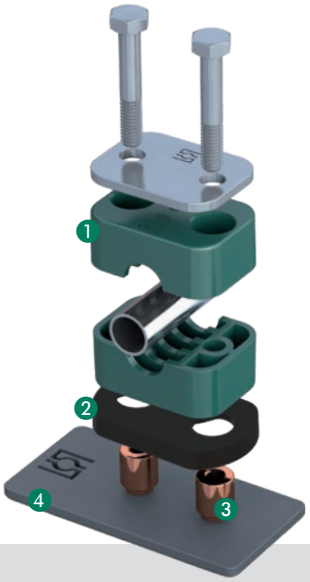
In addition to the individual components – weld studs, distance plates, clamp bodies and metal hardware required – STAUFF also provides the correspondingly designed assembly tools such as the weld inverter and the weld gun with distance tube, stud retainer and distance adaptor for DIN 3015 clamps. The lightweight and compact weld inverter works without high-voltage current.

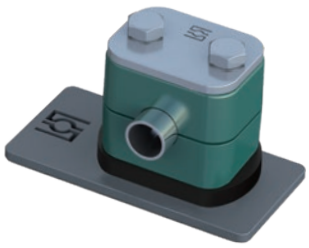
Thanks to increased productivity and flexibility for the installation of clamps, the system offers considerable savings potentials for users with significant processing volumes, especially when working in a horizontal or overhead position. The amount of rework on welding locations can be significantly decreased, and material distortion is reduced to a minimum through low thermal stress.

The joint of the weld stud with the substructure impresses in particular with a high degree of strength and safety, which is at least at the same level as for regular weld plates.

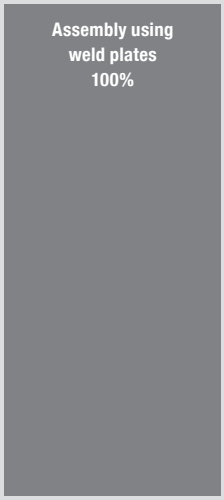
- Developed and optimised to the functions of original STAUFF Clamps in the Standard Series (DIN 3015, Part 1)
- Versatile combination and adaptation options available (e.g. fastening elements for conduit hoses, clamping belts and cable ties)
- All installation options are fully covered by only one weld stud
- Significant time and cost savings by a quicker welding process and reduced rework on welding locations
- Material distortion reduced to a minimum through low thermal stress (particularly significant when handling thin metal sheets)
- High degree of safety and protection against corrosion due to a welded joint over the whole surface
- Lightweight and compact designed welding inverter
- By default no shielding gas or ceramic ferrule required
- Works without high-voltage current

Contact STAUFF for more information.

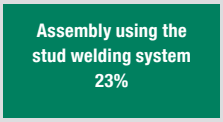




1. Clamp body and standard mounting hardware according to DIN 3015-1/3 (Standard and Twin Series)
2. Distance plate
3. Weld studs with female threads
4. Base material and surface suitable for stud welding



Reduction of the assembly time per clamp*



*For a typical assembly procedure in production environments.

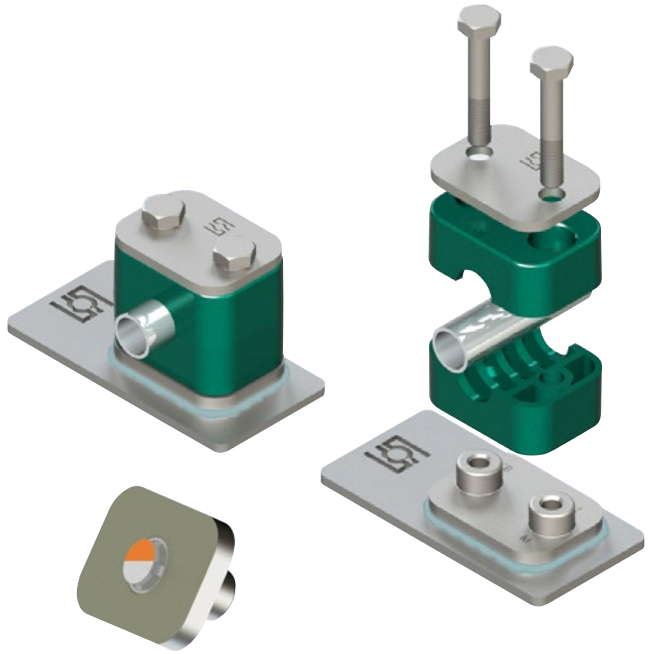
STAUFF Bond
Adhesive Bonded Fastening

The innovative STAUFF Bond system allows for pipes, tubes, hoses, cables and other components with outside diameters up to 102 mm / 4.00 in to be adhesively bonded to almost any surface material, such as prepared or unprepared metals, thermoplastics and composites.

It enables assembly and service technicians such as tube fitters to replace expensive and sometimes complicated mechanical fastening methods for STAUFF Clamps such as welding, brazing, bolting and riveting - a crucial benefit especially in safety-critical situations where welding is usually not considered to be an option.

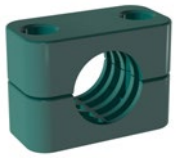
- Reduce cycle time and labour cost during installation
- Eliminate the need for hot work, fire watch and gas freeing
- Expensive tools and welding equipment no longer necessary
- No external power supply or electrical power required for installation
- Can be used with a variety of surfaces, especially in safety-critical situations when welding is not an option
- Enhance structural design, strength and integrity
- Reduce the number of holes drilled into the structure
- Prevent galvanic corrosion and potential leak paths
- Maximize design and work sequence flexibility
- Facilitate last minute changes and additions
- Simplify subsequent modification and repair

Contact STAUFF for more information.



Standard Clamp Body Materials	A76
Standard Elastomer Insert Materials	A77
Special Clamp Body Materials	A78 - A79
Standard Clamp Body Designs	A80
Materials and Surface Finishing of Metal Parts	A81
Thread Conversion Chart	A81
Property Classes / Grades of Bolts and Screws	A81
General Installation Instructions	A82
Tightening Torques / Maximum Loads in Pipe Direction	A83
Dimensions and Weights of Clamp Assemblies	A84 - A85
Packaging Units (Selection)	A85

Standard Clamp Body Materials



Material Code	PP	PA	AL	SA
Basic Material	Copolymeric Polypropylene	Polyamide	Aluminium AlSi12	Thermoplastic Elastomer
Standard Colour	Green	Black	Natural	Black
Mechanical Properties				
Tensile E-Module	1073 N/mm² (ISO 527)	> 1400 N/mm² (ISO 527)	> 65000 N/mm²	113 N/mm² at +23 °C / +73.4 °F (ASTM D412)
Notch Impact Strength	8 kJ/m² at +23 °C / +73.4 °F (acc. to Charpy / ISO 179 / 1eU)	> 15 kJ/m² at 23 °C / +73.4 °F (acc. to Charpy / ISO 179 / 1eU)		
Low Temperature Notch Impact Strength	3 kJ/m² at -20 °C / -4.0 °F (acc. to Charpy / ISO 179 / 1eU)	> 3 kJ/m² at -30 °C / -22.0 °F (acc. to Charpy / ISO 179 / 1eU)		
Tensile Strength at Yield (Tensile Strength)	26 MPa (ISO 527-2)	> 55 MPa (ISO 527)	> 240 MPa (ISO EN 10002)	15,9 MPa (ASTM D412)
Ball Indentation Hardness (Brinell Hardness)	45,4 MPa (ISO 2039-1)	> 65 MPa (ISO 2039-1)	> 70 HBS	
Shore Hardness				87 A (ISO 868) Alternative hardnesses are available upon request! Contact STAUFF for details.
Thermal Properties				
Temperature Resistance (Min ... Max)	-30 °C ... +90 °C / -22 °F ... +194 °F	-40 °C ... +120 °C / -40 °F ... +248 °F (Brief exposure up to +140 °C / +284 °F)	up to +300 °C / up to +572 °F	-40 °C ... +125 °C / -40 °F ... +257 °F
Chemical Properties				
Weak Acids	conditionally consistent	conditionally consistent	conditionally consistent	consistent
Solvents	conditionally consistent	conditionally consistent	conditionally consistent	conditionally consistent
Benzine	conditionally consistent	consistent	consistent	conditionally consistent
Mineral Oils	conditionally consistent	consistent	consistent	conditionally consistent
Other Oils	consistent	consistent	consistent	consistent
Alcohols	consistent	consistent	consistent	consistent
Seawater	consistent	consistent	consistent	consistent

Special Clamp Body Materials

Contact STAUFF for further details on fire-proof clamp body materials, tested and approved according to several international fire-protection standards (such as BS 6853, EN 45545-2, UL 94 and many more).

Refer to pages A78 - A79 for material properties and technical information.

The information for the Polyamide material PA has been determined in a conditioned state according to ISO 1110.
For Aluminium, the tensile strength (under reversed bending stress) and impact bending strength both rise constantly at decreasing temperatures whilst the value for breaking elongation decreases.

STAUFF reserves the right to supply products made from alternative, but comparable materials with matching technical characteristics.

Standard Clamp Insert Materials

STAUFF Group 4 and 6 (Standard Series)
STAUFF Group 4S to 6S (Heavy Series)

STAUFF Group 7S to 10S (Heavy Series)

SA	EPDM	Material Code
Thermoplastic Elastomer	Ethylene Propylene Diene Monomer	Basic Material
Black	Black	Standard Colour

		Mechanical Properties
16 N/mm² at +23 °C / +73.4 °F (ASTM D412)		Tensile E-Module
		Notch Impact Strength
		Low Temperature Notch Impact Strength
8,3 MPa (ASTM D412)	9,0 MPa (DIN 53504)	Tensile Strength at Yield (Tensile Strength)
		Ball Indentation Hardness (Brinell Hardness)
73 A (ISO 868)	70 A (DIN 53505)	Shore Hardness

		Thermal Properties
-40 °C ... +125 °C / -40 °F ... +257 °F	-50 °C ... +120 °C / -58 °F ... +248 °F	Temperature Resistance (Min ... Max)

		Chemical Properties
consistent	consistent	Weak Acids
conditionally consistent	consistent	Solvents
conditionally consistent	conditionally consistent	Benzine
conditionally consistent	conditionally consistent	Mineral Oils
consistent	conditionally consistent	Other Oils
consistent	consistent	Alcohols
consistent	consistent	Seawater

Special Clamp Insert Materials

Contact STAUFF for further details on fire-proof clamp body materials, tested and approved according to several international fire-protection standards (such as BS 6853, EN 45545-2, UL 94 and many more).

Refer to pages A78 - A79 for material properties and technical information.

STAUFF reserves the right to supply products made from alternative, but comparable materials with matching technical characteristics.

Special Clamp Body Materials (Selection)

Preventive Fire Protection

Material Code	PA-V0	PP-DA	PA-GF30-USR
Basic Material	Polyamide	Polypropylene	Polyamide
Standard Colour	Grey / Black	White	Black
Mechanical Properties			
Tensile E-Module	1500 MPa (ISO 527-2)	1614 N/mm² (ISO 527) at +23 °C / +73.4 °F: 50 mm/min	8274 MPa (ASTM D638)
Notch Impact Strength	35 kJ/m² at +23 °C / +73.4 °F (acc. to Charpy / ISO 179 / 1eU)	13 kJ/m² at +23 °C / +73.4 °F (acc. to IZOD / ISO 179 / 1eA)	15 kJ/m² (ASTM D256)
Low Temperature Notch Impact Strength		1.5 kJ/m² at -25 °C / -13.0 °F (acc. to IZOD / ISO 179 / 1eA)	
Tensile Strength at Yield (Tensile Strength)	45 MPa (ISO 527-2)	12.4 MPa (ISO 527) at +23 °C / +73.4 °F: 50 mm/min	131 MPa (ASTM D638)
Ball Indentation Hardness (Brinell Hardness)	100 N/mm² (ISO 2039-1)		
Shore Hardness			
Thermal Properties			
Temperature Resistance (Min ... Max)	-30 °C ... +120 °C / -22 °F ... +248 °F	-25 °C ... +90 °C / -13 °F ... +194 °F	-30 °C ... +120 °C / -22 °F ... +248 °F
Features			
Approvals / Properties	**Tested and approved acc. to UL94** [1] (material thickness: 3 mm) ▪ Classification: V-0 (Vertical Burning Test) **Tested and approved acc. to EN 45545-2** (material thickness: 3.5 mm) ▪ Requirements set R22 / R23 / R24 / R26 ▪ Hazard level HL1 - HL3 **Tested and approved acc. to DIN 5510, Part 2** (material thickness: 3 mm) ▪ Combustibility classification: S4 ▪ Smoke development classification: SR2 ▪ Dripping classification: ST2 **Tested and approved acc. to NF F 16-101** (material thickness: 3 mm) ▪ Classification: I3 / F2 **Low Smoke Zero Halogen (LSZH)**	**Tested and approved acc. to UL94** [1] (material thickness: 3 mm) ▪ Classification: V-0 (Vertical Burning Test) **Tested and approved acc. to Def Stan 07-247** ▪ Assessment: category B **Approved by the UK Ministry of Defence (MoD)** **Low Smoke Zero Halogen (LSZH)**	**Tested and approved acc. to ASTM D638** (material thickness: 1.5 mm) ▪ Classification: V-0 (Vertical Burning Test) **Tested and approved acc. to NFPA 130** (material thickness: 3 mm) ▪ no burning dripping **Halogen Free Flame Retardant (HFFR)**

[1] Successful testing and approval, according to UL94 (classification V-0) is equivalent to EN 45545-2 (requirements set R26; hazard level HL3).
The information for PA-V0 has been determined in a conditioned state according to ISO 1110.

STAUFF reserves the right to supply products made from alternative, but comparable materials with matching technical characteristics.

Special Clamp Body Materials (Selection)

Preventive Fire Protection

PP6853	PP-V0	SA-V0	Material Code
Polypropylene	Polypropylene	Thermoplastic Elastomer	**Basic Material**
White	Black	Natural	**Standard Colour**

			Mechanical Properties
1264 MPa (ICE 60811-1-1)		113 N/mm² at +23 °C / +73.4 °F (ASTM D412)	**Tensile E-Module**
17 kJ/m² at +23 °C / +73.4 °F (acc. to IZOD / ISO 179 / 1eA)	5 kJ/m² at +23 °C / +73.4 °F (acc. to ISO 180/A)		**Notch Impact Strength**
			Low Temperature Notch Impact Strength
25 MPa (ICE 60811-1-1)	24 MPa (ISO 527)	15.9 MPa (ASTM D412)	**Tensile Strength at Yield (Tensile Strength)**
			Ball Indentation Hardness (Brinell Hardness)
		86 A (ISO 868)	**Shore Hardness**

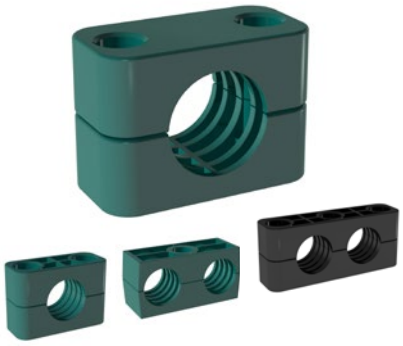
			Thermal Properties
-25 °C ... +90 °C / -13 °F ... +194 °F	-25 °C ... +90 °C / -13 °F ... +194 °F	-50 °C ... +90 °C / -58 °F ... +194 °F	**Temperature Resistance (Min ... Max)**

			Features
Tested and approved acc. to EN 45545-2 (material thickness: 3 mm) ▪ Requirements set R22 / R23 / R24 / R26 ▪ Hazard level HL1 - HL3 **Tested and approved acc. to BS 6853** (Code of practice for fire precautions in the design /construction of passenger carrying trains) ▪ Assessment: category 1a **Compliant to the requirements of London Underground / Metronet** (standard 2-01001-002: Fire Safety Performance of Materials) **Tested and approved acc. to DIN 5510, Part 2** (material thickness: 25 mm) ▪ Combustibility classification: S4 ▪ Smoke development classification: SR2 ▪ Dripping classification: ST2 **Tested and approved acc. to Def Stan 07-247** ▪ Assessment: category B **Compliant to the requirements of JRMA** (Japan Railway Rollingstock & Machinery Association) ▪ Classification: extremely incombustible **Low Smoke Zero Halogen (LSZH)**	**Tested and approved acc. to UL94** [1] (material thickness: 3 mm) ▪ Classification: V-0 (Vertical Burning Test)	**Tested and approved acc. to UL94** [1] (material thickness: 3 mm) ▪ Classification: V-0 (Vertical Burning Test)	Approvals / Properties

[1] Successful testing and approval, according to UL94 (classification V-0) is equivalent to EN 45545-2 (requirements set R26; hazard level HL3).

STAUFF reserves the right to supply products made from alternative, but comparable materials with matching technical characteristics.

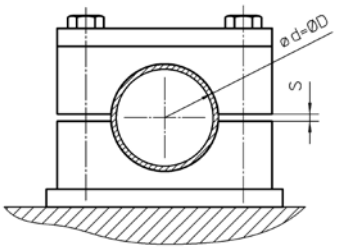
Standard Clamp Body Designs

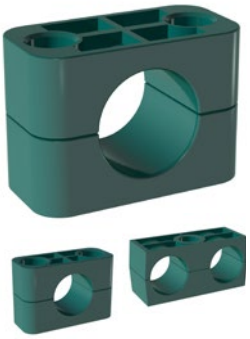


Profiled Design

Profiled Inside Surface with Tension Clearance

- Available in the Standard, Heavy, Twin and Heavy Twin Series
- Recommended for the safe installation of rigid pipes or tubes
- Available for all commonly used outside diameters and nominal sizes
- Vibration/noise reducing and impact absorbing effect towards the direction of the line provided by the grooves on the inside of the clamp bodies
- Clearance S between the clamp halves provides tension on the tube or pipe
- To be used as fixed point clamp preventing the line from sliding (Refer to page A83 for Maximum Loads in Pipe Direction)

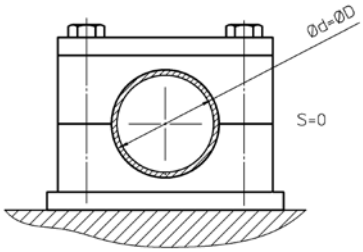




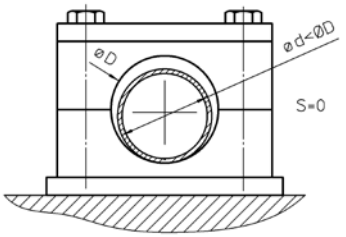
Type H (Smooth)

Smooth Inside Surface w/o Tension Clearance

- Available in the Standard, Heavy and Twin Series
- Recommended for the safe installation of hoses or cables
- Available for all commonly used outside diameters and nominal sizes
- Smooth inside surface and chamfered edges avoid damaging of the hose or cable

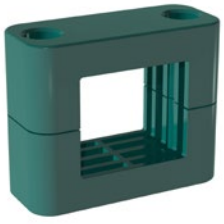


- Choose the diameter ØD of the clamp body slightly larger (in accordance to your specific requirements) than the outside diameter Ød of the pipe, tube, hose or cable in order to use it as a longitudinal guide allowing the line to slide



Type RI (with Elastomer Insert)

- Available in the Standard, Heavy and Heavy Twin Series
- Recommended for the extra-gentle installation of pipes, tubes, hoses or cables
- Available for all commonly used outside diameters and nominal sizes
- Elastomer insert made of Thermoplastic Elastomer with a hardness of 73 Shore-A provides effective reduction of vibration and noise caused by vibration



Rectangular Design ▪ Type VK

- Available in the Standard Series (STAUFF Group 5)
- Recommended for the safe installation of proximity switches according to DIN EN 60947-5-2 or similar, rectangular construction, with a square of 40 mm x 40 mm (1.57 in x 1.57 in) or 40 mm x 36 mm (1.57 in x 1.42 in)

Materials and Surface Finishing of Metal Parts

Materials

Unless otherwise stated, all metal parts (e.g. weld plates, cover plates, bolts, rail nuts etc.) are made of **Carbon Steel** (surface finishing according to material code).

In addition, all metal parts are also available **ex stock** in two different stainless steel qualities:

Stainless Steel V2A
- 1.4301 / 1.4305 (AISI 304 / 303)
- Material code: W4

Stainless Steel V4A
- 1.4401 / 1.4571 (AISI 316 / 316 Ti)
- Material code: W5

Alternative materials (e.g. Aluminium) are available upon request. Contact STAUFF for more information.

Surface Finishing

Unless otherwise stated, all metal parts made of Carbon Steel are available with the following standard surface finishing:

Carbon Steel, uncoated
- Material code: W1

Carbon Steel, phosphated
- Fe/Znph r 10 according to DIN EN 12476
- Material code: W2

Carbon Steel, zinc/nickel-plated
- More than 1200 hours resistance against red rust / base metal corrosion in the salt spray test to DIN EN ISO 9227
- Free of hexavalent chromium Cr(VI)
- RoHS compliant according to 2002/95/EC (Restrictions of the Use of Hazardous Substances)
- ELV compliant according to 2000/53/EC (End of Life Vehicles Directive)
- Material code: W3

Alternative surface finishings are available upon request. Contact STAUFF for more information.

Original STAUFF Cover Plate with Zinc/Nickel-Coating:
No signs of corrosion after 1200 hours in the salt spray chamber!

Original STAUFF Cover Plates with alternative surface finishing widely-used by competitors in the market (from left to right):

- Galvanisation and blue-chromating after 96 hours
- Galvanisation and yellow-chromating after 192 hours
- Zinc-coating, thick-film passivation and sealing after 192 hours

In all three cases, signs of white and red rust / base metal corrosion are quite clearly visible! Please do not hesitate to contact STAUFF and ask for a detailed report.

Thread Conversion Chart

Metric ISO vs. Unified Coarse (UNC) Thread

Unless otherwise stated, all threaded parts available with Metric ISO thread or unified coarse (UNC) thread.

Standard Series (DIN 3015, Part 1)

Group		Thread	
STAUFF	DIN	Metric ISO	Unified Coarse
1 to 8	0 to 8	M6	1/4–20 UNC

Heavy Series (DIN 3015, Part 2)

Group		Thread	
STAUFF	DIN	Metric ISO	Unified Coarse
3S to 5S	1 to 3	M10	3/8–16 UNC
6S	4	M12	7/16–14 UNC
7S	5	M16	5/8–11 UNC
8S	6	M20	3/4–10 UNC
9S	7	M24	7/8–9 UNC
10S	8	M30	1-1/8–7 UNC
11S to 12S	9 to 10	M30	1-1/4–7 UNC

Twin Series (DIN 3015, Part 3)

Group		Thread	
STAUFF	DIN	Metric ISO	Unified Coarse
1D	1	M6	1/4–20 UNC
2D to 5D	2 to 5	M8	5/16–18 UNC

Property Classes / Grades of Bolts and Screws

Hexagon Head Bolt

Socket Cap Screw

Slotted Head Screw

Bolt / Screw Type	Material Code	Property Class / Grade	
		Metric ISO Threaded Bolts / Screws	Unified Coarse Threaded Bolts / Screws
Hexagon Head Bolt Type AS	W1, W2, W3	8.8 (according to DIN EN ISO 898)	5 (according to SAE J429)
	W4	A2-70 (according to DIN EN ISO 3506)	AISI 304 / B8 (according to ASTM A193)
	W5	A4-70 (according to DIN EN ISO 3506)	AISI 316 / B8M (according to ASTM A193)
Socket Cap Screw Type IS	W1, W2, W3	8.8 (according to DIN EN ISO 898)	5 (according to SAE J429)
	W4	A2-70 (according to DIN EN ISO 3506)	AISI 304 / B8 (according to ASTM A193)
	W5	A4-70 (according to DIN EN ISO 3506)	AISI 316 / B8M (according to ASTM A193)
Slotted Head Screw Type LI	W1, W2, W3	4.8 (according to DIN EN ISO 898)	2 (according to SAE J429)
	W4	A2-70 (according to DIN EN ISO 3506)	AISI 304 / B8 (according to ASTM A193)
	W5	A4-70 (according to DIN EN ISO 3506)	AISI 316 / B8M (according to ASTM A193)

Unless otherwise stated, the above mentioned property classes / grades apply as standards for bolts and screws supplied by STAUFF. The information indicates the minimum requirements; higher property classes are available upon request. Contact STAUFF for details.

General Installation Instructions

Installation on Weld Plate

Different types of weld plates are available for all STAUFF Clamps according to DIN 3015 as well as for most of the other series and many custom-designed special clamps.

- Place weld plates in their designated positions. Please make sure these positions are suitable for the expected loads.
- Mark the positions of the weld plates to ensure the best alignment.
- Weld the weld plates into position. Elongated weld plates can also be mounted to their positions by using screws or bolts.
- Push bottom clamp half onto weld plate.
- Insert pipe, tube, hose, cable or any other type of line.
- Place second clamp half and cover plate (optional) on top and mount clamp assembly by using screws or bolts.

Unless otherwise stated, the bolt lengths indicated for clamps according to DIN 3015 refer to the installation on weld plates and mounting rails as well as multi-level (stacking) installation. For direct installation, different lengths may be required.

Installation on Mounting Rail

STAUFF Mounting Rails are available in different heights. STAUFF Rail Nuts are available for all STAUFF Clamps according to DIN 3015 (Heavy Series up to STAUFF Group 6S only) as well as for many custom-designed special clamps.

- Place mounting rails in their designated positions. Please make sure these bases are suitable for the expected loads.
- Mark the positions of the mounting rails to ensure the best alignment.
- Weld the mounting rails into position. Mounting rails can also be mounted to their positions by using side-mounting brackets with screws or bolts.
- Insert rail nuts into mounting rail and turn until stop to lock (Standard and Twin Series) or slide in rail nut (Heavy Series).
- Push bottom clamp half onto rail nuts.
- Insert pipe, tube, hose, cable or any other type of line.
- Place second clamp half and cover plate (optional) on top and mount clamp assembly by using screws or bolts.

The exact positions of the clamp assemblies can still be adjusted before being firmly bolted.

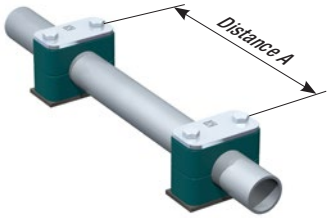
Multi-Level (Stacking) Installation

Stacking bolts permit the multi-level assembly of clamps of identical group sizes. Safety locking plates inserted between the levels prevent the stacking bolts from turning. The Twin Series also allows stacking of different group sizes (STAUFF Groups 2D to 5D).

- Push bottom clamp half onto weld plate or rail nuts.
- Insert pipe, tube, hose, cable or any other type of line.
- Place second clamp half.
- Insert stacking bolts into the clamp assembly and tighten using the following tightening torques (or in a way that the clamp halves are in contact with the line over the entire internal contact surface):
  Standard Series 1 ... 2 N·m / .75 ... 1.5 ft·lb (hand-tightened)
  Heavy Series 5 N·m / 3.75 ft·lb
  Twin Series 1 ... 2 N·m / .75 ... 1.5 ft·lb (hand-tightened)
- Place safety locking plate on top of the clamp assembly.
- Proceed with the next levels. Top level to be assembled with cover plate and hexagon head bolts using the tightening torques as indicated on page A83.

STAUFF multi-level clamp assemblies can be mounted both to weld plates or to mounting rails (with rail nuts).

Recommended Distance between Clamps



Please note: The recommended distances between clamps stated below are standard values and valid for static loads only.

Outside Diameter		Distance A	
(mm)	(in)	(m)	(ft)
6.0 ... 12.7	.23 ... .50	1.00	3.28
12.7 ... 22.0	.50 ... .86	1.20	3.94
22.0 ... 32.0	.86 ... 1.25	1.50	4.92
32.0 ... 38.0	1.25 ... 1.50	2.00	6.56
38.0 ... 57.0	1.5 ... 2.25	2.70	8.86
57.0 ... 75.0	2.25 ... 2.95	3.00	9.84
75.0 ... 76.1	2.95 ... 3.00	3.50	11.48
76.1 ... 88.9	3.00 ... 3.50	3.70	12.14
88.9 ... 102.0	3.50 ... 4.00	4.00	13.12
102.0 ... 114.0	4.00 ... 4.50	4.50	14.76

Outside Diameter		Distance A	
(mm)	(in)	(m)	(ft)
114.0 ... 168.0	4.50 ... 6.60	5.00	16.40
168.0 ... 219.0	6.60 ... 8.60	6.00	19.68
219.0 ... 324.0	8.60 ... 12.70	6.70	21.98
324.0 ... 356.0	12.70 ... 14.00	7.00	22.96
356.0 ... 406.0	14.00 ... 16.00	7.50	24.60
406.0 ... 419.0	16.00 ... 16.50	8.20	26.90
419.0 ... 508.0	16.50 ... 20.00	8.50	27.88
508.0 ... 521.0	20.00 ... 20.50	9.00	29.52
521.0 ... 558.0	20.50 ... 22.00	10.00	32.80
558.0 ... 800.0	22.00 ... 31.50	12.50	41.00

Installation next to Pipe Bends, Connectors / Couplings and Valves

Please note the following information on the installation of STAUFF Clamps next to pipe bends, connectors / couplings and valves:

Pipe Bends

Pipe bends should be supported by STAUFF Clamps as close to the bends as possible. Furthermore, it is recommended to design these clamps as fixed point clamps.

Connections / Couplings

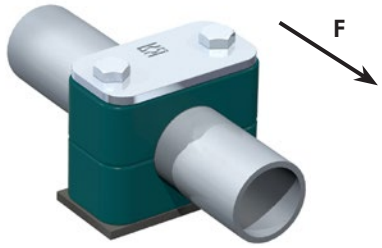
The first clamp should be placed directly next to the connector / coupling. This protects the connector / coupling from vibrations.

Valves

If valves are incorporated in the pipelines, it is recommended that support is provided in front of and behind these valves.

Contact STAUFF for more information.

Tightening Torques and Maximum Loads In Pipe Direction



All tightening torques and maximum loads in pipe direction refer to STAUFF Clamp Bodies (profiled inside surface with tension clearance) with Cover Plates, Weld Plates and Hexagon Head Bolts according to DIN EN ISO 4014/4017 (DIN 931/933).

The max. load in pipe direction (according to DIN 3015-10:1999) is an average value, determined by three tests at +23 °C / +73.4 °F with a steel pipe according to DIN EN 10220, St37 – rolled surface – taking static friction into consideration.

Sliding starts when the shown values (F) are reached.

Standard Series (DIN 3015-1:1999)

Group		Hexagon Head Bolt DIN EN ISO 4014/4017 (DIN 931/933)		Polypropylene				Polyamide				Aluminium			
		Metric	Unified Coarse	Tightening Torque		Maximum Load in Pipe Direction F		Tightening Torque		Maximum Load in Pipe Direction F		Tightening Torque		Maximum Load in Pipe Direction F	
STAUFF	DIN	ISO Thread	(UNC) Thread	(N·m)	(ft·lb)	(kN)	(lbf)	(N·m)	(ft·lb)	(kN)	(lbf)	(N·m)	(ft·lb)	(kN)	(lbf)
1	0	M6	1/4–20 UNC	8	6	0.6	135	10	7	0.6	135	12	9	3.5	787
1A	1	M6	1/4–20 UNC	8	6	1.1	247	10	7	0.7	157	12	9	4.2	944
2	2	M6	1/4–20 UNC	8	6	1.3	292	10	7	0.8	180	12	9	4.3	967
3	3	M6	1/4–20 UNC	8	6	1.4	315	10	7	1.6	360	12	9	4.9	1101
4	4	M6	1/4–20 UNC	8	6	1.5	337	10	7	1.7	382	12	9	5.0	1124
5	5	M6	1/4–20 UNC	8	6	1.9	427	10	7	2.0	450	12	9	7.3	1641
6	6	M6	1/4–20 UNC	8	6	2.0	450	10	7	2.5	562	12	9	8.9	2000
7	7	M6	1/4–20 UNC	8	6	2.3	517	10	7	3.2	719				
8	8	M6	1/4–20 UNC	8	6	2.6	585	10	7	3.5	787				

Heavy Series (DIN 3015-2:1999)

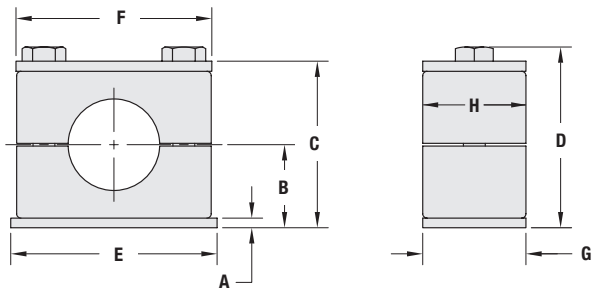
Group		Hexagon Head Bolt DIN EN ISO 4014/4017 (DIN 931/933)		Polypropylene				Polyamide				Aluminium			
		Metric	Unified Coarse	Tightening Torque		Maximum Load in Pipe Direction F		Tightening Torque		Maximum Load in Pipe Direction F		Tightening Torque		Maximum Load in Pipe Direction F	
STAUFF	DIN	ISO Thread	(UNC) Thread	(N·m)	(ft·lb)	(kN)	(lbf)	(N·m)	(ft·lb)	(kN)	(lbf)	(N·m)	(ft·lb)	(kN)	(lbf)
3S	1	M10	3/8–16 UNC	12	9	1.6	360	20	15	4.2	944	30	22	12.1	2720
4S	2	M10	3/8–16 UNC	12	9	2.9	652	20	15	4.5	1044	30	22	15.1	3395
5S	3	M10	3/8–16 UNC	15	11	3.3	742	25	18	5.1	1146	35	26	15.5	3485
6S	4	M12	7/16–14 UNC	30	22	8.2	1843	40	30	9.3	2090	55	41	29.5	6609
7S	5	M16	5/8–11 UNC	45	33	11.0	2472	55	41	15.8	3551	120	86	34.9	7845
8S	6	M20	3/4–10 UNC	80	59	14.0	3147	150	111	21.0	4720	220	162	50.0	11240
9S	7	M24	7/8–9 UNC	110	81	28.0	6300	200	148	32.0	7193	250	184	70.6	15871
10S	8	M30	1-1/8–7 UNC	180	133	40.0	8992	350	258	48.0	10790	500	369	84.5	18996
11S	9	M30	1-1/4–7 UNC	200	148	119.0	26752	370	273	125.0	27650	500	369	181.5	40802
12S	10	M30	1-1/4–7 UNC	270	199	168.0	37767	450	332	180.0	40465	600	443	244.5	54965

Twin Series (DIN 3015-2:1999)

Group		Hexagon Head Bolt DIN EN ISO 4014/4017 (DIN 931/933)		Polypropylene				Polyamide			
		Metric	Unified Coarse	Tightening Torque		Maximum Load in Pipe Direction F		Tightening Torque		Maximum Load in Pipe Direction F	
STAUFF	DIN	ISO Thread	(UNC) Thread	(N·m)	(ft·lb)	(kN)	(lbf)	(N·m)	(ft·lb)	(kN)	(lbf)
1D	1	M6	1/4–20 UNC	5	4	0.9	202	5	4	0.9	202
2D	2	M8	5/16–18 UNC	12	9	2.1	472	12	9	2.2	495
3D	3	M8	5/16–18 UNC	12	9	1.9	427	12	9	2.0	450
4D	4	M8	5/16–18 UNC	12	9	2.7	607	12	9	2.9	652
5D	5	M8	5/16–18 UNC	8	6	1.7	382	8	6	2.5	562

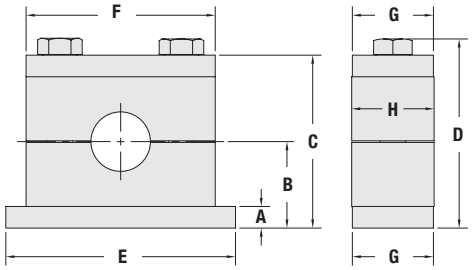
Only for the standard clamp body materials which are listed on page A76. In case of doubt, please contact STAUFF in advance.

Dimensions and Weights of Clamp Assemblies



Standard Series (DIN 3015, Part 1)

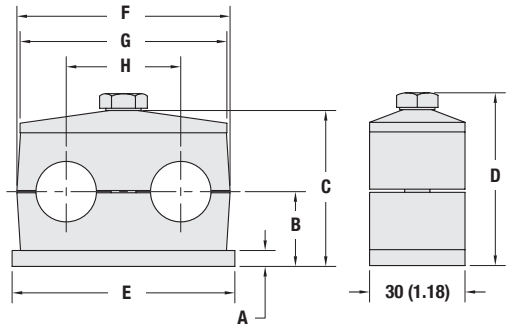
Group		Dimensions (mm/in)											Weight per 100 pcs.
		A	B		C		D		E	F	G	H	SP-✱✱-PP-DP-AS
STAUFF	DIN		Profiled Design	Type H (Smooth)	Profiled Design	Type H (Smooth)	Profiled Design	Type H (Smooth)					(kg/lbs)
1	0	3	16.5	16	33	32	37	36	31.5	28	30	30	6.20
		.12	.65	.63	1.30	1.26	1.46	1.42	1.24	1.10	1.18	1.18	13.64
1A	1	3	16.5	16	33	32	37	36	36	34	30	30	8.10
		.12	.65	.63	1.30	1.26	1.46	1.42	1.41	1.33	1.18	1.18	17.82
2	2	3	19.5	19	39	38	43	42	42	40.5	30	30	9.40
		.12	.77	0.75	1.54	1.50	1.69	1.65	1.65	1.59	1.18	1.18	20.68
3	3	3	21	20.75	42	41.5	46	45.5	50	48	30	30	11.20
		.12	.83	.82	1.65	1.64	1.81	1.80	1.96	1.88	1.18	1.18	24.64
4	4	3	24	23.75	48	47.5	52	51.5	60	57	30	30	13.70
		.12	.94	.94	1.89	1.87	2.05	2.03	2.36	2.24	1.18	1.18	30.14
5	5	3	32	31.25	64	62.5	68	66.5	71	70	30	30	17.10
		.12	1.26	1.23	2.52	2.46	2.68	2.62	2.79	2.75	1.18	1.18	37.62
6	6	3	36	35.25	72	70.5	76	74.5	88	86	30	30	21.30
		.12	1.42	1.39	2.83	2.78	2.99	2.94	3.46	3.38	1.18	1.18	46.86
7	7	5	51.5	51	103	102	107	106	122	118	30	30	42.10
		.20	2.03	2.01	4.06	4.02	4.21	4.17	4.81	4.65	1.18	1.18	92.62
8	8	5	64	63	128	126	132	130	148	144	30	30	44.00
		.20	2.52	2.48	5.04	4.96	5.20	5.12	5.83	5.67	1.18	1.18	96.80



Heavy Series (DIN 3015, Part 2)

Group		Dimensions (mm/in)												Weight per 1 pc.
		A	B		C		D		E	F	AL	G	H	SPAL-✱✱-PP-DPAL-AS
STAUFF	DIN		Profiled Design	Type H (Smooth)	Profiled Design	Type H (Smooth)	Profiled Design	Type H (Smooth)		PP/ PA/SA				(kg/lbs)
3S	1	8	24	23.25	48	46.5	54.4	52.9	74	55	56	30	30.5	0.32
		.31	.94	.92	1.89	1.83	2.14	2.09	2.91	2.16	2.20	1.18	1.20	.70
4S	2	8	32	31.25	64	62.5	70.4	68.9	86	70	70	30	30.5	0.40
		.31	1.26	1.23	2.52	2.46	2.77	2.72	3.39	2.76	2.76	1.18	1.20	.88
5S	3	8	38	37	76	74	82.4	80.4	100	85	85	30	30.5	0.49
		.31	1.50	1.46	2.99	2.91	3.24	3.17	3.94	3.35	3.35	1.18	1.20	1.08
6S	4	10	54.5	53.5	109	107	116.5	114.5	140	115	120	45	45	1.21
		.39	2.15	2.11	4.29	4.21	4.59	4.51	5.51	4.53	4.72	1.77	1.77	2.66
7S	5	10	70		140		150		180	154	152	60	60	2.30
		.39	2.76		5.51		5.91		7.09	6.06	5.98	2.36	2.36	5.06
8S	6	15	99		198		210.5		226	206	208	80	80	5.56
		.59	3.90		7.80		8.29		8.90	8.11	8.19	3.15	3.15	12.26
9S	7	15	115		230		245		270	251	255	90	91	7.97
		.59	4.53		9.06		9.65		10.63	9.88	10.04	3.54	3.58	17.58
10S	8	25	160		320		338.7		340	336	326	120	120	22.16
		.98	6.30		12.60		13.33		13.39	13.22	12.83	4.72	4.72	48.75
11S	9	30	235		470		488.7		520	470	470	160	162	54.11
		1.18	9.25		18.50		19.24		20.47	18.50	18.50	6.30	6.38	119.04
12S	10	30	295		590		608.7		680	630	630	180	182	77.40
		1.18	11.61		23.23		23.96		26.77	24.80	24.80	7.09	7.16	170.28

Dimensions & Weights of Clamp Assemblies



Twin Series (DIN 3015, Part 3)

Group		Dimensions (mm/in)											Weight per 100 pcs.
		A	B		C		D		E	F	G	H	SP-✱✱/✱✱-PP-GD-AS
STAUFF	DIN		Profiled Design	Type H (Smooth)	Profiled Design	Type H (Smooth)	Profiled Design	Type H (Smooth)					(kg/lbs)
1D	1	3	16.5	16.25	37	36.5	41	40.5	37	36	34	20	7.60
		.12	.65	.64	1.46	1.44	1.61	1.59	1.46	1.42	1.34	.79	16.72
2D	2	5	18.5	18.25	39	38.5	44	43.5	55	53	52	29	13.50
		.20	.73	.72	1.54	1.52	1.73	1.71	2.17	2.09	2.05	1.14	29.70
3D	3	5	23.5	23.25	49	48.5	54	53.5	70	67	65	36	17.70
		.20	.93	.92	1.93	1.91	2.13	2.11	2.76	2.64	2.56	1.42	38.94
4D	4	5	25	24	52	50	57	55	85	80	79	45	20.40
		.20	.98	.94	2.05	1.97	2.24	2.17	3.35	3.15	3.11	1.77	44.88
5D	5	5	31.5	31	65	64	70	69	110	106	102	56	27.70
		.20	1.24	1.22	2.56	2.52	2.76	2.72	4.33	4.17	4.02	2.20	60.94

Packaging Units (Selection)

Standard Series (DIN 3015, Part 1)

Clamp Bodies (Polypropylene / Polyamide)

Group		Quantity per Bag
STAUFF	DIN	(in pcs.)
1 - 6	0 - 6	25
7 + 8	7 + 8	10

Clamp Bodies (Aluminium)

Group		Quantity per Bag
STAUFF	DIN	(in pcs.)
1 - 5	0 - 5	25
6	6	10

Weld Plates (Type SP)
Cover Plates (Type DP)

Group		Quantity per Bag
STAUFF	DIN	(in pcs.)
1 - 6	0 - 6	25
7 + 8	7 + 8	10

Hexagon Rail Nut (Type SM)
Channel Rail Adaptor (Type CRA)

Group		Quantity per Bag
STAUFF	DIN	(in pcs.)
1 - 8	0 - 8	50

Heavy Series (DIN 3015, Part 2)

Clamp Bodies (Polypropylene / Polyamide)

Group		Quantity per Bag
STAUFF	DIN	(in pcs.)
3S - 6S	1 - 4	20
7S	5	10
8S - 12S	6 - 10	1

Clamp Bodies (Aluminium)

Group		Quantity per Bag
STAUFF	DIN	(in pcs.)
3S - 6S	1 - 4	20
7S	5	10
8S - 12S	6 - 10	1

Weld Plates (Type SPAL)
Cover Plates (Type DPAL)

Group		Quantity per Bag
STAUFF	DIN	(in pcs.)
3S - 6S	1 - 4	20
7S	5	10
8S - 12S	6 - 10	1

Mounting Rail Nut (Type GMV)
Channel Rail Adaptor (Type CRA)

Group		Quantity per Bag
STAUFF	DIN	(in pcs.)
3S - 6S	1 - 4	40

Twin Series (DIN 3015, Part 3)

Clamp Bodies (Polypropylene / Polyamide)

Group		Quantity per Bag
STAUFF	DIN	(in pcs.)
1D - 4D	1 - 4	25
5D	5	10

Weld Plates (Type SP)
Cover Plates (Type GD)

Group		Quantity per Bag
STAUFF	DIN	(in pcs.)
1D - 4D	1 - 4	25
5D	5	10

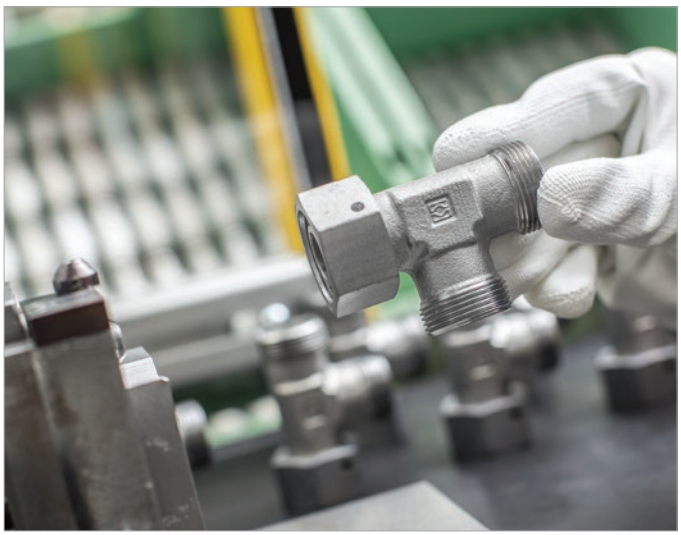
Hexagon Rail Nut (Type SM)
Channel Rail Adaptor (Type CRA)

Group		Quantity per Bag
STAUFF	DIN	(in pcs.)
1D	1	50
2D - 5D	2 - 5	25

Contact STAUFF and ask for standard packaging units for further components or special packaging options.

Tube Connectors - Steel FI-...-W3	**B3 - B64**
Tube Connectors - Stainless Steel FI-...-W5	**C1 - C27**
JIC 37° Adaptors ADP	**D1 - D29**
Instrumentation Fittings LOK	**E1 - E22**
Assembly Tools / Devices	**F1 - F22**
STAUFF Technology Centre	**G1 - G7**

Steel - Introduction	B4 - B8
Steel - Connecting Parts	B9 - B11
Steel - Male Stud Fittings	B13 - B19
Steel - Tube Fittings / Unions	B21 - B23
Steel - Bulkhead Fittings	B25 - B26
Steel - Weld Fittings	B27 - B28
Steel - Female Stud / Gauge Fittings	B29 - B30
Steel - Fittings with 24° Taper / O-Ring (DKO)	B31 - B34
Steel - Standpipe Fittings / Fittings with Lock Nut	B35 - B36
Steel - Banjo Fittings / Swivel Fittings	B37 - B39
Steel - Hydraulic Valves	B40 - B42
Steel - Spare Parts / Accessories	B43 - B49
Steel - Technical Appendix	B51 - B64



STAUFF Connect

The STAUFF Connect product group is closely aligned with the market requirements and contains an extensive range of tube connectors made of carbon steel for metric tubes with outer diameters ranging from 4 to 42 mm in accordance with ISO 8434-1 / DIN 2353:

- 24° cutting ring fittings
- 24° taper fittings with O-Ring
- 24° weld cones with O-Ring
- 37° flared tube fittings

The product range is completed by check and alternating valves for inline installation, thread reducers as well as blanking plugs and screws.

Special product types and sizes as well as alternative materials, material combinations and surface coatings deviating from the standards can be supplied on request.

Automated assembly machinery and hardened, wear-resistant tools enable the reliable assembly of tube connectors – both for series production in the workshop and on-site.

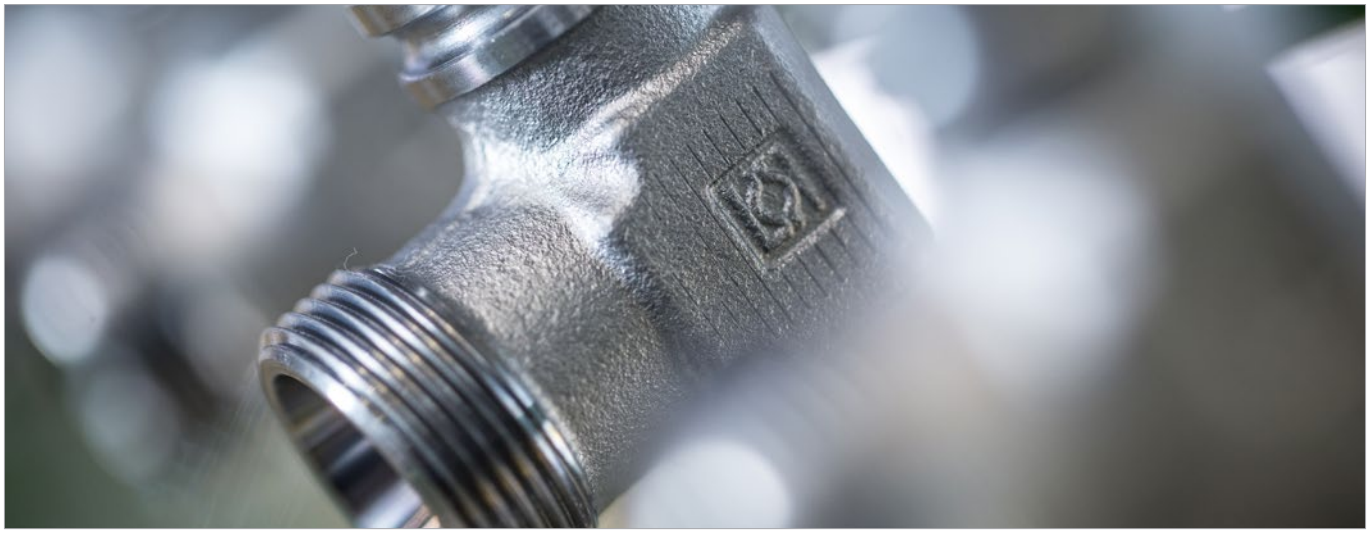
Because of its versatility and flexibility, the patented STAUFF Form tube forming system is undoubtedly the best solution for series production, in particular for applications with highest requirements with regards to safety, reliability and repeatability as well as process stability.

For the finishing of the tube connector range in carbon steel, STAUFF relies on the STAUFF Zinc/Nickel surface coating which has proven successful for many years. It provides reliable surface protection – even after transport, handling and assembly – and meets all current legal requirements.

For selected types and series, independent certificates and approvals can be provided:

- Bureau Veritas
- DNV GL
- Lloyd's Register

Refer to Catalogue 2 - STAUFF Connect



STAUFF Zinc/Nickel Coating

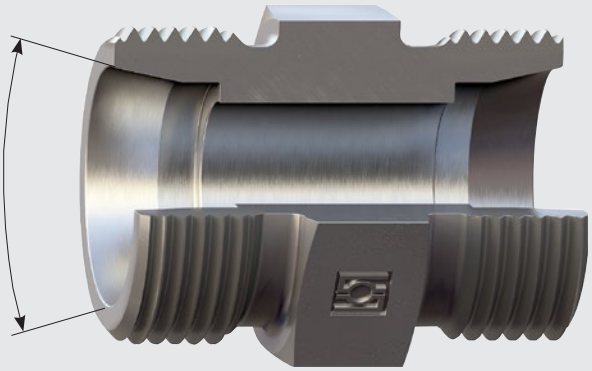
Layers
- Sealing
- Passivation
- Zinc/Nickel
- Steel

With at least 1200 hours resistance against red rust, the STAUFF Zinc/Nickel surface coating offers excellent surface protection – even after transport, handling and assembly. This was confirmed by testing in the salt-spray chamber, according to DIN EN ISO 9227.

Users across all industries and applications benefit from sophisticated technology, which has been developed for and used by the very demanding automotive industry for many years now and that is already the proven standard for a large proportion of STAUFF components since 2007.

- At least 1200 hours resistance to red rust / base metal corrosion under practical conditions in the salt-spray chamber according to DIN EN ISO 9227
- White rust occurs only by way of a slight grey haze
- Surpassing the requirements of the corrosion protection class K5 as defined by the VDMA, the German Engineering Association (360 hours resistance to white rust / 720 hours resistance to red rust)
- Free of hexavalent chrome Cr(VI)
- ELV compliant according to 2000/53/EC (End of Life Vehicles Directive)
- REACH compliant according to 1907/2006/EC (Registration, Evaluation, Authorisation and Restriction of Chemicals)
- RoHS compliant according to 2002/95/EC (Restrictions of the Use of Hazardous Substances)
- Appealing colour scheme with a bright semi-gloss surface finish – comparable to Stainless Steel
- Significantly reduced tendency to corrosion by contact with other metals (such as Aluminium and Stainless Steel)
- Improved abrasion resistance due to the ductility / plastic deformability of the coating
- Little to no risk of triggering allergies – nickel release is down to only a fraction of the statutory limits relating to objects which come into direct and prolonged contact with the skin (independent results of the reference test method according to DIN EN 1811 are available on request)
- Good paint adhesion properties
- Resistance against all commonly used hydraulic media

24° Tube Fittings in General



24° Tube Fittings are among the most commonly used and established industrial tube connector systems worldwide. They are regarded as the universal standard for fluid power applications in markets that use the metric system, such as Europe, Asia, Africa and South America.

Even in regions that traditionally used or still use the imperial measurement system (such as Australia or Northern America) 24° tube fittings are gaining more and more acceptance due to the ongoing metrification and specifications by globally operating OEMs.

24° Tube Fittings are specified in the ISO 8434-1 and DIN 2353 standards.

At least one tube connection end of the fitting body is characterized by a 24° conical bore (shape W according to DIN 3861), which serves as a metallic sealing surface, while the other end of the body is available with a variety of different connection types, such as male and female threaded or weld studs.

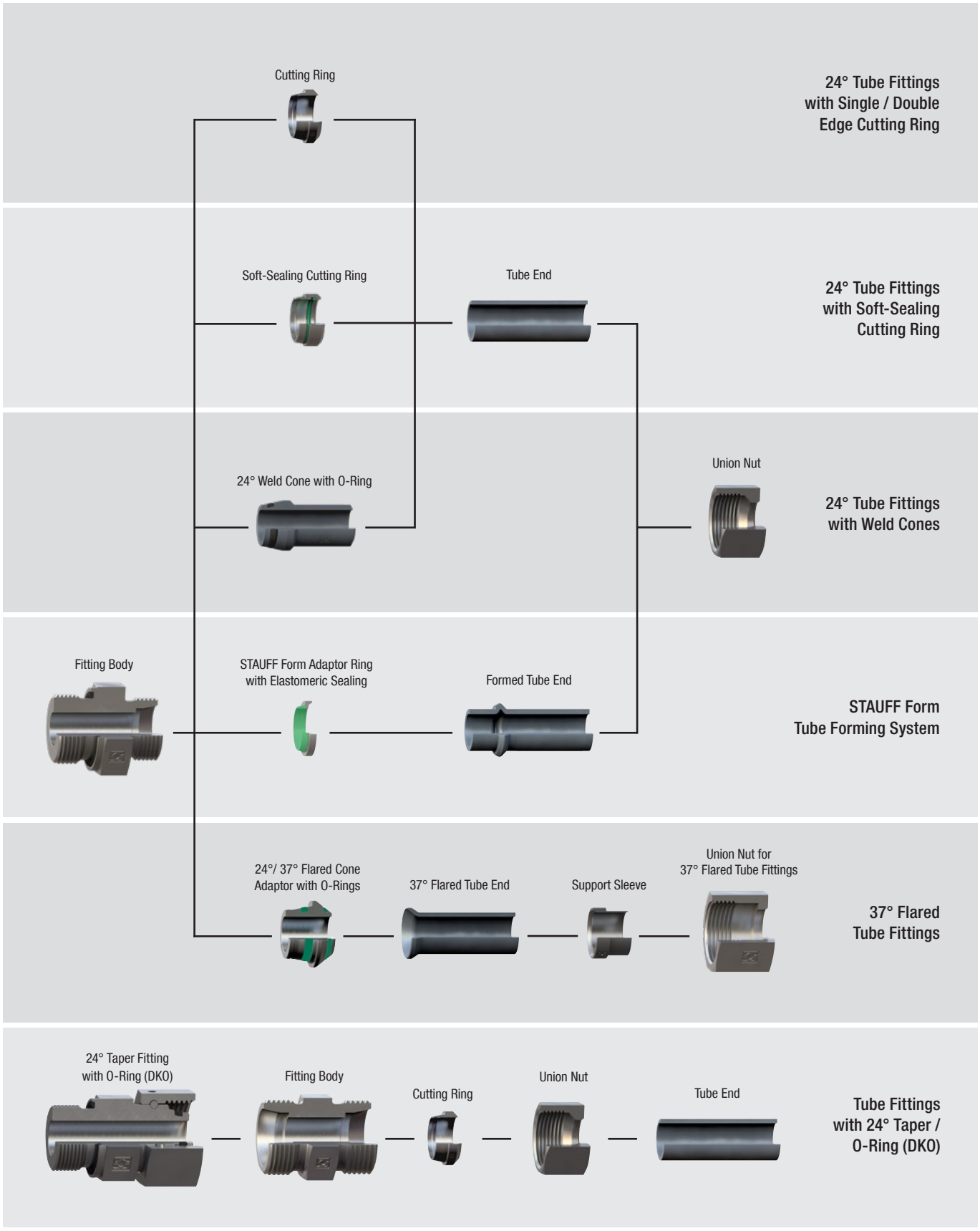
Various shapes (e.g. straight fittings, elbows, tees, crosses etc.) and designs (e.g. unions, studs, bulkheads or adjustable fittings) are available.

The portfolio consists of the Extra-Light (LL) Series as defined in the DIN 2353 standard as well as the Light Series (L) and the Heavy Series (S) as defined in the ISO 8434-1 standard, which differ from each other in dimensions and pressure ratings.

Main Advantages of the 24° Tube Fitting System

- 24° Tube Fittings can be quickly and easily field-assembled and even re-assembled with just a couple of standard wrenches and no requirement for hours of expensive staff training or special tube treatment. Under regular conditions, subsequent re-tightening of 24° Tube Fittings is not necessary.
- Most types of 24° Tube Fittings are available and suitable for light, medium, heavy and extra-heavy wall tubing with outside diameters ranging from 4 to 42 mm / .16 to 1.65 in, which allows optimum dimensioning of pipework circuits and saves material cost.
- The 24° Tube Fitting System is available in the Extra-Light (LL), the Light (L) and the Heavy (S) Series and provides suitable components with regards to sufficient pressure ratings and maximum leak-tightness up to nominal pressures of 800 bar / 11603 PSI (depending on series, type and size of the component – pressure reduction factors to be considered) for literally each application.
- Thanks to their optimised inner contour and design, 24° Tube Fittings offer ideal flow rates and therefore guarantee best performance without the excessive generation of vibrations, noise or heat.
- 24° Tube Fittings are small and compact in design compared to other systems, which makes them perfect for applications with space considerations.
- The recommended material raise in front of the first edge of the cutting ring after the assembly is clearly visible to tube fitters and inspectors and makes it easy to check and confirm the correct assembly of 24° Tube Fittings.
- On-site piping with 24° Tube Fittings is very efficient and offers maximum flexibility for tube fitters as the exact required tube length can be easily checked in advance by just trying out.
- 24° Tube Fittings are easy to combine with other tube fitting systems – even hoses can be connected without difficulties.

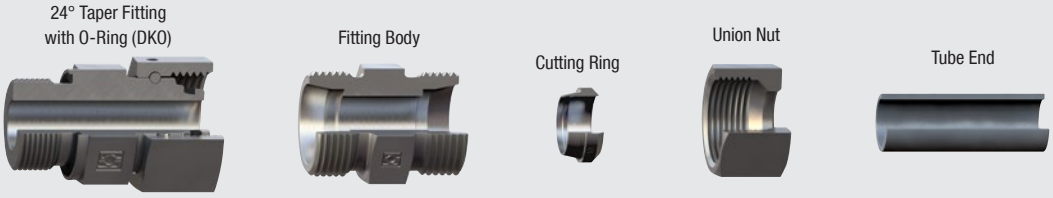
Overview of 24° Tube Fittings



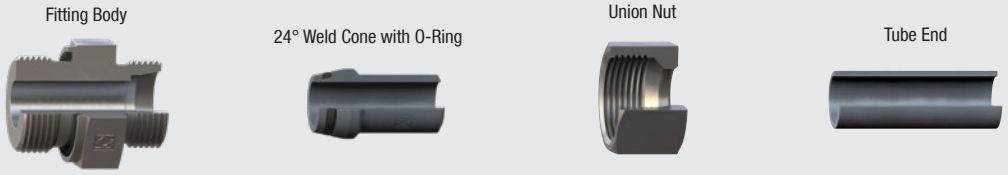
24° Tube Fittings with Single / Double Edge Cutting Ring

24° Tube Fittings with Soft-Sealing Cutting Ring

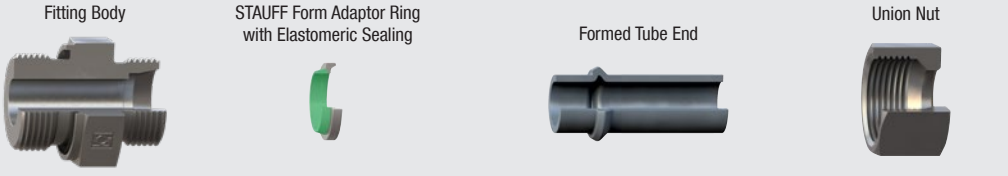
Tube Fittings with 24° Taper / O-Ring (DKO)



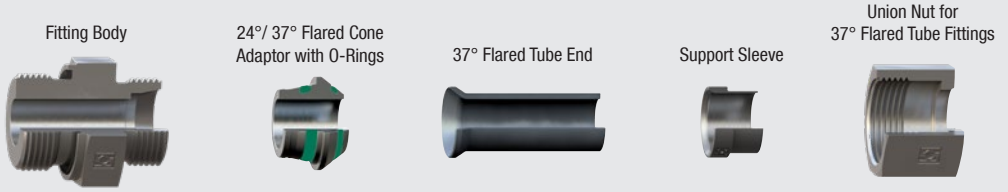
24° Weld Cones with O-Ring



24° Tube Fittings using the STAUFF Form Tube Forming System



37° Flared Tube Fittings



Single / Double Edge Cutting Ring
FI-S / FI-DS — **B10**

Soft-Sealing Cutting Ring
FI-WDDS — **B10**

Support Sleeve
FI-VH — **B10**

STAUFF Form Adaptor Ring
FI-AR — **B10**

Union Nut
FI-M — **B11**

24°/37° Flared Cone Adaptor with O-Rings
FI-BA — **B11**

Support Sleeve for 37° Flared Tube Fittings
FI-BH — **B11**

Union Nut for 37° Flared Tube Fittings
FI-BM — **B11**

37° Flared Tube Fitting Set
FI-AB — **B11**

Order Codes

FI	-	BA	-	15	L	-	V	-	W3
①		②		③	④		⑤		⑥

① Series

Fittings	**FI**

② Type

Single-Edge Cutting Ring	**S**
Double-Edge Cutting Ring	**DS**
Soft-Sealing Cutting Ring	**WDDS**
Support Sleeve	**VH**
STAUFF Form Adaptor Ring	**AR**
Union Nut	**M**
24°/37° Flared Cone Adaptor with O-Rings	**BA**
Support Sleeve for 37° Flared Tube Fittings	**BH**
Union Nut for 37° Flared Tube Fittings	**BM**
37° Flared Tube Fitting Set	**AB**

③ Tube O.D.

Outside Tube Diameter in mm according to dash sizing.
Reducers are separated by a slash (e.g. 08OD/06OD).
For FI-VH include Wall Thickness (e.g. 10x1.5)

④ Tube Series

Extra Light	**LL**
Light & Heavy (suits both)	**L/S**
Light	**L**
Heavy	**S**

⑤ Sealing Material

No Sealing Material	**(None)**
NBR (Buna-N®)	**B**
FKM (Viton®)	**V**

⑥ Surface Material

Steel, zinc/nickel-plated	**W3**
Brass	**W69**

For Stainless Steel W5 option, refer to Section C - Tube Connectors - Stainless Steel

Connecting Parts

Cutting Ring
Type FI-S (Single Edge) ▪ Series LL
Type FI-DS (Double Edge) ▪ Series L / S

Item No.	Designation	Series	Price
6030004283	FI-S-04LL-W3	LL	1.10
6030004285	FI-S-06LL-W3	LL	1.10
6030004286	FI-S-08LL-W3	LL	1.10
6030004267	FI-DS-06L/S-W3	L/S	1.10
6030004268	FI-DS-08L/S-W3	L/S	1.10
6030004269	FI-DS-10L/S-W3	L/S	1.20
6030004270	FI-DS-12L/S-W3	L/S	1.20
6030004271	FI-DS-15L-W3	L	1.40
6030004272	FI-DS-18L-W3	L	2.05
6030004273	FI-DS-22L-W3	L	2.45
6030004274	FI-DS-28L-W3	L	2.75
6030004275	FI-DS-35L-W3	L	4.35
6030004276	FI-DS-42L-W3	L	6.45
6030004277	FI-DS-14S-W3	S	2.25
6030004278	FI-DS-16S-W3	S	2.25
6030004279	FI-DS-20S-W3	S	2.65
6030004280	FI-DS-25S-W3	S	3.60
6030004281	FI-DS-30S-W3	S	4.35
6030004282	FI-DS-38S-W3	S	5.65

Support Sleeve
Type FI-VH

Item No.	Designation	Price
6030001327	FI-VH-8x1-W69	2.05
6030001330	FI-VH-10x1-W69	2.05
6030001329	FI-VH-10x1.5-W69	2.05
6030001333	FI-VH-12x1-W69	2.55
6030001332	FI-VH-12x1.5-W69	2.45
6030001337	FI-VH-15x1-W69	3.00
6030001336	FI-VH-15x1.5-W69	3.60
6030001339	FI-VH-18x1-W69	4.00
6030001338	FI-VH-18x1.5-W69	4.00
6030001340	FI-VH-20x1-W69	5.65
6030001345	FI-VH-28x2-W69	6.85

Used for inserting into polyflex tube

Soft-Sealing Cutting Ring
Type FI-WDDS ▪ Series L / S

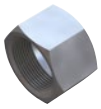
Item No.	Designation	Series	Price
6020002494	FI-WDDS-06L/S-V-W3	L/S	3.90
6020002495	FI-WDDS-08L/S-V-W3	L/S	4.10
6020002496	FI-WDDS-10L/S-V-W3	L/S	4.85
6020002497	FI-WDDS-12L/S-V-W3	L/S	5.40
6020002498	FI-WDDS-15L-V-W3	L	6.45
6020002499	FI-WDDS-18L-V-W3	L	9.85
6020002500	FI-WDDS-22L-V-W3	L	11.95
6020002501	FI-WDDS-28L-V-W3	L	13.60
6020002502	FI-WDDS-35L-V-W3	L	24.05
6020002503	FI-WDDS-42L-V-W3	L	32.55
6020002504	FI-WDDS-14S-V-W3	S	10.95
6020002505	FI-WDDS-16S-V-W3	S	9.05
6020002506	FI-WDDS-20S-V-W3	S	11.40
6020002507	FI-WDDS-25S-V-W3	S	15.50
6020002508	FI-WDDS-30S-V-W3	S	21.50
6020002509	FI-WDDS-38S-V-W3	S	27.95

STAUFF Form Adaptor Ring
Type FI-AR ▪ Series L / S

Item No.	Designation	Series	Price
6030012018	FI-AR-06L/S-V-W3	L/S	14.25
6030012019	FI-AR-08L/S-V-W3	L/S	14.25
6030012020	FI-AR-10L/S-V-W3	L/S	14.25
6030012021	FI-AR-12L/S-V-W3	L/S	14.25
6030012022	FI-AR-15L-V-W3	L	14.25
6030012023	FI-AR-18L-V-W3	L	14.25
6030012024	FI-AR-22L-V-W3	L	14.25
6030012025	FI-AR-28L-V-W3	L	21.25
6030012026	FI-AR-35L-V-W3	L	21.25
6030012027	FI-AR-42L-V-W3	L	28.25
6030012029	FI-AR-16S-V-W3	S	14.25
6030012030	FI-AR-20S-V-W3	S	21.25
6030012031	FI-AR-25S-V-W3	S	21.25
6030012032	FI-AR-30S-V-W3	S	21.25
6030012033	FI-AR-38S-V-W3	S	28.25

Used for STAUFF Form system, refer to Catalogue 2 - STAUFF Connect

Connecting Parts



Union Nut
Type FI-M ▪ Series LL / L / S

Item No.	Designation	Thread Size	Series	Price
6030003807	FI-M-04LL-W3	M8 x 1	LL	0.95
6030003809	FI-M-06LL-W3	M10 x 1	LL	1.10
6030003810	FI-M-08LL-W3	M12 x 1	LL	1.10
6030003811	FI-M-06L-W3	M12 x 1.5	L	1.10
6030003812	FI-M-08L-W3	M14 x 1.5	L	1.20
6030003813	FI-M-10L-W3	M16 x 1.5	L	1.20
6030003814	FI-M-12L-W3	M18 x 1.5	L	1.55
6030003815	FI-M-15L-W3	M22 x 1.5	L	2.25
6030003816	FI-M-18L-W3	M26 x 1.5	L	4.00
6030003817	FI-M-22L-W3	M30 x 2	L	5.35
6030003818	FI-M-28L-W3	M36 x 2	L	10.00
6030003819	FI-M-35L-W3	M45 x 2	L	12.85
6030003820	FI-M-42L-W3	M52 x 2	L	13.40
6030003821	FI-M-06S-W3	M14 x 1.5	S	1.20
6030003822	FI-M-08S-W3	M16 x 1.5	S	1.20
6030003823	FI-M-10S-W3	M18 x 1.5	S	1.90
6030003824	FI-M-12S-W3	M20 x 1.5	S	2.05
6030003825	FI-M-14S-W3	M22 x 1.5	S	2.75
6030003826	FI-M-16S-W3	M24 x 1.5	S	4.10
6030003827	FI-M-20S-W3	M30 x 2	S	6.05
6030003828	FI-M-25S-W3	M36 x 2	S	11.35
6030003829	FI-M-30S-W3	M45 x 2	S	14.25
6030003830	FI-M-38S-W3	M52 x 2	S	21.25

Union Nut
for 37° Flared Tube Fittings
Type FI-BM ▪ Series L / S

Item No.	Designation	Thread Size	Series	Price
6030006801	FI-BM-06L-W3	M12 x 1.5	L	1.90
6030006802	FI-BM-08L-W3	M14 x 1.5	L	2.55
6030006803	FI-BM-10L-W3	M16 x 1.5	L	2.75
6030006804	FI-BM-12L-W3	M18 x 1.5	L	3.00
6030006805	FI-BM-15L-W3	M22 x 1.5	L	5.35
6030006806	FI-BM-18L-W3	M26 x 1.5	L	10.70
6030006807	FI-BM-22L-W3	M30 x 2	L	13.40
6030006808	FI-BM-28L-W3	M36 x 2	L	16.95
6030006809	FI-BM-35L-W3	M45 x 2	L	24.05
6030006810	FI-BM-42L-W3	M52 x 2	L	42.20
6030006811	FI-BM-06S-W3	M14 x 1.5	S	2.45
6030006812	FI-BM-08S-W3	M16 x 1.5	S	2.75
6030006813	FI-BM-10S-W3	M18 x 1.5	S	4.00
6030006814	FI-BM-12S-W3	M20 x 1.5	S	4.50
6030006815	FI-BM-14S-W3	M22 x 1.5	S	4.40
6030006816	FI-BM-16S-W3	M24 x 1.5	S	10.00
6030007270	FI-BM-20S-W3	M30 x 2	S	13.40
6030006818	FI-BM-25S-W3	M36 x 2	S	22.60
6030006819	FI-BM-30S-W3	M45 x 2	S	28.25
6030006820	FI-BM-38S-W3	M52 x 2	S	45.00

24°/37° Flared Cone Adaptor
with O-Rings
Type FI-BA ▪ Series L / S

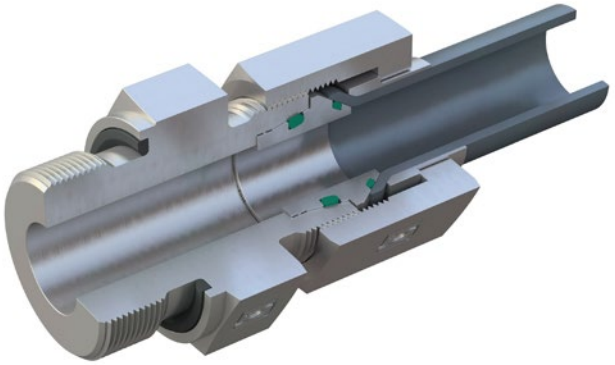
Item No.	Designation	Series	Price
6020001045	FI-BA-06L/S-V-W3	L/S	3.60
6020001046	FI-BA-08L/S-V-W3	L/S	3.70
6020001047	FI-BA-10L/S-V-W3	L/S	4.10
6020001048	FI-BA-12L/S-V-W3	L/S	4.20
6020001050	FI-BA-15L-V-W3	L	5.25
6020001056	FI-BA-18L-V-W3	L	6.55
6020001057	FI-BA-22L-V-W3	L	8.60
6020001058	FI-BA-28L-V-W3	L	10.00
6020001059	FI-BA-35L-V-W3	L	19.80
6020001060	FI-BA-42L-V-W3	L	28.25
6020001049	FI-BA-14S-V-W3	S	13.40
6020001051	FI-BA-16S-V-W3	S	6.45
6020001052	FI-BA-20S-V-W3	S	7.90
6020001053	FI-BA-25S-V-W3	S	10.00
6020001054	FI-BA-30S-V-W3	S	13.40
6020001055	FI-BA-38S-V-W3	S	22.60

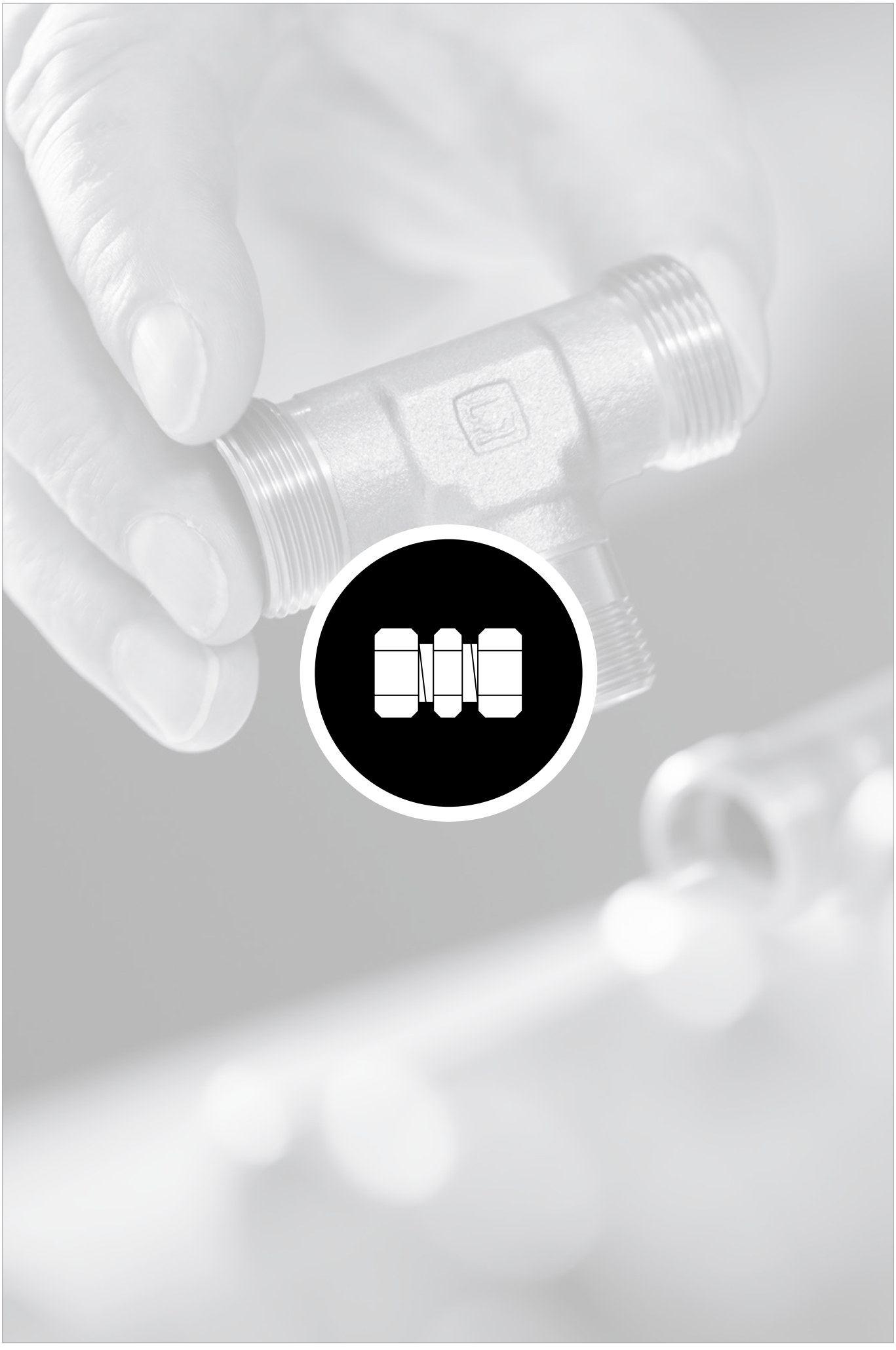
Support Sleeve
for 37° Flared Tube Fittings
Type FI-BH ▪ Series L / S

Item No.	Designation	Series	Price
6030008164	FI-BH-06L/S-W3	L/S	1.40
6030008165	FI-BH-08L/S-W3	L/S	1.55
6030008166	FI-BH-10L/S-W3	L/S	2.05
6030008167	FI-BH-12L/S-W3	L/S	3.40
6030008169	FI-BH-15L-W3	L	4.10
6030008171	FI-BH-18L-W3	L	4.60
6030008173	FI-BH-22L-W3	L	6.55
6030008175	FI-BH-28L-W3	L	10.00
6030008177	FI-BH-35L-W3	L	15.60
6030008179	FI-BH-42L-W3	L	21.25
6030008168	FI-BH-14S-W3	S	4.50
6030008170	FI-BH-16S-W3	S	5.00
6030008172	FI-BH-20S-W3	S	6.05
6030008174	FI-BH-25S-W3	S	10.70
6030008176	FI-BH-30S-W3	S	14.25
6030008178	FI-BH-38S-W3	S	22.60

37° Flared Tube Fitting Set
Type FI-AB ▪ Series L / S

Item No.	Designation	Series	Price
6010009097	FI-AB-06L-V-W3	L	6.90
6010009098	FI-AB-08L-V-W3	L	7.80
6010009099	FI-AB-10L-V-W3	L	8.90
6010009100	FI-AB-12L-V-W3	L	10.60
6010009101	FI-AB-15L-V-W3	L	14.70
6010009102	FI-AB-18L-V-W3	L	21.85
6010009103	FI-AB-22L-V-W3	L	28.55
6010009104	FI-AB-28L-V-W3	L	36.95
6010009105	FI-AB-35L-V-W3	L	59.45
6010009106	FI-AB-42L-V-W3	L	91.70
6010009107	FI-AB-06S-V-W3	S	7.45
6010009108	FI-AB-08S-V-W3	S	8.00
6010009109	FI-AB-10S-V-W3	S	10.15
6010009110	FI-AB-12S-V-W3	S	12.10
6010009111	FI-AB-14S-V-W3	S	22.30
6010009112	FI-AB-16S-V-W3	S	21.45
6010009113	FI-AB-20S-V-W3	S	27.35
6010009114	FI-AB-25S-V-W3	S	43.30
6010009115	FI-AB-30S-V-W3	S	55.90
6010009116	FI-AB-38S-B-W3	S	90.20





Straight Male Stud Fitting
FI-GE — **B15 - B17**

Whitworth Parallel Pipe Thread (BSPP) / Metallic Sealing Edge
FI-GE-...-R — **B15**

Metric Parallel Thread / Metallic Sealing Edge
FI-GE-...-M — **B15**

Whitworth Parallel Pipe Thread (BSPP) / Profile Sealing Ring
FI-GE-...-R-WD — **B15**

Metric Parallel Thread / Profile Sealing Ring
FI-GE-...-M-WD — **B16**

BSPP Thread / 60° Conical Bore / Sealing Surface for Gaskets
FI-GE-...-R-DF — **B16**

Metric Parallel Thread / O-Ring
FI-GE-...-M-OR — **B16**

Whitworth Taper Pipe Thread (BSPT)
FI-GE-...-Rk — **B17**

Metric Taper Thread
FI-GE-...-Mk — **B17**

NPT Thread
FI-GE-...-N — **B17**

UN/UNF Thread / O-Ring
FI-GE-...-U — **B17**

Male Stud Elbow
FI-WE — **B18**

Whitworth Parallel Pipe Thread (BSPP) / Metallic Sealing Edge
FI-WE-...-R — **B18**

Whitworth Taper Pipe Thread (BSPT)
FI-WE-...-Rk — **B18**

Metric Taper Thread
FI-WE-...-Mk — **B18**

NPT Thread
FI-WE-...-N — **B18**

Male Stud Branch Tee
FI-TE — **B19**

Whitworth Parallel Pipe Thread (BSPP) / Metallic Sealing Edge
FI-TE-...-R — **B19**

Whitworth Taper Pipe Thread (BSPT)
FI-TE-...-Rk — **B19**

Male Stud Barrel Tee
FI-LE — **B19**

Whitworth Parallel Pipe Thread (BSPP) / Metallic Sealing Edge
FI-LE-...-R — **B19**

Whitworth Taper Pipe Thread (BSPT)
FI-LE-...-Rk — **B19**

Order Codes

FI	-	GE	-	06	L	R	-	WD	-	B	-	W3	-	MS
①		②		③	④	⑤		⑥		⑦		⑧		⑨

① Series

Fittings	**FI**

② Type

Straight Male Stud Fitting	**GE**
Male Stud Elbow	**WE**
Male Stud Branch Tee	**TE**
Male Stud Barrel Tee	**LE**

③ Tube O.D.

Outside Tube Diameter in mm according to dash sizing.
Reducers are separated by a slash (e.g. 12/10L)

④ Tube Series

Extra Light	**LL**
Light	**L**
Heavy	**S**

⑤ Thread Type / Size

Whitworth Parallel Pipe Thread (BSPP) (Special sizes to be indicated, e.g. R1/4)	**R**
Metric Parallel Pipe Thread (Special sizes to be indicated, e.g. M14x1.5)	**M**
Whitworth Taper Pipe Thread (BSPT) (Special sizes to be indicated, e.g. R1/4k)	**Rk**
Metric Taper Pipe Thread (Special sizes to be indicated, e.g. M14x1.5k)	**Mk**
NPT (NPTF) (All sizes to be indicated, e.g. 3/8N)	**N**
UNF/UN (All sizes to be indicated, e.g. 7/16U)	**U**

⑥ Sealing Type

Standard seal type, including: Metallic Sealing Edge for thread types R / M O-Ring for thread type U Tapered Thread for thread types Rk / Mk / N	**(None)**
Elastomeric seal	**WD**
O-Ring	**OR**
Sealing face (60° seat)	**DF**

⑦ Sealing Material

No Sealing Material	**(None)**
NBR (Buna-N®)	**B**
FKM (Viton®)	**V**

⑧ Surface Material

Steel, zinc/nickel-plated	**W3**

⑨ Assembling

Body Only	**(None)**
Assembled with Cutting Ring and Union Nut	**MS**

DIN Thread Sizes

Series	Tube OD (mm)	Male Stud Metric Parallel Thread		Male Stud Whitworth Parallel Pipe Thread		Union Nut Metric Parallel Thread	
		Thread Size	Width AF	Thread Size	Width AF	Thread Size	Width AF
LL	04	M8 x 1	10	G1/8	11	M8 x 1	10
	06	M10 x 1	11	G1/8	14	M10 x 1	12
	08	M10 x 1	12	G1/8	14	M12 x 1	14
L	06	M10 x 1	14	G1/8	14	M12 x 1.5	14
	08	M12 x 1.5	17	G1/4	19	M14 x 1.5	17
	10	M14 x 1.5	19	G1/4	19	M16 x 1.5	19
	12	M16 x 1.5	22	G3/8	22	M18 x 1.5	22
	15	M18 x 1.5	24	G1/2	27	M22 x 1.5	27
	18	M22 x 1.5	27	G1/2	27	M26 x 1.5	32
	22	M26 x 1.5	32	G3/4	32	M30 x 2	36
	28	M33 x 2	41	G1	41	M36 x 2	41
	35	M42 x 2	50	G1-1/4	50	M45 x 2	50
	42	M48 x 2	55	G1-1/2	55	M52 x 2	60
S	06	M12 x 1.5	17	G1/4	19	M14 x 1.5	17
	08	M14 x 1.5	19	G1/4	19	M16 x 1.5	19
	10	M16 x 1.5	22	G3/8	22	M18 x 1.5	22
	12	M18 x 1.5	24	G3/8	22	M20 x 1.5	24
	14	M20 x 1.5	27	G1/2	27	M22 x 1.5	27
	16	M22 x 1.5	27	G1/2	27	M24 x 1.5	30
	20	M27 x 2	32	G3/4	32	M30 x 2	36
	25	M33 x 2	41	G1	41	M36 x 2	46
	30	M42 x 2	50	G1-1/4	50	M42 x 2	50
	38	M48 x 2	55	G1-1/2	55	M52 x 2	60

Straight Male Stud Fittings

Straight Male Stud Fitting
BSPP Thread
Type FI-GE-...-R ▪ Series LL / L / S

Item No.	Designation	Stud Size	Series	Price
6010000675	FI-GE-04LLR-W3-MS	1/8	LL	3.20
6010000676	FI-GE-06LLR-W3-MS	1/8	LL	4.35
6010000677	FI-GE-08LLR-W3-MS	1/8	LL	4.35
6010000678	FI-GE-06LR-W3-MS	1/8	L	4.10
6010000679	FI-GE-06LR1/4-W3-MS	1/4	L	5.65
6010000680	FI-GE-06LR3/8-W3-MS	3/8	L	7.90
6010000683	FI-GE-08LR-W3-MS	1/4	L	5.10
6010000684	FI-GE-08LR3/8-W3-MS	3/8	L	7.25
6010000687	FI-GE-10LR-W3-MS	1/4	L	5.35
6010000688	FI-GE-10LR3/8-W3-MS	3/8	L	7.05
6010000689	FI-GE-10LR1/2-W3-MS	1/2	L	11.35
6010000690	FI-GE-12LR1/4-W3-MS	1/4	L	7.90
6010000691	FI-GE-12LR-W3-MS	3/8	L	7.05
6010000692	FI-GE-12LR1/2-W3-MS	1/2	L	10.70
6010000695	FI-GE-15LR3/8-W3-MS	3/8	L	12.10
6010000696	FI-GE-15LR-W3-MS	1/2	L	10.00
6010001529	FI-GE-15LR3/4-WD-B-W3-MS	3/4	L	42.20
6010000699	FI-GE-18LR-W3-MS	1/2	L	12.85
6010000700	FI-GE-18LR3/4-W3-MS	3/4	L	22.60
6010000703	FI-GE-22LR1/2-W3-MS	1/2	L	32.40
6010000702	FI-GE-22LR-W3-MS	3/4	L	18.35
6010000704	FI-GE-22LR1-W3-MS	1	L	74.35
6010000705	FI-GE-28LR3/4-W3-MS	3/4	L	74.35
6010000706	FI-GE-28LR-W3-MS	1	L	33.80
6010000710	FI-GE-35LR-W3-MS	1-1/4	L	47.80
6010000715	FI-GE-42LR-W3-MS	1-1/2	L	56.25
6010000716	FI-GE-06SR-W3-MS	1/4	S	5.35
6010000719	FI-GE-08SR-W3-MS	1/4	S	6.05
6010000722	FI-GE-10SR1/4-W3-MS	1/4	S	10.70
6010000723	FI-GE-10SR-W3-MS	3/8	S	7.90
6010000724	FI-GE-10SR1/2-W3-MS	1/2	S	10.85
6010000726	FI-GE-12SR-W3-MS	3/8	S	8.60
6010000727	FI-GE-12SR1/2-W3-MS	1/2	S	10.00
6010000730	FI-GE-14SR-W3-MS	1/2	S	15.60
6010000732	FI-GE-16SR3/8-W3-MS	3/8	S	27.25
6010000733	FI-GE-16SR-W3-MS	1/2	S	14.25
6010000734	FI-GE-16SR3/4-W3-MS	3/4	S	21.80
6010000736	FI-GE-20SR1/2-W3-MS	1/2	S	36.60
6010000735	FI-GE-20SR-W3-MS	3/4	S	21.25
6010000739	FI-GE-25SR3/4-W3-MS	3/4	S	54.85
6010000738	FI-GE-25SR-W3-MS	1	S	36.60
6010000742	FI-GE-30SR1-W3-MS	1	S	36.60
6010000743	FI-GE-30SR-W3-MS	1-1/4	S	56.25
6010000745	FI-GE-38SR1-1/4-W3-MS	1-1/4	S	76.90
6010000746	FI-GE-38SR-W3-MS	1-1/2	S	67.45

Straight Male Stud Fitting
BSPP Thread with Profile Sealing Ring (NBR)
Type FI-GE-...-R-WD ▪ Series L / S

Item No.	Designation	Stud Size	Series	Price
6010001469	FI-GE-06LR-WD-B-W3-MS	1/8	L	5.10
6010001513	FI-GE-06LR1/4-WD-B-W3-MS	1/4	L	7.05
6010001531	FI-GE-08LR1/8-WD-B-W3-MS	1/8	L	9.20
6010001471	FI-GE-08LR-WD-B-W3-MS	1/4	L	4.50
6010001532	FI-GE-08LR3/8-WD-B-W3-MS	3/8	L	8.60
6010001473	FI-GE-10LR-WD-B-W3-MS	1/4	L	6.85
6010001526	FI-GE-10LR3/8-WD-B-W3-MS	3/8	L	7.90
6010001528	FI-GE-10LR1/2-WD-B-W3-MS	1/2	L	13.40
6010001461	FI-GE-12LR1/4-WD-B-W3-MS	1/4	L	9.20
6010001475	FI-GE-12LR-WD-B-W3-MS	3/8	L	8.60
6010001463	FI-GE-12LR1/2-WD-B-W3-MS	1/2	L	12.85
6010001530	FI-GE-12LR3/4-WD-B-W3-MS	3/4	L	17.80
6010001511	FI-GE-15LR3/8-WD-B-W3-MS	3/8	L	13.40
6010001477	FI-GE-15LR-WD-B-W3-MS	1/2	L	11.35
6010001529	FI-GE-15LR3/4-WD-B-W3-MS	3/4	L	42.20
6010001479	FI-GE-18LR-WD-B-W3-MS	1/2	L	14.25
6010001538	FI-GE-18LR3/4-WD-B-W3-MS	3/4	L	25.45
6010001524	FI-GE-22LR1/2-WD-B-W3-MS	1/2	L	29.55
6010001481	FI-GE-22LR-WD-B-W3-MS	3/4	L	19.80
6010001543	FI-GE-22LR1-WD-B-W3-MS	1	L	63.25
6010001518	FI-GE-28LR3/4-WD-B-W3-MS	3/4	L	38.05
6010001483	FI-GE-28LR-WD-B-W3-MS	1	L	36.60
6010001539	FI-GE-35LR1-WD-B-W3-MS	1	L	67.45
6010001485	FI-GE-35LR-WD-B-W3-MS	1-1/4	L	50.60
6010001559	FI-GE-42LR1-1/4-WD-B-W3-MS	1-1/4	L	66.50
6010001487	FI-GE-42LR-WD-B-W3-MS	1-1/2	L	60.35
6010001489	FI-GE-06SR-WD-B-W3-MS	1/4	S	6.70
6010001491	FI-GE-08SR-WD-B-W3-MS	1/4	S	7.25
6010001520	FI-GE-08SR3/8-WD-B-W3-MS	3/8	S	15.60
6010001465	FI-GE-10SR1/4-WD-B-W3-MS	1/4	S	12.85
6010001493	FI-GE-10SR-WD-B-W3-MS	3/8	S	9.20
6010001534	FI-GE-10SR1/2-WD-B-W3-MS	1/2	S	14.25
6010001521	FI-GE-12SR1/4-WD-B-W3-MS	1/4	S	15.60
6010001495	FI-GE-12SR-WD-B-W3-MS	3/8	S	10.00
6010001467	FI-GE-12SR1/2-WD-B-W3-MS	1/2	S	12.10
6010001497	FI-GE-14SR-WD-B-W3-MS	1/2	S	16.95
6010001554	FI-GE-16SR1/4-WD-B-W3-MS	1/4	S	49.10
6010001514	FI-GE-16SR3/8-WD-B-W3-MS	3/8	S	29.55
6010001498	FI-GE-16SR-WD-B-W3-MS	1/2	S	15.60
6010001536	FI-GE-16SR3/4-WD-B-W3-MS	3/4	S	25.45
6010001509	FI-GE-20SR1/2-WD-B-W3-MS	1/2	S	43.55
6010001500	FI-GE-20SR-WD-B-W3-MS	3/4	S	22.60
6010001541	FI-GE-20SR1-WD-B-W3-MS	1	S	61.80
6010001556	FI-GE-25SR1/2-WD-B-W3-MS	1/2	S	53.45
6010001459	FI-GE-25SR3/4-WD-B-W3-MS	3/4	S	56.25
6010001502	FI-GE-25SR-WD-B-W3-MS	1	S	39.45
6010001564	FI-GE-25SR1-1/4-WD-B-W3-MS	1-1/4	S	59.00
6010001567	FI-GE-30SR3/4-WD-B-W3-MS	3/4	S	73.05
6010001516	FI-GE-30SR1-WD-B-W3-MS	1	S	66.00
6010001504	FI-GE-30SR-WD-B-W3-MS	1-1/4	S	59.00
6010001566	FI-GE-38SR1-WD-B-W3-MS	1	S	81.60
6010001552	FI-GE-38SR1-1/4-WD-B-W3-MS	1-1/4	S	77.25
6010001506	FI-GE-38SR-WD-B-W3-MS	1-1/2	S	73.05

Straight Male Stud Fitting
Metric Thread
Type FI-GE-...-M ▪ Series L / S

Item No.	Designation	Stud Size	Series	Price
6010000600	FI-GE-06LM-W3-MS	M10 x 1	L	4.10
6010000612	FI-GE-10LM12x1.5-W3-MS	M12 x 1.5	L	21.25
6010000614	FI-GE-10LM16x1.5-W3-MS	M16 x 1.5	L	12.85
6010000616	FI-GE-10LM22x1.5-W3-MS	M22 x 1.5	L	28.25
6010000619	FI-GE-12LM14x1.5-W3-MS	M14 x 1.5	L	22.60
6010000624	FI-GE-15LM-W3-MS	M18 x 1.5	L	12.85
6010000630	FI-GE-18LM-W3-MS	M22 x 1.5	L	38.05
6010000631	FI-GE-18LM26x1.5-W3-MS	M26 x 1.5	L	45.00
6010000635	FI-GE-22LM-W3-MS	M26 x 1.5	L	19.80
6010000643	FI-GE-42LM-W3-MS	M48 x 2	L	56.25
6010000670	FI-GE-30SM-W3-MS	M42 x 2	S	54.85

Straight Male Stud Fittings

Straight Male Stud Fitting
Metric Thread with Profile Sealing Ring (NBR)
Type FI-GE-...-M-WD ▪ Series L / S

Item No.	Designation	Stud Size	Series	Price
6010001362	FI-GE-06LM-WD-B-W3-MS	M10 x 1	L	5.10
6010001364	FI-GE-08LM-WD-B-W3-MS	M12 x 1.5	L	6.20
6010001423	FI-GE-10LM12x1.5-WD-B-W3-MS	M12 x 1.5	L	12.85
6010001366	FI-GE-10LM-WD-B-W3-MS	M14 x 1.5	L	6.85
6010001357	FI-GE-10LM18x1.5-WD-B-W3-MS	M18 x 1.5	L	10.70
6010001434	FI-GE-10LM22x1.5-WD-B-W3-MS	M22 x 1.5	L	28.25
6010001368	FI-GE-12LM-WD-B-W3-MS	M16 x 1.5	L	8.60
6010001408	FI-GE-12LM18x1.5-WD-B-W3-MS	M18 x 1.5	L	13.40
6010001410	FI-GE-12LM22x1.5-WD-B-W3-MS	M22 x 1.5	L	15.60
6010001370	FI-GE-15LM-WD-B-W3-MS	M18 x 1.5	L	10.00
6010001412	FI-GE-15LM22x1.5-WD-B-W3-MS	M22 x 1.5	L	15.60
6010001403	FI-GE-18LM18x1.5-WD-B-W3-MS	M18 x 1.5	L	15.60
6010001372	FI-GE-18LM-WD-B-W3-MS	M22 x 1.5	L	14.25
6010001374	FI-GE-22LM-WD-B-W3-MS	M26 x 1.5	L	21.25
6010001376	FI-GE-28LM-WD-B-W3-MS	M33 x 2	L	35.20
6010001378	FI-GE-35LM-WD-B-W3-MS	M42 x 2	L	50.60
6010001380	FI-GE-42LM-WD-B-W3-MS	M48 x 2	L	61.80
6010001382	FI-GE-06SM-WD-B-W3-MS	M12 x 1.5	S	6.70
6010001383	FI-GE-08SM-WD-B-W3-MS	M14 x 1.5	S	7.25
6010001385	FI-GE-10SM-WD-B-W3-MS	M16 x 1.5	S	9.20
6010001387	FI-GE-12SM-WD-B-W3-MS	M18 x 1.5	S	10.00
6010001389	FI-GE-14SM-WD-B-W3-MS	M20 x 1.5	S	16.95
6010001390	FI-GE-16SM-WD-B-W3-MS	M22 x 1.5	S	15.60
6010001392	FI-GE-20SM-WD-B-W3-MS	M27 x 2	S	22.60
6010001394	FI-GE-25SM-WD-B-W3-MS	M33 x 2	S	39.45
6010001396	FI-GE-30SM-WD-B-W3-MS	M42 x 2	S	57.60
6010001398	FI-GE-38SM-WD-B-W3-MS	M48 x 2	S	73.05

Straight Male Stud Fitting
Metric Thread with O-Ring (NBR)
Type FI-GE-...-M-OR ▪ Series L / S

Item No.	Designation	Stud Size	Series	Price
6010001773	FI-GE-06LM-OR-B-W3-MS	M10 x 1	L	4.55
6010001775	FI-GE-08LM-OR-B-W3-MS	M12 x 1.5	L	5.55
6010001776	FI-GE-10LM-OR-B-W3-MS	M14 x 1.5	L	6.20
6010001782	FI-GE-12LM-OR-B-W3-MS	M16 x 1.5	L	7.75
6010001786	FI-GE-15LM-OR-B-W3-MS	M18 x 1.5	L	9.20
6010001788	FI-GE-18LM-OR-B-W3-MS	M22 x 1.5	L	13.25
6010001789	FI-GE-22LM27x2-OR-B-W3-MS	M27 x 2	L	19.15
6010001791	FI-GE-28LM-OR-B-W3-MS	M33 x 2	L	32.70
6010001792	FI-GE-35LM-OR-B-W3-MS	M42 x 2	L	46.65
6010001793	FI-GE-42LM-OR-B-W3-MS	M48 x 2	L	58.90
6010001794	FI-GE-06SM-OR-B-W3-MS	M12 x 1.5	S	6.10
6010001795	FI-GE-08SM-OR-B-W3-MS	M14 x 1.5	S	6.70
6010001796	FI-GE-10SM-OR-B-W3-MS	M16 x 1.5	S	8.25
6010001799	FI-GE-12SM-OR-B-W3-MS	M18 x 1.5	S	9.10
6010001800	FI-GE-16SM-OR-B-W3-MS	M22 x 1.5	S	14.35
6010001801	FI-GE-20SM-OR-B-W3-MS	M27 x 2	S	20.80
6010001802	FI-GE-25SM-OR-B-W3-MS	M33 x 2	S	35.80
6010001804	FI-GE-30SM-OR-B-W3-MS	M42 x 2	S	53.55
6010001805	FI-GE-38SM-OR-B-W3-MS	M48 x 2	S	69.15

Straight Male Stud Fitting
BSPP Thread / 60° Conical Bore /
Sealing Surface for Gaskets
Type FI-GE-...-R-DF ▪ Series L / S

Item No.	Designation	Stud Size	DIN Thread	Series	Price
6030004606	FI-GE-06LR-DF-W3	1/8	M12 x 1.5	L	3.00
6030005708	FI-GE-06LR1/4-DF-W3	1/4	M12 x 1.5	L	3.00
6030005709	FI-GE-06LR3/8-DF-W3	3/8	M12 x 1.5	L	45.00
6030007482	FI-GE-06LR1/2-DF-W3	1/2	M12 x 1.5	L	26.80
6030005713	FI-GE-08LR1/8-DF-W3	1/8	M14 x 1.5	L	12.10
6030004607	FI-GE-08LR-DF-W3	1/4	M14 x 1.5	L	3.70
6030005714	FI-GE-08LR3/8-DF-W3	3/8	M14 x 1.5	L	10.70
6030007483	FI-GE-08LR1/2-DF-W3	1/2	M14 x 1.5	L	36.60
6030004608	FI-GE-10LR-DF-W3	1/4	M16 x 1.5	L	4.35
6030005719	FI-GE-10LR3/8-DF-W3	3/8	M16 x 1.5	L	5.75
6030005718	FI-GE-10LR1/2-DF-W3	1/2	M16 x 1.5	L	10.70
6030005723	FI-GE-12LR1/4-DF-W3	1/4	M18 x 1.5	L	12.85
6030004609	FI-GE-12LR-DF-W3	3/8	M18 x 1.5	L	5.75
6030005722	FI-GE-12LR1/2-DF-W3	1/2	M18 x 1.5	L	9.20
6030007475	FI-GE-12LR3/4-DF-W3	3/4	M18 x 1.5	L	38.05
6030005727	FI-GE-15LR3/8-DF-W3	3/8	M22 x 1.5	L	10.00
6030004610	FI-GE-15LR-DF-W3	1/2	M22 x 1.5	L	7.90
6030007477	FI-GE-15LR3/4-DF-W3	3/4	M22 x 1.5	L	40.85
6030005732	FI-GE-18LR3/8-DF-W3	3/8	M26 x 1.5	L	39.45
6030004611	FI-GE-18LR-DF-W3	1/2	M26 x 1.5	L	8.60
6030005731	FI-GE-18LR3/4-DF-W3	3/4	M26 x 1.5	L	35.20
6030005735	FI-GE-22LR1/2-DF-W3	1/2	M30 x 2	L	19.80
6030004612	FI-GE-22LR-DF-W3	3/4	M30 x 2	L	12.85
6030005736	FI-GE-22LR1-DF-W3	1	M30 x 2	L	88.50
6030005738	FI-GE-28LR1/2-DF-W3	1/2	M36 x 2	L	102.45
6030005739	FI-GE-28LR3/4-DF-W3	3/4	M36 x 2	L	35.20
6030004613	FI-GE-28LR-DF-W3	1	M36 x 2	L	21.25
6030007480	FI-GE-28LR1-1/4-DF-W3	1-1/4	M36 x 2	L	130.40
6030005741	FI-GE-35LR1-DF-W3	1	M45 x 2	L	156.85
6030004614	FI-GE-35LR-DF-W3	1-1/4	M45 x 2	L	35.20
6030005744	FI-GE-42LR1-1/4-DF-W3	1-1/4	M52 x 2	L	115.75
6030004615	FI-GE-42LR-DF-W3	1-1/2	M52 x 2	L	78.75
6030005711	FI-GE-06SR1/8-DF-W3	1/8	M14 x 1.5	S	16.25
6030004616	FI-GE-06SR-DF-W3	1/4	M14 x 1.5	S	4.35
6030005712	FI-GE-06SR3/8-DF-W3	3/8	M14 x 1.5	S	32.40
6030005716	FI-GE-08SR1/8-DF-W3	1/8	M16 x 1.5	S	25.45
6030004617	FI-GE-08SR-DF-W3	1/4	M16 x 1.5	S	5.10
6030005717	FI-GE-08SR3/8-DF-W3	3/8	M16 x 1.5	S	23.25
6030005715	FI-GE-08SR1/2-DF-W3	1/2	M16 x 1.5	S	39.45
6030005721	FI-GE-10SR1/4-DF-W3	1/4	M18 x 1.5	S	15.60
6030004618	FI-GE-10SR-DF-W3	3/8	M18 x 1.5	S	10.70
6030005720	FI-GE-10SR1/2-DF-W3	1/2	M18 x 1.5	S	16.95
6030005725	FI-GE-12SR1/4-DF-W3	1/4	M20 x 1.5	S	22.60
6030004619	FI-GE-12SR-DF-W3	3/8	M20 x 1.5	S	6.45
6030005724	FI-GE-12SR1/2-DF-W3	1/2	M20 x 1.5	S	8.60
6030005726	FI-GE-12SR3/4-DF-W3	3/4	M20 x 1.5	S	42.20
6030007476	FI-GE-14SR3/8-DF-W3	3/8	M22 x 1.5	S	73.05
6030004620	FI-GE-14SR-DF-W3	1/2	M22 x 1.5	S	11.35
6030005730	FI-GE-16SR3/8-DF-W3	3/8	M24 x 1.5	S	28.25
6030004621	FI-GE-16SR-DF-W3	1/2	M24 x 1.5	S	10.00
6030005729	FI-GE-16SR3/4-DF-W3	3/4	M24 x 1.5	S	33.80
6030005733	FI-GE-20SR1/2-DF-W3	1/2	M30 x 2	S	54.85
6030004622	FI-GE-20SR-DF-W3	3/4	M30 x 2	S	31.00
6030005734	FI-GE-20SR1-DF-W3	1	M30 x 2	S	95.55
6030007479	FI-GE-25SR1/2-DF-W3	1/2	M36 x 2	S	102.45
6030005737	FI-GE-25SR3/4-DF-W3	3/4	M36 x 2	S	82.90
6030004623	FI-GE-25SR-DF-W3	1	M36 x 2	S	46.40
6030007478	FI-GE-25SR1-1/4-DF-W3	1-1/4	M36 x 2	S	113.65
6030007481	FI-GE-30SR3/4-DF-W3	3/4	M42 x 2	S	112.30
6030005740	FI-GE-30SR1-DF-W3	1	M42 x 2	S	103.90
6030004624	FI-GE-30SR-DF-W3	1-1/4	M42 x 2	S	78.75
6030005743	FI-GE-38SR1-DF-W3	1	M52 x 2	S	115.05
6030005742	FI-GE-38SR1-1/4-DF-W3	1-1/4	M52 x 2	S	113.65
6030004625	FI-GE-38SR-DF-W3	1-1/2	M52 x 2	S	92.70

Straight Male Stud Fittings

Straight Male Stud Fitting
BSPT Thread
Type FI-GE-...-Rk ▪ Series LL / L / S

Item No.	Designation	Stud Size	Series	Price
6010000501	FI-GE-04LLRk-W3-MS	1/8	LL	4.00
6010000503	FI-GE-06LLRk-W3-MS	1/8	LL	4.10
6010000504	FI-GE-08LLRk-W3-MS	1/8	LL	4.35
6010000507	FI-GE-06LRk-W3-MS	1/8	L	14.25
6010000508	FI-GE-06LR1/4k-W3-MS	1/4	L	16.95
6010000510	FI-GE-08LRk-W3-MS	1/4	L	6.70
6010000512	FI-GE-08LR3/8k-W3-MS	3/8	L	7.25
6010000514	FI-GE-10LRk-W3-MS	1/4	L	15.60
6010000515	FI-GE-10LR3/8k-W3-MS	3/8	L	16.95
6010000518	FI-GE-12LR1/4k-W3-MS	1/4	L	12.85
6010000517	FI-GE-12LRk-W3-MS	3/8	L	7.90
6010000519	FI-GE-12LR1/2k-W3-MS	1/2	L	14.25
6010000520	FI-GE-15LRk-W3-MS	1/2	L	22.60
6010000523	FI-GE-18LRk-W3-MS	1/2	L	25.45
6010000525	FI-GE-22LRk-W3-MS	3/4	L	14.25
6010000527	FI-GE-28LRk-W3-MS	1	L	29.55
6010000531	FI-GE-06SRk-W3-MS	1/4	S	7.25
6010000532	FI-GE-08SRk-W3-MS	1/4	S	50.60
6010000533	FI-GE-10SRk-W3-MS	3/8	S	45.00
6010000534	FI-GE-12SRk-W3-MS	3/8	S	11.35
6010000535	FI-GE-14SRk-W3-MS	1/2	S	26.80
6010000537	FI-GE-16SRk-W3-MS	1/2	S	16.95
6010000539	FI-GE-20SRk-W3-MS	3/4	S	26.80

Straight Male Stud Fitting
Metric Taper Thread
Type FI-GE-...-Mk ▪ Series LL / L

Item No.	Designation	Stud Size	Series	Price
6010000416	FI-GE-04LLM6x1k-W3-MS	M6 x 1	LL	6.50
6010000415	FI-GE-04LLMk-W3-MS	M8 x 1	LL	3.90
6010000417	FI-GE-04LLM10x1k-W3-MS	M10 x 1	LL	6.80
6010000421	FI-GE-06LLM6x1K-W3-MS	M6 x 1	LL	5.40
6010000418	FI-GE-06LLM8x1K-W3-MS	M8 x 1	LL	5.75
6010000419	FI-GE-06LLMK-W3-MS	M10 x 1	LL	4.35
6010000412	FI-GE-08LLM8x1k-W3-MS	M8 x 1	LL	24.65
6010000420	FI-GE-08LLMk-W3-MS	M10 x 1	LL	4.15
6010000422	FI-GE-06LMk-W3-MS	M10 x 1	L	8.30
6010000429	FI-GE-06LM12x1.5k-W3-MS	M12 x 1.5	L	23.95
6010000423	FI-GE-08LMk-W3-MS	M12 x 1.5	L	8.35
6010000424	FI-GE-08LM14x1.5k-W3-MS	M14 x 1.5	L	POA
6010000425	FI-GE-10LMk-W3-MS	M14 x 1.5	L	12.10
6010000426	FI-GE-10LM16x1.5k-W3-MS	M16 x 1.5	L	22.40
6010000427	FI-GE-12LMk-W3-MS	M16 x 1.5	L	21.25
6010000428	FI-GE-12LM18x1.5k-W3-MS	M18 x 1.5	L	26.85
6010000430	FI-GE-15LMk-W3-MS	M18 x 1.5	L	14.45
6010000431	FI-GE-18LMk-W3-MS	M22 x 1.5	L	24.70

Straight Male Stud Fitting
NPT Thread
Type FI-GE-...-N ▪ Series LL / L / S

Item No.	Designation	Stud Size	Series	Price
6010000546	FI-GE-04LL1/8N-W3-MS	1/8	LL	5.65
6010000547	FI-GE-06LL1/8N-W3-MS	1/8	LL	5.45
6010000548	FI-GE-08LL1/8N-W3-MS	1/8	LL	6.45
6010000549	FI-GE-06L1/8N-W3-MS	1/8	L	4.20
6010000550	FI-GE-06L1/4N-W3-MS	1/4	L	5.45
6010007578	FI-GE-06L3/8N-W3-MS	3/8	L	11.35
6010000552	FI-GE-08L1/4N-W3-MS	1/4	L	6.05
6010000554	FI-GE-08L3/8N-W3-MS	3/8	L	8.60
6010000556	FI-GE-10L1/4N-W3-MS	1/4	L	6.70
6010000557	FI-GE-10L3/8N-W3-MS	3/8	L	7.90
6010000559	FI-GE-12L1/4N-W3-MS	1/4	L	7.90
6010000560	FI-GE-12L3/8N-W3-MS	3/8	L	7.25
6010000561	FI-GE-12L1/2N-W3-MS	1/2	L	9.20
6010000562	FI-GE-15L3/8N-W3-MS	3/8	L	12.85
6010000563	FI-GE-15L1/2N-W3-MS	1/2	L	10.70
6010000564	FI-GE-18L1/2N-W3-MS	1/2	L	13.40
6010000565	FI-GE-18L3/4N-W3-MS	3/4	L	32.40
6010000566	FI-GE-22L1/2N-W3-MS	1/2	L	45.90
6010000567	FI-GE-22L3/4N-W3-MS	3/4	L	19.80
6010000568	FI-GE-28L1N-W3-MS	1	L	36.60
6010000569	FI-GE-35L1-1/4N-W3-MS	1-1/4	L	56.25
6010000570	FI-GE-42L1-1/2N-W3-MS	1-1/2	L	71.60
6010000571	FI-GE-06S1/4N-W3-MS	1/4	S	6.70
6010000572	FI-GE-08S1/4N-W3-MS	1/4	S	7.25
6010000574	FI-GE-10S1/4N-W3-MS	1/4	S	8.60
6010000575	FI-GE-10S3/8N-W3-MS	3/8	S	9.20
6010000577	FI-GE-12S1/4N-W3-MS	1/4	S	10.70
6010000578	FI-GE-12S3/8N-W3-MS	3/8	S	10.70
6010000579	FI-GE-12S1/2N-W3-MS	1/2	S	11.35
6010000582	FI-GE-14S1/2N-W3-MS	1/2	S	15.60
6010000583	FI-GE-16S3/8N-W3-MS	3/8	S	21.25
6010000584	FI-GE-16S1/2N-W3-MS	1/2	S	16.95
6010000585	FI-GE-16S3/4N-W3-MS	3/4	S	21.25
6010000586	FI-GE-20S1/2N-W3-MS	1/2	S	26.80
6010000587	FI-GE-20S3/4N-W3-MS	3/4	S	24.05
6010000588	FI-GE-25S3/4N-W3-MS	3/4	S	60.35
6010000589	FI-GE-25S1N-W3-MS	1	S	40.85
6010000590	FI-GE-30S1-1/4N-W3-MS	1-1/4	S	61.80
6010000592	FI-GE-38S1-1/2N-W3-MS	1-1/2	S	82.90

Straight Male Stud Fitting
UN/UNF Thread with O-Ring
Type FI-GE-...-U ▪ Series L / S

Item No.	Designation	Stud Size	Series	Price
6010001292	FI-GE-06L7/16U-B-W3-MS	7/16	L	28.45
6010001354	FI-GE-06L9/16U-B-W3-MS	9/16	L	28.25
6010001293	FI-GE-08L7/16U-B-W3-MS	7/16	L	32.40
6010001295	FI-GE-08L9/16U-B-W3-MS	9/16	L	32.40
6010001344	FI-GE-10L7/16U-B-W3-MS	7/16	L	33.80
6010001296	FI-GE-10L9/16U-B-W3-MS	9/16	L	35.20
6010001345	FI-GE-10L3/4U-B-W3-MS	3/4	L	36.60
6010001297	FI-GE-12L9/16U-B-W3-MS	9/16	L	33.80
6010001298	FI-GE-12L3/4U-B-W3-MS	3/4	L	40.85
6010001299	FI-GE-12L7/8U-B-W3-MS	7/8	L	46.40
6010001300	FI-GE-15L9/16U-B-W3-MS	9/16	L	38.05
6010001301	FI-GE-15L3/4U-B-W3-MS	3/4	L	42.20
6010001302	FI-GE-15L7/8U-B-W3-MS	7/8	L	49.20
6010001303	FI-GE-18L3/4U-B-W3-MS	3/4	L	49.20
6010001305	FI-GE-18L7/8U-B-W3-MS	7/8	L	53.45
6010001306	FI-GE-22L7/8U-B-W3-MS	7/8	L	66.00
6010001307	FI-GE-22L1-1/16U-B-W3-MS	1-1/16	L	66.00
6010001334	FI-GE-28L7/8U-B-W3-MS	7/8	L	84.30
6010001310	FI-GE-28L1-5/16U-B-W3-MS	1-5/16	L	87.05
6010001312	FI-GE-35L1-5/16U-B-W3-MS	1-5/16	L	123.50
6010001332	FI-GE-35L1-5/8U-B-W3-MS	1-5/8	L	110.90
6010001313	FI-GE-42L1-7/8U-B-W3-MS	1-7/8	L	142.90
6010001335	FI-GE-08S7/16U-B-W3-MS	7/16	S	32.40
6010001316	FI-GE-10S9/16U-B-W3-MS	9/16	S	36.60
6010001318	FI-GE-12S3/4U-B-W3-MS	3/4	S	45.00
6010001322	FI-GE-16S3/4U-B-W3-MS	3/4	S	47.80
6010001323	FI-GE-16S7/8U-B-W3-MS	7/8	S	57.60
6010001325	FI-GE-20S3/4U-B-W3-MS	3/4	S	73.05
6010001326	FI-GE-20S7/8U-B-W3-MS	7/8	S	73.05
6010001327	FI-GE-20S1-1/16U-B-W3-MS	1-1/16	S	73.05
6010001342	FI-GE-25S1-1/16U-B-W3-MS	1-1/16	S	98.25
6010001328	FI-GE-25S1-5/16U-B-W3-MS	1-5/16	S	98.25
6010001317	FI-GE-10S3/4U-B-W3-MS	3/4	S	67.45
6010001330	FI-GE-30S1-5/16U-B-W3-MS	1-5/16	S	185.45
6010001333	FI-GE-30S1-5/8U-B-W3-MS	1-5/8	S	126.30
6010001331	FI-GE-38S1-7/8U-B-W3-MS	1-7/8	S	165.60

Male Stud Elbows

Male Stud Elbow
BSPP Thread with Metallic Sealing Edge
Type FI-WE-...-R ▪ Series L / S

Item No.	Designation	Stud Size	Series	Price
6010013780	FI-WE-22LR-W3-MS	3/4	L	61.45
6010013764	FI-WE-28LR-W3-MS	1	L	94.75
6010013765	FI-WE-35LR-W3-MS	1-1/4	L	143.00
6010013766	FI-WE-42LR-W3-MS	1-1/2	L	164.65
6010013779	FI-WE-20SR-W3-MS	3/4	S	91.25
6010013767	FI-WE-25SR3/4-W3-MS	3/4	S	134.90
6010013768	FI-WE-25SR-W3-MS	1	S	84.65
6010013769	FI-WE-30SR-W3-MS	1-1/4	S	149.00
6010013770	FI-WE-38SR-W3-MS	1-1/2	S	177.10

Male Stud Elbow
Metric Taper Thread
Type FI-WE-...-Mk ▪ Series L / S

Item No.	Designation	Stud Size	Series	Price
6010000839	FI-WE-06LMk-W3-MS	M10 x 1	L	13.40
6010000840	FI-WE-08LMk-W3-MS	M12 x 1.5	L	15.60
6010000841	FI-WE-10LMk-W3-MS	M14 x 1.5	L	16.95
6010000843	FI-WE-12LMk-W3-MS	M16 x 1.5	L	19.80
6010000845	FI-WE-15LMk-W3-MS	M18 x 1.5	L	24.05
6010000846	FI-WE-18LMk-W3-MS	M22 x 1.5	L	33.80
6010000851	FI-WE-06SMk-W3-MS	M12 x 1.5	S	17.70
6010000852	FI-WE-08SMk-W3-MS	M14 x 1.5	S	21.25
6010000853	FI-WE-10SMk-W3-MS	M16 x 1.5	S	22.60
6010000854	FI-WE-12SMk-W3-MS	M18 x 1.5	S	25.45
6010000855	FI-WE-14SMk-W3-MS	M20 x 1.5	S	45.00
6010000856	FI-WE-16SMk-W3-MS	M22 x 1.5	S	40.85

Male Stud Elbow
BSPT Thread
Type FI-WE-...-Rk ▪ Series LL / L / S

Item No.	Designation	Stud Size	Series	Price
6010000861	FI-WE-04LLRk-W3-MS	1/8	LL	12.85
6010009906	FI-WE-06LLRk-W3-MS-PR	1/8	LL	13.40
6010009903	FI-WE-08LLRk-W3-MS-PR	1/8	LL	15.60
6010000866	FI-WE-06LRk-W3-MS	1/8	L	13.40
6010000867	FI-WE-06LR1/4k-W3-MS	1/4	L	29.55
6010000868	FI-WE-08LRk-W3-MS	1/4	L	14.25
6010000869	FI-WE-10LRk-W3-MS	1/4	L	16.95
6010000870	FI-WE-10LR3/8k-W3-MS	3/8	L	33.80
6010000871	FI-WE-12LR1/4k-W3-MS	1/4	L	26.80
6010000872	FI-WE-12LRk-W3-MS	3/8	L	19.80
6010000886	FI-WE-12LR1/2k-W3-MS	1/2	L	42.20
6010000873	FI-WE-15LRk-W3-MS	1/2	L	24.05
6010000865	FI-WE-18LRk-W3-MS	1/2	L	31.00
6010000876	FI-WE-22LRk-W3-MS	3/4	L	71.60
6010000878	FI-WE-28LRk-W3-MS	1	L	106.70
6010000879	FI-WE-35LRk-W3-MS	1-1/4	L	168.15
6010000889	FI-WE-06SRk-W3-MS	1/4	S	15.60
6010000890	FI-WE-08SRk-W3-MS	1/4	S	18.35
6010000891	FI-WE-10SRk-W3-MS	3/8	S	21.25
6010000894	FI-WE-12SRk-W3-MS	3/8	S	22.60
6010000895	FI-WE-14SRk-W3-MS	1/2	S	42.20
6010000899	FI-WE-16SRk-W3-MS	1/2	S	33.80
6010000905	FI-WE-25SRk-W3-MS	1	S	96.95

PR = fitting is made from profiled 90° solid bar

Male Stud Elbow
NPT Thread
Type FI-WE-...-N ▪ Series LL / L / S

Item No.	Designation	Stud Size	Series	Price
6010000910	FI-WE-04LL1/8N-W3-MS	1/8	LL	15.60
6010014938	FI-WE-06LL1/8N-W3-MS-PR	1/8	LL	15.60
6010009905	FI-WE-08LL1/8N-W3-MS-PR	1/8	LL	18.35
6010000916	FI-WE-06L1/8N-W3-MS	1/8	L	15.60
6010000917	FI-WE-08L1/4N-W3-MS	1/4	L	16.95
6010000918	FI-WE-10L1/4N-W3-MS	1/4	L	18.35
6010000923	FI-WE-10L3/8N-W3-MS	3/8	L	30.30
6010000919	FI-WE-12L1/4N-W3-MS	1/4	L	25.45
6010000920	FI-WE-12L3/8N-W3-MS	3/8	L	22.60
6010000924	FI-WE-12L1/2N-W3-MS	1/2	L	82.90
6010000921	FI-WE-15L1/2N-W3-MS	1/2	L	29.55
6010000914	FI-WE-18L1/2N-W3-MS	1/2	L	36.60
6010000915	FI-WE-22L3/4N-W3-MS	3/4	L	54.85
6010000913	FI-WE-28L1N-W3-MS	1	L	89.85
6010000925	FI-WE-35L1-1/4N-W3-MS	1-1/4	L	106.70
6010000926	FI-WE-42L1-1/2N-W3-MS	1-1/2	L	160.25
6010000927	FI-WE-06S1/4N-W3-MS	1/4	S	18.35
6010000928	FI-WE-08S1/4N-W3-MS	1/4	S	21.25
6010008851	FI-WE-10S1/4N-W3-MS	1/4	S	50.60
6010000929	FI-WE-10S3/8N-W3-MS	3/8	S	22.60
6010000930	FI-WE-12S3/8N-W3-MS	3/8	S	25.45
6010000931	FI-WE-14S1/2N-W3-MS	1/2	S	46.40
6010000932	FI-WE-16S1/2N-W3-MS	1/2	S	38.05
6010000933	FI-WE-20S3/4N-W3-MS	3/4	S	59.00
6010000934	FI-WE-25S1N-W3-MS	1	S	96.95
6010000935	FI-WE-30S1-1/4N-W3-MS	1-1/4	S	168.15
6010000936	FI-WE-38S1-1/2N-W3-MS	1-1/2	S	176.90

PR = fitting is made from profiled 90° solid bar

Male Stud Branch Tees

Male Stud Branch Tee
BSPP Thread with Metallic Sealing Edge
Type FI-TE-...-R ▪ Series L / S

Item No.	Designation	Stud Size	Series	Price
6010008471	FI-TE-22LR-W3-MS	3/4	L	122.60
6010008472	FI-TE-28LR-W3-MS	1	L	173.40
6010008473	FI-TE-35LR-W3-MS	1-1/4	L	298.80
6010008474	FI-TE-42LR-W3-MS	1-1/2	L	501.80
6010008475	FI-TE-20SR-W3-MS	3/4	S	134.85
6010008476	FI-TE-25SR-W3-MS	1	S	224.60
6010008477	FI-TE-30SR-W3-MS	1-1/4	S	315.30
6010008478	FI-TE-38SR-W3-MS	1-1/2	S	542.10

Male Stud Branch Tee
BSPT Thread
Type FI-TE-...-Rk ▪ Series LL / L / S

Item No.	Designation	Stud Size	Series	Price
6010000440	FI-TE-04LLRk-W3-MS	1/8	LL	22.60
6010000441	FI-TE-06LLRk-W3-MS	1/8	LL	25.85
6010000442	FI-TE-08LLRk-W3-MS	1/8	LL	22.85
6010000443	FI-TE-06LRk-W3-MS	1/8	L	35.20
6010000444	FI-TE-08LRk-W3-MS	1/4	L	38.05
6010000445	FI-TE-10LRk-W3-MS	1/4	L	40.85
6010000446	FI-TE-12LRk-W3-MS	3/8	L	42.30
6010000447	FI-TE-15LRk-W3-MS	1/2	L	73.05
6010000448	FI-TE-18LRk-W3-MS	1/2	L	101.10
6010000449	FI-TE-06SRk-W3-MS	1/4	S	39.45
6010000450	FI-TE-08SRk-W3-MS	1/4	S	36.50
6010000451	FI-TE-10SRk-W3-MS	3/8	S	61.80
6010000452	FI-TE-12SRk-W3-MS	3/8	S	63.25
6010000453	FI-TE-14SRk-W3-MS	1/2	S	78.75
6010000454	FI-TE-16SRk-W3-MS	1/2	S	101.10

DIN Thread Sizes

Series	Tube OD (mm)	Male Stud Metric Parallel Thread		Male Stud Whitworth Parallel Pipe Thread		Union Nut Metric Parallel Thread	
		Thread Size	Width AF	Thread Size	Width AF	Thread Size	Width AF
LL	04	M8 x 1	10	G1/8	11	M8 x 1	10
	06	M10 x 1	11	G1/8	14	M10 x 1	12
	08	M10 x 1	12	G1/8	14	M12 x 1	14
L	06	M10 x 1	14	G1/8	14	M12 x 1.5	14
	08	M12 x 1.5	17	G1/4	19	M14 x 1.5	17
	10	M14 x 1.5	19	G1/4	19	M16 x 1.5	19
	12	M16 x 1.5	22	G3/8	22	M18 x 1.5	22
	15	M18 x 1.5	24	G1/2	27	M22 x 1.5	27
	18	M22 x 1.5	27	G1/2	27	M26 x 1.5	32
	22	M26 x 1.5	32	G3/4	32	M30 x 2	36
	28	M33 x 2	41	G1	41	M36 x 2	41
	35	M42 x 2	50	G1-1/4	50	M45 x 2	50
	42	M48 x 2	55	G1-1/2	55	M52 x 2	60

Male Stud Barrel Tees

Male Stud Barrel Tee
BSPP Thread with Metallic Sealing Edge
Type FI-LE-...-R ▪ Series L / S

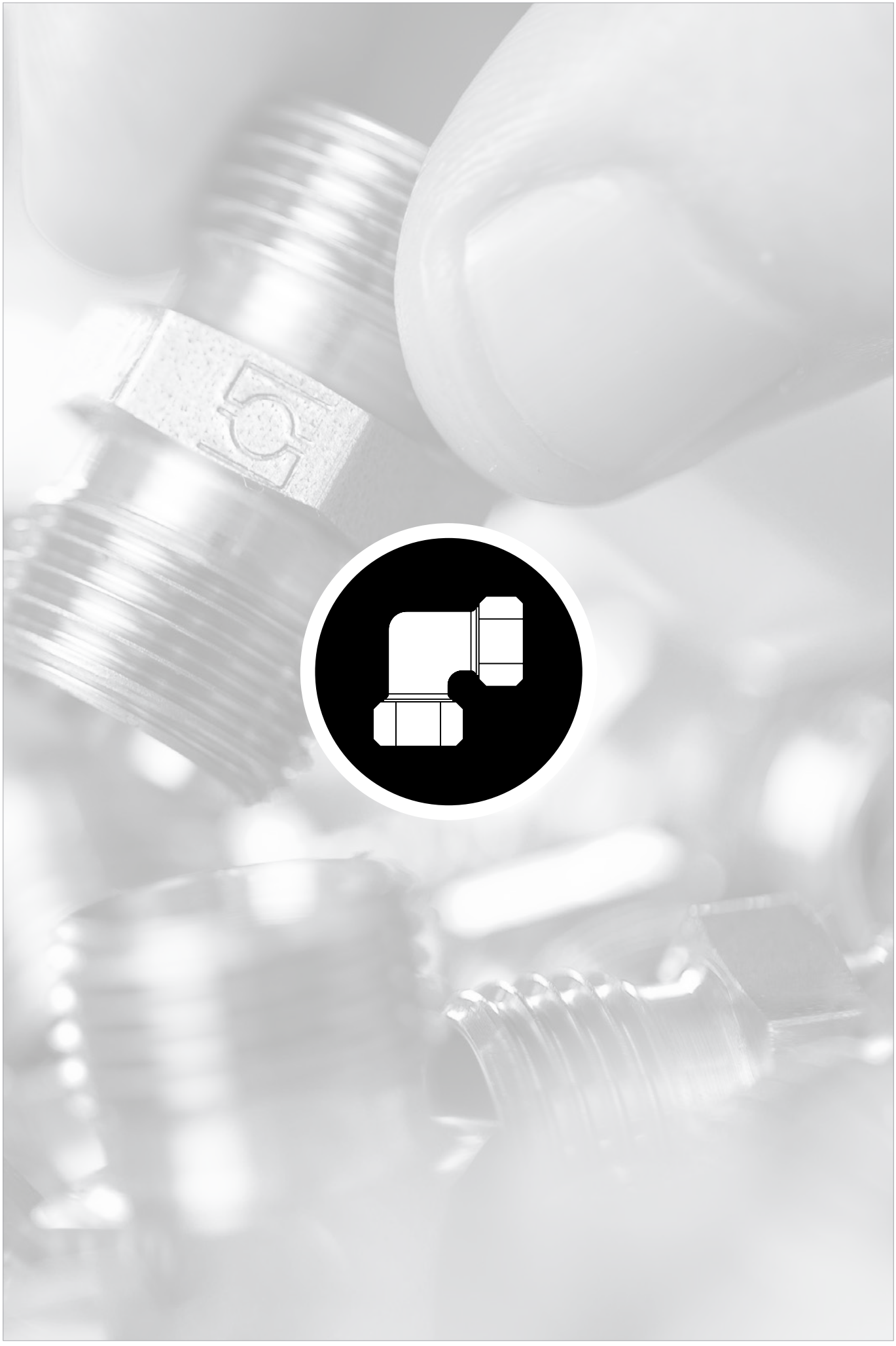
Item No.	Designation	Stud Size	Series	Price
6010008487	FI-LE-22LR-W3-MS	3/4	L	152.80
6010008488	FI-LE-28LR-W3-MS	1	L	198.60
6010008489	FI-LE-35LR-W3-MS	1-1/4	L	369.05
6010008490	FI-LE-42LR-W3-MS	1-1/2	L	356.30
6010008491	FI-LE-20SR-W3-MS	3/4	S	178.75
6010008492	FI-LE-25SR-W3-MS	1	S	224.00
6010008493	FI-LE-30SR-W3-MS	1-1/4	S	331.70
6010008494	FI-LE-38SR-W3-MS	1-1/2	S	562.45

Male Stud Barrel Tee
BSPT Thread
Type FI-LE-...-Rk ▪ Series LL / L / S

Item No.	Designation	Stud Size	Series	Price
6010000471	FI-LE-04LLRk-W3-MS	1/8	LL	31.00
6010000472	FI-LE-06LLRk-W3-MS	1/8	LL	26.35
6010000473	FI-LE-08LLRk-W3-MS	1/8	LL	32.40
6010000474	FI-LE-06LRk-W3-MS	1/8	L	38.05
6010000475	FI-LE-08LRk-W3-MS	1/4	L	40.85
6010000476	FI-LE-10LRk-W3-MS	1/4	L	45.00
6010000477	FI-LE-12LRk-W3-MS	3/8	L	53.45
6010000478	FI-LE-15LRk-W3-MS	1/2	L	89.85
6010000479	FI-LE-18LRk-W3-MS	1/2	L	92.70
6010000480	FI-LE-06SRk-W3-MS	1/4	S	40.85
6010000481	FI-LE-08SRk-W3-MS	1/4	S	39.70
6010000482	FI-LE-10SRk-W3-MS	3/8	S	63.25
6010000483	FI-LE-12SRk-W3-MS	3/8	S	64.65
6010000484	FI-LE-14SRk-W3-MS	1/2	S	78.75
6010000485	FI-LE-16SRk-W3-MS	1/2	S	106.70

DIN Thread Sizes

Series	Tube OD (mm)	Male Stud Metric Parallel Thread		Male Stud Whitworth Parallel Pipe Thread		Union Nut Metric Parallel Thread	
		Thread Size	Width AF	Thread Size	Width AF	Thread Size	Width AF
S	06	M12 x 1.5	17	G1/4	19	M14 x 1.5	17
	08	M14 x 1.5	19	G1/4	19	M16 x 1.5	19
	10	M16 x 1.5	22	G3/8	22	M18 x 1.5	22
	12	M18 x 1.5	24	G3/8	22	M20 x 1.5	24
	14	M20 x 1.5	27	G1/2	27	M22 x 1.5	27
	16	M22 x 1.5	27	G1/2	27	M24 x 1.5	30
	20	M27 x 2	32	G3/4	32	M30 x 2	36
	25	M33 x 2	41	G1	41	M36 x 2	46
	30	M42 x 2	50	G1-1/4	50	M42 x 2	50
	38	M48 x 2	55	G1-1/2	55	M52 x 2	60



Straight Union
FI-G
B22

Straight Reducer
FI-G-../..
B22

Equal Elbow
FI-W
B23

Equal Tee
FI-T
B23

Equal Cross
FI-K
B23

Order Codes

FI - G - 06 L - W3 - MS

① ② ③ ④ ⑤ ⑥

① Series

Fittings	**FI**

② Type

Straight Union	**G**
Straight Reducer	**G-../..**
Equal Elbow	**W**
Equal Tee	**T**
Equal Cross	**K**

③ Tube O.D.

Outside Tube Diameter in mm according to dash sizing.
Reducers are separated by a slash
(e.g. 08OD/06OD)

④ Tube Series

Extra Light	**LL**
Light	**L**
Heavy	**S**

⑤ Surface Material

Steel, zinc/nickel-plated	**W3**

⑥ Assembling

Assembled with Cutting Ring and Union Nut	**MS**

Straight Union
Type FI-G ▪ Series LL / L / S

Item No.	Designation	Series	Price
6010000751	FI-G-04LL-W3-MS	LL	6.05
6010000753	FI-G-06LL-W3-MS	LL	6.70
6010000754	FI-G-08LL-W3-MS	LL	6.85
6010000755	FI-G-06L-W3-MS	L	6.05
6010000756	FI-G-08L-W3-MS	L	6.55
6010000757	FI-G-10L-W3-MS	L	7.90
6010000758	FI-G-12L-W3-MS	L	9.20
6010000759	FI-G-15L-W3-MS	L	12.85
6010000760	FI-G-18L-W3-MS	L	19.80
6010000761	FI-G-22L-W3-MS	L	26.80
6010000762	FI-G-28L-W3-MS	L	46.40
6010000763	FI-G-35L-W3-MS	L	63.25
6010000764	FI-G-42L-W3-MS	L	81.60
6010000765	FI-G-06S-W3-MS	S	7.25
6010000766	FI-G-08S-W3-MS	S	8.60
6010000767	FI-G-10S-W3-MS	S	10.00
6010000768	FI-G-12S-W3-MS	S	11.35
6010000769	FI-G-14S-W3-MS	S	21.25
6010000770	FI-G-16S-W3-MS	S	21.25
6010000771	FI-G-20S-W3-MS	S	31.00
6010000772	FI-G-25S-W3-MS	S	52.05
6010000773	FI-G-30S-W3-MS	S	71.60
6010000774	FI-G-38S-W3-MS	S	96.95

Straight Reducer
Type FI-G ▪ Series LL / L / S

Item No.	Designation	Series	Price
6010000776	FI-G-06/04LL-W3-MS	LL	43.50
6010000777	FI-G-08/04LL-W3-MS	LL	46.20
6010000778	FI-G-08/06L-W3-MS	L	12.85
6010000779	FI-G-10/06L-W3-MS	L	14.25
6010000780	FI-G-10/08L-W3-MS	L	14.25
6010000781	FI-G-12/06L-W3-MS	L	15.60
6010000782	FI-G-12/08L-W3-MS	L	15.60
6010000783	FI-G-12/10L-W3-MS	L	16.95
6010000786	FI-G-15/10L-W3-MS	L	19.80
6010000787	FI-G-15/12L-W3-MS	L	21.25
6010000789	FI-G-18/10L-W3-MS	L	28.25
6010000790	FI-G-18/12L-W3-MS	L	28.25
6010000791	FI-G-18/15L-W3-MS	L	29.55
6010000795	FI-G-22/15L-W3-MS	L	36.60
6010000796	FI-G-22/18L-W3-MS	L	39.45
6010000799	FI-G-28/22L-W3-MS	L	75.85
6010000804	FI-G-42/35L-W3-MS	L	142.90
6010000815	FI-G-16/12S-W3-MS	S	31.00
6010000821	FI-G-20/16S-W3-MS	S	43.55
6010000822	FI-G-25/16S-W3-MS	S	78.75
6010000823	FI-G-25/20S-W3-MS	S	77.25
6010000824	FI-G-30/20S-W3-MS	S	98.85
6010000825	FI-G-30/25S-W3-MS	S	95.55

Equal Elbow
Type FI-W ▪ Series LL / L / S

Item No.	Designation	Series	Price
6010000937	FI-W-04LL-W3-MS	LL	13.75
6010009915	FI-W-06LL-W3-MS-PR	LL	14.25
6010000939	FI-W-08LL-W3-MS	LL	15.60
6010000940	FI-W-06L-W3-MS	L	14.25
6010000941	FI-W-08L-W3-MS	L	15.60
6010000942	FI-W-10L-W3-MS	L	15.60
6010000943	FI-W-12L-W3-MS	L	19.80
6010000944	FI-W-15L-W3-MS	L	25.45
6010000945	FI-W-18L-W3-MS	L	33.80
6010000946	FI-W-22L-W3-MS	L	47.80
6010000947	FI-W-28L-W3-MS	L	74.35
6010000948	FI-W-35L-W3-MS	L	106.70
6010000949	FI-W-42L-W3-MS	L	142.90
6010000950	FI-W-06S-W3-MS	S	15.60
6010000951	FI-W-08S-W3-MS	S	16.95
6010000952	FI-W-10S-W3-MS	S	19.80
6010000953	FI-W-12S-W3-MS	S	22.60
6010000954	FI-W-14S-W3-MS	S	38.05
6010000955	FI-W-16S-W3-MS	S	35.20
6010000956	FI-W-20S-W3-MS	S	47.80
6010000957	FI-W-25S-W3-MS	S	78.75
6010000958	FI-W-30S-W3-MS	S	109.55
6010000959	FI-W-38S-W3-MS	S	156.85

PR = fitting is made from profiled 90° solid bar

Equal Cross
Type FI-K ▪ Series L / S

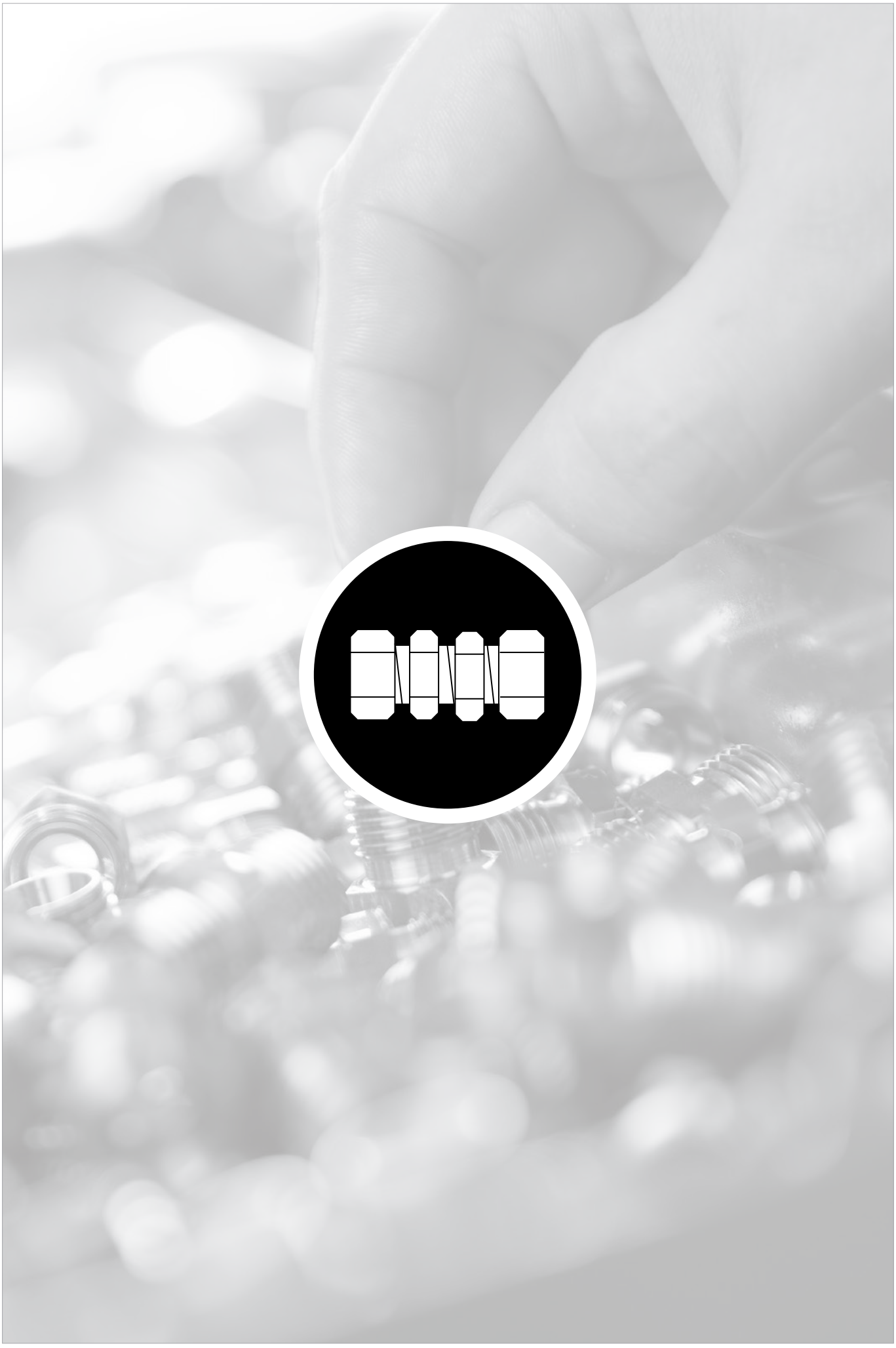
Item No.	Designation	Series	Price
6010001076	FI-K-06L-W3-MS	L	96.95
6010001077	FI-K-08L-W3-MS	L	60.35
6010001078	FI-K-10L-W3-MS	L	64.65
6010001079	FI-K-12L-W3-MS	L	71.60
6010001080	FI-K-15L-W3-MS	L	87.05
6010001081	FI-K-18L-W3-MS	L	109.55
6010001082	FI-K-22L-W3-MS	L	154.20
6010001083	FI-K-28L-W3-MS	L	207.35
6010001084	FI-K-35L-W3-MS	L	283.05
6010001085	FI-K-42L-W3-MS	L	440.50
6010001086	FI-K-06S-W3-MS	S	64.65
6010001087	FI-K-08S-W3-MS	S	71.60
6010001088	FI-K-10S-W3-MS	S	77.25
6010001089	FI-K-12S-W3-MS	S	81.60
6010001090	FI-K-14S-W3-MS	S	120.75
6010001091	FI-K-16S-W3-MS	S	117.85
6010001092	FI-K-20S-W3-MS	S	170.80
6010001093	FI-K-25S-W3-MS	S	207.35
6010001094	FI-K-30S-W3-MS	S	280.45
6010001095	FI-K-38S-W3-MS	S	445.75

Equal Tee
Type FI-T ▪ Series LL / L / S

Item No.	Designation	Series	Price
6010000961	FI-T-04LL-W3-MS	LL	16.95
6010000963	FI-T-06LL-W3-MS	LL	18.35
6010000964	FI-T-08LL-W3-MS	LL	19.80
6010000965	FI-T-06L-W3-MS	L	18.35
6010000966	FI-T-08L-W3-MS	L	19.80
6010000967	FI-T-10L-W3-MS	L	22.60
6010000968	FI-T-12L-W3-MS	L	26.80
6010000969	FI-T-15L-W3-MS	L	33.80
6010000970	FI-T-18L-W3-MS	L	46.40
6010000971	FI-T-22L-W3-MS	L	64.65
6010000972	FI-T-28L-W3-MS	L	106.70
6010000973	FI-T-35L-W3-MS	L	140.30
6010000974	FI-T-42L-W3-MS	L	202.10
6010000975	FI-T-06S-W3-MS	S	21.25
6010000976	FI-T-08S-W3-MS	S	22.60
6010000977	FI-T-10S-W3-MS	S	26.80
6010000978	FI-T-12S-W3-MS	S	28.25
6010000979	FI-T-14S-W3-MS	S	50.60
6010000980	FI-T-16S-W3-MS	S	47.80
6010000981	FI-T-20S-W3-MS	S	74.35
6010000982	FI-T-25S-W3-MS	S	110.90
6010000983	FI-T-30S-W3-MS	S	142.90
6010000984	FI-T-38S-W3-MS	S	218.65

DIN Thread Sizes

Series	Tube OD (mm)	Male Stud Metric Parallel Thread		Male Stud Whitworth Parallel Pipe Thread		Union Nut Metric Parallel Thread	
		Thread Size	Width AF	Thread Size	Width AF	Thread Size	Width AF
LL	04	M8 x 1	10	G1/8	11	M8 x 1	10
	06	M10 x 1	11	G1/8	14	M10 x 1	12
	08	M10 x 1	12	G1/8	14	M12 x 1	14
L	06	M10 x 1	14	G1/8	14	M12 x 1.5	14
	08	M12 x 1.5	17	G1/4	19	M14 x 1.5	17
	10	M14 x 1.5	19	G1/4	19	M16 x 1.5	19
	12	M16 x 1.5	22	G3/8	22	M18 x 1.5	22
	15	M18 x 1.5	24	G1/2	27	M22 x 1.5	27
	18	M22 x 1.5	27	G1/2	27	M26 x 1.5	32
	22	M26 x 1.5	32	G3/4	32	M30 x 2	36
	28	M33 x 2	41	G1	41	M36 x 2	41
	35	M42 x 2	50	G1-1/4	50	M45 x 2	50
	42	M48 x 2	55	G1-1/2	55	M52 x 2	60
S	06	M12 x 1.5	17	G1/4	19	M14 x 1.5	17
	08	M14 x 1.5	19	G1/4	19	M16 x 1.5	19
	10	M16 x 1.5	22	G3/8	22	M18 x 1.5	22
	12	M18 x 1.5	24	G3/8	22	M20 x 1.5	24
	14	M20 x 1.5	27	G1/2	27	M22 x 1.5	27
	16	M22 x 1.5	27	G1/2	27	M24 x 1.5	30
	20	M27 x 2	32	G3/4	32	M30 x 2	36
	25	M33 x 2	41	G1	41	M36 x 2	46
	30	M42 x 2	50	G1-1/4	50	M42 x 2	50
	38	M48 x 2	55	G1-1/2	55	M52 x 2	60



Straight Bulkhead Fitting
FI-GS
B26

Elbow Bulkhead Fittings
FI-WS
B26

Straight Bulkhead Weld Fitting
FI-ES
B26

Order Codes

FI - GS - 06 L - W3 - SKM-MS

① ② ③ ④ ⑤ ⑥

① Series

Fittings	**FI**

② Type

Straight Bulkhead Fitting	**GS**
Elbow Bulkhead Fitting	**WS**
Straight Bulkhead Weld Fitting	**ES**

③ Tube O.D.

Outside Tube Diameter in mm according to dash sizing.
Reducers are separated by a slash (e.g. 10/08).

④ Tube Series

Extra Light	**LL**
Light	**L**
Heavy	**S**

⑤ Surface Material

Steel, zinc/nickel-plated	**W3**
Fitting Body: Steel, uncoated/oiled Connecting Parts: Steel, zinc/nickel-plated	**W159**

⑥ Assembling

Body Only	**MS**
Assembled with Hexagon Lock Nut, Cutting Rings and Union Nuts	**SKM-MS**

Straight Bulkhead Fitting
Type FI-GS ▪ Series L / S

Item No.	Designation	Barrel Ø	Series	Price
6010001119	FI-GS-06L-W3-SKM-MS	12 mm	L	11.35
6010001121	FI-GS-08L-W3-SKM-MS	14 mm	L	12.10
6010001123	FI-GS-10L-W3-SKM-MS	16 mm	L	15.60
6010001125	FI-GS-12L-W3-SKM-MS	18 mm	L	16.95
6010001127	FI-GS-15L-W3-SKM-MS	22 mm	L	25.45
6010001129	FI-GS-18L-W3-SKM-MS	26 mm	L	40.85
6010001131	FI-GS-22L-W3-SKM-MS	30 mm	L	50.60
6010001133	FI-GS-28L-W3-SKM-MS	36 mm	L	77.25
6010001135	FI-GS-35L-W3-SKM-MS	45 mm	L	117.85
6010001137	FI-GS-42L-W3-SKM-MS	52 mm	L	160.25
6010001139	FI-GS-06S-W3-SKM-MS	14 mm	S	13.40
6010001141	FI-GS-08S-W3-SKM-MS	16 mm	S	16.95
6010001143	FI-GS-10S-W3-SKM-MS	18 mm	S	19.80
6010001145	FI-GS-12S-W3-SKM-MS	20 mm	S	25.45
6010001147	FI-GS-14S-W3-SKM-MS	22 mm	S	43.55
6010001149	FI-GS-16S-W3-SKM-MS	24 mm	S	40.85
6010001151	FI-GS-20S-W3-SKM-MS	30 mm	S	61.80
6010001153	FI-GS-25S-W3-SKM-MS	36 mm	S	98.25
6010001155	FI-GS-30S-W3-SKM-MS	42 mm	S	120.75
6010001157	FI-GS-38S-W3-SKM-MS	52 mm	S	196.05

Straight Bulkhead Weld Fitting
Type FI-ES ▪ Series L / S

Item No.	Designation	Barrel Ø	Series	Price
6010001201	FI-ES-06L-W159-MS	18 mm	L	29.55
6010001202	FI-ES-08L-W159-MS	20 mm	L	31.00
6010001203	FI-ES-10L-W159-MS	22 mm	L	31.00
6010001204	FI-ES-12L-W159-MS	25 mm	L	39.45
6010001205	FI-ES-15L-W159-MS	28 mm	L	42.20
6010001206	FI-ES-18L-W159-MS	32 mm	L	52.55
6010001207	FI-ES-22L-W159-MS	36 mm	L	73.05
6010001208	FI-ES-28L-W159-MS	40 mm	L	89.50
6010001209	FI-ES-35L-W159-MS	50 mm	L	122.10
6010001210	FI-ES-42L-W159-MS	60 mm	L	185.45
6010001211	FI-ES-06S-W159-MS	20 mm	S	35.20
6010001212	FI-ES-08S-W159-MS	22 mm	S	36.60
6010001213	FI-ES-10S-W159-MS	25 mm	S	40.85
6010001214	FI-ES-12S-W159-MS	28 mm	S	42.20
6010001215	FI-ES-14S-W159-MS	30 mm	S	63.25
6010001216	FI-ES-16S-W159-MS	35 mm	S	60.35
6010001217	FI-ES-20S-W159-MS	38 mm	S	73.10
6010001218	FI-ES-25S-W159-MS	45 mm	S	97.60
6010001219	FI-ES-30S-W159-MS	50 mm	S	122.35
6010001220	FI-ES-38S-W159-MS	60 mm	S	189.40

Elbow Bulkhead Fitting
Type FI-WS ▪ Series L / S

Item No.	Designation	Barrel Ø	Series	Price
6010001160	FI-WS-06L-W3-SKM-MS	12 mm	L	22.60
6010001161	FI-WS-08L-W3-SKM-MS	14 mm	L	24.05
6010001164	FI-WS-10L-W3-SKM-MS	16 mm	L	26.80
6010001165	FI-WS-12L-W3-SKM-MS	18 mm	L	32.40
6010001167	FI-WS-15L-W3-OGR-SKM-MS	22 mm	L	38.05
6010001169	FI-WS-18L-W3-SKM-MS	26 mm	L	53.45
6010001171	FI-WS-22L-W3-SKM-MS	30 mm	L	84.30
6010001173	FI-WS-28L-W3-SKM-MS	36 mm	L	120.55
6010001175	FI-WS-35L-W3-SKM-MS	45 mm	L	190.80
6010001177	FI-WS-42L-W3-SKM-MS	52 mm	L	269.15
6010001179	FI-WS-06S-W3-SKM-MS	14 mm	S	24.05
6010001182	FI-WS-08S-W3-OGR-SKM-MS	16 mm	S	29.55
6010001183	FI-WS-10S-W3-SKM-MS	18 mm	S	36.60
6010001185	FI-WS-12S-W3-SKM-MS	20 mm	S	38.05
6010001187	FI-WS-14S-W3-SKM-MS	22 mm	S	200.30
6010001189	FI-WS-16S-W3-SKM-MS	24 mm	S	53.45
6010001191	FI-WS-20S-W3-SKM-MS	30 mm	S	84.30
6010001193	FI-WS-25S-W3-SKM-MS	36 mm	S	137.65
6010001195	FI-WS-30S-W3-OGR-SKM-MS	42 mm	S	178.55
6010001197	FI-WS-38S-W3-SKM-MS	52 mm	S	280.45

The following Spare Part for FI-GS & FI-WS Fittings is also available on request

Hexagon Lock Nut
FI-SKM
Refer to Catalogue 2 - STAUFF Connect

Straight Weld Fitting
FI-AS
B28

24° Weld Cone with O-Ring
FI-SN
B28

24° Weld Cone Reducer with O-Ring
FI-SNR
B28

Order Codes

FI	-	AS	-	06	L	-	W159	-	MS
①		②		③	④		⑥		⑦

① Series

Fittings	**FI**

② Type

Straight Weld Fitting	**AS**
24° Weld Cone with O-Ring	**SN**
24° Weld Cone Reducer with O-Ring	**SNR**

③ Tube O.D.

Outside Tube Diameter in mm according to dash sizing.
Reducers are separated by a slash (e.g. 10/08).
For FI-SN & FI-SNR include Wall Thickness (e.g. 10x1.5)

④ Tube Series

Extra Light	**LL**
Light & Heavy (suits both)	**L/S**
Light	**L**
Heavy	**S**

⑤ Sealing Material

No Sealing Material	**(None)**
NBR (Buna-N®)	**B**

⑥ Surface Material

Phosphated	**W2**
Fitting Body: Steel, uncoated/oiled Connecting Parts: Steel, zinc/nickel-plated	**W159**

⑦ Assembling

Body Only	**(None)**
Assembled with Cutting Ring and Union Nut	**MS**

Straight Weld Fitting
Type FI-AS ▪ Series L / S

Item No.	Designation	Weld Size	Series	Price
6010001096	FI-AS-06L-W159-MS	10 mm	L	5.45
6010001097	FI-AS-08L-W159-MS	12 mm	L	6.55
6010001098	FI-AS-10L-W159-MS	14 mm	L	7.90
6010001099	FI-AS-12L-W159-MS	16 mm	L	8.60
6010001100	FI-AS-15L-W159-MS	19 mm	L	10.70
6010001101	FI-AS-18L-W159-MS	22 mm	L	14.25
6010001102	FI-AS-22L-W159-MS	27 mm	L	21.25
6010001103	FI-AS-28L-W159-MS	32 mm	L	38.05
6010001104	FI-AS-35L-W159-MS	40 mm	L	53.45
6010001105	FI-AS-42L-W159-MS	46 mm	L	71.60
6010001106	FI-AS-06S-W159-MS	11 mm	S	7.25
6010001107	FI-AS-08S-W159-MS	13 mm	S	8.60
6010001108	FI-AS-10S-W159-MS	15 mm	S	10.00
6010001109	FI-AS-12S-W159-MS	17 mm	S	11.35
6010001110	FI-AS-14S-W159-MS	19 mm	S	18.35
6010001111	FI-AS-16S-W159-MS	21 mm	S	16.95
6010001112	FI-AS-20S-W159-MS	26 mm	S	24.05
6010001113	FI-AS-25S-W159-MS	31 mm	S	39.45
6010001114	FI-AS-30S-W159-MS	36 mm	S	56.25
6010001115	FI-AS-38S-W159-MS	44 mm	S	82.90

24° Weld Cone
with O-Ring (NBR)
Type FI-SN ▪ Series L / S

Item No.	Designation	Series	Price
6020000151	FI-SN-6x1.5-B-W2	L/S	8.60
6020000152	FI-SN-8x1.5-B-W2	L/S	8.60
6020000153	FI-SN-8x2-B-W2	L/S	6.45
6020000154	FI-SN-10x1.5-B-W2	L/S	10.00
6020000155	FI-SN-10x2-B-W2	L/S	10.70
6020000156	FI-SN-10x2.5-B-W2	L/S	7.50
6020000157	FI-SN-12x1.5-B-W2	L/S	10.70
6020000158	FI-SN-12x2-B-W2	L/S	10.70
6020000159	FI-SN-12x2.5-B-W2	L/S	11.35
6020001152	FI-SN-15x2-B-W2	L	18.15
6020001496	FI-SN-15x2.5-B-W2	L	18.60
6020001156	FI-SN-18x2-B-W2	L	12.45
6020000146	FI-SN-22x2.5-B-W2	L	22.70
6020001162	FI-SN-28x2.5-B-W2	L	24.75
6020000147	FI-SN-28x3-B-W2	L	20.70
6020001165	FI-SN-35x3-B-W2	L	23.65
6020001498	FI-SN-35x4-B-W2	L	24.30
6020000148	FI-SN-42x3-B-W2	L	34.90
6020001170	FI-SN-42x4-B-W2	L	41.70
6020000162	FI-SN-14x2.5-B-W2	S	11.80
6020000164	FI-SN-14x3-B-W2	S	12.20
6020000165	FI-SN-16x2-B-W2	S	12.85
6020000167	FI-SN-16x2.5-B-W2	S	12.85
6020000169	FI-SN-16x3-B-W2	S	11.35
6020000171	FI-SN-20x2-B-W2	S	16.95
6020000173	FI-SN-20x2.5-B-W2	S	16.95
6020000175	FI-SN-20x3-B-W2	S	16.95
6020000177	FI-SN-20x4-B-W2	S	13.35
6020000181	FI-SN-25x3-B-W2	S	19.80
6020000182	FI-SN-25x4-B-W2	S	21.25
6020000184	FI-SN-25x5-B-W2	S	24.05
6020000186	FI-SN-30x3-B-W2	S	26.80
6020000188	FI-SN-30x4-B-W2	S	26.80
6020000190	FI-SN-30x5-B-W2	S	28.25
6020000192	FI-SN-38x4-B-W2	S	38.05
6020000194	FI-SN-38x5-B-W2	S	38.05
6020000196	FI-SN-38x6-B-W2	S	43.55

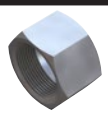
24° Weld Cone Reducer
with O-Ring (NBR)
Type FI-SNR ▪ Series L / S

Item No.	Designation	Series	Price
6020001272	FI-SNR-08/06x2-B-W2	L/S	25.45
6020001232	FI-SNR-10/08x2.5-B-W2	L/S	24.70
6020001233	FI-SNR-12/10x3-B-W2	L/S	25.75
6020001237	FI-SNR-14/12x3.5-B-W2	S	35.35
6020002302	FI-SNR-16/12x2-B-W2	S	39.90
6020001247	FI-SNR-20/16x3-B-W2	S	41.45
6020001253	FI-SNR-25/16x3-B-W2	S	25.45
6020001262	FI-SNR-30/25x5-B-W2	S	109.65

Recommended for Assembly

Union Nut - Type FI-M is available

Refer to page B11



	Straight Female Stud Fitting FI-GA	**B30**
	Female Whitworth Parallel Pipe Thread (BSPP) FI-GA-...-R	**B30**
	Female Metric Parallel Thread FI-GA-...-M	**B30**
	Gauge Fitting FI-MA	**B30**
	Female Whitworth Parallel Pipe Thread (BSPP) / Internal Metallic Sealing Ring FI-MA-...-R	**B30**
	Gauge Fitting with 24° Taper / O-Ring (DKO) FI-EMAD	**B30**
	Female Whitworth Parallel Pipe Thread (BSPP) / Internal Metallic Sealing Ring FI-EMAD-...-R	**B30**

Order Codes

FI	-	EMAD	-	06	L	R	-	V	-	W3	-	DKI-DKO
①		②		③	④	⑤		⑥		⑦		⑧

① Series

Fittings	**FI**

② Type

Straight Female Stud Fitting	**GA**
Gauge Fitting	**MA**
Gauge Fitting with 24° Taper / O-Ring	**EMAD**

③ Tube O.D.

Outside Tube Diameter in mm according to dash sizing.
Reducers are separated by a slash
(e.g. 08OD/06OD)

④ Tube Series

Extra Light	**LL**
Light	**L**
Heavy	**S**

⑤ Thread Type

Female Whitworth Parallel Pipe Thread BSPP	**R**
Female Metric Parallel Pipe Thread	**M**

⑥ Sealing Material

No Sealing Material	**(None)**
NBR (Buna-N®)	**B**
FKM (Viton®)	**V**

⑦ Surface Material

Steel, zinc/nickel-plated	**W3**

⑧ Assembling

Assembled with Cutting Ring and Union Nut	**MS**
Assembled with Internal Sealing Edge Ring, Cutting Ring and Union Nut	**DKI-MS**
Assembled with Internal Sealing Edge Ring, Swivel Nut and O-Ring	**DKI-DKO**

All DKO series fittings are fitted with FKM (Viton®) sealing as standard

Straight Female Stud Fittings

Straight Female Stud Fitting
BSPP Thread
Type FI-GA-...-R ▪ Series L / S

Item No.	Designation	Port Size	Series	Price
6010001221	FI-GA-06LR-W3-MS	G1/8	L	6.70
6010001223	FI-GA-08LR-W3-MS	G1/4	L	7.25
6010001226	FI-GA-10LR-W3-MS	G1/4	L	7.90
6010001229	FI-GA-12LR1/4-W3-MS	G1/4	L	45.00
6010001230	FI-GA-12LR-W3-MS	G3/8	L	10.00
6010001232	FI-GA-15LR-W3-MS	G1/2	L	13.40
6010001234	FI-GA-18LR-W3-MS	G1/2	L	18.35
6010001235	FI-GA-22LR-W3-MS	G3/4	L	25.45
6010001236	FI-GA-28LR-W3-MS	G1	L	66.00
6010001237	FI-GA-35LR-W3-MS	G1-1/4	L	103.90
6010001238	FI-GA-42LR-W3-MS	G1-1/2	L	110.90
6010001239	FI-GA-06SR-W3-MS	G1/4	S	13.40
6010001241	FI-GA-08SR-W3-MS	G1/4	S	14.25
6010001242	FI-GA-10SR-W3-MS	G3/8	S	18.35
6010001244	FI-GA-12SR-W3-MS	G3/8	S	18.35
6010001246	FI-GA-14SR-W3-MS	G1/2	S	32.40
6010001247	FI-GA-16SR-W3-MS	G1/2	S	24.05
6010001248	FI-GA-20SR-W3-MS	G3/4	S	39.45
6010001249	FI-GA-25SR-W3-MS	G1	S	77.25
6010001250	FI-GA-30SR-W3-MS	G1-1/4	S	106.70
6010001251	FI-GA-38SR-W3-MS	G1-1/2	S	126.30

Straight Female Stud Fitting
Metric Thread
Type FI-GA-...-M ▪ Series L / S

Item No.	Designation	Port Size	Series	Price
6010001265	FI-GA-06LM-W3-MS	M10 x 1	L	19.80
6010001267	FI-GA-08LM-W3-MS	M12 x 1.5	L	24.05
6010001268	FI-GA-10LM-W3-MS	M14 x 1.5	L	25.45
6010001269	FI-GA-12LM-W3-MS	M16 x 1.5	L	28.25
6010001270	FI-GA-15LM-W3-MS	M18 x 1.5	L	31.00
6010001271	FI-GA-18LM-W3-MS	M22 x 1.5	L	39.45
6010001272	FI-GA-22LM-W3-MS	M26 x 1.5	L	46.40
6010001277	FI-GA-06SM-W3-MS	M14 x 1.5	S	26.80
6010001280	FI-GA-12SM-W3-MS	M18 x 1.5	S	39.45
6010001281	FI-GA-14SM-W3-MS	M20 x 1.5	S	60.35
6010001282	FI-GA-16SM-W3-MS	M22 x 1.5	S	50.60
6010001283	FI-GA-20SM-W3-MS	M27 x 2	S	66.00

Gauge Fittings

Gauge Fitting
BSPP Thread
Type FI-MA-...-R ▪ Series L / S

Item No.	Designation	Port Size	Series	Price
6010001255	FI-MA-06LR-W3-DKI-MS	G1/4	L	10.00
6010001256	FI-MA-08LR-W3-DKI-MS	G1/4	L	10.00
6010001257	FI-MA-10LR-W3-DKI-MS	G1/4	L	10.70
6010001258	FI-MA-12LR-W3-DKI-MS	G1/4	L	12.10
6010001259	FI-MA-06SR-W3-DKI-MS	G1/2	S	16.95
6010001261	FI-MA-08SR-W3-DKI-MS	G1/2	S	16.95
6010001262	FI-MA-10SR-W3-DKI-MS	G1/2	S	18.35
6010001263	FI-MA-12SR-W3-DKI-MS	G1/2	S	18.55

Recommended for Assembly

FI-MA & FI-EMAD adaptors are suitable for SPG Pressure Gauges

Refer to Section M - STAUFF Diagtronics

Gauge Fitting
with 24° Taper / O-Ring (DKO)
Type FI-EMAD-...-R ▪ Series L / S

Item No.	Designation	Port Size	Series	Price
6010003221	FI-EMAD-06LR-V-W3-DKI-DKO	G1/4	L	12.85
6010003222	FI-EMAD-08LR-V-W3-DKI-DKO	G1/4	L	14.25
6010003223	FI-EMAD-10LR-V-W3-DKI-DKO	G1/4	L	15.60
6010003224	FI-EMAD-12LR-V-W3-DKI-DKO	G1/4	L	16.95
6010003226	FI-EMAD-06SR-V-W3-DKI-DKO	G1/2	S	26.80
6010003227	FI-EMAD-08SR-V-W3-DKI-DKO	G1/2	S	28.25
6010003229	FI-EMAD-10SR-V-W3-DKI-DKO	G1/2	S	29.55
6010003230	FI-EMAD-12SR-V-W3-DKI-DKO	G1/2	S	31.00

	Straight Male Stud Fitting with 24° Taper / O-Ring (DKO) FI-EGED	**B32**
	Whitworth Parallel Pipe Thread (BSPP) / Profile Sealing Ring FI-EGED-...-R-WD	**B32**
	Metric Parallel Thread / Profile Sealing Ring FI-EGED-...-M-WD	**B32**
	Straight Fitting with 24° Taper / O-Ring (DKO) FI-SNV	**B33**
	Straight Reducer for Tube Ends with 24° Taper / O-Ring (DKO) FI-REDSD	**B33**
	Adjustable Elbow (90°) with 24° Taper / O-Ring (DKO) FI-EWD	**B34**
	Adjustable Elbow (45°) with 24° Taper / O-Ring (DKO) FI-EVD	**B34**
	Adjustable Branch Tee with 24° Taper / O-Ring (DKO) FI-ETD	**B34**
	Adjustable Barrel Tee with 24° Taper / O-Ring FI-ELD	**B34**

Order Codes

FI	-	EGED	-	06	L	R	-	WD	-	BV	-	W3	-	DKO
①		②		③	④	⑤		⑥		⑦		⑧		⑨

① Series

Fittings	**FI**

② Type

Straight Male Stud Fitting with 24° Taper / O-Ring	**EGED**
Straight Fitting with 24° Taper / O-Ring	**SNV**
Straight Reducer for Tube Ends with 24° Taper / O-Ring	**REDSD**
Adjustable Elbow (90°) with 24° Taper / O-Ring	**EWD**
Adjustable Elbow (45°) with 24° Taper / O-Ring	**EVD**
Adjustable Branch Tee with 24° Taper / O-Ring	**ETD**
Adjustable Barrel Tee with 24° Taper / O-Ring	**ELD**

③ Tube O.D.

Outside Tube Diameter in mm according to dash sizing.
Reducers are separated by a slash (e.g. 12/10L)

④ Tube Series

Light	**L**
Heavy	**S**

⑤ Thread Type / Size

Whitworth Parallel Pipe Thread (BSPP) (Special sizes to be indicated, e.g. R1/4)	**R**
Metric Parallel Pipe Thread (Special sizes to be indicated, e.g. M14x1.5)	**M**

⑥ Sealing Type

Standard seal type, including: Metallic Sealing Edge for thread types R / M	**(None)**
Elastomeric seal	**WD**

⑦ Sealing Material

Male Stud: NBR (Buna-N®) 24° Taper: FKM (Viton®)	**BV**
FKM (Viton®)	**V**

⑧ Surface Material

Steel, zinc/nickel-plated	**W3**

⑨ Assembling

Assembled with Cutting Ring and Union Nut	**MS**
Assembled with Swivel Nut, O-Ring, Cutting Ring and Union Nut	**DKO-MS**
Assembled with Swivel Nut and O-Ring	**DKO**

All DKO series fittings are fitted with FKM (Viton®) sealing as standard

Straight Male Stud Fittings with 24° Taper / O-Ring

Straight Male Stud Fitting
with 24° Taper / O-Ring (DKO)
BSPP Thread with Profile Sealing Ring
Type FI-EGED-...-R-WD ▪ Series L / S

Item No.	Designation	Stud Size	Series	Price
6010003834	FI-EGED-06LR-WD-BV-W3-DKO	G1/8	L	12.85
6010003835	FI-EGED-08LR-WD-BV-W3-DKO	G1/4	L	13.40
6010003837	FI-EGED-10LR-WD-BV-W3-DKO	G1/4	L	13.40
6010003878	FI-EGED-12LR1/4-WD-BV-W3-DKO	G1/4	L	18.35
6010003839	FI-EGED-12LR-WD-BV-W3-DKO	G3/8	L	14.25
6010003884	FI-EGED-12LR1/2-WD-BV-W3-DKO	G1/2	L	16.95
6010003841	FI-EGED-15LR-WD-BV-W3-DKO	G1/2	L	19.80
6010003843	FI-EGED-18LR-WD-BV-W3-DKO	G1/2	L	21.25
6010003845	FI-EGED-22LR-WD-BV-W3-DKO	G3/4	L	31.00
6010003847	FI-EGED-28LR-WD-BV-W3-DKO	G1	L	46.40
6010003849	FI-EGED-35LR-WD-BV-W3-DKO	G1-1/4	L	77.25
6010003851	FI-EGED-42LR-WD-BV-W3-DKO	G1-1/2	L	87.05
6010003853	FI-EGED-06SR-WD-BV-W3-DKO	G1/4	S	14.25
6010003855	FI-EGED-08SR-WD-BV-W3-DKO	G1/4	S	14.25
6010003857	FI-EGED-10SR-WD-BV-W3-DKO	G3/8	S	14.25
6010003859	FI-EGED-12SR-WD-BV-W3-DKO	G3/8	S	15.60
6010003833	FI-EGED-12SR1/2-WD-BV-W3-DKO	G1/2	S	21.25
6010003861	FI-EGED-14SR-WD-BV-W3-DKO	G1/2	S	29.55
6010003863	FI-EGED-16SR-WD-BV-W3-DKO	G1/2	S	24.05
6010003865	FI-EGED-20SR-WD-BV-W3-DKO	G3/4	S	33.80
6010003867	FI-EGED-25SR-WD-BV-W3-DKO	G1	S	47.80
6010003869	FI-EGED-30SR-WD-BV-W3-DKO	G1-1/4	S	73.05
6010003871	FI-EGED-38SR-WD-BV-W3-DKO	G1-1/2	S	115.05

Straight Male Stud Fitting
with 24° Taper / O-Ring (DKO)
Metric Thread with Profile Sealing Ring
Type FI-EGED-...-M-WD ▪ Series L / S

Item No.	Designation	Stud Size	Series	Price
6010003801	FI-EGED-06LM-WD-BV-W3-DKO	M10 x 1	L	14.25
6010003803	FI-EGED-08LM-WD-BV-W3-DKO	M12 x 1.5	L	14.25
6010003805	FI-EGED-10LM-WD-BV-W3-DKO	M14 x 1.5	L	15.60
6010003806	FI-EGED-12LM-WD-BV-W3-DKO	M16 x 1.5	L	16.95
6010003807	FI-EGED-15LM-WD-BV-W3-DKO	M18 x 1.5	L	19.80
6010003809	FI-EGED-18LM-WD-BV-W3-DKO	M22 x 1.5	L	22.60
6010003810	FI-EGED-22LM-WD-BV-W3-DKO	M26 x 1.5	L	33.80
6010003812	FI-EGED-28LM-WD-BV-W3-DKO	M33 x 2	L	53.45
6010003814	FI-EGED-35LM-WD-BV-W3-DKO	M42 x 2	L	81.60
6010003815	FI-EGED-42LM-WD-BV-W3-DKO	M48 x 2	L	92.70
6010003816	FI-EGED-06SM-WD-BV-W3-DKO	M12 x 1.5	S	16.95
6010003817	FI-EGED-08SM-WD-BV-W3-DKO	M14 x 1.5	S	16.95
6010003818	FI-EGED-10SM-WD-BV-W3-DKO	M16 x 1.5	S	18.35
6010003819	FI-EGED-12SM-WD-BV-W3-DKO	M18 x 1.5	S	18.35
6010003821	FI-EGED-14SM-WD-BV-W3-DKO	M20 x 1.5	S	31.00
6010003822	FI-EGED-16SM-WD-BV-W3-DKO	M22 x 1.5	S	24.05
6010003824	FI-EGED-20SM-WD-BV-W3-DKO	M27 x 2	S	36.60
6010003825	FI-EGED-25SM-WD-BV-W3-DKO	M33 x 2	S	56.25
6010003826	FI-EGED-30SM-WD-BV-W3-DKO	M42 x 2	S	84.30
6010003827	FI-EGED-38SM-WD-BV-W3-DKO	M48 x 2	S	126.30

DIN Thread Sizes

Series	Tube OD (mm)	Male Stud Metric Parallel Thread		Male Stud Whitworth Parallel Pipe Thread		Union Nut (DKO-MS) Metric Parallel Thread	
		Thread Size	Width AF	Thread Size	Width AF	Thread Size	Width AF
L	06	M10 x 1	14	G1/8	14	M12 x 1.5	14
	08	M12 x 1.5	17	G1/4	19	M14 x 1.5	17
	10	M14 x 1.5	19	G1/4	19	M16 x 1.5	19
	12	M16 x 1.5	22	G3/8	22	M18 x 1.5	22
	15	M18 x 1.5	24	G1/2	27	M22 x 1.5	27
	18	M22 x 1.5	27	G1/2	27	M26 x 1.5	32
	22	M26 x 1.5	32	G3/4	32	M30 x 2	36
	28	M33 x 2	41	G1	41	M36 x 2	41
	35	M42 x 2	50	G1-1/4	50	M45 x 2	50
	42	M48 x 2	55	G1-1/2	55	M52 x 2	60

DIN Thread Sizes

Series	Tube OD (mm)	Male Stud Metric Parallel Thread		Male Stud Whitworth Parallel Pipe Thread		Union Nut (DKO-MS) Metric Parallel Thread	
		Thread Size	Width AF	Thread Size	Width AF	Thread Size	Width AF
S	06	M12 x 1.5	17	G1/4	19	M14 x 1.5	17
	08	M14 x 1.5	19	G1/4	19	M16 x 1.5	19
	10	M16 x 1.5	22	G3/8	22	M18 x 1.5	22
	12	M18 x 1.5	24	G3/8	22	M20 x 1.5	24
	14	M20 x 1.5	27	G1/2	27	M22 x 1.5	27
	16	M22 x 1.5	27	G1/2	27	M24 x 1.5	30
	20	M27 x 2	32	G3/4	32	M30 x 2	36
	25	M33 x 2	41	G1	41	M36 x 2	46
	30	M42 x 2	50	G1-1/4	50	M42 x 2	50
	38	M48 x 2	55	G1-1/2	55	M52 x 2	60

Straight Fittings with 24° Taper / O-Ring

Straight Fitting
with 24° Taper / O-Ring (DKO)
Female - Female
Type FI-SNV ▪ Series L / S

Item No.	Designation	DIN Thread	Series	Price
6010003201	FI-SNV-06L-V-W3-DKO	M12 x 1.5	L	36.60
6010003202	FI-SNV-08L-V-W3-DKO	M14 x 1.5	L	28.25
6010003203	FI-SNV-10L-V-W3-DKO	M16 x 1.5	L	28.25
6010003204	FI-SNV-12L-V-W3-DKO	M18 x 1.5	L	31.00
6010003205	FI-SNV-15L-V-W3-DKO	M22 x 1.5	L	33.80
6010003206	FI-SNV-18L-V-W3-DKO	M26 x 1.5	L	49.20
6010003207	FI-SNV-22L-V-W3-DKO	M30 x 2	L	53.45
6010003208	FI-SNV-28L-V-W3-DKO	M36 x 2	L	87.05
6010003209	FI-SNV-35L-V-W3-DKO	M45 x 2	L	110.90
6010003210	FI-SNV-42L-V-W3-DKO	M52 x 2	L	137.65
6010003211	FI-SNV-06S-V-W3-DKO	M14 x 1.5	S	38.05
6010003212	FI-SNV-08S-V-W3-DKO	M16 x 1.5	S	32.40
6010003213	FI-SNV-10S-V-W3-DKO	M18 x 1.5	S	33.80
6010003214	FI-SNV-12S-V-W3-DKO	M20 x 1.5	S	36.60
6010003215	FI-SNV-14S-V-W3-DKO	M22 x 1.5	S	66.00
6010003216	FI-SNV-16S-V-W3-DKO	M24 x 1.5	S	42.20
6010003217	FI-SNV-20S-V-W3-DKO	M30 x 2	S	54.85
6010003218	FI-SNV-25S-V-W3-DKO	M36 x 2	S	74.35
6010003219	FI-SNV-30S-V-W3-DKO	M42 x 2	S	89.85
6010003220	FI-SNV-38S-V-W3-DKO	M52 x 2	S	131.85

The following Fittings with 24° Taper / O-Ring are also available on request

Straight Reducer with 24° Taper / O-Ring (DKO)
FI-SNV-../..
Refer to Catalogue 2 - STAUFF Connect

Straight Reducer for Tube Ends
with 24° Taper / O-Ring (DKO)
Type FI-REDSD ▪ Series L

Item No.	Designation	Series	Price
6010003986	FI-REDSD-08/06L-V-W3-DKO-MS	L	14.25
6010003987	FI-REDSD-10/06L-V-W3-DKO-MS	L	12.10
6010003988	FI-REDSD-10/08L-V-W3-DKO-MS	L	12.85
6010003989	FI-REDSD-12/06L-V-W3-DKO-MS	L	12.85
6010003990	FI-REDSD-12/08L-V-W3-DKO-MS	L	13.40
6010003991	FI-REDSD-12/10L-V-W3-DKO-MS	L	13.40
6010003992	FI-REDSD-15/06L-V-W3-DKO-MS	L	15.60
6010003993	FI-REDSD-15/08L-V-W3-DKO-MS	L	14.25
6010003994	FI-REDSD-15/10L-V-W3-DKO-MS	L	15.60
6010003995	FI-REDSD-15/12L-V-W3-DKO-MS	L	15.60
6010003996	FI-REDSD-18/06L-V-W3-DKO-MS	L	29.55
6010003997	FI-REDSD-18/08L-V-W3-DKO-MS	L	19.80
6010003998	FI-REDSD-18/10L-V-W3-DKO-MS	L	19.80
6010003999	FI-REDSD-18/12L-V-W3-DKO-MS	L	19.80
6010004000	FI-REDSD-18/15L-V-W3-DKO-MS	L	19.80
6010004080	FI-REDSD-22/06L-V-W3-DKO-MS	L	36.85
6010004059	FI-REDSD-22/08L-V-W3-DKO-MS	L	33.80
6010004045	FI-REDSD-22/10L-V-W3-DKO-MS	L	32.40
6010004001	FI-REDSD-22/12L-V-W3-DKO-MS	L	24.05
6010004002	FI-REDSD-22/15L-V-W3-DKO-MS	L	25.45
6010004003	FI-REDSD-22/18L-V-W3-DKO-MS	L	26.80
6010004085	FI-REDSD-28/06L-V-W3-DKO-MS	L	57.60
6010004046	FI-REDSD-28/08L-V-W3-DKO-MS	L	52.35
6010004047	FI-REDSD-28/10L-V-W3-DKO-MS	L	46.40
6010004004	FI-REDSD-28/12L-V-W3-DKO-MS	L	43.55
6010004005	FI-REDSD-28/15L-V-W3-DKO-MS	L	43.55
6010004006	FI-REDSD-28/18L-V-W3-DKO-MS	L	45.00
6010004007	FI-REDSD-28/22L-V-W3-DKO-MS	L	47.80
6010004103	FI-REDSD-35/06L-V-W3-DKO-MS	L	179.70
6010004060	FI-REDSD-35/08L-V-W3-DKO-MS	L	170.90
6010004048	FI-REDSD-35/10L-V-W3-DKO-MS	L	87.05
6010004061	FI-REDSD-35/12L-V-W3-DKO-MS	L	145.65
6010004008	FI-REDSD-35/15L-V-W3-DKO-MS	L	75.15
6010004009	FI-REDSD-35/18L-V-W3-DKO-MS	L	67.45
6010004010	FI-REDSD-35/22L-V-W3-DKO-MS	L	61.80
6010004011	FI-REDSD-35/28L-V-W3-DKO-MS	L	66.00
6010004104	FI-REDSD-42/06L-V-W3-DKO-MS	L	226.65
6010004105	FI-REDSD-42/08L-V-W3-DKO-MS	L	203.75
6010004062	FI-REDSD-42/10L-V-W3-DKO-MS	L	129.10
6010004063	FI-REDSD-42/12L-V-W3-DKO-MS	L	117.85
6010004049	FI-REDSD-42/15L-V-W3-DKO-MS	L	120.75
6010004012	FI-REDSD-42/18L-V-W3-DKO-MS	L	116.20
6010004013	FI-REDSD-42/22L-V-W3-DKO-MS	L	81.60
6010004014	FI-REDSD-42/28L-V-W3-DKO-MS	L	82.90
6010004015	FI-REDSD-42/35L-V-W3-DKO-MS	L	92.70

Straight Reducer for Tube Ends
with 24° Taper / O-Ring (DKO)
Type FI-REDSD ▪ Series S

Item No.	Designation	Series	Price
6010004016	FI-REDSD-08/06S-V-W3-DKO-MS	S	25.45
6010004017	FI-REDSD-10/06S-V-W3-DKO-MS	S	16.95
6010004018	FI-REDSD-10/08S-V-W3-DKO-MS	S	16.95
6010004019	FI-REDSD-12/06S-V-W3-DKO-MS	S	15.60
6010004020	FI-REDSD-12/08S-V-W3-DKO-MS	S	15.60
6010004021	FI-REDSD-12/10S-V-W3-DKO-MS	S	15.60
6010004077	FI-REDSD-14/06S-V-W3-DKO-MS	S	37.25
6010004022	FI-REDSD-14/08S-V-W3-DKO-MS	S	37.00
6010004044	FI-REDSD-14/10S-V-W3-DKO-MS	S	47.80
6010004023	FI-REDSD-14/12S-V-W3-DKO-MS	S	39.45
6010004024	FI-REDSD-16/06S-V-W3-DKO-MS	S	28.25
6010004025	FI-REDSD-16/08S-V-W3-DKO-MS	S	19.80
6010004026	FI-REDSD-16/10S-V-W3-DKO-MS	S	21.25
6010004027	FI-REDSD-16/12S-V-W3-DKO-MS	S	21.25
6010004028	FI-REDSD-16/14S-V-W3-DKO-MS	S	43.80
6010004050	FI-REDSD-20/06S-V-W3-DKO-MS	S	36.60
6010004051	FI-REDSD-20/08S-V-W3-DKO-MS	S	33.80
6010004029	FI-REDSD-20/10S-V-W3-DKO-MS	S	31.00
6010004030	FI-REDSD-20/12S-V-W3-DKO-MS	S	26.80
6010004079	FI-REDSD-20/14S-V-W3-DKO-MS	S	60.40
6010004031	FI-REDSD-20/16S-V-W3-DKO-MS	S	29.55
6010004081	FI-REDSD-25/06S-V-W3-DKO-MS	S	68.60
6010004052	FI-REDSD-25/08S-V-W3-DKO-MS	S	59.00
6010004032	FI-REDSD-25/10S-V-W3-DKO-MS	S	54.85
6010004033	FI-REDSD-25/12S-V-W3-DKO-MS	S	45.00
6010008894	FI-REDSD-25/14S-V-W3-DKO-MS	S	92.70
6010004034	FI-REDSD-25/16S-V-W3-DKO-MS	S	45.00
6010004035	FI-REDSD-25/20S-V-W3-DKO-MS	S	49.20
6010004083	FI-REDSD-30/06S-V-W3-DKO-MS	S	124.95
6010004064	FI-REDSD-30/08S-V-W3-DKO-MS	S	86.15
6010004053	FI-REDSD-30/10S-V-W3-DKO-MS	S	67.45
6010004036	FI-REDSD-30/12S-V-W3-DKO-MS	S	54.85
6010004065	FI-REDSD-30/14S-V-W3-DKO-MS	S	54.85
6010004037	FI-REDSD-30/16S-V-W3-DKO-MS	S	57.60
6010004038	FI-REDSD-30/20S-V-W3-DKO-MS	S	59.00
6010004039	FI-REDSD-30/25S-V-W3-DKO-MS	S	67.45
6010008896	FI-REDSD-38/06S-V-W3-DKO-MS	S	185.65
6010004066	FI-REDSD-38/08S-V-W3-DKO-MS	S	207.05
6010004067	FI-REDSD-38/10S-V-W3-DKO-MS	S	131.85
6010004068	FI-REDSD-38/12S-V-W3-DKO-MS	S	109.55
6010008895	FI-REDSD-38/14S-V-W3-DKO-MS	S	171.95
6010004040	FI-REDSD-38/16S-V-W3-DKO-MS	S	81.60
6010004041	FI-REDSD-38/20S-V-W3-DKO-MS	S	92.70
6010004042	FI-REDSD-38/25S-V-W3-DKO-MS	S	96.95
6010004043	FI-REDSD-38/30S-V-W3-DKO-MS	S	101.10

Adjustable Fittings with 24° Taper / O-Ring

Adjustable Elbow (90°)
with 24° Taper / O-Ring (DKO)
Type FI-EWD ▪ Series L / S

Item No.	Designation	Series	Price
6010003451	FI-EWD-06L-V-W3-DKO-MS	L	18.35
6010003457	FI-EWD-08L-V-W3-DKO-MS	L	18.35
6010003463	FI-EWD-10L-V-W3-DKO-MS	L	19.80
6010003469	FI-EWD-12L-V-W3-DKO-MS	L	26.80
6010003475	FI-EWD-15L-V-W3-DKO-MS	L	28.25
6010003481	FI-EWD-18L-V-W3-DKO-MS	L	38.05
6010003487	FI-EWD-22L-V-W3-DKO-MS	L	52.05
6010003493	FI-EWD-28L-V-W3-DKO-MS	L	78.75
6010003499	FI-EWD-35L-V-W3-DKO-MS	L	117.85
6010003505	FI-EWD-42L-V-W3-DKO-MS	L	148.90
6010003511	FI-EWD-06S-V-W3-DKO-MS	S	19.80
6010003517	FI-EWD-08S-V-W3-DKO-MS	S	22.60
6010003523	FI-EWD-10S-V-W3-DKO-MS	S	25.45
6010003529	FI-EWD-12S-V-W3-DKO-MS	S	26.80
6010003535	FI-EWD-14S-V-W3-DKO-MS	S	36.60
6010003541	FI-EWD-16S-V-W3-DKO-MS	S	39.45
6010003547	FI-EWD-20S-V-W3-DKO-MS	S	56.25
6010003553	FI-EWD-25S-V-W3-DKO-MS	S	87.05
6010003559	FI-EWD-30S-V-W3-DKO-MS	S	117.85
6010003565	FI-EWD-38S-V-W3-DKO-MS	S	151.65

Adjustable Branch Tee
with 24° Taper / O-Ring (DKO)
Type FI-ETD ▪ Series L / S

Item No.	Designation	Series	Price
6010003568	FI-ETD-06L-V-W3-DKO-MS	L	28.25
6010003574	FI-ETD-08L-V-W3-DKO-MS	L	29.55
6010003580	FI-ETD-10L-V-W3-DKO-MS	L	33.80
6010003586	FI-ETD-12L-V-W3-DKO-MS	L	33.80
6010003592	FI-ETD-15L-V-W3-DKO-MS	L	45.00
6010003598	FI-ETD-18L-V-W3-DKO-MS	L	57.60
6010003604	FI-ETD-22L-V-W3-DKO-MS	L	89.85
6010003610	FI-ETD-28L-V-W3-DKO-MS	L	134.95
6010003616	FI-ETD-35L-V-W3-DKO-MS	L	179.55
6010003622	FI-ETD-42L-V-W3-DKO-MS	L	269.15
6010003628	FI-ETD-06S-V-W3-DKO-MS	S	32.40
6010003634	FI-ETD-08S-V-W3-DKO-MS	S	35.20
6010003640	FI-ETD-10S-V-W3-DKO-MS	S	39.45
6010003646	FI-ETD-12S-V-W3-DKO-MS	S	43.55
6010003652	FI-ETD-14S-V-W3-DKO-MS	S	63.25
6010003658	FI-ETD-16S-V-W3-DKO-MS	S	60.35
6010003664	FI-ETD-20S-V-W3-DKO-MS	S	95.55
6010003670	FI-ETD-25S-V-W3-DKO-MS	S	142.90
6010003676	FI-ETD-30S-V-W3-DKO-MS	S	182.10
6010003682	FI-ETD-38S-V-W3-DKO-MS	S	289.10

Adjustable Elbow (45°)
with 24° Taper / O-Ring (DKO)
Type FI-EVD ▪ Series L / S

Item No.	Designation	DIN Thread	Series	Price
6010003454	FI-EVD-06L-V-W3-DKO	M12 x 1.5	L	54.85
6010003460	FI-EVD-08L-V-W3-DKO	M14 x 1.5	L	54.85
6010003466	FI-EVD-10L-V-W3-DKO	M16 x 1.5	L	56.25
6010003472	FI-EVD-12L-V-W3-DKO	M18 x 1.5	L	60.35
6010003478	FI-EVD-15L-V-W3-DKO	M22 x 1.5	L	61.80
6010003484	FI-EVD-18L-V-W3-DKO	M26 x 1.5	L	68.80
6010003490	FI-EVD-22L-V-W3-DKO	M30 x 2	L	87.05
6010003496	FI-EVD-28L-V-W3-DKO	M36 x 2	L	103.90
6010003502	FI-EVD-35L-V-W3-DKO	M45 x 2	L	190.80
6010003508	FI-EVD-42L-V-W3-DKO	M52 x 2	L	204.75
6010003514	FI-EVD-06S-V-W3-DKO	M14 x 1.5	S	67.45
6010003520	FI-EVD-08S-V-W3-DKO	M16 x 1.5	S	67.45
6010003526	FI-EVD-10S-V-W3-DKO	M18 x 1.5	S	67.45
6010003532	FI-EVD-12S-V-W3-DKO	M20 x 1.5	S	67.45
6010003538	FI-EVD-14S-V-W3-DKO	M22 x 1.5	S	68.80
6010003544	FI-EVD-16S-V-W3-DKO	M24 x 1.5	S	70.30
6010003550	FI-EVD-20S-V-W3-DKO	M30 x 2	S	89.85
6010003556	FI-EVD-25S-V-W3-DKO	M36 x 2	S	109.55
6010003562	FI-EVD-30S-V-W3-DKO	M42 x 2	S	193.40
6010003564	FI-EVD-38S-V-W3-DKO	M52 x 2	S	213.30

Adjustable Barrel Tee
with 24° Taper / O-Ring (DKO)
Type FI-ELD ▪ Series L / S

Item No.	Designation	Series	Price
6010003685	FI-ELD-06L-V-W3-DKO-MS	L	28.25
6010003691	FI-ELD-08L-V-W3-DKO-MS	L	29.55
6010003697	FI-ELD-10L-V-W3-DKO-MS	L	32.40
6010003703	FI-ELD-12L-V-W3-DKO-MS	L	36.60
6010003709	FI-ELD-15L-V-W3-DKO-MS	L	46.40
6010003715	FI-ELD-18L-V-W3-DKO-MS	L	60.35
6010003721	FI-ELD-22L-V-W3-DKO-MS	L	89.85
6010003727	FI-ELD-28L-V-W3-DKO-MS	L	134.95
6010003733	FI-ELD-35L-V-W3-DKO-MS	L	179.55
6010003739	FI-ELD-42L-V-W3-DKO-MS	L	271.80
6010003745	FI-ELD-06S-V-W3-DKO-MS	S	32.40
6010003751	FI-ELD-08S-V-W3-DKO-MS	S	32.40
6010003757	FI-ELD-10S-V-W3-DKO-MS	S	40.85
6010003763	FI-ELD-12S-V-W3-DKO-MS	S	40.85
6010003769	FI-ELD-14S-V-W3-DKO-MS	S	61.80
6010003775	FI-ELD-16S-V-W3-DKO-MS	S	66.00
6010003781	FI-ELD-20S-V-W3-DKO-MS	S	95.55
6010003787	FI-ELD-25S-V-W3-DKO-MS	S	137.65
6010003793	FI-ELD-30S-V-W3-DKO-MS	S	185.45
6010003799	FI-ELD-38S-V-W3-DKO-MS	S	294.35

Adjustable Male Stud Elbow (90°) with Lock Nut B36
FI-WEE

Whitworth Parallel Pipe Thread (BSPP) /
O-Ring and Retaining Ring (Small) B36
FI-WEE-...-R-OK

Order Codes

FI - WEE - 06 L R - OK - B - W3 - MS

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

① Series
Fittings **FI**

② Type
Adjustable Male Stud Elbow (90°) with Lock Nut **WEE**

③ Tube O.D.
Outside Tube Diameter in mm according to dash sizing.
Reducers are separated by a slash (e.g. 12/10L)

④ Tube Series
Light **L**
Heavy **S**

⑤ Thread Type / Size
Whitworth Parallel Pipe Thread (BSPP) **R**

⑥ Sealing Type
Adjustable Coupling with O-Ring & Retaining Ring **OK**

⑦ Sealing Material
NBR (Buna-N®) **B**

⑧ Surface Material
Steel, zinc/nickel-plated **W3**

⑨ Assembling
Assembled with Cutting Ring and Union Nut **MS**

Straight Male Stud Standpipe Fittings

The following Standpipe Fittings are available on request

Straight Male Stud Standpipe Fitting
BSPP Thread / Metallic Sealing Edge
FI-EGE-..-R
Refer to Catalogue 2 - STAUFF Connect

Straight Male Stud Standpipe Fitting
Metric Parallel Thread / Metallic Sealing Edge
FI-EGE-..-M
Refer to Catalogue 2 - STAUFF Connect

Straight Male Stud Standpipe Fitting
BSPP Thread / Profile Sealing Ring
FI-EGE-..-R-WD
Refer to Catalogue 2 - STAUFF Connect

Straight Male Stud Standpipe Fitting
Metric Parallel Thread / Profile Sealing Ring
FI-EGE-..-M-WD
Refer to Catalogue 2 - STAUFF Connect

Straight Male Stud Standpipe Fitting
NPT Thread
FI-EGE-..-N
Refer to Catalogue 2 - STAUFF Connect

Straight Standpipe Reducer
FI-REDS
Refer to Catalogue 2 - STAUFF Connect

Adjustable Standpipe Elbow
FI-EW
Refer to Catalogue 2 - STAUFF Connect

Adjustable Standpipe Branch Tee
FI-ET
Refer to Catalogue 2 - STAUFF Connect

Adjustable Standpipe Barrel Tee
FI-EL
Refer to Catalogue 2 - STAUFF Connect

Adjustable Fittings with Lock Nut

Adjustable Male Stud Elbow (90°)
with Lock Nut
BSPP O-Ring & Retaining Ring
Type FI-WEE-...-R-OK ▪ Series L / S

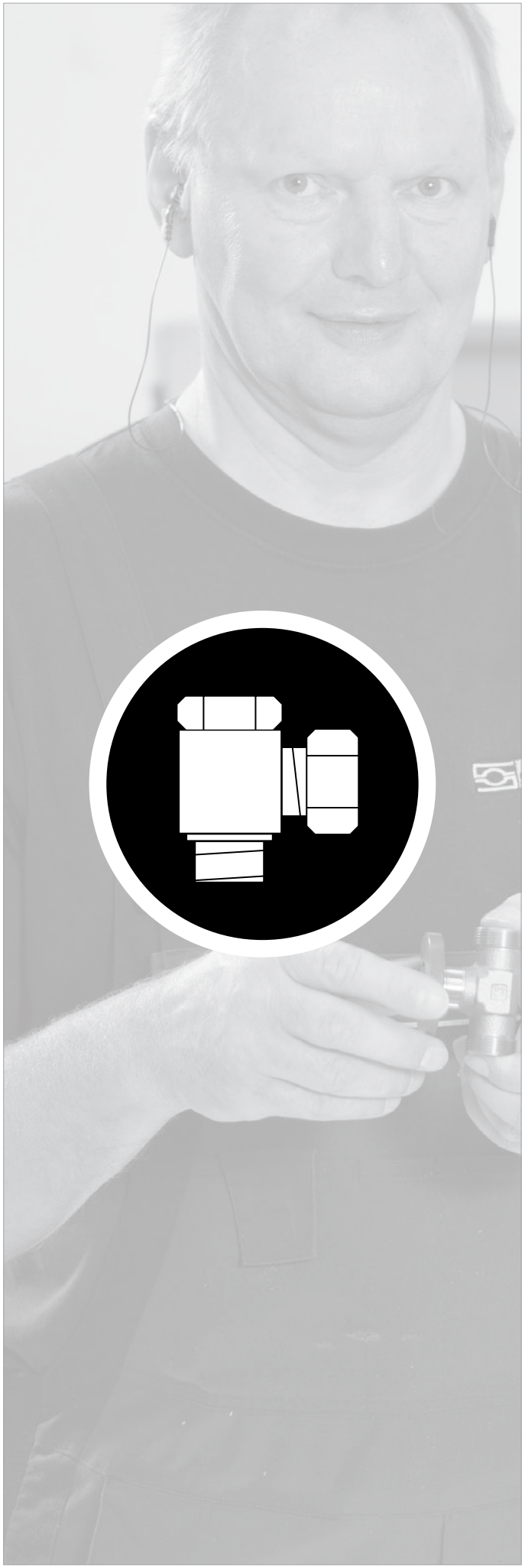
Item No.	Designation	Thread Size	Series	Price
6010008211	FI-WEE-06LR-OK-B-W3-MS	G1/8	L	40.85
6010008212	FI-WEE-08LR-OK-B-W3-MS	G1/4	L	54.85
6010008213	FI-WEE-10LR-OK-B-W3-MS	G1/4	L	36.60
6010008214	FI-WEE-12LR-OK-B-W3-MS	G3/8	L	46.40
6010008215	FI-WEE-15LR-OK-B-W3-MS	G1/2	L	43.55
6010008216	FI-WEE-18LR-OK-B-W3-MS	G1/2	L	56.25
6010008217	FI-WEE-22LR-OK-B-W3-MS	G3/4	L	68.80
6010008218	FI-WEE-28LR-OK-B-W3-MS	G1	L	148.90
6010008219	FI-WEE-35LR-OK-B-W3-MS	G1-1/4	L	168.15
6010008220	FI-WEE-42LR-OK-B-W3-MS	G1-1/2	L	221.25
6010008221	FI-WEE-06SR-OK-B-W3-MS	G1/4	S	54.85
6010008222	FI-WEE-08SR-OK-B-W3-MS	G1/4	S	45.00
6010008223	FI-WEE-10SR-OK-B-W3-MS	G3/8	S	47.80
6010008224	FI-WEE-12SR-OK-B-W3-MS	G3/8	S	49.20
6010008225	FI-WEE-14SR-OK-B-W3-MS	G1/2	S	92.70
6010008226	FI-WEE-16SR-OK-B-W3-MS	G1/2	S	66.00
6010008227	FI-WEE-20SR-OK-B-W3-MS	G3/4	S	70.30
6010008228	FI-WEE-25SR-OK-B-W3-MS	G1	S	129.10
6010008229	FI-WEE-30SR-OK-B-W3-MS	G1-1/4	S	174.15
6010008230	FI-WEE-38SR-OK-B-W3-MS	G1-1/2	S	229.95

The following Adjustable Fittings with Lock Nuts are also available on request

Adjustable Male Stud Elbow (90°) with Lock Nut
Metric Parallel Thread / O-Ring and Retaining Ring (Small)
FI-WEE-...-M-OK
Refer to Catalogue 2 - STAUFF Connect

Adjustable Male Stud Elbow (90°) with Lock Nut
Metric Parallel Thread / O-Ring
FI-WEE-...-M-OR
Refer to Catalogue 2 - STAUFF Connect

Adjustable Male Stud Elbow (90°) with Lock Nut
UN/UNF Thread / O-Ring
FI-WEE-...-U
Refer to Catalogue 2 - STAUFF Connect



Banjo Elbow (High-Pressure Version) — **B38 - B39**
FI-RSW

Whitworth Parallel Pipe Thread (BSPP) / External Metallic Sealing Ring — **B38**
FI-RSW-...-R-DK

Metric Parallel Thread / External Metallic Sealing Ring — **B38**
FI-RSW-...-M-DK

Whitworth Parallel Pipe Thread (BSPP) / Retaining Ring with Captive Seal — **B39**
FI-RSW-...-R-WD

Metric Parallel Thread / Retaining Ring with Captive Seal — **B39**
FI-RSW-...-M-WD

Order Codes

FI - RSW - 06 L R - DK - B - W3 - MS

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

① Series

Fittings	FI

② Type

Banjo Elbow (High-Pressure Version)	RSW

③ Tube O.D.

Outside Tube Diameter in mm according to dash sizing.
Reducers are separated by a slash (e.g. 12/10L)

④ Tube Series

Light	L
Heavy	S

⑤ Thread Type / Size

Whitworth Parallel Pipe Thread (BSPP) (Special sizes to be indicated, e.g. R1/4)	R
Metric Parallel Pipe Thread (Special sizes to be indicated, e.g. M14x1.5)	M

⑥ Sealing Type

Elastomeric seal	WD
External Metallic Sealing Ring	DK

⑦ Sealing Material

NBR (Buna-N®)	B

⑧ Surface Material

Steel, zinc/nickel-plated	W3

⑨ Assembling

Assembled with Cutting Ring and Union Nut	MS

Banjo Elbow
External Metallic Sealing Ring
Type FI-RSW-...-R-DK ▪ Series L / S

Item No.	Designation	Stud Size	Series	Price
6010003381	FI-RSW-06LR-DK-B-W3-MS	G1/8	L	28.05
6010003382	FI-RSW-08LR-DK-B-W3-MS	G1/4	L	29.40
6010003383	FI-RSW-10LR-DK-B-W3-MS	G1/4	L	32.40
6010007906	FI-RSW-12LR1/4-DK-B-W3-MS	G1/4	L	32.40
6010003384	FI-RSW-12LR-DK-B-W3-MS	G3/8	L	40.85
6010003385	FI-RSW-15LR-DK-B-W3-MS	G1/2	L	46.10
6010003386	FI-RSW-18LR-DK-B-W3-MS	G1/2	L	62.30
6010003387	FI-RSW-22LR-DK-B-W3-MS	G3/4	L	101.10
6010003388	FI-RSW-28LR-DK-B-W3-MS	G1	L	157.10
6010003389	FI-RSW-35LR-DK-B-W3-MS	G1-1/4	L	249.90
6010003390	FI-RSW-42LR-DK-B-W3-MS	G1-1/2	L	319.60
6010003391	FI-RSW-06SR-DK-B-W3-MS	G1/4	S	28.45
6010003392	FI-RSW-08SR-DK-B-W3-MS	G1/4	S	30.20
6010003393	FI-RSW-10SR-DK-B-W3-MS	G3/8	S	38.20
6010003394	FI-RSW-12SR-DK-B-W3-MS	G3/8	S	42.20
6010003395	FI-RSW-14SR-DK-B-W3-MS	G1/2	S	54.40
6010003396	FI-RSW-16SR-DK-B-W3-MS	G1/2	S	64.65
6010003397	FI-RSW-20SR-DK-B-W3-MS	G3/4	S	155.55
6010003398	FI-RSW-25SR-DK-B-W3-MS	G1	S	162.65
6010003399	FI-RSW-30SR-DK-B-W3-MS	G1-1/4	S	243.55
6010003400	FI-RSW-38SR-DK-B-W3-MS	G1-1/2	S	353.50

Banjo Elbow
External Metallic Sealing Ring
Type FI-RSW-...-M-DK ▪ Series L / S

Item No.	Designation	Stud Size	Series	Price
6010003334	FI-RSW-06LM-DK-B-W3-MS	M10 x 1	L	28.25
6010003335	FI-RSW-08LM-DK-B-W3-MS	M12 x 1.5	L	33.55
6010003338	FI-RSW-15LM-DK-B-W3-MS	M18 x 1.5	L	53.45
6010003339	FI-RSW-18LM-DK-B-W3-MS	M22 x 1.5	L	62.20
6010003341	FI-RSW-28LM-DK-B-W3-MS	M33 x 2	L	156.95
6010003342	FI-RSW-35LM-DK-B-W3-MS	M42 x 2	L	236.00
6010003343	FI-RSW-42LM-DK-B-W3-MS	M48 x 2	L	315.95
6010003346	FI-RSW-10SM-DK-B-W3-MS	M16 x 1.5	S	38.05
6010003347	FI-RSW-12SM-DK-B-W3-MS	M18 x 1.5	S	43.55
6010003348	FI-RSW-14SM-DK-B-W3-MS	M20 x 1.5	S	90.10
6010003349	FI-RSW-16SM-DK-B-W3-MS	M22 x 1.5	S	64.85
6010003350	FI-RSW-20SM-DK-B-W3-MS	M27 x 2	S	104.75
6010003351	FI-RSW-25SM-DK-B-W3-MS	M33 x 2	S	162.50
6010003352	FI-RSW-30SM-DK-B-W3-MS	M42 x 2	S	249.90
6010003353	FI-RSW-38SM-DK-B-W3-MS	M48 x 2	S	339.60

Banjo Elbow Fittings

Banjo Elbow
Retaining Ring with Captive Seal (NBR)
Type FI-RSW-...-R-WD ▪ Series L / S

Item No.	Designation	Stud Size	Series	Price
6010003401	FI-RSW-06LR-WD-B-W3-MS	G1/8	L	32.40
6010003402	FI-RSW-08LR-WD-B-W3-MS	G1/4	L	35.20
6010003403	FI-RSW-10LR-WD-B-W3-MS	G1/4	L	36.60
6010007898	FI-RSW-12LR1/4-WD-B-W3-MS	G1/4	L	45.00
6010003404	FI-RSW-12LR-WD-B-W3-MS	G3/8	L	45.00
6010003405	FI-RSW-15LR-WD-B-W3-MS	G1/2	L	54.85
6010003406	FI-RSW-18LR-WD-B-W3-MS	G1/2	L	71.60
6010003407	FI-RSW-22LR-WD-B-W3-MS	G3/4	L	109.55
6010003408	FI-RSW-28LR-WD-B-W3-MS	G1	L	174.15
6010003409	FI-RSW-35LR-WD-B-W3-MS	G1-1/4	L	260.45
6010003410	FI-RSW-42LR-WD-B-W3-MS	G1-1/2	L	342.20
6010003411	FI-RSW-06SR-WD-B-W3-MS	G1/4	S	36.60
6010003412	FI-RSW-08SR-WD-B-W3-MS	G1/4	S	36.60
6010003413	FI-RSW-10SR-WD-B-W3-MS	G3/8	S	46.40
6010003414	FI-RSW-12SR-WD-B-W3-MS	G3/8	S	47.80
6010003415	FI-RSW-14SR-WD-B-W3-MS	G1/2	S	61.80
6010003416	FI-RSW-16SR-WD-B-W3-MS	G1/2	S	71.60
6010003417	FI-RSW-20SR-WD-B-W3-MS	G3/4	S	110.90
6010003418	FI-RSW-25SR-WD-B-W3-MS	G1	S	176.90
6010003419	FI-RSW-30SR-WD-B-W3-MS	G1-1/4	S	268.60
6010003420	FI-RSW-38SR-WD-B-W3-MS	G1-1/2	S	364.80

Banjo Elbow
Retaining Ring with Captive Seal (NBR)
Type FI-RSW-...-M-WD ▪ Series L / S

Item No.	Designation	Stud Size	Series	Price
6010003356	FI-RSW-06LM-WD-B-W3-MS	M10 x 1	L	32.40
6010003357	FI-RSW-08LM-WD-B-W3-MS	M12 x 1.5	L	35.20
6010003358	FI-RSW-10LM-WD-B-W3-MS	M14 x 1.5	L	36.60
6010003359	FI-RSW-12LM-WD-B-W3-MS	M16 x 1.5	L	45.00
6010003360	FI-RSW-15LM-WD-B-W3-MS	M18 x 1.5	L	52.05
6010003361	FI-RSW-18LM-WD-B-W3-MS	M22 x 1.5	L	73.05
6010003362	FI-RSW-22LM-WD-B-W3-MS	M26 x 1.5	L	103.90
6010003363	FI-RSW-28LM-WD-B-W3-MS	M33 x 2	L	170.80
6010003364	FI-RSW-35LM-WD-B-W3-MS	M42 x 2	L	260.95
6010003365	FI-RSW-42LM-WD-B-W3-MS	M48 x 2	L	339.60
6010003366	FI-RSW-06SM-WD-B-W3-MS	M12 x 1.5	S	35.20
6010003367	FI-RSW-08SM-WD-B-W3-MS	M14 x 1.5	S	36.60
6010003368	FI-RSW-10SM-WD-B-W3-MS	M16 x 1.5	S	46.40
6010003369	FI-RSW-12SM-WD-B-W3-MS	M18 x 1.5	S	50.60
6010003371	FI-RSW-16SM-WD-B-W3-MS	M22 x 1.5	S	73.05
6010003372	FI-RSW-20SM-WD-B-W3-MS	M27 x 2	S	115.05
6010003373	FI-RSW-25SM-WD-B-W3-MS	M33 x 2	S	176.90
6010003374	FI-RSW-30SM-WD-B-W3-MS	M42 x 2	S	271.80
6010003375	FI-RSW-38SM-WD-B-W3-MS	M48 x 2	S	361.80

Banjo Tee Fittings

The following Banjo Fittings are also available on request

Banjo Elbow (Medium-Pressure Version)
BSPP Thread / External Metallic Sealing Ring
FI-RSWND-...-R-DK
Refer to Catalogue 2 - STAUFF Connect

Banjo Elbow (Medium-Pressure Version)
Metric Parallel Thread / External Metallic Sealing Ring
FI-RSWND-...-M-DK
Refer to Catalogue 2 - STAUFF Connect

Banjo Elbow (Medium-Pressure Version)
BSPP Thread / Retaining Ring with Captive Seal
FI-RSWND-...-R-WD
Refer to Catalogue 2 - STAUFF Connect

Banjo Elbow (Medium-Pressure Version)
Metric Parallel Thread / Retaining Ring with Captive Seal
FI-RSWND-...-M-WD
Refer to Catalogue 2 - STAUFF Connect

Banjo Tee (High-Pressure Version)
BSPP Thread / External Metallic Sealing Ring
FI-RST-...-R-DK
Refer to Catalogue 2 - STAUFF Connect

Banjo Tee (High-Pressure Version)
Metric Parallel Thread / External Metallic Sealing Ring
FI-RST-...-M-DK
Refer to Catalogue 2 - STAUFF Connect

Banjo Tee (High-Pressure Version)
BSPP Thread / External Metallic Sealing Ring
FI-RST-...-R-WD
Refer to Catalogue 2 - STAUFF Connect

Banjo Tee (High-Pressure Version)
Metric Parallel Thread / Retaining Ring with Captive Seal
FI-RST-...-M-WD
Refer to Catalogue 2 - STAUFF Connect

Swivel Fittings

The following Swivel Fittings are available on request

Swivel Elbow
BSPP Thread / Retaining Ring with Captive Seal
FI-DGWESV-...-R-WD
Refer to Catalogue 2 - STAUFF Connect

Swivel Elbow
Metric Parallel Thread / Retaining Ring with Captive Seal
FI-DGWESV-...-M-WD
Refer to Catalogue 2 - STAUFF Connect

Check Valve
FI-RV
B42

Alternating Valve
FI-WV
B42

Order Codes

FI	-	RV	-	06	L	-	W3	-	1	-	MS
①		②		③	④		⑤		⑥		⑦

① Series

Fittings	FI

② Type

Check Valve	RV
Alternating Valve	WV

③ Tube O.D.

Outside Tube Diameter in mm according to dash sizing.

④ Tube Series

Light	L
Heavy	S

⑤ Surface Material

Steel, zinc/nickel-plated	W3

⑥ Opening Pressure

1 bar / 14.5 PSI	1

⑦ Assembling

Assembled with Cutting Ring and Union Nut	MS

Check Valve
1 bar / 14.5 PSI Opening Pressure
Type FI-RV ▪ Series L / S

Item No.	Designation	Series	Price
6010001611	FI-RV-06L-W3-1-MS	L	38.05
6010001612	FI-RV-08L-W3-1-MS	L	40.85
6010001613	FI-RV-10L-W3-1-MS	L	49.20
6010001614	FI-RV-12L-W3-1-MS	L	60.35
6010001615	FI-RV-15L-W3-1-MS	L	78.75
6010001616	FI-RV-18L-W3-1-MS	L	103.90
6010001617	FI-RV-22L-W3-1-MS	L	168.15
6010001618	FI-RV-28L-W3-1-MS	L	235.25
6010001619	FI-RV-35L-W3-1-MS	L	303.00
6010001620	FI-RV-42L-W3-1-MS	L	344.90
6010001621	FI-RV-06S-W3-1-MS	S	52.05
6010001622	FI-RV-08S-W3-1-MS	S	48.70
6010001623	FI-RV-10S-W3-1-MS	S	63.25
6010001624	FI-RV-12S-W3-1-MS	S	66.00
6010001625	FI-RV-14S-W3-1-MS	S	110.90
6010001626	FI-RV-16S-W3-1-MS	S	106.70
6010001627	FI-RV-20S-W3-1-MS	S	174.15
6010001628	FI-RV-25S-W3-1-MS	S	210.70
6010001629	FI-RV-30S-W3-1-MS	S	266.50
6010001630	FI-RV-38S-W3-1-MS	S	336.20

The following Check Valves are also available on request

Male Stud Check Valve (Flow from Stud End)
BSPP Thread / Profile Sealing Ring
FI-RVV-...-R-WD
Refer to Catalogue 2 - STAUFF Connect

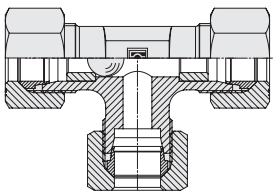
Male Stud Check Valve (Flow from Stud End)
Metric Parallel Thread / Profile Sealing Ring
FI-RVV-...-M-WD
Refer to Catalogue 2 - STAUFF Connect

Male Stud Check Valve (Flow to Stud End)
BSPP Thread / Profile Sealing Ring
FI-RVZ-...-R-WD
Refer to Catalogue 2 - STAUFF Connect

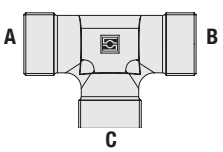
Male Stud Check Valve (Flow to Stud End)
Metric Parallel Thread / Profile Sealing Ring
FI-RVZ-...-M-WD
Refer to Catalogue 2 - STAUFF Connect

Alternating Valve
Type FI-WV ▪ Series L / S

Item No.	Designation	PN (bar)	Series	Price
6010007840	FI-WV-08L-W3-MS	250	L	126.30
6010007841	FI-WV-10L-W3-MS	250	L	126.30
6010007842	FI-WV-12L-W3-MS	250	L	105.30
6010007843	FI-WV-15L-W3-MS	250	L	150.40
6010007849	FI-WV-06S-W3-MS	630	S	85.05
6010007850	FI-WV-08S-W3-MS	630	S	94.90
6010007851	FI-WV-10S-W3-MS	630	S	123.25
6010007852	FI-WV-12S-W3-MS	630	S	128.80
6010007854	FI-WV-16S-W3-MS	400	S	154.20



Flow Directions:
A > C (B closed) or B > C (A closed)



Recommended Installation Position

In order to make sure that the valves will be suitable for your particular application, please contact STAUFF with details on media, operating pressure, pressure peaks, operating temperature and the expected frequency of valve actuations.
Do not use with compressed air or gas!

Please note: Alternating valves have been designed as switching devices for hydraulic fluids, where the non-pressurized connection of the valve is automatically closed off and sealed by a moving ball made of steel.

Alternating valves are only suitable for connections that fit directly against the tube end stop of the valve body. Do not use in combination with 24° weld cone fittings, 24° DKO taper fittings and other types of fittings with no direct contact to the tube end stop of the valve body.

	Thread Reducer FI-RED	**B44**
	Whitworth Parallel Pipe Thread (BSPP) / Profile Sealing Ring FI-RED-...-R-WD	**B44**
	Blanking Screw for Ports FI-VS	**B45**
	Whitworth Parallel Pipe Thread (BSPP) / Profile Sealing Ring FI-VS-...-R-WD	**B45**
	Metric Parallel Thread / Profile Sealing Ring FI-VS-...-M-WD	**B45**
	Blanking Plug with 24° Taper / O-Ring (DKO) FI-VD	**B45**
	Blanking Plug for Tube Ends FI-VSK	**B45**
	Profile Sealing Ring WDG	**B46**
	O-Ring O-Ring	**B47 - B48**
	External Metallic Sealing Ring FI-DKR	**B49**
	Retaining Ring with Captive Seal FI-DIR	**B49**
	Internal Metallic Sealing Ring FI-DKI	**B49**

Order Codes

FI	-	RED	-	R1/8	-	WD	-	R1/4	-	B	-	W3
①		②		③		⑤		③		⑦		⑧

FI	-	VD	-	15	L	-	B	-	W3
①		②		④	⑥		⑦		⑧

① Series

Fittings	**FI**

② Type

Thread Reducer	**RED**
Blanking Screw for Ports	**VS**
Blanking Screw for Ports (Heavy Duty)	**VSV**
Blanking Plug with 24° Taper / O-Ring (DKO)	**VD**
Blanking Plug for Tube Ends	**VSK**
External Metallic Sealing Ring	**DKR**
Retaining Ring with Captive Seal	**DIR**
Internal Metallic Sealing Ring	**DKI**

③ Thread Type / Size

Whitworth Parallel Pipe Thread (BSPP) (Sizes to be indicated, e.g. R1/4) For FI-RED, Male Thread Type/Size shown first and Female Thread Type/Size shown second e.g. FI-RED-**R1/8**-WD-**R1/4**-B-W3	**R**
Metric Parallel Pipe Thread (Sizes to be indicated, e.g. M14x1.5)	**M**

④ Tube O.D.

Outside Tube Diameter in mm according to dash sizing. Reducers are separated by a slash (e.g. 12/10L)	

⑤ Sealing Type

Standard seal type, including: Metallic Sealing Edge for thread types R / M	**(None)**
Elastomeric seal	**WD**

⑥ Tube Series

Extra Light	**LL**
Light & Heavy (suits both)	**L/S**
Light	**L**
Heavy	**S**

⑦ Sealing Material

No Sealing Material	**(None)**
NBR (Buna-N®)	**B**
FKM (Viton®)	**V**

⑧ Surface Material

Steel, zinc/nickel-plated	**W3**
Steel galvanised, thick layer passivated	**W66**

⑨ Additional Information

STAUFF internal information only	**Letter indicated**

Thread Reducer
BSPP with Profile Sealing Ring
Type FI-RED-...-R-WD

Item No.	Designation	PN (bar)	Price
6020000301	FI-RED-R1/8-WD-R1/4-B-W3	630	10.00
6020000300	FI-RED-R1/8-WD-R3/8-B-W3	630	19.80
6020000307	FI-RED-R1/4-WD-R1/8-B-W3	400	6.05
6020000305	FI-RED-R1/4-WD-R3/8-B-W3	400	9.20
6020000304	FI-RED-R1/4-WD-R1/2-B-W3	400	10.00
6020000303	FI-RED-R1/4-WD-R3/4-B-W3	400	35.20
6020000313	FI-RED-R3/8-WD-R1/8-B-W3	400	6.55
6020000311	FI-RED-R3/8-WD-R1/4-B-W3	400	6.45
6020000309	FI-RED-R3/8-WD-R1/2-B-W3	630	10.00
6020000308	FI-RED-R3/8-WD-R3/4-B-W3	400	31.00
6020000323	FI-RED-R1/2-WD-R1/8-B-W3	400	8.80
6020000321	FI-RED-R1/2-WD-R1/4-B-W3	400	7.05
6020000319	FI-RED-R1/2-WD-R3/8-B-W3	400	8.60
6020000317	FI-RED-R1/2-WD-R3/4-B-W3	400	26.80
6020000315	FI-RED-R1/2-WD-R1-B-W3	250	28.25
6020000314	FI-RED-R1/2-WD-R1-1/4-B-W3	250	89.85
6020000333	FI-RED-R3/4-WD-R1/4-B-W3	315	10.70
6020000331	FI-RED-R3/4-WD-R3/8-B-W3	315	10.00
6020000329	FI-RED-R3/4-WD-R1/2-B-W3	400	12.85
6020000327	FI-RED-R3/4-WD-R1-B-W3	400	29.55
6020000326	FI-RED-R3/4-WD-R1-1/4-B-W3	250	89.85
6020000324	FI-RED-R3/4-WD-R1-1/2-B-W3	250	109.55
6020000343	FI-RED-R1-WD-R1/4-B-W3	400	22.60
6020000341	FI-RED-R1-WD-R3/8-B-W3	400	22.60
6020000339	FI-RED-R1-WD-R1/2-B-W3	400	18.35
6020000337	FI-RED-R1-WD-R3/4-B-W3	400	22.60
6020000336	FI-RED-R1-WD-R1-1/4-B-W3	250	92.70
6020000335	FI-RED-R1-WD-R1-1/2-B-W3	250	101.10
6020000349	FI-RED-R1-1/4-WD-R1/2-B-W3	315	45.00
6020000347	FI-RED-R1-1/4-WD-R3/4-B-W3	315	31.00
6020000345	FI-RED-R1-1/4-WD-R1-B-W3	315	39.45
6020000344	FI-RED-R1-1/4-WD-R1-1/2-B-W3	250	123.50
6020000357	FI-RED-R1-1/2-WD-R1/2-B-W3	250	87.05
6020000355	FI-RED-R1-1/2-WD-R3/4-B-W3	250	46.40
6020000353	FI-RED-R1-1/2-WD-R1-B-W3	250	46.40
6020000351	FI-RED-R1-1/2-WD-R1-1/4-B-W3	250	64.65
6020000934	FI-RED-R2-WD-R1-1/4-B-W3	160	254.75
6020000933	FI-RED-R2-WD-R1-1/2-B-W3	160	247.95

The following Thread Reducers are also available on request

Thread Reducer
BSPP Thread / Metallic Sealing Edge
FI-RED-...-R
Refer to Catalogue 2 - STAUFF Connect

Blanking Screws for Ports

Blanking Screw for Ports
BSPP with Profile Sealing Ring (NBR)
Type FI-VS-R...-WD

Item No.	Designation	PN (bar)	Price
6010001854	FI-VS-R1/8-WD-B-W3	400	4.20
6010001856	FI-VS-R1/4-WD-B-W3	400	4.60
6010001858	FI-VS-R3/8-WD-B-W3	400	5.35
6010001860	FI-VS-R1/2-WD-B-W3	400	7.90
6010001862	FI-VS-R3/4-WD-B-W3	400	10.00
6010001864	FI-VS-R1-WD-B-W3	400	19.80
6010001866	FI-VS-R1-1/4-WD-B-W3	315	32.40
6010001867	FI-VS-R1-1/2-WD-B-W3	315	36.60

Note: Torque (Nm) recommendations for R1-1/4 = 320 Nm and R1-1/2 = 400 Nm

Blanking Screw for Ports (Heavy Duty)
BSPP with Profile Sealing Ring (NBR)
Type FI-VSV-R...-WD

Item No.	Designation	PN (bar)	Price
6010007731	FI-VSV-R1-1/4-WD-B-W3	400	70.70
6010007733	FI-VSV-R1-1/2-WD-B-W3	400	77.05

Note: Torque (Nm) recommendations for R1-1/4 = 400 Nm and R1-1/2 = 500 Nm

Blanking Screw for Ports
Metric with Profile Sealing Ring (NBR)
Type FI-VS-M...-WD

Item No.	Designation	PN (bar)	Price
6010007504	FI-VS-M8x1-WD-B-W3	400	6.55
6010001832	FI-VS-M10x1-WD-B-W3	400	5.25
6010001834	FI-VS-M12x1.5-WD-B-W3	400	6.70
6010001836	FI-VS-M14x1.5-WD-B-W3	400	7.90
6010001838	FI-VS-M16x1.5-WD-B-W3	400	9.20
6010001840	FI-VS-M18x1.5-WD-B-W3	400	8.60
6010001842	FI-VS-M20x1.5-WD-B-W3	400	12.10
6010001843	FI-VS-M22x1.5-WD-B-W3	400	11.35
6010001846	FI-VS-M26x1.5-WD-B-W3	400	16.95
6010001847	FI-VS-M27x2-WD-B-W3	400	14.25
6010001849	FI-VS-M33x2-WD-B-W3	400	19.80
6010001851	FI-VS-M42x2-WD-B-W3	250	26.80
6010001853	FI-VS-M48x2-WD-B-W3	250	38.05

Note for Torque (Nm) recommendations refer to Catalogue 2 - STAUFF Connect.

The following Blanking Screws are also available on request

Blanking Screw for Ports (Heavy Duty)
Metric Parallel Thread / Profile Sealing Ring
FI-VSV-...-M-WD
Refer to Catalogue 2 - STAUFF Connect

Blanking Screw for Ports
BSPP Thread / Metallic Sealing Edge
FI-VS-...-R
Refer to Catalogue 2 - STAUFF Connect

Blanking Plugs

Blanking Plug
with 24° Taper / O-Ring (DKO)
Type FI-VD ▪ Series LL / L / S

Item No.	Designation	Series	Price
6020000615	FI-VD-06L/S-V-W3	L/S	2.25
6020000616	FI-VD-08L/S-V-W3	L/S	2.65
6020000617	FI-VD-10L/S-V-W3	L/S	2.75
6020000618	FI-VD-12L/S-V-W3	L/S	3.60
6020000619	FI-VD-15L-V-W3	L	4.50
6020000620	FI-VD-18L-V-W3	L	5.00
6020000621	FI-VD-22L-V-W3	L	7.90
6020000622	FI-VD-28L-V-W3	L	12.85
6020000623	FI-VD-35L-V-W3	L	25.45
6020000624	FI-VD-42L-V-W3	L	38.05
6020000629	FI-VD-14S-V-W3	S	8.60
6020000630	FI-VD-16S-V-W3	S	4.60
6020000631	FI-VD-20S-V-W3	S	7.25
6020000632	FI-VD-25S-V-W3	S	10.00
6020000633	FI-VD-30S-V-W3	S	18.35
6020000634	FI-VD-38S-V-W3	S	32.40

Blanking Plug
for Tube Ends
Type FI-VSK ▪ Series L / S

Item No.	Designation	PN (bar)	Thread Size	Series	Price
6030003784	FI-VSK-06L-W3	315	M12 x 1.5	L	5.35
6030003785	FI-VSK-08L-W3	315	M14 x 1.5	L	6.45
6030003786	FI-VSK-10L-W3	315	M16 x 1.5	L	7.90
6030003787	FI-VSK-12L-W3	315	M18 x 1.5	L	9.20
6030003788	FI-VSK-15L-W3	315	M22 x 1.5	L	12.10
6030003789	FI-VSK-18L-W3	315	M26 x 1.5	L	18.35
6030003790	FI-VSK-22L-W3	160	M30 x 2	L	25.45
6030003791	FI-VSK-28L-W3	160	M36 x 2	L	47.80
6030003792	FI-VSK-35L-W3	160	M45 x 2	L	56.25
6030003793	FI-VSK-42L-W3	160	M52 x 2	L	68.80
6030003794	FI-VSK-06S-W3	630	M14 x 1.5	S	6.70
6030003795	FI-VSK-08S-W3	630	M16 x 1.5	S	7.90
6030003796	FI-VSK-10S-W3	630	M18 x 1.5	S	9.20
6030003797	FI-VSK-12S-W3	630	M20 x 1.5	S	10.70
6030003798	FI-VSK-14S-W3	630	M22 x 1.5	S	19.80
6030003799	FI-VSK-16S-W3	400	M24 x 1.5	S	19.80
6030003800	FI-VSK-20S-W3	400	M30 x 2	S	28.25
6030003801	FI-VSK-25S-W3	400	M36 x 2	S	47.80
6030003802	FI-VSK-30S-W3	400	M42 x 2	S	71.60
6030003803	FI-VSK-38S-W3	315	M52 x 2	S	103.90

The following Blanking Plugs are also available on request

Blanking Plug
with Sealing Edge
FI-BUZ
Refer to Catalogue 2 - STAUFF Connect

Profile Sealing Ring for Male Studs

Profile Sealing Ring for Male Studs
BSPP - NBR - 90 DURO
Type WDG

Item No.	Designation	For Stud	Price
1230020177	WDG-8.4x11.9x1-B90	G1/8	1.55
1230000481	WDG-11.6x16.5x1.5-B90	G1/4	1.70
1230000376	WDG-14.7x18.9x1.5-B90	G3/8	1.55
1230002280	WDG-18.5x23.9x1.5-B90	G1/2	2.05
1230003635	WDG-23.9x29.2x1.5-B90	G3/4	2.45
1230020702	WDG-29.7x35.7x2-B90	G1	4.10
1230020703	WDG-38.8x45.8x2-B90	G1-1/4	4.50
1230020704	WDG-44.7x50.7x2-B90	G1-1/2	6.70

Profile Sealing Ring for Male Studs
BSPP - FKM - 80 / 90 DURO
Type WDG

Item No.	Designation	For Stud	Price
1230020265	WDG-8.4x11.9x1-V90	G1/8	5.35
1230000517	WDG-11.6x16.5x1.5-V90	G1/4	6.45
1230000377	WDG-14.7x18.9x1.5-V90	G3/8	7.90
1230002775	WDG-18.5x23.9x1.5-V80	G1/2	8.85
1230002776	WDG-23.9x29.2x1.5-V80	G3/4	15.60
1230002777	WDG-29.7x35.7x2-V80	G1	19.80
1230002778	WDG-38.8x45.8x2-V80	G1-1/4	21.25
1230003533	WDG-44.7x50.7x2-V80	G1-1/2	21.40

Profile Sealing Ring for Male Studs
Metric - NBR - 90 DURO
Type WDG

Item No.	Designation	For Stud	Price
6030006413	WDG-6.5x9.9x1-B90	M8 x 1	1.20
1230020177	WDG-8.4x11.9x1-B90	M10 x 1	1.55
1230000355	WDG-9.8x14.5x1.5-B90	M12 x 1.5	2.65
1230000481	WDG-11.6x16.5x1.5-B90	M14 x 1.5	1.70
1230020420	WDG-13.8x18.9x1.5-B80	M16 x 1.5	1.55
1230004021	WDG-15.7x20.9x1.5-B90	M18 x 1.5	1.90
1230002719	WDG-17.8x22.9x1.5-B90	M20 x 1.5	1.90
1230004401	WDG-19.6x24.3x1.5-B90	M22 x 1.5	2.05
1230003635	WDG-23.9x29.2x1.5-B90	M26 x 1.5	2.45
1230003635	WDG-23.9x29.2x1.5-B90	M27 x 2	2.45
1230020702	WDG-29.7x35.7x2-B90	M33 x 2	4.10
1230020703	WDG-38.8x45.8x2-B90	M42 x 2	4.50
1230020704	WDG-44.7x50.7x2-B90	M48 x 2	6.70

Profile Sealing Ring for Male Studs
Metric - FKM - 80 / 90 DURO
Type WDG

Item No.	Designation	For Stud	Price
6030006409	WDG-6.5x9.9x1-V90	M8 x 1	4.00
1230020265	WDG-8.4x11.9x1-V90	M10 x 1	5.35
1230000356	WDG-9.8x14.5x1.5-V90	M12 x 1.5	6.05
1230000517	WDG-11.6x16.5x1.5-V90	M14 x 1.5	6.45
1230020128	WDG-13.8x18.9x1.5-V80	M16 x 1.5	7.90
1230004289	WDG-15.7x20.9x1.5-V80	M18 x 1.5	8.60
1230020418	WDG-17.8x22.9x1.5-V90	M20 x 1.5	9.20
1230020845	WDG-19.6x24.3x1.5-V90	M22 x 1.5	6.20
1230002776	WDG-23.9x29.2x1.5-V80	M26 x 1.5	15.60
1230002776	WDG-23.9x29.2x1.5-V80	M27 x 2	15.60
1230002777	WDG-29.7x35.7x2-V80	M33 x 2	19.80
1230002778	WDG-38.8x45.8x2-V80	M42 x 2	21.25
1230003533	WDG-44.7x50.7x2-V80	M48 x 2	21.40

DIN Thread Sizes

Series	Tube OD (mm)	Male Stud Metric Parallel Thread		Male Stud Whitworth Parallel Pipe Thread	
		Thread Size	Width AF	Thread Size	Width AF
L	06	M10 x 1	14	G1/8	14
	08	M12 x 1.5	17	G1/4	19
	10	M14 x 1.5	19	G1/4	19
	12	M16 x 1.5	22	G3/8	22
	15	M18 x 1.5	24	G1/2	27
	18	M22 x 1.5	27	G1/2	27
	22	M26 x 1.5	32	G3/4	32
	28	M33 x 2	41	G1	41
	35	M42 x 2	50	G1-1/4	50
	42	M48 x 2	55	G1-1/2	55

DIN Thread Sizes

Series	Tube OD (mm)	Male Stud Metric Parallel Thread		Male Stud Whitworth Parallel Pipe Thread	
		Thread Size	Width AF	Thread Size	Width AF
S	06	M12 x 1.5	17	G1/4	19
	08	M14 x 1.5	19	G1/4	19
	10	M16 x 1.5	22	G3/8	22
	12	M18 x 1.5	24	G3/8	22
	14	M20 x 1.5	27	G1/2	27
	16	M22 x 1.5	27	G1/2	27
	20	M27 x 2	32	G3/4	32
	25	M33 x 2	41	G1	41
	30	M42 x 2	50	G1-1/4	50
	38	M48 x 2	55	G1-1/2	55

O-Ring for 24°/37° Flared Cone Adaptors

O-Ring for 24° Flared Cone Adaptor
NBR - 90 DURO
Type O-Ring ▪ Series L / S

Item No.	Designation	Tube Size / Series	Price
1230000495	O-Ring-4.5x1.5-B90	06L	1.05
6030001724	O-Ring-6.5x1.5-B90	08L	0.80
1230000509	O-Ring-8.5x1.5-B90	10L	1.05
1230000513	O-Ring-10x1.5-B90	12L	1.15
6030002857	O-Ring-12.5x2-B90	15L	1.35
6030006822	O-Ring-16x2-B90	18L	0.95
1230000529	O-Ring-20x2-B90	22L	1.05
1230000533	O-Ring-26x2-B90	28L	1.90
1230000537	O-Ring-32x2.5-B90	35L	1.70
1230000541	O-Ring-38x2.5-B90	42L	2.45
1230000495	O-Ring-4.5x1.5-B90	06S	1.05
6030001724	O-Ring-6.5x1.5-B90	08S	0.80
1230000509	O-Ring-8.5x1.5-B90	10S	1.05
1230000513	O-Ring-10x1.5-B90	12S	1.15
1230000519	O-Ring-12x2-B90	14S	1.35
1230000523	O-Ring-14x2-B90	16S	1.35
1230000527	O-Ring-17.3x2.4-B90	20S	1.65
1230000531	O-Ring-22.3x2.4-B90	25S	2.05
1230000535	O-Ring-27.3x2.4-B90	30S	2.20
1230000539	O-Ring-35x2.5-B90	38S	2.45

O-Ring for 24° Flared Cone Adaptor
FKM - 90 DURO
Type O-Ring ▪ Series L / S

Item No.	Designation	Tube Size / Series	Price
1230000496	O-Ring-4.5x1.5-V90	06L	3.00
6030007322	O-Ring-6.5x1.5-V90	08L	1.75
1230000510	O-Ring-8.5x1.5-V90	10L	1.45
1230000514	O-Ring-10x1.5-V90	12L	1.75
6030007311	O-Ring-12.5x2-V90	15L	2.15
6030007312	O-Ring-16X2-V90	18L	2.00
1230000530	O-Ring-20x2-V90	22L	2.15
1230000534	O-Ring-26x2-V90	28L	6.20
1230000538	O-Ring-32x2.5-V90	35L	12.95
1230000542	O-Ring-38x2.5-V90	42L	8.50
1230000496	O-Ring-4.5x1.5-V90	06S	3.00
6030007322	O-Ring-6.5x1.5-V90	08S	1.75
1230000510	O-Ring-8.5x1.5-V90	10S	1.45
1230000514	O-Ring-10x1.5-V90	12S	1.75
1230000520	O-Ring-12x2-V90	14S	2.65
1230000524	O-Ring-14x2-V90	16S	2.60
1230000528	O-Ring-17.3x2.4-V90	20S	3.65
1230000532	O-Ring-22.3x2.4-V90	25S	5.30
1230000536	O-Ring-27.3x2.4-V90	30S	7.30
1230000540	O-Ring-35x2.5-V90	38S	7.60

O-Ring for 37° Flared Cone Adaptor
NBR - 90 DURO
Type O-Ring ▪ Series L / S

Item No.	Designation	Tube Size / Series	Price
6030008097	O-Ring-4.4x0.8-B90	06L	0.65
6030008108	O-Ring-6x0.8-B90	08L	0.70
6030008114	O-Ring-7.5x0.8-B90	10L	0.85
6030008122	O-Ring-9.5x0.8-B90	12L	2.75
6030007999	O-Ring-12.5x0.8-B90	15L	1.05
6030008013	O-Ring-15x1-B90	18L	1.10
6030008030	O-Ring-18x1-B90	22L	1.20
6030008050	O-Ring-23x1-B90	28L	3.40
6030008071	O-Ring-30x1-B90	35L	1.90
6030008506	O-Ring-37x1-B90	42L	4.10
6030008097	O-Ring-4.4x0.8-B90	06S	0.65
6030008108	O-Ring-6x0.8-B90	08S	0.70
6030008114	O-Ring-7.5x0.8-B90	10S	0.85
6030008122	O-Ring-9.5x0.8-B90	12S	2.75
6030007992	O-Ring-11x1-B90	14S	1.90
6030007999	O-Ring-12.5x0.8-B90	16S	1.05
6030008018	O-Ring-16x1-B90	20S	1.20
6030008040	O-Ring-20x1-B90	25S	1.35
6030008056	O-Ring-25x1-B90	30S	1.40
6030008077	O-Ring-32x1.78-B90	38S	3.60

O-Ring for 37° Flared Cone Adaptor
FKM - 90 DURO
Type O-Ring ▪ Series L / S

Item No.	Designation	Tube Size / Series	Price
6030008098	O-Ring-4.4x0.8-V90	06L	2.05
6030008109	O-Ring-6x0.8-V90	08L	2.10
6030008115	O-Ring-7.5x0.8-V90	10L	2.15
6030008123	O-Ring-9.5x0.8-V90	12L	3.00
6030008000	O-Ring-12.5x0.8-V90	15L	2.80
6030008014	O-Ring-15x1-V90	18L	4.00
6030008031	O-Ring-18x1-V90	22L	4.05
6030008051	O-Ring-23x1-V90	28L	5.50
6030008072	O-Ring-30x1-V90	35L	5.95
6030008508	O-Ring-37x1-V80	42L	2.65
6030008098	O-Ring-4.4x0.8-V90	06S	2.05
6030008109	O-Ring-6x0.8-V90	08S	2.10
6030008115	O-Ring-7.5x0.8-V90	10S	2.15
6030008123	O-Ring-9.5x0.8-V90	12S	3.00
6030007993	O-Ring-11x1-V90	14S	2.65
6030008004	O-Ring-12.5x1-V90	16S	2.80
6030008019	O-Ring-16x1-V90	20S	4.10
6030008041	O-Ring-20x1-V90	25S	5.40
6030008057	O-Ring-25x1-V90	30S	4.60

Recommended for Assembly

O-Ring Extraction Tool (Set) -
Type SPLM-TOOL-ORING-EXTRACTION
is available.
Refer to Section F - Assembly Tools / Devices

O-Ring for DKO Taper Fittings / 24° Weld Cones

O-Ring for DKO Taper Fitting / 24° Weld Cone
NBR - 90 DURO
Type O-Ring ▪ Series L / S

Item No.	Designation	Tube Size / Series	Price
1230000495	O-Ring-4.5x1.5-B90	06L	1.05
6030001724	O-Ring-6.5x1.5-B90	08L	0.80
1230000509	O-Ring-8.5x1.5-B90	10L	1.05
1230000513	O-Ring-10x1.5-B90	12L	1.15
6030002857	O-Ring-12.5x2-B90	15L	1.35
6030006822	O-Ring-16x2-B90	18L	0.95
1230000529	O-Ring-20x2-B90	22L	1.05
1230000533	O-Ring-26x2-B90	28L	1.90
1230000537	O-Ring-32x2.5-B90	35L	1.70
1230000541	O-Ring-38x2.5-B90	42L	2.45
1230000495	O-Ring-4.5x1.5-B90	06S	1.05
6030001724	O-Ring-6.5x1.5-B90	08S	0.80
1230000509	O-Ring-8.5x1.5-B90	10S	1.05
1230000513	O-Ring-10x1.5-B90	12S	1.15
1230000519	O-Ring-12x2-B90	14S	1.35
1230000523	O-Ring-14x2-B90	16S	1.35
1230000527	O-Ring-17.3x2.4-B90	20S	1.65
1230000531	O-Ring-22.3x2.4-B90	25S	2.05
1230000535	O-Ring-27.3x2.4-B90	30S	2.20
1230000539	O-Ring-35x2.5-B90	38S	2.45

O-Ring for DKO Taper Fitting / 24° Weld Cone
FKM - 90 DURO
Type O-Ring ▪ Series L / S

Item No.	Designation	Tube Size / Series	Price
1230000496	O-Ring-4.5x1.5-V90	06L	3.00
6030007322	O-Ring-6.5x1.5-V90	08L	1.75
1230000510	O-Ring-8.5x1.5-V90	10L	1.45
1230000514	O-Ring-10x1.5-V90	12L	1.75
6030007311	O-Ring-12.5x2-V90	15L	2.15
6030007312	O-Ring-16X2-V90	18L	2.00
1230000530	O-Ring-20x2-V90	22L	2.15
1230000534	O-Ring-26x2-V90	28L	6.20
1230000538	O-Ring-32x2.5-V90	35L	12.95
1230000542	O-Ring-38x2.5-V90	42L	8.50
1230000496	O-Ring-4.5x1.5-V90	06S	3.00
6030007322	O-Ring-6.5x1.5-V90	08S	1.75
1230000510	O-Ring-8.5x1.5-V90	10S	1.45
1230000514	O-Ring-10x1.5-V90	12S	1.75
1230000520	O-Ring-12x2-V90	14S	2.65
1230000524	O-Ring-14x2-V90	16S	2.60
1230000528	O-Ring-17.3x2.4-V90	20S	3.65
1230000532	O-Ring-22.3x2.4-V90	25S	5.30
1230000536	O-Ring-27.3x2.4-V90	30S	7.30
1230000540	O-Ring-35x2.5-V90	38S	7.60

O-Ring for Banjo Bolts of Banjo Fittings

O-Ring for Banjo Bolts of Banjo Fitting
NBR - 90 DURO
Type O-Ring

Item No.	Designation	For Thread	Price
1230000509	O-Ring-8.5x1.5-B90	G1/8	1.05
6030001725	O-Ring-11x2-B90	G1/4	1.50
6030001726	O-Ring-14.5x2-B90	G3/8	1.05
6030001728	O-Ring-19.5x2-B90	G1/2	1.45
6030001729	O-Ring-26x1.5-B90	G3/4	1.85
6030001730	O-Ring-31x2-B90	G1	1.05
6030001731	O-Ring-40x2-B90	G1-1/4	25.10
6030001732	O-Ring-46x2-B90	G1-1/2	2.80
6030001724	O-Ring-6.5x1.5-B90	M8 x 1	0.80
1230000509	O-Ring-8.5x1.5-B90	M10 x 1	1.05
6030001725	O-Ring-11x2-B90	M12 x 1.5	1.50
6030001725	O-Ring-11x2-B90	M14 x 1.5	1.50
6030001726	O-Ring-14.5x2-B90	M16 x 1.5	1.05
6030001726	O-Ring-14.5x2-B90	M18 x 1.5	1.05
6030001727	O-Ring-16.5x2-B90	M18 x 1.5	1.45
6030001728	O-Ring-19.5x2-B90	M20 x 1.5	1.45
6030001728	O-Ring-19.5x2-B90	M22 x 1.5	1.45
6030001729	O-Ring-26x1.5-B90	M26 x 1.5	1.85
6030001729	O-Ring-26x1.5-B90	M27 x 2	1.85
6030001730	O-Ring-31x2-B90	M33 x 2	1.05
6030001731	O-Ring-40x2-B90	M42 x 2	25.10
6030001732	O-Ring-46x2-B90	M48 x 2	2.80

O-Ring for Banjo Bolts of Banjo Fitting
FKM - 90 DURO
Type O-Ring

Item No.	Designation	For Thread	Price
1230000510	O-Ring-8.5x1.5-V90	G1/8	1.45
6030006364	O-Ring-11x2-V90	G1/4	2.70
6030006366	O-Ring-14.5x2-V90	G3/8	2.65
6030006370	O-Ring-19.5x2-V90	G1/2	3.45
6030008063	O-Ring-26x1.5-V90	G3/4	5.90
6030006377	O-Ring-31x2-V90	G1	2.65
6030006380	O-Ring-40x2-V90	G1-1/4	7.15
6030001734	O-Ring-46x2-V90	G1-1/2	6.55
6030007322	O-Ring-6.5x1.5-V90	M8 x 1	1.75
1230000510	O-Ring-8.5x1.5-V90	M10 x 1	1.45
6030006364	O-Ring-11x2-V90	M12 x 1.5	2.70
6030006364	O-Ring-11x2-V90	M14 x 1.5	2.70
6030006366	O-Ring-14.5x2-V90	M16 x 1.5	2.65
6030006366	O-Ring-14.5x2-V90	M18 x 1.5	2.65
6030001733	O-Ring-16.5x2-V90	M18 x 1.5	3.45
6030006370	O-Ring-19.5x2-V90	M20 x 1.5	3.45
6030006370	O-Ring-19.5x2-V90	M22 x 1.5	3.45
6030008063	O-Ring-26x1.5-V90	M26 x 1.5	5.90
6030008063	O-Ring-26x1.5-V90	M27 x 2	5.90
6030006377	O-Ring-31x2-V90	M33 x 2	2.65
6030006380	O-Ring-40x2-V90	M42 x 2	7.15
6030001734	O-Ring-46x2-V90	M48 x 2	6.55

Metallic Sealing Rings

External Metallic Sealing Ring
for Male Studs of Banjo Fittings
Type FI-DKR

Item No.	Designation	Price
6030001825	FI-DKR-M8x1-W3-WOB	4.30
6030001824	FI-DKR-M10x1-R1/8-W3-WOB	1.40
6030001827	FI-DKR-M12x1.5-W3-WOB	4.05
6030001826	FI-DKR-R1/4-W3-WOB	1.90
6030001828	FI-DKR-M14x1.5-W3-WOB	4.30
6030001830	FI-DKR-M16x1.5-W3-WOB	4.60
6030001829	FI-DKR-R3/8-W3-WOB	3.60
6030001831	FI-DKR-18L/16S-R1/2-W3-WOB	3.60
6030001832	FI-DKR-M18x1.5-W3-WOB	3.60
6030001833	FI-DKR-15L/14S-M20x1.5-R1/2-W3-WOB	5.30
6030001834	FI-DKR-M22x1.5-W3-WOB	3.60
6030001836	FI-DKR-M26x1.5-W3-WOB	6.00
6030001835	FI-DKR-M27x2-R3/4-W3-WOB	4.60
6030001837	FI-DKR-M33x2-R1-W3-WOB	7.90
6030001838	FI-DKR-M42x2-R1-1/4-W3-WOB	10.10
6030001839	FI-DKR-M48x2-R1-1/2-W3-WOB	8.60

Retaining Ring with Captive Seal
for Male Studs of Banjo Fittings
Type FI-DIR

Item No.	Designation	Price
6020000001	FI-DIR-M10x1-R1/8-B-W3	15.55
6020000003	FI-DIR-M12x1.5-B-W3	11.35
6020000002	FI-DIR-R1/4-B-W3	8.60
6020000004	FI-DIR-M14x1.5-B-W3	8.00
6020000005	FI-DIR-M16x1.5-R3/8-B-W3	10.00
6020000006	FI-DIR-M18x1.5-B-W3	12.85
6020000015	FI-DIR-12LM18x1.5-B-W3	14.25
6020002823	FI-DIR-15L/14S-R1/2-B-W3/2	14.30
6020000008	FI-DIR-18L/16S-R1/2-B-W3	12.35
6020000009	FI-DIR-M22x1.5-B-W3	13.05
6020000011	FI-DIR-M26x1.5-B-W3	18.70
6020000010	FI-DIR-M27x2-R3/4-B-W3	18.60
6020000012	FI-DIR-M33x2-R1-B-W3	22.60
6020000013	FI-DIR-M42x2-R1-1/4-B-W3	32.40
6020000014	FI-DIR-M48x2-R1-1/2-B-W3	33.80

Internal Metallic Sealing Ring
for Female Studs of Gauge Fittings
Type FI-DKI

Item No.	Designation	Price
6030002402	FI-DKI-R1/4-W3-WOB	3.80
6030002403	FI-DKI-R1/2-W3-WOB	3.80

Suits FI-MA & FI-EMAD Gauge Fittings - refer to page B30

Tube Fitting Materials and Surface Finishings	B52
Elastomer Seal Materials	B53
Pressure and Temperature Ratings	B54
Pressure Reduction Factors / Selection Criteria for Tube	B55
Calculated Design / Burst Pressures for Tube (bar)	B56 - B57
Port Dimensions for Fittings with Male Threaded Stud	B58 - B60
Dimensions of the 24° Conical Bore / Union Nut	B62
Standard Threads and Widths Across Flats for Fittings with Male Threaded Stud	B63
Certificates and Approvals	B64

Tube Fitting Materials and Surface Finishings

Layers
- Sealing
- Passivation
- Zinc/Nickel
- Steel

STAUFF Zinc/Nickel Coating

Fitting bodies of the STAUFF Connect range are usually machined from drawn or forged steel in accordance with DIN 3859-1 (Technical Specification for Tube Fittings).

Union nuts are either cold-pressed or hot-pressed.

Unless otherwise stated, all metal parts of the STAUFF Connect range of tube fittings are made of Steel with standard Zinc/Nickel coating (material code: W3), that offers excellent surface protection far beyond the market standard.

One of the few exceptions, weld fittings are made of Steel, uncoated and oiled (material code: W2).

Alternative surface coatings are available upon request. Contact STAUFF for more information.

Main Advantages of the STAUFF Zinc/Nickel Coating

- Premium long-life surface protection against corrosion with more than 1200 hours resistance to red rust / base metal corrosion in the salt-spray test according to DIN EN ISO 9227
- Free of hexavalent chrome Cr(VI)
- ELV compliant according to 2000/53/EC (End of Life Vehicles Directive)
- REACH compliant according to 1907/2006/EC (Registration, Evaluation, Authorisation and Restriction of Chemicals)
- RoHS compliant according to 2002/95/EC (Restrictions of the Use of Hazardous Substances)
- Easily surpassing the requirements of the corrosion protection class K5 (360 hours resistance to white rust / 720 hours resistance to red rust) as defined by the VDMA, the German Engineering Association (VDMA Standard Sheet 24576 "Fluid Power - Requirements and designations for corrosion-protection coatings free of hexavalent chrome")
- Significantly reduced tendency to corrosion by contact with other metals such as Aluminium and Stainless Steel
- High abrasion resistance due to the ductility / plastic deformability of the coating
- Appealing colour scheme with a bright semi-gloss surface finish – comparable to Stainless Steel
- Surface is paintable with good paint adhesion properties (However, a painting test and, if necessary, degreasing of the surfaces to be painted are highly recommended)
- Little to no risk of triggering allergies, as the Zinc/Nickel base layer with a nickel content of 12-15 % is covered by both a passivation and a sealing layer to avoid the release of nickel and any direct physical contact
- Resistant against all commonly used hydraulic media

Elastomer Seal Materials

Unless otherwise stated, standard elastomer seals are made of NBR (Perbunan®) with a hardness degree of 90 shore A.

Elastomer seals made of NBR (Perbunan® – material code: B) are especially suitable for liquid or gaseous media at operating temperatures that range from -35 °C to +100 °C / -31 °F to +212 °F.

Elastomer seals for applications with higher temperatures or aggressive media, such as FKM (Viton® – material code: V – operating temperature range from -25 °C to +200 °C / -13 °F to +392 °F) and EPDM (material code: E), are available upon request.

Contact STAUFF for more information.

The performance of elastomer seals during operation can be negatively affected by various influences. Elastomer seals should be inspected for any kind of damage (cracks, deformation, hardening or softening, swelling, reduced elasticity etc.) or contamination prior to the assembly process and when carrying out service and maintenance work, and should be replaced if necessary.

Spare seals are available as part of the STAUFF Connect range.

Storage Recommendations

Please observe the following storage recommendations for elastomer seals in accordance with DIN 7716 (Requirements for Storage, Cleaning and Maintenance of Rubber Products):

- Store seals in a dry place, away from draughts, at temperatures not exceeding +25 °C / +77 °F.
- Protect seals from sunlight, ozone and strong artificial lighting during storage.

These recommendations do not only apply for separate elastomer seals, but also for tube fittings with pre-assembled O-Rings and seals.

Not following these storage recommendations can cause brittle fracture of elastomer seals and result in leakage!

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Viton® is a registered trademark of DuPont Performance Elastomers L.L.C.

Pressure and Temperature Ratings

General Information

Unless otherwise stated, all pressure ratings in this product catalogue are indicated in bar and PSI. All temperature ratings are indicated in °C (degree Celsius) and °F (degree Fahrenheit).

Pressure ratings are usually rounded to correspond with standardised pressure ratings, which are internationally recognised and assist to identify and match common sizes of components together.

All tube fittings and other components of the STAUFF Connect range meet or exceed common standardised pressure ratings for mobile and industrial fluid power applications up to nominal pressures of 800 bar / 11600 PSI (depending on series, type and size of the component – pressure reduction factors to be considered).

Pressure ratings are divided into nominal pressures (PN) and permissible operating pressures (PB).

Nominal Pressure (PN)

Nominal pressure (PN) is a term used to describe the pressure that tube fittings and other components are designed to safely withstand, and indicates the maximum operating pressure of tube fittings and other components that should be applied to the component when operating the system under stationary conditions.

During static load tests, burst pressures must be at least 4 times higher than the nominal pressures (safety factor of 4).

Permissible Operating Pressure (PB)

The permissible operating pressure (PB) of a component (as defined in DIN 2401, part 1) is identical to the maximum internal overpressure at regular operating conditions (operating temperature of +120 °C / +248 °F without dynamic loads / pressure peaks) as calculated based on the material in use and considering the permissible operating temperature (TB).

During static load tests, burst pressures must be at least 2.5 times higher than the permissible operating pressures (safety factor of 2.5).

Please note:

The pressure ratings and safety factors as specified are only applicable when strictly following the assembly instructions (e.g. tightening torques for male stud fittings) and only refer to original components of the STAUFF Connect range. Avoid mixing with other brands' products!

If components are exposed to vibrations, dynamic loads or pressure peaks, the pressure ratings must be reduced accordingly in order to keep the same level of safety.

Permissible Operating Temperature (TB)

Unless otherwise stated, the permissible operating temperature (TB) for tube fittings and other components in this product catalogue ranges from -40 °C to +120 °C / -40 °F to +248 °F in accordance with DIN 3859-1 (Technical Specification for Tube Fittings).

Please observe that the permissible operating temperature may differ for tube fittings and other components that use elastomer seals.

Pressure Reduction Factors

Pressure reduction factors (in percent) have to be considered when intending to use the components at operating temperatures exceeding +120 °C / +248 °F.

Calculation Example

Component — Straight Fitting FI-G-10S-W3-MS made of Steel with a nominal pressure (PN) rating of 800 bar / 11600 PSI

Temperature +175 °C / +347 °F

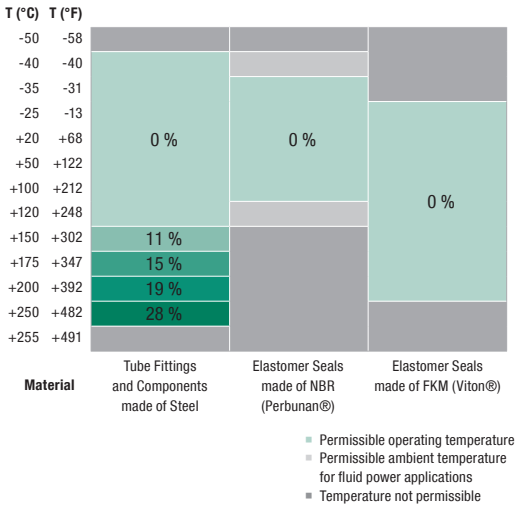
Reduction Factor 15 %

Reduced Nominal Pressure $PN = \frac{800\ bar}{100\ \%} \times (100\ \% - 15\ \%) = 680\ bar$

$PN = \frac{11600\ PSI}{100\ \%} \times (100\ \% - 15\ \%) = 9860\ PSI$

Please note:

When selecting tubes and other components for your system, any additional potential pressure reduction factors stated by the manufacturers / suppliers have to be considered.



Pressure Reduction Factors

Selection Criteria for Tube

STAUFF recommends to use seamless, cold-drawn and normalized precision steel tubes as specified in DIN EN 10305-4, material E235+N (material number 1.0308+N, formerly St37.4) or material E355 (material number 1.0580, formerly St52.4).

In order to avoid misdeliveries, the tubes have to be ordered from the supplier by specifying the exact outer and inner diameter.

Tube materials and tolerances differing from these recommendations may lead to system faults or leakages and may even result in total breakdowns.

Unless otherwise stated, the pressure / temperature ratings, as well as all other operating conditions indicated in this product catalogue, do not refer to the actual tube. Specifications made by the respective tube manufacturers / suppliers have to be considered.

Calculated Design / Burst Pressures for Tube (bar)

Tube OD	Tube ID	Tube Wall	STAUFF Nominal pressure		Calculated Design Pressure			Calculated Design Pressure			Calculated Burst Pressure		
(mm)	(mm)	(mm)	(bar)		(bar) in accordance with DIN 2413 - Load Case I (predominantly static loads, up to +120 °C)			(bar) in accordance with DIN 2413 - Load Case III (dynamic / pulsating loads, up to +120 °C)			(bar) in accordance with ISO 10763		
D1	D2	S	Light Series	Heavy Series	Material E235+N	Material E355	Material 1.4571	Material E235+N	Material E355	Material 1.4571	Material E235+N	Material E355	Material 1.4571
6	4.5	0.75	500	800	338	491	368	303	310	256	1116	1525	1346
6	4	1	500	800	450	655	490	391	400	330	1573	2149	1898
6	3	1.5	500	800	675	983	735	551	563	465	2689	3674	3244
6*	2	2	500	800	900	1310	980	692	708	585	4263	5823	5142
6*	1.5	2.25	500	800	1013	1474	1103	757	774	639	5379	7347	6488
8	6	1	500	800	338	491	368	303	310	256	1116	1525	1346
8	5	1.5	500	800	506	737	551	433	443	366	1824	2491	2200
8	4	2	500	800	675	983	735	551	563	465	2689	3674	3244
8*	3	2.5	500	800	844	1228	919	659	673	556	3806	5198	4590
10	8	1	500	800	270	393	294	248	253	209	866	1183	1044
10	7	1.5	500	800	405	590	441	357	365	301	1384	1890	1669
10	6	2	500	800	540	786	588	458	468	386	1982	2707	2391
10	5	2.5	500	800	675	983	735	551	563	465	2689	3674	3244
10*	4	3	500	800	810	1179	882	638	652	539	3555	4856	4288
12	10	1	400	630	225	328	245	209	214	177	707	966	853
12	9	1.5	400	630	338	491	368	303	310	256	1116	1525	1346
12	8	2	400	630	450	655	490	391	400	330	1573	2149	1898
12	7	2.5	400	630	563	819	613	474	484	400	2091	2857	2523
12	6	3	400	630	675	983	735	551	563	465	2689	3674	3244
12*	5	3.5	400	630	823	1180	858	624	638	527	3397	4640	4097
12*	4	4	400	630	940	1348	980	692	708	585	4263	5823	5142
14	12	1		630	193	281	210	181	185	153	598	817	721
14	11	1.5		630	289	421	315	264	270	223	936	1278	1129
14	10	2		630	386	561	420	342	349	289	1306	1783	1575
14	9	2.5		630	482	702	525	415	425	351	1714	2342	2068
14	8	3		630	579	842	30	485	496	410	2171	2966	2619
14	7	3.5		630	705	1011	735	551	563	465	2689	3674	3244
15	13	1	400		180	262	196	170	174	143	555	758	670
15	12	1.5	400		270	393	294	248	253	209	866	1183	1044
15	11	2	400		360	524	392	321	329	271	1203	1644	1452
15	10	2.5	400		450	655	490	391	400	330	1573	2149	1898
15	9	3	400		540	786	588	458	468	386	1982	2707	2391
16	14	1		630	169	246	184	160	163	135	518	708	625
16	13	1.5		630	253	368	276	233	239	197	806	1100	972
16	12	2		630	338	491	368	303	310	256	1116	1525	1346
16	11	2.5		630	422	614	459	370	378	312	1454	1986	1754
16	10	3		630	506	737	551	433	443	366	1824	2491	2200
16	8	4		630	705	1011	735	551	563	465	2689	3674	3244
18	16	1	400		150	218	163	143	146	121	457	624	551
18	15	1.5	400		225	328	245	209	214	177	707	966	853
18	14	2	400		300	437	327	273	279	230	975	1332	1176
18	13	2.5	400		375	546	408	333	341	281	1263	1725	1523
18	12	3	400		450	655	490	391	400	330	1573	2149	1898
18	10	4	400		627	899	653	500	511	422	2281	3115	2751
20	17	1.5		420	203	295	221	190	194	160	631	861	761
20	16	2		420	270	393	294	248	253	209	866	1183	1044
20	15	2.5		420	338	491	368	303	310	256	1116	1525	1346
20	14	3		420	405	590	441	357	365	301	1384	1890	1669
20	13	3.5		420	494	708	515	408	417	345	1671	2283	2016
20	12	4		420	564	809	588	458	468	386	1982	2707	2391
20	10	5		420	705	1011	735	551	563	465	2689	3674	3244

Load case I, according to DIN 2413, describes predominantly static loads at temperatures not exceeding +120 °C.
Load case III, according to DIN 2413, describes dynamic / pulsating loads at temperatures not exceeding +120 °C.

For some sizes of thin-walled steel tube, support sleeves are highly recommended and in some case generally required.
Refer to Catalogue 2 - STAUFF Connect for selection charts and detailed assembly instructions.

DIN 2413 does not apply to tube sizes marked by * (where D1/D2 > 2).

For Calculated Design / Burst Pressures for Tube (PSI), refer to Catalogue 2 - STAUFF Connect.

Calculated Design / Burst Pressures for Tube (bar)

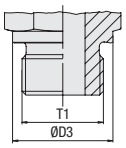
Tube OD	Tube ID	Tube Wall	STAUFF Nominal pressure		Calculated Design Pressure			Calculated Design Pressure			Calculated Burst Pressure		
(mm)	(mm)	(mm)	(bar)		(bar) in accordance with DIN 2413 - Load Case I (predominantly static loads, up to +120 °C)			(bar) in accordance with DIN 2413 - Load Case III (dynamic / pulsating loads, up to +120 °C)			(bar) in accordance with ISO 10763		
D1	D2	S	Light Series	Heavy Series	Material E235+N	Material E355	Material 1.4571	Material E235+N	Material E355	Material 1.4571	Material E235+N	Material E355	Material 1.4571
22	20	1	250		123	179	134	118	121	100	370	505	446
22	19	1.5	250		184	268	200	173	177	146	569	777	686
22	18	2	250		245	357	267	227	232	192	779	1064	939
22	17	2.5	250		307	447	334	278	285	235	1000	1366	1207
22	16	3	250		368	536	401	328	335	277	1236	1688	1490
22	15	3.5	250		449	643	468	376	384	317	1486	2030	1792
22	14	4	250		513	735	535	422	431	356	1754	2396	2115
25	22	1.5		420	162	236	176	154	157	130	496	678	598
25	21	2		420	216	314	235	201	206	170	676	924	816
25	20	2.5		420	270	393	294	248	253	209	866	1183	1044
25	19	3		420	324	472	353	292	299	247	1065	1455	1284
25	18	3.5		420	395	566	412	336	343	283	1275	1741	1537
25	17	4		420	451	647	470	378	386	319	1496	2044	1805
25	16	4.5		420	508	728	529	418	428	353	1732	2365	2089
25	15	5		420	564	809	588	458	468	386	1982	2707	2391
28	25	1.5	250		145	211	158	138	141	117	440	601	530
28	24	2	250		193	281	210	181	185	153	598	817	721
28	23	2.5	250		241	351	263	223	228	188	763	1043	921
28	22	3	250		289	421	315	264	270	223	936	1278	1129
28	21	3.5	250		353	506	368	303	310	256	1116	1525	1346
28	20	4	250		403	578	420	342	349	289	1306	1783	1575
30	26	2		420	180	262	196	170	174	143	555	758	670
30	25	2.5		420	225	328	245	209	214	177	707	966	853
30	24	3		420	270	393	294	248	253	209	866	1183	1044
30	23	3.5		420	329	472	343	285	291	241	1031	1408	1243
30	22	4		420	376	539	392	321	329	271	1203	1644	1452
30	20	5		420	470	674	490	391	400	330	1573	2149	1898
30	18	6		420	564	809	588	458	468	386	1982	2707	2391
35	32	1.5	250		121	173	126	111	114	94	348	475	419
35	31	2	250		161	231	168	147	150	124	471	643	568
35	30	2.5	250		201	289	210	181	185	153	598	817	721
35	29	3	250		242	347	252	215	220	181	730	997	880
35	27	4	250		322	462	336	280	286	236	1007	1375	1215
35	25	5	250		403	578	420	342	349	289	1306	1783	1575
38	34	2		420	148	213	155	136	139	115	432	589	521
38	33	2.5		420	186	266	193	168	171	142	547	748	660
38	32	3		420	223	319	232	199	203	168	667	911	804
38	30	4		420	297	426	309	260	265	219	917	1253	1106
38	28	5		420	371	532	387	318	325	268	1185	1619	1429
38	26	6		420	445	639	464	373	382	315	1472	2011	1776
38	24	7		420	519	745	542	427	436	360	1783	2436	2151
38	22	8		420	594	851	619	478	488	404	2121	2897	2558
42	39	1.5	250		101	144	105	93	96	79	288	393	347
42	38	2	250		134	193	140	123	126	104	388	530	468
42	37	2.5	250		168	241	175	153	156	129	492	672	593
42	36	3	250		201	289	210	181	185	153	598	817	721
42	34	4	250		269	385	280	237	242	200	820	1120	989
42	32	5	250		336	481	350	290	297	245		1441	1273

All figures are based on calculations carried out in accordance with DIN 2413 and ISO 10763.

They are intended to assist the user in the pre-selection of the correct tube only and do not discharge the obligation to carry out own calculations in consideration of the actual conditions of use.

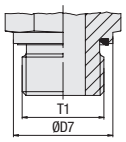
For Calculated Design / Burst Pressures for Tube (PSI), refer to Catalogue 2 - STAUFF Connect.

Port Dimensions for Fittings with Male Threaded Stud



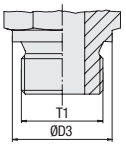
Metallic Sealing Edge

Metric Parallel Thread
DIN 3852-1 (Form B) / ISO 9974-3 (Type B)
Whitworth Parallel Pipe Thread
DIN 3852-2 (Form B) / ISO 1179-4 (Type B)



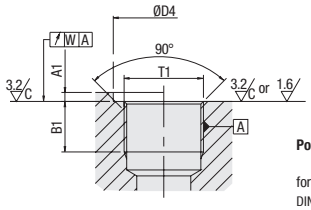
Profile Sealing Ring

Metric Parallel Thread
ISO 9974-2 (Type E)
Whitworth Parallel Pipe Thread
ISO 1179-2 (Type E)



Sealing Surface for Gasket (DIN 7603)

Metric Parallel Thread
DIN 3852-1 (Form A)
Whitworth Parallel Pipe Thread
DIN 3852-2 (Form A)



Port (Parallel Thread)

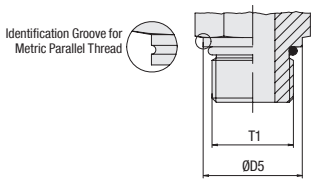
for Male Studs with Metric Parallel Thread
DIN 3852-1 (Form X) / ISO 9974-1
for Male Studs with Whitworth Parallel Pipe Thread
DIN 3852-2 (Form X) / ISO 1179-1

Dimensions
(mm/in)

Thread T1 [1]	D3	D7 $_{-0.2}$	D4 small $_{min}$	D4 wide $_{min}$	A1 $_{max}$	B1 $_{min}$	W
M8 x 1	12		13	17	1	8	0.1
	.47		.51	.67	.04	.31	.0039
M10 x 1	14	13.9	15	20	1	8	0.1
	.55	.55	.59	.79	.04	.31	.0039
M12 x 1.5	17	16.9	18	25	1.5	12	0.1
	.67	.67	.71	.98	.06	.47	.0039
M14 x 1.5	19	18.9	20	25	1.5	12	0.1
	.75	.74	.79	.98	.06	.47	.0039
M16 x 1.5	21	21.9	23	28	1.5	12	0.1
	.83	.86	.91	1.10	.06	.47	.0039
M18 x 1.5	23	23.9	25	30	2	12	0.1
	.91	.94	.98	1.18	.08	.47	.0039
M20 x 1.5	24	25.9	27	34	2	14	0.1
	.94	1.02	1.06	1.34	.08	.55	.0039
M22 x 1.5	27	26.9	28	34	2.5	14	0.1
	1.06	1.06	1.10	1.34	.10	.55	.0039
M26 x 1.5	31	31.9	33	42	2.5	16	0.2
	1.22	1.26	1.30	1.65	.10	.63	.0079
M27 x 2	32	31.9	33	42	2.5	16	0.2
	1.26	1.26	1.30	1.65	.10	.63	.0079
M33 x 2	39	39.9	41	47	2.5	18	0.2
	1.54	1.57	1.61	1.85	.10	.71	.0079
M42 x 2	49	49.9	51	58	2.5	20	0.2
	1.93	1.96	2.01	2.28	.10	.79	.0079
M48 x 2	55	54.9	56	65	2.5	22	0.2
	2.17	2.16	2.20	2.56	.10	.87	.0079
G 1/8 A	14	13.9	15	19	1	8.5	0.1
	.55	.55	.59	.75	.04	.33	.0039
G 1/4 A	18	18.9	20	25	1.5	12.5	0.1
	.71	.74	.79	.98	.06	.49	.0039
G 3/8 A	22	21.9	23	28	2	12.5	0.1
	.87	.86	.91	1.10	.08	.49	.0039
G 1/2 A	26	26.9	28	34	2.5	15	0.1
	1.02	1.06	1.10	1.34	.10	.59	.0039
G 3/4 A	32	31.9	33	42	2.5	16.5	0.2
	1.26	1.26	1.30	1.65	.10	.65	.0079
G 1 A	39	39.9	41	47	2.5	19	0.2
	1.54	1.57	1.61	1.85	.10	.75	.0079
G 1-1/4 A	49	49.9	51	58	2.5	21.1	0.2
	1.93	1.96	2.01	2.28	.10	.83	.0079
G 1-1/2 A	55	54.9	56	65	2.5	22.5	0.2
	2.17	2.16	2.20	2.56	.10	.89	.0079

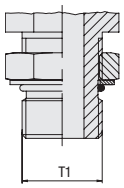
[1] Appendix A in the thread dimension column does not apply to (female) threaded ports.

Port Dimensions for Fittings with Male Threaded Stud



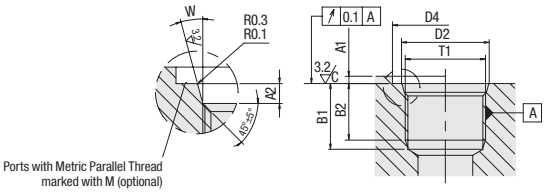
O-Ring without Retaining Ring (Non-Adjustable)

Metric Parallel Thread
ISO 6149-2 /-3
UN/UNF Thread
ISO 11926-2/-3



O-Ring without Retaining Ring (Adjustable)

Metric Parallel Thread
ISO 6149-2 /-3
UN/UNF Thread
ISO 11926-2/-3



Port (Parallel Thread)

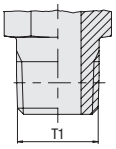
for Male Studs with Metric Parallel Thread
ISO 6149-1
for Male Studs with UN/UNF Thread
ISO 11926-1

Dimensions
(mm/in)

Thread T1 [1]	D5	D4 small $_{min}$	D4 wide $_{min}$	D2 $_{+0.1\ (UN/UNF:\ \pm0.05)}$	A1 $_{max}$	A2 $_{+0.4}$	B1 $_{min}$	B2 $_{min}$	W $_{\pm1°}$
M8 x 1	11.8	14	17	9.1	1	1.6	11.5	10	12
	.46	.55	.67	.36	.04	.06	.45	.39	.47
M10 x 1	13.8	16	20	11.1	1	1.6	11.5	10	12
	.54	.63	.79	.44	.04	.06	.45	.39	.47
M12 x 1.5	16.8	19	23	13.8	1.5	2.4	14	11.5	15
	.66	.75	.91	.54	.06	.09	.55	.45	.59
M14 x 1.5	18.8	21	25	15.8	1.5	2.4	14	11.5	15
	.74	.83	.98	.62	.06	.09	.55	.45	.59
M16 x 1.5	21.8	24	28	17.8	1.5	2.4	15.5	13	15
	.86	.94	1.10	.70	.06	.09	.61	.51	.59
M18 x 1.5	23.8	26	30	19.8	2	2.4	17	14.5	15
	.94	1.02	1.18	.78	.08	.09	.67	.57	.59
M22 x 1.5	26.8	29	33	23.8	2	2.4	18	15.5	15
	1.06	1.14	1.30	.94	.08	.09	.71	.61	.59
M27 x 2	31.8	34	40	29.4	2	3.1	22	19	15
	1.25	1.34	1.57	1.16	.08	.12	.87	.75	.59
M33 x 2	40.8	43	49	35.4	2.5	3.1	22	19	15
	1.61	1.69	1.93	1.39	.10	.12	.87	.75	.59
M42 x 2	49.8	52	58	44.4	2.5	3.1	22.5	19.5	15
	1.96	2.05	2.28	1.75	.10	.12	.89	.77	.59
M48 x 2	54.8	57	63	50.4	2.5	3.1	25	22	15
	2.16	2.24	2.48	1.98	.10	.12	.98	.87	.59
7/16–20 UNF-2A	14.4	21		12.45	1.6	2.4	14	11.5	12
	.57	.83		.49	.06	.09	.55	.45	.47
1/2–20 UNF-2A	16	23		14.05	1.6	2.4	14	11.5	12
	.63	.91		.55	.06	.09	.55	.45	.47
9/16–18 UNF-2A	17.6	25		15.7	1.6	2.5	15.5	12.7	12
	.69	.98		.62	.06	.10	.61	.50	.47
3/4–16 UNF-2A	21.8	30		20.65	2.4	2.5	17.5	14.3	15
	.86	1.18		.81	.09	.10	.69	.56	.59
7/8–14 UNF-2A	25.5	34		24	2.4	2.5	20	16.7	15
	1.00	1.34		.94	.09	.10	.79	.66	.59
1-1/16–12 UN-2A	31.9	41		29.2	2.4	3.3	23	19	15
	1.26	1.61		1.15	.09	.13	.91	.75	.59
1-5/16–12 UN-2A	38.2	49		35.55	3.2	3.3	23	19	15
	1.50	1.93		1.40	.13	.13	.91	.75	.59
1-5/8–12 UN-2A	47.7	58		43.55	3.2	3.3	23	19	15
	1.88	2.28		1.71	.13	.13	.91	.75	.59
1-7/8–12 UN-2A	54.8	65		49.9	3.2	3.3	23	19	15
	2.16	2.56		1.96	.13	.13	.91	.75	.59

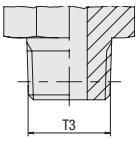
[1] Appendix -2B instead of -2A applies for (female) threaded ports.

Port Dimensions for Fittings with Male Threaded Stud



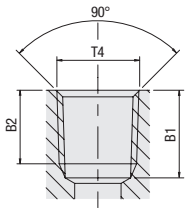
Taper Thread

National Pipe Thread (NPT)
ANSI/ASME B1.20.1-1983



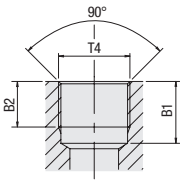
Taper Thread

Metric Taper Thread
DIN 3852-1 (Form C)
Whitworth Taper Pipe Thread
DIN 3852-2 (Form C)



Port (Taper Thread)

for Male Studs with National Pipe NPT Thread
ANSI/ASME B1.20.1-1983



Port (Parallel Thread)

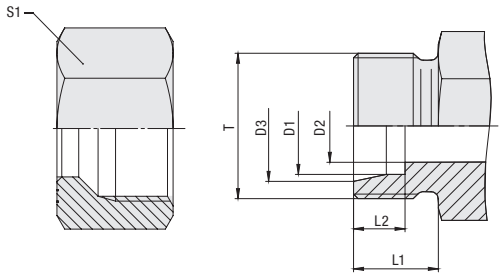
for Male Studs with Metric Taper Thread
DIN 3852-1 (Form Z)
for Male Studs with Whitworth Taper Pipe Thread
DIN 3852-2 (Form Z)

Dimensions
(mm/in)

Thread T1	Thread T3	Thread T4	B1 min	B2 min
1/8–27 NPT		1/8–27 NPT		6.9
				.27
1/4–18 NPT		1/4–18 NPT		10
				.39
3/8–18 NPT		3/8–18 NPT		10.3
				.41
1/2–14 NPT		1/2–14 NPT		13.6
				.54
3/4–14 NPT		3/4–14 NPT		14.1
				.56
1–11.5 NPT		1–11.5 NPT		16.8
				.66
1-1/4–11.5 NPT		1-1/4–11.5 NPT		17.3
				.68
1-1/2–11.5 NPT		1-1/2–11.5 NPT		17.3
				.68
	M8 x 1 keg.	M 8 x 1	10	5.5
			.39	.22
	M10 x 1 keg.	M 10 x 1	10	5.5
			.39	.22
	M12 x 1.5 keg.	M 12 x 1.5	13.5	8.5
			.53	.33
	M14 x 1.5 keg.	M 14 x 1.5	13.5	8.5
			.53	.33
	M16 x 1.5 keg.	M 16 x 1.5	13.5	8.5
			.53	.33
	M18 x 1.5 keg.	M 18 x 1.5	13.5	8.5
			.53	.33
	M20 x 1.5 keg.	M 20 x 1.5	15.5	10.5
			.61	.41
	M22 x 1.5 keg.	M 22 x 1.5	15.5	10.5
			.61	.41
	R 1/8 keg.	Rp 1/8	8.5	5.5
			.33	.22
	R 1/4 keg.	Rp 1/4	12.5	8.5
			.49	.33
	R 3/8 keg.	Rp 3/8	12.5	8.5
			.49	.33
	R 1/2 keg.	Rp 1/2	16.5	10.5
			.65	.41

Suitable liquid / plastic sealant required to achieve leak-tightness.

Dimensions of the 24° Conical Bore / Union Nut



Series	Tube OD (mm/in) D1	Dimensions (mm/in) Thread T	D2	D3	L1	L2	S1
LL	4	M8 x 1	3	5	8	4	10
	.16		.12	.20	.31	.16	.39
	6	M10 x 1	4.5	7.5	8	5.5	12
	.24		.18	.30	.31	.22	.47
	8	M12 x 1	6	9.5	9	5.5	14
	.31		.24	.37	.35	.22	.55
L	6	M12 x 1.5	4	8.1	10	7	14
	.24		.16	.32	.39	.28	.55
	8	M14 x 1.5	6	10.1	10	7	17
	.31		.24	.40	.39	.28	.67
	10	M16 x 1.5	8	12.3	11	7	19
	.39		.31	.48	.43	.28	.75
	12	M18 x 1.5	10	14.3	11	7	22
	.47		.39	.56	.43	.28	.87
	15	M22 x 1.5	12	17.3	12	7	27
	.59		.47	.68	.47	.28	1.06
	18	M26 x 1.5	15	20.3	12	7.5	32
	.71		.59	.80	.47	.30	1.26
	22	M30 x 2	19	24.3	14	7.5	36
	.87		.75	.96	.55	.30	1.42
	28	M36 x 2	24	30.3	14	7.5	41
	1.10		.94	1.19	.55	.30	1.61
	35	M45 x 2	30	38	16	10.5	50
	1.38		1.18	1.50	.63	.41	1.97
	42	M52 x 2	36	45	16	11	60
	1.65		1.42	1.77	.63	.43	2.36
S	6	M14 x 1.5	4	8.1	12	7	17
	.24		.16	.32	.47	.28	.67
	8	M16 x 1.5	5	10.1	12	7	19
	.31		.20	.40	.47	.28	.75
	10	M18 x 1.5	7	12.3	12	7.5	22
	.39		.28	.48	.47	.30	.87
	12	M20 x 1.5	8	14.3	12	7.5	24
	.47		.31	.56	.47	.30	.94
	14 [1]	M22 x 1.5	10	16.3	14	8	27
	.55 [1]		.39	.64	.55	.31	1.06
	16	M24 x 1.5	12	18.3	14	8.5	30
	.63		.47	.72	.55	.33	1.18
	20	M30 x 2	16	22.9	16	10.5	36
	.79		.63	.90	.63	.41	1.42
	25	M36 x 2	20	27.9	18	12	46
	.98		.79	1.10	.71	.47	1.81
	30	M42 x 2	25	33	20	13.5	50
	1.18		.98	1.30	.79	.53	1.97
	38	M52 x 2	32	41	22	16	60
	1.50		1.26	1.61	.87	.63	2.36

[1] Tube size is no longer covered by the applicable standard.

Standard Threads and Widths Across Flats for Fittings with Male Threaded Stud

Series	Tube OD (mm) D1	Male Stud Metric Parallel Thread Thread Size	Male Stud Metric Parallel Thread Width Across Flats	Male Stud Whitworth Parallel Pipe Thread Thread Size	Male Stud Whitworth Parallel Pipe Thread Width Across Flats	Union Nut Metric Parallel Thread Thread Size	Union Nut Metric Parallel Thread Width Across Flats
L	6	M10 x 1	14	G 1/8	14	M12 x 1.5	14
	.24		.55		.55		.55
	8	M12 x 1.5	17	G 1/4	19	M14 x 1.5	17
	.31		.67		.75		.67
	10	M14 x 1.5	19	G 1/4	19	M16 x 1.5	19
	.39		.75		.75		.75
	12	M16 x 1.5	22	G 3/8	22	M18 x 1.5	22
	.47		.87		.87		.87
	15	M18 x 1.5	24	G 1/2	27	M22 x 1.5	27
	.59		.94		1.06		1.06
	18	M22 x 1.5	27	G 1/2	27	M26 x 1.5	32
	.71		1.06		1.06		1.26
	22	M26 x 1.5 [2]	32	G 3/4	32	M30 x 2	36
	.87		1.26		1.26		1.42
	28	M33 x 2	41	G 1	41	M36 x 2	41
	1.10		1.61		1.61		1.61
	35	M42 x 2	50	G 1-1/4	50	M45 x 2	50
	1.38		1.97		1.97		1.97
	42	M48 x 2	55	G 1-1/2	55	M52 x 2	60
	1.65		2.17		2.17		2.36
S	6	M12 x 1.5	17	G 1/4	19	M14 x 1.5	17
	.24		.67		.75		.67
	8	M14 x 1.5	19	G 1/4	19	M16 x 1.5	19
	.31		.75		.75		.75
	10	M16 x 1.5	22	G 3/8	22	M18 x 1.5	22
	.39		.87		.87		.87
	12	M18 x 1.5	24	G 3/8	22	M20 x 1.5	24
	.47		.94		.87		.94
	14 [1]	M20 x 1.5	27	G 1/2	27	M22 x 1.5	27
	.55 [1]		1.06		1.06		1.06
	16	M22 x 1.5	27	G 1/2	27	M24 x 1.5	30
	.63		1.06		1.06		1.18
	20	M27 x 2	32	G 3/4	32	M30 x 2	36
	.79		1.26		1.26		1.42
	25	M33 x 2	41	G 1	41	M36 x 2	46
	.98		1.61		1.61		1.81
	30	M42 x 2	50	G 1-1/4	50	M42 x 2	50
	1.18		1.97		1.97		1.97
	38	M48 x 2	55	G 1-1/2	55	M52 x 2	60
	1.50		2.17		2.17		2.36

[1] Tube size is no longer covered by the applicable standard.
[2] M27 x 2 according to ISO 6149.

Certificates and Approvals

Our in-house laboratories carry out constant checks and tests in line with international standards on all STAUFF products. Certified in accordance with ISO 9001, ISO 14001, OHSAS 18001 and ISO 50001, the STAUFF quality assurance system continually strives for perfection.

The QA system encompasses both product quality, which is driven by customer requirements, and all related services. The QA focuses on the expectations of all partners involved. Quality management at STAUFF is a dynamic process that is checked on a daily basis to ensure that continuous improvements are made.

STAUFF is tuned in to the needs of the global market and this, together with the benefit of an experienced and highly motivated team of employees and the use of innovative technology, enables the company to offer a sophisticated product range which will satisfy the requirements of each and every customer worldwide.

The most common STAUFF Connect Tube Fittings have received certifications and approvals from various international institutes, organisations and authorities who have independently confirmed the quality and performance of the products:

- Bureau Veritas
- DNV GL
- DVGW
- Lloyd's Register

Please contact STAUFF for further approvals.

Please note:

All named approvals and certificates refer to certain products and designs, as well as to the application.

The validity of the approvals will be continuously extended at the approval offices after expiry. Details, such as the period of validity, can be found in the respective certificates.

Please find a current version of the approvals and certificates at: **www.stauff.com/certificates**

Stainless Steel - Connecting Parts	C2 - C4
Stainless Steel - Male Stud Fittings	C5 - C7
Stainless Steel - Tube Fittings / Unions	C8 - C11
Stainless Steel - Bulkhead Fittings	C12 - C14
Stainless Steel - Weld Fittings	C15 - C16
Stainless Steel - Female Stud / Gauge Fittings	C17 - C18
Stainless Steel - Fittings with 24° Taper / O-Ring (DKO)	C19 - C22
Stainless Steel - Spare Parts / Accessories	C23 - C27

Single / Double Edge Cutting Ring
FI-S / FI-DS — C4

STAUFF Form Adaptor Ring
FI-AR — C4

Union Nut
FI-M — C4

Order Codes

FI	-	M	-	06	L	-	W5	E
①		②		③	④		⑥	⑦

① Series

Fittings	**FI**

② Type

Single-Edge Cutting Ring	**S**
Double-Edge Cutting Ring	**DS**
STAUFF Form Adaptor Ring	**AR**
Union Nut	**M**

③ Tube O.D.

Outside Tube Diameter in mm according to dash sizing.
Reducers are separated by a slash (e.g. 08OD/06OD).
For FI-VH include Wall Thickness (e.g. 10x1.5)

④ Tube Series

Extra Light	**LL**
Light & Heavy (suits both)	**L/S**
Light	**L**
Heavy	**S**

⑤ Sealing Material

No Sealing Material	**(None)**
FKM (Viton®)	**V**

⑥ Surface Material

Stainless Steel	**W5**

⑦ Additional Information

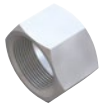
STAUFF internal information only	**Letter indicated**

Connecting Parts

Cutting Ring
Type FI-S (Single Edge) ▪ Series LL
Type FI-DS (Double Edge) ▪ Series L / S

Item No.	Designation	Series	Price
2011029780	FI-S-04LL-W5E	LL	5.10
2011029782	FI-S-06LL-W5E	LL	6.25
2011029783	FI-S-08LL-W5E	LL	7.80
2011618843	FI-DS-06L/S-W5E	L/S	3.15
2011618844	FI-DS-08L/S-W5E	L/S	3.75
2011618845	FI-DS-10L/S-W5E	L/S	5.15
2011618846	FI-DS-12L/S-W5E	L/S	5.90
2011618847	FI-DS-15L-W5E	L	7.35
2011618848	FI-DS-18L-W5E	L	7.90
2011618849	FI-DS-22L-W5E	L	8.90
2011618850	FI-DS-28L-W5E	L	13.55
2011618851	FI-DS-35L-W5E	L	19.80
2011618852	FI-DS-42L-W5E	L	22.55
2011618853	FI-DS-14S-W5E	S	7.15
2011618854	FI-DS-16S-W5E	S	7.40
2011618855	FI-DS-20S-W5E	S	8.50
2011618856	FI-DS-25S-W5E	S	13.15
2011618857	FI-DS-30S-W5E	S	18.95
2011618858	FI-DS-38S-W5E	S	20.20

Union Nut
Type FI-M ▪ Series LL / L / S



Item No.	Designation	Thread Size	Series	Price
2011027923	FI-M-04LL-W5E	M8 x 1	LL	4.15
2011027925	FI-M-06LL-W5E	M10 x 1	LL	4.65
2011027926	FI-M-08LL-W5E	M12 x 1	LL	7.60
2011027927	FI-M-06L-W5E	M12 x 1.5	L	3.95
2011027928	FI-M-08L-W5E	M14 x 1.5	L	4.60
2011027929	FI-M-10L-W5E	M16 x 1.5	L	5.05
2011027930	FI-M-12L-W5E	M18 x 1.5	L	6.05
2011027931	FI-M-15L-W5E	M22 x 1.5	L	8.40
2011027932	FI-M-18L-W5E	M26 x 1.5	L	16.05
2011027933	FI-M-22L-W5E	M30 x 2	L	19.40
2011027934	FI-M-28L-W5E	M36 x 2	L	28.60
2011027935	FI-M-35L-W5E	M45 x 2	L	42.20
2011027936	FI-M-42L-W5E	M52 x 2	L	57.60
2011028649	FI-M-06S-W5E	M14 x 1.5	S	4.95
2011027937	FI-M-08S-W5E	M16 x 1.5	S	5.50
2011027938	FI-M-10S-W5E	M18 x 1.5	S	6.50
2011027939	FI-M-12S-W5E	M20 x 1.5	S	7.40
2011027940	FI-M-14S-W5E	M22 x 1.5	S	10.05
2011027941	FI-M-16S-W5E	M24 x 1.5	S	14.95
2011027942	FI-M-20S-W5E	M30 x 2	S	20.50
2011027943	FI-M-25S-W5E	M36 x 2	S	42.10
2011027944	FI-M-30S-W5E	M45 x 2	S	52.95
2011027945	FI-M-38S-W5E	M52 x 2	S	83.30

STAUFF Form Adaptor Ring
Type FI-AR ▪ Series L / S

Item No.	Designation	Series	Price
6030012742	FI-AR-06L/S-V-W5	L/S	14.20
6030012743	FI-AR-08L/S-V-W5	L/S	14.70
6030012744	FI-AR-10L/S-V-W5	L/S	16.30
6030012745	FI-AR-12L/S-V-W5	L/S	15.80
6030012746	FI-AR-15L-V-W5	L	17.65
6030012747	FI-AR-18L-V-W5	L	20.55
6030012748	FI-AR-22L-V-W5	L	19.15
6030012749	FI-AR-28L-V-W5	L	24.20
6030012750	FI-AR-35L-V-W5	L	31.65
6030012751	FI-AR-42L-V-W5	L	36.40
6030012752	FI-AR-16S-V-W5	S	19.60
6030012753	FI-AR-20S-V-W5	S	20.60
6030012754	FI-AR-25S-V-W5	S	24.30
6030012755	FI-AR-30S-V-W5	S	26.85
6030012756	FI-AR-38S-V-W5	S	32.00

Used for STAUFF Form system, refer to Catalogue 2 - STAUFF Connect

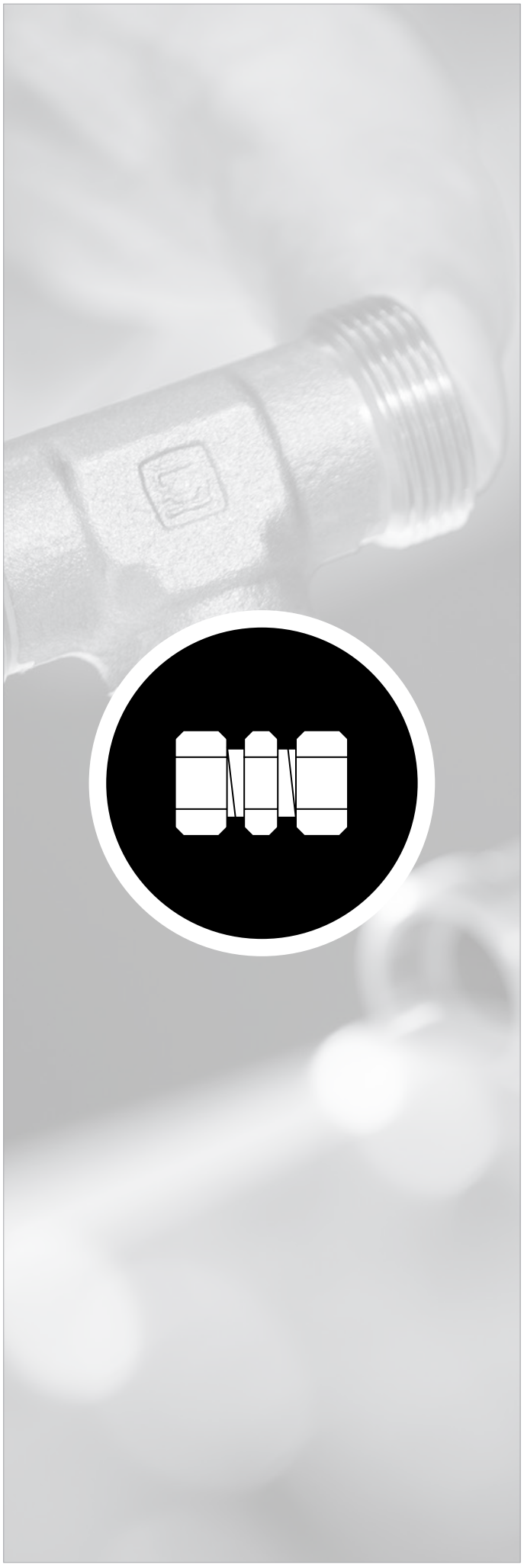
The following Connecting Parts are also available on request

24°/37° Flared Cone Adaptor with O-Rings
FI-BA
Refer to Catalogue 2 - STAUFF Connect

Support Sleeve for 37° Flared Tube Fittings
FI-BH
Refer to Catalogue 2 - STAUFF Connect

Union Nut for 37° Flared Tube Fittings
FI-BM
Refer to Catalogue 2 - STAUFF Connect

37° Flared Tube Fitting Set
FI-AB
Refer to Catalogue 2 - STAUFF Connect



	Straight Male Stud Fitting FI-GE	**C6 - C7**
	Whitworth Parallel Pipe Thread (BSPP) / Metallic Sealing Edge FI-GE-...-R	**C6**
	Whitworth Taper Pipe Thread (BSPT) FI-GE-...-Rk	**C6**
	Whitworth Parallel Pipe Thread (BSPP) / Profile Sealing Ring FI-GE-...-R-WD	**C7**
	NPT Thread FI-GE-...-N	**C7**
	Male Stud Elbow FI-WE	**C7**
	Whitworth Taper Pipe Thread (BSPT) FI-WE-...-Rk	**C7**

Order Codes

FI	-	GE	-	06	L	R	-	WD	-	V	-	W5	E	-	MS
①		②		③	④	⑤		⑥		⑦		⑧	⑨		⑩

① Series

Fittings	**FI**

② Type

Straight Male Stud Fitting	**GE**
Male Stud Elbow	**WE**

③ Tube O.D.

Outside Tube Diameter in mm according to dash sizing.
Reducers are separated by a slash (e.g. 12/10L)

④ Tube Series

Extra Light	**LL**
Light	**L**
Heavy	**S**

⑤ Thread Type / Size

Whitworth Parallel Pipe Thread (BSPP) (Special sizes to be indicated, e.g. R1/4)	**R**
Metric Parallel Pipe Thread (Special sizes to be indicated, e.g. M14x1.5)	**M**
Whitworth Taper Pipe Thread (BSPT) (Special sizes to be indicated, e.g. R1/4k)	**Rk**
Metric Taper Pipe Thread (Special sizes to be indicated, e.g. M14x1.5k)	**Mk**
UNF/UN (All sizes to be indicated, e.g. 3/8N)	**N**
NPT (NPTF) (All sizes to be indicated, e.g. 7/16U)	**U**

⑥ Sealing Type

Standard seal type, including: Metallic Sealing Edge for thread types R / M O-Ring for thread type U Tapered Thread for thread types Rk / Mk / N	**(None)**
Elastomeric seal	**WD**
O-Ring	**OR**
Sealing face (60°)	**DF**

⑦ Sealing Material

No Sealing Material	**(None)**
FKM (Viton®)	**V**

⑧ Surface Material

Stainless Steel	**W5**

⑨ Additional Information

STAUFF internal information only	**Letter indicated**

⑩ Assembling

Body Only	**(None)**
Assembled with Cutting Ring and Union Nut	**MS**

Straight Male Stud Fittings

Straight Male Stud Fitting
BSPP Thread
Type FI-GE-...-R ▪ Series L / S

Item No.	Designation	Stud Size	Price
2011620004	FI-GE-06LR-W5E-MS	1/8	22.00
2011620140	FI-GE-06LR1/4-W5E-MS	1/4	18.40
2011620005	FI-GE-08LR-W5E-MS	1/4	13.50
2011620174	FI-GE-08LR3/8-W5E-MS	3/8	21.20
2011620006	FI-GE-10LR-W5E-MS	1/4	15.20
2011620003	FI-GE-10LR3/8-W5E-MS	3/8	25.75
2011620230	FI-GE-10LR1/2-W5E-MS	1/2	28.70
2011620198	FI-GE-12LR1/4-W5E-MS	1/4	23.40
2011620007	FI-GE-12LR-W5E-MS	3/8	18.40
2011620148	FI-GE-12LR1/2-W5E-MS	1/2	29.90
2013031866	FI-GE-15LR1/4-W5E-MS	1/4	38.65
2011620191	FI-GE-15LR3/8-W5E-MS	3/8	29.25
2011620008	FI-GE-15LR-W5E-MS	1/2	26.75
2011620787	FI-GE-18LR3/8-W5E-MS	3/8	38.30
2011620009	FI-GE-18LR-W5E-MS	1/2	34.65
2011620471	FI-GE-18LR3/4-W5E-MS	3/4	50.95
6100033756	FI-GE-22LR3/8-W5E-MS	3/8	69.95
2011620469	FI-GE-22LR1/2-W5E-MS	1/2	51.90
2011620010	FI-GE-22LR-W5E-MS	3/4	46.60
2011620470	FI-GE-22LR1-W5E-MS	1	68.65
2011620011	FI-GE-28LR-W5E-MS	1	74.70
2011620012	FI-GE-35LR-W5E-MS	1-1/4	101.30
2011620013	FI-GE-42LR-W5E-MS	1-1/2	141.30
2011620014	FI-GE-06SR-W5E-MS	1/4	21.80
2011620015	FI-GE-08SR-W5E-MS	1/4	20.00
2011620811	FI-GE-08SR3/8-W5E-MS	3/8	30.40
2011620016	FI-GE-10SR-W5E-MS	3/8	22.45
2011620017	FI-GE-12SR-W5E-MS	3/8	28.35
2011620120	FI-GE-12SR1/2-W5E-MS	1/2	34.40
2011621512	FI-GE-14SR-W5E-MS	1/2	42.45
2011620018	FI-GE-16SR-W5E-MS	1/2	38.35
2011620019	FI-GE-20SR-W5E-MS	3/4	60.40
2011620020	FI-GE-25SR-W5E-MS	1	95.30
2011620021	FI-GE-30SR-W5E-MS	1-1/4	138.90
2011620022	FI-GE-38SR-W5E-MS	1-1/2	174.85

Straight Male Stud Fitting
BSPT Thread
Type FI-GE-...-Rk ▪ Series L

Item No.	Designation	Stud Size	Series	Price
2011620428	FI-GE-06LRk-W5E-MS	1/8	L	23.45
2011620527	FI-GE-06LR1/4k-W5E-MS	1/4	L	18.95
2011620909	FI-GE-06LR3/8k-W5E-MS	3/8	L	26.10
2011620492	FI-GE-08LRk-W5E-MS	1/4	L	20.10
2011620539	FI-GE-08LR3/8k-W5E-MS	3/8	L	28.05
2011620884	FI-GE-08LR1/2k-W5E-MS	1/2	L	26.10
2011620131	FI-GE-10LRk-W5E-MS	1/4	L	22.25
2011620132	FI-GE-10LR3/8k-W5E-MS	3/8	L	24.40
2011620911	FI-GE-10LR1/2k-W5E-MS	1/2	L	37.50
2011620354	FI-GE-12LRk-W5E-MS	3/8	L	26.25
2011620553	FI-GE-12LR1/2k-W5E-MS	1/2	L	30.40
2011620357	FI-GE-15LRk-W5E-MS	1/2	L	34.40
2011620429	FI-GE-18LRk-W5E-MS	1/2	L	45.40

Straight Male Stud Fittings

Straight Male Stud Fitting
BSPP Thread with Profile Sealing Ring (FKM)
Type FI-GE-...-R-WD ▪ Series L / S

Item No.	Designation	Stud Size	Series	Price
2011620444	FI-GE-06LR-WD-V-W5E-MS	1/8	L	20.20
2011620754	FI-GE-06LR1/4-WD-V-W5E-MS	1/4	L	22.50
2013030340	FI-GE-06LR3/8-WD-V-W5E-MS	3/8	L	32.75
2013030339	FI-GE-06LR1/2-WD-V-W5E-MS	1/2	L	38.60
2011620509	FI-GE-08LR-WD-V-W5E-MS	1/4	L	20.65
2011620907	FI-GE-08LR3/8-WD-V-W5E-MS	3/8	L	28.55
2011620972	FI-GE-08LR1/2-WD-V-W5E-MS	1/2	L	39.75
2011620973	FI-GE-10LR1/8-WD-V-W5E-MS	1/8	L	29.35
2011620437	FI-GE-10LR-WD-V-W5E-MS	1/4	L	21.95
2011620752	FI-GE-10LR3/8-WD-V-W5E-MS	3/8	L	31.80
2011620753	FI-GE-10LR1/2-WD-V-W5E-MS	1/2	L	35.75
6100092638	FI-GE-12LR1/8-WD-V-W5E-MS	1/8	L	33.30
2011620592	FI-GE-12LR1/4-WD-V-W5E-MS	1/4	L	30.40
2011620561	FI-GE-12LR-WD-V-W5E-MS	3/8	L	25.25
2011620761	FI-GE-12LR1/2-WD-V-W5E-MS	1/2	L	36.15
2011620852	FI-GE-15LR3/8-WD-V-W5E-MS	3/8	L	35.75
2011620460	FI-GE-15LR-WD-V-W5E-MS	1/2	L	33.85
2011620881	FI-GE-15LR3/4-WD-V-W5E-MS	3/4	L	51.40
2012030648	FI-GE-18LR3/8-WD-V-W5E-MS	3/8	L	57.95
2011620438	FI-GE-18LR-WD-V-W5E-MS	1/2	L	43.05
2011620439	FI-GE-22LR-WD-V-W5E-MS	3/4	L	54.05
6100062313	FI-GE-28LR1/2-WD-V-W5E-MS	1/2	L	115.80
2011620440	FI-GE-28LR-WD-V-W5E-MS	1	L	82.85
2011620981	FI-GE-28LR1-1/4-WD-V-W5E-MS	1-1/4	L	131.15
2011620558	FI-GE-35LR-WD-V-W5E-MS	1-1/4	L	128.80
2011620896	FI-GE-35LR1-1/2-WD-V-W5E-MS	1-1/2	L	164.35
2011620983	FI-GE-42LR1-WD-V-W5E-MS	1	L	230.00
2011620984	FI-GE-42LR1-1/4-WD-V-W5E-MS	1-1/4	L	225.95
2011620593	FI-GE-42LR-WD-V-W5E-MS	1-1/2	L	165.40
2011620445	FI-GE-06SR-WD-V-W5E-MS	1/4	S	31.45
2011620985	FI-GE-06SR3/8-WD-V-W5E-MS	3/8	S	33.25
2013030681	FI-GE-08SR1/8-WD-V-W5E-MS	1/8	S	29.50
2011620763	FI-GE-08SR-WD-V-W5E-MS	1/4	S	25.80
2011029767	FI-GE-08SR1/2-WD-V-W5E-MS	1/2	S	50.20
2011620567	FI-GE-10SR-WD-V-W5E-MS	3/8	S	31.00
2011028715	FI-GE-10SR1/2-WD-V-W5E-MS	1/2	S	43.60
2011620478	FI-GE-12SR-WD-V-W5E-MS	3/8	S	28.80
2011620828	FI-GE-12SR1/2-WD-V-W5E-MS	1/2	S	40.70
2011620990	FI-GE-12SR3/4-WD-V-W5E-MS	3/4	S	50.20
2013031387	FI-GE-14SR3/8-WD-V-W5E-MS	3/8	S	48.35
2011621513	FI-GE-14SR-WD-V-W5E-MS	1/2	S	55.10
6100044191	FI-GE-14SR3/4-WD-V-W5E-MS	3/4	S	62.25
2011620795	FI-GE-16SR3/8-WD-V-W5E-MS	3/8	S	45.50
2011620562	FI-GE-16SR-WD-V-W5E-MS	1/2	S	45.85
2011028718	FI-GE-20SR3/8-WD-V-W5E-MS	3/8	S	84.95
2011620643	FI-GE-20SR-WD-V-W5E-MS	3/4	S	61.45
2011621457	FI-GE-20SR1-WD-V-W5E-MS	1	S	76.65
2011620598	FI-GE-25SR-WD-V-W5E-MS	1	S	96.50
2011620836	FI-GE-25SR1-1/4-WD-V-W5E-MS	1-1/4	S	113.05
2013030509	FI-GE-30SR3/4-WD-V-W5E-MS	3/4	S	129.10
2011620846	FI-GE-30SR1-WD-V-W5E-MS	1	S	142.75
2011620646	FI-GE-30SR-WD-V-W5E-MS	1-1/4	S	134.95
2011620994	FI-GE-30SR1-1/2-WD-V-W5E-MS	1-1/2	S	212.10
2011620838	FI-GE-38SR1-1/4-WD-V-W5E-MS	1-1/4	S	230.20
2011620617	FI-GE-38SR-WD-V-W5E-MS	1-1/2	S	210.45

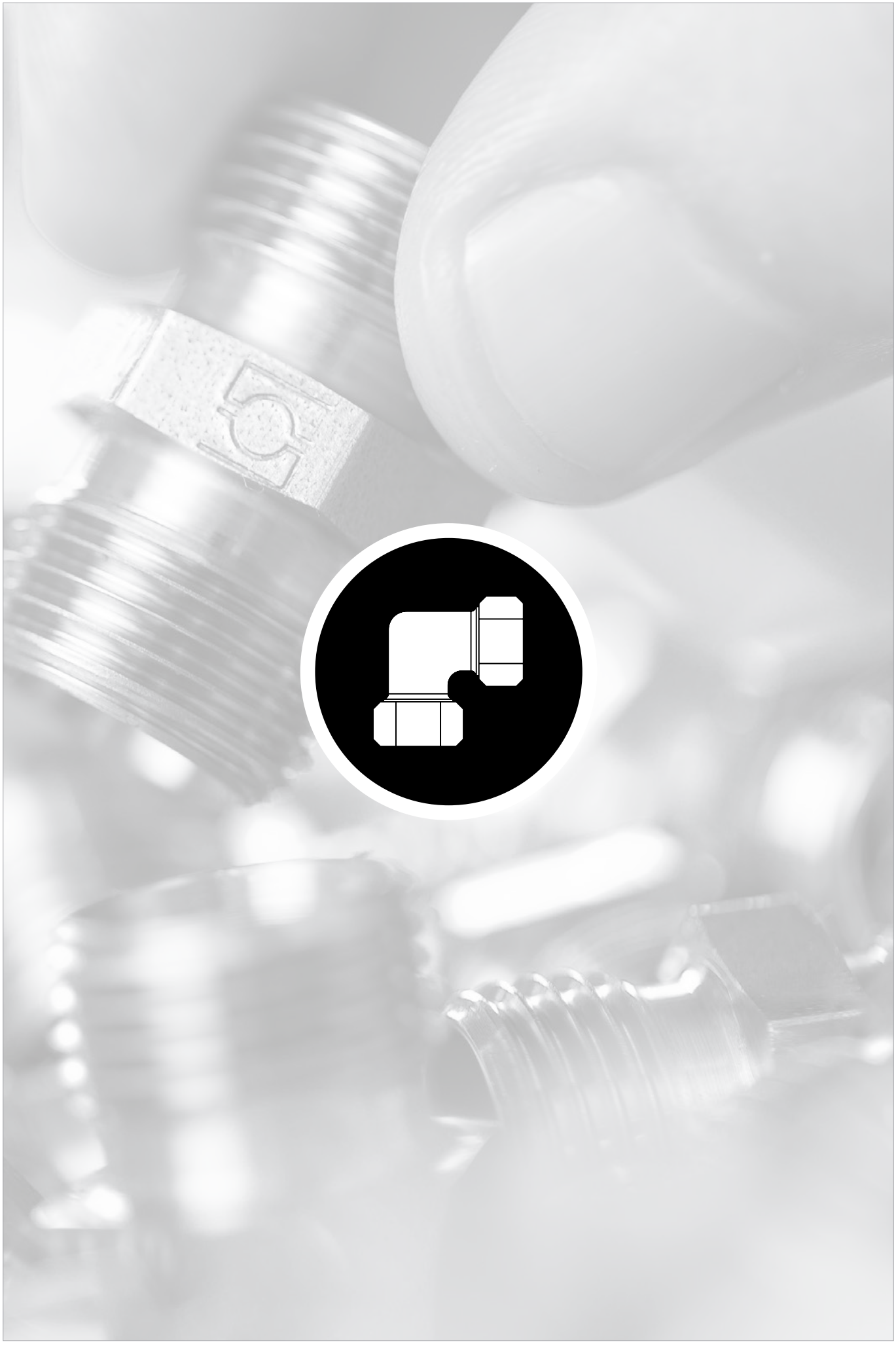
Straight Male Stud Fitting
NPT Thread
Type FI-GE-...-N ▪ Series L / S

Item No.	Designation	Stud Size	Series	Price
2011620123	FI-GE-06L1/8N-W5E-MS	1/8	L	19.80
2011620124	FI-GE-06L1/4N-W5E-MS	1/4	L	20.00
2011620128	FI-GE-08L1/4N-W5E-MS	1/4	L	21.15
2011620147	FI-GE-10L1/4N-W5E-MS	1/4	L	24.60
2011620213	FI-GE-10L3/8N-W5E-MS	3/8	L	28.70
2011620203	FI-GE-12L1/4N-W5E-MS	1/4	L	28.75
2011620210	FI-GE-12L3/8N-W5E-MS	3/8	L	30.20
2011620157	FI-GE-12L1/2N-W5E-MS	1/2	L	31.75
2011620211	FI-GE-15L1/2N-W5E-MS	1/2	L	39.30
2011620161	FI-GE-18L1/2N-W5E-MS	1/2	L	54.65
2011620260	FI-GE-22L3/4N-W5E-MS	3/4	L	67.90
2011620261	FI-GE-28L1N-W5E-MS	1	L	112.70
2011620262	FI-GE-35L1-1/4N-W5E-MS	1-1/4	L	148.05
2011620422	FI-GE-42L1-1/2N-W5E-MS	1-1/2	L	196.10
2011620189	FI-GE-06S1/4N-W5E-MS	1/4	S	31.45
2011620929	FI-GE-06S3/8N-W5E-MS	3/8	S	32.75
2011620523	FI-GE-08S1/4N-W5E-MS	1/4	S	29.05
2011620659	FI-GE-10S1/4N-W5E-MS	1/4	S	32.30
2011620370	FI-GE-10S3/8N-W5E-MS	3/8	S	29.50
2011620660	FI-GE-12S1/4N-W5E-MS	1/4	S	35.10
2011620491	FI-GE-12S3/8N-W5E-MS	3/8	S	36.85
2011620294	FI-GE-12S1/2N-W5E-MS	1/2	S	32.25
2011621499	FI-GE-14S1/2N-W5E-MS	1/2	S	49.30
2011620214	FI-GE-16S1/2N-W5E-MS	1/2	S	53.70
2011620212	FI-GE-20S3/4N-W5E-MS	3/4	S	74.70
2011620482	FI-GE-25S1N-W5E-MS	1	S	131.70
2011620497	FI-GE-30S1-1/4N-W5E-MS	1-1/4	S	154.90
2011617361	FI-GE-38S1N-W5E-MS	1	S	236.25
2011620948	FI-GE-38S1-1/2N-W5E-MS	1-1/2	S	237.15

Male Stud Elbows

Male Stud Elbow
BSPT Thread
Type FI-WE-...-Rk ▪ Series L / S

Item No.	Designation	Stud Size	Series	Price
2011620034	FI-WE-06LRk-W5E-MS	1/8	L	23.40
2011620169	FI-WE-06LR1/4k-W5E-MS	1/4	L	30.00
2013030376	FI-WE-08LR1/8k-W5E-MS	1/8	L	37.70
2011620035	FI-WE-08LRk-W5E-MS	1/4	L	29.45
2013030435	FI-WE-08LR3/8k-W5E-MS	3/8	L	35.55
2013030647	FI-WE-08LR1/2k-W5E-MS	1/2	L	35.55
2011620036	FI-WE-10LRk-W5E-MS	1/4	L	32.10
2011620347	FI-WE-10LR3/8k-W5E-MS	3/8	L	38.10
2013030648	FI-WE-10LR1/2k-W5E-MS	1/2	L	36.25
2011620170	FI-WE-12LR1/4k-W5E-MS	1/4	L	35.55
2011620037	FI-WE-12LRk-W5E-MS	3/8	L	35.75
2011620285	FI-WE-12LR1/2k-W5E-MS	1/2	L	48.15
2011029761	FI-WE-15LR3/8k-W5E-MS	3/8	L	47.15
2011620038	FI-WE-15LRk-W5E-MS	1/2	L	43.40
2011620039	FI-WE-18LRk-W5E-MS	1/2	L	61.45
2011620040	FI-WE-06SRk-W5E-MS	1/4	S	29.40
2013030360	FI-WE-06SR3/8k-W5E-MS	3/8	S	35.30
2011029771	FI-WE-06SR1/2k-W5E-MS	1/2	S	39.90
2011620041	FI-WE-08SRk-W5E-MS	1/4	S	35.60
2011030016	FI-WE-08SR3/8k-W5E-MS	3/8	S	38.10
2013031441	FI-WE-10SR1/4k-W5E-MS	1/4	S	39.30
2011620042	FI-WE-10SRk-W5E-MS	3/8	S	36.25
2013030429	FI-WE-10SR1/2k-W5E-MS	1/2	S	51.60
2011620043	FI-WE-12SRk-W5E-MS	3/8	S	47.50
2011615498	FI-WE-12SR1/2k-W5E-MS	1/2	S	52.65
2013030161	FI-WE-14SR3/8k-W5E-MS	3/8	S	60.20
2011621648	FI-WE-14SRk-W5E-MS	1/2	S	59.05
2011620044	FI-WE-16SRk-W5E-MS	3/4	S	83.55



Straight Union
FI-G
C10

Straight Reducer
FI-G-../..
C10

Equal Elbow
FI-W
C11

Equal Tee
FI-T
C11

Equal Cross
FI-K
C11

Order Codes

FI - G - 06 L - W5 E - MS

① ② ③ ④ ⑤ ⑥ ⑦

① Series

Fittings	**FI**

② Type

Straight Union	**G**
Straight Reducer	**G-../..**
Equal Elbow	**W**
Equal Tee	**T**
Equal Cross	**K**

③ Tube O.D.

Outside Tube Diameter in mm according to dash sizing.
Reducers are separated by a slash
(e.g. 08OD/06OD)

④ Tube Series

Extra Light	**LL**
Light	**L**
Heavy	**S**

⑤ Surface Material

Stainless Steel	**W5**

⑥ Additional Information

STAUFF internal information only	**Letter indicated**

⑦ Assembling

Assembled with Cutting Ring and Union Nut	**MS**

Straight Union
Type FI-G ▪ Series LL / L / S

Item No.	Designation	Series	PN (bar)	Price
2011069960	FI-G-04LL-W5E-MS	LL	100	9.45
2011620205	FI-G-06LL-W5E-MS	LL	100	9.85
2011620506	FI-G-08LL-W5E-MS	LL	100	14.65
2011620055	FI-G-06L-W5E-MS	L	500	14.50
2011620056	FI-G-08L-W5E-MS	L	500	18.00
2011620057	FI-G-10L-W5E-MS	L	500	22.25
2011620058	FI-G-12L-W5E-MS	L	400	25.60
2011620059	FI-G-15L-W5E-MS	L	400	33.90
2011620060	FI-G-18L-W5E-MS	L	400	50.50
2011620061	FI-G-22L-W5E-MS	L	250	65.70
2011620062	FI-G-28L-W5E-MS	L	250	103.95
2011620063	FI-G-35L-W5E-MS	L	250	147.95
2011620064	FI-G-42L-W5E-MS	L	250	196.20
2011620065	FI-G-06S-W5E-MS	S	800	18.15
2011620066	FI-G-08S-W5E-MS	S	800	21.60
2011620067	FI-G-10S-W5E-MS	S	630	26.90
2011620068	FI-G-12S-W5E-MS	S	630	30.05
2011621531	FI-G-14S-W5E-MS	S	630	38.05
2011620069	FI-G-16S-W5E-MS	S	420	50.05
2011620070	FI-G-20S-W5E-MS	S	420	71.45
2011620071	FI-G-25S-W5E-MS	S	420	118.70
2011620072	FI-G-30S-W5E-MS	S	420	164.15
2011620073	FI-G-38S-W5E-MS	S	420	215.50

Straight Reducer
Type FI-G-../.. ▪ Series L / S

Item No.	Designation	Series	Price
2011620872	FI-G-08/06L-W5E-MS	L	27.60
2011620857	FI-G-10/06L-W5E-MS	L	34.80
2011620156	FI-G-10/08L-W5E-MS	L	31.75
2013030394	FI-G-12/06L-W5E-MS	L	37.95
2011620190	FI-G-12/08L-W5E-MS	L	35.60
2011620548	FI-G-12/10L-W5E-MS	L	35.05
2011620841	FI-G-15/10L-W5E-MS	L	52.20
2011620616	FI-G-15/12L-W5E-MS	L	43.60
2011620575	FI-G-18/10L-W5E-MS	L	61.05
2011620574	FI-G-18/12L-W5E-MS	L	61.00
2011620615	FI-G-18/15L-W5E-MS	L	64.15
2011620849	FI-G-22/12L-W5E-MS	L	81.10
2011621009	FI-G-22/15L-W5E-MS	L	80.15
2011620833	FI-G-22/18L-W5E-MS	L	84.95
2011620800	FI-G-28/18L-W5E-MS	L	137.40
2011620900	FI-G-28/22L-W5E-MS	L	142.40
2013031316	FI-G-35/22L-W5E-MS	L	170.75
2011620397	FI-G-35/28L-W5E-MS	L	185.50
6100059263	FI-G-42/35L-W5E-MS	L	246.05
2013030502	FI-G-08/06S-W5E-MS	S	36.55
2013030503	FI-G-10/06S-W5E-MS	S	39.75
2013030504	FI-G-10/08S-W5E-MS	S	40.60
2011621015	FI-G-12/06S-W5E-MS	S	42.35
2011616423	FI-G-12/08S-W5E-MS	S	43.45
2013030252	FI-G-12/10S-W5E-MS	S	44.65
2013025858	FI-G-14/10S-W5E-MS	S	58.00
2013030391	FI-G-14/12S-W5E-MS	S	56.90
2011621020	FI-G-16/10S-W5E-MS	S	63.55
2011620573	FI-G-16/12S-W5E-MS	S	64.80
2013030386	FI-G-16/14S-W5E-MS	S	69.05
2013030456	FI-G-20/10S-W5E-MS	S	79.95
2013030284	FI-G-20/12S-W5E-MS	S	84.10
2011622192	FI-G-20/16S-W5E-MS	S	95.15
2011621025	FI-G-25/16S-W5E-MS	S	151.95
2011621026	FI-G-25/20S-W5E-MS	S	161.55
2011621027	FI-G-30/20S-W5E-MS	S	211.55
2011621028	FI-G-30/25S-W5E-MS	S	219.70
2011621029	FI-G-38/30S-W5E-MS	S	277.65

Equal Elbow
Type FI-W ▪ Series LL / L / S

Item No.	Designation	Series	PN (bar)	Price
2011621653	FI-W-04LL-W5E-MS	LL	-	25.80
2011620155	FI-W-06LL-W5E-MS	LL	-	27.10
2011620171	FI-W-08LL-W5E-MS	LL	-	28.80
2011620074	FI-W-06L-W5E-MS	L	500	28.40
2011620075	FI-W-08L-W5E-MS	L	500	29.55
2011620076	FI-W-10L-W5E-MS	L	500	34.35
2011620077	FI-W-12L-W5E-MS	L	400	39.45
2011620078	FI-W-15L-W5E-MS	L	400	51.80
2011620079	FI-W-18L-W5E-MS	L	400	75.65
2011620080	FI-W-22L-W5E-MS	L	250	93.90
2011620081	FI-W-28L-W5E-MS	L	250	173.50
2011620082	FI-W-35L-W5E-MS	L	250	269.25
2011620083	FI-W-42L-W5E-MS	L	250	424.40
2011620084	FI-W-06S-W5E-MS	S	800	30.75
2011620085	FI-W-08S-W5E-MS	S	800	35.30
2011620086	FI-W-10S-W5E-MS	S	630	41.70
2011620087	FI-W-12S-W5E-MS	S	630	47.60
2011621652	FI-W-14S-W5E-MS	S	630	57.10
2011620088	FI-W-16S-W5E-MS	S	630	74.80
2011620089	FI-W-20S-W5E-MS	S	420	100.00
2011620090	FI-W-25S-W5E-MS	S	420	207.25
2011620091	FI-W-30S-W5E-MS	S	420	274.70
2011620092	FI-W-38S-W5E-MS	S	420	411.60

Equal Cross
Type FI-K ▪ Series LL / L / S

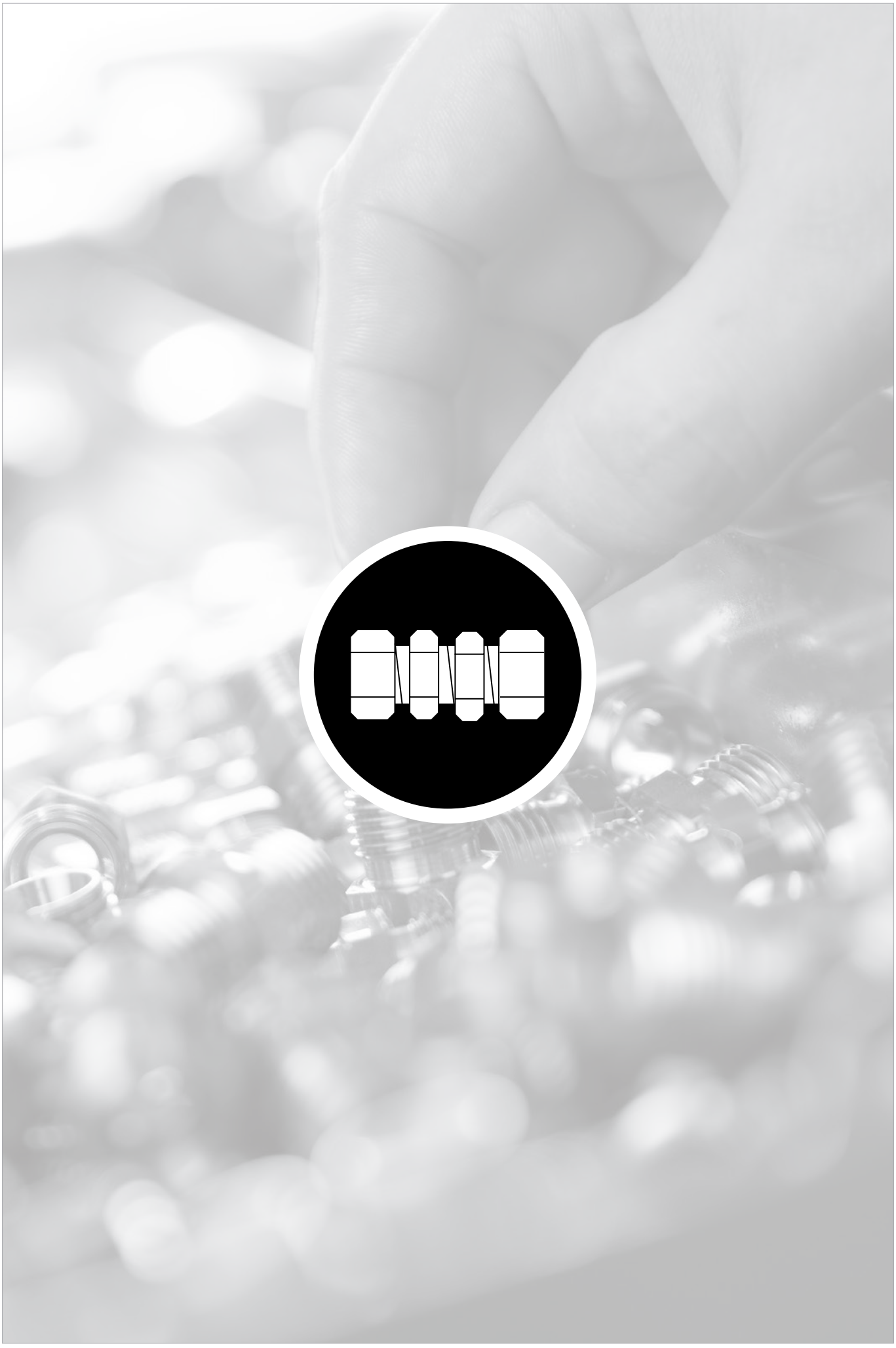
Item No.	Designation	Series	Price
6100036954	FI-K-06LL-W5E-MS	LL	75.35
6100014788	FI-K-06L-W5E-MS	L	76.15
2011621030	FI-K-08L-W5E-MS	L	153.55
2011620446	FI-K-10L-W5E-MS	L	162.50
2011620442	FI-K-12L-W5E-MS	L	175.00
2011620355	FI-K-15L-W5E-MS	L	260.60
2011620670	FI-K-18L-W5E-MS	L	287.40
2011620529	FI-K-22L-W5E-MS	L	371.35
2011621031	FI-K-28L-W5E-MS	L	483.75
2011621032	FI-K-35L-W5E-MS	L	815.75
2011620671	FI-K-42L-W5E-MS	L	1258.40
2011621033	FI-K-06S-W5E-MS	S	155.35
2011620649	FI-K-08S-W5E-MS	S	166.05
2011620498	FI-K-10S-W5E-MS	S	201.75
2011620522	FI-K-12S-W5E-MS	S	239.25
2011621534	FI-K-14S-W5E-MS	S	280.30
2011621034	FI-K-16S-W5E-MS	S	287.40
2011620906	FI-K-20S-W5E-MS	S	407.00
2011620515	FI-K-25S-W5E-MS	S	617.50
2011621035	FI-K-30S-W5E-MS	S	954.75
2011621036	FI-K-38S-W5E-MS	S	1319.60

Equal Tee
Type FI-T ▪ Series LL / L / S

Item No.	Designation	Series	PN (bar)	Price
2011621645	FI-T-04LL-W5E-MS	LL	-	33.25
2011620172	FI-T-06LL-W5E-MS	LL	-	35.05
2011620093	FI-T-06L-W5E-MS	L	500	39.00
2011620094	FI-T-08L-W5E-MS	L	500	42.25
2011620095	FI-T-10L-W5E-MS	L	500	47.75
2011620096	FI-T-12L-W5E-MS	L	400	57.40
2011620097	FI-T-15L-W5E-MS	L	400	80.55
2011620098	FI-T-18L-W5E-MS	L	400	109.60
2011620099	FI-T-22L-W5E-MS	L	250	155.05
2011620100	FI-T-28L-W5E-MS	L	250	245.10
2011620101	FI-T-35L-W5E-MS	L	250	419.85
2011620102	FI-T-42L-W5E-MS	L	250	584.00
2011620103	FI-T-06S-W5E-MS	S	800	42.45
2011620104	FI-T-08S-W5E-MS	S	800	46.65
2011620105	FI-T-10S-W5E-MS	S	630	57.60
2011620106	FI-T-12S-W5E-MS	S	630	70.85
2011621643	FI-T-14S-W5E-MS	S	630	78.30
2011620107	FI-T-16S-W5E-MS	S	630	111.50
2011620108	FI-T-20S-W5E-MS	S	420	157.05
2011620109	FI-T-25S-W5E-MS	S	420	269.25
2011620110	FI-T-30S-W5E-MS	S	420	392.60
2011620111	FI-T-38S-W5E-MS	S	420	611.40

DIN Thread Sizes

Series	Tube OD (mm)	Male Stud Metric Parallel Thread		Male Stud Whitworth Parallel Pipe Thread		Union Nut Metric Parallel Thread	
		Thread Size	Width AF	Thread Size	Width AF	Thread Size	Width AF
LL	04	M8 x 1	10	G1/8	11	M8 x 1	10
	06	M10 x 1	11	G1/8	14	M10 x 1	12
	08	M10 x 1	12	G1/8	14	M12 x 1	14
L	06	M10 x 1	14	G1/8	14	M12 x 1.5	14
	08	M12 x 1.5	17	G1/4	19	M14 x 1.5	17
	10	M14 x 1.5	19	G1/4	19	M16 x 1.5	19
	12	M16 x 1.5	22	G3/8	22	M18 x 1.5	22
	15	M18 x 1.5	24	G1/2	27	M22 x 1.5	27
	18	M22 x 1.5	27	G1/2	27	M26 x 1.5	32
	22	M26 x 1.5	32	G3/4	32	M30 x 2	36
	28	M33 x 2	41	G1	41	M36 x 2	41
	35	M42 x 2	50	G1-1/4	50	M45 x 2	50
	42	M48 x 2	55	G1-1/2	55	M52 x 2	60
S	06	M12 x 1.5	17	G1/4	19	M14 x 1.5	17
	08	M14 x 1.5	19	G1/4	19	M16 x 1.5	19
	10	M16 x 1.5	22	G3/8	22	M18 x 1.5	22
	12	M18 x 1.5	24	G3/8	22	M20 x 1.5	24
	14	M20 x 1.5	27	G1/2	27	M22 x 1.5	27
	16	M22 x 1.5	27	G1/2	27	M24 x 1.5	30
	20	M27 x 2	32	G3/4	32	M30 x 2	36
	25	M33 x 2	41	G1	41	M36 x 2	46
	30	M42 x 2	50	G1-1/4	50	M42 x 2	50
	38	M48 x 2	55	G1-1/2	55	M52 x 2	60



Straight Bulkhead Fitting
FI-GS
C14

Elbow Bulkhead Fittings
FI-WS
C14

Order Codes

FI	-	GS	-	06	L	-	W5	E	-	SKM-MS
①		②		③	④		⑤	⑥		⑦

① Series

Fittings	**FI**

② Type

Straight Bulkhead Fitting	**GS**
Elbow Bulkhead Fitting	**WS**

③ Tube O.D.

Outside Tube Diameter in mm according to dash sizing.
Reducers are separated by a slash (e.g. 10/08).

④ Tube Series

Extra Light	**LL**
Light	**L**
Heavy	**S**

⑤ Surface Material

Stainless Steel	**W5**

⑥ Additional Information

STAUFF internal information only	**Letter indicated**

⑦ Assembling

Assembled with Hexagon Lock Nut, Cutting Rings and Union Nuts	**SKM-MS**

Straight Bulkhead Fitting
Type FI-GS ▪ Series L / S

Item No.	Designation	Barrel Ø	Series	Price
2011620175	FI-GS-06L-W5E-SKM-MS	12 mm	L	37.80
2011620154	FI-GS-08L-W5E-SKM-MS	14 mm	L	37.95
2011620143	FI-GS-10L-W5E-SKM-MS	16 mm	L	45.50
2011620137	FI-GS-12L-W5E-SKM-MS	18 mm	L	49.85
2011620217	FI-GS-15L-W5E-SKM-MS	22 mm	L	64.10
2011620194	FI-GS-18L-W5E-SKM-MS	26 mm	L	99.45
2011620195	FI-GS-22L-W5E-SKM-MS	30 mm	L	126.20
2011620192	FI-GS-28L-W5E-SKM-MS	36 mm	L	179.60
2011620513	FI-GS-35L-W5E-SKM-MS	45 mm	L	275.25
2011620267	FI-GS-42L-W5E-SKM-MS	52 mm	L	321.55
2011620135	FI-GS-06S-W5E-SKM-MS	14 mm	S	53.70
2011620273	FI-GS-08S-W5E-SKM-MS	16 mm	S	50.00
2011620206	FI-GS-10S-W5E-SKM-MS	18 mm	S	61.90
2011620136	FI-GS-12S-W5E-SKM-MS	20 mm	S	63.45
2011620466	FI-GS-14S-W5E-SKM-MS	22 mm	S	89.90
2011620162	FI-GS-16S-W5E-SKM-MS	24 mm	S	98.75
2011620234	FI-GS-20S-W5E-SKM-MS	30 mm	S	148.35
2011620193	FI-GS-25S-W5E-SKM-MS	36 mm	S	222.60
2011620259	FI-GS-30S-W5E-SKM-MS	42 mm	S	272.95
2011620392	FI-GS-38S-W5E-SKM-MS	52 mm	S	403.90

Elbow Bulkhead Fitting
Type FI-WS ▪ Series L / S

Item No.	Designation	Barrel Ø	Series	Price
2011620245	FI-WS-06L-W5E-SKM-MS	12 mm	L	64.10
2011620480	FI-WS-08L-W5E-SKM-MS	14 mm	L	71.80
2011620502	FI-WS-10L-W5E-SKM-MS	16 mm	L	80.00
2011620246	FI-WS-12L-W5E-SKM-MS	18 mm	L	85.50
2011620338	FI-WS-15L-W5E-SKM-MS	22 mm	L	116.35
2011620500	FI-WS-18L-W5E-SKM-MS	26 mm	L	149.70
2011620520	FI-WS-22L-W5E-SKM-MS	30 mm	L	205.85
2011620552	FI-WS-28L-W5E-SKM-MS	36 mm	L	325.85
2011620672	FI-WS-35L-W5E-SKM-MS	45 mm	L	563.95
2011620673	FI-WS-42L-W5E-SKM-MS	52 mm	L	596.00
2011620540	FI-WS-06S-W5E-SKM-MS	14 mm	S	72.75
2011620541	FI-WS-08S-W5E-SKM-MS	16 mm	S	81.50
2011620463	FI-WS-10S-W5E-SKM-MS	18 mm	S	93.50
2011620334	FI-WS-12S-W5E-SKM-MS	20 mm	S	111.65
2011620674	FI-WS-14S-W5E-SKM-MS	22 mm	S	132.45
2011620264	FI-WS-16S-W5E-SKM-MS	24 mm	S	142.90
2011620223	FI-WS-20S-W5E-SKM-MS	30 mm	S	220.75
2011620247	FI-WS-25S-W5E-SKM-MS	36 mm	S	369.15
2011620675	FI-WS-30S-W5E-SKM-MS	42 mm	S	460.10
2011620391	FI-WS-38S-W5E-SKM-MS	52 mm	S	652.05

The following Spare Parts for FI-GS & FI-WS Fittings are also available on request

Hexagon Lock Nut
FI-SKM
Refer to Catalogue 2 - STAUFF Connect

Straight Weld Fitting
FI-AS
C16

24° Weld Cone with O-Ring
FI-SN
C16

Order Codes

FI	-	AS	-	06	L	-	W5	E	-	MS
①		②		③	④		⑥	⑦		⑧

① Series

Fittings	**FI**

② Type

Straight Weld Fitting	**AS**
24° Weld Cone with O-Ring	**SN**

③ Tube O.D.

Outside Tube Diameter in mm according to dash sizing.
Reducers are separated by a slash (e.g. 10/08).
For FI-SN & FI-SNR include Wall Thickness (e.g. 10x1.5)

④ Tube Series

Extra Light	**LL**
Light	**L**
Heavy	**S**

⑤ Sealing Material

No Sealing Material	**(None)**
FKM (Viton®)	**V**

⑥ Surface Material

Stainless Steel	**W5**

⑦ Additional Information

STAUFF internal information only	**Letter indicated**

⑧ Assembling

Body Only	**(None)**
Assembled with Cutting Ring and Union Nut	**MS**

Straight Weld Fitting
Type FI-AS ▪ Series L / S

Item No.	Designation	Weld Size	Series	Price
2011620204	FI-AS-06L-W5E-MS	10 mm	L	19.65
2011620271	FI-AS-08L-W5E-MS	12 mm	L	26.15
2011620220	FI-AS-10L-W5E-MS	14 mm	L	25.20
2011620221	FI-AS-12L-W5E-MS	16 mm	L	24.55
2011620222	FI-AS-15L-W5E-MS	19 mm	L	26.00
2011620178	FI-AS-18L-W5E-MS	22 mm	L	42.85
2011620208	FI-AS-22L-W5E-MS	27 mm	L	56.95
2011620177	FI-AS-28L-W5E-MS	32 mm	L	82.95
2011620176	FI-AS-35L-W5E-MS	40 mm	L	111.90
2011620676	FI-AS-42L-W5E-MS	46 mm	L	151.75
2011620677	FI-AS-06S-W5E-MS	11 mm	S	18.50
2011620318	FI-AS-08S-W5E-MS	13 mm	S	28.00
2011620149	FI-AS-10S-W5E-MS	15 mm	S	28.45
2011620231	FI-AS-12S-W5E-MS	17 mm	S	24.75
2011621459	FI-AS-14S-W5E-MS	19 mm	S	42.65
2011620411	FI-AS-16S-W5E-MS	21 mm	S	43.60
2011620396	FI-AS-20S-W5E-MS	26 mm	S	23.05
2011620432	FI-AS-25S-W5E-MS	31 mm	S	93.80
2011620678	FI-AS-30S-W5E-MS	36 mm	S	119.85
2011620476	FI-AS-38S-W5E-MS	44 mm	S	182.30

24° Weld Cone
with O-Ring (FKM)
Type FI-SN ▪ Series L / S

Item No.	Designation	Series	Price
2010000043	FI-SN-10x1.5-V-W5E	L/S	13.30
2010000323	FI-SN-10x2-V-W5E	L/S	13.30
2010000083	FI-SN-12x1.5-V-W5E	L/S	14.65
2010000154	FI-SN-12x2-V-W5E	L/S	14.65
2010000078	FI-SN-16x2-V-W5E	S	20.20
2010000150	FI-SN-16x2.5-V-W5E	S	20.20
2010000131	FI-SN-16x3-V-W5E	S	20.20
2010000085	FI-SN-20x2-V-W5E	S	25.40
2010000079	FI-SN-20x2.5-V-W5E	S	25.40
2010000207	FI-SN-20x3-V-W5E	S	25.40
2013030432	FI-SN-20x4-V-W5E	S	25.40
2013031794	FI-SN-25x2.5-V-W5E	S	37.15
2010000080	FI-SN-25x3-V-W5E	S	37.15
2010000110	FI-SN-25x4-V-W5E	S	37.15
2011030432	FI-SN-30x3-V-W5E	S	46.90
2010000081	FI-SN-30x4-V-W5E	S	46.90
2011029625	FI-SN-30x5-V-W5E	S	46.90
2010000473	FI-SN-38x4-V-W5E	S	63.80
2010000082	FI-SN-38x5-V-W5E	S	63.80

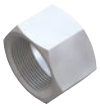
The following Weld Fittings are also available on request

24° Weld Cone Reducer with O-Ring
FI-SNR
Refer to Catalogue 2 - STAUFF Connect

Recommended for Assembly

Union Nut - Type FI-M is available

Refer to page C4



	Straight Female Stud Fitting FI-GA	**C18**
	Female Whitworth Parallel Pipe Thread (BSPP) FI-GA-...-R	**C18**
	Gauge Fitting FI-MA	**C18**
	Female Whitworth Parallel Pipe Thread (BSPP) / Internal Metallic Sealing Ring FI-MA-...-R	**C18**
	Female NPT Thread / Internal Metallic Sealing Ring FI-MA-...-N	**C18**
	Gauge Fitting with 24° Taper / O-Ring (DKO) FI-EMAD	**C18**
	Female Whitworth Parallel Pipe Thread (BSPP) / Internal Metallic Sealing Ring FI-EMAD-...-R	**C18**

Order Codes

FI - EMAD - 06 L R - V - W5 E - DKI-DKO

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

① Series

Fittings	**FI**

② Type

Straight Female Stud Fitting	**GA**
Gauge Fitting	**MA**
Gauge Fitting with 24° Taper / O-Ring	**EMAD**

③ Tube O.D.

Outside Tube Diameter in mm according to dash sizing.
Reducers are separated by a slash
(e.g. 08OD/06OD)

④ Tube Series

Extra Light	**LL**
Light	**L**
Heavy	**S**

⑤ Thread Type

Female Whitworth Parallel Pipe Thread BSPP	**R**
Female Metric Parallel Pipe Thread	**M**

⑥ Sealing Material

No Sealing Material	**(None)**
FKM (Viton®)	**V**

⑦ Surface Material

Stainless Steel	**W5**

⑧ Additional Information

STAUFF internal information only	**Letter indicated**

⑨ Assembling

Assembled with Cutting Ring and Union Nut	**MS**
Assembled with Internal Sealing Edge Ring, Cutting Ring and Union Nut	**DKI-MS**
Assembled with Internal Sealing Edge Ring, Swivel Nut and O-Ring	**DKI-DKO**

All DKO series fittings are fitted with FKM (Viton®) sealing as standard

Straight Female Stud Fittings

Straight Female Stud Fitting
BSPP Thread
Type FI-GA-...-R ▪ Series L / S

Item No.	Designation	Port Size	Series	Price
2011621217	FI-GA-06LR-W5E-MS	G1/8	L	22.70
2011621218	FI-GA-06LR1/4-W5E-MS	G1/4	L	28.30
2011620364	FI-GA-08LR-W5E-MS	G1/4	L	29.00
2011620241	FI-GA-10LR-W5E-MS	G1/4	L	28.85
2011620284	FI-GA-12LR-W5E-MS	G3/8	L	34.20
2011620634	FI-GA-12LR1/2-W5E-MS	G1/2	L	41.90
2013020035	FI-GA-15LR3/8-W5E-MS	G3/8	L	55.00
2011620201	FI-GA-15LR-W5E-MS	G1/2	L	45.55
2011029781	FI-GA-18LR3/8-W5E-MS	G3/8	L	65.85
2011620278	FI-GA-18LR-W5E-MS	G1/2	L	57.40
2011620219	FI-GA-22LR-W5E-MS	G3/4	L	77.25
2011620281	FI-GA-28LR-W5E-MS	G1	L	128.95
2011620494	FI-GA-35LR-W5E-MS	G1-1/4	L	172.80
2011620722	FI-GA-42LR-W5E-MS	G1-1/2	L	207.70
2011029779	FI-GA-06SR1/8-W5E-MS	G1/8	S	28.80
2011620000	FI-GA-06SR-W5E-MS	G1/4	S	29.15
2011620308	FI-GA-08SR-W5E-MS	G1/4	S	29.90
2011620233	FI-GA-10SR-W5E-MS	G3/8	S	39.25
2011621222	FI-GA-12SR1/4-W5E-MS	G1/4	S	40.25
2011620309	FI-GA-12SR-W5E-MS	G3/8	S	40.90
2013030468	FI-GA-12SR1/2-W5E-MS	G1/2	S	52.95
2011620531	FI-GA-14SR-W5E-MS	G1/2	S	58.80
2011620293	FI-GA-16SR-W5E-MS	G1/2	S	55.70
2011030012	FI-GA-20SR3/8-W5E-MS	G3/8	S	140.45
2013020057	FI-GA-20SR1/2-W5E-MS	G1/2	S	127.60
2011620323	FI-GA-20SR-W5E-MS	G3/4	S	80.15
2011620342	FI-GA-25SR-W5E-MS	G1	S	159.65
2011620723	FI-GA-30SR-W5E-MS	G1-1/4	S	223.60
2011620724	FI-GA-38SR-W5E-MS	G1-1/2	S	266.05

Gauge Fittings

Gauge Fitting
BSPP Thread
Type FI-MA-...-R ▪ Series L / S

Item No.	Designation	Port Size	Series	Price
2011620112	FI-MA-06LR-W5E-DKI-MS	G1/4	L	30.50
2011620113	FI-MA-08LR-W5E-DKI-MS	G1/4	L	30.35
2011620114	FI-MA-10LR-W5E-DKI-MS	G1/4	L	29.50
2011620115	FI-MA-12LR-W5E-DKI-MS	G1/4	L	35.55
2011620116	FI-MA-06SR-W5E-DKI-MS	G1/2	S	36.95
2011620117	FI-MA-08SR-W5E-DKI-MS	G1/2	S	37.40
2011620118	FI-MA-10SR-W5E-DKI-MS	G1/2	S	39.25
2011620119	FI-MA-12SR-W5E-DKI-MS	G1/2	S	39.75

Gauge Fitting
NPT Thread
Type FI-MA-...-N ▪ Series S

Item No.	Designation	Port Size	Series	Price
2011029679	FI-MA-06S1/2N-W5E-DKI-MS	1/2	S	37.40

Gauge Fitting
with 24° Taper / O-Ring (DKO)
Type FI-EMAD-...-R ▪ Series L / S

Item No.	Designation	Port Size	Series	Price
2011615259	FI-EMAD-06LR-V-W5E-DKI-DKO	1/4	L	36.25
2011617825	FI-EMAD-08LR-V-W5E-DKI-DKO	1/4	L	38.15
2011617826	FI-EMAD-10LR-V-W5E-DKI-DKO	1/4	L	39.00
2011614847	FI-EMAD-12LR-V-W5E-DKI-DKO	1/4	L	42.60
2011617827	FI-EMAD-06SR-V-W5E-DKI-DKO	1/2	S	47.80
6100021196	FI-EMAD-08SR1/4-V-W5E-DKI-DKO	1/4	S	40.55
2011615584	FI-EMAD-08SR-V-W5E-DKI-DKO	1/2	S	40.55
2011021988	FI-EMAD-10SR1/4-V-W5E-DKI-DKO	1/4	S	40.25
2011615441	FI-EMAD-10SR-V-W5E-DKI-DKO	1/2	S	42.60
2011030014	FI-EMAD-12SR1/4-V-W5E-DKI-DKO	1/4	S	43.55
2011617828	FI-EMAD-12SR-V-W5E-DKI-DKO	1/2	S	49.80

Recommended for Assembly

FI-MA & FI-EMAD adaptors are suitable for SPG Pressure Gauges

Refer to Section M - STAUFF Diagtronics

	Straight Male Stud Fitting with 24° Taper / O-Ring (DKO) FI-EGED	**C20**
	Whitworth Parallel Pipe Thread (BSPP) / **Profile Sealing Ring** FI-EGED-...-R-WD	**C20**
	Metric Parallel Thread / **Profile Sealing Ring** FI-EGED-...-M-WD	**C20**
	Straight Fitting with 24° Taper / O-Ring (DKO) FI-SNV	**C21**
	Straight Reducer for Tube Ends with 24° Taper / **O-Ring (DKO)** FI-REDSD	**C21**
	Adjustable Elbow (90°) with 24° Taper / O-Ring (DKO) FI-EWD	**C22**
	Adjustable Branch Tee with 24° Taper / O-Ring (DKO) FI-ETD	**C22**
	Adjustable Barrel Tee with 24° Taper / O-Ring FI-ELD	**C22**

Order Codes

FI	-	EGED	-	06	L	R	-	WD	-	V	-	W5	E	-	DKO
①		②		③	④	⑤		⑥		⑦		⑧	⑨		⑩

① Series

Fittings	**FI**

② Type

Straight Male Stud Fitting with 24° Taper / O-Ring	**EGED**
Straight Reducer for Tube Ends with 24° Taper / O-Ring	**REDSD**
Straight Fitting with 24° Taper / O-Ring	**SNV**
Adjustable Elbow (90°) with 24° Taper / O-Ring	**EWD**
Adjustable Branch Tee with 24° Taper / O-Ring	**ETD**
Adjustable Barrel Tee with 24° Taper / O-Ring	**ELD**

③ Tube O.D.

Outside Tube Diameter in mm according to dash sizing.
Reducers are separated by a slash (e.g. 12/10L)

④ Tube Series

Light	**L**
Heavy	**S**

⑤ Thread Type / Size

Whitworth Parallel Pipe Thread (BSPP) (Special sizes to be indicated, e.g. R1/4)	**R**
Metric Parallel Pipe Thread (Special sizes to be indicated, e.g. M14x1.5)	**M**

⑥ Sealing Type

Standard seal type, including: Metallic Sealing Edge for thread types R / M	**(None)**
Elastomeric seal	**WD**

⑦ Sealing Material

FKM (Viton®)	**V**

⑧ Surface Material

Stainless Steel	**W5**

⑨ Additional Information

STAUFF internal information only	**Letter indicated**

⑩ Assembling

Assembled with Cutting Ring and Union Nut	**MS**
Assembled with Swivel Nut, O-Ring, Cutting Ring and Union Nut	**DKO-MS**
Assembled with Swivel Nut and O-Ring	**DKO**

All DKO series fittings are fitted with FKM (Viton®) sealing as standard

Straight Male Stud Fittings with 24° Taper / O-Ring

Straight Male Stud Fitting
with 24° Taper / O-Ring (DKO)
BSPP Thread with Profile Sealing Ring
Type FI-EGED-...-R-WD ▪ Series L / S

Item No.	Designation	Stud Size	Series	Price
2011615162	FI-EGED-06LR-WD-V-W5E-DKO	G1/8	L	47.80
2011374950	FI-EGED-08LR-WD-V-W5E-DKO	G1/4	L	37.30
2011371550	FI-EGED-10LR-WD-V-W5E-DKO	G1/4	L	37.80
2011372579	FI-EGED-12LR-WD-V-W5E-DKO	G3/8	L	41.90
2011371553	FI-EGED-15LR-WD-V-W5E-DKO	G1/2	L	56.90
2011371556	FI-EGED-18LR-WD-V-W5E-DKO	G1/2	L	76.85
2011372751	FI-EGED-22LR-WD-V-W5E-DKO	G3/4	L	89.40
2011604194	FI-EGED-28LR-WD-V-W5E-DKO	G1	L	140.80
2011604648	FI-EGED-35LR-WD-V-W5E-DKO	G1-1/4	L	220.95
2011372348	FI-EGED-42LR-WD-V-W5E-DKO	G1-1/2	L	244.10
2011615654	FI-EGED-06SR-WD-V-W5E-DKO	G1/4	S	38.70
2011068481	FI-EGED-08SR-WD-V-W5E-DKO	G1/4	S	40.65
2011608620	FI-EGED-10SR-WD-V-W5E-DKO	G3/8	S	43.65
2011606820	FI-EGED-12SR-WD-V-W5E-DKO	G3/8	S	44.40
2011029707	FI-EGED-14SR-WD-V-W5E-DKO	G1/2	S	63.00
2011370609	FI-EGED-16SR-WD-V-W5E-DKO	G1/2	S	79.35
2011068479	FI-EGED-20SR-WD-V-W5E-DKO	G3/4	S	105.40
2011372332	FI-EGED-30SR-WD-V-W5E-DKO	G1-1/4	S	185.10
2011370961	FI-EGED-38SR-WD-V-W5E-DKO	G1-1/2	S	274.05

Straight Male Stud Fitting
with 24° Taper / O-Ring (DKO)
Metric Thread with Profile Sealing Ring
Type FI-EGED-...-M-WD ▪ Series L / S

Item No.	Designation	Stud Size	Series	Price
2011602795	FI-EGED-06LM-WD-V-W5E-DKO	M10 x 1	L	36.25
2011029665	FI-EGED-08LM-WD-V-W5E-DKO	M12 x 1.5	L	37.25
2011615649	FI-EGED-10LM-WD-V-W5E-DKO	M14 x 1.5	L	40.25
6100023698	FI-EGED-12LM-WD-V-W5E-DKO	M16 x 1.5	L	42.60
2013031756	FI-EGED-15LM-WD-V-W5E-DKO	M18 x 1.5	L	53.25
6100023699	FI-EGED-18LM-WD-V-W5E-DKO	M22 x 1.5	L	77.55
2011063647	FI-EGED-22LM-WD-V-W5E-DKO	M26 x 1.5	L	92.35
6100023700	FI-EGED-28LM-WD-V-W5E-DKO	M33 x 2	L	141.20
2011029293	FI-EGED-35LM-WD-V-W5E-DKO	M42 x 2	L	221.35
2011029291	FI-EGED-42LM-WD-V-W5E-DKO	M48 x 2	L	241.40
6100009050	FI-EGED-06SM-WD-V-W5E-DKO	M12 x 1.5	S	38.15
2011029667	FI-EGED-08SM-WD-V-W5E-DKO	M14 x 1.5	S	40.55
2011029671	FI-EGED-10SM-WD-V-W5E-DKO	M16 x 1.5	S	42.60
2090032249	FI-EGED-12SM-WD-V-W5E-DKO	M18 x 1.5	S	49.70
2011615219	FI-EGED-14SM-WD-V-W5E-DKO	M20 x 1.5	S	63.00
6100023701	FI-EGED-16SM-WD-V-W5E-DKO	M22 x 1.5	S	77.90
2011610674	FI-EGED-20SM-WD-V-W5E-DKO	M27 x 2	S	106.15
6100023702	FI-EGED-25SM-WD-V-W5E-DKO	M33 x 2	S	154.75
6100023703	FI-EGED-30SM-WD-V-W5E-DKO	M42 x 2	S	220.75
6100023704	FI-EGED-38SM-WD-V-W5E-DKO	M48 x 2	S	274.85

DIN Thread Sizes

Series	Tube OD (mm)	Male Stud Metric Parallel Thread		Male Stud Whitworth Parallel Pipe Thread	
		Thread Size	Width AF	Thread Size	Width AF
L	06	M10 x 1	14	G1/8	14
	08	M12 x 1.5	17	G1/4	19
	10	M14 x 1.5	19	G1/4	19
	12	M16 x 1.5	22	G3/8	22
	15	M18 x 1.5	24	G1/2	27
	18	M22 x 1.5	27	G1/2	27
	22	M26 x 1.5	32	G3/4	32
	28	M33 x 2	41	G1	41
	35	M42 x 2	50	G1-1/4	50
	42	M48 x 2	55	G1-1/2	55

DIN Thread Sizes

Series	Tube OD (mm)	Male Stud Metric Parallel Thread		Male Stud Whitworth Parallel Pipe Thread	
		Thread Size	Width AF	Thread Size	Width AF
S	06	M12 x 1.5	17	G1/4	19
	08	M14 x 1.5	19	G1/4	19
	10	M16 x 1.5	22	G3/8	22
	12	M18 x 1.5	24	G3/8	22
	14	M20 x 1.5	27	G1/2	27
	16	M22 x 1.5	27	G1/2	27
	20	M27 x 2	32	G3/4	32
	25	M33 x 2	41	G1	41
	30	M42 x 2	50	G1-1/4	50
	38	M48 x 2	55	G1-1/2	55

Straight Fittings with 24° Taper / O-Ring

Straight Fitting
with 24° Taper / O-Ring (DKO)
Female - Female
Type FI-SNV ▪ Series L / S

Item No.	Designation	DIN Thread	Series	Price
2011605650	FI-SNV-06L-V-W5E-DKO	M12 x 1.5	L	45.20
2011614821	FI-SNV-08L-V-W5E-DKO	M14 x 1.5	L	47.30
2011614822	FI-SNV-10L-V-W5E-DKO	M16 x 1.5	L	48.10
2011602792	FI-SNV-12L-V-W5E-DKO	M18 x 1.5	L	49.85
2011613125	FI-SNV-15L-V-W5E-DKO	M22 x 1.5	L	70.40
2011613126	FI-SNV-18L-V-W5E-DKO	M26 x 1.5	L	110.15
2011613249	FI-SNV-22L-V-W5E-DKO	M30 x 2	L	107.40
2011615448	FI-SNV-28L-V-W5E-DKO	M36 x 2	L	159.65
2011615456	FI-SNV-35L-V-W5E-DKO	M45 x 2	L	220.90
2011615609	FI-SNV-42L-V-W5E-DKO	M52 x 2	L	279.75
2011028250	FI-SNV-06S-V-W5E-DKO	M14 x 1.5	S	45.20
2011607143	FI-SNV-08S-V-W5E-DKO	M16 x 1.5	S	48.00
2011613325	FI-SNV-10S-V-W5E-DKO	M18 x 1.5	S	50.80
2011604350	FI-SNV-12S-V-W5E-DKO	M20 x 1.5	S	59.95
2011617644	FI-SNV-14S-V-W5E-DKO	M22 x 1.5	S	69.95
2011610011	FI-SNV-16S-V-W5E-DKO	M24 x 1.5	S	86.80
2011605521	FI-SNV-20S-V-W5E-DKO	M30 x 2	S	115.50
2011605522	FI-SNV-25S-V-W5E-DKO	M36 x 2	S	184.25
2011613266	FI-SNV-30S-V-W5E-DKO	M42 x 2	S	229.45
2011606413	FI-SNV-38S-V-W5E-DKO	M52 x 2	S	314.70

Straight Reducer for Tube Ends
with 24° Taper / O-Ring (DKO)
Type FI-REDSD ▪ Series L

Item No.	Designation	Series	Price
2011621368	FI-REDSD-08/06L-V-W5E-DKO-MS	L	33.00
2011621369	FI-REDSD-10/06L-V-W5E-DKO-MS	L	40.85
2011621370	FI-REDSD-10/08L-V-W5E-DKO-MS	L	34.90
2011621371	FI-REDSD-12/06L-V-W5E-DKO-MS	L	40.85
2011621372	FI-REDSD-12/08L-V-W5E-DKO-MS	L	43.30
2011621373	FI-REDSD-12/10L-V-W5E-DKO-MS	L	44.80
2011621374	FI-REDSD-15/06L-V-W5E-DKO-MS	L	45.55
2011621375	FI-REDSD-15/08L-V-W5E-DKO-MS	L	46.70
2011621376	FI-REDSD-15/10L-V-W5E-DKO-MS	L	48.20
2011621377	FI-REDSD-15/12L-V-W5E-DKO-MS	L	49.45
2011621378	FI-REDSD-18/06L-V-W5E-DKO-MS	L	53.70
2011029765	FI-REDSD-18/08L-V-W5E-DKO-MS	L	61.35
2013031106	FI-REDSD-18/10L-V-W5E-DKO-MS	L	60.50
2011621381	FI-REDSD-18/12L-V-W5E-DKO-MS	L	63.95
2011621382	FI-REDSD-18/15L-V-W5E-DKO-MS	L	63.80
2011030106	FI-REDSD-22/06L-V-W5E-DKO-MS	L	67.25
2011621384	FI-REDSD-22/08L-V-W5E-DKO-MS	L	65.65
2011621385	FI-REDSD-22/10L-V-W5E-DKO-MS	L	70.95
2011621386	FI-REDSD-22/12L-V-W5E-DKO-MS	L	71.90
2011621387	FI-REDSD-22/15L-V-W5E-DKO-MS	L	84.00
2011621388	FI-REDSD-22/18L-V-W5E-DKO-MS	L	92.35
6100023705	FI-REDSD-28/06L-V-W5E-DKO-MS	L	90.65
6100023709	FI-REDSD-28/08L-V-W5E-DKO-MS	L	95.10
2011621391	FI-REDSD-28/10L-V-W5E-DKO-MS	L	97.90
2011621392	FI-REDSD-28/12L-V-W5E-DKO-MS	L	99.80
2011621393	FI-REDSD-28/15L-V-W5E-DKO-MS	L	103.55
2011621394	FI-REDSD-28/18L-V-W5E-DKO-MS	L	111.90
2011621395	FI-REDSD-28/22L-V-W5E-DKO-MS	L	121.20
2011621396	FI-REDSD-35/06L-V-W5E-DKO-MS	L	134.30
6100023710	FI-REDSD-35/08L-V-W5E-DKO-MS	L	137.10
2011621398	FI-REDSD-35/10L-V-W5E-DKO-MS	L	144.55
2011621399	FI-REDSD-35/12L-V-W5E-DKO-MS	L	217.50
2011621400	FI-REDSD-35/15L-V-W5E-DKO-MS	L	152.90
2011621401	FI-REDSD-35/18L-V-W5E-DKO-MS	L	156.60
2011621402	FI-REDSD-35/22L-V-W5E-DKO-MS	L	158.55
2011621403	FI-REDSD-35/28L-V-W5E-DKO-MS	L	167.85
6100020147	FI-REDSD-42/10L-V-W5E-DKO-MS	L	184.60
2011621405	FI-REDSD-42/12L-V-W5E-DKO-MS	L	188.30
2011621406	FI-REDSD-42/15L-V-W5E-DKO-MS	L	191.05
2011621407	FI-REDSD-42/18L-V-W5E-DKO-MS	L	197.65
2011621408	FI-REDSD-42/22L-V-W5E-DKO-MS	L	200.45
2011612409	FI-REDSD-42/28L-V-W5E-DKO-MS	L	208.80
2011621410	FI-REDSD-42/35L-V-W5E-DKO-MS	L	217.15

Straight Reducer for Tube Ends
with 24° Taper / O-Ring (DKO)
Type FI-REDSD ▪ Series S

Item No.	Designation	Series	Price
2011621411	FI-REDSD-08/06S-V-W5E-DKO-MS	S	40.70
2011621412	FI-REDSD-10/06S-V-W5E-DKO-MS	S	45.65
2011621413	FI-REDSD-10/08S-V-W5E-DKO-MS	S	43.85
2011612414	FI-REDSD-12/06S-V-W5E-DKO-MS	S	46.35
2011621415	FI-REDSD-12/08S-V-W5E-DKO-MS	S	49.45
2011621416	FI-REDSD-12/10S-V-W5E-DKO-MS	S	51.40
2011029763	FI-REDSD-14/10S-V-W5E-DKO-MS	S	55.30
2011621421	FI-REDSD-16/06S-V-W5E-DKO-MS	S	61.70
2011621422	FI-REDSD-16/08S-V-W5E-DKO-MS	S	62.65
2011621423	FI-REDSD-16/10S-V-W5E-DKO-MS	S	67.25
2011621424	FI-REDSD-16/12S-V-W5E-DKO-MS	S	69.05
6100034333	FI-REDSD-16/14S-V-W5E-DKO-MS	S	70.00
6100023794	FI-REDSD-20/08S-V-W5E-DKO-MS	S	70.15
2011621428	FI-REDSD-20/10S-V-W5E-DKO-MS	S	76.75
2011621429	FI-REDSD-20/12S-V-W5E-DKO-MS	S	78.10
2011621431	FI-REDSD-20/16S-V-W5E-DKO-MS	S	95.15
2011621433	FI-REDSD-25/08S-V-W5E-DKO-MS	S	106.40
2011621434	FI-REDSD-25/10S-V-W5E-DKO-MS	S	109.15
2011621435	FI-REDSD-25/12S-V-W5E-DKO-MS	S	110.10
2011621436	FI-REDSD-25/14S-V-W5E-DKO-MS	S	117.05
2011621437	FI-REDSD-25/16S-V-W5E-DKO-MS	S	125.85
2011621438	FI-REDSD-25/20S-V-W5E-DKO-MS	S	145.45
2011621442	FI-REDSD-30/12S-V-W5E-DKO-MS	S	176.20
2011621444	FI-REDSD-30/16S-V-W5E-DKO-MS	S	190.15
2011621445	FI-REDSD-30/20S-V-W5E-DKO-MS	S	192.90
2011621446	FI-REDSD-30/25S-V-W5E-DKO-MS	S	203.20
2011621447	FI-REDSD-38/16S-V-W5E-DKO-MS	S	239.55
2011621453	FI-REDSD-38/20S-V-W5E-DKO-MS	S	242.30
2011621454	FI-REDSD-38/25S-V-W5E-DKO-MS	S	261.90
2011621455	FI-REDSD-38/30S-V-W5E-DKO-MS	S	277.65

Adjustable Fittings with 24° Taper / O-Ring

Adjustable Elbow (90°)
with 24° Taper / O-Ring (DKO)
Type FI-EWD ▪ Series L / S

Item No.	Designation	Series	Price
2011621326	FI-EWD-06L-V-W5E-DKO-MS	L	44.10
2011621327	FI-EWD-08L-V-W5E-DKO-MS	L	44.25
2011620618	FI-EWD-10L-V-W5E-DKO-MS	L	57.45
2011621329	FI-EWD-12L-V-W5E-DKO-MS	L	62.95
2011621330	FI-EWD-15L-V-W5E-DKO-MS	L	73.55
2011621331	FI-EWD-18L-V-W5E-DKO-MS	L	113.75
2011621332	FI-EWD-22L-V-W5E-DKO-MS	L	143.35
2011621333	FI-EWD-28L-V-W5E-DKO-MS	L	222.15
2011621334	FI-EWD-35L-V-W5E-DKO-MS	L	312.10
2011621335	FI-EWD-42L-V-W5E-DKO-MS	L	459.15
2011621336	FI-EWD-06S-V-W5E-DKO-MS	S	47.80
2011621337	FI-EWD-08S-V-W5E-DKO-MS	S	53.60
2011621338	FI-EWD-10S-V-W5E-DKO-MS	S	64.60
2011620589	FI-EWD-12S-V-W5E-DKO-MS	S	79.40
2011621339	FI-EWD-14S-V-W5E-DKO-MS	S	89.60
2011621340	FI-EWD-16S-V-W5E-DKO-MS	S	119.10
2011621341	FI-EWD-20S-V-W5E-DKO-MS	S	153.60
2011621342	FI-EWD-25S-V-W5E-DKO-MS	S	243.05
2011621343	FI-EWD-30S-V-W5E-DKO-MS	S	332.55
2011621344	FI-EWD-38S-V-W5E-DKO-MS	S	479.85

Adjustable Branch Tee
with 24° Taper / O-Ring (DKO)
Type FI-ETD ▪ Series L / S

Item No.	Designation	Series	Price
2011030021	FI-ETD-06L-V-W5E-DKO-MS	L	69.20
2011621100	FI-ETD-08L-V-W5E-DKO-MS	L	71.50
2011621346	FI-ETD-10L-V-W5E-DKO-MS	L	88.30
2011621347	FI-ETD-12L-V-W5E-DKO-MS	L	96.95
2011621348	FI-ETD-15L-V-W5E-DKO-MS	L	131.15
2013031166	FI-ETD-18L-V-W5E-DKO-MS	L	174.20
2011621102	FI-ETD-22L-V-W5E-DKO-MS	L	204.05
2011621349	FI-ETD-28L-V-W5E-DKO-MS	L	350.85
2011621350	FI-ETD-35L-V-W5E-DKO-MS	L	514.40
2011621351	FI-ETD-42L-V-W5E-DKO-MS	L	684.75
2011621103	FI-ETD-06S-V-W5E-DKO-MS	S	72.00
2011621352	FI-ETD-08S-V-W5E-DKO-MS	S	78.10
2011621353	FI-ETD-10S-V-W5E-DKO-MS	S	97.35
2011620637	FI-ETD-12S-V-W5E-DKO-MS	S	106.40
2011030022	FI-ETD-14S-V-W5E-DKO-MS	S	136.30
2011621354	FI-ETD-16S-V-W5E-DKO-MS	S	173.50
2011621355	FI-ETD-20S-V-W5E-DKO-MS	S	221.20
2011621356	FI-ETD-25S-V-W5E-DKO-MS	S	351.35
2011621357	FI-ETD-30S-V-W5E-DKO-MS	S	459.05
2011621358	FI-ETD-38S-V-W5E-DKO-MS	S	698.80

Adjustable Barrel Tee
with 24° Taper / O-Ring (DKO)
Type FI-ELD ▪ Series L / S

Item No.	Designation	Series	Price
2011620653	FI-ELD-06L-V-W5E-DKO-MS	L	69.20
2011621360	FI-ELD-08L-V-W5E-DKO-MS	L	71.50
2011621109	FI-ELD-10L-V-W5E-DKO-MS	L	90.40
2011620815	FI-ELD-12L-V-W5E-DKO-MS	L	96.95
2011620727	FI-ELD-15L-V-W5E-DKO-MS	L	131.15
2011621361	FI-ELD-18L-V-W5E-DKO-MS	L	174.20
2011621362	FI-ELD-22L-V-W5E-DKO-MS	L	219.05
2011621363	FI-ELD-28L-V-W5E-DKO-MS	L	420.95
2011621364	FI-ELD-35L-V-W5E-DKO-MS	L	539.65
2011621365	FI-ELD-42L-V-W5E-DKO-MS	L	740.95
2011620864	FI-ELD-06S-V-W5E-DKO-MS	S	72.00
2011621110	FI-ELD-08S-V-W5E-DKO-MS	S	78.10
2011621366	FI-ELD-10S-V-W5E-DKO-MS	S	97.35
2011620587	FI-ELD-12S-V-W5E-DKO-MS	S	110.80
2011030013	FI-ELD-14S-V-W5E-DKO-MS	S	137.70
2011621112	FI-ELD-16S-V-W5E-DKO-MS	S	173.50
2011620588	FI-ELD-20S-V-W5E-DKO-MS	S	221.20
2011621367	FI-ELD-25S-V-W5E-DKO-MS	S	369.80
2011621113	FI-ELD-30S-V-W5E-DKO-MS	S	550.80
2011621114	FI-ELD-38S-V-W5E-DKO-MS	S	761.35

	Thread Reducer FI-RED	**C24**
	Whitworth Parallel Pipe Thread (BSPP) / Profile Sealing Ring FI-RED-...-R-WD	**C24**
	Blanking Screw for Ports FI-VS	**C25**
	Whitworth Parallel Pipe Thread (BSPP) / Profile Sealing Ring FI-VS-...-R-WD	**C25**
	Metric Parallel Thread / Profile Sealing Ring FI-VS-...-M-WD	**C25**
	Blanking Plug with 24° Taper / O-Ring (DKO) FI-VD	**C25**
	Blanking Plug for Tube Ends FI-VSK	**C25**
	Profile Sealing Ring WDG	**C26**
	O-Ring O-Ring	**C27**

Order Codes

FI	-	RED	-	R1/8	-	WD	-	R1/4	-	V	-	W5	E
①		②		③		⑤		③		⑦		⑧	⑨

FI	-	VD	-	15	L	-	V	-	W5	E
①		②		④	⑥		⑦		⑧	⑨

① Series

Fittings	**FI**

② Type

Thread Reducer	**RED**
Blanking Screw for Ports	**VS**
Blanking Plug with 24° Taper / O-Ring (DKO)	**VD**
Blanking Plug for Tube Ends	**VSK**

③ Thread Type / Size

Whitworth Parallel Pipe Thread (BSPP) (Sizes to be indicated, e.g. R1/4) For FI-RED, Male Thread Type/Size shown first and Female Thread Type/Size shown second e.g. FI-RED-**R1/8**-WD-**R1/4**-B-W3	**R**
Metric Parallel Pipe Thread (Sizes to be indicated, e.g. M14x1.5)	**M**

④ Tube O.D.

Outside Tube Diameter in mm according to dash sizing. Reducers are separated by a slash (e.g. 12/10L)	

⑤ Sealing Type

Standard seal type, including: Metallic Sealing Edge for thread types R / M	**(None)**
Elastomeric seal	**WD**

⑥ Tube Series

Extra Light	**LL**
Light & Heavy (suits both)	**L/S**
Light	**L**
Heavy	**S**

⑦ Sealing Material

No Sealing Material	**(None)**
FKM (Viton®)	**V**

⑧ Surface Material

Stainless Steel	**W5**

⑨ Additional Information

STAUFF internal information only	**Letter indicated**

Thread Reducer
BSPP with Profile Sealing Ring
Type FI-RED-...-R-WD

Item No.	Designation	PN (bar)	Price
2011612430	FI-RED-R1/8-WD-R1/4-V-W5E	630	24.85
2011612431	FI-RED-R1/8-WD-R3/8-V-W5E	630	31.65
2011615402	FI-RED-R1/4-WD-R1/8-V-W5E	400	31.45
2011610621	FI-RED-R1/4-WD-R3/8-V-W5E	400	33.30
2011610620	FI-RED-R1/4-WD-R1/2-V-W5E	400	43.05
2011617815	FI-RED-R1/4-WD-R3/4-V-W5E	400	57.10
2011612428	FI-RED-R3/8-WD-R1/8-V-W5E	400	28.25
2011615403	FI-RED-R3/8-WD-R1/4-V-W5E	400	30.50
2011612429	FI-RED-R3/8-WD-R1/2-V-W5E	630	44.15
2011617813	FI-RED-R1/2-WD-R1/8-V-W5E	400	31.05
2011610622	FI-RED-R1/2-WD-R1/4-V-W5E	400	31.85
2011612095	FI-RED-R1/2-WD-R3/8-V-W5E	400	38.70
2011611320	FI-RED-R1/2-WD-R3/4-V-W5E	400	57.65
2011612928	FI-RED-R1/2-WD-R1-V-W5E	250	92.65
2011615487	FI-RED-R1/2-WD-R1-1/4-V-W5E	250	183.95
2011611100	FI-RED-R3/4-WD-R1/4-V-W5E	315	45.85
2011612089	FI-RED-R3/4-WD-R3/8-V-W5E	315	45.85
2011612017	FI-RED-R3/4-WD-R1/2-V-W5E	400	45.65
2011615220	FI-RED-R3/4-WD-R1-V-W5E	400	93.80
2011615412	FI-RED-R3/4-WD-R1-1/4-V-W5E	250	219.95
2011615508	FI-RED-R3/4-WD-R1-1/2-V-W5E	250	219.95
2011615116	FI-RED-R1-WD-R1/4-V-W5E	400	75.00
2011617814	FI-RED-R1-WD-R3/8-V-W5E	400	55.00
2011611254	FI-RED-R1-WD-R1/2-V-W5E	400	64.90
2011611989	FI-RED-R1-WD-R3/4-V-W5E	400	67.20
2011611321	FI-RED-R1-WD-R1-1/4-V-W5E	250	174.10
2011615411	FI-RED-R1-WD-R1-1/2-V-W5E	250	214.40
2011613813	FI-RED-R1-1/4-WD-R1/2-V-W5E	315	100.95
2011612044	FI-RED-R1-1/4-WD-R3/4-V-W5E	315	93.60
2011611629	FI-RED-R1-1/4-WD-R1-V-W5E	315	100.95
2011615483	FI-RED-R1-1/4-WD-R1-1/2-V-W5E	250	213.00
2011613127	FI-RED-R1-1/2-WD-R1/2-V-W5E	250	100.95
2010000124	FI-RED-R1-1/2-R3/4-WD-V-W5E	250	113.75
2011612103	FI-RED-R1-1/2-WD-R1-V-W5E	250	121.20
2011615231	FI-RED-R1-1/2-WD-R1-1/4-V-W5E	250	204.20

The following Thread Reducers are also available on request

Thread Reducer
BSPP Thread / Metallic Sealing Edge
FI-RED-...-R
Refer to Catalogue 2 - STAUFF Connect

Blanking Screws for Ports

Blanking Screw for Ports
BSPP with Profile Sealing Ring (FKM)
Type FI-VS-...-R-WD

Item No.	Designation	PN (bar)	Price
2011602800	FI-VS-R1/8-WD-V-W5E	400	14.80
2011374787	FI-VS-R1/4-WD-V-W5E	400	16.80
2011374841	FI-VS-R3/8-WD-V-W5E	400	19.35
2011372597	FI-VS-R1/2-WD-V-W5E	400	25.00
2011602802	FI-VS-R3/4-WD-V-W5E	400	34.55
2011374498	FI-VS-R1-WD-V-W5E	400	53.10
2011371504	FI-VS-R1-1/4-WD-V-W5E	315	82.50
2011609394	FI-VS-R1-1/2-WD-V-W5E	315	94.20

Blanking Screw for Ports
Metric with Profile Sealing Ring (FKM)
Type FI-VS-...-M-WD

Item No.	Designation	PN (bar)	Price
2011605040	FI-VS-M10X1-WD-V-W5E	400	14.00
2011605042	FI-VS-M12x1.5-WD-V-W5E	400	15.05
2011374724	FI-VS-M14x1.5-WD-V-W5E	400	18.60
2011605044	FI-VS-M16x1.5-WD-V-W5E	400	19.80
2013031113	FI-VS-M18x1.5-WD-V-W5E	400	21.20
2011609395	FI-VS-M20x1.5-WD-V-W5E	400	24.60
2011374725	FI-VS-M22x1.5-WD-V-W5E	400	26.90
2011617296	FI-VS-M26x1.5-WD-V-W5E	400	34.00
2013031269	FI-VS-M27x2-WD-V-W5E	400	37.25
2011605143	FI-VS-M33x2-WD-V-W5E	400	40.80
2011617297	FI-VS-M42x2-WD-V-W5E	250	42.50
6100023799	FI-VS-M48x2-WD-V-W5E	250	47.80

The following Blanking Screws are also available on request

Blanking Screw for Ports (Heavy Duty)
BSPP Thread / Profile Sealing Ring
FI-VSV-...-R-WD
Refer to Catalogue 2 - STAUFF Connect

Blanking Screw for Ports (Heavy Duty)
Metric Parallel Thread / Profile Sealing Ring
FI-VSV-...-M-WD
Refer to Catalogue 2 - STAUFF Connect

Blanking Screw for Ports
BSPP Thread / Metallic Sealing Edge
FI-VS-...-R
Refer to Catalogue 2 - STAUFF Connect

Blanking Plugs

Blanking Plug
with 24° Taper / O-Ring (DKO)
Type FI-VD ▪ Series L / S

Item No.	Designation	Series	Price
2011618775	FI-VD-06L/S-V-W5E	L/S	10.60
2011618776	FI-VD-08L/S-V-W5E	L/S	10.90
2011618777	FI-VD-10L/S-V-W5E	L/S	11.35
2011618778	FI-VD-12L/S-V-W5E	L/S	14.15
2011618779	FI-VD-15L-V-W5E	L	14.85
2011618780	FI-VD-18L-V-W5E	L	19.20
2011618781	FI-VD-22L-V-W5E	L	56.80
2011618782	FI-VD-28L-V-W5E	L	64.05
2011618783	FI-VD-35L-V-W5E	L	80.20
2011618784	FI-VD-42L-V-W5E	L	85.70
2011618785	FI-VD-14S-V-W5E	S	14.30
2011618786	FI-VD-16S-V-W5E	S	18.80
2011618787	FI-VD-20S-V-W5E	S	25.05
2011618788	FI-VD-25S-V-W5E	S	32.95
2011618789	FI-VD-30S-V-W5E	S	57.00
2011618790	FI-VD-38S-V-W5E	S	94.95

Blanking Plug
for Tube Ends
Type FI-VSK ▪ Series L / S

Item No.	Designation	PN (bar)	Thread Size	Series	Price
2011029723	FI-VSK-06L-W5E	315	M12 x 1.5	L	14.70
2011029727	FI-VSK-08L-W5E	315	M14 x 1.5	L	15.80
2011029731	FI-VSK-10L-W5E	315	M16 x 1.5	L	19.95
2011029735	FI-VSK-12L-W5E	315	M18 x 1.5	L	26.20
2011029741	FI-VSK-15L-W5E	315	M22 x 1.5	L	27.35
2011029745	FI-VSK-18L-W5E	315	M26 x 1.5	L	89.60
2011029749	FI-VSK-22L-W5E	160	M30 x 2	L	42.90
2011029635	FI-VSK-28L-W5E	160	M36 x 2	L	119.85
6100007781	FI-VSK-35L-W5E	160	M45 x 2	L	74.15
2011029637	FI-VSK-42L-W5E	160	M52 x 2	L	85.90
2011029725	FI-VSK-06S-W5E	630	M14 x 1.5	S	15.20
2011029729	FI-VSK-08S-W5E	630	M16 x 1.5	S	19.65
2011029733	FI-VSK-10S-W5E	630	M18 x 1.5	S	20.75
2011029737	FI-VSK-12S-W5E	630	M20 x 1.5	S	26.90
2011029739	FI-VSK-14S-W5E	630	M22 x 1.5	S	35.10
2011029743	FI-VSK-16S-W5E	400	M24 x 1.5	S	46.05
2011029747	FI-VSK-20S-W5E	400	M30 x 2	S	89.60
2011029751	FI-VSK-25S-W5E	400	M36 x 2	S	112.35
2011029753	FI-VSK-30S-W5E	400	M42 x 2	S	132.55
2011029755	FI-VSK-38S-W5E	315	M52 x 2	S	146.80

The following Blanking Plugs are also available on request

Blanking Plug
with Sealing Edge
FI-BUZ
Refer to Catalogue 2 - STAUFF Connect

Profile Sealing Ring for Male Studs

Profile Sealing Ring for Male Studs
BSPP - FKM - 80 / 90 DURO
Type WDG

Item No.	Designation	For Stud	Price
1230020265	WDG-8.4x11.9x1-V90	G1/8	5.35
1230000517	WDG-11.6x16.5x1.5-V90	G1/4	6.45
1230000377	WDG-14.7x18.9x1.5-V90	G3/8	7.90
1230002775	WDG-18.5x23.9x1.5-V80	G1/2	8.85
1230002776	WDG-23.9x29.2x1.5-V80	G3/4	15.60
1230002777	WDG-29.7x35.7x2-V80	G1	19.80
1230002778	WDG-38.8x45.8x2-V80	G1-1/4	21.25
1230003533	WDG-44.7x50.7x2-V80	G1-1/2	21.40

Profile Sealing Ring for Male Studs
Metric - FKM - 80 / 90 DURO
Type WDG

Item No.	Designation	For Stud	Price
6030006409	WDG-6.5x9.9x1-V90	M8 x 1	4.00
1230020265	WDG-8.4x11.9x1-V90	M10 x 1	5.35
1230000356	WDG-9.8x14.5x1.5-V90	M12 x 1.5	6.05
1230000517	WDG-11.6x16.5x1.5-V90	M14 x 1.5	6.45
1230020128	WDG-13.8x18.9x1.5-V80	M16 x 1.5	7.90
1230004289	WDG-15.7x20.9x1.5-V80	M18 x 1.5	8.60
1230020418	WDG-17.8x22.9x1.5-V90	M20 x 1.5	9.20
1230020845	WDG-19.6x24.3x1.5-V90	M22 x 1.5	6.20
1230002776	WDG-23.9x29.2x1.5-V80	M26 x 1.5	15.60
1230002776	WDG-23.9x29.2x1.5-V80	M27 x 2	15.60
1230002777	WDG-29.7x35.7x2-V80	M33 x 2	19.80
1230002778	WDG-38.8x45.8x2-V80	M42 x 2	21.25
1230003533	WDG-44.7x50.7x2-V80	M48 x 2	21.40

DIN Thread Sizes

Series	Tube OD (mm)	Male Stud Metric Parallel Thread		Male Stud Whitworth Parallel Pipe Thread	
		Thread Size	Width AF	Thread Size	Width AF
L	06	M10 x 1	14	G1/8	14
	08	M12 x 1.5	17	G1/4	19
	10	M14 x 1.5	19	G1/4	19
	12	M16 x 1.5	22	G3/8	22
	15	M18 x 1.5	24	G1/2	27
	18	M22 x 1.5	27	G1/2	27
	22	M26 x 1.5	32	G3/4	32
	28	M33 x 2	41	G1	41
	35	M42 x 2	50	G1-1/4	50
	42	M48 x 2	55	G1-1/2	55

DIN Thread Sizes

Series	Tube OD (mm)	Male Stud Metric Parallel Thread		Male Stud Whitworth Parallel Pipe Thread	
		Thread Size	Width AF	Thread Size	Width AF
S	06	M12 x 1.5	17	G1/4	19
	08	M14 x 1.5	19	G1/4	19
	10	M16 x 1.5	22	G3/8	22
	12	M18 x 1.5	24	G3/8	22
	14	M20 x 1.5	27	G1/2	27
	16	M22 x 1.5	27	G1/2	27
	20	M27 x 2	32	G3/4	32
	25	M33 x 2	41	G1	41
	30	M42 x 2	50	G1-1/4	50
	38	M48 x 2	55	G1-1/2	55

O-Ring for 24°/37° Flared Cone Adaptors

O-Ring for 24° Flared Cone Adaptor
FKM - 90 DURO
Type O-Ring ▪ Series L / S

Item No.	Designation	Tube Size / Series	Price
1230000496	O-Ring-4.5x1.5-V90	06L	3.00
6030007322	O-Ring-6.5x1.5-V90	08L	1.75
1230000510	O-Ring-8.5x1.5-V90	10L	1.45
1230000514	O-Ring-10x1.5-V90	12L	1.75
6030007311	O-Ring-12.5x2-V90	15L	2.15
6030007312	O-Ring-16X2-V90	18L	2.00
1230000530	O-Ring-20x2-V90	22L	2.15
1230000534	O-Ring-26x2-V90	28L	6.20
1230000538	O-Ring-32x2.5-V90	35L	12.95
1230000542	O-Ring-38x2.5-V90	42L	8.50
1230000496	O-Ring-4.5x1.5-V90	06S	3.00
6030007322	O-Ring-6.5x1.5-V90	08S	1.75
1230000510	O-Ring-8.5x1.5-V90	10S	1.45
1230000514	O-Ring-10x1.5-V90	12S	1.75
1230000520	O-Ring-12x2-V90	14S	2.65
1230000524	O-Ring-14x2-V90	16S	2.60
1230000528	O-Ring-17.3x2.4-V90	20S	3.65
1230000532	O-Ring-22.3x2.4-V90	25S	5.30
1230000536	O-Ring-27.3x2.4-V90	30S	7.30
1230000540	O-Ring-35x2.5-V90	38S	7.60

O-Ring for 37° Flared Cone Adaptor
FKM - 90 DURO
Type O-Ring ▪ Series L / S

Item No.	Designation	Tube Size / Series	Price
6030008098	O-Ring-4.4x0.8-V90	06L	2.05
6030008109	O-Ring-6x0.8-V90	08L	2.10
6030008115	O-Ring-7.5x0.8-V90	10L	2.15
6030008123	O-Ring-9.5x0.8-V90	12L	3.00
6030008000	O-Ring-12.5x0.8-V90	15L	2.80
6030008014	O-Ring-15x1-V90	18L	4.00
6030008031	O-Ring-18x1-V90	22L	4.05
6030008051	O-Ring-23x1-V90	28L	5.50
6030008072	O-Ring-30x1-V90	35L	5.95
6030008508	O-Ring-37x1-V80	42L	2.65
6030008098	O-Ring-4.4x0.8-V90	06S	2.05
6030008109	O-Ring-6x0.8-V90	08S	2.10
6030008115	O-Ring-7.5x0.8-V90	10S	2.15
6030008123	O-Ring-9.5x0.8-V90	12S	3.00
6030007993	O-Ring-11x1-V90	14S	2.65
6030008004	O-Ring-12.5x1-V90	16S	2.80
6030008019	O-Ring-16x1-V90	20S	4.10
6030008041	O-Ring-20x1-V90	25S	5.40
6030008057	O-Ring-25x1-V90	30S	4.60
6030008077	O-Ring-32x1.78-B90	38S	3.60

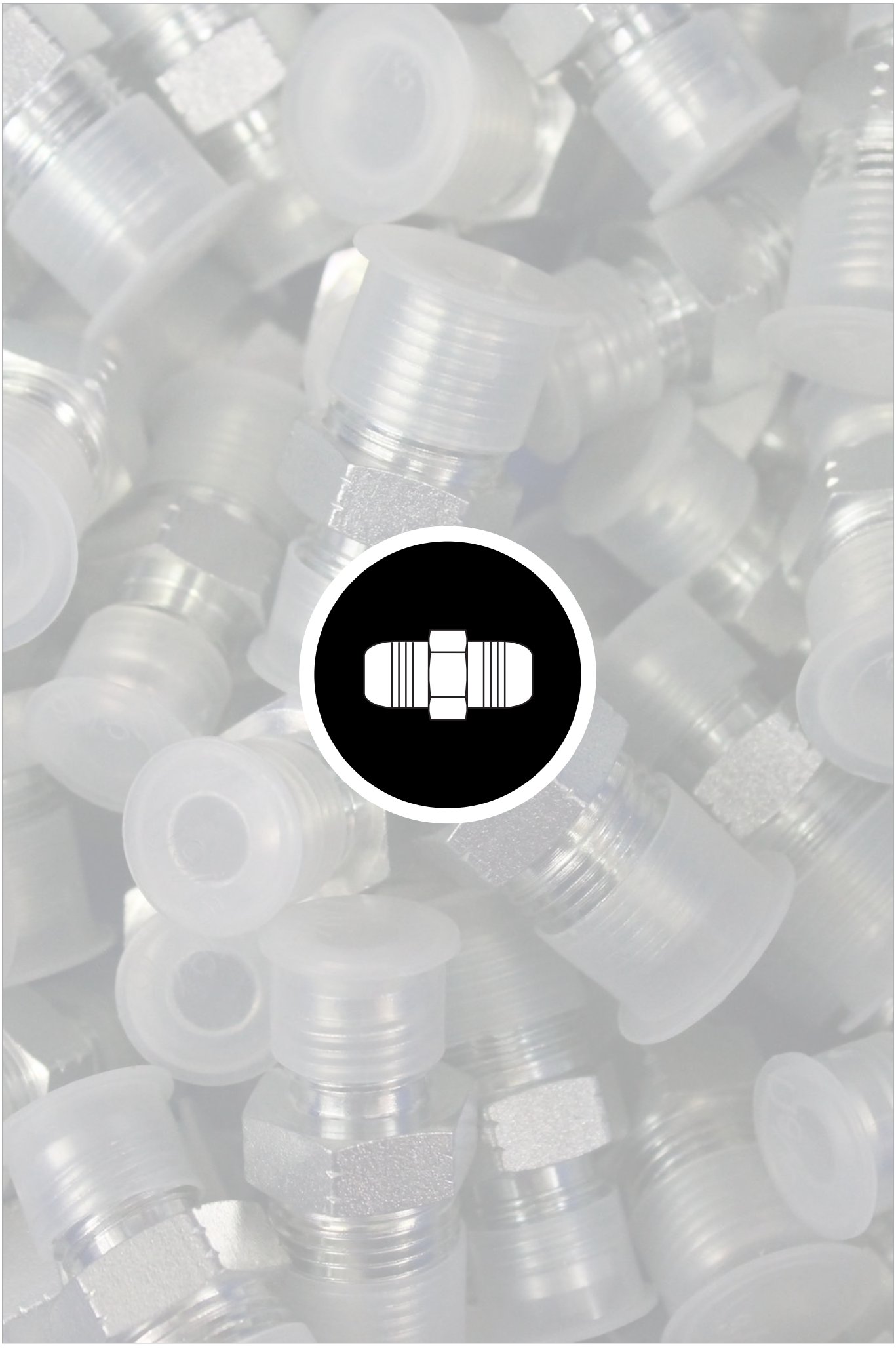
O-Ring for DKO Taper Fittings / 24° Weld Cones

O-Ring for DKO Taper Fitting / 24° Weld Cone
FKM - 90 DURO
Type O-Ring ▪ Series L / S

Item No.	Designation	Tube Size / Series	Price
1230000496	O-Ring-4.5x1.5-V90	06L	3.00
6030007322	O-Ring-6.5x1.5-V90	08L	1.75
1230000510	O-Ring-8.5x1.5-V90	10L	1.45
1230000514	O-Ring-10x1.5-V90	12L	1.75
6030007311	O-Ring-12.5x2-V90	15L	2.15
6030007312	O-Ring-16X2-V90	18L	2.00
1230000530	O-Ring-20x2-V90	22L	2.15
1230000534	O-Ring-26x2-V90	28L	6.20
1230000538	O-Ring-32x2.5-V90	35L	12.95
1230000542	O-Ring-38x2.5-V90	42L	8.50
1230000496	O-Ring-4.5x1.5-V90	06S	3.00
6030007322	O-Ring-6.5x1.5-V90	08S	1.75
1230000510	O-Ring-8.5x1.5-V90	10S	1.45
1230000514	O-Ring-10x1.5-V90	12S	1.75
1230000520	O-Ring-12x2-V90	14S	2.65
1230000524	O-Ring-14x2-V90	16S	2.60
1230000528	O-Ring-17.3x2.4-V90	20S	3.65
1230000532	O-Ring-22.3x2.4-V90	25S	5.30
1230000536	O-Ring-27.3x2.4-V90	30S	7.30
1230000540	O-Ring-35x2.5-V90	38S	7.60

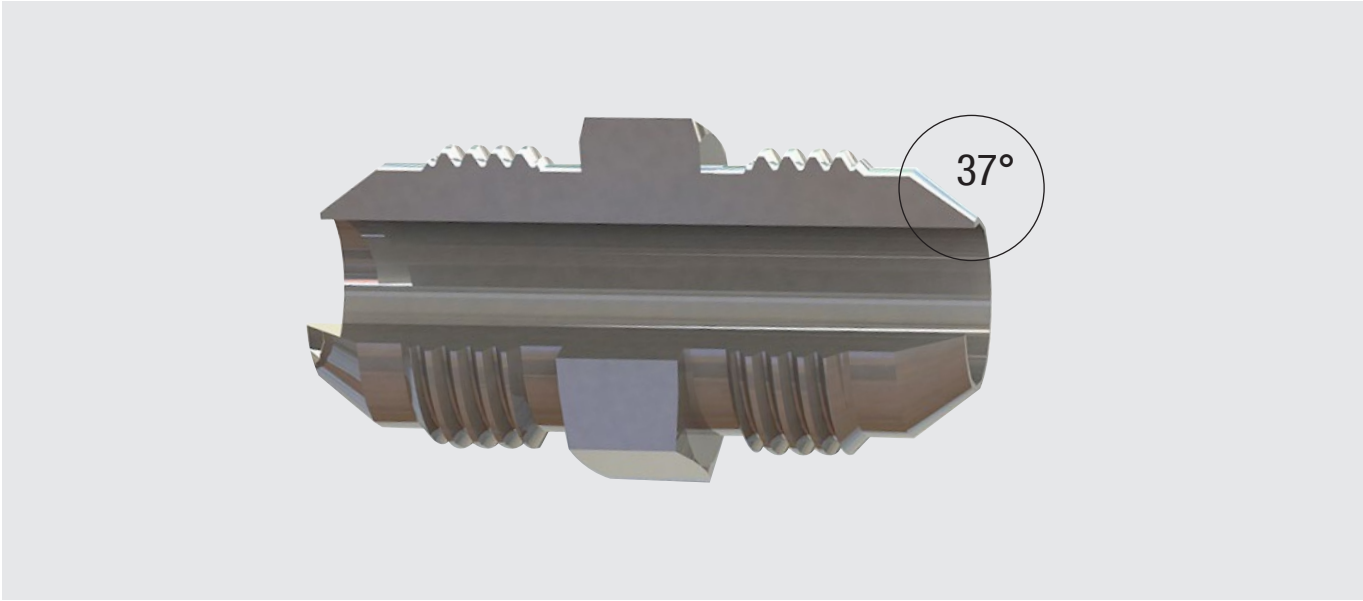
Recommended for Assembly

O-Ring Extraction Tool (Set) -
Type SPLM-TOOL-ORING-EXTRACTION
is available.
Refer to Section F - Assembly Tools / Devices



JIC - Introduction	D3 - D7
JIC - Connectors	D8 - D11
JIC - Bulkhead Adaptors	D12 - D15
JIC - Elbow / Tee Adaptors	D16 - D19
JIC - Swivel Adaptors	D20 - D22
JIC - Spare Parts / Accessories	D23 - D27
JIC - Assembly Instructions	D28 - D29

JIC 37° Adaptors



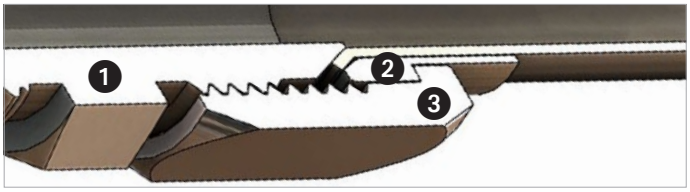
Defined by the SAE standard, JIC 37° flare adaptors are widely applied and are among the most common and established system used in industrial tube and hose connector systems worldwide. They are regarded as the universal standard for fluid power applications in markets that use the imperial systems, mainly throughout Australasia and Northern America.

The JIC fitting system consists of three pieces: adaptor body ❶, sleeve ❷ and nut ❸ which form the complete assembly. The seal is achieved through metal-to-metal contact between the finished surface of the fitting's 37° conical nose and the inside diameter of the flared tubing.

During assembly, the sleeve is used to evenly distribute the compressing load created on the flared end of the tube by the threading of the flare nut to the male fitting. The sleeve also extends out the back of the nut providing additional support to the assembly by lessoning any longitudinal loading on the flare.

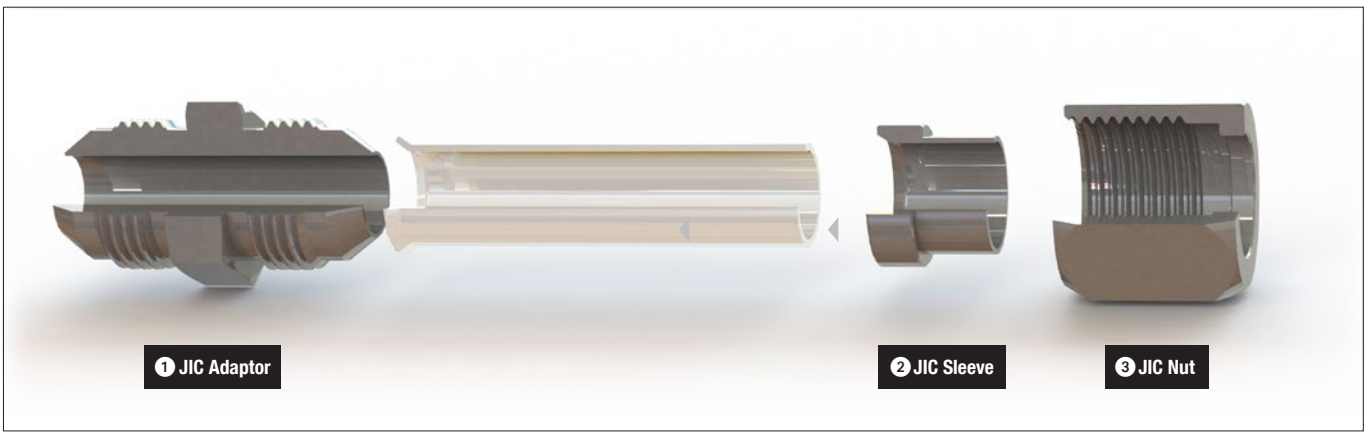
STAUFF offer an extensive range of carbon steel JIC 37° adaptors to complement the range of Imperial seamless tube. JIC adaptor body, flare nut and sleeve are available in outer diameter ("OD) sizes between 1/8" to 1-1/2" and also 2" size on-request. The other end of the adaptor body is available with a variety of different connection types, such as male and female threaded studs. Various shapes and designs, e.g. straight fittings, elbows, tees, crosses, unions, studs, and bulkheads etc. are available.

The commonly used connection types consist of JIC/BSPT Male Connector, JIC/BSPP Male Connector, JIC/ NPT Male connector, JIC Union, JIC/NPT Swivel Male Connector, JIC/BSPP Swivel Male Connector. Adaptor thread sizes are determined by the corresponding outside diameter of the inch tubing for the various types of tube ends.



Main Advantages of the JIC 37° fitting system:

- Simplicity, convenience, reliability and suitability to adapt to fixed-line tubing or flexible hose
- Assembly and re-assembly is fast and simple; therefore, the system provides cost savings during the installation of pipework circuits
- The JIC 37° fitting system provides suitable components with sufficient pressure ratings and maximum leak-tightness up to nominal pressures of 345 bar
- Optimised design, the JIC 37° tube adaptors offer ideal flow rates, and therefore guarantee best performance without the generation of vibrations, noise or heat
- JIC 37° tube adaptors are small and compact in design which makes them perfect for applications with space considerations
- Common system designed to international standards and available globally
- Flaring can be accomplished by using either manual equipment or the STAUFF PRESS bench top powered flaring machine which is a highly accurate, production capable machine
- Adaptors can be used with carbon steel and stainless steel seamless tubes
- Galvanised zinc surface protection



Ordering Codes

ADP	-	C	-	J08/U08	-	MM	-	W66	A	-	OR-B
①		②		③		④		⑥	⑦		⑧

① Series

Adaptor	ADP

② Type

Nut		N
Sleeve		S
Nut + Sleeve		NS
Cap		CP
Plug		HP
Connector		C
Compact Elbow 90°	⑤ Forged Body	CE90
Compact Elbow 45°	⑤ Forged Body	CE45
Tee Connector	⑤ Forged Body	T
Equal Cross	⑤ Forged Body	X
Bulkhead		B
Bulkhead 90°		B90
Bulkhead 45°		B45
Bulkhead Branch Tee		BBT
Bulkhead Run Tee		BRT
Positional Compact Elbow 90°	⑤ Forged Body	PCE90

③ Thread Types & Sizes

JIC	J
BSP Cylindrical	G
BSP WD	G..WD
BSP Taper	T
NPT (NPTF)	N
UNF/UN	U
Thread Sizes	- See Table

DIN Metric L/S see page 16

④ Gender Types

Male (Cap Only)	M
Male / Male	MM
Male / Male / Male (Tee Only)	MMM
Male / Male / Male / Male (Cross Only)	MMMM
Female (Plug Only)	F
Female / Female	FF
Female / Female Fixed	FFX
Female / Female / Female (Tee Only)	FFF
Female / Female / Female Fixed (Tee Only)	FFFX
Female / Female / Female / Female (Cross Only)	FFFF
Male / Female	MF
Male / Female Fixed	MFX

⑤ Body Type

Forged Body (standard) (For adaptor CE90, CE45, T, X & PCE90 only)	FG

⑥ Surface Protection

Steel Galvanised, thick layer passivated	W66
Main part of steel thick-layer-passivated (W66), add on parts Zinc-Nickel (W3) (Metric - JIC Only)	W111

⑦ Internal Information

STAUFF internal information only	A

⑧ Assembly Status

DIN Nut and Ring Assembled	MS
Nut and Sleeve Assembled	NS
Hexagon Nut Assembled	SKM
Perbunan Elastomeric Sealing	WD-B
Viton Elastomeric Sealing	WD-V
Perbunan Elastomeric Sealing and O-Ring	WDOR-B
Viton Elastomeric Sealing and O-Ring	WDOR-V
Perbunan O-Ring	OR-B
Viton O-Ring	OR-V
Perbunan O-Ring and Retaining Ring	OK-B
Viton O-Ring and Retaining Ring	OK-V
Perbunan O-Rings and Retaining Ring	OKOR-B

⑨ Additional Information

Hexagon size according to ISO 8434 (Nut only)	8434
Short version sleeve	SVS

③ Thread Sizes

Dash Size	JIC (J)	BSPP (G)	BSPT (T)	NPT (N)	UNO (U)
02	5/16	1/8	1/8	1/8	5/16–24
03	3/8	-	-	-	3/8–24
04	7/16	1/4	1/4	1/4	7/16–20
05	1/2	-	-	-	1/2–20
06	9/16	3/8	3/8	3/8	9/16–18
08	3/4	1/2	1/2	1/2	3/4–16
10	7/8	-	-	-	7/8–14

Dash Size	JIC (J)	BSPP (G)	BSPT (T)	NPT (N)	UNO (U)
12	1-1/16	3/4	3/4	3/4	1-1/16–12
14	1-3/16	-	-	-	1-3/16–12
16	1-5/16	1	1	1	1-5/16–12
20	1-5/8	1-1/4	1-1/4	1-1/4	1-5/8–12
24	1-7/8	1-1/2	1-1/2	1-1/2	1-7/8–12
32	2-1/2	2	2	2	2-1/2–12

Orientation of Adaptor Ends

Connectors & Elbows
Two Similar Gender Threads

If the thread types are the same on both sides, the smallest size is always defined first.

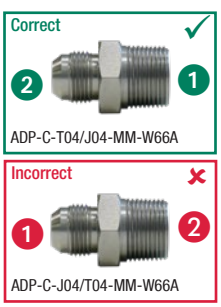
Example

If the thread types are not the same on both sides, we use the following to define the order:

Thread Order

1. BSPP (G), (G..WD)
2. BSP Taper (T)
3. JIC (J)
4. UNF (U)
5. NPT (N)

Example



Connectors & Elbows
Two Different Gender Threads

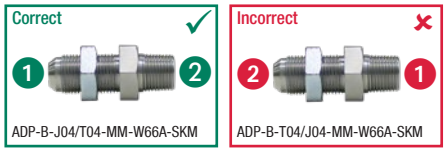
The male thread is always defined first.

Example

Bulkhead Straights
Two Similar Gender Threads

The thread with the locknut is defined first.

Example

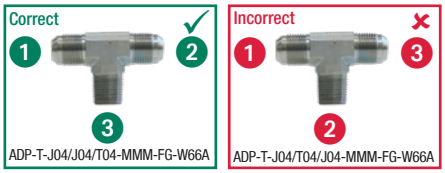


Tees

STAUFF use a clockwise rotation for defining the thread ends, always using a male in the top left if there is one.

If the gender and thread types are the same across the top run, the smallest thread is denoted first.

Example

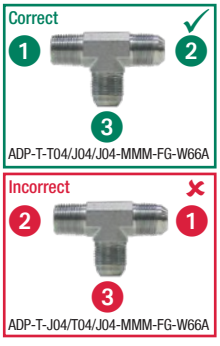


If the gender is the same, but the thread types are different across the top run, use the following to define the order:

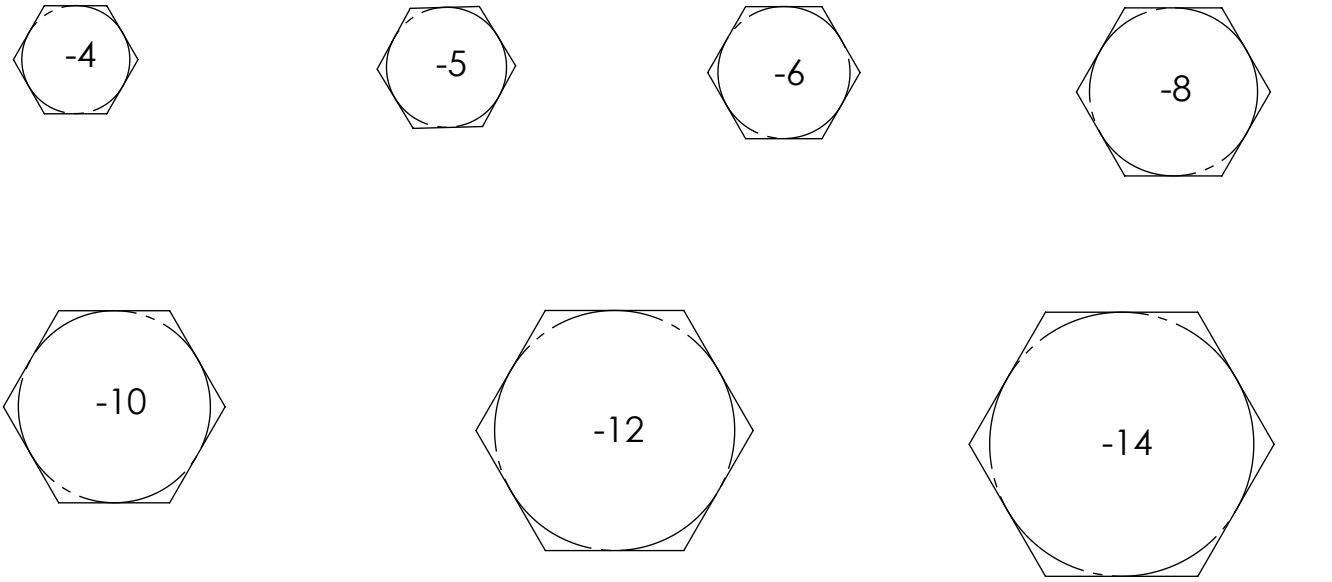
Thread Order

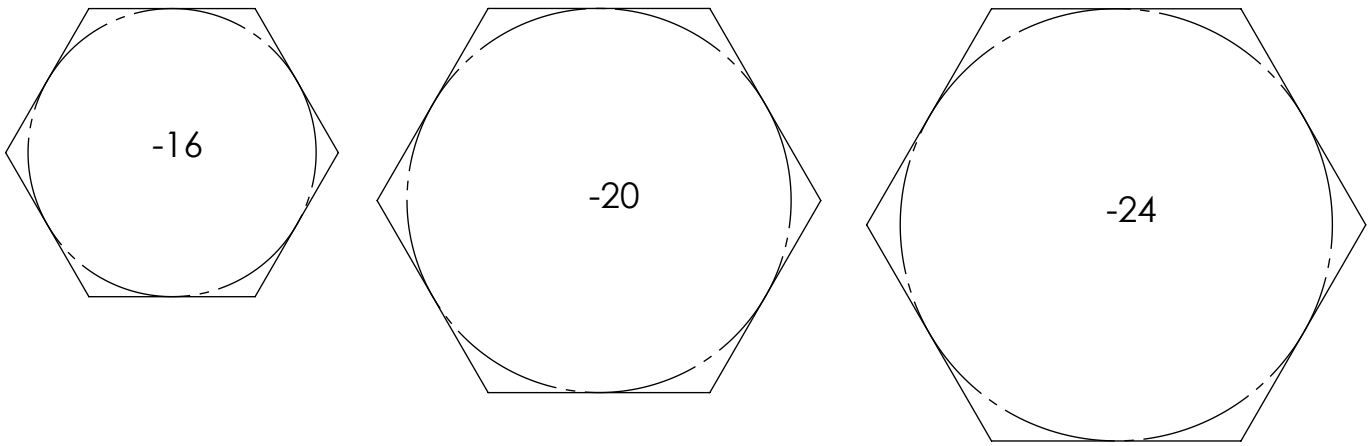
1. BSPP (G), (G..WD)
2. BSP Taper (T)
3. JIC (J)
4. UNF (U)
5. NPT (N)

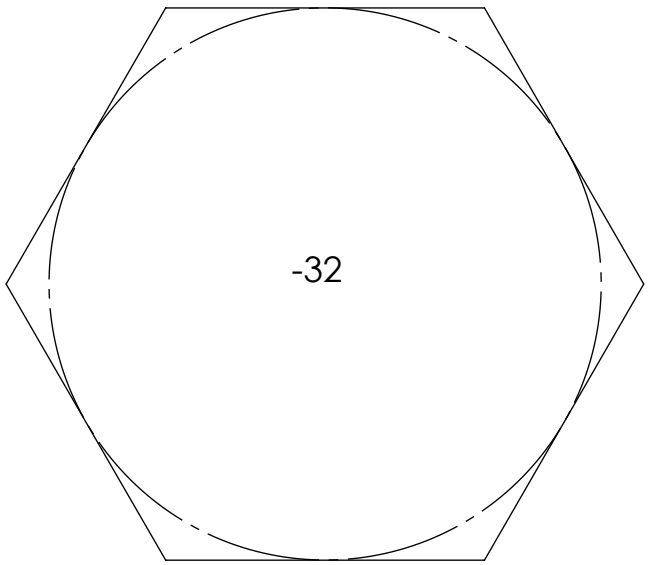
Example



JIC - SAE J514 Nut Sizing Chart
(Imperial Hexagon)





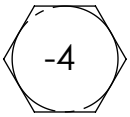


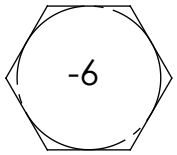
True to scale 1:1 at A4

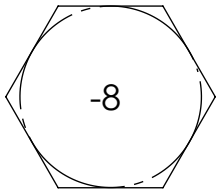
JIC - SAE J514 Nut Sizing Chart

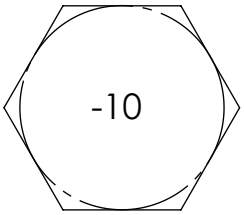
Dash Size	JIC Thread Size (inches)	Nut Hex (mm)	Tube O.D. (inches)
04	7/16	14.29	1/4
05	1/2	15.88	5/16
06	9/16	17.46	3/8
08	3/4	22.22	1/2
10	7/8	25.4	5/8
12	1-1/16	31.75	3/4
14	1-3/16	34.93	7/8
16	1-5/16	38.1	1
20	1-5/8	50.8	1-1/4
24	1-7/8	57.15	1-1/2
32	2-1/2	73.02	2

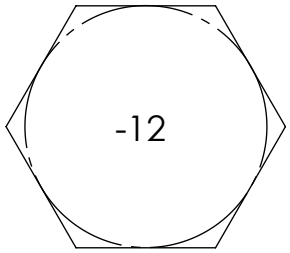
JIC - ISO 8434 Nut Sizing Chart
(Metric Hexagon)

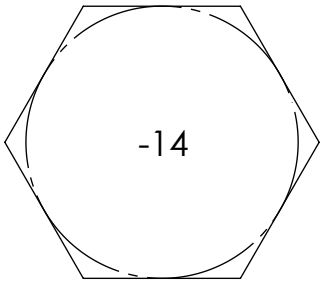


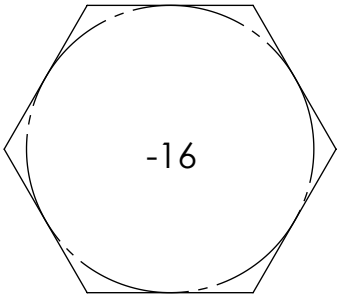


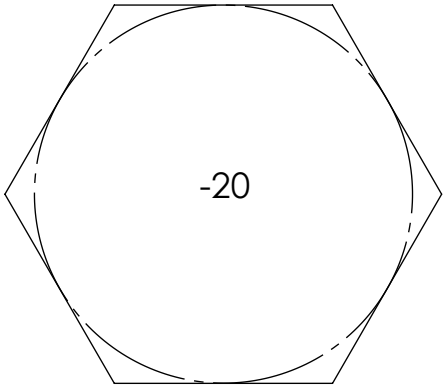


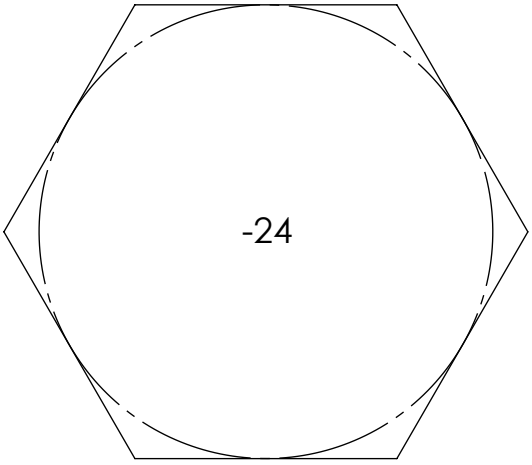


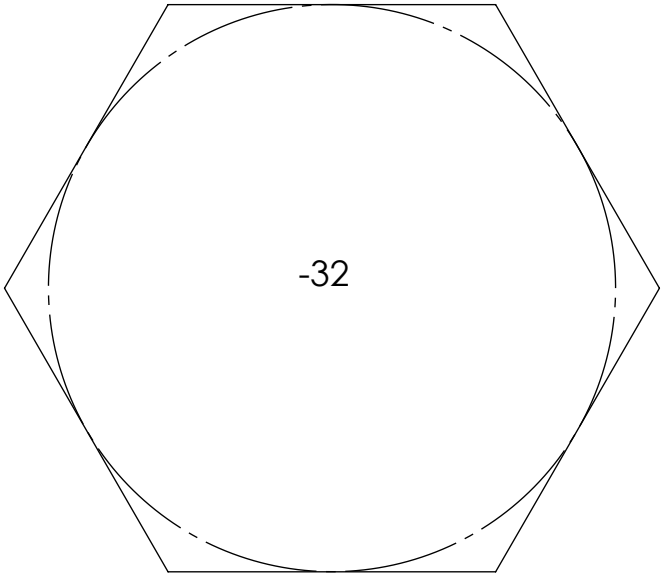










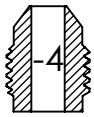


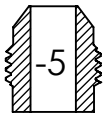
True to scale 1:1 at A4

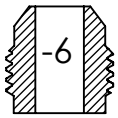
JIC - ISO 8434 Nut Sizing Chart

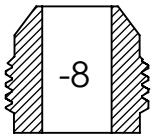
Dash Size	JIC Thread Size (inches)	Nut Hex (mm)	Tube O.D. (inches)
04	7/16	14	1/4
05	1/2	17	5/16
06	9/16	19	3/8
08	3/4	22	1/2
10	7/8	27	5/8
12	1-1/16	32	3/4
14	1-3/16	36	7/8
16	1-5/16	41	1
20	1-5/8	50	1-1/4
24	1-7/8	60	1-1/2
32	2-1/2	75	2

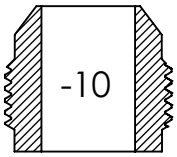
JIC Thread Sizing Chart

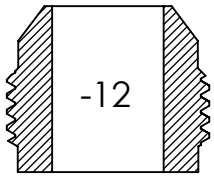


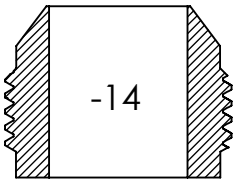


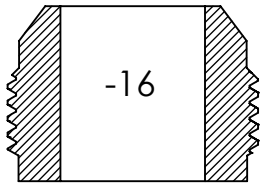


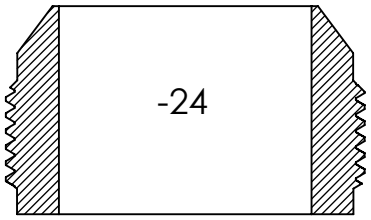


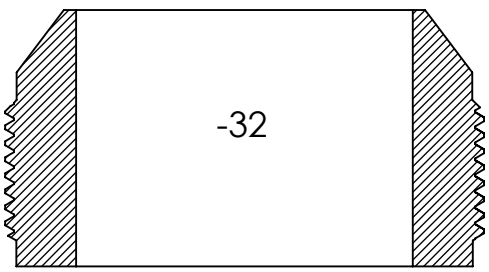












True to scale 1:1 at A4

JIC Thread Sizing Chart

Dash Size	JIC Thread Size [inches]	JIC Thread O.D. [mm]	Tube O.D. [inches]
04	7/16	11	1/4
05	1/2	13	5/16
06	9/16	14	3/8
08	3/4	19	1/2
10	7/8	22	5/8
12	1-1/16	27	3/4
14	1-3/16	30	7/8
16	1-5/16	33	1
20	1-5/8	41	1-1/4
24	1-7/8	47	1-1/2
32	2-1/2	64	2

	Male Connectors ADP-C-...-MM-W66A	**D9 - D11**
	Union **JIC - JIC** ADP-C-J..-MM-W66A	**D9**
	Reducing Union **JIC - JIC** ADP-C-J../J..-MM-W66A	**D9**
	Male Connector **BSPT - JIC** ADP-C-T../J..-MM-W66A	**D10**
	Male Connector **BSPP with Profile Sealing Ring - JIC** ADP-C-G..WD/J..-MM-W66A-WD-B	**D10**
	Male Connector **JIC - NPT** ADP-C-J../N..-MM-W66A	**D10**
	Male Connector **JIC - UNO with O-Ring** ADP-C-J../U..-MM-W66A-OR-B	**D10**
	Male Connector **Metric with DIN 2353 Nut and 24° Cutting Ring - JIC** ADP-C-.../J..-MM-W111A-MS	**D11**
	Female Connectors ADP-C-...-MFX-W66A	**D11**
	Female Connector **JIC - BSPT** ADP-C-J../T..-MFX-W66A	**D11**
	Female Connector **JIC - BSPP** ADP-C-J../G..-MFX-W66A	**D11**

Ordering Codes

ADP - **C** - **J08/U08** - **MM** - **W66** **A** - **OR-B**

① ② ③ ④ ⑤ ⑥ ⑦

① Series

Adaptor	**ADP**

② Type

Connector	**C**

③ Thread Types & Sizes

JIC	**J**
BSP Cylindrical	**G**
BSP WD	**G..WD**
BSP Taper	**T**
NPT (NPTF)	**N**
UNF/UN	**U**
Thread Sizes	- See Table

DIN Metric L/S see page 16

④ Gender Types

Male / Male	**MM**
Male / Female Fixed	**MFX**

⑤ Surface Protection

Steel Galvanised, thick layer passivated	**W66**
Main part of steel thick-layer-passivated (W66), add on parts Zinc-Nickel (W3) (Metric - JIC Only)	**W111**

⑥ Additional Information

STAUFF internal information only	**A**

⑦ Assembly Status

DIN Nut and Ring Assembled	**MS**
Perbunan Elastomeric Sealing	**WD-B**
Perbunan O-Ring	**OR-B**

③ Thread Sizes

Dash Size	JIC (J)	BSPP (G)	BSPT (T)	NPT (N)	UNO (U)
02	5/16	1/8	1/8	1/8	5/16–24
03	3/8	-	-	-	3/8–24
04	7/16	1/4	1/4	1/4	7/16–20
05	1/2	-	-	-	1/2–20
06	9/16	3/8	3/8	3/8	9/16–18
08	3/4	1/2	1/2	1/2	3/4–16
10	7/8	-	-	-	7/8–14

Dash Size	JIC (J)	BSPP (G)	BSPT (T)	NPT (N)	UNO (U)
12	1-1/16	3/4	3/4	3/4	1-1/16–12
14	1-3/16	-	-	-	1-3/16–12
16	1-5/16	1	1	1	1-5/16–12
20	1-5/8	1-1/4	1-1/4	1-1/4	1-5/8–12
24	1-7/8	1-1/2	1-1/2	1-1/2	1-7/8–12
32	2-1/2	2	2	2	2-1/2–12

Male Connectors

Union
JIC - JIC
Type ADP-C-J..-MM-W66A

Item No.	Designation	Tube O.D.	Price
2011623880	ADP-C-J04-MM-W66A	1/4	3.65
2011623891	ADP-C-J05-MM-W66A	5/16	4.20
2011623903	ADP-C-J06-MM-W66A	3/8	3.95
2011623919	ADP-C-J08-MM-W66A	1/2	4.90
2011623932	ADP-C-J10-MM-W66A	5/8	5.85
2011623939	ADP-C-J12-MM-W66A	3/4	7.55
2011623945	ADP-C-J14-MM-W66A	7/8	18.80
2011623951	ADP-C-J16-MM-W66A	1	14.30
2011623954	ADP-C-J20-MM-W66A	1-1/4	29.95
2011623956	ADP-C-J24-MM-W66A	1-1/2	47.50
2011024325	ADP-C-J32-MM-W66A	2	94.90

Reducing Union
JIC - JIC
Type ADP-C-J../J..-MM-W66A

Item No.	Designation	Tube O.D.	Price
2011623882	ADP-C-J04/J06-MM-W66A	1/4	4.75
2011623883	ADP-C-J04/J08-MM-W66A	1/4	7.60
2011623892	ADP-C-J05/J06-MM-W66A	5/16	4.55
2011020847	ADP-C-J05/J08-MM-W66A	5/16	7.50
2011623893	ADP-C-J05/J10-MM-W66A	5/16	9.10
2011623904	ADP-C-J06/J08-MM-W66A	3/8	7.10
2011623905	ADP-C-J06/J10-MM-W66A	3/8	8.90
2011623906	ADP-C-J06/J12-MM-W66A	3/8	8.40
2011623920	ADP-C-J08/J10-MM-W66A	1/2	8.85
2011623921	ADP-C-J08/J12-MM-W66A	1/2	15.95
2011623923	ADP-C-J08/J16-MM-W66A	1/2	15.45
2011623933	ADP-C-J10/J12-MM-W66A	5/8	15.85
2011029960	ADP-C-J10/J16-MM-W66A	5/8	14.45
2011623940	ADP-C-J12/J14-MM-W66A	3/4	15.65
2011623941	ADP-C-J12/J16-MM-W66A	3/4	22.75
2011623952	ADP-C-J16/J20-MM-W66A	1	22.20
2011026989	ADP-C-J16/J24-MM-W66A	1	21.95
2011623955	ADP-C-J20/J24-MM-W66A	1-1/4	21.70

Nut + Sleeve available, refer to pages D25 - D26

Male Connector
BSPT - JIC
Type ADP-C-T../J..-MM-W66A

Item No.	Designation	Tube O.D.	Price
2011029907	ADP-C-T04/J04-MM-W66A	1/4	3.60
2011026005	ADP-C-T06/J04-MM-W66A	1/4	6.65
6100000634	ADP-C-T08/J04-MM-W66A	1/4	8.85
2011026001	ADP-C-T04/J05-MM-W66A	5/16	5.30
2011029828	ADP-C-T04/J06-MM-W66A	3/8	3.55
2011026006	ADP-C-T06/J06-MM-W66A	3/8	4.20
2011025891	ADP-C-T08/J06-MM-W66A	3/8	6.10
2011026004	ADP-C-T04/J08-MM-W66A	1/2	7.55
2011026008	ADP-C-T06/J08-MM-W66A	1/2	5.05
2011020046	ADP-C-T08/J08-MM-W66A	1/2	5.45
2011026013	ADP-C-T12/J08-MM-W66A	1/2	10.70
6100000635	ADP-C-T04/J10-MM-W66A	5/8	12.15
2011026011	ADP-C-T08/J10-MM-W66A	5/8	6.10
2011026014	ADP-C-T12/J10-MM-W66A	5/8	10.95
2011026012	ADP-C-T08/J12-MM-W66A	3/4	11.10
2011026015	ADP-C-T12/J12-MM-W66A	3/4	11.10
6100000647	ADP-C-T16/J12-MM-W66A	3/4	15.70
6100000648	ADP-C-T12/J14-MM-W66A	7/8	25.60
2011026016	ADP-C-T12/J16-MM-W66A	1	15.85
2011026017	ADP-C-T16/J16-MM-W66A	1	16.40
6100000649	ADP-C-T12/J20-MM-W66A	1-1/4	38.90
6100000650	ADP-C-T16/J20-MM-W66A	1-1/4	33.25
6100000651	ADP-C-T20/J24-MM-W66A	1-1/2	52.95
6100000652	ADP-C-T24/J24-MM-W66A	1-1/2	47.50
6100000653	ADP-C-T32/J32-MM-W66A	2	85.50

Male Connector
JIC - NPT
Type ADP-C-J../N..-MM-W66A

Item No.	Designation	Tube O.D.	Price
2011623886	ADP-C-J04/N04-MM-W66A	1/4	3.90
2011026611	ADP-C-J04/N06-MM-W66A	1/4	6.20
2011026426	ADP-C-J04/N08-MM-W66A	1/4	8.75
2011029937	ADP-C-J05/N04-MM-W66A	5/16	5.65
2011623909	ADP-C-J06/N04-MM-W66A	3/8	4.00
2011623910	ADP-C-J06/N06-MM-W66A	3/8	4.75
2011623911	ADP-C-J06/N08-MM-W66A	3/8	8.75
2011623924	ADP-C-J08/N04-MM-W66A	1/2	7.20
2011623925	ADP-C-J08/N06-MM-W66A	1/2	5.20
2011623926	ADP-C-J08/N08-MM-W66A	1/2	5.85
2011024293	ADP-C-J08/N12-MM-W66A	1/2	10.00
2011024291	ADP-C-J10/N04-MM-W66A	5/8	8.85
2011029940	ADP-C-J10/N08-MM-W66A	5/8	7.10
2011026665	ADP-C-J10/N12-MM-W66A	5/8	10.90
2011029939	ADP-C-J12/N08-MM-W66A	3/4	11.10
2011623944	ADP-C-J12/N12-MM-W66A	3/4	11.35
2011020841	ADP-C-J12/N16-MM-W66A	3/4	15.95
6100000656	ADP-C-J14/N12-MM-W66A	7/8	19.60
2011020830	ADP-C-J16/N12-MM-W66A	1	19.40
2011020803	ADP-C-J16/N16-MM-W66A	1	16.65
2011024318	ADP-C-J20/N16-MM-W66A	1-1/4	43.00
2011024331	ADP-C-J20/N20-MM-W66A	1-1/4	36.95
2011021125	ADP-C-J24/N24-MM-W66A	1-1/2	52.95

Male Connector
BSPP with Profile Sealing Ring - JIC
Type ADP-C-G..WD/J..-MM-W66A-WD-B

Item No.	Designation	Tube O.D.	Price
6100001190	ADP-C-G04WD/J04-MM-W66A-WD-B	1/4	6.00
6100001191	ADP-C-G06WD/J04-MM-W66A-WD-B	1/4	8.90
6100001192	ADP-C-G08WD/J04-MM-W66A-WD-B	1/4	10.00
6100001193	ADP-C-G04WD/J05-MM-W66A-WD-B	5/16	8.90
6100001202	ADP-C-G06WD/J05-MM-W66A-WD-B	5/16	10.50
6100001203	ADP-C-G04WD/J06-MM-W66A-WD-B	3/8	7.60
6100001205	ADP-C-G06WD/J06-MM-W66A-WD-B	3/8	6.20
6100001206	ADP-C-G08WD/J06-MM-W66A-WD-B	3/8	9.10
6100001207	ADP-C-G06WD/J08-MM-W66A-WD-B	1/2	8.75
6100001208	ADP-C-G08WD/J08-MM-W66A-WD-B	1/2	8.85
6100001209	ADP-C-G12WD/J08-MM-W66A-WD-B	1/2	13.40
6100001210	ADP-C-G04WD/J10-MM-W66A-WD-B	5/8	12.20
6100001211	ADP-C-G08WD/J10-MM-W66A-WD-B	5/8	9.70
6100001212	ADP-C-G08WD/J12-MM-W66A-WD-B	3/4	11.80
6100001213	ADP-C-G12WD/J12-MM-W66A-WD-B	3/4	12.45
6100001214	ADP-C-G16WD/J12-MM-W66A-WD-B	3/4	21.05
6100001215	ADP-C-G12WD/J16-MM-W66A-WD-B	1	17.50
6100001216	ADP-C-G16WD/J16-MM-W66A-WD-B	1	20.80
6100001217	ADP-C-G20WD/J16-MM-W66A-WD-B	1	35.30
6100001218	ADP-C-G20WD/J20-MM-W66A-WD-B	1-1/4	35.30
6100001219	ADP-C-G20WD/J24-MM-W66A-WD-B	1-1/2	78.80
6100001220	ADP-C-G24WD/J24-MM-W66A-WD-B	1-1/2	76.05

Male Connector
JIC - UNO with O-Ring (NBR)
Type ADP-C-J.../U..-MM-W66A-OR-B

Item No.	Designation	Tube O.D.	Price
2011020887	ADP-C-J04/U04-MM-W66A-OR-B	1/4	5.85
2011027301	ADP-C-J04/U05-MM-W66A-OR-B	1/4	6.25
2011623885	ADP-C-J04/U06-MM-W66A-OR-B	1/4	7.20
2011028603	ADP-C-J04/U08-MM-W66A-OR-B	1/4	8.05
2011020831	ADP-C-J05/U05-MM-W66A-OR-B	5/16	8.90
2011020828	ADP-C-J05/U06-MM-W66A-OR-B	5/16	9.85
6100000930	ADP-C-J05/U08-MM-W66A-OR-B	5/16	6.25
2011026089	ADP-C-J06/U05-MM-W66A-OR-B	3/8	10.30
2011623907	ADP-C-J06/U06-MM-W66A-OR-B	3/8	4.20
2011024302	ADP-C-J06/U08-MM-W66A-OR-B	3/8	4.35
2011027552	ADP-C-J06/U10-MM-W66A-OR-B	3/8	8.00
2011024301	ADP-C-J06/U12-MM-W66A-OR-B	3/8	14.05
2011020829	ADP-C-J08/U06-MM-W66A-OR-B	1/2	5.55
2011020872	ADP-C-J08/U08-MM-W66A-OR-B	1/2	5.15
2011020019	ADP-C-J08/U10-MM-W66A-OR-B	1/2	8.20
2011026114	ADP-C-J08/U12-MM-W66A-OR-B	1/2	8.70
6100000931	ADP-C-J10/U06-MM-W66A-OR-B	5/8	10.20
2011026980	ADP-C-J10/U08-MM-W66A-OR-B	5/8	8.15
2011623934	ADP-C-J10/U10-MM-W66A-OR-B	5/8	8.30
2011026115	ADP-C-J10/U12-MM-W66A-OR-B	5/8	12.65
2011025842	ADP-C-J10/U16-MM-W66A-OR-B	5/8	20.50
2011026458	ADP-C-J12/U08-MM-W66A-OR-B	3/4	11.25
2011027050	ADP-C-J12/U10-MM-W66A-OR-B	3/4	11.70
2011020875	ADP-C-J12/U12-MM-W66A-OR-B	3/4	10.80
6100000964	ADP-C-J12/U14-MM-W66A-OR-B	3/4	26.50
2011029929	ADP-C-J12/U16-MM-W66A-OR-B	3/4	17.70
6100000957	ADP-C-J12/U20-MM-W66A-OR-B	3/4	39.45
6100000959	ADP-C-J14/U14-MM-W66A-OR-B	7/8	26.20
6100000960	ADP-C-J14/U16-MM-W66A-OR-B	7/8	29.15
6100000961	ADP-C-J16/U10-MM-W66A-OR-B	1	21.05
2011029793	ADP-C-J16/U12-MM-W66A-OR-B	1	18.45
6100000962	ADP-C-J16/U14-MM-W66A-OR-B	1	26.50
2011020885	ADP-C-J16/U16-MM-W66A-OR-B	1	17.55
2011029823	ADP-C-J20/U16-MM-W66A-OR-B	1-1/4	30.55
2011025838	ADP-C-J20/U20-MM-W66A-OR-B	1-1/4	33.25
6100000963	ADP-C-J20/U24-MM-W66A-OR-B	1-1/4	59.70
2011025840	ADP-C-J24/U20-MM-W66A-OR-B	1-1/2	66.45
2011026848	ADP-C-J24/U24-MM-W66A-OR-B	1-1/2	67.85

Male Connectors

Male Connector
Metric with DIN 2353 Nut and 24° Cutting Ring - JIC
Type ADP-C-..../J..-MM-W111A-MS

Item No.	Designation	Tube O.D.	PN (bar)	Price
6100010479	ADP-C-06L/J04-MM-W111A-MS	6 mm	315	6.65
6100010488	ADP-C-08L/J06-MM-W111A-MS	8 mm	315	6.95
6100010496	ADP-C-10L/J06-MM-W111A-MS	10 mm	315	8.30
6100010497	ADP-C-10L/J08-MM-W111A-MS	10 mm	310	8.70
6100010493	ADP-C-12L/J08-MM-W111A-MS	12 mm	310	10.30
6100010475	ADP-C-15L/J10-MM-W111A-MS	15 mm	240	11.65
6100010474	ADP-C-15L/J12-MM-W111A-MS	15 mm	240	20.00
6100010481	ADP-C-18L/J12-MM-W111A-MS	18 mm	240	22.15
6100010484	ADP-C-22L/J12-MM-W111A-MS	22 mm	160	23.80
6100010485	ADP-C-22L/J16-MM-W111A-MS	22 mm	160	23.80
6100010490	ADP-C-28L/J16-MM-W111A-MS	28 mm	160	29.70
6100010499	ADP-C-35L/J16-MM-W111A-MS	35 mm	160	56.85
6100010498	ADP-C-35L/J20-MM-W111A-MS	35 mm	160	49.10
6100010487	ADP-C-06S/J04-MM-W111A-MS	6 mm	345	6.75
6100010489	ADP-C-08S/J06-MM-W111A-MS	8 mm	345	6.95
6100010494	ADP-C-10S/J06-MM-W111A-MS	10 mm	345	8.95
6100010495	ADP-C-10S/J08-MM-W111A-MS	10 mm	310	9.35
6100010491	ADP-C-12S/J08-MM-W111A-MS	12 mm	310	10.70
6100010473*	ADP-C-14S/J10-MM-W111A-MS	14 mm	240	12.90
6100010478	ADP-C-16S/J10-MM-W111A-MS	16 mm	240	22.45
6100010476	ADP-C-16S/J12-MM-W111A-MS	16 mm	240	22.45
6100010483	ADP-C-20S/J12-MM-W111A-MS	20 mm	240	24.65
6100010486	ADP-C-25S/J16-MM-W111A-MS	25 mm	210	31.70
6100010501	ADP-C-30S/J16-MM-W111A-MS	30 mm	210	50.40
6100010500	ADP-C-30S/J20-MM-W111A-MS	30 mm	170	50.40

* Subject to minimum order quantity

Female Connectors

Female Connector
JIC - BSPT
Type ADP-C-J../T..-MFX-W66A

Item No.	Designation	Tube O.D.	Price
6100000675	ADP-C-J04/T02-MFX-W66A	1/4	7.30
6100000676	ADP-C-J04/T04-MFX-W66A	1/4	7.55
6100000677	ADP-C-J05/T04-MFX-W66A	5/16	7.55
6100000678	ADP-C-J06/T04-MFX-W66A	3/8	7.55
6100000679	ADP-C-J06/T06-MFX-W66A	3/8	8.60
6100000680	ADP-C-J08/T06-MFX-W66A	1/2	9.65
6100000681	ADP-C-J08/T08-MFX-W66A	1/2	12.85
6100000682	ADP-C-J10/T04-MFX-W66A	5/8	13.75
6100000683	ADP-C-J10/T08-MFX-W66A	5/8	12.65
6100000684	ADP-C-J12/T08-MFX-W66A	3/4	17.70
6100000685	ADP-C-J12/T12-MFX-W66A	3/4	29.40
6100000686	ADP-C-J14/T12-MFX-W66A	7/8	35.25
6100000687	ADP-C-J16/T16-MFX-W66A	1	35.25
6100000688	ADP-C-J20/T20-MFX-W66A	1-1/4	53.90
6100000689	ADP-C-J24/T24-MFX-W66A	1-1/2	100.35
6100000690	ADP-C-J32/T32-MFX-W66A	2	108.50

Thread Sizes

Dash Size	JIC (J)	BSPP (G)	BSPT (T)	NPT (N)	UNO (U)
02	5/16	1/8	1/8	1/8	5/16–24
03	3/8	-	-	-	3/8–24
04	7/16	1/4	1/4	1/4	7/16–20
05	1/2	-	-	-	1/2–20
06	9/16	3/8	3/8	3/8	9/16–18
08	3/4	1/2	1/2	1/2	3/4–16
10	7/8	-	-	-	7/8–14
12	1-1/16	3/4	3/4	3/4	1-1/16–12
14	1-3/16	-	-	-	1-3/16–12
16	1-5/16	1	1	1	1-5/16–12
20	1-5/8	1-1/4	1-1/4	1-1/4	1-5/8–12
24	1-7/8	1-1/2	1-1/2	1-1/2	1-7/8–12
32	2-1/2	2	2	2	2-1/2–12

Female Connector
JIC - BSPP
Type ADP-C-J../G..-MFX-W66A

Item No.	Designation	Tube O.D.	Price
6100000654	ADP-C-J04/G02-MFX-W66A	1/4	5.65
2011026428	ADP-C-J04/G04-MFX-W66A	1/4	7.15
6100000659	ADP-C-J05/G04-MFX-W66A	5/16	7.15
2011027554	ADP-C-J06/G04-MFX-W66A	3/8	7.45
2011029077	ADP-C-J06/G06-MFX-W66A	3/8	8.40
6100000660	ADP-C-J08/G06-MFX-W66A	1/2	9.10
2011026422	ADP-C-J08/G08-MFX-W66A	1/2	12.70
6100000655	ADP-C-J10/G08-MFX-W66A	5/8	17.35
2011028475	ADP-C-J12/G12-MFX-W66A	3/4	24.25
2011026457	ADP-C-J16/G16-MFX-W66A	1	32.95

Nut + Sleeve available, refer to pages D25 - D26

Male Bulkhead Adaptors
ADP-B-...-MM-W66A-SKM — **D13**

Bulkhead Union
JIC - JIC
ADP-B-J..-MM-W66A-SKM — **D13**

Male Bulkhead Connector
JIC - BSPT (M)
ADP-B-J../T..-MM-W66A-SKM — **D13**

Female Bulkhead Adaptors
ADP-B-...-MFX-W66A-SKM — **D14**

Female Bulkhead Connector
JIC - BSPT (F)
ADP-B-J../T..-MFX-W66A-SKM — **D14**

Bulkhead Elbow Adaptors
ADP-B..-...-MM-W66A-SKM — **D14**

Bulkhead Union Elbow 90°
JIC - JIC
ADP-B90-J..-MM-W66A-SKM — **D14**

Bulkhead Union Elbow 45°
JIC - JIC
ADP-B45-J..-MM-W66A-SKM — **D14**

Bulkhead Tee Adaptors
ADP-B..-...-MMM-W66A-SKM — **D15**

Bulkhead Branch Tee
JIC - JIC
ADP-BBT-J..-MMM-W66A-SKM — **D15**

Bulkhead Run Tee
JIC - JIC
ADP-BRT-J..-MMM-W66A-SKM — **D15**

Ordering Codes

ADP	-	B	-	J08/T06	-	MM	-	W66	A	-	SKM
①		②		③		④		⑤	⑥		⑦

① Series

Adaptor	**ADP**

② Type

Bulkhead	**B**
Bulkhead 90°	**B90**
Bulkhead 45°	**B45**
Bulkhead Branch Tee	**BBT**
Bulkhead Run Tee	**BRT**

③ Thread Types & Sizes

JIC	**J**
BSP Cylindrical	**G**
BSP WD	**G..WD**
BSP Taper	**T**
NPT (NPTF)	**N**
UNF/UN	**U**
Thread Sizes	**- See Table**

④ Gender Types

Male / Male	**MM**
Male / Male / Male (Tee Only)	**MMM**
Male / Female Fixed	**MFX**

⑤ Surface Protection

Steel Galvanised, thick layer passivated	**W66**

⑥ Additional Information

STAUFF internal information only	**A**

⑦ Assembly Status

Hexagon Nut Assembled	**SKM**

③ Thread Sizes

Dash Size	JIC (J)	BSPP (G)	BSPT (T)	NPT (N)	UNO (U)
02	5/16	1/8	1/8	1/8	5/16–24
03	3/8	-	-	-	3/8–24
04	7/16	1/4	1/4	1/4	7/16–20
05	1/2	-	-	-	1/2–20
06	9/16	3/8	3/8	3/8	9/16–18
08	3/4	1/2	1/2	1/2	3/4–16
10	7/8	-	-	-	7/8–14

Dash Size	JIC (J)	BSPP (G)	BSPT (T)	NPT (N)	UNO (U)
12	1-1/16	3/4	3/4	3/4	1-1/16–12
14	1-3/16	-	-	-	1-3/16–12
16	1-5/16	1	1	1	1-5/16–12
20	1-5/8	1-1/4	1-1/4	1-1/4	1-5/8–12
24	1-7/8	1-1/2	1-1/2	1-1/2	1-7/8–12
32	2-1/2	2	2	2	2-1/2–12

Male Bulkhead Adaptors

Bulkhead Union
JIC - JIC
Type ADP-B-J..-MM-W66A-SKM

Item No.	Designation	Tube O.D.	Barrel Ø	Price
2011623113	ADP-B-J04-MM-W66A-SKM	1/4	11 mm	12.65
2011623114	ADP-B-J05-MM-W66A-SKM	5/16	13 mm	16.15
2011623115	ADP-B-J06-MM-W66A-SKM	3/8	14 mm	11.10
2011623116	ADP-B-J08-MM-W66A-SKM	1/2	19 mm	15.45
2011623118	ADP-B-J10-MM-W66A-SKM	5/8	22 mm	20.05
2011623119	ADP-B-J12-MM-W66A-SKM	3/4	27 mm	28.55
2011623120	ADP-B-J14-MM-W66A-SKM	7/8	30 mm	44.60
2011623121	ADP-B-J16-MM-W66A-SKM	1	33 mm	44.80
2011623122	ADP-B-J20-MM-W66A-SKM	1-1/4	41 mm	61.75
2011623123	ADP-B-J24-MM-W66A-SKM	1-1/2	47 mm	115.25

Male Bulkhead Connector
JIC - BSPT (M)
Type ADP-B-J../T..-MM-W66A-SKM

Item No.	Designation	Tube O.D.	Barrel Ø	Price
6100000973	ADP-B-J04/T04-MM-W66A-SKM	1/4	11 mm	11.30
6100000974	ADP-B-J06/T06-MM-W66A-SKM	3/8	14 mm	14.35
6100000975	ADP-B-J08/T06-MM-W66A-SKM	1/2	19 mm	15.05
6100000976	ADP-B-J10/T08-MM-W66A-SKM	5/8	22 mm	19.55
6100000977	ADP-B-J12/T12-MM-W66A-SKM	3/4	27 mm	41.60
6100000978	ADP-B-J14/T12-MM-W66A-SKM	7/8	30 mm	58.05
6100000979	ADP-B-J16/T16-MM-W66A-SKM	1	33 mm	58.30

Female Bulkhead Adaptors

Female Bulkhead Connector
JIC - BSPT (F)
Type ADP-B-J../T..-MFX-W66A-SKM

Item No.	Designation	Tube O.D.	Barrel Ø	Price
6100000980	ADP-B-J04/T04-MFX-W66A-SKM	1/4	11 mm	11.90
6100000981	ADP-B-J06/T06-MFX-W66A-SKM	3/8	14 mm	15.45
6100000982	ADP-B-J08/T06-MFX-W66A-SKM	1/2	19 mm	16.15
6100000983	ADP-B-J10/T08-MFX-W66A-SKM	5/8	22 mm	25.70
6100000984	ADP-B-J12/T12-MFX-W66A-SKM	3/4	27 mm	43.05
6100000985	ADP-B-J14/T12-MFX-W66A-SKM	7/8	30 mm	59.55
6100000987	ADP-B-J16/T16-MFX-W66A-SKM	1	33 mm	58.95

Thread Sizes

Dash Size	JIC (J)	BSPP (G)	BSPT (T)	NPT (N)	UNO (U)
02	5/16	1/8	1/8	1/8	5/16–24
03	3/8	-	-	-	3/8–24
04	7/16	1/4	1/4	1/4	7/16–20
05	1/2	-	-	-	1/2–20
06	9/16	3/8	3/8	3/8	9/16–18
08	3/4	1/2	1/2	1/2	3/4–16
10	7/8	-	-	-	7/8–14
12	1-1/16	3/4	3/4	3/4	1-1/16–12
14	1-3/16	-	-	-	1-3/16–12
16	1-5/16	1	1	1	1-5/16–12
20	1-5/8	1-1/4	1-1/4	1-1/4	1-5/8–12
24	1-7/8	1-1/2	1-1/2	1-1/2	1-7/8–12
32	2-1/2	2	2	2	2-1/2–12

Bulkhead Elbow Adaptors

Bulkhead Union Elbow 90°
JIC - JIC
Type ADP-B90-J..-MM-W66A-SKM

Item No.	Designation	Tube O.D.	Barrel Ø	Price
2011025844	ADP-B90-J04-MM-W66A-SKM	1/4	11 mm	20.05
2011021281	ADP-B90-J05-MM-W66A-SKM	5/16	13 mm	34.90
6100000873	ADP-B90-J06-MM-W66A-SKM	3/8	14 mm	27.45
2011029909	ADP-B90-J08-MM-W66A-SKM	1/2	19 mm	28.05
2011028540	ADP-B90-J10-MM-W66A-SKM	5/8	22 mm	34.00
2011026990	ADP-B90-J12-MM-W66A-SKM	3/4	27 mm	38.75
6100000872	ADP-B90-J14-MM-W66A-SKM	7/8	30 mm	55.60
6100000871	ADP-B90-J16-MM-W66A-SKM	1	33 mm	46.30
6100000870	ADP-B90-J20-MM-W66A-SKM	1-1/4	41 mm	74.60
6100000869	ADP-B90-J24-MM-W66A-SKM	1-1/2	47 mm	101.75

Bulkhead Union Elbow 45°
JIC - JIC
Type ADP-B45-J..-MM-W66A-SKM

Item No.	Designation	Tube O.D.	Barrel Ø	Price
6100000867	ADP-B45-J04-MM-W66A-SKM	1/4	11 mm	25.60
6100000866	ADP-B45-J05-MM-W66A-SKM	5/16	13 mm	38.05
6100000865	ADP-B45-J06-MM-W66A-SKM	3/8	14 mm	32.35
2011028539	ADP-B45-J08-MM-W66A-SKM	1/2	19 mm	34.00
6100000863	ADP-B45-J10-MM-W66A-SKM	5/8	22 mm	46.20
6100000861	ADP-B45-J12-MM-W66A-SKM	3/4	27 mm	47.50
6100000862	ADP-B45-J14-MM-W66A-SKM	7/8	30 mm	61.10
6100000860	ADP-B45-J16-MM-W66A-SKM	1	33 mm	73.25

Nut + Sleeve available, refer to pages D25 - D26

Bulkhead Tee Adaptors

Bulkhead Branch Tee
JIC - JIC
Type ADP-BBT-J..-MMM-W66A-SKM

Item No.	Designation	Tube O.D.	Barrel Ø	Price
2011025913	ADP-BBT-J04-MMM-W66A-SKM	1/4	11 mm	39.75
6100000965	ADP-BBT-J06-MMM-W66A-SKM	3/8	14 mm	49.30
6100000966	ADP-BBT-J08-MMM-W66A-SKM	1/2	19 mm	47.50
6100000967	ADP-BBT-J10-MMM-W66A-SKM	5/8	22 mm	61.75
6100000968	ADP-BBT-J12-MMM-W66A-SKM	3/4	27 mm	79.30

Bulkhead Run Tee
JIC - JIC
Type ADP-BRT-J..-MMM-W66A-SKM

Item No.	Designation	Tube O.D.	Barrel Ø	Price
6100000969	ADP-BRT-J04-MMM-W66A-SKM	1/4	11 mm	28.55
2011027653	ADP-BRT-J06-MMM-W66A-SKM	3/8	14 mm	35.65
6100000970	ADP-BRT-J08-MMM-W66A-SKM	1/2	19 mm	46.85
6100000971	ADP-BRT-J10-MMM-W66A-SKM	5/8	22 mm	53.30
6100000972	ADP-BRT-J12-MMM-W66A-SKM	3/4	27 mm	78.00

STAUFF Press
Combined Cutting Ring Assembly and 37° Tube Flaring Machine with Automatic or Manual Pressure Setting and Control ▪ Type SPR-PRC-MA

Product Description

The electro-hydraulically operated STAUFF Press Assembly Machine SPR-PRC-MA allows the assembly of cutting rings in the Light Series (L) as well as in the Heavy Series (S) according to ISO 8434-1 / DIN 2353 on metric tube ends with outer diameters from 4 mm to 42 mm.

Exchangeable heads allows the device to be adapted for 37° flaring of metric and imperial tube ends with outer diameters from 4 mm to 42 mm and from 1/4 in to 1-1/2 in respectively according to DIN 3949 or SAE J514 / ISO 8434-2.

Refer to Section F - Assembly Tools / Devices

	Elbow Adaptors ADP-CE..-...	**D17 - D18**
	Union Elbow 90° **JIC - JIC** ADP-CE90-J..-MM-FG-W66A	**D17**
	Male Elbow 90° **BSPT - JIC** ADP-CE90-T../J..-MM-FG-W66A	**D17**
	Female Elbow 90° **JIC - BSPT** ADP-CE90-J../T..-MFX-FG-W66A	**D18**
	Male Elbow 45° **BPST - JIC** ADP-CE45-T../J..-MM-FG-W66A	**D18**
	Male Positional Elbow 90° **BSPP - JIC** ADP-PCE90-G../J..-MM-FG-W66A-OKOR-B	**D18**
	Male Positional Elbow 90° **JIC - UNF** ADP-PCE90-J../U..-MM-FG-W66A-OKOR-B	**D18**
	Tee Adaptors ADP-T-...	**D19**
	Union Tee **JIC - JIC - JIC** ADP-T-J..-MMM-FG-W66A	**D19**
	Male Branch Tee **JIC - JIC - BSPT** ADP-T-J../J../T..-MMM-FG-W66A	**D19**
	Male Run Tee **BSPT - JIC - JIC** ADP-T-T../J../J..-MMM-FG-W66A	**D19**
	Union Cross **JIC** ADP-X-J..-MMMM-FG-W66A	**D19**

Ordering Codes

ADP - **CE90** - **T08/J08** - **MM** - **FG** - **W66** **A**

① ② ③ ④ ⑤ ⑥ ⑦

① Series

Adaptor	**ADP**

② Type

Compact Elbow 90°	⑤	**CE90**
Compact Elbow 45°	⑤	**CE45**
Tee Connector	⑤	**T**
Equal Cross	⑤	**X**
Positional Compact Elbow 90°	⑤	**PCE90**

③ Thread Types & Sizes

JIC	**J**
BSP Cylindrical	**G**
BSP WD	**G..WD**
BSP Taper	**T**
NPT (NPTF)	**N**
UNF/UN	**U**
Thread Sizes	- See Table

④ Gender Types

Male / Male	**MM**
Male / Male / Male (Tee Only)	**MMM**
Male / Male / Male / Male (Cross Only)	**MMMM**
Male / Female Fixed	**MFX**

⑤ Body Type

Forged Body (standard) (For adaptor CE90, CE45, T, X and PCE90)	**FG**

⑥ Surface Protection

Steel Galvanised, thick layer passivated	**W66**

⑦ Additional Information

STAUFF internal information only	**A**

⑧ Assembly Status

Nut and Sleeve Assembled	**NS**
Perbunan O-Rings and Retaining Ring	**OKOR-B**

③ Thread Sizes

Dash Size	JIC (J)	BSPP (G)	BSPT (T)	NPT (N)	UNO (U)
02	5/16	1/8	1/8	1/8	5/16–24
03	3/8	-	-	-	3/8–24
04	7/16	1/4	1/4	1/4	7/16–20
05	1/2	-	-	-	1/2–20
06	9/16	3/8	3/8	3/8	9/16–18
08	3/4	1/2	1/2	1/2	3/4–16
10	7/8	-	-	-	7/8–14

Dash Size	JIC (J)	BSPP (G)	BSPT (T)	NPT (N)	UNO (U)
12	1-1/16	3/4	3/4	3/4	1-1/16–12
14	1-3/16	-	-	-	1-3/16–12
16	1-5/16	1	1	1	1-5/16–12
20	1-5/8	1-1/4	1-1/4	1-1/4	1-5/8–12
24	1-7/8	1-1/2	1-1/2	1-1/2	1-7/8–12
32	2-1/2	2	2	2	2-1/2–12

Elbow Adaptors

Union Elbow 90°
JIC - JIC
Type ADP-CE90-J..-MM-FG-W66A

Item No.	Designation	Tube O.D.	Price
6100075391	ADP-CE90-J04-MM-FG-W66A	1/4	9.25
6100075380	ADP-CE90-J05-MM-FG-W66A	5/16	11.65
2011623183	ADP-CE90-J06-MM-FG-W66A	3/8	10.25
2011623188	ADP-CE90-J08-MM-FG-W66A	1/2	10.80
2011026026	ADP-CE90-J10-MM-FG-W66A	5/8	10.85
6100054530	ADP-CE90-J12-MM-FG-W66A	3/4	22.05
6100075483	ADP-CE90-J14-MM-FG-W66A	7/8	25.80
2011029894	CE90-J16-MM	1	29.95
2011623202	ADP-CE90-J20-MM-FG-W66A	1-1/4	67.85
2011623203	ADP-CE90-J24-MM-FG-W66A	1-1/2	115.25
6100075484	ADP-CE90-J32-MM-FG-W66A	2	172.15

Male Elbow 90°
BSPT - JIC
Type ADP-CE90-T../J..-MM-FG-W66A

Item No.	Designation	Tube O.D.	Price
6100000719	ADP-CE90-T04/J04-MM-FG-W66A	1/4	11.10
6100000720	ADP-CE90-T06/J04-MM-FG-W66A	1/4	13.30
6100000721	ADP-CE90-T08/J04-MM-FG-W66A	1/4	19.95
6100000722	ADP-CE90-T04/J05-MM-FG-W66A	5/16	10.45
6100000723	ADP-CE90-T04/J06-MM-FG-W66A	3/8	10.80
6100000725	ADP-CE90-T06/J06-MM-FG-W66A	3/8	12.70
6100000724	ADP-CE90-T08/J06-MM-FG-W66A	3/8	17.70
2011028297	ADP-CE90-T04/J08-MM-FG-W66A	1/2	15.95
2011028298	ADP-CE90-T06/J08-MM-FG-W66A	1/2	10.25
6100000728	ADP-CE90-T08/J08-MM-FG-W66A	1/2	15.30
6100000729	ADP-CE90-T12/J08-MM-FG-W66A	1/2	21.65
6100000730	ADP-CE90-T04/J10-MM-FG-W66A	5/8	19.95
6100000731	ADP-CE90-T08/J10-MM-FG-W66A	5/8	14.55
6100000732	ADP-CE90-T12/J10-MM-FG-W66A	5/8	21.55
6100000733	ADP-CE90-T08/J12-MM-FG-W66A	3/4	25.85
6100000734	ADP-CE90-T12/J12-MM-FG-W66A	3/4	23.20
6100000735	ADP-CE90-T16/J12-MM-FG-W66A	3/4	28.85
6100000736	ADP-CE90-T12/J14-MM-FG-W66A	7/8	32.60
6100000743	ADP-CE90-T12/J16-MM-FG-W66A	1	32.40
6100000737	ADP-CE90-T16/J16-MM-FG-W66A	1	28.55
6100000738	ADP-CE90-T16/J20-MM-FG-W66A	1-1/4	61.10
6100000739	ADP-CE90-T20/J20-MM-FG-W66A	1-1/4	62.20
6100000740	ADP-CE90-T20/J24-MM-FG-W66A	1-1/2	116.65
6100000741	ADP-CE90-T24/J24-MM-FG-W66A	1-1/2	119.30
6100000742	ADP-CE90-T32/J32-MM-FG-W66A	2	181.70

Nut + Sleeve available, refer to pages D25 - D26

Elbow Adaptors

Female Elbow 90°
JIC - BSPT
Type ADP-CE90-J../T..-MFX-FG-W66A

Item No.	Designation	Tube O.D.	Price
6100000813	ADP-CE90-J04/T04-MFX-FG-W66A	1/4	11.10
6100000814	ADP-CE90-J05/T04-MFX-FG-W66A	5/16	10.80
6100000815	ADP-CE90-J06/T04-MFX-FG-W66A	3/8	10.80
6100000816	ADP-CE90-J06/T06-MFX-FG-W66A	3/8	14.30
6100000817	ADP-CE90-J08/T06-MFX-FG-W66A	1/2	19.95
6100000818	ADP-CE90-J08/T08-MFX-FG-W66A	1/2	22.90
6100000819	ADP-CE90-J10/T08-MFX-FG-W66A	5/8	22.95
6100000820	ADP-CE90-J12/T08-MFX-FG-W66A	3/4	22.95
6100000821	ADP-CE90-J12/T12-MFX-FG-W66A	3/4	29.20
6100000822	ADP-CE90-J14/T12-MFX-FG-W66A	7/8	42.05
6100000823	ADP-CE90-J16/T16-MFX-FG-W66A	1	66.05
6100000824	ADP-CE90-J20/T20-MFX-FG-W66A	1-1/4	115.25
6100000825	ADP-CE90-J24/T24-MFX-FG-W66A	1-1/2	186.85

Male Positional Elbow 90°
BSPP - JIC
Type ADP-PCE90-G../J..-MM-FG-W66A-OKOR-B

Item No.	Designation	Tube O.D.	Price
6100154155	ADP-PCE90-G02/J04-MM-FG-W66A-OKOR-B	1/4	17.65
6100154157	ADP-PCE90-G04/J04-MM-FG-W66A-OKOR-B	1/4	17.65
6100154156	ADP-PCE90-G06/J04-MM-FG-W66A-OKOR-B	1/4	26.40
6100154158	ADP-PCE90-G04/J05-MM-FG-W66A-OKOR-B	5/16	17.65
6100154159	ADP-PCE90-G04/J06-MM-FG-W66A-OKOR-B	3/8	17.65
6100154161	ADP-PCE90-G06/J06-MM-FG-W66A-OKOR-B	3/8	26.40
6100154160	ADP-PCE90-G08/J06-MM-FG-W66A-OKOR-B	3/8	31.60
6100154162	ADP-PCE90-G04/J08-MM-FG-W66A-OKOR-B	1/2	26.40
6100154164	ADP-PCE90-G06/J08-MM-FG-W66A-OKOR-B	1/2	26.40
6100154163	ADP-PCE90-G08/J08-MM-FG-W66A-OKOR-B	1/2	31.60
6100154165	ADP-PCE90-G12/J08-MM-FG-W66A-OKOR-B	1/2	42.05
6100154167	ADP-PCE90-G08/J12-MM-FG-W66A-OKOR-B	3/4	38.60
6100154166	ADP-PCE90-G12/J12-MM-FG-W66A-OKOR-B	3/4	42.05
6100154168	ADP-PCE90-G16/J12-MM-FG-W66A-OKOR-B	3/4	63.05
6100154170	ADP-PCE90-G12/J16-MM-FG-W66A-OKOR-B	1	63.05
6100154169	ADP-PCE90-G16/J16-MM-FG-W66A-OKOR-B	1	63.05

Male Elbow 45°
BSPT - JIC
Type ADP-CE45-T../J..-MM-FG-W66A

Item No.	Designation	Tube O.D.	Price
6100000691	ADP-CE45-T04/J04-MM-FG-W66A	1/4	13.40
6100000692	ADP-CE45-T04/J05-MM-FG-W66A	5/16	14.20
6100000693	ADP-CE45-T04/J06-MM-FG-W66A	3/8	14.30
6100000694	ADP-CE45-T06/J06-MM-FG-W66A	3/8	16.15
6100000695	ADP-CE45-T06/J08-MM-FG-W66A	1/2	16.40
6100000697	ADP-CE45-T08/J08-MM-FG-W66A	1/2	19.95

Male Positional Elbow 90°
JIC - UNF
Type ADP-PCE90-J../U..-MM-FG-W66A-OKOR-B

Item No.	Designation	Tube O.D.	Price
6100154171	ADP-PCE90-J04/U03-MM-FG-W66A-OKOR-B	1/4	17.65
6100154172	ADP-PCE90-J04/U04-MM-FG-W66A-OKOR-B	1/4	17.65
6100154173	ADP-PCE90-J04/U05-MM-FG-W66A-OKOR-B	1/4	19.65
6100154174	ADP-PCE90-J04/U06-MM-FG-W66A-OKOR-B	1/4	17.65
6100154175	ADP-PCE90-J06/U04-MM-FG-W66A-OKOR-B	3/8	19.65
6100154176	ADP-PCE90-J06/U05-MM-FG-W66A-OKOR-B	3/8	19.65
6100154177	ADP-PCE90-J06/U06-MM-FG-W66A-OKOR-B	3/8	17.65
6100154178	ADP-PCE90-J06/U08-MM-FG-W66A-OKOR-B	3/8	28.20
6100154179	ADP-PCE90-J08/U04-MM-FG-W66A-OKOR-B	1/2	28.20
6100154180	ADP-PCE90-J08/U06-MM-FG-W66A-OKOR-B	1/2	26.40
6100154181	ADP-PCE90-J08/U08-MM-FG-W66A-OKOR-B	1/2	28.20
6100154182	ADP-PCE90-J08/U10-MM-FG-W66A-OKOR-B	1/2	31.60
6100154183	ADP-PCE90-J08/U12-MM-FG-W66A-OKOR-B	1/2	42.05
6100154184	ADP-PCE90-J12/U08-MM-FG-W66A-OKOR-B	3/4	38.55
6100154185	ADP-PCE90-J12/U10-MM-FG-W66A-OKOR-B	3/4	38.60
6100154186	ADP-PCE90-J12/U12-MM-FG-W66A-OKOR-B	3/4	42.05
6100154187	ADP-PCE90-J12/U16-MM-FG-W66A-OKOR-B	3/4	63.05
6100154188	ADP-PCE90-J16/U12-MM-FG-W66A-OKOR-B	1	63.05
6100154189	ADP-PCE90-J16/U16-MM-FG-W66A-OKOR-B	1	63.05

Thread Sizes

Dash Size	JIC (J)	BSPP (G)	BSPT (T)	NPT (N)	UNO (U)
02	5/16	1/8	1/8	1/8	5/16–24
03	3/8	-	-	-	3/8–24
04	7/16	1/4	1/4	1/4	7/16–20
05	1/2	-	-	-	1/2–20
06	9/16	3/8	3/8	3/8	9/16–18
08	3/4	1/2	1/2	1/2	3/4–16
10	7/8	-	-	-	7/8–14
12	1-1/16	3/4	3/4	3/4	1-1/16–12
14	1-3/16	-	-	-	1-3/16–12
16	1-5/16	1	1	1	1-5/16–12
20	1-5/8	1-1/4	1-1/4	1-1/4	1-5/8–12
24	1-7/8	1-1/2	1-1/2	1-1/2	1-7/8–12
32	2-1/2	2	2	2	2-1/2–12

Tee Adaptors

Union Tee
JIC - JIC - JIC
Type ADP-T-J..-MMM-FG-W66A

Item No.	Designation	Tube O.D.	Price
2011026944	ADP-T-J04-MMM-FG-W66A	1/4	13.10
2011624055	ADP-T-J05-MMM-FG-W66A	5/16	15.70
2011624056	ADP-T-J06-MMM-FG-W66A	3/8	12.90
2011624058	ADP-T-J08-MMM-FG-W66A	1/2	16.65
2011624061	ADP-T-J10-MMM-FG-W66A	5/8	20.50
2011026951	ADP-T-J12-MMM-FG-W66A	3/4	35.05
6100054440	ADP-T-J14-MMM-FG-W66A	7/8	51.45
2011026952	ADP-T-J16-MMM-FG-W66A	1	53.05
6100075445	ADP-T-J20-MMM-FG-W66A	1-1/4	77.15
6100075414	ADP-T-J24-MMM-FG-W66A	1-1/2	114.35

Male Run Tee
BSPT - JIC - JIC
Type ADP-T-T../J../J..-MMM-FG-W66A

Item No.	Designation	Tube O.D.	Price
6100000838	ADP-T-T04/J04/J04-MMM-FG-W66A	1/4	18.85
6100000839	ADP-T-T04/J05/J05-MMM-FG-W66A	5/16	19.60
6100000840	ADP-T-T04/J06/J06-MMM-FG-W66A	3/8	20.60
6100000841	ADP-T-T06/J06/J06-MMM-FG-W66A	3/8	21.30
6100000842	ADP-T-T06/J08/J08-MMM-FG-W66A	1/2	26.20
6100000843	ADP-T-T08/J08/J08-MMM-FG-W66A	1/2	33.25
6100000844	ADP-T-T08/J10/J10-MMM-FG-W66A	5/8	33.80
6100000845	ADP-T-T12/J12/J12-MMM-FG-W66A	3/4	40.10
6100000846	ADP-T-T12/J14/J14-MMM-FG-W66A	7/8	67.10
6100000847	ADP-T-T16/J16/J16-MMM-FG-W66A	1	57.00
6100000848	ADP-T-T20/J20/J20-MMM-FG-W66A	1-1/4	119.30
6100000849	ADP-T-T24/J24/J24-MMM-FG-W66A	1-1/2	186.85

Male Branch Tee
JIC - JIC - BSPT
Type ADP-T-J../J../T..-MMM-FG-W66A

Item No.	Designation	Tube O.D.	Price
6100000826	ADP-T-J04/J04/T04-MMM-FG-W66A	1/4	15.80
6100000827	ADP-T-J05/J05/T04-MMM-FG-W66A	5/16	15.80
6100000828	ADP-T-J06/J06/T04-MMM-FG-W66A	3/8	18.85
6100000829	ADP-T-J06/J06/T06-MMM-FG-W66A	3/8	20.60
6100000830	ADP-T-J08/J08/T06-MMM-FG-W66A	1/2	25.20
6100000831	ADP-T-J08/J08/T08-MMM-FG-W66A	1/2	27.05
6100000832	ADP-T-J10/J10/T08-MMM-FG-W66A	5/8	28.20
6100000833	ADP-T-J12/J12/T12-MMM-FG-W66A	3/4	37.30
6100000834	ADP-T-J14/J14/T12-MMM-FG-W66A	7/8	67.10
6100000835	ADP-T-J16/J16/T16-MMM-FG-W66A	1	52.95
6100000836	ADP-T-J20/J20/T20-MMM-FG-W66A	1-1/4	119.30
6100000837	ADP-T-J24/J24/T24-MMM-FG-W66A	1-1/2	186.85

Union Cross

Union Cross
JIC
Type ADP-X-J..-MMMM-FG-W66A

Item No.	Designation	Tube O.D.	Price
6100075450	ADP-X-J04-MMMM-FG-W66A	1/4	32.90
6100075485	ADP-X-J05-MMMM-FG-W66A	5/16	33.00
6100075462	ADP-X-J06-MMMM-FG-W66A	3/8	35.65
6100075461	ADP-X-J08-MMMM-FG-W66A	1/2	42.30
6100075474	ADP-X-J10-MMMM-FG-W66A	5/8	88.75
6100075446	ADP-X-J12-MMMM-FG-W66A	3/4	88.05
6100075486	ADP-X-J14-MMMM-FG-W66A	7/8	113.45
6100075487	ADP-X-J16-MMMM-FG-W66A	1	126.75

Nut + Sleeve available, refer to pages D25 - D26

	Swivel Straight Connectors ADP-C-...	**D21**
	Female Swivel Straight **JIC - JIC** ADP-C-J..-FF-W66A	**D21**
	Male Swivel Straight **BSPT (M) - JIC (F)** ADP-C-T../J..-MF-W66A	**D21**
	Male Swivel Straight **BSPP with Profile Sealing Ring - JIC (F)** ADP-C-G..WD/J..-MF-W66A-WD-B	**D21**
	Swivel Elbow Adaptors ADP-CE..-	**D22**
	Male / Female Swivel Elbow 90° **JIC (M) - JIC (F)** ADP-CE90-J..-MF-FG-W66A	**D22**
	Female Swivel Elbow 90° **JIC (F) - JIC (F)** ADP-CE90-J..-FF-FG-W66A	**D22**
	Male / Female Swivel Elbow 45° **JIC (M) - JIC (F)** ADP-CE45-J..-MF-FG-W66A	**D22**
	Swivel Tee Adaptors ADP-T-J..-	**D22**
	Swivel Branch Tee **JIC - JIC - JIC (F)** ADP-T-J..-MMF-FG-W66A	**D22**
	Swivel Run Tee **JIC - JIC (F) - JIC** ADP-T-J..-MFM-FG-W66A	**D22**

Ordering Codes

ADP	-	C	-	G06WD/J08	-	MM	-	FG	-	W66	A	-	WD-B
①		②		③		④		⑤		⑥	⑦		⑧

① Series

Adaptor	**ADP**

② Type

Connector		**C**
Compact Elbow 90°	⑤	**CE90**
Compact Elbow 45°	⑤	**CE45**
Tee Connector	⑤	**T**

③ Thread Types & Sizes

JIC	**J**
BSP Cylindrical	**G**
BSP WD	**G..WD**
BSP Taper	**T**
NPT (NPTF)	**N**
UNF/UN	**U**
Thread Sizes	- See Table

④ Gender Types

Female / Female	**FF**
Male / Female	**MF**
Male / Male / Female (Tee Only)	**MMF**
Male / Female / Male (Tee Only)	**MFM**

⑤ Body Type

Forged Body (standard) (For adaptor CE90, CE45, T only)	**FG**

⑥ Surface Protection

Steel Galvanised, thick layer passivated	**W66**

⑦ Additional Information

STAUFF internal information only	**A**

⑧ Assembly Status

Perbunan Elastomeric Sealing	**WD-B**

③ Thread Sizes

Dash Size	JIC (J)	BSPP (G)	BSPT (T)	NPT (N)	UNO (U)
02	5/16	1/8	1/8	1/8	5/16–24
03	3/8	-	-	-	3/8–24
04	7/16	1/4	1/4	1/4	7/16–20
05	1/2	-	-	-	1/2–20
06	9/16	3/8	3/8	3/8	9/16–18
08	3/4	1/2	1/2	1/2	3/4–16
10	7/8	-	-	-	7/8–14

Dash Size	JIC (J)	BSPP (G)	BSPT (T)	NPT (N)	UNO (U)
12	1-1/16	3/4	3/4	3/4	1-1/16–12
14	1-3/16	-	-	-	1-3/16–12
16	1-5/16	1	1	1	1-5/16–12
20	1-5/8	1-1/4	1-1/4	1-1/4	1-5/8–12
24	1-7/8	1-1/2	1-1/2	1-1/2	1-7/8–12
32	2-1/2	2	2	2	2-1/2–12

Swivel Straight Connectors

Female Swivel Straight
JIC- JIC
Type ADP-C-J..-FF-W66A

Item No.	Designation	Tube O.D.	Price
2011623361	ADP-C-J04-FF-W66A	1/4	13.75
2011623365	ADP-C-J06-FF-W66A	3/8	14.55
2011623367	ADP-C-J08-FF-W66A	1/2	19.10
2011623368	ADP-C-J10-FF-W66A	5/8	23.90
2011623370	ADP-C-J12-FF-W66A	3/4	34.00
2011027219	ADP-C-J14-FF-W66A	7/8	44.80
2011623371	ADP-C-J16-FF-W66A	1	54.30
2011623372	ADP-C-J20-FF-W66A	1-1/4	67.85

Male Swivel Straight
BSPP with Profile Sealing Ring - JIC (F)
Type ADP-C-G..WD/J..-MF-..-WD-B-W66A

Item No.	Designation	Tube O.D.	Price
6100112102	ADP-C-G04WD/J04-MF-W66A-WD-B	1/4	11.70
6100112113	ADP-C-G04WD/J05-MF-W66A-WD-B	5/16	12.95
6100112112	ADP-C-G04WD/J06-MF-W66A-WD-B	3/8	12.95
6100112111	ADP-C-G06WD/J06-MF-W66A-WD-B	3/8	13.95
6100112109	ADP-C-G06WD/J08-MF-W66A-WD-B	1/2	15.90
6100112104	ADP-C-G08WD/J10-MF-W66A-WD-B	5/8	15.90
6100112103	ADP-C-G08WD/J12-MF-W66A-WD-B	3/4	24.55
6100112107	ADP-C-G12WD/J12-MF-W66A-WD-B	3/4	23.85
6100112105	ADP-C-G12WD/J16-MF-W66A-WD-B	1	38.50
6100112106	ADP-C-G16WD/J16-MF-W66A-WD-B	1	38.60
6100112108	ADP-C-G20WD/J20-MF-W66A-WD-B	1-1/4	52.75

Male Swivel Straight
BSPT (M) - JIC (F)
Type ADP-C-T../J..-MF-W66A

Item No.	Designation	Tube O.D.	Price
6100000747	ADP-C-T04/J04-MF-W66A	1/4	12.35
6100000748	ADP-C-T04/J05-MF-W66A	5/16	13.75
6100000749	ADP-C-T04/J06-MF-W66A	5/16	13.75
6100000750	ADP-C-T06/J06-MF-W66A	3/8	14.65
6100000751	ADP-C-T06/J08-MF-W66A	1/2	16.85
6100000752	ADP-C-T08/J10-MF-W66A	5/8	16.85
6100000753	ADP-C-T08/J12-MF-W66A	3/4	25.85
6100000754	ADP-C-T12/J12-MF-W66A	3/4	25.20
6100000755	ADP-C-T12/J16-MF-W66A	1	40.60
6100000756	ADP-C-T16/J16-MF-W66A	1	40.75
6100000757	ADP-C-T20/J20-MF-W66A	1-1/4	55.60

Swivel Elbow Adaptors

Male / Female Swivel Elbow 90°
JIC (M) - JIC (F)
Type ADP-CE90-J..-MF-FG-W66A

Item No.	Designation	Tube O.D.	Price
2011623177	ADP-CE90-J04-MF-FG-W66A	1/4	11.30
2011623180	ADP-CE90-J05-MF-FG-W66A	5/16	13.55
2011623182	ADP-CE90-J06-MF-FG-W66A	3/8	12.45
2011623187	ADP-CE90-J08-MF-FG-W66A	1/2	15.95
6100052237	ADP-CE90-J10-MF-FG-W66A	5/8	18.05
2011623196	ADP-CE90-J12-MF-FG-W66A	3/4	24.90
6100000744	ADP-CE90-J14-MF-FG-W66A	7/8	43.50
2011623200	ADP-CE90-J16-MF-FG-W66A	1	38.75
2011623201	ADP-CE90-J20-MF-FG-W66A	1-1/4	85.50
6100075403	ADP-CE90-J24-MF-FG-W66A	1-1/2	141.35

Female Swivel Elbow 90°
JIC (F) - JIC (F)
Type ADP-CE90-J..-FF-FG-W66A

Item No.	Designation	Tube O.D.	Price
6100054564	ADP-CE90-J04-FF-FG-W66A	1/4	17.50
6100075489	ADP-CE90-J05-FF-FG-W66A	5/16	18.70
6100054565	ADP-CE90-J06-FF-FG-W66A	3/8	20.05
6100054566	ADP-CE90-J08-FF-FG-W66A	1/2	24.40
6100054567	ADP-CE90-J10-FF-FG-W66A	5/8	28.55
6100054568	ADP-CE90-J12-FF-FG-W66A	3/4	38.60
6100075488	ADP-CE90-J14-FF-FG-W66A	7/8	60.40
6100054569	ADP-CE90-J16-FF-FG-W66A	1	60.40
6100054570	ADP-CE90-J20-FF-FG-W66A	1-1/4	109.15
6100075475	ADP-CE90-J24-FF-FG-W66A	1-1/2	177.25

Male / Female Swivel Elbow 45°
JIC (M) - JIC (F)
Type ADP-CE45-J..-MF-FG-W66A

Item No.	Designation	Tube O.D.	Price
2011026917	ADP-CE45-J04-MF-FG-W66A	1/4	11.30
2011026027	ADP-CE45-J05-MF-FG-W66A	5/16	13.55
2011026954	ADP-CE45-J06-MF-FG-W66A	3/8	12.45
2011024187	ADP-CE45-J08-MF-FG-W66A	1/2	15.95
2011026983	ADP-CE45-J10-MF-FG-W66A	5/8	19.10
2011026031	ADP-CE45-J12-MF-FG-W66A	3/4	24.90
6100052691	ADP-CE45-J14-MF-FG-W66A	7/8	43.50
2011026032	ADP-CE45-J16-MF-FG-W66A	1	38.75
2011026985	ADP-CE45-J20-MF-FG-W66A	1-1/4	85.50
2011026984	ADP-CE45-J24-MF-FG-W66A	1-1/2	149.00

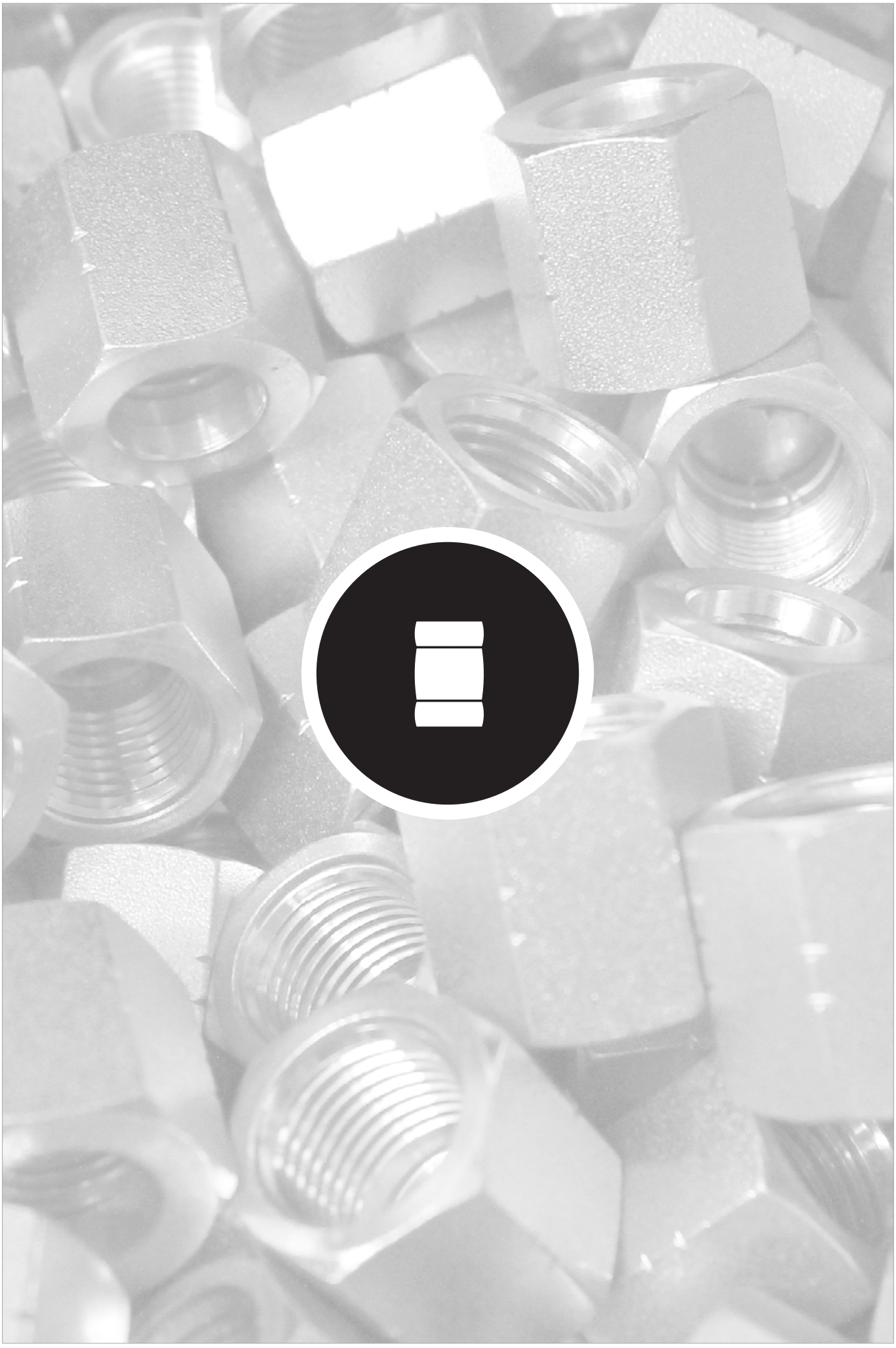
Swivel Tee Adaptors

Swivel Branch Tee
JIC - JIC - JIC (F)
Type ADP-T-J..-MMF-FG-W66A

Item No.	Designation	Tube O.D.	Price
2011624054	ADP-T-J04-MMF-FG-W66A	1/4	20.65
6100075451	ADP-T-J05-MMF-FG-W66A	5/16	21.30
6100052757	ADP-T-J06-MMF-FG-W66A	3/8	19.60
2011624060	ADP-T-J08-MMF-FG-W66A	1/2	24.55
6100054450	ADP-T-J10-MMF-FG-W66A	5/8	29.25
2011624064	ADP-T-J12-MMF-FG-W66A	3/4	47.50
6100054451	ADP-T-J16-MMF-FG-W66A	1	59.80
6100054452	ADP-T-J20-MMF-FG-W66A	1-1/4	109.15
6100075413	ADP-T-J24-MMF-FG-W66A	1-1/2	157.95

Swivel Run Tee
JIC - JIC (F) - JIC
Type ADP-T-J..-MFM-FG-W66A

Item No.	Designation	Tube O.D.	Price
2011624053	ADP-T-J04-MFM-FG-W66A	1/4	16.00
2011021198	ADP-T-J05-MFM-FG-W66A	5/16	21.70
2011624057	ADP-T-J06-MFM-FG-W66A	3/8	21.80
2011624059	ADP-T-J08-MFM-FG-W66A	1/2	23.80
2011021275	ADP-T-J10-MFM-FG-W66A	5/8	30.05
2011624063	ADP-T-J12-MFM-FG-W66A	3/4	40.65
2011624067	ADP-T-J16-MFM-FG-W66A	1	62.45
6100075381	ADP-T-J20-MFM-FG-W66A	1-1/4	96.35
6100075481	ADP-T-J24-MFM-FG-W66A	1-1/2	141.35



Spare Parts
JIC - SAE J514
ADP-... **D25**

Nut
JIC - SAE J514
ADP-N-J..-W66A **D25**

Nut + Sleeve
JIC - SAE J514
ADP-NS-J..-W66A **D25**

Spare Parts
JIC - ISO 8434
ADP-...-8434 **D26**

Nut
JIC - ISO 8434
ADP-N-J..-W66A-8434 **D26**

Nut + Sleeve
JIC - ISO 8434
ADP-NS-J..-W66A-8434 **D26**

Spare Parts
JIC Sleeve
ADP-S... **D26**

Sleeve
JIC
ADP-S-J..OD-W66A **D26**

Sleeve
JIC- Short Version
ADP-S-J..OD-W66A-SVS **D26**

Accessories
ADP-... **D26**

Cap
JIC
ADP-CP-J..-F-W66A **D26**

Plug
JIC
ADP-HP-J..-M-W66A **D26**

Profile Sealing Ring
WDG **D27**

Profile Sealing Ring
BSPP - NBR
WDG-..-B.. **D27**

Profile Sealing Ring
BSPP - FKM
WDG-..-V.. **D27**

O-Ring
O-Ring **D27**

O-Ring
UNO - NBR
O-Ring-..-B.. **D27**

O-Ring
UNO - FKM
O-Ring-..-V.. **D27**

Ordering Codes

ADP - **N** - **J08** - **W66** **A** - **8434**

① ② ③ ⑤ ⑥ ⑦

① Series

Adaptor	**ADP**

② Type

Nut	**N**
Sleeve	**S**
Nut + Sleeve	**NS**
Cap	**CP**
Plug	**HP**

③ Thread Types & Sizes

JIC	**J**
BSP Cylindrical	**G**
BSP WD	**G..WD**
BSP Taper	**T**
NPT (NPTF)	**N**
UNF/UN	**U**
Thread Sizes	- See Table

④ Gender Types

Male (Cap Only)	**M**
Female (Plug Only)	**F**

⑤ Surface Protection

Steel Galvanised, thick layer passivated	**W66**

⑥ Internal Information

STAUFF internal information only	**A**

⑦ Additional Information

Hexagon size according to ISO 8434 (Nut only)	**8434**
Short version sleeve	**SVS**

③ Thread Sizes

Dash Size	JIC (J)	BSPP (G)	BSPT (T)	NPT (N)	UNO (U)
02	5/16	1/8	1/8	1/8	5/16–24
03	3/8	-	-	-	3/8–24
04	7/16	1/4	1/4	1/4	7/16–20
05	1/2	-	-	-	1/2–20
06	9/16	3/8	3/8	3/8	9/16–18
08	3/4	1/2	1/2	1/2	3/4–16
10	7/8	-	-	-	7/8–14

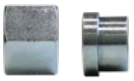
Dash Size	JIC (J)	BSPP (G)	BSPT (T)	NPT (N)	UNO (U)
12	1-1/16	3/4	3/4	3/4	1-1/16–12
14	1-3/16	-	-	-	1-3/16–12
16	1-5/16	1	1	1	1-5/16–12
20	1-5/8	1-1/4	1-1/4	1-1/4	1-5/8–12
24	1-7/8	1-1/2	1-1/2	1-1/2	1-7/8–12
32	2-1/2	2	2	2	2-1/2–12

Spare Parts

Nut
JIC - SAE J514 - Imperial Hex
Type ADP-N-J..-W66A

Item No.	Designation	Tube O.D.	Hex Size	Price
2031000055	ADP-N-J04-W66A	1/4	14.29 mm	3.00
2031030016	ADP-N-J05-W66A	5/16	15.88 mm	2.70
2031000056	ADP-N-J06-W66A	3/8	17.46 mm	2.50
6100085271	ADP-N-J08-W66A-8434	1/2	22.22 mm	3.25
2031000077	ADP-N-J10-W66A	5/8	25.40 mm	3.65
2011026155	ADP-N-J12/20-W66A	3/4	31.75 mm	4.55
2012031967	ADP-N-J14-W66A	7/8	34.93 mm	7.55
2031030008	ADP-N-J16-W66A	1	38.10 mm	6.55
2031025832	ADP-N-J20-W66A	1-1/4	50.80 mm	14.30
2011026914	ADP-N-J24-W66A	1-1/2	57.15 mm	24.55
6100000632	ADP-N-J32-W66A	2	73.02 mm	57.95

Nut + Sleeve
JIC - SAE J514 - Imperial Hex
Type ADP-NS-J..-W66A



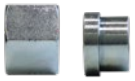
Item No.	Designation	Tube O.D.	Hex Size	Price
6100025167	ADP-NS-J04-W66A	1/4	14.29 mm	4.60
6100025168	ADP-NS-J05-W66A	5/16	15.88 mm	4.60
6100025169	ADP-NS-J06-W66A	3/8	17.46 mm	4.00
6100025170	ADP-NS-J08-W66A	1/2	22.22 mm	4.85
6100025171	ADP-NS-J10-W66A	5/8	25.40 mm	5.55
6100025172	ADP-NS-J12/20-W66A	3/4	31.75 mm	6.90
6100025173	ADP-NS-J14-W66A	7/8	34.93 mm	12.85
6100025174	ADP-NS-J16-W66	1	38.10 mm	11.00
6100025175	ADP-NS-J20-W66A	1-1/4	50.80 mm	21.50
6100025176	ADP-NS-J24-W66A	1-1/2	57.15 mm	45.25
6100025177	ADP-NS-J32-W66A	2	73.02 mm	79.75

Spare Parts

Nut
JIC - ISO 8434 - Metric Hex
Type ADP-N-J..-W66A-8434

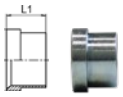
Item No.	Designation	Tube O.D.	Hex Size	Price
6100085268	ADP-N-J04-W66A-8434	1/4	14 mm	3.00
6100085269	ADP-N-J05-W66A-8434	5/16	17 mm	2.70
6100085270	ADP-N-J06-W66A-8434	3/8	19 mm	2.50
6100085271	ADP-N-J08-W66A-8434	1/2	22 mm	3.25
6100085272	ADP-N-J10-W66A-8434	5/8	27 mm	3.65
6100085273	ADP-N-J12/20-W66A-8434	3/4	32 mm	4.55
6100085274	ADP-N-J14-W66A-8434	7/8	36 mm	7.55
6100085275	ADP-N-J16-W66A-8434	1	41 mm	6.55
6100085276	ADP-N-J20-W66A-8434	1-1/4	50 mm	14.30
6100085277	ADP-N-J24-W66A-8434	1-1/2	60 mm	24.55
6100085278	ADP-N-J32-W66A-8434	2	75 mm	57.95

Nut + Sleeve
JIC - ISO 8434 - Metric Hex
Type ADP-NS-J..-W66A-8434



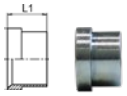
Item No.	Designation	Tube O.D.	Hex Size	Price
6100085280	ADP-NS-J04-W66A-8434	1/4	14 mm	4.60
6100085281	ADP-NS-J05-W66A-8434	5/16	17 mm	4.60
6100085282	ADP-NS-J06-W66A-8434	3/8	19 mm	4.00
6100085283	ADP-NS-J08-W66A-8434	1/2	22 mm	4.85
6100085284	ADP-NS-J10-W66A-8434	5/8	27 mm	5.55
6100085286	ADP-NS-J12/20-W66A-8434	3/4	32 mm	6.90
6100085288	ADP-NS-J14-W66A-8434	7/8	36 mm	12.00
6100085290	ADP-NS-J16-W66A-8434	1	41 mm	11.85
6100085291	ADP-NS-J20-W66A-8434	1-1/4	50 mm	21.50
6100085292	ADP-NS-J24-W66A-8434	1-1/2	60 mm	45.25
6100085293	ADP-NS-J32-W66A-8434	2	75 mm	79.75

Sleeve
JIC
Type ADP-S-J..OD-W66A



Item No.	Designation	Tube O.D.	L1	Price
2031030086	ADP-S-J040D-W66A	1/4	10.4 mm	1.60
2011026159	ADP-S-J050D-W66A	5/16	11.2 mm	1.90
2031030150	ADP-S-J060D-W66A	3/8	12.7 mm	1.50
2031030153	ADP-S-J080D-W66A	1/2	14.2 mm	1.60
2011026162	ADP-S-J100D-W66A	5/8	16.8 mm	1.90
2031030154	ADP-S-J120D-W66A	3/4	17.3 mm	2.35
6100001257	ADP-S-J140D-W66A	7/8	19.3 mm	5.30
2031030228	ADP-S-J160D-W66A	1	19.8 mm	4.45
6100001258	ADP-S-J200D-W66A	1-1/4	23.1 mm	7.20
6100001259	ADP-S-J240D-W66A	1-1/2	28.4 mm	20.70
6100001260	ADP-S-J320D-W66A	2	30.2 mm	21.80

Sleeve
JIC - Short Version
Type ADP-S-J..OD-W66A-SVS



Item No.	Designation	Tube O.D.	L1	Price
6100085447	ADP-S-J040D-W66A-SVS	1/4	6.9 mm	1.60
6100085448	ADP-S-J050D-W66A-SVS	5/16	7.7 mm	1.90
6100085449	ADP-S-J060D-W66A-SVS	3/8	8.5 mm	1.50
6100085450	ADP-S-J080D-W66A-SVS	1/2	9.8 mm	1.60
6100085451	ADP-S-J100D-W66A-SVS	5/8	11.2 mm	1.90
6100085453	ADP-S-J120D-W66A-SVS	3/4	11.8 mm	2.35
6100085454	ADP-S-J160D-W66A-SVS	7/8	12.1 mm	5.30
6100085455	ADP-S-J140D-W66A-SVS	1	12.4 mm	4.45
6100085456	ADP-S-J200D-W66A-SVS	1-1/4	14.3 mm	7.20
6100085457	ADP-S-J240D-W66A-SVS	1-1/2	16 mm	20.70
6100085458	ADP-S-J320D-W66A-SVS	2	18.8 mm	21.80

Accessories

Cap
JIC
Type ADP-CP-J..-F-W66A

Item No.	Designation	Tube O.D.	Price
2011623223	ADP-CP-J04-F-W66A	1/4	2.40
2011623224	ADP-CP-J05-F-W66A	5/16	3.25
2011623225	ADP-CP-J06-F-W66A	3/8	3.55
2011623226	ADP-CP-J08-F-W66A	1/2	3.80
2011623227	ADP-CP-J10-FX-W66A	5/8	3.95
2011623228	ADP-CP-J12-F-W66A	3/4	7.10
2011623229	ADP-CP-J14-F-W66A	7/8	10.45
2011623230	ADP-CP-J16-F-W66A	1	10.45
2011623231	ADP-CP-J20-F-W66A	1-1/4	21.80
2011623232	ADP-CP-J24-F-W66A	1-1/2	38.75
2011623233	ADP-CP-J32-F-W66A	2	67.85

Plug
JIC
Type ADP-HP-J..-M-W66A

Item No.	Designation	Tube O.D.	Price
2011623282	ADP-HP-J04-M-W66A	1/4	3.60
2011623283	ADP-HP-J05-M-W66A	5/16	4.75
2011623284	ADP-HP-J06-M-W66A	3/8	4.20
2011623285	ADP-HP-J08-M-W66A	1/2	3.95
2011623286	ADP-HP-J10-M-W66A	5/8	4.35
2011623287	ADP-HP-J12-M-W66A	3/4	6.15
2011623288	ADP-HP-J14-M-W66A	7/8	13.10
2011623289	ADP-HP-J16-M-W66A	1	10.30
2011623290	ADP-HP-J20-M-W66A	1-1/4	21.05
2011623291	ADP-HP-J24-M-W66A	1-1/2	42.80
2011026334	ADP-HP-J32-M-W66A	2	103.05

Profile Sealing Ring

Profile Sealing Ring for Male Studs
BSPP - NBR - 90 DURO
Type WDG-..-B..

Item No.	Designation	For Thread	Price
1230020177	WDG-8.4x11.9x1-B90	1/8	1.55
1230000481	WDG-11.6x16.5x1.5-B90	1/4	1.70
1230000376	WDG-14.7x18.9x1.5-B90	3/8	1.55
1230002280	WDG-18.5x23.9x1.5-B90	1/2	2.05
1230003635	WDG-23.9x29.2x1.5-B90	3/4	2.45
1230020702	WDG-29.7x35.7x2-B90	1	4.10
1230020703	WDG-38.8x45.8x2-B90	1-1/4	4.50
1230020704	WDG-44.7x50.7x2-B90	1-1/2	6.70

O-Ring

O-Ring
UNO - NBR - 90 DURO
Type O-Ring-..-B..

Item No.	Designation	For Thread	Price
1230000343	O-Ring-8.92x1.83-B90	7/16–20 UNF	0.70
1230000372	O-Ring-10.52x1.83-B90	1/2–20 UNF	0.95
1230000374	O-Ring-11.89x1.98-B90	9/16–18 UNF	0.70
1230002541	O-Ring-16.36x2.2-B90	3/4–16 UNF	1.15
1230003743	O-Ring-19.18x2.46-B90	7/8–14 UNF	1.10
1230020951	O-Ring-23.47x2.95-B90	1-1/16–12 UN	1.65
6030004930	O-Ring-26.62x2.95-B90	1-3/16–12 UN	1.05
1030008864	O-Ring-29.74x2.95-B90	1-5/16–12 UN	1.75
1230020852	O-Ring-37.47x3-B90	1-5/8–12 UN	3.45
6030006393	O-Ring-43.69x3-B90	1-7/8–12 UN	6.50

Profile Sealing Ring for Male Studs
BSPP - FKM - 80 / 90 DURO
Type WDG-..-V..

Item No.	Designation	For Thread	Price
1230020265	WDG-8.4x11.9x1-V90	1/8	5.35
1230000517	WDG-11.6x16.5x1.5-V90	1/4	6.45
1230000377	WDG-14.7x18.9x1.5-V90	3/8	7.90
1230002775	WDG-18.5x23.9x1.5-V80	1/2	8.85
1230002776	WDG-23.9x29.2x1.5-V80	3/4	15.60
1230002777	WDG-29.7x35.7x2-V80	1	19.80
1230002778	WDG-38.8x45.8x2-V80	1-1/4	21.25
1230003533	WDG-44.7x50.7x2-V80	1-1/2	21.40

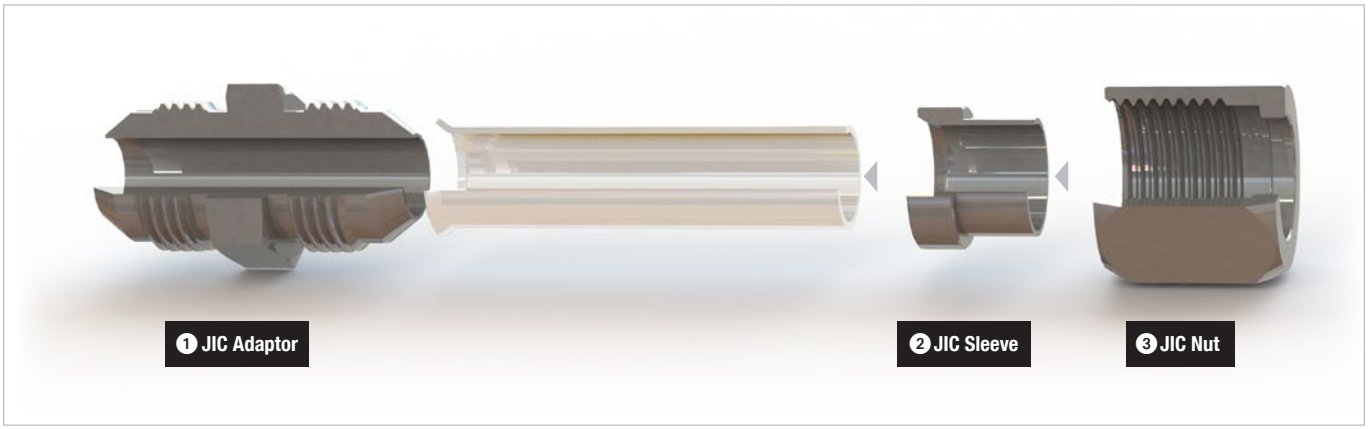
O-Ring
UNO - FKM - 90 DURO
Type O-Ring-..-V..

Item No.	Designation	For Thread	Price
1230000344	O-Ring-8.92x1.83-V90	7/16–20 UNF	2.20
1230000373	O-Ring-10.52x1.83-V90	1/2–20 UNF	2.55
1230000375	O-Ring-11.89x1.98-V90	9/16–18 UNF	1.05
1230004103	O-Ring-16.36x2.2-V90	3/4–16 UNF	4.00
1230004422	O-Ring-19.18x2.46-V90	7/8–14 UNF	4.05
1230004290	O-Ring-23.47x2.95-V80	1-1/16–12 UN	4.55
6030004931	O-Ring-26.62x2.95-V90	1-3/16–12 UN	1.75
6030006376	O-Ring-29.74x2.95-V90	1-5/16–12 UN	3.65
6030006379	O-Ring-37.47x3-V90	1-5/8–12 UN	3.45
6030006360	O-Ring-43.69x3-V90	1-7/8–12 UN	9.70

Recommended for Assembly

O-Ring Extraction Tool (Set) -
Type SPLM-TOOL-ORING-EXTRACTION
is available.
Refer to Section F - Assembly Tools / Devices

Assembly of JIC 37° Adaptors



Tube Preparation

Tube preparation should be made with at least the same precision and thoroughness as the actual assembly. Always check tubes (and the end sections in particular) for damages and distortions of any kind prior to the assembly.

Saw off the tube at a right angle using a cold saw or hack saw at least 10 mm from the cut made by the tube manufacturer /supplier in order to avoid failures related to the delivery.

DO NOT use powered grinders or manual rotary tube cutters to saw off the tube as this may result in unwanted inclined cuts, rolled edges or distortion and cause severe burring.

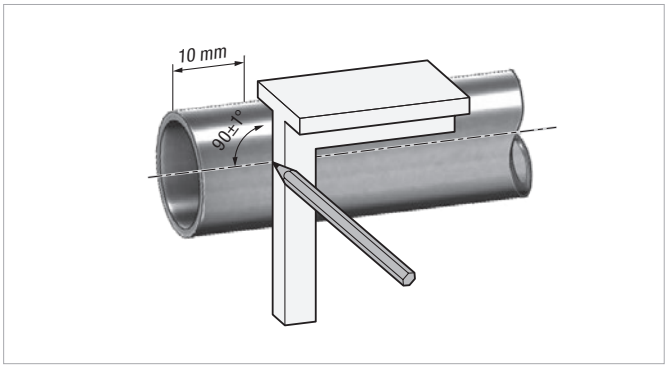
Remove all sharp edges by slightly deburring inside and outside of the tube end to maximum 0.15 mm.

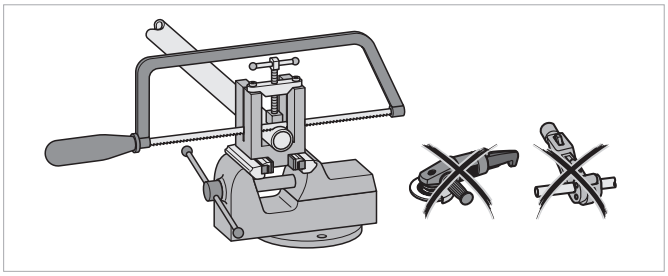
The assembly area of the tube has to be cleaned from all forms of contamination e.g. Dust, paint, grease, excess oil or waxes.

It is recommended to clean the tube internally using the STAUFF CLEAN system or equivalent cleaning method.

IMPORTANT: Improperly prepared and contaminated tubes may reduce the service life of the tube adaptors and result in leakages.

IMPORTANT: If the flare does not meet the quality preparation, cut-off the damaged end and restart process.

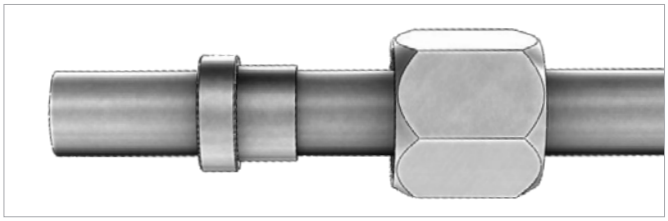




Assembly Preparation

Consecutively put the union nut ❸ and then the support sleeve ❷ onto the tube end.

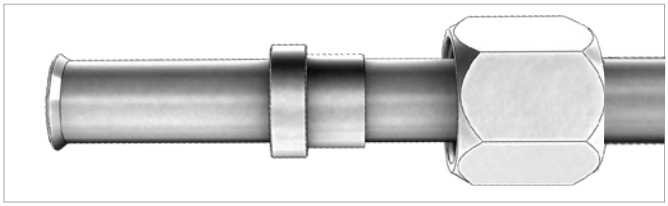
Ensure flare tool in either machine or manual device is clean and free of contamination.



Tube Flaring

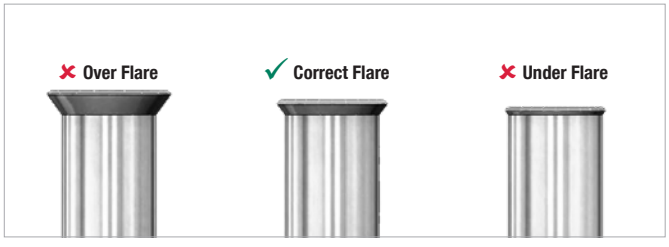
The preferred method of flaring is using a (STAUFF PRESS) machine.
It offers a faster (consistent with accuracy) and cost-saving method of flaring.

Flare the tube end as defined in ISO 8434-2/SAE J514 standard using a flaring machine or manual hand flaring. Check the tube end for cracking and imperfections after flaring. Wipe clean using a clean cloth any visible contamination. Make sure that all components are suitably protected against any damage to the flare surfaces prior to assembly.



Always verify the dimensional accuracy of the flare. Perfect function of the tube connection is dependant of a satisfactory flare. The flare on the tube end must be equal dimensionally with the mating sleeve.

IMPORTANT: If the flare is eccentric, too short or too wide, then perfect function and sealing of the tube connection cannot be guaranteed!

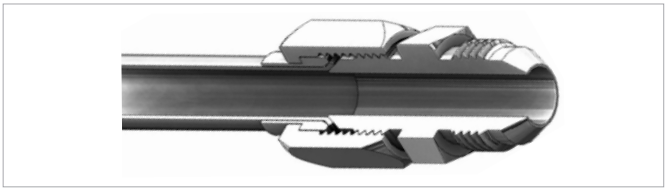


Assembly of JIC 37° Adaptors - continued..

Assembly in the Adaptor body

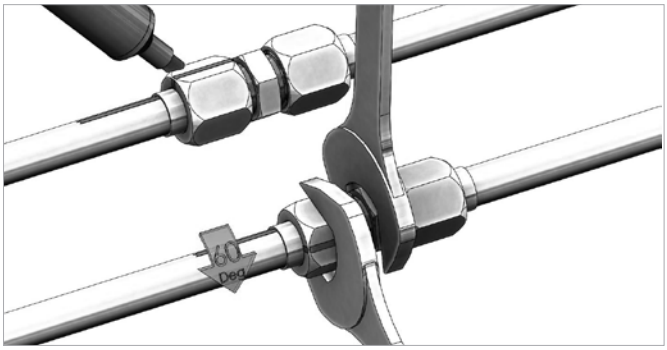
Apply the flared tube end to the 37° flared tube adaptor ❶, tighten the union nut finger tight, then line mark the nut and adaptor body, and finish the assembly with another approximately 1 spanner flat (60°) beyond this point.

IMPORTANT: The assembly may require an increasing amount of force as the fitting size increases but a secure connection is achieved only after a turn of 60°.



Re-Assembly

For repeated assembly, the union nut has to be tightened using exactly the same force as for the original assembly.

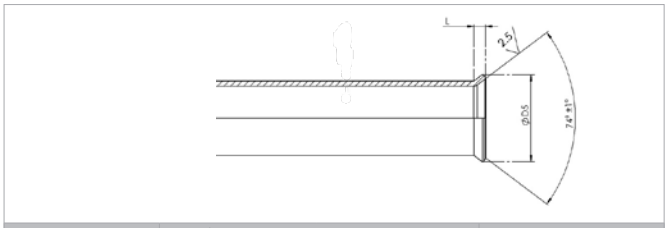


Tube Length Allowance

The correct length for flaring is dependent on the flare tooling used.
Allow extra according to dimension L, which is an approximate value.

Dimensional Accuracy of the Tube Flare

Always verify the dimensional accuracy of the flare.
The checking diameter corresponds to the outside diameter D5 of the flared tube end (according to dimension table), the flare must be at a right angle to the tube axis and concentric with the tube.



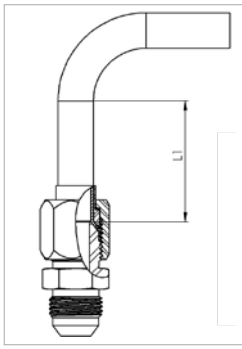
Tube O.D. [inches]	Flare Ø D5 [mm]		L [mm] approx.
	Min	Max	
1/4	8.6	9.7	2.2
5/16	10.5	11.3	2.2
3/8	11.7	12.7	2.1
1/2	16.0	17.3	3.1
5/8	19.3	20.2	2.9
3/4	23.4	24.7	3.7
1	29.7	31.0	3.7
1-1/4	37.6	38.9	4.7
1-1/2	43.2	45.3	4.8

Minimum Straight Length of Tube End to First Bend

Prior to flaring a tube end after a bend, it is important to ensure a minimum straight length before the start of the bend. This allows for clearance fit of the flare tooling during flaring.

Refer to table for minimum lengths. Dimensions are based on STAUFF PRESS flare tools and may vary if using other flare tools and devices.

IMPORTANT: Forcing an improperly bent tube into alignment or assembling a tube which is too short using the nut, places adverse strain on the assembly, which could result in leakage.



Tube O.D. [inches]	L1 [mm] Minimum Length
1/4	40
5/16	40
3/8	42
1/2	43
5/8	45
3/4	55
1	58
1-1/4	65
1-1/2	70

LOK - Introduction	E2
LOK - Twin Ferrule Fittings	E4 - E13
LOK - Adapter Fittings	E14 - E18
LOK - Assembly Instructions / LOK - Technical Appendix	E19 - E22

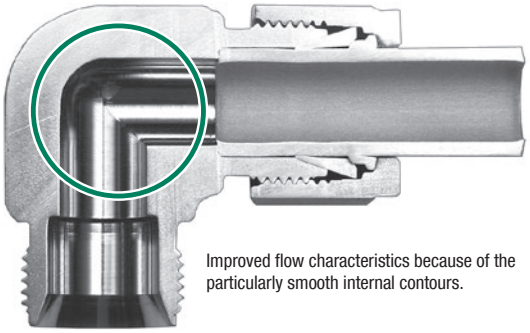
Introduction

STAUFF LOK twin ferrule fittings are designed and manufactured for highest demands concerning quality and by using state-of-the-art manufacturing technologies.

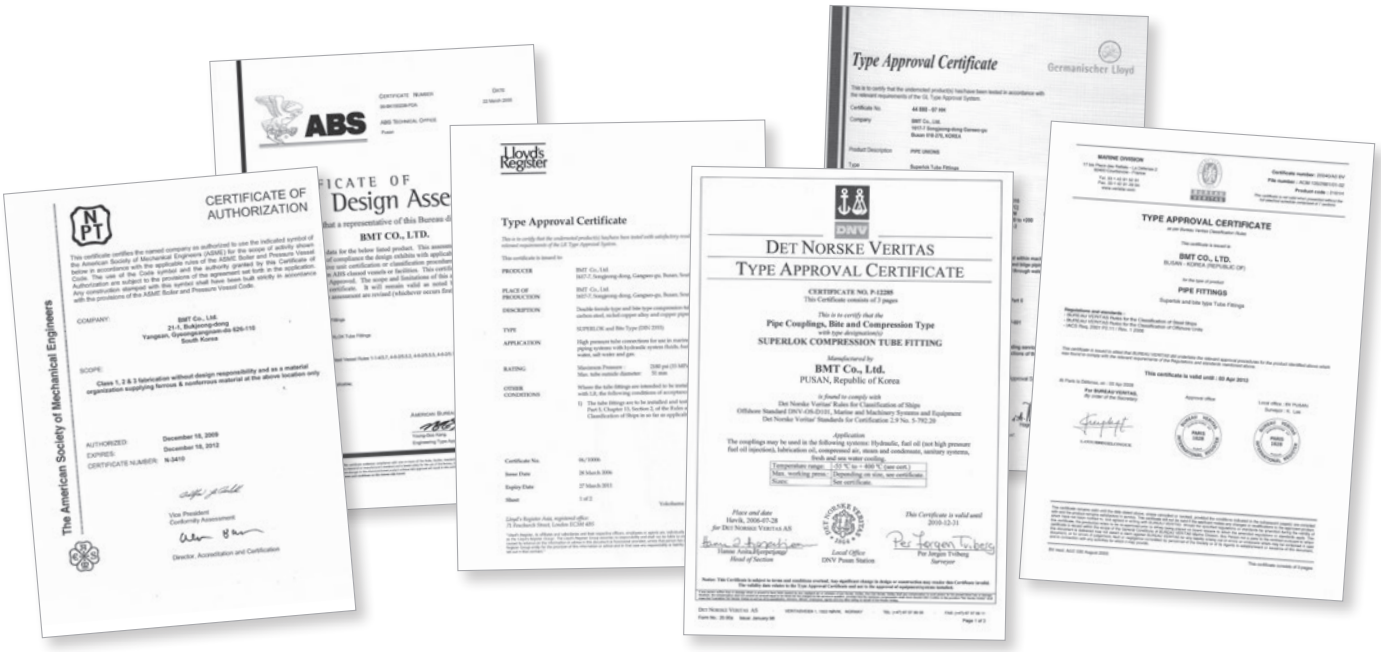
They are specially designed for use in process, measuring and control engineering, in the oil and gas industry, for chemical and petrochemical applications as well as in power plants, but can also be used in many other areas where outstanding quality and safety standards are required.

STAUFF LOK twin ferrule fittings thereby offer the following benefits in particular:

- Structurally identical and confirmed interchangeability with common competition products
- Worldwide availability due to representations and stored in all industrial countries
- Batch traceability via Heat Codes on all components
- Outstanding product quality thanks to automated manufacture with consistent monitoring
- Technical support and application specific know-how
- Numerous certificates and approvals



Improved flow characteristics because of the particularly smooth internal contours.



Numerous certificates and approvals, among others:
American Bureau of Shipping ▪ ASME N/NPT/NS ▪ Bureau Veritas ▪ Det Norske Veritas ▪ ECE R110 ▪ Germanischer Lloyd ▪ Lloyd´s Register

	Union LOK-F-SU	**E7**
	Reducing Union LOK-F-SRU	**E7**
	Bulkhead Union LOK-F-SBHU	**E7**
	Male Connector LOK-F-SMC	**E7 - E8**
	Male Connector **NPT Thread** LOK-F-SMC-..-N	**E7**
	Male Connector **BSPT Thread** LOK-F-SMC-..-T	**E7**
	Male Connector **BSPP Thread** LOK-F-SMC-..-G	**E8**
	Bulkhead Male Connector **NPT Thread** LOK-F-SMCB-..-N	**E8**
	Male Connector for Bonded Washer Seal **BSPP Thread** LOK-F-SGMC-..-G	**E8**
	O-Seal Straight Thread Connector **UNF Thread** LOK-F-SOSC-..-U	**E8**
	O-Seal Pipe Thread Connector **NPT Thread** LOK-F-SOPC-..-N	**E8**
	SAE / MS Male Connector **UNF Thread** LOK-F-SSMC-..-U	**E8**
	Female Connector LOK-F-SFC	**E9**
	Female Connector **NPT Thread** LOK-F-SFC-..-N	**E9**
	Female Connector **BSPT Thread** LOK-F-SFC-..-T	**E9**
	Female Connector **BSPP Thread** LOK-F-SFC-..-G	**E9**
	Bulkhead Female Connector **NPT Thread** LOK-F-SFCB-..-N	**E9**
	Male Pipe Weld Connector LOK-F-SPWC-..-..P	**E9**
	Reducer LOK-F-SR	**E9**

	Elbows	**E10**
	Union Elbow LOK-F-SUE	**E10**
	Male Elbow **NPT Thread** LOK-F-SME-..-N	**E10**
	Male Elbow **BSPT Thread** LOK-F-SME-..-T	**E10**
	Female Elbow **NPT Thread** LOK-F-SFE-..-N	**E10**
	Tees	**E11**
	Union Tee LOK-F-SUT	**E11**
	Reducing Union Tee LOK-F-SRUT	**E11**
	Male Branch Tee **NPT Thread** LOK-F-SMBT-..-N	**E11**
	Male Run Tee **NPT Thread** LOK-F-SMRT-..-N	**E11**
	Female Branch Tee **NPT Thread** LOK-F-SFBT-..-N	**E11**
	Female Run Tee **NPT Thread** LOK-F-SFRT-..-N	**E11**
	Crosses	**E11**
	Union Cross LOK-F-SUC	**E11**
	Adapters	**E12**
	Male Adapter **NPT Thread** LOK-F-SMA-..-N	**E12**
	AN Union **UNF Thread** LOK-F-SAU-..-U	**E12**
	Female Adapter **NPT Thread** LOK-F-SFA-..-N	**E12**
	Port Connector LOK-F-SPC	**E12**
	Reducing Port Connector LOK-F-SRPC	**E12**
	Spare Parts	**E13**
	Plug LOK-F-SP	**E13**
	Cap LOK-F-SC	**E13**
	Nut LOK-F-SN	**E13**
	Front Ferrule LOK-F-SFF	**E13**
	Back Ferrule LOK-F-SBF	**E13**
	Ferrule Set LOK-F-SFS	**E13**
	Tooling	**E13**
	Inspection Gap Gauge **for Tube O.D. Sizes - 1/4, 3/8, 1/2** LOK-T-IGG-040608-W5	**E13**
	Inspection Gap Gauge **for Tube O.D. Sizes - 3/4, 1** LOK-T-IGG-1216-W5	**E13**

Ordering Codes

LOK - F - SMC - 04 - N02 - W5

① ② ③ ④ ⑤ ⑥

① Series

STAUFF LOK	**LOK**

② Type

Twin Ferrule Fitting	**F**

③ Series

Union	**SU**
Reducing Union	**SRU**
Bulkhead Union	**SBHU**
Male Connector	**SMC**
Bulkhead Male Connector	**SMCB**
Male Connector for Bonded Washer Seal	**SGMC**
O-Seal Straight Thread Connector	**SOSC**
O-Seal Pipe Thread Connector	**SOPC**
SAE / MS Male Connector	**SSMC**
Female Connector	**SFC**
Bulkhead Female Connector	**SFCB**
Male Pipe Weld Connector	**SPWC**
Reducer	**SR**
Union Elbow	**SUE**
Male Elbow	**SME**
Female Elbow	**SFE**
Union Tee	**SUT**
Reducing Union Tee	**SRUT**
Male Branch Tee	**SMBT**
Male Run Tee	**SMRT**
Female Branch Tee	**SFBT**
Female Run Tee	**SFRT**
Union Cross	**SUC**
Male Adapter	**SMA**
Female Adapter	**SFA**
Port Connector	**SPC**
Reducing Port Connector	**SRPC**
AN Union	**SAU**
Plug	**SP**
Cap	**SC**
Nut	**SN**
Front Ferrule	**SFF**
Back Ferrule	**SBF**
Ferrule Set	**SFS**

④ Tube O.D. Size

1/16	**01**
1/8	**02**
3/16	**03**
1/4	**04**
5/16	**05**
3/8	**06**
1/2	**08**
5/8	**10**
3/4	**12**
7/8	**14**
1	**16**
1-1/4	**20**
1-1/2	**24**
2	**32**

⑤ Pipe Thread

BSPP (parallel)		**BSPT (tapered)**	
1/8" BSPP	**G02**	1/8" BSPT	**T02**
1/4" BSPP	**G04**	1/4" BSPT	**T04**
3/8" BSPP	**G06**	3/8" BSPT	**T06**
1/2" BSPP	**G08**	1/2" BSPT	**T08**
3/4" BSPP	**G12**	3/4" BSPT	**T12**
1" BSPP	**G16**	1" BSPT	**T16**
NPT		**UNF**	
1/8" NPT	**N02**	5/16 UNF	**U02**
1/4" NPT	**N04**	7/16 UNF	**U04**
3/8" NPT	**N06**	9/16 UNF	**U06**
1/2" NPT	**N08**	3/4 UNF	**U08**
3/4" NPT	**N12**	1-1/16 UNF	**U12**
1" NPT	**N16**	1-5/16 UNF	**U16**

⑥ Material

Stainless Steel (AISI) 316	**W5**

Ordering Codes

LOK - T - IGG - 040608 - W5

① ② ③ ④ ⑤

① Series

STAUFF LOK	**LOK**

② Type

Tooling	**T**

③ Series

Inspection Gap Gauge	**IGG**

④ Tube O.D. Size

1/4, 3/8, 1/2	**040608**
3/4, 1	**1216**

⑤ Material

Stainless Steel (AISI) 316	**W5**

Unions

Union
Type LOK-F-SU ▪ Imperial

Item No.	Designation	Tube O.D.	Price
7020001342	LOK-F-SU-02-W5	1/8	25.85
7020001353	LOK-F-SU-04-W5	1/4	25.85
7020001355	LOK-F-SU-05-W5	5/16	28.55
7020001356	LOK-F-SU-06-W5	3/8	36.75
7020001357	LOK-F-SU-08-W5	1/2	54.30
7020001332	LOK-F-SU-10-W5	5/8	69.20
7020001334	LOK-F-SU-12-W5	3/4	85.50
7020001339	LOK-F-SU-16-W5	1	150.25
7020001350*	LOK-F-SU-32-W5	2	745.05

* Subject to minimum order quantity

Reducing Union
Type LOK-F-SRU ▪ Imperial

Item No.	Designation	Tube O.D.	Reducing O.D.	Price
7020001262	LOK-F-SRU-02-01-W5	1/8	1/16	35.30
7020002433	LOK-F-SRU-03-01-W5	3/16	1/16	39.45
7020001266	LOK-F-SRU-03-02-W5	3/16	1/8	24.55
7020002407	LOK-F-SRU-04-01-W5	1/4	1/16	29.95
7020001269	LOK-F-SRU-04-02-W5	1/4	1/8	27.25
7020001274	LOK-F-SRU-05-04-W5	5/16	1/4	29.95
7020001276	LOK-F-SRU-06-04-W5	3/8	1/4	36.75
7020001277	LOK-F-SRU-06-05-W5	3/8	5/16	36.75
7020001284	LOK-F-SRU-08-04-W5	1/2	1/4	55.60
7020001285	LOK-F-SRU-08-06-W5	1/2	3/8	55.60
7020001236	LOK-F-SRU-10-08-W5	5/8	1/2	70.55
7020001244	LOK-F-SRU-12-04-W5	3/4	1/4	96.25
7020001245	LOK-F-SRU-12-06-W5	3/4	3/8	96.25
7020001246	LOK-F-SRU-12-08-W5	3/4	1/2	84.10
7020001255	LOK-F-SRU-16-08-W5	1	1/2	169.50
7020001254	LOK-F-SRU-16-12-W5	1	3/4	154.80

Bulkhead Union
Type LOK-F-SBHU ▪ Imperial

Item No.	Designation	Barrel Ø	Tube O.D.	Price
7020000088	LOK-F-SBHU-02-W5	8.33 mm	1/8	51.60
7020000093	LOK-F-SBHU-03-W5	9.92 mm	3/16	51.60
7020000096	LOK-F-SBHU-04-W5	11.50 mm	1/4	38.05
7020000099	LOK-F-SBHU-05-W5	13.09 mm	5/16	43.50
7020000101	LOK-F-SBHU-06-W5	14.68 mm	3/8	54.30
7020000104	LOK-F-SBHU-08-W5	19.44 mm	1/2	78.80
7020000074	LOK-F-SBHU-10-W5	22.62 mm	5/8	111.15
7020000077	LOK-F-SBHU-12-W5	25.79 mm	3/4	128.45
7020000083	LOK-F-SBHU-16-W5	33.75 mm	1	249.10

Male Connectors

Male Connector
NPT Thread
Type LOK-F-SMC-..-N ▪ Imperial

Item No.	Designation	Tube O.D.	Price
7020000604	LOK-F-SMC-01-N02-W5	1/16	27.25
7020002418	LOK-F-SMC-02-N01-W5	1/8	17.70
7020000638	LOK-F-SMC-02-N02-W5	1/8	17.70
7020000641	LOK-F-SMC-02-N04-W5	1/8	19.10
7020000647	LOK-F-SMC-02-N06-W5	1/8	29.95
7020000660	LOK-F-SMC-03-N02-W5	3/16	17.70
7020000661	LOK-F-SMC-03-N04-W5	3/16	19.10
7020001969	LOK-F-SMC-04-N01-W5	1/4	17.70
7020000669	LOK-F-SMC-04-N02-W5	1/4	16.40
7020000671	LOK-F-SMC-04-N04-W5	1/4	16.40
7020000673	LOK-F-SMC-04-N06-W5	1/4	21.80
7020000675	LOK-F-SMC-04-N08-W5	1/4	28.55
7020000668	LOK-F-SMC-04-N12-W5	1/4	43.50
7020000681	LOK-F-SMC-05-N02-W5	5/16	17.70
7020000683	LOK-F-SMC-05-N04-W5	5/16	21.80
7020000687	LOK-F-SMC-06-N02-W5	3/8	20.50
7020000689	LOK-F-SMC-06-N04-W5	3/8	23.20
7020000691	LOK-F-SMC-06-N06-W5	3/8	25.85
7020000693	LOK-F-SMC-06-N08-W5	3/8	29.95
7020000686	LOK-F-SMC-06-N12-W5	3/8	39.45
7020000706	LOK-F-SMC-08-N02-W5	1/2	40.75
7020000707	LOK-F-SMC-08-N04-W5	1/2	32.60
7020000709	LOK-F-SMC-08-N06-W5	1/2	34.00
7020000711	LOK-F-SMC-08-N08-W5	1/2	38.05
7020000703	LOK-F-SMC-08-N12-W5	1/2	48.85
7020000705	LOK-F-SMC-08-N16-W5	1/2	92.30
7020000580	LOK-F-SMC-10-N06-W5	5/8	39.45
7020000581	LOK-F-SMC-10-N08-W5	5/8	42.05
7020000579	LOK-F-SMC-10-N12-W5	5/8	51.60
7020000594	LOK-F-SMC-12-N08-W5	3/4	54.30
7020000591	LOK-F-SMC-12-N12-W5	3/4	57.00
7020000593	LOK-F-SMC-12-N16-W5	3/4	85.50
7020000605	LOK-F-SMC-14-N12-W5	7/8	97.65
7020000615	LOK-F-SMC-16-N08-W5	1	100.35
7020000612	LOK-F-SMC-16-N12-W5	1	104.40
7020000613	LOK-F-SMC-16-N16-W5	1	100.35

Male Connector
BSPT Thread
Type LOK-F-SMC-..-T ▪ Imperial

Item No.	Designation	Tube O.D.	Price
7020000639	LOK-F-SMC-02-T02-W5	1/8	19.10
7020000642	LOK-F-SMC-02-T04-W5	1/8	17.70
7020002454	LOK-F-SMC-03-T02-W5	3/16	17.70
7020001995	LOK-F-SMC-03-T04-W5	3/16	24.55
7020000670	LOK-F-SMC-04-T02-W5	1/4	17.70
7020000672	LOK-F-SMC-04-T04-W5	1/4	19.10
7020000674	LOK-F-SMC-04-T06-W5	1/4	23.20
7020000676	LOK-F-SMC-04-T08-W5	1/4	31.30
7020000684	LOK-F-SMC-05-T04-W5	5/16	21.80
7020000688	LOK-F-SMC-06-T02-W5	3/8	21.80
7020000690	LOK-F-SMC-06-T04-W5	3/8	24.55
7020000692	LOK-F-SMC-06-T06-W5	3/8	28.55
7020000694	LOK-F-SMC-06-T08-W5	3/8	34.00
7020001963	LOK-F-SMC-08-T02-W5	1/2	23.20
7020000708	LOK-F-SMC-08-T04-W5	1/2	35.30
7020000710	LOK-F-SMC-08-T06-W5	1/2	38.05
7020000712	LOK-F-SMC-08-T08-W5	1/2	42.05
7020000704	LOK-F-SMC-08-T12-W5	1/2	52.95
7020001968	LOK-F-SMC-10-T06-W5	5/8	38.05
7020001966	LOK-F-SMC-10-T08-W5	5/8	39.45
7020001967	LOK-F-SMC-10-T12-W5	5/8	48.85
7020001715	LOK-F-SMC-12-T08-W5	3/4	70.55
7020000592	LOK-F-SMC-12-T12-W5	3/4	57.00
7020002002	LOK-F-SMC-12-T16-W5	3/4	85.50
7020001964	LOK-F-SMC-16-T08-W5	1	134.20
7020001965	LOK-F-SMC-16-T12-W5	1	103.05
7020000614	LOK-F-SMC-16-T16-W5	1	100.35
7020001945*	LOK-F-SMC-24-T24-W5	1-1/2	257.50
7020001944*	LOK-F-SMC-32-T32-W5	2	533.40

* Subject to minimum order quantity

Male Connectors

Male Connector
BSPP Thread - Metal Sealing Face
Type LOK-F-SMC-..-G ▪ Imperial

Item No.	Designation	Tube O.D.	Price
7020002469	LOK-F-SMC-02-G02-W5	1/8	27.25
7020002462	LOK-F-SMC-02-G04-W5	1/8	29.95
7020002464	LOK-F-SMC-04-G02-W5	1/4	24.55
7020002457	LOK-F-SMC-04-G04-W5	1/4	24.55
7020002458	LOK-F-SMC-04-G08-W5	1/4	43.50
7020002467	LOK-F-SMC-06-G04-W5	3/8	32.60
7020002461	LOK-F-SMC-06-G06-W5	3/8	39.45
7020002460	LOK-F-SMC-06-G08-W5	3/8	39.45
7020002463	LOK-F-SMC-08-G04-W5	1/2	50.25
6100053172	LOK-F-SMC-08-G06-W5	1/2	101.75
7020002466	LOK-F-SMC-08-G08-W5	1/2	78.80
7020002465	LOK-F-SMC-08-G12-W5	1/2	71.80
7020002468	LOK-F-SMC-10-G06-W5	5/8	59.70

O-Seal Straight Thread Connector
UNF Thread
Type LOK-F-SOSC-..-U ▪ Imperial

Item No.	Designation	Tube O.D.	Price
7020000963	LOK-F-SOSC-02-U02-W5	1/8	31.30
7020000965	LOK-F-SOSC-04-U04-W5	1/4	32.60
7020000967	LOK-F-SOSC-06-U06-W5	3/8	38.05
7020000968	LOK-F-SOSC-08-U08-W5	1/2	54.30
7020000961	LOK-F-SOSC-12-U12-W5	3/4	70.55

Bulkhead Male Connector
NPT Thread
Type LOK-F-SMCB-..-N ▪ Imperial

Item No.	Designation	Barrel Ø	Tube O.D.	Price
7020000109	LOK-F-SMCB-02-N02-W5	8.33 mm	1/8	51.60
7020000110	LOK-F-SMCB-04-N02-W5	9.92 mm	1/4	35.30
7020000111	LOK-F-SMCB-04-N04-W5	9.92 mm	1/4	35.30
7020000112	LOK-F-SMCB-06-N04-W5	14.68 mm	3/8	34.00
7020000113	LOK-F-SMCB-06-N06-W5	14.68 mm	3/8	38.05
7020000115	LOK-F-SMCB-08-N06-W5	19.44 mm	1/2	65.10
7020000116	LOK-F-SMCB-08-N08-W5	19.44 mm	1/2	66.45

O-Seal Pipe Thread Connector
NPT Thread
Type LOK-F-SOPC-..-N ▪ Imperial

Item No.	Designation	Tube O.D.	Price
7020000954	LOK-F-SOPC-02-N02-W5	1/8	38.05
7020000956	LOK-F-SOPC-04-N04-W5	1/4	40.75
7020000958	LOK-F-SOPC-06-N06-W5	3/8	40.75
7020000960	LOK-F-SOPC-08-N08-W5	1/2	62.45

Male Connector for Bonded Washer Seal
BSPP Thread
Type LOK-F-SGMC-..-G ▪ Imperial

Item No.	Designation	Tube O.D.	Price
7020000467	LOK-F-SGMC-08-G06-W5	1/2	51.60
7020000468	LOK-F-SGMC-08-G08-W5	1/2	53.90
7020000425	LOK-F-SGMC-12-G08-W5	3/4	74.60
7020000424	LOK-F-SGMC-12-G12-W5	3/4	80.05
7020002001	LOK-F-SGMC-16-G08-W5	1	131.65
7020000433	LOK-F-SGMC-16-G16-W5	1	138.05

SAE / MS Male Connector
UNF Thread
Type LOK-F-SSMC-..-U ▪ Imperial

Item No.	Designation	Tube O.D.	Price
7020001308	LOK-F-SSMC-04-U04-W5	1/4	20.50
7020001309	LOK-F-SSMC-04-U06-W5	1/4	23.20
7020001310	LOK-F-SSMC-04-U08-W5	1/4	35.30
7020001314	LOK-F-SSMC-06-U06-W5	3/8	27.25
7020001315	LOK-F-SSMC-06-U08-W5	3/8	36.75
7020001318	LOK-F-SSMC-08-U06-W5	1/2	42.05
7020001319	LOK-F-SSMC-08-U08-W5	1/2	35.30
7020001316	LOK-F-SSMC-08-U10-W5	1/2	44.80
7020001317	LOK-F-SSMC-08-U12-W5	1/2	55.60
7020001302	LOK-F-SSMC-12-U08-W5	3/4	63.75
7020001301	LOK-F-SSMC-12-U12-W5	3/4	80.05
7020001304	LOK-F-SSMC-16-U12-W5	1	82.75
7020001305	LOK-F-SSMC-16-U16-W5	1	123.35

Female Connectors

Female Connector
NPT Thread
Type LOK-F-SFC-..-N ▪ Imperial

Item No.	Designation	Tube O.D.	Price
7020000252	LOK-F-SFC-02-N04-W5	1/8	25.85
7020000262	LOK-F-SFC-04-N02-W5	1/4	21.80
7020000264	LOK-F-SFC-04-N06-W5	1/4	32.60
7020000265	LOK-F-SFC-04-N08-W5	1/4	36.75
7020000271	LOK-F-SFC-06-N02-W5	3/8	28.55
7020000272	LOK-F-SFC-06-N04-W5	3/8	27.25
7020000273	LOK-F-SFC-06-N06-W5	3/8	35.30
7020000274	LOK-F-SFC-06-N08-W5	3/8	47.50
7020000284	LOK-F-SFC-08-N04-W5	1/2	38.05
7020000285	LOK-F-SFC-08-N06-W5	1/2	38.05
7020000286	LOK-F-SFC-08-N08-W5	1/2	52.95
7020000283	LOK-F-SFC-08-N12-W5	1/2	62.45
7020000214	LOK-F-SFC-10-N06-W5	5/8	61.10
7020000215	LOK-F-SFC-10-N08-W5	5/8	55.60
7020000225	LOK-F-SFC-12-N08-W5	3/4	69.20
7020000224	LOK-F-SFC-12-N12-W5	3/4	70.55
7020000239	LOK-F-SFC-16-N12-W5	1	123.35
7020000240	LOK-F-SFC-16-N16-W5	1	149.00

Female Connector
BSPT Thread
Type LOK-F-SFC-..-T ▪ Imperial

Item No.	Designation	Tube O.D.	Price
7020001685	LOK-F-SFC-02-T02-W5	1/8	21.80
7020001854	LOK-F-SFC-04-T02-W5	1/4	23.20
7020001855	LOK-F-SFC-04-T04-W5	1/4	29.95
7020001957	LOK-F-SFC-04-T06-W5	1/4	35.30
7020001956	LOK-F-SFC-04-T08-W5	1/4	39.45
7020001856	LOK-F-SFC-06-T04-W5	3/8	29.95
7020001859	LOK-F-SFC-06-T06-W5	3/8	39.45
7020001961	LOK-F-SFC-06-T08-W5	3/8	39.45
7020001954	LOK-F-SFC-08-T04-W5	1/2	42.05
7020001955	LOK-F-SFC-08-T06-W5	1/2	42.05
7020001953	LOK-F-SFC-08-T08-W5	1/2	57.00
7020001962	LOK-F-SFC-10-T08-W5	5/8	55.60
7020001959	LOK-F-SFC-12-T08-W5	3/4	101.75
7020001960	LOK-F-SFC-12-T12-W5	3/4	109.80
7020001958	LOK-F-SFC-16-T16-W5	1	140.60

Female Connector
BSPP Thread
Type LOK-F-SFC-..-G ▪ Imperial

Item No.	Designation	Tube O.D.	Price
7020002429	LOK-F-SFC-02-G04-W5	1/8	35.30
7020002419	LOK-F-SFC-04-G06-W5	1/4	48.85
7020002416	LOK-F-SFC-04-G08-W5	1/4	57.00
7020002426	LOK-F-SFC-06-G06-W5	3/8	52.95
7020002412	LOK-F-SFC-06-G08-W5	3/8	69.20
7020002411	LOK-F-SFC-08-G06-W5	1/2	48.85
7020002413	LOK-F-SFC-08-G08-W5	1/2	78.80

Bulkhead Female Connector
NPT Thread
Type LOK-F-SFCB-..-N ▪ Imperial

Item No.	Designation	Barrel Ø	Tube O.D.	Price
7020000062	LOK-F-SFCB-02-N02-W5	8.33 mm	1/8	69.20
7020000063	LOK-F-SFCB-04-N02-W5	11.50 mm	1/4	40.75
7020001720	LOK-F-SFCB-06-N04-W5	14.68 mm	3/8	55.60
7020000068	LOK-F-SFCB-08-N08-W5	19.44 mm	1/2	89.55

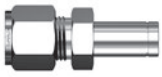
Weld Connectors

Male Pipe Weld Connector
Type LOK-F-SPWC-..-..P ▪ Imperial

Item No.	Designation	Tube O.D.	Pipe O.D.	Price
7020001112	LOK-F-SPWC-02-02P-W5	1/8	10.30 mm	20.50
7020001116	LOK-F-SPWC-04-04P-W5	1/4	13.70 mm	17.70
7020001121	LOK-F-SPWC-06-06P-W5	3/8	17.10 mm	28.55
7020001127	LOK-F-SPWC-08-08P-W5	1/2	21.30 mm	38.05
7020001103	LOK-F-SPWC-12-12P-W5	3/4	26.67 mm	62.45

Reducers

Reducer
Type LOK-F-SR ▪ Imperial



Item No.	Designation	Tube O.D.	Port O.D.	Price
7020002425	LOK-F-SR-01-02-W5	1/16	1/8	31.30
7020001166	LOK-F-SR-02-01-W5	1/8	1/16	50.25
7020001167	LOK-F-SR-02-02-W5	1/8	1/8	50.25
7020001171	LOK-F-SR-02-03-W5	1/8	3/16	21.80
7020001172	LOK-F-SR-02-04-W5	1/8	1/4	21.80
7020001175	LOK-F-SR-02-06-W5	1/8	3/8	23.20
7020001176	LOK-F-SR-02-08-W5	1/8	1/2	28.55
7020001177	LOK-F-SR-03-02-W5	3/16	1/8	31.30
7020001178	LOK-F-SR-03-04-W5	3/16	1/4	23.20
7020001186	LOK-F-SR-04-02-W5	1/4	1/8	28.55
7020001187	LOK-F-SR-04-03-W5	1/4	3/16	27.25
7020001188	LOK-F-SR-04-04-W5	1/4	1/4	21.80
7020001189	LOK-F-SR-04-05-W5	1/4	5/16	27.25
7020001190	LOK-F-SR-04-06-W5	1/4	3/8	21.80
7020001191	LOK-F-SR-04-08-W5	1/4	1/2	24.55
7020001185	LOK-F-SR-04-12-W5	1/4	3/4	39.45
7020001194	LOK-F-SR-05-06-W5	5/16	3/8	21.80
7020001198	LOK-F-SR-06-04-W5	3/8	1/4	28.55
7020001200	LOK-F-SR-06-08-W5	3/8	1/2	28.55
7020001197	LOK-F-SR-06-12-W5	3/8	3/4	34.00
7020001212	LOK-F-SR-08-04-W5	1/2	1/4	42.05
7020001213	LOK-F-SR-08-06-W5	1/2	3/8	35.30
7020001214	LOK-F-SR-08-08-W5	1/2	1/2	35.30
7020001209	LOK-F-SR-08-10-W5	1/2	5/8	36.75
7020001210	LOK-F-SR-08-12-W5	1/2	3/4	36.75
7020001211	LOK-F-SR-08-16-W5	1/2	1	59.70
7020001134	LOK-F-SR-10-16-W5	5/8	1	116.65
7020001142	LOK-F-SR-12-16-W5	3/4	1	84.10

Thread Sizes

Dash Size	BSPP (G)	BSPT (T)	NPT (N)	UNF (U)
02	1/8	1/8	1/8	5/16
03	-	-	-	3/8
04	1/4	1/4	1/4	7/16
05	-	-	-	1/2
06	3/8	3/8	3/8	9/16
08	1/2	1/2	1/2	3/4
10	-	-	-	7/8
12	3/4	3/4	3/4	1-1/16
14	-	-	-	1-3/16
16	1	1	1	1-5/16
20	1-1/4	1-1/4	1-1/4	1-5/8
24	1-1/2	1-1/2	1-1/2	1-7/8
32	2	2	2	2-1/2

Elbows

Union Elbow
Type LOK-F-SUE ▪ Imperial

Item No.	Designation	Tube O.D.	Price
7020001382	LOK-F-SUE-01-W5	1/16	113.85
7020001393	LOK-F-SUE-02-W5	1/8	35.30
7020001401	LOK-F-SUE-03-W5	3/16	35.30
7020001407	LOK-F-SUE-04-W5	1/4	36.75
7020001409	LOK-F-SUE-05-W5	5/16	38.05
7020001410	LOK-F-SUE-06-W5	3/8	44.80
7020001412	LOK-F-SUE-08-W5	1/2	73.25
7020001383	LOK-F-SUE-10-W5	5/8	82.75
7020001385	LOK-F-SUE-12-W5	3/4	128.45
7020001390	LOK-F-SUE-16-W5	1	247.85

Male Elbow
BSPT Thread
Type LOK-F-SME-..-T ▪ Imperial

Item No.	Designation	Tube O.D.	Price
7020001979	LOK-F-SME-02-T02-W5	1/8	28.55
7020001797	LOK-F-SME-02-T04-W5	1/8	28.55
7020001981	LOK-F-SME-03-T04-W5	3/16	29.95
7020000782	LOK-F-SME-04-T02-W5	1/4	32.60
7020000784	LOK-F-SME-04-T04-W5	1/4	35.30
7020000786	LOK-F-SME-04-T06-W5	1/4	48.85
7020001983	LOK-F-SME-05-T02-W5	5/16	32.60
7020000795	LOK-F-SME-05-T04-W5	5/16	36.00
7020001975	LOK-F-SME-06-T02-W5	3/8	40.75
7020000800	LOK-F-SME-06-T04-W5	3/8	43.50
7020000802	LOK-F-SME-06-T06-W5	3/8	51.60
7020001974	LOK-F-SME-06-T08-W5	3/8	63.75
7020001937	LOK-F-SME-08-T04-W5	1/2	55.60
7020000815	LOK-F-SME-08-T06-W5	1/2	55.60
7020000817	LOK-F-SME-08-T08-W5	1/2	71.80
7020002445	LOK-F-SME-08-T12-W5	1/2	POA
7020001985	LOK-F-SME-10-T06-W5	5/8	85.50
7020001976	LOK-F-SME-10-T08-W5	5/8	85.50
7020001972	LOK-F-SME-12-T08-W5	3/4	86.80
7020001973	LOK-F-SME-12-T12-W5	3/4	127.35
7020001971	LOK-F-SME-16-T12-W5	1	163.70
7020001970	LOK-F-SME-16-T16-W5	1	168.25

Male Elbow
NPT Thread
Type LOK-F-SME-..-N ▪ Imperial

Item No.	Designation	Tube O.D.	Price
7020000764	LOK-F-SME-02-N02-W5	1/8	27.25
7020000766	LOK-F-SME-02-N04-W5	1/8	29.95
7020000774	LOK-F-SME-03-N02-W5	3/16	27.25
7020000775	LOK-F-SME-03-N04-W5	3/16	35.30
7020000781	LOK-F-SME-04-N02-W5	1/4	28.55
7020000783	LOK-F-SME-04-N04-W5	1/4	31.30
7020000785	LOK-F-SME-04-N06-W5	1/4	43.50
7020000787	LOK-F-SME-04-N08-W5	1/4	50.25
7020000794	LOK-F-SME-05-N04-W5	5/16	32.60
7020000798	LOK-F-SME-06-N02-W5	3/8	40.75
7020000799	LOK-F-SME-06-N04-W5	3/8	39.45
7020000801	LOK-F-SME-06-N06-W5	3/8	46.20
7020000803	LOK-F-SME-06-N08-W5	3/8	59.70
7020000797	LOK-F-SME-06-N12-W5	3/8	89.55
7020000813	LOK-F-SME-08-N04-W5	1/2	54.30
7020000814	LOK-F-SME-08-N06-W5	1/2	54.30
7020000816	LOK-F-SME-08-N08-W5	1/2	66.45
7020000812	LOK-F-SME-08-N12-W5	1/2	96.25
7020000722	LOK-F-SME-10-N06-W5	5/8	70.55
7020000723	LOK-F-SME-10-N08-W5	5/8	74.60
7020000721	LOK-F-SME-10-N12-W5	5/8	86.80
7020000733	LOK-F-SME-12-N08-W5	3/4	82.75
7020000731	LOK-F-SME-12-N12-W5	3/4	82.75
7020000732	LOK-F-SME-12-N16-W5	3/4	104.40
7020000743	LOK-F-SME-14-N12-W5	7/8	123.35
7020000744	LOK-F-SME-16-N12-W5	1	159.95
7020000745	LOK-F-SME-16-N16-W5	1	159.95

Female Elbow
NPT Thread
Type LOK-F-SFE-..-N ▪ Imperial

Item No.	Designation	Tube O.D.	Price
7020000311	LOK-F-SFE-04-N04-W5	1/4	43.50
7020000312	LOK-F-SFE-04-N06-W5	1/4	62.45
7020000313	LOK-F-SFE-04-N08-W5	1/4	71.80
7020000320	LOK-F-SFE-06-N06-W5	3/8	50.25
7020000321	LOK-F-SFE-06-N08-W5	3/8	73.25
7020000325	LOK-F-SFE-08-N04-W5	1/2	57.00
7020000326	LOK-F-SFE-08-N06-W5	1/2	61.10
7020000327	LOK-F-SFE-08-N08-W5	1/2	81.40

Thread Sizes

Dash Size	BSPP (G)	BSPT (T)	NPT (N)	UNF (U)
02	1/8	1/8	1/8	5/16
03	-	-	-	3/8
04	1/4	1/4	1/4	7/16
05	-	-	-	1/2
06	3/8	3/8	3/8	9/16
08	1/2	1/2	1/2	3/4
10	-	-	-	7/8
12	3/4	3/4	3/4	1-1/16
14	-	-	-	1-3/16
16	1	1	1	1-5/16
20	1-1/4	1-1/4	1-1/4	1-5/8
24	1-1/2	1-1/2	1-1/2	1-7/8
32	2	2	2	2-1/2

Tees

Union Tee
Type LOK-F-SUT ▪ Imperial

Item No.	Designation	Tube O.D.	Price
7020001414	LOK-F-SUT-01-W5	1/16	89.55
7020001425	LOK-F-SUT-02-W5	1/8	55.60
7020001433	LOK-F-SUT-03-W5	3/16	55.60
7020001439	LOK-F-SUT-04-W5	1/4	51.60
7020001442	LOK-F-SUT-06-W5	3/8	66.45
7020001444	LOK-F-SUT-08-W5	1/2	101.75
7020001415	LOK-F-SUT-10-W5	5/8	117.90
7020001417	LOK-F-SUT-12-W5	3/4	152.85
7020001419	LOK-F-SUT-14-W5	7/8	262.55
7020001422	LOK-F-SUT-16-W5	1	328.10

Reducing Union Tee
Type LOK-F-SRUT ▪ Imperial

Item No.	Designation	Tube O.D.	Price
7020001296	LOK-F-SRUT-06-04-W5	3/8	90.85
7020001297	LOK-F-SRUT-08-04-W5	1/2	128.45
7020001298	LOK-F-SRUT-08-06-W5	1/2	134.20
7020001290	LOK-F-SRUT-12-06-W5	3/4	POA
7020001291	LOK-F-SRUT-12-08-W5	3/4	188.15
7020001294	LOK-F-SRUT-16-06-W5	1	369.70
7020001295	LOK-F-SRUT-16-08-W5	1	405.05
7020001292	LOK-F-SRUT-16-12-W5	1	479.45

Male Branch Tee
NPT Thread
Type LOK-F-SMBT-..-N ▪ Imperial

Item No.	Designation	Tube O.D.	Price
7020000555	LOK-F-SMBT-02-N02-W5	1/8	55.60
7020000556	LOK-F-SMBT-02-N04-W5	1/8	93.60
7020000557	LOK-F-SMBT-03-N02-W5	3/16	61.10
7020000562	LOK-F-SMBT-04-N02-W5	1/4	52.95
7020000563	LOK-F-SMBT-04-N04-W5	1/4	42.05
7020002449	LOK-F-SMBT-04-N06-W5	1/4	78.80
7020000566	LOK-F-SMBT-05-N02-W5	5/16	63.75
7020000567	LOK-F-SMBT-06-N04-W5	3/8	65.10
7020000568	LOK-F-SMBT-06-N06-W5	3/8	74.60
7020002450	LOK-F-SMBT-06-N08-W5	3/8	113.85
7020000573	LOK-F-SMBT-08-N06-W5	1/2	101.75
7020000574	LOK-F-SMBT-08-N08-W5	1/2	109.80
7020000536	LOK-F-SMBT-10-N08-W5	5/8	124.75
7020000541	LOK-F-SMBT-12-N12-W5	3/4	159.95

Male Run Tee
NPT Thread
Type LOK-F-SMRT-..-N ▪ Imperial

Item No.	Designation	Tube O.D.	Price
7020000850	LOK-F-SMRT-02-N02-W5	1/8	55.60
7020000851	LOK-F-SMRT-02-N04-W5	1/8	93.60
7020000852	LOK-F-SMRT-03-N02-W5	3/16	52.95
7020000857	LOK-F-SMRT-04-N02-W5	1/4	52.95
7020000858	LOK-F-SMRT-04-N04-W5	1/4	62.45
7020002447	LOK-F-SMRT-04-N06-W5	1/4	78.80
7020000862	LOK-F-SMRT-06-N04-W5	3/8	66.45
7020000863	LOK-F-SMRT-06-N06-W5	3/8	74.60
7020000867	LOK-F-SMRT-08-N06-W5	1/2	101.75
7020000868	LOK-F-SMRT-08-N08-W5	1/2	109.80
7020000837	LOK-F-SMRT-12-N12-W5	3/4	159.95

Female Branch Tee
NPT Thread
Type LOK-F-SFBT-..-N ▪ Imperial

Item No.	Designation	Tube O.D.	Price
7020000198	LOK-F-SFBT-02-N02-W5	1/8	69.20
7020000202	LOK-F-SFBT-06-N06-W5	3/8	84.10
7020000208	LOK-F-SFBT-08-N04-W5	1/2	115.25
7020000209	LOK-F-SFBT-08-N06-W5	1/2	107.10
7020000210	LOK-F-SFBT-08-N08-W5	1/2	123.35
7020000191	LOK-F-SFBT-12-N12-W5	3/4	211.25
7020000195	LOK-F-SFBT-16-N12-W5	1	362.70

Female Run Tee
NPT Thread
Type LOK-F-SFRT-..-N ▪ Imperial

Item No.	Designation	Tube O.D.	Price
7020000363	LOK-F-SFRT-02-N02-W5	1/8	69.20
7020000364	LOK-F-SFRT-04-N02-W5	1/4	65.10
7020000365	LOK-F-SFRT-04-N04-W5	1/4	73.25
7020000366	LOK-F-SFRT-06-N04-W5	3/8	76.05
7020000371	LOK-F-SFRT-08-N06-W5	1/2	107.10
7020000372	LOK-F-SFRT-08-N08-W5	1/2	123.35

Crosses

Union Cross
Type LOK-F-SUC ▪ Imperial

Item No.	Designation	Tube O.D.	Price
7020001369	LOK-F-SUC-02-W5	1/8	97.65
7020001375	LOK-F-SUC-04-W5	1/4	92.30
7020001378	LOK-F-SUC-06-W5	3/8	115.25
7020001380	LOK-F-SUC-08-W5	1/2	134.20
7020001362	LOK-F-SUC-12-W5	3/4	231.80
7020001366	LOK-F-SUC-16-W5	1	414.70

Adapters

Male Adapter
NPT Thread
Type LOK-F-SMA-..-N ▪ Imperial

Item No.	Designation	Port O.D.	Price
7020000514	LOK-F-SMA-02-N02-W5	1/8	15.05
7020000515	LOK-F-SMA-02-N04-W5	1/8	17.70
7020000519	LOK-F-SMA-04-N02-W5	1/4	13.75
7020000520	LOK-F-SMA-04-N04-W5	1/4	15.05
7020000521	LOK-F-SMA-04-N06-W5	1/4	19.10
7020002129	LOK-F-SMA-05-N04-W5	5/16	19.10
7020000525	LOK-F-SMA-06-N02-W5	3/8	17.70
7020002130	LOK-F-SMA-06-N04-W5	3/8	19.10
7020002131	LOK-F-SMA-06-N06-W5	3/8	23.20
7020002453	LOK-F-SMA-06-N08-W5	3/8	27.25
7020002134	LOK-F-SMA-08-N04-W5	1/2	28.55
7020002135	LOK-F-SMA-08-N06-W5	1/2	29.95
7020002136	LOK-F-SMA-08-N08-W5	1/2	32.60
7020002123	LOK-F-SMA-12-N08-W5	3/4	46.20
7020000510	LOK-F-SMA-16-N12-W5	1	89.55

AN Union
UNF Thread
Type LOK-F-SAU-..-U ▪ Imperial

Item No.	Designation	Tube O.D.	Price
7020000028	LOK-F-SAU-02-U04-W5	1/8	27.25
7020000029	LOK-F-SAU-04-U04-W5	1/4	23.20
7020000031	LOK-F-SAU-06-U04-W5	3/8	38.05
7020000032	LOK-F-SAU-06-U06-W5	3/8	32.60
7020000033	LOK-F-SAU-08-U08-W5	1/2	44.80
7020000025	LOK-F-SAU-12-U12-W5	3/4	101.75
7020000026	LOK-F-SAU-16-U16-W5	1	156.05

Female Adapter
NPT Thread
Type LOK-F-SFA-..-N ▪ Imperial

Item No.	Designation	Port O.D.	Price
7020000165	LOK-F-SFA-02-N02-W5	1/8	19.10
7020000166	LOK-F-SFA-02-N04-W5	1/8	21.80
7020000170	LOK-F-SFA-04-N02-W5	1/4	19.10
7020002062	LOK-F-SFA-04-N04-W5	1/4	23.20
7020000172	LOK-F-SFA-04-N06-W5	1/4	27.25
7020000173	LOK-F-SFA-04-N08-W5	1/4	32.60
7020002064	LOK-F-SFA-06-N04-W5	3/8	24.55
7020002065	LOK-F-SFA-06-N06-W5	3/8	31.30
7020000179	LOK-F-SFA-06-N08-W5	3/8	42.05
7020002067	LOK-F-SFA-08-N04-W5	1/2	32.60
7020000183	LOK-F-SFA-08-N06-W5	1/2	32.60
7020002068	LOK-F-SFA-08-N08-W5	1/2	46.20
7020000157	LOK-F-SFA-12-N08-W5	3/4	58.30
7020002058	LOK-F-SFA-12-N12-W5	3/4	59.70
7020000162	LOK-F-SFA-16-N12-W5	1	105.80
7020002061	LOK-F-SFA-16-N16-W5	1	127.35

Ports

Port Connector
Type LOK-F-SPC ▪ Imperial

Item No.	Designation	Port O.D.	Price
7020000997	LOK-F-SPC-02-W5	1/8	17.70
7020002225	LOK-F-SPC-04-W5	1/4	12.95
7020001000	LOK-F-SPC-05-W5	5/16	21.80
7020002227	LOK-F-SPC-06-W5	3/8	19.85
7020002223	LOK-F-SPC-16-W5	1	48.85

Reducing Port Connector
Type LOK-F-SRPC ▪ Imperial

Item No.	Designation	Port O.D.	Price
7020001094	LOK-F-SRPC-04-02-W5	1/4	29.95
7020001095	LOK-F-SRPC-06-02-W5	3/8	21.05
7020001096	LOK-F-SRPC-06-04-W5	3/8	17.70
7020001097	LOK-F-SRPC-08-04-W5	1/2	28.55
7020001098	LOK-F-SRPC-08-06-W5	1/2	28.55
7020001090	LOK-F-SRPC-12-08-W5	3/4	23.20

Thread Sizes

Dash Size	BSPP (G)	BSPT (T)	NPT (N)	UNF (U)
02	1/8	1/8	1/8	5/16
03	-	-	-	3/8
04	1/4	1/4	1/4	7/16
05	-	-	-	1/2
06	3/8	3/8	3/8	9/16
08	1/2	1/2	1/2	3/4
10	-	-	-	7/8
12	3/4	3/4	3/4	1-1/16
14	-	-	-	1-3/16
16	1	1	1	1-5/16
20	1-1/4	1-1/4	1-1/4	1-5/8
24	1-1/2	1-1/2	1-1/2	1-7/8
32	2	2	2	2-1/2

Spare Parts

Plug
Type LOK-F-SP ▪ Imperial

Item No.	Designation	Tube O.D.	Price
7020002414	LOK-F-SP-01-W5	1/16	32.60
7020000978	LOK-F-SP-02-W5	1/8	16.40
7020000983	LOK-F-SP-03-W5	3/16	16.40
7020002214	LOK-F-SP-04-W5	1/4	12.95
7020002216	LOK-F-SP-06-W5	3/8	15.05
7020000969	LOK-F-SP-10-W5	5/8	28.55
7020000975	LOK-F-SP-16-W5	1	66.45

Cap
Type LOK-F-SC ▪ Imperial

Item No.	Designation	Tube O.D.	Price
7020000133	LOK-F-SC-02-W5	1/8	15.05
7020000140	LOK-F-SC-04-W5	1/4	12.95
7020000142	LOK-F-SC-05-W5	5/16	13.75
7020000143	LOK-F-SC-06-W5	3/8	17.70
7020000145	LOK-F-SC-08-W5	1/2	25.85
7020000124	LOK-F-SC-10-W5	5/8	31.30
7020000126	LOK-F-SC-12-W5	3/4	42.05
7020000130	LOK-F-SC-16-W5	1	76.05

Nut
Type LOK-F-SN ▪ Imperial

Item No.	Designation	Tube O.D.	Price
7020000884	LOK-F-SN-02-W5	1/8	6.10
7020000889	LOK-F-SN-03-W5	3/16	5.15
7020000891	LOK-F-SN-04-W5	1/4	5.85
7020000893	LOK-F-SN-05-W5	5/16	5.85
7020000894	LOK-F-SN-06-W5	3/8	7.55
7020000896	LOK-F-SN-08-W5	1/2	12.35
7020000874	LOK-F-SN-10-W5	5/8	17.70
7020000876	LOK-F-SN-12-W5	3/4	20.50
7020000878	LOK-F-SN-14-W5	7/8	27.25
7020000881	LOK-F-SN-16-W5	1	39.45

Tooling

Inspection Gap Gauge
for Tube O.D. Sizes - 1/4, 3/8, 1/2
Type LOK-T-IGG-040608-W5

Item No.	Designation	Price
6100177322	LOK-T-IGG-040608-W5	123.85

Ferrules

Front Ferrule
Type LOK-F-SFF ▪ Imperial

Item No.	Designation	Tube O.D.	Price
7020000330	LOK-F-SFF-01-W5	1/16	6.80
7020000341	LOK-F-SFF-02-W5	1/8	4.45
7020000348	LOK-F-SFF-04-W5	1/4	3.25
7020000350	LOK-F-SFF-05-W5	5/16	4.20
7020000351	LOK-F-SFF-06-W5	3/8	4.45
7020000353	LOK-F-SFF-08-W5	1/2	6.30
7020000331	LOK-F-SFF-10-W5	5/8	7.55
7020000333	LOK-F-SFF-12-W5	3/4	10.95
7020000335	LOK-F-SFF-14-W5	7/8	16.40
7020000338	LOK-F-SFF-16-W5	1	20.50

Back Ferrule
Type LOK-F-SBF ▪ Imperial

Item No.	Designation	Tube O.D.	Price
7020000045	LOK-F-SBF-02-W5	1/8	4.20
7020000050	LOK-F-SBF-03-W5	3/16	4.20
7020000052	LOK-F-SBF-04-W5	1/4	3.65
7020000054	LOK-F-SBF-05-W5	5/16	4.20
7020000055	LOK-F-SBF-06-W5	3/8	4.20
7020000057	LOK-F-SBF-08-W5	1/2	6.10
7020000035	LOK-F-SBF-10-W5	5/8	7.55
7020000037	LOK-F-SBF-12-W5	3/4	9.65
7020000042	LOK-F-SBF-16-W5	1	15.05
7020001903	LOK-F-SBF-20-W5	1-1/4	23.20

Ferrule Set
Type LOK-F-SFS ▪ Imperial

Item No.	Designation	Qty	Tube O.D.	Price
7020000378	LOK-F-SFS-02-W5	10 pcs	1/8	84.10
7020000382	LOK-F-SFS-04-W5	10 pcs	1/4	66.45
7020001993	LOK-F-SFS-05-W5	10 pcs	5/16	81.40
7020001946	LOK-F-SFS-06-W5	10 pcs	3/8	84.10
7020001759	LOK-F-SFS-08-W5	10 pcs	1/2	122.05
7020001947	LOK-F-SFS-10-W5	10 pcs	5/8	149.00
7020001948	LOK-F-SFS-12-W5	10 pcs	3/4	203.55
7020001949	LOK-F-SFS-16-W5	10 pcs	1	352.45

Inspection Gap Gauge
for Tube O.D. Sizes - 3/4, 1
Type LOK-T-IGG-1216-W5

Item No.	Designation	Price
6100177323	LOK-T-IGG-1216-W5	148.60

	Adapters	**E16**
	Adapter **Male BSPP to Female NPT Thread** LOK-A-IA	**E16**
	Reducing Adapter **Male to Female NPT Thread** LOK-A-IRA	**E16**
	Reducing Hex Bushing LOK-A-IRHB	**E16**
	Reducing Hex Bushing **Male to Female NPT Thread** LOK-A-IRHB-N..	**E16**
	Reducing Hex Bushing **Male to Female BSPT Thread** LOK-A-IRHB-T..	**E16**
	Hex Coupling LOK-A-IHC	**E17**
	Hex Coupling **NPT Thread** LOK-A-IHC-N..	**E17**
	Hex Coupling BSPT Thread LOK-A-IHC-T..	**E17**
	Hex Reducing Coupling **NPT Thread** LOK-A-IHRC-N..	**E17**
	Hex Nipple LOK-A-IHN	**E17**
	Hex Nipple **NPT Thread** LOK-A-IHN-N..	**E17**
	Hex Nipple **BSPT Thread** LOK-A-IHN-T..	**E17**
	Hex Reducing Nipple LOK-A-IHRN	**E17**
	Hex Reducing Nipple **NPT Thread** LOK-A-IHRN-N..	**E17**
	Hex Reducing Nipple **BSPT Thread** LOK-A-IHRN-T..	**E17**
	Elbows	**E18**
	Male Elbow **NPT Thread** LOK-A-IME	**E18**
	Female Elbow **NPT Thread** LOK-A-IFE	**E18**
	Street Elbow **NPT Thread** LOK-A-ISE	**E18**
	Reducing Street Elbow **NPT Thread** LOK-A-IRSE	**E18**
	Tees	**E18**
	Male Tee **NPT Thread** LOK-A-IMT	**E18**
	Female Tee **NPT Thread** LOK-A-IFT	**E18**
	Caps and Plugs	**E18**
	Pipe Cap **NPT Thread** LOK-A-IPC	**E18**
	Pipe Plug LOK-A-IPP	**E18**
	Pipe Plug **NPT Thread** LOK-A-IPP-N..	**E18**
	Pipe Plug **BSPT Thread** LOK-A-IPP-T..	**E18**

Ordering Codes

LOK - **A** - **IA** - **G04** - **N04** - **W5**

① ② ③ ④ ⑤ ⑥

① Series

STAUFF LOK	**LOK**

② Type

Adapter Fitting	**A**

③ Series

Adapter, Male BSPP to Female NPT thread	**IA**
Reducing Adapter, Male to Female NPT thread	**IRA**
Reducing Hex Bushing, Male to Female NPT thread	**IRHB**
Hex Coupling, Female NPT thread	**IHC**
Hex Nipple, Male NPT thread	**IHN**
Hex Reducing Coupling, Female NPT thread	**IHRC**
Hex Reducing Nipple, Male NPT thread	**IHRN**
Male Elbow, Male NPT thread	**IME**
Female Elbow, Female NPT thread	**IFE**
Street Elbow, Female to Male NPT thread	**ISE**
Male Tee, Male NPT thread	**IMT**
Female Tee, Female NPT thread	**IFT**
Pipe Cap, Female NPT thread	**IPC**
Pipe Plug, Female NPT thread	**IPP**

④ Pipe Thread

BSPP (parallel)		BSPT (tapered)	
1/8" BSPP	**G02**	1/8" BSPT	**T02**
1/4" BSPP	**G04**	1/4" BSPT	**T04**
3/8" BSPP	**G06**	3/8" BSPT	**T06**
1/2" BSPP	**G08**	1/2" BSPT	**T08**
3/4" BSPP	**G12**	3/4" BSPT	**T12**
1" BSPP	**G16**	1" BSPT	**T16**
NPT		**UNF**	
1/8" NPT	**N02**	5/16 UNF	**U02**
1/4" NPT	**N04**	7/16 UNF	**U04**
3/8" NPT	**N06**	9/16 UNF	**U06**
1/2" NPT	**N08**	3/4 UNF	**U08**
3/4" NPT	**N12**	1-1/16 UNF	**U12**
1" NPT	**N16**	1-5/16 UNF	**U16**

⑤ Second Pipe Thread

BSPP (parallel)		BSPT (tapered)	
1/8" BSPP	**G02**	1/8" BSPT	**T02**
1/4" BSPP	**G04**	1/4" BSPT	**T04**
3/8" BSPP	**G06**	3/8" BSPT	**T06**
1/2" BSPP	**G08**	1/2" BSPT	**T08**
3/4" BSPP	**G12**	3/4" BSPT	**T12**
1" BSPP	**G16**	1" BSPT	**T16**
NPT		**UNF**	
1/8" NPT	**N02**	5/16 UNF	**U02**
1/4" NPT	**N04**	7/16 UNF	**U04**
3/8" NPT	**N06**	9/16 UNF	**U06**
1/2" NPT	**N08**	3/4 UNF	**U08**
3/4" NPT	**N12**	1-1/16 UNF	**U12**
1" NPT	**N16**	1-5/16 UNF	**U16**

⑥ Material

Stainless Steel (AISI) 316	**W5**

Adapters

Adapter
Male BSPP to Female NPT Thread
Type LOK-A-IA ▪ Imperial

Item No.	Designation	Price
7020001492	LOK-A-IA-G04-N04-W5	27.25
7020001494	LOK-A-IA-G06-N06-W5	34.00
7020001496	LOK-A-IA-G08-N08-W5	51.60
7020001487	LOK-A-IA-G12-N12-W5	POA
7020001489	LOK-A-IA-G16-N16-W5	134.20

Reducing Adapter
Male to Female NPT Thread
Type LOK-A-IRA ▪ Imperial

Item No.	Designation	Price
7020001584	LOK-A-IRA-N02-N04-W5	23.20
7020001585	LOK-A-IRA-N02-N06-W5	32.60
7020001586	LOK-A-IRA-N02-N08-W5	50.25
7020001589	LOK-A-IRA-N04-N06-W5	29.95
7020001587	LOK-A-IRA-N04-N12-W5	71.80
7020001588	LOK-A-IRA-N04-N16-W5	105.80
7020001592	LOK-A-IRA-N06-N08-W5	43.50
7020001591	LOK-A-IRA-N06-N12-W5	70.55
7020001593	LOK-A-IRA-N08-N12-W5	59.70
7020001583	LOK-A-IRA-N12-N16-W5	89.55

Hex Bushings

Reducing Hex Bushing
Male to Female NPT Thread
Type LOK-A-IRHB-N.. ▪ Imperial

Item No.	Designation	Price
7020001601	LOK-A-IRHB-N04-N02-W5	15.05
7020001602	LOK-A-IRHB-N06-N02-W5	17.70
7020001603	LOK-A-IRHB-N06-N04-W5	19.10
7020001604	LOK-A-IRHB-N08-N02-W5	27.25
7020001605	LOK-A-IRHB-N08-N04-W5	27.25
7020001606	LOK-A-IRHB-N08-N06-W5	28.55
7020001595	LOK-A-IRHB-N12-N04-W5	34.00
7020001596	LOK-A-IRHB-N12-N06-W5	34.00
7020002373	LOK-A-IRHB-N16-N06-W5	51.60
7020001600	LOK-A-IRHB-N16-N08-W5	57.00
7020001598	LOK-A-IRHB-N16-N12-W5	65.10

Reducing Hex Bushing
Male to Female BSPT Thread
Type LOK-A-IRHB-T.. ▪ Imperial

Item No.	Designation	Price
7020002330	LOK-A-IRHB-T04-T02-W5	15.05
7020002395	LOK-A-IRHB-T06-T02-W5	17.70
7020002361	LOK-A-IRHB-T06-T04-W5	19.10
7020002389	LOK-A-IRHB-T08-T02-W5	27.25
7020002398	LOK-A-IRHB-T08-T04-W5	27.25
7020002350	LOK-A-IRHB-T08-T06-W5	28.55
7020002394	LOK-A-IRHB-T12-T04-W5	34.00
7020002356	LOK-A-IRHB-T12-T06-W5	35.30
7020002357	LOK-A-IRHB-T12-T08-W5	38.05
7020002353	LOK-A-IRHB-T16-T08-W5	57.00
7020002360	LOK-A-IRHB-T16-T12-W5	65.10

Hex Couplings

Hex Coupling
NPT Thread
Type LOK-A-IHC-N.. ▪ Imperial

Item No.	Designation	Price
7020001463	LOK-A-IHC-N04-W5	24.55
7020001468	LOK-A-IHC-N06-W5	34.00
7020001472	LOK-A-IHC-N08-W5	50.25
7020001503	LOK-A-IHC-N12-W5	62.45
7020001504	LOK-A-IHC-N16-W5	112.50

Hex Coupling
BSPT Thread
Type LOK-A-IHC-T.. ▪ Imperial

Item No.	Designation	Price
7020002340	LOK-A-IHC-T02-W5	38.05
7020002333	LOK-A-IHC-T04-W5	24.55
7020002325	LOK-A-IHC-T08-W5	54.30
7020002328	LOK-A-IHC-T12-W5	62.45
7020002378	LOK-A-IHC-T16-W5	112.50
6100136409	LOK-A-IHC-T32-W5	162.45

Hex Reducing Coupling
NPT Thread
Type LOK-A-IHRC-N.. ▪ Imperial

Item No.	Designation	Price
7020001547	LOK-A-IHRC-N04-N02-W5	27.25
7020001548	LOK-A-IHRC-N06-N04-W5	35.30
7020001551	LOK-A-IHRC-N08-N06-W5	50.25
7020001544	LOK-A-IHRC-N12-N08-W5	70.55

Thread Sizes

Dash Size	BSPP (G)	BSPT (T)	NPT (N)	UNF (U)
02	1/8	1/8	1/8	5/16
03	-	-	-	3/8
04	1/4	1/4	1/4	7/16
05	-	-	-	1/2
06	3/8	3/8	3/8	9/16
08	1/2	1/2	1/2	3/4
10	-	-	-	7/8
12	3/4	3/4	3/4	1-1/16
14	-	-	-	1-3/16
16	1	1	1	1-5/16
20	1-1/4	1-1/4	1-1/4	1-5/8
24	1-1/2	1-1/2	1-1/2	1-7/8
32	2	2	2	2-1/2

Hex Nipples

Hex Nipple
NPT Thread
Type LOK-A-IHN-N.. ▪ Imperial

Item No.	Designation	Price
7020001538	LOK-A-IHN-N02-W5	11.70
7020001453	LOK-A-IHN-N04-W5	15.05
7020001465	LOK-A-IHN-N06-W5	20.50
7020001470	LOK-A-IHN-N08-W5	31.30
7020001534	LOK-A-IHN-N12-W5	43.50
7020001536	LOK-A-IHN-N16-W5	78.80

Hex Nipple
BSPT Thread
Type LOK-A-IHN-T.. ▪ Imperial

Item No.	Designation	Price
7020002311	LOK-A-IHN-T02-W5	11.70
7020002306	LOK-A-IHN-T04-W5	15.05
7020002310	LOK-A-IHN-T06-W5	20.50
7020002308	LOK-A-IHN-T08-W5	31.30
7020002309	LOK-A-IHN-T16-W5	78.80

Hex Reducing Nipple
NPT Thread
Type LOK-A-IHRN-N.. ▪ Imperial

Item No.	Designation	Price
7020001557	LOK-A-IHRN-N04-N02-W5	15.05
7020001558	LOK-A-IHRN-N06-N02-W5	21.80
7020001559	LOK-A-IHRN-N06-N04-W5	19.10
7020001560	LOK-A-IHRN-N08-N02-W5	32.60
7020001561	LOK-A-IHRN-N08-N04-W5	29.95
7020001562	LOK-A-IHRN-N08-N06-W5	29.95
7020001552	LOK-A-IHRN-N12-N04-W5	42.05
7020001553	LOK-A-IHRN-N12-N08-W5	40.75
7020001556	LOK-A-IHRN-N16-N08-W5	73.25
7020001554	LOK-A-IHRN-N16-N12-W5	73.25

Hex Reducing Nipple
BSPT Thread
Type LOK-A-IHRN-T.. ▪ Imperial

Item No.	Designation	Price
7020002402	LOK-A-IHRN-T04-T02-W5	16.40
7020002404	LOK-A-IHRN-T06-T02-W5	21.80
7020002403	LOK-A-IHRN-T06-T04-W5	20.50
7020002347	LOK-A-IHRN-T08-T04-W5	31.30
7020002335	LOK-A-IHRN-T12-T08-W5	44.80

Elbows

Male Elbow
NPT Thread
Type LOK-A-IME ▪ Imperial

Item No.	Designation	Price
7020001565	LOK-A-IME-N02-W5	34.00
7020001462	LOK-A-IME-N04-W5	35.30
7020001467	LOK-A-IME-N06-W5	51.60
7020001474	LOK-A-IME-N08-W5	82.75

Female Elbow
NPT Thread
Type LOK-A-IFE ▪ Imperial

Item No.	Designation	Price
7020001519	LOK-A-IFE-N02-W5	39.45
7020001520	LOK-A-IFE-N04-W5	46.20
7020001521	LOK-A-IFE-N06-W5	63.75
7020001522	LOK-A-IFE-N08-W5	104.40
7020001517	LOK-A-IFE-N12-W5	180.45
7020001518	LOK-A-IFE-N16-W5	268.35

Street Elbow
NPT Thread
Type LOK-A-ISE ▪ Imperial

Item No.	Designation	Price
7020001622	LOK-A-ISE-N02-W5	40.75
7020001452	LOK-A-ISE-N04-W5	43.50
7020001623	LOK-A-ISE-N06-W5	63.75
7020001624	LOK-A-ISE-N08-W5	107.10

Reducing Street Elbow
NPT Thread
Type LOK-A-IRSE ▪ Imperial

Item No.	Designation	Price
7020001610	LOK-A-IRSE-N04-N02-W5	52.95
7020001611	LOK-A-IRSE-N06-N04-W5	82.20
7020001612	LOK-A-IRSE-N08-N04-W5	233.70
7020001613	LOK-A-IRSE-N08-N06-W5	275.65

Thread Sizes

Dash Size	BSPP (G)	BSPT (T)	NPT (N)	UNF (U)
02	1/8	1/8	1/8	5/16
03	-	-	-	3/8
04	1/4	1/4	1/4	7/16
05	-	-	-	1/2
06	3/8	3/8	3/8	9/16
08	1/2	1/2	1/2	3/4
10	-	-	-	7/8
12	3/4	3/4	3/4	1-1/16
14	-	-	-	1-3/16
16	1	1	1	1-5/16
20	1-1/4	1-1/4	1-1/4	1-5/8
24	1-1/2	1-1/2	1-1/2	1-7/8
32	2	2	2	2-1/2

Tees

Male Tee
NPT Thread
Type LOK-A-IMT ▪ Imperial

Item No.	Designation	Price
7020001568	LOK-A-IMT-N02-W5	39.45
7020001469	LOK-A-IMT-N06-W5	70.55
7020001473	LOK-A-IMT-N08-W5	116.65

Female Tee
NPT Thread
Type LOK-A-IFT ▪ Imperial

Item No.	Designation	Price
7020001525	LOK-A-IFT-N04-W5	58.30
7020001526	LOK-A-IFT-N06-W5	107.10
7020001527	LOK-A-IFT-N08-W5	142.60
7020001523	LOK-A-IFT-N12-W5	249.10
7020001524	LOK-A-IFT-N16-W5	362.70

Caps and Plugs

Pipe Cap
NPT Thread
Type LOK-A-IPC ▪ Imperial

Item No.	Designation	Price
7020000005	LOK-A-IPC-N02-W5	11.70
7020001571	LOK-A-IPC-N04-W5	19.10
7020001572	LOK-A-IPC-N06-W5	21.80
7020001573	LOK-A-IPC-N08-W5	32.60
7020001569	LOK-A-IPC-N12-W5	51.60
7020001570	LOK-A-IPC-N16-W5	69.20

Pipe Plug
NPT Thread
Type LOK-A-IPP-N.. ▪ Imperial

Item No.	Designation	Price
7020001582	LOK-A-IPP-N02-W5	23.20
7020001454	LOK-A-IPP-N04-W5	12.35
7020001466	LOK-A-IPP-N06-W5	16.40
7020001580	LOK-A-IPP-N12-W5	34.00
7020001581	LOK-A-IPP-N16-W5	55.60

Pipe Plug
BSPT Thread
Type LOK-A-IPP-T.. ▪ Imperial

Item No.	Designation	Price
7020002318	LOK-A-IPP-T02-W5	13.25
7020002326	LOK-A-IPP-T04-W5	12.35
7020002380	LOK-A-IPP-T06-W5	16.40
7020002396	LOK-A-IPP-T08-W5	23.20
7020002329	LOK-A-IPP-T12-W5	34.00

Assembly of STAUFF Instrumentation Fittings

STAUFF Instrumentation fittings are delivered as completely assembled units and can therefore be used immediately without any further preparation. We generally recommend the use of a pre-assembly socket.

Initial assembly of fittings up to 1" / 25 mm

Step 1: Insert the pipe into the fitting and make sure that the pipe rests correctly on the shoulder provided for this purpose. Then tighten the nut hand tight.

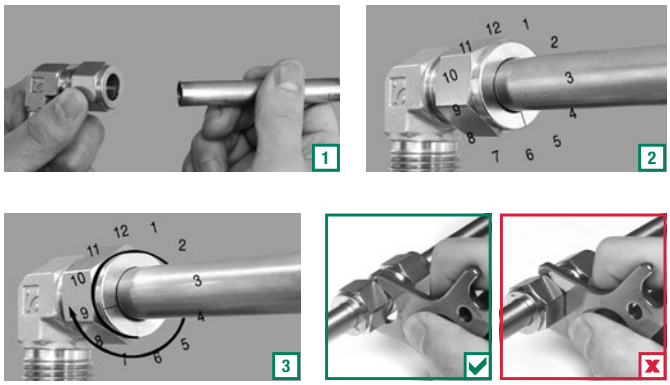
High pressure applications or applications with a high safety factor: Tighten the nut so that the pipe can no longer be rotated freely.

Step 2: Mark the nut in 6 o'clock position.

Step 3: Hold the fitting body tight and turn the nut with a matching spanner for 1-1/4 revolution. The mark should now be in the 9 o'clock position.

Note: For size 2, 3 and 4 as well as 1/16", 1/8" and 3/16" you should follow the instructions above, but only tighten the nut for 3/4 of a revolution.

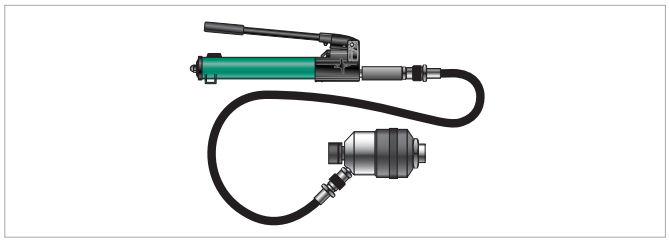
Optionally: After initial assembly, you can use a gap gauge to check whether the nut has been tightened correctly. If the gap gauge does not fit between nut and body, the fitting has been sufficiently tightened.



Initial assembly of fittings over 1" / 25 mm

For initial assembly of fittings over 1" / 25 mm we recommend the use of a pre-assembly machine.

Subsequently mark the nut at the 6 o'clock position and tighten the nut with a spanner by another 1/2 revolution to 12 o'clock position.



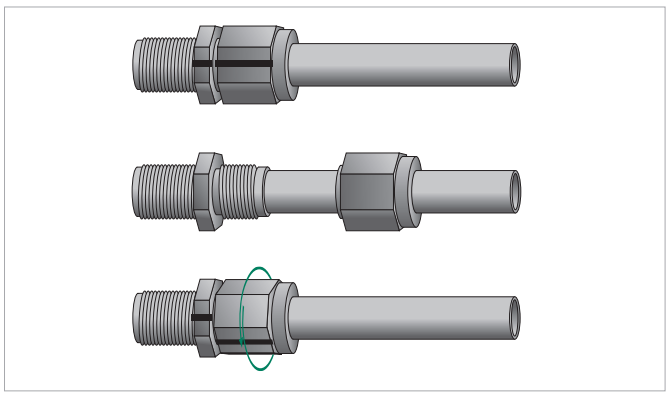
Reassembly

Before disassembling mark body and nut with a continuous line.

For reassembly insert the pipe into the fitting until it bottoms and make sure that the ferrules are correctly fitted into the cone.

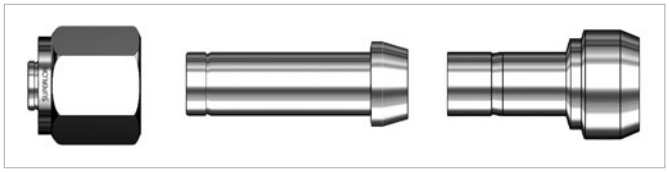
Now tighten the nut so that the marks on nut and body are in line again. Now tighten the nut lightly until you notice a significant increase of torque. The fitting has thereby reached its nominal position.

Note: The gap gauge cannot be used for reassembled fittings.



Assembling plugs and port connectors with machined ferrule

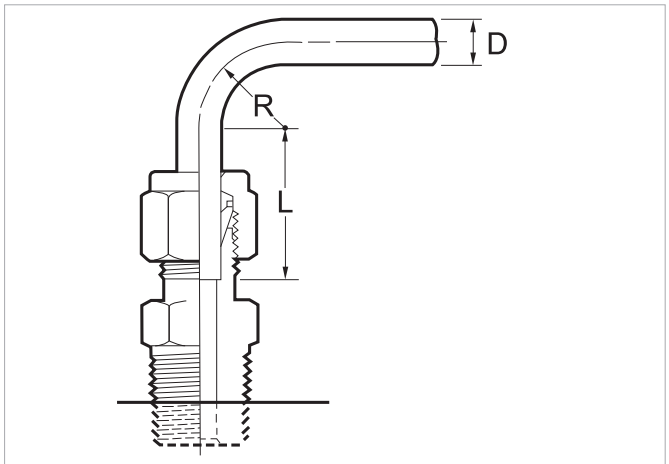
Both plugs and port connectors must first be turned hand tight and tightened for another 1/4 revolution.



Preparing the pipe

- Concentricity and degree of hardness of the pipe
  See information on pipe selection below for details.
- Surface free of scratches and dirt
- Straight cut face
- Deburring of pipe from inside and outside

Peculiarities with elbows



Imperial		Metric	
D (inch)	L (inch)	D (mm)	L (mm)
1/16	1/2	3	19
1/8	23/32	6	21
3/16	3/4	8	23
1/4	13/16	10	25
5/16	7/8	12	31
3/8	15/16	14	32
1/2	1-3/16	15	32
5/8	1-1/4	16	32
3/4	1-1/4	18	32
7/8	1-5/16	20	34
1	1-1/2	22	34
1-1/4	2	25	40
1-1/2	2-13/32	28	46
2	3-1/4	30	50
		32	54
		38	63
		50	80

Information on pipe selection

The correct pipe selection is very important for the function of the STAUFF Superlok fitting and the entire pipeline system.

Material	Requirement
Copper	ASTM B65, B75 or equivalent, seamless and annealed
Stainless steel	ASTM A213, A269, A632 or equivalent, seamless and annealed, HRb < 80
Monel	ASTM B165 or equivalent, Alloy 400, seamless and annealed, HRb < 75

Pressure rates for stainless steel tubes

Imperial

	0.010	0.012	0.014	0.016	0.020	0.028	0.035	0.049	0.065	0.083	0.095	0.109	0.120
1/16	5600	6800	8100	9400	12000								
1/8						8500	10900						
3/16						5400	7000	10200					
1/4						4000	5100	7500	10200				
5/16							4000	5800	8000				
3/8							3300	4800	6500				
1/2							2600	3700	5100	6700			
5/8								2900	4000	5200	6000		
3/4								2400	3300	4200	4900	5800	
7/8								2000	2800	3600	4200	4800	
1									2400	3100	3600	4200	4700

Suitable for applications with gaseous media

Metric

	0.71	0.89	1.00	1.25	1.50	1.65	2.00	2.11	2.41	2.50	2.77	3.00	3.05
3	10800	13800	15300										
4	7900	10100	11500	14400									
6	5000	6500	7400	9400	11500	12700							
8		4700	5800	6800	8400	9300							
10		3700	4200	5300	6500	7300							
12		3000	3400	4400	5300	5900	6800	7200					
16			2500	3200	3900	4300	5300	5700	6600	6800			
18				2800	3400	3800	4700	5000	5800	6000	6700		
20				2500	3000	3400	4200	4400	5100	5300	6000		
22				2300	2800	3000	3800	4000	4600	4800	5400		
25				2000	2400	2700	3300	3500	4000	4200	4700	5100	5200

Suitable for applications with gaseous media

Coefficient for pressure calculation at high temperatures

The maximum permissible pressures at higher temperatures can be calculated with the following factors

°F	°C	Cu	SS304	SS316	Monel
200	93	0.8	1	1	0.88
400	204	0.5	0.93	0.96	0.79
600	316		0.82	0.85	0.79
800	427		0.76	0.79	0.76
1000	538		0.69	0.76	
1200	649		0.3	0.37	

Pressure rates: Fittings with thread

NPT / BSPT According to ASME Code B31.3

Imperial

	SS 316/316L			
	SMC, SBMC, SME, SHME, SMBT, SMRT, SMA		SFC, SBFC, SFE, SFBT, SFRT, SFA	
	psig	bar	psig	bar
1/16	11000	760	6700	460
1/8	10000	690	6500	440
1/4	8000	550	6600	450
3/8	7800	540	5300	360
1/2	7700	530	4900	330
3/4	7300	500	4600	320
1	5300	370	4400	300
1-1/4	6000	410	5000	350
1-1/2	5000	340	4600	310
2	3900	270	3900	270

All pressure rates were determined at ambient temperature

Pressure rates: Fittings with thread

O-seal stainless steel and carbon steel fittings up to 25 mm and 1" have a pressure rate of 206 bar (3000 psig).

BSPP

	SS 316/316L	
	SPME, SPMBT, SPMRT	
	psig	bar
1/8	4568	315
1/4		
3/8		
1/2	2320	160
3/4		
1		

All pressure rates were determined at ambient temperature

UN According to SAE J1926/3

		SS 316/316L			
		SAU, SAA, SAF		SPHME, SPME, SPMBT, SPMRT	
		psig	bar	psig	bar
5/16-24	2U	4568	315	4568	315
7/16-20	4U				
1/2-20	5U				
9/16-18	6U			3626	250
3/4-16	8U				
7/8-14	10U	3626	250	2900	200
1-1/16-12	12U				
1-3/16-12	14U	2900	200	2320	160
1-5/16-12	16U				
1-5/8-12	20U	2320	160	1813	125
1-7/8-12	24U				
2-1/2-12	32U	1813	125	1450	100

All pressure rates were determined at ambient temperature

O-Seal Sizes

SOSC (UN)		
2U	7.65 x 1.78	-11
3U	9.25 x 1.78	-12
4U	10.77 x 2.62	-111
5U	12.42 x 2.62	-112
6U	15.54 x 2.62	-114
8U	18.72 x 2.62	-116
12U	26.57 x 3.53	-215
16U	32.92 x 3.53	-219

SSMC/SPHME/SPME/SPMBT/SPMRT (UN)		
2U	6.07 x 1.78	-902
4U	8.92 x 1.83	-904
5U	10.52 x 1.83	-905
6U	11.89 x 1.98	-906
8U	16.36 x 2.21	-908
10U	19.18 x 2.46	-910
12U	23.47 x 2.95	-912
14U	26.59 x 2.95	-914
16U	29.74 x 2.95	-916

SOPC (NPT)		
2N	10.77 x 2.62	-111
4N	13.94 x 2.62	-113
6N	18.72 x 2.62	-116
8N	21.82 x 3.53	-212

SPME/SPMBT/SPMRT (BSPP)		
2G	7.8 x 1.9	
4G	10.77 x 2.62	-111
6G	13.94 x 2.62	-113
8G	17.12 x 2.62	-115
12G	23.47 x 2.62	-912
16G	29.74 x 3.53	-916

All O-seals made of NBR with a degree of hardness of 70 Shore-A

Threads

NPT (N)	ANSI B1.20.1-1983
BSPT (R)	ISO 7 / DIN 2999-1 / BS 21
BSPP (G)	ISO 228/1 SGMC: DIN 3852-2 A SOMC: ISO 1179-4 / DIN 3852-2 B SPME, SPHME, SPMBT SPMRT: ISO 1179-3 SGC: EN 837
UN (U)	ANSI B1.1, ISO 11926 / SAE J1926

Assembly Tools / Devices	F3 - F16
Tube and Fittings Accessories	F17 - F22

Manual Tube Bend Kit - Lever Vice Mount
TUB-M-...-LV-KIT — **F4**

Final Assembly Stud for the Manual Cutting Ring Assembly
FI-FK — **F5**

STAUFF Press Portable Cutting Ring Assembly Machine with Manual Pressure Setting (Set)
SPR-PRC-H-SET-M642 — **F6 - F7**

Mounting Bracket for Portable Cutting-Ring Pre-Assembly Machine
SPR-PRC-H-M-MH — **F7**

Table Stand for Portable Cutting-Ring Pre-Assembly Machine
SPR-PRC-H-M-TS — **F7**

Tripod Stand for Portable Cutting-Ring Pre-Assembly Machine
SPR-PRC-H-M-TP — **F7**

Cutting Ring Assembly Stud for Machine-Assisted Assembly
FI-MVK-..-PRC-H-M — **F7**

Cutting Ring Pre-Assembly and 37° Flaring Machine with Automatic / Manual Pressure Setting
SPR-PRC-MA — **F8 - F11**

Tooling Head for Cutting Ring Assembly (Automatic Pressure Setting)
SPR-PRC-TH-C-A — **F10**

Tooling Head for Cutting Ring Assembly (Manual Pressure Setting)
SPR-PRC-TH-C-M — **F10**

Tooling Head for 37° Flaring (Manual Pressure Setting)
SPR-PRC-TH-F-M — **F10**

Cutting Ring Assembly Stud for Machine-Assisted Assembly
FI-MVK-..-PRC — **F10**

Counter Support Plate for Machine-Assisted Assembly
FI-GP-..-PRC — **F10**

Assembly Tool Magazine
SPR-TM — **F10**

Clamping Jaws for 37° Flaring
FI-KB-..-PRC — **F11**

STAUFF Clean Pipe, Tube and Hose Cleaning System — **F12 -F15**

STAUFF Clean Launchers / Launcher Kits
SC-.. — **F13**

STAUFF Clean Nozzles / Nozzle Set
SCN-.. — **F14**

STAUFF Clean Projectiles
SCP-.. — **F15**

Thread Identification Board
FI-TIB-.. — **F16**

Manual Tube Bend Kit
Type TUB-MA

Product Description

STAUFF manual tube and pipe benders are ideal for bending standard steel ST37/ST57 and stainless steel hydraulic tubes with diameters of 6, 8, 10, 12, 14, 15, 16, 18 and 22 mm with a defined minimum wall thickness. In addition to the metric version, a model for handling inch-gauge tubes with diameters of between 1/4" and 7/8" inches is also available.

A scale lasered onto the bending rollers enhances the accuracy of the required bending angle. The holding roller, which can be individually set to 3 stages, in conjunction with the 8 bending rollers (6 included in the 'imperial' (inch) model), provides precise and optimum bending quality.

The manual tube bender is supplied with all the necessary components and multilingual instructions for use as a complete kit in a high-quality steel case.

Features

- Small bending radii allow for compact assemblies
- Optimised bending contour, which enables tube bends free of flattening and constriction
- Hard-wearing steel bending rolls
- Ideal for versatile site use, possibly for installation work on site

Order Codes

TUB - **MA** - **TBM622** - **LV-KIT**

① ② ③ ④

① Series

Tube Bending Machines	**TUB**

② Category

Manual (Hand Operated Bender)	**MA**

③ Type

Tube bender Metric 6 mm - 22 mm	**TBM622**
Tube bender Imperial 1/4" - 7/8"	**I4140D**

④ Additional Information

Lever Vice Mount kit	**LV-KIT**

Bending Rollers

Outer Diameter	Metric	Imperial	Radius	Minimum Wall Thickness
6 & 8 mm (1/4" & 5/16")	•	•	33 mm	< 1.5 mm
10 mm (3/8")				
12 mm	•			1.5 mm
1/2"		•		1.5 mm
14 mm	•		40 mm	2.0 mm
15 mm	•			1.5 mm
16 mm (5/8")	•	•		1.5 mm
18 mm	•		48 mm	1.5 mm
3/4"		•		2.0 mm
20 mm	•			2.0 mm
22 mm (7/8")	•	•		2.0 mm

Manual Tube Bend Kit -
Lever Vice Mount ▪ Metric
Type TUB-MA-TBM622-LV-KIT

Item No.	Designation	Price
6100135836	TUB-MA-TBM622-LV-KIT	1388.20

Manual Tube Bend Kit -
Lever Vice Mount ▪ Imperial
Type TUB-MA-I4140D-LV-KIT

Item No.	Designation	Price
6100135837	TUB-MA-I4140D-LV-KIT	1461.95

Final Assembly Stud for the Manual Cutting Ring Assembly
Type FI-FK

Recommended for Manual Assembly

Product Description

Manual Final Assembly Studs of the FI-FK series facilitate the final assembly of cutting rings on tube ends, thus allowing for consistent assembly results with a maximum degree of accuracy, reliability and process stability

Characteristics and Features

- Available in the Extra-Light, Light and Heavy Series according to ISO 8434-1 / DIN 2353
- Hardened and wear-resistant
- Marked with a groove for easier identification

Order Codes

FI-FK - 06 - L - HR

① ② ③ ④

① Series and Type

Manual Final-Assembly Body	**FI-FK**

② Tube O.D.

Outside Tube Diameter in mm

③ Tube Series

Extra Light	**LL**
Light	**L**
Heavy	**S**

④ Surface Material

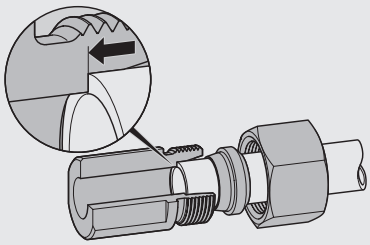
Steel, uncoated, hardened	**HR**

Final Assembly Stud for the Manual Cutting Ring Assembly Type FI-FK ▪ Series LL / L / S

Item No.	Description	DIN Thread	Price
6030011263	FI-FK-04LL-HR	M8 x 1	150.25
6030011264	FI-FK-06LL-HR	M10 x 1	150.25
6030011265	FI-FK-08LL-HR	M12 x 1	162.45
6030011266	FI-FK-06L-HR	M12 x 1.5	150.25
6030011267	FI-FK-08L-HR	M14 x 1.5	162.45
6030011268	FI-FK-10L-HR	M16 x 1.5	209.95
6030011269	FI-FK-12L-HR	M18 x 1.5	209.95
6030011270	FI-FK-15L-HR	M22 x 1.5	242.75
6030011271	FI-FK-18L-HR	M26 x 1.5	300.45
6030011272	FI-FK-22L-HR	M30 x 2	307.45
6030011273	FI-FK-28L-HR	M36 x 2	365.90
6030011274	FI-FK-35L-HR	M45 x 2	483.30
6030011275	FI-FK-42L-HR	M52 x 2	513.45
6030011276	FI-FK-06S-HR	M14 x 1.5	150.25
6030011277	FI-FK-08S-HR	M16 x 1.5	209.95
6030011278	FI-FK-10S-HR	M18 x 1.5	301.85
6030011279	FI-FK-12S-HR	M20 x 1.5	323.15
6030011280	FI-FK-14S-HR	M22 x 1.5	242.75
6030011281	FI-FK-16S-HR	M24 x 1.5	300.45
6030011282	FI-FK-20S-HR	M30 x 2	300.45
6030011283	FI-FK-25S-HR	M36 x 2	476.35
6030011284	FI-FK-30S-HR	M42 x 2	695.90
6030011285	FI-FK-38S-HR	M52 x 2	518.60

General Assembly Instruction

1.



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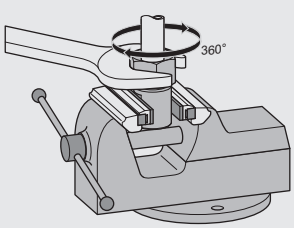
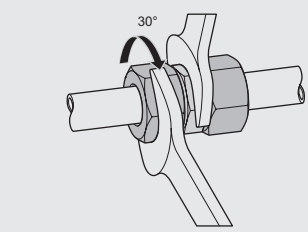


3.



Full Assembly Instruction

Refer to Catalogue 2 - STAUFF Connect for full assembly instructions

STAUFF Press
Portable Cutting Ring Assembly Machine with Manual Pressure Setting (Set)
Type SPR-PRC-H-SET

Product Description

With the battery-operated STAUFF Press Assembly Machine SPR-PRC-H-M, STAUFF provides an ergonomically designed, light-weight and at the same time robust device for the assembly of cutting rings in the Light Series (L) as well as in the Heavy Series (S) according to ISO 8434-1 / DIN 2353 on metric tube ends with outer diameters from 6 mm to 42 mm.

The machine has been designed for hand-held, tripod- or table-mounted operation and offers the best technical compromise between maximum flexibility, economic efficiency and a high level of process reliability with a considerable reduction of time and cost for the assembly of cutting ring fittings.

Short tool change and setup times (with only a few seconds required to manually adjust the assembly pressure) make it possible to carry out the assembly of medium and even small quantities of cutting ring fittings, e.g. during maintenance, servicing, conversion and repair work on hydraulic pipe and tube systems. With the rechargeable battery being able to typically cover more than 200 assembly cycles per charge (depending on pressure settings and other influencing factors), the machine is also suitable for mass processing and production.

The assembly machine is supplied in a heavy-duty trolley transport case that is equipped with a range of accessories and also provides suitable space for the assembly studs.

Mode dial to manually adjust the pressure (settings indicated on the machine housing)

Status lights on the back of the machine housing

Assembly machine attached to a tripod stand using a mounting bracket

Technical Data

Area of Application

- Function: Pressure-controlled assembly of cutting rings acc. to ISO 8434-1 / DIN 2353 on metric tube ends
  Light (L): 6, 8, 10, 12, 15, 18, 22, 28, 35 and 42 mm
  Heavy (S): 6, 8, 10, 12, 14, 16, 20, 25, 30 and 38 mm

Dimensions / Weight

- Dimensions (L x H x W): 440 mm x 330 mm x 80 mm
  17.32 in x 12.99 in x 3.15 in
  (including rechargeable battery)
- Weight (basic machine): 6.8 kg / 15 lbs
  (including rechargeable battery)
- Weight (case): 16.5 kg / 36 lbs
  (including assembly machine and accessories)
- Case: IP67 certified, equipped with O-Ring seal and automatic pressure valve

Materials

- Machine cover: Plastic
- Tool head: Steel, uncoated, hardened
- Assembly studs: Stainless steel, hardened

Rechargeable Battery

- Typically covers more than 200 assembly cycles per charge (depending on pressure settings and other influencing factors)
- Battery type: Lithium-ion (18V / 3.0 Ah)

Charging Unit

- Charging time for empty batteries is approximately 75 minutes
- Power supply: 230 V AC @ 50 Hz - single-phase
- Electrical connection: 2-pin grounded safety plug (CEE 7/4, type F / Schuko)
- Cable length: 1.10 m / 3.61 ft

List of Components

Set supplied in a heavy-duty trolley transport case:

① Light-weight and ergonomically designed cutting ring assembly machine for the handheld, tripod-mounted or table-mounted operation
② Rechargeable battery
③ Additional replacement battery
④ Battery quick charging unit
⑤ Clips (to keep the assembly stud in position)
Not displayed: Shoulder strap

Equipment can also be ordered separately:

⑥ Assembly oil (to lubricate the taper of the assembly stud)
⑦ Cutting Ring Assembly Studs **FI-MVK-...-PRC-H-M-HR**

Accessories

- Tripod Stand **SPR-PRC-H-M-TP**
- Table Stand **SPR-PRC-H-M-TS**
- Mounting Bracket **SPR-PRC-H-M-MH**
  (required as a machine holder for both the tripod stand and the table stand)

Spare Parts

- Assembly oil **SPR-PRC-H-M-OS**
  (required to lubricate the taper of the assembly stud)
- Rechargeable Battery **SPR-PRC-H-M-BP**
- Battery Quick Charging Unit **SPR-PRC-H-M-BC**

STAUFF Press
Portable Cutting Ring Assembly Machine with Manual Pressure Setting (Set)
Type SPR-PRC-H-...

Ordering Codes

SPR-PRC - **H** - **SET** - **M642**

① ② ③ ④

① Series

STAUFF Connect Machines - Press	**SPR-PRC**

② Type

Hand controlled	**H**

③ Accessories & Spares

Mounting Bracket	**M-MH**
Tripod stand	**M-TP**
Table stand	**M-TS**
Supplied with heavy-duty trolley transport case (including assembly machine, rechargeable battery x 2, battery charger unit, clips, shoulder strap). Cutting Ring Assembly Studs not included in the set	**SET**

④ Additional Information

With complete set of tools 6mm - 42 mm	**M642**

Portable Cutting-Ring
Pre-Assembly Machine with
Manual Pressure Setting (Set)
with Complete Set of Tools

Item No.	Designation	Price
6100170995	SPR-PRC-H-SET-M642	20963.60

Cutting Ring Assembly Studs included in the set

Mounting Bracket for
Portable Cutting-Ring Pre-Assembly Machine
Type SPR-PRC-H-M-MH

Item No.	Designation	Price
6020002620	SPR-PRC-H-M-MH	684.20

Required as a machine holder for both tripod stand and table stand

Table Stand for
Portable Cutting-Ring Pre-Assembly Machine
Type SPR-PRC-H-M-TS

Item No.	Designation	Price
6020002623	SPR-PRC-H-M-TS	684.20

Tripod Stand for
Portable Cutting-Ring Pre-Assembly Machine
Type SPR-PRC-H-M-TP

Item No.	Designation	Price
6020002622	SPR-PRC-H-M-TP	1381.50

Cutting Ring Assembly Stud
Type FI-MVK-..-PRC-H-M ▪ Series L / S

Item No.	Designation	Tube O.D.	Series	Price
6030013209	FI-MVK-06L-PRC-H-M-HR	6 mm	L	291.35
6030013210	FI-MVK-08L-PRC-H-M-HR	8 mm	L	291.35
6030013211	FI-MVK-10L-PRC-H-M-HR	10 mm	L	291.35
6030013212	FI-MVK-12L-PRC-H-M-HR	12 mm	L	291.35
6030013213	FI-MVK-15L-PRC-H-M-HR	15 mm	L	291.35
6030013214	FI-MVK-18L-PRC-H-M-HR	18 mm	L	291.35
6030013215	FI-MVK-22L-PRC-H-M-HR	22 mm	L	291.35
6030013216	FI-MVK-28L-PRC-H-M-HR	28 mm	L	291.35
6030013217	FI-MVK-35L-PRC-H-M-HR	35 mm	L	291.35
6030013218	FI-MVK-42L-PRC-H-M-HR	42 mm	L	291.35
6030013219	FI-MVK-06S-PRC-H-M-HR	6 mm	S	291.35
6030013220	FI-MVK-08S-PRC-H-M-HR	8 mm	S	291.35
6030013221	FI-MVK-10S-PRC-H-M-HR	10 mm	S	291.35
6030013222	FI-MVK-12S-PRC-H-M-HR	12 mm	S	291.35
6030013223	FI-MVK-14S-PRC-H-M-HR	14 mm	S	291.35
6030013224	FI-MVK-16S-PRC-H-M-HR	16 mm	S	291.35
6030013225	FI-MVK-20S-PRC-H-M-HR	20 mm	S	291.35
6030013226	FI-MVK-25S-PRC-H-M-HR	25 mm	S	291.35
6030013227	FI-MVK-30S-PRC-H-M-HR	30 mm	S	291.35
6030013228	FI-MVK-38S-PRC-H-M-HR	38 mm	S	291.35

Materials / surface finishing: **HR** Stainless steel, hardened

STAUFF Press
Combined Cutting Ring Assembly and 37° Tube Flaring Machine with Automatic or Manual Pressure Setting and Control ▪ Type SPR-PRC-MA

Product Description

The electro-hydraulically operated STAUFF Press Assembly Machine SPR-PRC-MA allows the assembly of cutting rings in the Light Series (L) as well as in the Heavy Series (S) according to ISO 8434-1 / DIN 2353 on metric tube ends with outer diameters from 4 mm to 42 mm.

Exchangeable heads allow the device to be adapted for 37° flaring of metric and imperial tube ends with outer diameters from 4 mm to 42 mm and from 1/4" to 1-1/2" respectively according to DIN 3949 or SAE J514 / ISO 8434-2.

Short times for tool changes, setup and assembly (even when changing the assembly type from cutting ring assembly to 37° tube flaring) make it possible to carry out series production as well as the assembly of small and medium quantities with a high level of economic efficiency, reproducibility and process reliability with considerable reduction of times and cost of assembly of fittings.

The adjustable return stoke of the cylinder helps the operator to further optimise the total cycle times.

The machine is designed as a robust table-top device for continuous operation in the workshop. It is used in connection with hardened and wear-resistant assembly tools which are specially designed for the machine-assisted assembly.

Tooling head for cutting ring assembly based on pre-defined settings / automatic tool size detection

Tooling head for cutting ring assembly based on settings manually defined by the operator

Tooling head for 37° tube flaring based on settings manually defined by the operator

Smart programmable control panel with push/turn button and back-lit parameter display

Noise-reducing tool tray with durable rubber mat

Robust rubber feet providing secure positioning and dampening during operation

USB connection for maintenance and data input by the manufacturer

Electrical connection 20 Amp 5 pin plug compliant to AS3123

Connections for the tool head as well as for the external hand control switch (available on request)

STAUFF Press
Combined Cutting Ring Assembly and 37° Tube Flaring Machine with Automatic or Manual Pressure Setting and Control ▪ Type SPR-PRC-MA

Characteristics

Performance
- Pressure-controlled assembly of cutting rings on metric tube ends as well as 37° tube flaring of metric/imperial tube ends due to exchangeable tool heads
- Cutting ring assembly with Tooling Head SPR-PRC-TH-C-A based on pre-defined pressure settings (with automatic tool size detection) or with Tooling Head SPR-PRC-TH-C-M based on pressure settings as manually defined by the operator
- Short times for tool and head changes, setup and assembly (even when changing the assembly type from cutting ring assembly to 37° tube flaring)
- Adjustable return stoke of the cylinder in order to further optimise the total cycle times
- Internal memory for up to 8 assembly programs which can be selected on the operating panel: predefined are tube materials steel E235 and E355 as well as stainless steel 316; parameters for other materials (copper, CuNiFe, Tungum, polyamide etc.) can be added by the manufacturer if required
- Counters for lot/batch sizes and total quantities
- Operator-friendly and easy to maintain and service

Design
① Robust and compact table-top device allowing for maximum mobility and flexibility
② Optimised assembly area with approx. 80 mm / 3.15 in distance from the tube axis to the interfering edge of the machine housing, which allows the processing of tubes with low bending radii or complex geometries
③ Noise-reducing tool tray with durable rubber mat
④ Lateral handlebars as attachment points for transport (e.g. with lifting belts)
⑤ Robust rubber feet providing secure positioning and dampening during operation
⑥ Type plate, with technical data, serial number, year of manufacture, etc.

Operating Elements
⑦ Push/turn control button to select all relevant settings and assembly parameters
⑧ Smart programmable control panel with back-lit parameter display
⑨ Button for definite confirmation of entries made on the operating panel
⑩ Illuminated pushbutton to reset the cylinder and to indicate incorrect assemblies

Safety Devices
⑪ Selector switch to choose the operation mode (can be locked with a key and secured against unauthorised actuation, if required)
⑫ Main power switch
⑬ Separate emergency stop button to immediately stop all machine movements

Connections
⑭ Electrical connection 20 Amp 5 pin plug compliant to AS3123 (cable length: 4 m / 13.12 ft)
⑮ USB connection for maintenance and data input by the manufacturer
⑯ Connections for tool heads for cutting ring assembly based on pre-defined pressure settings as well as for the external hand control switch SPR-PRC-HS (available on request)

Assembly Tools
- Tooling head SPR-PRC-TH-C-A for cutting ring assembly based on automatic pressure setting (50% pre-assembly is pre-defined) and with tool size detection via the support plates
- Tooling head SPR-PRC-TH-C-M for cutting ring assembly based on manual settings
- Tooling head SPR-PRC-TH-F-M for 37° tube flaring based on manual settings
- Wear-resistant cutting ring assembly stud FI-MVK-...-PRC
- Support plate FI-GP-...-PRC
- Clamping jaws FI-KB-...-PRC for 37° tube flaring

Technical Data

Area of Application
- Function:
  Pressure-controlled assembly of cutting rings
  Light (L): 6, 8, 10, 12, 15, 18, 22, 28, 35, 42 mm
  Heavy (S): 6, 8, 10, 12, 14, 16, 20, 25, 30, 38 mm

  Pressure-controlled 37° flaring of metric tube ends (according to DIN 3949 bzw. SAE J 514 / ISO 8434-2):
  Light (L): from 6 x 1 mm to 42 x 4 mm
  Heavy (S): from 6 x 1 mm to 38 x 5 mm

  Pressure-controlled 37° flaring of imperial tube ends (according to SAE J 514 / ISO 8434-2):
  1/4, 5/16, 3/8, 1/2, 5/8, 3/4, 7/8, 1, 1-1/4, 1-1/2 inch

Dimensions / Weight
- Dimensions (W x D x H): 660 mm x 515 mm x 265 mm
  25.98 in x 20.28 in x 10.43 in
  with lateral handlebars (detachable)
- Distance from the tube axis to the interfering edge of the machine housing: 80 mm / 3.15 in
- Clearance height: 30 mm / 1.18 in (height of the machine feet)
- Weight (basic machine): 66 kg / 145 lbs
  (incl. operating fluid, excl. assembly tools)
- Weight (tooling heads): SPR-PRC-TH-C-A: 6,0 kg / 13 lbs
  SPR-PRC-TH-C-M: 5,5 kg / 12 lbs
  SPR-PRC-TH-F-M: 19,5 kg / 43 lbs

Materials
- Machine frame: Steel
- Machine cover: Plastic
- Tool tray: NBR (Perbunan®)
- Machine feet: Natural rubber
- Assembly tools: Steel, uncoated, hardened

Motor Configuration
- Power supply: 400 V AC @ 50 Hz - 3 phases
- Current consumption: 2,8 A
- Connected load: 1,2 kW
- Electrical connection: 20 Amp 5 pin plug compliant to AS3123
- Cable length: 4 m / 13.12 ft

Alternative motor configurations and plug types are available on request.
Please contact STAUFF for details.

Hydraulic System
- Operating fluid: Hydraulic oil Shell Nuto H 32 or equivalent (filled and ready for operation when delivered)
- Fluid volume: 4 litres / .78 US Gallon
- Max working pressure: 200 bar / 2901 PSI

Operating Conditions
- Storage temperature: -10°C … +70°C / +14°F … +158°F
- Ambient temperature: +10°C … +50°C / +50°F … +122°F
- Ambient conditions: Dry, no condensing humidity, operation in horizontal position only
- Noise emission: less than 60 dB(A) as per EN ISO 11202

STAUFF Press
Combined Cutting Ring Assembly and 37° Tube Flaring Machine with Automatic or Manual Pressure Setting and Control

Assembly Machine (without Tool Head and Assembly Tools)
Type SPR-PRC-MA

SPR-PRC-MA - D - A

① ② ③

① Series

STAUFF Press Cutting Ring Assembly and 37° Tube Flaring Machine with Automatic or Manual Pressure Setting and Control	**SPR-PRC-MA**

② Motor Configuration

400 V AC @ 50 Hz - 3 phases	**D**

③ Plug Type

Phase reversing plug according to IEC 60309 CEE 16A	**A**

Alternative motor configurations and plug types are available on request.
Please contact STAUFF for details.

Tool Heads
Type SPR-PRC-TH

SPR-PRC-TH - C-MA

① ②

① Series

Tool Head for the STAUFF Press Cutting Ring Assembly and 37° Tube Flaring Machine	**SPR-PRC-TH**

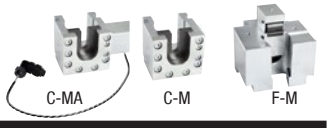
② Tool Head Type

For the cutting ring assembly based on automatic pressure setting (50% pre-assembly is pre-defined) and tool size detection via the support plates	**C-MA**
For the cutting ring assembly based on manually defined pressure settings	**C-M**
For 37° tube flaring of metric and imperial tube ends according to DIN 3949 bzw. SAE J514 / ISO 8434-2 F-M based on manually defined pressure settings	**F-M**

STAUFF Press
Machine for Cutting-Ring
Pre-Assembly and 37° flaring

Item No.	Designation	Price
6010014625	SPR-PRC-MA-D-A	20627.85

Tool Heads for
SPR-PRC-MA Assembly Machine
Type SPR-PRC-TH-..



Item No.	Designation	Price
6010014627	SPR-PRC-TH-C-MA	3998.20
6010014986	SPR-PRC-TH-C-M	2112.05
6010014988	SPR-PRC-TH-F-M	4051.35

Pre-Assembly Stud
Type FI-MFK ▪ Series L / S

Item No.	Designation	Tube O.D.	Price
6030008746	FI-MFK-06L-W100	6 mm	252.55
6030008747	FI-MFK-08L-W100	8 mm	252.55
6030008748	FI-MFK-10L-W100	10 mm	252.55
6030008749	FI-MFK-12L-W100	12 mm	252.55
6030008750	FI-MFK-15L-W100	15 mm	252.55
6030008751	FI-MFK-18L-W100	18 mm	252.55
6030008752	FI-MFK-22L-W100	22 mm	252.55
6030008753	FI-MFK-28L-W100	28 mm	308.30
6030008754	FI-MFK-35L-W100	35 mm	350.75
6030008755	FI-MFK-42L-W100	42 mm	350.75
6030008756	FI-MFK-06S-W100	6 mm	252.55
6030008757	FI-MFK-08S-W100	8 mm	252.55
6030008758	FI-MFK-10S-W100	10 mm	252.55
6030008759	FI-MFK-12S-W100	12 mm	252.55
6030008760	FI-MFK-14S-W100	14 mm	252.55
6030008761	FI-MFK-16S-W100	16 mm	252.55
6030008762	FI-MFK-20S-W100	20 mm	252.55
6030008763	FI-MFK-25S-W100	25 mm	308.30
6030008764	FI-MFK-30S-W100	30 mm	350.75
6030008765	FI-MFK-38S-W100	38 mm	350.75

Counter Support Plate
Type FI-GP ▪ Series L / S

Item No.	Designation	Tube O.D.	Price
6030012319	FI-GP-06L/S-PRC-MA-W1	6 mm	385.40
6030012320	FI-GP-08L/S-PRC-MA-W1	8 mm	385.40
6030012321	FI-GP-10L/S-PRC-MA-W1	10 mm	385.40
6030012322	FI-GP-12L/S-PRC-MA-W1	12 mm	385.40
6030012323	FI-GP-15L-PRC-MA-W1	15 mm	385.40
6030012324	FI-GP-18L-PRC-MA-W1	18 mm	518.15
6030012325	FI-GP-22L-PRC-MA-W1	22 mm	518.15
6030012326	FI-GP-28L-PRC-MA-W1	28 mm	518.15
6030012327	FI-GP-35L-PRC-MA-W1	35 mm	518.15
6030012328	FI-GP-42L-PRC-MA-W1	42 mm	518.15
6030012329	FI-GP-14S-PRC-MA-W1	14 mm	385.40
6030012330	FI-GP-16S-PRC-MA-W1	16 mm	518.15
6030012331	FI-GP-20S-PRC-MA-W1	20 mm	518.15
6030012332	FI-GP-25S-PRC-MA-W1	25 mm	518.15
6030012333	FI-GP-30S-PRC-MA-W1	30 mm	518.15
6030012334	FI-GP-38S-PRC-MA-W1	38 mm	518.15

Assembly Tooling Magazine
for Cutting Ring Tools
Type SPR-TM

Item No.	Designation	Price
6010015003	SPR-TM	504.90

Cartridges for: 10 x Support Plates, 12 x Pre-Assembly Stud

Clamping Jaws for SPR-PRC-MA Assembly Machine

Clamping Jaw for 37° Flare
Metric Tube ▪ DIN 3949
Type FI-KB-..-PRC-MF ▪ Series L / S

Item No.	Designation	Tube O.D.	Price
6020002562	FI-KB-06L/S-PRC-MF-W1	6 mm	1447.95
6020002563	FI-KB-08L/S-PRC-MF-W1	8 mm	1447.95
6020002564	FI-KB-10L/S-PRC-MF-W1	10 mm	1447.95
6020002565	FI-KB-12L/S-PRC-MF-W1	12 mm	1447.95
6020002566	FI-KB-15L-PRC-MF/F-W1	15 mm	1447.95
6020002568	FI-KB-18L-PRC-MF/F-W1	18 mm	1447.95
6020002570	FI-KB-22L-PRC-MF/F-W1	22 mm	1447.95
6020002572	FI-KB-28L-PRC-MF-W1	28 mm	2430.90
6020002574	FI-KB-35L-PRC-MF-W1	35 mm	1447.95
6020002576	FI-KB-42L-PRC-MF-W1	42 mm	2430.90
6020002641	FI-KB-14S-PRC-MF/F-W1	14 mm	1447.95
6020002567	FI-KB-16S-PRC-MF-W1	16 mm	1447.95
6020002569	FI-KB-20S-PRC-MF-W1	20 mm	1447.95
6020002571	FI-KB-25S-PRC-MF-W1	25 mm	1447.95
6020002573	FI-KB-30S-PRC-MF/F-W1	30 mm	1447.95
6020002625	FI-KB-30Sx5-PRC-MF-W1	30 mm	1447.95
6020002575	FI-KB-38S-PRC-MF-W1	38 mm	1447.95
6020002626	FI-KB-38Sx5-PRC-MF-W1	38 mm	1447.95

Clamping Jaw for 37° Flare
Metric Tube ▪ SAE J514 / ISO 8434-2
Type FI-KB-..-PRC-F ▪ Series L / S

Item No.	Designation	Tube O.D.	Price
6020002644	FI-KB-06-PRC-F-W1	6 mm	850.25
6020002645	FI-KB-08/5/16-PRC-F-W1	8 mm	850.25
6020002646	FI-KB-10-PRC-F-W1	10 mm	850.25
6020002647	FI-KB-12-PRC-F-W1	12 mm	850.25
6020002566	FI-KB-15L-PRC-MF/F-W1	15 mm	1447.95
6020002568	FI-KB-18L-PRC-MF/F-W1	18 mm	1447.95
6020002570	FI-KB-22L-PRC-MF/F-W1	22 mm	1447.95
6020002651	FI-KB-28-PRC-F-W1	28 mm	850.25
6020002652	FI-KB-35-PRC-F-W1	35 mm	850.25
6020002653	FI-KB-42-PRC-F-W1	42 mm	850.25
6020002641	FI-KB-14S-PRC-MF/F-W1	14 mm	1447.95
6020002655	FI-KB-16-PRC-F-W1	16 mm	850.25
6020002656	FI-KB-20-PRC-F-W1	20 mm	850.25
6020002657	FI-KB-25-PRC-F-W1	25 mm	850.25
6020002573	FI-KB-30S-PRC-MF/F-W1	30 mm	1447.95
6020002659	FI-KB-38/1-1/2-PRC-F-W1	38 mm	850.25

Size 15L, 22L, 14S & 30S use the same MF Tooling

Clamping Jaw for 37° Flare
Imperial Tube ▪ SAE J514 / ISO 8434-2
Type FI-KB-..-PRC-F ▪ Series L / S

Item No.	Designation	Tube O.D.	Price
6020002660	FI-KB-1/4-PRC-F-W1	1/4	850.25
6020002645	FI-KB-08/5/16-PRC-F-W1	5/16	850.25
6020002662	FI-KB-3/8-PRC-F-W1	3/8	850.25
6020002663	FI-KB-1/2-PRC-F-W1	1/2	850.25
6020002664	FI-KB-5/8-PRC-F-W1	5/8	850.25
6020002665	FI-KB-3/4-PRC-F-W1	3/4	850.25
6020002666	FI-KB-7/8-PRC-F-W1	7/8	850.25
6020002667	FI-KB-1-PRC-F-W1	1	850.25
6020002668	FI-KB-1-1/4-PRC-F-W1	1-1/4	850.25
6020002659	FI-KB-38/1-1/2-PRC-F-W1	1-1/2	850.25

STAUFF Clean
Pipe, Tube and Hose Cleaning System

Product Description

The STAUFF Clean System comprises of a pneumatic launcher and a range of specially designed nozzles and projectiles.

The launcher uses standard industrial compressed air pressure between 6 and 8 bar / 87 and 116 PSI to propel a foam projectile through the nozzle and into the pipe, tube or hose bore to have their inside surface cleaned from any unwanted contamination.

This provides a safe and environmentally friendly tool that requires little formal expertise to operate and apply.

The launcher is the part of the system that controls the air supply to propel the projectile from start to finish the cleaning job.

The nozzles are specially designed to affect an airtight seal on any pipe, tube or hose with or without end fittings. Its main purpose is to compress the foam projectile allowing it to enter the internal diameter of the pipe, tube or hose to be cleaned.

The projectile is the part of the system that does the cleaning: The foam projectile is sized to be approximately 15 % larger than the internal diameter of the pipe, tube or hose to be cleaned.
The compression of the projectile against the internal wall cleans the internal surface and expels any loose contaminants from the end of the pipe, tube or hose.

The STAUFF Clean System is available as separate components or in a variety of kit forms comprising various nozzle types, adaptor and launcher, all contained in a heavy-duty carrying case.

STAUFF Clean
Launchers / Launcher Kits

Characteristics

- Pneumatic pistol-grip launcher
- Light-weight and ergonomic design
- Easy to operate and apply
- Connection to air supply with quick release coupling
- Suitable for any type of nozzle
- Delivered separately or in a variety of kit forms including carrying case, adaptor ring and nozzles (if required)

Technical Data

- Air compressor requirement: 6 ... 8 bar / 87 ... 116 PSI
- Effective air volume: 250 ... 400 l/min / 66 ... 106 US GPM

Order Codes

SC - 10UV-K

① ②

① Series

STAUFF Clean Launcher Kits	**SC**

② Type

Launcher only	**LG**
Launcher kit without nozzles	**LK**
Launcher kit with JIC Nozzles (set of 10)	**10J-K**
Launcher kit with Universal Nozzles (set of 10)	**10UV-K**
Launcher kit with Metric Nozzles (set of 18)	**18MT-K**

Launcher Kits
Type SC

Item No.	Designation	Price
1910020544	SC-LG	1379.75
1910020758	SC-LK	1706.95
1910021321	SC-10J-K	2696.55
1910003257	SC-10UV-K	2708.00
1910003431	SC-18MT-K	3413.80

For STAUFF Clean Projectiles refer to page F15

STAUFF Clean
Nozzles / Nozzle Sets

Universal Nozzle Set (SCN-U-SET)

The Universal Nozzle is designed with a tapered seat that will allow it to suit 90% of applications, including Hose, Tube and Pipe, with or without fittings, in hydraulic and pneumatic pipe systems, condenser tubes, boiler tubes and food lines.

The Universal Nozzle kit fits all and will accommodate applications with JIC, SAE and BSP end fittings.

The set of 10 nozzles consists of the following sizes:
6 mm, 8 mm, 10 mm, 13 mm, 16 mm, 19 mm, 25 mm and 32, 38mm and 50 mm.

Metric Tube Nozzle Set (SCN-M-SET)

The Metric Tube Nozzle is intended for use specifically with Metric sized tube and is designed to fit over the outside of the tube or pipe being cleaned.

The inside diameter of the nozzle is reduced to match the inside diameter of the tube. The nozzles are machined from solid bar stock and designed for superior strength.

The set of 18 nozzles consist of the following sizes: 6 mm, 8 mm, 10 mm, 12 mm, 14 mm, 15 mm, 16 mm, 18 mm, 20 mm, 22 mm, 25 mm, 28 mm, 30 mm, 35 mm, 38 mm, 42 mm, 50 mm and 60 mm.

JIC Nozzle Set (SCN-J-SET)

The JIC Nozzle is designed specifically for use with JIC and SAE type fittings. The nozzles are machined to accommodate both male and female configuration, ensuring a perfect airtight seal every time.

The set of 10 nozzles consist of the following sizes: 6 mm, 8 mm, 10 mm, 13 mm, 16 mm, 19 mm, 25 mm, 32 mm, 38 mm and 50 mm.

BSP Nozzle Set (SCN-B-SET)

The BSP Nozzle is designed specifically for BSP configuration fittings. The nozzles are machined to accommodate both male and female configurations, ensuring a perfect airtight seal every time.

The set of 7 nozzles consist of the following sizes:
6 mm, 10 mm, 13 mm, 16 mm, 19 mm, 25 mm and 32 mm.

Nozzle Sets
Type SCN-..-SET

Item No.	Designation	Price
1910003892	SCN-U-SET	989.60
1910003893	SCN-M-SET	1706.95
2020077601	SCN-J-SET	989.60
1910003897	SCN-B-SET	643.05

Order Codes

SCN - **U** - **06**
① ② ③

① Series

Nozzle	**SCN**

② Type

Universal Nozzles (suits metric and imperial)	**U**
Adaptor Ring (required for sizes 6 - 32 mm)	**AR**

③ Nozzle Size

Nozzle 1/8" nominal	**03**
Nozzle 5 mm nominal	**05**
Nozzle 1/4" / 6 mm nominal	**06**
Nozzle 5/16" / 8 mm nominal	**08**
Nozzle 3/8" / 10 mm nominal	**10**
Nozzle 1/2" / 13 mm nominal	**13**
Nozzle 5/8" / 16 mm nominal	**16**
Nozzle 3/4" / 19 mm nominal	**19**
Nozzle 1" / 25 mm nominal	**25**
Nozzle 1-1/4" / 32 mm nominal	**32**
Nozzle 1-1/2" / 38 mm nominal	**38**
Nozzle 2" / 50 mm nominal	**50**

Nozzles
Type SCN-U

Item No.	Designation	Price
1910021311	SCN-U-06	111.15
1910021312	SCN-U-08	111.15
1910021313	SCN-U-10	111.15
1910021314	SCN-U-13	111.15
1910021315	SCN-U-16	111.15
1910021316	SCN-U-19	111.15
1910021317	SCN-U-25	111.15
1910021318	SCN-U-32	111.15
2020080925	SCN-U-38	172.15
1910021013	SCN-U-50	172.15

Adaptor Ring for Nozzles
Type SCN-AR

Item No.	Designation	Price
1910021319	SCN-AR	135.55

One required for sizes 6 - 32 mm

STAUFF Clean Projectiles
Type SCP

SCP - S - 07 - V100
① ② ③

① Series

Projectile	SCP

② Type

Standards series	S
Coupling series	C
Abrasive series	A
Grinding series	G

③ Projectile Size

7 mm projectile (to suit 4.8 mm, 3/16 inch)	07
10 mm projectile (to suit 6.35 mm, 1/4 inch)	10
12 mm projectile (to suit 7.9 mm, 5/16 inch)	12
14 mm projectile (to suit 9.5 mm, 3/8 inch)	14
16 mm projectile (to suit 11.1 mm, 7/16 inch)	16
18 mm projectile (to suit 12.7 mm, 1/2 inch)	18
20 mm projectile (to suit14.28 mm, 9/16 inch)	20
22 mm projectile (to suit 15.88 mm, 5/8 inch)	22
26 mm projectile (to suit 19.05 mm, 3/4 inch)	26
30 mm projectile (to suit 22.23 mm, 7/8 inch)	30
33 mm projectile (to suit 25.4 mm, 1 inch)	33
36 mm projectile (to suit 26/27 mm, 1-1/16 inch)	36
40 mm projectile (to suit 31.75 mm, 1-1/4 inch)	40
45 mm projectile (to suit 34.93 mm, 1-3/8 inch)	45
50 mm projectile (to suit 38.1 mm, 1-1/2 inch)	50
60 mm projectile (to suit 50.8, 2 inch)	60
80 mm projectile	80

④ Pack Size

Packed In Qty 15 pieces	V15
Packed In Qty 20 pieces	V20
Packed In Qty 25 pieces	V25
Packed In Qty 30 pieces	V30
Packed In Qty 40 pieces	V40
Packed In Qty 50 pieces	V50
Packed In Qty 100 pieces	V100

Standard Series
Type SCP-S

Intended for the cleaning of hose, tube or pipe without end fittings or restrictions.

Item No.	Designation	Price
1910021294	SCP-S-07-V100	35.30
1910021296	SCP-S-10-V100	38.05
1910021297	SCP-S-12-V100	39.45
1910021298	SCP-S-14-V100	43.50
1910003746	SCP-S-16-V100	47.50
1910021299	SCP-S-18-V100	51.60
1910021300	SCP-S-20-V100	57.00
1910021301	SCP-S-22-V100	63.75
1910021302	SCP-S-26-V50	57.00
1910021303	SCP-S-30-V40	66.45
1910021304	SCP-S-33-V40	85.50
1910021305	SCP-S-36-V30	76.05
1910021306	SCP-S-40-V30	78.80
1910021307	SCP-S-45-V20	85.50
1910021308	SCP-S-50-V20	103.05
1910021309	SCP-S-60-V15	115.25
1910021310	SCP-S-80-V10	396.70

Coupling Series
Type SCP-C

Intended for the cleaning of hose assemblies or the removal of loose contamination from pipe, tube or hose.

Item No.	Designation	Price
1910021282	SCP-C-07-V100	31.30
1910003718	SCP-C-10-V100	35.30
1910003719	SCP-C-12-V100	35.30
1910003757	SCP-C-14-V100	38.05
1910003720	SCP-C-16-V100	43.50
1910003344	SCP-C-18-V100	47.50
1910003721	SCP-C-20-V100	51.60
1910003722	SCP-C-22-V100	57.00
1910003345	SCP-C-26-V50	51.60
1910003724	SCP-C-30-V40	54.30
1910003725	SCP-C-33-V40	61.10
1910021283	SCP-C-36-V30	63.75
1910003726	SCP-C-40-V30	66.45
1910021284	SCP-C-45-V20	78.80
1910003727	SCP-C-50-V20	105.80
1910021285	SCP-C-55-V15	111.15
1910003728	SCP-C-60-V15	105.80

Abrasive Series
Type SCP-A

Intended for the internal cleaning of metal pipe and tube to remove light contaminants (rust and scale).

Item No.	Designation	Price
1910021274	SCP-A-07-V100	48.85
1910021275	SCP-A-10-V100	52.95
1910003758	SCP-A-12-V100	54.30
1910003759	SCP-A-14-V100	57.00
1910003760	SCP-A-16-V100	65.10
1910003761	SCP-A-18-V100	67.85
1910003762	SCP-A-20-V100	85.50
1910003763	SCP-A-22-V100	100.35
1910003764	SCP-A-26-V50	80.05
1910003779	SCP-A-30-V40	93.60
1910021276	SCP-A-33-V40	100.35
1910021277	SCP-A-36-V30	105.80
1910021278	SCP-A-40-V30	112.50
1910021279	SCP-A-45-V20	134.20
1910021280	SCP-A-50-V20	177.25
1910021281	SCP-A-60-V15	177.25

Grinding Series
Type SCP-G

Intended for the internal cleaning of metal pipe and tube to remove medium and heavy contamination (rust and scale).

Item No.	Designation	Price
1910021286	SCP-G-07-V100	209.95
1910021287	SCP-G-10-V100	233.15
1910003766	SCP-G-12-V100	310.60
1910003767	SCP-G-14-V100	294.95
1910003768	SCP-G-16-V100	265.15
1910003769	SCP-G-18-V100	309.75
1910003770	SCP-G-20-V100	321.70
1910003771	SCP-G-22-V100	239.50
1910003772	SCP-G-26-V50	172.15
1910003780	SCP-G-30-V40	204.75
1910021288	SCP-G-33-V40	239.50
1910021289	SCP-G-36-V30	239.50
1910021290	SCP-G-40-V30	257.50
1910021291	SCP-G-45-V20	242.75
1910021292	SCP-G-50-V20	283.10
1910021293	SCP-G-60-V15	296.60

Thread Identification Board
Type FI-TIB

Product Description

The STAUFF Thread Identification Board is intended to be used as a universal tool for workshops, warehouses or sales counters allowing quick and easy determination of common thread types and sizes, e.g. for male stud tube connectors and test couplings.

The board is available in two different versions:

FI-TIB-M/G

- **13 Metric Parallel Threaded Ports**
  M8 x 1 / M10 x 1 / M12 x 1.5 / M14 x 1.5 / M16 x 1.5 / M18 x 1.5 / M20 x 1.5 / M22 x 1.5 / M26 x 1.5 / M27 x 2 / M33 x 2 / M42 x 2 / M48 x 2
- **8 Whitworth Parallel Pipe Threaded Ports**
  G1/8 / G1/4 / G3/8 / G1/2 / G3/4 / G1 / G1-1/4 / G1-1/2

FI-TIB-N/U

- **8 National Pipe Threaded Ports**
  1/8–27 NPT / 1/4–18 NPT / 3/8–18 NPT / 1/2–14 NPT / 3/4–14 NPT / 1–11.5 NPT / 1-1/4–11.5 NPT / 1-1/2–11.5 NPT
- **9 UNF/UN Threaded Ports**
  7/16–20 UNF / 1/2–20 UNF / 9/16–18 UNF / 3/4–16 UNF / 7/8–14 UNF / 1-1/16–12 UN / 1-5/16–12 UN / 1-5/8–12 UN / 1-7/8–12 UN

Product Features

- Covering all relevant thread type and sizes of male stud tube connectors and test couplings
- Boards made of hardened quality steel
- Finished with an extremely resistant cathodic electrodeposition coating
- Laser markings indicating the thread types and sizes next to the threaded ports
- Non-slip rubber feet providing good stability

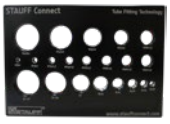
Technical Data

- Dimensions (W x D x H): 275 mm x 190 mm x 31 mm / 10.82 in x 7.48 in x 1.22 in
- Clearance height: 13 mm / .51 in (height of the rubber feet)
- Weight: 6.0 kg / 13.2 lbs

Note

Thread identification boards are intended to be tools for the basic determination of thread types and sizes.
They do not replace high-precision thread gauges and measurement devices (should these become necessary at any point).

Thread Identification Board
Metric and BSPP Threads
Type FI-TIB-M/G



Item No.	Designation	Price
6010014583	FI-TIB-M/G	991.50

Thread Identification Board
NPT and UNF/UN Threads
Type FI-TIB-N/U

Item No.	Designation	Price
6010014582	FI-TIB-N/U	991.50

STAUFF Serviceline Plug
SSP-..-YE
F18 - F19

STAUFF Aqualine Plug
SSP-..-BL
F18 - F19

STAUFF Foodline Plug
SSP-..-WH
F18 - F19

Seal Kits
O-Ring-Kit-..
F20

Seal Kits
Bonded Washer Kits
BD-Ring-Kit-..
F20

Thread Sealing Compounds
Anti-Seize Compounds
LUBRICANT-ANTI-SEIZE-LCT-37566
F20

O-Ring Extraction Tool (Set)
SPLM-TOOL-ORING-EXTRACTION
F20

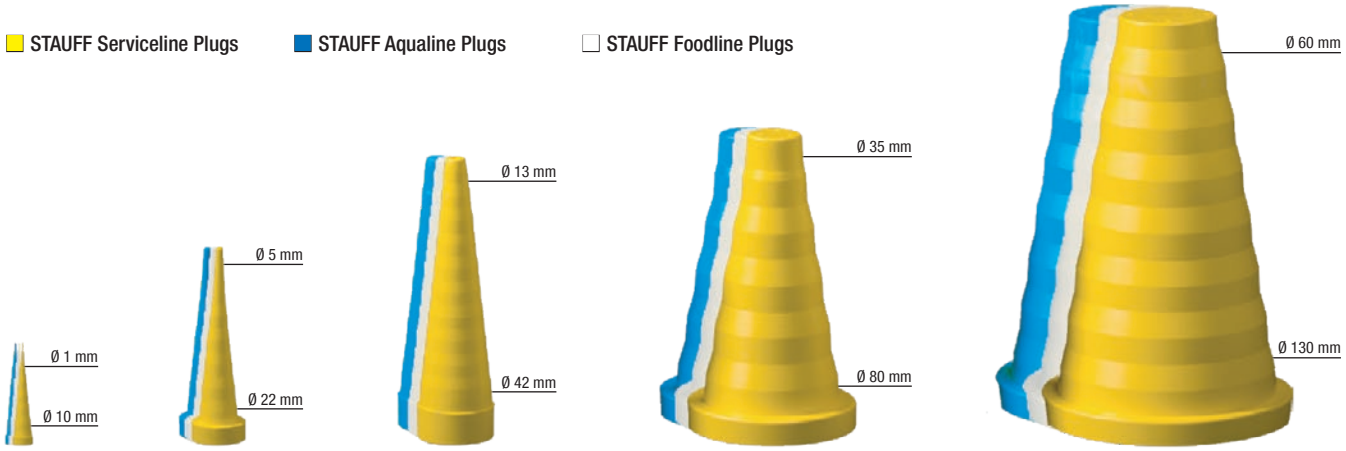
Manual Tube Deburring Tool
TUD-T-.. / TUD-A-..
F21

Tabletop Deburring Machine
TUD-M-02-S648-D
F22

Service Plugs

Plug Sizes:

STAUFF Serviceline Plugs STAUFF Aqualine Plugs STAUFF Foodline Plugs



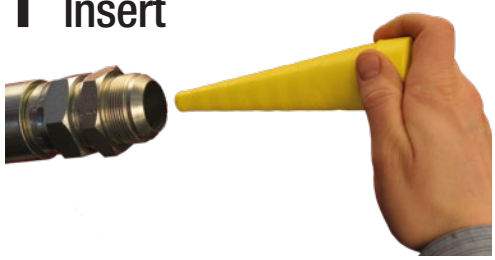
MICRO: 1-10 mm | STD: 5-22 mm | XL:13-42 mm | INDUSTRIAL: 35-80 mm | INDUSTRIAL: 60-130 mm

Packaging Quantities:

MICRO: 20 pieces | STD:10 pieces | XL: 4 pieces | MIXBOX: 4 x MICRO, 4 x STD, 2 x XL | INDUSTRIAL 35-80: 1 piece | INDUSTRIAL 60-130: 1 piece

3 Easy Steps

1 Insert



2 Push

3 Push & twist

Order Codes

SSP - **01/42** - **YE** - **MIXBOX**

① ② ③ ④

① Series

Service Plugs	**SSP**

② Size

To suit 1mm min. to 10mm max. (MICRO)	**01/10**
To suit 1mm min. to 42mm max. (MIXBOX)	**01/42**
To suit 5mm min. to 22mm max. (STD)	**05/22**
To suit 13mm min. to 42mm max. (XL)	**13/42**
To suit 35mm min. to 80mm max. (INDUSTRIAL)	**35/80**
To suit 60mm min. to 130mm max. (INDUSTRIAL)	**60/130**

③ Colour

Yellow - material for industrial production	**YE**
Blue - material for water (sanitary & heating)	**BL**
White - material for food production (FDA Approved)	**WH**

④ Special Designs

Box of service plugs which includes : 4 x size 01/10 (micro) , 4 x size 05/22 (STD) and 2 x size 13/42 (XL)	**MIXBOX**
Pack of 4 (XL sizes only)	**PK4**
Pack of 10 (STD sizes only)	**PK10**
Pack of 20 (MICRO sizes only)	**PK20**
Individual plugs (Industrial sizes only)	**(None)**

STAUFF Serviceline Plugs

STAUFF Serviceline plugs offer an environmental and material protection system preventing oil and chemical spills and leakages.

Applications in hydraulic maintenance, heavy industry, offshore, forestry, construction, lifting, shipping, demolition, military, transportation, automotive, motorcycles.

Contact STAUFF For more information.

STAUFF Aqualine Plugs

STAUFF Aqualine plugs are the optimal tool for any water based usage.

Applications range from sanitary/plumbing works through to heating, boilers, radiators. All hoses and piping systems in and outdoors.

Contact STAUFF For more information.

STAUFF Foodline Plugs

STAUFF Foodline plugs are produced from an FDA approved material. Foodline is to be used where mediums like food, drinks and pharmacies are involved.

Applications are in commercial and industrial areas such as restaurant, bar, café, hotel, private homes, dairy, brewery, bakery, chemical factory.

Contact STAUFF For more information.

STAUFF Serviceline Plug
Type SSP-..-YE

Item No.	Designation	Price
2020073453	SSP-01/10-YE-PK20	138.05
2020067695	SSP-05/22-YE-PK10	138.05
2020067696	SSP-13/42-YE-PK4	138.05
2020076472	SSP-01/42-YE-MIXBOX	169.50
6100108136	SSP-35/80-YE	134.90
6100108137	SSP-60/130-YE	206.80

STAUFF Aqualine Plug
Type SSP-..-BL

Item No.	Designation	Price
6100107832	SSP-01/10-BL-PK20	138.05
6100107831	SSP-05/22-BL-PK10	138.05
6100107967	SSP-13/42-BL-PK4	138.05
6100107972	SSP-01/42-BL-MIXBOX	169.50
6100107973	SSP-35/80-BL	134.90
6100107974	SSP-60/130-BL	206.80

STAUFF Foodline Plug
Type SSP-..-WH

Item No.	Designation	Price
6100108058	SSP-01/10-WH-PK20	200.30
6100108096	SSP-05/22-WH-PK10	200.30
6100108113	SSP-13/42-WH-PK4	200.30
6100108134	SSP-01/42-WH-MIXBOX	204.20
6100108138	SSP-35/80-WH	170.90
6100108139	SSP-60/130-WH	260.65

Seal Kits

Order Codes - O-Ring Kits

O-Ring-Kit - IMP - 03/44 - B - 90 - VS30

① ② ③ ④ ⑤ ⑥

① Type

O-Ring Kits	**O-Ring-Kit**

② Range

Imperial Inch Sizes	**IMP**
Japanese Metric	**JPM**
European Metric	**EUM**
Imperial ORF/UNF/SAE	**IOUS**

③ Dimensions

Inner diameter of the smallest O-Ring / Inner diameter of the largest O-Ring in mm

④ Material

NBR-Perbunan	**B**

⑤ Shore Hardness (Durometer)

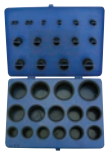
70 Shore Hardness	**70**
90 Shore Hardness	**90**

⑥ Quantity of Different Sizes

Quantity of different sizes in kit	**VSxx**

Seal Kits
70 DURO O-Ring Kits
Type O-Ring-Kit-..

Item No.	Designation	Price
6100053383	O-Ring-Kit-EUM-03/44-B-70-VS30	203.85
6100053385	O-Ring-Kit-IMP-03/44-B-70-VS30	168.60
6100053386	O-Ring-Kit-JPM-03/48-B-70-VS30	263.15



Seal Kits
90 DURO O-Ring Kits
Type O-Ring-Kit-..

Item No.	Designation	Price
6100139248	O-Ring-Kit-EUM-03/44-B-90-VS30	579.40
1930020856	O-Ring-Kit-IMP-03/44-B-90-VS30	811.10
1930020957	O-Ring-Kit-JPM-03/48-B-90-VS30	153.20
6100137632	O-Ring-Kit-IOUS-03/48-B-90-VS30	696.30

Order Codes - Bonded Washer Kits

BD-Ring-Kit - G02/G16 - W66 - B - SC - VS10

① ② ③ ④ ⑤ ⑥

① Type

Bonded Seal Kits	**BD-Ring-Kit**

② Thread Type

To Suit BSPP Thread	**G**
To Suit Metric Thread	**M**

② Thread Sizes

The smallest to largest size available in kit e.g.
For thread type G indicate 02/16 for sizes from 1/8" to 1"

③ Material

Steel galvanised, thick layer passivated	**W66**

④ Seal Material

Perbunan seal	**B**

⑤ Additional Information

Self centering	**SC**

⑥ Quantity of Different Sizes

Quantity of different sizes in kit	**VSxx**

Seal Kits
Bonded Washer Kits
Type BD-Ring-Kit-...-W3-B-SC-VS10

Item No.	Designation	Price
2020079377	BD-Ring-Kit-M6/M30-W66-B-SC-VS10	877.80
2020079375	BD-Ring-Kit-G02/G16-W66-B-SC-VS10	877.80

Accessories

Thread Sealing Compounds
Anti-Seize Compounds
Type LUBRICANT-ANTI-SEIZE-LCT-37566

Item No.	Designation	Price
1930020919	LUBRICANT-ANTI-SEIZE-LCT-37566	85.50

O-Ring Extraction Tool (Set)
Type SPLM-TOOL-ORING-EXTRACTION

Item No.	Designation	Price
6100011646	SPLM-TOOL-ORING-EXTRACTION	61.75

Includes hook, 45° angle pick, 90° bent pick and straight awl

Manual Tube Deburring Tool
Type TUD-T / TUD-A

Product Description

STAUFF manual deburring tools are designed to deburr tube/ pipe ends after cutting to remove swarf. The tools can be used either manually or machine abled using the adaptor for fast and easy operation. The hardened tooth profile gives a clean edge after internal and external deburring.

Features and Advantages

- Easy to use
- Lightweight alloy housing
- Flexible for use in a workshop or onsite environment
- Hardened grade steel cutting teeth - internal and external
- External course knurled surface for firm gripping by hand
- Suitable for most metals, e.g. steel, stainless steel, brass, aluminium

Specification

Deburrer

Small model	6 – 35 / 42 mm	external / internal
Large model	10 – 56 / 61 mm	external / internal

Accessories

Drill Adaptor (for use with a portable machine) enables a fast switch for internal or external machining. Using low speed machining time is only a few seconds.

Order Codes

TUD - T - 03 - SMD0635/42 - SET

① ② ③ ④ ⑤

① Series

Tube Deburring Machines, Spares and Accessories	**TUD**

② Category

Tool (use only if operated by hand)	**T**
Accessory	**A**

③ Additional Information

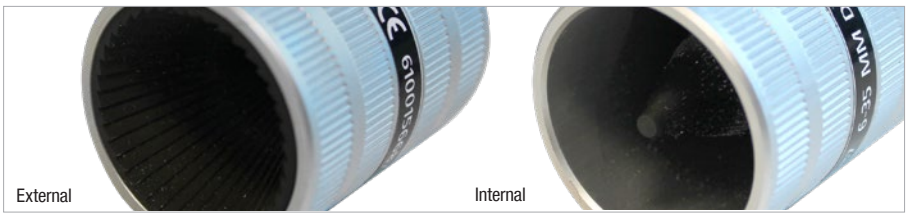
STAUFF internal information only	**03**

④ Type

Small Model Deburrer 6 - 35 / 42 mm external / internal	**SMD0635/42**
Large Model Deburrer 10 - 56 / 61 mm external / internal	**LMD1056/61**
Small Model Deburrer 6 - 35 / 42 mm & Large Model Deburrer 10 - 56 / 61 mm	**SMD/LMD**

⑤ Additional Information

Deburring Tool + Drill Adaptor	**SET**
Drill Adaptor	**DA**
Includes Case, Deburrer tool + Drill adaptor EXT & INT, cleaning brush, instruction card.	**KIT**



Manual Tube Deburring Tool Kit
Type TUD-T-03-SMD/LMD-KIT

Item No.	Designation	Price
6100170992	TUD-T-03-SMD/LMD-KIT	1084.10

Manual Tube Deburring Tool
Type TUD-T-03-...

Item No.	Designation	Price
6100156687	TUD-T-03-SMD0635/42	205.05
6100156688	TUD-T-03-LMD1056/61	257.60

Drill Adaptor for
Manual Tube Deburring Tool
Type TUD-A-03-...-DA

Item No.	Designation	Price
6100156689	TUD-A-03-SMD0635/42-DA	205.05
6100156690	TUD-A-03-LMD1056/61-DA	257.60

Manual Tube Deburring Tool
and Drill Adaptor
Type TUD-T-03-...-SET

Item No.	Designation	Price
6100161710	TUD-T-03-SMD0635/42-SET	409.90
6100161711	TUD-T-03-LMD1056/61-SET	514.95

Tabletop Deburring Machine
Type TUD-M

Product Description

STAUFF tabletop deburring machine is designed to deburr tube/pipe ends internally and externally after cutting to remove swarf. The two rotation speeds enable the operator to deburr in a low or high production capability. The machine is mobile and flexible to use in a factory environment or on-site.

Features

- Compact and rugged table-top machine for internal and external deburring of pipe ends
- Special deburring tools made of high-speed steel for long service life
- Tooling available for steel and stainless steel material tube and pipes
- Uniform and clean deburring of the pipe ends due to the fixed rotation speed of the tooling
- Integrated collection box for the metal swarf provides for cleanliness at the workplace
- Emergency stop button
- Simple start / stop function and error-free operation

Specification

Pipe diameter range	Ø 6 - 48 mm
Rotation speed of the tools (switchable)	140 min-1 / 280 min-1
Dimensions, approx. (WxHxD)	430 x 240 x 320 mm
Weight, approx	25 kg
Connected load	0.12 kW
Voltage	400 V 50 Hz

Optional
Tabletop machine available to deburr tube/pipe size up to Ø 60.3 mm OD.

Order Codes

TUD - **M** - **02** - **S648** - **D**

① ② ③ ④ ⑤

① Series
Tube Deburring Machines, Spares and Accessories **TUD**

② Category
Machine **M**

③ Additional Information
STAUFF internal information only **02**

④ Type
S648 Deburring Device suitable for 6-48 mm OD **S648**

⑤ Power Rating
400 VAC, 50 Hz, three phases **D**

Before

After

Tabletop Deburring Machine
Type TUD-M-02-S648-D

Item No.	Designation	Price
2020082031	TUD-M-02-S648-D	11642.20

STC - Introduction	G2
Tube Design, Bending and End Forming	G3 - G4
STAUFF Hose Production	G5
Repair and Calibration Services	G6
Engineered Hydraulic Solutions, Fluid System Design, Manufacturing and Fabrication	G7

STAUFF Technology Centre

STAUFF Technology Centre is a leading edge, specialised fluid power technology facility comprising world-class resources and services to complement STAUFF's range of precision hydraulic components and accessories.

STAUFF Technology Centre services include ultra-high accuracy, repeatable manipulated tube and pipe development, hydraulic hose kitting, reverse engineering, scanning, tube end forming, certified test and calibration of hydraulic equipment and measuring devices, engineered fluid solutions and manufacture and fabrication of hydraulic power and filtration systems.

Incorporating modern production facilities, STAUFF Technology Centre combines qualified, experienced engineering and trades staff to produce specially-designed, cost-effective systems according to customers' specific requirements.

All services are quality assured according to ISO 9001:2015 and traceable to related standards.

Tube Design, Bending and End Forming

Tube reverse engineering and scanning

- Hexagon Absolute Arm
- VTube Laser software
- Microscribe scanner and design software

Computerised bending

- UNISON BREEZE 50

End forming - assembly machines / tools / devices

- STAUFF Form
- STAUFF Press

Tube finishing

- End capping (screw type or heat shrink seal)
- Labelling (pin stamping, decals, engraving)
- Specialised packaging and crating
- Custom kitting, sub-assembling or production boards

STAUFF Hose Production

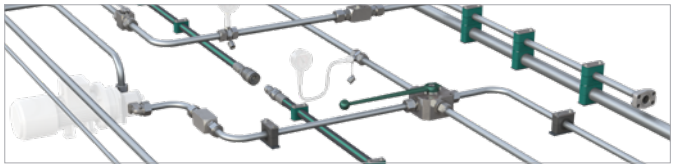
- Hose production
- Hose accessories
- Hose testing

Repair and calibration services

- Service and calibration test centre
- Pressure gauge calibration service

Engineered hydraulic solutions, fluid system design, manufacturing and fabrication

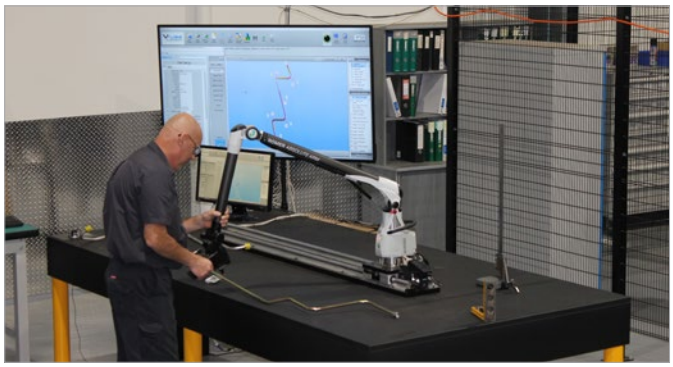
- Engineered hydraulic solutions
- Fluid system design
- Manufacturing and light fabrication



STAUFF Line

STAUFF Technology Centre provides OEM-original equipment manufacturers, custom-designed and ready-to-install connection to connection hydraulic lines and components as well as supplemental services.

Tube Design, Bending and End Forming



Tube reverse engineering and scanning

Hexagon Absolute Arm

The Absolute Arm 7-Axis delivers tactile probing and non-contact laser scanning for high-end portable measurement applications. With usability central to its design, the articulating measuring arm combines ease of movement and ease of measurement to a capacity of 6 m length track system, allowing STAUFF to deliver a fast high-accuracy 3D scanning and digitisation of tube assemblies - as well as reverse engineering capabilities to create absolute measurement results from a sample.

VTube Laser software

Combining with the Hexagon Absolute Arm, VTube laser software uses tactile plus laser scanning technology to collect point clouds of surface data to create generic shapes then build them in SOLIDWORKS. With an accuracy of +/- 0.001 mm, STAUFF is capable of creating highly accurate tube designs and modelling.

Microscribe scanner and design software

Microscribe is a portable system that can be taken on-site to accurately measure and plot geometric tube data from a sample pipe during design or prototyping by the customer, which can then be reverse engineered at STAUFF Technology Centre - accurate to exact customer specifications.

Computerised bending

UNISON BREEZE 50

The Unison Pinball bending machine is a hi-tech fully automated electric CNC mandrel bender suitable for bending highly complex shapes utilising its multi-head function which minimises collisions during bending - all controlled by Unibend programming, OPT2SIM simulation software and Hexagon Absolute Arm.

- Capacity to 50.8 mm (2") O.D. tube minimum wall thickness 0.9 mm
- Tube length 6100 mm or expanded to 7300 mm
- Accuracy and repeatability between bends 0.1 mm / 0.05 mm
- Accuracy and repeatability degree of bend 0.1 deg / 0.05 deg
- Dual head left and right for collision avoidance
- Left and right hand bending for complex shapes
- All moving components are servo driven for accuracy and precision
- Multi stack head for multiple tube sizes

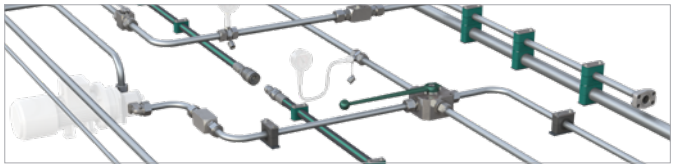
Additional bender equipment:

- Tracto-Technik Tubotronic 6-50.8 (2" O.D.) fully automatic PLC controlled 3-axis bender
- Tracto-Technik Tubobend 4-16 (5/8" O.D.) PLC controlled 1-axis bender
- Various manual benders and tube-bending jigs

Tooling

A comprehensive range of 2 x D, 2.5 x D and 3 x D bend tools, ball and solid mandrels, wiper dies, custom-made tools, and bending jigs to suit metric and imperial O.D. tube and nominal bore NB pipe in various materials.

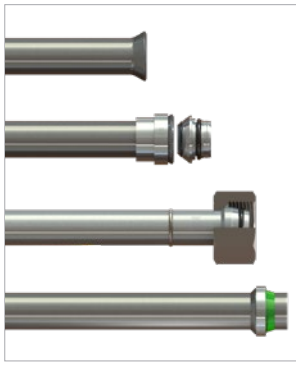
Storage of prototypes is available for OEM customers.



STAUFF Line

STAUFF Technology Centre provides OEM-original equipment manufacturers, custom-designed and ready-to-install connection to connection hydraulic lines and components as well as supplemental services.

Tube Design, Bending and End Forming - Continued



End forming - assembly machines / tools / devices

STAUFF Technology Centre offers various end forming options for the preparation of O.D. tubes

- Cold forming (STAUFF Form)
- Assembly of cutting ring (STAUFF Press)
- Flaring (metric O.D. and imperial JIC)
- Bead forming
- Brazing & soldering
- TIG & MIG welding

STAUFF Form

This high production machine is a weldless system which cold forms metric DIN tubes 6-42 mm O.D. in steel and stainless steel, forming or shaping the tube end to DIN 2353 system - adapting to the STAUFF Connect range of DIN fittings.

STAUFF Press

Two versions of machines suitable for low and high production capacity which aids in the assembly of STAUFF Connect cutting rings onto metric DIN tubes 6-42 mm O.D. steel and stainless steel.

Low production version STAUFF Press combines flaring to 37° JIC or metric flare and pre-assembly of cutting rings.

Tube finishing

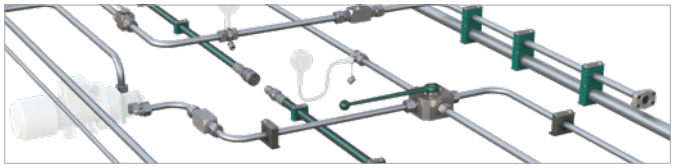
The finishing stage of tube production requires the tube to be finalised, which incorporates several customer-specific options:

- End capping - screw type or heat shrink seal
- Labelling - pin stamping, decals, engraving
- Specialised packaging and crating
- Custom kitting, sub-assembling or production boards

Tube material capabilities

STAUFF's production capabilities encompass numerous grades of materials:

- Dual certified: 316L ASTM A269, ASTM A213, cold drawn seamless, bright annealed & pickled and metric O.D.
- Steel and stainless steel, cold drawn seamless, bright annealed & pickled, imperial O.D.
- ERW (Electric Resistance Welded) steel and stainless steel tubes
- Metric: DIN 2391/c ST 37.4NBK 6 mm to 42 mm
- Nominal bore pipe 3602 CFS 360 up to 1-1/2"
- Copper BS287/C106 and other specialist metal also available to special requirements



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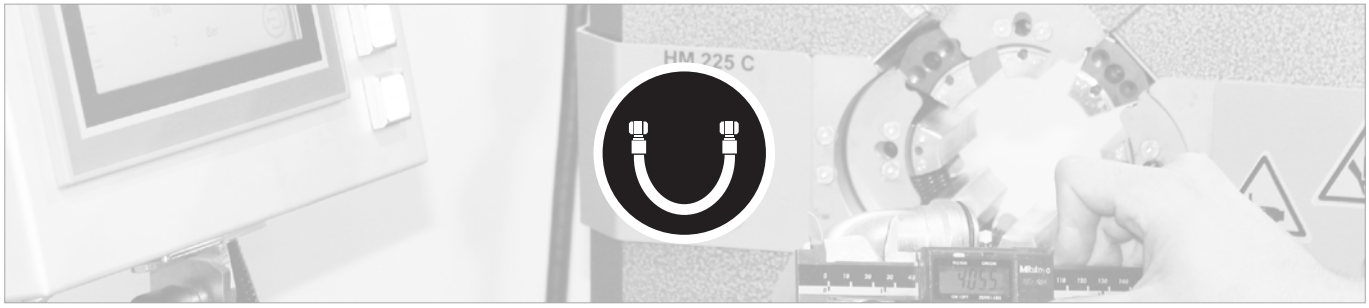
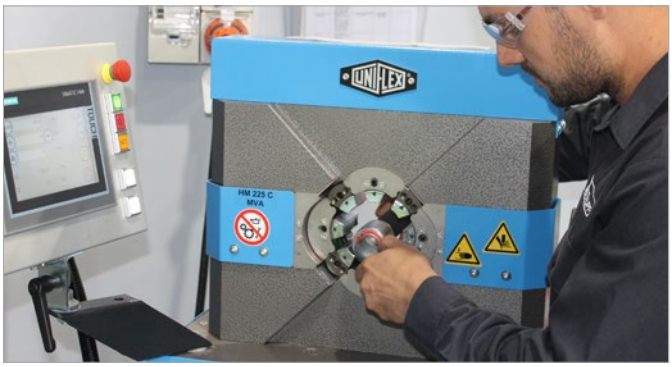


STAUFF Hose Production



Hose production

STAUFF Technology Centre provides complete hose production capability for STAUFF Flex hydraulic hose and STAUFF Hose Connectors to meet industry applications per the following scope of capabilities:

- Hose measuring and cutting to DIN 20066 for 2" 6-wire and 3" industrial hose
- Internal and external skiver - internal 5/8" – 2" / externally 3/16" – 2"
- CNC hose crimper - range up to 1-1/4" R15 – 2" industrial hose
- Test bench - to maximum 1600 bar
- Finishing; inspecting, labelling, tagging, end cap protection

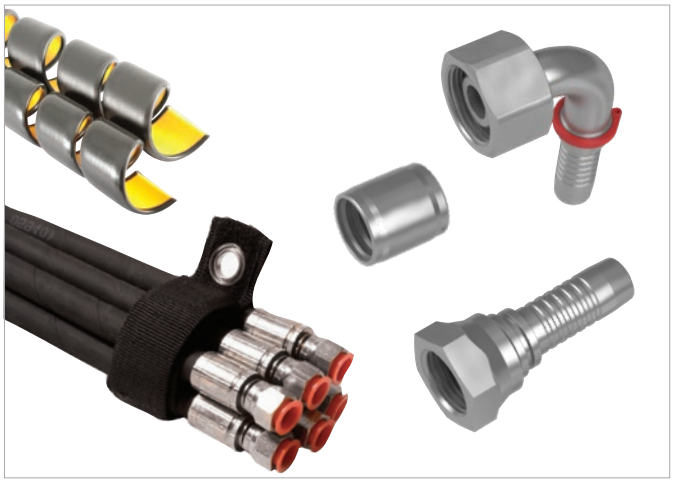
Production is carried out by qualified hose technicians using state-of-the-art assembly equipment.

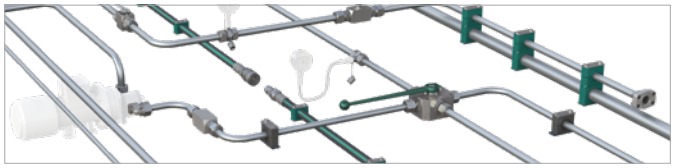
Hose accessories

A range of hose accessories are also available, e.g., various hose protection options according to MDG41 underground coal mining standard, surface mining and other industry-based standards.

Hose testing

Static pressure testing and validation certificates of each hose assembly are available according to the customer's specifications.

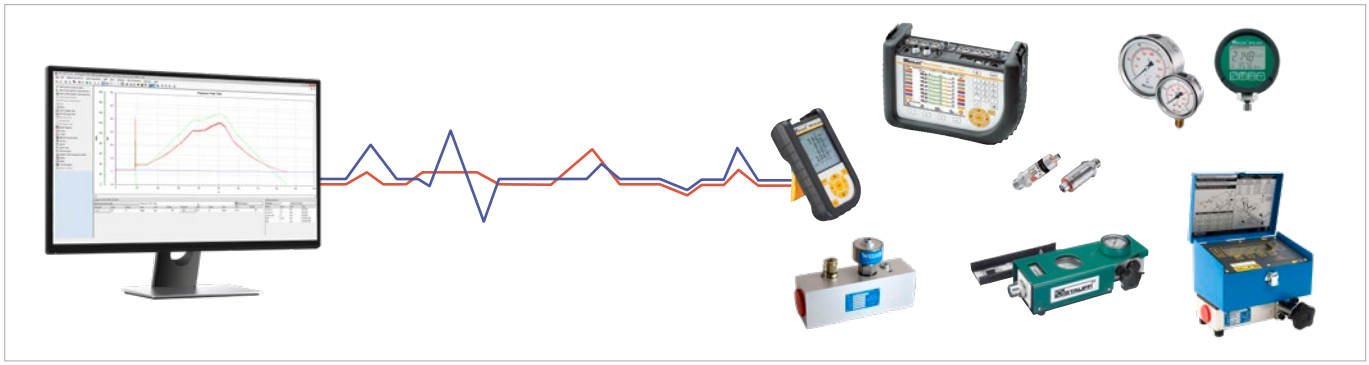




STAUFF Line

STAUFF Technology Centre provides OEM-original equipment manufacturers, custom-designed and ready-to-install connection to connection hydraulic lines and components as well as supplemental services.

Repair and Calibration Services



Service and calibration test centre

STAUFF Technology Centre provides the capability to service, test and calibrate equipment and is the region's authorised service centre for STAUFF Diagtronics and WEBTEC's digital and analogue hydraulic measuring and diagnostic equipment in addition to other brands and types of equipment.

STAUFF's Test centre (certified to ISO 9001:2015 with full traceability to British, German and Australian national standards) integrates with the WEBTEC C2000 micro-processor with built-in, high-speed, multi-channel data acquisition system.

Hydraulic parameters tested (measurement can be in metric and imperial units):

Flow, pressure and temperature parameters

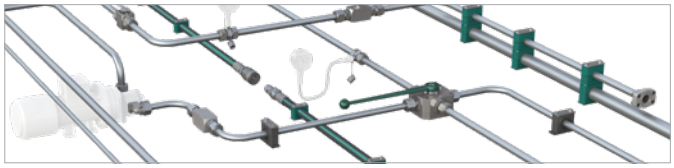
- Flow measurement to 800 LPM / 210 USGPM
- Pressure to 400 bar / 6000 PSI static
- Temperature to 80 °C / 176 °F

Pressure gauge calibration service

Calibrated and certified to NATA standards, STAUFF's high-accuracy comparator is capable of testing analogue and digital pressure gauges up to 2000 bar static. Recorded data is reported as a workshop certificate, traceable to NATA standards, validating the test data and accuracy.

Annual service and calibration reminder service

STAUFF Technology Centre sends automated reminders in alignment with customers' quality systems, annual equipment calibration requirements and manufacturers' due dates, thus eliminating costs of accidental oversights in the servicing of valuable equipment.



STAUFF Line

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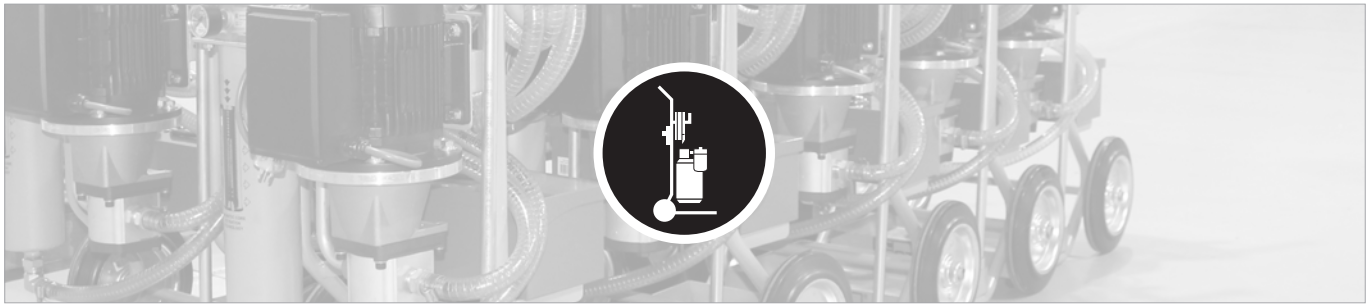
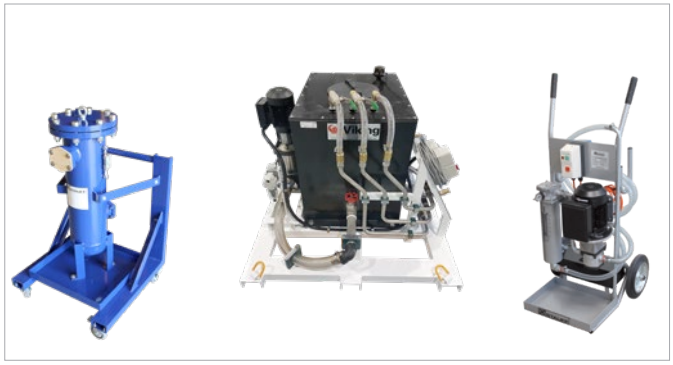
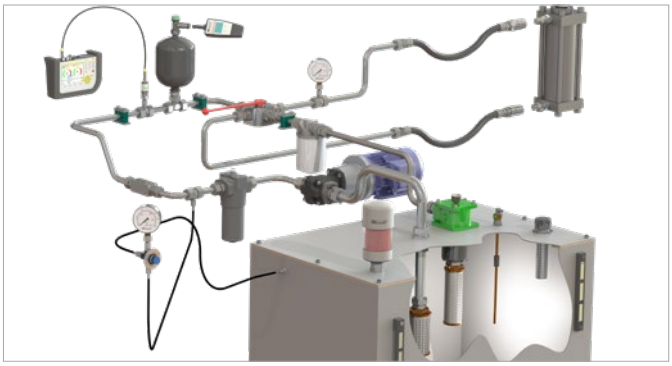
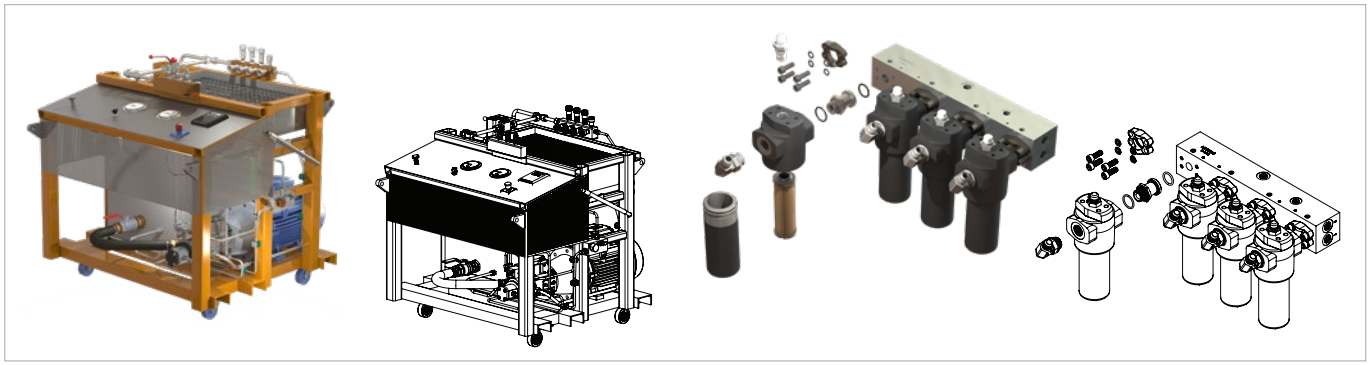


Engineered Hydraulic Solutions, Fluid System Design, Manufacturing and Fabrication







Engineered hydraulic solutions

Utilising STAUFF's Technology Centre's comprehensive range of in-house products and services from design to commissioning & training. STAUFF provides complete solutions for the manufacture of custom-designed hydraulic systems, together with access to;

- Engineering services - mechanical and electrical
- Design and drafting
- Prototyping
- Specialist advice
- Project collaboration - in-house and on-site
- Commissioning
- Training

Fluid system design

STAUFF and our authorised partners provide a comprehensive range of hydraulic fluid components and accessories integrated into system designs:

- STAUFF Clamps
- STAUFF Connect
- STAUFF Flanges
- STAUFF Hose and Connectors
- STAUFF Quick Release Couplings
- STAUFF Valves
- STAUFF Test
- STAUFF Diagtronics
- STAUFF Filtration Technology
- STAUFF Hydraulic Accessories
- STAUFF Accumulators

Manufacturing and light fabrication

STAUFF Technology Centre's in-house manufacturing and fabrication capabilities support a full scope of hydraulic production services and systems manufactured to customer-specific requirements.

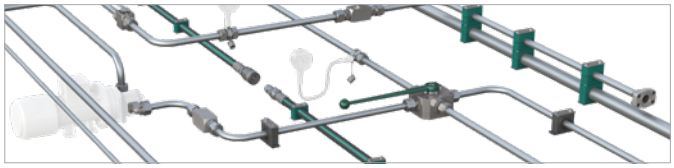
- Accumulator systems and stations
- Portable and stationary filtration systems
- Hydraulic test systems and reservoir systems
- Hydraulic and lubrication power systems
- Additional specialised equipment

Additional services

- Hydraulic valve refurbishment and test stand (mineral oil and water based oils)
- Testing, commissioning and training

Industries and applications serviced

- Hydraulic and lubrication - heavy and light industrial
- Manufacturing
- Agriculture
- Mining and construction
- Transportation - automotive, road, rail, marine
- Defence - army, navy, air-ground support

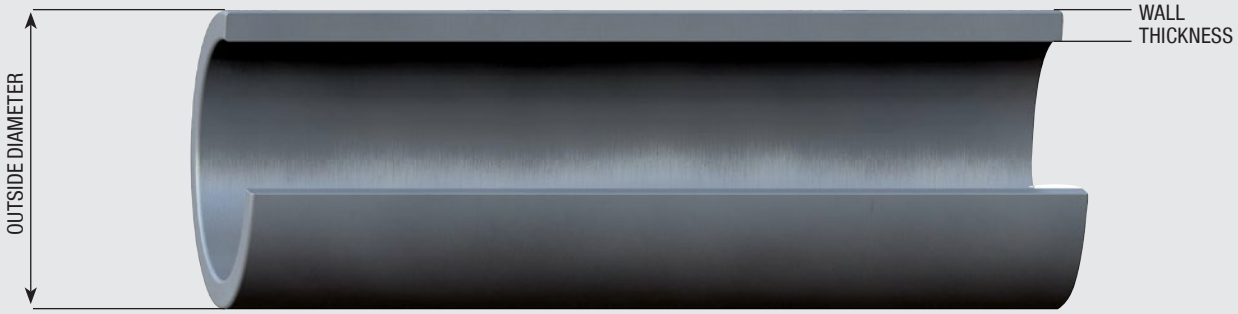


STAUFF Line

STAUFF Technology Centre provides OEM-original equipment manufacturers, custom-designed and ready-to-install connection to connection hydraulic lines and components as well as supplemental services.

Introduction	H2
STAUFF Tube - Steel	H3 - H5
STAUFF Tube - Stainless Steel	H6 - H11

Tube



STAUFF supplies a range of precision hydraulic tubing in both metric and imperial sizes. The materials available are standard cold drawn, normalised, seamless (CDS) carbon steel, galvanised zinc plated, CDS carbon steel, and seamless annealed 316L stainless steel.

Steel tube is cleaned, normalised, free of scale, has a passivated zinc plated exterior with an oiled interior and capped ends.
Stainless steel tube is cold drawn seamless, heat treated to anneal, and supplied with capped ends.
Tube is sold as 6 metre lengths.

Typical markets and applications

- Transport vehicles and equipment
- Construction mobile and stationary equipment
- Marine shipbuilding and offshore
- Heavy industrial plant and equipment
- Light industrial plant and equipment
- Process and instrumentation

Order Codes

The following designation structure is for Australian and New Zealand standard marketed range. Contact STAUFF for other options available on request.

TUM - **10x1.5** - **L6** - **W5/07** - **S02** - **AP**

① ② ③ ④ ⑤ ⑥

① Model Code

Tubing - OD Metric	**TUM**
Tubing - OD Imperial	**TUI**

② Size

The sizing is defined in the following format :
(outside diameter in mm) x (wall thickness in mm)

Metric Example: 10 x 1.5

Imperial Example: 6.35 x 0.91

③ Length

Length 6000 mm (6 m) (standard)	**L6**
Length Random *	**LR**
Length Custom - defined in mm * (LC3500 = Length 3.5 metres)	**LCxxxx**

* Conditions apply

④ Material

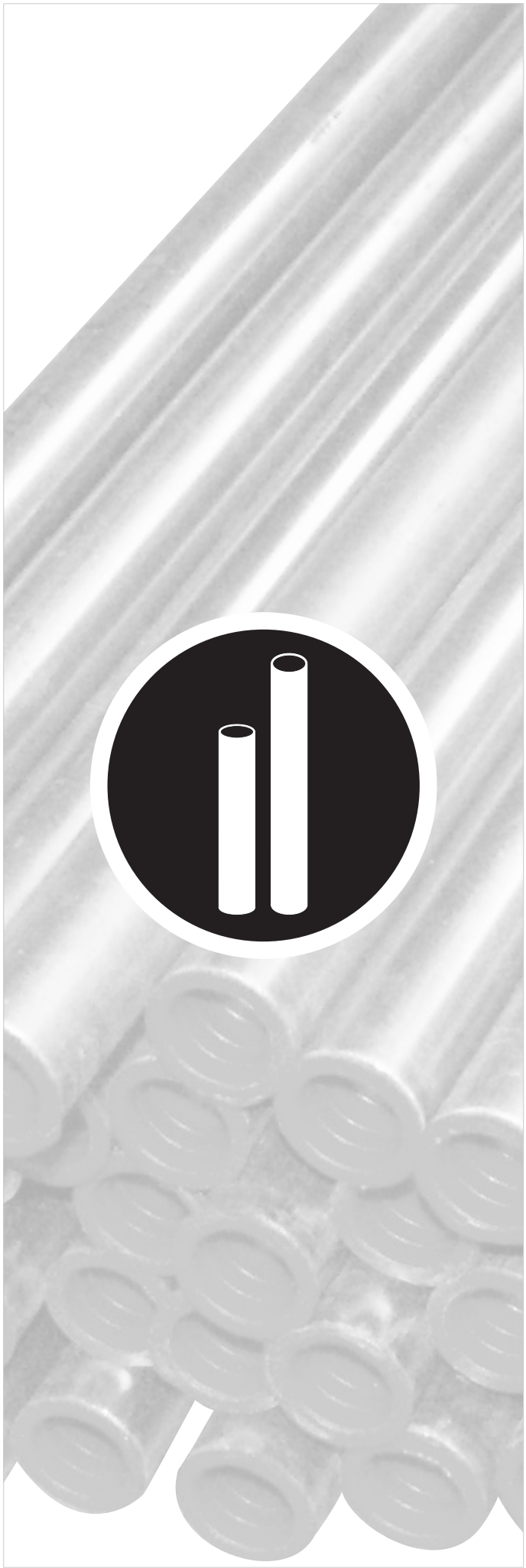
Carbon steel galvanised E235 +N, thick layer passivated (ST37-4)	**W66/01**
A4 Stainless steel 1.4401 / 1.4404 AISI 316 / AISI 316L (Mo 2.0% min)	**W5/07**
A4 Stainless steel 1.4435 / 1.4436 AISI 316 / AISI 316L (Mo 2.5%min, Ni 12.5%min)	**W5/10**

⑤ Standard

EN 10305-4:2016 Steel tubes for precision applications. Seamless cold drawn tubes for hydraulic and pneumatic power systems. (CDS)	**S01**
EN 10216-5:2013 Seamless steel tubes for pressure purposes. Stainless steel tubes	**S02**

⑥ Surface Finish

Annealed and pickled (for Stainless Steel materials only)	**AP**
Bright annealed (for Stainless Steel materials only)	**BA**



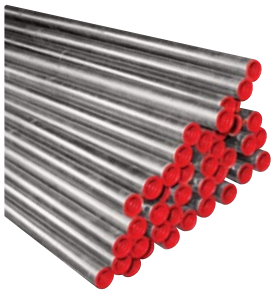
Metric Carbon Steel - Zinc Plated Tube
TUM-...-W66/01

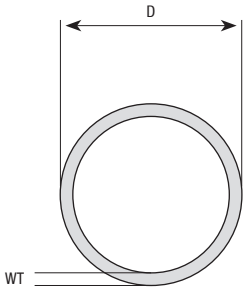
H4

Imperial Carbon Steel - Zinc Plated Tube
TUI-...-W66/01

H5

Tube ▪ Metric
Type TUM ▪ Carbon Steel - Zinc Plated





Size	Tube OD (mm) D1	Wall Thickness (mm) D2	Working Pressure (bar)	Burst Pressure (bar)	Weight (kg/m)
6 x 1	6	1	444	1538	0.12
8 x 1	8	1	333	1120	0.17
8 x 1.5	8	1.5	499	1753	0.24
10 x 1	10	1	282	878	0.22
10 x 1.5	10	1.5	423	1369	0.31
12 x 1.5	12	1.5	352	1120	0.39
12 x 2	12	2	470	1538	0.49
14 x 2	14	2	403	1297	0.59
15 x 1.5	15	1.5	282	878	0.50
16 x 1.5	16	1.5	264	819	0.54
16 x 2	16	2	352	1120	0.69
16 x 2.5	16	2.5	440	1432	0.83
18 x 1.5	18	1.5	235	721	0.61
18 x 2	18	2	313	985	0.79
20 x 2	20	2	282	878	0.96
20 x 2.5	20	2.5	352	1120	1.08
22 x 2	22	2	256	792	0.99
25 x 2	25	2	226	690	1.14
25 x 2.5	25	2.5	282	878	1.42
25 x 3	25	3	338	1071	1.63
28 x 2	28	2	201	612	1.28
30 x 3	30	3	282	878	2.00
30 x 4	30	4	376	1202	2.57
35 x 2.5	35	2.5	201	612	2.02
35 x 3	35	3	242	743	2.40
38 x 4	38	4	297	928	3.35
38 x 5	38	5	371	1185	4.07
42 x 3	42	3	201	612	2.89

Item No.	Designation	Price (per length)
2030033122	TUM-6x1-L6-W66/01-S01	35.30
2030033112	TUM-8x1-L6-W66/01-S01	43.50
2030033123	TUM-8x1.5-L6-W66/01-S01	47.50
2030033124	TUM-10x1-L6-W66/01-S01	48.85
2030033113	TUM-10x1.5-L6-W66/01-S01	52.95
2030033114	TUM-12x1.5-L6-W66/01-S01	61.10
2030033127	TUM-12x2-L6-W66/01-S01	67.85
2030033128	TUM-14x2-L6-W66/01-S01	94.90
2030033129	TUM-15x1.5-L6-W66/01-S01	67.85
2030033131	TUM-16x1.5-L6-W66/01-S01	74.60
2030033132	TUM-16x2-L6-W66/01-S01	81.40
2030044183	TUM-16x2.5-L6-W66/01-S01	108.50
2030033134	TUM-18x1.5-L6-W66/01-S01	81.40
2030033115	TUM-18x2-L6-W66/01-S01	94.90
2030033137	TUM-20x2-L6-W66/01-S01	101.75
2030033119	TUM-20x2.5-L6-W66/01-S01	108.50
2030033140	TUM-22x2-L6-W66/01-S01	122.05
2030033142	TUM-25x2-L6-W66/01-S01	135.55
2030033141	TUM-25x2.5-L6-W66/01-S01	156.05
2030033143	TUM-25x3-L6-W66/01-S01	169.50
2030033145	TUM-28x2-L6-W66/01-S01	156.05
2030033148	TUM-30x3-L6-W66/01-S01	236.85
2030033149	TUM-30x4-L6-W66/01-S01	291.35
6100060041	TUM-35x2.5-L6-W66/01-S01	217.00
2030033118	TUM-35x3-L6-W66/01-S01	230.55
2030033153	TUM-38x4-L6-W66/01-S01	338.90
2030043517	TUM-38x5-L6-W66/01-S01	379.35
2030033155	TUM-42x3-L6-W66/01-S01	263.95

Standard length 6000 mm (6 m) sold as lengths

Weight unit is kilogram per metre

Specification – Steel Tube Zinc Plated

Material: E235

Tech. Std.: EN10305-4

Condition: Cold drawn seamless

Delivery condition: +N normalised
oiled and capped

Working pressures calculated for straight lengths @ <120° C

Zinc plated FeZn8C Chromium 6 Free

Order Codes

TUM-6x1*-L6*-W66/01*-S01

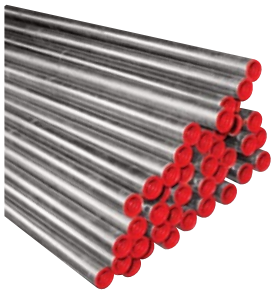
* Tubing - OD Metric		TUM	* Material	Carbon Steel	-W66/01
* Outside Tube Diameter - D (in mm)		-6	* Tube Standard	EN 10305-4:2016	-S01
* Wall Thickness - WT (in mm)		x1			
* Length	6 metre	-L6			

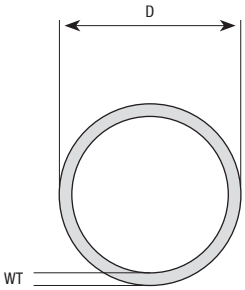
Please note: Tubing should be cut according to relevant fitting manufacturer's assembly instructions.
STAUFF do not recommend the use of rotary cutting tools.

DISCLAIMER: Pressures are calculated for straight tube according to AS4041 for dynamic stress for the carbon steel tube and to AS4041 for static stress for the stainless steel tube and are given as a guide only. Bends may introduce wall thinning with consequent reduction in the allowable pressure. All critical applications should be subject to proving tests. No allowance has been made for corrosion in the calculations. Thin walled tubing will need support sleeves for secure "bite" type and "compression" type fitting assembly.

Tube is generally available ex-stock, subject to prior sale. Minimum mill quantities may apply to certain sizes.

Tube ▪ Imperial
Type TUI ▪ Carbon Steel - Zinc Plated





Size	Tube OD (mm/inches) D		Wall Thickness (mm) WT	Working Pressure (bar)	Burst Pressure (bar)	Weight (kg/m)
6.35 x 0.91	6.35	1/4	0.91	404	1302	0.12
9.53 x 1.22	9.53	3/8	1.22	361	1150	0.25
9.53 x 1.63	9.53	3/8	1.63	482	1583	0.32
12.7 x 1.22	12.7	1/2	1.22	271	841	0.35
12.7 x 1.63	12.7	1/2	1.63	362	1153	0.45
15.88 x 1.22	15.88	5/8	1.22	218	665	0.45
15.88 x 1.63	15.88	5/8	1.63	291	908	0.58
15.88 x 2.03	15.88	5/8	2.03	362	1154	0.59
19.05 x 1.63	19.05	3/4	1.63	241	742	0.71
19.05 x 2.03	19.05	3/4	2.03	300	941	0.86
19.05 x 2.64	19.05	3/4	2.64	391	1255	1.13
25.4 x 1.63	25.4	1	1.63	181	546	0.98
25.4 x 2.03	25.4	1	2.03	225	690	1.23
25.4 x 2.64	25.4	1	2.64	293	916	1.41
25.4 x 3.25	25.4	1	3.25	361	1149	1.78
31.75 x 1.63	31.75	1-1/4	1.63	144	431	1.2
31.75 x 2.03	31.75	1-1/4	2.03	180	543	2.27
31.75 2.64	31.75	1-1/4	2.64	240	740	1.93
31.75 x 3.25	31.75	1-1/4	3.25	288	899	2.33
38.1 x 3.25	38.1	1-1/2	3.25	288	899	2.31

Item No.	Designation	Price (per length)
2030050250	TUI-6.35x0.91-L6-W66/01-S01	44.80
2030050252	TUI-9.53x1.22-L6-W66/01-S01	48.85
2030001571	TUI-9.53x1.63-L6-W66/01-S01	51.60
2030050254	TUI-12.7x1.22-L6-W66/01-S01	58.30
2030050283	TUI-12.7x1.63-L6-W66/01-S01	61.10
2030050256	TUI-15.88x1.22-L6-W66/01-S01	67.85
2030050258	TUI-15.88x1.63-L6-W66/01-S01	74.60
2030050259	TUI-15.88x2.03-L6-W66/01-S01	101.75
2030050261	TUI-19.05x1.63-L6-W66/01-S01	81.40
2030044325	TUI-19.05x2.03-L6-W66/01-S01	94.90
2030050264	TUI-19.05x2.64-L6-W66/01-S01	169.50
2030050265	TUI-25.4x1.63-L6-W66/01-S01	142.60
2030050266	TUI-25.4x2.03-L6-W66/01-S01	146.90
2030050268	TUI-25.4x2.64-L6-W66/01-S01	149.00
2030050269	TUI-25.4x3.25-L6-W66/01-S01	203.55
2030050270	TUI-31.75x1.63-L6-W66/01-S01	196.45
2030050271	TUI-31.75x2.03-L6-W66/01-S01	209.95
2030050272	TUI-31.75x2.64-L6-W66/01-S01	257.50
2030050273	TUI-31.75x3.25-L6-W66/01-S01	236.85
2030050061	TUI-38.1x3.25-L6-W66/01-S01	291.35

Standard length 6000 mm (6 m) sold as lengths

Weight unit is kilogram per metre

Specification – Steel Tube Zinc Plated

Material: E235

Tech. Std.: EN10305-4

Condition: Cold drawn seamless

Delivery condition: +N normalised
oiled and capped

Working pressures calculated for straight lengths @ <120° C

Zinc plated FeZn8C Chromium 6 Free

Order Codes

TUI-6.35x0.91*-L6*-W66/01*-S01

* Tubing - OD Imperial		**TUI**	* Material	Carbon Steel	**-W66/01**
* Outside Tube Diameter - D (in mm)		**-6.35**	* Tube Standard	EN 10305-4:2016	**-S01**
* Wall Thickness - WT (in mm)		**x0.91**			
* Length	6 metre	**-L6**			

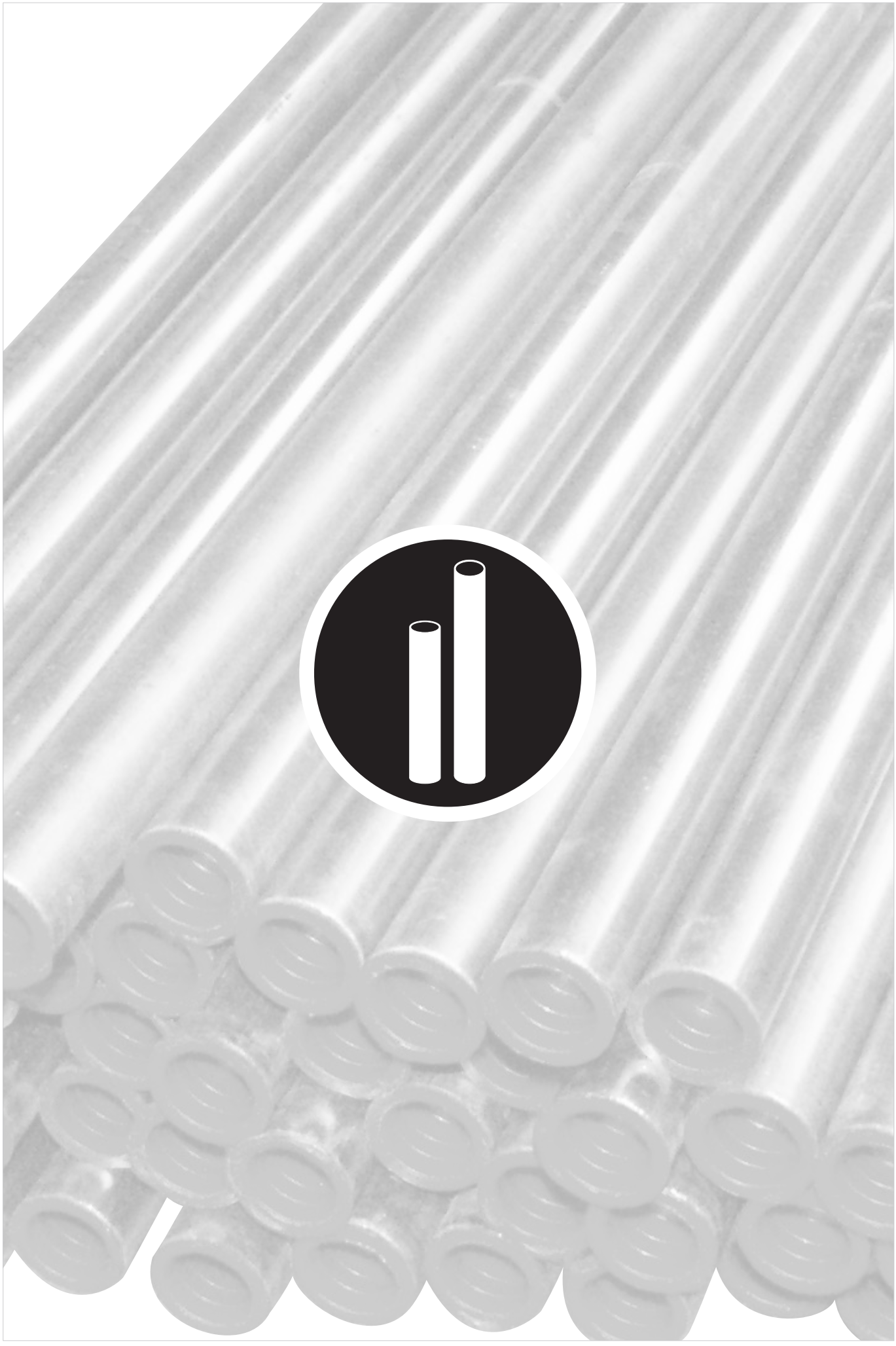
Please note: Tubing should be cut according to relevant fitting manufacturer's assembly instructions.
STAUFF do not recommend the use of rotary cutting tools.

Refer to following pages for other STAUFF Line products:

Clamps	24° DIN Fittings	37° JIC Adaptors	SAE Flanges	Ball Valves
Section A	**Section B**	**Section D**	**Section I**	**Section K**

DISCLAIMER: Pressures are calculated for straight tube according to AS4041 for dynamic stress for the carbon steel tube and to AS4041 for static stress for the stainless steel tube and are given as a guide only. Bends may introduce wall thinning with consequent reduction in the allowable pressure. All critical applications should be subject to proving tests. No allowance has been made for corrosion in the calculations. Thin walled tubing will need support sleeves for secure "bite" type and "compression" type fitting assembly.

Tube is generally available ex-stock, subject to prior sale. Minimum mill quantities may apply to certain sizes.



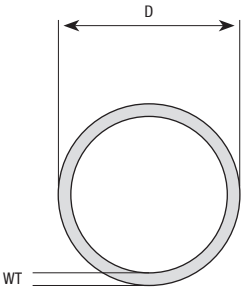
Metric Stainless Steel - Annealed & Pickled Tube
TUM-...-W5/07-AP
H8

Imperial Stainless Steel - Annealed & Pickled Tube
TUI-...-W5/07-AP
H9

Metric Stainless Steel - Bright Annealed Tube
TUM-...-W5/10-BA
H10

Imperial Stainless Steel - Bright Annealed Tube
TUI-...-W5/10-BA
H11

Tube ▪ Metric
Type TUM ▪ Stainless Steel - Annealed & Pickled



Size	Tube OD (mm) D	Wall Thickness (mm) WT	Working Pressure (bar)	Burst Pressure (bar)	Weight (kg/m)	Item No.	Designation	Price (per length)
6 x 1	6	1	374	1923	0.13	6100053776	TUM-6x1-L6-W5/07-S02-AP	94.90
8 x 1	8	1	281	1400	0.16	2030050201	TUM-8x1-L6-W5/07-S02-AP	122.05
8 x 1.5	8	1.5	421	2191	0.24	2030050202	TUM-8x1.5-L6-W5/07-S02-AP	135.55
8 x 2	8	2	594	3000	0.30	2030050203	TUM-8x2-L6-W5/07-S02-AP	156.05
10 x 1	10	1	238	1098	0.23	2030050204	TUM-10x1-L6-W5/07-S02-AP	108.50
10 x 1.5	10	1.5	356	1711	0.32	2030050205	TUM-10x1.5-L6-W5/07-S02-AP	142.60
12 x 1	12	1	198	902	0.28	2030050206	TUM-12x1-L6-W5/07-S02-AP	128.45
12 x 1.5	12	1.5	297	1400	0.39	2030050207	TUM-12x1.5-L6-W5/07-S02-AP	156.05
12 x 2	12	2	396	1923	0.50	2030050208	TUM-12x2-L6-W5/07-S02-AP	189.40
14 x 2	14	2	339	1622	0.60	2030050210	TUM-14x2-L6-W5/07-S02-AP	217.00
15 x 1.5	15	1.5	238	1098	0.51	2030050211	TUM-15x1.5-L6-W5/07-S02-AP	183.00
16 x 1.5	16	1.5	223	1024	0.55	2030050212	TUM-16x1.5-L6-W5/07-S02-AP	189.40
16 x 2	16	2	297	1400	0.70	2030050213	TUM-16x2-L6-W5/07-S02-AP	230.55
16 x 2.5	16	2.5	371	1790	0.85	2030050214	TUM-16x2.5-L6-W5/07-S02-AP	311.30
18 x 1.5	18	1.5	198	902	0.62	2030050215	TUM-18x1.5-L6-W5/07-S02-AP	223.40
20 x 2	20	2	238	1098	0.90	2030050216	TUM-20x2-L6-W5/07-S02-AP	257.50
20 x 2.5	20	2.5	297	1400	1.10	2030050217	TUM-20x2.5-L6-W5/07-S02-AP	324.80
22 x 2	22	2	216	990	1.00	2030050219	TUM-22x2-L6-W5/07-S02-AP	318.40
25 x 2.5	25	2.5	238	1098	1.41	2030050221	TUM-25x2.5-L6-W5/07-S02-AP	379.35
25 x 3	25	3	285	1339	1.64	2030050222	TUM-25x3-L6-W5/07-S02-AP	426.85
28 x 2	28	2	170	765	1.30	2030050223	TUM-28x2-L6-W5/07-S02-AP	318.40
30 x 3	30	3	238	1098	2.03	2030050225	TUM-30x3-L6-W5/07-S02-AP	521.20
30 x 4	30	4	317	1503	2.60	2030050226	TUM-30x4-L6-W5/07-S02-AP	609.70
35 x 2	35	2	136	604	1.65	6100053745	TUM-35x2-L6-W5/07-S02-AP	362.00
35 x 3	35	3	252	825	2.41	6100232279	TUM-35x3-L6-W5/7-S02-AP	630.65
38 x 3	38	3	188	851	2.98	6100053744	TUM-38x3-L6-W5/07-S02-AP	571.25
38 x 5	38	5	313	1481	4.13	2030050234	TUM-38x5-L6-W5/07-S02-AP	981.90
42 x 3	42	3	170	765	2.93	2030050236	TUM-42x3-L6-W5/07-S02-AP	717.55

Standard length 6000 mm (6 m) sold as lengths

Weight unit is kilogram per metre

Order Codes

***TUM*-6x1*-L6*-W5/07*-S02*-AP**

* Tubing - OD Metric		**TUM**	* Material	Stainless Steel	**-W5/07**
* Outside Tube Diameter - D (in mm)		**-6**	* Tube Standard	EN 10216-5:2013	**-S02**
* Wall Thickness - WT (in mm)		**x1**	* Tube Finish	Annealed and Pickled	**-AP**
* Length	6 metre	**-L6**			

Specification – Stainless Steel Tube Matt Finish

Material : Austenitic stainless steel 316/316L

Technical standards: ASTM A213AW/A269

Condition: Cold drawn seamless

Delivery Condition: plugged or capped

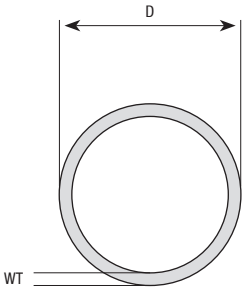
Working pressures: calculated for straight lengths at 50° C.

Please note: Tubing should be cut according to relevant fitting manufacturer's assembly instructions.
STAUFF do not recommend the use of rotary cutting tools.

DISCLAIMER: Pressures are calculated for straight tube according to AS4041 for dynamic stress for the carbon steel tube and to AS4041 for static stress for the stainless steel tube and are given as a guide only. Bends may introduce wall thinning with consequent reduction in the allowable pressure. All critical applications should be subject to proving tests. No allowance has been made for corrosion in the calculations. Thin walled tubing will need support sleeves for secure "bite" type and "compression" type fitting assembly.

Tube is generally available ex-stock, subject to prior sale. Minimum mill quantities may apply to certain sizes.

Tube ▪ Imperial
Type TUI ▪ Stainless Steel - Annealed & Pickled



Size	Tube OD (mm/inches) D		Wall Thickness (mm) WT	Working Pressure (bar)	Burst Pressure (bar)	Weight (kg/m)
6.35 x 0.89	6.35	1/4	0.89	333	1588	0.12
6.35 x 1.24	6.35	1/4	1.24	464	2292	0.17
9.53 x 0.89	9.53	3/8	0.89	222	1019	0.19
9.53 x 1.24	9.53	3/8	1.24	309	1463	0.26
9.53 x 1.65	9.53	3/8	1.65	411	2161	0.33
12.7 x 0.89	12.7	1/2	0.89	166	749	0.27
12.7 x 1.24	12.7	1/2	1.24	232	1145	0.36
12.7 x 1.65	12.7	1/2	1.65	309	1461	0.46
15.88 x 1.24	15.88	5/8	1.24	186	841	0.45
15.88 x 1.65	15.88	5/8	1.65	247	1144	0.59
19.05 x 1.24	19.05	3/4	1.24	155	403	0.55
19.05 x 1.65	19.05	3/4	1.65	206	940	0.72
19.05 x 2.11	19.05	3/4	2.11	263	1227	0.90
19.05 x 3.25	19.05	3/4	3.25	405	1973	1.30
25.4 x 1.65	25.4	1	1.65	154	691	0.98
25.4 x 2.11	25.4	1	2.11	225	1037	1.23
31.75 x 1.65	31.75	1-1/4	1.65	122	539	1.39
31.75 x 3.05	31.75	1-1/4	3.05	228	1049	2.17
31.75 x 3.25	31.75	1-1/4	3.25	262	1124	3.54

Item No.	Designation	Price (per length)
2030050312	TUI-6.35X0.89-L6-W5/07-S02-AP	61.10
2030050314	TUI-6.35X1.24-L6-W5/07-S02-AP	74.60
2030050318	TUI-9.53X0.89-L6-W5/07-S02-AP	74.60
2030050320	TUI-9.53X1.24-L6-W5/07-S02-AP	94.90
2030050325	TUI-9.53x1.65-L6-W5/07-S02-AP	108.50
2030050327	TUI-12.7X0.89-L6-W5/07-S02-AP	101.75
2030050329	TUI-12.7X1.24-L6-W5/07-S02-AP	115.25
2030050331	TUI-12.7X1.65-L6-W5/07-S02-AP	142.60
2030050335	TUI-15.88X1.24-L6-W5/07-S02-AP	135.55
2030050338	TUI-15.88X1.65-L6-W5/07-S02-AP	169.50
2030050339	TUI-19.05X1.24-L6-W5/07-S02-AP	162.45
2030050341	TUI-19.05X1.65-L6-W5/07-S02-AP	183.00
2030050343	TUI-19.05X2.11-L6-W5/07-S02-AP	291.35
2030050344	TUI-19.05X3.25-L6-W5/07-S02-AP	446.75
2030050346	TUI-25.4X1.65-L6-W5/07-S02-AP	277.90
2030050348	TUI-25.4X2.11-L6-W5/07-S02-AP	331.90
2030050350	TUI-31.75X1.65-L6-W5/07-S02-AP	548.85
2030050351	TUI-31.75X3.05-L6-W5/07-S02-AP	582.15
2030050352	TUI-31.75X3.25-L6-W5/07-S02-AP	609.70

Standard length 6000 mm (6 m) sold as lengths

Weight unit is kilogram per metre

Specification – Stainless Steel Tube Matt Finish

Material : Austenitic stainless steel 316/316L
Technical standards: ASTM A213AW/A269
Condition: Cold drawn seamless
Delivery Condition: plugged or capped
Working pressures: calculated for straight lengths at 50° C.

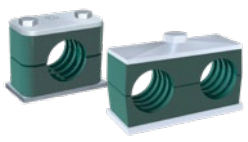
Order Codes

***TUI*-6.35x0.89*-L6*-W5/07*-S02*-AP**

* Tubing - OD Imperial	**TUI**	* Material	Stainless Steel	**-W5/07**
* Outside Tube Diameter - D (in mm)	**-6.35**	* Tube Standard	EN 10216-5:2013	**-S02**
* Wall Thickness - WT (in mm)	**x0.89**	* Tube Finish	Annealed and Pickled	**-AP**
* Length 6 metre	**-L6**			

Please note: Tubing should be cut according to relevant fitting manufacturer's assembly instructions.
STAUFF do not recommend the use of rotary cutting tools.

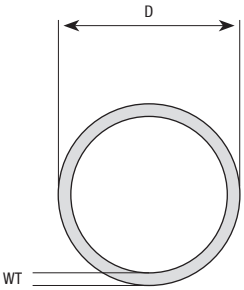
Refer to following pages for other STAUFF Line products:

Clamps	24° DIN Fittings	37° JIC Adaptors	SAE Flanges	Ball Valves
				
Section A	**Section B**	**Section D**	**Section I**	**Section K**

DISCLAIMER: Pressures are calculated for straight tube according to AS4041 for dynamic stress for the carbon steel tube and to AS4041 for static stress for the stainless steel tube and are given as a guide only. Bends may introduce wall thinning with consequent reduction in the allowable pressure. All critical applications should be subject to proving tests. No allowance has been made for corrosion in the calculations. Thin walled tubing will need support sleeves for secure "bite" type and "compression" type fitting assembly.

Tube is generally available ex-stock, subject to prior sale. Minimum mill quantities may apply to certain sizes.

Tube ▪ Metric
Type TUM ▪ Stainless Steel - Bright Annealed



Size	Tube OD (mm) D	Wall Thickness (mm) WT	Working Pressure (bar)	Burst Pressure (bar)	Weight (kg/m)
6 x 1	6	1	374	1923	0.13
6 x 1.5	6	1.5	561	3000	0.17
8 x 1	8	1	281	1400	0.18
8 x 1.5	8	1.5	421	2191	0.24
8 x 2	8	2	594	3000	0.30
10 x 1	10	1	238	1098	0.23
10 x 1.5	10	1.5	356	1711	0.32
12 x 1	12	1	198	902	0.28
12 x 1.5	12	1.5	297	1400	0.39
12 x 2	12	2	396	1923	0.50
14 x 2	14	2	339	1622	0.60
15 x 1.5	15	1.5	238	1098	0.51
16 x 1.5	16	1.5	223	1024	0.55
16 x 2	16	2	297	1400	0.70
16 x 2.5	16	2.5	371	1790	0.85
18 x 1.5	18	1.5	198	902	0.62
18 x 2	18	2	264	1231	0.80
20 x 2	20	2	238	1098	0.90
20 x 2.5	20	2.5	297	1400	1.10
22 x 2	22	2	216	990	1.00
25 x 2.5	25	2.5	238	1098	1.41
25 x 3	25	3	285	1339	1.64
28 x 2	28	2	170	765	1.30
30 x 3	30	3	238	1098	2.03
30 x 4	30	4	317	1503	2.61
35 x 2	35	2	136	604	1.65
35 x 3	35	3	204	929	2.50
38 x 3	38	3	188	851	2.98
38 x 5	38	5	313	1481	4.13
42 x 3	42	3	170	765	2.93

Item No.	Designation	Price (per length)
6100053777	TUM-6x1-L6-W5/10-S02-BA	142.60
6100053775	TUM-6x1.5-L6-W5/10-S02-BA	169.50
6100053774	TUM-8x1-L6-W5/10-S02-BA	169.50
6100053773	TUM-8x1.5-L6-W5/10-S02-BA	189.40
6100053772	TUM-8x2-L6-W5/10-S02-BA	244.00
6100053770	TUM-10x1-L6-W5/10-S02-BA	169.50
6100053769	TUM-10x1.5-L6-W5/10-S02-BA	217.00
6100053767	TUM-12x1-L6-W5/10-S02-BA	183.00
6100053766	TUM-12x1.5-L6-W5/10-S02-BA	230.55
6100053765	TUM-12x2-L6-W5/10-S02-BA	270.95
6100053764	TUM-14x2-L6-W5/10-S02-BA	318.40
6100053763	TUM-15x1.5-L6-W5/10-S02-BA	448.40
6100053762	TUM-16x1.5-L6-W5/10-S02-BA	297.85
6100053761	TUM-16x2-L6-W5/10-S02-BA	345.35
6100053760	TUM-16x2.5-L6-W5/10-S02-BA	453.75
6100053759	TUM-18x1.5-L6-W5/10-S02-BA	331.90
6100053758	TUM-18x2-L6-W5/10-S02-BA	372.35
6100053757	TUM-20x2-L6-W5/10-S02-BA	385.80
6100053756	TUM-20x2.5-L6-W5/10-S02-BA	465.60
6100053755	TUM-22x2-L6-W5/10-S02-BA	446.75
6100053750	TUM-25x2.5-L6-W5/10-S02-BA	616.15
6100053749	TUM-25x3-L6-W5/10-S02-BA	684.15
6100053748	TUM-28x2-L6-W5/10-S02-BA	582.15
6100053747	TUM-30x3-L6-W5/10-S02-BA	907.45
6100053746	TUM-30x4-L6-W5/10-S02-BA	1137.20
2030050227	TUM-35x2-L6-W5/10-S02-AP	751.50
2030050228	TUM-35x3-L6-W5/10-S02-AP	1318.75
2030050230	TUM-38x3-L6-W5/10-S02-AP	1049.30
2030050233	TUM-38x5-L6-W5/10-S02-AP	1572.20
2030050235	TUM-42x3-L6-W5/10-S02-AP	1218.65

Standard length 6000 mm (6 m) sold as lengths

Weight unit is kilogram per metre

Specification – Stainless Steel Tube Bright Annealed

Material : Austenitic stainless steel 316/316L

Technical standards: ASTM A213AW/A269

Condition: Cold drawn seamless

Delivery Condition: plugged or capped

Working pressures: calculated for straight lengths at 50° C.

Please note: Tubing should be cut according to relevant fitting manufacturer's assembly instructions.

STAUFF do not recommend the use of rotary cutting tools.

Order Codes

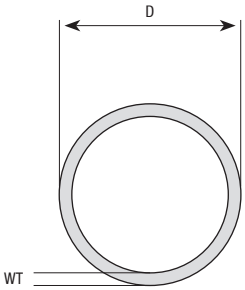
TUM-6x1*-L6*-W5/10*-S02*-BA

* Tubing - OD Metric		**TUM**	* Material	Stainless Steel	**-W5/10**
* Outside Tube Diameter - D (in mm)		**-6**	* Tube Standard	EN 10216-5:2013	**-S02**
* Wall Thickness - WT (in mm)		**x1**	* Tube Finish	Bright Annealed	**-BA**
				Annealed and Pickled (sizes 35 to 42)	**-AP**
* Length	6 metre	**-L6**			

DISCLAIMER: Pressures are calculated for straight tube according to AS4041 for dynamic stress for the carbon steel tube and to AS4041 for static stress for the stainless steel tube and are given as a guide only. Bends may introduce wall thinning with consequent reduction in the allowable pressure. All critical applications should be subject to proving tests. No allowance has been made for corrosion in the calculations. Thin walled tubing will need support sleeves for secure "bite" type and "compression" type fitting assembly.

Tube is generally available ex-stock, subject to prior sale. Minimum mill quantities may apply to certain sizes.

Tube ▪ Imperial
Type TUI ▪ Stainless Steel - Bright Annealed



Size	Tube OD (mm/inches) D		Wall Thickness (mm) WT	Working Pressure (bar)	Burst Pressure (bar)	Weight (kg/m)
4.76 x 0.89	4.76	3/16	0.89	445	1403	0.92
6.35 x 0.89	6.35	1/4	0.89	333	1588	0.12
6.35 x 1.24	6.35	1/4	1.24	464	2292	0.17
6.35 x 1.65	6.35	1/4	1.65	617	3125	0.18
7.94 x 0.89	7.94	5/16	0.89	266	1241	0.17
9.53 x 0.89	9.53	3/8	0.89	222	1019	0.19
9.53 x 1.24	9.53	3/8	1.24	309	1463	0.26
9.53 x 1.65	9.53	3/8	1.65	411	2161	0.33
12.7 x 0.89	12.7	1/2	0.89	166	749	0.27
12.7 x 1.24	12.7	1/2	1.24	232	1145	0.36
12.7 x 1.65	12.7	1/2	1.65	309	1461	0.46
12.7 x 2.11	12.7	1/2	2.11	395	1916	0.56
15.88 x 1.24	15.88	5/8	1.24	186	841	0.45
15.88 x 1.65	15.88	5/8	1.65	247	1144	0.59
19.05 x 1.24	19.05	3/4	1.24	155	403	0.55
19.05 x 1.65	19.05	3/4	1.65	206	940	0.72
19.05 x 2.11	19.05	3/4	2.11	263	1227	0.90
25.4 x 1.65	25.4	1	1.65	154	691	0.98
25.4 x 2.11	25.4	1	2.11	225	1037	1.23

Item No.	Designation	Price (per length)
2030050310	TUI-4.76x0.89-L6-W5/10-S02-BA	393.05
2030050311	TUI-6.35x0.89-L6-W5/10-S02-BA	159.20
2030050313	TUI-6.35x1.24-L6-W5/10-S02-BA	108.50
2030050315	TUI-6.35x1.65-L6-W5/10-S02-BA	115.25
2030050353	TUI-7.94x0.89-L6-W5/10-S02-BA	142.00
2030050317	TUI-9.53x0.89-L6-W5/10-S02-BA	212.40
2030050319	TUI-9.53x1.24-L6-W5/10-S02-BA	156.05
2030050324	TUI-9.53x1.65-L6-W5/10-S02-BA	189.40
2030050326	TUI-12.7x0.89-L6-W5/10-S02-BA	156.05
2030050328	TUI-12.7x1.24-L6-W5/10-S02-BA	207.05
2030050330	TUI-12.7x1.65-L6-W5/10-S02-BA	230.55
2030050332	TUI-12.7x2.11-L6-W5/10-S02-BA	250.40
2030050334	TUI-15.88x1.24-L6-W5/10-S02-BA	364.30
2030050336	TUI-15.88x1.65-L6-W5/10-S02-BA	236.85
2030050337	TUI-19.05x1.24-L6-W5/10-S02-BA	291.35
2030050340	TUI-19.05x1.65-L6-W5/10-S02-BA	318.40
2030050342	TUI-19.05x2.11-L6-W5/10-S02-BA	338.90
2030050345	TUI-25.4x1.65-L6-W5/10-S02-BA	426.85
2030050347	TUI-25.4x2.11-L6-W5/10-S02-BA	501.30

Standard length 6000 mm (6 m) sold as lengths

Weight unit is kilogram per metre

Specification – Stainless Steel Tube Bright Annealed

Material : Austenitic stainless steel 316/316L

Technical standards: ASTM A213AW/A269

Condition: Cold drawn seamless

Delivery Condition: plugged or capped

Working pressures: calculated for straight lengths at 50° C.

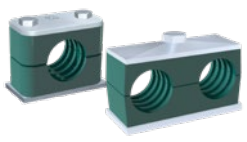
Order Codes

***TUI*-6.35x0.89*-L6*-W5/10*-S02*-BA**

* Tubing - OD Imperial	**TUI**	* Material	Stainless Steel	**-W5/10**
* Outside Tube Diameter - D (in mm)	**-6.35**	* Tube Standard	EN 10216-5:2013	**-S02**
* Wall Thickness - WT (in mm)	**x0.89**	* Tube Finish	Bright Annealed	**-BA**
* Length	6 metre	**-L6**		

Please note: Tubing should be cut according to relevant fitting manufacturer's assembly instructions.
STAUFF do not recommend the use of rotary cutting tools.

Refer to following pages for other STAUFF Line products:

Clamps	24° DIN Fittings	37° JIC Adaptors	SAE Flanges	Ball Valves
				
Section A	**Section B**	**Section D**	**Section I**	**Section K**

DISCLAIMER: Pressures are calculated for straight tube according to AS4041 for dynamic stress for the carbon steel tube and to AS4041 for static stress for the stainless steel tube and are given as a guide only. Bends may introduce wall thinning with consequent reduction in the allowable pressure. All critical applications should be subject to proving tests. No allowance has been made for corrosion in the calculations. Thin walled tubing will need support sleeves for secure "bite" type and "compression" type fitting assembly.

Tube is generally available ex-stock, subject to prior sale. Minimum mill quantities may apply to certain sizes.

Introduction	I 2
SAE Split Flange Halves / Flange Clamps	I 3 - I 4
SAE Flange / Counterflange Adaptors	I 5 - I 7
SAE Single-Part Flanges / Counterflanges	I 8 - I 14
Accessories for SAE Flanges	I 15 - I 18
Assembly Instuctions	I 19 - I 23

STAUFF Flanges

The STAUFF Flanges product group is closely aligned with the market requirements and contains an extensive range of single-part and multi-part SAE flange connectors in the standard and high-pressure series according to SAE J 518 C and ISO 6162-1/2.

The Standard-Pressure Series (3000 PSI) contains flange components with maximum operating pressures between 35 bar and 350 bar or 508 PSI and 5075 PSI and is available for a variety of nominal sizes between DN 13 (1/2") and DN 127 (5").

The 6000 PSI High-Pressure Series is suitable for maximum operating pressures up to 420 bar or 6090 PSI and covers nominal sizes between DN 13 (1/2") and DN 76 (3"),

STAUFF SAE Flanges are used as a reliable alternative in applications where the use of regular tube fittings is not permitted or technically not possible due to the required operating pressure, the size or the limited mounting space.

Compared to tube fittings, the biggest advantage of SAE Flanges is the considerably higher pressure resistance for most sizes and the continuous pressure level in the High-Pressure Series (6000 PSI).

The STAUFF Flanges product group in completed by various types and designs of gear pump flanges made from carbon steel and aluminium in accordance with German and Italian connection standards.

SAE Split Flange Halves
DB

I 4

SAE Flange Clamp
BM

I 4

SAE Split Flange Halves (Flat Styles)
DB-FL

I 4

Order Codes

DB - 3 04 - M - W66

① ② ③ ④ ⑤

① Series

SAE Split Flange Halves	**DB**
SAE Flange Clamp	**BM**
SAE Split Flange Halves (Flat Style)	**DB-FL**

② Group Size

3000 PSI Series	**3**
6000 PSI Series	**6**

③ Nominal Size

DN 13 / 1/2 inch	**01**
DN 19 / 3/4 inch	**02**
DN 25 / 1 inch	**03**
DN 32 / 1-1/4 inch	**04**
DN 38 / 1-1/2 inch	**05**
DN 51 / 2 inch	**06**
DN 64 / 2-1/2 inch	**07**
DN 76 / 3 inch	**08**
DN 89 / 3-1/2 inch	**09**
DN 102 / 4 inch	**10**
DN 127 / 5 inch	**11**

④ Bolt Thread

Metric & UNC version	**(None)**
Metric Only version	**M**
Non-standard Metric Thread version	**M****
UNC Only version	**U**

⑤ Material / Surface Protection

All metal parts chromium VI-free zinc plated + thick-layer-passivation, washers zinc plated + blue chromated (W32)	**W66**
All metal parts made of stainless steel	**W5**

SAE Split Flange Halves

SAE Split Flange Halves
Type DB ▪ 3000 PSI Series

Item No.	Designation	Nominal Size	Price
1730000012	DB-301-W66	1/2	7.65
1730000002	DB-302-W66	3/4	10.65
1730000005	DB-303-W66	1	13.00
1730000009	DB-304-M-W66	1-1/4	16.95
1730000015	DB-305-W66	1-1/2	20.80
1730000019	DB-306-W66	2	27.55
1730000023	DB-307-W66	2-1/2	46.60
1730000026	DB-308-W66	3	65.65
1730000040	DB-309-W66	3-1/2	82.30
1730000042	DB-310-W66	4	107.75
1730000044	DB-311-W66	5	216.55

SAE Split Flange Halves
Type DB ▪ 6000 PSI Series

Item No.	Designation	Nominal Size	Price
1730000028	DB-601-W66	1/2	9.90
1730000030	DB-602-W66	3/4	15.95
1730000032	DB-603-M-W66	1	21.55
1730000034	DB-604-M14-W66	1-1/4	27.90
1730000063	DB-604-W66	1-1/4	27.90
1730000036	DB-605-W66	1-1/2	53.90
1730000038	DB-606-W66	2	76.40

SAE Flange Clamps

SAE Flange Clamp
Type BM ▪ 3000 PSI Series

Item No.	Designation	Nominal Size	Price
1730000011	BM-301-W66	1/2	7.90
1730000001	BM-302-W66	3/4	10.85
1730000003	BM-303-W66	1	13.25
1730000007	BM-304-M-W66	1-1/4	17.50
1730000013	BM-305-W66	1-1/2	21.30
1730000017	BM-306-W66	2	28.30
1730000021	BM-307-W66	2-1/2	47.80
1730000025	BM-308-W66	3	67.25
1730000041	BM-310-W66	4	110.45

SAE Flange Clamp
Type BM ▪ 6000 PSI Series

Item No.	Designation	Nominal Size	Price
1730000027	BM-601-W66	1/2	10.10
1730000029	BM-602-W66	3/4	16.30
1730000031	BM-603-M-W66	1	22.05
1730000033	BM-604-M14-W66	1-1/4	28.55
1730000035	BM-605-W66	1-1/2	55.30
1730000037	BM-606-W66	2	78.30

The following SAE Split Flange Halves / Flange Clamps are available on request

SAE Flange Clamp (Flat Style)
BM-FL
Refer to Catalogue 3 - STAUFF Flanges

SAE Flange Clamp with Metric Tapped Holes
BM-G
Refer to Catalogue 3 - STAUFF Flanges

SAE Split Flange Halves (Flat Style)

SAE Split Flange Halves (Flat Style)
Type DB-FL ▪ 6000 PSI Series

Item No.	Designation	Nominal Size	Price
1730000066	DB-FL-603-M-W66	1	21.80
1730001624	DB-FL-605-W66	1-1/2	50.30
1730000678	DB-FL-607-M-W66	2-1/2	345.85
1730000675	DB-FL-608-M-W66	3	461.10

Separate Bolt Kits and Sealings available, refer to page I 18

SAE Butt-Weld Flange Adaptor
CAG-ST
I 6 - I 7

SAE Butt-Weld Counterflange Adaptor
CSG-ST
I 6

SAE Socket-Weld Counterflange Adaptor
CAG-ES
I 7

SAE Flange Adaptor with Male Metric Thread and 24° Conical Bore (acc. to ISO 8434-1)
CAG-L/S
I 7

SAE 90° Flange Adaptor with Male Metric Thread and 24° Conical Bore (acc. to ISO 8434-1)
CAG90-L/S
I 7

Order Codes

CAG - 3 04 - ST - 42.4/19 - W1

① ② ③ ⑤ ⑥ ⑧

① Series

SAE Flange Adaptor	**CAG**
SAE Counterflange Adaptor	**CSG**

② Group Size

3000 PSI Series	**3**
6000 PSI Series	**6**

③ Nominal Size

DN 13 / 1/2 inch	**01**
DN 19 / 3/4 inch	**02**
DN 25 / 1 inch	**03**
DN 32 / 1-1/4 inch	**04**
DN 38 / 1-1/2 inch	**05**
DN 51 / 2 inch	**06**
DN 64 / 2-1/2 inch	**07**
DN 76 / 3 inch	**08**
DN 89 / 3-1/2 inch	**09**
DN 102 / 4 inch	**10**
DN 127 / 5 inch	**11**

④ Tube O.D.

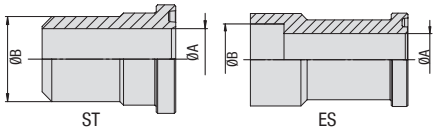
Outside Tube Diameter in mm For 24° Cone Adaptor (CAG-...-..L/S) only.	

⑤ Type

Butt-Weld Flange Adaptor	**ST**
Socket-Weld Flange Adaptor (only CAG/CSG)	**ES**
24° Cone Adaptor (size before type)	**L/S**

⑥ Type Size

ØB / ØA for Type ST	**../..**
Inner ØB / Inner ØA for Types ES	**../..**



⑦ Bolt Thread

Metric & UNC version	**(None)**
UNC Only version	**U**

⑧ Material / Surface Protection

All metal parts made of carbon steel, untreated and oiled	**W1**
CAG/CSG steel untreated (W1), DB/BM + bolts steel thick layer passivated (W66). Kitted with O-Ring	**W57-K**
All metal parts chromium VI-free zinc plated + thick-layer-passivation, washers zinc plated + blue chromated (W32)	**W66**
All metal parts made of stainless steel	**W5**

SAE Butt-Weld Flange Adaptors

SAE Butt-Weld Flange Adaptor
Type CAG-ST ▪ 3000 PSI Series

Item No.	Designation	Nominal Size	Price
1730001852	CAG-301-ST-21.3/13.7-W1	1/2	30.85
1730001604	CAG-302-ST-26.9/19.7-W1	3/4	38.95
1730001330	CAG-303-ST-33.7/24.7-W1	1	42.40
1730003349	CAG-304-ST-42.4/19-W1	1-1/4	52.40
1730001346	CAG-304-ST-42.4/29.8-W1	1-1/4	59.40
1730001867	CAG-305-ST-42/36-W1	1-1/2	67.05
1730001015	CAG-305-ST-48.3/37.7-W1	1-1/2	66.00
1730003350	CAG-305-ST-50/30-W1	1-1/2	58.40
1730001064	CAG-306-ST-60.3/50.3-W1	2	79.75
1730001645	CAG-306-ST-60.3/52-W1	2	79.75
1730003351	CAG-306-ST-61/38-W1	2	70.40
1730001419	CAG-307-ST-74/61.8-W1	2-1/2	117.95
1730001883	CAG-308-ST-89/74-W1	3	164.90
1730001890	CAG-309-ST-89/73-W1	3-1/2	151.65
1730001894	CAG-310-ST-114/96.7-W1	4	293.10
1730000102	CAG-310-ST-114/107-W1	4	329.25

SAE Butt-Weld Flange Adaptor
Type CAG-ST ▪ 6000 PSI Series

Item No.	Designation	Nominal Size	Price
1730001900	CAG-601-ST-21.3/12.3-W1	1/2	34.85
1730001905	CAG-602-ST-26.9/15.7-W1	3/4	43.55
1730001329	CAG-603-ST-33.7/21-W1	1	48.80
1730003352	CAG-604-ST-42.4/19-M14-W1	1-1/4	53.45
1730001587	CAG-604-ST-42.4/29.8-W1	1-1/4	60.35
1730001914	CAG-605-ST-48.3/34-W1	1-1/2	72.20
1730003353	CAG-605-ST-51/28-W1	1-1/2	63.70
1730001917	CAG-606-ST-60.3/42.8-W1	2	132.00

SAE Butt-Weld Counterflange Adaptors

SAE Butt-Weld Counterflange Adaptor
Type CSG-ST ▪ 3000 PSI Series

Item No.	Designation	Nominal Size	Price
1730001923	CSG-301-ST-21.3/13.7-W1	1/2	30.85
1730001597	CSG-302-ST-26.9/19.7-W1	3/4	38.95
1730001328	CSG-303-ST-33.7/24.7-W1	1	42.40
1730001941	CSG-304-ST-42.4/29.8-W1	1-1/4	59.40
1730000131	CSG-305-ST-48.3/37.7-W1	1-1/2	66.00
1730000132	CSG-306-ST-60.3/50.3-W1	2	79.75
1730001621	CSG-307-ST-74/61.8-W1	2-1/2	117.95
1730001972	CSG-308-ST-89/74-W1	3	164.90
1730001983	CSG-310-ST-114/107-W1	4	329.25

SAE Butt-Weld Counterflange Adaptor
Type CSG-ST ▪ 6000 PSI Series

Item No.	Designation	Nominal Size	Price
1730001990	CSG-601-ST-21.3/12.3-W1	1/2	34.85
1730001997	CSG-602-ST-26.9/15.7-W1	3/4	43.55
1730001327	CSG-603-ST-33.7/21-W1	1	48.80
1730001367	CSG-604-ST-42.4/29.8-W1	1-1/4	60.35
1730001615	CSG-605-ST-48.3/34-W1	1-1/2	72.20
1730001614	CSG-606-ST-60.3/42.8-W1	2	132.00

Separate Bolt Kits and Sealings available, refer to page I 18

SAE Butt-Weld Counterflange Adaptors

SAE Butt-Weld Flange / Counterflange Adaptor
Type CAG-ST-...-K ▪ 3000 PSI Series ▪ Kitted with O-Ring

Item No.	Designation	Nominal Size	Price
1710002011	CAG-304-ST-42.4/19-U-W57-K	1-1/4	137.95
1710002010	CAG-304-ST-42.4/19-W57-K	1-1/4	78.05
1710002012	CAG-305-ST-50/30-W57-K	1-1/2	90.90
1710002013	CAG-306-ST-61/38-U-W57-K	2	186.15
1710002232	CAG-306-ST-61/38-W57-K	2	109.65

SAE Socket-Weld Flange Adaptors

SAE Socket-Weld Flange Adaptor
Type CAG-ES ▪ 3000 PSI Series

Item No.	Designation	Nominal Size	Price
1730001528	CAG-302-ES-27.3/19-W1	3/4	41.75
1730001533	CAG-305-ES-49/38-W1	1-1/2	90.50
1730001535	CAG-306-ES-61/50-W1	2	126.15
1730001537	CAG-308-ES-90.5/70-W1	3	290.70

SAE Flange Adaptors

SAE Flange Adaptor with Male Metric Thread
and 24° Conical Bore (acc. to ISO 8434-1)
Type CAG-L/S ▪ 3000 PSI Series

Item No.	Designation	Nominal Size	Price
1730000613	CAG-301-15L-W66	1/2	37.75
1730000188	CAG-302-18L-W66	3/4	36.95
1730000618	CAG-302-22L-W66	3/4	38.25
1730000627	CAG-302-28L-W66	3/4	38.05
1730000620	CAG-303-28L-W66	1	42.65
1730000629	CAG-304-28L-W66	1-1/4	55.00
1730000623	CAG-304-35L-W66	1-1/4	53.60
1730000625	CAG-305-42L-W66	1-1/2	77.90
1730000614	CAG-301-16S-W66	1/2	38.20
1730000610	CAG-302-20S-W66	3/4	40.25
1730000689	CAG-302-25S-W66	3/4	40.70
1730000619	CAG-303-25S-W66	1	45.25
1730000628	CAG-303-30S-W66	1	46.60
1730000621	CAG-304-25S-W66	1-1/4	57.60
1730000622	CAG-304-30S-W66	1-1/4	58.65
1730000630	CAG-304-38S-W66	1-1/4	61.30
1730000624	CAG-305-38S-W66	1-1/2	85.65

SAE Flange Adaptor with Male Metric Thread
and 24° Conical Bore (acc. to ISO 8434-1)
Type CAG-L/S ▪ 6000 PSI Series

Item No.	Designation	Nominal Size	Price
1730000632	CAG-601-16S-W66	1/2	40.40
1730000633	CAG-602-16S-W66	3/4	40.70
1730000634	CAG-602-20S-W66	3/4	41.00
1730000636	CAG-602-25S-W66	3/4	42.70
1730000637	CAG-602-30S-W66	3/4	43.30
1730000639	CAG-603-25S-W66	1	59.10
1730000641	CAG-603-30S-W66	1	60.05
1730000192	CAG-604-30S-W66	1-1/4	72.70
1730000156	CAG-604-38S-W66	1-1/4	79.85
1730000160	CAG-605-38S-W66	1-1/2	103.85

SAE 90° Flange Adaptors

SAE 90° Flange Adaptor with Male Metric Thread
and 24° Conical Bore (acc. to ISO 8434-1)
Type CAG90-L/S ▪ 6000 PSI Series

Item No.	Designation	Nominal Size	Price
1730000918	CAG90-602-20S-W3	3/4	112.10
1730001294	CAG90-603-25S-W3	1	137.55
1730001293	CAG90-603-30S-W3	1	128.35
1730001292	CAG90-604-38S-W3	1-1/4	165.55
1730000879	CAG90-605-38S-W3	1-1/2	230.75

The following SAE Flange / Counterflange Adaptors are available on request

SAE Flange Adaptor with Male BSPT Thread
CAG-T
Refer to Catalogue 3 - STAUFF Flanges

SAE Counterflange Adaptor with Male BSPT Thread
CSG-T
Refer to Catalogue 3 - STAUFF Flanges

SAE Flange Adaptor with Male NPT Thread
CAG-N
Refer to Catalogue 3 - STAUFF Flanges

SAE Counterflange Adaptor with Male NPT Thread
CSG-N
Refer to Catalogue 3 - STAUFF Flanges

SAE 90° Butt-Weld Flange Adaptor
CAG90-ST
Refer to Catalogue 3 - STAUFF Flanges

Separate Bolt Kits and Sealings available, refer to page I 18

SAE Single-Part Flange with Female BSPP Thread BFX-G — I 10

SAE Single-Part Counterflange with Female BSPP Thread BAS-G — I 10

SAE Single-Part Flange with Female NPT Thread BFX-N — I 11

SAE Single-Part Counterflange with Female NPT Thread BAS-N — I 11

SAE Single-Part Butt-Weld Flange for High-Pressure Tubes BFX-ST — I 12

SAE Single-Part Butt-Weld Counterflange for High-Pressure Tubes BAS-ST — I 12

SAE Single-Part Socket-Weld Flange BFX-ES — I 13

SAE Single-Part Socket-Weld Counterflange BAS-ES — I 13

SAE Single-Part Socket-Weld Flange (Flat Style) BFX-FL-ES — I 13

SAE Single-Part Flange with Male Metric Thread and 24° Conical Bore (acc. to ISO 8434-1) BFX-L/S — I 14

SAE Single-Part Flange with Male UN/UNF Thread and 37° JIC Taper (acc. to ISO 8434-2 / SAE J514) BFX-J — I 14

SAE 90° Single-Part Flange with Female BSPP Thread BFX90-G — I 14

SAE 90° Single-Part Socket-Weld Flange BFX90-ES — I 14

Order Codes

BFX - 3 04 - ST - 42.8/32 - W1

① ② ③ ⑤ ⑥ ⑧

① Series

SAE Flange (O-Ring Groove)	**BFX**
SAE Counterflange (Flat Face)	**BAS**
SAE 90° Flange (O-Ring Groove)	**BFX90**
SAE Flange Flat Version	**BFX-FL**

② Group Size

3000 PSI Series	**3**
6000 PSI Series	**6**

③ Nominal Size

DN 13 / 1/2 inch	**01**
DN 19 / 3/4 inch	**02**
DN 25 / 1 inch	**03**
DN 32 / 1-1/4 inch	**04**
DN 38 / 1-1/2 inch	**05**
DN 51 / 2 inch	**06**
DN 64 / 2-1/2 inch	**07**
DN 76 / 3 inch	**08**
DN 89 / 3-1/2 inch	**09**
DN 102 / 4 inch	**10**
DN 127 / 5 inch	**11**

④ Tube O.D.

Outside Tube Diameter in mm
For 24° Cone Flange (BFX-...-..L/S) only.

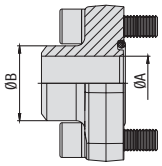
⑤ Type

BSPP Screw-in Flange	**G**
NPT Screw-in Flange	**N**
Butt-Weld Flange	**ST**
Socket-Weld Flange	**ES**
24° Cone Flange	**L/S**
JIC 37° Cone Flange	**J**

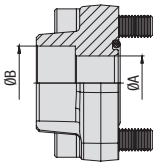
Standard thread shown directly after the code letter (type J)

⑥ Type Size

ØB / ØA for Types ST	**../..**
Inner ØB / Inner ØA for Types ES	**../..**



ST



ES

⑦ Bolt Thread

Metric & UNC version	**(None)**
Metric Only version	**M**
Non-standard Metric Thread version	**M****
UNC Only version	**U**

⑧ Material / Surface Protection

All metal parts made of carbon steel, untreated and oiled	**W1**
Flange steel (W1) , bolts thick layer passivated (W66). Kitted with O-Ring	**W46-K**
All metal parts chromium VI-free zinc plated + thick-layer-passivation, washers zinc plated + blue chromated (W32)	**W66**
All metal parts made of stainless steel	**W5**

SAE Flanges ▪ BSPP Screw-in Flange

SAE Single-Part Flange with Female BSPP Thread
Type BFX-G ▪ 3000 PSI Series

Item No.	Designation	Thread Size	Nominal Size	Price
1730000200	BFX-301-G-W1	1/2	1/2	43.80
1730000202	BFX-302-G-W1	3/4	3/4	47.45
1730000203	BFX-303-G-W1	1	1	54.85
1730000205	BFX-304-G-W1	1-1/4	1-1/4	67.35
1730000209	BFX-305-G-W1	1-1/2	1-1/2	80.20
1730000210	BFX-306-G-W1	2	2	92.80
1730000211	BFX-307-G-W1	2-1/2	2-1/2	110.65
1730000215	BFX-308-G-W1	3	3	133.70
1710000236	BFX-301-G-W46-K	1/2	1/2	53.00
1710000125	BFX-302-G-W46-K	3/4	3/4	58.70
1710000121	BFX-303-G-W46-K	1	1	67.15
1710000120	BFX-304-G-W46-K	1-1/4	1-1/4	82.85
1710000042	BFX-305-G-W46-K	1-1/2	1-1/2	98.90
1710000056	BFX-306-G-W46-K	2	2	113.80
1710000054	BFX-307-G-W46-K	2-1/2	2-1/2	133.55
1710000098	BFX-308-G-W46-K	3	3	171.10

SAE Single-Part Flange with Female BSPP Thread
Type BFX-G ▪ 6000 PSI Series

Item No.	Designation	Thread Size	Nominal Size	Price
1730000218	BFX-601-G-W1	1/2	1/2	49.20
1730000220	BFX-602-G-W1	3/4	3/4	54.85
1730000222	BFX-603-G-W1	1	1	67.35
1730000224	BFX-604-G-M14-W1	1-1/4	1-1/4	91.00
1730000193	BFX-604-G-W1	1-1/4	1-1/4	91.00
1730000226	BFX-605-G-W1	1-1/2	1-1/2	133.70
1730000228	BFX-606-G-W1	2	2	173.30
1730000229	BFX-607-G-W1	2-1/2	2-1/2	321.45
1730003348	BFX-608-G-W1	3	3	395.75
1710000280	BFX-601-G-W46-K	1/2	1/2	58.40
1710000053	BFX-602-G-W46-K	3/4	3/4	66.10
1710000052	BFX-603-G-W46-K	1	1	84.75
1710000081	BFX-604-G-M14-W46-K	1-1/4	1-1/4	116.85
1710000050	BFX-605-G-W46-K	1-1/2	1-1/2	168.10
1710000059	BFX-606-G-W46-K	2	2	231.05
1710002004	BFX-607-G-W46-K	2-1/2	2-1/2	475.25
1710002007	BFX-608-G-W46-K	3	3	785.60

SAE Counterflanges ▪ BSPP Screw-in Flange

SAE Single-Part Counterflange with Female BSPP Thread
Type BAS-G ▪ 3000 PSI Series

Item No.	Designation	Thread Size	Nominal Size	Price
1730000249	BAS-301-G-W1	1/2	1/2	43.80
1730000251	BAS-302-G-W1	3/4	3/4	47.45
1730000253	BAS-303-G-W1	1	1	54.85
1730000255	BAS-304-G-W1	1-1/4	1-1/4	67.35
1730000256	BAS-305-G-W1	1-1/2	1-1/2	80.20
1730000258	BAS-306-G-W1	2	2	92.80
1730000260	BAS-307-G-W1	2-1/2	2-1/2	110.65
1730000261	BAS-308-G-W1	3	3	133.70

SAE Single-Part Counterflange with Female BSPP Thread
Type BAS-G ▪ 6000 PSI Series

Item No.	Designation	Thread Size	Nominal Size	Price
1730000264	BAS-601-G-W1	1/2	1/2	49.20
1730000265	BAS-602-G-W1	3/4	3/4	54.85
1730000266	BAS-603-G-W1	1	1	67.35
1730000267	BAS-604-G-M14-W1	1-1/4	1-1/4	91.00
1730000268	BAS-605-G-W1	1-1/2	1-1/2	133.70
1730000270	BAS-606-G-W1	2	2	173.30
1730002494	BAS-607-G-W1	2-1/2	2-1/2	321.45
1730003345	BAS-608-G-W1	3	3	376.80

Separate Bolt Kits and Sealings available, refer to page I 18

SAE Flanges ▪ NPT Screw-in Flange

SAE Single-Part Flange with Female NPT Thread
Type BFX-N ▪ 3000 PSI Series

Item No.	Designation	Thread Size	Nominal Size	Price
1730000230	BFX-301-N-W1	1/2	1/2	49.20
1730000231	BFX-302-N-W1	3/4	3/4	54.85
1730000233	BFX-303-N-W1	1	1	61.80
6100139071	BFX-304-N-M12-W1	1-1/4	1-1/4	197.85
1730000234	BFX-304-N-W1	1-1/4	1-1/4	74.45
1730000235	BFX-305-N-W1	1-1/2	1-1/2	92.80
1730000236	BFX-306-N-W1	2	2	105.25
1730000237	BFX-307-N-W1	2-1/2	2-1/2	132.10
1730000534	BFX-308-N-W1	3	3	153.35
1710000780	BFX-301-N-W46-K	1/2	1/2	58.40
1710000781	BFX-302-N-W46-K	3/4	3/4	66.10
1710000782	BFX-303-N-W46-K	1	1	74.10
1710000783	BFX-304-N-W46-K	1-1/4	1-1/4	89.95
1710000784	BFX-305-N-W46-K	1-1/2	1-1/2	111.50
1710000785	BFX-306-N-W46-K	2	2	126.25
1710002000	BFX-307-N-W46-K	2-1/2	2-1/2	155.00
1710000058	BFX-308-N-W46-K	3	3	190.75

SAE Single-Part Flange with Female NPT Thread
Type BFX-N ▪ 6000 PSI Series

Item No.	Designation	Thread Size	Nominal Size	Price
1730000239	BFX-601-N-W1	1/2	1/2	54.85
1730000240	BFX-602-N-W1	3/4	3/4	61.80
1730000133	BFX-603-N-W1	1	1	76.40
1730000134	BFX-604-N-M14-W1	1-1/4	1-1/4	103.70
1730000787	BFX-604-N-W1	1-1/4	1-1/4	103.70
1730000241	BFX-605-N-W1	1-1/2	1-1/2	153.30
1730000242	BFX-606-N-W1	2	2	201.20
1710000786	BFX-601-N-W46-K	1/2	1/2	64.05
1710000787	BFX-602-N-W46-K	3/4	3/4	73.05
1710000788	BFX-603-N-W46-K	1	1	93.80
1710000789	BFX-604-N-M14-W46-K	1-1/4	1-1/4	129.55
1710000790	BFX-605-N-W46-K	1-1/2	1-1/2	187.70
1710000791	BFX-606-N-W46-K	2	2	258.95

SAE Counterflanges ▪ NPT Screw-in Flange

SAE Single-Part Counterflange with Female NPT Thread
Type BAS-N ▪ 3000 PSI Series

Item No.	Designation	Thread Size	Nominal Size	Price
1730000995	BAS-301-N-W1	1/2	1/2	31.10
1730000524	BAS-302-N-W1	3/4	3/4	54.85
1730000525	BAS-303-N-W1	1	1	61.80
1730000526	BAS-304-N-W1	1-1/4	1-1/4	74.80
1730000527	BAS-305-N-W1	1-1/2	1-1/2	92.80
1730001001	BAS-306-N-W1	2	2	105.25
1730001003	BAS-307-N-W1	2-1/2	2-1/2	132.10
1730000609	BAS-308-N-W1	3	3	153.35

SAE Single-Part Counterflange with Female NPT Thread
Type BAS-N ▪ 6000 PSI Series

Item No.	Designation	Thread Size	Nominal Size	Price
1730001005	BAS-601-N-W1	1/2	1/2	54.85
1730000528	BAS-602-N-W1	3/4	3/4	61.80
1730000529	BAS-603-N-W1	1	1	76.40
1730001009	BAS-604-N-M14-W1	1-1/4	1-1/4	105.25
1730001011	BAS-605-N-W1	1-1/2	1-1/2	153.35
1730001013	BAS-606-N-W1	2	2	201.20

The following SAE Single-Part Flanges / Counterflanges are available on request

SAE Single-Part Flange with Female UN/UNF Thread
BFX-U
Refer to Catalogue 3 - STAUFF Flanges

SAE Single-Part Butt-Weld Flange for Low-Pressure Tubes
BFX-STRE
Refer to Catalogue 3 - STAUFF Flanges

SAE Single-Part Butt-Weld Counterflange for Low-Pressure Tubes
BAS-STRE
Refer to Catalogue 3 - STAUFF Flanges

SAE Single-Part Butt-Weld Flange for Metric Tubes
BFX-SRE
Refer to Catalogue 3 - STAUFF Flanges

SAE Single-Part Butt-Weld Counterflange for Metric Tubes
BAS-SRE
Refer to Catalogue 3 - STAUFF Flanges

SAE Single-Part Socket-Weld Counterflange (Flat Style)
BAS-FL-ES
Refer to Catalogue 3 - STAUFF Flanges

SAE Single-Part Flange with Male BSPP Thread and 60° Conical Bore
BFX-B
Refer to Catalogue 3 - STAUFF Flanges

SAE 90° Single-Part Flange with Female NPT Thread
BFX90-N
Refer to Catalogue 3 - STAUFF Flanges

SAE 90° Single-Part Butt-Weld Flange for High-Pressure Tubes
BFX90-STC
Refer to Catalogue 3 - STAUFF Flanges

SAE 90° Single-Part Butt-Weld Flange for Metric Tubes
BFX90-SRE
Refer to Catalogue 3 - STAUFF Flanges

SAE 90° Single-Part Flange with Male Metric Thread and 24° Conical Bore
BFX90-L/S
Refer to Catalogue 3 - STAUFF Flanges

SAE Flanges ▪ Butt-Weld Flange

SAE Single-Part Butt-Weld Flange
for High-Pressure Tubes
Type BFX-ST ▪ 3000 PSI Series

Item No.	Designation	Nominal Size	Price
1730000919	BFX-301-ST-21.6/13-W1	1/2	41.95
1730000920	BFX-302-ST-28/19-W1	3/4	43.80
1730000275	BFX-303-ST-34/25-W1	1	51.05
1730000276	BFX-304-ST-42.8/32-W1	1-1/4	58.25
1730000277	BFX-305-ST-48.6/38-W1	1-1/2	74.45
1730000278	BFX-306-ST-61/51-W1	2	89.25
1730000279	BFX-307-ST-77/63-W1	2-1/2	106.70
1730000280	BFX-308-ST-92/73-W1	3	126.50
1710020001	BFX-301-ST-21.6/13-W46-K	1/2	51.15
1710000361	BFX-302-ST-28/19-W46-K	3/4	55.05
1710000362	BFX-303-ST-34/25-W46-K	1	63.35
1710000257	BFX-304-ST-42.8/32-W46-K	1-1/4	73.75
1710000363	BFX-305-ST-48.6/38-W46-K	1-1/2	93.15
1710000023	BFX-306-ST-61/51-W46-K	2	110.25
1710000240	BFX-307-ST-77/63-W46-K	2-1/2	129.60
1710000241	BFX-308-ST-92/73-W46-K	3	163.90

SAE Single-Part Butt-Weld Flange
for High-Pressure Tubes
Type BFX-ST ▪ 6000 PSI Series

Item No.	Designation	Nominal Size	Price
1730000926	BFX-601-ST-21.5/13-W1	1/2	47.40
1730000927	BFX-602-ST-28/19-W1	3/4	51.05
1730000749	BFX-603-ST-35/22-W1	1	68.95
1730000750	BFX-604-ST-42.8/29-M14-W1	1-1/4	103.95
1730001059	BFX-605-ST-48.6/32-W1	1-1/2	154.75
1730001061	BFX-606-ST-61/43-W1	2	203.30
1730001060	BFX-606-ST-61/51-W1	2	164.35
1730000992	BFX-607-ST-76.1/51-W1	2-1/2	380.85
1710000364	BFX-601-ST-21.5/13-W46-K	1/2	56.60
1710000354	BFX-602-ST-28/19-W46-K	3/4	62.30
1710000116	BFX-603-ST-35/22-W46-K	1	86.35
1710000356	BFX-604-ST-42.8/29-M14-W46-K	1-1/4	129.80
1710000357	BFX-605-ST-48.6/32-W46-K	1-1/2	189.15
1710000358	BFX-606-ST-61/43-W46-K	2	261.05
1710001010	BFX-606-ST-61/51-W46-K	2	222.10
1710002005	BFX-607-ST-76.1/51-W46-K	2-1/2	534.65

SAE Counterflanges ▪ Butt-Weld Counterflange

SAE Single-Part Butt-Weld Counterflange
for High-Pressure Tubes
Type BAS-ST ▪ 3000 PSI Series

Item No.	Designation	Nominal Size	Price
1730000285	BAS-301-ST-21.6/13-W1	1/2	41.95
1730000287	BAS-302-ST-28/19-W1	3/4	43.80
1730000288	BAS-303-ST-34/25-W1	1	51.05
1730000290	BAS-304-ST-42.8/32-W1	1-1/4	58.25
1730000116	BAS-305-ST-48.6/38-W1	1-1/2	74.45
1730000295	BAS-306-ST-61/51-W1	2	89.25
1730000297	BAS-307-ST-77/63-W1	2-1/2	105.25
1730000299	BAS-308-ST-92/73-W1	3	126.50

SAE Single-Part Butt-Weld Counterflange
for High-Pressure Tubes
Type BAS-ST ▪ 6000 PSI Series

Item No.	Designation	Nominal Size	Price
1730001068	BAS-601-ST-21.6/13-W1	1/2	47.40
1730001070	BAS-602-ST-28/19-W1	3/4	51.05
1730001071	BAS-603-ST-34/25-W1	1	60.05
1730000303	BAS-604-ST-42.8/29-M14-W1	1-1/4	103.95
1730000991	BAS-605-ST-48.6/32-W1	1-1/2	154.75
1730001043	BAS-606-ST-61/43-W1	2	203.30
1730001075	BAS-607-ST-76/51-W1	2-1/2	325.45
1730003346	BAS-608-ST-90/58-W1	3	376.80

Separate Bolt Kits and Sealings available, refer to page I 18

SAE Flanges ▪ Socket-Weld Flange

SAE Single-Part Socket-Weld Flange
Type BFX-ES ▪ 3000 PSI Series

Item No.	Designation	Nominal Size	Price
1730000182	BFX-301-ES-21.6/13-W1	1/2	41.95
1730000178	BFX-302-ES-27.2/19-W1	3/4	43.55
1730000172	BFX-303-ES-34/25-W1	1	51.05
1730000173	BFX-304-ES-42.8/32-W1	1-1/4	58.25
1730000164	BFX-305-ES-48.6/38-W1	1-1/2	74.45
1730000163	BFX-306-ES-61/51-W1	2	89.25
1730000166	BFX-307-ES-76.6/63-W1	2-1/2	105.25
1730000165	BFX-308-ES-90/73-W1	3	127.75
1710000161	BFX-301-ES-21.6/13-W46-K	1/2	51.15
1710000088	BFX-302-ES-27.2/19-W46-K	3/4	54.80
1710000089	BFX-303-ES-34/25-W46-K	1	63.35
1710000090	BFX-304-ES-42.8/32-W46-K	1-1/4	73.75
1710000091	BFX-305-ES-48.6/38-W46-K	1-1/2	93.15
1710000165	BFX-306-ES-61/51-W46-K	2	110.25
1710000388	BFX-307-ES-76.6/63-W46-K	2-1/2	128.15
1710000242	BFX-308-ES-90.5/73-W46-K	3	163.95

SAE Single-Part Socket-Weld Flange
Type BFX-ES ▪ 6000 PSI Series

Item No.	Designation	Nominal Size	Price
1730000177	BFX-601-ES-21.6/13-W1	1/2	47.40
1730000897	BFX-602-ES-27.2/19-W1	3/4	51.05
1730000181	BFX-603-ES-34/25-W1	1	60.05
1730000176	BFX-604-ES-42.8/32-M14-W1	1-1/4	83.75
1730000167	BFX-605-ES-48.6/38-W1	1-1/2	124.75
1730000171	BFX-606-ES-61/51-W1	2	164.35
1730003076	BFX-607-ES-76.6/63-W1	2-1/2	264.35
1730003347	BFX-608-ES-90.5/73-W1	3	379.40
1710000304	BFX-601-ES-21.6/13-W46-K	1/2	56.60
1710000278	BFX-602-ES-27.2/19-W46-K	3/4	62.30
1710000134	BFX-603-ES-34/25-W46-K	1	77.45
1710000135	BFX-604-ES-42.8/32-M14-W46-K	1-1/4	109.60
1710000281	BFX-605-ES-48.6/38-W46-K	1-1/2	159.15
1710000282	BFX-606-ES-61/51-W46-K	2	222.10
1710001603	BFX-607-ES-76.6/63-W46-K	2-1/2	418.15
1710000673	BFX-608-ES-90.5/73-W46-K	3	769.25

SAE Counterflanges ▪ Socket-Weld Counterflange

SAE Single-Part Socket-Weld Counterflange
Type BAS-ES ▪ 3000 PSI Series

Item No.	Designation	Nominal Size	Price
1730000309	BAS-301-ES-21.6/13-W1	1/2	41.95
1730000313	BAS-302-ES-27.2/19-W1	3/4	43.80
1730000317	BAS-303-ES-34/25-W1	1	51.05
1730000321	BAS-304-ES-42.8/32-W1	1-1/4	58.25
1730000327	BAS-305-ES-48.6/38-W1	1-1/2	74.45
1730000329	BAS-306-ES-61/51-W1	2	89.25
1730000331	BAS-307-ES-76.6/63-W1	2-1/2	105.25
1730000333	BAS-308-ES-90.5/73-W1	3	126.50

SAE Single-Part Socket-Weld Counterflange
Type BAS-ES ▪ 6000 PSI Series

Item No.	Designation	Nominal Size	Price
1730000338	BAS-601-ES-21.6/13-W1	1/2	47.40
1730000137	BAS-602-ES-27.2/19-W1	3/4	51.05
1730000342	BAS-603-ES-34/25-W1	1	60.05
1730000345	BAS-604-ES-42.8/32-M14-W1	1-1/4	83.75
1730000348	BAS-605-ES-48.6/38-W1	1-1/2	124.75
1730001034	BAS-605-ES-50.5/38-W1	1-1/2	154.75
1730000351	BAS-606-ES-61/51-W1	2	164.35
1730000353	BAS-607-ES-76.6/63-W1	2-1/2	384.30
1730000354	BAS-608-ES-90.5/73-W1	3	530.55

SAE Flanges (Flat Style) ▪ Socket-Weld Flange

SAE Single-Part Socket-Weld Flange (Flat Style)
Type BFX-FL-ES ▪ 3000 PSI Series

Item No.	Designation	Nominal Size	Price
1730000861	BFX-FL-305-ES-49/42-W1	1-1/2	60.05
1730000862	BFX-FL-306-ES-61/53-W1	2	60.75
1730001353	BFX-FL-307-ES-77/64-W1	2-1/2	67.85
1730000863	BFX-FL-308-ES-90/80-W1	3	103.40
1730001038	BFX-FL-309-ES-103/93-W1	3-1/2	124.25
1730001039	BFX-FL-310-ES-116/105-W1	4	132.95

Separate Bolt Kits and Sealings available, refer to page I 18

SAE Flanges ▪ 24° Cone Flange

SAE Single-Part Flange with Male Metric Thread and 24° Conical Bore (acc. to ISO 8434-1)
Type BFX-L/S ▪ 3000 PSI Series

Item No.	Designation	Thread Size	Nominal Size	Price
1730001495	BFX-301-15L-W66	M22 x 1.5	1/2	77.15
1730001496	BFX-302-22L-W66	M30 x 2	3/4	92.50
1730001497	BFX-303-28L-W66	M36 x 2	1	100.85
1730001499	BFX-304-35L-W66	M45 x 2	1-1/4	123.15
1730001503	BFX-305-42L-W66	M52 x 2	1-1/2	153.60
1730000872	BFX-302-20S-W66	M30 x 2	3/4	92.50
1730001361	BFX-303-20S-W66	M30 x 2	1	100.85
1730001362	BFX-303-25S-W66	M36 x 2	1	100.85
1730000888	BFX-304-30S-W66	M42 x 2	1-1/4	123.15
1730001500	BFX-305-38S-W66	M52 x 2	1-1/2	153.60

SAE Single-Part Flange with Male Metric Thread and 24° Conical Bore (acc. to ISO 8434-1)
Type BFX-L/S ▪ 6000 PSI Series

Item No.	Designation	Thread Size	Nominal Size	Price
1730001501	BFX-601-16S-W66	M24 x 1.5	1/2	97.10
1730001502	BFX-602-16S-W66	M24 x 1.5	3/4	121.10
1730000495	BFX-602-20S-W66	M30 x 2	3/4	121.10
1730001261	BFX-602-25S-W66	M36 x 2	3/4	121.10
1730000496	BFX-603-20S-W66	M30 x 2	1	149.55
1730001504	BFX-604-30S-M14-W66	M42 x 2	1-1/4	161.50
1730001506	BFX-604-38S-M14-W66	M52 x 2	1-1/4	161.50
1730001363	BFX-605-38S-W66	M52 x 2	1-1/2	179.75

SAE Flanges ▪ JIC 37° Flange

SAE Single-Part Flange with Male UN/UNF Thread and 37° JIC Taper (acc. to ISO 8434-2 / SAE J514)
Type BFX-J ▪ 3000 PSI Series

Item No.	Designation	Thread Size	Nominal Size	Price
1730001456	BFX-301-J08-W66	3/4–16	1/2	77.15
1730001458	BFX-302-J12-W66	1-1/2–12	3/4	92.50
1730002240	BFX-303-J12-W66	1-1/2–12	1	122.95
1730001459	BFX-303-J16-W66	1-5/16–12	1	100.85
1730001461	BFX-304-J20-W66	1-5/8–12	1-1/4	123.15
1730001462	BFX-305-J24-W66	1-7/8–12	1-1/2	153.60
1710001993	BFX-301-J08-W66-K	3/4–16	1/2	86.35
1710001994	BFX-302-J12-W66-K	1-1/2–12	3/4	103.75
1710001995	BFX-303-J12-W66-K	1-1/2–12	1	135.25
1710001996	BFX-303-J16-W66-K	1-5/16–12	1	115.25
1710001997	BFX-304-J16-W66-K	1-5/16–12	1-1/4	140.80
1710001998	BFX-304-J20-W66-K	1-5/8–12	1-1/4	138.65
1710001999	BFX-305-J24-W66-K	1-7/8–12	1-1/2	172.30

SAE Single-Part Flange with Male UN/UNF Thread and 37° JIC Taper (acc. to ISO 8434-2 / SAE J514)
Type BFX-J ▪ 6000 PSI Series

Item No.	Designation	Thread Size	Nominal Size	Price
1730001343	BFX-602-J12-W66	1-1/2–12	3/4	100.25
1730001428	BFX-603-J16-W66	1-5/16–12	1	123.15
1730001466	BFX-604-J20-M14-W66	1-5/8–12	1-1/4	161.50
1730001467	BFX-605-J24-W66	1-7/8–12	1-1/2	200.05
1710001343	BFX-601-J12-W66-K	1-1/2–12	1/2	111.50
1710002001	BFX-603-J16-W66-K	1-5/16–12	1	140.55
1710002002	BFX-604-J20-M14-W66-K	1-5/8–12	1-1/4	195.70
1710002003	BFX-605-J24-W66-K	1-7/8–12	1-1/2	218.75

SAE 90° Flanges

SAE 90° Single-Part Flange with Female BSPP Thread
Type BFX90-G ▪ 3000 PSI Series

Item No.	Designation	Thread Size	Nominal Size	Price
1730000381	BFX90-301-G-W1	1/2	1/2	98.15
1730000382	BFX90-302-G-W1	3/4	3/4	105.35
1730000383	BFX90-303-G-W1	1	1	117.80
1730000384	BFX90-304-G-W1	1-1/4	1-1/4	137.40
1730000385	BFX90-305-G-W1	1-1/2	1-1/2	169.45
1730000386	BFX90-306-G-W1	2	2	205.05
1710000465	BFX90-301-G-W46-K	1/2	1/2	107.35
1710000269	BFX90-302-G-W46-K	3/4	3/4	116.60
1710000268	BFX90-303-G-W46-K	1	1	130.10
1710000057	BFX90-304-G-W46-K	1-1/4	1-1/4	152.90
1710000262	BFX90-305-G-W46-K	1-1/2	1-1/2	188.15
1710000055	BFX90-306-G-W46-K	2	2	226.05

SAE 90° Single-Part Flange with Female BSPP Thread
Type BFX90-G ▪ 6000 PSI Series

Item No.	Designation	Thread Size	Nominal Size	Price
1730000388	BFX90-601-G-W1	1/2	1/2	108.00
1730000389	BFX90-602-G-W1	3/4	3/4	118.40
1730000390	BFX90-603-G-W1	1	1	136.10
1730000391	BFX90-604-G-M14-W1	1-1/4	1-1/4	167.70
1730000392	BFX90-605-G-W1	1-1/2	1-1/2	203.10
1730000393	BFX90-606-G-W1	2	2	494.30
1710000559	BFX90-601-G-W46-K	1/2	1/2	117.20
1710000079	BFX90-602-G-W46-K	3/4	3/4	129.65
1710000078	BFX90-603-G-W46-K	1	1	153.50
1710000434	BFX90-604-G-M14-W46-K	1-1/4	1-1/4	193.55
1710000860	BFX90-605-G-W46-K	1-1/2	1-1/2	237.50
1710002009	BFX90-606-G-W46-K	2	2	552.05

SAE 90° Single-Part Socket-Weld Flange
Type BFX90-ES ▪ 6000 PSI Series

Item No.	Designation	Nominal Size	Price
1730000374	BFX90-602-ES-27.2/19-W1	3/4	108.80
1730001404	BFX90-603-ES-30.3/25-W1	1	156.60
1730000376	BFX90-603-ES-34/25-W1	1	126.50
1730000379	BFX90-605-ES-48.6/38-W1	1-1/2	188.70

Separate Bolt Kits and Sealings available, refer to page I 18

SAE Single-Part Blanking Flange
BFX-...-CP
I 16

SAE Single-Part Blanking Counterflange
BAS-...-CP
I 16

SAE Sandwich Plate with Female BSPP Port
SPL-G04-L
I 17

SAE Blindplug (Standard)
CAG-BP
I 17

SAE Sandwich Plate
SPL
I 17

SAE Cover Plate
CPL
I 17

Bolt Kits and Sealings
I 18

O-Ring for SAE Flanges
I 18

Order Codes

BFX - 6 04 - CP - M14 - W1

① ② ③ ④ ⑤ ⑥

① Series

SAE Flange (O-Ring Groove)	**BFX**
SAE Counterflange (Flat Face)	**BAS**
SAE Blindplug	**CAG-BP**
SAE Sandwich Plate	**SPL**
SAE Cover Plate	**CPL**

② Group Size

3000 PSI Series	**3**
6000 PSI Series	**6**

③ Nominal Size

DN 13 / 1/2 inch	**01**
DN 19 / 3/4 inch	**02**
DN 25 / 1 inch	**03**
DN 32 / 1-1/4 inch	**04**
DN 38 / 1-1/2 inch	**05**
DN 51 / 2 inch	**06**
DN 64 / 2-1/2 inch	**07**
DN 76 / 3 inch	**08**
DN 89 / 3-1/2 inch	**09**
DN 102 / 4 inch	**10**
DN 127 / 5 inch	**11**

④ Type

Single-Part Blanking (BFX / BAS)	**CP**
With Female BSPP Port (only SPL)	**G04-L**

⑤ Bolt Thread

Metric & UNC version	**(None)**
Metric Only version	**M**
Non-standard Metric Thread version	**M****
UNC Only version	**U**

⑥ Material / Surface Protection

All metal parts made of carbon steel, untreated and oiled	**W1**
Flange steel (W1) , bolts thick layer passivated (W66). Kitted with O-Ring	**W46-K**
All metal parts chromium VI-free zinc plated + thick-layer-passivation, washers zinc plated + blue chromated (W32)	**W66**
All metal parts made of stainless steel	**W5**

SAE Single-Part Blanking Flanges

SAE Single-Part Blanking Flange
Type BFX-...-CP ▪ 3000 PSI Series

Item No.	Designation	Nominal Size	Price
1730000405	BFX-301-CP-W1	1/2	31.10
1730000406	BFX-302-CP-W1	3/4	32.70
1730000407	BFX-303-CP-W1	1	38.20
1730000408	BFX-304-CP-W1	1-1/4	40.25
1730000410	BFX-305-CP-W1	1-1/2	47.40
1730000413	BFX-306-CP-W1	2	48.45
1730000414	BFX-307-CP-W1	2-1/2	55.40
1730000415	BFX-308-CP-W1	3	87.40
1730000416	BFX-309-CP-W1	3-1/2	103.15
1730000417	BFX-310-CP-W1	4	110.25
1710000928	BFX-301-CP-W46-K	1/2	40.30
1710000143	BFX-302-CP-W46-K	3/4	43.95
1710000048	BFX-303-CP-W46-K	1	50.50
1710000049	BFX-304-CP-W46-K	1-1/4	55.75
1710000144	BFX-305-CP-W46-K	1-1/2	66.10
1710000145	BFX-306-CP-W46-K	2	69.45
1710000126	BFX-307-CP-W46-K	2-1/2	78.30
1710001788	BFX-308-CP-W46-K	3	124.80
1710000147	BFX-310-CP-W46-K	4	153.80

Refer to page I 18 for O-Rings

SAE Single-Part Blanking Flange
Type BFX-...-CP ▪ 6000 PSI Series

Item No.	Designation	Nominal Size	Price
1730000418	BFX-601-CP-W1	1/2	36.40
1730000419	BFX-602-CP-W1	3/4	38.25
1730000420	BFX-603-CP-W1	1	43.80
1730000421	BFX-604-CP-M14-W1	1-1/4	51.85
1730000422	BFX-605-CP-W1	1-1/2	60.75
1730000423	BFX-606-CP-W1	2	108.20
1730001267	BFX-607-CP-W1	2-1/2	384.75
1730002493	BFX-608-CP-W1	3	586.95
1710000149	BFX-601-CP-W46-K	1/2	45.60
1710000735	BFX-602-CP-W46-K	3/4	49.50
1710000128	BFX-603-CP-W46-K	1	61.20
1710000360	BFX-604-CP-M14-W46-K	1-1/4	77.70
1710000045	BFX-605-CP-W46-K	1-1/2	95.15
1710000044	BFX-606-CP-W46-K	2	165.95
1710001412	BFX-607-CP-W46-K	2-1/2	538.55
1710002006	BFX-608-CP-W46-K	3	976.80

Refer to page I 18 for O-Rings

SAE Single-Part Blanking Counterflanges

SAE Single-Part Blanking Counterflange
Type BAS-...-CP ▪ 3000 PSI Series

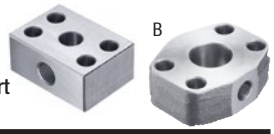
Item No.	Designation	Nominal Size	Price
1730001109	BAS-301-CP-W1	1/2	31.10
1730001110	BAS-302-CP-W1	3/4	32.70
1730001111	BAS-303-CP-W1	1	38.25
1730000937	BAS-304-CP-W1	1-1/4	40.25
1730001112	BAS-305-CP-W1	1-1/2	47.40
1730001113	BAS-306-CP-W1	2	48.45
1730001114	BAS-307-CP-W1	2-1/2	55.40
1730001115	BAS-308-CP-W1	3	87.50
1730001116	BAS-309-CP-W1	3-1/2	103.35
1730001117	BAS-310-CP-W1	4	110.25

SAE Single-Part Blanking Counterflange
Type BAS-...-CP ▪ 6000 PSI Series

Item No.	Designation	Nominal Size	Price
1730001119	BAS-601-CP-W1	1/2	36.40
1730001120	BAS-602-CP-W1	3/4	38.25
1730001121	BAS-603-CP-W1	1	43.80
1730001122	BAS-604-CP-M14-W1	1-1/4	51.85
1730001123	BAS-605-CP-W1	1-1/2	60.75
1730001014	BAS-606-CP-W1	2	96.25

SAE Sandwich Plates

A B

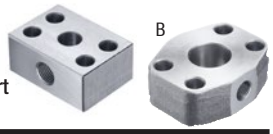


SAE Sandwich Plate with Female BSPP Port
Type SPL-...-G04-L ▪ 3000 PSI Series

Item No.	Designation	Version	Nominal Size	Price
1730000966	SPL-301-G04-L-W1	A	1/2	102.60
1730000967	SPL-302-G04-L-W1	A	3/4	102.60
1730000880	SPL-303-G04-L-W1	B	1	109.50
1730000764	SPL-304-G04-L-W1	B	1-1/4	102.75
1730000763	SPL-305-G04-L-W1	B	1-1/2	122.10
1730000968	SPL-306-G04-L-W1	B	2	211.25

Port Connection G1/4
Refer to Section L - STAUFF Test for the range of STAUFF Test Couplings

A B



SAE Sandwich Plate with Female BSPP Port
Type SPL-...-G04-L ▪ 6000 PSI Series

Item No.	Designation	Version	Nominal Size	Price
1730000954	SPL-601-G04-L-W1	A	1/2	103.75
1730000936	SPL-602-G04-L-W1	A	3/4	108.80
1730000969	SPL-603-G04-L-W1	B	1	102.75
1730000765	SPL-604-G04-L-M14-W1	B	1-1/4	119.55
1730000970	SPL-605-G04-L-W1	B	1-1/2	163.60
1730000971	SPL-606-G04-L-W1	B	2	258.15

Port Connection G1/4
Refer to Section L - STAUFF Test for the range of STAUFF Test Couplings

SAE Blindplugs

SAE Blindplug (Standard)
Type CAG-BP ▪ 3000 PSI Series

Item No.	Designation	Nominal Size	Price
1730001545	CAG-BP-301-W66	1/2	10.10
1730001546	CAG-BP-302-W66	3/4	14.60
1730001547	CAG-BP-303-W66	1	15.55
1730001548	CAG-BP-304-W66	1-1/4	20.40
1730001549	CAG-BP-305-W66	1-1/2	45.90
1730001550	CAG-BP-306-W66	2	55.40
1730001552	CAG-BP-308-W66	3	89.75

To suit SAE Split Flange Halves and SAE Flange Clamps, refer to page I 4

SAE Blindplug (Standard)
Type CAG-BP ▪ 6000 PSI Series

Item No.	Designation	Nominal Size	Price
1730001555	CAG-BP-601-W66	1/2	15.05
1730001544	CAG-BP-602-W66	3/4	11.70
1730001556	CAG-BP-603-W66	1	19.80
1730001557	CAG-BP-604-W66	1-1/4	20.40
1730001558	CAG-BP-605-W66	1-1/2	47.40
1730001559	CAG-BP-606-W66	2	97.75

To suit SAE Split Flange Halves and SAE Flange Clamps, refer to page I 4

SAE Sandwich Plates

SAE Sandwich Plate
Type SPL ▪ 3000 PSI Series

Item No.	Designation	Nominal Size	Price
1730001270	SPL-301-W1	1/2	10.85
1730001268	SPL-302-W1	3/4	13.00
1730001269	SPL-303-W1	1	15.50
1730001280	SPL-304-W1	1-1/4	17.65
1730001282	SPL-305-W1	1-1/2	18.05
1730001271	SPL-306-W1	2	19.30

SAE Sandwich Plate
Type SPL ▪ 6000 PSI Series

Item No.	Designation	Nominal Size	Price
1730001273	SPL-601-W1	1/2	13.55
1730001274	SPL-602-W1	3/4	18.05
1730001275	SPL-603-W1	1	18.95
1730001276	SPL-604-M14-W1	1-1/4	19.80
1730001277	SPL-605-W1	1-1/2	21.60

SAE Cover Plates

SAE Cover Plate
Type CPL ▪ 3000 PSI Series

Item No.	Designation	Nominal Size	Price
1730001835	CPL-304-W1	1-1/4	9.70
1730001803	CPL-305-W1	1-1/2	11.70
1730001791	CPL-306-W1	2	12.90
1730001773	CPL-307-W1	2-1/2	15.30
1730001775	CPL-310-W1	4	22.65
1730001788	CPL-311-W1	5	28.60

SAE Cover Plate
Type CPL ▪ 6000 PSI Series

Item No.	Designation	Nominal Size	Price
1730001786	CPL-603-W1	1	15.30
1730002032	CPL-604-M14-W1	1-1/4	14.25
1730001777	CPL-605-W1	1-1/2	17.90
1730001776	CPL-606-W1	2	22.95
1730002139	CPL-608-W1	3	36.10

Bolt Kits for SAE Flanges

Metric Bolt Kits for SAE Flanges
Bolts - ISO 4762 ▪ Spring Rings - DIN 7980
Type KIT-BFX-IS-..-ISO4762

Item No.	Designation	Price
1720000002	Kit-BFX-IS-M8x30-ISO4762-8.8-W66	4.95
1720000063	Kit-BFX-IS-M10x30-ISO4762-10.9-W1	11.15
1720000004	Kit-BFX-IS-M10x35-ISO4762-8.8-W66	6.60
1720000005	Kit-BFX-IS-M10x40-ISO4762-8.8-W66	8.70
1720000006	Kit-BFX-IS-M12x35-ISO4762-8.8-W66	10.80
1720000078	Kit-BFX-IS-M12x45-ISO4762-10.9-W1	11.70
1720000058	Kit-BFX-IS-M12x70-ISO4762-8.8-W66	12.70
1720000065	Kit-BFX-IS-M14x45-ISO4762-8.8-W66	19.05
1720000009	Kit-BFX-IS-M14x50-ISO4762-8.8-W66	19.05
1720000010	Kit-BFX-IS-M16x50-ISO4762-8.8-W66	24.30
1720000011	Kit-BFX-IS-M16x55-ISO4762-8.8-W66	27.40
1720000012	Kit-BFX-IS-M20x65-ISO4762-8.8-W66	48.45
1720000152	Kit-BFX-IS-M24x80-ISO4762-8.8-W66	142.60
1720000150	Kit-BFX-IS-M30x100-ISO4762-8.8-W66	376.75

Bolt kits consist of 4 hexagon socket head cap bolts and 4 spring rings

The following Accessories for SAE Flanges are available on request

SAE Blindplug (High)
CAG-BPH
Refer to Catalogue 3 - STAUFF Flanges

SAE Reducing Flange
BFX-BAS
Refer to Catalogue 3 - STAUFF Flanges

O-Ring for SAE Flanges

O-Ring for SAE Flanges
NBR - 90 DURO
Type O-Ring-..-B90

Item No.	Designation	Flange Size	Price
1730000073	O-Ring-18.64x3.53-B90	1/2	4.25
1730000074	O-Ring-24.99x3.53-B90	3/4	4.65
1730000075	O-Ring-32.92x3.53-B90	1	5.70
1730000051	O-Ring-37.69x3.53-B90	1-1/4	6.80
1730000052	O-Ring-47.22x3.53-B90	1-1/2	7.00
1730000053	O-Ring-56.74x3.53-B90	2	9.30
1730000054	O-Ring-69.44x3.53-B90	2-1/2	11.20
1730000055	O-Ring-85.32x3.53-B90	3	13.10
1730000056	O-Ring-98.02x3.53-B90	3-1/2	15.45
1730000057	O-Ring-110.72x3.53-B90	4	19.25
1730000076	O-Ring-136.12x3.53-B90	5	23.85

O-Rings to suit SAE Flanges - Type BFX-..

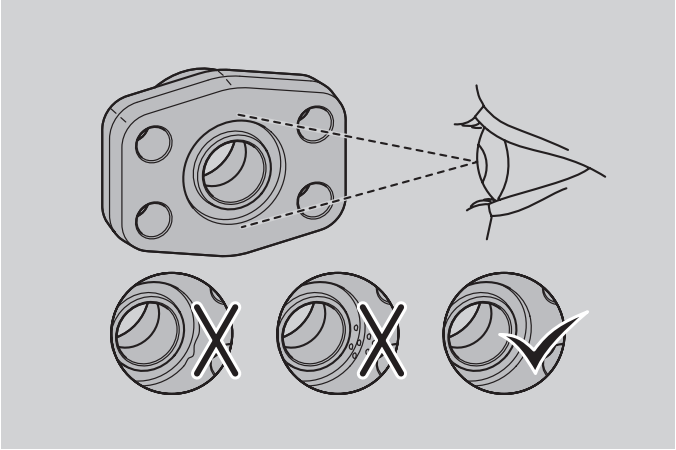
O-Ring for SAE Flanges
FKM - 90 DURO
Type O-Ring-..-V90

Item No.	Designation	Flange Size	Price
1730001372	O-Ring-18.64x3.53-V90	1/2	13.95
1730000099	O-Ring-24.99x3.53-V90	3/4	15.45
1730000091	O-Ring-32.92x3.53-V90	1	21.55
1730001373	O-Ring-37.69x3.53-V90	1-1/4	29.15
1730000095	O-Ring-47.22x3.53-V90	1-1/2	29.35
1730001376	O-Ring-56.74x3.53-V90	2	29.80
1730001375	O-Ring-69.44x3.53-V90	2-1/2	39.05
1730001374	O-Ring-85.32x3.53-V90	3	59.95
1730001760	O-Ring-110.72x3.53-V90	4	148.55
1730001413	O-Ring-136.12x3.53-V90	5	110.60

O-Rings to suit SAE Flanges - Type BFX-..

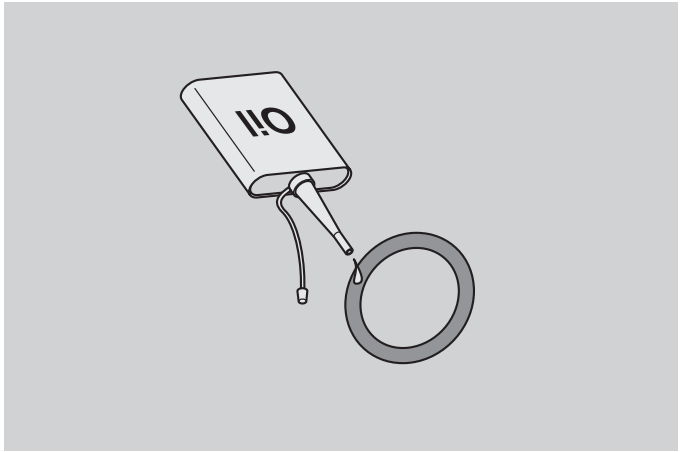
Assembly Instructions for SAE Flanges	I 20
Property Classes of Bolts and Tightening Torques	I 21
Sizing Guide for SAE Flanges	I 22 - I 23

Assembly Instructions for SAE Flanges



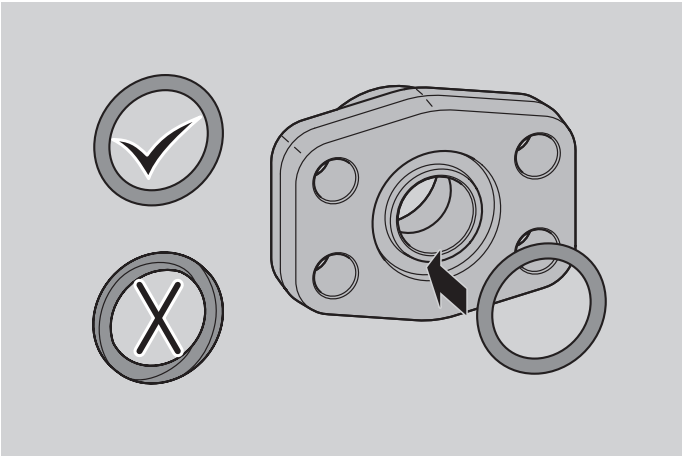
Check the sealing surface and the o-ring groove of the flange for visible damage (scratches, cracks, notches, sharp edges or burrs) and make sure that both are free of contamination and any foreign particles. Circular machining marks up to a surface roughness of Ra max 3,2 (ISO 1302) are acceptable and do not influence the performance of the flange connection.

Scratches with a width greater than 0.13 mm (.0005 in) running perpendicular, radial, or spiral on the sealing surface or in the O-Ring groove are not acceptable.

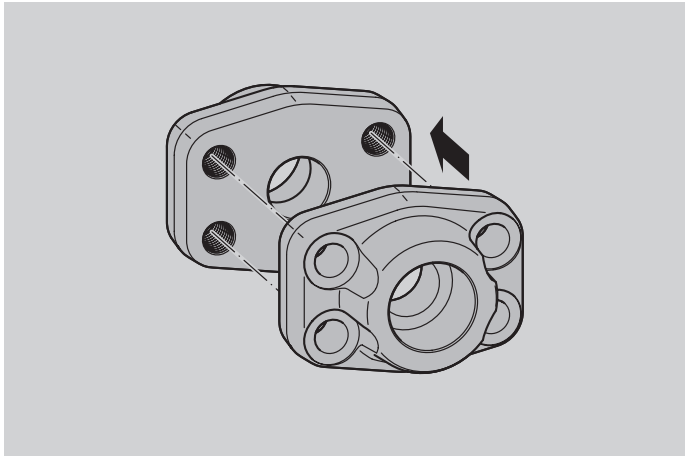


Lubricate the O-Ring using the system fluid (or a compatible lubricant) and immediately proceed with the assembly in order to avoid exposure to contamination.

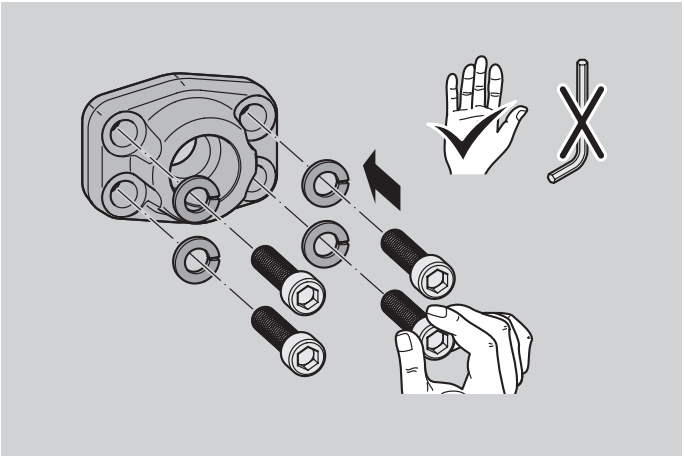
Do not use lubricating grease!



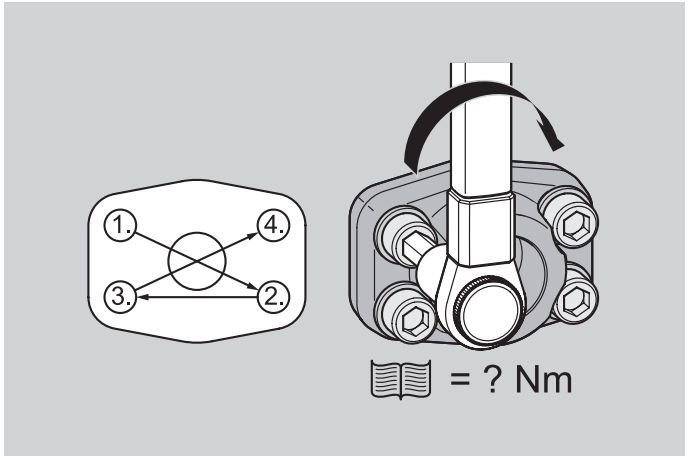
Place the O-Ring into the O-Ring groove, making sure that it is not twisted.



Position the flange against the mating component.



Place the socket head screws (with spring washers) into the flange and hand-tighten.



Finish the assembly by gradually tightening the socket head screws in small increments and in the displayed sequence to the appropriate torque level (refer to page I21 for more information)).

Property Classes of Bolts and Tightening Torques

Bolts 8.8 M (Metric Standard)

3000 PSI Standard-Pressure Series (according to ISO 6162-1:2002)

Nominal Size		Bolt Size	Tightening Torques +10%		Working Pressure max		Burst Pressure min	
ISO	SAE		(Nm)	(ft·lb)	(bar)	(PSI)	(bar)	(PSI)
13	1/2	M8	24	17.8	350	5075	1400	20300
19	3/4	M10	50	37.0	350	5075	1400	20300
25	1	M10	50	37.0	250	3625	1000	14500
32	1-1/4	M10	50	37.0	200	2900	800	11600
38	1-1/2	M12	92	68.1	200	2900	800	11600
51	2	M12	92	68.1	160	2320	640	9280
64	2-1/2	M12	92	68.1	100	1450	400	5800
76	3	M16	210	155.4	100	1450	400	5800
89	3-1/2	M16	210	155.4	35	508	140	2030
102	4	M16	210	155.4	35	508	140	2030
127	5	M16	210	155.4	35	508	140	2030

6000 PSI High-Pressure Series (according to ISO 6162-2:2002)

Nominal Size		Bolt Size	Tightening Torques +10%		Working Pressure max		Burst Pressure min	
ISO	SAE		(Nm)	(ft·lb)	(bar)	(PSI)	(bar)	(PSI)
13	1/2	M8	24	17.8	350	5075	1400	20300
19	3/4	M10	50	37.0	350	5075	1400	20300
25	1	M12	92	68.1	350	5075	1400	20300
32	1-1/4	M12	92	68.1	350	5075	1400	20300
32	1-1/4	M14 [1]	130	96.2	350	5075	1400	20300
38	1-1/2	M16	210	155.4	350	5075	1400	20300
51	2	M20	400	296.0	350	5075	1400	20300

Bolts 10.9 MH (Metric High)

3000 PSI Standard-Pressure Series (according to ISO 6162-1:2002)

Nominal Size		Bolt Size	Tightening Torques +10%		Working Pressure max		Burst Pressure min	
ISO	SAE		(Nm)	(ft·lb)	(bar)	(PSI)	(bar)	(PSI)
13	1/2	M8	32	23.7	350	5075	1400	20300
19	3/4	M10	70	51.8	350	5075	1400	20300
25	1	M10	70	51.8	315	4568	1260	18270
32	1-1/4	M10	70	51.8	250	3625	1000	14500
38	1-1/2	M12	130	96.2	200	2900	800	11600
51	2	M12	130	96.2	200	2900	800	11600
64	2-1/2	M12	130	96.2	160	2320	640	9280
76	3	M16	295	218.3	160	2320	640	9280
89	3-1/2	M16	295	218.3	35	508	140	2030
102	4	M16	295	218.3	35	508	140	2030
127	5	M16	295	218.3	35	508	140	2030

6000 PSI High-Pressure Series (according to ISO 6162-2:2002)

Nominal Size		Bolt Size	Tightening Torques +10%		Working Pressure max		Burst Pressure min	
ISO	SAE		(Nm)	(ft·lb)	(bar)	(PSI)	(bar)	(PSI)
13	1/2	M8	32	23.7	400	5800	1600	23200
19	3/4	M10	70	51.8	400	5800	1600	23200
25	1	M12	130	96.2	400	5800	1600	23200
32	1-1/4	M12	130	96.2	400	5800	1600	23200
32	1-1/4	M14 [1]	180	133.2	400	5800	1600	23200
38	1-1/2	M16	295	218.3	400	5800	1600	23200
51	2	M20	550	407.0	400	5800	1600	23200

Bolts Gr8 U (UNC)

3000 PSI Standard-Pressure Series (according to ISO 6162-1:2002)

Nominal Size		Bolt Size	Tightening Torques +10%		Working Pressure max		Burst Pressure min	
ISO	SAE		(Nm)	(ft·lb)	(bar)	(PSI)	(bar)	(PSI)
13	1/2	5/16-18 UNC	32	23.7	350	5075	1400	20300
19	3/4	3/8-16 UNC	60	44.4	350	5075	1400	20300
25	1	3/8-16 UNC	60	44.4	315	4568	1260	18270
32	1-1/4	7/16-14 UNC	92	68.1	250	3625	1000	14500
38	1-1/2	1/2-13 UNC	150	111.0	200	2900	800	11600
51	2	1/2-13 UNC	150	111.0	200	2900	800	11600
64	2-1/2	1/2-13 UNC	150	111.0	160	2320	640	9280
76	3	5/8-11 UNC	295	218.3	160	2320	640	9280
89	3-1/2	5/8-11 UNC	295	218.3	35	508	140	2030
102	4	5/8-11 UNC	295	218.3	35	508	140	2030
127	5	5/8-11 UNC	295	218.3	35	508	140	2030

6000 PSI High-Pressure Series (according to ISO 6162-2:2002)

Nominal Size		Bolt Size	Tightening Torques +10%		Working Pressure max		Burst Pressure min	
ISO	SAE		(Nm)	(ft·lb)	(bar)	(PSI)	(bar)	(PSI)
13	1/2	5/16-18 UNC	32	23.7	400	5800	1600	23200
19	3/4	3/8-16 UNC	60	44.4	400	5800	1600	23200
25	1	7/16-14 UNC	92	68.1	400	5800	1600	23200
32	1-1/4	1/2-13 UNC	150	111.0	400	5800	1600	23200
38	1-1/2	5/8-11 UNC	295	218.3	400	5800	1600	23200
51	2	3/4-10 UNC	450	333.0	400	5800	1600	23200

Notes

[1] Not to be used for new designs.

Attention:
All bolts have to be pre-tightened before applying the full tightening torque to the bolts. Otherwise, the flange may break.

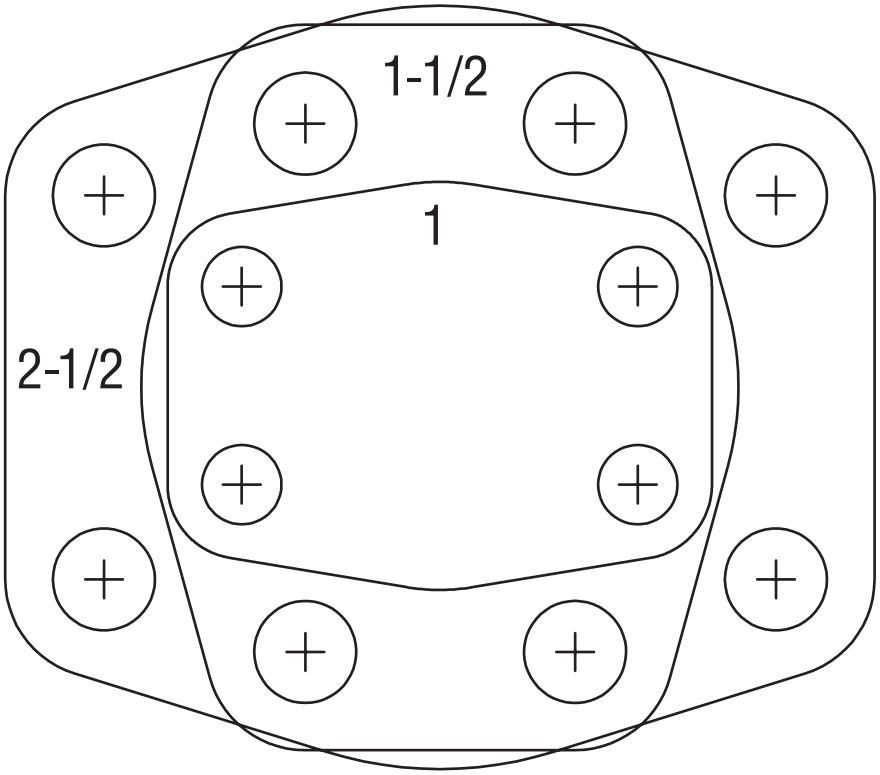
Please note that the tightening torques as stated on this page are only recommendations. These values correspond to oiled bolts with a friction coefficient of 0.17 and the material combination Steel/Steel.

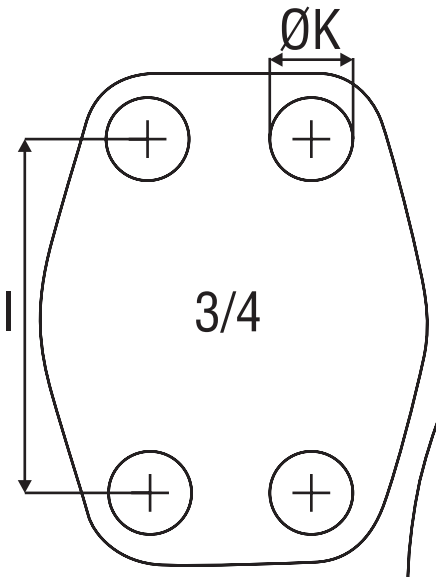
The exact tightening torques depend on factors like material, finishing, coating and lubrication of the components used, and have to be determined by the user himself.

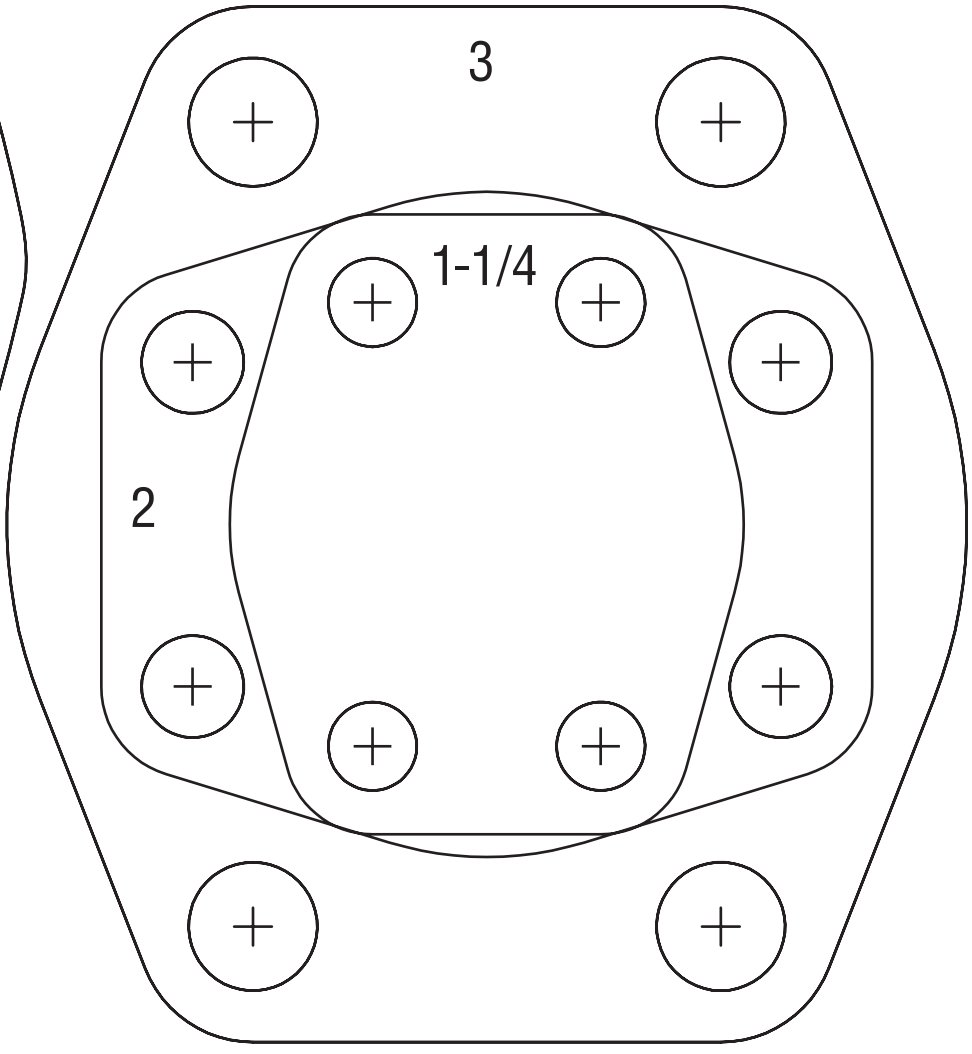
Please contact STAUFF prior to the assembly for torque recommendations for alternative mating materials.

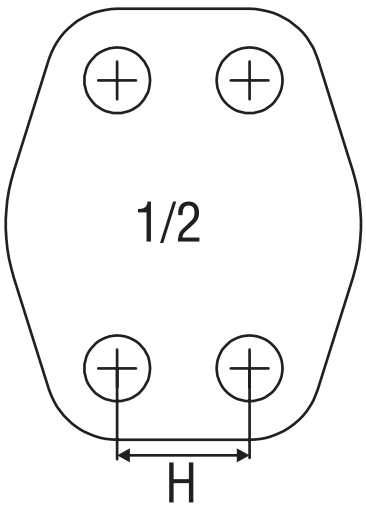
Sizing Guide for SAE Flanges
3000 PSI Standard-Pressure Series

Nominal Size SAE	Dimensions (mm/in) H	I	ØK	Metric Threads
1/2	17.5	38.1	8.7	M8
	.69	1.50	.34	
3/4	22.3	47.6	10.5	M10
	.88	1.87	.41	
1	26.2	52.4	10.5	M10
	1.03	2.06	.41	
1-1/4	3.2	58.7	10.5 / 12.5	M10 / M12
	1.19	2.31	.41 / .49	
1-1/2	35.7	69.9	13.5 / 14.5	M12 / M14
	1.41	2.75	.53 / .57	
2	42.9	77.8	13.5 / 14.5	M12 / M14
	1.69	3.06	.53 / .57	
2-1/2	50.8	88.9	13.5 / 14.5	M12 / M14
	2.00	3.50	.53 / .57	
3	61.9	106.4	17	M16
	2.44	4.19	.67	
3-1/2	69.9	120.7	17	M16
	2.75	4.75	.67	
4	77.8	130.2	17	M16
	3.06	5.13	.67	
5	92.1	152.4	17	M16
	3.63	6.00	.67	



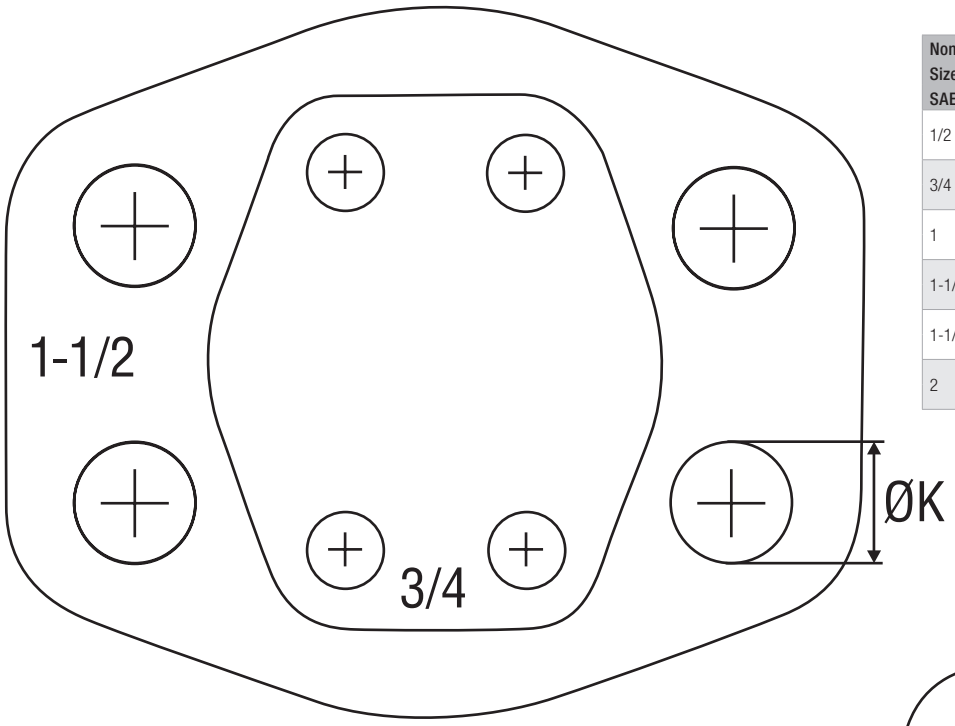


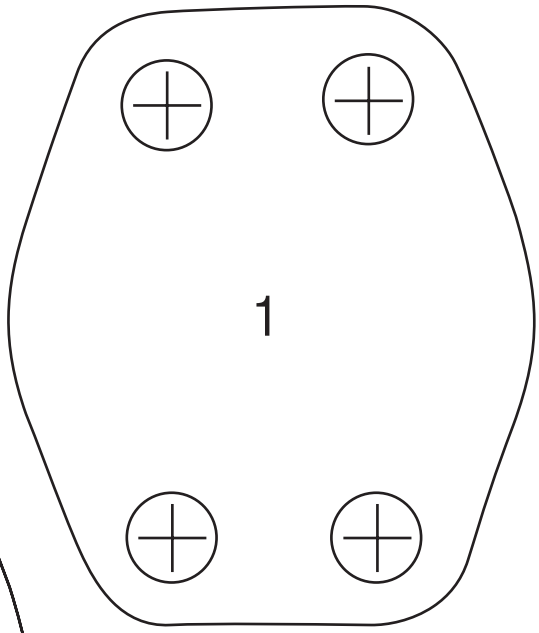


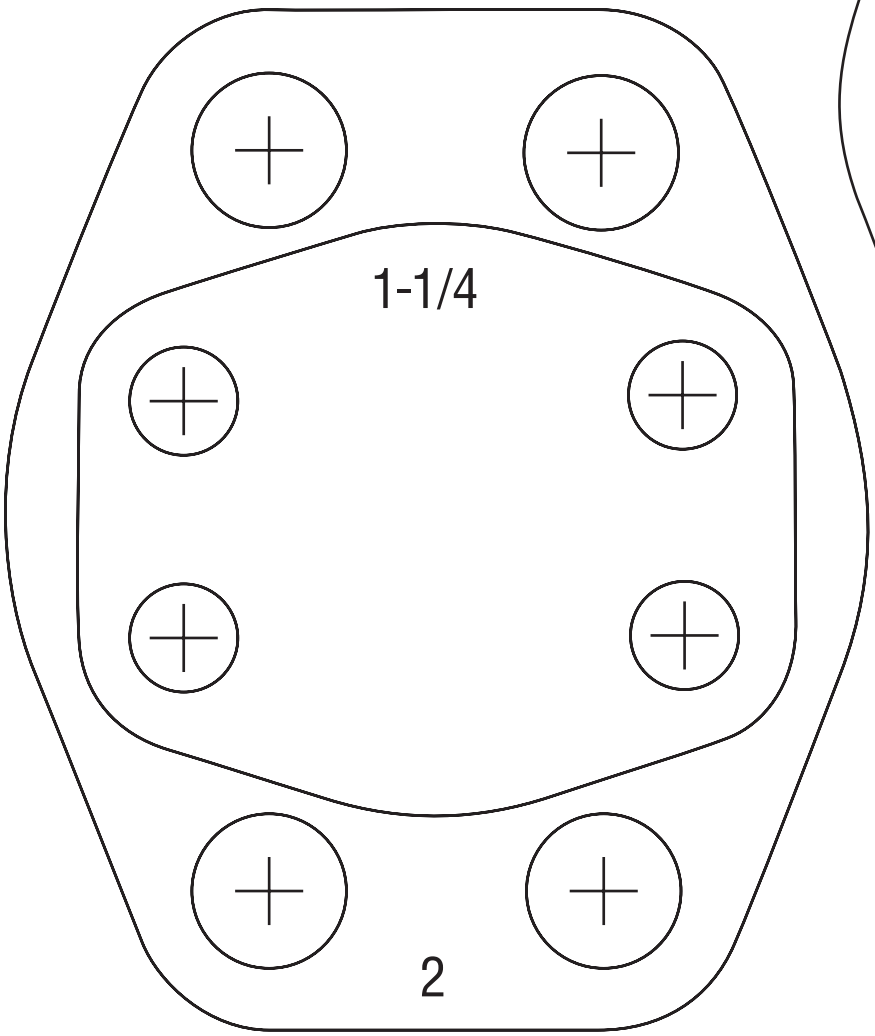


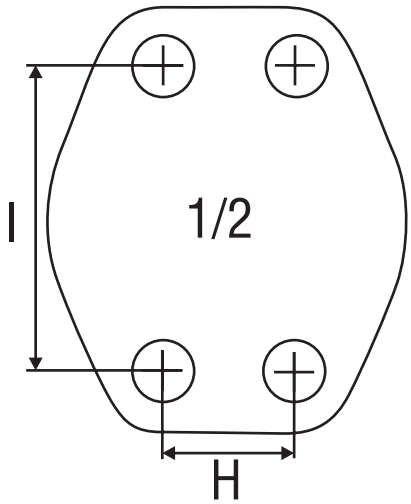
Sizing Guide for SAE Flanges
6000 PSI High-Pressure Series

Nominal Size	Dimensions (mm/in)			
SAE	H	I	ØK	Metric Threads
1/2	18.2	40.5	8.7	M8
	.72	1.59	.34	
3/4	23.8	50.8	10.5	M10
	.94	2.00	.41	
1	27.8	57.2	13	M12
	1.09	2.25	.51	
1-1/4	31.8	66.6	13.5 / 15.0	M12 / M14
	1.25	2.62	.53 / .59	
1-1/2	36.5	79.3	17	M16
	1.44	3.12	.67	
2	44.5	96.8	21	M20
	1.75	3.81	.83	

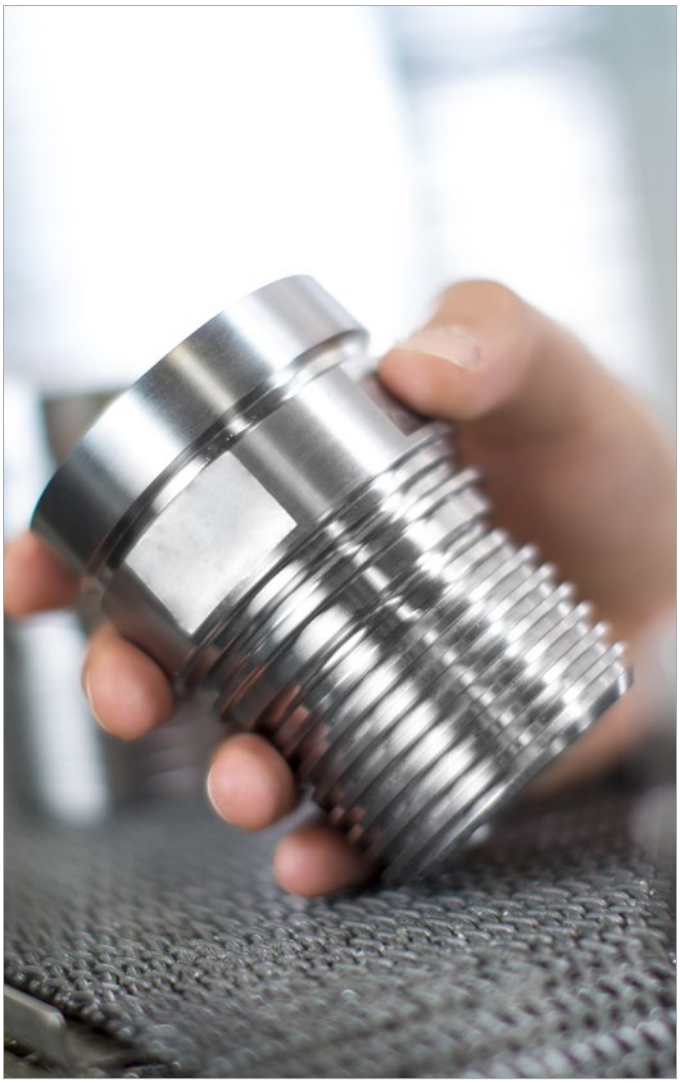








Introduction	J2 - J5
Push-to-Connect Couplings	J6 - J11
Multi Couplings	J12 - J13
Screw-to-Connect Couplings	J14 - J19
Technical Appendix	J21



STAUFF Quick Release Couplings

STAUFF couplings have proven their value for many years in practical use in hydraulic systems. The excellent quality of the couplings is the result of continual product improvement in which the experiences of users have been taken into consideration as well. Our high production standards, combined with our quality management system certified in accordance with EN ISO 9001, assures the quality of our products.

For the technical specifications of the individual couplings please refer to the following pages of the catalogue.

Housing material
Steel according to EN 10277,
Coating: Zinc-Plating and Thick-Film-Passivation (Chrome III)

Couplings Series FH, FU, MK, FT RK/RH and HP10:
Zinc-Nickel coating

Seals
NBR (Buna-N®), PTFE
ISO 3601

Operating temperature
- 20 °C ... + 100 °C / -4° F ... +212° F
with NBR (Buna-N®), PTFE
- 25 °C ... + 200 °C / -13° F ... +392° F
with FKM (Viton®)

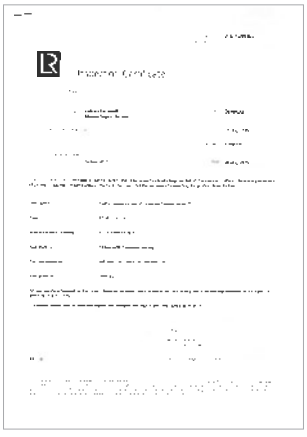
Contact STAUFF to require other combinations of materials.

The operating pressures specified in our catalogue relate to the strength of the housing components. Standardized connector shapes may have other rated pressures, which cannot automatically be applied to the particular coupling type.

Any remodelling and modification of the couplings are prohibited. By any maintenance of our couplings, it's necessary to use original STAUFF parts. In case of using no original parts or disassembling of the couplings, the warranty will expire.

The STAUFF hydraulic couplings don't have the 94/7/EG guidance for using in the explosive field. The couplings don't have an own ignition source which could be a reason of inflame.

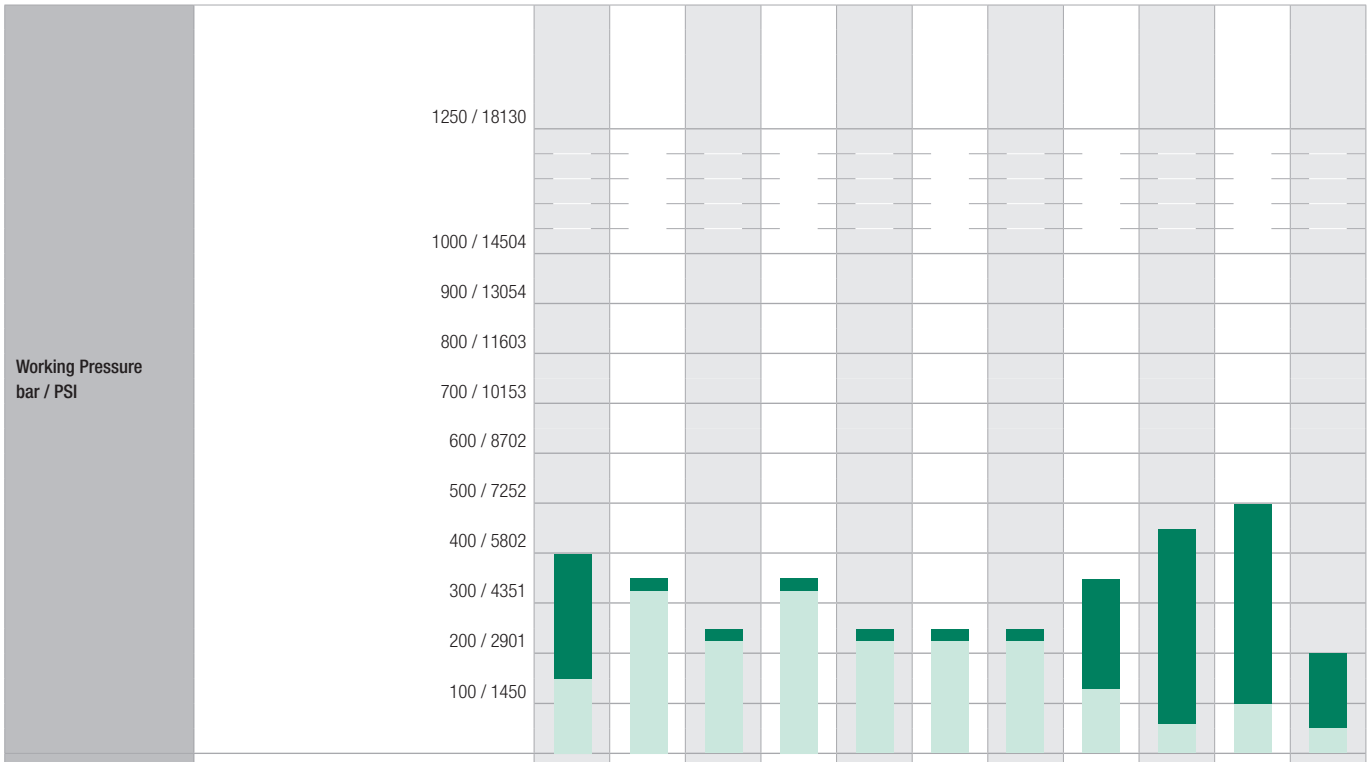
- Free of hexavalent chrome Cr(VI)
- ELV compliant according to 2000/53/EC (End of Life Vehicles Directive)
- REACH compliant according to 1907/2006/EC (Registration, Evaluation, Authorisation and Restriction of Chemicals)
- RoHS compliant according to 2002/95/EC (Restrictions of the Use of Hazardous Substances)



Normative references

EN ISO 8330:2000, ISO 5675,
ISO 5676, ISO 7241, ISO 16028, AMD 1

Quick Release Couplings ▪ Overview

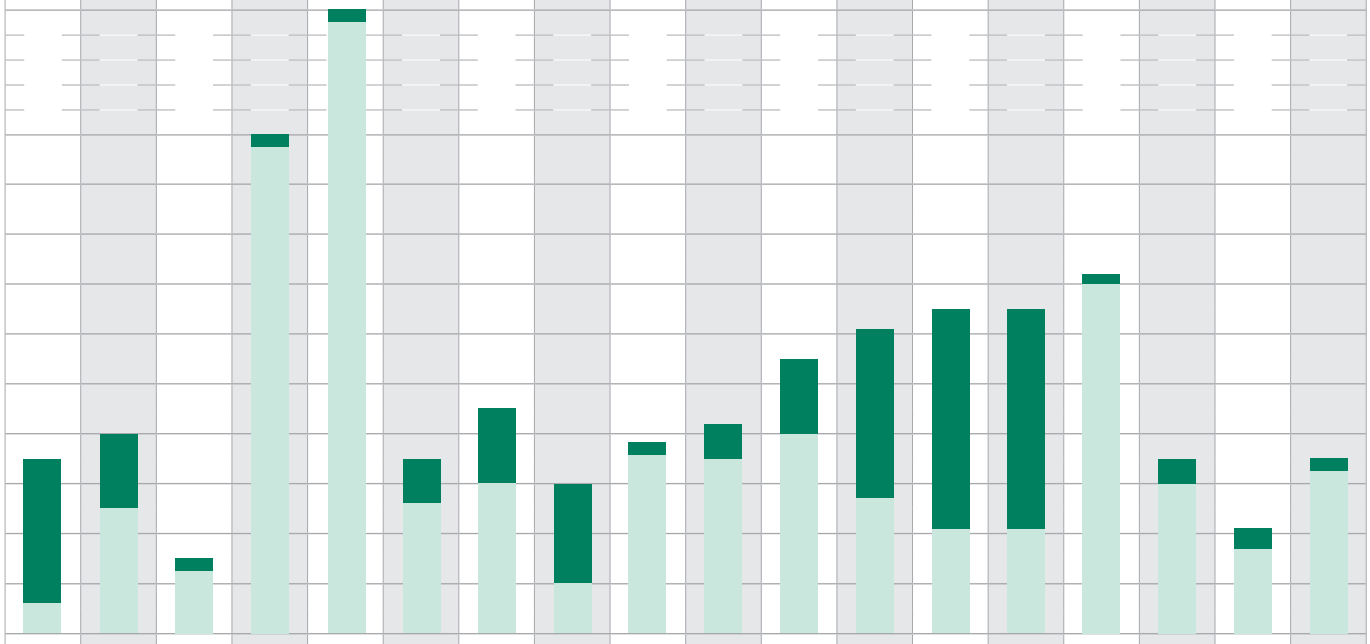


Series		FF	FU	FH	FO	HP	HU	UX	IA	IA	IB	IB
Material	Carbon Steel	•	•			•	•	•	•		•	
	Stainless Steel			•	•					•		
	Brass											•
Surface Finishing	Zinc-Nickel	•	•			•			•		•	
	Zinc-Plating and Thick-Film-Passivation (Chrome III)	•				•	•	•				
Standard Seal Material(s) [1]	NBR (Buna-N®)	•	•			•	•	•	•		•	
	HNBR											
	FKM (Viton®)			•	•					•		•
	PTFE	•	•	•		•		•				
	PU	•	•									
Working Temperature	°C	-25 ... +100	-25 ... +100	-25 ... +200	-25 ... +200	-25 ... +100	-25 ... +100	-30 ... +100	-25 ... +100	-25 ... +200	-25 ... +100	-25 ... +200
	°F	-13 ... +212	-13 ... +212	-13 ... +392	-13 ... +392	-13 ... +212	-13 ... +212	-22 ... +212	-13 ... +212	-13 ... +392	-13 ... +212	-13 ... +392
Valve Design	Flat Face	•	•	•	•							
	Poppet Valve					•	•	•	•	•	•	•
	Ball Valve											
Connection	Push	•	•	•	•	• [2]	• [2]	•				
	Push and actuate Push-Pull Sleeve					•	•					
	Push and actuate Push Sleeve								•	•	•	•
	Screw											
Disconnection	Pull					• [2]	• [2]	•				
	Actuate Push-Pull Sleeve					•	•					
	Actuate Push Sleeve	•	•	•	•				•	•	•	•
	Screw											
Connect Under Pressure [6]	Male Tip		• [3]				• [3]					
	Female Body							• [7]				
Application	Agricultural and Forestry Machinery					•	•	•	•	•		
	Construction Machinery	•	•									
	Industrial Hydraulic	•	•	•						•	•	•
	Offshore				•							
	Rescue and Tensioning Hydraulics											
ISO Interchange		ISO 16028	ISO 16028	ISO 16028		ISO 7241-1, Series A					ISO 7241-1, Series B	
Page		J10	J10	J10	Refer to Catalogue 5	J11	Refer to Catalogue 5	J11	J11	J11	Refer to Catalogue 5	Refer to Catalogue 5

[1] Alternative seal materials are available on request.
Working Pressure depends on the nominal size.
Minimum Working Pressure

[2] When mounting the Sleeve in Bulkhead
[3] Up to max. 250 bar / 3626 PSI
[4] Up to 33% of the Working Pressure with Tools
[5] Max. 100 bar / 1450 PSI

[6] Only Residual Pressure
[7] Female Body with ISO-A Male Tip up to the max. Working Pressure allowed
[8] Max. 20 bar / 290 PSI Residual Pressure with Tools
[9] Up to max. 50 bar / 725 PSI with Tools



IB	ID	BP	HC	HD	HUS	HS	HS	PS	RH/RK	FT	HR	HH	HH	HI (HIB)	HT	HM	HV
	•	•	•	•	•	•		•	•	•	•	•		•	•	•	•
•							•						•				
																•	
	•	•			•			•	•	•		•		•	•		
	•	•	•	•		•					•						•
					•	•			•	•	•	•		•	•	•	•
								•									
•							•	•					•				
		•			•			•	•	•							
														•			
-25 ... +200	-25 ... +100	-25 ... +100	-35 ... +130	-35 ... +130	-40 ... +106	-25 ... +100	-25 ... +200	-20 ... +100	-20 ... +100	-25 ... +100	-25 ... +100	-25 ... +100	-25 ... +200	-25 ... +100	-25 ... +100	-25 ... +100	-25 ... +100
-13 ... +392	-13 ... +212	-13 ... +212	-31 ... +266	-31 ... +266	-40 ... +223	-13 ... +212	-13 ... +392	-4 ... +212	-4 ... +212	-13 ... +212	-13 ... +212	-13 ... +212	-13 ... +392	-13 ... +212	-13 ... +212	-13 ... +212	-13 ... +212
		•	•	•					•	•						•	
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						•	•	•	•	•	•	•	•	•	•	•	•
					•	• [4]	• [4]	• [9]	• [8]	• [3]	• [5]	•	•				• [5]
					•	• [4]	• [4]	• [9]	• [8]		• [5]	•	•				• [5]
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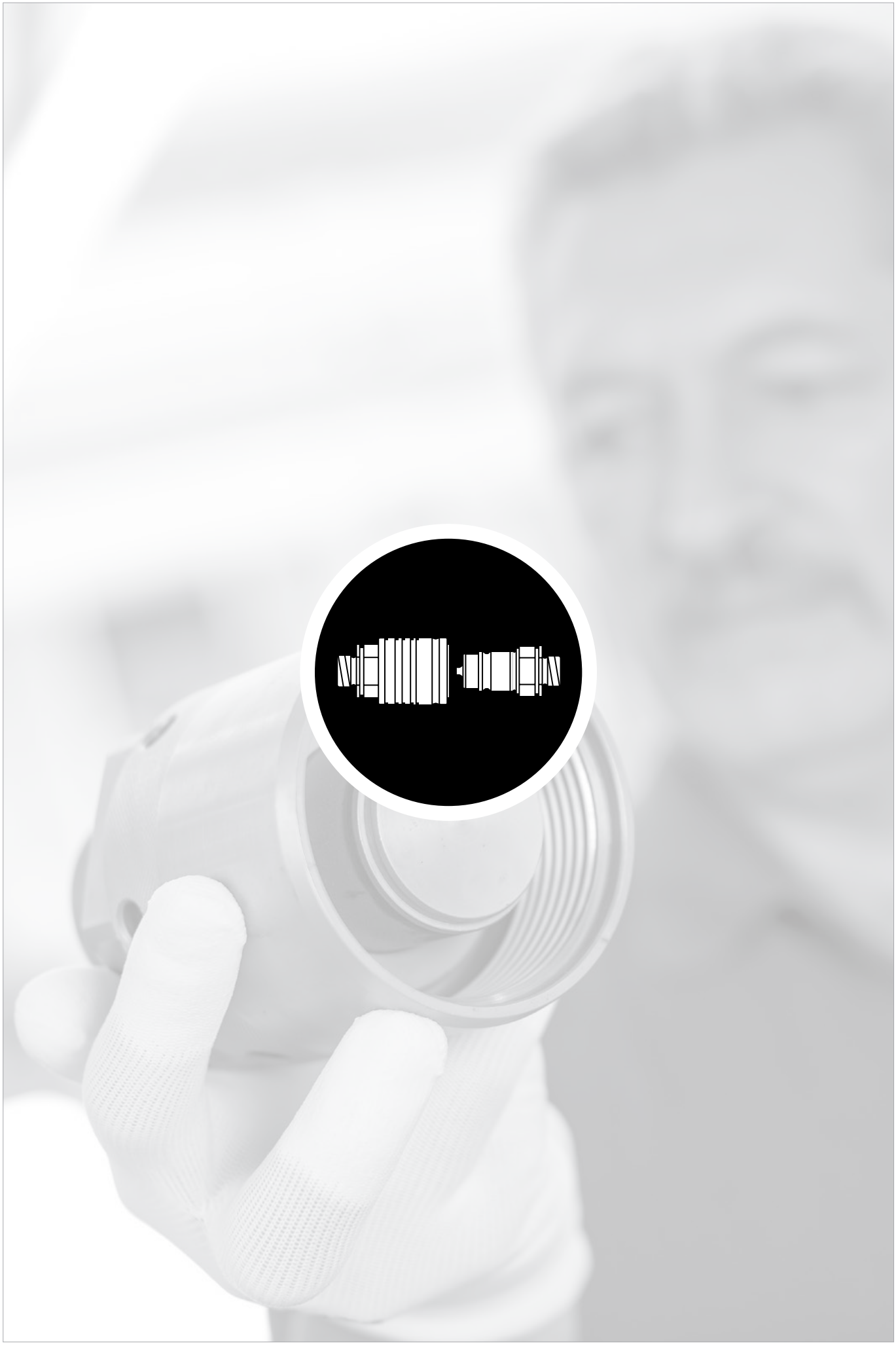
					•	•	•	•	•	•	•						•
•	•				•		•			•		•	•	•	•	•	•
										•			•				
			•	•								•	•	•			
		ISO 5676				ISO 14541								ISO 14540			
Refer to Catalogue 5	J11	Refer to Catalogue 5	Refer to Catalogue 5	Refer to Catalogue 5	J11	J18	Refer to Catalogue 5	Refer to Catalogue 5	J18	J19	Refer to Catalogue 5	Refer to Catalogue 5	Refer to Catalogue 5	J19	Refer to Catalogue 5	Refer to Catalogue 5	J19



Flat face coupling (ISO 16028)
QRC-FF — **J10**

Flat face coupling, connect under pressure
QRC-FU — **J10**

Flat face coupling (ISO 16028), stainless steel
QRC-FH-...-W5 — **J10**

Dust Plugs and Caps
FF / FH / FU Series — **J10**

Push-Pull (ISO 7241-A)
QRC-HP — **J11**

Push-Pull (ISO 7241-A), connect under pressure
QRC-HU — **J11**

Single-hand coupling (ISO 7241-A)
connection under pressure (Long version)
QRC-UX-L — **J11**

Push (ISO 7241-A)
QRC-IA — **J11**

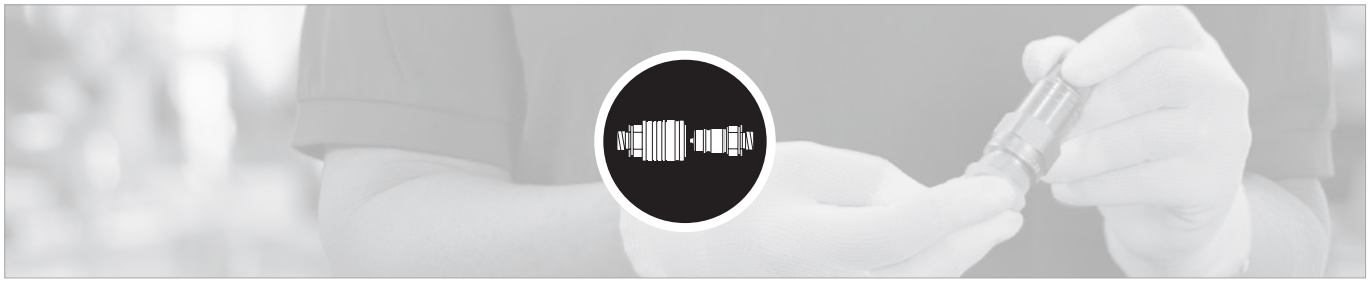
Push (ISO 7241-A), stainless steel
QRC-IA-...-W5 — **J11**

Push
QRC-ID — **J11**

Dust Plugs and Caps
HP / UX / IA / ID Series — **J11**

Push-Pull, with decompression valve and safety locking,
interchangeable with Holmbury F Series and TEMA T Series
QRC-HUS — **J11**

Dust Plugs and Caps
HUS Series — **J11**



Push-to-Connect Couplings

STAUFF push-to-connect Couplings consist of a Female Body and a Male Tip and ensure that two tube/hose ends can be quickly and incredibly easily coupled and uncoupled without the need for a tool.

The permitted working pressures of push-to-connect Couplings are comparatively limited (depending on the respective nominal size) as they are securely locked by snap-in balls.

Series **FF/FC**

Flat-face Coupling acc. to ISO 16028,
Series FC Connection under pressure

Series **FH** (Stainless Steel)

Flat-face Coupling acc. to ISO 16028

Resistant to aggressive environment and flow mediums

Series **HP/HU**

ISO 7241-1, Series A, Push-Pull

Valves close automatically if the Male Tip break away
Series HU Connection under pressure

Series **UX**

ISO 7241-1, Series A, Push-Pull,
Connection under pressure

Compatible with Series HP Male Tip

Series **IA**

ISO 7241-1, Series A

Double shut-off valve design
Compatible with Series HP

Series **IA** (Stainless Steel)

ISO 7241-1, Series A

Double shut-off valve design

Series **ID**

Double shut-off valve design

Series **HUS**

Order Codes ▪ Push-to-Connect Couplings

QRC	-	HP	-	12	-	F	-	G06	-	B	-	W3
①		②		③		④		⑤		⑥		⑦

① Quick Release Coupling

Quick release coupling	**QRC**

② Series

Flat face coupling (ISO 16028)	**FF**
Flat face coupling, connect under pressure	**FC**
Flat face coupling (ISO 16028), stainless steel	**FH**
Push-Pull (ISO 7241-A)	**HP**
Push-Pull (ISO 7241-A) connection under pressure	**HU**
Single-hand coupling (ISO 7241-A) connection under pressure	**UX-L**
Push (ISO 7241-A)	**IA**
Push (ISO 7241-A), stainless steel	**IA**
Push	**ID**
Push-Pull, with decompression valve and safety locking, interchangeable with Holmbury F Series and TEMA T Series	**HUS**

③ Size

Size 6.3 (ISO 4397) / 1/4" / Ø6mm	**06**
Size 8 (ISO 4397) / 5/16" / Ø8mm	**08**
Size 10 (ISO 4397) / 3/8" / Ø10mm	**10**
Size 12.5 (ISO 4397) / 1/2" / Ø12mm	**12**
Size 16 (ISO 4397) / 5/8" / Ø16mm	**16**
Size 19 (ISO 4397) / 3/4" / Ø19mm	**19**
Size 25 (ISO 4397) / 1" / Ø25mm	**25**
Size 31.5 (ISO 4397) / 1-1/4" / Ø31.5mm	**31**
Size 38 (ISO 4397) / 1-1/2" / Ø38mm	**38**

④ Types

Female body with valve	**F**
Male tip with valve	**M**

⑤ Connection Type

BSPP, female thread	**G**
UNF, female thread	**U**
ORFS Male stud with bulkhead	**O..B**

⑤ Connection Size

BSPP (G)	UNF (U)	Dash Size
1/8	5/16–24	**02**
-	3/8–24	**03**
1/4	7/16–20	**04**
-	1/2–20	**05**
3/8	9/16–18	**06**
1/2	3/4–16	**08**
-	7/8–14	**10**
3/4	1-1/16–12	**12**
-	1-3/16–12	**14**
1	1-5/16–12	**16**
1-1/4	1-5/8–12	**20**
1-1/2	1-7/8–12	**24**
2	2-1/2–12	**32**

⑥ Seal Material

NBR (Perbunan)	**B**
NBR (Perbunan) + PTFE (Teflon)	**BT**
NBR (Perbunan) + PU (Polyurethan)	**BP**
NBR (Perbunan) + PU (Polyurethan) + PTFE (Teflon)	**S1**
FKM (Viton) + PTFE (Teflon)	**VT**

⑦ Material / Surface Protection

Steel, zinc-nickel plated	**W3**
Stainless steel	**W5**
Steel chromium VI-free zinc plated plus thick-layer-passivation (contents CrIII)	**W66**

⑧ Additional Information

STAUFF internal information only	**Letter indicated**

⑨ Assembly Status

Without seal at connection side	**(None)**
Sealing assembled at connection side (ORFS only)	**SM**

Push-to-Connect Couplings ▪ Overview

Description	Characteristics	Series	DN Inch	DN ISO 4397
Flat Face Coupling	Acc. to ISO 16028	FF-06	1/4"	6.3
		FF-10	3/8"	10
		FF-12	1/2"	12.5
		FF-16	5/8"	16
		FF-19	3/4"	19
		FF-25	1"	25
		FF-38	1-1/2"	38
		FF-51	2"	51
	Male tip connect under pressure	FC-10	3/8"	10
		FC-12	1/2"	12.5
		FC-19	3/4"	19
Flat Face Coupling	Acc. to ISO 16028 Stainless Steel	FH-10	3/8"	10
		FH-12	1/2"	12.5
		FH-19	3/4"	19
Push-to-Connect Coupling	Push-pull-type	HP-12	1/2"	12.5
	Male tip connect under pressure	HU-12	1/2"	12.5
Push-to-Connect Coupling	Acc. to ISO 7241-1. series A Push-pull-type Breakaway function	UX-L-12	1/2"	12.5
Push-to-Connect Coupling	Acc. to ISO 7241-1. series A	IA-06	1/4"	6.3
		IA-10	3/8"	10
		IA-12	1/2"	12.5
		IA-19	3/4"	19 (20)
		IA-25	1"	25
		IA-38	1-1/2"	38
Push-to-Connect Coupling	Acc. to ISO 7241-1. series A Stainless Steel	IA-12-..-W5	1/2"	12.5
Push-to-Connect Coupling		ID-06	1/4"	6.3
		ID-10	3/8"	10
		ID-19	3/4"	19 (20)
Push-to-Connect Coupling	Push-Pull, with decompression valve and safety locking, interchangeable with Holmbury F Series and TEMA T Series	HUS-10	3/8"	10
		HUS-12	1/2"	12.5
		HUS-19	3/4"	19 (20)
		HUS-25	1"	25

Push-to-Connect Couplings

Quick Release Coupling	Series	Type	DN Body Size		Q_{max} l/min	Working Pressure bar	Burst Press. Connected bar	Port Thread	Item No.	Designation	Price
			Inch	ISO 4397							
Push-to-Connect Couplings											
	FF Series Flat face type Acc. to ISO 16028	Female Body	1/4"	6.3	40	400	1500	G 1/4"	6100149598	QRC-FF-06-F-G04-BT-W3	85.65
			3/8"	10	80	350	1400	G 3/8"	6100074501	QRC-FF-10-F-G06-BT-W3	91.30
			3/8"	10	80	350	1400	G 1/2"	6100074502	QRC-FF-10-F-G08-BT-W3	109.55
			1/2"	12.5	120	350	1400	G 1/2"	6100109447	QRC-FF-12-F-G08-BT-W3	98.25
			1/2"	12.5	120	350	1400	G 3/4"	6100109445	QRC-FF-12-F-G12-BT-W3	98.25
			1/2"	12.5	120	350	1400	U 7/8–14	6100074536	QRC-FF-12-F-U10-BT-W3	69.85
			1/2"	12.5	120	350	1400	ORFS 1–14	6100123020	QRC-FF-12-F-O10B-BT-W3-SM	98.25
			5/8"	16	150	350	1600	G 3/4"	6100218232	QRC-FF-16-F-G12-BT-W3	168.15
			5/8"	16	150	350	1600	G 1"	6100177463	QRC-FF-16-F-G16-BT-W3	182.10
			5/8"	16	150	350	1600	U 1-1/16–12	6100177465	QRC-FF-16-F-U12-BT-W3	178.20
			3/4"	19	200	350	1200	G 3/4"	6100074569	QRC-FF-19-F-G12-BT-W3	171.80
			3/4"	19	200	350	1200	G 1"	6100074570	QRC-FF-19-F-G16-BT-W3	171.80
			3/4"	19	200	350	1200	U 1-5/16–12	6100074573	QRC-FF-19-F-U12-BT-W3	121.05
			1"	25	380	260	1200	G 1"	6100175778	QRC-FF-25-F-G16-BT-W3	413.20
			1"	25	380	260	1200	G 1-1/4"	6100149571	QRC-FF-25-F-G20-BT-W3	413.20
			1"	25	380	260	1200	G 1-1/2"	6100175779	QRC-FF-25-F-G24-BT-W3	413.20
			1-1/2"	38	600	300	1000	G 1-1/2"	6100068720	QRC-FF-38-F-G24-S1-W3	851.95
		Male Tip	1/4"	6.3	40	400	1500	G 1/4"	6100149574	QRC-FF-06-M-G04-S1-W3	39.45
			3/8"	10	80	350	1400	G 3/8"	6100074516	QRC-FF-10-M-G06-BP-W3	42.20
			3/8"	10	80	350	1400	G 1/2"	6100074517	QRC-FF-10-M-G08-BP-W3	42.10
			1/2"	12.5	120	350	1400	G 1/2"	6100074550	QRC-FF-12-M-G08-BP-W3	63.25
			1/2"	12.5	120	350	1400	G 3/4"	6100074551	QRC-FF-12-M-G12-BP-W3	63.25
			1/2"	12.5	120	350	1400	U 7/8–14	6100074555	QRC-FF-12-M-U10-BP-W3	46.60
			1/2"	12.5	120	350	1400	ORFS 1–14	6100123028	QRC-FF-12-M-O10B-BP-W3-SM	63.25
			5/8"	16	150	350	1600	G 3/4"	6100218240	QRC-FF-16-M-G12-BT-W3	101.10
			5/8"	16	150	350	1600	G 1"	6100177472	QRC-FF-16-M-G16-BT-W3	103.90
			5/8"	16	150	350	1600	U 1-1/16–12	6100177475	QRC-FF-16-M-U12-BT-W3	103.90
			3/4"	19	200	350	1200	G 3/4"	6100074587	QRC-FF-19-M-G12-BP-W3	126.30
			3/4"	19	200	350	1200	G 1"	6100074588	QRC-FF-19-M-G16-BP-W3	126.30
			3/4"	19	200	350	1200	U 1-1/16–12	6100074591	QRC-FF-19-M-U12-BP-W3	162.20
			1"	25	380	260	1200	G 1"	6100175771	QRC-FF-25-M-G16-BP-W3	287.65
			1"	25	380	260	1200	G 1-1/4"	6100149510	QRC-FF-25-M-G20-BP-W3	287.65
			1"	25	380	260	1200	G 1-1/2"	6100175773	QRC-FF-25-M-G24-BP-W3	287.65
			1-1/2"	38	600	300	1000	G 1-1/2"	6100068727	QRC-FF-38-M-G24-BT-W3	545.05
	FU/FC Series Flat face type - Male tip Acc. to ISO 16028 connects under pressure	Male Tip	3/8"	10	80	350	1700	G 3/8"	6100200731	QRC-FC-10-M-G06-S5-W3	88.50
			3/8"	10	80	350	1700	G 1/2"	6100247745	QRC-FC-10-M-G08-S5-W3	88.50
			1/2"	12.5	120	350	1500	G 1/2"	6100195695	QRC-FC-12-M-G08-S5-W3	112.30
			1/2"	12.5	120	350	1500	G 3/4"	6100195694	QRC-FC-12-M-G12-S5-W3	112.30
			3/4“	19	180	350	1600	G 3/4"	6100195617	QRC-FC-19-M-G12-S5-W3	231.30
			3/4“	19	180	350	1600	G 1"	6100195618	QRC-FC-19-M-G16-S5-W3	231.30
	FH Series **Stainless Steel** Flat face type Acc. to ISO 16028	Female Body	3/8"	10	80	250	1300	G 3/8"	6100068120	QRC-FH-10-F-G06-VT-W5	435.30
			3/8"	10	80	250	1300	G 1/2"	6100006511	QRC-FH-10-F-G08-VT-W5	435.30
			1/2"	12.5	120	250	1300	G 1/2"	6100068279	QRC-FH-12-F-G08-VT-W5	552.40
			1/2"	12.5	120	250	1300	G 3/4"	6100068286	QRC-FH-12-F-G12-VT-W5	552.40
			3/4"	19	180	250	1300	G 3/4"	6100068460	QRC-FH-19-F-G12-VT-W5	677.90
			3/4"	19	180	250	1300	G 1"	6100068467	QRC-FH-19-F-G16-VT-W5	677.90
		Male Tip	3/8"	10	80	250	1300	G 3/8"	6100068196	QRC-FH-10-M-G06-VT-W5	242.85
			3/8"	10	80	250	1300	G 1/2"	6100006600	QRC-FH-10-M-G08-VT-W5	242.85
			1/2"	12.5	120	250	1300	G 1/2"	6100068356	QRC-FH-12-M-G08-VT-W5	334.85
			1/2"	12.5	120	250	1300	G 3/4"	6100068363	QRC-FH-12-M-G12-VT-W5	334.85
			3/4"	19	180	250	1300	G 3/4"	6100025851	QRC-FH-19-M-G12-VT-W5	443.60
			3/4"	19	180	250	1300	G 1"	6100068507	QRC-FH-19-M-G16-VT-W5	443.60
	FF / FH / FU Series Dust Plugs and Caps	Dust Plug	1/4"	6.3	To suit Female Body				6100068025	QRC-FF-06-DF-24-K-RD	5.95
			3/8"	10					6100122987	QRC-FF-10-DF-30-K-RD	5.10
			1/2"	12.5					6100123044	QRC-FF-12-DF-36-K-RD	5.75
			5/8"	16					6100068392	QRC-FF-16-DF-30-K-RD	7.25
			3/4"	19					6100123091	QRC-FF-19-DF-46-K-RD	8.60
			1"	25					6100068527	QRC-FF-25-DF-51-K-RD	21.25
		Dust Cap	1/4"	6.3	To suit Male Tip				6100068026	QRC-FF-06-DM-22-KP-RD	5.95
			3/8"	10					6100093269	QRC-FF-10-DM-27-K-RD	5.10
			1/2"	12.5					6100123007	QRC-FF-12-DM-36-K-RD	5.75
			5/8"	16					6100068393	QRC-FF-16-DM-30-K-RD	7.25
			3/4"	19					6100123071	QRC-FF-19-DM-46-K-RD	8.60
			1"	25					6100068528	QRC-FF-25-DM-51-K-RD	21.25

Push-to-Connect Couplings

Quick Release Coupling	Series	Type	DN Body Size		Q_{max} l/min	Working Pressure bar	Burst Press. Connected bar	Port Thread	Item No.	Designation	Price
			Inch	ISO 4397							
Push-to-Connect Couplings											
	HP Series Push-pull-type Acc. to ISO 7241-1. series A Breakaway function	Female Body	1/2"	12.5	100	250	1000	G 3/8"	6100111025	QRC-HP-12-F-G06-B-W3	28.05
			1/2"	12.5	100	250	1000	G 1/2"	6100073463	QRC-HP-12-F-G08-B-W3	28.05
		Male Tip	1/2"	12.5	100	250	1000	G 3/8"	6100111073	QRC-HP-12-M-G06-B-W3	16.10
			1/2"	12.5	100	250	1000	G 1/2"	6100111078	QRC-HP-12-M-G08-B-W3	12.10
	HU Series Push-pull-type Acc. to ISO 7241-1. series A Breakaway function Connects with HP-12, Connects under pressure	Male Tip	1/2"	12.5	90	250	1100	G 3/8"	6100074039	QRC-HU-12-M-G06-B-W66I	34.80
			1/2"	12.5	90	250	1100	G 1/2"	6100074043	QRC-HU-12-M-G08-B-W66I	35.40
	UX Series Push-pull-type Acc. to ISO 7241-1. series A Breakaway function Couple under full pressure	Female Body	1/2"	12.5	100	250	1000	G 1/2"	6100069898	QRC-UX-L-12-F-G08-S1-W66	114.00
		Male Tip	1/2"	12.5	100	250	1000	G 1/2"	6100111078	QRC-HP-12-M-G08-B-W3	12.10
	IA Series Pull type Male Tip Acc. to ISO 7241-1. series A	Female Body	1/4"	6.3	17	350	1400	G 1/4"	6100201500	QRC-IA-06-F-G04-BT-W3AA	19.50
			3/8“	10	46	275	1500	G 3/8"	6100201502	QRC-IA-10-F-G06-BT-W3AA	23.50
			1/2"	12.5	90	275	1200	G 1/2"	6100201504	QRC-IA-12-F-G08-BT-W3AA	29.80
			3/4“	19 (20)	190	200	1000	G 3/4"	6100201506	QRC-IA-19-F-G12-BT-W3AA	47.65
			1“	25	280	200	1000	G 1"	6100201508	QRC-IA-25-F-G16-BT-W3AA	77.25
			1-1/2“	38	757	130	820	G 1-1/2"	6100131283	QRC-IA-38-F-G24-BT-W3AA	320.55
		Male Tip	1/4"	6.3	17	350	1400	G 1/4"	6100201501	QRC-IA-06-M-G04-B-W3AA	8.75
			3/8“	10	46	275	1500	G 3/8"	6100201503	QRC-IA-10-M-G06-B-W3AA	10.25
			1/2"	12.5	90	275	1200	G 1/2"	6100201505	QRC-IA-12-M-G08-B-W3AA	12.90
			3/4“	19 (20)	190	200	1000	G 3/4"	6100201507	QRC-IA-19-M-G12-B-W3AA	20.55
			1“	25	280	200	1000	G 1"	6100201509	QRC-IA-25-M-G16-B-W3AA	33.25
			1-1/2“	38	757	130	820	G 1-1/2"	6100201510	QRC-IA-38-M-G24-B-W3AA	138.80
	IA Series **Stainless Steel** Pull type Male Tip Acc. to ISO 7241-1. series A	Female Body	1/2"	12.5	90	300	1350	G 1/2"	6100073856	QRC-IA-12-F-G08-VT-W5I	217.70
		Male Tip	1/2"	12.5	90	300	1350	G 1/2"	6100073857	QRC-IA-12-M-G08-V-W5I	112.10
	ID Series Pull type	Female Body	1/4"	6.3	24	400	1700	G 1/4"	6100164205	QRC-ID-06-F-G04-BT-W3AA	23.50
			3/8"	10	46	350	1500	G 3/8"	6100130497	QRC-ID-10-F-G06-BT-W3AA	25.60
			3/4"	19 (20)	190	250	1100	G 3/4"	6100130494	QRC-ID-19-F-G12-BT-W3AA	61.85
		Male Tip	1/4"	6.3	24	400	1700	G 1/4"	6100164206	QRC-ID-06-M-G04-B-W3AA	14.65
			3/8"	10	46	350	1500	G 3/8"	6100130496	QRC-ID-10-M-G06-B-W3AA	11.30
			3/4"	19 (20)	190	250	1100	G 3/4"	6100130493	QRC-ID-19-M-G12-B-W3AA	26.45
	HP Series Dust Plugs and Caps Also suitable for UX, IA, ID.	Dust Plug	3/8"	10	To suit Female Body				6100068747	QRC-HP-10-DF-22-K-RD	3.70
			1/2"	12.5					2012032149	QRC-HP-12-DF-27-K/1-RD	4.35
			3/4"	19 (20)					6100069012	QRC-HP-19-DF-37-K-RD	6.45
			1"	25					6100069060	QRC-HP-25-DF-41-K-RD	8.60
		Dust Cap	3/8"	10	To suit Male Tip				6100068749	QRC-HP-10-DM-22-K-RD	3.70
			1/2"	12.5					2012032148	QRC-HP-12-DM-27-K/1-RD	4.35
			3/4"	19 (20)					6100069014	QRC-HP-19-DM-37-K-RD	6.45
			1"	25					6100069061	QRC-HP-25-DM-41-K-RD	8.60
	HUS Series Push-pull-type with decompression valve and safety locking, interchangeable with Holmbury F Series and TEMA T Series	Female Body	3/8"	10	-	350	1500	G 3/8"	6100201574	QRC-HUS-10-F-G06-BT-W3AA	37.10
			1/2"	12.5	-	315	1300	G 1/2"	6100201576	QRC-HUS-12-F-G08-BT-W3AA	41.75
			3/4"	19 (20)	-	300	1250	G 3/4"	6100201578	QRC-HUS-19-F-G12-BT-W3AA	69.75
			1"	25	-	260	1100	G 1"	6100201580	QRC-HUS-25-F-G16-BT-W3AA	81.45
		Male Tip	3/8"	10	-	350	1500	G 3/8"	6100201575	QRC-HUS-10-M-G06-B-W3AA	12.30
			1/2"	12.5	-	315	1300	G 1/2"	6100201577	QRC-HUS-12-M-G08-B-W3AA	18.15
			3/4"	19 (20)	-	300	1250	G 3/4"	6100201579	QRC-HUS-19-M-G12-B-W3AA	27.70
			1"	25	-	260	1100	G 1"	6100201581	QRC-HUS-25-M-G16-B-W3AA	59.10
	HUS Series Dust Plugs and Caps	Dust Plug	3/8"	10	To suit Female Body				6100165689	QRC-HUS-10-DF-36-KAA-RD	3.45
			1/2"	12.5					6100165690	QRC-HUS-12-DF-36-KAA-RD	3.55
			3/4"	19 (20)					6100165691	QRC-HUS-19-DF-36-KAA-RD	5.30
			1"	25					6100165692	QRC-HUS-25-DF-40-KAA-RD	6.90
		Dust Cap	3/8"	10	To suit Male Tip				6100165694	QRC-HUS-10-DM-36-KAA-RD	3.55
			1/2"	12.5					6100165695	QRC-HUS-12-DM-36-KAA-RD	4.40
			3/4"	19 (20)					6100165696	QRC-HUS-19-DM-36-KAA-RD	5.20
			1"	25					6100165697	QRC-HUS-25-DM-40-KAA-RD	7.65

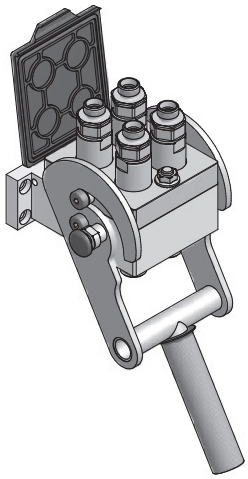
Series MK ▪ Characteristics

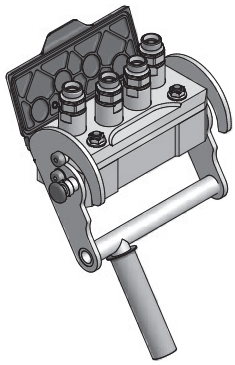
Description
The multi-coupling has been created for connecting and disconnecting several hydraulic lines at the same time. This is done by an operating lever the guide crank of which is designed for a minimum of operating force.

The connection of the hydraulic lines is made with flat face couplings. Due to the special sealing, it is possible to couple against trapped pressure on the male halves (max. 4x100 bar / 4x1450 PSI)

The main features of the multi coupling are:

- Safety against commutability of hydraulic lines
- Quick connecting
- Coupling against trapped pressure
- Optimally minimised leakage during the coupling process





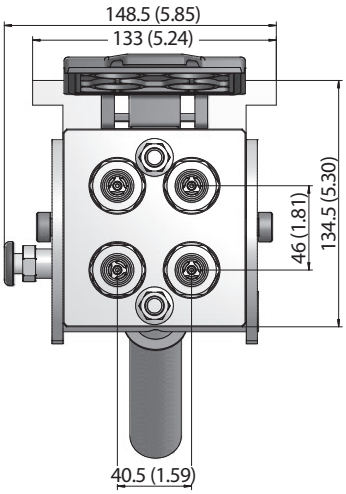
Series MK-Q-10/4 ▪ BG 2 ▪ Nominal Size 10

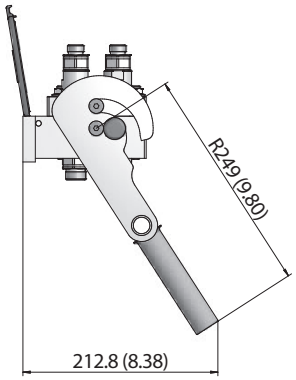
Working Pressure
250 bar / 25 MPa / 3626 PSI (2 x 250 bar, 2 x 40 bar)

Material
Steel

Surface Finishing
Zinc-Nickel

Standard Seal Material(s)
NBR (Buna-N®), PTFE, PU





SW: Width across flats. All dimensions in mm (inch).

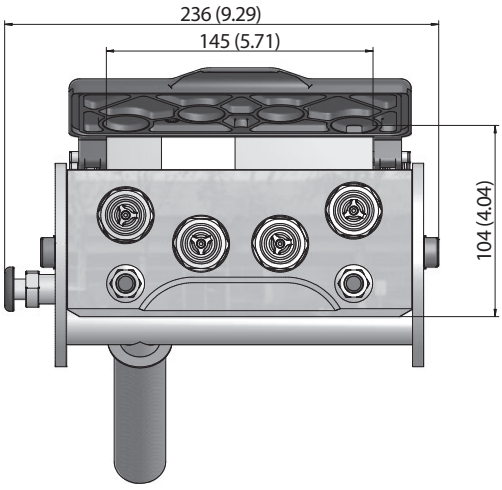
Series MK-R-10/4 ▪ BG 2 ▪ Nominal Size 10

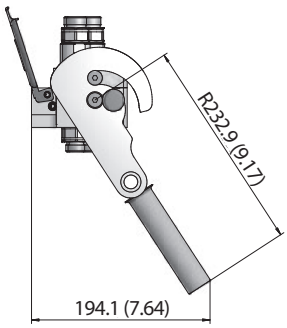
Working Pressure
250 bar / 25 MPa / 3626 PSI (2 x 250 bar, 2 x 40 bar)

Material
Steel

Surface Finishing
Zinc-Nickel

Standard Seal Material(s)
NBR (Buna-N®), PTFE, PU





SW: Width across flats. All dimensions in mm (inch).

Available on request. Contact STAUFF for more information

Screw-on type (ISO 14541)
QRC-HS — **J18**

Dust Plugs and Caps
HS Series
QRC-HS-...-DF / QRC-HS-...-DM — **J18**

Flat face pipeline coupling
QRC-RH / QRC-RK — **J18**

Dust Plugs and Caps
RH Series
QRC-RH-...-DF / QRC-RH-...-DM — **J18**

Screw-on type, flat face
QRC-FT — **J19**

Dust Plugs and Caps
FT Series
QRC-FT-...-DF / QRC-FT-...-DM — **J19**

Screw-on type ISO14540 with cone valve
QRC-HI — **J19**

Dust Plugs and Caps
HI Series
QRC-HI-...-DF / QRC-HI-...-DM — **J19**

Screw-on type with wing nut,
interchangeable with Snap-Tite 75, Dixon WS
QRC-HV — **J19**

Dust Plugs and Caps
HV Series
QRC-HV-...-DF / QRC-HV-...-DM — **J19**

Screw-to-Connect Couplings

STAUFF Screw-to-connect Couplings are locked by manually screwing together the thread of the female body and the thread of the male tip as far as they will go.

Higher working pressures can sometimes be achieved with Screw-to-connect Couplings than with push-to-connect Couplings (depending on the respective nominal size) as the forces produced act on the thread rather than on the snap-in balls.

Series **HS**

ISO 14541

For heavy-duty service conditions
and high working pressures

Series **RH/RK**

Flat-face, Pipeline Coupling

Permit separation without any loss of medium

Series **FT**

Flat-face Coupling, connection under pressure

Tested and certified acc. API 16 D
and acc. EUB Directive # 36

Series **HI**

ISO 14540

Double shut-off valve design

Series **HV**

Wing style
Connection under pressure

Double shut-off valve design

Screw-to-Connect Couplings ▪ Ordering Codes

QRC	-	HS	-	12	-	F	-	G06	-	BT	-	W66
①		②		③		④		⑤		⑥		⑦

① Quick Release Coupling

Quick release coupling	**QRC**

② Series

Screw-on type (ISO 14541)	**HS**
Pipeline coupling, small leakage (420 bar)	**RH**
Pipeline coupling, small leakage (350 bar)	**RK**
Screw-on type, flat face	**FT**
Screw-on type ISO14540 with cone valve	**HI**
Screw-on type with wing nut, interchangeable with Snap-Tite 75, Dixon WS	**HV**

③ Size

Size 6.3 (ISO 4397) / 1/4" / Ø6mm	**06**
Size 8 (ISO 4397) / 5/16" / Ø8mm	**08**
Size 10 (ISO 4397) / 3/8" / Ø10mm	**10**
Size 12.5 (ISO 4397) / 1/2" / Ø12mm	**12**
Size 16 (ISO 4397) / 5/8" / Ø16mm	**16**
Size 19 (ISO 4397) / 3/4" / Ø19mm	**19**
Size 25 (ISO 4397) / 1" / Ø25mm	**25**
Size 31.5 (ISO 4397) / 1-1/4" / Ø31.5mm	**31**
Size 38 (ISO 4397) / 1-1/2" / Ø38mm	**38**
Size 51 (ISO 4397) / 2" / Ø50mm	**51**

④ Types

Female body with valve	**F**
Male tip with valve	**M**

⑤ Connection Type

BSPP, female thread	**G**
NPTF, female thread	**NF**
Male 24° Conical Bore DIN 3861	- See Table Below

⑤ Connection Size

BSPP (G)	NPTF (NF)	Dash Size
1/8	1/8–27	**02**
1/4	1/4–18	**04**
3/8	3/8–18	**06**
1/2	1/2–14	**08**
3/4	3/4–14	**12**
1	1–11.5	**16**
1-1/4	1-1/4–11.5	**20**
1-1/2	1-1/2–11.5	**24**
2	2–11.5	**32**

⑤ Male 24° Conical Bore DIN 3861

Metric Thread	L Series	S Series
M14x1.5	**08L**	**-**
M16x1.5	**10L**	**08S**
M18x1.5	**12L**	**10S**
M20x1.5	**-**	**12S**
M22x1.5	**15L**	**14S**
M24x1.5	**-**	**16S**
M26x1.5	**18L**	**-**
M30x2	**22L**	**22S**
M36x2	**28L**	**25S**
M42x2	**-**	**30S**
M45x2	**35L**	**-**
M52x2	**42L**	**38S**

⑥ Seal Material

NBR (Perbunan)	**B**
NBR (Perbunan) + PU (Polyurethan)	**BP**
NBR (Perbunan) + PTFE (Teflon)	**BT**
NBR (Perbunan) + PU (Polyurethan) + PTFE (Teflon)	**S1**
NBR (Perbunan) + PU (Polyurethan) + PTFE (Teflon) + FKM (Viton)	**S2**

⑦ Material / Surface Protection

Steel, zinc-nickel plated	**W3**
Steel chromium VI-free zinc plated plus thick-layer-passivation (contents CrIII)	**W66**

⑧ Additional Information

STAUFF internal information only	**Letter indicated**

Screw-to-Connect Couplings ▪ Overview

Description	Characteristics	Series	DN Inch	DN ISO 4397
Screw-to-Connect Coupling	Acc. to ISO 14541 (BG 1-6)	HS-06	1/4"	6.3
		HS-10	3/8"	10
		HS-12	1/2"	12.5
		HS-19	3/4"	19
		HS-25	1"	25
		HS-38	1-1/2"	38
Flat face Coupling	Pipeline Coupling	RH-10	3/8"	10
		RH-12	1/2"	12.5
		RH-16	5/8"	16
		RK-19	3/4"	19
		RH-25	1"	25
Flat face Coupling	Male Part Connect under Pressure	FT-10	3/8"	10
		FT-12	1/2"	12.5
		FT-16	5/8"	16
		FT-19	3/4"	19
		FT-25	1"	25
		FT-32	1-1/4"	31.5
Screw-to-Connect Coupling	Acc. to ISO 14540 Working Pressure 700 bar	HV-10	3/8"	10
Screw-to-Connect Coupling	wing style	HV-19	3/4"	19 (20)
		HV-25	1"	25
		HV-31	1-1/4''	31
		HV-38	1-1/2''	38
		HV-51	2"	51

Screw-to-Connect Couplings

Quick Release Coupling	Series	Type	DN Body Size		Q_{max} l/min	Working Pressure bar	Burst Press. Connected bar	Port Type	Item No.	Designation	Price
			Inch	ISO 4397							
Screw-to-Connect Couplings											
	HS Series Acc. to ISO 14541 (BG 1-6)	Female Body	1/4"	6.3	20	450	1800	G 1/4"	2012031687	QRC-HS-06-F-G04-BT-W66	40.85
			3/8"	10	40	450	1600	G 1/4"	6100038334	QRC-HS-10-F-G04-BT-W66	42.20
			3/8"	10	40	450	1600	G 3/8"	2012031702	QRC-HS-10-F-G06-BT-W66	42.20
			1/2"	12.5	80	400	1400	G 3/8"	6100069292	QRC-HS-12-F-G06-BT-W66	39.45
			1/2"	12.5	80	400	1400	G 1/2"	2012031688	QRC-HS-12-F-G08-BT-W66	39.45
			3/4"	19	120	400	1500	G 3/4"	2012031703	QRC-HS-19-F-G12-BT-W66	87.05
			1"	25	160	300	1180	G 3/4"	6100038349	QRC-HS-25-F-G12-BT-W66	96.95
			1"	25	160	300	1180	G 1"	2012031689	QRC-HS-25-F-G16-BT-W66	96.95
			1-1/2"	38	220	300	1800	G 1-1/4"	2012031676	QRC-HS-38-F-G20-BT-W66	483.60
			1-1/2"	38	220	300	1800	G 1-1/2"	2012031690	QRC-HS-38-F-G24-BT-W66	483.60
		Male Tip	1/4"	6.3	20	450	1800	G 1/4"	2012031681	QRC-HS-06-M-G04-B-W66	42.20
			3/8"	10	40	450	1600	G 1/4"	6100038345	QRC-HS-10-M-G04-B-W66	45.00
			3/8"	10	40	450	1600	G 3/8"	2012031682	QRC-HS-10-M-G06-B-W66	45.00
			1/2"	12.5	80	400	1400	G 3/8"	6100069354	QRC-HS-12-M-G06-B-W66	45.00
			1/2"	12.5	80	400	1400	G 1/2"	2012031683	QRC-HS-12-M-G08-B-W66	43.55
			3/4"	19	120	400	1500	G 3/4"	2012031684	QRC-HS-19-M-G12-B-W66	89.85
			1"	25	160	300	1180	G 3/4"	6100038379	QRC-HS-25-M-G12-B-W66	87.05
			1"	25	160	300	1180	G 1"	2012031685	QRC-HS-25-M-G16-B-W66	102.45
			1-1/2"	38	220	300	1800	G 1-1/4"	2012031675	QRC-HS-38-M-G20-B-W66	525.45
			1-1/2"	38	220	300	1800	G 1-1/2"	2012031686	QRC-HS-38-M-G24-B-W66	454.40
	HS Series Dust Plugs and Caps	Dust Plug	1/4"	6.3	To suit Female Body				2012032182	QRC-HS-06-DF-19-K-RD	8.60
			3/8"	10					6100038382	QRC-HS-10-DF-23-K-RD	10.00
			1/2"	12.5					2012032135	QRC-HS-12-DF-30-K-RD	7.25
			3/4"	19					2012032121	QRC-HS-19-DF-37-K-RD	10.00
			1"	25					2012032123	QRC-HS-25-DF-41-K-RD	8.60
			1-1/2"	38					2012032510	QRC-HS-38-DF-55-K-RD	18.35
		Dust Cap	1/4"	6.3	To suit Male Tip				2012032183	QRC-HS-06-DM-19-K-RD	8.60
			3/8"	10					6100038383	QRC-HS-10-DM-23-K-RD	10.00
			1/2"	12.5					2012032136	QRC-HS-12-DM-30-K-RD	7.25
			3/4"	19					2012032077	QRC-HS-19-DM-37-K-RD	10.00
			1"	25					2012032124	QRC-HS-25-DM-41-K-RD	8.60
			1-1/2"	38					2012032509	QRC-HS-38-DM-55-K-RD	18.35
	RH/RK Series Flat face Pipeline Coupling	Female Body	3/8"	10	40	420	1300	M18x1.5	2012032108	QRC-RH-10-F-12L-S1-W3	91.85
			3/8"	10	40	420	1300	M22x1.5	6100069693	QRC-RH-10-F-15L-S1-W3	85.95
			1/2"	12.5	70	420	1260	M24x1.5	2014901797	QRC-RH-12-F-16S-S1-W3	134.95
			3/4"	19	120	350	1000	M36x2	6100069830	QRC-RK-19-F-28L-S1-W3	232.60
		Male Tip	3/8"	10	40	420	1300	M14x1.5	6100069707	QRC-RH-10-M-08L-BT-W3	113.00
			3/8"	10	40	420	1300	M18x1.5	6100069711	QRC-RH-10-M-10S-BT-W3	179.55
			1/2"	12.5	70	420	1260	M24x1.5	6100069775	QRC-RH-12-M-16S-BT-W3	145.55
			3/4"	19	120	350	1000	M36x2	6100069848	QRC-RK-19-M-28L-BT-W3	259.20
	RH Series Dust Plugs and Caps	Dust Plug	3/8"	10	To suit Female Body				6100069660	QRC-RH-10-DF-37-K-RD	8.50
			1/2"	12.5					2014901795	QRC-RH-12-DF-41-K-RD	14.25
			3/4"	19					6100069799	QRC-RH-19-DF-CN-W89-SI	140.30
		Dust Cap	3/8"	10	To suit Male Tip				6100069671	QRC-RH-10-DM-30-K-RD	8.50
			1/2"	12.5					2014901794	QRC-RH-12-DM-30-K-RD	12.85
			3/4"	19					6100069800	QRC-RH-19-DM-CN-W89-SI	125.75

Note: Dust Plugs & Caps are available in - K - Plastic material and - W89-SI - Aluminium silver plated.
W89-SI material is recommended for heavy duty applications or extreme environments, e.g. Dust.

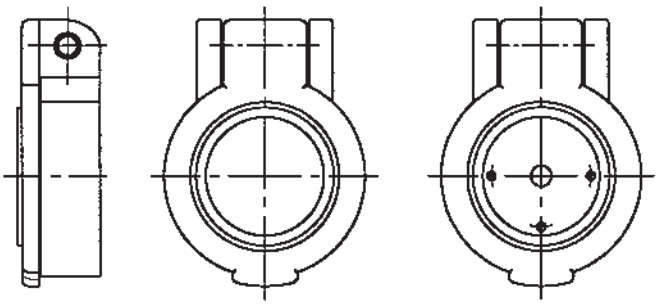
Screw-to-Connect Couplings

Quick Release Coupling	Series	Type	DN Body Size		Q_{max} l/min	Working Pressure bar	Burst Press. Connected bar	Port Type	Item No.	Designation	Price
			Inch	ISO 4397							
Screw-to-Connect Couplings											
	FT Series Flat face Coupling Male Part Connect under Pressure	Female Body	3/8"	10	80	550	1400	G 3/8"	2012031691	QRC-FT-10-F-G06-BT-W3	175.45
			3/8"	10	80	550	1400	G 1/2"	2012031692	QRC-FT-10-F-G08-BT-W3	175.45
			1/2"	12.5	120	550	1400	G 1/2"	2012031693	QRC-FT-12-F-G08-BT-W3	210.70
			1/2"	12.5	120	550	1400	G 3/4"	2012031704	QRC-FT-12-F-G12-BT-W3	210.70
			5/8"	16	140	550	1400	G 3/4"	6100038389	QRC-FT-16-F-G12-BT-W3	238.60
			3/4"	19	180	500	1400	G 1"	2012031696	QRC-FT-19-F-G16-BT-W3	399.30
			1"	25	260	470	1300	G 1-1/4"	6100038393	QRC-FT-25-F-G20-BT-W3	455.75
		Male Tip	3/8"	10	80	550	1400	G 3/8"	2012031694	QRC-FT-10-M-G06-BT-W3	182.10
			3/8"	10	80	550	1400	G 1/2"	2012031695	QRC-FT-10-M-G08-BT-W3	182.10
			1/2"	12.5	120	550	1400	G 1/2"	2012031699	QRC-FT-12-M-G08-BT-W3	175.45
			1/2"	12.5	120	550	1400	G 3/4"	2012031705	QRC-FT-12-M-G12-BT-W3	175.45
			5/8"	16	140	550	1400	G 3/4"	6100038391	QRC-FT-16-M-G12-S2-W3	266.50
			3/4"	19	180	500	1400	G 1"	2012031697	QRC-FT-19-M-G16-BT-W3	518.85
			1"	25	260	470	1300	G 1-1/4"	6100038395	QRC-FT-25-M-G20-BT-W3	679.55
	FT Series Dust Plugs and Caps	Dust Plug	3/8"	10	To suit Female Body				6100038398	QRC-FG-10-DF-30-W89-SI	112.30
			1/2"	12.5					6100038400	QRC-FG-12-DF-36-W89-SI	147.60
			5/8"	16					6100038402	QRC-FG-16-DF-43-W89-SI	189.45
			3/4"	19					6100038404	QRC-FG-19-DF-46-W89-SI	168.15
			1"	25					6100038406	QRC-FG-25-DF-55-W89-SI	280.45
		Dust Cap	3/8"	10	To suit Male Tip				6100038397	QRC-FG-10-DM-30-W89-SI	105.30
			1/2"	12.5					6100038399	QRC-FG-12-DM-41-W89-SI	147.60
			5/8"	16					6100038401	QRC-FG-16-DM-43-W89-SI	189.45
			3/4"	19					6100038403	QRC-FG-19-DM-46-W89-SI	168.15
			1"	25					6100038405	QRC-FG-25-DM-55-W89-SI	280.45
	HI Series ISO 14540	Female Body	3/8"	10	20	1000	3300	NPTF 3/8"	6100131580	QRC-HI-10-F-NF06M-S1-W3AA	29.65
		Male Tip	3/8"	10	20	1000	3300	NPTF 3/8"	6100131581	QRC-HI-10-M-NF06-BP-W3AA	12.95
	HI Series Dust Plugs and Caps	Dust Plug	3/8"	10	To suit Female Body				6100131584	QRC-HI-10-DM-26/CN-W3AA	7.80
		Dust Cap	3/8"	10	To suit Male Tip				6100131585	QRC-HI-10-DF-26/CN-W3AA	6.50
	HV Series Wing style	Female Body	3/4"	19 (20)	190	350	1500	NPTF 3/4"	6100074335	QRC-HV-19-F-NF12-BT-W66I	79.75
			1"	25	280	350	1600	G 1"	6100097447	QRC-HV-25-M-G16-B-W66I	139.65
			1-1/4''	31	480	350	1300	G 1-1/4"	6100097593	QRC-HV-31-F-G20-BT-W66I	350.75
			1-1/2''	38	700	350	1200	G 1-1/2"	6100097200	QRC-HV-38-F-G24-BT-W66I	512.90
			2"	51	1000	350	1100	NPTF 2"	6100074343	QRC-HV-51-F-NF32-BT-W66I	770.60
		Male Tip	3/4"	19 (20)	190	350	1500	NPTF 3/4"	6100074336	QRC-HV-19-M-NF12-B-W66I	131.00
			1"	25	280	350	1600	G 1"	6100097490	QRC-HV-25-F-G16-BT-W66I	214.10
			1-1/4''	31	480	350	1300	G 1-1/4"	6100105267	QRC-HV-31-M-G20-B-W66I	249.90
			1-1/2''	38	700	350	1200	G 1-1/2"	6100097493	QRC-HV-38-M-G24-B-W66I	478.40
			2"	51	1000	350	1100	NPTF 2"	6100074344	QRC-HV-51-M-NF32-B-W66I	969.80
	HV Series Dust Plugs and Caps	Dust Plug	3/4"	19 (20)	To suit Female Body				6100074285	QRC-HV-19-DF-CN-W89I-SI	52.75
			1"	25					6100074287	QRC-HV-25-DF-48/CN-W89I-SI	64.85
			1-1/4''	31					6100074289	QRC-HV-31-DF-49/CN-W89I-SI	77.95
			1-1/2''	38					6100074291	QRC-HV-38-DF-48/CN-W89I-SI	91.20
			2"	51					6100074293	QRC-HV-51-DF-CN-W89I-SI	179.90
		Dust Cap	3/4"	19 (20)	To suit Male Tip				6100074286	QRC-HV-19-DM-CN-W89I-SI	46.90
			1"	25					6100074288	QRC-HV-25-DM-48/CN-W89I-SI	57.15
			1-1/4''	31					6100074290	QRC-HV-31-DM-49/CN-W89I-SI	74.65
			1-1/2''	38					6100074292	QRC-HV-38-DM-48/CN-W89I-SI	89.85
			2"	51					6100074294	QRC-HV-51-DM-CN-W89I-SI	162.20

Note: Dust Plugs & Caps are available in - K - Plastic material and - W89-SI - Aluminium silver plated.
W89-SI material is recommended for heavy duty applications or extreme environments, e.g. Dust.

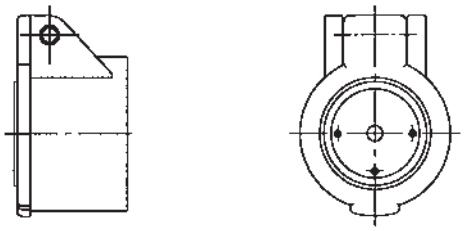
Dust cover clips

This dust guard can be fitted to the female body sleeve after installation for series HP and FH. The cap can be provided with an optional drill hole for a marking clip. Size HP-10 is available in blue, yellow, red, green and black. Sizes HP-08 and HP-12 only in black.



Dust cover body

The dust guard is used to protect the carrier half against pollution. It is produced in black plastic. The cap can be delivered optionally with a drill hole for a marking clip.

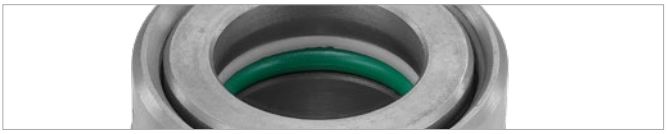


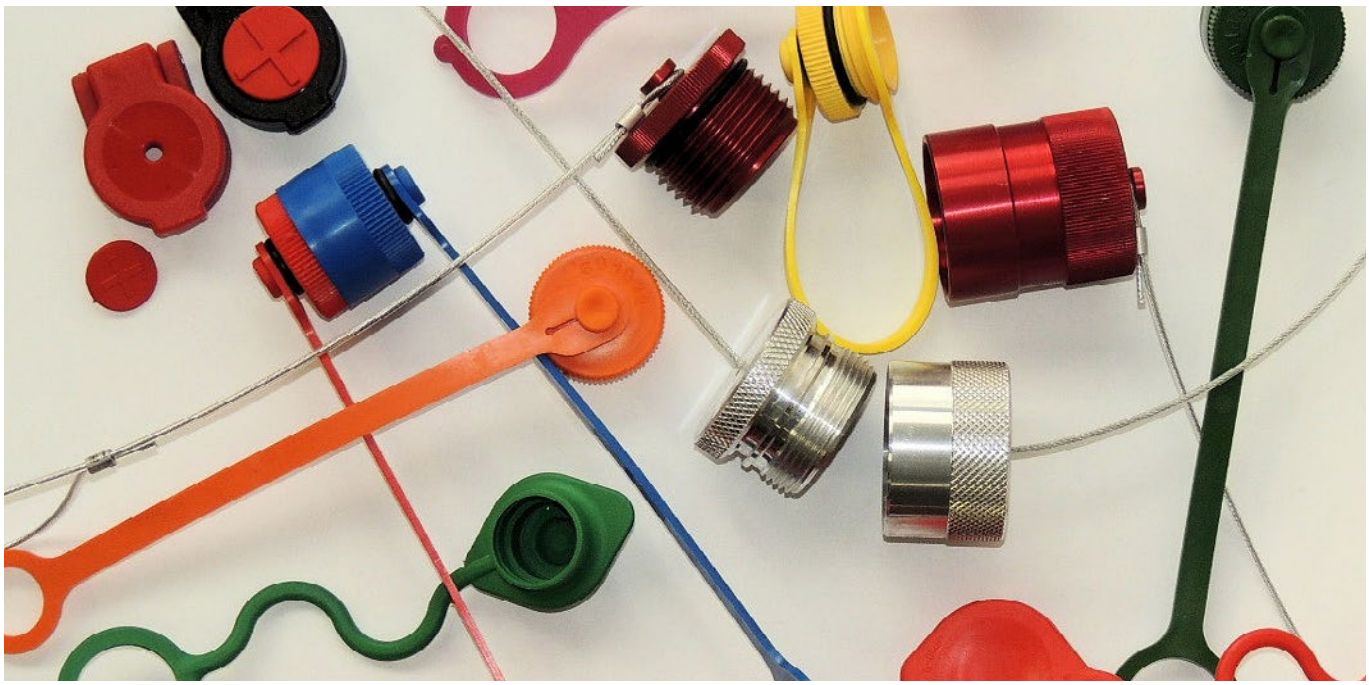
Marking Clips

The marking clips are used for identification purposes.

Seal Kits

Range of O-Rings, back-up rings, profile rings, arrest rings, PTFE rings and profile packing.
Note: Any disconnection of the coupling leads to the expiration of the guarantee





Standard Connection Sizes

ISO 4397	DIN Sizes	Inch Sizes	Flange		Metric Ports						Imperial Ports					
			ISO 6162-1	ISO 6261-2	DIN EN ISO 8434-1		EN ISO 6149		EN ISO 9974		ISO 1179 BSP		SAE J514	SAE J1453	SAE J1926-1 ISO 11926	ANSI B 1.20.1 ANSI B 1.20.3
			350 bar	420 bar												
Nominal			(3000 PSI)	(6000 PSI)									JIC 37°	ORS		
hose size	DN	inch			light series	heavy series	light series	heavy series	light series	heavy series	light series	heavy series	UN / UNF	UN / UNF	UN / UNF	NPT / NPTF
3.2	03	1/8					M8x1	M10x1								
4	04				M12x1.5–6	M14x1.5–6	M10x1	M12x1.5	M10x1	M12x1.5	G 1/8					1/8–27
5	05	3/16				M16x1.5–8			M12x1.5	M14x1.5		G 1/4	7/16–20	9/16–18	7/16–20	
6.3	06	1/4			M14x1.5–8	M18x1.5–10	M12x5	M14x1.5	M14x1.5	M16x1.5	G 1/4		1/2–20	1-1/16–16		1/4–18
8	08	5/16			M16x1.5–10	M20x1.5–12	M16x1.5		M16x1.5	M18x1.5		G 3/8	9/16–18		9/16–18	
10	10	3/8			M18x1.5–12	M22x1.5–14	M18x1.8	M18x1.5	M18x1.5	M20x1.5	G 3/8		3/4–16	1-3/16–16	3/4–16	3/8–18
12.5	12	1/2	13 (1/2")	13 (1/2")	M22x1.5–15	M24x1.5–16	M22x1.5	M22x1.5	M22x1.5	M22x1.5	G 1/2	G 1/2	7/8–14	1–14	7/8–14	1/2–14
16	16	5/8			M26x1.5–18	M30x2–20	M27x2	M30x2		M27x2		G 3/4	1-1/16–12	1-3/16–12	1-1/16–12	
19	19	3/4	19 (3/4")	19 (3/4")	M30x2–20	M36x2–25	M30x2	M33x2	M26x1.5	M33x2	G 3/4	G 1	1-5/16–12	1-7/16–12	1-5/16–12	3/4–14
25	25	1	25 (1")	25 (1")	M36x2–25	M42x2–30	M33x2	M42x2	M33x2	M42x2	G 1	G 1-1/4	1-5/8–12	1-11/16–12	1-5/8–12	1–11.5
31.5	31	1-1/4	32 (1-1/4")	32 (1-1/4")	M45x2–35	M52x2–38	M42x2	M48x2	M42x2	M48x2	G 1-1/4	G 1-1/2	1-7/8–12	2–12	1-7/8–12	1-1/4–11.5
38	38	1-1/2	38 (1-1/2")	38 (1-1/2")	M52x2–42		M48x2	M60x2			G 1-1/2	G 2	2-1/2–12			1-1/2–11.5
51	51	2	51 (2")	51 (2")									3–12			2–11.5
63	63	2-1/2	64 (2-1/2")	64 (2-1/2")									3-1/2–12			

Safety Regulations for Handling of Quick Release Couplings and Accessories

Important !
Incorrect selection or incorrect and inexpert handling of couplings and accessories may result in property damage or personal injury.

- High velocity fluid discharge
- Explosion or combustion of the conveyed fluid
- Collision with moving or dropping components, caused by failure of a hydraulic circuit
- Dangerous whipping of hydraulic hoses
- Risk of injury through contacting hot, cold or otherwise dangerous fluids

Read and observe the following instructions prior to selecting and using a snap-in coupling or associated accessories.

1 General Notes

1.1 General
This section contains instructions on selection and handling (installation, coupling and uncoupling and maintenance). This is to be understood as additional safety notes and must be taken into consideration in the use and application of the products.

1.2 Safety Measures
Couplings may possibly fail without prior warning. Take this into consideration when planning the safety devices of your system or plant.

1.3 Information for the User
Forward these safety notes to the persons responsible for the selection and handling of couplings. Use only couplings for which you have received and understood product-specific information.

1.4 Responsibility of the User
Due to the versatile range of applications of couplings, not every application case and every technical detail can be dealt with in this document.

The user is responsible for:
- final selection of the product
- fulfilment of requirements by the operator
- safety of operating personnel and plant
- safety measures necessary in the use of couplings

Contact STAUFF for more information.

2 Correct Selection of Couplings

2.1 Pressure Range
The coupling to be used must be selected so that the maximum permissible operating pressure is equal to or higher than the system pressure. Pressure peaks in the system in excess of the operating pressure reduce the service life of the couplings and therefore should be taken into consideration when making the selection.

2.2 Resistance to Media
The Sealing Materials in the couplings are suitable for a large variety of pressure media. Information on the compatibility of a particular type of fluid are available upon request from STAUFF.

2.3 Operating Temperature
The indication of operating temperatures in the technical specifications represents maximum values. These values may not be exceeded in standing or flowing circuits. For actuation the natural warming of the coupling must also be taken into consideration.

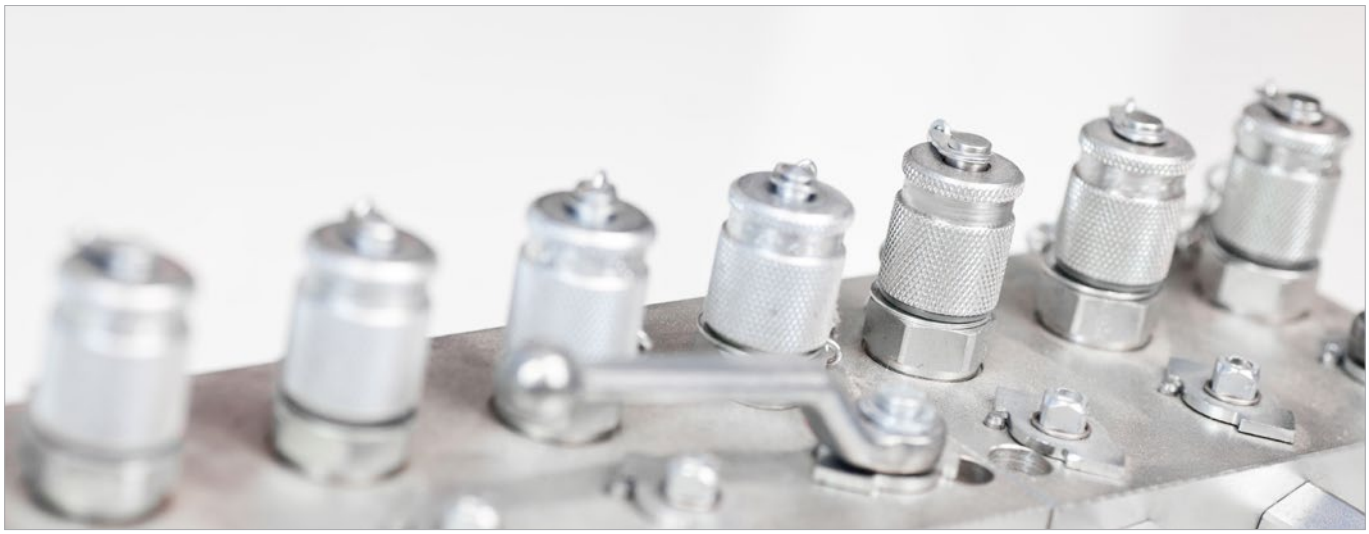
2.4 Size
The selection of the size and type of connection depends on the required transmission of forces. For this purpose, refer to the corresponding diagrams. Flow volume, pressure loss and flow speed should be taken into consideration when selecting the correct size of a coupling. Should these values be exceeded, malfunctions within the coupling may occur.

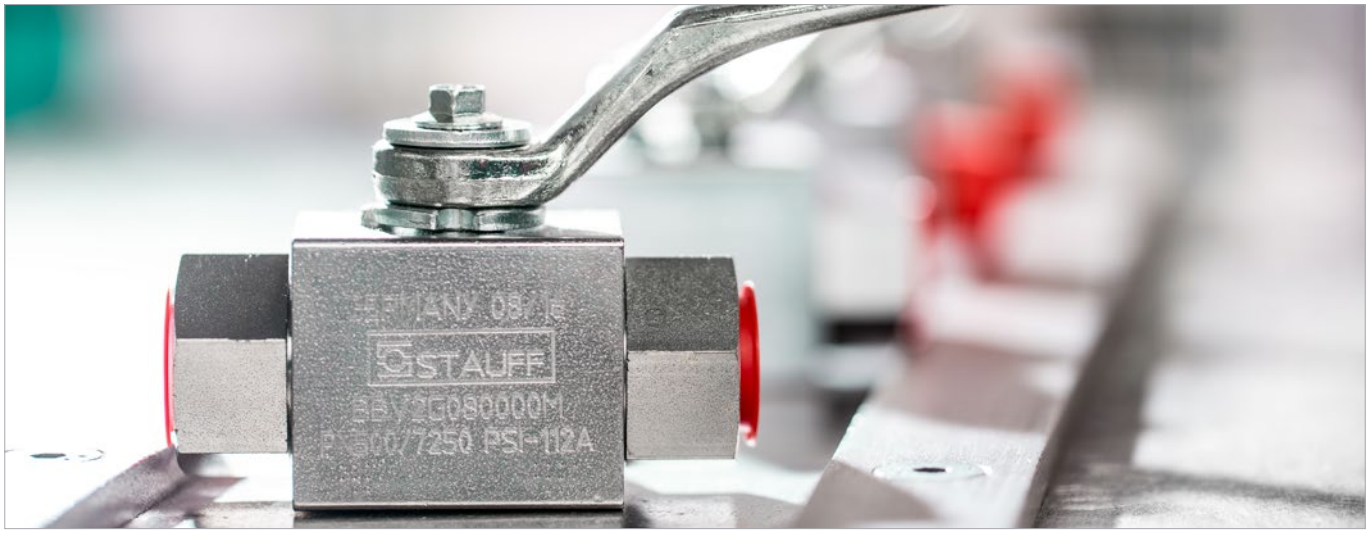
2.5 Mechanical Connection
The connection of the two halves of a coupling is achieved depending on the type. It is important to observe the positive engagement of plug-type couplings and the secure tightening of screw-type couplings to the limit stop of the thread. Forced or improper separation will result in a malfunction of the coupling.

2.6 Thermal Stress
Excessive warming of the coupling above the recommended operating temperature, for instance due to welding or soldering, can cause the formation of dangerous gases. In addition, the protective surface finish (galvanization) will be damaged and the function of the coupling may be impaired.

2.7 Guidelines
Applicable specifications, standards and regulations, as well as technical rules, must be taken into consideration in the selection of couplings.

Introduction	K2 - K3
Two-Way Ball Valves	K4 - K15
Multi-Way Ball Valves	K16 - K29
Flow Control Valves	K30 - K35
Gauge Isolator Valves	K36 - K39
Spare Parts / Accessories	K40 - K43





STAUFF Valves

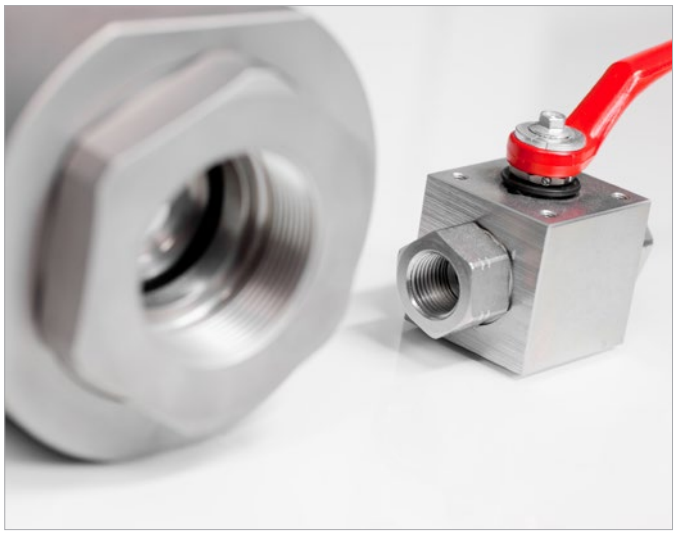
With the STAUFF Valves product range, the companies of STAUFF Group provide access to a comprehensive range of manually operated valves for shutting off, regulating, throttling and fluid media in mobile and industrial hydraulics.

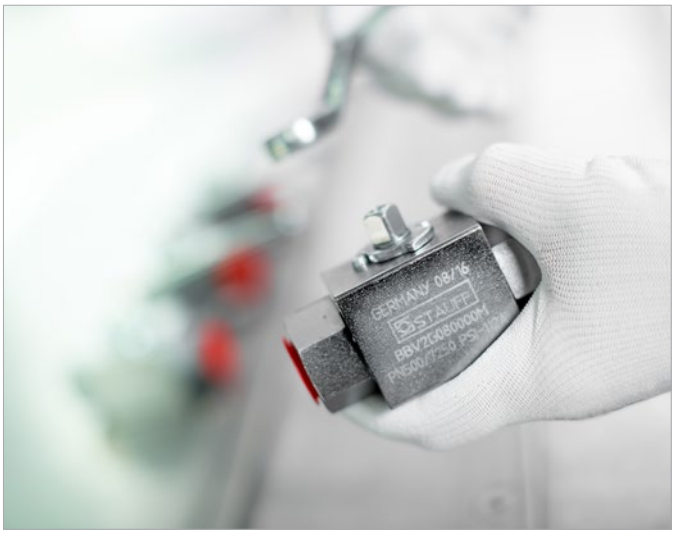
The portfolio includes two-way, three-way and four-way ball valves of various designs and sizes made of steel or stainless steel for medium and high-pressure applications.

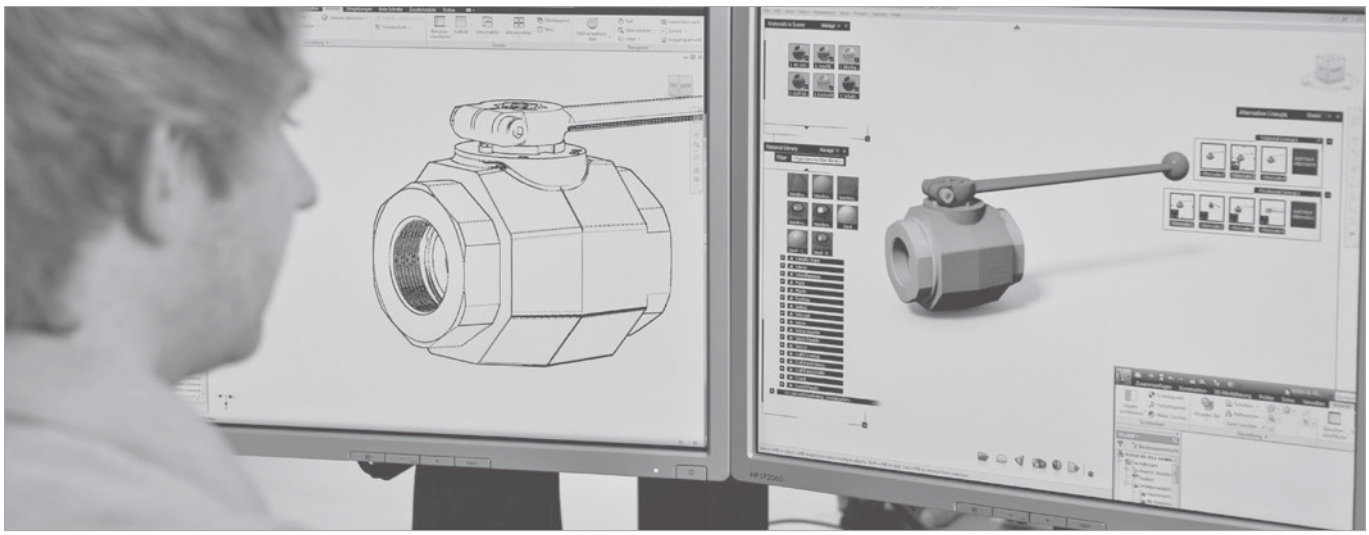
The product range is completed by flow control valves (such as throttle valves and check valves) for in-line assembly, manifold mounting and cartridge assembly, as well as single-station and multi-station gauge isolator valves.

For special applications, STAUFF is able to provide technically modified products that will, for example, cover extreme pressure ranges up to 800 bar /12000 PSI and temperatures up to +500°C / +932°F.

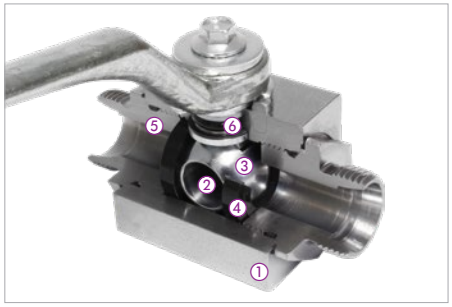
For these and other customised solutions according to customer's specifications or based on our in-house development, STAUFF guarantees prompt service.





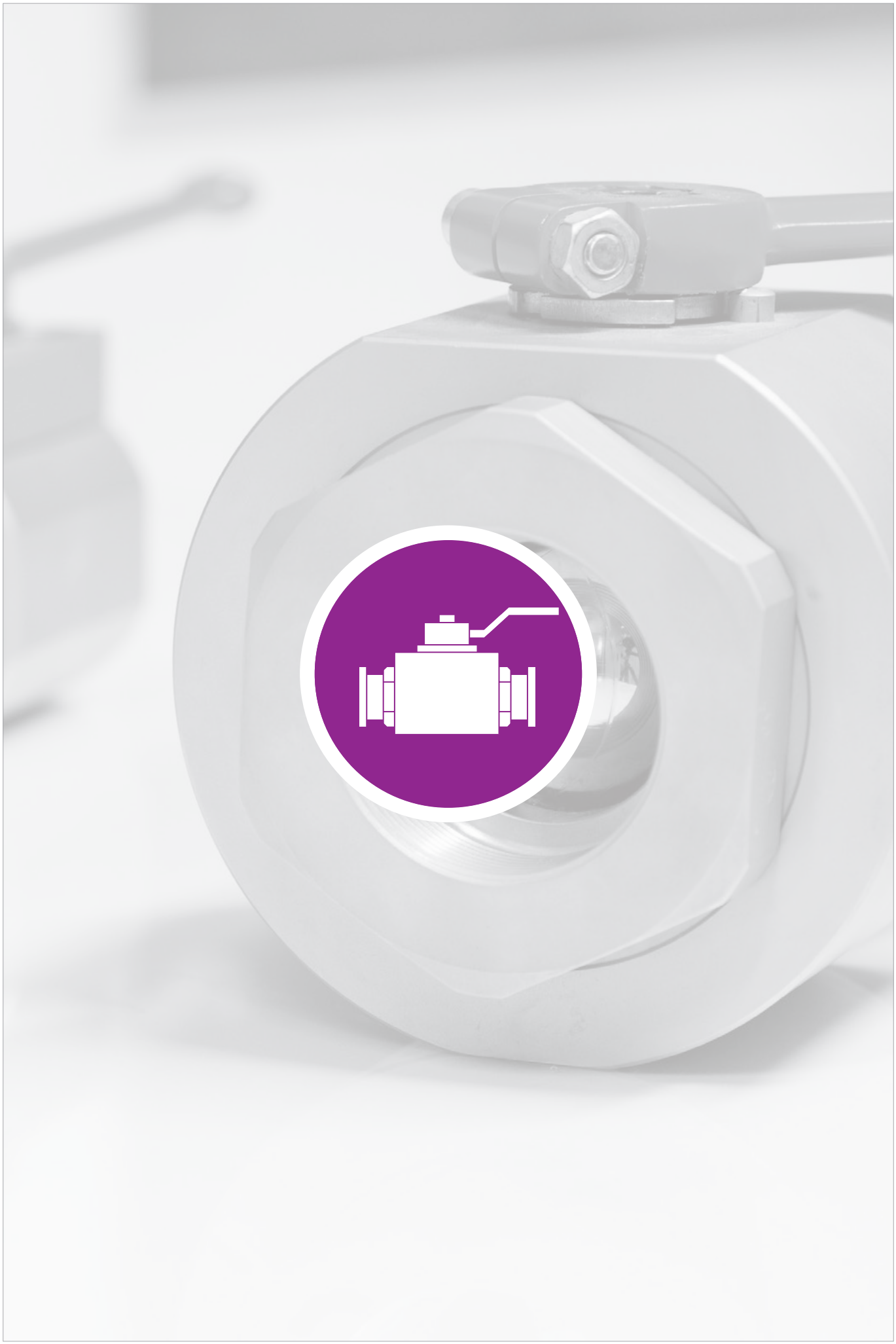


Design Features of STAUFF Valves



① Ball valve body made of European quality steel with the option of full material identification and retraceability
② Ball with a full bore with no cross-section restriction in the ball valve
③ Hard chrome-plated balls to reduce friction and seat wear
④ Ball seats made of Delrin® (POM) to assure low operating torques
⑤ No exposed threads in the flow passage
⑥ High-quality design with a large thrust washer (strength of 1mm) and back-up ring to protect the O-Ring against extrusion

Gradual changeover of the standard surface coating of selected series from "Carbon Steel, zinc/iron-plated" to "Carbon Steel, zinc/nickel-plated"



	Two-Way Ball Valves High-Pressure		**K6 - K13**
	High-Pressure Block Body Ball Valve BBV-2		**K6 - K7**
	BBV-2-G	Female BSPP Thread	**K7**
	BBV-2-N	Female NPT Thread	**K7**
	BBV-2-L/S	24° Cone Connection	**K7**
	High-Pressure Forged Body Ball Valve FBV-2		**K8**
	FBV-2-G	Female BSPP Thread	**K8**
	FBV-2-N	Female NPT Thread	**K8**
	FBV-2-L/S	24° Cone Connection	**K8**
	High-Pressure 800 bar / 12000 PSI Block Body Ball Valve HBV-2		**K9**
	HBV-2-N	Female NPT Thread	**K9**
	High-Pressure Block Body Ball Valve BBV-2-F		**K10**
	BBV-2-F3	SAE Split Flange Connection 3000 PSI Series (ISO 6162-1)	**K10**
	BBV-2-F6	SAE Split Flange Connection 6000 PSI Series (ISO 6162-2)	**K10**
	High-Pressure Forged Body Ball Valve FBV-2-F		**K11**
	FBV-2-F3	SAE Split Flange Connection 3000 PSI Series (ISO 6162-1)	**K11**
	FBV-2-F6	SAE Split Flange Connection 6000 PSI Series (ISO 6162-2)	**K11**
	High-Pressure Round Body Ball Valve BV-2-C36		**K12**
	BV-2-C36	SAE Flange Connection 3000/6000 PSI Series (ISO 6162-1/2) - Dual Pattern	**K12**
	High-Pressure Block Body Ball Valve for Manifold Mounting MBBV-2		**K13**
	Two-Way Ball Valves Low-Pressure		**K14**
	Low-Pressure Ball Valve BV2L-2		**K14**
	BV2L-2	Female BSPP Thread	**K14**

High-Pressure Block Body Ball Valve ▪ Type BBV-2

Pressure Range

- Pressure range: up to 500 bar / 7250 PSI
  (depending on size and material combination of the ball valve)

Order Codes

BBV	-	2	-	G	02	-	8	0	0	1	-	M
①		②		③	④		⑤	⑥	⑦	⑧		⑨

① Type

High-Pressure Block Body Ball Valve	**BBV**

② Number of Ports

Two Ports (Two-Way Ball Valve)	**2**

③ Connection Style

Female BSPP Thread (DIN ISO 228)	**G**
Female NPT Thread (ANSI B1.20.1)	**N**
Female UN/UNF Thread (SAE J 514)	**U**
Male ORFS Connection (ISO 8434-3)	**ORFS**
24° Cone Connection (Light / Heavy Series)	**(None)**

Contact STAUFF for alternative connection styles.

④ Connection Size

STAUFF Size for connection styles G, N, U and ORFS:
(refer to Catalogue 6 - STAUFF Valves)

02	04	06	08	10	12	16	20R	24R

Tube Size (according to dimension table)
for 24° Cone Connection (Light Series):

06L	08L	10L	12L	15L	18L	22L	28L	35L	42L

Tube Size for 24° Cone Connection (Heavy Series):
(refer to Catalogue 6 - STAUFF Valves)

06S	08S	10S	12S	14S	16S	20S	25S	30S	38S

Contact STAUFF for alternative connection sizes.

⑤ Body Material / Surface Finishing

W96 (Carbon Steel, zinc/iron-plated)	**0**
W5 (Stainless Steel, 316 Ti)	**1**
W48 (Carbon steel, zinc-plated and yellow chromated)	**2**
W85 (Aluminium)	**4**
W87 (Aluminium bronze)	**5**
W102 (Carbon Steel, Chemical nickel-plated / electroless nickel)	**7**
W3 (Carbon Steel, zinc/nickel coated) (standard option)	**8**
W60 (Carbon Steel, zinc-nickel-plated and black chromated)	**B**
W52 (Duplex 1.4462)	**D**
Hastelloy (Ni-Basis)	**H**
Monell (Cu-Ni-Basis)	**N**
W2 (Carbon Steel, back phosphated)	**P**
Titanium	**T**

⑥ Ball / Stem Material

Ball: CS (Carbon Steel) hard chrome plated Stem: CS (Carbon Steel) from size 48 SN65 Stem Duplex (standard option)	**0**
Ball / Stem: W5 (Stainless Steel, 1.4571, 316 Ti)	**1**
Ball: W69 (Brass) chrome plated Stem: CS (Carbon Steel)	**2**
Ball: W5 (Stainless Steel,1.4571, 316 Ti) Stem: CS (Carbon Steel)	**3**
Ball: CS (Carbon Steel, hard chrome plated) Stem: W5 (Stainless Steel, 1.4571, 316 Ti)	**4**
Ball: W69 (Brass) chrome plated Stem: W69 (Brass)	**5**
Ball: W5 (Stainless Steel, 1.4571, 316 Ti) Stem: W52 (Duplex 1.4462)	**6**
Ball: W5 (Stainless Steel,1.4571, 316 Ti) plasma nitrated (Hardened) Stem: CS (Carbon Steel)	**F**
Ball / Stem: Hastelloy (Ni-Basis)	**H**
Ball / Stem: Monell (Cu-Ni-Basis)	**N**
Ball: CS (Carbon Steel, Standard) Special Stem with Cold Rolled O-Ring Groove	**S**
Ball / Stem: Titanium	**T**

⑦ Ball Seat Material

DE (Delrin / POM) (standard option)	**0**
PA (Polyamide 6.6)	**1**
POM (with Atex-certification)	**2**
B (Buna / NBR / Perbunan)	**3**
Teflon (PTFE)	**4**
V (Viton /FPM)	**5**
E (EPDM, EPR)	**6**
Teflon (Glass Fibre Reinforced)	**7**
POM front side sealing	**8**
PEEK (with Atex-certification)	**9**
PEEK with Protection ring against erosion	**A**
POM (Encapsulated / encased)	**B**
DE (Delrin / POM, graphite reinforced)	**C**
Graphite	**D**
Torlon	**E**
Steel, Cast Iron	**F**
PEEK	**G**
POM with Protection ring against erosion	**H**
Steel, Cast Iron front side sealing	**K**
PVDF (Polyvinyliden fluoride)	**P**

⑧ O-Ring Material

B (Buna / NBR / Perbunan)	**0**
V (Viton /FPM, STANDARD) (standard option)	**1**
Teflon (PTFE)	**2**
E (EPDM, EPR)	**3**
LB (Buna / NBR / Perbunan) Temperature range: 60°C to 130°C [N75L])	**5**
LV46 (FPM / Viton, Low Temperature -46°C) V91A	**6**
LB (Buna / NBR / Perbunan, Temperature range -40°C)	**7**
Graphite	**D**
CR (Neoprene)	**N**
PTGF (Glass Fibre Reinforced Teflon)	**P**
MFQ (FVMQ, with backup ring, Temperatures down to -40°C)	**V**
Stem O-Ring: Teflon, Adaptor O-Ring: FPM	**T**

⑨ Manufacturing Code

Manufacturing code for all connection style	**M**
Manufacturing code for high-pressure version of connection styles G, N and U (STAUFF Size 16)	**H**

⑩ Lever Options

Supplied with standard lever (according to table)	**(None)**
Supplied without lever	**0**

Note: Levers can be ordered separately, refer to page K42 for more information.

⑪ Accessories

Locking Device - refer to page K43 for more information	
Pattern - Side Mounting Holes	**SM**

High-Pressure Block Body Ball Valve ▪ Type BBV-2

BBV-2-G
Female BSPP Thread (DIN ISO 228)

Item No.	Designation	STAUFF Size	Thread Size	Nominal Size DN	Price
6100085753	BBV-2-G02-8001-M	02	G 1/8 BSPP	4	66.45
6100075929	BBV-2-G04-8001-M	04	G 1/4 BSPP	6	54.30
6100075930	BBV-2-G06-8001-M	06	G 3/8 BSPP	10	62.45
6100075950	BBV-2-G08-8001-M	08	G 1/2 BSPP	13	74.60
6100075951	BBV-2-G12-8001-M	12	G 3/4 BSPP	20	127.35
6100075962	BBV-2-G16-8001-M	16	G 1 BSPP	25	158.65
6100075970	BBV-2-G20R-8001-M	20R	G 1-1/4 BSPP	25/32	223.40
6100075971	BBV-2-G24R-8001-M	24R	G 1-1/2 BSPP	25/40	250.40

BBV-2-N
Female NPT Thread (ANSI B1.20.1)

Item No.	Designation	STAUFF Size	Thread Size	Nominal Size DN	Price
6100075972	BBV-2-N04-8001-M	04	1/4-18 NPT	6	71.80
6100075973	BBV-2-N06-8001-M	06	3/8-18 NPT	10	74.60
6100075974	BBV-2-N08-8001-M	08	1/2-14 NPT	13	82.75
6100075975	BBV-2-N12-8001-M	12	3/4-14 NPT	20	161.25
6100075977	BBV-2-N16-8001-M	16	1-11–1/2 NPT	25	193.90
6100075978	BBV-2-N20R-8001-M	20R	1-1/4–11-1/2 NPT	25/32	206.80
6100075979	BBV-2-N24R-8001-M	24R	1-1/2–11-1/2 NPT	25/40	254.25

BBV-2-G
Stainless Steel
Female BSPP Thread (DIN ISO 228)

Item No.	Designation	STAUFF Size	Thread Size	Nominal Size DN	Price
6100207244	BBV-2-G04-1101-M-W50	04	G 1/4 BSPP	6	414.70
6100039574	BBV-2-G06-1101-M-W50	06	G 3/8 BSPP	10	471.15
3404002848	BBV-2-G08-1101-M-W50	08	G 1/2 BSPP	13	487.80
6100035381	BBV-2-G12-1101-M-W50	12	G 3/4 BSPP	20	777.90
6100207246	BBV-2-G16-1101-M-W50	16	G 1 BSPP	25	874.05
6100207496	BBV-2-G20R-1101-M-W50	20R	G 1-1/4 BSPP	25/32	1296.30

BBV-2-G
with Side Mounting Holes
Female BSPP Thread (DIN ISO 228)

Item No.	Designation	STAUFF Size	Thread Size	Nominal Size DN	Price
6100076137	BBV-2-G04-8001-M-SM	04	G 1/4 BSPP	6	178.35
6100076138	BBV-2-G06-8001-M-SM	06	G 3/8 BSPP	10	81.40
6100076139	BBV-2-G08-8001-M-SM	08	G 1/2 BSPP	13	74.60
6100076140	BBV-2-G12-8001-M-SM	12	G 3/4 BSPP	20	159.95
6100076141	BBV-2-G16-8001-M-SM	16	G 1 BSPP	25	189.40

BBV-2 ▪ Light Series (DIN 2353 / ISO 8434-1)
24° Cone Connection

Item No.	Designation	STAUFF Size	Tube / Thread Size	Nominal Size DN	Price
6100084933	BBV-2-06L-8001-M	02	M12 x 1.5	4	44.65
6100076135	BBV-2-08L-8001-M	04	M14 x 1.5	6	73.25
6100084943	BBV-2-10L-8001-M	05	M16 x 1.5	8	73.25
6100075798	BBV-2-12L-8001-M	06	M18 x 1.5	10	76.05
6100076136	BBV-2-15L-8001-M	08	M22 x 1.5	13	85.50
6100084949	BBV-2-18LDN13-8001-M	08	M26 x 1.5	13	126.00
6100084951	BBV-2-22L-8001-M	12	M30 x 2	20	164.95
6100084957	BBV-2-28L-8001-M	16	M36 x 2	25	191.60
6100084959	BBV-2-35LDN25-8001-M	20R	M45 x 2	25/32	182.30
6100084961	BBV-2-42LDN25-8001-M	24R	M52 x 2	25/40	424.20

BBV-2 ▪ Heavy Series (DIN 2353 / ISO 8434-1)
24° Cone Connection

Item No.	Designation	STAUFF Size	Tube / Thread Size	Nominal Size DN	Price
6100084939	BBV-2-08S-8001-M	02	M16 x 1.5	4	70.55
6100084944	BBV-2-10S-8001-M	04	M18 x 1.5	6	71.80
6100084948	BBV-2-12S-8001-M	05	M20 x 1.5	8	71.80
6100085733	BBV-2-14S-8001-M	06	M22 x 1.5	10	75.00
6100059294	BBV-2-16S-8001-M	08	M24 x 1.5	13	82.75
6100084950	BBV-2-20SDN13-8001-M	08	M30 x 2	13	161.25
6100088799	BBV-2-20S-8001-M	10	M30 x 2	16	147.70
6100084956	BBV-2-25S-8001-M	12	M36 x 2	20	184.30
6100084958	BBV-2-30S-8001-M	16	M42 x 2	25	196.45
6100084960	BBV-2-38SDN25-8001-M	20R	M52 x 2	25/32	352.45

High-Pressure Forged Body Ball Valve ▪ Type FBV-2

Pressure Range
- Pressure range: up to 420 bar / 6000 PSI
  (depending on size and material combination of the ball valve)

Order Codes

FBV	-	2	-	G	20	-	0	0	0	1	-	M
①		②		③	④		⑤	⑥	⑦	⑧		⑨

① Type

High-Pressure Forged Body Ball Valve	**FBV**

② Number of Ports

Two Ports (Two-Way Ball Valve)	**2**

③ Connection Style

Female BSPP Thread (DIN ISO 228)	**G**
Female NPT Thread (ANSI B1.20.1)	**N**
Female UN/UNF Thread (SAE J 514)	**U**
Male ORFS Connection (ISO 8434-3)	**ORFS**
24° Cone Connection (Light / Heavy Series)	**(None)**

Contact STAUFF for alternative connection styles.

④ Connection Size

STAUFF Size for connection styles G, N, U and B: (refer to Catalogue 6 - STAUFF Valves)	
20 **24**	**32**
Tube Size for 24° Cone Connection (Light Series) (refer to Catalogue 6 - STAUFF Valves)	**35L**
Tube Size for 24° Cone Connection (Light Series) (refer to Catalogue 6 - STAUFF Valves)	**42L**
Tube Size for 24° Cone Connection (Heavy Series) (refer to Catalogue 6 - STAUFF Valves)	**38S**

Contact STAUFF for alternative connection sizes.

⑤ Body Material / Surface Finishing

Carbon Steel, zinc/iron-plated	**0**
Stainless Steel V4A (AISI 316Ti)	**1**

Alternative materials / surface finishings are available on request. Contact STAUFF for more information.

⑥ Ball / Stem Material

Ball: Carbon Steel, hard chrome-plated Stem: Carbon Steel	**0**
Ball / Stem: Stainless Steel V4A (AISI 316Ti)	**1**

Alternative materials / surface finishings are available on request. Contact STAUFF for more information.

⑦ Ball Seat Material

Delrin® (POM)	**0**

Alternative materials are available on request. Contact STAUFF for more information.

⑧ O-Ring Material

NBR (Buna-N®)	**0**
FKM/FPM (Viton®)	**1**

Alternative materials are available on request. Contact STAUFF for more information.

⑨ Manufacturing Code

Manufacturing code for all connection styles	**M**

⑩ Lever Options

Supplied with lever	**(None)**
Supplied without lever	**O**

Note: Levers can be ordered separately, refer to page K42 for more information.

Accessories

Locking Device - refer to page K43 for more information

FBV-2-G
Female BSPP Thread (DIN ISO 228)

Item No.	Designation	STAUFF Size	Thread Size	Nominal Size DN	Price
3404000022	FBV-2-G20-0001-M	20	G 1-1/4BSPP	32	419.80
3404000023	FBV-2-G24-0001-M	24	G 1-1/2 BSPP	40	534.65
3404000024	FBV-2-G32-0001-M	32	G 2 BSPP	50	690.60

FBV-2-N
Female NPT Thread (ANSI B1.20.1)

Item No.	Designation	STAUFF Size	Thread Size	Nominal Size DN	Price
3404001516	FBV-2-N20-0001-M	20	1-1/4–11-1/2 NPT	32	464.65
3404001522	FBV-2-N24-0001-M	24	1-1/2–11-1/2-NPT	40	587.85
3404001525	FBV-2-N32-0001-M	32	2-11–1/2 NPT	50	795.20

FBV-2 ▪ Light Series (DIN 2353 / ISO 8434-1)
24° Cone Connection

Item No.	Designation	STAUFF Size	Tube / Thread Size	Nominal Size DN	Price
3404001206	FBV-2-35L-0001-M	20	35L / M45 x 2	32	537.85
3404000309	FBV-2-42L-0001-M	24	42L / M52 x 2	40	652.75

FBV-2 ▪ Heavy Series (DIN 2353 / ISO 8434-1)
24° Cone Connection

Item No.	Designation	STAUFF Size	Tube / Thread Size	Nominal Size DN	Price
3404001982	FBV-2-38S-0001-M	20	38S / M52 x 2	32	492.90

High-Pressure 800 bar / 12000 PSI Block Body Ball Valve ▪ Type HBV-2

Pressure Range

- Pressure range: up to 800 bar / 12000 PSI
  (depending on size and material combination of the ball valve)

Order Codes

HBV	-	2	-	N	16	-	0	0	B	1	-	M
①		②		③	④		⑤	⑥	⑦	⑧		⑨

① Type

High-Pressure Block Body Ball Valve	**HBV**

② Number of Ports

Two Ports (Two-Way Ball Valve)	**2**

③ Connection Style

Female NPT Thread (ANSI B1.20.1)	**N**
24° Cone Connection (Heavy Series)	**(None)**

Contact STAUFF for alternative connection styles.

④ Connection Size

STAUFF Size for connection style N:
(refer to Catalogue 6 - STAUFF Valves)

04	06	08	12	16

Tube Size for 24° Cone Connection (Heavy Series):
(refer to Catalogue 6 - STAUFF Valves)

08S	10S	12S	14S	16S	20S	25S	30S

Contact STAUFF for alternative connection sizes.

⑤ Body Material / Surface Finishing

Carbon Steel, zinc/iron-plated	**0**
Stainless Steel V4A (AISI 316Ti)	**1**

Alternative materials / surface finishings are available on request. Contact STAUFF for more information.

⑥ Ball / Stem Material

Ball: Carbon Steel, hard chrome-plated Stem: Carbon Steel	**0**
Ball / Stem: Stainless Steel V4A (AISI 316Ti)	**1**

Alternative materials / surface finishings are available on request. Contact STAUFF for more information.

⑦ Ball Seat Material

POM, Encased	**B**

Alternative materials are available on request. Contact STAUFF for more information.

⑧ O-Ring Material

NBR (Buna-N®)	**0**
FKM/FPM (Viton®)	**1**

Alternative materials are available on request. Contact STAUFF for more information.

⑨ Manufacturing Code

Manufacturing code for all connection styles	**M**

⑩ Lever Options

Supplied with lever	**(None)**
Supplied without lever	**O**

Note: Levers can be ordered separately, refer to page K42 for more information.

Accessories

Locking Device - refer to page K43 for more information

HBV-2-N
Female NPT Thread (ANSI B1.20.1)

Item No.	Designation	STAUFF Size	Thread Size	Nominal Size DN	Price
3404001483	HBV-2-N04-00B1-M	04	1/4 NPT	6	494.25
3404001485	HBV-2-N06-00B1-M	06	3/8 NPT	10	494.25
3404000691	HBV-2-N08-00B1-M	08	1/2 NPT	13	494.25
3404000692	HBV-2-N12-00B1-M	12	3/4 NPT	20	743.10
3404001491	HBV-2-N16-00B1-M	16	1 NPT	25	1238.60

High-Pressure Block Body Ball Valve ▪ Type BBV-2-F

Pressure Range

- Pressure range: up to 420 bar / 6000 PSI (depending on size and material combination of the ball valve)

Note: The final maximum working pressure is determined by flange and pipe/tubing rating.

Order Codes

BBV	-	2	-	F3	16	-	0	0	0	1	-	M
①		②		③	④		⑤	⑥	⑦	⑧		⑨

① Type

High-Pressure Block Body Ball Valve	**BBV**

② Number of Ports

Two Ports (Two-Way Ball Valve)	**2**

③ Connection Style

3000 PSI (Code 61) SAE Split Flange Connectors (Standard Adaptor Length)	**F3**
3000 PSI (Code 61) SAE Split Flange Connectors (Extended Adaptor Length)	**F3X**
6000 PSI (code 62) SAE Split Flange Connectors (Standard Adaptor Length)	**F6**
6000 PSI (code 62) SAE Split Flange Connectors (Extended Adaptor Length)	**F6X**

Contact STAUFF for alternative connection styles.

④ Connection Size

STAUFF Size (refer to Catalogue 6 - STAUFF Valves)		
08	**12**	**16**

Contact STAUFF for alternative connection sizes.

⑤ Body Material / Surface Finishing

Carbon Steel, zinc/iron-plated	**0**
Stainless Steel V4A (AISI 316Ti)	**1**

Alternative materials / surface finishings are available on request. Contact STAUFF for more information.

⑥ Ball / Stem Material

Ball: Carbon Steel, hard chrome-plated Stem: Carbon Steel	**0**
Ball / Stem: Stainless Steel V4A (AISI 316Ti)	**1**

Alternative materials / surface finishings are available on request. Contact STAUFF for more information.

⑦ Ball Seat Material

Delrin® (POM)	**0**

Alternative materials are available on request. Contact STAUFF for more information.

⑧ O-Ring Material

NBR (Buna-N®)	**0**
FKM/FPM (Viton®)	**1**

Alternative materials are available on request. Contact STAUFF for more information.

⑨ Manufacturing Code

Manufacturing code for all connection styles	**M**
Manufacturing code for high-pressure version of 6000 PSI Series (STAUFF Size 16)	**H**

⑩ Lever Options

Supplied with lever	**(None)**
Supplied without lever	**O**

Note: Levers can be ordered separately, refer to page K42 for more information.

Accessories

Locking Device - refer to page K43 for more information

BBV-2-F3
3000 PSI SAE Split Flange Connection (ISO 6162-1)

Item No.	Designation	STAUFF Size	SAE Flange Size	Nominal Size DN	Price
3404000047	BBV-2-F308-0001-M	08	1/2	13	309.50
3404000048	BBV-2-F312-0001-M	12	3/4	20	480.20
3404000049	BBV-2-F316-0001-M	16	1	25	579.60

Extended adaptor length available, contact STAUFF for more information

BBV-2-F6
6000 PSI SAE Split Flange Connection (ISO 6162-2)

Item No.	Designation	STAUFF Size	SAE Flange Size	Nominal Size DN	Price
3404000053	BBV-2-F608-0001-M	08	1/2	13	441.60
3404000054	BBV-2-F612-0001-M	12	3/4	20	589.15
3404000055	BBV-2-F616-0001-M	16	1	25	644.35

Extended adaptor length available, contact STAUFF for more information

SAE Flanges available in all sizes refer, to Section I - STAUFF Flanges

High-Pressure Forged Body Ball Valve ▪ Type FBV-2-F

Pressure Range

- Pressure range: up to 420 bar / 6000 PSI (depending on size and material combination of the ball valve)

Note: The final maximum working pressure is determined by flange and pipe/tubing rating.

Order Codes

FBV	-	2	-	F3	20	-	0	0	0	1	-	M
①		②		③	④		⑤	⑥	⑦	⑧		⑨

① Type

High-Pressure Forged Body Ball Valve	**FBV**

② Number of Ports

Two Ports (Two-Way Ball Valve)	**2**

③ Connection Style

3000 PSI (Code 61) SAE Split Flange Connectors (Standard Adaptor Length)	**F3**
3000 PSI (Code 61) SAE Split Flange Connectors (Extended Adaptor Length)	**F3X**
6000 PSI (code 62) SAE Split Flange Connectors (Standard Adaptor Length)	**F6**
6000 PSI (code 62) SAE Split Flange Connectors (Extended Adaptor Length)	**F6X**

Contact STAUFF for alternative connection styles.

④ Connection Size

STAUFF Size (refer to Catalogue 6 - STAUFF Valves)		
20	**24**	**32**

Contact STAUFF for alternative connection sizes.

⑤ Body Material / Surface Finishing

Carbon Steel, zinc/iron-plated	**0**
Stainless Steel V4A (AISI 316Ti)	**1**

Alternative materials / surface finishings are available on request. Contact STAUFF for more information.

⑥ Ball / Stem Material

Ball: Carbon Steel, hard chrome-plated Stem: Carbon Steel	**0**
Ball / Stem: Stainless Steel V4A (AISI 316Ti)	**1**

Alternative materials / surface finishings are available on request. Contact STAUFF for more information.

⑦ Ball Seat Material

Delrin® (POM)	**0**

Alternative materials are available on request. Contact STAUFF for more information.

⑧ O-Ring Material

NBR (Buna-N®)	**0**
FKM/FPM (Viton®)	**1**

Alternative materials are available on request. Contact STAUFF for more information.

⑨ Manufacturing Code

Manufacturing code for all connection styles	**M**

⑩ Lever Options

Supplied with lever	**(None)**
Supplied without lever	**O**

Note: Levers can be ordered separately, refer to page K42 for more information.

Accessories

Locking Device - refer to page K43 for more information

FBV-2-F3
3000 PSI SAE Split Flange Connection (ISO 6162-1)

Item No.	Designation	STAUFF Size	SAE Flange Size	Nominal Size DN	Price
3404000050	FBV-2-F320-0001-M	20	1-1/4	32	812.55
3404000051	FBV-2-F324-0001-M	24	1-1/2	40	934.40
3404000052	FBV-2-F332-0001-M	32	2	50	1151.25

Extended adaptor length available, contact STAUFF for more information

FBV-2-F6
6000 PSI SAE Split Flange Connection (ISO 6162-2)

Item No.	Designation	STAUFF Size	SAE Flange Size	Nominal Size DN	Price
3404000056	FBV-2-F620-0001-M	20	1-1/4	32	1191.70
3404000057	FBV-2-F624-0001-M	24	1-1/2	40	1514.50
3404000058	FBV-2-F632-0001-M	32	2	50	2072.75

Extended adaptor length available, contact STAUFF for more information

SAE Flanges available in all sizes refer, to Section I - STAUFF Flanges

High-Pressure Round Body Ball Valve ▪ Type BV-2-C36

Pressure Range

- Pressure range: up to 420 bar / 6000 PSI (depending on size and material combination of the ball valve)

Note: The final maximum working pressure is determined by flange and pipe/tubing rating.

Order Codes

BV	-	2	-	C36	32	M	-	0	0	0	1	-	M
①		②		③	④	⑤		⑥	⑦	⑧	⑨		⑩

① Type

High-Pressure Round Body Ball Valve	**BV**

② Number of Ports

Two Ports (Two-Way Ball Valve)	**2**

③ Connection Style

3000/6000 PSI (Code 61/62) SAE Direct Flange Connection	**C36**

Contact STAUFF for alternative connection styles.

④ Connection Size

STAUFF Size: (refer to Catalogue 6 - STAUFF Valves)

08	12	16	20	24	32	40	48

Contact STAUFF for alternative connection sizes.

⑤ Thread Type

Flange Connection with Metric ISO Threads	**M**
Flange Connection with Unified Coarse (UNC) Threads (available on request)	**U**

⑥ Body Material / Surface Finishing

Carbon Steel, zinc/iron-plated	**0**

Alternative materials / surface finishings are available on request. Contact STAUFF for more information.

⑦ Ball / Stem Material

Ball: Carbon Steel, hard chrome-plated Stem: Carbon Steel / Duplex (for STAUFF Size 48)	**0**

Alternative materials / surface finishings are available on request. Contact STAUFF for more information.

⑧ Ball Seat Material

Delrin® (POM)	**0**

Alternative materials are available on request. Contact STAUFF for more information.

⑨ O-Ring Material

NBR (Buna-N®)	**0**
FKM/FPM (Viton®)	**1**

Alternative materials are available on request. Contact STAUFF for more information.

⑩ Manufacturing Code

Manufacturing code for all connection styles	**M**

⑪ Lever Options

Supplied with lever	**(None)**
Supplied without lever	**O**

Note: Levers can be ordered separately, refer to page K42 for more information.

Accessories

Locking Device - refer to page K43 for more information

BV-2-C36
Dual Pattern 3000/6000 PSI SAE Flange Connection (Code 61/62)
Metric ISO Threads

Item No.	Designation	STAUFF Size	SAE Flange Size	Nominal Size DN	Price
6100109670	BV-2-C3608M-0001-M	08	1/2	15	1095.40
3404003618	BV-2-C3612M-0001-M	12	3/4	20	1095.45
3404002414	BV-2-C3616M-0001-M	16	1	25	1341.20
3404002415	BV-2-C3620M-0001-M	20	1-1/4	32	1488.80
3404002416	BV-2-C3624M-0001-M	24	1-1/2	40	1745.45
3404002391	BV-2-C3632M-0001-M	32	2	50	1963.60
3404002417	BV-2-C3640M-0001-M	40	2-1/2	65	6025.40

Note: The final maximum working pressure is determined by flange and pipe/tubing rating.
Lever must be fixed in the central position during operation. In case of vibration, the lever may otherwise operate the valve by itself.

SAE Flanges available in all sizes refer, to Section I - STAUFF Flanges

High-Pressure Block Body Ball Valve ▪ Type MBBV-2

Pressure Range

- Pressure range: up to 500 bar / 7250 PSI
  (depending on size and material combination of the ball valve)

Order Codes

M	BBV	-	2	-	08	-	0	0	0	1	-	M
①	②		③		④		⑤	⑥	⑦	⑧		⑨

① Connection Style

Manifold Mounting	**M**

② Type

High-Pressure Block Body Ball Valve	**BBV**

③ Number of Ports

Two Ports (Two-Way Ball Valve)	**2**

④ Connection Size

STAUFF Size: (refer to Catalogue 6 - STAUFF Valves)

04	06	08	12	16	20	24	32

Contact STAUFF for alternative connection sizes.

⑤ Body Material / Surface Finishing

Carbon Steel, zinc/iron-plated	**0**
Stainless Steel V4A (AISI 316Ti)	**1**

Alternative materials / surface finishings are available on request. Contact STAUFF for more information.

⑥ Ball / Stem Material

Ball: Carbon Steel, hard chrome-plated Stem: Carbon Steel	**0**
Ball / Stem: Stainless Steel V4A (AISI 316Ti)	**1**

Alternative materials / surface finishings are available on request. Contact STAUFF for more information.

⑦ Ball Seat Material

Delrin® (POM)	**0**
PEEK	**G**
Delrin® (POM) with Protection Ring against Erosion	**H**

Alternative materials are available on request. Contact STAUFF for more information.

⑧ O-Ring Material

NBR (Buna-N®)	**0**
FKM/FPM (Viton®)	**1**
EPDM	**3**
NBR (Buna-N®) for Low-Temperature Applications	**X**

Alternative materials are available on request. Contact STAUFF for more information.

⑨ Manufacturing Code

Manufacturing code for all connection styles	**M**

⑩ Lever Options

Supplied with lever	**(None)**
Supplied without lever	**O**

Note: Levers can be ordered separately, refer to page K42 for more information.

Accessories

Locking Device - refer to page K43 for more information

MBBV-2
High-Pressure Block Body Ball Valve
Manifold Mounting

Item No.	Designation	STAUFF Size	Nominal Size DN	Price
3404000363	MBBV-2-04-0001-M	04	6	311.30
3404000258	MBBV-2-06-0001-M	06	10	318.25
3404000364	MBBV-2-08-0001-M	08	13	487.80
3404001005	MBBV-2-12-0001-M	12	20	739.35
3404000901	MBBV-2-16-0001-M	16	25	923.45
3404000129	MBBV-2-20-0001-M	20	32	2656.60
3404001463	MBBV-2-24-0001-M	24	40	2846.85
3404001464	MBBV-2-32-0001-M	32	50	3535.65

Note: Bolts are not included in delivery, refer to Catalogue 6 - STAUFF Valves for more information. STAUFF recommend using socket cap screws according to ISO 4762 or ANSI / ASME B18.3 for installation.

Low-Pressure Ball Valve ▪ Type BV2L-2

Pressure Range

- Pressure range: up to 25 bar / 360 PSI
  (depending on size and material combination of the ball valve)

Order Codes

BV2L	-	2	-	G	04	-	E	5	4	1	-	XAU	-	W50P
①		②		③	④		⑤	⑥	⑦	⑧		⑨		⑩

① Type

Ball Valve 25 bar / 400 PSI	**BV2L**

② Number of Ports

Two Ports (Two-Way Ball Valve)	**2**

③ Connection Style

Female BSPP Thread (DIN ISO 228)	**G**

④ Connection Size

1/4" BSPP	**04**
3/8"BSPP	**06**
1/2" BSPP	**08**
3/4" BSPP	**12**
1" BSPP	**16**
1-1/4" BSPP	**20**
1-1/2" BSPP	**24**
2" BSPP	**32**
2-1/2" BSPP	**40**
3" BSPP	**48**

⑤ Body Material / Surface Finishing

W123 (Brass nickel-plated)	**E**

Stainless Steel available on request.
Contact STAUFF for alternative finishings.

⑥ Ball / Stem Material

Ball: W69 (Brass) chrome plated Stem: W69 (Brass)	**5**

⑦ Ball Seat Material

Teflon (PTFE)	**4**

⑧ O-Ring Material

V (Viton /FPM, STANDARD)	**1**

⑨ Manufacturing Code

Australia	**XAU**

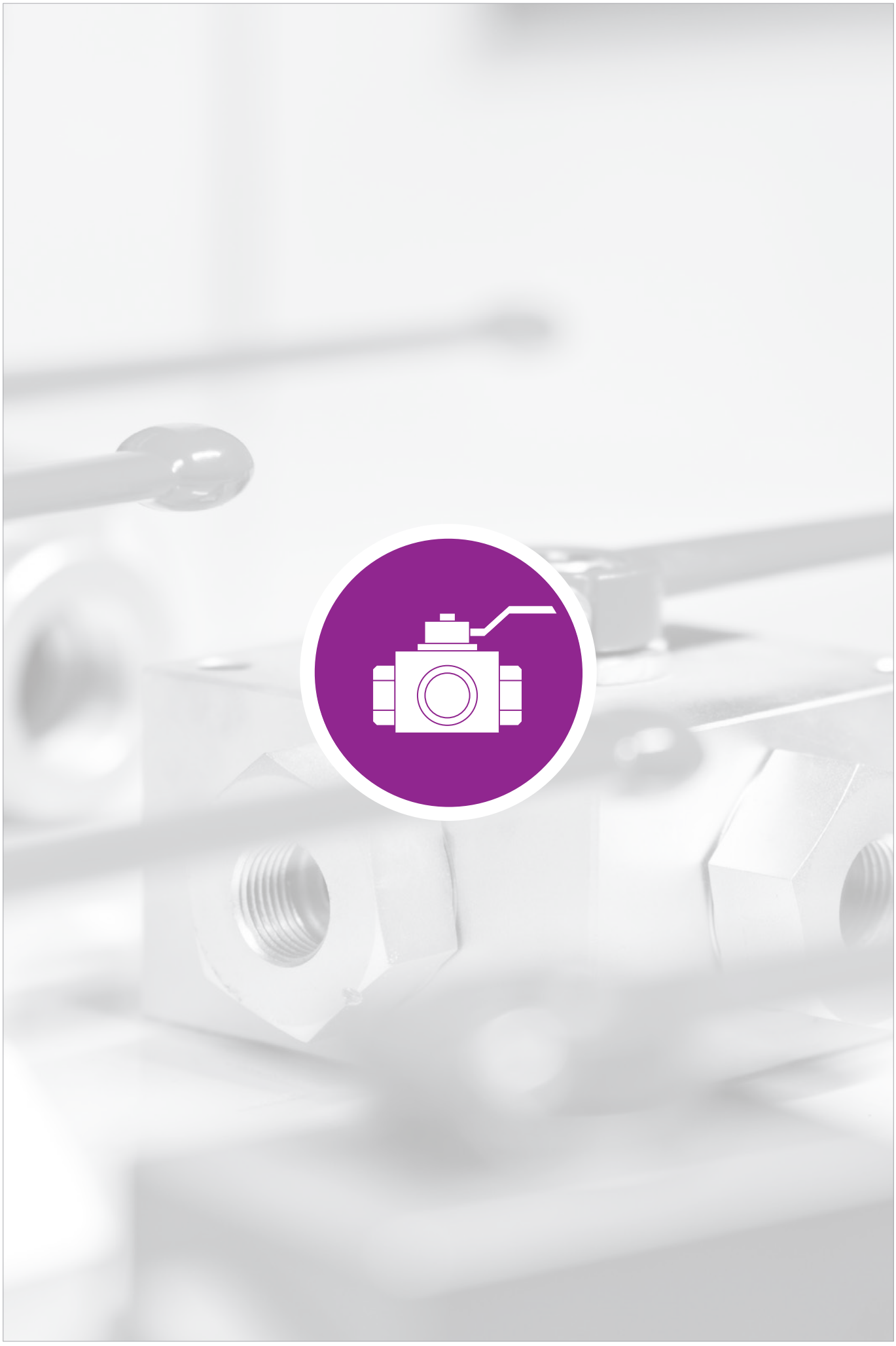
⑩ Lever Options

Stainless Steel, 316 Ti Off-Set Handle (PVC)	**W50P**
Supplied without lever	**0**

Alternative connections, sizes and materials available on request. Contact STAUFF for more information.

BV2L-2
Low-Pressure Ball Valve
Two-Way ▪ Female BSPP Thread (DIN ISO 228)

Item No.	Designation	Price
3404003763	BV2L-2-G04-E541-XAU-W50P	15.70
3404003765	BV2L-2-G06-E541-XAU-W50P	16.15
3404003764	BV2L-2-G08-E541-XAU-W50P	16.15
3404003759	BV2L-2-G12-E541-XAU-W50P	21.30
3404003762	BV2L-2-G16-E541-XAU-W50P	31.40
3404003756	BV2L-2-G20-E541-XAU-W50P	60.10
3404003761	BV2L-2-G24-E541-XAU-W50P	85.55
3404003760	BV2L-2-G32-E541-XAU-W50P	130.25
3404003757	BV2L-2-G40-E541-XAU-W50P	290.95
3404003740	BV2L-2-G48-E541-XAU-W50P	424.10



Multi-Way Ball Valves High-Pressure K18 - K27

High-Pressure Block Body Ball Valve for Manifold Mounting
Pressure inlet only from the centre port — K18

MCBVL-3 90° Operation — K18

High-Pressure Block Body Ball Valve for Manifold Mounting
Pressure inlet possible from all ports — K19

MCBVSL-3 180° Operation — K19

Compact High-Pressure Block Body Ball Valve
L-Bore Three-Way Selector
Pressure inlet only from the centre port — K20

CBVL-3-G Female BSPP Thread — K20

Compact High-Pressure Block Body Ball Valve
T-Bore Three-Way Selector
Pressure inlet only from the centre port — K21

CBVT-3-G Female BSPP Thread — K21

Compact High-Pressure Block Body Ball Valve
L-Bore Three-Way Selector
Pressure inlet possible from all ports — K22

CBVSL-3-G Female BSPP Thread — K22

Compact High-Pressure Block Body Ball Valve
T-Bore Three-Way Selector
Pressure inlet possible from all ports — K23

CBVST-3-G Female BSPP Thread — K23

High-Pressure Block Body Ball Valve
L-Bore Three-Way Selector
Pressure inlet possible from all ports — K24

LBV-3-G Female BSPP Thread — K24

High-Pressure Block Body Ball Valve
T-Bore Three-Way Selector
Pressure inlet possible from all ports — K25

TBV-3-G Female BSPP Thread — K25

High-Pressure Block Body Ball Valve
T-Bore Four-Four Selector
Pressure inlet possible from all ports — K26

TBV-4-G Female BSPP Thread — K26

High-Pressure Block Body Ball Valve
Double L-Bore Four-Way Selector
Pressure inlet possible from all ports — K27

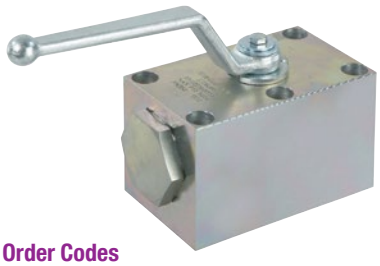
XBV-4-G Female BSPP Thread — K27

Multi-Way Block Body Ball Valves Low-Pressure K28

Low-Pressure Ball Valves
L Port
BV0L-3L Female BSPP Thread — K28

Low-Pressure Ball Valves
T Port
BV0L-3T Female BSPP Thread — K28

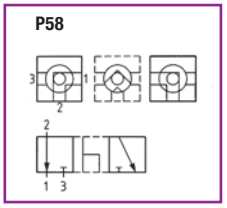
High-Pressure Block Body Ball Valve ▪ Type MCBVL-3



Pressure Range

- Pressure range: up to 500 bar / 7250 PSI (depending on size and material combination of the ball valve)

Pressure application only with connected flanges.
Pressure inlet only from centre port (port 2)!



Order Codes

M	CBVL	-	3	-	08	-	0	0	0	1	-	M
①	②		③		④		⑤	⑥	⑦	⑧		⑨

① Connection Style

Manifold Mounting	**M**

② Type

Compact High-Pressure Block Body Ball Valve with pressure inlet only from centre port	**CBVL**

③ Number of Ports

Three Ports (Three-Way Ball Valve)	**3**

④ Connection Size

STAUFF Size: (refer to Catalogue 6 - STAUFF Valves)

04	06	08	12	16	20	24	32

Contact STAUFF for alternative connection sizes.

⑤ Body Material / Surface Finishing

Carbon Steel, zinc/iron-plated	**0**
Stainless Steel V4A (AISI 316Ti)	**1**

Alternative materials / surface finishings are available on request. Contact STAUFF for more information.

⑥ Ball / Stem Material

Ball: Carbon Steel, hard chrome-plated Stem: Carbon Steel	**0**
Ball / Stem: Stainless Steel V4A (AISI 316Ti)	**1**

Alternative materials / surface finishings are available on request. Contact STAUFF for more information.

⑦ Ball Seat Material

Delrin® (POM)	**0**
PEEK	**G**
Delrin® (POM) with Protection Ring against Erosion	**H**

Alternative materials are available on request. Contact STAUFF for more information.

⑧ O-Ring Material

NBR (Buna-N®)	**0**
FKM/FPM (Viton®)	**1**
EPDM	**3**
NBR (Buna-N®) for Low-Temperature Applications	**X**

Alternative materials are available on request. Contact STAUFF for more information.

⑨ Manufacturing Code

Manufacturing code for all connection styles	**M**

⑩ Lever Options

Supplied with lever	**(None)**
Supplied without lever	**O**

Note: Levers can be ordered separately, refer to page K42 for more information.

Accessories

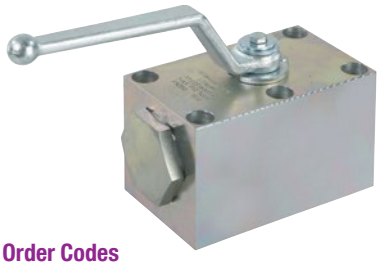
Locking Device - refer to page K43 for more information

MCBVL-3
High-Pressure Block Body Ball Valve
Pressure application only with connected flanges
Pressure inlet only from centre port ▪ 90° Operation

Item No.	Designation	STAUFF Size	Nominal Size DN	Price
3404001017	MCBVL-3-04-0001-M	04	6	386.25
3404001789	MCBVL-3-06-0001-M	06	10	404.60
3404002238	MCBVL-3-08-0001-M	08	13	689.00
6100107450	MCBVL-3-12-0001-M	12	20	763.00
6100106312	MCBVL-3-16-0001-M	16	25	818.55
6100111565	MCBVL-3-20-0001-M	20	32	2711.60
6100130682	MCBVL-3-24-0001-M	24	40	POA
6100130704	MCBVL-3-32-0001-M	32	50	3656.70

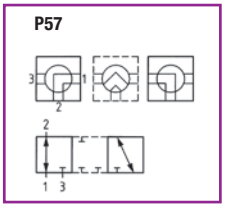
Note: Bolts are not included in delivery, refer to Catalogue 6 - STAUFF Valves for more information. STAUFF recommend using socket cap screws according to ISO 4762 or ANSI / ASME B18.3 for installation.

High-Pressure Block Body Ball Valve ▪ Type MCBVSL-3



Pressure Range
- Pressure range: up to 500 bar / 7250 PSI (depending on size and material combination of the ball valve)

Pressure application only with connected flanges.
Pressure inlet possible from all ports!



Order Codes

M	CBVSL	-	3	-	08	-	0	0	8	1	-	M
①	②		③		④		⑤	⑥	⑦	⑧		⑨

① Connection Style

Manifold Mounting	**M**

② Type

Compact High-Pressure Block Body Ball Valve with pressure inlet possible from all ports	**CBVSL**

③ Number of Ports

Three Ports (Three-Way Ball Valve)	**3**

④ Connection Size

STAUFF Size: (refer to Catalogue 6 - STAUFF Valves)

04	06	08	12	16	20	24	32

Contact STAUFF for alternative connection sizes.

⑤ Body Material / Surface Finishing

Carbon Steel, zinc/iron-plated	**0**
Stainless Steel V4A (AISI 316Ti)	**1**

Alternative materials / surface finishings are available on request. Contact STAUFF for more information.

⑥ Ball / Stem Material

Ball: Carbon Steel, hard chrome-plated Stem: Carbon Steel	**0**
Ball / Stem: Stainless Steel V4A (AISI 316Ti)	**1**

Alternative materials / surface finishings are available on request. Contact STAUFF for more information.

⑦ Ball Seat Material

Delrin® (POM) Front side Sealing	**8**
PEEK	**G**
Delrin® (POM) with Protection Ring against Erosion	**H**

Alternative materials are available on request. Contact STAUFF for more information.

⑧ O-Ring Material

NBR (Buna-N®)	**0**
FKM/FPM (Viton®)	**1**
EPDM	**3**
NBR (Buna-N®) for Low-Temperature Applications	**X**

Alternative materials are available on request. Contact STAUFF for more information.

⑨ Manufacturing Code

Manufacturing code for all connection styles	**M**

⑩ Lever Options

Supplied with lever	**(None)**
Supplied without lever	**O**

Note: Levers can be ordered separately, refer to page K42 for more information.

Accessories

Locking Device - refer to page K43 for more information

MCBVSL-3
High-Pressure Block Body Ball Valve
Pressure application only with connected flanges
Pressure inlet possible from all ports ▪ 180° Operation

Item No.	Designation	STAUFF Size	Nominal Size DN	Price
3404001916	MCBVSL-3-04-0081-M	04	6	639.30
3404000910	MCBVSL-3-06-0081-M	06	10	570.00
3404001915	MCBVSL-3-08-0081-M	08	13	729.35
3404000973	MCBVSL-3-12-0081-M	12	20	2456.20
3404003597	MCBVSL-3-16-0081-M	16	25	2476.95
6100072692	MCBVSL-3-20-0081-M	20	32	3907.80
6100130744	MCBVSL-3-24-0081-M	24	40	4115.05
6100072691	MCBVSL-3-32-0081-M	32	50	6116.35

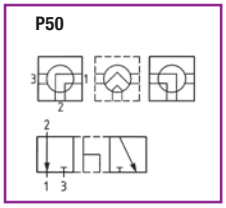
Note: Bolts are not included in delivery, refer to Catalogue 6 - STAUFF Valves for more information. STAUFF recommend using socket cap screws according to ISO 4762 or ANSI / ASME B18.3 for installation.

Compact High-Pressure Block Body Ball Valve ▪ Type CBVL-3

Pressure Range

- Pressure range: up to 500 bar / 7250 PSI (depending on size and material combination of the ball valve)

Pressure inlet only from centre port (port 2)!



Order Codes

CBVL	-	3	-	G	04	-	0	0	0	1	-	M
①		②		③	④		⑤	⑥	⑦	⑧		⑨

① Type

Compact High-Pressure Block Body Ball Valve with pressure inlet only from centre port	**CBVL**

② Number of Ports

Three Ports (Three-Way Ball Valve)	**3**

③ Connection Style

Female BSPP Thread (DIN ISO 228)	**G**
Female NPT Thread (ANSI B1.20.1)	**N**
Female UN/UNF Thread (SAE J 514)	**U**
24° Cone Connection (Light / Heavy Series)	**(None)**

Contact STAUFF for alternative connection styles.

④ Connection Size

STAUFF Size for connection styles G, N and U:
(refer to Catalogue 6 - STAUFF Valves)

02	04	06	08	12	16	20	24	32

Tube Size for 24° Cone Connection (Light Series):
(refer to Catalogue 6 - STAUFF Valves)

06L	08L	10L	12L	15L	18L	22L	28L	35L

Tube Size for 24° Cone Connection (Heavy Series):
(refer to Catalogue 6 - STAUFF Valves)

08S	10S	12S	14S	16S	20S	25S	30S	38S

Contact STAUFF for alternative connection sizes.

⑤ Body Material / Surface Finishing

Carbon Steel, zinc/iron-plated	**0**
Carbon Steel, zinc/nickel-plated	**8**
Stainless Steel V4A (AISI 316Ti)	**1**

Alternative materials / surface finishings are available on request. Contact STAUFF for more information.

⑥ Ball / Stem Material

Ball: Carbon Steel, hard chrome-plated Stem: Carbon Steel	**0**
Ball / Stem: Stainless Steel V4A (AISI 316Ti)	**1**

Alternative materials / surface finishings are available on request. Contact STAUFF for more information.

⑦ Ball Seat Material

Delrin® (POM)	**0**

Alternative materials are available on request. Contact STAUFF for more information.

⑧ O-Ring Material

NBR (Buna-N®)	**0**
FKM/FPM (Viton®)	**1**
EPDM	**3**

Alternative materials are available on request. Contact STAUFF for more information.

⑨ Manufacturing Code

Manufacturing code for all connection styles	**M**

⑩ Lever Options

Supplied with lever	**(None)**
Supplied without lever	**O**

Note: Levers can be ordered separately, refer to page K42 for more information.

Accessories

Locking Device - refer to page K43 for more information

CBVL-3-G
Compact High-Pressure Block Body Ball Valve
Pressure inlet only from centre port ▪ Female BSPP Thread (DIN ISO 228)

Item No.	Designation	STAUFF Size	Thread Size	Nominal Size DN	Price
6100075986	CBVL-3-G04-8001-M	04	G 1/4 BSPP	6	135.55
6100075987	CBVL-3-G06-8001-M	06	G 3/8 BSPP	10	146.45
6100075988	CBVL-3-G08-8001-M	08	G 1/2 BSPP	13	164.95
6100075989	CBVL-3-G12-8001-M	12	G 3/4 BSPP	20	273.45
6100075990	CBVL-3-G16-8001-M	16	G 1 BSPP	25	341.55
3404000030	CBVL-3-G20-0001-M	20	G 1-1/4 BSPP	32	1095.45
6100130782	CBVL-3-G20-8001-M	20	G 1-1/4 BSPP	32	1940.45
3404000031	CBVL-3-G24-0001-M	24	G 1-1/2 BSPP	40	2068.95
6100130783	CBVL-3-G32-8001-M	32	G 2 BSPP	50	3552.45

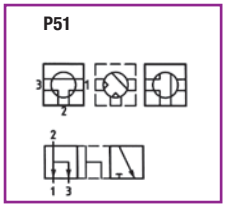
Note the pressure ratings of the tube connections.

Compact High-Pressure Block Body Ball Valve ▪ Type CBVT-3

Pressure Range

- Pressure range: up to 500 bar / 7250 PSI (depending on size and material combination of the ball valve)

⚠ **Pressure inlet only from centre port (port 2)!**



Order Codes

CBVT	-	3	-	G	04	-	0	0	0	1	-	M
①		②		③	④		⑤	⑥	⑦	⑧		⑨

① Type

Compact High-Pressure Block Body Ball Valve with pressure inlet only from centre port	**CBVT**

② Number of Ports

Three Ports (Three-Way Ball Valve)	**3**

③ Connection Style

Female BSPP Thread (DIN ISO 228)	**G**
Female NPT Thread (ANSI B1.20.1)	**N**
Female UN/UNF Thread (SAE J 514)	**U**
24° Cone Connection (Light / Heavy Series)	**(None)**

Contact STAUFF for alternative connection styles.

④ Connection Size

STAUFF Size for connection styles G, N and U: (refer to Catalogue 6 - STAUFF Valves)

02	04	06	08	12	16	20	24	32

Tube Size for 24° Cone Connection (Light Series): (refer to Catalogue 6 - STAUFF Valves)

06L	08L	10L	12L	15L	18L	22L	28L	35L

Tube Size for 24° Cone Connection (Heavy Series): (refer to Catalogue 6 - STAUFF Valves)

08S	10S	12S	14S	16S	20S	25S	30S	38S

Contact STAUFF for alternative connection sizes.

⑤ Body Material / Surface Finishing

Carbon Steel, zinc/iron-plated	**0**
Carbon Steel, zinc/nickel-plated	**8**
Stainless Steel V4A (AISI 316Ti)	**1**

Alternative materials / surface finishings are available on request. Contact STAUFF for more information.

⑥ Ball / Stem Material

Ball: Carbon Steel, hard chrome-plated Stem: Carbon Steel	**0**
Ball / Stem: Stainless Steel V4A (AISI 316Ti)	**1**

Alternative materials / surface finishings are available on request. Contact STAUFF for more information.

⑦ Ball Seat Material

Delrin® (POM)	**0**

Alternative materials are available on request. Contact STAUFF for more information.

⑧ O-Ring Material

NBR (Buna-N®)	**0**
FKM/FPM (Viton®)	**1**
EPDM	**3**

Alternative materials are available on request. Contact STAUFF for more information.

⑨ Manufacturing Code

Manufacturing code for all connection styles	**M**

⑩ Lever Options

Supplied with lever	**(None)**
Supplied without lever	**O**

Note: Levers can be ordered separately, refer to page K42 for more information.

Accessories

Locking Device - refer to page K43 for more information

CBVT-3-G
Compact High-Pressure Block Body Ball Valve
Pressure inlet only from centre port ▪ Female BSPP Thread (DIN ISO 228)

Item No.	Designation	STAUFF Size	Thread Size	Nominal Size DN	Price
3404000982	CBVT-3-G04-0001-M	04	G 1/4 BSPP	6	135.55
3404000981	CBVT-3-G06-0001-M	06	G 3/8 BSPP	10	146.45
3404000980	CBVT-3-G08-0001-M	08	G 1/2 BSPP	13	164.95
3404001955	CBVT-3-G12-0001-M	12	G 3/4 BSPP	20	273.45
3404002412	CBVT-3-G16-0001-M	16	G 1 BSPP	25	341.55
3404002413	CBVT-3-G20-0001-M	20	G 1-1/4 BSPP	32	1392.60
3404003569	CBVT-3-G24-0001-M	24	G 1-1/2 BSPP	40	2946.60
6100021274	CBVT-3-G32-0001-M	32	G 2 BSPP	50	2919.75

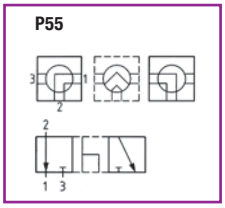
Note the pressure ratings of the tube connections.

Compact High-Pressure Block Body Ball Valve ▪ Type CBVSL-3

Pressure Range

- Pressure range: up to 500 bar / 7250 PSI (depending on size and material combination of the ball valve)

Pressure inlet possible from all ports!
Must be operated only at ΔP = 0 bar



Order Codes

CBVSL	-	3	-	G	04	-	0	0	8	1	-	M
①		②		③	④		⑤	⑥	⑦	⑧		⑨

① Type

Compact High-Pressure Block Body Ball Valve with pressure inlet possible from all ports Must be operated only at ΔP = 0 bar	**CBVSL**

② Number of Ports

Three Ports (Three-Way Ball Valve)	**3**

③ Connection Style

Female BSPP Thread (DIN ISO 228)	**G**
Female NPT Thread (ANSI B1.20.1)	**N**
Female UN/UNF Thread (SAE J 514)	**U**
24° Cone Connection (Light / Heavy Series)	**(None)**

Contact STAUFF for alternative connection styles.

④ Connection Size

STAUFF Size for connection styles G, N and U:
(refer to Catalogue 6 - STAUFF Valves)

02	04	06	08	12	16	20	24	32

Tube Size for 24° Cone Connection (Light Series):
(refer to Catalogue 6 - STAUFF Valves)

06L	08L	10L	12L	15L	18L	22L	28L	35L

Tube Size for 24° Cone Connection (Heavy Series):
(refer to Catalogue 6 - STAUFF Valves)

08S	10S	12S	14S	16S	20S	25S	30S	38S

Contact STAUFF for alternative connection sizes.

⑤ Body Material / Surface Finishing

Carbon Steel, zinc/iron-plated	**0**
Carbon Steel, zinc/nickel-plated	**8**
Stainless Steel V4A (AISI 316Ti)	**1**

Alternative materials / surface finishings are available on request. Contact STAUFF for more information.

⑥ Ball / Stem Material

Ball: Carbon Steel, hard chrome-plated Stem: Carbon Steel	**0**
Ball / Stem: Stainless Steel V4A (AISI 316Ti)	**1**

Alternative materials / surface finishings are available on request. Contact STAUFF for more information.

⑦ Ball Seat Material

Delrin® (POM) Front side Sealing	**8**

Alternative materials are available on request. Contact STAUFF for more information.

⑧ O-Ring Material

NBR (Buna-N®)	**0**
FKM/FPM (Viton®)	**1**
EPDM	**3**

Alternative materials are available on request. Contact STAUFF for more information.

⑨ Manufacturing Code

Manufacturing code for all connection styles	**M**

⑩ Lever Options

Supplied with lever	**(None)**
Supplied without lever	**O**

Note: Levers can be ordered separately, refer to page K42 for more information.

Accessories

Locking Device - refer to page K43 for more information

CBVSL-3-G
Compact High-Pressure Block Body Ball Valve
Pressure inlet possible from all ports ▪ Female BSPP Thread (DIN ISO 228)

Item No.	Designation	STAUFF Size	Thread Size	Nominal Size DN	Price
3404002407	CBVSL-3-G04-0081-M	04	G 1/4 BSPP	6	539.15
3404002408	CBVSL-3-G06-0081-M	06	G 3/8 BSPP	10	184.35
3404002551	CBVSL-3-G08-0081-M	08	G 1/2 BSPP	13	234.80
3404002409	CBVSL-3-G12-0081-M	12	G 3/4 BSPP	20	834.00
3404002410	CBVSL-3-G16-0081-M	16	G 1 BSPP	25	605.15
6100130784	CBVSL-3-G20-0081-M	20	G 1-1/4 BSPP	32	3474.15
6100043506	CBVSL-3-G24-0081-M	24	G 1-1/2 BSPP	40	3521.65

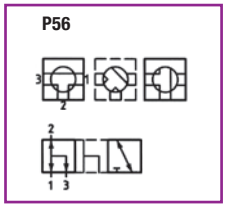
Must be operated only at ΔP = 0 bar
Note the pressure ratings of the tube connections.

Compact High-Pressure Block Body Ball Valve ▪ Type CBVST-3

Pressure Range

- Pressure range: up to 500 bar / 7250 PSI (depending on size and material combination of the ball valve)

Pressure inlet possible from all ports!
Must be operated only at ΔP = 0 bar



Order Codes

CBVST	-	3	-	G	04	-	0	0	8	1	-	M
①		②		③	④		⑤	⑥	⑦	⑧		⑨

① Type

Compact High-Pressure Block Body Ball Valve with pressure inlet possible from all ports Must be operated only at ΔP = 0 bar	**CBVST**

② Number of Ports

Three Ports (Three-Way Ball Valve)	**3**

③ Connection Style

Female BSPP Thread (DIN ISO 228)	**G**
Female NPT Thread (ANSI B1.20.1)	**N**
Female UN/UNF Thread (SAE J 514)	**U**
24° Cone Connection (Light / Heavy Series)	**(None)**

Contact STAUFF for alternative connection styles.

④ Connection Size

STAUFF Size for connection styles G, N and U:
(refer to Catalogue 6 - STAUFF Valves)

02	04	06	08	12	16	20	24	32

Tube Size for 24° Cone Connection (Light Series):
(refer to Catalogue 6 - STAUFF Valves)

06L	08L	10L	12L	15L	18L	22L	28L	35L

Tube Size for 24° Cone Connection (Heavy Series):
(refer to Catalogue 6 - STAUFF Valves)

08S	10S	12S	14S	16S	20S	25S	30S	38S

Contact STAUFF for alternative connection sizes.

⑤ Body Material / Surface Finishing

Carbon Steel, zinc/iron-plated	**0**
Carbon Steel, zinc/nickel-plated	**8**
Stainless Steel V4A (AISI 316Ti)	**1**

Alternative materials / surface finishings are available on request. Contact STAUFF for more information.

⑥ Ball / Stem Material

Ball: Carbon Steel, hard chrome-plated Stem: Carbon Steel	**0**
Ball / Stem: Stainless Steel V4A (AISI 316Ti)	**1**

Alternative materials / surface finishings are available on request. Contact STAUFF for more information.

⑦ Ball Seat Material

Delrin® (POM) Front side Sealing	**8**

Alternative materials are available on request. Contact STAUFF for more information.

⑧ O-Ring Material

NBR (Buna-N®)	**0**
FKM/FPM (Viton®)	**1**
EPDM	**3**

Alternative materials are available on request. Contact STAUFF for more information.

⑨ Manufacturing Code

Manufacturing code for all connection styles	**M**

⑩ Lever Options

Supplied with lever	**(None)**
Supplied without lever	**O**

Note: Levers can be ordered separately, refer to page K42 for more information.

Accessories

Locking Device - refer to page K43 for more information

CBVST-3-G
Compact High-Pressure Block Body Ball Valve
Pressure inlet possible from all ports ▪ Female BSPP Thread (DIN ISO 228)

Item No.	Designation	STAUFF Size	Thread Size	Nominal Size DN	Price
6100089324	CBVST-3-G04-0081-M	04	G 1/4 BSPP	6	270.95
6100021564	CBVST-3-G06-0081-M	06	G 3/8 BSPP	10	159.00
6100089325	CBVST-3-G08-0081-M	08	G 1/2 BSPP	13	234.80
6100139492	CBVST-3-G12-0081-M	12	G 3/4 BSPP	20	383.85
6100130806	CBVST-3-G16-0081-M	16	G 1 BSPP	25	978.00
6100130808	CBVST-3-G20-0081-M	20	G 1-1/4 BSPP	32	2086.85
6100097008	CBVST-3-G24-0081-M	24	G 1-1/2 BSPP	40	2946.60
6100130809	CBVST-3-G32-0081-M	32	G 2 BSPP	50	3530.95

Must be operated only at ΔP = 0 bar
Note the pressure ratings of the tube connections.

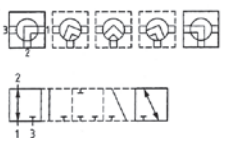
High-Pressure Block Body Ball Valve ▪ Type LBV-3

Pressure Range

- Pressure range: up to 500 bar / 7250 PSI (depending on size and material combination of the ball valve)

⚠ **Pressure inlet possible from all ports!**

P01



Order Codes

LBV	-	3	-	G	04	-	0	0	0	1	-	M
①		②		③	④		⑤	⑥	⑦	⑧		⑨

① Type

Multi-Way L-Bore Ball Valve with pressure inlet possible form all ports	**LBV**

② Number of Ports

Three Ports (Three-Way Ball Valve)	**3**

③ Connection Style

Female BSPP Thread (DIN ISO 228)	**G**
Female NPT Thread (ANSI B1.20.1)	**N**
Female UN/UNF Thread (SAE J 514)	**U**
24° Cone Connection (Light / Heavy Series)	**(None)**

Contact STAUFF for alternative connection styles.

④ Connection Size

STAUFF Size for connection styles G, N and U:
(refer to Catalogue 6 - STAUFF Valves)

02	04	06	08	10	12	16	20R	24R

Tube Size for 24° Cone Connection (Light Series):
(refer to Catalogue 6 - STAUFF Valves)

06L	08L	10L	12L	15L	18L	22L	28L	35L

Tube Size for 24° Cone Connection (Heavy Series):
(refer to Catalogue 6 - STAUFF Valves)

08S	10S	12S	14S	16S	20S	25S	30S	38S

Contact STAUFF for alternative connection sizes.

⑤ Body Material / Surface Finishing

Carbon Steel, zinc/iron-plated	**0**
Stainless Steel V4A (AISI 316Ti)	**1**

Alternative materials / surface finishings are available on request. Contact STAUFF for more information.

⑥ Ball / Stem Material

Ball: Carbon Steel, hard chrome-plated Stem: Carbon Steel	**0**
Ball / Stem: Stainless Steel V4A (AISI 316Ti)	**1**

Alternative materials / surface finishings are available on request. Contact STAUFF for more information.

⑦ Ball Seat Material

Delrin® (POM)	**0**

Alternative materials are available on request. Contact STAUFF for more information.

⑧ O-Ring Material

NBR (Buna-N®)	**0**
FKM/FPM (Viton®)	**1**
EPDM	**3**

Alternative materials are available on request. Contact STAUFF for more information.

⑨ Manufacturing Code

Manufacturing code for all connection styles	**M**

⑩ Lever Options

Supplied with lever	**(None)**
Supplied without lever	**O**

Note: Levers can be ordered separately, refer to page K42 for more information.

Accessories

Locking Device - refer to page K43 for more information

LBV-3-G
High-Pressure Block Body Ball Valve
Pressure inlet possible from all ports ▪ Female BSPP Thread (DIN ISO 228)

Item No.	Designation	STAUFF Size	Thread Size	Nominal Size DN	Price
3404002395	LBV-3-G04-0001-M	04	G 1/4 BSPP	6	571.25
3404000410	LBV-3-G06-0001-M	06	G 3/8 BSPP	10	652.75
3404000986	LBV-3-G08-0001-M	08	G 1/2 BSPP	13	817.70
3404000987	LBV-3-G12-0001-M	12	G 3/4 BSPP	20	1173.70
3404000985	LBV-3-G16-0001-M	16	G 1 BSPP	25	1546.60
6100102885	LBV-3-G20R-0001-M	20R	G 1-1/4 BSPP	25/32	2053.40
6100102884	LBV-3-G24R-0001-M	24R	G 1-1/2 BSPP	25/40	2708.00

Note the pressure ratings of the tube connections.

High-Pressure Block Body Ball Valve ▪ Type TBV-3

Pressure Range

- Pressure range: up to 500 bar / 7250 PSI (depending on size and material combination of the ball valve)

Pressure inlet possible from all ports!

P02

Order Codes

TBV	-	3	-	G	04	-	0	0	0	1	-	M
①		②		③	④		⑤	⑥	⑦	⑧		⑨

① Type

Multi-Way T-Bore Ball Valve with pressure inlet possible from all ports	**TBV**

② Number of Ports

Three Ports (Three-Way Ball Valve)	**3**

③ Connection Style

Female BSPP Thread (DIN ISO 228)	**G**
Female NPT Thread (ANSI B1.20.1)	**N**
Female UN/UNF Thread (SAE J 514)	**U**
24° Cone Connection (Light / Heavy Series)	**(None)**

Contact STAUFF for alternative connection styles.

④ Connection Size

STAUFF Size for connection styles G, N and U:
(refer to Catalogue 6 - STAUFF Valves)

02	04	06	08	10	12	16	20R	24R

Tube Size for 24° Cone Connection (Light Series):
(refer to Catalogue 6 - STAUFF Valves)

06L	08L	10L	12L	15L	18L	22L	28L	35L

Tube Size for 24° Cone Connection (Heavy Series):
(refer to Catalogue 6 - STAUFF Valves)

08S	10S	12S	14S	16S	20S	25S	30S	38S

Contact STAUFF for alternative connection sizes.

⑤ Body Material / Surface Finishing

Carbon Steel, zinc/iron-plated	**0**
Stainless Steel V4A (AISI 316Ti)	**1**

Alternative materials / surface finishings are available on request. Contact STAUFF for more information.

⑥ Ball / Stem Material

Ball: Carbon Steel, hard chrome-plated Stem: Carbon Steel	**0**
Ball / Stem: Stainless Steel V4A (AISI 316Ti)	**1**

Alternative materials / surface finishings are available on request. Contact STAUFF for more information.

⑦ Ball Seat Material

Delrin® (POM)	**0**

Alternative materials are available on request. Contact STAUFF for more information.

⑧ O-Ring Material

NBR (Buna-N®)	**0**
FKM/FPM (Viton®)	**1**
EPDM	**3**

Alternative materials are available on request. Contact STAUFF for more information.

⑨ Manufacturing Code

Manufacturing code for all connection styles	**M**

⑩ Lever Options

Supplied with lever	**(None)**
Supplied without lever	**O**

Note: Levers can be ordered separately, refer to page K42 for more information.

Accessories

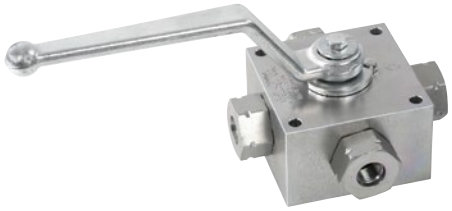
Locking Device - refer to page K43 for more information

TBV-3-G
High-Pressure Block Body Ball Valve
Pressure inlet possible from all ports ▪ Female BSPP Thread (DIN ISO 228)

Item No.	Designation	STAUFF Size	Thread Size	Nominal Size DN	Price
3404002424	TBV-3-G04-0001-M	04	G 1/4 BSPP	6	571.25
3404002425	TBV-3-G06-0001-M	06	G 3/8 BSPP	10	652.75
3404002426	TBV-3-G08-0001-M	08	G 1/2 BSPP	13	817.70
3404002427	TBV-3-G12-0001-M	12	G 3/4 BSPP	20	1173.70
3404002428	TBV-3-G16-0001-M	16	G 1 BSPP	25	1546.60
6100130810	TBV-3-G20R-0001-M	20R	G 1-1/4 BSPP	25/32	1605.35
6100130811	TBV-3-G24R-0001-M	24R	G 1-1/2 BSPP	25/40	1787.00

Note the pressure ratings of the tube connections.

High-Pressure Block Body Ball Valve ▪ Type TBV-4

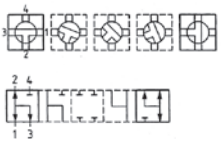


Pressure Range

- Pressure range: up to 500 bar / 7250 PSI (depending on size and material combination of the ball valve)

⚠ **Pressure inlet possible from all ports!**

P13



Order Codes

TBV	-	4	-	G	04	-	0	0	0	1	-	M
①		②		③	④		⑤	⑥	⑦	⑧		⑨

① Type

Multi-Way T-Bore Ball Valve with pressure inlet possible form all ports	**TBV**

② Number of Ports

Four Ports (Four-Way Ball Valve)	**4**

③ Connection Style

Female BSPP Thread (DIN ISO 228)	**G**
Female NPT Thread (ANSI B1.20.1)	**N**
Female UN/UNF Thread (SAE J 514)	**U**
24° Cone Connection (Light / Heavy Series)	**(None)**

Contact STAUFF for alternative connection styles.

④ Connection Size

STAUFF Size for connection styles G, N and U:
(refer to Catalogue 6 - STAUFF Valves)

02	04	06	08	10	12	16	20R	24R

Tube Size for 24° Cone Connection (Light Series):
(refer to Catalogue 6 - STAUFF Valves)

06L	08L	10L	12L	15L	18L	22L	28L	35L

Tube Size for 24° Cone Connection (Heavy Series):
(refer to Catalogue 6 - STAUFF Valves)

08S	10S	12S	14S	16S	20S	25S	30S	38S

Contact STAUFF for alternative connection sizes.

⑤ Body Material / Surface Finishing

Carbon Steel, zinc/iron-plated	**0**
Stainless Steel V4A (AISI 316Ti)	**1**

Alternative materials / surface finishings are available on request. Contact STAUFF for more information.

⑥ Ball / Stem Material

Ball: Carbon Steel, hard chrome-plated Stem: Carbon Steel	**0**
Ball / Stem: Stainless Steel V4A (AISI 316Ti)	**1**

Alternative materials / surface finishings are available on request. Contact STAUFF for more information.

⑦ Ball Seat Material

Delrin® (POM)	**0**

Alternative materials are available on request. Contact STAUFF for more information.

⑧ O-Ring Material

NBR (Buna-N®)	**0**
FKM/FPM (Viton®)	**1**
EPDM	**3**

Alternative materials are available on request. Contact STAUFF for more information.

⑨ Manufacturing Code

Manufacturing code for all connection styles	**M**

⑩ Lever Options

Supplied with lever	**(None)**
Supplied without lever	**O**

Note: Levers can be ordered separately, refer to page K42 for more information.

Accessories

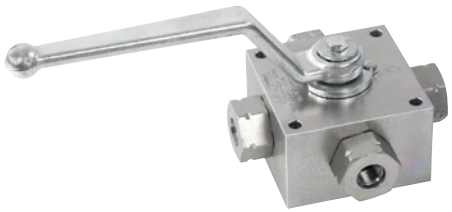
Locking Device - refer to page K43 for more information

TBV-4-G
High-Pressure Block Body Ball Valve
Pressure inlet possible from all ports ▪ Female BSPP Thread (DIN ISO 228)

Item No.	Designation	STAUFF Size	Thread Size	Nominal Size DN	Price
3404002429	TBV-4-G04-0001-M	04	G 1/4 BSPP	6	571.25
3404002430	TBV-4-G06-0001-M	06	G 3/8 BSPP	10	643.05
3404001169	TBV-4-G08-0001-M	08	G 1/2 BSPP	13	983.20
3404002431	TBV-4-G12-0001-M	12	G 3/4 BSPP	20	1140.35
3404001170	TBV-4-G16-0001-M	16	G 1 BSPP	25	1546.60
6100130284	TBV-4-G20R-0001-M	20R	G 1-1/4 BSPP	25/32	2403.80
6100130812	TBV-4-G24R-0001-M	24R	G 1-1/2 BSPP	25/40	2529.60

Note the pressure ratings of the tube connections.

High-Pressure Block Body Ball Valve ▪ Type XBV-4

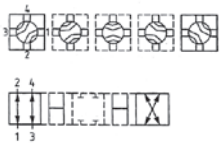


Pressure Range

- Pressure range: up to 500 bar / 7250 PSI (depending on size and material combination of the ball valve)

Pressure inlet possible from all ports!

P14



Order Codes

XBV	-	4	-	G	04	-	0	0	0	1	-	M
①		②		③	④		⑤	⑥	⑦	⑧		⑨

① Type

Multi-Way Double L-Bore Ball Valve with pressure inlet possible from all ports	**XBV**

② Number of Ports

Four Ports (Four-Way Ball Valve)	**4**

③ Connection Style

Female BSPP Thread (DIN ISO 228)	**G**
Female NPT Thread (ANSI B1.20.1)	**N**
Female UN/UNF Thread (SAE J 514)	**U**
24° Cone Connection (Light / Heavy Series)	**(None)**

Contact STAUFF for alternative connection styles.

④ Connection Size

STAUFF Size for connection styles G, N and U:
(refer to Catalogue 6 - STAUFF Valves)

02	04	06	08	10	12	16	20R	24R

Tube Size for 24° Cone Connection (Light Series):
(refer to Catalogue 6 - STAUFF Valves)

06L	08L	10L	12L	15L	18L	22L	28L	35L

Tube Size for 24° Cone Connection (Heavy Series):
(refer to Catalogue 6 - STAUFF Valves)

08S	10S	12S	14S	16S	20S	25S	30S	38S

Contact STAUFF for alternative connection sizes.

⑤ Body Material / Surface Finishing

Carbon Steel, zinc/iron-plated	**0**
Stainless Steel V4A (AISI 316Ti)	**1**

Alternative materials / surface finishings are available on request. Contact STAUFF for more information.

⑥ Ball / Stem Material

Ball: Carbon Steel, hard chrome-plated Stem: Carbon Steel	**0**
Ball / Stem: Stainless Steel V4A (AISI 316Ti)	**1**

Alternative materials / surface finishings are available on request. Contact STAUFF for more information.

⑦ Ball Seat Material

Delrin® (POM)	**0**

Alternative materials are available on request. Contact STAUFF for more information.

⑧ O-Ring Material

NBR (Buna-N®)	**0**
FKM/FPM (Viton®)	**1**
EPDM	**3**

Alternative materials are available on request. Contact STAUFF for more information.

⑨ Manufacturing Code

Manufacturing code for all connection styles	**M**

⑩ Lever Options

Supplied with lever	**(None)**
Supplied without lever	**O**

Note: Levers can be ordered separately, refer to page K42 for more information.

Accessories

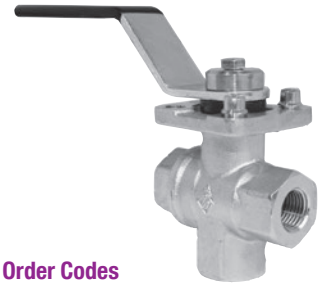
Locking Device - refer to page K43 for more information

XBV-4-G
High-Pressure Block Body Ball Valve
Pressure inlet possible from all ports ▪ Female BSPP Thread (DIN ISO 228)

Item No.	Designation	STAUFF Size	Thread Size	Nominal Size DN	Price
3404002433	XBV-4-G04-0001-M	04	G 1/4 BSPP	6	571.25
3404000972	XBV-4-G06-0001-M	06	G 3/8 BSPP	10	652.75
3404002435	XBV-4-G08-0001-M	08	G 1/2 BSPP	13	817.70
3404002436	XBV-4-G12-0001-M	12	G 3/4 BSPP	20	1173.70
3404002437	XBV-4-G16-0001-M	16	G 1 BSPP	25	1627.30
6100086733	XBV-4-G20R-0001-M	20R	G 1-1/4 BSPP	25/32	2012.50
6100130813	XBV-4-G24R-0001-M	24R	G 1-1/2 BSPP	25/40	2529.60

Note the pressure ratings of the tube connections.

Low-Pressure Ball Valve ▪ Type BV0L-3



Pressure Range

- Pressure range: up to 25 bar / 360 PSI
  (depending on size and material combination of the ball valve)

Order Codes

BV0L	-	3L	-	G	04	-	E	5	4	1	-	XAU	-	W50P
①		②		③	④		⑤	⑥	⑦	⑧		⑨		⑩

① Type

Ball Valve 10 bar / 145 PSI	**BV0L**

② Number of Ports

Three Ports (Three-Way Ball Valve) L-Bore	**3L**
Three Ports (Three-Way Ball Valve) T-Bore	**3T**

③ Connection Style

Female BSPP Thread (DIN ISO 228)	**G**

④ Connection Size

1/4" BSPP	**04**
3/8"BSPP	**06**
1/2" BSPP	**08**
3/4" BSPP	**12**
1" BSPP	**16**
1-1/4" BSPP	**20**
1-1/2" BSPP	**24**
2" BSPP	**32**

⑤ Body Material / Surface Finishing

W123 (Brass nickel-plated)	**E**

Stainless Steel available on request.
Contact STAUFF for alternative finishings.

⑥ Ball / Stem Material

Ball: W69 (Brass) chrome plated Stem: W69 (Brass)	**5**

⑦ Ball Seat Material

Teflon (PTFE)	**4**

⑧ O-Ring Material

V (Viton /FPM, STANDARD)	**1**

⑨ Manufacturing Code

Australia	**XAU**

⑩ Lever Options

Stainless Steel, 316 Ti Off-Set Handle (PVC)	**W50P**
Supplied without lever	**0**

Alternative connections, sizes and materials available on request. Contact STAUFF for more information.

BV0L-3L
Low-Pressure Ball Valve
Three-Way ▪ Female BSPP Thread (DIN ISO 228)

Item No.	Designation	Price
3404004560	BV0L-3-L-G04-E541-XAU-W50P	124.35
3404003752	BV0L-3-L-G06-E541-XAU-W50P	147.60
3404003747	BV0L-3-L-G08-E541-XAU-W50P	160.65
3404003749	BV0L-3-L-G12-E541-XAU-W50P	216.20
3404003748	BV0L-3-L-G16-E541-XAU-W50P	286.85
3404003755	BV0L-3-L-G20-E541-XAU-W50P	439.75
3404003744	BV0L-3-L-G24-E541-XAU-W50P	576.30
6100006929	BV0L-3-L-G32-E541-XAU-W50P	1011.35

BV0L-3T
Low-Pressure Ball Valve
Three-Way ▪ Female BSPP Thread (DIN ISO 228)

Item No.	Designation	Price
3404003741	BV0L-3-T-G04-E541-XAU-W50P	124.35
6100007773	BV0L-3-T-G06-E541-XAU-W50P	124.35
6100006926	BV0L-3-T-G08-E541-XAU-W50P	160.65
3404003743	BV0L-3-T-G12-E541-XAU-W50P	256.70
6100006928	BV0L-3-T-G16-E541-XAU-W50P	286.85
6100006927	BV0L-3-T-G20-E541-XAU-W50P	439.75
3404003742	BV0L-3-T-G24-E541-XAU-W50P	576.30
6100006930	BV0L-3-T-G32-E541-XAU-W50P	1011.75

	Throttle and Shut-Off Valve (In-Line Assembly) DV	**K32**
	Flow Control Valve (In-Line Assembly) DRV	**K32**
	Pressure Compensated Flow Control Valve (In-Line Assembly) PNDRV	**K33**
	Check Valve (In-Line Assembly) RVR	**K34 - K35**
	Heavy-Duty Check Valve (In-Line Assembly) RV	**K35**

Throttle and Shut-Off Valve ▪ Type DV (In-Line Assembly)

Order Codes

DV - 25 - B - G - W5 - PM

① ② ③ ④ ⑤ ⑥

① Type

Throttle and Shut-Off Valve (In-Line Assembly)	**DV**

② Nominal Size DN

06	08	10	12	16	20	25	30	40

(refer to Catalogue 6 - STAUFF Valves)

③ Sealing Material

NBR (Buna-N®) (standard option)	**B**
FKM/FPM (Viton®)	**V**
EPDM	**E**

④ Connection

Female BSPP Threads (ISO 228)	**G**
Female NPT threads (ANSI B1.20.1)	**N**
Female UN/UNF thread (SAE J514)	**U**

⑤ Body / Spindle Material

Steel, zinc/iron-plated (standard option)	**(None)**
Stainless Steel	**W5**

⑥ Panel Mounting Nut

Without panel mounting nut (standard option)	**(None)**
With panel mounting nut	**PM**

Technical Data

- Maximum working pressure: 350 bar / 5000 PSI (for all sizes)
- Operating temperature range: -20 °C ... +100 °C / -4 °F ... +212 °F

Refer to Catalogue 6 - STAUFF Valves for detailed flow characteristics.

DV
Throttle and Shut-Off Valve
(In-Line Assembly)

Item No.	Designation	Thread Size	Price
1910000199	DV-06-V-G	G1/8 BSPP	107.10
1910000203	DV-08-V-G	G1/4 BSPP	108.85
1910000206	DV-10-V-G	G3/8 BSPP	114.05
1910000208	DV-12-V-G	G1/2 BSPP	138.05
1910000211	DV-16-V-G	G3/4 BSPP	183.00
1910000213	DV-20-V-G	G1 BSPP	361.40
1910000215	DV-25-V-G	G1-1/4 BSPP	479.45
1910000217	DV-30-V-G	G1-1/2 BSPP	661.05
1910000219	DV-40-V-G	G2 BSPP	1217.95

Flow Control Valve ▪ Type DRV (In-Line Assembly)

Order Codes

DRV - 25 - B - G - W5 - PM

① ② ③ ④ ⑤ ⑥

① Type

Flow Control Valve (In-Line Assembly)	**DRV**

② Nominal Size DN

06	08	10	12	16	20	25	30	40

(refer to Catalogue 6 - STAUFF Valves)

③ Sealing Material

NBR (Buna-N®) (standard option)	**B**
FKM/FPM (Viton®)	**V**
EPDM	**E**

④ Connection

Female BSPP Threads (ISO 228)	**G**
Female NPT threads (ANSI B1.20.1)	**N**
Female UN/UNF thread (SAE J514)	**U**

⑤ Body / Spindle Material

Steel, zinc/iron-plated (standard option)	**(None)**
Stainless Steel	**W5**

⑥ Panel Mounting Nut

Without panel mounting nut (standard option)	**(None)**
With panel mounting nut	**PM**

Technical Data

- Opening pressure: 0.5 bar / 7 PSI (4.5 bar / 65 PSI available on request)
- Maximum working pressure: 350 bar / 5000 PSI (for all sizes)
- Operating temperature range: -20 °C ... +100 °C / -4 °F ... +212 °F

Refer to Catalogue 6 - STAUFF Valves for detailed flow characteristics.

DRV
Flow Control Valve
(In-Line Assembly)

Item No.	Designation	Thread Size	Price
1910000178	DRV-06-V-G	G1/8 BSPP	120.60
1910000181	DRV-08-V-G	G1/4 BSPP	125.80
1910000184	DRV-10-V-G	G3/8 BSPP	128.45
1910000186	DRV-12-V-G	G1/2 BSPP	142.60
1910000188	DRV-16-V-G	G3/4 BSPP	203.55
1910000190	DRV-20-V-G	G1 BSPP	379.35
1910000192	DRV-25-V-G	G1-1/4 BSPP	512.15
1910000194	DRV-30-V-G	G1-1/2 BSPP	729.70
1910000196	DRV-40-V-G	G2 BSPP	1205.15

Pressure Compensated Flow Control Valve ▪ Type PNDRV (In-Line Assembly)

Order Codes

PNDRV - 12 - B - G - W5 - PM

① ② ③ ④ ⑤ ⑥

① Type

Pressure Compensated Flow Control Valve (In-Line Assembly)	**PNDRV**

② Nominal Size DN

08	10	12	16

(refer to Catalogue 6 - STAUFF Valves)

③ Sealing Material

NBR (Buna-N®) (standard option)	**B**
FKM/FPM (Viton®)	**V**
EPDM	**E**

④ Connection

Female BSPP Thread (ISO 228)	**G**
Female NPT thread (ANSI B1.20.1)	**N**
Female UN/UNF thread (SAE J514)	**U**

⑤ Body Material

Steel, phosphated (standard option)	**(None)**
Stainless Steel	**W5**

⑥ Panel Mounting Nut

Without panel mounting nut (standard option)	**(None)**
With panel mounting nut	**PM**

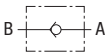
Technical Data

- Maximum working pressure: 210 bar / 3000 PSI (for all sizes)
- Operating temperature range: -20 °C ... +120 °C / -4 °F ... +248 °F
- Minimum filtration grade: 25 µm (absolute) to ensure the correct functioning, reduce wear and tear and increase the service life of the valve

PNDRV
Pressure Compensated Flow Control Valve (In-Line Assembly)

Item No.	Designation	Thread Size	Price
3404003772	PNDRV-08-B-G	G1/4 BSPP	391.60
3404002710	PNDRV-10-B-G	G3/8 BSPP	417.20
3404003777	PNDRV-12-B-G	G1/2 BSPP	564.75
3404003767	PNDRV-16-B-G	G3/4 BSPP	738.05

Check Valve ▪ Type RVR (In-Line Assembly)



Order Codes

RVR - 25 - B0.5 - G - W66 D

① ② ③ ④ ⑤ ⑥

① Type

Check Valve with Round Body	**RVR**

② Nominal Size DN

06	08	10	15	20	25	30	40

Contact STAUFF for more information

③ Opening Pressure

0.5 bar / 7 PSI	**B0.5**
1 bar / 14 PSI	**B1.0**
2 bar / 29 PSI	**B2.0**
3 bar / 43 PSI	**B3.0**
4 bar / 58 PSI	**B4.0**
5 bar / 72 PSI	**B5.0**

④ Connection

BSPP Thread	**G**

⑤ Body Material

Chromium VI-free zinc plated, thick-layer passivation (standard)	**W66**
Stainless Steel	**W5**

⑥ Manufacturing Code

STAUFF internal information only	**D**

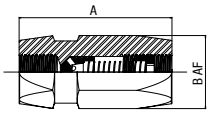
⑦ Orifice size (optional)

Orifice size	**Orifice size in mm to 2 decimal places**

Order code example including 2mm orifice: RVR-08-B5.0-G-WDD-2.00

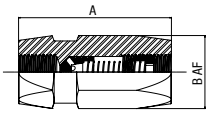
Technical Data

- Opening pressure: 0.5 bar / 7 PSI (other pressures available on request)
- Maximum working pressure: 630 bar / 9137 PSI (depending on size)
- Operating temperature range: -20 °C ... +100 °C / -4 °F ... +212 °F
- Test Pressure 2 x indicated working pressure



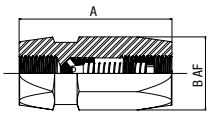
RVR
Check Valve - 06, 08, 10, 15

Item No.	Designation	Thread Size	A mm	B mm	Working Pressure	Price
3404004000	RVR-06-B0.5-G-W66D	G1/4 BSPP	58	24	630 bar	54.30
3404003988	RVR-06-B1.0-G-W66D	G1/4 BSPP	58	24	630 bar	69.20
3404003968	RVR-06-B2.0-G-W66D	G1/4 BSPP	58	24	630 bar	69.20
3404003982	RVR-06-B3.0-G-W66D	G1/4 BSPP	58	24	630 bar	69.20
3404003953	RVR-06-B4.0-G-W66D	G1/4 BSPP	58	24	630 bar	69.20
3404004005	RVR-06-B5.0-G-W66D	G1/4 BSPP	58	24	630 bar	57.00
3404004004	RVR-08-B0.5-G-W66D	G3/8 BSPP	58	27	630 bar	61.10
3404004564	RVR-08-B1.0-G-W66D	G3/8 BSPP	58	27	630 bar	84.10
3404003969	RVR-08-B2.0-G-W66D	G3/8 BSPP	58	27	630 bar	84.10
3404003991	RVR-08-B3.0-G-W66D	G3/8 BSPP	58	27	630 bar	84.10
3404003973	RVR-08-B4.0-G-W66D	G3/8 BSPP	58	27	630 bar	84.10
3404003998	RVR-08-B5.0-G-W66D	G3/8 BSPP	58	27	630 bar	63.75
3404004002	RVR-10-B0.5-G-W66D	G1/2 BSPP	72	32	500 bar	74.60
3404003994	RVR-10-B1.0-G-W66D	G1/2 BSPP	72	32	500 bar	101.75
3404003990	RVR-10-B2.0-G-W66D	G1/2 BSPP	72	32	500 bar	101.75
3404003993	RVR-10-B3.0-G-W66D	G1/2 BSPP	72	32	500 bar	101.75
3404003950	RVR-10-B4.0-G-W66D	G1/2 BSPP	72	32	500 bar	101.75
3404004561	RVR-10-B5.0-G-W66D	G1/2 BSPP	72	32	500 bar	77.35
3404004003	RVR-15-B0.5-G-W66D	G3/4 BSPP	85	41	500 bar	88.15
3404003999	RVR-15-B1.0-G-W66D	G3/4 BSPP	85	41	500 bar	115.25
3404004001	RVR-15-B2.0-G-W66D	G3/4 BSPP	85	41	500 bar	115.25
3404003964	RVR-15-B3.0-G-W66D	G3/4 BSPP	85	41	500 bar	115.25
3404003976	RVR-15-B4.0-G-W66D	G3/4 BSPP	85	41	500 bar	115.25
3404003997	RVR-15-B5.0-G-W66D	G3/4 BSPP	85	41	500 bar	97.65



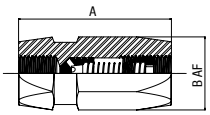
RVR
Check Valve - 20, 25, 30, 40

Item No.	Designation	Thread Size	A mm	B mm	Working Pressure	Price
3404004006	RVR-20-B0.5-G-W66D	G1 BSPP	96	51	400 bar	147.70
3404003980	RVR-20-B1.0-G-W66D	G1 BSPP	96	51	400 bar	199.05
3404003978	RVR-20-B2.0-G-W66D	G1 BSPP	96	51	400 bar	199.05
3404003955	RVR-20-B3.0-G-W66D	G1 BSPP	96	51	400 bar	199.05
3404003987	RVR-20-B4.0-G-W66D	G1 BSPP	96	51	400 bar	199.05
3404004562	RVR-20-B5.0-G-W66D	G1 BSPP	96	51	400 bar	161.25
3404003966	RVR-25-B0.5-G-W66D	G1 1/4 BSPP	120	61	350 bar	498.10
3404003970	RVR-25-B1.0-G-W66D	G1 1/4 BSPP	120	61	350 bar	566.10
3404003971	RVR-25-B2.0-G-W66D	G1 1/4 BSPP	120	61	350 bar	566.10
3404004563	RVR-25-B3.0-G-W66D	G1 1/4 BSPP	120	61	350 bar	566.10
3404003952	RVR-25-B5.0-G-W66D	G1 1/4 BSPP	120	61	350 bar	536.55
3404003981	RVR-30-B0.5-G-W66D	G1 1/2 BSPP	135	65	300 bar	679.65
3404003961	RVR-30-B1.0-G-W66D	G1 1/2 BSPP	135	65	300 bar	751.50
3404003979	RVR-30-B2.0-G-W66D	G1 1/2 BSPP	135	65	300 bar	751.50
3404003967	RVR-30-B3.0-G-W66D	G1 1/2 BSPP	135	65	300 bar	751.50
3404003972	RVR-30-B5.0-G-W66D	G1 1/2 BSPP	135	65	300 bar	729.70
6100021273	RVR-40-B0.5-G-W66D	G2 BSPP	145	80	250 bar	972.25
3404003956	RVR-40-B3.0-G-W66D	G2 BSPP	145	80	250 bar	1042.85



RVR
Check Valve - 08
Orifice

Item No.	Designation	Thread Size	A mm	B mm	Working Pressure	Price
3404003983	RVR-08-B0.5-G-W66D-0.50	G3/8 BSPP	58	27	630 bar	88.15
3404003996	RVR-08-B0.5-G-W66D-1.60	G3/8 BSPP	58	27	630 bar	88.15
3404003962	RVR-08-B0.5-G-W66D-2.70	G3/8 BSPP	58	27	630 bar	83.95
3404003965	RVR-08-B3.0-G-W66D-2.40	G3/8 BSPP	58	27	630 bar	88.15
3404003954	RVR-08-B5.0-G-W66D-2.00	G3/8 BSPP	58	27	630 bar	88.15



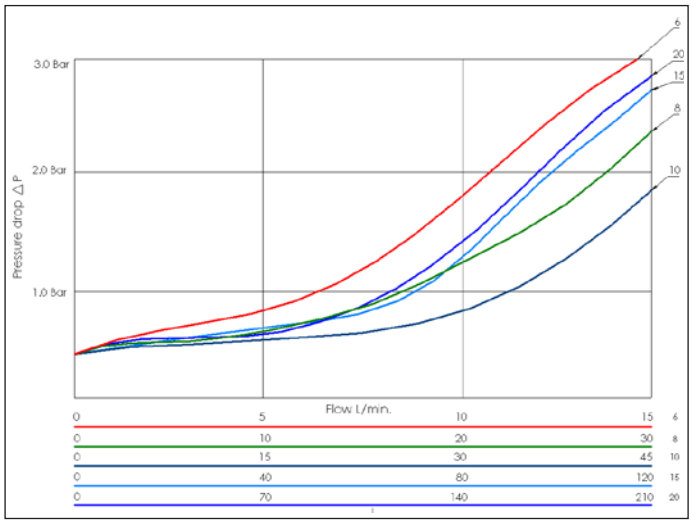
RVR
Check Valve - 20
Orifice

Item No.	Designation	Thread Size	A mm	B mm	Working Pressure	Price
3404004007	RVR-20-B5.0-G-W66D-1.60	G1 BSPP	96	51	400 bar	199.05
3404003984	RVR-20-B0.5-G-W66D-6.80	G1 BSPP	96	51	400 bar	217.00

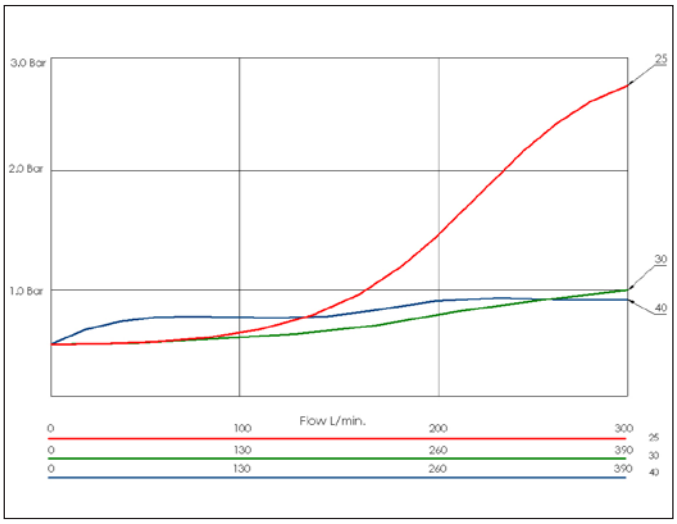
Check Valve ▪ Type RVR

Flow Characteristics
Opening Pressure = 0.5 Bar

Nominal Size DN - 6, 8, 10, 15, 20

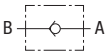


Nominal Size DN - 25, 30, 40



Contact STAUFF for more information.

Heavy-Duty Check Valve ▪ Type RV (In-Line Assembly)



Order Codes

RV - 25 - B0.5 - G - W5

① ② ③ ④ ⑤

① Type

Heavy-Duty Check Valve (In-Line Assembly)	**RV**

② Nominal Size DN

06	08	10	12	16	20	25	30	40

(refer to Catalogue 6 - STAUFF Valves)

③ Opening Pressure

0.5 bar / 7 PSI (standard option)	**B0.5**
4.5 bar / 65 PSI	**B4.5**

Contact STAUFF for alternative opening pressures.

④ Connection

Female BSPP Thread (ISO 228)	**G**
Female NPT thread (ANSI B1.20.1)	**N**
Female UN/UNF thread (SAE J514)	**U**

⑤ Body Material

Steel, zinc/iron-plated (standard option)	**(None)**
Stainless Steel	**W5**

Technical Data

- Opening pressure: 0.5 bar / 7 PSI (4.5 bar / 65 PSI available on request)
- Maximum working pressure: 500 bar / 7250 PSI (depending on size)
- Operating temperature range: -20 °C ... +100 °C / -4 °F ... +212 °F

Refer to Catalogue 6 - STAUFF Valves for detailed flow characteristics.

RV
Heavy-Duty Check Valve (In-Line Assembly)

Item No.	Designation	Thread Size	Price
1910000371	RV-06-B0.5-G	G1/8 BSPP	94.90
1910000372	RV-08-B0.5-G	G1/4 BSPP	51.60
1910000373	RV-10-B0.5-G	G3/8 BSPP	61.10
1910000374	RV-12-B0.5-G	G1/2 BSPP	74.60
1910000375	RV-16-B0.5-G	G3/4 BSPP	108.50
1910000376	RV-20-B0.5-G	G1 BSPP	175.95
1910000377	RV-25-B0.5-G	G1-1/4 BSPP	270.95
1910000378	RV-30-B0.5-G	G1-1/2 BSPP	479.45
1910000379	RV-40-B0.5-G	G2 BSPP	903.00

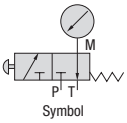
Gauge Isolator Valve
(Single Station)
SWS-S1 — **K38**

Gauge Isolator Valve
(Multi Station)
SWS-M — **K38**

Gauge Isolator Needle Valve
(Single Station)
SWS-A1 — **K39**

Gauge Isolator Needle Valve
(Single Station)
SWS-A2 — **K39**

Gauge Isolator Valve ▪ Type SWS-S1 (Single Station)



Symbol

Technical Data

- Maximum working pressure: 400 bar / 5800 PSI
- Operating temperature range:
  -30 °C ... +115 °C / -22 °F ... +239 °F

Order Codes

SWS - S1 - G04
① ② ③

① Type

Gauge Isolator Valve	**SWS**

② Style

Single station	**S1**

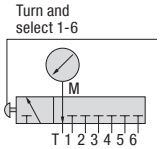
③ Connection Thread

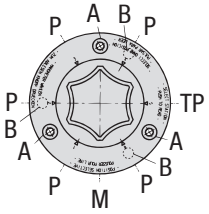
Female G1/4 BSPP (for all connections)	**G04**
Female 1/4 NPT (for all connections)	**N04**

SWS-S1
Gauge Isolator Valve
(Single Station)

Item No.	Designation	Price
1910000479	SWS-S1-G04	122.05
1910000558	SWS-S1-N04	211.25

Gauge Isolator Valve ▪ Type SWS-M (Multi Station)





Mounting Bores (ø6 mm / .24 in)
A 3 bores, equally spaced (120°), BCD ø65 mm / 2.56 in
B 3 bores, equally spaced (120°), BCD ø65 mm / 2.56 in

Connections (G1/4 BSPP or 7/16–20 UNF)
P 6 bores, equally spaced (60°)
M 1 bore
T 1 bore

Technical Data

- Maximum working pressure: 400 bar / 5800 PSI
- Operating temperature range:
  -30 °C ... +115 °C / -22 °F ... +239 °F

Order Codes

SWS - M - G04
① ② ③

① Type

Gauge Isolator Valve	**SWS**

② Style

Multi station	**M**

③ Connection Thread

Female G1/4 BSPP for all connections	**G04**
Female 7/16–20 UNF (1/4" SAE) for all connections	**U04**

SWS-M
Gauge Isolator Valve
(Multi Station)

Item No.	Designation	Price
1910000480	SWS-M-G04	422.40
3404002992	SWS-M-U04	589.15

Gauge Isolator Needle Valve ▪ Types SWS-A1/A2 (Single Station)

In-Line Version
(Type SWS-A1)

90° Version
(Type SWS-A2)

Order Codes

SWS - **A1** - **G04/B04** - **PM**
① ② ③ ④

① Type

Gauge Isolator Valve	**SWS**

② Style

Single station, in-line version	**A1**
Single station, 90° version	**A2**

③ Connection Threads

Female G1/4 BSPP and Male 1/4 BSPT	**G04/B04**
Female 1/4 NPT and Male 1/4 NPT	**N04F/N04M**
Female 1/4 NPT and Male 7/16–20 UNF (1/4" SAE) (available on request for in-line version only)	**N04F/U04M**

④ Panel Mounting Kit

Without panel mounting kit (standard option)	**(None)**
With panel mounting kit	**PM**

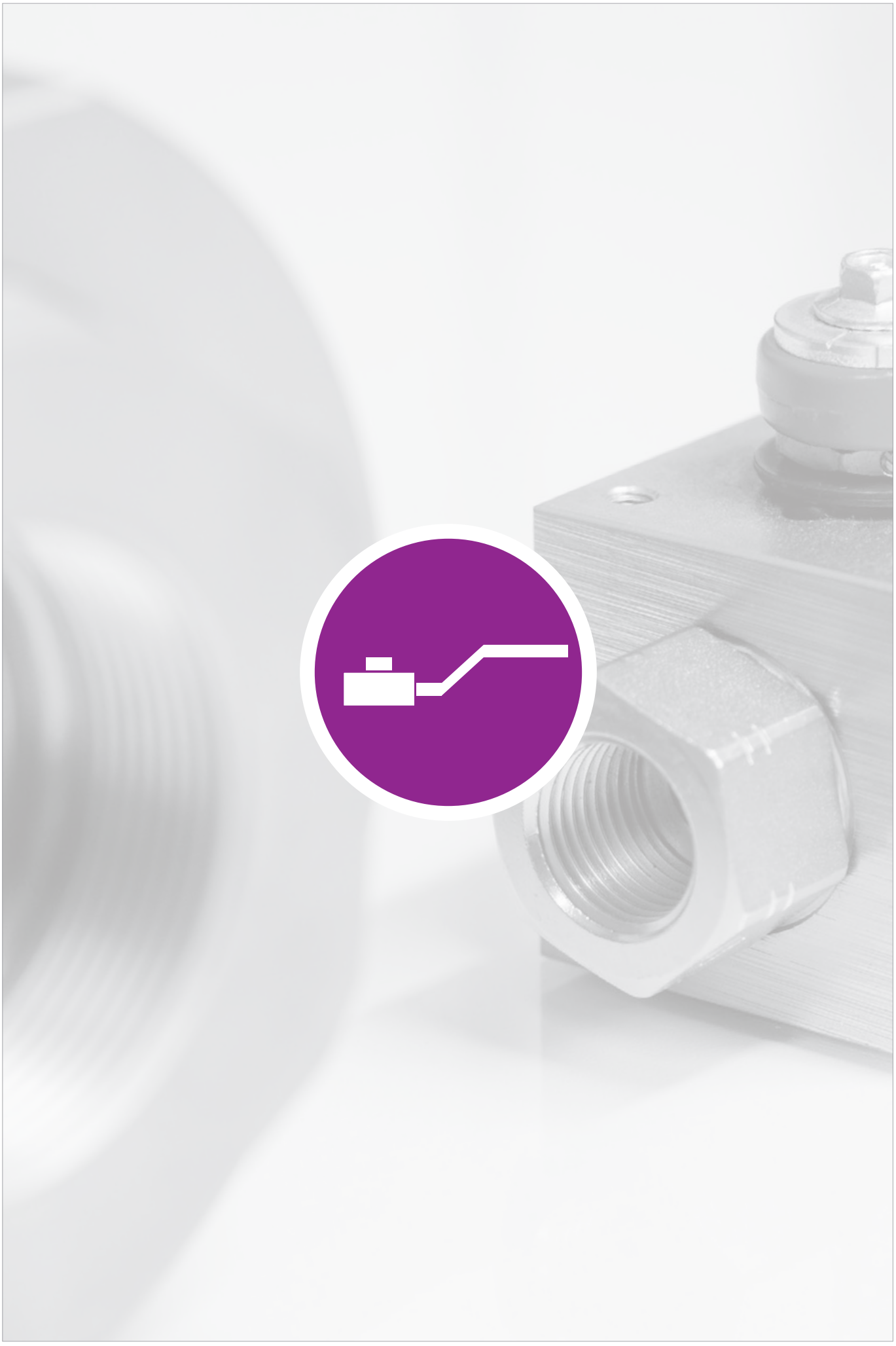
Technical Data
- Maximum working pressure: 400 bar / 5800 PSI (for all sizes)
- Operating temperature range: -20 °C ... +100 °C / -4 °F ... +212 °F

SWS-A1
Gauge Isolator Needle Valve (Single Station - In-line Version)

Item No.	Designation	Price
3404000433	SWS-A1-G04/B04	103.05
3404000746	SWS-A1-N04F/N04M	128.45

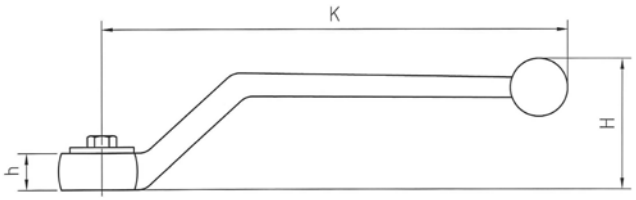
SWS-A2
Gauge Isolator Needle Valve (Single Station - 90° Version)

Item No.	Designation	Price
3404000434	SWS-A2-G04/B04	103.00
3404002794	SWS-A2-N04F/N04M	128.45



Levers	**K42**
Locking Devices LD	**K43**

Levers



Zinc ▪ Off-Set Design

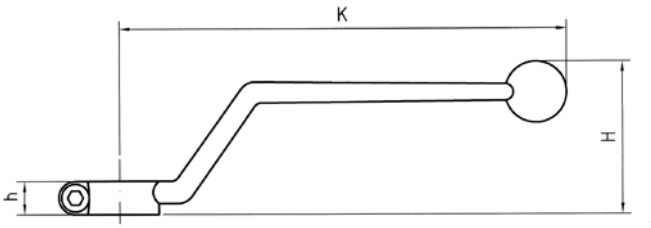
SW	Dimensions (mm/in) K	h	H	Weight (kg/lbs)	Item No.	Designation	Price
07	80	6.5	30	0.03	6100061908	Lever-BV-SW07-ZNO	9.20
	3.15	.26	1.18	.07			
09	115	8.7	45	0.09	6100128849	Lever-BV-SW09-ZNO	20.50
	4.52	.34	1.77	.20			

Carbon Steel ▪ Off-Set Design

SW	Dimensions (mm/in) K	h	H	Weight (kg/lbs)	Item No.	Designation	Price
07	80	6.5	30	0.05	6100091834	Lever-BV-SW07-CSO	12.00
	3.15	.26	1.18	.11			
09	115	9	47	0.09	3404000602	Lever-BV-SW09-CSO	27.25
	4.52	.35	1.85	.20			
14	170	12	64	0.23	3404000604	Lever-BV-SW14-CSO	40.75
	6.73	.47	2.52	.51			
17	306	17	80	0.66	3404003709	Lever-BV-SW17-CSO	73.25
	12.04	.69	3.15	1.45			

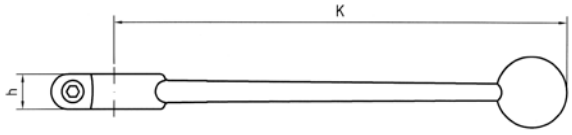
Stainless Steel V4A ▪ Off-Set Design

SW	Dimensions (mm/in) K	h	H	Weight (kg/lbs)	Item No.	Designation	Price
07	60	6.5	22	0.04	6100063940	Lever-BV-SW07-W50	154.15
	2.36	.26	.87	.09			
09	115	9	47	0.10	3404000606	Lever-BV-SW09-W50	36.75
	4.52	.35	1.85	.22			
14	173	12	64	0.23	3404000658	Lever-BV-SW14-W50	57.95
	6.80	.47	2.52	.51			
17	227.5	15	90	0.66	3404002299	Lever-BV-SW17-W50	385.80
	8.96	.59	3.54	1.45			



Aluminium ▪ Off-Set Design

SW	Dimensions (mm/in) K	h	H	Weight (kg/lbs)	Item No.	Designation	Price
12	160	12	55	0.07	3404000521	Lever-BV-SW12-ALO	59.70
	6.30	.47	2.17	.16			



Zinc ▪ Straight Design

SW	Dimensions (mm/in) K	h	Weight (kg/lbs)	Item No.	Designation	Price
09	155	10	0.09	3404002597	Lever-BV-SW09-ZNS	9.20
	6.10	.29	.20			
14	200	14	0.22	3404000522	Lever-BV-SW14-ZNS	34.00
	7.87	.55	.48			

Aluminium ▪ Straight Design

SW	Dimensions (mm/in) K	h	Weight (kg/lbs)	Item No.	Designation	Price
09	150	11	0.06	3404001956	Lever-BV-SW09-ALS	21.80
	5.91	.43	.13			
14	200	12	0.11	6100128843	Lever-BV-SW14-ALS	47.50
	7.87	.47	.24			
17	320	16	0.27	3404000523	Lever-BV-SW17-ALS	96.25
	12.60	.63	.59			

Note: Alternative lever designs and materials deviating from the delivery standard can be ordered by adding -ZnO, -CSO, -W5O, -ALO, -ZnS or -ALS at the end of the ordering code of the complete ball valve (e.g. FBV-2-G20-0001-M-W5O).

Locking Device ▪ Type LD8

Dimensions / Order Codes

Nominal Size DN	SW	Item No.	Designation	Price
04-13	09	3404004485	LD8-SW09-W5XAUS	73.25
16	12	3404004477	LD8-SW12-W5XAUS	74.60
20-25	14	3404004484	LD8-SW14-W5XAUS	81.40

Characteristics

Locking kit consisting of two plates

Features

- Universal field-installed locking device
- High security: Cannot be dismounted when locked

Suitability

Type	Description
BBV	Block Body Valve with Threaded Connections (SW09-14)
HBV	High-Pressure Block Body Valve with Threaded Connections (SW09-14)
BBV-2-F	Block Body Valve with SAE Split Flange Connections (SW09-14)

Type	Description
BBV	Block Body Valve with SAE Flange Connections (SW09-14)
MBBV-2	Block Body Valve (Two-Way Selector) for Manifold Mounting (SW09-14)
MCBVL-3	Block Body Valve (Three-Way Selector) for Manifold Mounting (SW09-14)
MCBVSL-3	Block Body Valve (Three-Way Selector) for Manifold Mounting (SW09-14)

Type	Description
CBV	Block Body Valve (Three-Way Selector) with Threaded Connections (SW09-14)
CBVS	Block Body Valve (Three-Way Selector) with Threaded Connections (SW09-14)

Locking Device ▪ Type LD9

Dimensions / Order Codes

Nominal Size DN	SW	Item No.	Designation	Price
32-50	17	3404004480	LD9-SW17-W5XAUS	88.15

Characteristics

Locking kit consisting of two plates.

Features

- Field-installed locking device
- Can be dismounted after disassembly of lever

Suitability

Type	Description
FBV	Forged Body Valve with Threaded Connections (SW17)

Type	Description
FBV-2-F	Forged Body Valve with SAE Split Flange Connections (SW17)

Type	Description
CBV	Block Body Valve (Three-Way Selector) with Threaded Connections (SW17)
KHZ	High-Pressure Block Body Ball Valve (SW17)
MBBV-2	High-Pressure Block Body Ball Valve for Manifold Mounting 2-Way (SW17)
MCBVL-3	High-Pressure Block Body Ball Valve for Manifold Mounting 3-Way (SW17)
MCBVSL-3	High-Pressure Block Body Ball Valve for Manifold Mounting 3-Way (SW17)
LBV	High-Pressure Block Body Ball Valve L-Bore 3-way Selector (SW17)
TBV	High-Pressure Block Body Ball Valve T-Bore 3-way Selector (SW17)
XBV	High-Pressure Block Body Ball Valve X-Bore 3-way Selector (SW17)

Introduction	L2 - L3
Test Couplings SMK-20	L4 - L11
Test Couplings SKK-20	L12 - L15
Test Couplings SMK-15	L16 - L21
Test Couplings SKK-12	L22 - L27
Test Adaptors	L28 - L33
Test Hoses and Connectors	L34 - L53

STAUFF Test

Test couplings from the STAUFF Test product range are already planned in suitable positions in the hydraulic system during the design phase of a machine or added at a later stage in the course of retrofitting or upgrading.

They allow machine operators and maintenance personnel to easily and safely connect analogue and digital measuring and display devices for the temporary testing or continuous monitoring of system pressure and other factors.

If required, they also allow venting of the system as well as collecting representative fluid samples, e.g. for analysing the degree of contamination of the fluid.

This type of connection requires no tools and can also be carried out during operation under full system pressure up to 630 bar / 9135 PSI (depending on the type of coupling).

The check valve (ball or poppet valve) integrated into the test coupling opens only after connection of the measuring and display device with suitable adapters or test hoses, which complete the product range. This guarantees safe sealing of the connection without any risks of leakages or fluid escaping from the system.

During production, STAUFF test couplings are not crimped after insertion of the internal valve components and seals but rather closed with a threaded nipple in a fully automated process, which secures the proper functioning of the couplings under permanent loads.

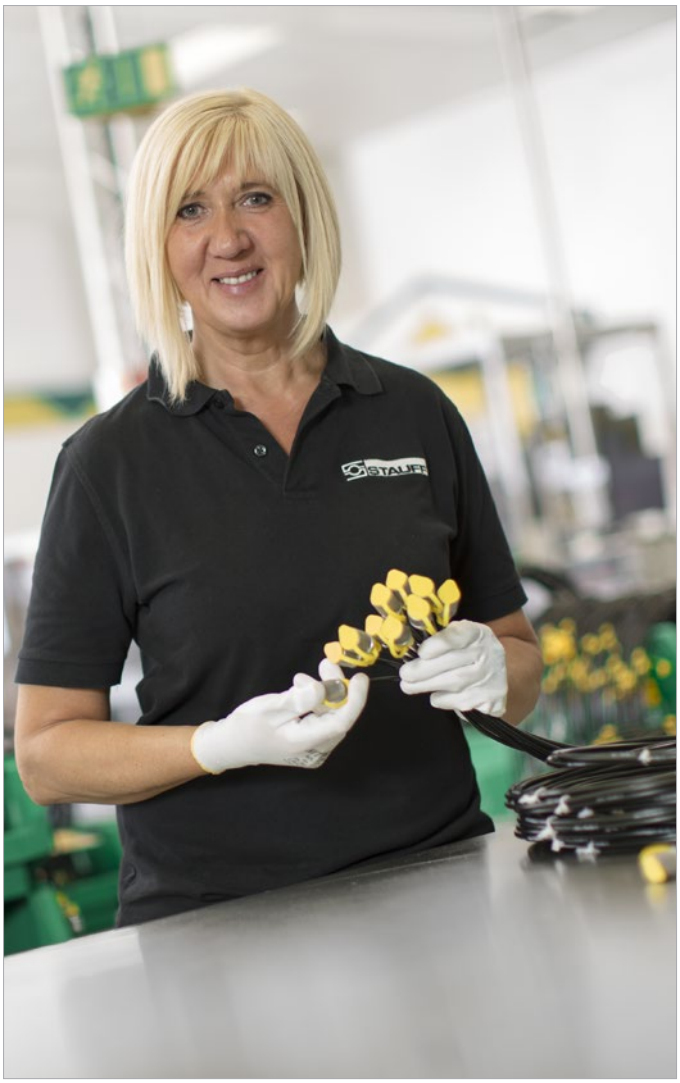
The vibration protection feature, which prevents self-loosening of the protective metal cap caused by vibrations in the system, is another competitive advantage.

For the finishing of the test coupling range in carbon steel, STAUFF relies on the STAUFF Zinc/Nickel surface coating which has proven successful for many years. It provides reliable surface protection – even after transport, handling and assembly – and meets all current legal requirements.

Versions in stainless steel V2A and V4A are generally available from stock. Alternative materials and surfaces are available on request.

For selected types and series, independent certificates and approvals can be provided:

- Military approval for use as gas filling valves for nitrogen accumulators by the German Bundeswehr (Wehrtechnische Dienststelle für Pionier- und Truppengerät)
- DVGW registration as test points for gas pressure control systems, issued by the German Technical and Scientific Association for Gas and Water



STAUFF Zinc/Nickel Coating

Layers
- Sealing
- Passivation
- Zinc/Nickel
- Steel

With at least 1200 hours resistance against red rust, the STAUFF Zinc/Nickel surface coating offers excellent surface protection – even after transport, handling and assembly. This was confirmed by testing in the salt-spray chamber, according to DIN EN ISO 9227.

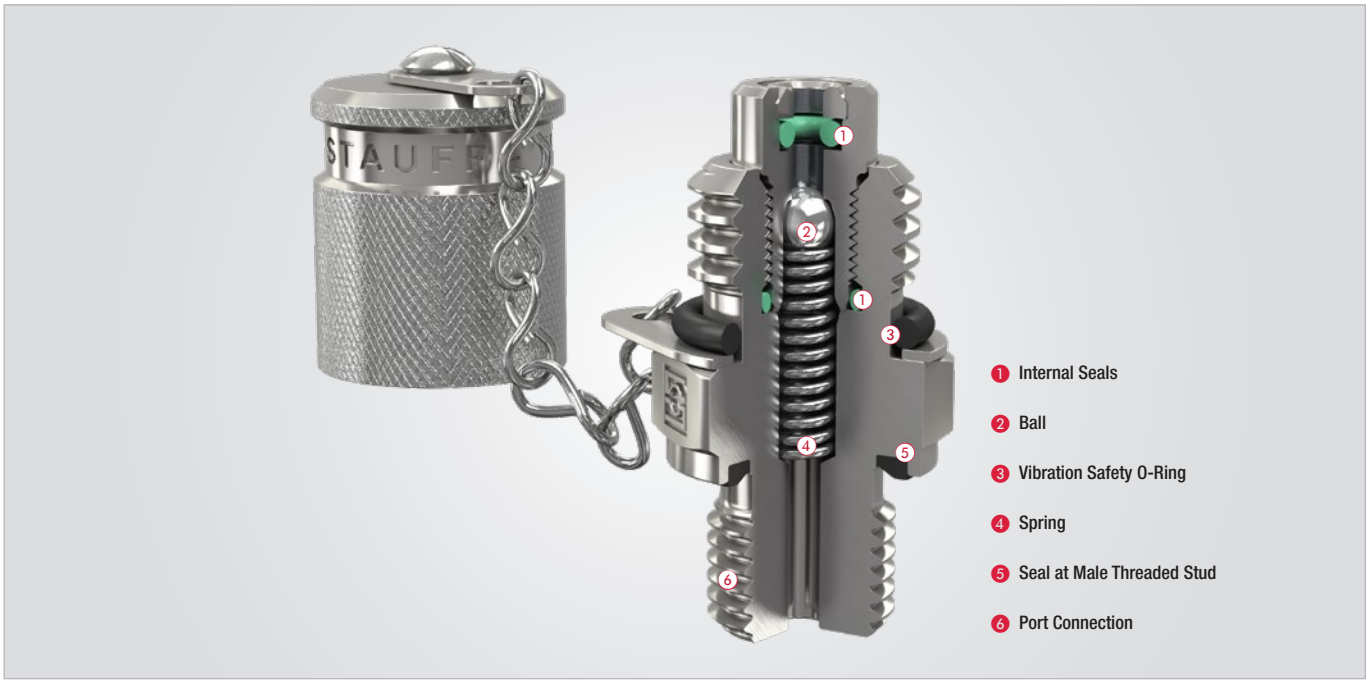
Users across all industries and applications benefit from sophisticated technology, which has been developed for and used by the very demanding automotive industry for many years now and that is already the proven standard for a large proportion of STAUFF components since 2007.

- At least 1200 hours resistance to red rust / base metal corrosion under practical conditions in the salt-spray chamber according to DIN EN ISO 9227
- White rust occurs only by way of a slight grey haze
- Surpassing the requirements of the corrosion protection class K5 as defined by the VDMA, the German Engineering Association (360 hours resistance to white rust / 720 hours resistance to red rust)
- Free of hexavalent chrome Cr(VI)
- ELV compliant according to 2000/53/EC (End of Life Vehicles Directive)
- REACH compliant according to 1907/2006/EC (Registration, Evaluation, Authorisation and Restriction of Chemicals)
- RoHS compliant according to 2002/95/EC (Restrictions of the Use of Hazardous Substances)
- Appealing colour scheme with a bright semi-gloss surface finish – comparable to Stainless Steel
- Significantly reduced tendency to corrosion by contact with other metals (such as Aluminium and Stainless Steel)
- Improved abrasion resistance due to the ductility / plastic deformability of the coating
- Little to no risk of triggering allergies – nickel release is down to only a fraction of the statutory limits relating to objects which come into direct and prolonged contact with the skin (independent results of the reference test method according to DIN EN 1811 are available on request)
- Good paint adhesion properties
- Resistance against all commonly used hydraulic media

Test 20 - Connection Thread M16 x 2	**SMK-20**	**L6 - L11**

	Introduction Test Coupling with Ball Check	**L6**
	Test Coupling **with Male Threaded Stud** SMK-20	**L7**
	Test Coupling **with Straight 24° Fitting** SMK-20 Type G	**L8**
	Test Coupling **with 24° Taper / O-Ring (DKO)** SMK-20 Type K	**L8**
	Test Coupling **with Straight 37° JIC Connection** SMK-20-JIC Type G	**L8**
	Test Coupling **with 37° JIC Connection** SMK-20-JIC Type K	**L8**
	Test Coupling **with Swivel Run Tee 37° JIC Connection** SMK-20 Type FM	**L8**
	Swivel Run Tee **with 37° JIC Connection** SGV-JIC Type FM	**L8**
	Swivel Run Tee SGV-BSPP Type FM	**L8**
	Test Coupling **with ORFS Connection** SMK-20 Type ORFS	**L10**
	Bulkhead SSK-20	**L10**
	Coupling Cap SKP-SMK-20	**L10**
	Test Adaptor SAD-20	**L10**
	Gauge Adaptor SMA-20	**L10**
	Gauge Adaptor SMD-20	**L10**
	Male Adaptor SDA-20	**L10**

Test Coupling with Ball Check
SMK-20



Fast Coupling for

- Monitoring and control of pressure
- Venting
- Sampling in high- and low-pressure systems
- Connection Thread according to ISO 15171-2

Advantages

- Test system at working pressure
- Leakproof connection before **Ball Check** is open
- Simple connection to measurement, control and switching devices
- Self-locking metal protective cap

Working Pressure

- Max. working pressure 630 bar / 9137 PSI
  For SMK Type G and K the recommended working pressure of the fitting manufacturer should be noted
- Connection under pressure up to 400 bar / 5801 PSI max.

Materials

- **Metal Parts:**
  Standard material: Steel, zinc/nickel-plated = **W3**
  Optional:
  Stainless Steel **W4** (1.4305 / AISI 303) on request
  Stainless Steel **W5** (1.4571 / AISI 316Ti) on request

- **Ball:** Stainless Steel

- **Seal Types:**
  B = NBR (Buna-N®)
  (Temperature range -20 °C ... +100 °C / -4 °F ... +212 °F)
  Note: Internal Seal Types made of FKM/FPM, even for standard NBR-type.

  V = FKM/FPM (Viton®)*
  (Temperature range -20 °C ... +200 °C / -4 °F ... +392 °F)

  E = EPDM Ethylene Propylene Diene Monomer Rubber
  (for Brake fluid, Temperature range -40 °C ... +150 °C / -40 °F ... +302 °F)

  Vibration safety O-Ring made of NBR (Buna-N®).

Media

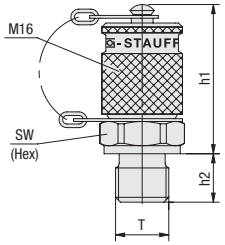
- Suitable for hydraulic oils and other Mineral oil-based fluids
  (Check compatibility of Seal Type material)
- For use with other liquid media please contact STAUFF

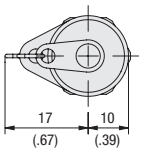
Protection Cap

- The complete STAUFF-Test-20-type-SMK range is also available with a hexagonal protection cap made of steel or plastic protection cap.

SMK-20 Test Coupling with Male Threaded Stud	**SMK-20 Type G** Test Coupling with Straight 24° Fitting	**SMK-20 Type K** Test Coupling With 24° Taper / O-Ring (DKO)	**SMK-20-JIC** Test Coupling with 37° JIC Connection	**SSK-20** Bulkhead

Test Coupling with Male Threaded Stud SMK-20





Ordering Codes

***SMK*-20*-G1/4*-B*-C*-SK*-W3**

* Type	Test Coupling with Ball Check	**SMK**
* Series	STAUFF Test 20 (Connection Thread M16x2)	**-20**
* Port Connection	acc. to dimension table	**-G1/4**
* Seal Material	NBR (Buna-N®)	**-B**
	FKM/FPM (Viton®)	**-V**
	EPDM	**-E**
* Seal Type	O-Ring Type A	**-A**
	Metal Joint Type B	**-B**
	Elastomeric Sealing Type C	**-C**
	Taper Type D	**-D**
	O-Ring Type E	**-E**
* Protection Cap	Knurled protection cap	**–**
	Hexagonal protection cap	**-SK**
	Plastic protection cap	**-KK**
* Material Code	Steel, zinc/nickel-plated	**-W3**
	Stainless Steel V2A - 1.4305 (AISI 303)	**-W4**
	Stainless Steel V4A - 1.4571 (AISI 316 Ti)	**-W5**

Seal Type

O-Ring Type A

Metal Joint Type B

Elastomeric Sealing Type C

Taper Type D1

O-Ring Type E

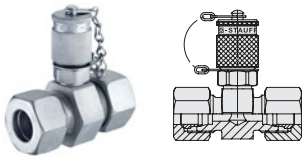
For more information on seal types refer to page L52

Thread T	Seal Type	Working Pressure (bar/PSI)	Dimensions (mm/in) h1	h2	Hex	Torque (N·m/ft·lb) ca. Thread T	Weight (kg/lbs) ca. per 100	Item No.	Designation	Price
M8 x 1	Type A	250	38	8.5	17	6	6.10	1210026085	SMK-20-M8x1-B-A-W3	25.45
		3625	1.50	.33	.67	4.4	13.42			
M10 x 1		630	38	9.8	17	12	6.70	1210026076	SMK-20-M10x1-B-A-W3	25.45
		9137	1.50	.39	.67	8.8	14.74	1210000066	SMK-20-M10x1-B-A-W5	151.65
M10 x 1.25		630	38	9.8	17	12	6.70	1210027382	SMK-20-M10x1.25-B-A-W3	49.20
		9137	1.50	.39	.67	8.8	14.74			
M14 x 1.5	Type B	630	37	12	19	55	7.50	1210026081	SMK-20-M14X1.5-B-W3	29.55
		9137	1.46	.47	.75	40.6	16.50			
M16 x 1.5		630	37	12	22	70	8.40	1210026084	SMK-20-M16X1.5-B-W3	29.55
		9137	1.46	.47	.87	51.6	18.48			
G1/4		630	37	12	19	55	7.30	1210026065	SMK-20-G1/4-B-W3	25.45
		9137	1.46	.47	.75	40.6	16.06	1210000853	SMK-20-G1/4-B-W5	228.90
G3/8		630	37	12	22	90	8.90	1210026073	SMK-20-G3/8-B-W3	31.00
		9137	1.46	.47	.87	66.4	19.58	1210005271	SMK-20-G3/8-B-W5	151.65
M10 x 1	Type C	400	39	8	17	18	6.80	1210026078	SMK-20-M10x1-B-C-W3	25.45
		5801	1.54	.31	.67	13.3	14.96			
M12 x 1.5		630	37	12	17	35	6.90	1210026080	SMK-20-M12x1.5-B-C-W3	25.45
		9137	1.46	.47	.67	25.8	15.18	1210002967	SMK-20-M12x1.5-B-C-W5	151.65
M14 x 1.5		630	37	12	19	50	7.70	1210026082	SMK-20-M14x1.5-B-C-W3	31.00
		9137	1.46	.47	.75	36.9	16.94			
M16 x 1.5		630	37	12	22	60	8.70	1210026294	SMK-20-M16x1.5-B-C-W3	31.00
		9137	1.46	.47	.87	44.2	19.14			
G1/8		400	39	8	17	18	6.80	1210026071	SMK-20-G1/8-B-C-W3	25.45
		5801	1.54	.31	.67	13.3	14.96	1210000852	SMK-20-G1/8-B-C-W5	151.65
G1/4		630	37	12	19	45	8.10	1210026116	SMK-20-G1/4-B-C-W3	25.45
		9137	1.46	.47	.75	33.2	17.82	1210000855	SMK-20-G1/4-B-C-W5	151.65
G3/8		630	37	12	22	80	8.90	1210026074	SMK-20-G3/8-B-C-W3	31.00
		9137	1.46	.47	.87	59	19.58			
G1/2		630	39	14	27	110	12.80	1210026064	SMK-20-G1/2-B-C-W3	45.00
		9137	1.54	.55	1.06	81.1	28.16			
R1/8 K	Type D[1]	400	37	8	17		6.70	1210026304	SMK-20-R1/8K-D-W3	25.45
		5801	1.46	.31	.67		14.74	1210008770	SMK-20-R1/8K-D-W5	151.65
R1/4 K		630	35	12	17		7.10	1210026086	SMK-20-R1/4K-D-W3	25.45
		9137	1.38	.47	.67		15.62	1210004702	SMK-20-R1/4K-D-W5	151.65
1/8 NPT		400	36	10	17		6.40	1210026031	SMK-20-1/8NPT-D-W3	25.45
		5801	1.42	.39	.67		14.08	1210001659	SMK-20-1/8NPT-D-W5	151.65
1/4 NPT		630	35	15	17		7.30	1210026029	SMK-20-1/4NPT-D-W3	25.45
		9137	1.38	.59	.67		16.06			
5/16–24 UNF	Type E	400	38	7.5	17	8	6.70	1210027283	SMK-20-5/16UNF-B-E-W3	25.45
		5.801	1.50	.30	.67	5.9	14.74			
7/16–20 UNF		630	38	9.1	17	20	7.00	1210026059	SMK-20-7/16UNF-B-E-W3	25.45
		9137	1.50	.36	.67	14.7	15.40	1210002676	SMK-20-7/16UNF-B-E-W5	151.65
1/2–20 UNF		630	38	9.2	17	25	7.20	1210026242	SMK-20-1/2UNF-B-E-W3	25.45
		9137	1.50	.36	.67	18.4	15.84			
9/16–18 UNF		630	37	10	19	35	7.60	1210026062	SMK-20-9/16UNF-B-E-W3	25.45
		9137	1.46	.39	.75	25.8	16.72			
3/4–16 UNF		630	37	11.1	19	70	9.58	1210027252	SMK-20-3/4UNF-B-E-W3	88.55
		9137	1.46	.44	.75	51.6	21.08			
M14 x 1.5		630	38	11	19	45	7.80	1210026083	SMK-20-M14x1.5-B-E-W3	33.80
		9137	1.50	.43	.75	33.2	17.16			

[1] Suitable liquid / plastic sealant required.
Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.
Torque recommendations for steel mating material.

Dimensional drawings: All dimensions in mm (in).

Test Couplings

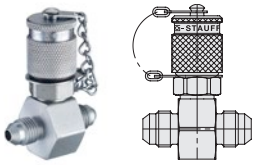


Test Coupling with Straight 24° Fitting SMK-20 Type G

Item No.	Designation	Series	Price
1210026236	SMK-20-06L-G-W3-MS	L	53.45
1210026026	SMK-20-08L-G-W3-MS	L	52.05
1210026033	SMK-20-10L-G-W3-MS	L	53.45
1210026040	SMK-20-12L-G-W3-MS	L	53.45
1210026045	SMK-20-15L-G-W3-MS	L	59.00
1210026050	SMK-20-18L-G-W3-MS	L	57.60
1210026054	SMK-20-22L-G-W3-MS	L	64.65
1210026250	SMK-20-28L-G-W3-MS	L	82.90
1210027262	SMK-20-35L-G-W3-MS	L	94.10
1210027278	SMK-20-42L-G-W3-MS	L	110.90
1210027035	SMK-20-06S-G-W3-MS	S	53.45
1210026240	SMK-20-08S-G-W3-MS	S	52.05
1210026038	SMK-20-10S-G-W3-MS	S	57.60
1210026043	SMK-20-12S-G-W3-MS	S	57.60
1210027158	SMK-20-14S-G-W3-MS	S	57.60
1210026048	SMK-20-16S-G-W3-MS	S	61.80
1210026052	SMK-20-20S-G-W3-MS	S	68.80
1210026056	SMK-20-25S-G-W3-MS	S	82.90
1210026252	SMK-20-30S-G-W3-MS	S	95.55
1210027271	SMK-20-38S-G-W3-MS	S	113.65

L = Light Series S = Heavy Series

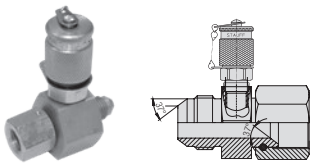
W3 = Steel zinc/nickel-plated



Test Coupling with Straight 37° JIC Connection SMK-20-JIC Type G

Item No.	Designation	Thread	Price
1210027354	SMK-20-JIC1/4-G-W3	7/16–20 UNF	53.45
1210021658	SMK-20-JIC5/16-G-W3	1/2–20 UNF	53.45
1210022962	SMK-20-JIC3/8-G-W3	9/16–18 UNF	53.45
1210027349	SMK-20-JIC1/2-G-W3	3/4–16 UNF	61.80
1210022940	SMK-20-JIC5/8-G-W3	7/8–14 UNF	61.80
1210027366	SMK-20-JIC3/4-G-W3	1-1/16–12 UN	70.30
1210027358	SMK-20-JIC1-G-W3	1-5/16–12 UN	85.65
6100074688	SMK-20-JIC1-1/4-G-W3	1-5/8–12 UN	98.25
1210022941	SMK-20-JIC1-1/2-G-W3	1-7/8–12 UN	99.60

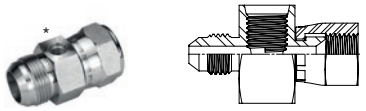
W3 = Steel zinc/nickel-plated



Test Coupling with Swivel Run Tee 37° JIC FM Connection

Item No.	Designation	Thread	Price
1210024263	SMK-20-7/16UNF-04-JIC1/4-FM-W3	7/16–20 UNF	56.25
1210024264	SMK-20-7/16UNF-06-JIC3/8-FM-W3	9/16–18 UNF	67.45
1210024265	SMK-20-7/16UNF-08-JIC1/2-FM-W3	3/4–16 UNF	75.85
1210024266	SMK-20-7/16UNF-10-JIC5/8-FM-W3	7/8–14 UNF	88.50
1210024268	SMK-20-7/16UNF-12-JIC3/4-FM-W3	1-1/16–12 UN	103.90
1210024267	SMK-20-7/16UNF-16-JIC1-FM-W3	1-5/16–12 UN	133.00

W3 = Steel zinc/nickel-plated

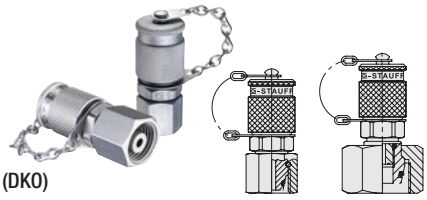


Swivel Run Tee with 37° JIC Connection SGV-JIC Body FM

Item No.	Designation	Thread	Price
1220026905	SGV-7/16UNF-04-JIC1/4-FM-W66	7/16–20 UNF	31.00
1220026906	SGV-7/16UNF-06-JIC3/8-FM-W66	9/16–18 UNF	42.20
1220021138	SGV-7/16UNF-08-JIC1/2-FM-W66	3/4–16 UNF	45.00
1220021123	SGV-7/16UNF-10-JIC5/8-FM-W66	7/8–14 UNF	70.30
1220020999	SGV-7/16UNF-12-JIC3/4-FM-W66	1-1/16–12 UN	87.05
1220021008	SGV-7/16UNF-16-JIC1-FM-W66	1-5/16–12 UN	126.30

W66 = Steel, zinc-plated and Thick-layer passivated

*Test Coupling use SMK-20-7/16UNF-B-E-W3



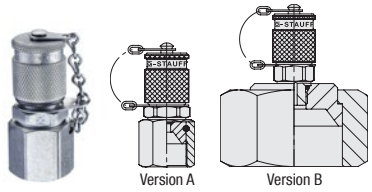
Test Coupling with 24° Taper / O-Ring (DKO) SMK-20 Type K

Version A Version B

Item No.	Designation	Series	Thread	Version	Price
1210026024	SMK-20-06L-B-K-W3	L	M12 x 1.5	A	53.45
1210026027	SMK-20-08L-B-K-W3	L	M14 x 1.5	A	57.60
1210026034	SMK-20-10L-B-K-W3	L	M16 x 1.5	A	56.25
1210026041	SMK-20-12L-B-K-W3	L	M18 x 1.5	A	56.25
1210026046	SMK-20-15L-B-K-GS-W3	L	M22 x 1.5	B	59.00
1210026051	SMK-20-18L-B-K-GS-W3	L	M26 x 1.5	B	59.00
1210026055	SMK-20-22L-B-K-GS-W3	L	M30 x 2	B	57.60
1210026058	SMK-20-28L-B-K-GS-W3	L	M36 x 2	B	61.80
1210026254	SMK-20-35L-B-K-GS-W3	L	M45 x 2	B	63.25
1210026256	SMK-20-42L-B-K-GS-W3	L	M52 x 2	B	101.80
1210026025	SMK-20-06S-B-K-W3	S	M14 x 1.5	A	57.60
1210026028	SMK-20-08S-B-K-W3	S	M16 x 1.5	A	57.60
1210026039	SMK-20-10S-B-K-W3	S	M18 x 1.5	A	56.25
1210026044	SMK-20-12S-B-K-W3	S	M20 x 1.5	A	57.60
1210026248	SMK-20-14S-B-K-GS-W3	S	M22 x 1.5	B	57.60
1210026049	SMK-20-16S-B-K-GS-W3	S	M24 x 1.5	B	57.60
1210026053	SMK-20-20S-B-K-GS-W3	S	M30 x 2	B	57.60
1210026057	SMK-20-25S-B-K-GS-W3	S	M36 x 2	B	57.60
1210026253	SMK-20-30S-B-K-GS-W3	S	M42 x 2	B	66.00
1210026255	SMK-20-38S-B-K-GS-W3	S	M52 x 2	B	68.80

L = Light Series S = Heavy Series

W3 = Steel zinc/nickel-plated

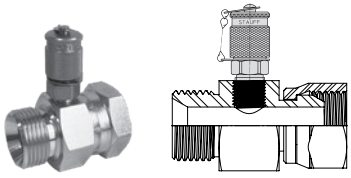


Test Coupling with 37° JIC Connection SMK-20-JIC Type K

Version A Version B

Item No.	Designation	Thread	Version	Price
1210026280	SMK-20-JIC1/4-K-W3	7/16–20 UNF	A	59.00
1210024282	SMK-20-JIC5/16-K-W3	1/2–20 UNF	A	59.00
1210026281	SMK-20-JIC3/8-K-W3	9/16–18 UNF	A	59.00
1210026278	SMK-20-JIC1/2-K-W3	3/4–16 UNF	A	59.00
1210027381	SMK-20-JIC5/8-K-W3	7/8–14 UNF	A	59.00
1210027367	SMK-20-JIC3/4-K-GS-W3	1-1/16–12 UN	B	63.25
1210024132	SMK-20-JIC1-K-GS-W3	1-5/16–12 UN	B	63.25
1210027344	SMK-20-JIC1-1/4-K-GS-W3	1-5/8–12 UN	B	88.50
1210027342	SMK-20-JIC1-1/2-K-GS-W3	1-7/8–12 UN	B	122.10

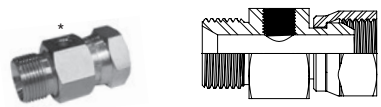
W3 = Steel zinc/nickel-plated



Test Coupling with Swivel Run Tee 60° BSPP FM Connection

Item No.	Designation	Thread	Price
6100088792	SMK-20-G1/8-1/4BSPP-FM-W111	1/4 BSPP	56.75
6100001643	SMK-20-G1/8-3/8BSPP-FM-W111	3/8 BSPP	58.05
6100189524	SMK-20-G1/8-1/2BSPP-FM-W111	1/2 BSPP	59.45
1210022996	SMK-20-G1/8-3/4BSPP-FM-W111	3/4 BSPP	71.65
1210024948	SMK-20-G1/8-1BSPP-FM-W111	1 BSPP	82.45

W111 = Combination of W66 (chromium VI-free zinc plated plus thick-layer-passivation) and W60 (zinc-nickel black)



Swivel Run Tee with 60° BSPP Connection SGV-BSPP Body FM

Item No.	Designation	Price
1220021620	SGV-G1/8-1/4BSPP-FM-W66	31.30
1220021622	SGV-G1/8-3/8BSPP-FM-W66	32.60
6100189525	SGV-G1/8-1/2BSPP-FM-W66	34.00
1220021621	SGV-G1/8-3/4BSPP-FM-W66	46.20
1220021618	SGV-G1/8-1BSPP-FM-W66	57.00

W66 = Steel, zinc-plated and Thick-layer passivated

*Test Coupling use SMK-20-G1/8-B-C-W3

Order Codes - SMK-20 Type G, K

SMK - 20 - 18L - B - K - W3 - MS
① ② ③ ④ ⑤ ⑧ ⑨

① Type

Test Coupling with Ball Check	SMK

② Series

STAUFF Test 20 (Connection Thread M16x2)	20

③ Outside Tube Diameter (in)

	Series	
6 ØD	L / S	06
8 ØD	L / S	08
10 ØD	L / S	10
12 ØD	L / S	12
14 ØD	S	14
15 ØD	L	15
16 ØD	S	16
18 ØD	L	18
20 ØD	S	20
22 ØD	L	22
25 ØD	S	25

③ Outside Tube Diameter (in) continued..

	Series	
28 ØD	L	28
30 ØD	S	30
35 ØD	L	35
38 ØD	S	38
42 ØD	L	42

Series

Light Series	L
Heavy Series	S

④ Seal Material (SMK-20 Type K only)

NBR (Buna-N®)	B
FKM/FPM (Viton®)	V
EPDM	E

⑤ Connection

Straight 24° Fitting	G
24° Taper / O-Ring (DKO)	K

⑥ Design (24° Taper connection only)

One-piece design (Version A)	(None)
Screwed design (Version B)	GS

⑦ Protection cap

Knurled protection cap	(None)
Hexagonal protection cap	SK
Plastic protection cap	KK

⑧ Material Code

Steel, zinc/nickel-plated	W3
Stainless Steel V2A-1.4305 (AISI 303)	W4
Stainless Steel V4A-1.4571 (AISI 316 Ti)	W5

⑨ Assembling / Kitting (Straight 24° Fitting)

Fitting body only	(None)
Fitting body supplied with cutting rings and union nuts	MS
Fitting body supplied with soft-sealing cutting rings and union nuts	W5

Order Codes - SMK-20-JIC Type G, K

SMK - 20 - JIC3/4 - K - GS - SK - W3
① ② ③ ④ ⑤ ⑥ ⑦

① Type

Test Coupling with Ball Check	SMK

② Series

STAUFF Test 20 (Connection Thread M16x2)	20

③ Connection

37° JIC Connection	JIC

Outside Tube Diameter (in)

1/4 ØD	1/4
5/16 ØD	5/16
3/8 ØD	3/8
1/2 ØD	1/2
5/8 ØD	5/8
3/4 ØD	3/4
1 ØD	1
1-1/4 ØD	1-1/4
1-1/2 ØD	1-1/2

④ Connection

Straight Fitting	G
37° JIC Taper	K

⑤ Design (37° Taper connection only)

One-piece design (Version A)	(None)
Screwed design (Version B)	GS

⑥ Protection cap

Knurled protection cap	(None)
Hexagonal protection cap	SK
Plastic protection cap	KK

⑦ Material Code

Steel, zinc/nickel-plated	W3
Stainless Steel V2A-1.4305 (AISI 303)	W4
Stainless Steel V4A-1.4571 (AISI 316 Ti)	W5

Order Codes - Test Coupling and Swivel Run Tee SGV

SGV - 7/16UNF - 04 - JIC1/4 - FM - W66
① ② ③ ④ ⑤ ⑥

① Type

with Test Coupling with Swivel Run Tee	SMK-20
Swivel Run Tee	SGV

② Port Connection

7/16–20 UNF	7/16UNF
G1/8 BSPP	G1/8

③ JIC Size

7/16–20 UNF	04
9/16–18 UNF	06
3/4–16 UNF	08
7/8–14 UNF	10
1-1/16–12 UNF	12
1-5/16–12UNF	16

③ BSPP Size

1/4 BSPP	1/4
3/8 BSPP	3/8
1/2 BSPP	1/2
3/4 BSPP	3/4
1 BSPP	1

④ Connection (JIC)

37° JIC Connection	JIC

Outside Tube Diameter (in)

1/4 ØD	1/4
3/8 ØD	3/8
1/2 ØD	1/2
5/8 ØD	5/8
3/4 ØD	3/4
1 ØD	1

④ Connection (BSPP)

BSPP	BSPP

⑤ Connection

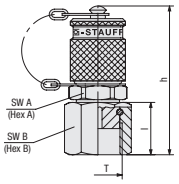
Female/Male Thread	FM

⑥ Material Code

Steel, zinc/nickel-plated	W3
Steel, zinc plated and Thick-layer passivated	W66
Combination of W66 (chromium VI-free zinc plated plus thick-layer-passivation) and W60 (zinc-nickel black)	W111

Test Couplings

Test Coupling with ORFS Connection SMK-20 Type ORFS



Item No.	Designation	Thread	Price
1210026235	SMK-20-04-ORFS-W3	9/16–18 UNF	78.90
1210026237	SMK-20-06-ORFS-W3	11/16–16 UN	50.60
1210027055	SMK-20-08-ORFS-W3	13/16–16 UN	50.60

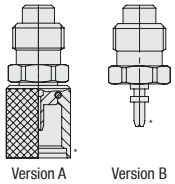
W3 = Steel zinc/nickel-plated

Coupling Cap SKP-SMK-20

Item No.	Designation	Thread	Price
1220026105	SKP-SMK-20-W3	M16 x 2	10.00
1220001871	SKP-SMK-20-W5/3	M16 x 2	36.60

W3 = Steel zinc/nickel-plated W5 = Stainless Steel

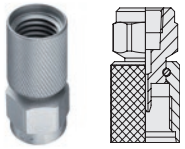
Test Adaptor SAD-20



Item No.	Designation	Thread*	Version	Price
1210021553	SAD-20/15-W3	M16 x 1.5	A	56.25
1210021553	SAD-20/15-W3	M16 x 1.5	A	56.25
1210026000	SAD-20/12-W3	S12.65 x 1.5	A	56.25
1210026151	SAD-20/10-W3	Plug in (Staple lock)	B	56.25

W3 = Steel zinc/nickel-plated

Direct Gauge Adaptor SMD-20



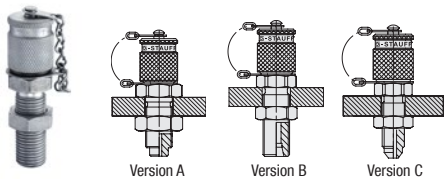
Item No.	Designation	Thread	Price
1210026219	SMD-20-G1/4-B-OR-W3	G1/4	46.40
1210026019	SMD-20-G1/2-B-OR-W3	G1/2	46.40
1210026222	SMD-20-G1/4-V-OR-W3	G1/4	60.35
1210026973	SMD-20-G1/4-B-OR-DG-W3 *	G1/4	74.35
1210026959	SMD-20-1/2NPT-W3	1/2 NPT	53.45
1210026217	SMD-20-7/16UNF-W3	7/16-20 UNF	40.85
1210026963	SMD-20-9/16UNF-W3	9/16-18 UNF	40.85
1210004166	SMD-20-G1/4-B-OR-W5	G1/4	175.45
1210006649	SMD-20-G1/4-V-OR-W5	G1/4	189.45
1210002961	SMD-20-G1/2-B-OR-W5	G1/2	238.60
1210007415	SMD-20-1/4NPT-W5	1/4 NPT	490.95

W3 = Steel zinc/nickel-plated W5 = Stainless Steel

*Fitted with Snubber (DG)

Suitable for adaption to STAUFF SPG-063 series pressure gauges

Bulkhead SSK-20



Item No.	Designation	Thread	Version	Price
1210026112	SSK-20-W3	M16 x 2	A	59.00
1210028751	SSK-20/08S-W3	M16 x 1.5[1]	B	73.05
1210026363	SSK-20-JIC1/4-M-W3	7/16-20 UNF	C	40.85

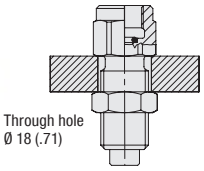
[1] Compression ring assembly 08S according to ISO 8434-1 / DIN 2353
W3 = Steel zinc/nickel-plated

Gauge Adaptor with Test Coupling Test 20, G1/4 BSP Gauge port with NBR sealing

Item No.	Designation	Price
1210026401	ADAPTOR-SMK-20/SMA-G1/4-B-OR/G1/4-FM-W3	105.30

General applications:
- Sampling at a known pressure
- Draining & Ventilation
- Bleed port using long gauge test hose lines
- Bypass pressure port for secondary pressure measurement

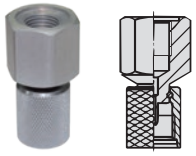
Gauge Adaptor SMA-20



Item No.	Designation	Thread	Price
1210026016	SMA-20-G1/4-B-OR-W3	G1/4	32.40
1210026017	SMA-20-G1/4-V-OR-W3	G1/4	28.25
1210026015	SMA-20-G1/2-B-OR-W3	G1/2	36.60
1210026209	SMA-20-1/4NPT-W3	1/4 NPT	33.80
1210026209	SMA-20-1/4NPT-W3	1/4 NPT	33.80
1210026874	SMA-20-1/2NPT-W3	1/2 NPT	42.20
1210026874	SMA-20-1/2NPT-W3	1/2 NPT	42.20
1210001707	SMA-20-G1/4-B-OR-W5	G1/4	168.15
1210001613	SMA-20-G1/2-B-OR-W5	G1/2	451.15

W3 = Steel zinc/nickel-plated W5 = Stainless Steel

Male Adaptor SDA-20



Item No.	Designation	Price
1210026153	SDA-20-G1/4-W3	52.05
1210026152	SDA-20-G1/2-W3	57.60

W3 = Steel zinc/nickel-plated

Order Codes - SMK-20 Type ORFS

SMK - 20 - 06 - ORFS - W3

① ② ③ ④ ⑥

① Type

Test Coupling with Ball Check	**SMK**

② Series

STAUFF Test 20 (Connection Thread M16x2)	**20**

③ ORFS-Size

04	**04**
06	**06**
08	**08**

④ Connection

ORFS	**ORFS**

⑤ Protection cap

Knurled protection cap	**(None)**
Hexagonal protection cap	**SK**
Plastic protection cap	**KK**

⑥ Material Code

Steel, zinc/nickel-plated	**W3**
Stainless Steel V2A-1.4305 (AISI 303)	**W4**
Stainless Steel V4A-1.4571 (AISI 316 Ti)	**W5**

Order Codes - SSK-20

SSK - 20 - JIC1/4 - M - W3

① ② ③ ④ ⑥

① Type

Bulkhead with Ball Check	**SSK**

② Series

STAUFF Test 20 (Connection Thread M16x2)	**20**

③ Connection

STAUFF Test 20 (Connection Thread M16x2) - Both ends	**(None)**
8 ØD	**08S**
37° JIC Connection / 1/4 in ØD	**JIC1/4**

④ Connection

Male Thread	**M**

⑤ Protection cap

Knurled protection cap	**(None)**
Hexagonal protection cap	**SK**
Plastic protection cap	**KK**

⑥ Material Code

Steel, zinc/nickel-plated	**W3**
Stainless Steel V2A-1.4305 (AISI 303)	**W4**
Stainless Steel V4A-1.4571 (AISI 316 Ti)	**W5**

Order Codes - SAD-20

SAD - 20/15 - W3

① ② ③

① Type

Test Adaptor	**SAD**

② Connection Type

Version A	**20/15**
Version A	**20/12**
Version B	**20/10**

③ Material Code

Steel, zinc/nickel-plated	**W3**
Stainless Steel V2A-1.4305 (AISI 303)	**W4**
Stainless Steel V4A-1.4571 (AISI 316 Ti)	**W5**

Order Codes - SMA / SMD / SDA-20

SMA - 20 - G1/4 - B - OR - DG - W3

① ② ③ ④ ⑤ ⑥ ⑦

① Type

Gauge Adaptor	**SMA**
Direct Gauge Adaptor	**SMD**
Male Adaptor	**SDA**

② Series

STAUFF Test 20 (Connection Thread M16x2)	**20**

③ Thread

G1/4	**G1/4**
G1/2	**G1/2**
1/4 NPT	**1/4NPT**
1/2 NPT	**1/2NPT**
7/16–20 UNF	**7/16UNF**
9/16–18 UNF	**9/16UNF**

④ Seal Material (SMA, SMD)

NBR (Buna-N®)	**B**
FKM/FPM (Viton®)	**V**
EPDM	**E**

⑤ Seal Type (SMA, SMD)

with O-Ring	**OR**

⑥ Option (SMD)

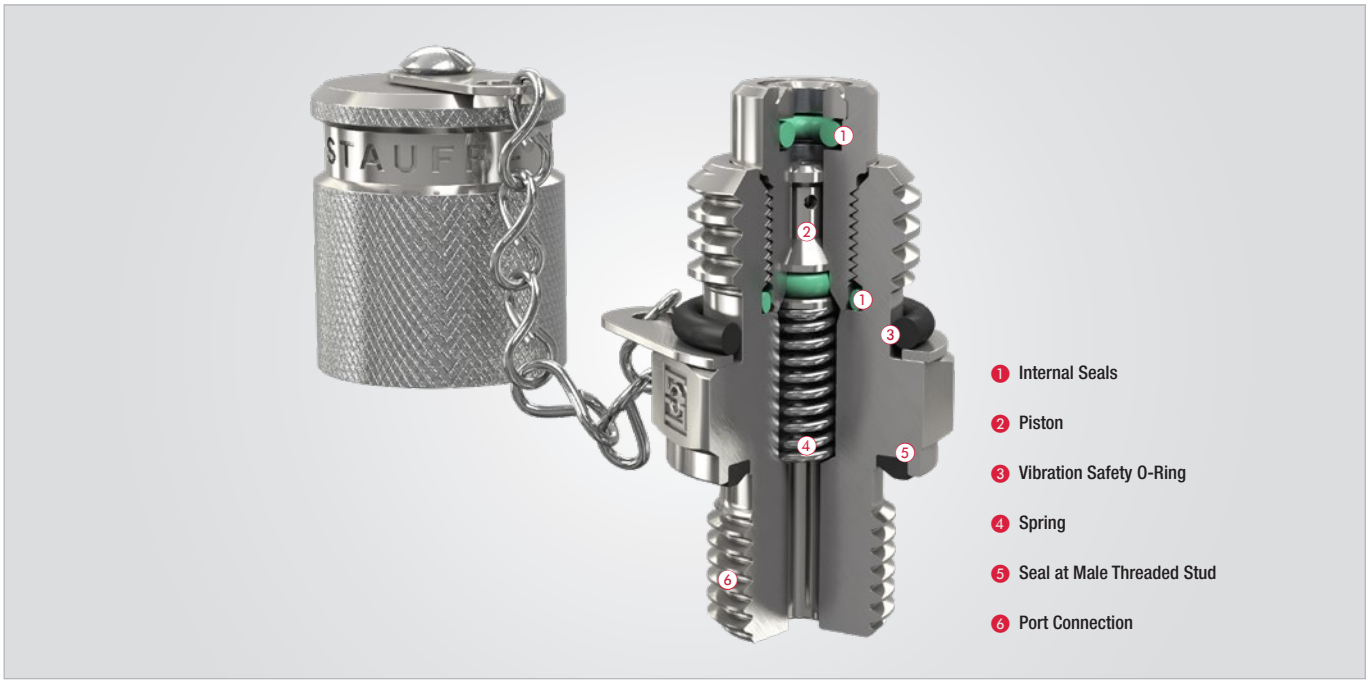
Fitted with snubber	**DG**

⑦ Material Code

Steel, zinc/nickel-plated	**W3**
Stainless Steel V2A-1.4305 (AISI 303)	**W4**
Stainless Steel V4A-1.4571 (AISI 316 Ti)	**W5**

Test 20 - Connection Thread M16 x 2	**SKK-20**	**L14 - L15**
	Introduction Test Coupling with Piston Valve		**L14**
	Test Coupling **with Male Threaded Stud** SKK-20		**L15**

Test Coupling with Piston Valve
SKK-20



Fast Coupling for

- Monitoring and control of pressure
- Venting
- Sampling in high and low-pressure systems
- Filling of accumulators (special filling-version)
- Connection Thread according to ISO 15171-2

Advantages

- Test system at working pressure
- Leak proof connection before **the piston v**alve is open
- Simple connection to measurement, control and switching devices
- Self-locking metal protective cap

Working Pressure

- Max. working pressure 630 bar / 9137 PSI
  For SKK Type G and K the recommended working pressure of fitting manufacturer should be noted.
- Connection under pressure up to 400 bar / 5801 PSI max.

DVGW

- DVGW registration as test points for gas pressure control systems, issued by the German Technical and Scientific Association for Gas and Water
- The DVGW approval relates solely to the SKK-12 and SKK-20 series with connection types:
  - M8x1-V-A-DVGW
  - M10x1-V-A-DVGW
  - 1/8NPT-V-D-DVGW
  - 1/4NPT-V-D-DVGW

Media

- Suitable for hydraulic oils and other Mineral oil-based fluids (Check compatibility of sealing material)
- For use with other liquid media please contact STAUFF
- In case of ultimate tightness requirements for gaseous media, a special Gas-type is available

Materials

- **Metal Parts:**
  Standard material: Steel, zinc/nickel-plated = **W3**
  Optional:
  Stainless Steel **W4** (1.4305 / AISI 303) on request
  Stainless Steel **W5** (1.4571 / AISI 316Ti) on request

- **Seal Types:**
  B = NBR (Buna-N®)
  (Temperature range -20 °C ... +100 °C / -4 °F ... +212 °F)
  Note: Internal sealings made of FKM/FPM, even for standard NBR-type.

  V = FKM/FPM (Viton®)*
  (Temperature range -20 °C ... +200 °C / -4 °F ... +392 °F)

  E = EPDM Ethylene Propylene Diene Monomer Rubber
  (for Brake fluid, Temperature range -40 °C ... +150 °C / -40 °F ... +302 °F)

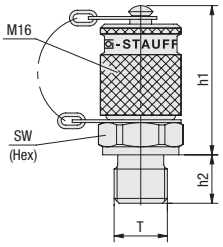
  Vibration safety O-Ring made of NBR (Buna-N®).

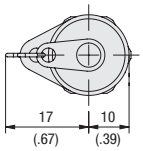
Protection Cap

- The complete STAUFF-Test-20-Type-SKK range is also available with a hexagonal protection cap made of steel or plastic protection cap.

SKK-20 Test Coupling with Male Threaded Stud	**SKK-20 Type G** Test Coupling with Straight 24° Fitting	**SKK-20 Type K** Test Coupling With 24° Taper / O-Ring (DKO)

Test Coupling with Male Threaded Stud SKK-20





Ordering Codes

***SKK*-20*-G1/4*-B*-C*-SK*-W3**

* Type	Test Coupling with Piston Valve	**SKK**
* Series	STAUFF Test 20 (Connection Thread M16x2)	**-20**
* Port Connection	acc. to dimension table	**-G1/4**
* Seal Material	NBR (Buna-N®)	**-B**
	FKM/FPM (Viton®)	**-V**
	EPDM	**-E**
* Seal Type	O-Ring Type A	**-A**
	Metal Joint Type B	**-B**
	Elastomeric Sealing Type C	**-C**
	Taper Type D	**-D**
	O-Ring Type E	**-E**
* Protection Cap	Knurled protection cap	**–**
	Hexagonal protection cap	**-SK**
	Plastic protection cap	**-KK**
* Material Code	Steel, zinc/nickel-plated	**-W3**
	Stainless Steel V2A - 1.4305 (AISI 303)	**-W4**
	Stainless Steel V4A - 1.4571 (AISI 316 Ti)	**-W5**

Thread T	Seal Type	Working Pressure (bar/PSI)	Dimensions (mm/in) h1	h2	Hex	Torque (N·m/ft-lb) ca. Thread T	Weight (kg/lbs) ca. per 100	Item No.	Designation	Price
M10 x 1	Type A	630	38	9.8	17	12	6.90	1210026199	SKK-20-M10x1-B-A-W3	36.60
		9137	1.50	.39	.67	8.8	15.18			
M14 x 1.5	Type B	630	37	12	19	55	7.70	1210026839	SKK-20-M14X1.5-B-W3	39.45
		9137	1.46	.47	.75	40.6	16.94			
G1/4		630	37	12	19	55	7.60	1210026193	SKK-20-G1/4-B-W3	33.80
		9137	1.46	.47	.75	40.6	16.72			
M10 x 1	Type C	400	39	8	17	18	7.10	1210026200	SKK-20-M10x1-B-C-W3	36.60
		5801	1.54	.31	.67	13.3	15.62			
M12 x 1.5		630	37	12	17	35	6.90	1210026201	SKK-20-M12x1.5-B-C-W3	33.80
		9137	1.46	.47	.67	25.8	15.18			
M14 x 1.5		630	37	12	19	50	7.70	1210026203	SKK-20-M14x1.5-B-C-W3	46.40
		9137	1.46	.47	.75	36.9	16.94			
M16 x 1.5		630	37	12	22	60	8.80	1210026850	SKK-20-M16x1.5-B-C-W3	54.85
		9137	1.46	.47	.87	44.2	19.36			
G1/8		400	39	8	17	18	7.00	1210026198	SKK-20-G1/8-B-C-W3	33.80
		5801	1.54	.31	.67	13.3	15.40			
G1/4		630	37	12	19	45	7.80	1210026012	SKK-20-G1/4-B-C-W3	33.80
		9137	1.46	.47	.75	33.2	17.16	1210003450	SKK-20-G1/4-B-C-W5	265.15
R1/8 K	Type D[1]	400	37	8	17		6.60	1210026859	SKK-20-R1/8K-D-W3	64.65
		5801	1.46	.31	.67		14.52			
R1/4 K		630	35	12	17		7.20	1210026856	SKK-20-R1/4K-D-W3	64.65
		9137	1.38	.47	.67		15.84			
1/4 NPT		630	35	15	17		7.10	1210026178	SKK-20-1/4NPT-D-W3	35.20
		9137	1.38	.59	.67		15.62			

[1] Suitable liquid / plastic sealant required.
Torque recommendations for steel mating material.
Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

Seal Type

O-Ring Type A

Metal Joint Type B

Elastomeric Sealing Type C

Taper Type D[1]

O-Ring Type E

For more information on seal types refer to page L52

Suitable for Gaseous Media

Thread T	Seal Type	Working Pressure (bar/PSI)	Dimensions (mm/in) h1	h2	Hex	Torque (N·m/ft-lb) ca. Thread T	Weight (kg/lbs) ca. per 100	Item No.	Designation	Price
M14 x 1.5	Type C	630	37	12	19	50	7.70	1210026841	SKK-20-M14x1.5-B-C-GAS-W3	55.20
		9137	1.46	.47	.75	36.9	16.94			
G1/8		400	39	8	17	18	7.00	1210004083	SKK-20-G1/8-V-C-GAS-W5	293.00
		5801	1.54	.31	.67	13.3	15.40			
G1/4		630	37	12	19	45	7.80	1210026812	SKK-20-G1/4-V-C-GAS-W3	74.35
		9137	1.46	.47	.75	33.2	17.16	1210003206	SKK-20-G1/4-V-C-GAS-W5	266.50
1/8 NPT	Type D[1]	400	36	10	17		6.30	1210026716	SKK-20-1/8NPT-D-GAS-W3	108.10
		5801	1.42	.39	.67		13.86			
1/4 NPT		630	35	15	17		7.10	1210026711	SKK-20-1/4NPT-D-GAS-W3	122.10
		9137	1.38	.59	.67		15.62	1210003503	SKK-20-1/4NPT-D-GAS-W5	266.50
1/2–20 UNF	Type E	630	38	9.2	17	25	7.10	1210024743	SKK-20-1/2UNF-V-E-GAS-W5	180.80
		9137	1.50	.36	.67	18.4	15.62			

Not suitable for use with OXYGEN, NATURAL GAS or other PETROLEUM BASED GASES
Note: All gas couplings are seal tight tested to 60 bar with Nitrogen gas. Gas test points certified with DVGW are tested to 100 bar according to the DVGW standard.
[1] Suitable liquid / plastic sealant required.
Torque recommendations for steel mating material.
Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

Dimensional drawings: All dimensions in mm (in).

Test 15 - Connection Thread M16 x 1.5 SMK-15 L18 - 21

Introduction
Test Coupling with Ball Check L18

Test Coupling
with Male Threaded Stud
SMK-15 L19

Test Coupling
with 24° Taper / O-Ring (DKO)
SMK-15 Type K L20

Swivel Run Tee
with 37° JIC Connection
SGV-JIC Type FM L20

Test Adaptor
SAD-15 L21

Direct Gauge Adaptor
SMD-15 L21

Coupling Cap
SKP-SMK-15 L21

Test Coupling with Ball Check
SMK-15

Fast Coupling for

- Monitoring and control of pressure
- Venting
- Sampling in high- and low-pressure systems

Advantages

- Test system at working pressure
- Leak proof connection before **Ball Check** is open
- Simple connection to measurement, control and switching devices
- Self-locking metal protective cap

Working Pressure

- Max. working pressure 630 bar / 9137 PSI
  For SMK Type G and K the recommended working pressure of fitting manufacturer should be noted.
- Connection under pressure up to 630 bar / 9137 PSI max.

Materials

- **Metal Parts:**
  Standard Material Code: Steel, zinc/nickel-plated, black = **W3**
  Optional:
  Stainless Steel **W4** (1.4305 / AISI 303) on request
  Stainless Steel **W5** (1.4571 / AISI 316Ti) on request

- **Ball:** Stainless Steel

- **Seal Types:**
  B = NBR (Buna-N®)
  (Temperature range -20 °C ... +100 °C / -4 °F ... +212 °F)
  Note: Internal sealings made of FKM/FPM, even for standard NBR-type.

  V = FKM/FPM (Viton®)
  (Temperature range -20 °C ... +200 °C / -4 °F ... +392 °F)

  E = EPDM Ethylene Propylene Diene Monomer Rubber
  (for Brake fluid,
  Temperature range -40 °C ... +150 °C / -40 °F ... +302 °F)

  Vibration safety O-Ring made of NBR (Buna-N®).

Media

- Suitable for hydraulic oils and other Mineral oil-based fluid
  (Check compatibility of seal material)
- For use with other liquid media please contact STAUFF

Protection Cap

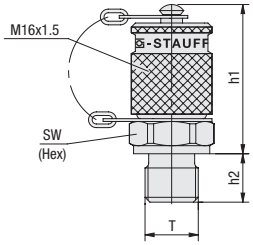
- The complete STAUFF-Test-15-Type-SMK range is also available with a hexagonal protection cap made of steel.

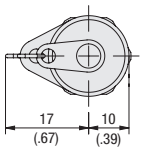
Note

- On request TEST 15 is also available as SKK-type including "Gas"- and "Filling"-versions.

SMK-15 Test Coupling with Male Threaded Stud	**SMK-15 Type G** Test Coupling with Straight 24° Fitting	**SMK-15 Type K** Test Coupling With 24° Taper / O-Ring (DKO)	**SSK-15** Bulkhead

Test Coupling with Male Threaded Stud SMK-15





Ordering Codes

***SMK*-15*-G1/4*-B*-C*-SK*-W3**

* Type	Test Coupling with Ball Check	**SMK**
* Series	STAUFF Test 15 (Connection Thread M16x1.5)	**-15**
* Port Connection	acc. to dimension table	**-G1/4**
* Seal Material	NBR (Buna-N®)	**-B**
	FKM/FPM (Viton®)	**-V**
	EPDM	**-E**
* Seal Type	O-Ring Type A	**-A**
	Metal Joint Type B	**-B**
	Elastomeric Sealing Type C	**-C**
	Taper Type D	**-D**
	O-Ring Type E	**-E**
* Protection Cap	Knurled protection cap	**–**
	Hexagonal protection cap	**-SK**
* Material Code	Steel, zinc/nickel-plated	**-W3**
	Stainless Steel V2A - 1.4305 (AISI 303)	**-W4**
	Stainless Steel V4A - 1.4571 (AISI 316 Ti)	**-W5**

Thread T	Seal Type	Working Pressure (bar/PSI)	Dimensions (mm/in) h1	h2	Hex	Torque (N·m/ft·lb) ca. Thread T	Weight (kg/lbs) ca. per 100	Item No.	Designation	Price
M10 x 1	Type A	630	38	9,8	17	12	6,90	1210001001	SMK-15-M10x1-B-A-W3	39.45
		9137	1.50	.39	.67	8.8	15.18			
M14 x 1.5	Type B	630	37	12	19	55	7,90	1210001004	SMK-15-M14X1.5-B-W3	32.40
		9137	1.46	.47	.75	40.6	17.38			
G1/4		630	37	12	19	55	7,60	1210001011	SMK-15-G1/4-B-W3	33.80
G3/8		630	37	12	22	90	9,00	1210002040	SMK-15-G3/8-B-W3	33.80
		9137	1.46	.47	.87	66.4	19.80			
M12 x 1.5	Type C	630	37	12	17	35	7,10	1210001003	SMK-15-M12x1.5-B-C-W3	71.60
		9137	1.46	.47	.67	25.8	15.62			
G1/8		400	39	8	17	18	6,60	1210001010	SMK-15-G1/8-B-C-W3	54.85
		5801	1.54	.31	.67	13.3	14.52			
G1/4		630	37	12	19	45	7,60	1210001013	SMK-15-G1/4-B-C-W3	53.45
		9137	1.46	.47	.75	33.2	16.72	1210001014	SMK-15-G1/4-V-C-W3	50.60
R1/4 K	Type D[1]	630	35	12	17		7,10	1210001186	SMK-15-R1/4K-D-W3	36.60
		9137	1.38	.47	.67		15.62			
1/8 NPT		400	36	10	17		6,50	1210001223	SMK-15-1/8NPT-D-W3	32.40
		5801	1.42	.39	.67		14.30			
1/4 NPT		630	35	15	17		7,20	1210001015	SMK-15-1/4NPT-D-W3	36.60
		9137	1.38	.59	.67		15.84			
7/16–20 UNF	Type E	630	38	9,1	17	20	7,00	1210001187	SMK-15-7/16UNF-B-E-W3	33.80
		9137	1.50	.36	.67	14.7	15.40			
9/16–18 UNF		630	37	10	19	35	7,60	1210002095	SMK-15-9/16UNF-B-E-W3	33.80
		9137	1.46	.39	.75	25.5	16.72			

[1] Suitable liquid / plastic sealant required.
Torque recommendations for steel mating material.
Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

Seal Type

O-Ring Type A

Metal Joint Type B

Elastomeric Sealing Type C

Taper Type D[1]

O-Ring Type E

For more information on seal types refer to page L52

Dimensional drawings: All dimensions in mm (in).

Test Couplings

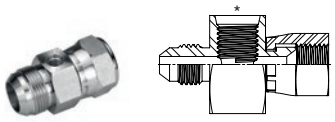
Test Coupling
with 24° Taper / O-Ring (DKO)
SMK-15 Type K

Item No.	Designation	Series	Thread	Version	Price
1210000206	SMK-15-08L-B-K-W3	L	M14 x 1.5	A	56.25
1210000208	SMK-15-10L-B-K-W3	L	M16 x 1.5	A	56.25
1210000205	SMK-15-06S-B-K-W3	S	M14 x 1.5	A	63.25
1210000207	SMK-15-08S-B-K-W3	S	M16 x 1.5	A	54.85

L = Light Series S = Heavy Series

W3 = Steel zinc/nickel-plated

Swivel Run Tee
with 37° JIC Connection
SGV-JIC Type FM



Item No.	Designation	Thread	Price
1220026905	SGV-7/16UNF-04-JIC1/4-FM-W66	7/16–20 UNF	31.00
1220026906	SGV-7/16UNF-06-JIC3/8-FM-W66	9/16–18 UNF	42.20
1220021138	SGV-7/16UNF-08-JIC1/2-FM-W66	3/4–16 UNF	45.00
1220021123	SGV-7/16UNF-10-JIC5/8-FM-W66	7/8–14 UNF	70.30
1220020999	SGV-7/16UNF-12-JIC3/4-FM-W66	1-1/16–12 UN	87.05
1220021008	SGV-7/16UNF-16-JIC1-FM-W66	1-5/16–12 UN	126.30

W66 = Steel, zinc-plated and Thick-layer passivated

*Test Coupling use SMK-15-7/16UNF-B-E-W3

For Swivel Run Tee SGV-BSPP type FM refer to page L8

Order Codes - SMK-15 Type K

SMK - 15 - 08L - B - K - W3

① ② ③ ④ ⑤ ⑧

① Type

Test Coupling with Ball Check	**SMK**

② Series

STAUFF Test 15 (Connection Thread M16x2)	**15**

③ Outside Tube Diameter (in)

6 ØD	**06**
8 ØD	**08**
10 ØD	**10**
12 ØD	**12**
15 ØD	**15**
18 ØD	**18**
22 ØD	**22**
28 ØD	**28**
35 ØD	**35**
42 ØD	**42**

Series

Light Series	**L**
Heavy Series	**S**

④ Seal Material

NBR (Buna-N®)	**B**
FKM/FPM (Viton®)	**V**
EPDM	**E**

⑤ Connection

24° Taper / O-Ring (DKO)	**K**

⑥ Design (24° Taper connection only)

One-piece design (Version A)	**(None)**
Screwed design (Version B)	**GS**

⑦ Protection cap

Knurled protection cap	**(None)**
Hexagonal protection cap	**SK**

⑧ Material Code

Steel, zinc/nickel-plated	**W3**
Stainless Steel V2A-1.4305 (AISI 303)	**W4**
Stainless Steel V4A-1.4571 (AISI 316 Ti)	**W5**

Order Codes - SGV-JIC Type FM

SGV - 7/16UNF - 04 - JIC - 1/4 - FM - W66

① ② ③ ④ ⑤ ⑥ ⑦

① Type

Swivel Run Tee	**SGV**

② Port Connection

7/16–20 UNF	**7/16UNF**

③ JIC Size

7/16–20 UNF	**04**
9/16–18 UNF	**06**
3/4–16 UNF	**08**
7/8–14 UNF	**10**
1-1/16–12 UNF	**12**
1-5/16–12UNF	**16**

④ Connection

37° JIC Connection	**JIC**

⑤ Outside Tube Diameter (in)

1/4 ØD	**1/4**
3/8 ØD	**3/8**
1/2 ØD	**1/2**
5/8 ØD	**5/8**
3/4 ØD	**3/4**
1 ØD	**1**

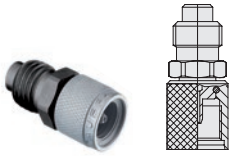
⑥ Connection

Female/Male Thread	**FM**

⑦ Material Code

Steel, zinc plated and Thick-layer passivated	**W66**

Test Adaptor
SAD-15

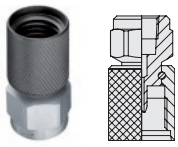


Item No.	Designation	Thread	Version	Price
1210002755	SAD-15/20-W3	M16 x 2	A	56.25
1210007783	SAD-15/12-W3	S12.65 x 1.5[1]	A	52.05

W3 = Steel zinc/nickel-plated

[1] Special thread: buttress thread S12.65 x 1.5

Direct Gauge Adaptor
SMD-15



Item No.	Designation	Thread	Price
1210001169	SMD-15-G1/4-B-OR-W3	G1/4	49.20
1210001877	SMD-15-1/4NPT-W3	1/4 NPT	45.00

W3 = Steel zinc/nickel-plated

Coupling Cap
SKP-SMK-15

Item No.	Designation	Thread	Price
1220001643	SKP-SMK-15-W3	M16 x 1.5	10.00

W3 = Steel zinc/nickel-plated

Order Codes - SAD

SAD - 15/20 - W3

① ② ③

① Type

Test Adaptor	**SAD**

② Connection Type

Version A	**15/20**
Version A	**15/12**
Version B	**15/10**

③ Material Code

Steel, zinc/nickel-plated	**W3**
Stainless Steel V2A-1.4305 (AISI 303)	**W4**
Stainless Steel V4A-1.4571 (AISI 316 Ti)	**W5**

Order Codes - SMD

SMD - 15 - G1/4 - B - OR - W3

① ② ③ ④ ⑤ ⑥

① Type

Direct Gauge Adaptor	**SMD**

② Series

STAUFF Test 15 (Connection Thread M16x1.5)	**15**

③ Thread

G1/4	**G1/4**
G1/2	**G1/2**
1/4 NPT	**1/4NPT**
1/2 NPT	**1/2NPT**

④ Seal Material

NBR (Buna-N®)	**B**
FKM/FPM (Viton®)	**V**
EPDM	**E**

⑤ Seal Type

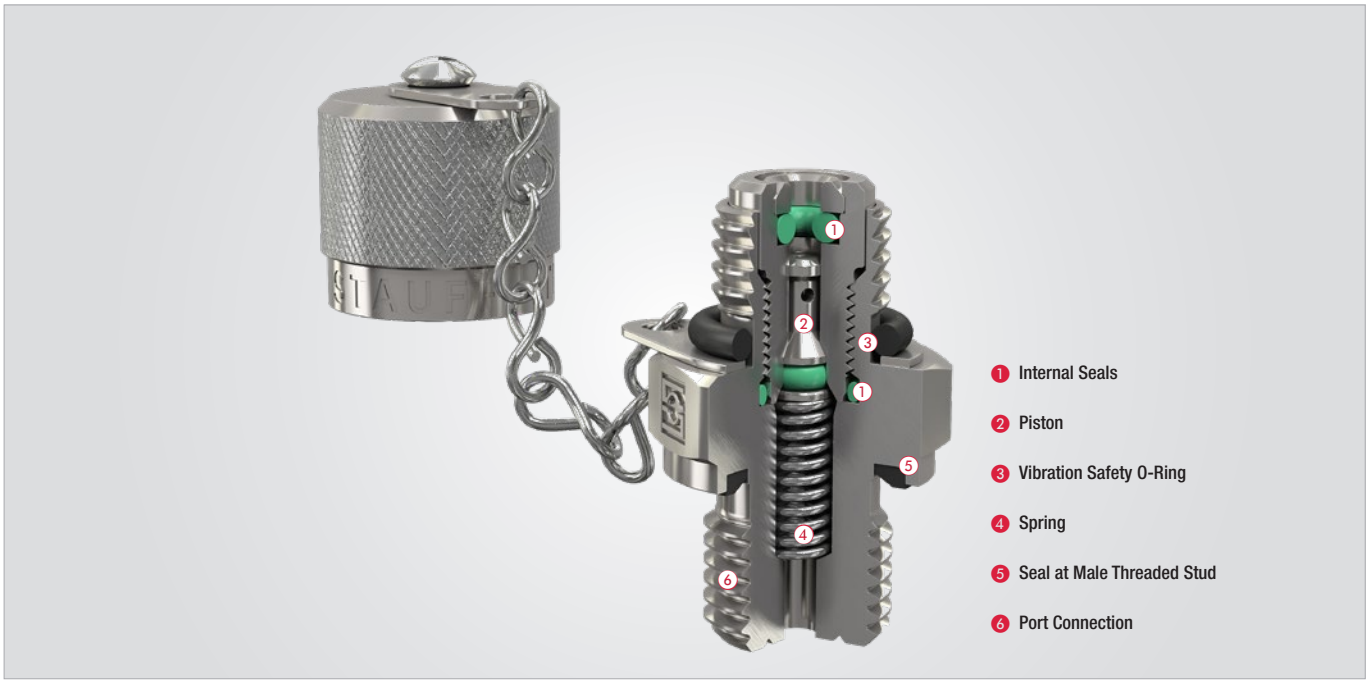
with O-Ring	**OR**

⑥ Material Code

Steel, zinc/nickel-plated	**W3**
Stainless Steel V2A-1.4305 (AISI 303)	**W4**
Stainless Steel V4A-1.4571 (AISI 316 Ti)	**W5**

	Test 12 - Connection Thread S12.65 x 1.5 SKK-12	**L24 - L27**
	Introduction Test Coupling with Piston Valve	**L24**
	Test Coupling **with Male Threaded Stud** SKK-12	**L25**
	Bulkhead SSKK-12	**L26**
	Swivel Run Tee **with 37° JIC Connection** SGV-JIC Type FM	**L26**
	Test Adaptor SAD-12	**L26**
	Gauge Adaptor SMD-12	**L26**

Test Coupling with Piston Valve
SKK-12



Fast Coupling for

- Monitoring and control of pressure
- Venting
- Sampling in high- and low-pressure systems
- Filling of accumulators (special filling-version)

Advantages

- Test system at working pressure
- Leak proof connection before **the piston v**alve is open
- Simple connection to measurement, control and switching devices
- Self-locking metal protective cap

Working Pressure

- Max. working pressure 630 bar/ 9137 PSI
  For SKK Type G and K the recommended working pressure of fitting manufacturer should be noted
- Connection under pressure up to 400 bar / 5801 PSI max.

DVGW

- DVGW registration as test points for gas pressure control systems, issued by the German Technical and Scientific Association for Gas and Water
- The DVGW approval relates solely to the SKK-12 and SKK-20 series with connection types:
  - M8x1-V-A-DVGW
  - M10x1-V-A-DVGW
  - 1/8NPT-V-D-DVGW
  - 1/4NPT-V-D-DVGW

Materials

- **Metal Parts:**
  Standard material: Steel, zinc/nickel-plated = **W3**
  Optional:
  Stainless Steel **W4** (1.4305 / AISI 303) on request
  Stainless Steel **W5** (1.4571 / AISI 316Ti) on request

- **Seal Types:**
  B = NBR (Buna-N®)
  (Temperature range -20 °C ... +100°C / -4 °F ... +212 °F)
  Note: Internal sealings made of FKM/FPM, even for standard NBR-type.

  V = FKM/FPM (Viton®)
  (Temperature range -20 °C ... +200 °C / -4 °F ... +392 °F)

  E = EPDM Ethylene Propylene Diene Monomer Rubber
  (for Brake fluid, Temperature range -40 °C ... +150 °C / -40 °F ... +302 °F)

Vibration safety O-Ring made of NBR (Buna-N®).

Media

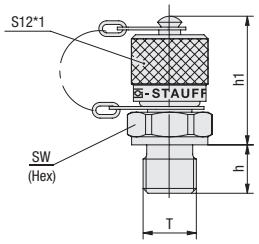
- Suitable for hydraulic oils and other Mineral oil-based fluids (Check compatibility of seal material)
- For use with other liquid media please contact STAUFF
- In case of ultimate tightness requirements for gaseous media, a special Gas-type is available

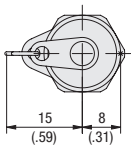
Protection Cap

- The complete STAUFF-Test-12-type-SKK range is also available with a plastic protection cap

SKK-12 Test Coupling with Male Threaded Stud	**SKK-12 Type G** Test Coupling with Straight 24° Fitting	**SMK-12 Type K** Test Coupling With 24° Taper / O-Ring (DKO)	**SSKK-12** Bulkhead

Test Coupling with Male Threaded Stud SKK-12





Ordering Codes

***SKK*-12*-G1/4*-B*-C*-KK*-W3**

* Type	Test Coupling with Piston Valve	**SKK**
* Series	STAUFF Test 12 (Connection Thread S12.65 x 1.5)	**-12**
* Port Connection	acc. to dimension table	**-G1/4**
* Seal Material	NBR (Buna-N®)	**-B**
	FKM/FPM (Viton®)	**-V**
	EPDM	**-E**
* Seal Type	O-Ring Type A	**-A**
	Metal Joint Type B	**-B**
	Elastomeric Sealing Type C	**-C**
	Taper Type D	**-D**
	O-Ring Type E	**-E**
* Protection Cap	Knurled protection cap	**–**
	Plastic protection cap	**-KK**
* Material Code	Steel, zinc/nickel-plated	**-W3**
	Stainless Steel V2A - 1.4305 (AISI 303)	**-W4**
	Stainless Steel V4A - 1.4571 (AISI 316 Ti)	**-W5**

Seal Type

O-Ring Type A

Metal Joint Type B

Elastomeric Sealing Type C

Taper Type D[1]

O-Ring Type E

For more information on seal types refer to page L52

Thread T	Seal Type	Working Pressure (bar/PSI)	Dimensions (mm/in) h1	h2	Hex	Torque (N·m/ft·lb) ca. Thread T	Weight (kg/lbs) ca. per 100	Item No.	Designation	Price
M8 x 1	Type A	250	38	8.5	14	6	5.50	1210026175	SKK-12-M8x1-B-A-W3	26.80
		3625	1.50	.33	.55	4.4	12.10			
M10 x 1		630	35	9.8	14	12	5.30	1210026170	SKK-12-M10x1-B-A-W3	26.80
		9137	1.38	.39	.67	8.8	11.66	1210006541	SKK-12-M10x1-B-A-W5	451.15
M14 x 1.5	Type B	630	31	12	19	55	6.40	1210026672	SKK-12-M14X1.5-B-W3	31.00
		9137	1.22	.47	.75	40.6	14.08			
M16 x 1.5		630	31	12	22	70	8.10	1210026677	SKK-12-M16X1.5-B-W3	35.20
		9137	1.22	.47	.87	51.6	17.82			
G1/4		630	30	12	19	55	6.10	1210026648	SKK-12-G1/4-B-W3	29.55
		9137	1.18	.47	.75	40.6	13.42			
G3/8		630	31	12	22	90	7.80	1210026663	SKK-12-G3/8-B-W3	33.80
		9137	1.22	.47	.87	66.4	17.16			
M12 x 1.5	Type C	630	31	12	17	35	5.70	1210026172	SKK-12-M12x1.5-B-C-W3	32.40
		9137	1.22	.47	.67	25.8	12.54			
G1/8		400	40	8	14	18	5.90	1210026656	SKK-12-G1/8-B-C-W3	35.20
		5801	1.57	.31	.55	13.3	12.98			
G1/4		630	31	12	19	45	6.30	1210026005	SKK-12-G1/4-B-C-W3	29.55
								1210001695	SKK-12-G1/4-B-C-W5	270.45
		9137	1.22	.47	.75	33.2	13.86	1210001650	SKK-12-G1/4-V-C-W5	279.05
R1/8 K	Type D[2]	400	33	8	17		5.00	1210026683	SKK-12-R1/8K-D-W3	26.80
		5801	1.30	.31	.55		11.00			
R1/4 K		630	30	12	17		5.40	1210026681	SKK-12-R1/4K-D-W3	26.80
		9137	1.18	.47	.55		11.88			
1/8 NPT		400	33	10	14		5.00	1210026589	SKK-12-1/8NPT-D-W3	29.55
		5801	1.30	.39	.55		11.00			
1/4 NPT		630	28	15	14		5.50	1210026584	SKK-12-1/4NPT-D-W3	29.55
		9137	1.10	.59	.55		12.10	1210000842	SKK-12-1/4NPT-D-W5	544.85
5/16–24 UNF	Type E	400	38	7.5	14	8	5.40	1210026637	SKK-12-5/16UNF-B-E-W3	33.80
		5801	1.50	.30	.55	5.9	11.88			
7/16–20 UNF		630	33	9.1	17	20	5.90	1210026640	SKK-12-7/16UNF-B-E-W3	33.80
		9137	1.30	.36	.67	14.7	12.98			
1/2–20 UNF		630	32	9.2	17	25	5.90	1210026580	SKK-12-1/2UNF-B-E-W3	33.80
		9137	1.26	.36	.67	18.4	12.98			
9/16–18 UNF		630	31	10	19	35	6.30	1210026642	SKK-12-9/16UNF-B-E-W3	33.80
		9137	1.22	.39	.75	25.8	13.86			

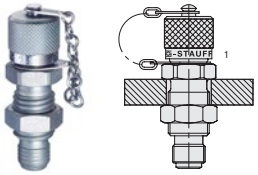
[1] Special thread: buttress thread S12.65 x 1.5
[2] Suitable liquid / plastic sealant required.
Torque recommendations for steel mating material.
Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

Suitable for Gaseous Media

Thread T	Seal Type	Working Pressure (bar/PSI)	Dimensions (mm/in) h1	h2	Hex	Torque (N·m/ft·lb) ca. Thread T	Weight (kg/lbs) ca. per 100	Item No.	Designation	Price
M12 x 1.5	Type B	630	31	12	17	35	5.60	1210024744	SKK-12-M12X1.5-GAS-W5	190.80
		9137	1.22	.47	.67	25.8	12.35			
G1/8	Type C	400	40	8	14	18	5.90	1210026660	SKK-12-G1/8-V-C-GAS-W3	124.90
		5801	1.57	.31	.55	13.3	12.98	1210020012	SKK-12-G1/8-V-C-GAS-W5	308.30
G1/4		630	31	12	19	45	6.30	1210023953	SKK-12-G1/4-V-C-GAS-W5	189.45
		9137	1.22	.47	.75	33.2	13.86			
1/4 NPT	Type D[2]	630	28	15	14		5.50	1210026585	SKK-12-1/4NPT-D-GAS-W3	122.10
		9137	1.10	.59	.55		12.10	1210023952	SKK-12-1/4NPT-D-GAS-W5	462.45

Not suitable for use with OXYGEN, NATURAL GAS or other PETROLEUM BASED GASES
Note: All gas couplings are seal tight tested to 60 bar with Nitrogen gas. Gas test points certified with DVGW are tested to 100 bar according to the DVGW standard.
[1] Special thread: buttress thread S12.65 x 1.5
[2] Suitable liquid / plastic sealant required.
Torque recommendations for steel mating material.
Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

Test Couplings

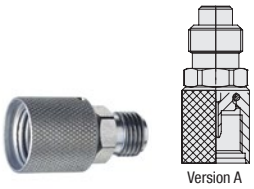


Bulkhead
SSKK-12

Item No.	Designation	Thread	Price
1210028767	SSKK-12-W3	S12.65 x 1.5[1]	77.25

W3 = Steel zinc/nickel-plated

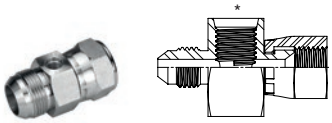
[1] Special thread: buttress thread S12.65 x 1.5



Test Adaptor
SAD-12

Item No.	Designation	Thread	Price
1210026409	SAD-12/20-W3	M16 x 2	56.25
1210026412	SAD-12/20-RV-W3	M16 x 2	91.30
1210021579	SAD-12/15-W3	M16 x 1.5	52.05

W3 = Steel zinc/nickel-plated



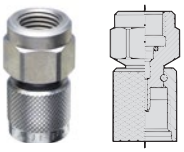
Swivel Run Tee
with 37° JIC Connection
SGV-JIC Type FM

Item No.	Designation	Thread	Price
1220026905	SGV-7/16UNF-04-JIC1/4-FM-W66	7/16–20 UNF	31.00
1220026906	SGV-7/16UNF-06-JIC3/8-FM-W66	9/16–18 UNF	42.20
1220021138	SGV-7/16UNF-08-JIC1/2-FM-W66	3/4–16 UNF	45.00
1220021123	SGV-7/16UNF-10-JIC5/8-FM-W66	7/8–14 UNF	70.30
1220020999	SGV-7/16UNF-12-JIC3/4-FM-W66	1-1/16–12 UN	87.05
1220021008	SGV-7/16UNF-16-JIC1-FM-W66	1-5/16–12 UN	126.30

W66 = Steel, zinc-plated and Thick-layer passivated

*Test Coupling use SMK-12-7/16UNF-B-E-W3

For Swivel Run Tee SGV-BSPP type FM refer to page L8



Direct Gauge Adaptor
SMD-12

Item No.	Designation	Thread	Price
1210026216	SMD-12-G1/4-B-OR-W3	G1/4	45.00
1210026956	SMD-12-G1/2-B-OR-W3	G1/2	46.40
1210026953	SMD-12-1/4NPT-W3	1/4 NPT	45.00
1210004191	SMD-12-G1/4-B-OR-W5	G1/4	218.65

W3 = Steel zinc/nickel-plated W5 = Stainless Steel

Suitable for adaption to STAUFF SPG-063 series pressure gauges

Order Codes - SKK-12

SSKK - 12 - W3

① ② ④

① Type

Bulkhead with Piston Valve	**SSKK**

② Series

STAUFF Test 12 (Connection Thread S12.65 x 1.5)	**12**

③ Protection Cap

Knurled protection cap	**(None)**
Hexagonal protection cap	**SK**

④ Material Code

Steel, zinc/nickel-plated	**W3**
Stainless Steel V2A-1.4305 (AISI 303)	**W4**
Stainless Steel V4A-1.4571 (AISI 316 Ti)	**W5**

Order Codes - SGV-JIC Type FM

SGV - 7/16UNF - 04 - JIC - 1/4 - FM - W66

① ② ③ ④ ⑤ ⑥ ⑦

① Type

Swivel Run Tee	**SGV**

② Port Connection

7/16–20 UNF	**7/16UNF**

③ JIC Size

7/16–20 UNF	**04**
9/16–18 UNF	**06**
3/4–16 UNF	**08**
7/8–14 UNF	**10**
1-1/16–12 UNF	**12**
1-5/16–12UNF	**16**

④ Connection

37° JIC Connection	**JIC**

⑤ Outside Tube Diameter (in)

1/4 ØD	**1/4**
3/8 ØD	**3/8**
1/2 ØD	**1/2**
5/8 ØD	**5/8**
3/4 ØD	**3/4**
1 ØD	**1**

⑥ Connection

Female/Male Thread	**FM**

⑦ Material Code

Steel, zinc plated and Thick-layer passivated	**W66**

Order Codes -SAD-12

SAD - 12/20 - W3

① ② ③

① Type

Test Adaptor	**SAD**

② Connection Type

Version A	**12/20**
Version A	**12/15**
Version B	**12/10**

③ Material Code

Steel, zinc/nickel-plated	**W3**
Stainless Steel V2A-1.4305 (AISI 303)	**W4**
Stainless Steel V4A-1.4571 (AISI 316 Ti)	**W5**

Order Codes - SMD-12

SMD - 12 - G1/4 - B - OR - W3

① ② ③ ④ ⑤ ⑥

① Type

Direct Gauge Adaptor	**SMD**

② Series

STAUFF Test 12 (Connection Thread S12.65x1.5)	**12**

③ Thread

G1/4	**G1/4**
G1/2	**G1/2**
1/4 NPT	**1/4NPT**
1/2 NPT	**1/2NPT**

④ Seal Material

NBR (Buna-N®)	**B**
FKM/FPM (Viton®)	**V**
EPDM	**E**

⑤ Seal Type

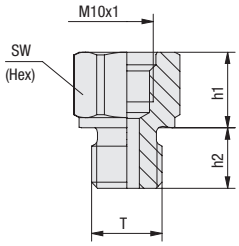
with O-Ring	**OR**

⑥ Material Code

Steel, zinc/nickel-plated	**W3**
Stainless Steel V2A-1.4305 (AISI 303)	**W4**
Stainless Steel V4A-1.4571 (AISI 316 Ti)	**W5**

	Test Adaptors	**L30 - L33**
	Thread Adaptor SRS-20	**L30**
	Thread Adaptor SRS-15	**L30**
	Welding Adaptor SAS	**L32**
	Adjustable Gauge Fitting EMV	**L32**
	Pressure Test Kits	**L33**

Thread Adaptor SRS-20

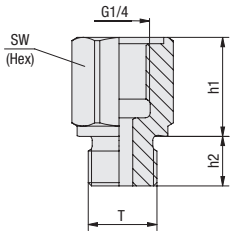


Thread T	Seal Type	Dimensions (mm/in) h1	h2	Hex	Weight (kg/lbs) ca. per 100
G1/8	Type B	15.5	8	17	2.50
		.61	.31	.67	5.50
G1/4		15	12	19	3.50
		.59	.47	.75	7.70
G3/8		10.5	12	22	3.80
		.41	.47	.87	8.36
G1/2		10.5	14	27	6.60
		.41	.55	1.06	14.52
G1/4	Type C	15	12	19	3.60
		.59	.47	.75	7.92
R1/4 K	Type D[1]	13	12	17	3.20
		.51	.47	.67	7.04
1/4 NPT		10	15	17	2.39
		.39	.59	.67	5.26
1/2 NPT		8	20	22	5.83
		.31	.79	.87	12.83
9/16–18 UNF	Type E	15.5	10	19	3.60
		.61	.39	.75	7.92

Item No.	Designation	Price
1230026654	SRS-20-G1/8-B-W3	10.55
1230026653	SRS-20-G1/4-B-W3	10.70
1230026276	SRS-20-G3/8-B-W3	12.10
1230001309	SRS-20-G3/8-B-W5	156.85
1230026274	SRS-20-G1/2-B-W3	12.10
1230001310	SRS-20-G1/2-B-W5	156.85
1210028744	SRS-20-G1/4-B-C-W3	14.25
1230026663	SRS-20-R1/4K-D-W3	10.70
1230026651	SRS-20-1/4NPT-D-W3	13.40
1230020353	SRS-20-1/2NPT-D-W3	120.75
1210021400	SRS-20-3/8UNF-B-E-W3	18.35

[1] Suitable liquid / plastic sealant required.
Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

Thread Adaptor SRS-15



Thread T	Seal Type	Dimensions (mm/in) h1	h2	Hex	Weight (kg/lbs) ca. per 100
M14 x 1.5	Type B	24	12	19	5.10
		.95	.47	.75	11.22
M16 x 1.5		24	12	22	6.70
		.95	.47	.87	14.74
M20 x 1.5		10.5	14	27	5.40
		.41	.55	1.06	11.88
G1/2		10.5	14	27	5.60
		.41	.55	1.06	12.32

Item No.	Designation	Price
1230000236	SRS-15-M14x1.5-B-W3	17.65
1230000235	SRS-15-M16x1.5-B-W3	21.80
1230001204	SRS-15-M20x1.5-B-W3	14.25
1230000994	SRS-15-G1/2-B-W3	21.80

Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

Seal Type

Metal Joint Type B

Elastomeric Sealing Type C

Taper Type D

O-Ring Type E

For more information on seal types refer to page L52

Thread Adaptor
SRS-20

Order Codes - SRS-20

SRS - 20 - G1/8 - B - C - W3
① ② ③ ④ ⑤ ⑥

① Type

Thread Adaptor	**SRS**

② Series

STAUFF Test 20 (All sizes)	**20**

③ Port Connection

G1/8	**G1/8**
G1/4	**G1/4**
G3/8	**G3/8**
G1/2	**G1/2**
R1/4K	**R1/4K**
1/4NPT	**1/4NPT**
1/2NPT	**1/2NPT**
9/16–18 UNF	**9/16UNF**

④ Seal Material

Seal Type - Metal Joint Type B	**None**
NBR (Buna-N®)	**B**
FKM/FPM (Viton®)	**V**
EPDM	**E**

⑤ Seal Type

Metal Joint Type B	**B**
Elastomeric Sealing Type C	**C**
Taper Type D	**D**
O-Ring Type E	**E**

⑥ Material Code

Steel, zinc/nickel-plated	**W3**
Stainless Steel V2A-1.4305 (AISI 303)	**W4**
Stainless Steel V4A-1.4571 (AISI 316 Ti)	**W5**

Thread Adaptor
SRS-15

Order Codes - SRS-15

SRS - 15 - M14x1.5 - B - C - W3
① ② ③ ④ ⑤ ⑥

① Type

Thread Adaptor	**SRS**

② Series

STAUFF Test 15 (All sizes)	**15**

③ Port Connection

M14 x 1.5	**M14x1.5**
M16 x 1.5	**M16x1.5**
M20 x 1.5	**M20x1.5**
G3/8	**G3/8**
G1/2	**G1/2**

④ Seal Material

Seal Type - Metal Joint Type B	**None**
NBR (Buna-N®)	**B**
FKM/FPM (Viton®)	**V**
EPDM	**E**

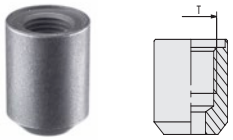
⑤ Seal Type

Metal Joint Type B	**B**
Elastomeric Sealing Type C	**C**

⑥ Material Code

Steel, zinc/nickel-plated	**W3**
Stainless Steel V2A-1.4305 (AISI 303)	**W4**
Stainless Steel V4A-1.4571 (AISI 316 Ti)	**W5**

Welding Adaptor
SAS



Welding Adaptor
SAS

Item No.	Designation	T	Price
1230000224	SAS-G1/4-W2	G1/4	15.60
1230000220	SAS-G1/4-W5	G1/4	68.80

W2 = Steel Phosphated W5 = Stainless Steel

Order Codes - SAS

SAS - G1/4 - W2

① ② ③

① Type

Welding Adaptor	**SAS**

② Port Connection

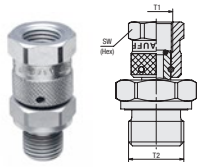
G1/4	**G1/4**

③ Material Code

Steel, phosphated	**W2**
Stainless Steel V4A-1.4571 (AISI 316 Ti)	**W5**

Alternative materials and surface finishings are available upon request.
Contact STAUFF for more information.

Adjustable Gauge Fitting
EMV



Adjustable Gauge Fitting
EMV

Item No.	Designation	T1	T2	Price
1210026150	EMV-G1/4-B-OR-B-C-W3	G1/4	G1/4	43.55
1210026405	EMV-G1/4/G1/2-B-OR-B-C-W3	G1/4	G1/2	71.60
1210026402	EMV-G1/2/G1/4-B-OR-B-C-W3	G1/2	G1/4	109.55
1210026404	EMV-G1/2-B-OR-B-C-W3	G1/2	G1/2	180.80

W3 = Steel zinc/nickel-plated

Order Codes - EMV

EMV - G1/4 - B - OR - B - C - W3

① ② ③ ④ ⑤ ⑤

① Type

Adjustable Gauge Fitting	**EMV**

② Port Connection

G1/4	**G1/4**
G1/2	**G1/2**

③ Seal Material

NBR (Buna-N®)	**B**
FKM/FPM (Viton®)	**V**
EPDM	**E**

④ Seal Type (Female)

with O-Ring	**OR**

⑤ Seal Material

NBR (Buna-N®)	**B**

⑥ Seal Type

Elastomeric Sealing Type C	**C**

⑦ Material Code

Steel, zinc/nickel-plated	**W3**
Stainless Steel V2A-1.4305 (AISI 303)	**W4**
Stainless Steel V4A-1.4571 (AISI 316 Ti)	**W5**

Alternative materials and surface finishings are available upon request.
Contact STAUFF for more information.

Pressure Test Kit (analogue)
SMB

In addition to the individual SPG gauges, the STAUFF Pressure Gauges are also available as a part of a Pressure Test Kit SMB.

The SMB Pressure Test Kits are assembled in various versions, in accordance with customer requirements.

All Pressure Test Kits are supplied in a handy case with custom-designed foam inserts.

For further information on these products and components refer to Section M - STAUFF Diagtronics.

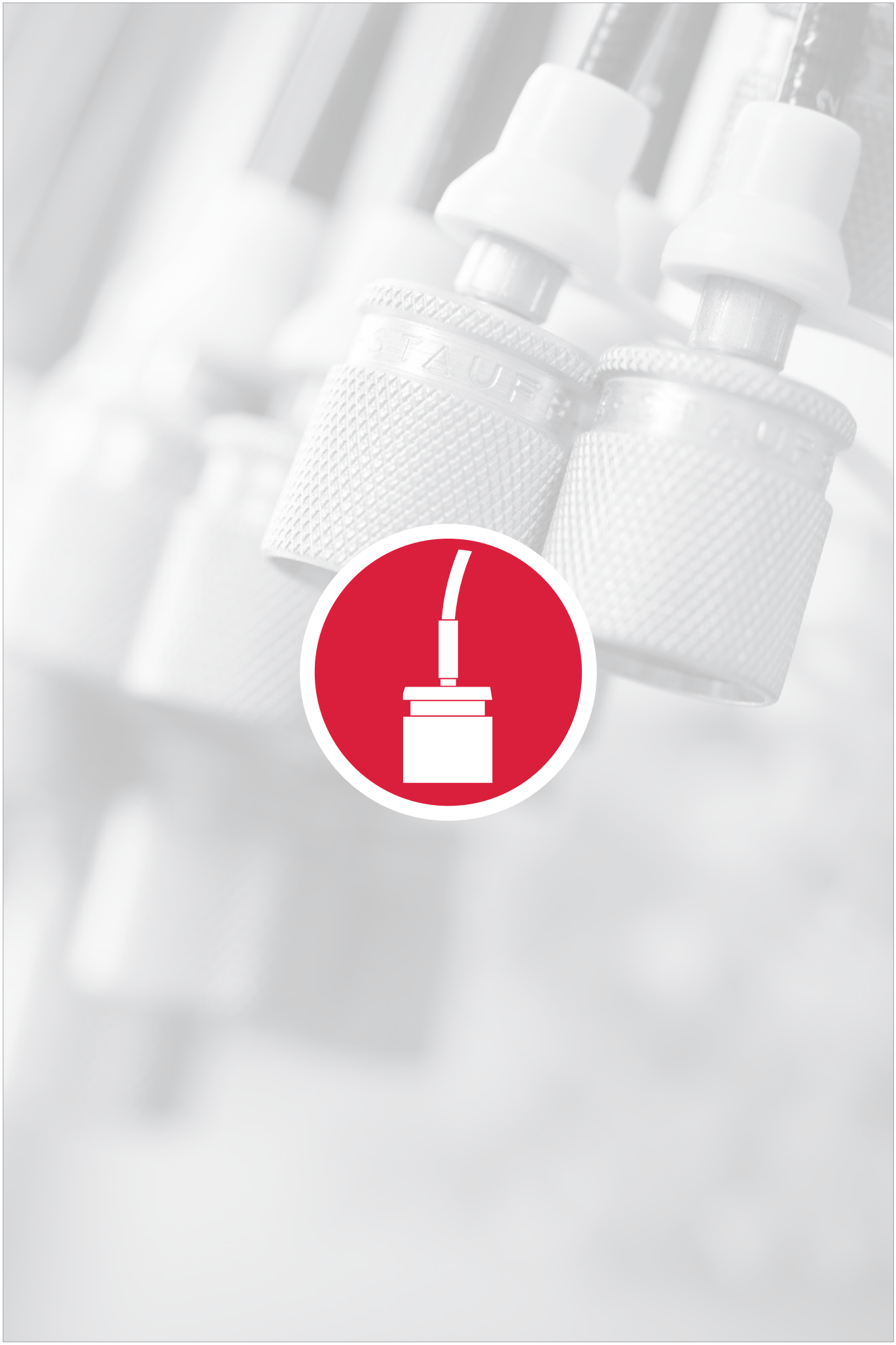
Pressure Test Kit (digital)
SMB-DIGI

In addition to the individual SPG-DIGI devices, the STAUFF Digital Pressure Gauges are also available as a part of a Pressure Test Kit SMB-DIGI.

The SMB-DIGI Pressure Test Kits are assembled in various versions, in accordance with customer requirements.

All Pressure Test Kits are supplied in a handy case with custom-designed foam inserts.

For further information on these products and components refer to Section M - STAUFF Diagtronics.



	Test Hoses and Connectors	**L36 - L52**
	Test Hose **Technical Data / Ordering Codes** SMS / SGS	**L37 - L39**
	Hose Assemblies SMS-20	**L40 - L41**
	Hose Assemblies SMS-12	**L42 - L43**
	Hose Connector SSV	**L41 / L43**
	Test Hose SMS / SGS	**L44**
	Hose End Protector	**L44**
	Hose End HE	**L45 -L51**
	Sampling Hose Adaptor SHA	**L49**
	Seal Types	**L52**
	Assembly Instructions	**L53**

STAUFF

Technical Data Test Hose

			A	B	C	D
Nominal Bore (DN)		(mm)	DN 2		DN 4	
Max. Working Pressure (PN)		(bar / PSI)	400 / 5801	630 / 9135	340 / 4931	630 / 9135
Min. Burst Pressure		(bar / PSI)	1100 / 15954	1900 / 27557	850 / 12328	1900 / 27557
Testing Pressure		(bar / PSI)	600 / 8702	950 / 13778	570 / 8267	950 / 13779
Pressure Rating in bar / PSI at Indicated Temperature	at 0 °C / 32 °F (122 %)	(bar / PSI)	488 / 7077	768 / 11139	415 / 6016	768 / 11139
	at 30 °C / 86 °F (110 %)		440 / 6381	693 / 10051	374 / 5424	693 / 10051
	at 50°C / 122 °F (100 %)		400 / 5801	630 / 9137	340 / 4931	630 / 9137
	at 80°C / 176 °F (86 %)		344 / 4989	542 / 7861	292 / 4241	542 / 7861
	at 100 °C / 212 °F (77 %)		308 / 4467	485 / 7034	262 / 3797	485 / 7034
Working Temperature		(°C / °F)	-35 °C ... +100 °C / -31 °F ... +212 °F (momentary +120 °C / +248 °F)			
Inside Diameter		(mm / in)	2 / .08		4 / .16	
Outside Diameter		(mm / in)	5 / .20		8.6 / .34	
Bending Radius[1]	at working pressure	(mm / in)	20 / .79		40 / 1.57	
	at -20 °C / 4 °F		30 / 1.18		60 / 2.36	
Max. Coil Length		(m / ft)	20 / 65.62			
Weight / m		(g / oz)	16 / .50		42 / 1.35	
Inner / Outer Tube			PA			
Reinforcement			Synthetic Fibre			
Standard hose end material is Steel 11 S Mn Pb 30 (1.0718), zinc/ nickel-plated (Type 15: Steel, black zinc/nickel-plated)						
Stainless Steel: V2A (1.4305/AISI 303), V4A (1.4571/AISI 316Ti) on request						

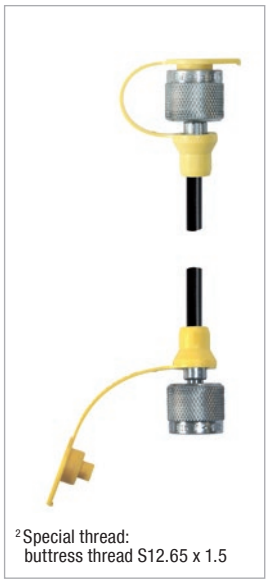
[1] Note: During mounting, make sure that the bending radius for the test hose does not fall below the smallest permissible value.

STAUFF Test Hoses (Selection)

STAUFF-Test 20/20

STAUFF-Test 15/15

STAUFF-Test 12/12[2]



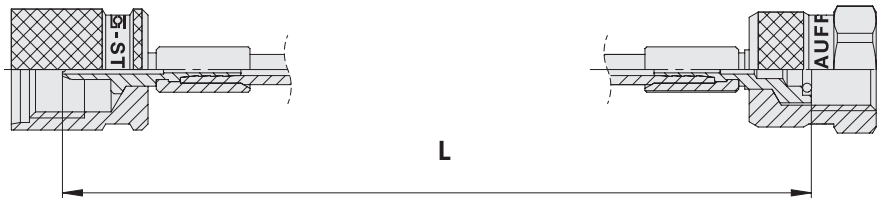
[2] Special thread:
buttress thread S12.65 x 1.5

STAUFF-Test 10/10

Gauge Adaptor

Refer to page L53 for STAUFF Test Assembly Instructions

STAUFF Test Hose Assemblies



Hose Ends (Different both ends)

Order Codes

SMS - **20** / **M1/4** - **B-OR** - **630** - **B** - **W3** - **BD**

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

① Hose

STAUFF Test Hose	**SMS**
STAUFF Test Hose for gaseous media Test Hoses are perforated	**SGS**

② Hose End 1 - Connection Thread

Refer to page L39 for Hose Ends

③ Hose End 2 - Connection Thread

Refer to page L39 for Hose Ends

Refer to pages L44-L50 for additional Hose End information.

④ Seal Material (only required for connection thread M & W)

NBR (Buna-N®) O-Ring	**B-OR**

⑤ Hose Length (mm)

200 mm	**200**
300 mm	**300**
400 mm	**400**
500 mm	**500**
600 mm	**600**
630 mm	**630**
800 mm	**800**
850 mm	**850**
1000 mm	**1000**
1100 mm	**1100**
1200 mm	**1200**
1500 mm	**1500**
2000 mm	**2000**
2400 mm	**2400**
2500 mm	**2500**
3000 mm	**3000**
4000 mm	**4000**
5000 mm	**5000**
6000 mm	**6000**
7000 mm	**7000**

⑥ Hose DN Size / Pressure Setting

DN2 630 bar / 9137 PSI	**B**
DN4 630 bar / 9137 PSI (perforated)	**D**

⑦ Material

Steel 11 S Mn Pb 30 (1.0718), zinc/nickel-plated	**W3**
Type 15: Steel, black zinc/nickel-plated	**W3**
Stainless Steel V2A (1.4305/AISI 303)	**W4**
Stainless Steel V4A (1.4571/AISI 316Ti)	**W5**

⑧ Accessories

With bend protection	**BD**

Custom length options available on request.
Customise STAUFF Test Hose assemblies to meet your specifications. Contact STAUFF for more information.

(DN2 and DN4)

Bending protection available, refer to page L44

Hose Ends (The same hose ends)

Order Codes

SMS - **20** - **400** - **B** - **W3** - **BD**

① ② ③ ④ ⑤ ⑥

① Hose

STAUFF Test Hose	**SMS**
STAUFF Test Hose for gaseous media Test Hoses are perforated	**SGS**

② Hose End - Connection Thread

Refer to page L39 for Hose Ends

Refer to pages L44-L50 for additional Hose End information.

④ Seal Material (only required for connection thread M & W)

NBR (Buna-N®) O-Ring	**B-OR**

⑤ Hose Length (mm)

200 mm	**200**
300 mm	**300**
400 mm	**400**
500 mm	**500**
600 mm	**600**
630 mm	**630**
800 mm	**800**
850 mm	**850**
1000 mm	**1000**
1100 mm	**1100**
1200 mm	**1200**
1500 mm	**1500**
2000 mm	**2000**
2400 mm	**2400**
2500 mm	**2500**
3000 mm	**3000**
4000 mm	**4000**
5000 mm	**5000**
6000 mm	**6000**
7000 mm	**7000**

⑥ Hose DN Size / Pressure Setting

DN2 630 bar / 9137 PSI	**B**
DN4 340 bar / 4931 PSI (perforated)	**C**

⑦ Material

Steel 11 S Mn Pb 30 (1.0718), zinc/nickel-plated	**W3**
Type 15: Steel, black zinc/nickel-plated	**W3**
Stainless Steel V2A (1.4305/AISI 303)	**W4**
Stainless Steel V4A (1.4571/AISI 316Ti)	**W5**

⑧ Accessories

With bend protection	**BD**

Custom length options available on request.
Customise STAUFF Test Hose assemblies to meet your specifications. Contact STAUFF for more information.

(DN2 and DN4)

Bending protection available, refer to page L44

Note: For Hose assembly pricing refer to standard pre-packaged hose assemblies pages L40-L43, or Loose Hose page L43 and Hose Ends pages L46-L51 to build a price.

STAUFF Test Hose Assemblies

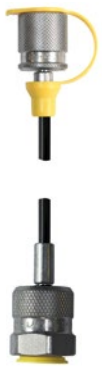
Order Codes - Hose End Connection Threads

Connection Thread	Type
M16 x 2 Screw-type (Test 20)	20
M16 x 1.5 Screw-type (Test 15)	15
S12.65 x 1.5 Screw-type (Test 12)	12
M16 x 2 Screw Type 90° elbow	020
M16 x 1.5 Screw Type 90° elbow	015
S12.65 x 1.5 Screw Type 90° elbow	012
M16 x 2 Screw Type 90° elbow (short version)	OX20
M16 x 1.5 Screw Type 90° elbow (short version)	OX15
S12.65 x 1.5 Screw Type 90° elbow (short version)	OX12
Plug In System	10
G1/4 Gauge adaptor BSPP thread	M1/4
G1/2 Gauge adaptor BSPP thread	M1/2
G3/8 Gauge adaptor BSPP thread	M3/8
M14 x 1.5 Gauge adaptor BSPP thread	M14
M20 x 1.5 Gauge adaptor BSPP thread	M20
G1/4 90° elbow gauge adaptor BSPP thread	W1/4
G1/2 90° elbow gauge adaptor BSPP thread	W1/2
1/4 NPT gauge adaptor NPT thread	N1/4
1/2 NPT gauge adaptor NPT thread	N1/2
1/4 NPT 90° elbow gauge adaptor NPT thread	A1/4
1/2 NPT 90° elbow gauge adaptor NPT thread	A1/2
4 LL Standpipe for compression ring fittings	S04
6 L - 6 S Standpipe for compression ring fittings	S06
8 L - 8 S Standpipe for compression ring fittings	S08
10 L - 10 S Standpipe for compression ring fittings	S10
12 L - 12 S Standpipe for compression ring fittings	S12
1/4 Standpipe for compression ring fittings	S1/4
6 L - 6 S Standpipe for compression ring fittings 90° elbow	SG06
8 L - 8 S Standpipe for compression ring fittings 90° elbow	SG08
M12 x 1.5 Seal with O-Ring for 24° cone fitting (c/w swivel nut)	K06L
M14 x 1.5 Seal with O-Ring for 24° cone fitting (c/w swivel nut)	K08L
M16 x 1.5 Seal with O-Ring for 24° cone fitting (c/w swivel nut)	K10L
M18 x 1.5 Seal with O-Ring for 24° cone fitting (c/w swivel nut)	K12L
M14 x 1.5 Seal with O-Ring for 24° cone fitting (c/w swivel nut)	K06S
M16 x 1.5 Seal with O-Ring for 24° cone fitting (c/w swivel nut)	K08S
M18 x 1.5 Seal with O-Ring for 24° cone fitting (c/w swivel nut)	K10S
M20 x 1.5 Seal with O-Ring for 24° cone fitting (c/w swivel nut)	K12S
M12 x 1.5 Seal with O-Ring for 24° cone fitting (c/w swivel nut) 45° elbow	R06L
M14 x 1.5 Seal with O-Ring for 24° cone fitting (c/w swivel nut) 45° elbow	R06S
M12 x 1.5 Seal with O-Ring for 24° cone fitting (c/w swivel nut) 90° elbow	L06L
M14 x 1.5 Seal with O-Ring for 24° cone fitting (c/w swivel nut) 90° elbow	L08L
M16 x 1.5 Seal with O-Ring for 24° cone fitting (c/w swivel nut) 90° elbow	L10L
M14 x 1.5 Seal with O-Ring for 24° cone fitting (c/w swivel nut) 90° elbow	L06S
M16 x 1.5 Seal with O-Ring for 24° cone fitting (c/w swivel nut) 90° elbow	L08S
M18 x 1.5 Seal with O-Ring for 24° cone fitting (c/w swivel nut) 90° elbow	L10S
M12 x 1.5 Male thread	G12

Connection Thread continued..	Type
G1/8 Male thread	G1/8
G1/4 Male thread	G1/4
G1/2 Male thread	G1/2
1/8 NPT Male thread NPT	F1/8
1/4 NPT Male thread NPT	F1/4
M12 x 1.5 Male thread for 24° cone fitting	C06L
M14 x 1.5 Male thread for 24° cone fitting	C08L
M12 x 1.5 Male thread for 24° cone fitting	C06S
M14 x 1.5 Male thread for 24° cone fitting	C08S
7/16-20 UNF Male thread	J1/4
1/2-20 UNF Male thread	J5/16
9/16-18 UNF Male thread	J3/8
M12 x 1.5 Universal sealing head with swivel nut for 24° cone fitting	D06L
M14 x 1.5 Universal sealing head with swivel nut for 24° cone fitting	D08L
M16 x 1.5 Universal sealing head with swivel nut for 24° cone fitting	D10L
M18 x 1.5 Universal sealing head with swivel nut for 24° cone fitting	D12L
M14 x 1.5 Universal sealing head with swivel nut for 24° cone fitting	D06S
M16 x 1.5 Universal sealing head with swivel nut for 24° cone fitting	D08S
M18 x 1.5 Universal sealing head with swivel nut for 24° cone fitting	D10S
M20 x 1.5 Universal sealing head with swivel nut for 24° cone fitting	D12S
G1/8 Sealing head with swivel nut for cone fitting	B1/8
G1/4 Sealing head with swivel nut for cone fitting	B1/4
7/16-20 UNF Sealing head with swivel nut according to SAE J 514 37° cone	U1/4
1/2-20 UNF Sealing head with swivel nut according to SAE J 514 37° cone	U5/16
9/16-18 UNF Sealing head with swivel nut according to SAE J 514 37° cone	U3/8
7/16-20 UNF Sealing head with swivel nut according to SAE J 516 45° cone	UR1/4
7/16-20 UNF Sealing head with swivel nut according to SAE J 516 37° cone, 90° elbow	E1/4
7/16-20 UNF Sealing head with swivel nut according to SAE J 516 45° cone, 90° elbow	ER1/4
M16 x 1.5 Test hose for air brake systems	P02
G1/4 Sealing head with swivel nut for 60° cone	H1/4
9/16-18 UNF Screw-type ORFS	T9/16
11/16-16 UN Screw-type ORFS	T11/16
11/16-16 UN Screw-type ORFS 90° elbow	V11/16
M16 x 2 Hose end with integrated check valve	RV20
M16 x 1.5 Hose end with integrated check valve	RV15

Refer to pages L45-L51 for additional Hose End information.

STAUFF Hose Assemblies - Standard pre-packaged lengths

SMS-20 DN2 M1/4" BSPP Page L40	SMS-20 DN2 M1/2" BSPP Page L40	SMS-20 Page L41	SMS-12 DN2 M1/4" BSPP Page L42	SMS-12 DN2 M1/2" BSPP Page L42	SMS-12 Page L43
					

STAUFF Hose Assemblies
SMS-20 (standard pre-packaged lengths)

Hose Assemblies	Description	DN	Working Pressure ($^{bar}/_{PSI}$) [1]	Length (mm)	Item No.	Designation	Price
SMS-20 DN2 M1/4" BSPP	STAUFF Hose Assemblies SMS-20 M1/4" BSPP Gauge Connection with O-Ring Seal (NBR)	2 (B)	630 / 9137	400	1210027786	SMS-20/M1/4-B-OR-400-B-W3	47.40
					1210025538	SMS-20/M1/4-B-OR-400-B-W5	360.90
				500	1210027791	SMS-20/M1/4-B-OR-500-B-W3	48.85
					6100039221	SMS-20/M1/4-B-OR-500-B-W5	362.40
				600	1210023640	SMS-20/M1/4-B-OR-600-B-W3	52.25
					1210010361	SMS-20/M1/4-B-OR-600-B-W5	363.85
				630	1210026322	SMS-20/M1/4-B-OR-630-B-W3	52.70
					6100034048	SMS-20/M1/4-B-OR-630-B-W5	364.30
				800	1210027807	SMS-20/M1/4-B-OR-800-B-W3	52.10
					1210040121	SMS-20/M1/4-B-OR-800-B-W5	366.80
				1000	1210026314	SMS-20/M1/4-B-OR-1000-B-W3	56.15
					1210021080	SMS-20/M1/4-B-OR-1000-B-W5	369.75
				1200	1210027755	SMS-20/M1/4-B-OR-1200-B-W3	58.00
					1210024011	SMS-20/M1/4-B-OR-1200-B-W5	372.70
				1500	1210027759	SMS-20/M1/4-B-OR-1500-B-W3	63.50
					1210008191	SMS-20/M1/4-B-OR-1500-B-W5	377.15
				2000	1210026316	SMS-20/M1/4-B-OR-2000-B-W3	62.80
					1210022133	SMS-20/M1/4-B-OR-2000-B-W5	384.50
				2300	1210040111	SMS-20/M1/4-B-OR-2300-B-W3	74.25
					1210040112	SMS-20/M1/4-B-OR-2300-B-W5	388.95
				2500	1210027766	SMS-20/M1/4-B-OR-2500-B-W3	78.00
					1210010796	SMS-20/M1/4-B-OR-2500-B-W5	391.90
				3000	1210027771	SMS-20/M1/4-B-OR-3000-B-W3	85.35
					1210010072	SMS-20/M1/4-B-OR-3000-B-W5	399.25
				4000	1210027783	SMS-20/M1/4-B-OR-4000-B-W3	100.05
					1210010177	SMS-20/M1/4-B-OR-4000-B-W5	414.00
				5000	1210026320	SMS-20/M1/4-B-OR-5000-B-W3	117.15
					1210040118	SMS-20/M1/4-B-OR-5000-B-W5	428.75
				6000	1210023210	SMS-20/M1/4-B-OR-6000-B-W3	131.90
					1210040119	SMS-20/M1/4-B-OR-6000-B-W5	443.50
SMS-20 DN2 M1/2" BSPP	STAUFF Hose Assemblies SMS-20 M1/2" BSPP Gauge Connection with O-Ring Seal (NBR)	2 (B)	630 / 9137	200	1210025899	SMS-20/M1/2-B-OR-200-B-W3	58.45
					1210024645	SMS-20/M1/2-B-OR-200-B-W5	468.25
				300	6100011051	SMS-20/M1/2-B-OR-300-B-W3	59.95
					6100070215	SMS-20/M1/2-B-OR-300-B-W5	469.75
				400	1210027720	SMS-20/M1/2-B-OR-400-B-W3	61.40
					1210015350	SMS-20/M1/2-B-OR-400-B-W5	471.20
				600	1210023300	SMS-20/M1/2-B-OR-600-B-W3	64.35
					1210024644	SMS-20/M1/2-B-OR-600-B-W5	474.15
				800	1210015109	SMS-20/M1/2-B-OR-800-B-W3	67.30
					1210015351	SMS-20/M1/2-B-OR-800-B-W5	477.10
				1000	1210027699	SMS-20/M1/2-B-OR-1000-B-W3	70.25
					1210024638	SMS-20/M1/2-B-OR-1000-B-W5	480.05
				1100	6100031767	SMS-20/M1/2-B-OR-1100-B-W3	71.75
					1210024639	SMS-20/M1/2-B-OR-1100-B-W5	481.55
				1500	1210027703	SMS-20/M1/2-B-OR-1500-B-W3	77.65
					6100110599	SMS-20/M1/2-B-OR-1500-B-W5	487.45
				2000	1210027706	SMS-20/M1/2-B-OR-2000-B-W3	85.00
					1210008243	SMS-20/M1/2-B-OR-2000-B-W5	494.80
				2400	6100031768	SMS-20/M1/2-B-OR-2400-B-W3	90.90
					1210024641	SMS-20/M1/2-B-OR-2400-B-W5	500.70
				2500	1210027711	SMS-20/M1/2-B-OR-2500-B-W3	92.40
					1210024642	SMS-20/M1/2-B-OR-2500-B-W5	502.20
				3000	1210022568	SMS-20/M1/2-B-OR-3000-B-W3	99.75
					1210024643	SMS-20/M1/2-B-OR-3000-B-W5	509.55
				4000	1210022929	SMS-20/M1/2-B-OR-4000-B-W3	114.50
					1210023481	SMS-20/M1/2-B-OR-4000-B-W5	524.30
				5000	1210022557	SMS-20/M1/2-B-OR-5000-B-W3	129.25
					1210024647	SMS-20/M1/2-B-OR-6000-B-W5	553.80
				6000	1210021705	SMS-20/M1/2-B-OR-6000-B-W3	144.00
					1210024646	SMS-20/M1/2-B-OR-5000-B-W5	539.05

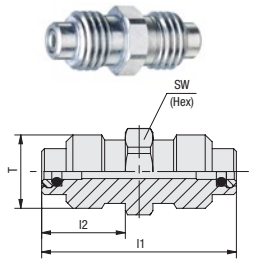
W3 = Steel zinc/nickel-plated W5 = Stainless Steel

STAUFF Hose Assemblies
SMS - 20 (standard pre-packaged lengths)

Hose Assemblies	Description	DN	Working Pressure (bar/PSI) [1]	Length (mm)	Item No.	Designation	Price
SMS-20	STAUFF Hose Assemblies SMS-20	2 (B)	630 / 9137	200	1210027964	SMS-20-200-B-W3	35.95
					1210022063	SMS-20-200-B-W5	261.15
				400	1210026337	SMS-20-400-B-W3	40.10
					1210020403	SMS-20-400-B-W5	264.10
				500	1210026339	SMS-20-500-B-W3	41.60
					1210006679	SMS-20-500-B-W5	265.60
				600	1210028050	SMS-20-600-B-W3	43.05
					1210020929	SMS-20-600-B-W5	267.05
				630	1210026341	SMS-20-630-B-W3	43.45
					1210006239	SMS-20-630-B-W5	267.50
				800	1210026344	SMS-20-800-B-W3	46.00
					1210004881	SMS-20-800-B-W5	270.00
				1000	1210026326	SMS-20-1000-B-W3	48.85
					1210004882	SMS-20-1000-B-W5	272.95
				1500	1210026330	SMS-20-1500-B-W3	56.15
					1210004883	SMS-20-1500-B-W5	280.35
				2000	1210026332	SMS-20-2000-B-W3	63.50
					1210004884	SMS-20-2000-B-W5	287.70
				2500	1210027974	SMS-20-2500-B-W3	70.75
					1210010556	SMS-20-2500-B-W5	295.10
				3000	1210026334	SMS-20-3000-B-W3	78.00
					1210025704	SMS-20-3000-B-W5	302.45
				4000	1210028012	SMS-20-4000-B-W3	92.70
					1210004298	SMS-20-4000-B-W5	317.20
				5000	1210028030	SMS-20-5000-B-W3	107.30
					1210024121	SMS-20-5000-B-W5	331.95
				6000	1210028045	SMS-20-6000-B-W3	121.95
					1210009763	SMS-20-6000-B-W5	346.70
				7000	1210028063	SMS-20-7000-B-W3	136.50
					6100070256	SMS-20-7000-B-W5	361.45

W3 = Steel zinc/nickel-plated W5 = Stainless Steel

Hose Connector SSV (Open Bore)

Hose Connector	Description	Thread					Weight (kg/lbs) ca	Item No.	Designation	Price
		T		l1	l2	Hex	per 100			
	Hose Connector SSV	M16 x 2		42.5	18.5	17	4.60	1210026119	SSV-20-W3	40.85
				1.67	.73	.67	10.12			
		M16 x 1.5		42.5	18.5	17	4.79	1210001499	SSV-15-W3	52.95
				1.67	.73	.67	10.54			
		S12.65 x 1.5[1]		31	12.5	14	2.50	1210028771	SSV-12-W3	35.20
				1.22	.49	.55	5.50			

W3 = Steel zinc/nickel-plated [1] Special thread: buttress thread S12.65 x 1.5

STAUFF Hose Assemblies
SMS-12 (standard pre-packaged lengths)

Hose Assemblies	Description	DN	Working Pressure ($^{bar}/_{PSI}$) [1]	Length (mm)	Item No.	Designation	Price
SMS-12 DN2 M1/4" BSPP	STAUFF Hose Assemblies SMS-12 M1/4" BSPP Gauge Connection with O-Ring Seal (NBR)	2 (B)	630 / 9137	400	1210022472	SMS-12/M1/4-B-OR-400-B-W3	48.75
					6100110980	SMS-12/M1/4-B-OR-400-B-W5	323.10
				600	1210040081	SMS-12/M1/4-B-OR-600-B-W3	51.70
					6100110981	SMS-12/M1/4-B-OR-600-B-W5	326.05
				800	1210023780	SMS-12/M1/4-B-OR-800-B-W3	54.65
					6100110982	SMS-12/M1/4-B-OR-800-B-W5	318.40
				1000	1210027560	SMS-12/M1/4-B-OR-1000-B-W3	58.75
					6100110983	SMS-12/M1/4-B-OR-1000-B-W5	331.95
				1200	1210040077	SMS-12/M1/4-B-OR-1200-B-W3	60.55
					6100110984	SMS-12/M1/4-B-OR-1200-B-W5	334.90
				1500	1210024333	SMS-12/M1/4-B-OR-1500-B-W3	65.00
					6100110985	SMS-12/M1/4-B-OR-1500-B-W5	339.35
				2000	1210027562	SMS-12/M1/4-B-OR-2000-B-W3	72.35
					6100110986	SMS-12/M1/4-B-OR-2000-B-W5	346.70
				3000	1210009635	SMS-12/M1/4-B-OR-3000-B-W3	87.10
					6100110987	SMS-12/M1/4-B-OR-3000-B-W5	361.45
				4000	1210025916	SMS-12/M1/4-B-OR-4000-B-W3	101.85
					6100110988	SMS-12/M1/4-B-OR-4000-B-W5	376.20
				5000	1210009530	SMS-12/M1/4-B-OR-5000-B-W3	116.60
					6100110989	SMS-12/M1/4-B-OR-5000-B-W5	390.95
				6000	1210040080	SMS-12/M1/4-B-OR-6000-B-W3	131.35
					6100110990	SMS-12/M1/4-B-OR-6000-B-W5	405.70
SMS-12 DN2 M1/2" BSPP	STAUFF Hose Assemblies SMS-12 M1/2" BSPP Gauge Connection with O-Ring Seal (NBR)	2 (B)	630 / 9137	200	1210024631	SMS-12/M1/2-B-OR-200-B-W3	61.00
					6100110592	SMS-12/M1/2-B-OR-200-B-W5	430.45
				400	1210024629	SMS-12/M1/2-B-OR-400-B-W3	63.95
					6100110593	SMS-12/M1/2-B-OR-400-B-W5	433.40
				600	1210024630	SMS-12/M1/2-B-OR-600-B-W3	66.90
					6100110600	SMS-12/M1/2-B-OR-600-B-W5	436.35
				800	1210024632	SMS-12/M1/2-B-OR-800-B-W3	69.85
					6100110602	SMS-12/M1/2-B-OR-800-B-W5	439.30
				850	1210040076	SMS-12/M1/2-B-OR-850-B-W3	70.60
					6100110603	SMS-12/M1/2-B-OR-850-B-W5	440.05
				1000	1210024624	SMS-12/M1/2-B-OR-1000-B-W3	72.80
					6100110730	SMS-12/M1/2-B-OR-1000-B-W5	442.25
				1100	1210024625	SMS-12/M1/2-B-OR-1100-B-W3	74.30
					6100110758	SMS-12/M1/2-B-OR-1100-B-W5	443.75
				1200	1210040074	SMS-12/M1/2-B-OR-1200-B-W3	75.75
					6100110844	SMS-12/M1/2-B-OR-1200-B-W5	445.20
				1500	1210040075	SMS-12/M1/2-B-OR-1500-B-W3	80.20
					6100110846	SMS-12/M1/2-B-OR-1500-B-W5	449.65
				2400	1210024626	SMS-12/M1/2-B-OR-2400-B-W3	93.45
					6100110847	SMS-12/M1/2-B-OR-2400-B-W5	462.90
				2500	1210024627	SMS-12/M1/2-B-OR-2500-B-W3	94.95
					6100110848	SMS-12/M1/2-B-OR-2500-B-W5	464.40
				3000	1210024628	SMS-12/M1/2-B-OR-3000-B-W3	102.30
					6100110868	SMS-12/M1/2-B-OR-3000-B-W5	471.75
				4000	1210024633	SMS-12/M1/2-B-OR-4000-B-W3	117.05
					6100110880	SMS-12/M1/2-B-OR-4000-B-W5	486.50
				5000	1210024634	SMS-12/M1/2-B-OR-5000-B-W3	131.80
					6100110896	SMS-12/M1/2-B-OR-5000-B-W5	501.25
				6000	1210024635	SMS-12/M1/2-B-OR-6000-B-W3	146.55
					6100110907	SMS-12/M1/2-B-OR-6000-B-W5	516.00

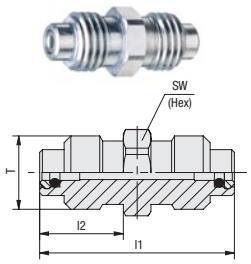
W3 = Steel zinc/nickel-plated W5 = Stainless Steel

Test Hose Assemblies
SMS-12 (standard pre-packaged lengths)

Hose Assemblies	Description	DN	Working Pressure (bar/PSI) [1]	Length (mm)	Item No.	Designation	Price
SMS-12	STAUFF Hose Assemblies SMS-12	2 (B)	630 / 9137	200	1210040069	SMS-12-200-B-W3	41.05
					1210024608	SMS-12-200-B-W5	185.55
				400	1210022918	SMS-12-400-B-W3	44.00
					1210024609	SMS-12-400-B-W5	188.50
				600	1210010558	SMS-12-600-B-W3	46.95
					1210024610	SMS-12-600-B-W5	191.45
				800	1210027609	SMS-12-800-B-W3	49.90
					1210024611	SMS-12-800-B-W5	194.40
				1000	1210027582	SMS-12-1000-B-W3	53.90
					1210020161	SMS-12-1000-B-W5	197.35
				1200	1210040066	SMS-12-1200-B-W3	55.80
					1210024612	SMS-12-1200-B-W5	200.30
				1500	1210027585	SMS-12-1500-B-W3	60.25
					1210024613	SMS-12-1500-B-W5	204.75
				2000	1210026309	SMS-12-2000-B-W3	50.20
					1210024614	SMS-12-2000-B-W5	212.10
				3000	1210023104	SMS-12-3000-B-W3	82.35
					1210024615	SMS-12-3000-B-W5	226.85
				4000	1210024471	SMS-12-4000-B-W3	97.10
					1210024616	SMS-12-4000-B-W5	241.60
				5000	1210022196	SMS-12-5000-B-W3	111.85
					1210024617	SMS-12-5000-B-W5	256.35
				6000	1210009412	SMS-12-6000-B-W3	126.60
					1210024618	SMS-12-6000-B-W5	271.10

W3 = Steel zinc/nickel-plated W5 = Stainless Steel

Hose Connector SSV (Open Bore)

Hose Connector	Description	Thread T	l1	l2	Hex	Weight (kg/lbs) ca per 100	Item No.	Designation	Price
	Hose Connector SSV	M16 x 2	42.5	18.5	17	4.60	1210026119	SSV-20-W3	40.85
			1.67	.73	.67	10.12			
		M16 x 1.5	42.5	18.5	17	4.79	1210001499	SSV-15-W3	52.95
			1.67	.73	.67	10.54			
		S12.65 x 1.5[1]	31	12.5	14	2.50	1210028771	SSV-12-W3	35.20
			1.22	.49	.55	5.50			

W3 = Steel zinc/nickel-plated

[1] Special thread: buttress thread S12.65 x 1.5

Test Hose

Order Codes - Loose Hose

HOSE - SMS - B

① ② ③

① Hose

STAUFF Hose	**HOSE**

② Hose

STAUFF Test Hose	**SMS**
STAUFF Test Hose for gaseous media Test Hoses are perforated	**SGS**

③ Hose DN Size / Pressure Setting

DN2 630 bar / 9137 PSI	**B**
DN4 630 bar / 9137 PSI (perforated)	**D**

Hose - Custom Length	Description	DN	Working Pressure ($^{bar}/_{PSI}$) [1]	Item No.	Designation	Price (per metre)
	Test Hose SMS	2	630 / 9137	1240000003	Hose-SMS-B	14.75
	Test Hose SGS Perforated Outer Sheath Suitable for use with Oil & Gas	2	630 / 9137	1240000007	Hose-SGS-B	21.25
		4	630 / 9137	1240000066	Hose-SGS-D	24.05

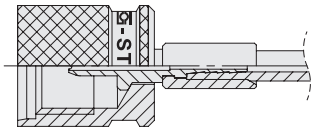
Hose End Protector

Hose Connector	Description	Item No.	Designation	Price
	Hose End Protector (DN2)	1230026152	Bending-protection-HE-W3	5.10
	Hose End Protector (DN4)	1230026409	Bending-protection-HE-C-W3	6.60

W3 = Steel zinc/nickel-plated

Refer to page L53 for STAUFF Test Assembly Instructions

STAUFF Hose End



Order Codes - Hose Ends

HE - M1/4 - B-OR - A - W3

① ② ③ ④ ⑤

① Hose

Hose End	**HE**

② Connection Thread

M16 x 2 Screw-type	**20**
M16 x 1.5 Screw-type	**15**
S12.65 x 1.5 Screw-type	**12**
M16 x 2 Screw Type 90° elbow	**O20**
M16 x 1.5 Screw Type 90° elbow	**O15**
S12.65 x 1.5 Screw Type 90° elbow	**O12**
M16 x 2 Screw Type 90° elbow (short version)	**OX20**
M16 x 1.5 Screw Type 90° elbow (short version)	**OX15**
S12.65 x 1.5 Screw Type 90° elbow (short version)	**OX12**
Plug In System	**10**
G1/4 Gauge adaptor BSPP thread	**M1/4**
G1/2 Gauge adaptor BSPP thread	**M1/2**
G3/8 Gauge adaptor BSPP thread	**M3/8**
M14 x 1.5 Gauge adaptor BSPP thread	**M14**
M20 x 1.5 Gauge adaptor BSPP thread	**M20**
G1/4 90° elbow gauge adaptor BSPP thread	**W1/4**
G1/2 90° elbow gauge adaptor BSPP thread	**W1/2**
1/4 NPT gauge adaptor NPT thread	**N1/4**
1/2 NPT gauge adaptor NPT thread	**N1/2**
1/4 NPT 90° elbow gauge adaptor NPT thread	**A1/4**
1/2 NPT 90° elbow gauge adaptor NPT thread	**A1/2**
4 LL Standpipe for compression ring fittings	**S04**
6 L - 6 S Standpipe for compression ring fittings	**S06**
8 L - 8 S Standpipe for compression ring fittings	**S08**
10 L - 10 S Standpipe for compression ring fittings	**S10**
12 L - 12 S Standpipe for compression ring fittings	**S12**
1/4 Standpipe for compression ring fittings	**S1/4**
6 L - 6 S Standpipe for compression ring fittings 90° elbow	**SG06**
8 L - 8 S Standpipe for compression ring fittings 90° elbow	**SG08**
M12 x 1.5 Seal with O-Ring for 24° cone fitting (c/w swivel nut)	**K06L**
M14 x 1.5 Seal with O-Ring for 24° cone fitting (c/w swivel nut)	**K08L**
M16 x 1.5 Seal with O-Ring for 24° cone fitting (c/w swivel nut)	**K10L**
M18 x 1.5 Seal with O-Ring for 24° cone fitting (c/w swivel nut)	**K12L**
M14 x 1.5 Seal with O-Ring for 24° cone fitting (c/w swivel nut)	**K06S**
M16 x 1.5 Seal with O-Ring for 24° cone fitting (c/w swivel nut)	**K08S**
M18 x 1.5 Seal with O-Ring for 24° cone fitting (c/w swivel nut)	**K10S**
M20 x 1.5 Seal with O-Ring for 24° cone fitting (c/w swivel nut)	**K12S**
M12 x 1.5 Seal with O-Ring for 24° cone fitting (c/w swivel nut) 45° elbow	**R06L**
M14 x 1.5 Seal with O-Ring for 24° cone fitting (c/w swivel nut) 45° elbow	**R06S**
M12 x 1.5 Seal with O-Ring for 24° cone fitting (c/w swivel nut) 90° elbow	**L06L**
M14 x 1.5 Seal with O-Ring for 24° cone fitting (c/w swivel nut) 90° elbow	**L08L**
M16 x 1.5 Seal with O-Ring for 24° cone fitting (c/w swivel nut) 90° elbow	**L10L**
M14 x 1.5 Seal with O-Ring for 24° cone fitting (c/w swivel nut) 90° elbow	**L06S**
M16 x 1.5 Seal with O-Ring for 24° cone fitting (c/w swivel nut) 90° elbow	**L08S**
M18 x 1.5 Seal with O-Ring for 24° cone fitting (c/w swivel nut) 90° elbow	**L10S**

② Connection Thread continued..

M12 x 1.5 Male thread	**G12**
G1/8 Male thread	**G1/8**
G1/4 Male thread	**G1/4**
G1/2 Male thread	**G1/2**
1/8 NPT Male thread NPT	**F1/8**
1/4 NPT Male thread NPT	**F1/4**
M12 x 1.5 Male thread for 24° cone fitting	**C06L**
M14 x 1.5 Male thread for 24° cone fitting	**C08L**
M12 x 1.5 Male thread for 24° cone fitting	**C06S**
M14 x 1.5 Male thread for 24° cone fitting	**C08S**
7/16-20 UNF Male thread	**J1/4**
1/2-20 UNF Male thread	**J5/16**
9/16-18 UNF Male thread	**J3/8**
M12 x 1.5 Universal sealing head with swivel nut for 24° cone fitting	**D06L**
M14 x 1.5 Universal sealing head with swivel nut for 24° cone fitting	**D08L**
M16 x 1.5 Universal sealing head with swivel nut for 24° cone fitting	**D10L**
M18 x 1.5 Universal sealing head with swivel nut for 24° cone fitting	**D12L**
M14 x 1.5 Universal sealing head with swivel nut for 24° cone fitting	**D06S**
M16 x 1.5 Universal sealing head with swivel nut for 24° cone fitting	**D08S**
M18 x 1.5 Universal sealing head with swivel nut for 24° cone fitting	**D10S**
M20 x 1.5 Universal sealing head with swivel nut for 24° cone fitting	**D12S**
G1/8 Sealing head with swivel nut for cone fitting	**B1/8**
G1/4 Sealing head with swivel nut for cone fitting	**B1/4**
7/16-20 UNF Sealing head with swivel nut according to SAE J 514 37° cone	**U1/4**
1/2-20 UNF Sealing head with swivel nut according to SAE J 514 37° cone	**U5/16**
9/16-18 UNF Sealing head with swivel nut according to SAE J 514 37° cone	**U3/8**
7/16-20 UNF Sealing head with swivel nut according to SAE J 516 45° cone	**UR1/4**
7/16-20 UNF Sealing head with swivel nut according to SAE J 516 37° cone, 90° elbow	**E1/4**
7/16-20 UNF Sealing head with swivel nut according to SAE J 516 45° cone, 90° elbow	**ER1/4**
M16 x 1.5 Test hose for air brake systems	**P02**
G1/4 Sealing head with swivel nut for 60° cone	**H1/4**
9/16-18 UNF Screw-type ORFS	**T9/16**
11/16-16 UN Screw-type ORFS 90° elbow	**V11/16**
M16 x 2 Hose end with integrated check valve	**RV20**
M16 x 1.5 Hose end with integrated check valve	**RV15**

③ Seal Material (only required for connection thread M & W)

NBR (Buna-N®) O-Ring	**B-OR**

④ Hose DN size / Pressure Setting

DN2 400 bar / 5802 PSI	**A**
DN4 340 bar / 4931 PSI (perforated)	**C**

⑤ Material

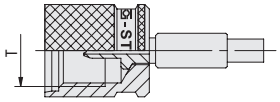
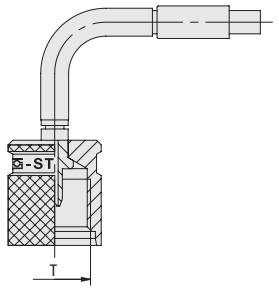
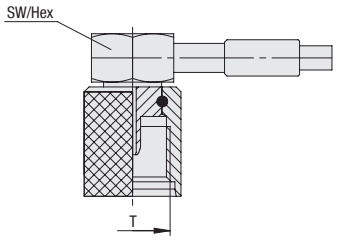
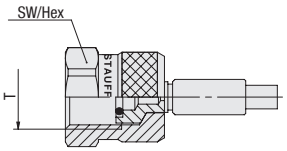
Steel 11 S Mn Pb 30 (1.0718), zinc/nickel-plated	**W3**
Type 15: Steel, black zinc/nickel-plated	**W3**
Stainless Steel V2A (1.4305/AISI 303)	**W4**
Stainless Steel V4A (1.4571/AISI 316Ti)	**W5**

⑥ Special Information

Hexagonal	**SK**
Without sleeve	**WOS**
With soft seal	**WDG**
Bending protection	**BD**

Refer to page L53 for STAUFF Test Assembly Instructions

STAUFF Hose End

Hose End	Description	T	Hex (mm/in)		DN	Working Pressure (bar/PSI) [1]	Type		Designation	Price
	**Type 20, 15, 12** STAUFF-Test Screw-type suitable for test points	M16 x 2			2 (A) and 4 (C)	630 / 9137		**20**	HE-20-A-W3	16.50
									HE-20-A-W5-K	129.10
									HE-20-C-W3	42.30
		M16 x 1.5						**15**	HE-15-A-W3	16.50
									HE-15-A-W5	POA
									HE-15-C-W3	42.20
		S12.65 x 1.5						**12**	HE-12-A-W3	19.05
									HE-12-C-W3	45.45
									HE-12-A-W5	91.30
	**Type 0** STAUFF-Test Screw-type 90° elbow suitable for test points	M16 x 2			2 (A)	630 / 9137	**0**	**20**	HE-020-A-W3-K	38.05
		M16 x 1.5						**15**	HE-015-A-W3	POA
		S12.65 x 1.5						**12**	HE-012-A-W3	43.55
	**Type 0X** STAUFF-Test Screw-type 90° elbow suitable for test points (short wire version)	M16 x 2	17	.67	2 (A)	630 / 9137	**0X**	**20**	HE-0X20-A-W3	73.05
									HE-0X20-A-W5	390.70
		M16 x 1.5						**15**	HE-0X15-A-W3	39.45
		S12.65 x 1.5						**12**	HE-0X12-A-W3	74.35
	Type 10 STAUFF-Test Plug in type	Plug In System			2 (A)	400 / 5801		**10**	HE-10-A-W3	13.95
	**Type M** Gauge adaptor BSP-thread for G3/8. G1/2. M14 x 1.5 and M20 x 1.5 swivel nut like type N	G1/4	19	.75	2 (A) and 4 (C)	630 / 9137	**M**	**1/4**	HE-M1/4-B-OR-A-W3	23.80
									HE-M1/4-B-OR-A-W5-K	225.90
		G1/2	27	1.06				**1/2**	HE-M1/2-B-OR-A-W3-K	26.80
									HE-M1/2-B-OR-A-W5-K	336.20
		G3/8	22	.87	2 (A)	630 / 9137		**3/8**	HE-M3/8-B-OR-A-W3	41.40
									HE-M3/8-B-OR-A-W5	POA
		M14 x 1.5	19	.75				**14**	HE-M14-B-OR-A-W3	POA
		M20 x 1.5	27	1.06				**20**	HE-M20-B-OR-A-W5	POA

[1] The indicated working pressure applies only to the Hose End. The actual working pressure depends on the Test Hose used.

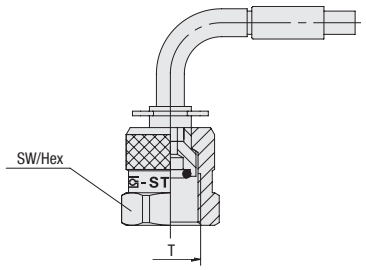
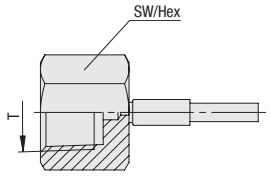
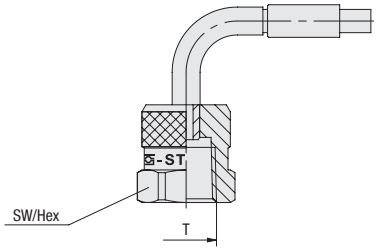
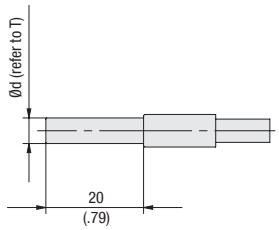
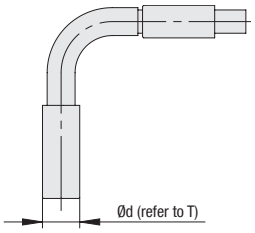
W3 = Steel zinc/nickel-plated

W5 = Stainless Steel

POA - Available on request, minimum order quantities may apply

Dimensional drawings: All dimensions in mm (in)

STAUFF Hose End

Hose End	Description	T	Hex (mm / in)		DN	Working Pressure (bar / PSI) [1]	Type		Designation	Price
	**Type W** 90° elbow gauge adaptor BSP-thread for G1/2 swivel nut like type N	G1/4	19	.75	2 (A) and 4 (C)	630 / 9137	W	1/4	HE-W1/4-B-OR-A-W3-K	39.45
		G1/2	27	1.06				1/2	HE-W1/2-B-OR-A-W3-K	73.05
	**Type N** Gauge adaptor NPT-thread for 1/4 NPT swivel nut like type M	1/4 NPT	19	.75	2 (A)		N	1/4	HE-N1/4-A-W3	22.35
		1/2 NPT	27	1.06				1/2	HE-N1/2-A-W3	30.80
	**Type A** 90° elbow gauge adaptor NPT-thread for 1/2 NPT swivel nut like type N	1/4 NPT	19	.75	2 (A) and 4 (C)		A	1/4	HE-A1/4-A-W3	45.00
		1/2 NPT	27	1.06				1/2	HE-A1/2-A-W3	POA
	**Type S** Standpipe for compression ring fittings according to ISO 8434-1 / DIN 2353 Note: Standpipe version is not in accordance with the state of the art. Use at own risk. We recommend the use of the series K, R or L.	4 LL			2 (A)	100 / 1450	S	04	HE-S04-A-W3	19.80
									HE-S04-C-W3	POA
		6 L - 6 S			2 (A) and 4 (C)	630 / 9137		06	HE-S06-A-W3	9.20
									HE-S06-C-W3	18.35
		8 L - 8 S						08	HE-S08-A-W3	11.35
									HE-S08-C-W3	23.60
		10 L - 10 S						10	HE-S10-A-W3	15.60
									HE-S10-C-W3	18.35
		12 L - 12 S			2 (A)			12	HE-S12-A-W3	11.35
		1/4			2 (A) and 4 (C)			1/4	HE-S1/4-A-W3	20.90
									HE-S1/4-C-W3	21.25
	**Type SG** Standpipe for compression ring fittings according to ISO 8434-1 / DIN 2353 90° elbow Note: Standpipe version is not in accordance with the state of the art. Use at own risk. We recommend the use of the series K, R or L.	6 L - 6 S			2 (A) and 4 (C)	630 / 9137	SG	06	HE-SG06-A-W3	POA
									HE-SG06-C-W3	55.70
		8 L - 8 S						08	HE-SG08-A-W3	POA

[1] The indicated working pressure applies only to the Hose End. The actual working pressure depends on the Test Hose used.

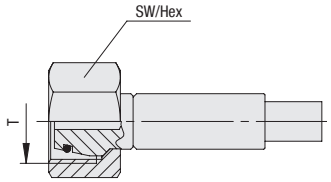
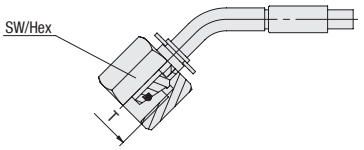
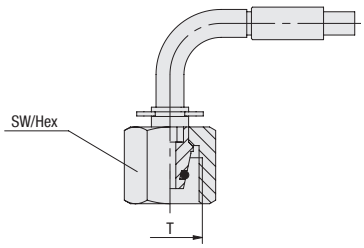
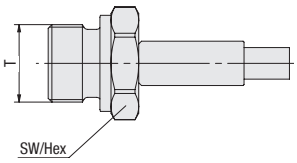
W3 = Steel zinc/nickel-plated

W5 = Stainless Steel

POA - Available on request, minimum order quantities may apply

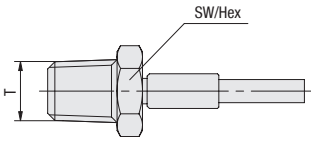
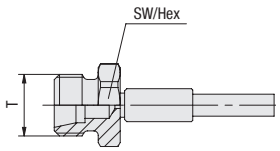
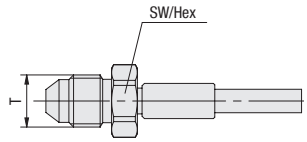
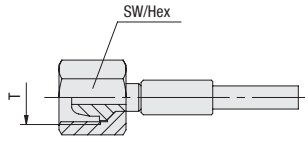
Dimensional drawings: All dimensions in mm (in)

STAUFF Hose End

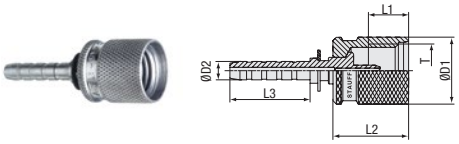
Hose End	Description	T	Hex (mm/in)		DN	Working Pressure (bar/PSI) [1]	Type		Designation	Price
	**Type K** Seal with O-Ring for 24° cone fitting according to ISO 8434-1 / DIN 2353 c/w swivel nut	M12 x 1.5	14	.55	2 (A) and 4 (C)	315 / 4568	K	06L	HE-K06L-A-W3	22.00
									HE-K06L-C-W3	31.75
		M14 x 1.5	17	.67				08L	HE-K08L-A-W3	23.90
									HE-K08L-C-W3	30.50
		M16 x 1.5	19	.75				10L	HE-K10L-A-W3	23.90
									HE-K10L-C-W3	30.50
		M18 x 1.5	22	.87				12L	HE-K12L-A-W3	27.75
									HE-K12L-C-W3	31.10
		M14 x 1.5	17	.67		630 / 9137		06S	HE-K06S-A-W3	22.10
									HE-K06S-C-W3	27.90
		M16 x 1.5	19	.75				08S	HE-K08S-A-W3	23.90
									HE-K08S-C-W3	30.50
		M18 x 1.5	22	.87				10S	HE-K10S-A-W3	24.60
									HE-K10S-C-W3	31.20
		M20 x 1.5	24	.94				12S	HE-K12S-A-W3	28.25
									HE-K12S-C-W3	31.60
	**Type R** Seal with O-Ring for 24° cone fitting according to ISO 8434-1 / DIN 2353 c/w swivel nut 45° elbow	M12 x 1.5	14	.55	2 (A) and 4 (C)	315 / 4568	R	06L	HE-R06L-A-W3	POA
									HE-R06L-C-W3	POA
		M14 x 1.5	14	.67		315 / 4568		06S	HE-R08S-A-W3	POA
									HE-R08S-C-W3	POA
	**Type L** Seal with O-Ring for 24° cone fitting according to ISO 8434-1 / DIN 2353 c/w swivel nut 90° elbow	M12 x 1.5	14	.55	2 (A) and 4 (C)	315 / 4568	L	06L	HE-L06L-A-W3	28.25
									HE-L06L-C-W3-K	42.20
		M14 x 1.5	17	.67				08L	HE-L08L-A-W3	POA
									HE-L08L-C-W3	80.85
		M16 x 1.5	19	.75				10L	HE-L10L-A-W3	32.40
									HE-L10L-C-W3	POA
		M14 x 1.5	17	.67		630 / 9137		06S	HE-L06S-A-W3	POA
									HE-L06S-C-W3-K	50.60
		M16 x 1.5	19	.75				08S	HE-L08S-A-W3	POA
									HE-L08S-C-W3	POA
		M18 x 1.5	24	.94				10S	HE-L10S-A-W3	POA
									HE-L10S-C-W3	POA
	**Type G** Male thread according to DIN 3852-B	M12 x 1.5	17	.67	2 (A) and 4 (C)	630 / 9137	G	12	HE-G12-A-W3	26.80
									HE-G12-A-W5	POA
									HE-G12-C-W3	35.20
		G1/8	14	.55		400 / 5801		1/8	HE-G1/8-A-W3	32.10
									HE-G1/8-A-W5	POA
									HE-G1/8-C-W3	POA
									HE-G1/8-C-W5	POA
		G1/4	19	.75		630 / 9137		1/4	HE-G1/4-A-W3	47.55
									HE-G1/4-A-W5	161.55
									HE-G1/4-C-W3	43.30
									HE-G1/4-C-W5	POA
		G1/2	27	1.06		630 / 9137		1/2	HE-G1/2-A-W3	POA
									HE-G1/2-A-W5	POA
									HE-G1/2-C-W3	POA
									HE-G1/2-C-W5	POA

[1] The indicated working pressure applies only to the Hose End. The actual working pressure depends on the Test Hose used.
W3 = Steel zinc/nickel-plated
W5 = Stainless Steel
POA - Available on request, minimum order quantities may apply
Dimensional drawings: All dimensions in mm (in)

STAUFF Hose End

Hose End	Description	T	Hex (mm/in)		DN	Working Pressure (bar/PSI) [1]	Type		Designation	Price
	**Type F** Male thread NPT according to ANSI-standard	1/8 NPT	13	.51	2 (A) and 4 (C)	400 / 5801	F	1/8	HE-F1/8-A-W3	19.50
									HE-F1/8-A-W5	POA
									HE-F1/8-C-W3	44.70
									HE-F1/8-C-W5	POA
		1/4 NPT	17	.67		630 / 9137		1/4	HE-F1/4-A-W3	20.90
									HE-F1/4-A-W5	POA
									HE-F1/4-C-W3	50.25
	**Type C** Male thread for 24° cone fitting according to ISO 8434-1 / DIN 2353	M12 x 1.5	14	.55	2 (A) and 4 (C)	315 / 4568	C	06L	HE-C06L-A-W3	28.25
									HE-C06L-C-W3	41.85
		M14 x 1.5	17	.67				08L	HE-C08L-A-W3	31.00
									HE-C08L-C-W3	32.40
		M14 x 1.5	17	.67		630 / 9137		06S	HE-C06S-A-W3	31.00
									HE-C06S-C-W3	42.20
		M16 x 1.5	17	.67				08S	HE-C08S-A-W3	31.00
									HE-C08S-C-W3	43.55
	**Type J** Male thread according to SAE J 514	7/16–20 UNF	14	.55	2 (A) and 4 (C)	350 / 5076	J	1/4	HE-J1/4-A-W3	29.35
									HE-J1/4-A-W5	POA
									HE-J1/4-C-W3	46.10
		1/2–20 UNF	14	.55				5/16	HE-J5/16-A-W3	29.35
									HE-J5/16-C-W3	40.85
		9/16–18 UNF	17	.67				3/8	HE-J3/8-A-W3	33.55
									HE-J3/8-C-W3	54.45
	**Type D** Universal sealing head with swivel nut for 24° cone fitting according to ISO 8434-1 / DIN 2353	M12 x 1.5	14	.55	2 (A) and 4 (C)	315 / 4568	D	06L	HE-D06L-A-W3	24.90
									HE-D06L-A-W5	POA
									HE-D06L-C-W3	55.50
									HE-D06L-C-W5	POA
		M14 x 1.5	17	.67				08L	HE-D08L-A-W3	23.55
									HE-D08L-C-W3	29.05
		M16 x 1.5	19	.75				10L	HE-D10L-A-W3	23.55
									HE-D10L-C-W3	29.05
		M18 x 1.5	22	.87				12L	HE-D12L-A-W3	27.40
									HE-D12L-C-W3	37.80
		M14 x 1.5	17	.67		630 / 9137		06S	HE-D06S-A-W3	25.00
									HE-D06S-C-W3	51.45
		M16 x 1.5	19	.75				08S	HE-D08S-A-W3	23.55
									HE-D08S-A-W5	POA
									HE-D08S-C-W3	29.05
		M18 x 1.5	22	.87				10S	HE-D10S-A-W3	24.25
									HE-D10S-C-W3	29.75
		M20 x 1.5	24	.94				12S	HE-D12S-A-W3	27.90
									HE-D12S-C-W3	38.30

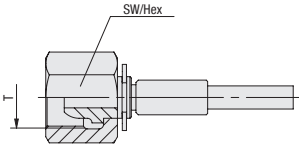
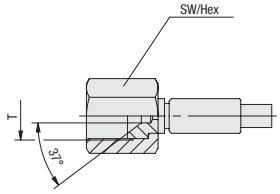
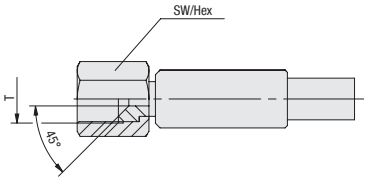
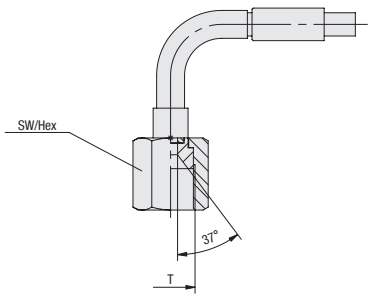
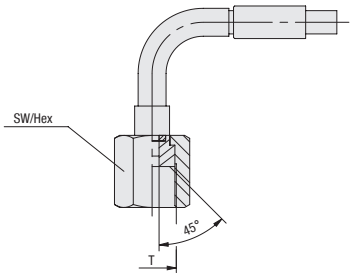
Sampling Hose Adaptor SHA

Hose Adaptor	Description	Dimensions (mm/in)						Weight (kg/lbs) ca.	Item No.	Designation	Price
		ØD1	ØD2	L1	L2	L3	T	per 100			
	Sampling Hose Adaptor SHA	22	5.5	13	23	24	M16 x 2	3.36	1210026422	SHA-20-5.5MM-W3	53.45
		.87	.22	.51	.91	.94		7.39	6100085737	SHA-20-5.5MM-W5	529.85

W3 = Steel zinc/nickel-plated W5 = Stainless Steel Suitable for Oil Sampling

Dimensional drawings: All dimensions in mm (in)

STAUFF Hose End

Hose End	Description	T	Hex (mm/in)		DN	Working Pressure (bar/PSI) [1]	Type		Designation	Price
	**Type B** Sealing head with swivel nut for cone fitting according to DIN EN 560	G1/8	12	.47	2 (A)		B	1/8	HE-B1/8-A-W3-K	33.80
									HE-B1/8-A-W5	POA
		G1/4	17	.67	2 (A) and 4 (C)			1/4	HE-B1/4-A-W3	27.10
									HE-B1/4-A-W5	POA
									HE-B1/4-C-W3	37.95
									HE-B1/4-C-W5	POA
	**Type U** Sealing head with swivel nut according to SAE J 514 37° cone	7/16–20 UNF	14	.55	2 (A) and 4 (C)	350 / 5076	U	1/4	HE-U1/4-A-W3	26.25
									HE-U1/4-A-W5	354.80
									HE-U1/4-C-W3	31.85
									HE-U1/4-C-W5	378.70
		1/2–20 UNF	17	.67				5/16	HE-U5/16-A-W3	19.80
									HE-U5/16-C-W3	18.35
									HE-U5/16-C-W5	POA
		9/16–18 UNF	19	.75				3/8	HE-U3/8-A-W3	28.90
									HE-U3/8-C-W3	32.70
									HE-U3/8-C-W5	365.95
	**Type UR** Sealing head with swivel nut according to SAE J 516 45° cone	7/16–20 UNF	14	.55	2 (A)		UR	1/4	HE-UR1/4-A-W3	25.45
									HE-UR1/4-A-W5	POA
									HE-UR1/4-C-W3	POA
	**Type E** Sealing head with swivel nut according to SAE J 514 37° cone 90° elbow	7/16–20 UNF	14	.55	2 (A) and 4 (C)	350 / 5076	E	1/4	HE-E1/4-A-W3-K	35.20
									HE-E1/4-C-W3	225.45
	**Type ER** Sealing head with swivel nut according to SAE J 516 45° cone 90° elbow	7/16–20 UNF	14	.55	2 (A)		ER	1/4	HE-ER1/4-A-W3	40.85
									HE-ER1/4-C-W3	POA

[1] The indicated working pressure applies only to the Hose End. The actual working pressure depends on the Test Hose used.

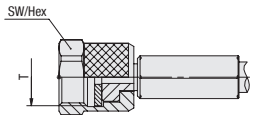
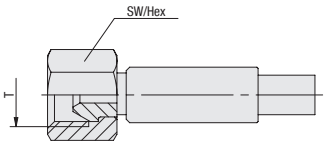
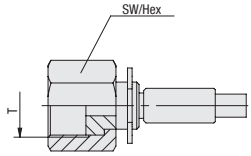
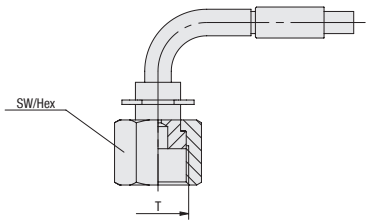
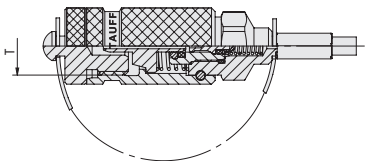
W3 = Steel zinc/nickel-plated

W5 = Stainless Steel

POA - Available on request, minimum order quantities may apply

Dimensional drawings: All dimensions in mm (in)

STAUFF Hose End

Hose End	Description	T	Hex (mm/in)		DN	Working Pressure (bar/PSI) [1]	Type		Designation	Price
	**Type P** Test hose for air brake systems according to ISO 3583	M16 x 1.5	19	.75	2 (A)		**P**	**02**	HE-P02-A-W3	37.20
	**Type H** Sealing head with swivel nut 60° cone	G1/4	17	.67	2 (A) and 4 (C)	630 / 9137	**H**	**1/4**	HE-H1/4-A-W3	POA
									HE-H1/4-A-W5	POA
									HE-H1/4-C-W3	POA
									HE-H1/4-C-W5	POA
	**Type T** Screw-type ORFS according to SAE J 1453	9/16–18 UNF	17	.67	2 (A)		**T**	**9/16**	HE-T9/16-A-W3	16.95
									HE-T9/16-A-W5	POA
		11/16–16 UN	21	.83				**11/16**	HE-T11/16-A-W3	21.25
									HE-T11/16-A-W5	POA
									HE-T11/16-C-W3	40.50
	**Type V** Screw-type ORFS according to SAE J 1453 90° elbow	11/16–16 UN	21	.83	2 (A) and 4 (C)		**V**	**11/16**	HE-V11/16-A	POA
									HE-V11/16-C	POA
	**Type RV** Hose end with integrated check valve	M16 x 2			2 (A)	630 / 9137	**RV**	**20**	HE-20-RV-A-W3	140.25
		M16 x 1.5						**15**	HE-15-RV-A-W3	POA

[1] The indicated working pressure applies only to the Hose End. The actual working pressure depends on the Test Hose used.

W3 = Steel zinc/nickel-plated

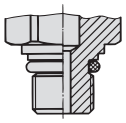
W5 = Stainless Steel

POA - Available on request, minimum order quantities may apply

Dimensional drawings: All dimensions in mm (in)

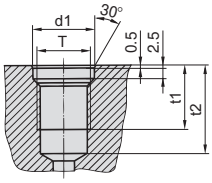
Seal Types

Type A



with O-Ring

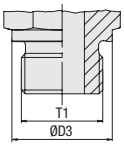
Factory standard



Port Factory standard

Type A

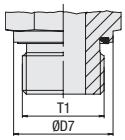
Type B



Metallic Sealing Edge

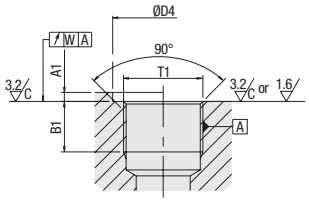
Metric Parallel Thread
DIN 3852-1 (Form B) / ISO 9974-3 (Type B)
Whitworth Parallel Pipe Thread
DIN 3852-2 (Form B) / ISO 1179-4 (Type B)

Type C



Profile Sealing Ring

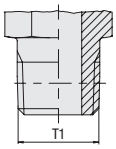
Metric Parallel Thread
ISO 9974-2 (Type E)
Whitworth Parallel Pipe Thread
ISO 1179-2 (Type E)



Port (Parallel Thread)

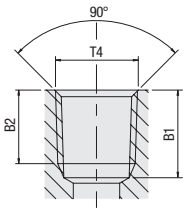
for Male Studs with Metric Parallel Thread
DIN 3852-1 (Form X) / ISO 9974-1
for Male Studs with Whitworth Parallel Pipe Thread
DIN 3852-2 (Form X) / ISO 1179-1

Type D



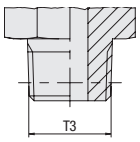
Taper Thread

National Pipe Thread (NPT)
ANSI/ASME B1.20.1-1983



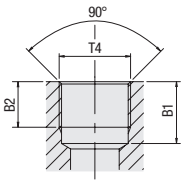
Port (Taper Thread)

for Male Studs with
National Pipe NPT Thread
ANSI/ASME B1.20.1-1983



Taper Thread

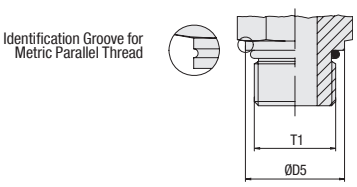
Metric Taper Thread
DIN 3852-1 (Form C)
Whitworth Taper Pipe Thread
DIN 3852-2 (Form C)



Port (Parallel Thread)

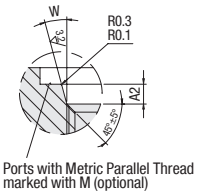
for Male Studs with Metric Taper Thread
DIN 3852-1 (Form Z)
for Male Studs with Whitworth Taper Pipe Thread
DIN 3852-2 (Form Z)

Type E

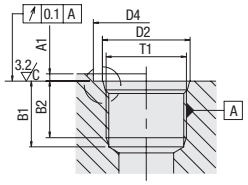


O-Ring without Retaining Ring (Non-Adjustable)

Metric Parallel Thread
ISO 6149-2 /-3
UN/UNF Thread
ISO 11926-2/-3



Ports with Metric Parallel Thread
marked with M (optional)



Port (Parallel Thread)

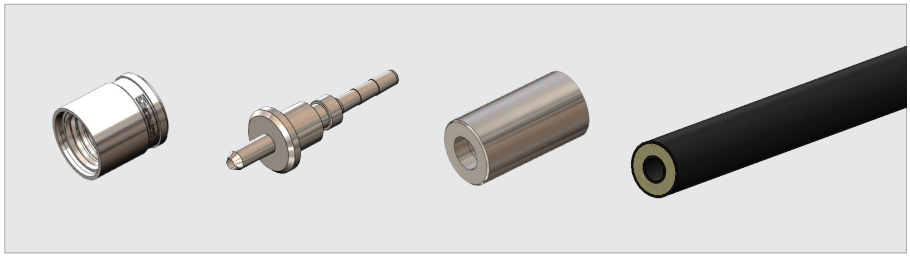
for Male Studs with Metric Parallel Thread
ISO 6149-1
for Male Studs with UN/UNF Thread
ISO 11926-1

Refer to Catalogue 7 - STAUFF Test for Port Dimensions

Dimensional drawings: All dimensions in mm (in).

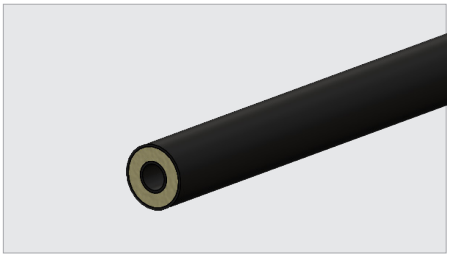
Assembly Instructions for STAUFF Test DN2 and DN4 test hose fittings

1. Select required componentry



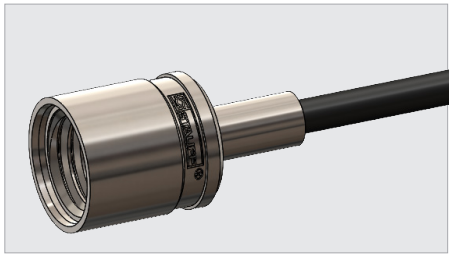
Ensure components are of matched size and appropriate ratings for intended service.
Consult Catalogue 7 - STAUFF Test or consult STAUFF if in doubt.

2. Hose Preparation

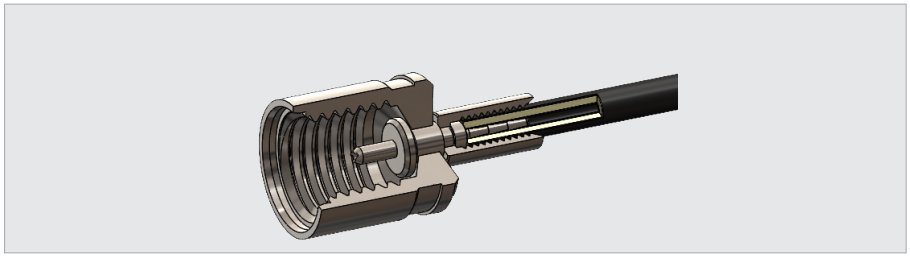


Cut hose to desired length.
Ensure hose is cut square and retains a circular profile.
Hose end should not be compressed or deformed.

3. Assemble loose components

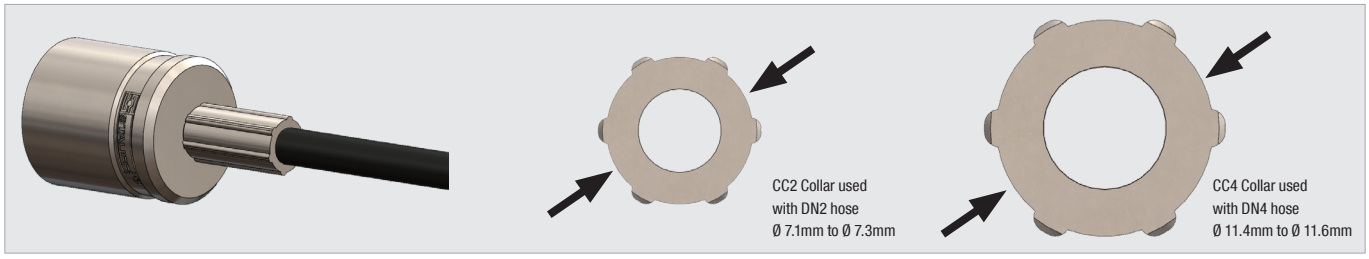


Assemble loose components, ensure to insert collar over hose first.



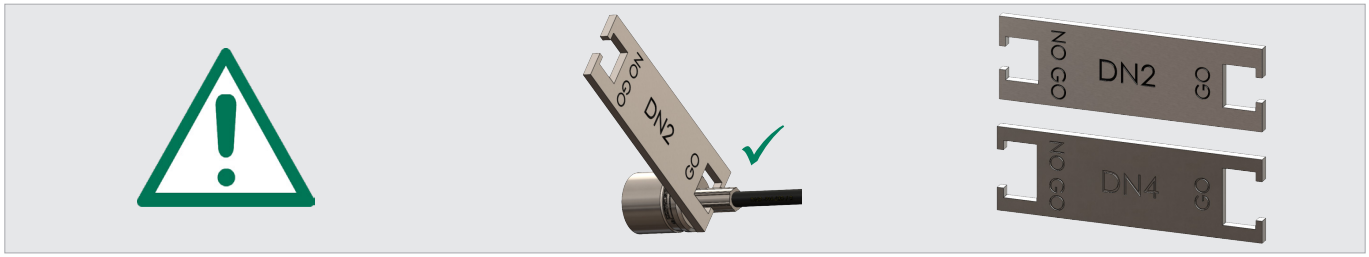
Ensure hose is fully inserted into fitting until it abuts the test fitting insert collar. Ensure insert has properly entered hose without damage to hose bore. Softly blow a stream of air through assembly to ensure that bore is clear.

4. Crimping process



Crimping of assembly is performed using a 6 die swaging press. Measure the final crimp diameters across the flats of the crimped collar.
The final crimp diameters should be within values shown in diagram above.

5. Validate Assembly Result - Step 1



CAUTION: Failure to properly assemble Hydraulic Hose can create serious hazards, including unintended release of fluids under high pressure, and possible personal injury or damage to equipment.

STAUFF Corporation recommends STAUFF GO / NO GO gauges for confirmation of crimping process.

Slide GO portion of gauge over complete length of crimp collar flats to prove that crimp is sufficient.

If the NO GO portion of the gauge will fit over crimp collar flats - the crimp is excessive and the assembly must be discarded.

STAUFF GO / NO GO gauges are manufactured from long lasting AISI 316 material and are available for purchase under the following codes:

Item No.	Designation
1230021023	HOSE CRIMP GAUGE DN2 GO/NO GO
1230021024	HOSE CRIMP GAUGE DN4 GO/NO GO

6. Validate Assembly Result - Step 2 - Refer to Page L54 for continued instruction

Assembly Instructions for STAUFF Test DN2 and DN4 test hose fittings continued..

6. Validate Assembly Result - Step 2

Hose Assemblies must be subjected to final inspection according to the following procedures prior to operation.

Test Criteria	Testing interval	Test Equipment	Description	Specification
Hose Length	First piece Then every 25th piece	Tape Measure	Measure assembly	± 5mm
Crimp Diameter	First piece of order Last piece of order	Calliper gauge	Measure crimp diameter according to step 4	CC2 = Ø7.2 ± 0.1 CC4 = Ø11.5 ± 0.1
Flow	First piece Every 10th piece 100% with elbow fittings	Hose testing station	Visual control	Confirm through flow
Pressure Testing	First piece Every 10th piece 100% with elbow fittings	Hose testing station	Application of test pressure for prescribed times as shown in table Table 5.1 Pressure Table 5.2 Test Duration	No leakage, bursting or bulging
Final Testing	100%		Visual	Crimping meets order spec Label identified and correct

Table 5.1 - Pressure

Hose Designation	Testing Pressure (Bar)
A	630
B	1,000
C	600
Gas hoses	Nitrogen 60 Bar

Table 5.2 - Test Duration

Hose length (L) mm	Time to build pressure seconds	Test duration seconds	Blow through time seconds
L < 800	5	15	10
800 > L <2,000	6	15	10
2,000 > L < 4,000	7	15	12
L > 4,000	8	15	15

Introduction	M2 - M3
Pressure Gauges	M4 - M25
Pressure Switches	M26 - M31
Hydraulic Testers	M32 - M61
Oil Analysis Equipment	M62 - M67

STAUFF Diagtronics

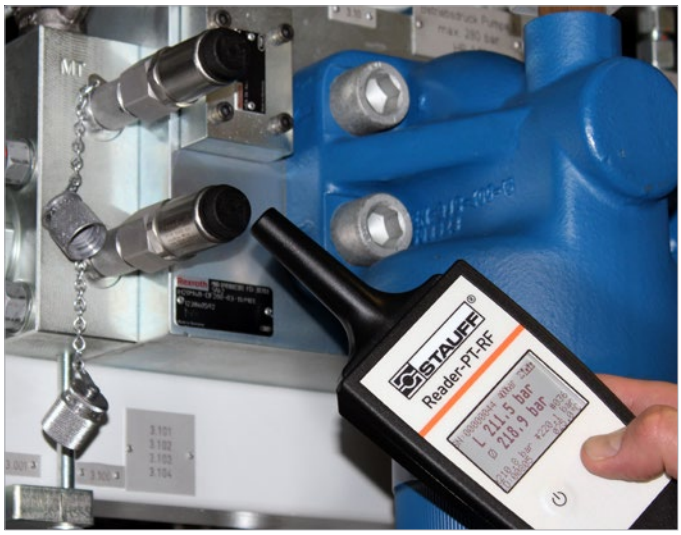
With measuring, testing, display and analysis devices and equipment from the STAUFF Diagtronics product range, system operators, maintenance personnel and repair technicians can determine and monitor the essential parameters in mobile and industrial hydraulics: operating pressure, maximum pressure, differential pressure, system temperature, volume flow, contamination and much more.

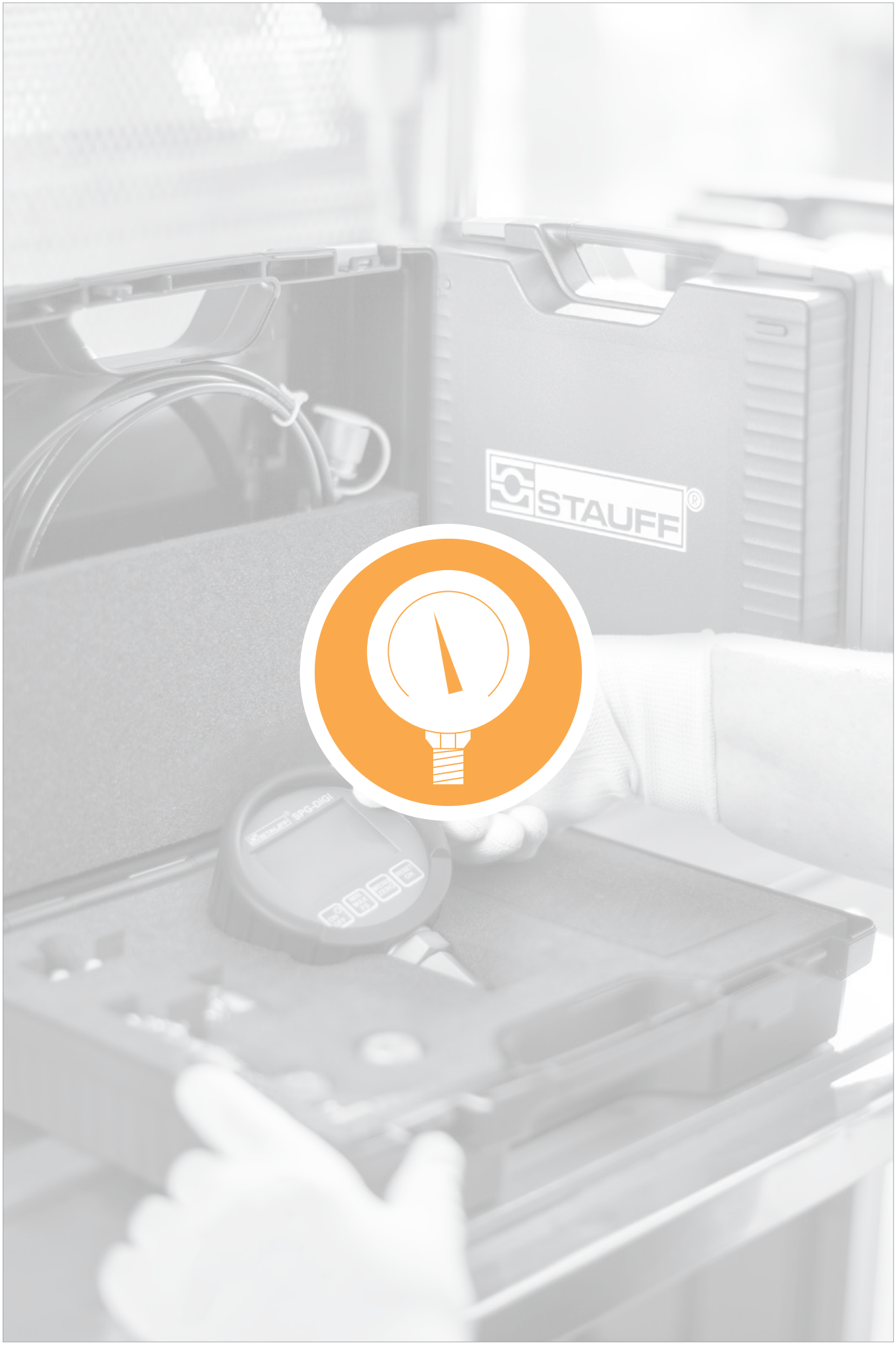
The range includes analogue and digital pressure gauges that are either supplied individually or as part of practical pressure test kits including the required connection adaptors and accessories, as well as high-performance hand-held hydraulic testers of the PPC series, that have been developed to meet the growing demands of the industry.

The PT-RF series of pressure transmitters and readers are an alternative solution for universal pressure measurements for fluid technology applications. The advantages resulting from the use of the non-contact RFID technology for system operators, maintenance personnel and repair technicians are clear: Measurements can be carried out very easily, without extensive training and within a few seconds at the press of a button and then documented in a reliable process – while temporary opening of the system if not required. Potential hazards for people, machines and the environment as well as ingress of contamination into the system can be effectively excluded.

Fluid analysis is a crucial element of any oil management program. Early detection of system contamination can prevent costly repairs and downtime.

Portable and permanently installed STAUFF particle counters and monitors enable the precise determination of cleanliness levels of hydraulic media according to international standards.


STAUFF
Reader-PT-RF


STAUFF
SPG-DIGI

	Introduction	**M6**
	Information on the Pressure Equipment Directive	**M7**
	Accessories for Pressure Gauges (Overview)	**M7**
	Pressure Gauges & Accessories	**M8 - M22**
	Analogue Pressure Gauge SPG	**M8 - M10**
	Pressure Gauge Accessories	**M11**
	Analogue Pressure Test Kit SMB-20	**M12 - M15**
	Analogue Pressure Test Kit - Metal Case SMBM-20	**M16 - M19**
	Digital Pressure Gauge SPG-DIGI SPG-DIGI-USB	**M20 - M21**
	Digital Pressure Test Kit SMB-DIGI SMB-DIGI-USB	**M22**
	Repair and Calibration Services	**M24**

Pressure Gauges (analogue/digital) and Accessories

Measuring pressure on equipment is indispensable for monitoring and ensuring the smooth functioning and operating safety of these systems.

STAUFF offers a variety of simple pressure measuring devices for liquid and gaseous media. These pressure gauges can be used as either stationary or portable devices. STAUFF addresses the very extensive width of possible system pressures and the strict requirements for precision with a variety of pressure gauge types with different measuring ranges.

The glycerine filled gauge range is available with various connection ports to fit many different installation needs. The pressure gauges can be purchased alone or in a test kit. The kits can be supplied with gauges with different pressure ranges and adaptors to satisfy any requirement.

The analog pressure gauges are primarily designed for permanent installations. STAUFF also offers a digital line for analytical troubleshooting.

These digital pressure gauges are also available as a pressure test kit and also make it possible to perform the many different measurement tasks with the help of adaptors and the measuring hose. An important advantage is the possibility to measure pressure peaks with the device, to save them short term and to display them in the display as MIN and MAX values.

In addition to the individual products, the STAUFF measuring devices are also available as a kit.

Information on the Pressure Equipment Directive (PED) 97/23/EC
Pressure Equipment Directive (PED)

Our pressure gauges (SPG) conform to the European Standard EN 837-1 and are manufactured and tested according to appropriate requirements. Pressure gauges with a full scale value between 0.5 bar and 200 bar / 7.25 PSI and 2900 PSI come under "Good Engineering Practice" and must not carry a CE mark (section 3, paragraph 3).

Pressure gauges (SPG) with a full scale value of less than 0.5 bar / 7.25 PSI and loose diaphragm sealings do not come under the PED and must not carry a CE mark. Our pressure gauges (SPG) with a full scale value of > 200 bar / 2900 PSI receive a CE mark according to the conformity procedure.

The CE mark is attached to the outside of the housing (type designation plate).
We are not authorised to CE mark pressure gauges without a company name or a company logo.

Pressure Gauges ▪ Accessories

Single Station Gauge Isolator Valve
(refer to Catalogue 6 - STAUFF Valves)

Multi Station Gauge Isolator Valve
(refer to Catalogue 6 - STAUFF Valves)

Gauge Isolator Needle Valves
(refer to Catalogue 6 - STAUFF Valves)

Test Hoses - Gauge Adaptor
(refer to Catalogue 7 - STAUFF Test)

Gauge Adaptor
(refer to Catalogue 7 - STAUFF Test)

Direct Gauge Adaptor
(refer to Catalogue 7 - STAUFF Test)

Adjustable Gauge Fitting
(refer to Catalogue 7 - STAUFF Test)

Pressure Gauge (analogue) ▪ Type SPG

Pressure Gauge (Analogue) Type SPG (Stem Mounting)

Pressure Gauge (Analogue) Type SPG (Panel Mounting)

Product Description

Area of Application

- Mechanical pressure measurement

Features

- Suitable for hydraulic oil and gaseous media compatible with copper based alloys
- Available in nominal sizes 63 and 100 mm / 2.5 and 4 in
- Thread form: for BSPP (G1/4 and G1/2), NPT (1/4 NPT and 1/2 NPT), SAE (7/16–20 UNF)
- Stainless Steel (1.4301) housing
- Acrylic sight glass
- Glycerine filled
- Standard dual scales with pressure indication in bar and PSI
- U-bolt or flange mounting kit on request

Note: Contact STAUFF before you use SPG with other media.

Options

- Protective rubber cap
- Additional scale readings including personalisation
- U-bolt and flange mounting kits are available separately as spare parts

Technical Data

- Pressure gauge according to EN 837-1
- Subject to technical modifications

Accuracies

SPG-063:	1.6 (± 1.6 % FS* as per EN 837-1)
SPG-100:	1.0 (± 1.0 % FS* as per EN 837-1)

Permissible Temperatures

▪ Ambient:	-20 °C ... +60 °C / -4 °F ... +140 °F
▪ Media:	max. +60 °C / max. +140 °F

Protection Ratings

▪ IP 65:	for all manometer SPG-100 and SPG-063 > 16 bar / 232 PSI IP 65 protection rating: Dust tight and protected against water jets
▪ IP 54	for all manometer SPG-063 ≤ 16 bar / 232 PSI due to pressure compensation opening IP 54 protection rating: Dust protected and protected against splashing water

Order Codes

SPG	-	063	-	00160	-	01	-	P	-	B04	-	U
①		②		③		④		⑤		⑥		⑦

① Series and Type

Stainless Steel Pressure Gauge	**SPG**

② Size

Ø 63 mm, with G1/4 or 1/4 NPT connection	**063**

③ Pressure Ranges (only for type 01 - bar/PSI)

-1 ... 0 bar / -30 ... 0 in/Hg	**(-00001)-00000**
-1 ... 1.5 bar / -14.5 ... 21 PSI	**(-00001)-00001.5**
-1 ... 3 bar / -14.5 ... 43 PSI	**(-00001)-00003**
0 ... 1 bar / 0 ... 14 PSI	**00001**
0 ... 2.5 bar / 0 ... 36 PSI	**00002.5**
0 ... 3 bar / 0 ... 43 PSI	**00003**
0 ... 4 bar / 0 ... 58 PSI	**00004**
0 ... 6 bar / 0 ... 87 PSI	**00006**
0 ... 8 bar / 0 ... 116 PSI	**00008**
0 ... 10 bar / 0 ... 145 PSI	**00010**
0 ... 16 bar / 0 ... 232 PSI	**00016**
0 ... 25 bar / 0 ... 362 PSI	**00025**
0 ... 40 bar / 0 ... 580 PSI	**00040**
0 ... 60 bar / 0 ... 870 PSI	**00060**
0 ... 80 bar / 0 ... 1160 PSI	**00080**
0 ... 100 bar / 0 ... 1450 PSI	**00100**
0 ... 160 bar / 0 ... 2320 PSI	**00160**
0 ... 250 bar / 0 ... 3625 PSI	**00250**
0 ... 315 bar / 0 ... 4568 PSI	**00315**
0 ... 400 bar / 0 ... 5801 PSI	**00400**
0 ... 500 bar / 0 ... 7251 PSI	**00500**
0 ... 600 bar / 0 ... 8702 PSI	**00600**
0 ... 680 bar / 0 ... 9862 PSI	**00680**
0 ... 1000 bar / 0 ... 14503 PSI	**01000**
0 ... 1600 bar / 0 ... 23206 PSI	**01600**
0 ... 2500 bar / 0 ... 36259 PSI	**02500**
0 ... 4000 bar / 0 ... 58015 PSI	**04000**
0 ... 10000 bar / 0 ... 145037 PSI	**10000**
0 ... 25000 bar / 0 ... 362594 PSI	**25000**
0 ... 31500 bar / 0 ... 456868 PSI	**35000**
0 ... 50000 bar / 0 ... 725188 PSI	**50000**
0 ... 100000 bar / 0 ... 1450377 PSI	**100000**

Note: Additional Pressure Ranges available on request
Always refer to the pressure setting of the outside scale.

④ Styles of Scales

bar / PSI (bar outside/PSI inside - standard option)	**01**
bar	**02**
PSI	**03**
PSI / bar (PSI outside/ bar inside)	**05**
kPa / PSI (kPa outside/ PSI inside)	**10**
bar / inHg	**26**

Scale designator 01 - +/-ive BAR values and +/-ive PSI values specific to pressure and compound vacuum gauges. Only for vacuum gauges if PSI scale is all -ive value full scale then the unit will be indicated/replaced with in/Hg (inches/mercury)

⑤ Adaption

Stem mounting	**S**
Panel mounting	**P**

⑥ Process Connection

G1/4 (only SPG-063)	**B04**
G1/2 (only SPG-100)	**B08**
1/4 NPT (only SPG-063)	**N04**
1/2 NPT (only SPG-100)	**N08**
1/4 BSPT	**T04**
7/16–20 UNF (only SPG-063)	**U04**

Note: Others on request.

⑦ Accessories

No accessory	**(None)**
U-bolt assembly	**U**
Front flange assembly (for panel mount only)	**F**
Rear flange assembly	**R**
U-bolt and front flange assembly (for panel mount only)	**UF**
Protective rubber cap (for stem mount only)	**G**

⑧ Special Type (optional)

Safety Pattern Gauge (available on request) (Pressure gauge according to Safety series EN 837-1, Measuring system XrNi-steel, without glycerine) Ensure compliance with relevant standards in country of use.	**490179**

Pressure Gauge (analogue) ▪ Type SPG-063

SPG-063
Dual Scale - bar / PSI
1/4" BSPP Stem Mount

Ø 63mm

Item No.	Designation	Scale	Price
1910000635	SPG-063-(-00001)-00000-26-S-B04	bar / inHg	61.80
1910000380	SPG-063-(-00001)-00003-01-S-B04	bar / PSI / inHg	61.80
1910001316	SPG-063-00001-01-S-B04	bar / PSI	61.80
1910001049	SPG-063-00003-01-S-B04	bar / PSI	61.80
1910000730	SPG-063-00004-01-S-B04	bar / PSI	61.80
1910000636	SPG-063-00006-01-S-B04	bar / PSI	61.80
1910000381	SPG-063-00010-01-S-B04	bar / PSI	61.80
1910000382	SPG-063-00016-01-S-B04	bar / PSI	61.80
1910000383	SPG-063-00025-01-S-B04	bar / PSI	61.80
1910000384	SPG-063-00040-01-S-B04	bar / PSI	61.80
1910000385	SPG-063-00060-01-S-B04	bar / PSI	61.80
1910000386	SPG-063-00100-01-S-B04	bar / PSI	61.80
1910000387	SPG-063-00160-01-S-B04	bar / PSI	61.80
1910000388	SPG-063-00250-01-S-B04	bar / PSI	61.80
1910001002	SPG-063-00315-01-S-B04	bar / PSI	61.80
1910000389	SPG-063-00400-01-S-B04	bar / PSI	61.80
1910002352	SPG-063-00500-01-S-B04	bar / PSI	70.30
1910000390	SPG-063-00600-01-S-B04	bar / PSI	70.30
1910000391	SPG-063-00680-01-S-B04	bar / PSI	70.30
1910000393	SPG-063-01000-01-S-B04	bar / PSI	70.30

All Pressure Gauges have an internal thread for screw-in snubber, refer to page M11

SPG-063
Dual Scale - bar / PSI
1/4" BSPP Panel Mount with Bracket

Ø 63mm

Item No.	Designation	Scale	Price
1910001099	SPG-063-(-00001)-00000-26-P-B04-U	bar / inHg	78.75
1910000940	SPG-063-(-00001)-00003-01-P-B04-U	bar / PSI / inHg	78.75
1910001691	SPG-063-00006-01-P-B04-U	bar / PSI	78.75
1910000792	SPG-063-00010-01-P-B04-U	bar / PSI	78.75
1910000793	SPG-063-00016-01-P-B04-U	bar / PSI	78.75
1910000794	SPG-063-00025-01-P-B04-U	bar / PSI	78.75
1910000795	SPG-063-00040-01-P-B04-U	bar / PSI	78.75
1910000796	SPG-063-00060-01-P-B04-U	bar / PSI	78.75
1910000797	SPG-063-00100-01-P-B04-U	bar / PSI	78.75
1910000622	SPG-063-00160-01-P-B04-U	bar / PSI	78.75
1910000623	SPG-063-00250-01-P-B04-U	bar / PSI	78.75
1910001141	SPG-063-00315-01-P-B04-U	bar / PSI	78.75
1910000798	SPG-063-00400-01-P-B04-U	bar / PSI	78.75
1910002464	SPG-063-00500-01-P-B04-U	bar / PSI	82.90
1910001091	SPG-063-00600-01-P-B04-U	bar / PSI	82.90
1910001500	SPG-063-00680-01-P-B04-U	bar / PSI	82.90
1910001633	SPG-063-01000-01-P-B04-U	bar / PSI	85.65

Includes Panel Mount U-Bracket
All Pressure Gauges have an internal thread for screw-in snubber, refer to page M11

SPG-063
Dual Scale - kPa / PSI
1/4" BSPP Stem Mount

Ø 63mm

Item No.	Designation	Scale	Price
1910002072	SPG-063-(-00100)-00000-10-S-B04	kPa / inHg	64.65
1910002007	SPG-063-(-00100)-00300-10-S-B04	kPa / PSI / inHg	64.65
1910002008	SPG-063-00060-10-S-B04	kPa / PSI	64.65
1910002009	SPG-063-00100-10-S-B04	kPa / PSI	64.65
1910002010	SPG-063-00250-10-S-B04	kPa / PSI	64.65
1910002011	SPG-063-00600-10-S-B04	kPa / PSI	64.65
1910002012	SPG-063-01000-10-S-B04	kPa / PSI	64.65
1910002013	SPG-063-01600-10-S-B04	kPa / PSI	64.65
1910002014	SPG-063-02500-10-S-B04	kPa / PSI	64.65
1910002015	SPG-063-04000-10-S-B04	kPa / PSI	64.65
1910002016	SPG-063-10000-10-S-B04	kPa / PSI	64.65
1910002017	SPG-063-25000-10-S-B04	kPa / PSI	64.65
1910002018	SPG-063-31500-10-S-B04	kPa / PSI	64.65
1910002073	SPG-063-50000-10-S-B04	kPa / PSI	75.85
1910002232	SPG-063-100000-10-S-B04	kPa / PSI	75.85

All Pressure Gauges have an internal thread for screw-in snubber, refer to page M11

SPG-063
Dual Scale - kPa / PSI
1/4" BSPP Panel Mount with Bracket

Ø 63mm

Item No.	Designation	Scale	Price
1910002075	SPG-063-(-00100)-00000-10-P-B04-U	kPa / inHg	81.60
1910001603	SPG-063-(-00100)-00300-10-P-B04-U	kPa / PSI / inHg	81.60
1910002087	SPG-063-00060-10-P-B04-U	kPa / PSI	81.60
1910002077	SPG-063-00100-10-P-B04-U	kPa / PSI	81.60
1910002386	SPG-063-00250-10-P-B04-U	kPa / PSI	81.60
1910020102	SPG-063-00600-10-P-B04-U	kPa / PSI	81.60
1910002079	SPG-063-01000-10-P-B04-U	kPa / PSI	81.60
1910002091	SPG-063-01600-10-P-B04-U	kPa / PSI	81.60
1910002081	SPG-063-02500-10-P-B04-U	kPa / PSI	81.60
1910002083	SPG-063-04000-10-P-B04-U	kPa / PSI	81.60
1910002089	SPG-063-10000-10-P-B04-U	kPa / PSI	81.60
1910002093	SPG-063-31500-10-P-B04-U	kPa / PSI	81.60
1910002085	SPG-063-50000-10-P-B04-U	kPa / PSI	85.65
1910002095	SPG-063-100000-10-P-B04-U	kPa / PSI	85.65

Includes Panel Mount U-Bracket
All Pressure Gauges have an internal thread for screw-in snubber, refer to page M11

SPG-063
Dual Scale - bar / PSI
1/4" BSPT Stem Mount

Ø 63mm

Item No.	Designation	Scale	Price
1910003241	SPG-063-00002.5-01-S-T04	bar / PSI	67.45
1910003226	SPG-063-00003-01-S-T04	bar / PSI	67.45
1910003227	SPG-063-00004-01-S-T04	bar / PSI	67.45
1910003228	SPG-063-00006-01-S-T04	bar / PSI	67.45
1910003229	SPG-063-00008-01-S-T04	bar / PSI	67.45
1910000923	SPG-063-00010-01-S-T04	bar / PSI	67.45
1910000949	SPG-063-00016-01-S-T04	bar / PSI	67.45
1910001295	SPG-063-00025-01-S-T04	bar / PSI	67.45
1910002122	SPG-063-00040-01-S-T04	bar / PSI	67.45
1910020126	SPG-063-00060-01-S-T04	bar / PSI	67.45
1910003230	SPG-063-00080-01-S-T04	bar / PSI	67.45
1910000752	SPG-063-00100-01-S-T04	bar / PSI	67.45
1910000753	SPG-063-00250-01-S-T04	bar / PSI	67.45
1910003584	SPG-063-00315-01-S-T04	bar / PSI	67.45
1910000952	SPG-063-00400-01-S-T04	bar / PSI	67.45

All Pressure Gauges have an internal thread for screw-in snubber, refer to page M11

SPG-063
Dual Scale - bar / PSI
1/4" BSPT Panel Mount with Bracket

Ø 63mm

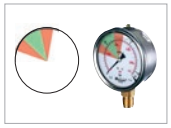
Item No.	Designation	Scale	Price
1910002233	SPG-063-00100-01-P-T04-U	bar / PSI	74.35
1910000954	SPG-063-00400-01-P-T04-U	bar / PSI	84.30

Includes Panel Mount U-Bracket
All Pressure Gauges have an internal thread for screw-in snubber, refer to page M11

Pressure Gauge Accessories

Refer to page M11

Gauge Protector



Operating Range Indicator Sticker

Gauge Saver

Gauge Swivel Adaptors

STAUFF

STAUFF Diagtronics

Pressure Gauge (analogue) ▪ Type SPG -100

Order Codes

SPG - 100 - 00160 - 01 - P - B08

① ② ③ ④ ⑤ ⑥

① Series and Type

Stainless Steel Pressure Gauge	**SPG**

② Size

Ø 100 mm, with G1/2 or 1/2 NPT connection	**100**

③ Pressure Ranges (only for type 01 - bar/PSI)

-1 ... 1.5 bar / -14.5 ... 21 PSI	**(-00001)-(00001.5)**
-1 ... 3 bar / -14.5 ... 43 PSI	**(-00001)-00003**
0 ... 6 bar / 0 ... 87 PSI	**00006**
0 ... 10 bar / 0 ... 145 PSI	**00010**
0 ... 16 bar / 0 ... 232 PSI	**00016**
0 ... 25 bar / 0 ... 362 PSI	**00025**
0 ... 40 bar / 0 ... 580 PSI	**00040**
0 ... 60 bar / 0 ... 870 PSI	**00060**
0 ... 80 bar / 0 ... 1160 PSI	**00080**
0 ... 100 bar / 0 ... 1450 PSI	**00100**
0 ... 160 bar / 0 ... 2320 PSI	**00160**
0 ... 250 bar / 0 ... 3625 PSI	**00250**
0 ... 315 bar / 0 ... 4568 PSI	**00315**
0 ... 400 bar / 0 ... 5801 PSI	**00400**
0 ... 600 bar / 0 ... 8702 PSI	**00600**
0 ... 680 bar / 0 ... 9862 PSI	**00680**
0 ... 700 bar / 0 ... 10152 PSI	**00700**
0 ... 1000 bar / 0 ... 14503 PSI	**01000**

Note: Additional Pressure Ranges available on request
Always refer to the pressure setting of the outside scale.

④ Styles of Scales

bar / PSI (bar outside/PSI inside - standard option)	**01**
bar	**02**
PSI	**03**
PSI / bar (PSI outside/ bar inside)	**05**
kPa / PSI (kPa outside/ PSI inside)	**10**

Scale designator 01 - +/-ive BAR values and +/-ive PSI values specific to pressure and compound vacuum gauges. Only for vacuum gauges if PSI scale is all -ive value full scale then the unit will be indicated/replaced with in/Hg (inches/mercury)

⑤ Adaption

Stem mounting	**S**
Panel mounting	**P**

⑥ Process Connection

G1/4 (only SPG-063)	**B04**
G1/2 (only SPG-100)	**B08**
1/4 NPT (only SPG-063)	**N04**
1/2 NPT (only SPG-100)	**N08**
1/4 BSPT	**T04**
7/16–20 UNF (only SPG-063)	**U04**

⑦ Accessories

No accessory	**(None)**
U-bolt assembly	**U**
Front flange assembly (for panel mount only)	**F**
Rear flange assembly	**R**
U-bolt and front flange assembly (for panel mount only)	**UF**
Protective rubber cap (for stem mount only)	**G**

SPG-100
Dual Scale - bar / PSI
1/2" BSPP Stem Mount

Ø 100mm

Item No.	Designation	Scale	Price
1910000403	SPG-100-(-00001)-00003-01-S-B08	bar / PSI / inHg	186.75
1910000633	SPG-100-00006-01-S-B08	bar / PSI	186.75
1910000404	SPG-100-00010-01-S-B08	bar / PSI	186.75
1910000727	SPG-100-00016-01-S-B08	bar / PSI	186.75
1910000627	SPG-100-00025-01-S-B08	bar / PSI	186.75
1910000405	SPG-100-00040-01-S-B08	bar / PSI	186.75
1910000406	SPG-100-00060-01-S-B08	bar / PSI	186.75
1910000407	SPG-100-00100-01-S-B08	bar / PSI	186.75
1910000408	SPG-100-00160-01-S-B08	bar / PSI	186.75
1910000409	SPG-100-00250-01-S-B08	bar / PSI	186.75
1910001576	SPG-100-00315-01-S-B08	bar / PSI	186.75
1910000410	SPG-100-00400-01-S-B08	bar / PSI	186.75
1910000411	SPG-100-00600-01-S-B08	bar / PSI	196.05
1910001264	SPG-100-00680-01-S-B08	bar / PSI	196.05
1910000858	SPG-100-00700-01-S-B08	bar / PSI	196.05
1910000744	SPG-100-01000-01-S-B08	bar / PSI	210.70

All Pressure Gauges have an internal thread for screw-in snubber, refer to page M11

SPG-100
Dual Scale - bar / PSI
1/2" BSPP Panel Mount without Bracket

Ø 100mm

Item No.	Designation	Scale	Price
1910001086	SPG-100-00001-00003-01-P-B08	bar / PSI / inHg	203.40
1910000815	SPG-100-00006-01-P-B08	bar / PSI	203.40
1910000725	SPG-100-00010-01-P-B08	bar / PSI	203.40
1910000818	SPG-100-00016-01-P-B08	bar / PSI	203.40
1910000724	SPG-100-00025-01-P-B08	bar / PSI	203.40
1910000412	SPG-100-00040-01-P-B08	bar / PSI	203.40
1910000413	SPG-100-00060-01-P-B08	bar / PSI	203.40
1910001015	SPG-100-00080-01-P-B08	bar / PSI	203.40
1910000677	SPG-100-00100-01-P-B08	bar / PSI	203.40
1910000723	SPG-100-00160-01-P-B08	bar / PSI	203.40
1910000565	SPG-100-00250-01-P-B08	bar / PSI	203.40
1910000414	SPG-100-00315-01-P-B08	bar / PSI	203.40
1910000415	SPG-100-00400-01-P-B08	bar / PSI	203.40
1910000722	SPG-100-00600-01-P-B08	bar / PSI	210.70
1910000997	SPG-100-00700-01-P-B08	bar / PSI	210.70
1910000819	SPG-100-01000-01-P-B08	bar / PSI	224.60

All Pressure Gauges have an internal thread for screw-in snubber, refer to page M11

Specialised Pressure Gauges

Mining Preferred Pressure gauge
Dual Scale - BAR/PSI
1/4" BSPT Panel Mount with Bracket

Item No.	Designation	Price
1910021595	SPG-050-00600-01-S-FIT-W69	176.25

Quadrigauge
Multiple Pressure gauge Unit
Connection: 1/8 NPT (F) - 300mm Hose Length

Item No.	Designation	Price
1810011487	SQG-001-36	1341.20

1 & 2. Vacuum - 30 Hg / Low Pressure Range 0-150 PSI (10 kg/cm²)
3. Med. Pressure Range 0-600 PSI (40 kg/cm²)
4. High Pressure Range 0-5000 PSI (350 kg/cm²)

Pressure Gauge Accessories ▪ Type SPG

Front Flange Assembly for Panel Mounting

Item No.	Designation	Diameter	Price
1910003446	SPG-063-F-W	63mm	14.25
1910000417	SPG-100-F-W	100mm	21.25

Panel Mount Assembly for Panel Mounting

Item No.	Designation	Diameter	Price
1910003878	SPG-063-U-W-W4	63mm	14.85
1910000419	SPG-100-U-W	100mm	16.95

Gauge Protector Type SPG-063 Gauges

Item No.	Designation	Diameter	Price
1230001564	SPG-063-G-BK	63mm	19.80
1910002066	SPG-100-G-BK	100mm	84.30

Operating Range Indicator Sticker

Item No.	Designation	Diameter	Price
1830000067	Label-SPG-063-TL-RV-N	63mm	12.35
1830000066	Label-SPG-100-TL-RV-N	100mm	16.40

Colour-coded self-adhesive sticker that can be placed on the desired position to permanently indicate if the system is within the approved or desired operating parameters. The colour coding allows any workplace personnel to quickly evaluate system pressure through colour indication and not by scale or technical knowledge of each and every system on-site.

Operating Range Indicator Stickers reduce the potential for continuous overpressure situations that can lead to system failure, possibly serious injury, or difficult-to-recognise low-pressure operation, which reduces production efficiency.

Visibly effective in areas where lighting is dim in factory/plant environments.

Snubber Type SPG-063 and SPG-100 Gauges

Item No.	Designation	Oriffice Ø	Thread Ø	Price
1910020785	SPG-063-O-0.5-W	0.5 mm	3.5 mm	2.25
1910020788	SPG-100-O-0.6-W	0.6 mm	4.0 mm	2.45

Note: The purpose of the snubber is to dampen oscillations and therefore provide a steady reading and protection for gauges. For installation, use a small instrument screwdriver (1 mm) to screw the snubber into the internal thread in the gauge connection port.

SMM-GSB Gauge Saver - Brass

Item No.	Designation	Thread	Max. Pressure	Price
1830000055	SMM-GSB-14-BSP	1/4" BSPP	138 bar	230.55
1830000056	SMM-GSB-38-BSP	3/8" BSPP	138 bar	230.55
1830000058	SMM-GSB-12-BSP	1/2" BSPP	138 bar	250.40

SWS-A1 Gauge Isolator Needle Valve (Single Station - In-line Version)

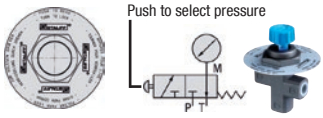
Item No.	Designation	Thread	Price
3404000433	SWS-A1-G04/B04	G1/4" BSPP / 1/4" BSPT	103.05

Refer to Section L - STAUFF Test for Test Hose & Adaptors

SWS-A2 Gauge Isolator Needle Valve (Single Station - 90° Version)

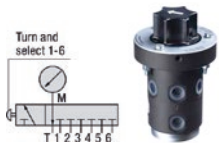
Item No.	Designation	Thread	Price
3404000434	SWS-A2-G04/B04	G1/4" BSPP / 1/4" BSPT	103.00

Refer to Section L - STAUFF Test for Test Hose & Adaptors



SWS-S1 Gauge Isolator Valve (Single Station)

Item No.	Designation	Thread	Price
1910000479	SWS-S1-G04	G1/4" BSPP	122.05



SWS-M Gauge Isolator Valve (Multi Station)

Item No.	Designation	Thread	Price
1910000480	SWS-M-G04	G1/4" BSPP	422.40

Mounting Bores (Ø 6mm / .24in)	
A	3 Bores, equally spaced (120°) BCD Ø 65mm / 2.56in
B	3 Bores, equally spaced (120°) BCD Ø 65mm / 2.56in
Connections (G1/4 BSPP)	
P	6 Bores, equally spaced (60°)
M	1 Bore (Pressure gauge port)
T	1 Bore (Tank line)

Gauge Swivel Adaptors with O-Ring Seal Designed working pressure: 400 bar

Item No.	Designation	M Thread	F Thread	Price
1910021222	ADP-GC-T02/G02-MF-W66A	1/8" BSPT	1/8" BSPP	25.85
1910021217	ADP-GC-T02/G04-MF-W66A	1/8" BSPT	1/4" BSPP	23.20
1910020936	ADP-GC-T04/G04-MF-W66A	1/4" BSPT	1/4" BSPP	23.20
1910020962	ADP-GC-T08/G04-MF-W66A	1/2" BSPT	1/4" BSPP	24.55
1910021216	ADP-GC-T04/G08-MF-W66A	1/4" BSPT	1/2" BSPP	31.30
1910020963	ADP-GC-T08/G08-MF-W66A	1/2" BSPT	1/2" BSPP	42.05
1910021215	ADP-GC-G04/G08-MF-W66A	1/4" BSPP	1/2" BSPP	32.60
1910021219	ADP-GC-N04/G04-MF-W66A	1/4" NPT	1/4" BSPP	27.25

Pressure Test Kit (analogue) ▪ Type SMB-20-063

Pressure test kit (analogue) with SPG-063 (3x)

Product Description

In addition to the individual SPG gauges, the STAUFF Pressure Gauges are also available as part of a pressure test kit.

The SMB Pressure Test Kits are assembled in various versions, in accordance with customer requirements. All pressure test kits are supplied in a handy case with custom-designed foam inserts.

Custom kits available upon request. Contact STAUFF for more information.

Components

Standard Option SMB-20

- Pressure Gauge SPG-063
- Test Hose (2 m / 6.56 ft), M16 x 2, pressure-resistant 600 bar (8702 PSI) SMS-20-2000-B-W3
- Adaptor SDA (G1/4 to M16 x 2) SDA-20-G1/4-W3
- Hose Connector SSV-20-W3
- Test Coupling SMK-20-G1/4-B-C-W3
- Test Coupling SMK-20-M10x1-B-A-W3
- Thread Adaptor SRS-20-G3/8-B-W3
- Thread Adaptor SRS-20-G1/2-B-W

Quantity of components vary depending on the number of gauges

Order Codes - SMB-20 (SPG-063 Gauge)

SMB-20 - **3** - **010/060/100** - **W3**

① ② ③ ④

① Series and Type

Pressure Test Kit, analogue (STAUFF Test 20)	**SMB-20**

② Number of Pressure Gauges

1 pressure gauge SPG-063	**1**
2 pressure gauges SPG-063	**2**
3 pressure gauges SPG-063	**3**
4 pressure gauges SPG-063	**4**
5 pressure gauges SPG-063	**5**

③ Pressure Ranges

-1 ... 3 bar / -14.5 ... 43 PSI	**(-1)-003**
0 ... 4 bar / 0 ... 58 PSI	**00004**
0 ... 10 bar / 0 ... 145 PSI	**010**
0 ... 16 bar / 0 ... 232 PSI	**016**
0 ... 25 bar / 0 ... 362 PSI	**025**
0 ... 40 bar / 0 ... 580 PSI	**040**
0 ... 60 bar / 0 ... 870 PSI	**060**
0 ... 100 bar / 0 ... 1450 PSI	**100**
0 ... 160 bar / 0 ... 2320 PSI	**160**
0 ... 250 bar / 0 ... 3625 PSI	**250**
0 ... 400 bar / 0 ... 5801 PSI	**400**
0 ... 600 bar / 0 ... 8702 PSI	**600**

Note: Indicate pressure ranges in bar.
Order of gauges must be written lowest to highest pressure.

For one pressure gauge eg. 010
For two pressure gauges eg. 016/250
For three pressure gauges eg. 025/160/400
For four pressure gauges eg. 025/100/250/400
For five pressure gauges eg. 016/100/250/400/600

④ Material Surface

Steel, zinc/nickel-plated	**W3**

Optional

Certificate of accuracy is available on request, contact STAUFF for more information.

Pressure Test Kit (analogue) ▪ Type SMB-20

SMB-20-1
1 Gauge Test Kit

Item No.	Designation	Price
1210026895	SMB-20-1-010-W3	492.80
1210021538	SMB-20-1-016-W3	492.80
6100093171	SMB-20-1-025-W3	492.80
6100064334	SMB-20-1-040-W3	492.80
1210026903	SMB-20-1-060-W3	492.80
6100000854	SMB-20-1-100-W3	492.80
1210026896	SMB-20-1-160-W3	492.80
1210026897	SMB-20-1-250-W3	492.80
1210026900	SMB-20-1-400-W3	492.80
1210026902	SMB-20-1-600-W3	501.30

Other gauge combinations available on request, contact STAUFF for more information.

SMB-20-2
2 Gauge Test Kit

Item No.	Designation	Price
6100056151	SMB-20-2-(-1)-003/010-W3	554.60
6100244720	SMB-20-2-(-1)-003/025-W3	554.60
6100048717	SMB-20-2-010/010-W3	554.60
1210023578	SMB-20-2-010/016-W3	554.60
1210026907	SMB-20-2-010/040-W3	554.60
1210026908	SMB-20-2-010/060-W3	554.60
6100061556	SMB-20-2-010/160-W3	554.60
1210026905	SMB-20-2-010/250-W3	554.60
1210026906	SMB-20-2-010/400-W3	554.60
1210023798	SMB-20-2-010/600-W3	563.10
1210023117	SMB-20-2-016/100-W3	554.60
1210026915	SMB-20-2-016/250-W3	554.60
1210021903	SMB-20-2-016/400-W3	554.60
1210026922	SMB-20-2-025/025-W3	554.60
1210026924	SMB-20-2-025/040-W3	554.60
1210022926	SMB-20-2-025/060-W3	554.60
1210026920	SMB-20-2-025/100-W3	554.60
1210025298	SMB-20-2-025/160-W3	554.60
1210026921	SMB-20-2-025/250-W3	554.60
1210026923	SMB-20-2-025/400-W3	554.60
1210026931	SMB-20-2-040/040-W3	554.60
6100064716	SMB-20-2-040/060-W3	554.60
1210026928	SMB-20-2-040/160-W3	554.60
1210026929	SMB-20-2-040/250-W3	554.60
1210026930	SMB-20-2-040/400-W3	554.60
1210026932	SMB-20-2-040/600-W3	563.10
1210026939	SMB-20-2-060/060-W3	554.60
1210026935	SMB-20-2-060/160-W3	554.60
1210026936	SMB-20-2-060/250-W3	554.60
1210026937	SMB-20-2-060/400-W3	554.60
1210026938	SMB-20-2-060/600-W3	563.10
1210026909	SMB-20-2-100/100-W3	554.60
1210026910	SMB-20-2-100/160-W3	554.60
1210026911	SMB-20-2-100/250-W3	554.60
1210026912	SMB-20-2-100/400-W3	554.60
1210026916	SMB-20-2-160/160-W3	554.60
1210026917	SMB-20-2-160/250-W3	554.60
1210026918	SMB-20-2-160/400-W3	554.60
1210026919	SMB-20-2-160/600-W3	563.10
1210026925	SMB-20-2-250/250-W3	554.60
1210026214	SMB-20-2-250/400-W3	554.60
1210026926	SMB-20-2-250/600-W3	563.10
1210026933	SMB-20-2-400/400-W3	554.60
1210026934	SMB-20-2-400/600-W3	563.10
1210026940	SMB-20-2-600/600-W3	571.60

Other gauge combinations available on request, contact STAUFF for more information.

SMB-20-3
3 Gauge Test Kit

Item No.	Designation	Price
6100186796	SMB-20-3-004/010/040-W3	828.10
6100236440	SMB-20-3-(-1)-003/003/010-W3	828.10
1210023910	SMB-20-3-(-1)-003/010/160-W3	828.10
6100087423	SMB-20-3-(-1)-003/025/250-W3	828.10
6100048819	SMB-20-3-(-1)-003/040/250-W3	828.10
6100075317	SMB-20-3-(-1)-003/160/400-W3	828.10
1210002936	SMB-20-3-010/010/010-W3	828.10
1210024313	SMB-20-3-010/016/250-W3	828.10
6100043684	SMB-20-3-010/025/400-W3	828.10
1210023963	SMB-20-3-010/060/100-W3	828.10
6100018737	SMB-20-3-010/060/600-W3	836.60
1210024715	SMB-20-3-010/160/160-W3	828.10
6100061554	SMB-20-3-010/160/400-W3	828.10
1210022676	SMB-20-3-016/016/016-W3	828.10
6100088128	SMB-20-3-016/060/250-W3	828.10
1210024419	SMB-20-3-016/100/400-W3	828.10
1210024512	SMB-20-3-016/100/600-W3	836.60
1210024151	SMB-20-3-016/160/400-W3	828.10
6100006991	SMB-20-3-016/250/400-W3	828.10
6100184530	SMB-20-3-025/060/250-W3	828.10
1210024163	SMB-20-3-025/100/400-W3	828.10
1210023618	SMB-20-3-025/160/400-W3	828.10
1210023571	SMB-20-3-025/250/250-W3	828.10
1210024422	SMB-20-3-025/250/400-W3	828.10
1210024301	SMB-20-3-025/250/600-W3	836.60
1210024215	SMB-20-3-040/040/040-W3	828.10
1210024595	SMB-20-3-040/060/100-W3	828.10
1210024464	SMB-20-3-040/100/250-W3	828.10
1210023674	SMB-20-3-040/100/400-W3	828.10
6100024411	SMB-20-3-040/160/400-W3	828.10
1210024222	SMB-20-3-040/250/400-W3	828.10
1210023599	SMB-20-3-040/250/600-W3	836.60
6100076505	SMB-20-3-040/400/400-W3	828.10
6100067741	SMB-20-3-040/400/600-W3	836.60
6100025373	SMB-20-3-060/100/250-W3	828.10
6100055793	SMB-20-3-060/100/400-W3	828.10
1210024149	SMB-20-3-060/100/600-W3	836.60
6100085783	SMB-20-3-060/160/250-W3	828.10
6100160710	SMB-20-3-060/160/600-W3	836.60
1210024590	SMB-20-3-060/250/250-W3	828.10
6100026341	SMB-20-3-060/250/400-W3	828.10
1210024036	SMB-20-3-060/250/600-W3	836.60
1210024551	SMB-20-3-060/400/400-W3	828.10
6100051692	SMB-20-3-060/600/600-W3	845.10
6100048098	SMB-20-3-100/160/160-W3	828.10
1210023676	SMB-20-3-100/250/400-W3	828.10
1210024926	SMB-20-3-100/250/600-W3	836.60
1210024865	SMB-20-3-100/400/400-W3	828.10
6100045286	SMB-20-3-100/400/600-W3	836.60
6100023824	SMB-20-3-100/600/600-W3	845.10
1210023874	SMB-20-3-160/160/160-W3	828.10
6100039431	SMB-20-3-160/250/250-W3	828.10
6100008102	SMB-20-3-160/250/400-W3	828.10
6100134026	SMB-20-3-160/250/600-W3	836.60
1210021879	SMB-20-3-160/400/600-W3	836.60
1210023783	SMB-20-3-250/250/250-W3	828.10
1210024431	SMB-20-3-250/250/400-W3	828.10
1210024593	SMB-20-3-250/400/400-W3	828.10
6100034413	SMB-20-3-250/400/600-W3	836.60
1210026943	SMB-20-3-400/400/400-W3	828.10
6100162127	SMB-20-3-400/600/600-W3	845.10
6100000853	SMB-20-3-600/600/600-W3	853.60

Other gauge combinations available on request, contact STAUFF for more information.

STAUFF®

Pressure Test Kit (analogue) ▪ Type SMB-20

SMB-20-4
4 Gauge Test Kit

Item No.	Designation	Price
6100201844	SMB-20-4-(-1)-003/010/040/100-W3	745.95
6100201845	SMB-20-4-(-1)-003/010/160/250-W3	745.95
6100201846	SMB-20-4-(-1)-003/025/100/250-W3	745.95
6100201847	SMB-20-4-(-1)-003/040/100/250-W3	745.95
1210026946	SMB-20-4-(-1)-003/040/250/600-W3	754.45
6100201848	SMB-20-4-(-1)-003/160/250/400-W3	745.95
1210026947	SMB-20-4-006/040/250/600-W3	754.45
6100201849	SMB-20-4-010/010/010/010-W3	745.95
6100201850	SMB-20-4-010/016/250/400-W3	745.95
6100201851	SMB-20-4-010/025/160/400-W3	745.95
6100201852	SMB-20-4-010/060/100/250-W3	745.95
6100201853	SMB-20-4-010/060/160/600-W3	754.45
6100201854	SMB-20-4-010/160/160/250-W3	745.95
6100201855	SMB-20-4-010/160/400/600-W3	754.45
6100201856	SMB-20-4-016/016/016/100-W3	745.95
6100201857	SMB-20-4-016/060/250/400-W3	745.95
6100201861	SMB-20-4-016/060/250/600-W3	754.45
6100201858	SMB-20-4-016/100/250/400-W3	745.95
6100201859	SMB-20-4-016/100/400/600-W3	754.45
6100201860	SMB-20-4-016/160/250/400-W3	745.95
6100201863	SMB-20-4-025/060/250/400-W3	745.95
6100201862	SMB-20-4-025/100/250/400-W3	745.95
6100201865	SMB-20-4-025/160/250/400-W3	745.95
6100201864	SMB-20-4-025/250/250/400-W3	745.95
6100201866	SMB-20-4-025/250/400/600-W3	754.45
6100201867	SMB-20-4-040/040/040/100-W3	745.95
6100201868	SMB-20-4-040/060/100/250-W3	745.95
6100201869	SMB-20-4-040/100/250/400-W3	745.95
6100201873	SMB-20-4-040/100/250/600-W3	754.45
6100201870	SMB-20-4-040/100/400/600-W3	754.45
6100201871	SMB-20-4-040/160/400/600-W3	754.45
6100201875	SMB-20-4-040/250/400/600-W3	754.45
6100201874	SMB-20-4-040/400/400/600-W3	754.45
6100201878	SMB-20-4-060/100/250/400-W3	745.95
6100201876	SMB-20-4-060/100/250/600-W3	754.45
6100201877	SMB-20-4-060/100/400/600-W3	754.45
6100239469	SMB-20-4-060/160/250/250-W3	745.95
6100201879	SMB-20-4-060/160/250/400-W3	745.95
6100201882	SMB-20-4-060/160/250/600-W3	754.45
6100201843	SMB-20-4-060/160/400/600-W3	754.45
6100201880	SMB-20-4-060/250/250/600-W3	754.45
6100201881	SMB-20-4-060/250/400/600-W3	754.45
6100201883	SMB-20-4-060/400/400/600-W3	754.45
6100201884	SMB-20-4-060/400/600/600-W3	762.95
6100201888	SMB-20-4-100/100/400/400-W3	745.95
6100201885	SMB-20-4-100/160/160/250-W3	745.95
6100201887	SMB-20-4-100/250/250/600-W3	754.45
6100201886	SMB-20-4-100/250/400/400-W3	745.95
6100201889	SMB-20-4-100/250/400/600-W3	754.45
6100201890	SMB-20-4-100/250/600/600-W3	762.95
6100201891	SMB-20-4-160/160/160/160-W3	745.95
6100201892	SMB-20-4-160/250/250/400-W3	745.95
6100201893	SMB-20-4-160/250/400/600-W3	754.45
6100201894	SMB-20-4-250/250/250/250-W3	745.95
6100201895	SMB-20-4-250/250/400/600-W3	754.45
6100201896	SMB-20-4-250/400/400/600-W3	754.45
6100201897	SMB-20-4-250/400/600/600-W3	762.95
6100201898	SMB-20-4-400/400/400/400-W3	745.95
6100201899	SMB-20-4-600/600/600/600-W3	779.95

Other gauge combinations available on request, contact STAUFF for more information.

SMB-20-5
5 Gauge Test Kit

Item No.	Designation	Price
6100201901	SMB-20-5-(-1)-003/010/040/100/160-W3	807.05
6100201902	SMB-20-5-(-1)-003/010/060/160/250-W3	807.05
6100201903	SMB-20-5-(-1)-003/025/060/100/250-W3	807.05
6100201904	SMB-20-5-(-1)-003/040/100/160/250-W3	807.05
6100201905	SMB-20-5-(-1)-003/060/160/250/400-W3	807.05
6100006709	SMB-20-5-003/025/160/400/400-W3	807.05
6100201906	SMB-20-5-010/010/010/010/010-W3	807.05
6100201907	SMB-20-5-010/016/100/250/400-W3	807.05
6100201908	SMB-20-5-010/025/060/160/400-W3	807.05
6100201909	SMB-20-5-010/060/100/250/400-W3	807.05
6100201910	SMB-20-5-010/060/160/400/600-W3	815.55
6100201911	SMB-20-5-010/160/160/250/250-W3	807.05
6100201912	SMB-20-5-010/160/250/400/600-W3	815.55
6100201913	SMB-20-5-016/016/016/100/250-W3	807.05
6100201914	SMB-20-5-016/060/100/250/400-W3	807.05
6100201917	SMB-20-5-016/060/250/400/600-W3	815.55
6100201915	SMB-20-5-016/100/250/400/600-W3	815.55
6100201916	SMB-20-5-016/160/250/400/600-W3	815.55
6100201919	SMB-20-5-025/060/250/400/600-W3	815.55
6100201918	SMB-20-5-025/100/250/400/600-W3	815.55
6100201921	SMB-20-5-025/160/250/400/600-W3	815.55
6100201920	SMB-20-5-025/250/250/400/600-W3	815.55
6100185118	SMB-20-5-040/040/040/040/040-W3	807.05
6100201922	SMB-20-5-040/040/040/100/160-W3	807.05
6100201923	SMB-20-5-040/060/100/250/400-W3	807.05
6100201924	SMB-20-5-040/100/250/400/600-W3	815.55
6100201925	SMB-20-5-040/160/250/400/600-W3	815.55
6100201929	SMB-20-5-060/100/250/250/600-W3	815.55
6100201927	SMB-20-5-060/100/250/400/400-W3	807.05
6100201926	SMB-20-5-060/100/250/400/600-W3	815.55
6100201900	SMB-20-5-060/160/250/400/600-W3	815.55
6100201932	SMB-20-5-100/100/400/400/600-W3	815.55
6100201930	SMB-20-5-100/160/160/250/400-W3	807.05
6100201931	SMB-20-5-100/250/250/400/400-W3	807.05
6100201933	SMB-20-5-160/160/160/160/160-W3	807.05
6100201934	SMB-20-5-160/250/250/400/600-W3	815.55
6100201935	SMB-20-5-250/250/250/250/250-W3	807.05
6100201936	SMB-20-5-250/250/400/400/600-W3	815.55
6100201937	SMB-20-5-250/250/400/600/600-W3	824.05
6100201938	SMB-20-5-400/400/400/400/400-W3	807.05
6100201939	SMB-20-5-600/600/600/600/600-W3	849.55

Other gauge combinations available on request, contact STAUFF for more information.

Pressure Test Kit (analogue) ▪ Type SMB-20/100

Pressure test kit (analogue) with SPG-100 (1x)

Product Description

In addition to the individual SPG gauges, the STAUFF Pressure Gauges are also available as part of a pressure test kit.

The SMB Pressure Test Kits are assembled in various versions, in accordance with customer requirements. All pressure test kits are supplied in a handy case with custom-designed foam inserts.

Custom kits available upon request. Contact STAUFF for more information.

Components

Standard Option SMB-20

- Pressure Gauge SPG-100
- Test Hose (2 m / 6.56 ft), M16 x 2, pressure-resistant 600 bar (8702 PSI) SMS-20-2000-B-W3
- Adaptor SMA-20-G1/2-W3
- Hose Connector SSV-20-W3
- Test Coupling SMK-20-G1/4-B-C-W3
- Test Coupling SMK-20-M10x1-B-A-W3
- Thread Adaptor SRS-20-G3/8-B-W3
- Thread Adaptor SRS-20-G1/2-B-W3

Order Codes - SMB-20 (SPG-100 Gauge)

SMB-20	/100-1	-	025	-	W3
①	②		③		④

① Series and Type

Pressure Test Kit, analogue (STAUFF Test 20)	**SMB-20**

② Number of Pressure Gauges

1 pressure gauge SPG-100	**/100-1**

③ Pressure Ranges

0 ... 6 bar / 0 ... 87 PSI	**006**
0 ... 10 bar / 0 ... 145 PSI	**010**
0 ... 16 bar / 0 ... 232 PSI	**016**
0 ... 25 bar / 0 ... 362 PSI	**025**
0 ... 40 bar / 0 ... 580 PSI	**040**
0 ... 60 bar / 0 ... 870 PSI	**060**
0 ... 100 bar / 0 ... 1450 PSI	**100**
0 ... 160 bar / 0 ... 2320 PSI	**160**
0 ... 250 bar / 0 ... 3625 PSI	**250**
0 ... 315 bar / 0 ... 4568 PSI	**315**
0 ... 400 bar / 0 ... 5801 PSI	**400**
0 ... 600 bar / 0 ... 8702 PSI	**600**

④ Material Surface

Steel, zinc/nickel plated	**W3**

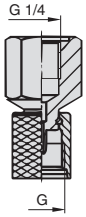
Optional

Certificate of accuracy is available on request, contact STAUFF for more information.

SMB-20/100-1
Test Kit

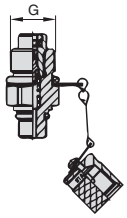
Item No.	Designation	Price
6100109681	SMB-20/100-1-006-W3	582.10
6100109682	SMB-20/100-1-010-W3	582.10
6100109683	SMB-20/100-1-016-W3	582.10
6100109684	SMB-20/100-1-025-W3	582.10
6100109688	SMB-20/100-1-040-W3	582.10
6100109689	SMB-20/100-1-060-W3	582.10
6100109690	SMB-20/100-1-100-W3	582.10
6100106607	SMB-20/100-1-160-W3	582.10
6100109691	SMB-20/100-1-250-W3	582.10
6100109692	SMB-20/100-1-315-W3	582.10
1210023972	SMB-20/100-1-400-W3	582.10
1210026944	SMB-20/100-1-600-W3	591.40

Accessories (Connection Adaptors)



SDA adaptor
Connects the pressure gauge to a Test Coupling

SAD adaptor
Only in conjunction with the SDA-20-G1/4-W3 adaptor, connects to other Test Coupling sizes



Test Coupling
STAUFF Test or comparable

Adaptor	Adaption from	to Dimension G
SDA-20-G1/4-W3	G1/4	M16 x 2
SAD-20/15-B-W3	M16 x 2	M16 x 1.5
SAD-20/12-B-W3	M16 x 2	S12.65 x 1.5
SAD-20/10-B-W3	M16 x 2	Plug-in system

Pressure Test Kit (analogue) ▪ Type SMBM-20
Metal Case

Pressure test kit (analogue) with SPG-063 (3x)

Product Description

In addition to the individual SPG gauges, the STAUFF Pressure Gauges are also available as part of a pressure test kit.

The SMBM Pressure Test Kits are assembled in various versions, in accordance with customer requirements. All pressure test kits are supplied in a Metal case. Custom kits available upon request. Contact STAUFF for more information.

Components

Standard Option SMBM-20

- Pressure Gauge SPG-063
- Test Hose (2 m / 6.56 ft), M16 x 2, pressure-resistant 600 bar (8702 PSI) SMS-20-2000-B-W3
- Adaptor SMA-20-G1/4-B-OR-W3

Quantity of components vary depending on the number of gauges

Order Codes - SMBM-20 (SPG-063 Gauge)

SMBM-20	-	3	-	010/060/100	-	W3
①		②		③		④

① Series and Type

Pressure Test Kit, analogue (STAUFF Test 20)	**SMBM-20**

② Number of Pressure Gauges

2 pressure gauges SPG-063	**2**
3 pressure gauges SPG-063	**3**
4 pressure gauges SPG-063	**4**
5 pressure gauges SPG-063	**5**
6 pressure gauges SPG-063	**6**

③ Pressure Ranges

-1 ... 3 bar / -14.5 ... 43 PSI	**(-1)-003**
0 ... 10 bar / 0 ... 145 PSI	**010**
0 ... 16 bar / 0 ... 232 PSI	**016**
0 ... 25 bar / 0 ... 362 PSI	**025**
0 ... 40 bar / 0 ... 580 PSI	**040**
0 ... 60 bar / 0 ... 870 PSI	**060**
0 ... 100 bar / 0 ... 1450 PSI	**100**
0 ... 160 bar / 0 ... 2320 PSI	**160**
0 ... 250 bar / 0 ... 3625 PSI	**250**
0 ... 400 bar / 0 ... 5801 PSI	**400**
0 ... 600 bar / 0 ... 8702 PSI	**600**

Note: Indicate pressure ranges in bar.
Order of gauges must be written lowest to highest pressure.

For two pressure gauges eg. 016/250
For three pressure gauges eg. 025/160/400
For four pressure gauges eg. 025/100/250/400
For five pressure gauges eg. 016/100/250/400/600

④ Material Surface

Steel, zinc/nickel plated	**W3**

Optional

Certificate of accuracy is available on request, contact STAUFF for more information.

Pressure Test Kit (analogue) ▪ Type SMBM-20
Metal Case

SMBM-20-2
2 Gauge Test Kit

Item No.	Designation	Price
6100201601	SMBM-20-2-(-1)-003/010-W3	1130.60
6100201602	SMBM-20-2-010/010-W3	1130.60
6100201603	SMBM-20-2-010/016-W3	1130.60
6100201604	SMBM-20-2-010/040-W3	1130.60
6100201609	SMBM-20-2-010/060-W3	1130.60
6100201605	SMBM-20-2-010/160-W3	1130.60
6100201606	SMBM-20-2-010/250-W3	1130.60
6100201607	SMBM-20-2-010/400-W3	1130.60
6100201608	SMBM-20-2-010/600-W3	1139.10
6100201610	SMBM-20-2-016/100-W3	1130.60
6100201611	SMBM-20-2-016/250-W3	1130.60
6100201612	SMBM-20-2-016/400-W3	1130.60
6100201613	SMBM-20-2-025/025-W3	1130.60
6100201614	SMBM-20-2-025/040-W3	1130.60
6100201615	SMBM-20-2-025/060-W3	1130.60
6100201616	SMBM-20-2-025/100-W3	1130.60
6100201617	SMBM-20-2-025/160-W3	1130.60
6100201618	SMBM-20-2-025/250-W3	1130.60
6100201619	SMBM-20-2-025/400-W3	1130.60
6100201620	SMBM-20-2-040/040-W3	1130.60
6100201621	SMBM-20-2-040/060-W3	1130.60
6100201622	SMBM-20-2-040/160-W3	1130.60
6100201623	SMBM-20-2-040/250-W3	1130.60
6100201624	SMBM-20-2-040/400-W3	1130.60
6100201625	SMBM-20-2-040/600-W3	1139.10
6100201626	SMBM-20-2-060/060-W3	1130.60
6100201627	SMBM-20-2-060/160-W3	1130.60
6100201628	SMBM-20-2-060/250-W3	1130.60
6100201629	SMBM-20-2-060/400-W3	1130.60
6100201630	SMBM-20-2-060/600-W3	1139.10
6100201631	SMBM-20-2-100/100-W3	1130.60
6100201632	SMBM-20-2-100/160-W3	1130.60
6100201633	SMBM-20-2-100/250-W3	1130.60
6100201634	SMBM-20-2-100/400-W3	1130.60
6100201635	SMBM-20-2-160/160-W3	1130.60
6100201636	SMBM-20-2-160/250-W3	1130.60
6100201637	SMBM-20-2-160/400-W3	1130.60
6100201638	SMBM-20-2-160/600-W3	1139.10
6100201639	SMBM-20-2-250/250-W3	1130.60
6100201640	SMBM-20-2-250/400-W3	1130.60
6100201641	SMBM-20-2-250/600-W3	1139.10
6100201642	SMBM-20-2-400/400-W3	1130.60
6100201643	SMBM-20-2-400/600-W3	1139.10
6100201644	SMBM-20-2-600/600-W3	1147.60

Other gauge combinations available on request, contact STAUFF for more information.

SMBM-20-3
3 Gauge Test Kit

Item No.	Designation	Price
6100201646	SMBM-20-3-(-1)-003/010/160-W3	1224.80
6100201647	SMBM-20-3-(-1)-003/025/250-W3	1224.80
6100201648	SMBM-20-3-(-1)-003/040/250-W3	1224.80
6100201649	SMBM-20-3-(-1)-003/160/400-W3	1224.80
6100201650	SMBM-20-3-010/010/010-W3	1224.80
6100201651	SMBM-20-3-010/016/250-W3	1224.80
6100201652	SMBM-20-3-010/025/400-W3	1224.80
6100201653	SMBM-20-3-010/060/100-W3	1224.80
6100201654	SMBM-20-3-010/060/600-W3	1233.30
6100201655	SMBM-20-3-010/160/160-W3	1224.80
6100201656	SMBM-20-3-010/160/400-W3	1224.80
6100201657	SMBM-20-3-016/016/016-W3	1224.80
6100201658	SMBM-20-3-016/060/250-W3	1224.80
6100201659	SMBM-20-3-016/100/400-W3	1224.80
6100201660	SMBM-20-3-016/100/600-W3	1233.30
6100201661	SMBM-20-3-016/160/400-W3	1224.80
6100201662	SMBM-20-3-016/250/400-W3	1224.80
6100201663	SMBM-20-3-025/100/400-W3	1224.80
6100201664	SMBM-20-3-025/160/400-W3	1224.80
6100201665	SMBM-20-3-025/250/250-W3	1224.80
6100201666	SMBM-20-3-025/250/400-W3	1224.80
6100201667	SMBM-20-3-025/250/600-W3	1233.30
6100201668	SMBM-20-3-040/040/040-W3	1224.80
6100201669	SMBM-20-3-040/060/100-W3	1224.80
6100201670	SMBM-20-3-040/100/250-W3	1224.80
6100201671	SMBM-20-3-040/100/400-W3	1224.80
6100201672	SMBM-20-3-040/160/400-W3	1224.80
6100201673	SMBM-20-3-040/250/400-W3	1224.80
6100201674	SMBM-20-3-040/250/600-W3	1233.30
6100201675	SMBM-20-3-040/400/400-W3	1224.80
6100201676	SMBM-20-3-040/400/600-W3	1233.30
6100201677	SMBM-20-3-060/100/250-W3	1224.80
6100201678	SMBM-20-3-060/100/400-W3	1224.80
6100201679	SMBM-20-3-060/100/600-W3	1233.30
6100201680	SMBM-20-3-060/160/250-W3	1224.80
6100201681	SMBM-20-3-060/250/250-W3	1224.80
6100201682	SMBM-20-3-060/250/400-W3	1224.80
6100201683	SMBM-20-3-060/250/600-W3	1233.30
6100201684	SMBM-20-3-060/400/400-W3	1224.80
6100201685	SMBM-20-3-060/600/600-W3	1241.80
6100201686	SMBM-20-3-100/160/160-W3	1224.80
6100201687	SMBM-20-3-100/250/400-W3	1224.80
6100201688	SMBM-20-3-100/250/600-W3	1233.30
6100201689	SMBM-20-3-100/400/400-W3	1224.80
6100201690	SMBM-20-3-100/400/600-W3	1233.30
6100201691	SMBM-20-3-100/600/600-W3	1241.80
6100201692	SMBM-20-3-160/160/160-W3	1224.80
6100201693	SMBM-20-3-160/250/250-W3	1224.80
6100201694	SMBM-20-3-160/250/400-W3	1224.80
6100201645	SMBM-20-3-160/400/600-W3	1233.30
6100201695	SMBM-20-3-250/250/250-W3	1224.80
6100201696	SMBM-20-3-250/250/400-W3	1224.80
6100201697	SMBM-20-3-250/400/400-W3	1224.80
6100201698	SMBM-20-3-250/400/600-W3	1233.30
6100201700	SMBM-20-3-400/400/400-W3	1224.80
6100201701	SMBM-20-3-600/600/600-W3	1250.30

Other gauge combinations available on request, contact STAUFF for more information.

STAUFF®

Pressure Test Kit (analogue) ▪ Type SMBM-20
Metal Case

SMBM-20-4
4 Gauge Test Kit

Item No.	Designation	Price
6100201703	SMBM-20-4-(-1)-003/010/040/100-W3	1319.00
6100201704	SMBM-20-4-(-1)-003/010/160/250-W3	1319.00
6100201705	SMBM-20-4-(-1)-003/025/100/250-W3	1319.00
6100201706	SMBM-20-4-(-1)-003/040/100/250-W3	1319.00
6100201759	SMBM-20-4-(-1)-003/040/250/600-W3	1327.50
6100201707	SMBM-20-4-(-1)-003/160/250/400-W3	1319.00
6100201760	SMBM-20-4-006/040/250/600-W3	1327.50
6100201708	SMBM-20-4-010/010/010/010-W3	1319.00
6100201709	SMBM-20-4-010/016/250/400-W3	1319.00
6100201710	SMBM-20-4-010/025/160/400-W3	1319.00
6100185685	SMBM-20-4-010/040/250/600-W3	1327.50
6100201711	SMBM-20-4-010/060/100/250-W3	1319.00
6100201712	SMBM-20-4-010/060/160/600-W3	1327.50
6100201713	SMBM-20-4-010/160/160/250-W3	1319.00
6100201714	SMBM-20-4-010/160/400/600-W3	1327.50
6100201715	SMBM-20-4-016/016/016/100-W3	1319.00
6100201716	SMBM-20-4-016/060/250/400-W3	1319.00
6100201720	SMBM-20-4-016/060/250/600-W3	1327.50
6100201717	SMBM-20-4-016/100/250/400-W3	1319.00
6100187207	SMBM-20-4-016/100/400/400-W3	1319.00
6100201718	SMBM-20-4-016/100/400/600-W3	1327.50
6100201719	SMBM-20-4-016/160/250/400-W3	1319.00
6100185473	SMBM-20-4-025/025/060/250-W3	1319.00
6100201722	SMBM-20-4-025/060/250/400-W3	1319.00
6100201721	SMBM-20-4-025/100/250/400-W3	1319.00
6100201724	SMBM-20-4-025/160/250/400-W3	1319.00
6100201723	SMBM-20-4-025/250/250/400-W3	1319.00
6100201725	SMBM-20-4-025/250/400/600-W3	1327.50
6100201726	SMBM-20-4-040/040/040/100-W3	1319.00
6100201727	SMBM-20-4-040/060/100/250-W3	1319.00
6100201728	SMBM-20-4-040/100/250/400-W3	1319.00
6100201732	SMBM-20-4-040/100/250/600-W3	1327.50
6100201729	SMBM-20-4-040/100/400/600-W3	1327.50
6100201730	SMBM-20-4-040/160/400/600-W3	1327.50
6100201734	SMBM-20-4-040/250/400/600-W3	1327.50
6100201733	SMBM-20-4-040/400/400/600-W3	1327.50
6100201737	SMBM-20-4-060/100/250/400-W3	1319.00
6100201735	SMBM-20-4-060/100/250/600-W3	1327.50
6100201736	SMBM-20-4-060/100/400/600-W3	1327.50
6100201738	SMBM-20-4-060/160/250/400-W3	1319.00
6100201741	SMBM-20-4-060/160/250/600-W3	1327.50
6100201702	SMBM-20-4-060/160/400/600-W3	1327.50
6100201739	SMBM-20-4-060/250/250/600-W3	1327.50
6100201740	SMBM-20-4-060/250/400/600-W3	1327.50
6100201742	SMBM-20-4-060/400/400/600-W3	1327.50
6100201743	SMBM-20-4-060/400/600/600-W3	1336.00
6100201747	SMBM-20-4-100/100/400/400-W3	1319.00
6100201744	SMBM-20-4-100/160/160/250-W3	1319.00
6100201746	SMBM-20-4-100/250/250/600-W3	1327.50
6100201745	SMBM-20-4-100/250/400/400-W3	1319.00
6100201748	SMBM-20-4-100/250/400/600-W3	1327.50
6100201749	SMBM-20-4-100/250/600/600-W3	1336.00
6100201750	SMBM-20-4-160/160/160/160-W3	1319.00
6100201751	SMBM-20-4-160/250/250/400-W3	1319.00
6100201752	SMBM-20-4-160/250/400/600-W3	1327.50
6100201753	SMBM-20-4-250/250/250/250-W3	1319.00
6100201754	SMBM-20-4-250/250/400/600-W3	1327.50
6100201755	SMBM-20-4-250/400/400/600-W3	1327.50
6100201756	SMBM-20-4-250/400/600/600-W3	1336.00
6100201757	SMBM-20-4-400/400/400/400-W3	1319.00
6100201758	SMBM-20-4-600/600/600/600-W3	1353.00

Other gauge combinations available on request, contact STAUFF for more information.

SMBM-20-5
5 Gauge Test Kit

Item No.	Designation	Price
6100201762	SMBM-20-5-(-1)-003/010/040/100/160-W3	1496.55
6100201763	SMBM-20-5-(-1)-003/010/060/160/250-W3	1496.55
6100201764	SMBM-20-5-(-1)-003/025/060/100/250-W3	1496.55
6100201765	SMBM-20-5-(-1)-003/040/100/160/250-W3	1496.55
6100201766	SMBM-20-5-(-1)-003/060/160/250/400-W3	1496.55
6100201801	SMBM-20-5-003/025/160/400/400-W3	1496.55
6100201767	SMBM-20-5-010/010/010/010/010-W3	1496.55
6100201768	SMBM-20-5-010/016/100/250/400-W3	1496.55
6100201769	SMBM-20-5-010/025/060/160/400-W3	1496.55
6100201770	SMBM-20-5-010/060/100/250/400-W3	1496.55
6100201771	SMBM-20-5-010/060/160/400/600-W3	1496.55
6100201772	SMBM-20-5-010/160/160/250/250-W3	1496.55
6100201773	SMBM-20-5-010/160/250/400/600-W3	1505.05
6100201774	SMBM-20-5-016/016/016/100/250-W3	1496.55
6100201775	SMBM-20-5-016/060/100/250/400-W3	1496.55
6100201778	SMBM-20-5-016/060/250/400/600-W3	1505.05
6100201776	SMBM-20-5-016/100/250/400/600-W3	1505.05
6100201777	SMBM-20-5-016/160/250/400/600-W3	1505.05
6100201780	SMBM-20-5-025/060/250/400/600-W3	1505.05
6100201779	SMBM-20-5-025/100/250/400/600-W3	1505.05
6100201782	SMBM-20-5-025/160/250/400/600-W3	1505.05
6100201781	SMBM-20-5-025/250/250/400/600-W3	1505.05
6100201783	SMBM-20-5-040/040/040/100/160-W3	1496.55
6100201784	SMBM-20-5-040/060/100/250/400-W3	1496.55
6100201785	SMBM-20-5-040/100/250/400/600-W3	1505.05
6100201786	SMBM-20-5-040/160/250/400/600-W3	1505.05
6100227370	SMBM-20-5-040/250/400/400/600-W3	1505.05
6100201790	SMBM-20-5-060/100/250/250/600-W3	1505.05
6100201788	SMBM-20-5-060/100/250/400/400-W3	1496.55
6100201787	SMBM-20-5-060/100/250/400/600-W3	1505.05
6100201761	SMBM-20-5-060/160/250/400/600-W3	1505.05
6100201761	SMBM-20-5-060/160/250/400/600-W3	1505.05
6100201793	SMBM-20-5-100/100/400/400/600-W3	1505.05
6100201791	SMBM-20-5-100/160/160/250/400-W3	1496.55
6100201792	SMBM-20-5-100/250/250/400/400-W3	1496.55
6100201794	SMBM-20-5-160/160/160/160/160-W3	1496.55
6100201795	SMBM-20-5-160/250/250/400/600-W3	1505.05
6100201796	SMBM-20-5-250/250/250/250/250-W3	1496.55
6100201797	SMBM-20-5-250/250/400/400/600-W3	1505.05
6100201798	SMBM-20-5-250/250/400/600/600-W3	1513.55
6100201799	SMBM-20-5-400/400/400/400/400-W3	1496.55
6100201800	SMBM-20-5-600/600/600/600/600-W3	1539.05

Other gauge combinations available on request, contact STAUFF for more information.

Pressure Test Kit (analogue) ▪ Type SMBM-20
Metal Case

SMBM-20-6
6 Gauge Test Kit

Item No.	Designation	Price
6100201803	SMBM-20-6-(-1)-003/010/040/100/160/250W3	1590.75
6100201804	SMBM-20-6-(-1)-003/010/060/160/250/400W3	1590.75
6100201805	SMBM-20-6-(-1)-003/025/060/100/250/400W3	1590.75
6100201806	SMBM-20-6-(-1)-003/040/100/160/250/400W3	1590.75
6100201807	SMBM-20-6-(-1)-003/060/160/250/400/400W3	1590.75
6100201842	SMBM-20-6-003/025/160/400/400/600-W3	1599.25
6100201808	SMBM-20-6-010/010/010/010/010/010-W3	1590.75
6100201809	SMBM-20-6-010/016/100/250/400/600-W3	1599.25
6100201810	SMBM-20-6-010/025/060/160/400/600-W3	1599.25
6100201811	SMBM-20-6-010/060/100/250/400/600-W3	1599.25
6100201812	SMBM-20-6-010/060/160/250/400/600-W3	1599.25
6100201813	SMBM-20-6-010/160/160/250/250/400-W3	1590.75
6100201814	SMBM-20-6-010/160/250/250/400/600-W3	1599.25
6100201815	SMBM-20-6-016/016/016/100/160/250-W3	1590.75
6100201816	SMBM-20-6-016/040/060/100/250/400-W3	1590.75
6100201817	SMBM-20-6-016/040/100/250/400/600-W3	1599.25
6100201818	SMBM-20-6-016/040/160/250/400/600-W3	1599.25
6100201819	SMBM-20-6-016/060/100/250/400/600-W3	1599.25
6100201820	SMBM-20-6-025/040/100/250/400/600-W3	1599.25
6100201821	SMBM-20-6-025/060/100/250/400/600-W3	1599.25
6100201823	SMBM-20-6-025/100/160/250/400/600-W3	1599.25
6100201822	SMBM-20-6-025/160/250/250/400/600-W3	1599.25
6100201824	SMBM-20-6-040/040/040/100/160/250-W3	1590.75
6100201825	SMBM-20-6-040/060/100/160/250/400-W3	1590.75
6100201802	SMBM-20-6-040/060/160/250/400/600-W3	1599.25
6100201826	SMBM-20-6-040/100/160/250/400/600-W3	1599.25
6100201827	SMBM-20-6-040/160/250/400/400/600-W3	1599.25
6100201829	SMBM-20-6-060/100/100/250/400/400-W3	1590.75
6100201828	SMBM-20-6-060/100/250/250/400/600-W3	1599.25
6100201831	SMBM-20-6-060/100/250/250/600/600-W3	1607.75
6100201830	SMBM-20-6-060/160/250/400/600/600-W3	1607.75
6100201834	SMBM-20-6-100/100/100/400/400/600-W3	1599.25
6100201832	SMBM-20-6-100/160/160/250/400/600-W3	1599.25
6100201833	SMBM-20-6-100/250/250/400/400/600-W3	1599.25
6100201835	SMBM-20-6-160/160/160/160/160/160-W3	1590.75
6100201836	SMBM-20-6-160/160/250/250/400/600-W3	1599.25
6100201837	SMBM-20-6-250/250/250/250/250/600-W3	1599.25
6100201838	SMBM-20-6-250/250/250/400/400/600-W3	1599.25
6100201839	SMBM-20-6-250/250/250/400/600/600-W3	1607.75
6100201840	SMBM-20-6-400/400/400/400/400/600-W3	1599.25
6100201841	SMBM-20-6-600/600/600/600/600/600-W3	1641.75

Other gauge combinations available on request, contact STAUFF for more information.

SMK-20 Test Coupling with Male Threaded Stud	**SMK-20 Type G** Test Coupling with Straight 24° Fitting	**SMK-20 Type K** Test Coupling With 24° Taper / O-Ring (DKO)	**SMK-20-JIC** Test Coupling with 37° JIC Connection	**SSK-20** Bulkhead

For more information refer to Section L - STAUFF Test

Digital Pressure Gauge ▪ Type SPG-DIGI

SPG-DIGI

SPG-DIGI-USB

Product Description

The STAUFF SPG-DIGI digital pressure gauges are designed for digital measurement and display of pressure in hydraulic systems, especially for oils, lubricants and water. Current measured values, as well as min and max values, can be displayed with a precision of 0.5% of the full-scale value.

The SPG-DIGI is also available in a USB version, equipped with an internal data memory. A measurement stated on the measuring device is automatically stored in the internal data memory in the universal .csv file format. The measurement data can then be transferred to the PC using the supplied mini USB cable. The device shows up on the PC as a USB data storage medium, so that no additional software is required for transferring the data. This allows easy export of the data, e.g. into Microsoft Excel®.

The measurement data is stored in the internal memory with a resolution of up to 100 ms for short measurements and a pressure peak monitoring of 10 ms. A total of 10 measurements can be stored in the device.
The maximum measurement duration for each measurement is 24 h.

The STAUFF SPG-DIGI digital pressure gauges are available individually or as part of a complete pressure test kit (refer to page M22).
They are very robust, reliable, easy to operate and bear a CE mark.

Features

- Bar graph display (drag indicator)
- Backlit display
- Zero correction
- Battery status indicator
- Gauge ability to swivel 360°

Technical Data (for USB version)

▪ Internal memory:	10 measurements
▪ Measurement data lengths:	max. 24 h
▪ Memory interval:	up to 100 ms (increases with duration of measurement)
▪ Pressure peak detection min/max:	10 ms
▪ Date type:	Date/time/pressure value/min. pressure/ max. pressure
▪ Data format:	CSV

A USB connecting cable is supplied as a standard.

Order Codes

SPG-DIGI - **B0016** - **B**

① ② ③

① Series and Type

Digital Pressure Gauge	**SPG-DIGI**
Digital Pressure Gauge USB	**SPG-DIGI-USB**

② Pressure Ranges

-1 ... 5 bar / -14.5 ... 72 PSI	**B0005**
-1 ... 16 bar / -14.5 ... 232 PSI	**B0016**
0 ... 100 bar / 0 ... 1450 PSI	**B0100**
0 ... 400 bar / 0 ... 5801 PSI	**B0400**
0 ... 600 bar / 0 ... 8702 PSI	**B0600**
0 ... 1000 bar / 0 ... 14504 PSI	**B1000**

③ Process Connection

G1/4	**B**
7/16–20 UNF	**U**

Optional

Certificate of accuracy is available on request, contact STAUFF for more information.

Pressure Ranges

Version	Pressure Range (bar/PSI)	Maximum Pressure (bar/PSI)	Burst Pressure (bar/PSI)
B0005	-1 ... 5	30	50
	-14.5 ... 72	50	725
B0016	-1 ... 16	40	160
	-14.5 ... 232	580	2321
B0100	0 ... 100	200	800
	0 ... 1450	2900	11603
B0400	0 ... 400	800	1700
	0 ... 5801	11603	24656
B0600	0 ... 600	1200	2200
	0 ... 8702	17404	31908
B1000	0 ... 1000	1500	2500
	0 ... 14504	0 ... 21756	0 ... 36259

Technical Data

Materials
- Housing made of die-cast Zinc with TPE
- Wetted parts: Stainless Steel 1.4404, NBR (Buna-N®), ceramics
- Seals: NBR (Buna-N®) FKM (Viton®) or EPDM on request

Weight
- Max. weight: 360 g / .79 lbs

Display
- Text display 4 1/2 digits
- Size: 50 x 34 mm / 1.97 x 1.34 in
- Actual value display: 15 mm / .59 in
- MIN/MAX or FS* display: 8 mm / .31 in
- Units: bar, PSI, Mpa, kPa, mbar
- Pressure peak measurement with 10 ms sampling rate
- Illuminated measured value display

Display
- ±0.25% FS* typ. / ±0.5% FS* max.
- Resolution: 4096 steps

Permissible Temperature ranges
- Ambient temp.: -10 °C ... +50 °C / +14 °F ... +122 °F
- Media temp.: -20 °C ... +80 °C / -4 °F ... +176 °F
- Storage temp.: -20 °C ... +60 °C / -4 °F ... +140 °F
- Relative humidity: < 85%
- Battery life: max. 600 hours
- (operation without illumination, 2 x 1.5 V DC AA (LR6-AA)
- alkaline)

Process Connections
- G1/4 or 7/16–20 UNF, Stainless Steel 1.4404
- Vibration: IEC 60068-2-6 / 10 ... 500 Hz / 5 g
- Shock: IEC 60068-2-27 / 11 ms / 25 g
- Load change (106): 100

Protection Rating
- IP 65: Dust-tight and protected against water jets (SPG-DIGI-USB: IP65 only with cover installed)

*FS = Full Scale

SPG-DIGI
Digital Pressure Gauge
G1/4" BSPP

Item No.	Designation	Price
1810000166	SPG-DIGI-B0016-B	629.30
1810000167	SPG-DIGI-B0100-B	629.30
1810000168	SPG-DIGI-B0400-B	629.30
1810000169	SPG-DIGI-B0600-B	629.30

To adapt to STAUFF Test Coupling use SDA-20-G1/4-W3
Suitable for direct mount installation.
Do not use with DN2 or DN4 Test hose (exceeds maximum pressure).

SPG-DIGI-USB
Digital Pressure Gauge
G1/4" BSPP

Item No.	Designation	Price
6100163489	SPG-DIGI-USB-B0016-B	896.20
6100163491	SPG-DIGI-USB-B0100-B	896.20
6100163493	SPG-DIGI-USB-B0400-B	896.20
6100163496	SPG-DIGI-USB-B0600-B	896.20

To adapt to STAUFF Test Coupling use SDA-20-G1/4-W3
Suitable for direct mount installation.
Do not use with DN2 or DN4 Test hose (exceeds maximum pressure).

SPG-DIGI
Digital Pressure Gauge
G1/4" BSPP

Item No.	Designation	Price
1810000225	SPG-DIGI-B1000-B	957.10

To adapt to STAUFF Test Coupling use SDA-20-G1/4-W3
Suitable for direct mount installation.
Do not use with DN2 or DN4 Test hose (exceeds maximum pressure).

SPG-DIGI-USB
Digital Pressure Gauge
G1/4" BSPP

Item No.	Designation	Price
6100163497	SPG-DIGI-USB-B1000-B	1398.05

To adapt to STAUFF Test Coupling use SDA-20-G1/4-W3
Suitable for direct mount installation.
Do not use with DN2 or DN4 Test hose (exceeds maximum pressure).

Spare
SPG-DIGI Gauge Protector

Item No.	Designation	Price
1810000367	CAP-SPG-DIGI-RUBBER-BLACK	35.20

Spare
SPG-DIGI-USB Gauge Protector

Item No.	Designation	Price
6100163575	CAP-SPG-DIGI-USB-RUBBER-GR	35.20

Pressure Test Kit (digital) ▪ Type SMB-DIGI

Pressure Test Kit (Digital) Type SMB-DIGI single gauge
(1 x standard gauge)

Pressure Test Kit (Digital) Type SMB-DIGI dual gauge
(2 x standard gauges)

Pressure Test Kit (Digital) Type SMB-DIGI dual gauge
(1 x standard gauge and 1 x USB gauge)

Product Description

In addition to the individual SPG-DIGI devices, the STAUFF Digital Pressure Gauges are also available as part of a pressure test kit (single gauge or dual gauge options).

The SMB-DIGI pressure test kits are assembled in various versions, (single gauge and dual gauge kits) in accordance with customer requirements.
All pressure test kits are supplied in a handy case with custom designed foam inserts.

Components

Single Gauge Kit SMB-DIGI-20 (standard option)
- Digital Pressure Gauge SPG-DIGI or SPG-DIGI-USB (SPG-DIGI-USB supplied with a mini USB connecting cable)
- Test Hose (2 m / 6.56 ft), M16 x 2, pressure-resistant 600 bar (8702 PSI) SMS-20-2000-B-W3
- Adaptor SDA (G1/4 to M16 x 2) SDA-20-G1/4-W3
- Hose Connector SSV-20-W3
- Test Coupling SMK-20-G1/4-B-C-W3
- Test Coupling SMK-20-M10x1-B-A-W3
- Thread Adaptor SRS-20-G3/8-B-W3
- Thread Adaptor SRS-20-G1/2-B-W3
- Operating manual (multilingual) on CD

Dual Gauge Kit SMB-DIGI-20
- 2 x Digital Pressure Gauges
  Options:
  - 2 x Digital Pressure Gauges SPG-DIGI
  - 1 x Digital Pressure Gauge SPG-DIGI and 1 x SPG-DIGI-USB (SPG-DIGI-USB supplied with a mini USB connecting cable)
- 2 x Test Hoses (2 m / 6.56 ft), M16 x 2, pressure-resistant 600 bar (8702 PSI) SMS-20-2000-B-W3
- 2 x Adaptors SDA (G1/4 to M16 x 2) SDA-20-G1/4-W3
- Hose Connector SSV-20-W3
- Test Coupling SMK-20-G1/4-B-C-W3
- Test Coupling SMK-20-M10x1-B-A-W3
- Thread Adaptor SRS-20-G3/8-B-W3
- Thread Adaptor SRS-20-G1/2-B-W3
- Operating manual (multilingual) on CD

Order Codes

SMB-DIGI - **20** - **B0016** - **B**

① ② ③ ④

① Series and Type

Pressure Test Kit, digital pressure gauge	**SMB-DIGI**
(for standard single gauge kits, dual gauge kits and combination standard/USB gauge kits)	
Pressure Test Kit, single digital pressure gauge with USB	**SMB-DIGI-USB**

② Adaptor Version

Adapts to STAUFF Test 20 (M16 x 2)	**20**

③ Pressure Gauge Options

Pressure Ranges (single gauge kit - standard)

-1 ... 16 bar / -14.5 ... 232 PSI	**B0016**
0 ... 100 bar / 0 ... 1450 PSI	**B0100**
0 ... 400 bar / 0 ... 5801 PSI	**B0400**
0 ... 600 bar / 0 ... 8702 PSI	**B0600**

Pressure Ranges (dual gauge kit - standard)

-1 ... 16 bar / -14.5 ... 232 PSI 0 ... 100 bar / 0 ... 1450 PSI	**B0016 /B0100**
-1 ... 16 bar / -14.5 ... 232 PSI 0 ... 400 bar / 0 ... 5801 PSI	**B0016 /B0400**
-1 ... 16 bar / -14.5 ... 232 PSI 0 ... 600 bar / 0 ... 8702 PSI	**B0016 /B0600**
0 ... 100 bar / 0 ... 1450 PSI 0 ... 100 bar / 0 ... 1450 PSI	**B0100 /B0100**
0 ... 100 bar / 0 ... 1450 PSI 0 ... 400 bar / 0 ... 5801 PSI	**B0100 /B0400**
0 ... 100 bar / 0 ... 1450 PSI 0 ... 600 bar / 0 ... 8702 PSI	**B0100 /B0600**
0 ... 400 bar / 0 ... 5801 PSI 0 ... 400 bar / 0 ... 5801 PSI	**B0400 /B0400**
0 ... 400 bar / 0 ... 5801 PSI 0 ... 600 bar / 0 ... 8702 PSI	**B0400 /B0600**
0 ... 600 bar / 0 ... 8702 PSI 0 ... 600 bar / 0 ... 8702 PSI	**B0600 /B0600**

Pressure Ranges (dual gauge kit - standard and USB)

0 ... 100 bar / 0 ... 1450 PSI (standard) 0 ... 600 bar / 0 ... 8702 PSI (USB)	**B0100 /B0600USB**
0 ... 400 bar / 0 ... 5801 PSI (standard) 0 ... 600 bar / 0 ... 8702 PSI (USB)	**B0400 /B0600USB**
0 ... 600 bar / 0 ... 8702 PSI (standard) 0 ... 600 bar / 0 ... 8702 PSI (USB)	**B0600 /B0600USB**

④ Process Connection

G1/4	**B**

Optional

Certificate of accuracy is available on request, contact STAUFF for more information.

Pressure Test Kit (digital) ▪ Type SMB-DIGI

SMB-DIGI
Digital Pressure Test Kit (single gauge - standard)

Item No.	Designation	Price
1810000247	SMB-DIGI-20-B0016-B	792.65
1810000248	SMB-DIGI-20-B0100-B	792.65
1810000249	SMB-DIGI-20-B0400-B	792.65
1810000239	SMB-DIGI-20-B0600-B	792.65

SMB-DIGI-USB
Digital Pressure Test Kit (single gauge USB)

Item No.	Designation	Price
6100163508	SMB-DIGI-USB-20-B0016-B	1320.20
6100163510	SMB-DIGI-USB-20-B0100-B	1320.20
6100163513	SMB-DIGI-USB-20-B0400-B	1320.20
6100163515	SMB-DIGI-USB-20-B0600-B	1320.20

SMB-DIGI
Digital Pressure Test Kit (dual gauges - standard)

Item No.	Designation	Price
6100224527	SMB-DIGI-20-B0016/B0100-B	1249.55
6100224524	SMB-DIGI-20-B0016/B0400-B	1249.55
6100224520	SMB-DIGI-20-B0016/B0600-B	1249.55
6100224529	SMB-DIGI-20-B0100/B0100-B	1249.55
6100224525	SMB-DIGI-20-B0100/B0400-B	1249.55
6100224521	SMB-DIGI-20-B0100/B0600-B	1249.55
6100224526	SMB-DIGI-20-B0400/B0400-B	1249.55
6100224522	SMB-DIGI-20-B0400/B0600-B	1249.55
6100224523	SMB-DIGI-20-B0600/B0600-B	1249.55

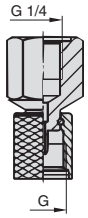
SMB-DIGI
Digital Pressure Test Kit (dual gauges - standard and USB)

Item No.	Designation	Price
6100227089	SMB-DIGI-20-B0100/B0600USB-B	2035.75
6100227090	SMB-DIGI-20-B0400/B0600USB-B	2035.75
6100227095	SMB-DIGI-20-B0600/B0600USB-B	2035.75

Pressure Ranges

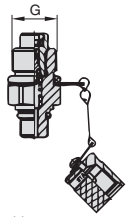
Version	Pressure Range (bar/PSI)	Maximum Pressure (bar/PSI)	Burst Pressure (bar/PSI)
B0016	-1 ... 16	40	160
	-14.5 ... 232	580	2321
B0100	0 ... 100	200	800
	0 ... 1450	2900	11603
B0400	0 ... 400	800	1700
	0 ... 5801	11603	24656
B0600	0 ... 600	1200	2200
	0 ... 8702	17404	31908

Accessories (Connection Adaptors)



SDA adaptor
Connects the pressure gauge to a Test Coupling (Max. Pressure 630 bar / 9137 PSI)

SAD adaptor
Only in conjunction with the SDA-20-G1/4-W3 adaptor, connects to other Test Coupling sizes (Max. Pressure 630 bar / 9137 PSI)



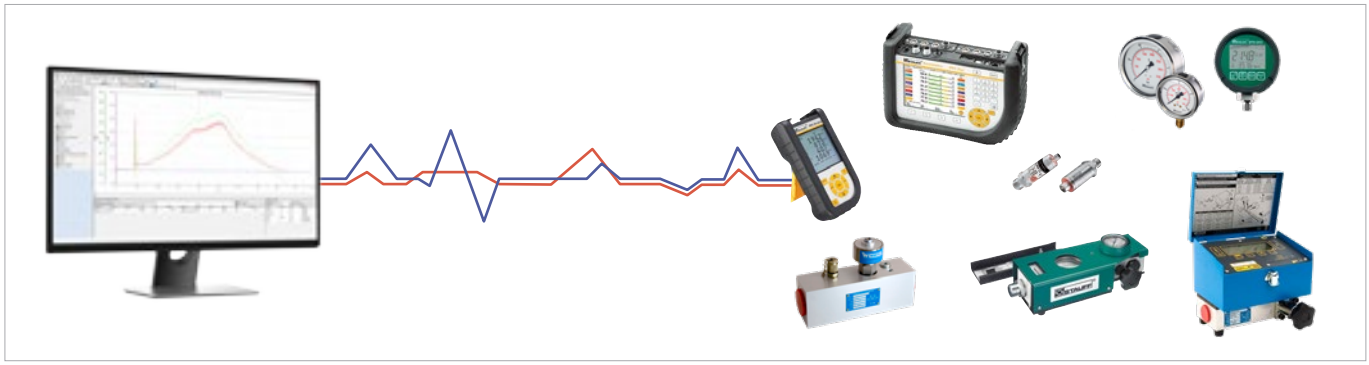
Test Coupling
STAUFF Test or comparable
(Max. Pressure 630 bar / 9137 PSI)

Adaptor	Adaption from	to Dimension G
SDA-20-G1/4-W3	G1/4	M16 x 2
SDA-15-G1/4-W3	G1/4	M16 x 1.5
SDA-12-G1/4-W3	G1/4	S12.65 x 1.5
SAD-20/15-B-W3	M16 x 2	M16 x 1.5
SAD-20/12-B-W3	M16 x 2	S12.65 x 1.5
SAD-20/10-B-W3	M16 x 2	Plug-in system

Other adaptors are available on request, contact STAUFF for more information.

Repair and Calibration Services

STAUFF Technology Centre



Service and calibration test centre

STAUFF Technology Centre provides the capability to service, test and calibrate equipment and is the region's authorised service centre for STAUFF Diagtronics and WEBTEC's digital and analogue hydraulic measuring and diagnostic equipment in addition to other brands and types of equipment.

STAUFF's Test centre (certified to ISO 9001:2015 with full traceability to British, German and Australian national standards) integrates with the WEBTEC C2000 microprocessor with built-in, high-speed, multi-channel data acquisition system.

Hydraulic parameters tested (measurement can be in metric and imperial units):

Flow, pressure and temperature parameters

- Flow measurement to 800 LPM / 210 USGPM
- Pressure to 400 bar / 6000 PSI static
- Temperature to 80 °C / 176 °F

Pressure gauge calibration service

Calibrated and certified to NATA standards, STAUFF's high-accuracy comparator is capable of testing analogue and digital pressure gauges up to 2000 bar static. Recorded data is reported as a workshop certificate, traceable to NATA standards, validating the test data and accuracy.

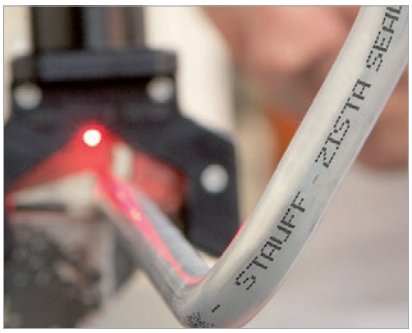
Annual service and calibration reminder service

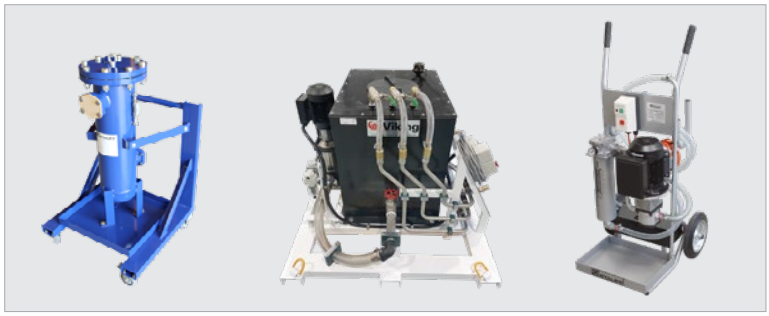
STAUFF Technology Centre sends automated reminders in alignment with customers' quality systems, annual equipment calibration requirements and manufacturers' due dates, thus eliminating costs of accidental oversights in the servicing of valuable equipment.

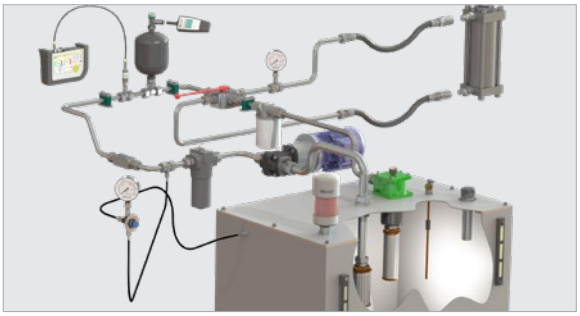
Contact STAUFF for more information.

STAUFF Technology Centre

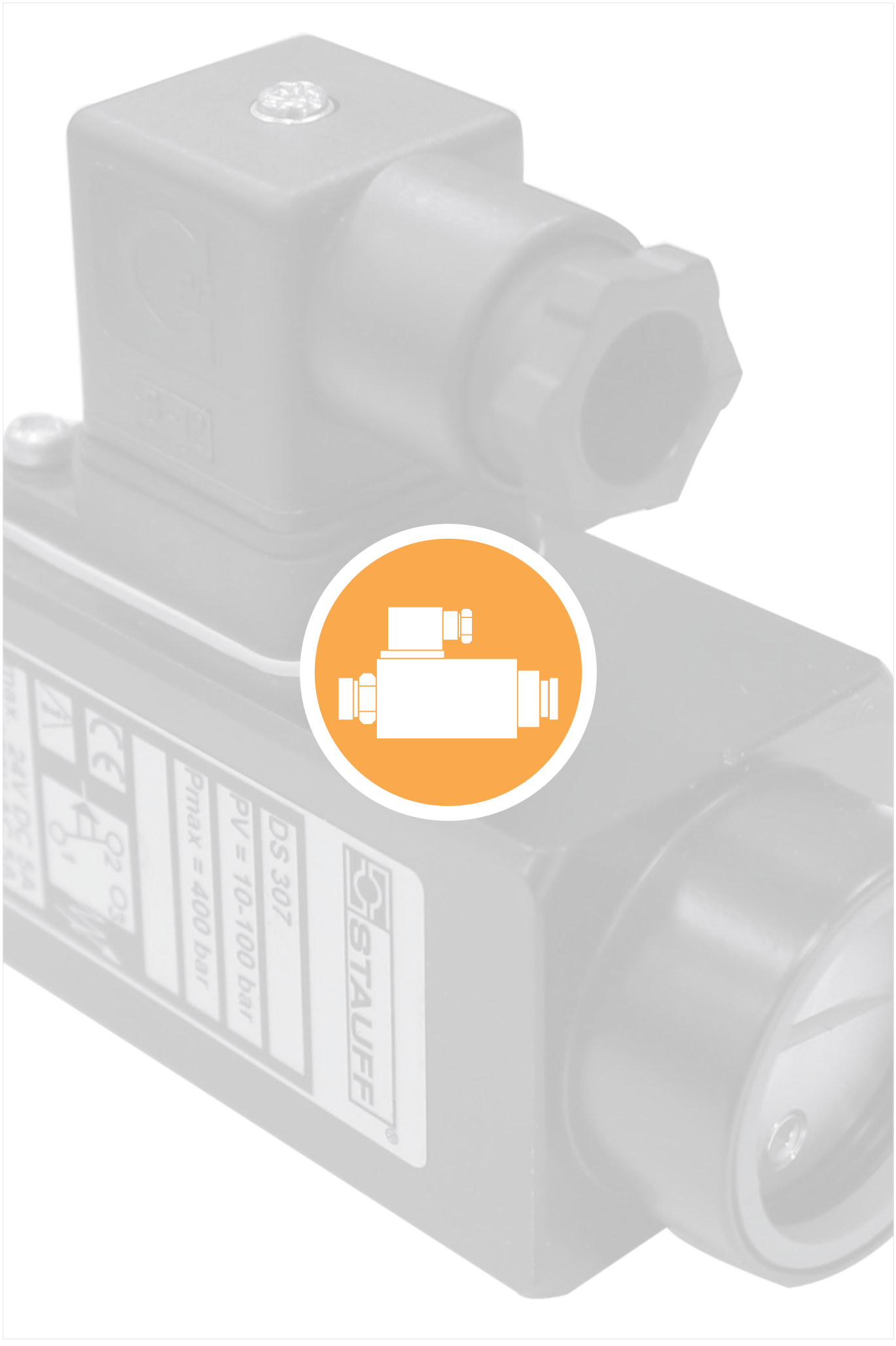
Tube Design, Bending & End Forming / STAUFF Hose Production / Repair & Calibration Services / Engineered Hydraulic Solutions, Fluid System Design, Manufacturing & Fabrication







Contact STAUFF for more information.


DS 307
PV = 10-100 bar
Pmax = 400 bar
STAUFF

	Pressure Switches	**M28 - M31**
	Piston Type Adjustable SPW-PI	**M28 - M29**
	Piston Type Adjustable with Scale SPW-PI	**M28 - M29**
	Piston Type Suitable for Underground Mining SPW-PI	**M28- M29**
	Mounting Clamp **Suitable for Piston Type Switch - Adjustable** SPV / CRA	**M29**
	Micro Switch SPW-PI	**M29**
	Protection Cap SPW-PI	**M29**
	Diaphragm Type SPW-DM	**M30 - M31**
	Piston Type SPW-PI	**M30 - M31**
	Piston Type Cap SPW-PI-CAP	**M31**

Pressure Switches ▪ Type SPW-PI

Product Description

STAUFF's range of SPW-PI type pressure switch is available in piston execution up to 420 Bar and ES Intrinsically safe version up to 55 Bar. A robust design and suitably reliable under rough ambient conditions ensure precise monitoring of pressures. The function operates on the piston-spring principle using microswitch to be actuated if the pressure lies below the configured value.

A stable range of pressure switches suitable for a wide range of industrial and OEM pressure monitoring applications. Different options and combinations are available, including pressure & vacuum, switching outputs NO / NC, voltages and terminal protection.

Applications

- Hydraulic
- Automation
- Lifting systems
- Press systems
- Lubrication plants
- Refrigeration

Features

- Piston spring-loaded
- Mechanical stop prevents compression seizing due to excessive turning
- Adjustable (screw cover or knurled adjusting knob)
- Repetitive accuracy < 1%
- Low hysteresis
- Reliable contacts
- Quality electrical protection
- Quality surface protection
- Suitable for high pressure
- Suitable for oil or oil-water-emulsion

Technical

- Voltage AC or DC
- Switch rating Resistive 5A Inductive 1A 250V AC
- Switch rating Resistive 5A Inductive 4A 24V DC
- Max rating - Preservation of gold contacts 30mA / 30V DC
- Switch insulation C according to VDE 0110
- Hysteresis ~15% set-point value
- Temperature range -40° + 90°C
  (subject to change according to Piston / gasket material)
- Protection (terminals) IP65
- Protection cover optional
- Max cycle rate at 25°C 120/1' (diaphragm type)
- Max cycle rate at 25°C 60/1' (piston type)
- Mechanical life 106 cycles
- Weight from 0.5 kg

Materials

- Sealing type: NBR Perbunan standard
- Silver-plated contacts Ag. CdO

Order Codes

SPW-PI - 03 - B00150 - B04 / B - NC - C65 - W212 H - S

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩

① Type

Piston	**SPW-PI**

② Series

Series 3 (standard version)	**03**

③ Pressure

10-55 bar / 145-798 PSI	**B00055**
10-100 bar / 145-1450 PSI	**B00100**
30-150 bar / 435-2176 PSI	**B00150**
50-200 bar / 725-2901 PSI	**B00200**
50-240 bar / 725-3481 PSI	**B00240**
50-300 bar / 725-4351 PSI	**B00300**
20-350 bar / 290-5076 PSI	**B00350**
50-420 bar / 725-6091 PSI	**B00420**

④ Thread

G1/4 BSPP	**B04**

⑤ Sealing Type

Perbunan (standard)	**B**
EPDM	**E**
Viton	**V**

⑥ Switching Outputs

Normally Closed (standard)	**NC**
Normally Open	**NO**

⑦ Terminal Protection (Cap)

Voltage Maximum 250 VAC (Standard)

IP65 (Without Cap) (Standard IP65 DIN 40050)	**C65**
Intrinsically Safe	**ES**

⑧ Material Surface Protection

Housing -Aluminium, Internal - Brass	**W212**
Brass (Intrinsically safe ES)	**W69**

⑨ Additional Information

STAUFF internal information only	**H**

⑩ Optional

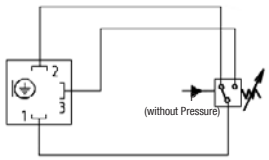
Scale (Adjustable)	**S**

Pressure Switches ▪ Type SPW-PI

Pressure Switch	Type / Weight	Connection	Switching Pressure Range (bar/PSI)	Maximum Pressure (bar/PSI)	Piston Diameter (mm/in)	Item No.	Designation	Price
	Piston Type Adjustable Weight 0.63 kg	G1/4 BSPP	5 ... 55	300	6	1810011250	SPW-PI-03-B00055-B04/B-NC-C65-W212H	392.85
			73 ... 797	4351	0.24			
			10 ... 100	400	6	1810011243	SPW-PI-03-B00100-B04/B-NC-C65-W212H	392.85
			145 ... 1450	5801	0.24			
			20 ... 150	500	5	1810011244	SPW-PI-03-B00150-B04/B-NC-C65-W212H	392.85
			290 ... 2175	7251	0.19			
			40 ...240	500	4	1810011245	SPW-PI-03-B00240-B04/B-NC-C65-W212H	392.85
			580 ... 3481	7251	0.15			
			20 ... 350	600	4	1810011247	SPW-PI-03-B00350-B04/B-NC-C65-W212H	392.85
			290 ... 5076	8702	0.15			
			50 ... 420	600	3	1810011249	SPW-PI-03-B00420-B04/B-NC-C65-W212H	392.85
			725 ... 6091	8702	0.11			
	Piston Type Adjustable with Scale Weight 0.68 kg	G1/4 BSPP	20 ... 150	500	5	1810011256	SPW-PI-B00150-B04/B-NC-C65-W212H-S	534.65
			290 ... 2175	7251	0.19			
			40 ...240	500	4	1810011257	SPW-PI-B00240-B04/B-NC-C65-W212H-S	534.65
			580 ... 3481	7251	0.15			
	Piston Type Intrinsically Safe Suitable for Underground Mining Weight 1.5 kg	G1/4 BSPP	5 ... 55	300	6	1810011232	SPW-PI-B00055-B04/B-NC-ES-W69H	913.80
			73 ... 797	4351	0.24			

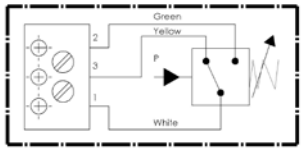
Electrical Connection

Piston Type Switch



1. Common
2. NC (Normally Closed)
3. NO (Normally Open)

Piston Type Switch
Intrinsically Safe - Suitable for Underground Mining



Spare Parts and Accessories ▪ Piston Type Pressure Switch

Mounting Clamp
Suitable for Piston Type Switch - Adjustable

CRA

SPV

Item No.	Designation	Price
1110032288	SPV-540-40-PP-VK-DP-AS-M-W3	11.10
1110032313	CRA-540-40-PP-VK-IS-M-W3	19.20

Refer to STAUFF Clamps for additional mounting options
SPV - Screw Fixing Mount
CRA - Channel Rail Mount

Spare
Micro Switch
Suitable for Piston Type Switch - Adjustable

Item No.	Designation	Price
1810011262	SPW-PI-MSW-H	61.10

Protection Cap
40 x 40mm

Item No.	Designation	Price
1810011229	SPW-PI-PC-CR-H	13.60

Provides added protection to the pressure adjustment screw end

Seal kits available on request, contact STAUFF for more information.

Pressure Switch Mounted

Typical installation pressure switch mounted

Pressure Switches ▪ Type SPW-DM/PI

Product Description

STAUFF's range of SPW type pressure switches are available in either Piston execution up to 300 Bar or Diaphragm up to 100 Bar. A versatile, low-cost reliable and adjustable range of pressure switches are suitable for a wide range of industrial and OEM pressure monitoring applications.

A range of options and combinations are available, including pressure & vacuum, switching output SPDT, range of voltages, terminal protection.

Applications

- Hydraulic
- Automation
- Lifting systems
- Lubrication plants
- Refrigeration

Features

- Adjustable
- Low hysteresis
- Reliable contacts
- Quality electrical protection
- Quality surface protection

Technical

- Switch rating Resistive 6A Inductive 2A / 250V AC
- Switch rating Resistive 2A Inductive 1A / 24V DC
- Max rating - Preservation of gold contacts 30mA / 30V DC
- Switch insulation C according to VDE 0110
- Hysteresis - 15% set-point value @ 25°C (bar)
- Temperature range -40° ÷ 140°C
- (subject to change according to diaphragm / gasket material)
- Protection (terminals) IP00
- Protection with CAP IP65
- Max cycle rate at 25°C 120/1' (diaphragm type)
- Max cycle rate at 25°C 60/1' (piston type)
- Mechanical life 106 cycles
- Tightening torque 5 Kgm
- Tightening torque 0.5 Kgm (CAP)

Materials

- Sealing type: NBR Perbunan standard
- 24 AF body
- Silver-plated contacts Ag. CdO
- CAP material Black Nylon (-10° ÷ +110°C)
- Switch housing material: Pocan®

Order Codes

SPW-DM	-	B00002	-	B04	/	B	-	SD	-	C65	-	W69	Z	-	CG
①		②		③		④		⑤		⑥		⑦	⑧		⑨

① Type

Diaphragm (membrane)	**SPW-DM**
Piston	**SPW-PI**

② Pressure

0.2-2 bar / 3-29 PSI	**B00002**
1-10 bar / 15-145 PSI	**B00010**
10-50 bar / 145-725 PSI	**B00050**
10-100 bar / 145-1450 PSI	**B00100**
30-150 bar / 435-2176 PSI	**B00150**
50-300 bar / 725-4351 PSI	**B00300**

③ Thread

G1/4 BSPP	**B04**

④ Sealing Type

Perbunan	**B**

⑤ Switching Outputs

SPDT Open/Close Contact	**SD**

⑥ Terminal Protection (Cap)

Voltage Maximum 250 VAC (Standard)

IP00 (Without Cap) (Standard IP00 DIN 40050)	**C00**
IP65 (Without Cap) (Standard IP65 DIN 40050)	**C65**
IP67 (Without Cap) (Standard IP67 DIN 40050)	**C67**

⑦ Material Surface Protection

Brass	**W69**
Galvanized Steel with Zinc layer	**W88**

⑧ Additional Information

STAUFF internal information only	**Z**

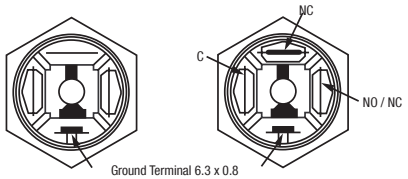
⑨ Options

Certified tested for use with gas	**CG**

Pressure Switches ▪ Type SPW-DM/PI

Pressure Switch	Type	Connection	Switching Pressure Range (bar/PSI)	Item No.	Designation	Price
	Diaphragm Type with Cap	G1/4 BSPP	0.2 ... 2	1810011273	SPW-DM-B00002-B04/B-SD-C65-W69Z	142.60
			3 ... 29	1810011269	SPW-DM-B00010-B04/B-SD-C65-W69Z	142.60
			1 ... 10	1810011277	SPW-DM-B00050-B04/B-SD-C65-W88Z	142.60
			15 ... 145	1810011267	SPW-DM-B00100-B04/B-SD-C65-W88Z-CG	142.60
			10 ... 50			
			145 ... 725			
			10 ... 100			
			145 ... 1450			
	Piston Type with Cap	G1/4 BSPP	50 ... 300	1810011281	SPW-PI-B00300-B04/B-SD-C65-W88Z	145.15
			725 ... 4351			
	Piston Type Cap	G1/4 BSPP		1810011218	SPW-PI-CAP-PA-C65Z	10.95

Electrical Connection



Type NO / NC		Type SD	
Normally Open	NO	Common	C
Normally Closed	NC	Normally Open	NO
		Normally Closed	NC
Voltage: 250 VAC			
Current: 6(2)A			

	Introduction	**M34**
	Overview	**M35**
	Functional Block Diagrams	**M36**
	Hydraulic Testers	**M37 - M41**
	PPC-04-plus PPC-04-plus-CAN	**M37**
	PPC-Pad	**M38 - M41**
	Flow Turbines	**M42 - M43**
	Flow-Meter-PPC-04/12-SFM	**M42**
	Flow-Meter-PPC-CAN-SFM	**M43**
	Pressure Sensors	**M44**
	Sensor-PPC-04/12-P	**M44**
	Sensor-PPC-CAN-P	**M44**
	Temperature Sensors	**M45 - M46**
	Sensor-PPC-04/12-T	**M45**
	Sensor-PPC-CAN-T	**M46**

	Accessories	**M47 - M48**
	Rotational Speed Sensor Sensor-PPC-04/12-SDS-CAB	**M47**
	PPC-04 Accessories	**M48**
	CAN Accessories	**M48**
	Complete Systems	**M50 - M52**
	PPC-04/06/08-plus-SET	**M50**
	PPC-04-CAN-SET	**M51**
	PPC-Pad-SET	**M52**
	Pressure Transmitter	**M53 - M56**
	Overview	**M53**
	PT-RF	**M54**
	Reader-PT-RF	**M55**
	Complete Systems PT-RF-SET	**M56**

	Flow Indicators and Testers	**M57 - M61**
	Flow Indicators SDMKR	**M57**
	Flow Indicators SDM	**M57**
	Portable Hydraulic Testers WT-HT	**M58**
	Portable Hydraulic Testers WT-DHT	**M58**
	Portable Hydraulic Testers WT-DHM	**M58**
	Portable Hydraulic Testers WT-DHCR	**M58**
	Burst Discs WTS-Disc	**M59**
	Photo Tachometer	**M59**
	Flow Turbine WT-SFM-FM	**M60**
	Flow Turbine Accessories Cable WTS-CAB	**M60**
	In-line Flow Monitor SFF Aluminium	**M61**
	In-line Flow Monitor SFF Brass	**M61**
	Portable Flow Tester for Mining SFFM	**M61**

Hydraulic Testers of the PPC Series

The STAUFF measuring and test equipment of the PPC series are perfectly suited for measuring all relevant parameters in fluid power systems, including pressure, differential pressure, temperature, flow and rotational speed.

Depending on the type, they allow evaluation, storage and further processing in PCs or notebooks. They have been specially developed for the growing needs of system monitoring, troubleshooting, and determining measured values in hydraulic and pneumatic systems.

The application areas are broad:

- Industrial hydraulics
- Mobile, agricultural and forestry hydraulics
- Marine and offshore hydraulics
- Chemical and petrochemical industries
- Energy and air conditioning industries
- Heating and sanitary industries

Among other things, the latest generation of Hydraulic Tester PPC-04-plus is characterised by a simple operation. Even in low-light situations, measured values can be read quickly and reliably from the multi-line, backlit LCD display. The new Hydraulic Tester is available in two versions, either with two inputs for analogue sensors or with a CAN interface for connecting up to three digital sensors. Both versions are equipped with internal data memory and a USB port. They are driven by an internal power supply (Lithium-Ion pack).

The Hydraulic Testers of the PPC-06/08-plus series, depending on the type, provide the potential of connecting three or four analogue sensors. Even older sensors of the STAUFF Diagtronics product program or third-party sensors can be used with these units without any problems.
Both Hydraulic Testers are equipped with large data memory and an integrated USB port, they can be used for several hours in battery operation. The included PC software allows to show the measured values as numerical values or as curve graphs on PCs or notebooks.

The PPC Pad is the highest-performance unit of the PPC series. This portable multi-function hand-held measuring instrument has been especially developed for the increasing fluid technology requirements. STAUFF's CAN bus sensors take advantage of the bus system's automatic sensor recognition to provide an easy-to-install Plug & Play solution. The measured values can be displayed in various presentation styles and make effective solutions-orientated analysis possible.

The Hydraulic Testers of the PPC series and their corresponding sensors are also available as calibrated versions, and they are delivered with a calibration certificate. A subsequent calibration can be ordered, contact STAUFF for more information.

Refer to Catalogue 8 - STAUFF Diagtronics

Hydraulic Testers of the PPC Series ▪ Product Overview

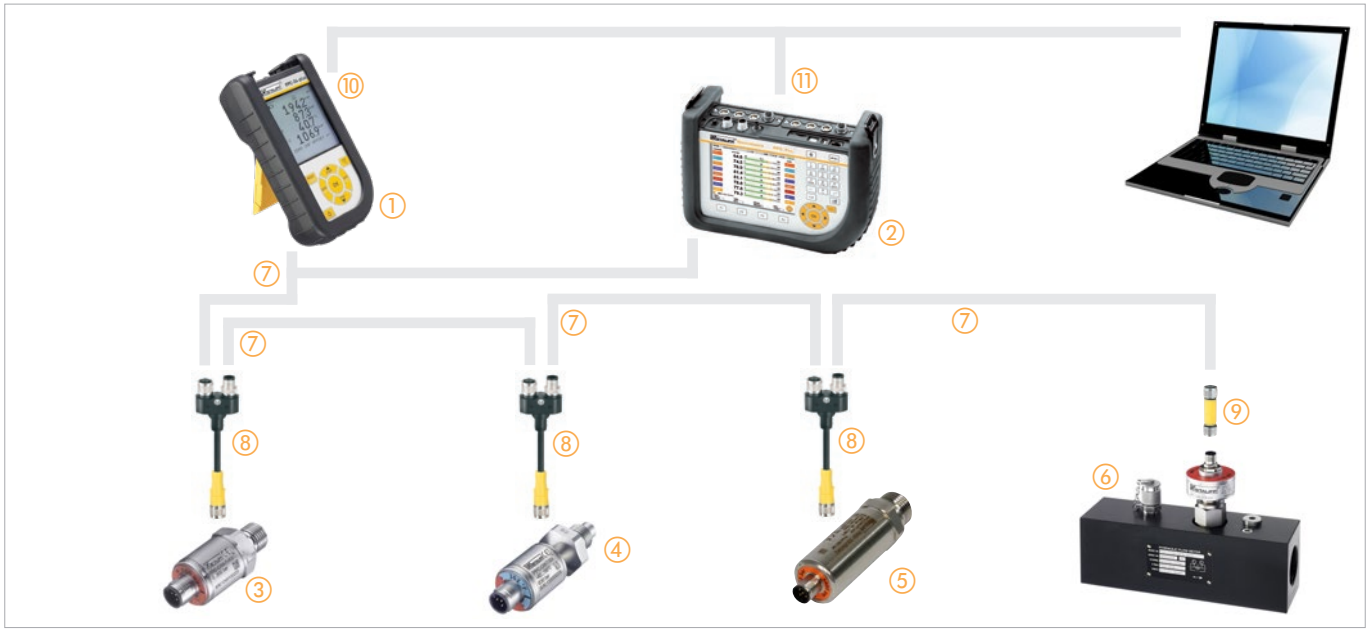
Hydraulic Testers			
Options	**PPC-04-plus**	**PPC-04-plus-CAN**	**PPC-Pad**
Rechargeable Battery	●	●	●
Number of Sensor Inputs	2 (max. 2 analogue sensors)	1x CAN (max. 3 CAN sensors)	max. 6 + 2 x CAN (each 8 sensors)
PC Interface	USB	USB	USB / Ethernet
Online Function	●	●	●
Internal Memory	●	●	●
Programming of Automatic Measuring Tasks	–	–	●
Internal Trigger Function	–	–	●
Data Display	●	●	●
Display Lightning	●	●	●
Curve Printout on Display	–	–	●
PC Software Kit	●	●	●
Pressure Measurement	●	●	●
Temperature Measurement	●	●	●
Flow Measurement	●	●	●
Rotational Speed Measurement	●	–	●
Frequency Measurement	●	●	●
Third-Party Sensors	●	●	●
Current / Voltage Adaptor	●	●	●
STAUFF CAN Sensor	–	●	●

● = standard, – = not available

Hydraulic Testers of the PPC Series

① Hydraulic Tester **PPC-04-plus**
max. two analogue sensors can be connected at the same time
② Hydraulic Tester **PPC-Pad**
max. six analogue sensors can be connected at the same time
③ Pressure **Sensor-PPC-04/12-P**
④ Pressure / Temperature **Sensor-PPC-04/12-PT**
⑤ Rotational Speed **Sensor-PPC-04/12-SDS-CAB** with integrated connection cable, optionally with Contact **Adaptor-PPC-04/12-SKA-Contact** or Focusing **Adaptor-PPC-04/12-SKA-Focus**
⑥ Screw-in Temperature **Sensor-PPC-04/12-T**
Manual Temperature **Sensor-PPC-04/12-TSH**
⑦ Flow Turbine **Flow-Meter-PPC-04/12-SFM** with integrated signal converter, for connecting pressure and temperature sensor
⑧ 5-pin Connection Cable for sensors **Cable-PPC-04/12-3** (3 m / 9.84 ft), optionally with Extension Cable **Cable-PPC-04/12-5-EXT** (5 m / 16.40 ft)
⑨ PPC Connection Cable as a component of the PC Sets **PC-SET-04-plus-SW-CAB** (USB)
⑩ PPC Connection Cable as a component of the PC Sets **LAN-** or **USB 2.0-Cable**

Hydraulic Testers PPC Series (CAN Version)



① Hydraulic Tester **PPC-04-plus-CAN** with CAN interface (1x)
② Hydraulic Tester **PPC-Pad** with two CAN interfaces
③ CAN Pressure **Sensor-PPC-CAN-P**
④ CAN Temperature **Sensor-PPC-CAN-T**
⑤ CAN Pressure / Temperature **Sensor-PPC-CAN-PT**
⑥ CAN Flow Turbine **Flow-Meter-PPC-CAN-SFM** with integrated signal converter, for connecting pressure and temperature sensors
⑦ CAN Connection **Cable-PPC-CAN-X**
⑧ CAN Y-Splitter **Cable-PPC-CAN-Y**
⑨ CAN Terminating Resistor **PPC-CAN-R**
⑩ PPC Connection Cable as a component of the PC Sets **PC-SET-04-plus-SW-CAB** (USB)
⑪ PPC Connection Cable as a component of the PC Sets **LAN-** or **USB 2.0-Cable**

Hydraulic Testers ▪ Type PPC-04-plus / PPC-04-plus-CAN

PPC-04-plus with 2 sensor inputs
for max. 2 analogue sensors

PPC-04-plus-CAN with CAN interface for
max. 3 sensors (max. 50 m / 164 ft cable length)

Product Description

The PPC-04-plus and PPC-04-plus-CAN Hydraulic Testers have been developed for the growing demands in mobile and industrial hydraulic systems. They are perfectly suited for the precise determination of pressure, temperature, volume flow and rotational speed.

- Multi-line, backlit LCD display
- Max. two analogue sensors can be connected at the same time
- With CAN interface, max. three digital sensors can be connected at the same time
- Integrated data memory for 15000 data records
- External storage by using a USB memory stick (1 GB included)
- Max. CAN bus length: 50 m / 164 ft (CAN version)

Order Codes

PPC-04-plus - **CAN** - **CAL**

① ② ③

① Series and Type

Hydraulic Tester	**PPC-04-plus**

② Version

Analogue version	**(None)**
CAN version	**CAN**

③ Calibration

Without calibration certificate	**(None)**
With calibration certificate	**CAL**

Note: Calibration certificate is only available for the analogue Hydraulic Tester PPC-04-plus.

Technical Data

Dimensions and Weight

- W x H x D: 96 x 172 x 54 mm / 3.78 x 6.77 x 2.13 in
- Weight: ca. 540 g / 1.19 lbs

Measurements / Display

- Pressure: in bar, PSI, mbar, kPa, MPa
- Temperature: in °C and °F
- Volume flow: in l/min and US GPM
- Rotational speed: in 1/min and RPM
- Display: FSTN-LCD, graphic, LED backlit
- Visible area: 62 x 62 mm / 2.44 x 2.44 in
- Resolution: 130 x 130 Pixel

Power Supply

- External: Micro USB socket, type B +5V DC, max. 1000 mA
- Battery: Lithium-Ion pack 3.7 V DC / 2250 mAh or 3.7 V DC / 4500 mAh CAN version
- Operating time with the rechargeable battery: approx. 8 hours

Sensor Inputs

- Push-in connection: 5-pol., push-pull or 5-pol., M12x1, SPEEDCON, connector (CAN version)
- Automatic sensor recognition
- Sampling rate: 1 ms
- Accuracy: < ±0.2 % FS* ±1 Digit

Permissible Temperatures

- Ambient: 0 °C ... +50 °C / +32 °F ... +122 °F
- Storage: -25 °C ... +60 °C / -13 °F ... +140 °F

- Relative humidity: < 80 %
- CE certified

Interfaces

- USB device: Online transmission between unit and PC via PPC-Soft-plus (software)
  Measured value transmission: ACT/MIN/MAX, min. 5 ms
  USB standard: 2.0, full speed
  Push-in connection: Micro USB socket, shielded, type A
- USB host: Connection for USB stick, max. 4 GB
  USB standard: 2.0, full speed, max. 100 mA
  Push-on connection: Micro USB socket, shielded, type B

Protection Rating

- IP 54 protection rating: Dust protected and protected against splashing water
- (CAN version)
  IP 67 protection rating: Dust tight and protected against splashing water

PPC-04-plus

Item No.	Designation	Price
1810010769	PPC-04-plus	1317.05
1810010771	PPC-04-plus-CAN	1317.05

Hydraulic Tester ▪ Type PPC-Pad-102/103

Features

- Portable multi-function hand-held measuring instrument
- Pressure, temperature, flow and speed can be measured, monitored and analysed
- Measurement and display of over 50 channels
- Measured value display: numerical, bar graph, pointer, curve graph
- Project templates can be saved and loaded
- Interfaces: CAN, LAN, USB
- Total memory with up to 1 billion measured values
- Measured data can be (automatically) recorded, saved and analysed with the PPC-Soft-plus PC software and a LAN or USB connection
- Max. CAN bus length: 100 m / 328 ft

Order Codes

PPC-Pad - 102

① ②

① Series and Type

Hydraulic Tester	**PPC-Pad**

② Version

PPC-Pad-101	**101**
PPC-Pad-102	**102**
PPC-Pad-103	**103**

③ Calibration (only -102 / -103)

Without calibration certificate	**(None)**
With calibration certificate	**CAL**

Hydraulic Tester Version

Version	CAN Sensor Inputs	Sensor Inputs with Sensor Recognition STAUFF (Analogue)	Aux. Sensor Input (Analogue)
PPC-Pad-101	2 networks each with 8 sensors max.	-	-
PPC-Pad-102		3	2
PPC-Pad-103		6	4

PPC-Pad-102/103

Item No.	Designation	Price
1810000324	PPC-Pad-102	6860.60
1810000326	PPC-Pad-103	8826.35

Hydraulic Tester ▪ Type PPC-Pad-102/103

Technical Data

Dimensions and Weight
- W x H x D: 257 x 181 x 75 mm / 10.12 x 7.13 x 2.95 in
- Weight: 1550 g / 3.4 lbs (basic model)

Input with Sensor Recognition
- 3 or 6 sensor inputs (up to 6 or 12 analogue measurement channels) with sensor recognition (p/T/Q/n) for PPC sensors
- Push-in connection: 5-pin, push-pull, combination panel plug/socket
- Scanning rate: 1 ms = 1000 measured values/sec.

- For the Sensor-PPC-04/12-PT combined Pressure/Temperature Sensor, there is an additional temperature channel for each sensor input
- Temperature scanning: 1 s

Inputs for Auxiliary Sensors
- 2 analogue sensor inputs: for measuring current and voltage
  Scanning rate: 1 ms = 1000 measured values/sec.
  Voltage measuring range: -10 … +10 V DC (freely configurable)
  Current measuring range: 0/4…20 mA
  Supply external sensors: +18 … +24 V DC/max. 100 mA
  Push-in connection: M12x1.5-pin socket

- FAST mode: Scanning rate: 0.1 ms = 10000 measured values/sec. only one auxiliary sensor input is usable

Accuracy
- +0.02 % per °C

Module Slots
- 2, for input module, flexible placement possible
- Slot 1 = IN1, IN2, IN3, IN4/5
- Slot 2 = IN6, IN7, IN8, IN9/10 (expandable only by STAUFF)

Display
- FT-LCD colour graphic display
- Visible area: 115 x 86 mm/ 4.53 x 3.39 in
- Resolution: 640 x 480 Pixel

Functions
- Measurement: ACT/MIN/MAX values
- Measured value display: Numerical, bar graph, pointer, curve graph
- Measuring functions: Start/stop, points, trigger

- Trigger: Slope, manual, level, window, time, logic (interconnection of up to two events for the measurement start and stop)
- Pre-trigger

- Remote operation via the Ethernet
- Acoustic notification at any incident

Input
- USB device: Online data transmission between unit and PC via PPC-Soft-plus
  Measured value transmission: ACT/MIN/MAX
  USB standard: 2.0, full speed
  Push-in connection: USB socket, shielded, type B

- USB host: Connection for mass storage devices such as USB memory stick or removable hard disc
  standard: 2.0, full speed, 100 mA max.
  Push-in connection: USB socket, shielded, type A

- Ethernet: Online data transmission between unit and PC via PPC-Soft-plus and remote control
  Measured value transmission: ACT/MIN/MAX
  standard: 10, 100 Mbit/s, IEEE 802.3 (10/100 base T)
  Push-in connection: RJ45, socket, shielded

Measured Data Memory
- For storing measured values, project data and screenshots

- Memory capacity: ≤4 million measured values per measurement
  Total measured value memory >1 billion measured values
- Memory format: ACT/MIN/MAX
- Memory interval: 1 ms to 24 h
- Memory duration: 1 ms to 300 h (trigger measurement)

- Internal: 64 MB (approx. 32 million measured values)

- External SD memory: MicroSD memory card incl. in standard shipment
  Slot: MicroSD memory card

- External USB mass memory device: up to 40 GB

Ambient Conditions
- Operating temperature: 0 °C … +50 °C / +32 °F ... +122 °F
- Storage temperature: -25 °C … +60 °C / -13 °F ... +140 °F
- Relative humidity: < 80 %
- Environmental test: IEC60068-2-32 (1 m, free fall)

Power Supply
- Internal: Lithium-Ion pack, +7.4 V DC / 4500 mAh
  Battery charging circuit/operating time with 3 CAN sensors: > 8 h

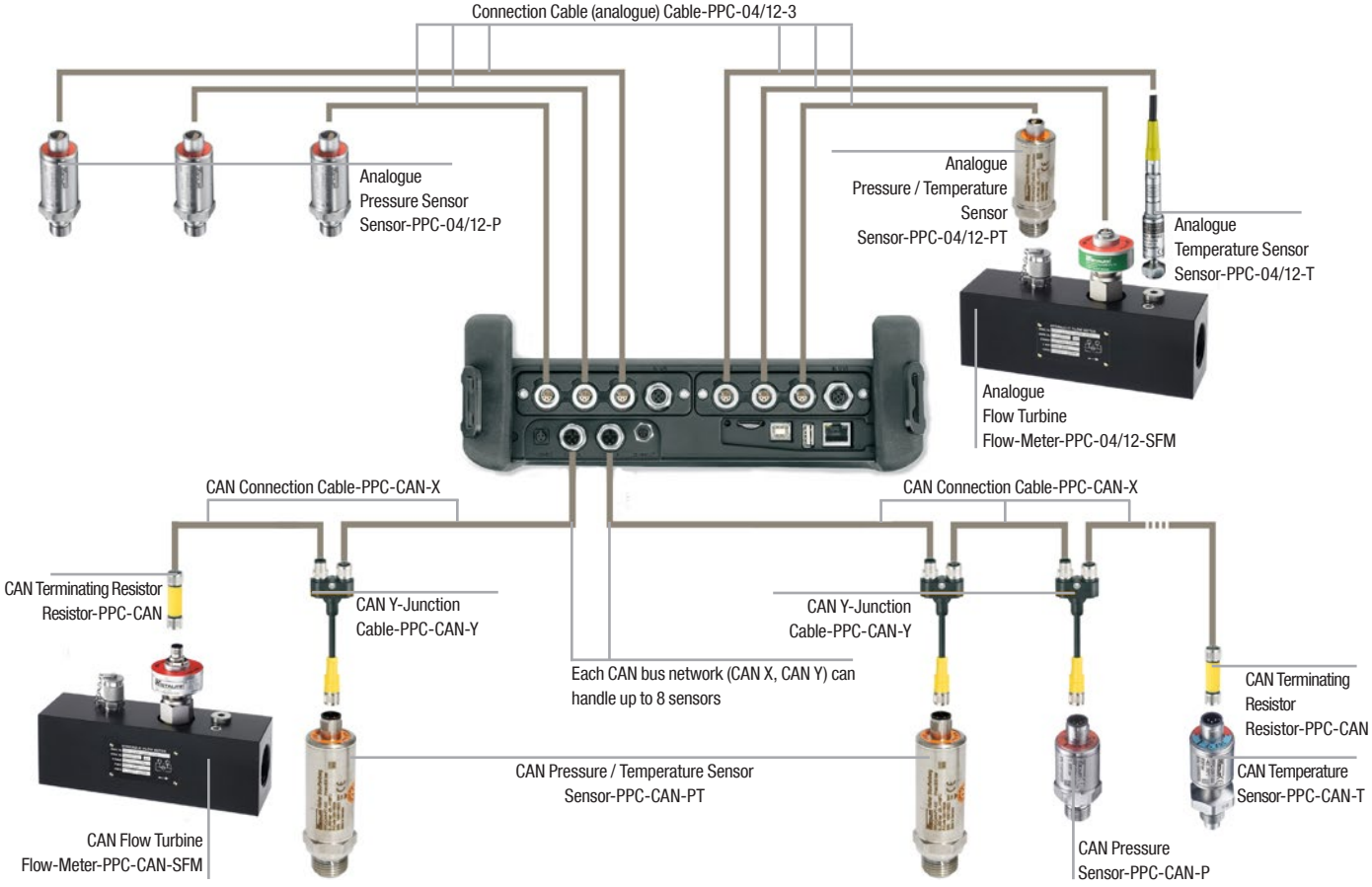
Protection Rating
- IP 64 protection rating: Dust tight and protected against splashing water

Hydraulic Tester ▪ Type PPC-Pad

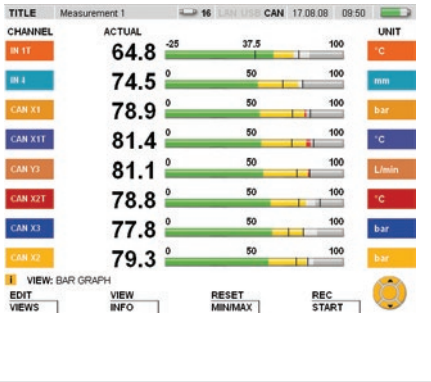
Functional Description

① High protection from moisture and dirt due to cover caps and a rubber protective sleeve, protection class IP 64
② Illuminated display for excellent readability in any situation
③ Protection of the housing, affording usage in harsh environments and absorption of shocks
④ Big 5.7 in colour display for clearly viewing the extensive information
⑤ Intuitive operation due to clear-cut control elements and function-oriented keys
⑥ Ergonomic housing shape ensures convenient portability and long operating times
⑦ Large keyboard and fonts for easy operation and readability
⑧ Portable multi-function hand-held measuring instrument - strong in design and tough in operation
⑨ Easy to carry and hang up with carrying strip
⑩ 110 / 240 V AC power supply, battery life 8 hours, recharging time 3 hours
⑪ 2 x CAN bus networks with each 16 channels
⑫ Modular design for up to 6 analogue sensors or 2 high-speed channels (0.1 ms) automatic sensor recognition
⑬ PC interface (USB 2.0); ACT/MIN/MAX measured value transmission to the PPC-Soft-plus software, terminal for USB mass storage devices
⑭ LAN interface for remote monitoring, MicroSD memory card for storage enlargement

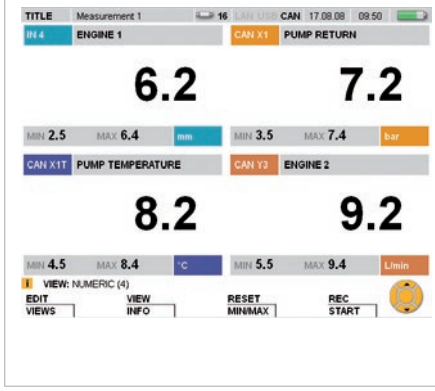
Connection of Analogue Sensors / CAN Sensors



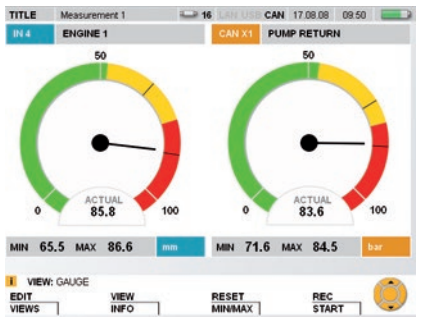
Hydraulic Tester ▪ PPC-Pad-Display



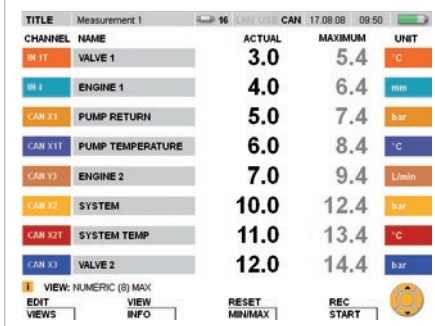
- Display of measured values as figures and bars
- Fixing of alarm ranges in green, yellow and red
- Trailing pointer function with MIN and MAX values



- Up to 4 channels in one large-format display
- Simultaneous display of ACT, MIN and MAX values
- Information lines of current settings, events and views
- Individual measurement channel identifier



- Large-area pointer display of measured values
- Trailing pointer for MIN and MAX values
- Alarm range in green, yellow and red
- Further channels can be called up with the arrow keys



- Up to 8 channels in one display
- Colour allocation of the individual channels
- Uniform headings with measurement titles, sensors connected, interfaces, date, time and battery condition indicator
- Display can be changed between MIN and MAX values and full scale

- Up to 8 channels in one graph display
- Fine, precise graph image thanks to high definition display
- A choice between ACT and MIN/MAX value display
- Automatic and manual scaling of the time axis for optimum measured value display

Flow Turbine ▪ Type Flow-Meter-PPC-04/12-SFM

Product Description

The Flow-Meter-PPC-04/12-SFM Flow Turbine is permanently installed in the pipeline. The oil flow rotates the internal axial turbine. The frequencies generated are processed by digital electronics (a signal converter). Interferences caused by flow effects are compensated by this process.
The signal converter is now directly integrated into the Flow Turbine. This allows even simpler operation and supports permanent coupling of the turbine and signal converter components that are matched to one another.

The Flow Turbine also improves the response time (from previously 400 ms to 50 ms) and increases the measuring accuracy.

The Flow-Meter-PPC-04/12-SFM is available in five versions for various flow speeds. A Pressure Sensor-PPC-04/12-P (refer to page M44) can be connected in parallel to the Flow Turbine by way of the integrated Test Coupling. In addition, the oil temperature can also be measured using the connection of the Temperature Sensor-PPC-04/12-T (refer to page M45).

In general, the Flow Turbine can handle flows in either direction. The specified technical data and the calibration (available as an option) apply only when the flow through the Flow Turbine matches the recommended flow direction. A double-headed arrow is shown on the nameplate of the Flow-Meter-PC-04/12-SFM. The thicker end of the double-headed arrow specifies the recommended direction of flow.

Note: A Connection Cable-PPC-04/12-3 (3 m / 9.84 ft) is needed to connect the Flow Turbine to the current Hydraulic Testers.
An Extension Cable-PPC-04/12-5-EXT (5 m / 16.40 ft) is also available as an option.
Refer to Catalogue 8 - STAUFF Diagtronics for more information.

Order Codes

Flow-Meter-PPC-04/12 - SFM-015

① ②

① Series and Type

Flow Turbine	**Flow-Meter-PPC-04/12**

② Version

1 ... 15 l/min / .27 ... 3.90 US GPM	**SFM-015**
3 ... 60 l/min / .79 ... 15.90 US GPM	**SFM-060**
5 ... 150 l/min / 1.32 ... 39.60 US GPM	**SFM-150**
8 ... 300 l/min / 2.11 ... 79.00 US GPM	**SFM-300**
15 ... 600 l/min / 3.96 ... 158.00 US GPM	**SFM-600**

③ Calibration

Without calibration certificate	**(None)**
With calibration certificate	**CAL**

UNF version available on request.

Technical Data

Materials

- Housing: Aluminium (black anodised)
- Gaskets: FKM/FPM (Viton®)
- 5-pin connection
- Pressure measurement connection: SMK-20 (M16 x 2)
- Temperature measurement connection: M10 x 1 (standard screw plug)

Ambient Conditions

- Media temperature: -20 °C ... +90 °C / -4 °F ... +194 °F
- Ambient temperature: -10 °C ... +50 °C / +14 °F ... +122 °F
- Storage temperature: -20 °C ... +80 °C / -4 °F ... +176 °F
- Permissible particle size: <10 Micron for SFM-015, <25 Micron for others
- Viscosity range: 10 ... 100 cSt

Electrical Data

- Response time: 50 ms

Process Connection

- Refer to the table below

Flow-Meter-PPC-04/12-SFM

Item No.	Designation	Price
1810000151	Flow-Meter-PPC-04/12-SFM-060	3559.85
1810000084	Flow-Meter-PPC-04/12-SFM-150	3559.85
1810000152	Flow-Meter-PPC-04/12-SFM-300	3559.85
1810000153	Flow-Meter-PPC-04/12-SFM-600	3559.85

Dimensions and Measuring Range

Version	Measuring Range						Dimensions (mm/in)						
Flow Turbine PPC-04/12-	Measuring Range (l/min / US GPM)	Max. Flow (l/min / US GPM)	Operating Pressure (bar / PSI)	Max. Pressure (bar / PSI)	Accuracy (at 21 cSt)	Max. Pressure Drop (at FS*) (bar / PSI)	G ** (BSPP)	G (UNF)	B	D	L	H	Weight (g / lbs)
SFM-060	3 ... 60	66	350	420	±1 (% of the displayed value)	1.5	G3/4	1-1/16–16	62	72	190	50	750
	.79 ... 15.90	17.4	5076	6091		21.8			2.44	2.83	7.48	1.97	1.6
SFM-150	5 ... 150	165	350	420	±1 (% of the displayed value)	1.5	G3/4	1-1/16–16	62	72	190	50	750
	1.32 ... 39.60	43.6	5076	6091		21.8			2.44	2.83	7.48	1.97	1.6
SFM-300	8 ... 300	330	350	420	±1 (% of the displayed value)	4	G1	1-5/16–16	62	76	190	50	1200
	2.11 ... 79.00	87.2	5076	6091		58			2.44	2.99	7.48	1.97	2.6
SFM-600	15 ... 600	660	290	348	±1 (% of the displayed value)	5	G1-1/4	1-5/8–12	62	66	212	75	1800
	3.96 ... 158.00	174.4	4206	5047		72.5			2.44	2.60	8.35	2.95	4

* FS = Full Scale

** Standard option

CAN Flow Turbine ▪ Type Flow-Meter-PPC-CAN-SFM

Product Description

The CAN Flow Turbine Flow-Meter-PPC-CAN-SFM is specially designed for the use with the CAN Hydraulic Testers and has to be installed permanently in the pipeline where the oil flow rotates the internal axial turbine. The generated frequencies are processed by digital electronics (a signal converter). Interferences caused by flow effects are compensated by this process. The signal converter is now directly integrated into the CAN Flow Turbine. This allows even simpler operation and supports permanent coupling of the turbine and signal converter components that are matched to one another.

The CAN Flow Turbine also improves the response times/ reaction times (from a previous 400 ms to 50 ms) and increases measurement accuracy.
The CAN Flow Turbine is available in five versions for various flow speeds. A CAN Pressure Sensor-PPC-CAN-P (refer to page M44) can be connected parallel to the CAN Flow Turbine by way of the integrated Test Coupling. In addition, the oil temperature can also be measured using the connection of the Temperature Sensor-PPC-CAN-T (refer to page M46).

In general, the CAN Flow Turbine can handle flows in either direction. The specified technical data and the calibration (available as an option) apply only when the flow through the CAN Flow Turbine matched the recommended flow direction. A double-headed arrow is shown on the nameplate of the Flow-Meter-PPC-CAN-SFM. The thicker end of the double-headed arrow specifies the recommended direction of the flow.

Connecting the CAN Flow Turbine to the CAN Hydraulic Tester a CAN Connection Cable and a CAN Terminating Resistor is needed. Refer to Catalogue 8 - STAUFF Diagtronics for more information.

Order Codes

Flow-Meter-PPC-CAN - **SFM-015**

① ②

① Series and Type

CAN Flow Turbine	**Flow-Meter-PPC-CAN**

② Version

1 ... 15 l/min / .27 ... 3.90 US GPM	**SFM-015**
3 ... 60 l/min / .79 ... 15.90 US GPM	**SFM-060**
5 ... 150 l/min / 1.32 ... 39.60 US GPM	**SFM-150**
8 ... 300 l/min / 2.11 ... 79.00 US GPM	**SFM-300**
15 ... 600 l/min / 3.96 ... 158.00 US GPM	**SFM-600**

③ Calibration

Without calibration certificate	**(None)**
With calibration certificate	**CAL**

UNF version available on request.

Technical Data

Materials

- Housing: Aluminium (black anodised)
- Gaskets: FKM/FPM (Viton®)
- 5-pin SPEEDCON connection plug
- Pressure measurement connection: SMK-20 (M16 x 2)
- Temperature measurement connection: M10 x 1 (standard screw plug)

Ambient Conditions

- Media temperature: -20 °C ... +90 °C / -4 °F ... +194 °F
- Ambient temperature: -10 °C ... +50 °C / +14 °F ... +122 °F
- Storage temperature: -20 °C ... +80 °C / -4 °F ... +176 °F
- Permissible particle size: <10 Micron for SFM-015 (CAN), <25 Micron for others
- Viscosity range: 10 ... 100 cSt

Electrical Data

- Response time: 50 ms

Process Connection

- Refer to the table below

Flow-Meter-PPC-CAN-SFM

Item No.	Designation	Price
1810000342	Flow-Meter-PPC-CAN-SFM-060	6281.50
1810000344	Flow-Meter-PPC-CAN-SFM-150	3154.75
1810000346	Flow-Meter-PPC-CAN-SFM-300	3154.75
1810000348	Flow-Meter-PPC-CAN-SFM-600	6872.20

Dimensions and Measuring Range

Version	Measuring Range						Dimensions (mm/in)						
Flow Turbine PPC-CAN-	Measuring Range (l/min / US GPM)	Max. Flow (l/min / US GPM)	Operating Pressure (bar/PSI)	Max. Pressure (bar/PSI)	Accuracy (at 21 cSt)	Max. Pressure Drop (at FS*) (bar/PSI)	G ** (BSPP)	G (UNF)	B	D	L	H	Weight (g/lbs)
SFM-060	3 ... 60	66	350	420	±1 (% of the displayed value)	1.5	G3/4	1-1/16–16	62	79.4	190	50	750
	.79 ... 15.90	17.4	5076	6091		21.8			2.44	3.13	7.48	1.97	1.65
SFM-150	5 ... 150	165	350	420	±1 (% of the displayed value)	1.5	G3/4	1-1/16–16	62	79.4	190	50	750
	1.32 ... 39.60	43.6	5076	6091		21.8			2.44	3.13	7.48	1.97	1.65
SFM-300	8 ... 300	330	350	420	±1 (% of the displayed value)	4	G1	1-5/16–16	62	81.3	190	50	1200
	2.11 ... 79.00	87.2	5076	6091		58			2.44	3.20	7.48	1.97	2.65
SFM-600	15 ... 600	660	290	348	±1 (% of the displayed value)	5	G1-1/4	1-5/8–12	62	76.2	212	75	1800
	3.96 ... 158.00	174.4	4206	5047		72.5			2.44	3	8.35	2.95	3.97

* FS = Full Scale
** Standard option

SPEEDCON is a trademark of PHOENIX CONTACT GmbH & Co. KG

Pressure Sensor ▪ Type Sensor-PPC

Type Sensor-PPC-04/12-P

Type Sensor-PPC-CAN-P

Product Description

Sensor-PPC-04/12-P and Sensor-PPC-CAN-P

The Pressure Sensor-PPC-04/12-P can be used with all analogue Hydraulic Testers of the PPC series, due to their 5-pin connection.

The CAN Pressure Sensor-PPC-CAN-P are specially designed for use with the CAN Hydraulic Testers. These sensors are using the CANopen protocol to transfer the measurement values to the CAN Hydraulic Testers. Most technical details are the same as with the Pressure Sensors.

Due to their sturdy Stainless Steel design, the quick response times (< 1 ms) and the high accuracy (±0.25% FS* typ.) with automatic sensor recognition, the Pressure Sensors are a reliable and flexible solution for the Hydraulic Testers of the PPC series.

Technical Data

- Sturdy Stainless Steel housing (1.4301)
- FKM/FPM (Viton®) gasket
- Weight: 85 g / .19 lbs
- Suitable for gases and liquids (in the case of aggressive media, only after consultation)
- 5-pin connection
- Pressure connection G1/4 (without adaptor)

Ambient Conditions

- Media temperature: -25 °C ... +105 °C /-13 °F ... +221 °F
- Ambient temperature: -25 °C ... +85 °C / -13 °F ... +185 °F
- Storage temperature: -25 °C ... +85 °C / -13 °F ... +185 °F
- Load cycles (10^6): 100

Sensor-PPC-04/12-P Electrical Data

- Input voltage: 9 ... 36 V DC
- Output signal: 0 ... 3 V DC
- Response time: 1 ms
- Long-term stability: < 0.2 % FS* /a
- Vibration loading: acc. to IEC 60068-2-6 (20 g)
- Shock loading: acc. to IEC 60068-2-27 (50 g)

Sensor-PPC-CAN-P Electrical Data

- Response time: 1 ms
- Long-term stability: < 0.2 % FS* /a
- Vibration loading: acc. to IEC 60068-2-6 (20 g)
- Shock loading: acc. to IEC 60068-2-27 (50 g)

CANopen Interface

- CANopen protocol profile DS406 v3.2 with manufacturer-specific additions
- LSS service DS305 v2.0

Order Codes

Sensor-PPC-04/12-P - **015** - **CAL**

① ② ③

① Series and Type

Pressure Sensor	**Sensor-PPC-04/12-P**
CAN Pressure Sensor	**Sensor-PPC-CAN-P**

② Version

Refer to the table below

③ Calibration

Without calibration certificate	**(None)**
With calibration certificate	**CAL**

Pressure Range and Accuracies

Version		Pressure Range and Accuracies					
Sensor- (1) PPC-04/12-P (2) PPC-CAN-P		Pressure Measuring Range (bar/PSI)	Type of Measurement	Maximum Pressure (bar/PSI)	Burst Pressure (bar/PSI)	Accuracy (±% FS*) typ.	Accuracy (±% FS*) max.
1	015	-1 ... 15	Relative pressure	30	150	0.25	0.5
		-14.5 ... 217		435	2175		
2	016	-1 ... 16	Relative pressure	32	150	0.25	0.5
		-14.5 ... 232		464	2175		
1 & 2	060	0 ... 60	Absolute pressure	120	500	0.25	0.5
		0 ... 870		1740	7251		
1	150	0 ... 150	Absolute pressure	300	900	0.25	0.5
		0 ... 2175		4351	13053		
2	160	0 ... 160	Absolute pressure	320	900	0.25	0.5
		0 ... 2320		4641	13053		
1 & 2	400	0 ... 400	Absolute pressure	800	1200	0.25	0.5
		0 ... 5801		11603	17404		
1 & 2	600	0 ... 600	Absolute pressure	1200	1800	0.25	0.5
		0 ... 8702		17404	26106		
1 & 2	601	0 ... 600 **	Absolute pressure	1200	2500	0.25	0.5
		0 ... 8702		17404	36259		

* FS = Full Scale

** Pressure peaks up to 1000 bar / 14503 PSI

Sensor-PPC-04/12-P

Item No.	Designation	Price
1810010793	Sensor-PPC-04/12-P-015	621.30
1810010794	Sensor-PPC-04/12-P-060	621.30
1810010795	Sensor-PPC-04/12-P-150	621.30
1810010796	Sensor-PPC-04/12-P-400	621.30
1810010797	Sensor-PPC-04/12-P-600	621.30

Sensor-PPC-CAN-P

Item No.	Designation	Price
1810010788	Sensor-PPC-CAN-P-016	621.30
1810010789	Sensor-PPC-CAN-P-060	621.30
1810010790	Sensor-PPC-CAN-P-160	621.30
1810010791	Sensor-PPC-CAN-P-400	621.30
1810010792	Sensor-PPC-CAN-P-600	621.30

Temperature Sensor ▪ Type Sensor-PPC-04/12-T

Product Description

The Screw-in Temperature Sensor-PPC-04/12-T measure current temperature directly in the pipeline and are compatible with the Flow Turbine Flow-Meter-PPC-04/12-SFM and the Straight Threaded Joint SGV-16S-G-W3 (only process connection M10x1, refer to figure below).
Refer to the product information of Flow Turbine on page M42.

The Rod-type Temperature Sensor-PPC-04/12-TSH is especially designed to determine the media temperatures in tanks and containers.

Technical Data

- Suitable for liquids
  (in the case of aggressive media only after consultation)
- 5-pin connection

Materials

- Housing (T): Stainless Steel
- Gaskets (T): FKM/FPM (Viton®)
- Rod (TSH): Stainless Steel 1.4304
- Handle (TSH): Delrin®

Weight

- Screw-in (T)
  M02 (M10x1): 70 g / .15 lbs
  B04 (G1/4): 55 g / .12 lbs
- Rod-type (TSH): 120 g / .26 lbs

Connection

- STAUFF Test connection SGV-16S-G-W3 in the pipeline (only M10x1)
- Screw-in thread (T): M10x1 or G1/4 (refer to figure)
- Screw-in thread (TSH): M10

Ambient Conditions (Screw-in Temperature Sensor)

- Media temperature: -40 °C ...+150 °C / -40 °F ... +302 °F
- Ambient temperature: -40 °C ... +85 °C / -40 °F ... +185 °F
- Storage temperature: -40 °C ... +85 °C / -40 °F ... +185 °F

Ambient Conditions (Rod-type Temperature Sensor)

- Media temperature: -25 °C ... +125 °C / -13 °F ... +257 °F
- Ambient temperature: -25 °C ... +70 °C / -13 °F ... +158 °F
- Storage temperature: -25 °C ... +80 °C / -13 °F ... +176 °F

Measuring Range

- Measuring range (T): -40 °C ...+150 °C / -40 °F ... +302 °F
- Measuring range (TSH): -25 °C ... +125 °C / -13 °F ... +257 °F
- Operating pressure (T): 630 bar / 9137 PSI
- Maximum pressure (T): 800 bar / 11603 PSI
- Burst pressure (T): 2150 bar / 31183 PSI
- Accuracy: ±1 % FS

Electrical Data

- Input signal: 7 ...12 V DC
- Output signal: 0 ...3 V DC
- Response time (T)
  M02 (M10x1): $T_{50} \leq 4$ s, $T_{90} \leq 14$ s
  B04 (G1/4): $T_{50} \leq 4$ s, $T_{90} \leq 12$ s
- Response time (TSH): $T_{90} \leq 9{,}1$ s
- Vibration loading: acc. to IEC 60068-2-6 (20 g)
- Shock loading: acc. to IEC 60068-2-27 (50 g)

Order Codes

Sensor-PPC-04/12 - T - M02 - CAL

① ② ③ ④

① Series and Type

Temperature Sensor	**Sensor-PPC-04/12**

② Version

Screw-in	**T**
Rod-type	**TSH**

③ Process Connection (only for Version T)

M10x1	**M02**
G1/4	**B04**

④ Calibration

Without calibration certificate	**(None)**
With calibration certificate	**CAL**

Sensor-PPC-04/12-T

Item No.	Designation	Price
1810000519	Sensor-PPC-04/12-T-M02	631.05
1810000517	Sensor-PPC-04/12-T-B04	631.05

TSH
Temperature Probe

Item No.	Designation	Price
1810000238	Sensor-PPC-04/12-TSH	845.40

Sensor-PPC-04/12-T-M02 with SGV-16S-G-W3

Refer to Catalogue 7 - STAUFF Test for more information.

CAN Temperature Sensor ▪ Type Sensor-PPC-CAN-T

Product Description

The CAN Temperature Sensor-PPC-CAN-T are specially designed for use with the CAN Hydraulic Testers. This sensor is using the CANopen protocol to transfer the measurement values to the CAN Hydraulic Testers. The Sensor-PPC-CAN-T is compatible with the CAN Flow Turbine Flow-Meter-PPC-CAN-SFM and the Straight Threaded Joint SGV-16S-G-W3 (only process connection M10x1, refer to figure below). Refer to the product information of CAN Flow Turbine on page M43.
Most technical details are the same as with the Temperature Sensor-PPC-04/12-T.
Due to their sturdy Stainless Steel design with automatic sensor recognition, the CAN Temperature Sensor is a reliable and flexible solution for the CAN Hydraulic Tester.
The status of the sensor is indicated via LED.

Connecting the CAN Temperature Sensor to the CAN Hydraulic Tester a CAN Connection Cable and a CAN Terminating Resistor is needed. Refer to page M48 for more information.

Technical Data

- Suitable for liquids
  (in the case of aggressive media only after consultation)
- 5-pin SPEEDCON connection plug
- Sensor identification LED

Materials

- Housing: Stainless Steel
- Gaskets: FKM/FPM (Viton®)

Weight

- M02 (M10x1): 70 g / .15 lbs
- B04 (G1/4): 55 g / .12 lbs

Ambient Conditions

- Media temperature: -40 °C ...+150 °C / -40 °F ... +302 °F
- Ambient temperature: -40 °C ... +85 °C / -40 °F ... +185 °F
- Storage temperature: -40 °C ... +85 °C / -40 °F ... +185 °F

Measuring Range

- Measuring range: -40 °C ...+150 °C / -40 °F ... +302 °F
- Operating pressure: 630 bar / 9137 PSI
- Maximum pressure: 800 bar / 11603 PSI
- Burst pressure: 2150 bar / 31183 PSI
- Accuracy: ±0.66 % FS

CANopen Interface

- CANopen protocol profile DS301, Typ 2.0A
  with manufacturer-specific additions
- LSS service DS305 v2.0

Electrical Data

- Output signal: CAN bus
- Response time
  M02 (M10x1): $T_{50} \leq 4$ s, $T_{90} \leq 12$ s
  B04 (G1/4): $T_{50} \leq 4$ s, $T_{90} \leq 14$ s
- Vibration loading: acc. to IEC 60068-2-6 (20 g)
- Shock loading: acc. to IEC 60068-2-27 (50 g)

Order Codes

Sensor-PPC-CAN - T - B04 - CAL

① ② ③ ④

① Series and Type

CAN Temperature Sensor	**Sensor-PPC-CAN**

② Version

Screw-in	**T**

③ Process Connection (only for Version T)

M10x1	**M02**
G1/4	**B04**

④ Calibration

Without calibration certificate	**(None)**
With calibration certificate	**CAL**

Sensor-PPC-CAN-T

Item No.	Designation	Price
1810000521	Sensor-PPC-CAN-T-B04	484.95

Sensor-PPC-CAN-T-M02 with SGV-16S-G-W3

Refer to Catalogue 7 - STAUFF Test for more information.

Rotational Speed Sensor ▪ Type Sensor-PPC-04/12-SDS-CAB

Product Description

The Sensor-PPC-04/12-SDS-CAB Rotational Speed Sensor allows non-contact speed measurement of rotating components. The sensor is based on an opto-electrical measurement principle that determines the rotational speed with high-accuracy using a reflecting strip on the shaft.

The contact rotational speed measurement is obtained by using a Contact Adaptor that is mounted to the sensor, and which makes contact with the rotating component during measurement. This also produces high-accuracy measurement results. In the case of especially small areas, using the focusing adaptor facilities measurement.

Note: The analogue Rotational Speed Sensor-PPC-04/12-SDS-CAB can only be used with analogue Hydraulic Testers.

Technical Data

- Material: ABS
- Weight: 230 g / .51 lbs
- 5-pin connection
- Both contacting and non-contacting measurement possible
- Type of measurement: optical, red LED

Ambient Conditions

- Ambient temperature: 0 °C ... +70 °C / +32 °F ... +158 °F

Measuring Range

- Measuring range: 20 ... 10000 1/min
- Measuring distance: 25 ... 500 mm (1 ... 20 in)
- Measuring angle: ±45 °C
- Accuracy: ≤ ±0.5 % FS*
- Resolution: ±5 1/min

Electrical Data

- Output signal: 0 ... 3 V DC
- Input signal: 7 ...12 V DC

Note: We recommended not extending the 2 m / 6.56 ft permanent cable connection provided on the sensor!

Order Codes

Sensor-PPC-04/12-SDS-CAB - CAL

① ②

① Series and Type

Rotational Speed Sensor	**Sensor-PPC-04/12-SDS-CAB**

② Calibration

Without calibration certificate	**(None)**
With calibration certificate	**CAL**

Rotational Speed Sensor

Item No.	Designation	Price
1810000070	Sensor-PPC-04/12-SDS-CAB	1368.30

Focus Adaptor

Item No.	Designation	Price
1810000155	Adaptor-PPC-04/12-SFA-Focus	223.25

Contact Adaptor

Item No.	Designation	Price
1810000154	Adaptor-PPC-04/12-SKA-Contact	312.95

Applications Examples

Fig. 1 -
Contacting rotational speed measurement with the contact adaptor

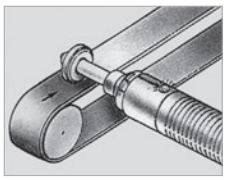


Fig. 2 -
End face rotational speed measurement with the contact adaptor

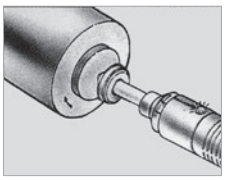
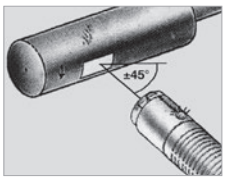


Fig. 3 -
Rotating shaft / non-contacting rotational speed measurement using the focusing adaptor and marking strip



Connection and Extension Cables (analogue)

Connection Cable-PPC-04/12-3
Extension Cable-PPC-04/12-5-EXT

PC Connection Cable as a component
of the PPC-SET-PPC-04-plus-SW-CAB

PC Connection Cable as a component
of the PPC-SET-PPC-06/08-plus-SW-CAB

Order Codes
Connection and Extension Cable

Cable-PPC-04/12-3

① Series and Type

Standard Connection Cable for Sensors	**Cable-PPC-04/12-3**
Extension Cable	**Cable-PPC-04/12-5-EXT**

Item No.	Designation	Price
1810000066	Cable-PPC-04/12-3	249.35
1810000145	Cable-PPC-04/12-5-EXT	545.35

Order Codes
PC Connection Cable and PC Software

PC-SET-PPC-04-plus-SW-CAB

① Series and Type

PC Set	**PC-SET-PPC-04-plus-SW-CAB**

Item No.	Designation	Price
1810010839	PC-SET-PPC-04-plus-SW-CAB	364.95

Order Codes
PC Connection Cable and PC Software

PC-SET-PPC-06/08-plus-SW-CAB

① Series and Type

PC Set	**PPC-SET-PPC-06/08-plus-SW-CAB**

Item No.	Designation	Price
1810000276	PC-SET-PPC-06/08-plus-SW-CAB	375.40

CAN Accessories

CAN Connection Cable-PPC-CAN

CAN Y-Splitter Cable-PPC-CAN-Y

CAN Terminating Resistor-PPC-CAN

Order Codes
CAN Connection Cable

Cable-PPC-CAN - 2

① Series and Type

CAN Connection Cable	**Cable-PPC-CAN**

② Length

0.5 m / 1.64 ft	**0.5**
2 m / 6.65 ft	**2**
5 m / 16.40 ft	**5**
10 m / 32.81 ft	**10**
20 m / 65.62 ft	**20**

Item No.	Designation	Price
1810000376	Cable-PPC-CAN-0.5	63.25
1810000350	Cable-PPC-CAN-2	154.25
1810000351	Cable-PPC-CAN-5	166.85
1810000352	Cable-PPC-CAN-10	193.40
1810000377	Cable-PPC-CAN-20	392.65

Order Codes
CAN-Y Splitter Cable

Cable-PPC-CAN-Y

① Series and Type

CAN Y-Splitter Cable 0.3 m / .98 ft	**Cable-PPC-CAN-Y**

Item No.	Designation	Price
1810000353	Cable-PPC-CAN-Y	105.30

Order Codes
CAN Terminating Resistor

Resistor-PPC-CAN

① Series and Type

CAN Terminating Resistor	**Resistor-PPC-CAN**

Item No.	Designation	Price
1810000354	Resistor-PPC-CAN	92.65

Complete Systems for analogue Hydraulic Testers PPC-04-SET

Complete Systems PPC-04-SET

Product Description

Complete systems for analogue Hydraulic Testers are assembled in different versions according to customer requirements. The complete systems are supplied in a handy case with individually designed pockets/sections and have space for the components listed below.

Components

Standard Options for Complete Systems PPC-04-SET

- 1x Case
- 1 x Hydraulic Tester PPC-04-plus
- 1x Power supply incl. country-specific adaptor
- Up to 3 Pressure Sensor-PPC-04/12-P with installed adaptors for STAUFF Test 20 (M16 x 2)
- Up to 2 Connection Cables (3 m / 9.84 ft)
- 1x Temperature Sensor-PPC-04/12-T-M02 with installed SGV-16S-G-W3 (optional)
- 3x Adaptors SAD for the STAUFF Test 15/12/10 series (standard for all PPC complete systems)
- 1x Operating instructions (multilingual) on CD
- 1x PC software for PPC-04-plus
- 1x PC connection cable

Order Codes

PPC - 04-SET - 2 - T - 015 / 150 / 000 - CAL

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

① Series and Type

Hydraulic Tester	**PPC**

② Version

2 sensor inputs, incl. PC software and PC connection cable	**04-SET**

③ Number of Pressure Sensors

With 1 Pressure Sensor	**1**
With 2 Pressure Sensors	**2**
With 3 Pressure Sensors	**3**

④ Temperature Sensor

Without Temperature Sensor T and SGV	**(None)**
With Temperature Sensor T and SGV	**T**

⑤ Pressure Range and Pressure Sensor

1. Pressure Sensor	**refer to the table below**

⑥ Pressure Range and Pressure Sensor

2. Pressure Sensor	**refer to the table below**

⑦ Pressure Range and Pressure Sensor

3. Pressure Sensor	**refer to the table below**

⑧ Calibration

Without calibration certificate	**(None)**
With calibration certificate	**CAL**

Pressure Range and Pressure Sensor

Pressure Range	Pressure Sensor		
000	When ordering a complete system with one or two pressure sensors, specify "000" for the pressure range of the 2. and / or 3. pressure sensors.		
015	Pressure Range 1. Pressure Sensor	Pressure Range 2. Pressure Sensor	Pressure Range 3. Pressure Sensor
060			
150			
400			
600			
e.g.	**015** (15 bar)	**060** (60 bar)	**000** (0 bar)
Please keep in mind that two pressure sensors with identical measuring ranges are necessary for differential pressure measurements.			

PPC-04-SET

Item No.	Designation	Sensors	Price
6100114383	PPC-04-SET-1-015/000/000	1	2625.85
6100114394	PPC-04-SET-1-060/000/000	1	2625.85
6100114395	PPC-04-SET-1-150/000/000	1	2625.85
6100114400	PPC-04-SET-1-400/000/000	1	2625.85
6100114401	PPC-04-SET-1-600/000/000	1	2625.85
6100114402	PPC-04-SET-2-015/150/000	2	3548.55
6100114403	PPC-04-SET-2-060/150/000	2	3548.55
6100114408	PPC-04-SET-2-150/400/000	2	3548.55
6100114409	PPC-04-SET-2-400/400/000	2	3548.55
6100114414	PPC-04-SET-2-600/600/000	2	3548.55
6100114415	PPC-04-SET-2-400/600/000	2	3548.55
6100114416	PPC-04-SET-2-150/600/000	2	3548.55
6100114418	PPC-04-SET-3-015/060/150	3	4221.90
6100114420	PPC-04-SET-3-015/150/400	3	4221.90
6100114421	PPC-04-SET-3-060/150/400	3	4221.90
6100114424	PPC-04-SET-3-060/150/600	3	4221.90
6100114425	PPC-04-SET-3-150/150/400	3	4221.90
6100114426	PPC-04-SET-3-150/400/400	3	4221.90
6100114427	PPC-04-SET-3-150/150/600	3	4221.90
6100114428	PPC-04-SET-3-400/400/600	3	4221.90
6100114430	PPC-04-SET-3-400/400/400	3	4221.90
6100182680	PPC-04-SET-3-400/600/600	3	4221.90
6100114431	PPC-04-SET-3-600/600/600	3	4221.90

Complete Systems ▪ Type PPC-04-CAN-SET

Complete Systems PPC-04-CAN-SET

Product Description

Complete Systems for Hydraulic Testers PPC-04-plus-CAN are assembled in different versions according to customer requirements. The complete systems are supplied in a handy case with individually designed pockets/sections and have space for the components listed below.

Components

Standard Options for Complete Systems PPC-04-CAN-SET

- 1x Case
- 1x Hydraulic Tester PPC-04-plus-CAN
- 1x Power Supply incl. country-specific Adaptor
- Up to 3 CAN Pressure Sensor-PPC-CAN-P with installed Adaptors for STAUFF Test 20 (M16 x 2)
- 1x CAN Temperature Sensor-PPC-CAN-T-M02 with installed SGV-16S-G-W3 (optional)
- 3x Adaptors SAD for the STAUFF Test 15/12/10 series (standard for all PPC complete systems)
- Up to 3 CAN Connecting Cables
- Up to 2 CAN Y-Splitter Cables
- 1x CAN Terminating Resistor
- 1x Operating instructions (multilingual) on CD
- 1x PC software
- 1x PC connection cable

Contact STAUFF for calibrated version.

Order Codes

PPC - 04-CAN-SET - 2 - T - 016 / 060 / 000 - CAL

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

① Series and Type

Hydraulic Tester	**PPC**

② Version

CAN version with CAN interface	**04-CAN-SET**

③ Number of CAN Pressure Sensors

With one CAN Pressure Sensor	**1**
With two CAN Pressure Sensors	**2**
With three CAN Pressure Sensors	**3**

④ CAN-Temperature Sensor

Without CAN-Temperature Sensor T and SGV	**(None)**
With CAN-Temperature Sensor T and SGV	**T**

⑤ Pressure Range and Pressure Sensors

1. CAN Pressure Sensor	**refer to the table below**

⑥ Pressure Range and Pressure Sensors

2. CAN Pressure Sensor	**refer to the table below**

⑦ Pressure Range and Pressure Sensors

3. CAN Pressure Sensor	**refer to the table below**

⑧ Calibration

Without calibration certificate	**(None)**
With calibration certificate	**CAL**

Pressure Range and CAN Pressure Sensor

Pressure Range	CAN Pressure Sensor		
000	When ordering a complete system with one or two CAN pressure sensors, specify „000“ for the pressure range of the 2. and / or 3. CAN pressure sensors.		
016	Pressure Range 1. CAN Pressure Sensor	Pressure Range 2. CAN Pressure Sensor	Pressure Range 3. CAN Pressure Sensor
060			
160			
400			
600			
e.g.	**016** (16 bar)	**060** (60 bar)	**000** (0 bar)
Please keep in mind that two CAN pressure sensors with identical measuring ranges are necessary for differential pressure measurements.			

PPC-04-CAN SET

Item No.	Designation	Sensors	Price
6100114435	PPC-04-CAN-SET-1-016/000/000	1	2623.40
6100114436	PPC-04-CAN-SET-1-060/000/000	1	2623.40
6100114446	PPC-04-CAN-SET-1-160/000/000	1	2623.40
6100114451	PPC-04-CAN-SET-1-400/000/000	1	2623.40
6100114452	PPC-04-CAN-SET-1-600/000/000	1	2623.40
6100114453	PPC-04-CAN-SET-2-016/160/000	2	3556.30
6100114454	PPC-04-CAN-SET-2-060/160/000	2	3556.30
6100114455	PPC-04-CAN-SET-2-160/400/000	2	3556.30
1810010883	PPC-04-CAN-SET-2-400/400/000	2	3556.30
1810010882	PPC-04-CAN-SET-2-600/600/000	2	3556.30
6100114456	PPC-04-CAN-SET-2-400/600/000	2	3556.30
6100114457	PPC-04-CAN-SET-2-160/600/000	2	3556.30
6100114458	PPC-04-CAN-SET-3-016/060/160	3	4489.20
6100114459	PPC-04-CAN-SET-3-016/160/400	3	4489.20
6100114537	PPC-04-CAN-SET-3-060/160/400	3	4489.20
6100114579	PPC-04-CAN-SET-3-060/160/600	3	4489.20
6100114581	PPC-04-CAN-SET-3-160/160/400	3	4489.20
6100114582	PPC-04-CAN-SET-3-160/400/400	3	4489.20
6100114583	PPC-04-CAN-SET-3-160/160/600	3	4489.20
6100114584	PPC-04-CAN-SET-3-400/400/600	3	4489.20
6100114585	PPC-04-CAN-SET-3-400/400/400	3	4489.20
6100114586	PPC-04-CAN-SET-3-600/600/600	3	4489.20

Complete Systems ▪ Type PPC-Pad-SET

Complete Systems PPC-Pad-SET-102

Product Description

The PPC Pad is also available in a specially designed case to store your unit and your accessories. The case is robust, lightweight and can be carried directly to your machine.

It has individually designed inserts that can hold up to 4 Pressure Sensors, 2 CAN Flow Turbines, Frequency and Aux.-Adaptor Cable and additional equipment.
The PPC Pad case is a robust way to store and protect your equipment.

Standard PPC-Pad-SET kits equip the technician with the essential diagnostic equipment needed for accurate measurement.

Features

STAUFF's CAN bus sensors now take advantage of the bus system's automatic sensor recognition to provide an easy-to-install Plug & Play solution (max. CAN bus length 100 m /328 ft). Compatibility with existing diagnostic sensors is also provided.

Our proven storage strategy is focused on MIN and MAX value measurements. Combined with a wide variety of value presentation styles, these features make effective solutions oriented analysis possible.

The PPC-Soft-plus PC software offers additional methods for analysis, control and remote maintenance using LAN and USB connections. Together with this software, the PPC Pad is a truly user-friendly measuring instrument that can be used for any type of diagnostics application.

Components

Standard Options for Complete Systems PPC-Pad-SET

- Hydraulic Tester PPC Pad
- Flow-Meter-CAN-SFM-600
- Flow-Meter-CAN-SFM-060
- Sensor-CAN-PT-400
- Sensor-CAN-PT-016
- Installed Handle
- 24 V DC / 2,5 A Power supply incl. country-specific adaptor
- M8 x 1 / 4-pin (digital in/out)
- USB 2.0 cable (2 m / 6.56 ft)
- LAN cable (5 m / 16.40 ft)
- Operating Instructions
- PC software
- MicroSD memory card
- Equipment case
- Neck strap
- CAN Connection Cable (5 m / 16.40 ft)
- 2x CAN Terminating Resistor
- Analogue Connection Cable (3 m / 9.84 ft)
- M12 cable socket Aux. output

Order Codes

PPC-Pad - SET-102

① ②

① Series and Type

Hydraulic Tester	**PPC-Pad**

② Version

PPC-Pad-SET-102	**SET-102**

PPC-Pad-SET-102

Item No.	Designation	Price
1810000383	PPC-Pad-SET-102	24083.30

Pressure Transmitter

The PT-RF series of pressure transmitters are an alternative solution for universal pressure measurements for fluid technology applications, which will provide benefits for system operators, maintenance personnel and repair technicians as well as for original equipment manufacturers.

The advantages resulting from the use of the new technology for system operators, maintenance personnel and repair technicians are clear:

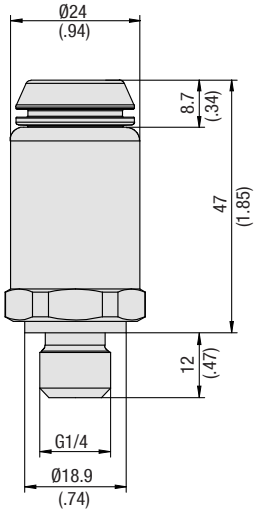
Measurements can be carried out very easily, without extensive training and within a few seconds at the press of a button and then documented in a reliable process.

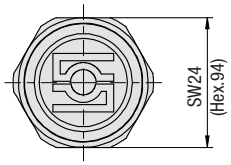
Unscrewing and re-installing pressure gauges or other measuring and display devices – practically a temporary opening of the system – is not required. Potential hazards for people, machines and the environment, for example from emitted residual oil in the test hose or leaks at the measuring point, as well as ingress of dirt into the system (e.g. in dusty environments), can be effectively excluded.

Original equipment manufacturers will also benefit from this new technology: If the pressure transmitters are installed at their factory already, the innovative technology can provide a competitive edge over alternative suppliers and open up specific advantages for the users, increasing the value retention of their own devices in the long term.

If the pressure transmitters are installed directly in the system or pipeline for permanent use, they protrude only slightly more than conventional hydraulic Test Couplings and meet the highest demands with regard to space requirements and weight.

Pressure Transmitter ▪ Type PT-RF





Process connection G1/4 (B04)

Product Description

The pressure transmitters from the PT-RF series are integrated into fluid technology plants and systems permanently or temporarily using the appropriate process connection adapters. The energy required for a measurement is transferred to the pressure transmitter via the antenna of the reading device using wireless RFID technology.
This means that the pressure transmitters require neither internal nor external power supply and are completely maintenance-free.

Technical Data

Wetted Parts
- Suitable for liquid and gaseous media

Materials
- Housing: Stainless Steel 1.4305
- Sealing (B04): FKM/FPM (Viton®)
- Cap: Polyamide (glass fibre-reinforced)

Dimensions / Weight
- Dimensions: 59 x 26 mm / 2.32 x 1.02 in
- Weight: 80 g / .18 lbs

Temperature Range
- Media temp. (N04): -40°C … +135°C / -40°F … +275°F
  Media temp. (B04): -30°C … +135°C / -22°F … +275°F
- Ambient temp.: -40 °C ... +85 °C / -40 °F ... +185 °F
- Storage temp.: -55 °C ...+125 °C / -67 °F ... +257 °F

Electrical Data
- Sampling rate: typ. 250 ms / max. 400 ms
- Long-term stability: according to IEC EN 60770-1
  max. ± 0.25 % FS* /a
- Load cycles (10^6): 10
- Vibration loading: acc. to IEC 60068-2-6 (20 g)
- Shock loading: acc. to IEC 60068-2-27 (30 g) 11 ms

Protection Rating
- IP69 protection rating: Dust tight and protected against high-pressure and steam cleaning

Order Codes

PT - **RF** - **B00600** - **B04**

① ② ③ ④

① Series and Type
Pressure Transmitter **PT**

② Version
Signal transmission via RFID technology **RF**

③ Pressure Range
Refer to the table below

④ Process Connection
G1/4 **B04**

Pressure Range and Accuracies

Version	Pressure Range and Accuracies					
Pressure Transmitter PT-RF	Pressure Range ($^{bar}/_{PSI}$)	Type of Measurement	Maximum Pressure ($^{bar}/_{PSI}$)	Burst Pressure ($^{bar}/_{PSI}$)	Accuracy (±% FS*) typ.	Accuracy (±% FS*) max.
B00016	0 ... 16	Relative pressure	32	48	0.25	0.5
	0 ... 232		464	696		
B00060	0 ... 60	Relative pressure	120	180	0.25	0.5
	0 ... 870		1740	2610		
B00160	0 ... 160	Relative pressure	320	480	0.25	0.5
	0 ... 2320		4641	6961		
B00400	0 ... 400	Relative pressure	800	1200	0.25	0.5
	0 ... 5801		11603	17405		
B00600	0 ... 600	Relative pressure	1200	1800	0.25	0.5
	0 ... 8702		17404	26107		

Temperature behaviour: max. ± 0.2 % FS* /10K (test condition 25 °C; 45 % v. F.)

* FS = Full Scale

PT-RF

Item No.	Designation	Price
1810011057	PT-RF-B00016-B04	294.35
1810011058	PT-RF-B00060-B04	294.35
1810011059	PT-RF-B00160-B04	294.35
1810011060	PT-RF-B00400-B04	294.35
1810011061	PT-RF-B00600-B04	294.35

Reader ▪ Type Reader-PT-RF

Product Description

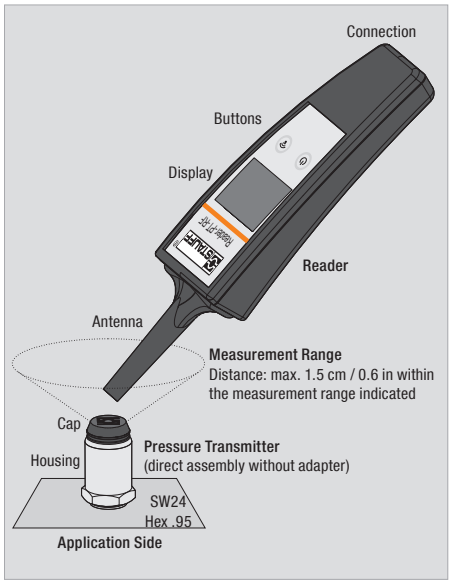
The hand-held readers transfer the energy required for a measurement to the pressure transmitter using RFID technology. All that is required is a maximum distance of 1.5 cm / 0.6 in from the antenna to the tip of the pressure transmitter for the duration of the measurement.

When the pressure transmitter is activated by the press of a button, a current measured value is determined within only 0.5 seconds and then immediately transmitted back to the reading device together with other relevant information and then output on the illuminated display and stored.
Over 15,000 of these measurement sets can be stored in the internal memory of the device.

PC Software

The software included with the delivery allows transmission of the stored measured values from the reading device to the PC, subsequent evaluation and export, e.g. to Microsoft Excel®.

Set Up



Order Code

Reader-PT-RF

①

① Series and Type

Reader	**Reader-PT-RF**

Standard option:
- Reader-PT-RF
- Manual and software on CD
- Quick guide
- USB 2.0 cable (1 m / 3.28 ft)
- 5 V DC / 1 A power supply incl. country-specific adaptors

Reader-PT-RF

Item No.	Designation	Price
1810011067	Reader-PT-RF	1191.55

Technical Data

Material
- Housing made of ABS

Dimensions / Weight
- Dimensions: 76 x 35 x 240 mm / 3.0 x 1.38 x 9.45 in
- Weight: 220 g / .49 lbs

Measurements / Display
- Pressure: in bar and PSI
- Temperature: in °C and °F
- Display: graphic, LED backlit
- Visible area: 55 x 46 mm / 2.17 x 1.81 in
- Resolution: 128 x 64 Pixel

Power Supply
- Battery: Lithium-Ion (3.7 V DC / 900 mAh)
- Operating time approx. 6h (approx. 1800 individual measurement)

Temperature Range
- Ambient temp.: -20 °C ... +70 °C / -4 °F ... +158 °F
- Storage temp.: -25 °C ... +60 °C / -13 °F ... +140 °F
- CE certified

Electrical Data / Interface
- Sampling rate: typ. 250 ms / max. 400 ms
- Interface: Micro USB
- EMV: EN 61326-1:2013
  EN 300330

Protection Rating
- IP65 protection rating: Dust tight and protected against water jets

Additional application

The PT-RF reader along with PT-RF transmitter is an ideal tool to check the pre-charge pressure of an accumulator fitted with a STAUFF SKK gas valve.
Refer to Section P - STAUFF Accumulators, or contact STAUFF for more information.

Complete system ▪ Type PT-RF-SET

Complete system in case PT-RF-SET

Product Description

The PT-RF-SET complete system is compiled in different versions according to customer requirements. All complete systems are supplied in a handy carrying case containing individually shaped foam inserts for a maximum of 10 pressure transmitters and 10 process connection adaptors and offering space for the following components:

Standard Option

- 1x Reader-PT-RF
- up to 3 Pressure Transmitters PT-RF
- up to 3 Process Connection Adaptors SDA or SMD
- 1x Manual and Software on CD
- 1x Quick Guide
- 1x USB 2.0 cable(1 m / 3.28 ft)
- 1x Power Supply incl. country-specific adaptors

Order Codes

PT-RF - SET - 2 - 400 / 600 / 000 - B

① ② ③ ④ ⑤ ⑥ ⑦

① Series and Type

Series PT-RF	**PT-RF**

② Version

Complete system in case	**SET**

③ Number of Pressure Transmitters in the Set

1x pressure transmitter	**1**
2x pressure transmitter	**2**
3x pressure transmitter	**3**

④ Pressure Range / Version

1st pressure transmitter	**refer to the table below**

⑤ Pressure Range / Version

2nd Pressure Transmitter	**refer to the table below**

⑥ Pressure Range / Version

3rd Pressure Transmitter	**refer to the table below**

⑦ Process Connection Adaptor

Adaptor SDA for process connection G1/4 (B04)	**B**
Adaptor SMD for process connection 1/4NPT (N04)	**N**

Pressure Transmitter: Pressure Range and Version

Pressure Range	Version of Pressure Transmitter		
000	When ordering a complete system with one or two pressure transmitters, the pressure range for the 2nd and 3rd pressure transmitter is given as "**000**".		
016	Version pressure transmitter: **B00016** (pressure range: 0 ... 16 bar / 0 ... 232 PSI)		
060	Version pressure transmitter: **B00060** (pressure range: 0 ... 60 bar / 0 ... 870 PSI)		
160	Version pressure transmitter: **B00160** (pressure range: 0 ... 160 bar / 0 ... 2320 PSI)		
400	Version pressure transmitter: **B00400** (pressure range: 0 ... 400 bar / 0 ... 5801 PSI)		
600	Version pressure transmitter: **B00600** (pressure range: 0 ... 600 bar / 0 ... 8702 PSI)		
e.g.	**400** (400 bar)	**600** (600 bar)	**000** (0 bar)

Reader-PT-RF

Item No.	Designation	Price
6100003673	PT-RF-SET-1-600/000/000-B	2042.85
6100003674	PT-RF-SET-2-400/600/000-B	2389.25
6100016976	PT-RF-SET-3-060/060/160-B	2735.65
6100010866	PT-RF-SET-3-060/400/400-B	2735.65
6100016975	PT-RF-SET-3-160/400/400-B	2735.65
6100003675	PT-RF-SET-3-160/400/600-B	2735.65
6100010694	PT-RF-SET-3-400/400/400-B	2735.65
6100010689	PT-RF-SET-3-400/400/600-B	2735.65

Spare Parts / Accessories

Product Description

In addition to the Power-Supply-PT-RF-Reader-MULTI which is available as a spare part, the Case-PT-RF-Set is also available as an individual item for assembling a complete system later on.

The Case-Reader-PT-RF is available if only a storage case for the reading device is required. It only provides space for the reading device and the associated accessories (without pressure transmitters and process connection adaptors).

① Spare Parts / Accessories

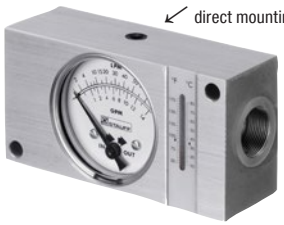
Case, small	**Case-Reader-PT-RF**
Case, large	**Case-PT-RF-SET**
5 V DC / 1 A power supply incl. country-specific adaptors and USB 2.0 cable	**Power-Supply-PT-RF-Reader-MULTI**
Adaptor for pressure transmitter (B04)	**SDA-20-G1/4-W3**
Adaptor for pressure transmitter (N04)	**SMD-20-1/4NPT-W3**

Spare Parts / Accessories

Item No.	Designation	Price
6100000353	Case-Reader-PT-RF	294.35
6100003635	Case-PT-RF-SET	504.90
1810011055	Power-Supply-PT-RF-Reader-MULTI	126.30
1210026153	SDA-20-G1/4-W3	52.05
1210026018	SMD-20-1/4NPT-W3	56.25

Flow Indicator ▪ Types SDM / SDMKR

Flow Indicator Type SDMKR-750



Flow Indicator Type SDM

Product Description

Analogue flow indicators for measuring the flow rate of fluids in mobile and industrial hydraulics.
The SDMKR is designed with a loading valve for the strain test of the hydraulic system to facilitate precise control of the operating pressure. In addition, this product can also be subjected to a reverse flow direction (without flow rate determination).

Features

- Suitable for Mineral Oil (Aluminium), HFC Fluids and Water (Brass)
- Designed for In-line installation
- Mechanical flow measurement
- Controlling working pressure with a pressure control valve (only SDMKR)
- Flow indication in l/min and GPM for Aluminium units, Brass units have flow indication for Water and Oil both in l/min
- Aluminium unit: Dual scale
- Brass unit: Single scale
- Thread to connect with a pressure gauge (only SDM)

Note: Other thread versions available on request.

Order Codes

SDM - 750 - A - 016 - T

① ② ③ ④ ⑤

① Series and Type

Flow Indicator Type SDM	**SDM**
Flow Indicator Type SDMKR	**SDMKR**

② Size

750	**750**
1500 (only SDM)	**1500**

③ Housing Material

Aluminium	**A**
Brass (only SDM)	**B**

Brass housing material available on request, contact STAUFF for more information.

④ Flow Ranges

Refer to the table below

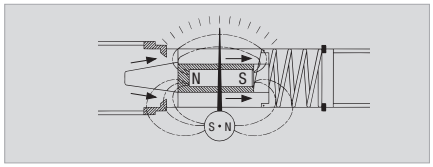
⑤ Thermometer

With integrated thermometer (standard option) **T**

Optional

Certificate of accuracy is available on request, contact STAUFF for more information.

Functional Principal Flow Measuring



The flow indicators SDM and SDMKR have a sharp-edged orifice and a tapered metering piston, which moves in proportion to changes of flow against a spring.
In no flow condition the piston closes the opening and the pointer indicates zero.

With increasing flow and differential pressure the piston moves against the calibrated spring. The piston movement is directly proportional to the flow rate and is magnetically coupled to the rotary pointer. During this function the sharp-edged orifice minimises the effects of viscosity.
The flow is shown on a calibrated scale in l/min and gal/min.

Controlling Working Pressure with SDMKR

The pressure control valve of the SDMKR is directly connected to a flow-block, and together with the integrated pressure gauge it allows exact control of the working pressure in the maximum range.
For protection the SDMKR has two rupture disks. At a pressure >420 bar the disks burst and the fluid is by-passed around the valve. The rupture disks (other pressure ranges on request) can be replaced easily.
The SDMKR also permits flow in the reverse direction (without flow rate determination).

Technical Data

Max. Working Pressure (bar/PSI)	Flow Range (l/min/US GPM) Aluminium Units	Flow Range Brass Units (only SDM) *	Weight (kg/lbs)	Connection T
420	2 - 16	-	1.36	G3/4
6091	0.5 - 4	-	3.0	
420	2 - 30	-	1.36	G3/4
6091	0.5 - 8	-	3.0	
420	2 - 60	-	1.36	G3/4
6091	0.5 - 16	-	3.0	
420	4 - 120	-	1.36	G3/4
6091	1 - 32	-	3.0	
420	10 - 180	-	1.36	G3/4
6091	4 - 48	-	3.0	
350	10 - 200	-	3.0	G1-1/2
5075	5 - 50	-	6.61	
350	20 - 300	-	3.0	G1-1/2
5075	4 - 80	-	6.61	
350	20 - 400	-	3.0	G1-1/2
5075	5 - 100	-	6.61	
350	-	20 - 400 l/min in oil	8.0	G1-1/2
5075	-	20 - 400 l/min in water	17.64	
420	2 - 30	-	6.6	G3/4
6091	0.5 - 8	-	14.55	
420	5 - 60	-	6.6	G3/4
6091	1.3 - 16	-	14.55	
420	5 - 120	-	6.6	G1
6091	1.3 - 32	-	14.55	
420	10 - 200	-	6.6	G1
6091	4 - 53	-	14.55	

Order Codes

Item No.	Designation	Price
1910000609	SDM-750-A-016-T	1137.20
1910000610	SDM-750-A-030-T	1137.20
1910000611	SDM-750-A-060-T	1137.20
1910000612	SDM-750-A-120-T	1137.20
1910000613	SDM-750-A-180-T	1302.70
1910000614	SDM-1500-A-200-T	2489.80
1910000615	SDM-1500-A-300-T	2489.80
1910000616	SDM-1500-A-400-T	2489.80
1910000621	SDM-1500-B-400-T	4145.25
1910020789	SDMKR-750-A-030-T	2842.70
1910020790	SDMKR-750-A-060-T	2842.70
1910020791	SDMKR-750-A-120-T	2842.70
1910020792	SDMKR-750-A-200-T	2842.70

Portable Hydraulic Flow Tester ▪ Type WT-HT / DHT / DHM / DHCR

WT-HT Analogue Hydraulic Tester

WT-DHT Digital Hydraulic Tester

WT-DHM Digital Hydraulic Multimeter

WT-DHCR Digital Hydraulic Control Readout

Product Description

WT portable hydraulic components are integrated to measure pressure, flow, temperature and speed. A portable range of testers will allow you to easily and safely simulate operating conditions using the built-in load valve to help pinpoint the fault.
A safe and clean environment is maintained by including the unique INTERPASS™ protection system. In the event of over-pressurisation, burst discs built into the load valve will safely bypass oil internally through the valve and back to the tank. NOT externally where it could contaminate the environment or physically injure a person.
Webtec has a policy of innovation and continuous improvement that has led to a comprehensive range of instruments with unique features, such as the bi-directional pressure balanced load valve, internal burst discs and simplified controls.

Features

- Bi-directional pressure balanced load valve
- Internal burst discs
- Simplified control
- Accurate measurement
- Robust cases and controls

INTERPASS™ is a registered product of Webtec Ltd. UK.

Range

- DHM Series Digital Multimeter
- DHT Series Digital Tester
- HT Series Analogue Tester
- DHCR Series Digital Remote
- Flow Hub Readout
- Flow Meters: In-line
  Bi-directional
- RFIK Mechanical Testers
- Flow Indicators: High Pressure
- FTM Mining Tester

Measuring Parameters

- Flow
- Pressure
- Speed
- Temperature

Order Codes

WT	-	DHT	-	L00400	-	B0420	-	G16	-	CAL
①		②		③		④		⑤		⑥

① Series and Type

Series Webtec	**WT**

② Version

Analogue Hydraulic Tester	**HT**
Digital Hydraulic Tester - Light Version (Limited digital controls, available in 400 LPM only)	**DHT01**
Digital Hydraulic Tester	**DHT**
Digital Hydraulic Multimeter	**DHM**
Digital Hydraulic Control Readou	**DHCR**

③ Flow

400 LPM	**L00400**
800 LPM	**L00800**

④ Pressure Range

420 Bar	**B0420**
480 Bar	**B0480**

⑤ Connection

G1 BSPP	**G16**
1 5/16-12 UN	**U16**
1 7/8-12	**U24**

⑥ Calibration

Calibrated	**CAL**
Certified to NATA traceable standard	**CN**

WT-HT
Analogue Hydraulic Tester

Item No.	Designation	Price
1810011469	WT-HT-L00400-B0420-G16	6769.75

WT-DHT
Digital Hydraulic Tester

Item No.	Designation	Price
1810011422	WT-DHT01-L00400-B0420-G16	6769.75
1810011396	WT-DHT-L00400-B0420-G16	7841.30
6100007744	WT-DHT-L00800-B0480-U24	9208.00

WT-DHM
Digital Hydraulic Multimeter

Item No.	Designation	Price
6100018002	WT-DHM-L00400-B0420-G16	7841.30
1810010948	WT-DHM-L00400-B0420-U16	7841.30
6100018006	WT-DHM-L00800-B0480-U24	9881.80

WT-DHCR
Digital Hydraulic Control Readout

Item No.	Designation	Price
1810011178	WT-DHCR-B0420	3317.60

Refer to page M60 for Flow Turbines and Cables

Portable Hydraulic Flow Tester ▪ Accessories

WTS-DISC
Burst Disc for Testers with Load Valve Fitted

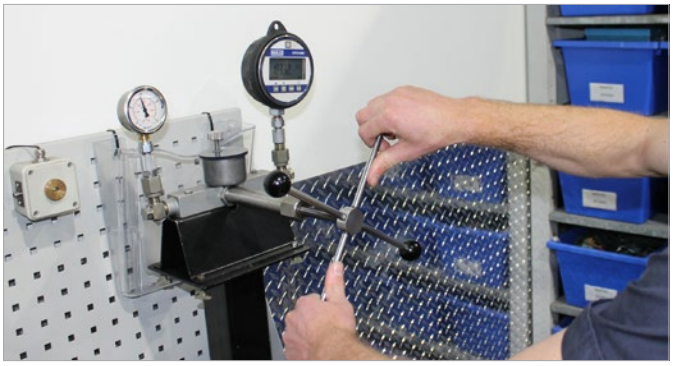
Item No.	Designation	LPM	Diameter	Price
6100008182	WTS-DISC-BURST-B0210/P3000-D16	400	16 mm	60.15
1810011454	WTS-DISC-BURST-B0280/P4000-D16	400	16 mm	60.15
1810011477	WTS-DISC-BURST-B0345/P5000-D16	400	16 mm	60.15
1810011482	WTS-DISC-BURST-B0420/P6000-D16	400	16 mm	60.15
6100039723	WTS-DISC-BURST-B0345/P5000-D19.8	500-800	20 mm	60.15
1810011447	WTS-DISC-BURST-B0420/P6000-D19.8	500-800	20 mm	60.15
6100007743	WTS-DISC-BURST-B0480/P7000-D19.8	500-800	20 mm	60.15

Photo Tachometer

Item No.	Designation	Price
6100008184	WTS-TACHO-IR-3-9251	1042.85
1810011418	WTC-BASE-MAGNETIC-9351	589.15

Repair and Calibration Services

STAUFF Technology Centre



Service and calibration test centre

STAUFF Technology Centre provides the capability to service, test and calibrate equipment and is the region's authorised service centre for STAUFF Diagtronics and WEBTEC's digital and analogue hydraulic measuring and diagnostic equipment in addition to other brands and types of equipment.

STAUFF's Test centre (certified to ISO 9001:2015 with full traceability to British, German and Australian national standards) integrates with the WEBTEC C2000 microprocessor with built-in, high-speed, multi-channel data acquisition system.

Hydraulic parameters tested (measurement can be in metric and imperial units):

Flow, pressure and temperature parameters

- Flow measurement to 800 LPM / 210 USGPM
- Pressure to 400 bar / 6000 PSI static
- Temperature to 80 °C / 176 °F

Pressure gauge calibration service

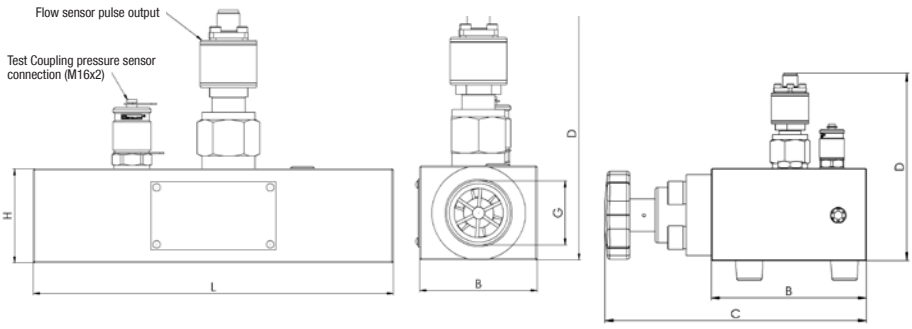
Calibrated and certified to NATA standards, STAUFF's high-accuracy comparator is capable of testing analogue and digital pressure gauges up to 2000 bar static. Recorded data is reported as a workshop certificate, traceable to NATA standards, validating the test data and accuracy.

Annual service and calibration reminder service

STAUFF Technology Centre sends automated reminders in alignment with customers' quality systems, annual equipment calibration requirements and manufacturers' due dates, thus eliminating costs of accidental oversights in the servicing of valuable equipment.

Contact STAUFF for more information.

Flow Turbines & Accessories



*C - LV (Integral Loading Valve) option only

Product Description

The WT-SFM-FM flow turbine may be used as a piece of test equipment or permanently mounted in the pipeline.
The oil flow rotates the internal axial turbine creating a pulse output from the flow sensor.
The frequencies generated may be read by other devices in the STAUFF range including the DHCR or as external input information to the the DHT or HT series testers (refer to page M58).
The flow sensor is fitted with a thermistor bead to provide temperature information to be displayed on the reading device. This turbine is capable of reading flow in either direction.
For accurate readings ensure 8 to 10 diameters of straight conductor are used on the inlet side of the turbine and always use straight fittings. Avoid the use of elbow type fittings.
The turbine may be supplied with or without a pressure balance loading valve. Protected by rupture discs, this convenient loading valve allows the user to observe system performance under load.

Order Codes

WT - SFM-FM - L00060 - B0420 - G12 - LV

① ② ③ ④ ⑤ ⑥

① Series and Type

Flow Turbine	**WT**

② Version

Flow Turbine - Frequency	**SFM-FM**

③ Flow Range

3 ... 60 l/min / .79 ... 15.90 US GPM	**L00060**
10 ... 400 l/min / 2.11 ... 79.00 US GPM	**L00400**
15 ... 600 l/min / 3.96 ... 158.00 US GPM	**L00600**
20... 800 l/min / 5.28... 211.34 US GPM	**L00800**

④ Pressure Range

210 Bar / 3045 PSI	**B0210**
420 Bar / 6091 PSI	**B0420**
480 Bar / 6961 PSI	**B0480**

⑤ Fluid Port Connection

G3/4 BSPP	**G12**
G1 BSPP	**G16**
1 7/8 - 12 UN O-Ring	**U24**
1 1/2 SAE Flange 3000 PSI	**F324U**

⑥ Loading Valve

Integral Loading Valve	**LV**
Without	**(None)**

Technical Data

Materials

- Housing: Aluminium
- Seals: Viton standard
- E. Connection 5 Pin M12
- P. Sensor SMK20 (M16x2)

Ambient Conditions

- Media temperature: 5°C ... +90 °C / 41 °F ... +194 °F
- Ambient temperature: 5 °C ... +40 °C / +41 °F ... +104 °F
- Max. particle size: <25 Micron

Electrical Output

- Frequency: 20 to 2,000 Hz.
- Resistance: 3,700 Ohm

Cables

Item No.	Designation	Price
1810011464	WTS-CAB/SMS-MD-APMS5P-20A-DHCR-10521-02	365.90
6100008187	WTS-CAB-MD-FT-AMPS5P-4M-9377-4	406.35

Suitable for connection between DHCR & LT Flow Turbines

*LV - Integral Loading Valve

Technical Data

Max. Working Pressure ($^{bar}/_{PSI}$)	Flow Range ($^{l/min}/_{US\ GPM}$)	Accuracy at 21 cSt	G	L	B	C	D	H
420	3 - 60	± 1% of display	3/4 BSPP	190	62		121	50
6091	79 - 15.90							
420	10 - 400		1 BSPP	190	62		122	50
6091	2.11 - 79.00							
420	10 - 400		1 BSPP	222	100	182	150	49
6091	2.11 - 79.00							
210	15 - 600		1 1/2 SAE 3000 PSI	212	62		139	75
3045	3.96 - 158.00							
480	20 - 800		1 7/8-12UN OR	212	100		139	75
6961	5.28 - 211.34							
480	20 - 800		1 7/8-12UN OR	235	125	211	169	75
6961	5.28 - 211.34							

Turbines with Frequency output 4-20 mA and Voltage 5 V PLC output are available on request, contact STAUFF for more information.

Order Codes

Item No.	Designation	Price
1810011419	WT-SFM-FM-L00060-B0420-G12	2842.70
6100008191	WT-SFM-FM-L00400-B0420-G16	2842.70
1810011451	WT-SFM-FM-L00400-B0420-G16-LV	5075.65
6100033461	WT-SFM-FM-L00600-B0210-F324U	2842.70
1810011420	WT-SFM-FM-L00800-B0480-U24	3182.80
1810011421	WT-SFM-FM-L00800-B0480-U24-LV	6429.60

*LV - Integral Loading Valve

In-line Flow Monitors ▪ Type SFF / SFFM

Product Description

The STAUFF Flowtell In-line Flow Meter is ideal for monitoring case drain, pump performance and media flows through hydraulic circuits and sub-circuits. It allows the designer to install it in any orientation (horizontal, vertical or inverted) and is weather-tight for use outdoors and/or on systems where washdowns are required. It is also a reliable service tool that provides years of maintenance-free performance. Flows can be measured up to a value of 550 l/min / 150 GPM.

Available in two versions, SFF In-line flow meter, and SFFM In-line flow meter for mining (suitable for use underground).

Features

- G3/8"-G2" BSPP
- Flow range up to 550 l/min / 150 GPM
- SFFM fitted with Integral Loading Valve, Temperature and analogue Pressure Gauge
- SFFM version is Bi-directional

Options

- Additional process connections available on request

Technical Data

Materials

- Aluminium, Brass or Stainless Steel end caps
- Polycarbonate Window Tube
- NBR (Buna-N®) and Teflon sealings
- Suitable for Mineral-Based Hydraulic Fluid

Accuracy

- ±2.5 % of full scale in mid-third of flow range
- ±4.0 % over entire flow range

Repeatability

- ±1 % of full sale

Max. Operating Pressure

- Range 40... 420 bar / 580... 6091 PSI

Max. Operating Temperature

- 116 °C / +240 °F

Order Codes

SFF - L00001 - 0 - B0250 - G06 - W85

① ② ③ ④ ⑤ ⑥

① Series and Type

In-line Flow Meter	**SFF**
In-line Flow Meter Mining Version	**SFFM**

② Flow

0.05-1 GPM / 0.5-4 LPM	**L00001**
0.2-2 GPM / 1-8 LPM	**L00002**
0.5-5 GPM / 2-19 LPM	**L00005**
1-10 GPM / 4-38 LPM	**L00010**
1-15 GPM / 4-56 LPM	**L00015**
2-20 GPM / 0-75 LPM	**L00020**
2-25 GPM / 10-100 LPM	**L00025**
3-30 GPM / 10-115 LPM	**L00030**
4-40 GPM / 15-150 LPM	**L00040**
5-50 GPM / 20-190 LPM	**L00050**
8-75 GPM / 30-280 LPM	**L00075**
10-100 GPM / 50-375 LPM	**L00100**
20-150 GPM / 10-550 LPM	**L00150**

③ Type (Optional)

For use with Air	**A**
For use with Oil	**O**
For use with Water	**W**

④ Pressure Range

40 bar / 580 PSI	**B0040**
70 bar / 1015 PSI	**B0070**
250 bar / 3625 PSI	**B0250**
380 bar / 5511 PSI	**B0380**
420 bar / 6091 PSI	**B0420**

⑤ Thread

G3/8 BSPP - (L00001 / 2)	**G06**
G1/2 BSPP - (L00005 / 10)	**G08**
G3/4 BSPP - (L00015 / 20 / 25)	**G12**
G1 BSPP - (L00030 / 40)	**G16**
G1-1/4 BSPP - (L00050 / 75 / 100)	**G20**
G1-1/2 BSPP - (L000150)	**G24**
G2 BSPP - (L000150)	**G32**

⑥ Material

Stainless Steel 316	**W5**
Brass	**W69**
Aluminium	**W85**

⑦ Adaptions (SFFM only)

Bidirectional	**BI**
Integral Loading Valve	**LV**
Reverse Flow	**RF**

Additional options available
Contact STAUFF for more information

SFF - Aluminium
In-line Flow Monitors - Oil

Item No.	Designation	Price
1810011375	SFF-L00001-O-B0250-G06-W85	541.65
1810011372	SFF-L00002-O-B0250-G06-W85	541.65
1810011373	SFF-L00005-O-B0250-G08-W85	602.60
1810011337	SFF-L00010-O-B0250-G08-W85	602.60
1810011314	SFF-L00015-O-B0250-G12-W85	826.00
6100039994	SFF-L00020-O-B0250-G12-W85	826.00
1810011330	SFF-L00025-O-B0250-G12-W85	826.00
1810011315	SFF-L00030-O-B0250-G16-W85	920.95
1810011323	SFF-L00040-O-B0250-G16-W85	920.95
6100008139	SFF-L00050-O-B0250-G20-W85	2169.00
1810011324	SFF-L00075-O-B0250-G20-W85	2169.00
6100008140	SFF-L00100-O-B0250-G20-W85	2169.00

SFF - Brass
In-line Flow Monitors - Oil

Item No.	Designation	Price
6100008142	SFF-L00001-O-B0250-G06-W69	677.10
6100000288	SFF-L00002-O-B0250-G06-W69	677.10
1810011325	SFF-L00005-O-B0250-G08-W69	751.50
1810011331	SFF-L00010-O-B0250-G08-W69	751.50
1810011332	SFF-L00020-O-B0250-G12-W69	1042.85
6100008153	SFF-L00025-O-B0250-G12-W69	1042.85
1810011326	SFF-L00030-O-B0250-G16-W69	1164.75
6100008154	SFF-L00040-O-B0250-G16-W69	1164.75
6100008155	SFF-L00050-O-B0250-G20-W69	3182.80
6100008156	SFF-L00075-O-B0250-G20-W69	3375.30
6100008170	SFF-L00100-O-B0250-G20-W69	3182.80
6100008171	SFF-L00150-O-B0250-G24-W69	3587.00

SFF - Brass
In-line Flow Monitors - Water

Item No.	Designation	Price
6100008172	SFF-L00001-W-B0250-G06-W69	677.10
6100008173	SFF-L00002-W-B0250-G06-W69	677.10
1810011316	SFF-L00005-W-B0250-G08-W69	751.50
1810011333	SFF-L00010-W-B0250-G08-W69	751.50
1810011327	SFF-L00020-W-B0250-G12-W69	1042.85
1810011309	SFF-L00025-W-B0250-G12-W69	1042.85
1810011334	SFF-L00030-W-B0250-G16-W69	1164.75
1810011335	SFF-L00040-W-B0250-G16-W69	1164.75
6100008174	SFF-L00050-W-B0250-G20-W69	3182.80
1810011317	SFF-L00075-W-B0250-G20-W69	3182.80
1810011310	SFF-L00100-W-B0250-G20-W69	3375.30

SFFM
Portable Flow Tester for Mining

Item No.	Designation	Price
1810011460	SFFM-L00400-B0420-G20-BI/LV/RF	8848.70

	Overview	**M64**
	Laser Particle Counter	**M65**
	Portable LasPaC-II-P	**M65**
	Particle Monitor	**M66**
	Oil Sampling Kit KIT-SFS	**M66**

Laser Particle Counter ▪ Type LasPaC-II

Fluid analysis is a crucial component of any oil management program. Early detection of potential problems can prevent costly repairs and downtime. The LasPaC-II makes it possible to detect the ISO Cleanness levels of the hydraulic media.

Characteristics

The LasPaC-II devices feature a twin laser system and eight channels for different particle sizes in order to guarantee high accuracy and repeatability. These compact units are easy to handle for mobile and In-line applications for systems with pressures up to 400 bar / 5801 PSI.
The LasPaC-II is available in two different versions:

LasPaC-II-P: Portable Laser Particle Counter
The LasPaC-II-P is a fully equipped portable laser particle counter.
The LasPaC-II-P features a complete QWERTY keyboard, an integrated thermal printer, an internal rechargeable battery and a large LCD display.

LasPaC-II-M: Mobile Laser Particle Counter
The LasPaC-II-M is a highly accurate laser particle counter. With a competitive price, the LasPaC-II-M is the best compromise between lower cost and brilliant accuracy/reliability.

All LasPaC-II devices have an internal data memory and are available within the accompanying Windows® based software package for reports and data downloads.

Overview

Options	**LasPaC-II-P (Portable)**	**LasPaC-II-M (Mobile)**	**Bottle Sampler 110**	**Bottle Sampler 500**	**LPM-II-plus**
Laser Type	Twin-Laser	Twin-Laser	-	-	LED Laser
Analysis Range	8 channels (4,6,14,21,25,38,50,68 $\mu m_{(c)}$)	8 channels (4,6,14,21,25,38,50,68 $\mu m_{(c)}$)	-	-	8 channels (4,6,14,21,25,38,50,68 $\mu m_{(c)}$)
Power Supply	External	External	-	-	External
Battery Option	Internal	Internal (optional)	-	-	-
Display	Integrated (large)	Integrated (small)	-	-	Internal / External
Keyboard	Integrated	-	-	-	-
Printer	Integrated	-	-	-	-
Data Storage	Internal (for approximately 600 tests)	Internal (for approximately 600 tests)	-	-	Internal (for approximately 4000 tests)
PC Interface	RS-232	RS-232	-	-	RS485, RS232, Modbus, CAN Bus
Fluid Preparation	-	-	Integrated vacuum/pressure pump	Integrated vacuum/pressure pump	-
Maximal Bottle Size	-	-	110 ml	500 ml	-
Compatible with	Mineral oil and petroleum based fluids, Specific Water Glycol fluids or phosphate ester	Mineral oil and petroleum based fluids, Specific Water Glycol fluids or phosphate ester	Mineral oil and petroleum based fluids	Mineral oil, petroleum based fluids and Specific Water Glycol fluids or phosphate ester	Mineral oil and Specific Water Glycol fluids or phosphate ester

Refer to Catalogue 8 - STAUFF Diagtronics

Laser Particle Counter ▪ Type LasPaC-II-P (Portable)

Light-Weight Rugged Industrial Case

Integrated Printer

High-speed Flush Valve

Computer Interfaces of the LasPaC-II-P

Easy Connection to common Test Couplings

Product Description

The LasPaC-II-P (Portable) is the most complete way to measure the contamination level of your system. With the LasPaC-II-P you have the ability to measure, analyse and document your results immediately without the need of any additional equipment.

Technical Data

Dimensions (mm/in) (W x D x H)	551 x 358 x 226
	21.69 x 14.09 x 8.90
Weight (kg/lbs)	13
	28.66
Keyboard	QWERTY keyboard integrated
Printer	Thermal printer integrated (384 dots per line)
Viscosity Range	1 ... 400 cSt
Calibration	MTD, ISO 11 171:1999
Analysis Range	ISO 8-24, ISO 4406 Code, NAS 1638 Code 2-12, SAE AS 4059 Code 2-12
Sensitivity	4, 6, 14, 21, 25, 38, 50, 68 $\mu m_{(c)}$
Sample Volume	8 ml (short)
	15 ml (normal)
	30 ml (dynamic)
	24 ml (bottle sampler)
	15 ml (continuous)
Pressure Range (bar/PSI)	2 ... 400
	29 ... 5801
Operating Temperature (°C/°F)	+5 ... +80
	+41 ... +176
Max. Concentration	ISO 24
Power Supply	110 ... 240 V AC 12 ... 24 V DC
Battery	Internal rechargeable battery
Data Storage	600 tests
Fluid Compatibility	Mineral Oil / Petroleum based fluids; Phosphate Ester and water glycol compatible devices on request
PC Interface	RS-232
External Alarm	External alarm socket
Hose Connections	Test Coupling STAUFF Test 20 or comparable (M16 x 2)
Accessories	Moisture/temperature sensor
	Bottle sampling unit (110 ml / 500 ml)
	Screen filter (500 µm)

Order Codes

LasPaC-II - P - M - O

① ② ③ ④

① Series and Types

Laser Particle Counter	**LasPaC-II**

② Version

Portable	**P**

③ Fluid Compatibility

Mineral Oil, Petroleum based fluids (standard option)	**M**
Phosphate Ester (e.g. Skydrol®)	**E**
Specific Water Glycol fluids	**G**

④ Moisture/ Temperature Sensor

Without moisture/ temperature sensor	**O**
With moisture/ temperature sensor	**W**

Note: The moisture/ temperature sensor is not suitable for Phosphate Ester (e.g. Skydrol®) and Water Glycol fluids.

LasPaC-II-P

Item No.	Designation	Price
1810000288	LasPac-II-P-M-O	23543.35
1810000289	LasPac-II-P-M-W	24944.65
1810000291	LasPac-II-P-G-O	25502.50

Oil Sampling Kit ▪ Type KIT-SFS

Product Description

Fluid analysis is a crucial component of any oil management program. Early detection of potential problems can prevent costly repairs and downtime of plant, equipment or machinery.

STAUFF KIT-SFS oil analysis kits provide the means to take a sample from either a STAUFF test coupling (fitted In-line in a hydraulic system using a STAUFF test adaptor SHA and plastic hose), or directly from a reservoir, sump or drum (drawing fluid using the vacuum pump into the cleaned sample bottle).

Suitable for sampling oil in any hydraulic fluid system application eg. Mining (surface or underground), steel mills, mobile machinery, stationary plant and equipment or in systems hydraulic or lube oil is used.

Features

- Heavy-duty plastic vacuum pump
- Two sample bottles
- STAUFF test points and adaptor allows oil samples to be taken from STAUFF Test 20 test points
- Magnetic clip (for mounting pump on hydraulic tank or steel drum during sampling)

Components

KIT-SFS

- 1 x Plastic fluid sampling vacuum pump PUMP-SFS-38P
- 1 x Hose adaptor SHA-20-5.5 mm
- 2 x 1 m / 3.28 ft Push on 1/4" hose
- 1 x SMK-20-G1/4-B-C-W3
- 1 x SMK-20-M10x1-B-A-W3
- 2 x Sample bottles 110 ml (cleaned to ISO 13/8/7)
- 2 x Mailing kits (prepaid express postage satchels)
- 1 x Magnetic clip (for mounting pump on hydraulic tank or steel drum during sampling)

Order Codes

KIT-SFS	-	02	-	110	C	-	MCP-38P
①		②		③	④		⑤

① Type

Fluid Sampling Kit	**KIT-SFS**
Fluid Sampling Bottle	**BOTTLE-SFS**

② Series

BSPP (only for KIT-SFS)	**02**

③ Bottle Size

110 ml	**110**

④ Cleanliness Tested IOS4406.99

Bottle cleaned to ISO 13/8/7	**C**

⑤ Additional Information

(for multiple options use a dash (-) between each option)

Mailing Container including pre-paid postage satchel (KIT-SFS) Oil sampling form included	**MCP**
Mailing Container (BOTTLE-SFS) - Oil sampling form included	**MC**
Pump Diameter 38 mm (plastic parts)	**38P**

KIT-SFS

Item No.	Designation	Price
6100154363	KIT-SFS-02-110C-MCP-38P	518.80

Replacement Oil Sampling Bottle

Item No.	Designation		Price
1020026451	BOTTLE-SFS-110C-MCP	(including pre-paid postage satchel)	67.85

Introduction	N2
Filtration Guideline	N3 - N11
Pressure Filters	N12 - N105
Filter Elements	N106 - N117
Return-Line Filters	N118 - N147
Spin-On Filters	N148 - N171
Filtration Systems	N173 - N175

STAUFF Filtration Technology

The STAUFF Filtration Technology product range contains an extensive product range in the areas of filtration and purification of oils and other media, which fully meets – or even exceeds – the requirements of modern service and maintenance of machines and equipment.

As an experienced manufacturer, STAUFF provides quick and direct access to a complete range of replacement filter elements for industrial liquids such as hydraulic and lubrication oils, heavy fuels, water, chemicals, coolants and other media – equal in form, fit and function to the original products while maintaining or surpassing their performance.

Flexible manufacturing lines and extensive stock-keeping in the country of destination guarantee fast reaction times and shortest delivery times.

STAUFF guarantees prompt service, even for customised solutions according to customer's specifications or based on our in-house development.

STAUFF filter housings can be installed in either Pressure, Suction, or Return line applications - in hydraulic or lubrication systems. They can be suitably installed in the hydraulic circuit during the design phase of a machine, or added at a later stage in the course of retrofitting or upgrading.

Filtration Guideline	**N5 - N11**
Filtration - Why?	**N5**
Contamination	**N5**
STAUFF Filter Components	**N6 - N7**
Test Standards and Oil Purity	**N8**
Short & Curt: Filter Rating	**N9**
ß-Value and Separations Efficiency	**N9**
Choice of Filters / Examples of Calculation	**N10**

Filtration - Why?

The need for good hydraulic filtration is gaining more and more importance in the use of hydraulic systems.

Reducing contamination in the hydraulic system will reduce the wear of the components and thus extend the service life of the machine. This will prevent production downtime and lower the overall production costs.

Right from the beginning, there is contamination in a new hydraulic system, which reduces the service life of the system and its components such as valves and cylinders without any or with inadequate filtration.

This built-in dirt is created during the manufacturing of the components and mainly consists of coarse particles.

In addition to the contamination that arises during operation of the system, e.g. abrasive wear, dirt particles can also get into the system when it is filled with hydraulic oil.
This is called ingress contamination.

Choosing the right filter contributes significantly to prevent the dangers mentioned above thereby, ensuring efficient operation even after many years.

Reduction of Contamination

- Extension of service life
- Extension of maintenance intervals
- Reduction of machine downtime
- Reduction of environmental pollution

▶ **Cost savings for the user**

Origin of Contamination

The main cause of failures and downtime is dirt in the hydraulic system.

Failure analysis indicates that 80% of the failures are caused by faults in the hydraulic system. 90% of them are caused by impurities in the hydraulic oil.

Sources of External Contamination

- Filling and refilling the hydraulic tank
- Inadequately dimensioned breathers
- Damaged tank seals
- Replacement of hydraulic lines and components (pumps, cylinders)
- Impurities in the air

Types of Internal Contamination

- Contamination on system components caused by the manufacturing process (e.g. chips)
- Contamination caused by the installation of the components

Sources of Internal Contamination

- Disintegration of particles from high pressure changes and tension on the surface of hydraulic components (e.g. cavitation)
- Material erosion that occurs at places in the hydraulic units due to the impact of pressurised liquid at high speeds (erosion wear)

Contamination

Particle Sizes (Selection)

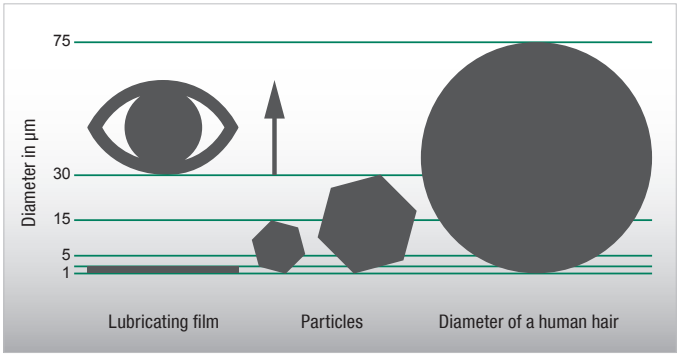
- 100µm table salt, fine sand
- 75µm diameter of a human hair
- 60µm flower pollen
- 50µm fog
- **30µm (from approx.) resolution of the human eye**
- 15µm fine particles
- 7µm red blood cells
- 2µm bacteria
- 1µm layer of lubricating film (for comparison)

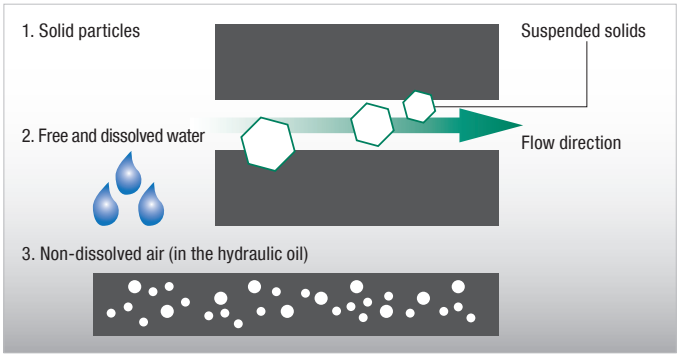
Type of Contamination

The most frequent ones are:

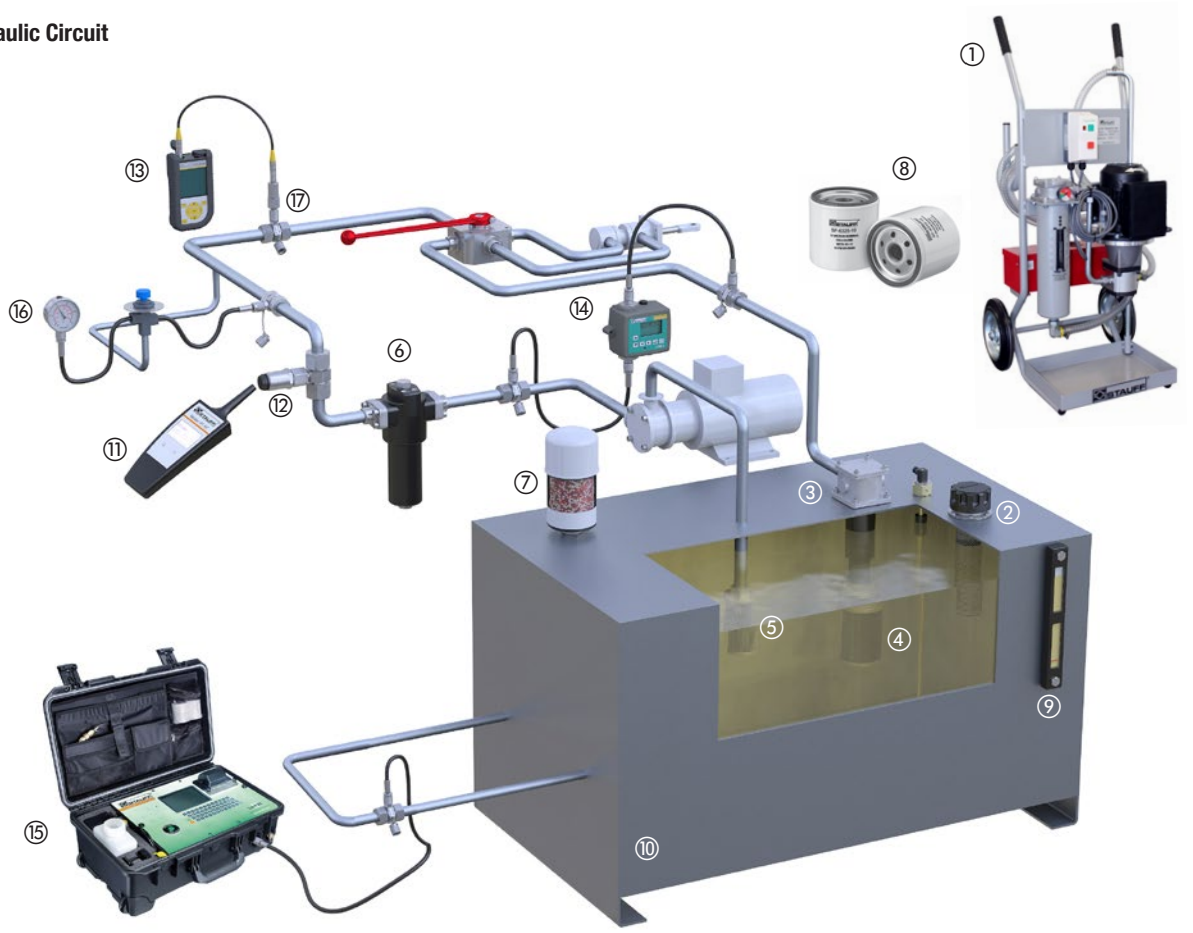
- Solid particles
- Free and dissolved water
- Non-dissolved air

A majority of the contamination can be removed with filtration.



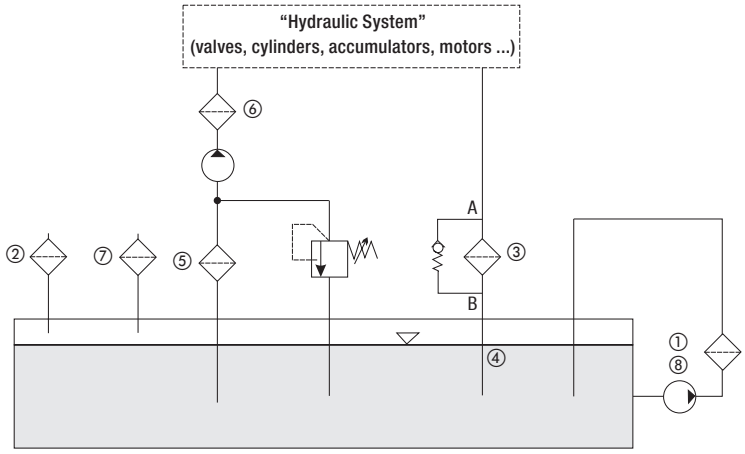


Hydraulic Circuit



Selection of Components within the Hydraulic Circuit

①	STAUFF Mobile Filter System	**SPFC**
②	STAUFF Plastic Filler Breather	**SPB**
③	STAUFF Return-Line Filter	**RF**
④	STAUFF Diffuser	**SRV**
⑤	STAUFF Suction Strainer	**SUS**
⑥	STAUFF Pressure Filter	**SF**
⑦	STAUFF Desiccant Air Breather	**SDB**
⑧	STAUFF Spin-On Filter	**SSF**
⑨	STAUFF Level Gauge	**SNA**
⑩	Oil tank	
⑪	STAUFF Reader	**PT-RF**
⑫	STAUFF Pressure Transmitter	**PT-RF**
⑬	STAUFF Hydraulic Tester	**PPC**
⑭	STAUFF Particle Monitor	**LPM-II**
⑮	STAUFF Laser Particle Counter	**LasPac-II**
⑯	STAUFF Pressure Gauge	**SPG**
⑰	STAUFF Test Coupling	**SMK / SKK**



STAUFF Filter Components and Supplementary Products

Pressure Filters Series SF / SF-TM / SFA / SFZ
(page N13)

Return-Line Filters Series RF / RFB / RFS / RTF
(page N118)

Magnetic Core Filters
(Page N119)

In-Line Filters (Low Pressure)
(page N118)

Spin-On Filters
(page N148)

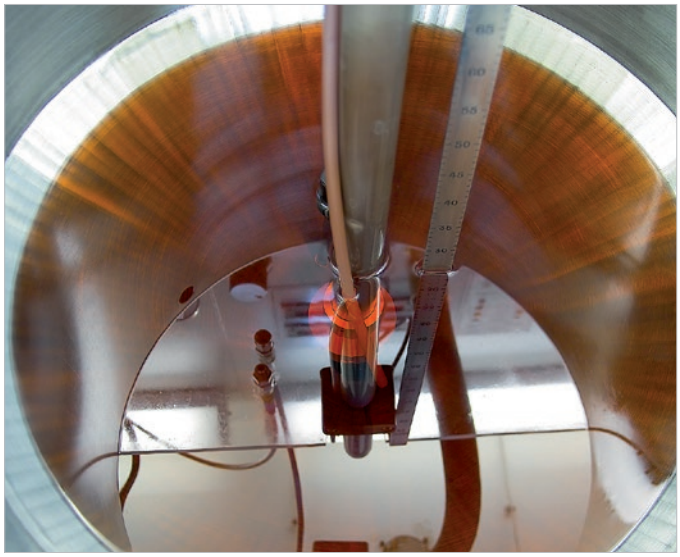
Mobile Filter Units
(page N173)

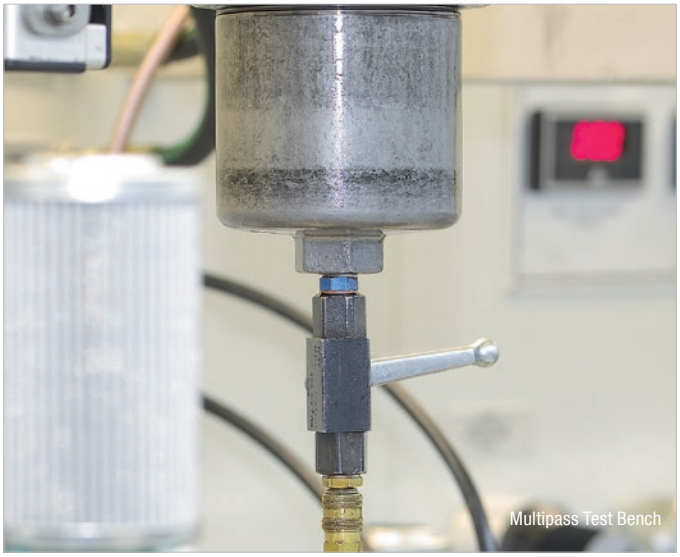
Test
(Refer to Section L - STAUFF Test)

Particle Counters
(Refer to Section M - STAUFF Diagtronics)

Diffusers / Suction Strainers / Filler Breathers
(Refer to Section O - STAUFF Hydraulic Accessories)

Desiccant Air Breathers
(Refer to Section O - STAUFF Hydraulic Accessories)





Multipass Test Bench

Test Standards and Oil Purity

Definition of the Required Micron Rating

The components installed in the hydraulic system determine the micron rating of the filtration system.

To guarantee a reliable mode of operation over the years, it is mandatory to maintain the optimum oil purity class for specific components.

The most sensitive component determines the choice of filter material and micron rating.

To determine the oil purity according to ISO 4406 (1999), a laser particle counter is used to count particles that are >4µm $_{(c)}$, >6µm $_{(c)}$ and >14µm $_{(c)}$ in 100 ml of hydraulic oil. The number of particles is then assigned with a classification number (e.g. 14/11/8) that then corresponds to the ISO purity class. Please note here that the number of particles doubles for the next higher class. The cleanliness level that has to be achieved is an important criterion for choosing the right filtration system.

STAUFF Filter Elements are subject to the following Test Methods

- ISO 2941 Collapse and burst resistance
- ISO 2942 Verification of fabrication integrity (bubble point test)
- ISO 2943 Compatibility with hydraulic media
- ISO 3723 End load test
- ISO 3724 Flow fatigue characteristics
- ISO 3968 Flow characteristics
- ISO 16889 Filtration performance test (multi-pass method)

Number of particles in 100 ml fluid		Classification numbers ISO 4406 (1999)		
More than	Less than	> 4µm$_{(c)}$	> 6µm$_{(c)}$	> 14µm$_{(c)}$
16000000	32000000	25	25	25
8000000	16000000	24	24	24
4000000	8000000	23	23	23
2000000	4000000	22	22	22
1000000	2000000	21	21	21
500000	1000000	20	20	20
250000	500000	19	19	19
130000	250000	18	18	18
64000	130000	17	17	17
32000	64000	16	16	16
16000	32000	15	15	15
8000	16000	**14**	14	14
4000	8000	13	13	13
2000	4000	12	12	12
1000	2000	11	**11**	11
500	1000	10	10	10
250	500	9	9	9
130	250	8	8	**8**
64	130	7	7	7
32	64	6	6	6
16	32	5	5	5

STAUFF Laser Particle Counter LasPaC-II, LPM-II and Bottle Sampler refer to Section M - STAUFF Diagtronics

Short & Curt: Filter Rating

(For exact recommendation refer to STAUFF Contamination Control Program page N5)

Type	Component	ISO 4406 Code	Recommended Filter Rating
Pump	Piston Pump (Slow Speed, In-Line)	22/20/16	20µm
	Gear Pump	19/17/15	20µm
	Vane Pump	18/16/14	5µm
	Piston Pump (High Speed, Variable)	17/15/13	5µm
Motor	Gear Motor	20/18/15	20µm
	Vane Motor	19/17/14	10µm
	Radial Piston Motor	19/17/13	10µm
	Axial Piston Motor	18/16/13	5µm
Valve	Directional Valves (Solenoid)	20/18/15	20µm
	Check Valves	20/18/15	20µm
	Logic Valves	20/18/15	20µm
	Cartridge Valves	20/18/15	20µm
	Pressure Control Valves (Modulating)	19/17/14	10µm
	Flow Control Valves	19/17/14	10µm
	Standard Hydraulic <100 bar / <1450 PSI	19/17/14	10µm
	Proportional Valves	18/16/13	5µm
	Servo Valves <210 bar / <3045 PSI	16/14/11	3µm
	Servo Valves >210 bar / >3045 PSI	15/13/10	3µm
Actuator	Cylinder	20/18/15	20µm

ß-Value and Separations Efficiency

To select filtration that meets the requirements, performance characteristics like the filter fineness, the filtration efficiency, the dirt-hold capacity and the pressure loss has to be observed.

The ß-value as per ISO 16889 is the relevant characteristic value for the filtration efficiency. The ß-value is the ratio of particles before ($N_{up\,x}$) and after ($N_{down\,x}$) the filter related to a specific particle size x.

$$ß_x = \frac{N_{up\,x}}{N_{down\,x}}$$

$ß_{10} > 200$ means that of 1000 particles that are 10µm in size, only five particles can pass through the filter. 995 particles will be trapped by the filter element.

Popular filters with inorganic glass fibre medium have to achieve a ß-value of at least 200 in order to meet the demands placed on hydraulic filtration today.

The filtration efficiency, also called the retention rate, is directly related to the ß-value and is calculated as follows:

$$E = \frac{(ß_x - 1)}{ß_x}$$

$ß_{10} > 200$ corresponds to filtration efficiency of 99,5%.

Comparison of the ß-Value and Efficiency E (each related to a defined Particle Size)

ß-value	Filtration Efficiency E
1	0,00 %
2	50,00 %
10	90,00 %
25	96,00 %
50	98,00 %
75	98,67 %
100	99,00 %
200	99,50 %
1000	99,90 %
9999	99,99 %

The **dirt-hold capacity** (DHC) shows how much solid dirt a filter element can hold before it has to be replaced. The dirt-hold capacity is therefore the most important parameter in the filter service life.

The **differential pressure** (Δp) is another important criterion for the configuration of the filter. Ensure that the size of the filter element is chosen according to the calculation guideline by STAUFF.

To guarantee optimum filtration, the ß-value, the dirt-hold capacity (DHC) and the differential pressure (Δp) must be carefully selected.

Choice of Filters

Choice of a Suitable Micron Rating
Commonly, the type of components incorporated in the hydraulic system will determine the micron rating required. It has been clearly demonstrated that system components will operate reliably for years if a specific minimum oil cleanliness grade is maintained. Frequently the choice will be determined by the most sensitive component in the system.

a) Operating Filter
To establish the filter rating of what filter is needed to assure a particular oil cleanness grade refer to page N9.

Apart from the specific flow rate (l/min per cm² of filter area), other factors such as operating environment and condition of seals and breathers can have an effect on the cleanliness grade which can actually be achieved.

b) Protective Filter
Occasionally, protective filters are fitted downstream of major components, e.g. the pump, to collect the debris in case of a catastrophic failure. This avoids total stripping and flushing of the system. For economic reasons, protective filters are usually one grade coarser than the operating filters since they do not significantly contribute to the cleaning of the system and this extends filter service intervals.

Choice of the Optimum Filter
In selecting the filter, the following information must be considered:

- Maximum flow volume (Q_{max}) through the filter including surge flows
- Kinematic viscosity (υ) of the fluid in mm²/s (cSt) at cold start temperature and operating temperature
- Density ρ of the fluid
- Micron rating (µm): refer table on page N9
- Filter material

The aim is to choose a filter whose total differential pressure (Δp) is not higher than Δp_{max} = 1,0 bar (for Pressure Filters) or Δp_{max} = 0,5 bar (for Return-Line filters), in a clean state at the normal operating temperature. These values have been proven in practice to give the optimum service life for the element.

The nominal flow volume of the filter is the obvious reference value for pre-selection and this should be larger than the flow to be filtered.

$$Q_{nom} > Q_{max}$$

Calculations based on the filter data will verify whether the pre-selected filter meets the requirements, at operating temperatures:

$\Delta p_{max} \leq$ 1,0 bar (for Pressure Filter)
$\Delta p_{max} \leq$ 0,5 bar (for Return-Line Filter)

The total differential pressure of the assembly Δp_{Assy} is calculated by adding the differential pressure of the housing Δp_{Hous} and that of the element Δp_{Elem}. Both the kinematic viscosity and density of the operating medium should be considered for the selection, as the flow curves on the pages following have been determined with a kinematic viscosity of υ = 30 cSt and a density of ρ = 0,86 kg/dm³. The values of the pressure drops for the Δp_{Hous} and the Δp_{Elem} can be read from the flow curves on the pages following. The values for the kinematic viscosity in cSt and the density in kg/dm³ should be inserted into the following formula:

$$\Delta p_{Assy} = \frac{\rho}{0{,}86} \cdot \Delta p_{Hous} + \frac{\rho}{0{,}86} \cdot \frac{\upsilon}{30} \cdot \Delta p_{Elem}$$

The filter size is suitable if the $\Delta p_{Assy} < \Delta p_{max}$.
If the calculated Δp_{Assy} is higher than Δp_{max} select the next larger filter size and re-calculate until a satisfactory filter size is found.

The following two examples explain and help to understand the procedure of calculating a filter.

Examples of Calculation

Example 1: Selection Pressure Filter
System Information: A Pressure Filter with an Inorganic Glass Fibre element is required immediately after the pump. The system has standard components and is operating at pressures up to 200 bar. The filter shall be fitted with a bypass valve and a visual clogging indicator.

For better understanding only the calculation at the upper temperature is carried out.

Data given:	Q_{max}:	100 l/min
	Oil type:	ISO 68
	Temperature max.:	+50°C
	Viscosity $\upsilon_{operating}$:	44 mm²/s
	Density ρ:	0,882 kg/dm³
	Micron rating:	10µm (refer to the table on page N9)

First Step
Pre-selection of the size: SF-045, $Q_{nominal}$ = 160 l/min > Q_{max}

Pressure drop values (at a viscosity of 30 mm²/s) from the flow characteristics:

Δp_{Hous} = 0,15 bar (SF-045 ..., refer to page N15)
Δp_{Elem} = 0,77 bar (SE-045-G -10- B/4, refer to page N15)

Determination of the correction factor:

$$\Delta p_{Assy} = \frac{0{,}882}{0{,}86} \cdot 0{,}15 \text{ bar} + \frac{0{,}882}{0{,}86} \cdot \frac{44}{30} \cdot 0{,}77 \text{ bar}$$

Δp_{Assy} = 1,31 bar ≥ Δp_{max} = 1,0 bar

Since the actual pressure drop is larger than the allowed pressure drop, a larger filter has to be chosen.

Second Step
Selection of the next larger filter size: SF-070, $Q_{nominal}$ = 240 l/min > Q_{max}

Δp_{Hous} = 0,15 bar (SF-070 ..., refer to page N15)
Δp_{Elem} = 0,45 bar (SE-070-G-10-B/4, refer to page N15)

$$\Delta p_{Assy} = \frac{0{,}882}{0{,}86} \cdot 0{,}15 \text{ bar} + \frac{0{,}882}{0{,}86} \cdot \frac{44}{30} \cdot 0{,}45 \text{ bar}$$

Δp_{Assy} = 0,83 bar ≤ Δp_{max} = 1,0 bar

In a clean state, this filter fulfils the requirements and is suitable for the application. The correct filter designation would be **SF-070-G-10-B-T-G20-B-V**.

Example 2: Selection Return-Line Filter
System Information: A Return-Line filter with a Cellulose element with a micron rating of 10µm is required to clean the oil. No clogging indicator is required.

Note: If the system incorporates either accumulators or cylinders, the return flow can dramatically exceed pump flow, and the maximum surge flow should be the flow used to calculate the pressure drop through the filter.

Data given:	Q_{max}:	100 l/min
	Oil type:	ISO 68
	Temperature max.:	+60°C
	Viscosity $\upsilon_{operating}$:	29 mm²/s
	Density ρ:	0,882 kg/dm³
	Micron rating:	10µm (refer to the table on page N9)

First Step
Pre-selection of the size: RF-030, $Q_{nominal}$ = 110 l/min > Q_{max}

Pressure drop values (at viscosity of 30 mm²/s) from the flow characteristics:

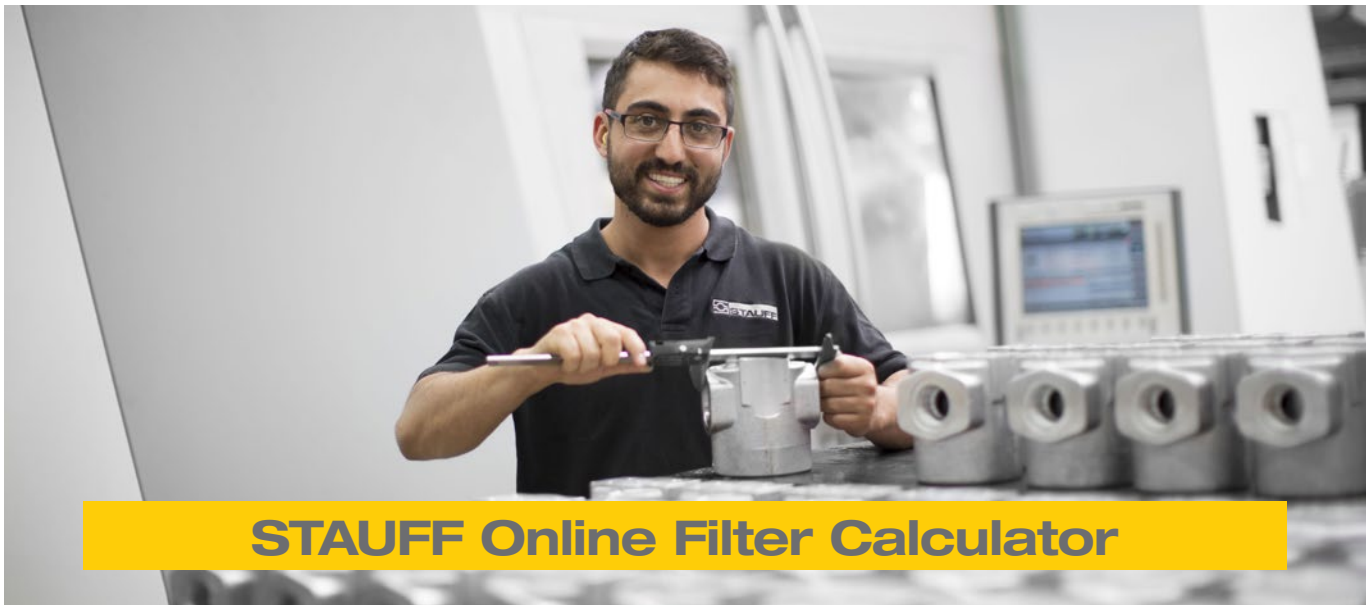
Δp_{Hous} = 0,30 bar (RF-030 ..., refer to page N123)
Δp_{Elem} = 0,067 bar (RE-030-N-10-B, refer to page N123)

Determination of the correction factor:

$$\Delta p_{Assy} = \frac{0{,}882}{0{,}86} \cdot 0{,}30 \text{ bar} + \frac{0{,}882}{0{,}86} \cdot \frac{29}{30} \cdot 0{,}067 \text{ bar}$$

Δp_{Assy} = 0,37 bar ≤ Δp_{max} = 0,5 bar

In a clean state, this filter fulfils the requirements and is suitable for the application. No further calculation is necessary. The correct filter designation would be **RF-030-N-10-B-G16**.



STAUFF Online Filter Calculator

www.filtercalc.stauff.com

- ✓ Save Time
- ✓ Accurate
- ✓ Easy Selection
- ✓ Selection specification created

STAUFF Online Filter Calculator

The STAUFF Online Filter Calculator calculates the correct filter size, generates the complete technical data sheet and ordering codes.

The correct sizing of a hydraulic filter not only saves money by reducing costly downtime and avoiding the unscheduled replacement of sensitive components, it also increases the life of the entire hydraulic system.

To make the task of selecting a filter less daunting, STAUFF has developed the STAUFF Online Filter Calculator. This new web-based tool will assist in the selection of the most suitable hydraulic filter based on the application parameters entered.

Check it out at **www.filtercalc.stauff.com** and try it for yourself!
The use of this service is without obligation and free of charge.

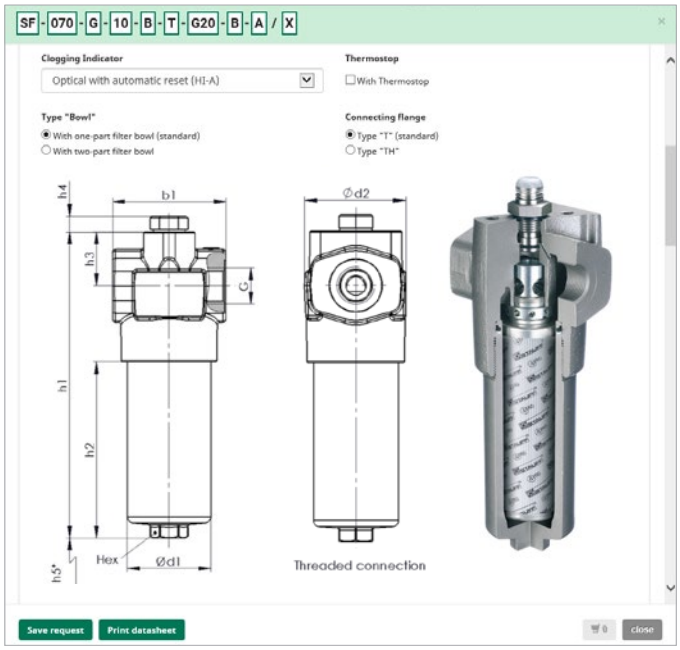
Filter Sizing

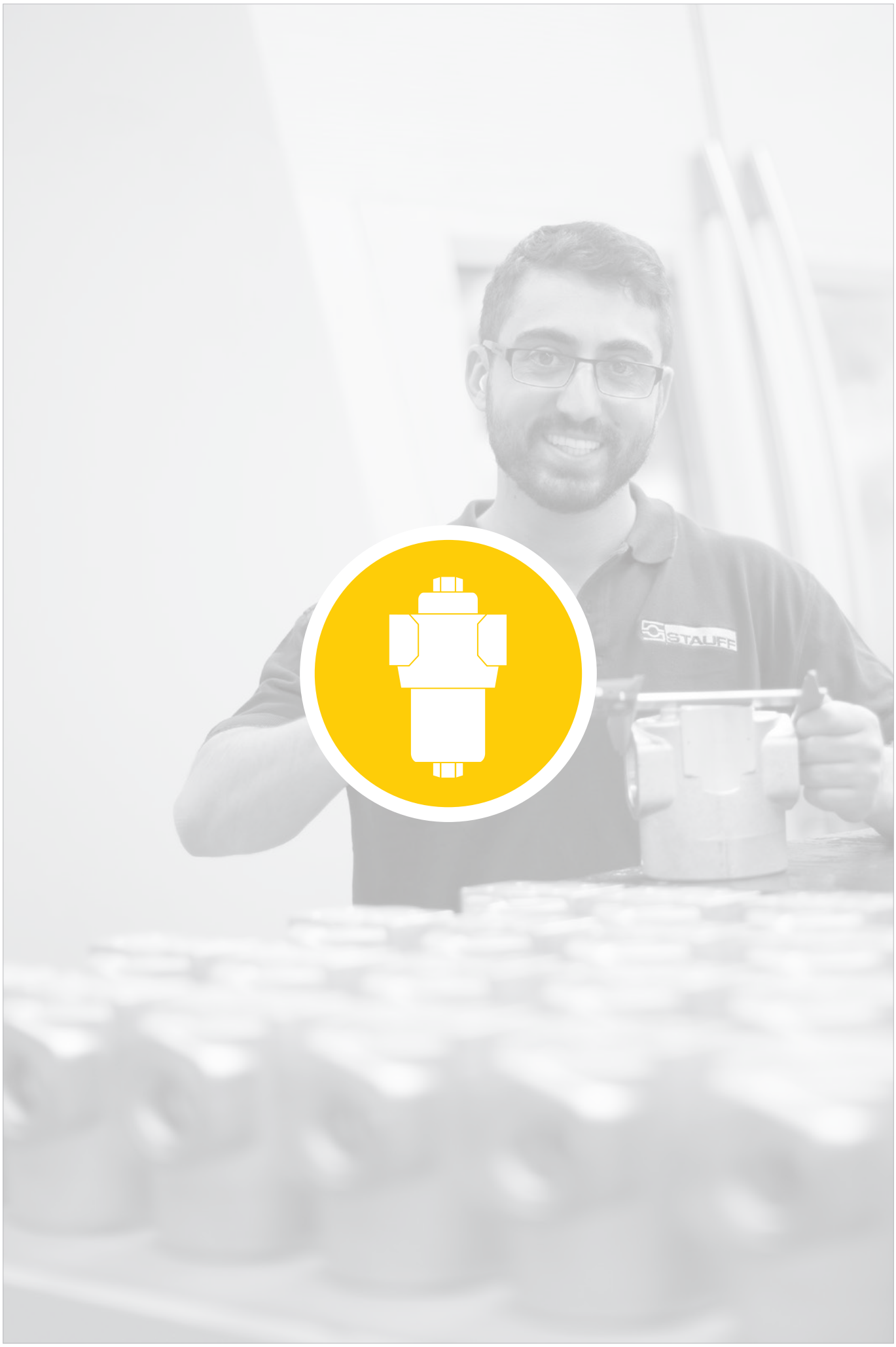
Select by:
- Pressure Filters
- Return-Line Filters
- In-Line Filters
- Spin-On Filters

Selectable Parameters (in metric or imperial units of measure):
- Select by Oil (Type, Temperature or Viscosity)
- Select by Flow
- Select by Filtration Media
- Select by Micron Rating
- Select by Pressure Limitation (cold start and operating)

Final Selection Features:
- Multiple assembly options
- Builds complete filter order code
- Product Data specification of the selected filter assembly
- Choice of sealing material
- Choice of Connection type e.g. BSPP, SAE
- Choice of Clogging Indicator e.g. Visual or Electrical
- Dimensional drawing of housing
- Calculated Differential Pressure e.g. Pressure vs Flow curve

Contact STAUFF for more information




STAUFF

High Pressure Filters (In-Line) **SF**
Max. 420 bar / 6000 PSI
Max. 1135 l/min / 300 US GPM — **N14 - N69**

Order Code - High Pressure Filters / Elements — **N15**

SF
Without Clogging Indicator — **N16 - N18**

SF
Visual Clogging Indicator with Automatic Reset — **N20 - N23**

SF
Visual Clogging Indicator with Manual Reset — **N24 - N27**

SF
Electrical Clogging Indicator — **N28 - N31**

SF - SAE Flange 6000 PSI
Without Clogging Indicator — **N32 - N34**

SF - SAE Flange 6000 PSI
Visual Clogging Indicator with Automatic Reset — **N36 - N39**

SF - SAE Flange 6000 PSI
Visual Clogging Indicator with Manual Reset — **N40 - N43**

SF - SAE Flange 6000 PSI
Electrical Clogging Indicator — **N44 - N47**

SF - Toploader, with bowl in two-part style
Without Clogging Indicator — **N48 - N50**

SF - Toploader, with bowl in two-part style
Visual Clogging Indicator with Automatic Reset — **N52 - N56**

SF - Toploader, with bowl in two-part style
Visual Clogging Indicator with Manual Reset — **N58 - N62**

SF - Toploader, with bowl in two-part style
Electrical Clogging Indicator — **N64 - N68**

Filter Elements — **N69**

High Pressure Filters (Top-mounted) **SF-TM**
Max. 315 bar / 4560 PSI
Max. 1135 l/min / 300 US GPM — **N70 - N88**

Order Code - High Pressure Filters / Elements — **N71**

SF-TM
Without Clogging Indicator — **N72 - N74**

SF-TM
Visual Clogging Indicator with Automatic Reset — **N76 - N79**

SF-TM
Visual Clogging Indicator with Manual Reset — **N80 - N83**

SF-TM
Electrical Clogging Indicator — **N84 - N87**

Filter Elements — **N88**

Medium Pressure Filters (In-Line) **SFA**
Max. 160 bar / 2320 PSI
Max. 240 l/min / 70 US GPM — **N90 - N99**

Order Code - Medium Pressure Filter / Elements — **N91**

SFA
Without Clogging Indicator — **N92 - N93**

SFA
Visual Clogging Indicator with Automatic Reset — **N94 - N95**

SFA
Visual Clogging Indicator with Manual Reset — **N96 - N97**

SFA
Electrical Clogging Indicator — **N98 - N99**

Filter Elements — **N99**

Clogging Indicators (for SF / SF-TM / SFA / SFZ)
HI — **N100 - N101**

Valves
HVO / HVB / HVR / HVN / HVM — **N102**

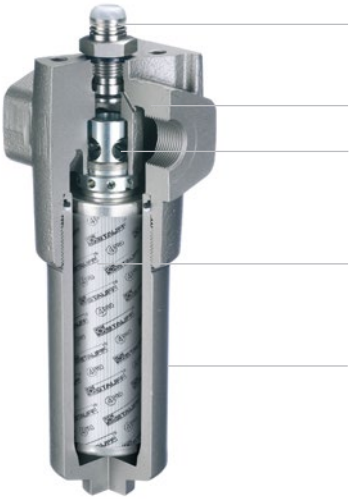
Filter Bowls / Seals
Suitable for Custom Filter Manifolds — **N103**

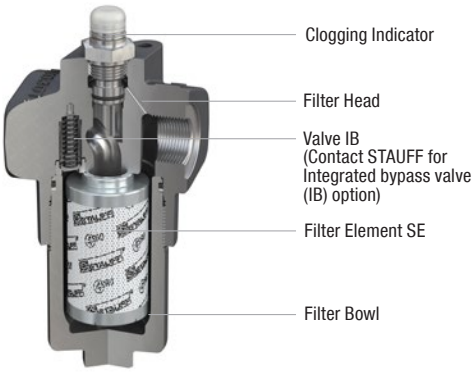
High Pressure Filters (Sandwich) **SFZ**
Max. 315 bar / 4560 PSI
Max. 30 l/min / 8 US GPM — **N104 - N105**

SFZ High Pressure Filters
Filter Elements / Clogging Indicators — **N104**

Order Code - High Pressure Filters / Elements — **N105**

High Pressure Filters ▪ Type SF





Optional Assembly:
- IO - Integrated non-bypass standard insert without valve
- IB - Integrated bypass valve

Product Description

STAUFF SF series High Pressure Filters are designed for in-line hydraulic applications, with a maximum operating pressure of 420 bar / 6000 PSI. Used together with STAUFF SE series Filter Elements, a high efficiency of contaminant removal is assured. The high dirt-hold capacity of the elements ensures long service life and, as a result, reduced maintenance costs.

Technical Data

Construction
- Designed for in-line assembly, with threaded mounting holes on top of the head.

Materials
- Filter head: Spheroidal Graphite Cast Iron
- Filter bowl: Cold Drawn Steel
- O-Rings: NBR (Buna-N®)
  FKM/FPM (Viton®)
  EPDM (Ethylene-Propylene-Diene-Monomer-Rubber)
- Support ring: PTFE (Polytetrafluoroethylene)

Port Connections
- BSPP
- NPT
- SAE O-Ring thread
- SAE 3000 PSI (Code 61) flange
- SAE 6000 PSI (Code 62) flange

Other port connections are available on request.

Operating Pressure
- Max. 420 bar / 6000 PSI

Burst Pressure
- Min. 1260 bar / 18275 PSI

Temperature Range
- -10 °C ... +100 °C / +14 °F ... +212 °F

Filter Elements
- Specifications refer to page N15

Media Compatibility
- Mineral oils
  Other fluids on request

Options and Accessories

Valves
- Bypass valve: Allows unfiltered oil to bypass the contaminated element once the opening pressure has been reached, a differential pressure of $6^{+0.5}$ bar / $87^{+7.25}$ PSI Δp is the standard setting. Other settings available on request.
- Reverse flow valve: Allows reverse flow through the filter head without back flushing the element.
- Non-return valve: Prevents draining of the delivery line during element change.
- Multi-function valve: Opening pressure $6^{+0.5}$ bar / $87^{+7.25}$ PSI
  Bypass, reverse flow capability and non-return valve combined in one valve.

Clogging Indicators
- Standard actuating pressure: $5_{-0.5}$ bar / $72.5_{-7.25}$ PSI Δp
  Other actuating pressure settings are available on request.
- Available indicators: Visual
  Electrical
  Visual-electrical (24 V DC, 110 V AC, 230 V AC versions)
  Double Visual-electrical (24 V DC)

High Pressure Filter Housings / Complete Filters ▪ Type SF

SF	-	014	-	G	-	10	-	B	-	T	-	G12	-	B	-	P	T	230	-	TL	/	X
①		②		③		④		⑤		⑥		⑦		⑧		⑨	⑩	⑪		⑫		⑬

① Type

High Pressure Filter	**SF**

② Group

Flow	Size
60 l/min / 14 US GPM	**014**
110 l/min / 30 US GPM	**030**
160 l/min / 45 US GPM	**045**
240 l/min / 70 US GPM	**070**
330 l/min / 90 US GPM	**090**
475 l/min / 125 US GPM	**125**
500 l/min / 132 US GPM	**130**
660 l/min / 160 US GPM	**160**
990 l/min / 250 US GPM	**250**
1135 l/min / 300 US GPM	**300**

Note: Exact flow will depend on the selected filter element. For technical data refer to Catalogue 9 - STAUFF Filtration Technology.

③ Filter Material

Material	max. Δp*collapse	Micron ratings available	Code
Without filter element	-	-	**0**
Inorg. glass fibre	25 bar / 363 PSI	3, 5, 10, 20	**G**
Inorg. glass fibre	210 bar / 3045 PSI		**H**
Stainless fibre	210 bar / 3045 PSI		**A**
Stainless mesh	30 bar / 435 PSI	25, 50, 100, 200	**S**

Note: * Collapse/burst resistance as per ISO 2941.

④ Micron Rating

Without filter element	**0**
3µm	**03**
5µm	**05**
10µm	**10**
20µm	**20**
25µm	**25**
50µm	**50**
100µm	**100**
200µm	**200**

Note: Other micron ratings are available on request.

⑤ Sealing Material

NBR (Buna-N®)	**B**
FKM/FPM (Viton®)	**V**
EPDM	**E**

Note: Other sealing materials are available on request.

⑥ Connecting Flange

Type T	**T**
Type TH (optional)	**TH**

⑦ Connection Style

Connection Style	Thread Style	Group 014 030	Code	Group 045 070 125	Code	Group 090 130 160 250 300	Code
BSPP	metric	3/4	**G12**	1-1/4	**G20**	1-1/2	**G24**
BSPP	metric	1	G16	1-1/2	G24	-	-
NPT	UNC	3/4	**N12**	1-1/4	**N20**	1-1/2	**N24**
SAE O-Ring Thread	UNC	1-1/16–12	**U12**	1-5/8–12	**U20**	1-7/8–12	**U24**
SAE Flange 6000 PSI	metric	3/4	C612M	1-1/4	C620M	1-1/2	C624M
SAE Flange 6000 PSI	UNC	3/4	**C612U**	1-1/4	**C620U**	1-1/2	**C624U**
SAE Flange 3000 PSI	metric	3/4	C312M	1-1/4	C320M	1-1/2	C324M
SAE Flange 3000 PSI	UNC	3/4	C312U	1-1/4	C320U	1-1/2	C324U
SAE Flange 3000 PSI	metric	1	C316M	-	-	2	C332M
SAE Flange 3000 PSI	UNC	1	C316U	-	-	2	C332U

Note: Other port connections are available on request. Bold types identify preferred connection styles.

⑧ Valve

Integrated non-bypass standard insert without valve	**IO**
Non-bypass standard insert without valve	**O**
Integrated bypass valve	**IB**
Bypass valve	**B**
Reverse flow valve	**R**
Non-return valve	**N**
Multi-function valve	**M**

⑨ Clogging Indicator

Without clogging indicator	**0**
Visual, with automatic reset	**A**
Visual, with manual reset	**V**
Electrical	**E**
Electrical, Deutsch plug	**ED**
Visual-electrical	**P**
Double Visual-electrical	**D024**

⑩ Thermostop

Without thermostop	**(None)**
With thermostop	**T**

⑪ Voltage (only for Code P)

24 V DC	**024**
110 V AC	**110**
230 V AC	**230**

⑫ Style Filter Bowl

With bowl in one-part style	**(None)**
Toploader, with bowl in two-part style	**TL**

Note: Group size SF-125, SF-250 and SF-300 only available in TL-version. With drain plug available on request.
Group size SF-130 only available in one-part style.

⑬ Design Code

STAUFF internal information	**X**

Filter Elements ▪ Type SE

SE	-	014	-	G	-	10	-	B	/	X
①		②		③		④		⑤		⑥

① Type

Filter Element Series	**SE**

② Group

According to filter housing

③ Filter Material

Material	max. Δp*collapse	Micron ratings available	Code
Inorganic glass fibre	25 bar / 363 PSI	3, 5, 10, 20	**G**
Inorganic glass fibre	210 bar / 3045 PSI		**H**
Stainless fibre	210 bar / 3045 PSI		**A**
Stainless mesh	30 bar / 435 PSI	25, 50, 100, 200	**S**

Note: * Collapse/burst resistance as per ISO 2941.

④ Micron Rating

3µm	**03**
5µm	**05**
10µm	**10**
20µm	**20**
25µm	**25**
50µm	**50**
100µm	**100**
200µm	**200**

Note: Other micron ratings are available on request.

⑤ Sealing Material

NBR (Buna-N®)	**B**
FKM/FPM (Viton®)	**V**
EPDM	**E**

Note: Other sealing materials are available on request.

⑥ Design Code

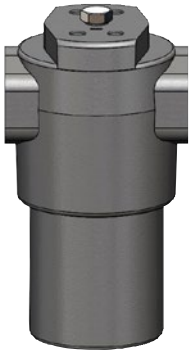
STAUFF internal information	**X**

High Pressure Filter Assemblies ▪ Type SF
Without Clogging Indicator

Filter Element	Description	Filter Material	Pressure Setting	Nominal Size	Valve	Micron	Designation	Price
	High Pressure Filter Assemblies Without Clogging indicator (Fitted with plug)	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	014	Bypass Valve	3µm	SF-014-G-03-B-T-G12-B-0	775.90
						5µm	SF-014-G-05-B-T-G12-B-0	775.90
						10µm	SF-014-G-10-B-T-G12-B-0	775.90
						20µm	SF-014-G-20-B-T-G12-B-0	775.90
					Multi-function Valve	3µm	SF-014-G-03-B-T-G12-M-0	902.15
						5µm	SF-014-G-05-B-T-G12-M-0	902.15
						10µm	SF-014-G-10-B-T-G12-M-0	902.15
						20µm	SF-014-G-20-B-T-G12-M-0	902.15
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	014	Non-bypass without Valve	3µm	SF-014-H-03-B-T-G12-O-0	774.20
						5µm	SF-014-H-05-B-T-G12-O-0	760.25
						10µm	SF-014-H-10-B-T-G12-O-0	746.30
						20µm	SF-014-H-20-B-T-G12-O-0	746.30
					Bypass Valve	3µm	SF-014-H-03-B-T-G12-B-0	859.65
						5µm	SF-014-H-05-B-T-G12-B-0	845.70
						10µm	SF-014-H-10-B-T-G12-B-0	831.75
						20µm	SF-014-H-20-B-T-G12-B-0	831.75
					Multi-function Valve	3µm	SF-014-H-03-B-T-G12-M-0	985.90
						5µm	SF-014-H-05-B-T-G12-M-0	971.95
						10µm	SF-014-H-10-B-T-G12-M-0	958.00
						20µm	SF-014-H-20-B-T-G12-M-0	958.00
	High Pressure Filter Assemblies Without Clogging indicator (Fitted with plug)	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	030	Bypass Valve	3µm	SF-030-G-03-B-T-G12-B-0	845.70
						5µm	SF-030-G-05-B-T-G12-B-0	831.80
						10µm	SF-030-G-10-B-T-G12-B-0	817.80
						20µm	SF-030-G-20-B-T-G12-B-0	817.80
					Multi-function Valve	3µm	SF-030-G-03-B-T-G12-M-0	971.95
						5µm	SF-030-G-05-B-T-G12-M-0	958.05
						10µm	SF-030-G-10-B-T-G12-M-0	944.05
						20µm	SF-030-G-20-B-T-G12-M-0	944.05
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	030	Non-bypass without Valve	3µm	SF-030-H-03-B-T-G12-O-0	872.55
						5µm	SF-030-H-05-B-T-G12-O-0	858.60
						10µm	SF-030-H-10-B-T-G12-O-0	844.65
						20µm	SF-030-H-20-B-T-G12-O-0	844.65
					Bypass Valve	3µm	SF-030-H-03-B-T-G12-B-0	958.00
						5µm	SF-030-H-05-B-T-G12-B-0	944.05
						10µm	SF-030-H-10-B-T-G12-B-0	930.10
						20µm	SF-030-H-20-B-T-G12-B-0	930.10
					Multi-function Valve	3µm	SF-030-H-03-B-T-G12-M-0	1084.25
						5µm	SF-030-H-05-B-T-G12-M-0	1070.30
						10µm	SF-030-H-10-B-T-G12-M-0	1056.35
						20µm	SF-030-H-20-B-T-G12-M-0	1056.35
	High Pressure Filter Assemblies Without Clogging indicator (Fitted with plug)	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	045	Bypass Valve	3µm	SF-045-G-03-B-T-G20-B-0	1151.45
						5µm	SF-045-G-05-B-T-G20-B-0	1137.50
						10µm	SF-045-G-10-B-T-G20-B-0	1137.50
						20µm	SF-045-G-20-B-T-G20-B-0	1137.50
					Multi-function Valve	3µm	SF-045-G-03-B-T-G20-M-0	1334.10
						5µm	SF-045-G-05-B-T-G20-M-0	1320.15
						10µm	SF-045-G-10-B-T-G20-M-0	1320.15
						20µm	SF-045-G-20-B-T-G20-M-0	1320.15
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	045	Non-bypass without Valve	3µm	SF-045-H-03-B-T-G20-O-0	1158.70
						5µm	SF-045-H-05-B-T-G20-O-0	1130.80
						10µm	SF-045-H-10-B-T-G20-O-0	1116.85
						20µm	SF-045-H-20-B-T-G20-O-0	1116.85
					Bypass Valve	3µm	SF-045-H-03-B-T-G20-B-0	1305.55
						5µm	SF-045-H-05-B-T-G20-B-0	1277.65
						10µm	SF-045-H-10-B-T-G20-B-0	1263.70
						20µm	SF-045-H-20-B-T-G20-B-0	1263.70
					Multi-function Valve	3µm	SF-045-H-03-B-T-G20-M-0	1488.20
						5µm	SF-045-H-05-B-T-G20-M-0	1460.30
						10µm	SF-045-H-10-B-T-G20-M-0	1446.35
						20µm	SF-045-H-20-B-T-G20-M-0	1446.35

For replacement filter elements refer to page N69

High Pressure Filter Assemblies ▪ Type SF
Without Clogging Indicator

Filter Element	Description	Filter Material	Pressure Setting	Nominal Size	Valve	Micron	Designation	Price
	High Pressure Filter Assemblies Without Clogging indicator (Fitted with plug)	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	070	Bypass Valve	3µm	SF-070-G-03-B-T-G20-B-0	1264.40
						5µm	SF-070-G-05-B-T-G20-B-0	1250.50
						10µm	SF-070-G-10-B-T-G20-B-0	1235.85
						20µm	SF-070-G-20-B-T-G20-B-0	1235.85
					Multi-function Valve	3µm	SF-070-G-03-B-T-G20-M-0	1447.05
						5µm	SF-070-G-05-B-T-G20-M-0	1433.15
						10µm	SF-070-G-10-B-T-G20-M-0	1418.50
						20µm	SF-070-G-20-B-T-G20-M-0	1418.50
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	070	Non-bypass without Valve	3µm	SF-070-H-03-B-T-G20-O-0	1313.55
						5µm	SF-070-H-05-B-T-G20-O-0	1299.55
						10µm	SF-070-H-10-B-T-G20-O-0	1285.60
						20µm	SF-070-H-20-B-T-G20-O-0	1285.60
					Bypass Valve	3µm	SF-070-H-03-B-T-G20-B-0	1460.40
						5µm	SF-070-H-05-B-T-G20-B-0	1446.40
						10µm	SF-070-H-10-B-T-G20-B-0	1432.45
						20µm	SF-070-H-20-B-T-G20-B-0	1432.45
					Multi-function Valve	3µm	SF-070-H-03-B-T-G20-M-0	1643.05
						5µm	SF-070-H-05-B-T-G20-M-0	1629.05
						10µm	SF-070-H-10-B-T-G20-M-0	1615.10
						20µm	SF-070-H-20-B-T-G20-M-0	1615.10
	High Pressure Filter Assemblies Without Clogging indicator (Fitted with plug)	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	090	Bypass Valve	3µm	SF-090-G-03-B-T-G24-B-0	1950.55
						5µm	SF-090-G-05-B-T-G24-B-0	1936.60
						10µm	SF-090-G-10-B-T-G24-B-0	1922.70
						20µm	SF-090-G-20-B-T-G24-B-0	1922.70
					Multi-function Valve	3µm	SF-090-G-03-B-T-G24-M-0	2090.75
						5µm	SF-090-G-05-B-T-G24-M-0	2076.80
						10µm	SF-090-G-10-B-T-G24-M-0	2062.90
						20µm	SF-090-G-20-B-T-G24-M-0	2062.90
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	090	Non-bypass without Valve	3µm	SF-090-H-03-B-T-G24-O-0	2062.75
						5µm	SF-090-H-05-B-T-G24-O-0	2034.90
						10µm	SF-090-H-10-B-T-G24-O-0	2020.90
						20µm	SF-090-H-20-B-T-G24-O-0	2020.90
					Bypass Valve	3µm	SF-090-H-03-B-T-G24-B-0	2258.75
						5µm	SF-090-H-05-B-T-G24-B-0	2230.90
						10µm	SF-090-H-10-B-T-G24-B-0	2216.90
						20µm	SF-090-H-20-B-T-G24-B-0	2216.90
					Multi-function Valve	3µm	SF-090-H-03-B-T-G24-M-0	2398.95
						5µm	SF-090-H-05-B-T-G24-M-0	2371.10
						10µm	SF-090-H-10-B-T-G24-M-0	2357.10
						20µm	SF-090-H-20-B-T-G24-M-0	2357.10
	High Pressure Filter Assemblies Without Clogging indicator (Fitted with plug)	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	130	Bypass Valve	3µm	SF-130-G-03-B-T-G24-B-0	2467.05
						5µm	SF-130-G-05-B-T-G24-B-0	2425.15
						10µm	SF-130-G-10-B-T-G24-B-0	2411.20
						20µm	SF-130-G-20-B-T-G24-B-0	2411.20
					Multi-function Valve	3µm	SF-130-G-03-B-T-G24-M-0	2607.25
						5µm	SF-130-G-05-B-T-G24-M-0	2565.35
						10µm	SF-130-G-10-B-T-G24-M-0	2551.40
						20µm	SF-130-G-20-B-T-G24-M-0	2551.40
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	130	Non-bypass without Valve	3µm	SF-130-H-03-B-T-G24-O-0	2635.60
						5µm	SF-130-H-05-B-T-G24-O-0	2512.75
						10µm	SF-130-H-10-B-T-G24-O-0	2565.15
						20µm	SF-130-H-20-B-T-G24-O-0	2565.15
					Bypass Valve	3µm	SF-130-H-03-B-T-G24-B-0	2831.60
						5µm	SF-130-H-05-B-T-G24-B-0	2708.75
						10µm	SF-130-H-10-B-T-G24-B-0	2761.15
						20µm	SF-130-H-20-B-T-G24-B-0	2761.15
					Multi-function Valve	3µm	SF-130-H-03-B-T-G24-M-0	2971.80
						5µm	SF-130-H-05-B-T-G24-M-0	2848.95
						10µm	SF-130-H-10-B-T-G24-M-0	2901.35
						20µm	SF-130-H-20-B-T-G24-M-0	2901.35

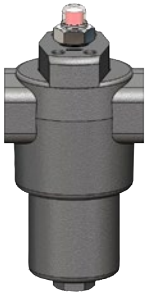
For replacement filter elements refer to page N69

High Pressure Filter Assemblies ▪ Type SF
Without Clogging Indicator

Filter Element	Description	Filter Material	Pressure Setting	Nominal Size	Valve	Micron	Designation	Price
	High Pressure Filter Assemblies Without Clogging indicator (Fitted with plug)	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 294	160	Bypass Valve	3µm	SF-160-G-03-B-T-G24-B-0	2483.80
						5µm	SF-160-G-05-B-T-G24-B-0	2483.80
						10µm	SF-160-G-10-B-T-G24-B-0	2441.40
						20µm	SF-160-G-20-B-T-G24-B-0	2441.40
					Multi-function Valve	3µm	SF-160-G-03-B-T-G24-M-0	2624.00
						5µm	SF-160-G-05-B-T-G24-M-0	2624.00
						10µm	SF-160-G-10-B-T-G24-M-0	2581.60
						20µm	SF-160-G-20-B-T-G24-M-0	2581.60
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	160	Non-bypass without Valve	3µm	SF-160-H-03-B-T-G24-O-0	2890.20
						5µm	SF-160-H-05-B-T-G24-O-0	2876.20
						10µm	SF-160-H-10-B-T-G24-O-0	2777.90
						20µm	SF-160-H-20-B-T-G24-O-0	2777.90
					Bypass Valve	3µm	SF-160-H-03-B-T-G24-B-0	3086.20
						5µm	SF-160-H-05-B-T-G24-B-0	3072.20
						10µm	SF-160-H-10-B-T-G24-B-0	2973.90
						20µm	SF-160-H-20-B-T-G24-B-0	2973.90
					Multi-function Valve	3µm	SF-160-H-03-B-T-G24-M-0	3226.40
						5µm	SF-160-H-05-B-T-G24-M-0	3212.40
						10µm	SF-160-H-10-B-T-G24-M-0	3114.10
						20µm	SF-160-H-20-B-T-G24-M-0	3114.10

For replacement filter elements refer to page N69

High Pressure Filter Assemblies ▪ Type SF
Includes Visual Clogging Indicator with Automatic Reset

Filter Element	Description	Filter Material	Pressure Setting	Nominal Size	Valve	Micron	Designation	Price
	High Pressure Filter Assemblies Includes Visual Clogging Indicator with Automatic Reset	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	014	Bypass Valve	3µm	SF-014-G-03-B-T-G12-B-A	955.00
						5µm	SF-014-G-05-B-T-G12-B-A	955.00
						10µm	SF-014-G-10-B-T-G12-B-A	955.00
						20µm	SF-014-G-20-B-T-G12-B-A	955.00
					Multi-function Valve	3µm	SF-014-G-03-B-T-G12-M-A	1081.25
						5µm	SF-014-G-05-B-T-G12-M-A	1081.25
						10µm	SF-014-G-10-B-T-G12-M-A	1081.25
						20µm	SF-014-G-20-B-T-G12-M-A	1081.25
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	014	Non-bypass without Valve	3µm	SF-014-H-03-B-T-G12-O-A	953.30
						5µm	SF-014-H-05-B-T-G12-O-A	939.35
						10µm	SF-014-H-10-B-T-G12-O-A	925.40
						20µm	SF-014-H-20-B-T-G12-O-A	925.40
					Bypass Valve	3µm	SF-014-H-03-B-T-G12-B-A	1038.75
						5µm	SF-014-H-05-B-T-G12-B-A	1024.80
						10µm	SF-014-H-10-B-T-G12-B-A	1010.85
						20µm	SF-014-H-20-B-T-G12-B-A	1010.85
					Reverse Flow Valve	3µm	SF-014-H-03-B-T-G12-R-A	1108.50
						5µm	SF-014-H-05-B-T-G12-R-A	1094.55
						10µm	SF-014-H-10-B-T-G12-R-A	1080.60
						20µm	SF-014-H-20-B-T-G12-R-A	1080.60
					Multi-function Valve	3µm	SF-014-H-03-B-T-G12-M-A	1165.00
						5µm	SF-014-H-05-B-T-G12-M-A	1151.05
						10µm	SF-014-H-10-B-T-G12-M-A	1137.10
						20µm	SF-014-H-20-B-T-G12-M-A	1137.10
	High Pressure Filter Assemblies Includes Visual Clogging Indicator with Automatic Reset	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	030	Bypass Valve	3µm	SF-030-G-03-B-T-G12-B-A	1024.80
						5µm	SF-030-G-05-B-T-G12-B-A	1010.90
						10µm	SF-030-G-10-B-T-G12-B-A	996.90
						20µm	SF-030-G-20-B-T-G12-B-A	996.90
					Multi-function Valve	3µm	SF-030-G-03-B-T-G12-M-A	1151.05
						5µm	SF-030-G-05-B-T-G12-M-A	1137.15
						10µm	SF-030-G-10-B-T-G12-M-A	1123.15
						20µm	SF-030-G-20-B-T-G12-M-A	1123.15
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	030	Non-bypass without Valve	3µm	SF-030-H-03-B-T-G12-O-A	1051.65
						5µm	SF-030-H-05-B-T-G12-O-A	1037.70
						10µm	SF-030-H-10-B-T-G12-O-A	1023.75
						20µm	SF-030-H-20-B-T-G12-O-A	1023.75
					Bypass Valve	3µm	SF-030-H-03-B-T-G12-B-A	1137.10
						5µm	SF-030-H-05-B-T-G12-B-A	1123.15
						10µm	SF-030-H-10-B-T-G12-B-A	1109.20
						20µm	SF-030-H-20-B-T-G12-B-A	1109.20
					Reverse Flow Valve	3µm	SF-030-H-03-B-T-G12-R-A	1206.85
						5µm	SF-030-H-05-B-T-G12-R-A	1192.90
						10µm	SF-030-H-10-B-T-G12-R-A	1178.95
						20µm	SF-030-H-20-B-T-G12-R-A	1178.95
					Multi-function Valve	3µm	SF-030-H-03-B-T-G12-M-A	1263.35
						5µm	SF-030-H-05-B-T-G12-M-A	1249.40
						10µm	SF-030-H-10-B-T-G12-M-A	1235.45
						20µm	SF-030-H-20-B-T-G12-M-A	1235.45

For replacement filter elements refer to page N69

High Pressure Filter Assemblies ▪ Type SF
Includes Visual Clogging Indicator with Automatic Reset

Filter Element	Description	Filter Material	Pressure Setting	Nominal Size	Valve	Micron	Designation	Price
	High Pressure Filter Assemblies Includes Visual Clogging Indicator with Automatic Reset	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	045	Bypass Valve	3µm	SF-045-G-03-B-T-G20-B-A	1330.55
						5µm	SF-045-G-05-B-T-G20-B-A	1316.60
						10µm	SF-045-G-10-B-T-G20-B-A	1316.60
						20µm	SF-045-G-20-B-T-G20-B-A	1316.60
					Multi-function Valve	3µm	SF-045-G-03-B-T-G20-M-A	1513.20
						5µm	SF-045-G-05-B-T-G20-M-A	1499.25
						10µm	SF-045-G-10-B-T-G20-M-A	1499.25
						20µm	SF-045-G-20-B-T-G20-M-A	1499.25
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	045	Non-bypass without Valve	3µm	SF-045-H-03-B-T-G20-O-A	1337.80
						5µm	SF-045-H-05-B-T-G20-O-A	1309.90
						10µm	SF-045-H-10-B-T-G20-O-A	1295.95
						20µm	SF-045-H-20-B-T-G20-O-A	1295.95
					Bypass Valve	3µm	SF-045-H-03-B-T-G20-B-A	1484.65
						5µm	SF-045-H-05-B-T-G20-B-A	1456.75
						10µm	SF-045-H-10-B-T-G20-B-A	1442.80
						20µm	SF-045-H-20-B-T-G20-B-A	1442.80
					Reverse Flow Valve	3µm	SF-045-H-03-B-T-G20-R-A	1582.95
						5µm	SF-045-H-05-B-T-G20-R-A	1555.05
						10µm	SF-045-H-10-B-T-G20-R-A	1541.10
						20µm	SF-045-H-20-B-T-G20-R-A	1541.10
					Multi-function Valve	3µm	SF-045-H-03-B-T-G20-M-A	1667.30
						5µm	SF-045-H-05-B-T-G20-M-A	1639.40
						10µm	SF-045-H-10-B-T-G20-M-A	1625.45
						20µm	SF-045-H-20-B-T-G20-M-A	1625.45
	High Pressure Filter Assemblies Includes Visual Clogging Indicator with Automatic Reset	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	070	Bypass Valve	3µm	SF-070-G-03-B-T-G20-B-A	1443.50
						5µm	SF-070-G-05-B-T-G20-B-A	1429.60
						10µm	SF-070-G-10-B-T-G20-B-A	1414.95
						20µm	SF-070-G-20-B-T-G20-B-A	1414.95
					Multi-function Valve	3µm	SF-070-G-03-B-T-G20-M-A	1626.15
						5µm	SF-070-G-05-B-T-G20-M-A	1612.25
						10µm	SF-070-G-10-B-T-G20-M-A	1597.60
						20µm	SF-070-G-20-B-T-G20-M-A	1597.60
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	070	Non-bypass without Valve	3µm	SF-070-H-03-B-T-G20-O-A	1492.65
						5µm	SF-070-H-05-B-T-G20-O-A	1478.65
						10µm	SF-070-H-10-B-T-G20-O-A	1464.70
						20µm	SF-070-H-20-B-T-G20-O-A	1464.70
					Bypass Valve	3µm	SF-070-H-03-B-T-G20-B-A	1639.50
						5µm	SF-070-H-05-B-T-G20-B-A	1625.50
						10µm	SF-070-H-10-B-T-G20-B-A	1611.55
						20µm	SF-070-H-20-B-T-G20-B-A	1611.55
					Reverse Flow Valve	3µm	SF-070-H-03-B-T-G20-R-A	1737.80
						5µm	SF-070-H-05-B-T-G20-R-A	1723.80
						10µm	SF-070-H-10-B-T-G20-R-A	1709.85
						20µm	SF-070-H-20-B-T-G20-R-A	1709.85
					Multi-function Valve	3µm	SF-070-H-03-B-T-G20-M-A	1822.15
						5µm	SF-070-H-05-B-T-G20-M-A	1808.15
						10µm	SF-070-H-10-B-T-G20-M-A	1794.20
						20µm	SF-070-H-20-B-T-G20-M-A	1794.20

For replacement filter elements refer to page N69

High Pressure Filter Assemblies ▪ Type SF
Includes Visual Clogging Indicator with Automatic Reset

Filter Element	Description	Filter Material	Pressure Setting	Nominal Size	Valve	Micron	Designation	Price
	High Pressure Filter Assemblies Includes Visual Clogging Indicator with Automatic Reset	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	090	Bypass Valve	3µm	SF-090-G-03-B-T-G24-B-A	2129.65
						5µm	SF-090-G-05-B-T-G24-B-A	2115.70
						10µm	SF-090-G-10-B-T-G24-B-A	2101.80
						20µm	SF-090-G-20-B-T-G24-B-A	2101.80
					Multi-function Valve	3µm	SF-090-G-03-B-T-G24-M-A	2269.85
						5µm	SF-090-G-05-B-T-G24-M-A	2255.90
						10µm	SF-090-G-10-B-T-G24-M-A	2242.00
						20µm	SF-090-G-20-B-T-G24-M-A	2242.00
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	090	Non-bypass without Valve	3µm	SF-090-H-03-B-T-G24-O-A	2241.85
						5µm	SF-090-H-05-B-T-G24-O-A	2214.00
						10µm	SF-090-H-10-B-T-G24-O-A	2200.00
						20µm	SF-090-H-20-B-T-G24-O-A	2200.00
					Bypass Valve	3µm	SF-090-H-03-B-T-G24-B-A	2437.85
						5µm	SF-090-H-05-B-T-G24-B-A	2410.00
						10µm	SF-090-H-10-B-T-G24-B-A	2396.00
						20µm	SF-090-H-20-B-T-G24-B-A	2396.00
					Reverse Flow Valve	3µm	SF-090-H-03-B-T-G24-R-A	2494.35
						5µm	SF-090-H-05-B-T-G24-R-A	2466.50
						10µm	SF-090-H-10-B-T-G24-R-A	2452.50
						20µm	SF-090-H-20-B-T-G24-R-A	2452.50
					Multi-function Valve	3µm	SF-090-H-03-B-T-G24-M-A	2578.05
						5µm	SF-090-H-05-B-T-G24-M-A	2550.20
						10µm	SF-090-H-10-B-T-G24-M-A	2536.20
						20µm	SF-090-H-20-B-T-G24-M-A	2536.20
	High Pressure Filter Assemblies Includes Visual Clogging Indicator with Automatic Reset	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	130	Bypass Valve	3µm	SF-130-G-03-B-T-G24-B-A	2646.15
						5µm	SF-130-G-05-B-T-G24-B-A	2604.25
						10µm	SF-130-G-10-B-T-G24-B-A	2590.30
						20µm	SF-130-G-20-B-T-G24-B-A	2590.30
					Multi-function Valve	3µm	SF-130-G-03-B-T-G24-M-A	2786.35
						5µm	SF-130-G-05-B-T-G24-M-A	2744.45
						10µm	SF-130-G-10-B-T-G24-M-A	2730.50
						20µm	SF-130-G-20-B-T-G24-M-A	2730.50
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	130	Non-bypass without Valve	3µm	SF-130-H-03-B-T-G24-O-A	2814.70
						5µm	SF-130-H-05-B-T-G24-O-A	2691.85
						10µm	SF-130-H-10-B-T-G24-O-A	2744.25
						20µm	SF-130-H-20-B-T-G24-O-A	2744.25
					Bypass Valve	3µm	SF-130-H-03-B-T-G24-B-A	3010.70
						5µm	SF-130-H-05-B-T-G24-B-A	2887.85
						10µm	SF-130-H-10-B-T-G24-B-A	2940.25
						20µm	SF-130-H-20-B-T-G24-B-A	2940.25
					Reverse Flow Valve	3µm	SF-130-H-03-B-T-G24-R-A	3067.20
						5µm	SF-130-H-05-B-T-G24-R-A	2944.35
						10µm	SF-130-H-10-B-T-G24-R-A	2996.75
						20µm	SF-130-H-20-B-T-G24-R-A	2996.75
					Multi-function Valve	3µm	SF-130-H-03-B-T-G24-M-A	3150.90
						5µm	SF-130-H-05-B-T-G24-M-A	3028.05
						10µm	SF-130-H-10-B-T-G24-M-A	3080.45
						20µm	SF-130-H-20-B-T-G24-M-A	3080.45

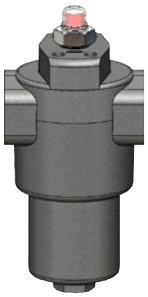
For replacement filter elements refer to page N69

High Pressure Filter Assemblies ▪ Type SF
Includes Visual Clogging Indicator with Automatic Reset

Filter Element	Description	Filter Material	Pressure Setting	Nominal Size	Valve	Micron	Designation	Price
	High Pressure Filter Assemblies Includes Visual Clogging Indicator with Automatic Reset	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	160	Bypass Valve	3µm	SF-160-G-03-B-T-G24-B-A	2662.90
						5µm	SF-160-G-05-B-T-G24-B-A	2662.90
						10µm	SF-160-G-10-B-T-G24-B-A	2620.50
						20µm	SF-160-G-20-B-T-G24-B-A	2620.50
					Multi-function Valve	3µm	SF-160-G-03-B-T-G24-M-A	2803.10
						5µm	SF-160-G-05-B-T-G24-M-A	2803.10
						10µm	SF-160-G-10-B-T-G24-M-A	2760.70
						20µm	SF-160-G-20-B-T-G24-M-A	2760.70
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	160	Non-bypass without Valve	3µm	SF-160-H-03-B-T-G24-O-A	3069.30
						5µm	SF-160-H-05-B-T-G24-O-A	3055.30
						10µm	SF-160-H-10-B-T-G24-O-A	2957.00
						20µm	SF-160-H-20-B-T-G24-O-A	2957.00
					Bypass Valve	3µm	SF-160-H-03-B-T-G24-B-A	3265.30
						5µm	SF-160-H-05-B-T-G24-B-A	3251.30
						10µm	SF-160-H-10-B-T-G24-B-A	3153.00
						20µm	SF-160-H-20-B-T-G24-B-A	3153.00
					Reverse Flow Valve	3µm	SF-160-H-03-B-T-G24-R-A	3321.80
						5µm	SF-160-H-05-B-T-G24-R-A	3307.80
						10µm	SF-160-H-10-B-T-G24-R-A	3209.50
						20µm	SF-160-H-20-B-T-G24-R-A	3209.50
					Multi-function Valve	3µm	SF-160-H-03-B-T-G24-M-A	3405.50
						5µm	SF-160-H-05-B-T-G24-M-A	3391.50
						10µm	SF-160-H-10-B-T-G24-M-A	3293.20
						20µm	SF-160-H-20-B-T-G24-M-A	3293.20

For replacement filter elements refer to page N69

High Pressure Filter Assemblies ▪ Type SF
Includes Visual Clogging Indicator with Manual Reset

Filter Element	Description	Filter Material	Pressure Setting	Nominal Size	Valve	Micron	Designation	Price
	High Pressure Filter Assemblies Includes Visual Clogging Indicator with Manual Reset	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	014	Bypass Valve	3µm	SF-014-G-03-B-T-G12-B-V	941.05
						5µm	SF-014-G-05-B-T-G12-B-V	941.05
						10µm	SF-014-G-10-B-T-G12-B-V	941.05
						20µm	SF-014-G-20-B-T-G12-B-V	941.05
					Multi-function Valve	3µm	SF-014-G-03-B-T-G12-M-V	1067.30
						5µm	SF-014-G-05-B-T-G12-M-V	1067.30
						10µm	SF-014-G-10-B-T-G12-M-V	1067.30
						20µm	SF-014-G-20-B-T-G12-M-V	1067.30
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	014	Non-bypass without Valve	3µm	SF-014-H-03-B-T-G12-O-V	939.35
						5µm	SF-014-H-05-B-T-G12-O-V	925.40
						10µm	SF-014-H-10-B-T-G12-O-V	911.45
						20µm	SF-014-H-20-B-T-G12-O-V	911.45
					Bypass Valve	3µm	SF-014-H-03-B-T-G12-B-V	1024.80
						5µm	SF-014-H-05-B-T-G12-B-V	1010.85
						10µm	SF-014-H-10-B-T-G12-B-V	996.90
						20µm	SF-014-H-20-B-T-G12-B-V	996.90
					Reverse Flow Valve	3µm	SF-014-H-03-B-T-G12-R-V	1094.55
						5µm	SF-014-H-05-B-T-G12-R-V	1080.60
						10µm	SF-014-H-10-B-T-G12-R-V	1066.65
						20µm	SF-014-H-20-B-T-G12-R-V	1066.65
					Multi-function Valve	3µm	SF-014-H-03-B-T-G12-M-V	1151.05
						5µm	SF-014-H-05-B-T-G12-M-V	1137.10
						10µm	SF-014-H-10-B-T-G12-M-V	1123.15
						20µm	SF-014-H-20-B-T-G12-M-V	1123.15
	High Pressure Filter Assemblies Includes Visual Clogging Indicator with Manual Reset	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	030	Bypass Valve	3µm	SF-030-G-03-B-T-G12-B-V	1010.85
						5µm	SF-030-G-05-B-T-G12-B-V	996.95
						10µm	SF-030-G-10-B-T-G12-B-V	982.95
						20µm	SF-030-G-20-B-T-G12-B-V	982.95
					Multi-function Valve	3µm	SF-030-G-03-B-T-G12-M-V	1137.10
						5µm	SF-030-G-05-B-T-G12-M-V	1123.20
						10µm	SF-030-G-10-B-T-G12-M-V	1109.20
						20µm	SF-030-G-20-B-T-G12-M-V	1109.20
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	030	Non-bypass without Valve	3µm	SF-030-H-03-B-T-G12-O-V	1037.70
						5µm	SF-030-H-05-B-T-G12-O-V	1023.75
						10µm	SF-030-H-10-B-T-G12-O-V	1009.80
						20µm	SF-030-H-20-B-T-G12-O-V	1009.80
					Bypass Valve	3µm	SF-030-H-03-B-T-G12-B-V	1123.15
						5µm	SF-030-H-05-B-T-G12-B-V	1109.20
						10µm	SF-030-H-10-B-T-G12-B-V	1095.25
						20µm	SF-030-H-20-B-T-G12-B-V	1095.25
					Reverse Flow Valve	3µm	SF-030-H-03-B-T-G12-R-V	1192.90
						5µm	SF-030-H-05-B-T-G12-R-V	1178.95
						10µm	SF-030-H-10-B-T-G12-R-V	1165.00
						20µm	SF-030-H-20-B-T-G12-R-V	1165.00
					Multi-function Valve	3µm	SF-030-H-03-B-T-G12-M-V	1249.40
						5µm	SF-030-H-05-B-T-G12-M-V	1235.45
						10µm	SF-030-H-10-B-T-G12-M-V	1221.50
						20µm	SF-030-H-20-B-T-G12-M-V	1221.50

For replacement filter elements refer to page N69

High Pressure Filter Assemblies ▪ Type SF
Includes Visual Clogging Indicator with Manual Reset

Filter Element	Description	Filter Material	Pressure Setting	Nominal Size	Valve	Micron	Designation	Price
	High Pressure Filter Assemblies Includes Visual Clogging Indicator with Manual Reset	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	045	Bypass Valve	3µm	SF-045-G-03-B-T-G20-B-V	1316.60
						5µm	SF-045-G-05-B-T-G20-B-V	1302.65
						10µm	SF-045-G-10-B-T-G20-B-V	1302.65
						20µm	SF-045-G-20-B-T-G20-B-V	1302.65
					Multi-function Valve	3µm	SF-045-G-03-B-T-G20-M-V	1499.25
						5µm	SF-045-G-05-B-T-G20-M-V	1485.30
						10µm	SF-045-G-10-B-T-G20-M-V	1485.30
						20µm	SF-045-G-20-B-T-G20-M-V	1485.30
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	045	Non-bypass without Valve	3µm	SF-045-H-03-B-T-G20-O-V	1323.85
						5µm	SF-045-H-05-B-T-G20-O-V	1295.95
						10µm	SF-045-H-10-B-T-G20-O-V	1282.00
						20µm	SF-045-H-20-B-T-G20-O-V	1282.00
					Bypass Valve	3µm	SF-045-H-03-B-T-G20-B-V	1470.70
						5µm	SF-045-H-05-B-T-G20-B-V	1442.80
						10µm	SF-045-H-10-B-T-G20-B-V	1428.85
						20µm	SF-045-H-20-B-T-G20-B-V	1428.85
					Reverse Flow Valve	3µm	SF-045-H-03-B-T-G20-R-V	1569.00
						5µm	SF-045-H-05-B-T-G20-R-V	1541.10
						10µm	SF-045-H-10-B-T-G20-R-V	1527.15
						20µm	SF-045-H-20-B-T-G20-R-V	1527.15
					Multi-function Valve	3µm	SF-045-H-03-B-T-G20-M-V	1653.35
						5µm	SF-045-H-05-B-T-G20-M-V	1625.45
						10µm	SF-045-H-10-B-T-G20-M-V	1611.50
						20µm	SF-045-H-20-B-T-G20-M-V	1611.50
	High Pressure Filter Assemblies Includes Visual Clogging Indicator with Manual Reset	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	070	Bypass Valve	3µm	SF-070-G-03-B-T-G20-B-V	1429.55
						5µm	SF-070-G-05-B-T-G20-B-V	1415.65
						10µm	SF-070-G-10-B-T-G20-B-V	1401.00
						20µm	SF-070-G-20-B-T-G20-B-V	1401.00
					Multi-function Valve	3µm	SF-070-G-03-B-T-G20-M-V	1612.20
						5µm	SF-070-G-05-B-T-G20-M-V	1598.30
						10µm	SF-070-G-10-B-T-G20-M-V	1583.65
						20µm	SF-070-G-20-B-T-G20-M-V	1583.65
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	070	Non-bypass without Valve	3µm	SF-070-H-03-B-T-G20-O-V	1478.70
						5µm	SF-070-H-05-B-T-G20-O-V	1464.70
						10µm	SF-070-H-10-B-T-G20-O-V	1450.75
						20µm	SF-070-H-20-B-T-G20-O-V	1450.75
					Bypass Valve	3µm	SF-070-H-03-B-T-G20-B-V	1625.55
						5µm	SF-070-H-05-B-T-G20-B-V	1611.55
						10µm	SF-070-H-10-B-T-G20-B-V	1597.60
						20µm	SF-070-H-20-B-T-G20-B-V	1597.60
					Reverse Flow Valve	3µm	SF-070-H-03-B-T-G20-R-V	1723.85
						5µm	SF-070-H-05-B-T-G20-R-V	1709.85
						10µm	SF-070-H-10-B-T-G20-R-V	1695.90
						20µm	SF-070-H-20-B-T-G20-R-V	1695.90
					Multi-function Valve	3µm	SF-070-H-03-B-T-G20-M-V	1808.20
						5µm	SF-070-H-05-B-T-G20-M-V	1794.20
						10µm	SF-070-H-10-B-T-G20-M-V	1780.25
						20µm	SF-070-H-20-B-T-G20-M-V	1780.25

For replacement filter elements refer to page N69

High Pressure Filter Assemblies ▪ Type SF
Includes Visual Clogging Indicator with Manual Reset

Filter Element	Description	Filter Material	Pressure Setting	Nominal Size	Valve	Micron	Designation	Price
	High Pressure Filter Assemblies Includes Visual Clogging Indicator with Manual Reset	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	090	Bypass Valve	3µm	SF-090-G-03-B-T-G24-B-V	2115.70
						5µm	SF-090-G-05-B-T-G24-B-V	2101.75
						10µm	SF-090-G-10-B-T-G24-B-V	2087.85
						20µm	SF-090-G-20-B-T-G24-B-V	2087.85
					Multi-function Valve	3µm	SF-090-G-03-B-T-G24-M-V	2255.90
						5µm	SF-090-G-05-B-T-G24-M-V	2241.95
						10µm	SF-090-G-10-B-T-G24-M-V	2228.05
						20µm	SF-090-G-20-B-T-G24-M-V	2228.05
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	090	Non-bypass without Valve	3µm	SF-090-H-03-B-T-G24-O-V	2227.90
						5µm	SF-090-H-05-B-T-G24-O-V	2200.05
						10µm	SF-090-H-10-B-T-G24-O-V	2186.05
						20µm	SF-090-H-20-B-T-G24-O-V	2186.05
					Bypass Valve	3µm	SF-090-H-03-B-T-G24-B-V	2423.90
						5µm	SF-090-H-05-B-T-G24-B-V	2396.05
						10µm	SF-090-H-10-B-T-G24-B-V	2382.05
						20µm	SF-090-H-20-B-T-G24-B-V	2382.05
					Reverse Flow Valve	3µm	SF-090-H-03-B-T-G24-R-V	2480.40
						5µm	SF-090-H-05-B-T-G24-R-V	2452.55
						10µm	SF-090-H-10-B-T-G24-R-V	2438.55
						20µm	SF-090-H-20-B-T-G24-R-V	2438.55
					Multi-function Valve	3µm	SF-090-H-03-B-T-G24-M-V	2564.10
						5µm	SF-090-H-05-B-T-G24-M-V	2536.25
						10µm	SF-090-H-10-B-T-G24-M-V	2522.25
						20µm	SF-090-H-20-B-T-G24-M-V	2522.25
	High Pressure Filter Assemblies Includes Visual Clogging Indicator with Manual Reset	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	130	Bypass Valve	3µm	SF-130-G-03-B-T-G24-B-V	2632.20
						5µm	SF-130-G-05-B-T-G24-B-V	2590.30
						10µm	SF-130-G-10-B-T-G24-B-V	2576.35
						20µm	SF-130-G-20-B-T-G24-B-V	2576.35
					Multi-function Valve	3µm	SF-130-G-03-B-T-G24-M-V	2772.40
						5µm	SF-130-G-05-B-T-G24-M-V	2730.50
						10µm	SF-130-G-10-B-T-G24-M-V	2716.55
						20µm	SF-130-G-20-B-T-G24-M-V	2716.55
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	130	Non-bypass without Valve	3µm	SF-130-H-03-B-T-G24-O-V	2800.75
						5µm	SF-130-H-05-B-T-G24-O-V	2677.90
						10µm	SF-130-H-10-B-T-G24-O-V	2730.30
						20µm	SF-130-H-20-B-T-G24-O-V	2730.30
					Bypass Valve	3µm	SF-130-H-03-B-T-G24-B-V	2996.75
						5µm	SF-130-H-05-B-T-G24-B-V	2873.90
						10µm	SF-130-H-10-B-T-G24-B-V	2926.30
						20µm	SF-130-H-20-B-T-G24-B-V	2926.30
					Reverse Flow Valve	3µm	SF-130-H-03-B-T-G24-R-V	3053.25
						5µm	SF-130-H-05-B-T-G24-R-V	2930.40
						10µm	SF-130-H-10-B-T-G24-R-V	2982.80
						20µm	SF-130-H-20-B-T-G24-R-V	2982.80
					Multi-function Valve	3µm	SF-130-H-03-B-T-G24-M-V	3136.95
						5µm	SF-130-H-05-B-T-G24-M-V	3014.10
						10µm	SF-130-H-10-B-T-G24-M-V	3066.50
						20µm	SF-130-H-20-B-T-G24-M-V	3066.50

For replacement filter elements refer to page N69

High Pressure Filter Assemblies ▪ Type SF
Includes Visual Clogging Indicator with Manual Reset

Filter Element	Description	Filter Material	Pressure Setting	Nominal Size	Valve	Micron	Designation	Price
	High Pressure Filter Assemblies Includes Visual Clogging Indicator with Manual Reset	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	160	Bypass Valve	3µm	SF-160-G-03-B-T-G24-B-V	2648.95
						5µm	SF-160-G-05-B-T-G24-B-V	2648.95
						10µm	SF-160-G-10-B-T-G24-B-V	2606.55
						20µm	SF-160-G-20-B-T-G24-B-V	2606.55
					Multi-function Valve	3µm	SF-160-G-03-B-T-G24-M-V	2789.15
						5µm	SF-160-G-05-B-T-G24-M-V	2789.15
						10µm	SF-160-G-10-B-T-G24-M-V	2746.75
						20µm	SF-160-G-20-B-T-G24-M-V	2746.75
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	160	Non-bypass without Valve	3µm	SF-160-H-03-B-T-G24-O-V	3055.35
						5µm	SF-160-H-05-B-T-G24-O-V	3041.35
						10µm	SF-160-H-10-B-T-G24-O-V	2943.05
						20µm	SF-160-H-20-B-T-G24-O-V	2943.05
					Bypass Valve	3µm	SF-160-H-03-B-T-G24-B-V	3251.35
						5µm	SF-160-H-05-B-T-G24-B-V	3237.35
						10µm	SF-160-H-10-B-T-G24-B-V	3139.05
						20µm	SF-160-H-20-B-T-G24-B-V	3139.05
					Reverse Flow Valve	3µm	SF-160-H-03-B-T-G24-R-V	3307.85
						5µm	SF-160-H-05-B-T-G24-R-V	3293.85
						10µm	SF-160-H-10-B-T-G24-R-V	3195.55
						20µm	SF-160-H-20-B-T-G24-R-V	3195.55
					Multi-function Valve	3µm	SF-160-H-03-B-T-G24-M-V	3391.55
						5µm	SF-160-H-05-B-T-G24-M-V	3377.55
						10µm	SF-160-H-10-B-T-G24-M-V	3279.25
						20µm	SF-160-H-20-B-T-G24-M-V	3279.25

For replacement filter elements refer to page N69

High Pressure Filter Assemblies ▪ Type SF
Includes Electrical Clogging Indicator

Filter Element	Description	Filter Material	Pressure Setting	Nominal Size	Valve	Micron	Designation	Price
	High Pressure Filter Assemblies Includes Electrical Clogging Indicator (supplied loose ie. not fitted)	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	014	Bypass Valve	3µm	SF-014-G-03-B-T-G12-B-E	1095.15
						5µm	SF-014-G-05-B-T-G12-B-E	1095.15
						10µm	SF-014-G-10-B-T-G12-B-E	1095.15
						20µm	SF-014-G-20-B-T-G12-B-E	1095.15
					Multi-function Valve	3µm	SF-014-G-03-B-T-G12-M-E	1221.40
						5µm	SF-014-G-05-B-T-G12-M-E	1221.40
						10µm	SF-014-G-10-B-T-G12-M-E	1221.40
						20µm	SF-014-G-20-B-T-G12-M-E	1221.40
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	014	Non-bypass without Valve	3µm	SF-014-H-03-B-T-G12-O-E	1093.45
						5µm	SF-014-H-05-B-T-G12-O-E	1079.50
						10µm	SF-014-H-10-B-T-G12-O-E	1065.55
						20µm	SF-014-H-20-B-T-G12-O-E	1065.55
					Bypass Valve	3µm	SF-014-H-03-B-T-G12-B-E	1178.90
						5µm	SF-014-H-05-B-T-G12-B-E	1164.95
						10µm	SF-014-H-10-B-T-G12-B-E	1151.00
						20µm	SF-014-H-20-B-T-G12-B-E	1151.00
					Reverse Flow Valve	3µm	SF-014-H-03-B-T-G12-R-E	1248.65
						5µm	SF-014-H-05-B-T-G12-R-E	1234.70
						10µm	SF-014-H-10-B-T-G12-R-E	1220.75
						20µm	SF-014-H-20-B-T-G12-R-E	1220.75
					Multi-function Valve	3µm	SF-014-H-03-B-T-G12-M-E	1305.15
						5µm	SF-014-H-05-B-T-G12-M-E	1291.20
						10µm	SF-014-H-10-B-T-G12-M-E	1277.25
						20µm	SF-014-H-20-B-T-G12-M-E	1277.25
	High Pressure Filter Assemblies Includes Electrical Clogging Indicator (supplied loose ie. not fitted)	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	030	Bypass Valve	3µm	SF-030-G-03-B-T-G12-B-E	1164.95
						5µm	SF-030-G-05-B-T-G12-B-E	1151.05
						10µm	SF-030-G-10-B-T-G12-B-E	1137.05
						20µm	SF-030-G-20-B-T-G12-B-E	1137.05
					Multi-function Valve	3µm	SF-030-G-03-B-T-G12-M-E	1291.20
						5µm	SF-030-G-05-B-T-G12-M-E	1277.30
						10µm	SF-030-G-10-B-T-G12-M-E	1263.30
						20µm	SF-030-G-20-B-T-G12-M-E	1263.30
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	030	Non-bypass without Valve	3µm	SF-030-H-03-B-T-G12-O-E	1191.80
						5µm	SF-030-H-05-B-T-G12-O-E	1177.85
						10µm	SF-030-H-10-B-T-G12-O-E	1163.90
						20µm	SF-030-H-20-B-T-G12-O-E	1163.90
					Bypass Valve	3µm	SF-030-H-03-B-T-G12-B-E	1277.25
						5µm	SF-030-H-05-B-T-G12-B-E	1263.30
						10µm	SF-030-H-10-B-T-G12-B-E	1249.35
						20µm	SF-030-H-20-B-T-G12-B-E	1249.35
					Reverse Flow Valve	3µm	SF-030-H-03-B-T-G12-R-E	1347.00
						5µm	SF-030-H-05-B-T-G12-R-E	1333.05
						10µm	SF-030-H-10-B-T-G12-R-E	1319.10
						20µm	SF-030-H-20-B-T-G12-R-E	1319.10
					Multi-function Valve	3µm	SF-030-H-03-B-T-G12-M-E	1403.50
						5µm	SF-030-H-05-B-T-G12-M-E	1389.55
						10µm	SF-030-H-10-B-T-G12-M-E	1375.60
						20µm	SF-030-H-20-B-T-G12-M-E	1375.60

For replacement filter elements refer to page N69

High Pressure Filter Assemblies ▪ Type SF
Includes Electrical Clogging Indicator

Filter Element	Description	Filter Material	Pressure Setting	Nominal Size	Valve	Micron	Designation	Price
	High Pressure Filter Assemblies Includes Electrical Clogging Indicator (supplied loose ie. not fitted)	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	045	Bypass Valve	3µm	SF-045-G-03-B-T-G20-B-E	1470.70
						5µm	SF-045-G-05-B-T-G20-B-E	1456.75
						10µm	SF-045-G-10-B-T-G20-B-E	1456.75
						20µm	SF-045-G-20-B-T-G20-B-E	1456.75
					Multi-function Valve	3µm	SF-045-G-03-B-T-G20-M-E	1653.35
						5µm	SF-045-G-05-B-T-G20-M-E	1639.40
						10µm	SF-045-G-10-B-T-G20-M-E	1639.40
						20µm	SF-045-G-20-B-T-G20-M-E	1639.40
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	045	Non-bypass without Valve	3µm	SF-045-H-03-B-T-G20-O-E	1477.95
						5µm	SF-045-H-05-B-T-G20-O-E	1450.05
						10µm	SF-045-H-10-B-T-G20-O-E	1436.10
						20µm	SF-045-H-20-B-T-G20-O-E	1436.10
					Bypass Valve	3µm	SF-045-H-03-B-T-G20-B-E	1624.80
						5µm	SF-045-H-05-B-T-G20-B-E	1596.90
						10µm	SF-045-H-10-B-T-G20-B-E	1582.95
						20µm	SF-045-H-20-B-T-G20-B-E	1582.95
					Reverse Flow Valve	3µm	SF-045-H-03-B-T-G20-R-E	1723.10
						5µm	SF-045-H-05-B-T-G20-R-E	1695.20
						10µm	SF-045-H-10-B-T-G20-R-E	1681.25
						20µm	SF-045-H-20-B-T-G20-R-E	1681.25
					Multi-function Valve	3µm	SF-045-H-03-B-T-G20-M-E	1807.45
						5µm	SF-045-H-05-B-T-G20-M-E	1779.55
						10µm	SF-045-H-10-B-T-G20-M-E	1765.60
						20µm	SF-045-H-20-B-T-G20-M-E	1765.60
	High Pressure Filter Assemblies Includes Electrical Clogging Indicator (supplied loose ie. not fitted)	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	070	Bypass Valve	3µm	SF-070-G-03-B-T-G20-B-E	1583.65
						5µm	SF-070-G-05-B-T-G20-B-E	1569.75
						10µm	SF-070-G-10-B-T-G20-B-E	1555.10
						20µm	SF-070-G-20-B-T-G20-B-E	1555.10
					Multi-function Valve	3µm	SF-070-G-03-B-T-G20-M-E	1766.30
						5µm	SF-070-G-05-B-T-G20-M-E	1752.40
						10µm	SF-070-G-10-B-T-G20-M-E	1737.75
						20µm	SF-070-G-20-B-T-G20-M-E	1737.75
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	070	Non-bypass without Valve	3µm	SF-070-H-03-B-T-G20-O-E	1632.80
						5µm	SF-070-H-05-B-T-G20-O-E	1618.80
						10µm	SF-070-H-10-B-T-G20-O-E	1604.85
						20µm	SF-070-H-20-B-T-G20-O-E	1604.85
					Bypass Valve	3µm	SF-070-H-03-B-T-G20-B-E	1779.65
						5µm	SF-070-H-05-B-T-G20-B-E	1765.65
						10µm	SF-070-H-10-B-T-G20-B-E	1751.70
						20µm	SF-070-H-20-B-T-G20-B-E	1751.70
					Reverse Flow Valve	3µm	SF-070-H-03-B-T-G20-R-E	1877.95
						5µm	SF-070-H-05-B-T-G20-R-E	1863.95
						10µm	SF-070-H-10-B-T-G20-R-E	1850.00
						20µm	SF-070-H-20-B-T-G20-R-E	1850.00
					Multi-function Valve	3µm	SF-070-H-03-B-T-G20-M-E	1962.30
						5µm	SF-070-H-05-B-T-G20-M-E	1948.30
						10µm	SF-070-H-10-B-T-G20-M-E	1934.35
						20µm	SF-070-H-20-B-T-G20-M-E	1934.35

For replacement filter elements refer to page N69

High Pressure Filter Assemblies ▪ Type SF
Includes Electrical Clogging Indicator

Filter Element	Description	Filter Material	Pressure Setting	Nominal Size	Valve	Micron	Designation	Price
	High Pressure Filter Assemblies Includes Electrical Clogging Indicator (supplied loose ie. not fitted)	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	090	Bypass Valve	3µm	SF-090-G-03-B-T-G24-B-E	2269.80
						5µm	SF-090-G-05-B-T-G24-B-E	2255.85
						10µm	SF-090-G-10-B-T-G24-B-E	2241.95
						20µm	SF-090-G-20-B-T-G24-B-E	2241.95
					Multi-function Valve	3µm	SF-090-G-03-B-T-G24-M-E	2410.00
						5µm	SF-090-G-05-B-T-G24-M-E	2396.05
						10µm	SF-090-G-10-B-T-G24-M-E	2382.15
						20µm	SF-090-G-20-B-T-G24-M-E	2382.15
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	090	Non-bypass without Valve	3µm	SF-090-H-03-B-T-G24-O-E	2382.00
						5µm	SF-090-H-05-B-T-G24-O-E	2354.15
						10µm	SF-090-H-10-B-T-G24-O-E	2340.15
						20µm	SF-090-H-20-B-T-G24-O-E	2340.15
					Bypass Valve	3µm	SF-090-H-03-B-T-G24-B-E	2578.00
						5µm	SF-090-H-05-B-T-G24-B-E	2550.15
						10µm	SF-090-H-10-B-T-G24-B-E	2536.15
						20µm	SF-090-H-20-B-T-G24-B-E	2536.15
					Reverse Flow Valve	3µm	SF-090-H-03-B-T-G24-R-E	2634.50
						5µm	SF-090-H-05-B-T-G24-R-E	2606.65
						10µm	SF-090-H-10-B-T-G24-R-E	2592.65
						20µm	SF-090-H-20-B-T-G24-R-E	2592.65
					Multi-function Valve	3µm	SF-090-H-03-B-T-G24-M-E	2718.20
						5µm	SF-090-H-05-B-T-G24-M-E	2690.35
						10µm	SF-090-H-10-B-T-G24-M-E	2676.35
						20µm	SF-090-H-20-B-T-G24-M-E	2676.35
	High Pressure Filter Assemblies Includes Electrical Clogging Indicator (supplied loose ie. not fitted)	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	130	Bypass Valve	3µm	SF-130-G-03-B-T-G24-B-E	2786.30
						5µm	SF-130-G-05-B-T-G24-B-E	2744.40
						10µm	SF-130-G-10-B-T-G24-B-E	2730.45
						20µm	SF-130-G-20-B-T-G24-B-E	2730.45
					Multi-function Valve	3µm	SF-130-G-03-B-T-G24-M-E	2926.50
						5µm	SF-130-G-05-B-T-G24-M-E	2884.60
						10µm	SF-130-G-10-B-T-G24-M-E	2870.65
						20µm	SF-130-G-20-B-T-G24-M-E	2870.65
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	130	Non-bypass without Valve	3µm	SF-130-H-03-B-T-G24-O-E	2954.85
						5µm	SF-130-H-05-B-T-G24-O-E	2832.00
						10µm	SF-130-H-10-B-T-G24-O-E	2884.40
						20µm	SF-130-H-20-B-T-G24-O-E	2884.40
					Bypass Valve	3µm	SF-130-H-03-B-T-G24-B-E	3150.85
						5µm	SF-130-H-05-B-T-G24-B-E	3028.00
						10µm	SF-130-H-10-B-T-G24-B-E	3080.40
						20µm	SF-130-H-20-B-T-G24-B-E	3080.40
					Reverse Flow Valve	3µm	SF-130-H-03-B-T-G24-R-E	3207.35
						5µm	SF-130-H-05-B-T-G24-R-E	3084.50
						10µm	SF-130-H-10-B-T-G24-R-E	3136.90
						20µm	SF-130-H-20-B-T-G24-R-E	3136.90
					Multi-function Valve	3µm	SF-130-H-03-B-T-G24-M-E	3291.05
						5µm	SF-130-H-05-B-T-G24-M-E	3168.20
						10µm	SF-130-H-10-B-T-G24-M-E	3220.60
						20µm	SF-130-H-20-B-T-G24-M-E	3220.60

For replacement filter elements refer to page N69

High Pressure Filter Assemblies ▪ Type SF
Includes Electrical Clogging Indicator

Filter Element	Description	Filter Material	Pressure Setting	Nominal Size	Valve	Micron	Designation	Price
	High Pressure Filter Assemblies Includes Electrical Clogging Indicator (supplied loose ie. not fitted)	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	160	Bypass Valve	3µm	SF-160-G-03-B-T-G24-B-E	2803.05
						5µm	SF-160-G-05-B-T-G24-B-E	2803.05
						10µm	SF-160-G-10-B-T-G24-B-E	2760.65
						20µm	SF-160-G-20-B-T-G24-B-E	2760.65
					Multi-function Valve	3µm	SF-160-G-03-B-T-G24-M-E	2943.25
						5µm	SF-160-G-05-B-T-G24-M-E	2943.25
						10µm	SF-160-G-10-B-T-G24-M-E	2900.85
						20µm	SF-160-G-20-B-T-G24-M-E	2900.85
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	160	Non-bypass without Valve	3µm	SF-160-H-03-B-T-G24-O-E	3209.45
						5µm	SF-160-H-05-B-T-G24-O-E	3195.45
						10µm	SF-160-H-10-B-T-G24-O-E	3097.15
						20µm	SF-160-H-20-B-T-G24-O-E	3097.15
					Bypass Valve	3µm	SF-160-H-03-B-T-G24-B-E	3405.45
						5µm	SF-160-H-05-B-T-G24-B-E	3391.45
						10µm	SF-160-H-10-B-T-G24-B-E	3293.15
						20µm	SF-160-H-20-B-T-G24-B-E	3293.15
					Reverse Flow Valve	3µm	SF-160-H-03-B-T-G24-R-E	3461.95
						5µm	SF-160-H-05-B-T-G24-R-E	3447.95
						10µm	SF-160-H-10-B-T-G24-R-E	3349.65
						20µm	SF-160-H-20-B-T-G24-R-E	3349.65
					Multi-function Valve	3µm	SF-160-H-03-B-T-G24-M-E	3545.65
						5µm	SF-160-H-05-B-T-G24-M-E	3531.65
						10µm	SF-160-H-10-B-T-G24-M-E	3433.35
						20µm	SF-160-H-20-B-T-G24-M-E	3433.35

For replacement filter elements refer to page N69

High Pressure Filter Assemblies ▪ Type SF
Without Clogging Indicator - SAE Flange 6000 PSI 3/4" / 1-1/4"

Filter Element	Description	Filter Material	Pressure Setting	Nominal Size	Valve	Micron	Designation	Price
	High Pressure Filter Assemblies Without Clogging Indicator (Fitted with plug) SAE Flange 6000 PSI 3/4"	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	014	Bypass Valve	3µm	SF-014-G-03-B-T-C612M-B-0	914.25
						5µm	SF-014-G-05-B-T-C612M-B-0	914.25
						10µm	SF-014-G-10-B-T-C612M-B-0	914.25
						20µm	SF-014-G-20-B-T-C612M-B-0	914.25
					Multi-function Valve	3µm	SF-014-G-03-B-T-C612M-M-0	1040.50
						5µm	SF-014-G-05-B-T-C612M-M-0	1040.50
						10µm	SF-014-G-10-B-T-C612M-M-0	1040.50
						20µm	SF-014-G-20-B-T-C612M-M-0	1040.50
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	014	Non-bypass without Valve	3µm	SF-014-H-03-B-T-C612M-O-0	912.55
						5µm	SF-014-H-05-B-T-C612M-O-0	898.60
						10µm	SF-014-H-10-B-T-C612M-O-0	884.65
						20µm	SF-014-H-20-B-T-C612M-O-0	884.65
					Bypass Valve	3µm	SF-014-H-03-B-T-C612M-B-0	998.00
						5µm	SF-014-H-05-B-T-C612M-B-0	984.05
						10µm	SF-014-H-10-B-T-C612M-B-0	970.10
						20µm	SF-014-H-20-B-T-C612M-B-0	970.10
					Multi-function Valve	3µm	SF-014-H-03-B-T-C612M-M-0	1124.25
						5µm	SF-014-H-05-B-T-C612M-M-0	1110.30
						10µm	SF-014-H-10-B-T-C612M-M-0	1096.35
						20µm	SF-014-H-20-B-T-C612M-M-0	1096.35
	High Pressure Filter Assemblies Without Clogging Indicator (Fitted with plug) SAE Flange 6000 PSI 3/4"	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	030	Bypass Valve	3µm	SF-030-G-03-B-T-C612M-B-0	984.05
						5µm	SF-030-G-05-B-T-C612M-B-0	970.15
						10µm	SF-030-G-10-B-T-C612M-B-0	956.15
						20µm	SF-030-G-20-B-T-C612M-B-0	956.15
					Multi-function Valve	3µm	SF-030-G-03-B-T-C612M-M-0	1110.30
						5µm	SF-030-G-05-B-T-C612M-M-0	1096.40
						10µm	SF-030-G-10-B-T-C612M-M-0	1082.40
						20µm	SF-030-G-20-B-T-C612M-M-0	1082.40
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	030	Non-bypass without Valve	3µm	SF-030-H-03-B-T-C612M-O-0	1010.90
						5µm	SF-030-H-05-B-T-C612M-O-0	996.95
						10µm	SF-030-H-10-B-T-C612M-O-0	983.00
						20µm	SF-030-H-20-B-T-C612M-O-0	983.00
					Bypass Valve	3µm	SF-030-H-03-B-T-C612M-B-0	1096.35
						5µm	SF-030-H-05-B-T-C612M-B-0	1082.40
						10µm	SF-030-H-10-B-T-C612M-B-0	1068.45
						20µm	SF-030-H-20-B-T-C612M-B-0	1068.45
					Multi-function Valve	3µm	SF-030-H-03-B-T-C612M-M-0	1222.60
						5µm	SF-030-H-05-B-T-C612M-M-0	1208.65
						10µm	SF-030-H-10-B-T-C612M-M-0	1194.70
						20µm	SF-030-H-20-B-T-C612M-M-0	1194.70
	High Pressure Filter Assemblies Without Clogging Indicator (Fitted with plug) SAE Flange 6000 PSI 1-1/4"	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	045	Bypass Valve	3µm	SF-045-G-03-B-T-C620M-B-0	1417.75
						5µm	SF-045-G-05-B-T-C620M-B-0	1403.80
						10µm	SF-045-G-10-B-T-C620M-B-0	1403.80
						20µm	SF-045-G-20-B-T-C620M-B-0	1403.80
					Multi-function Valve	3µm	SF-045-G-03-B-T-C620M-M-0	1600.40
						5µm	SF-045-G-05-B-T-C620M-M-0	1586.45
						10µm	SF-045-G-10-B-T-C620M-M-0	1586.45
						20µm	SF-045-G-20-B-T-C620M-M-0	1586.45
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	045	Non-bypass without Valve	3µm	SF-045-H-03-B-T-C620M-O-0	1425.00
						5µm	SF-045-H-05-B-T-C620M-O-0	1397.10
						10µm	SF-045-H-10-B-T-C620M-O-0	1383.15
						20µm	SF-045-H-20-B-T-C620M-O-0	1383.15
					Bypass Valve	3µm	SF-045-H-03-B-T-C620M-B-0	1571.85
						5µm	SF-045-H-05-B-T-C620M-B-0	1543.95
						10µm	SF-045-H-10-B-T-C620M-B-0	1530.00
						20µm	SF-045-H-20-B-T-C620M-B-0	1530.00
					Multi-function Valve	3µm	SF-045-H-03-B-T-C620M-M-0	1754.50
						5µm	SF-045-H-05-B-T-C620M-M-0	1726.60
						10µm	SF-045-H-10-B-T-C620M-M-0	1712.65
						20µm	SF-045-H-20-B-T-C620M-M-0	1712.65

For replacement filter elements refer to page N69

High Pressure Filter Assemblies ▪ Type SF
Without Clogging Indicator - SAE Flange 6000 PSI 1-1/4" / 1-1/2"

Filter Element	Description	Filter Material	Pressure Setting	Nominal Size	Valve	Micron	Designation	Price
	High Pressure Filter Assemblies Without Clogging Indicator (Fitted with plug) SAE Flange 6000 PSI 1-1/4"	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	070	Bypass Valve	3µm	SF-070-G-03-B-T-C620M-B-0	1530.70
						5µm	SF-070-G-05-B-T-C620M-B-0	1516.80
						10µm	SF-070-G-10-B-T-C620M-B-0	1502.15
						20µm	SF-070-G-20-B-T-C620M-B-0	1502.15
					Multi-function Valve	3µm	SF-070-G-03-B-T-C620M-M-0	1713.35
						5µm	SF-070-G-05-B-T-C620M-M-0	1699.45
						10µm	SF-070-G-10-B-T-C620M-M-0	1684.80
						20µm	SF-070-G-20-B-T-C620M-M-0	1684.80
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	070	Non-bypass without Valve	3µm	SF-070-H-03-B-T-C620M-O-0	1579.85
						5µm	SF-070-H-05-B-T-C620M-O-0	1565.85
						10µm	SF-070-H-10-B-T-C620M-O-0	1551.90
						20µm	SF-070-H-20-B-T-C620M-O-0	1551.90
					Bypass Valve	3µm	SF-070-H-03-B-T-C620M-B-0	1726.70
						5µm	SF-070-H-05-B-T-C620M-B-0	1712.70
						10µm	SF-070-H-10-B-T-C620M-B-0	1698.75
						20µm	SF-070-H-20-B-T-C620M-B-0	1698.75
					Multi-function Valve	3µm	SF-070-H-03-B-T-C620M-M-0	1909.35
						5µm	SF-070-H-05-B-T-C620M-M-0	1895.35
						10µm	SF-070-H-10-B-T-C620M-M-0	1881.40
						20µm	SF-070-H-20-B-T-C620M-M-0	1881.40
	High Pressure Filter Assemblies Without Clogging Indicator (Fitted with plug) SAE Flange 6000 PSI 1-1/2"	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	090	Bypass Valve	3µm	SF-090-G-03-B-T-C624M-B-0	2202.80
						5µm	SF-090-G-05-B-T-C624M-B-0	2188.85
						10µm	SF-090-G-10-B-T-C624M-B-0	2174.95
						20µm	SF-090-G-20-B-T-C624M-B-0	2174.95
					Multi-function Valve	3µm	SF-090-G-03-B-T-C624M-M-0	2343.00
						5µm	SF-090-G-05-B-T-C624M-M-0	2329.05
						10µm	SF-090-G-10-B-T-C624M-M-0	2315.15
						20µm	SF-090-G-20-B-T-C624M-M-0	2315.15
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	090	Non-bypass without Valve	3µm	SF-090-H-03-B-T-C624M-O-0	2315.00
						5µm	SF-090-H-05-B-T-C624M-O-0	2287.15
						10µm	SF-090-H-10-B-T-C624M-O-0	2273.15
						20µm	SF-090-H-20-B-T-C624M-O-0	2273.15
					Bypass Valve	3µm	SF-090-H-03-B-T-C624M-B-0	2511.00
						5µm	SF-090-H-05-B-T-C624M-B-0	2483.15
						10µm	SF-090-H-10-B-T-C624M-B-0	2469.15
						20µm	SF-090-H-20-B-T-C624M-B-0	2469.15
					Multi-function Valve	3µm	SF-090-H-03-B-T-C624M-M-0	2651.20
						5µm	SF-090-H-05-B-T-C624M-M-0	2623.35
						10µm	SF-090-H-10-B-T-C624M-M-0	2609.35
						20µm	SF-090-H-20-B-T-C624M-M-0	2609.35
	High Pressure Filter Assemblies Without Clogging Indicator (Fitted with plug) SAE Flange 6000 PSI 1-1/2"	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	130	Bypass Valve	3µm	SF-130-G-03-B-T-C624M-B-0	2719.30
						5µm	SF-130-G-05-B-T-C624M-B-0	2677.40
						10µm	SF-130-G-10-B-T-C624M-B-0	2663.45
						20µm	SF-130-G-20-B-T-C624M-B-0	2663.45
					Multi-function Valve	3µm	SF-130-G-03-B-T-C624M-M-0	2859.50
						5µm	SF-130-G-05-B-T-C624M-M-0	2817.60
						10µm	SF-130-G-10-B-T-C624M-M-0	2803.65
						20µm	SF-130-G-20-B-T-C624M-M-0	2803.65
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	130	Non-bypass without Valve	3µm	SF-130-H-03-B-T-C624M-O-0	2887.85
						5µm	SF-130-H-05-B-T-C624M-O-0	2765.00
						10µm	SF-130-H-10-B-T-C624M-O-0	2817.40
						20µm	SF-130-H-20-B-T-C624M-O-0	2817.40
					Bypass Valve	3µm	SF-130-H-03-B-T-C624M-B-0	3083.85
						5µm	SF-130-H-05-B-T-C624M-B-0	2961.00
						10µm	SF-130-H-10-B-T-C624M-B-0	3013.40
						20µm	SF-130-H-20-B-T-C624M-B-0	3013.40
					Multi-function Valve	3µm	SF-130-H-03-B-T-C624M-M-0	3224.05
						5µm	SF-130-H-05-B-T-C624M-M-0	3101.20
						10µm	SF-130-H-10-B-T-C624M-M-0	3153.60
						20µm	SF-130-H-20-B-T-C624M-M-0	3153.60

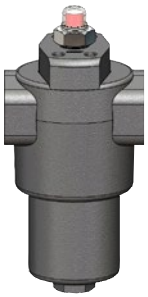
For replacement filter elements refer to page N69

High Pressure Filter Assemblies ▪ Type SF
Without Clogging Indicator - SAE Flange 6000 PSI 1-1/2"

Filter Element	Description	Filter Material	Pressure Setting	Nominal Size	Valve	Micron	Designation	Price
	High Pressure Filter Assemblies Without Clogging Indicator (Fitted with plug) SAE Flange 6000 PSI 1-1/2"	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	160	Bypass Valve	3µm	SF-160-G-03-B-T-C624M-B-0	2736.05
						5µm	SF-160-G-05-B-T-C624M-B-0	2736.05
						10µm	SF-160-G-10-B-T-C624M-B-0	2693.65
						20µm	SF-160-G-20-B-T-C624M-B-0	2693.65
					Multi-function Valve	3µm	SF-160-G-03-B-T-C624M-M-0	2876.25
						5µm	SF-160-G-05-B-T-C624M-M-0	2876.25
						10µm	SF-160-G-10-B-T-C624M-M-0	2833.85
						20µm	SF-160-G-20-B-T-C624M-M-0	2833.85
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	160	Non-bypass without Valve	3µm	SF-160-H-03-B-T-C624M-O-0	3142.45
						5µm	SF-160-H-05-B-T-C624M-O-0	3128.45
						10µm	SF-160-H-10-B-T-C624M-O-0	3030.15
						20µm	SF-160-H-20-B-T-C624M-O-0	3030.15
					Bypass Valve	3µm	SF-160-H-03-B-T-C624M-B-0	3338.45
						5µm	SF-160-H-05-B-T-C624M-B-0	3324.45
						10µm	SF-160-H-10-B-T-C624M-B-0	3226.15
						20µm	SF-160-H-20-B-T-C624M-B-0	3226.15
					Multi-function Valve	3µm	SF-160-H-03-B-T-C624M-M-0	3478.65
						5µm	SF-160-H-05-B-T-C624M-M-0	3464.65
						10µm	SF-160-H-10-B-T-C624M-M-0	3366.35
						20µm	SF-160-H-20-B-T-C624M-M-0	3366.35

For replacement filter elements refer to page N69

High Pressure Filter Assemblies ▪ Type SF
Includes Visual Clogging Indicator with Automatic Reset - SAE Flange 6000 PSI 3/4"

Filter Element	Description	Filter Material	Pressure Setting	Nominal Size	Valve	Micron	Designation	Price
	High Pressure Filter Assemblies Includes Visual Clogging Indicator with Automatic Reset SAE Flange 6000 PSI 3/4"	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	014	Bypass Valve	3µm	SF-014-G-03-B-T-C612M-B-A	1093.35
						5µm	SF-014-G-05-B-T-C612M-B-A	1093.35
						10µm	SF-014-G-10-B-T-C612M-B-A	1093.35
						20µm	SF-014-G-20-B-T-C612M-B-A	1093.35
					Multi-function Valve	3µm	SF-014-G-03-B-T-C612M-M-A	1219.60
						5µm	SF-014-G-05-B-T-C612M-M-A	1219.60
						10µm	SF-014-G-10-B-T-C612M-M-A	1219.60
						20µm	SF-014-G-20-B-T-C612M-M-A	1219.60
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	014	Non-bypass without Valve	3µm	SF-014-H-03-B-T-C612M-O-A	1091.65
						5µm	SF-014-H-05-B-T-C612M-O-A	1077.70
						10µm	SF-014-H-10-B-T-C612M-O-A	1063.75
						20µm	SF-014-H-20-B-T-C612M-O-A	1063.75
					Bypass Valve	3µm	SF-014-H-03-B-T-C612M-B-A	1177.10
						5µm	SF-014-H-05-B-T-C612M-B-A	1163.15
						10µm	SF-014-H-10-B-T-C612M-B-A	1149.20
						20µm	SF-014-H-20-B-T-C612M-B-A	1149.20
					Reverse Flow Valve	3µm	SF-014-H-03-B-T-C612M-R-A	1246.85
						5µm	SF-014-H-05-B-T-C612M-R-A	1232.90
						10µm	SF-014-H-10-B-T-C612M-R-A	1218.95
						20µm	SF-014-H-20-B-T-C612M-R-A	1218.95
					Multi-function Valve	3µm	SF-014-H-03-B-T-C612M-M-A	1303.35
						5µm	SF-014-H-05-B-T-C612M-M-A	1289.40
						10µm	SF-014-H-10-B-T-C612M-M-A	1275.45
						20µm	SF-014-H-20-B-T-C612M-M-A	1275.45
	High Pressure Filter Assemblies Includes Visual Clogging Indicator with Automatic Reset SAE Flange 6000 PSI 3/4"	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	030	Bypass Valve	3µm	SF-030-G-03-B-T-C612M-B-A	1163.15
						5µm	SF-030-G-05-B-T-C612M-B-A	1149.25
						10µm	SF-030-G-10-B-T-C612M-B-A	1135.25
						20µm	SF-030-G-20-B-T-C612M-B-A	1135.25
					Multi-function Valve	3µm	SF-030-G-03-B-T-C612M-M-A	1289.40
						5µm	SF-030-G-05-B-T-C612M-M-A	1275.50
						10µm	SF-030-G-10-B-T-C612M-M-A	1261.50
						20µm	SF-030-G-20-B-T-C612M-M-A	1261.50
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	030	Non-bypass without Valve	3µm	SF-030-H-03-B-T-C612M-O-A	1190.00
						5µm	SF-030-H-05-B-T-C612M-O-A	1176.05
						10µm	SF-030-H-10-B-T-C612M-O-A	1162.10
						20µm	SF-030-H-20-B-T-C612M-O-A	1162.10
					Bypass Valve	3µm	SF-030-H-03-B-T-C612M-B-A	1275.45
						5µm	SF-030-H-05-B-T-C612M-B-A	1261.50
						10µm	SF-030-H-10-B-T-C612M-B-A	1247.55
						20µm	SF-030-H-20-B-T-C612M-B-A	1247.55
					Reverse Flow Valve	3µm	SF-030-H-03-B-T-C612M-R-A	1345.20
						5µm	SF-030-H-05-B-T-C612M-R-A	1331.25
						10µm	SF-030-H-10-B-T-C612M-R-A	1317.30
						20µm	SF-030-H-20-B-T-C612M-R-A	1317.30
					Multi-function Valve	3µm	SF-030-H-03-B-T-C612M-M-A	1401.70
						5µm	SF-030-H-05-B-T-C612M-M-A	1387.75
						10µm	SF-030-H-10-B-T-C612M-M-A	1373.80
						20µm	SF-030-H-20-B-T-C612M-M-A	1373.80

For replacement filter elements refer to page N69

High Pressure Filter Assemblies ▪ Type SF
Includes Visual Clogging Indicator with Automatic Reset - SAE Flange 6000 PSI 1-1/4"

Filter Element	Description	Filter Material	Pressure Setting	Nominal Size	Valve	Micron	Designation	Price
	High Pressure Filter Assemblies Includes Visual Clogging Indicator with Automatic Reset SAE Flange 6000 PSI 1-1/4"	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	045	Bypass Valve	3µm	SF-045-G-03-B-T-C620M-B-A	1596.85
						5µm	SF-045-G-05-B-T-C620M-B-A	1582.90
						10µm	SF-045-G-10-B-T-C620M-B-A	1582.90
						20µm	SF-045-G-20-B-T-C620M-B-A	1582.90
					Multi-function Valve	3µm	SF-045-G-03-B-T-C620M-M-A	1779.50
						5µm	SF-045-G-05-B-T-C620M-M-A	1765.55
						10µm	SF-045-G-10-B-T-C620M-M-A	1765.55
						20µm	SF-045-G-20-B-T-C620M-M-A	1765.55
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	045	Non-bypass without Valve	3µm	SF-045-H-03-B-T-C620M-O-A	1604.10
						5µm	SF-045-H-05-B-T-C620M-O-A	1576.20
						10µm	SF-045-H-10-B-T-C620M-O-A	1562.25
						20µm	SF-045-H-20-B-T-C620M-O-A	1562.25
					Bypass Valve	3µm	SF-045-H-03-B-T-C620M-B-A	1750.95
						5µm	SF-045-H-05-B-T-C620M-B-A	1723.05
						10µm	SF-045-H-10-B-T-C620M-B-A	1709.10
						20µm	SF-045-H-20-B-T-C620M-B-A	1709.10
					Reverse Flow Valve	3µm	SF-045-H-03-B-T-C620M-R-A	1849.25
						5µm	SF-045-H-05-B-T-C620M-R-A	1821.35
						10µm	SF-045-H-10-B-T-C620M-R-A	1807.40
						20µm	SF-045-H-20-B-T-C620M-R-A	1807.40
					Multi-function Valve	3µm	SF-045-H-03-B-T-C620M-M-A	1933.60
						5µm	SF-045-H-05-B-T-C620M-M-A	1905.70
						10µm	SF-045-H-10-B-T-C620M-M-A	1891.75
						20µm	SF-045-H-20-B-T-C620M-M-A	1891.75
	High Pressure Filter Assemblies Includes Visual Clogging Indicator with Automatic Reset SAE Flange 6000 PSI 1-1/4"	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	070	Bypass Valve	3µm	SF-070-G-03-B-T-C620M-B-A	1709.80
						5µm	SF-070-G-05-B-T-C620M-B-A	1695.90
						10µm	SF-070-G-10-B-T-C620M-B-A	1681.25
						20µm	SF-070-G-20-B-T-C620M-B-A	1681.25
					Multi-function Valve	3µm	SF-070-G-03-B-T-C620M-M-A	1892.45
						5µm	SF-070-G-05-B-T-C620M-M-A	1878.55
						10µm	SF-070-G-10-B-T-C620M-M-A	1863.90
						20µm	SF-070-G-20-B-T-C620M-M-A	1863.90
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	070	Non-bypass without Valve	3µm	SF-070-H-03-B-T-C620M-O-A	1758.95
						5µm	SF-070-H-05-B-T-C620M-O-A	1744.95
						10µm	SF-070-H-10-B-T-C620M-O-A	1731.00
						20µm	SF-070-H-20-B-T-C620M-O-A	1731.00
					Bypass Valve	3µm	SF-070-H-03-B-T-C620M-B-A	1905.80
						5µm	SF-070-H-05-B-T-C620M-B-A	1891.80
						10µm	SF-070-H-10-B-T-C620M-B-A	1877.85
						20µm	SF-070-H-20-B-T-C620M-B-A	1877.85
					Reverse Flow Valve	3µm	SF-070-H-03-B-T-C620M-R-A	2004.10
						5µm	SF-070-H-05-B-T-C620M-R-A	1990.10
						10µm	SF-070-H-10-B-T-C620M-R-A	1976.15
						20µm	SF-070-H-20-B-T-C620M-R-A	1976.15
					Multi-function Valve	3µm	SF-070-H-03-B-T-C620M-M-A	2088.45
						5µm	SF-070-H-05-B-T-C620M-M-A	2074.45
						10µm	SF-070-H-10-B-T-C620M-M-A	2060.50
						20µm	SF-070-H-20-B-T-C620M-M-A	2060.50

For replacement filter elements refer to page N69

High Pressure Filter Assemblies ▪ Type SF
Includes Visual Clogging Indicator with Automatic Reset - SAE Flange 6000 PSI 1-1/2"

Filter Element	Description	Filter Material	Pressure Setting	Nominal Size	Valve	Micron	Designation	Price
	High Pressure Filter Assemblies Includes Visual Clogging Indicator with Automatic Reset SAE Flange 6000 PSI 1-1/2"	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	090	Bypass Valve	3µm	SF-090-G-03-B-T-C624M-B-A	2381.90
						5µm	SF-090-G-05-B-T-C624M-B-A	2367.95
						10µm	SF-090-G-10-B-T-C624M-B-A	2354.05
						20µm	SF-090-G-20-B-T-C624M-B-A	2354.05
					Multi-function Valve	3µm	SF-090-G-03-B-T-C624M-M-A	2522.10
						5µm	SF-090-G-05-B-T-C624M-M-A	2508.15
						10µm	SF-090-G-10-B-T-C624M-M-A	2494.25
						20µm	SF-090-G-20-B-T-C624M-M-A	2494.25
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	090	Non-bypass without Valve	3µm	SF-090-H-03-B-T-C624M-O-A	2494.10
						5µm	SF-090-H-05-B-T-C624M-O-A	2466.25
						10µm	SF-090-H-10-B-T-C624M-O-A	2452.25
						20µm	SF-090-H-20-B-T-C624M-O-A	2452.25
					Bypass Valve	3µm	SF-090-H-03-B-T-C624M-B-A	2690.10
						5µm	SF-090-H-05-B-T-C624M-B-A	2662.25
						10µm	SF-090-H-10-B-T-C624M-B-A	2648.25
						20µm	SF-090-H-20-B-T-C624M-B-A	2648.25
					Reverse Flow Valve	3µm	SF-090-H-03-B-T-C624M-R-A	2746.60
						5µm	SF-090-H-05-B-T-C624M-R-A	2718.75
						10µm	SF-090-H-10-B-T-C624M-R-A	2704.75
						20µm	SF-090-H-20-B-T-C624M-R-A	2704.75
					Multi-function Valve	3µm	SF-090-H-03-B-T-C624M-M-A	2830.30
						5µm	SF-090-H-05-B-T-C624M-M-A	2802.45
						10µm	SF-090-H-10-B-T-C624M-M-A	2788.45
						20µm	SF-090-H-20-B-T-C624M-M-A	2788.45
	High Pressure Filter Assemblies Includes Visual Clogging Indicator with Automatic Reset SAE Flange 6000 PSI 1-1/2"	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	130	Bypass Valve	3µm	SF-130-G-03-B-T-C624M-B-A	2898.40
						5µm	SF-130-G-05-B-T-C624M-B-A	2856.50
						10µm	SF-130-G-10-B-T-C624M-B-A	2842.55
						20µm	SF-130-G-20-B-T-C624M-B-A	2842.55
					Multi-function Valve	3µm	SF-130-G-03-B-T-C624M-M-A	3038.60
						5µm	SF-130-G-05-B-T-C624M-M-A	2996.70
						10µm	SF-130-G-10-B-T-C624M-M-A	2982.75
						20µm	SF-130-G-20-B-T-C624M-M-A	2982.75
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	130	Non-bypass without Valve	3µm	SF-130-H-03-B-T-C624M-O-A	3066.95
						5µm	SF-130-H-05-B-T-C624M-O-A	2944.10
						10µm	SF-130-H-10-B-T-C624M-O-A	2996.50
						20µm	SF-130-H-20-B-T-C624M-O-A	2996.50
					Bypass Valve	3µm	SF-130-H-03-B-T-C624M-B-A	3262.95
						5µm	SF-130-H-05-B-T-C624M-B-A	3140.10
						10µm	SF-130-H-10-B-T-C624M-B-A	3192.50
						20µm	SF-130-H-20-B-T-C624M-B-A	3192.50
					Reverse Flow Valve	3µm	SF-130-H-03-B-T-C624M-R-A	3319.45
						5µm	SF-130-H-05-B-T-C624M-R-A	3196.60
						10µm	SF-130-H-10-B-T-C624M-R-A	3249.00
						20µm	SF-130-H-20-B-T-C624M-R-A	3249.00
					Multi-function Valve	3µm	SF-130-H-03-B-T-C624M-M-A	3403.15
						5µm	SF-130-H-05-B-T-C624M-M-A	3280.30
						10µm	SF-130-H-10-B-T-C624M-M-A	3332.70
						20µm	SF-130-H-20-B-T-C624M-M-A	3332.70

For replacement filter elements refer to page N69

High Pressure Filter Assemblies ▪ Type SF
Includes Visual Clogging Indicator with Automatic Reset - SAE Flange 6000 PSI 1-1/2"

Filter Element	Description	Filter Material	Pressure Setting	Nominal Size	Valve	Micron	Designation	Price
	High Pressure Filter Assemblies Includes Visual Clogging Indicator with Automatic Reset SAE Flange 6000 PSI 1-1/2"	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	160	Bypass Valve	3µm	SF-160-G-03-B-T-C624M-B-A	2915.15
						5µm	SF-160-G-05-B-T-C624M-B-A	2915.15
						10µm	SF-160-G-10-B-T-C624M-B-A	2872.75
						20µm	SF-160-G-20-B-T-C624M-B-A	2872.75
					Multi-function Valve	3µm	SF-160-G-03-B-T-C624M-M-A	3055.35
						5µm	SF-160-G-05-B-T-C624M-M-A	3055.35
						10µm	SF-160-G-10-B-T-C624M-M-A	3012.95
						20µm	SF-160-G-20-B-T-C624M-M-A	3012.95
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	160	Non-bypass without Valve	3µm	SF-160-H-03-B-T-C624M-O-A	3321.55
						5µm	SF-160-H-05-B-T-C624M-O-A	3307.55
						10µm	SF-160-H-10-B-T-C624M-O-A	3209.25
						20µm	SF-160-H-20-B-T-C624M-O-A	3209.25
					Bypass Valve	3µm	SF-160-H-03-B-T-C624M-B-A	3517.55
						5µm	SF-160-H-05-B-T-C624M-B-A	3503.55
						10µm	SF-160-H-10-B-T-C624M-B-A	3405.25
						20µm	SF-160-H-20-B-T-C624M-B-A	3405.25
					Reverse Flow Valve	3µm	SF-160-H-03-B-T-C624M-R-A	3574.05
						5µm	SF-160-H-05-B-T-C624M-R-A	3560.05
						10µm	SF-160-H-10-B-T-C624M-R-A	3461.75
						20µm	SF-160-H-20-B-T-C624M-R-A	3461.75
					Multi-function Valve	3µm	SF-160-H-03-B-T-C624M-M-A	3657.75
						5µm	SF-160-H-05-B-T-C624M-M-A	3643.75
						10µm	SF-160-H-10-B-T-C624M-M-A	3545.45
						20µm	SF-160-H-20-B-T-C624M-M-A	3545.45

For replacement filter elements refer to page N69

High Pressure Filter Assemblies ▪ Type SF
Includes Visual Clogging Indicator with Manual Reset - SAE Flange 6000 PSI 3/4"

Filter Element	Description	Filter Material	Pressure Setting	Nominal Size	Valve	Micron	Designation	Price
	High Pressure Filter Assemblies Includes Visual Clogging Indicator with Manual Reset SAE Flange 6000 PSI 3/4"	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	014	Bypass Valve	3µm	SF-014-G-03-B-T-C612M-B-V	1079.40
						5µm	SF-014-G-05-B-T-C612M-B-V	1079.40
						10µm	SF-014-G-10-B-T-C612M-B-V	1079.40
						20µm	SF-014-G-20-B-T-C612M-B-V	1079.40
					Multi-function Valve	3µm	SF-014-G-03-B-T-C612M-M-V	1205.65
						5µm	SF-014-G-05-B-T-C612M-M-V	1205.65
						10µm	SF-014-G-10-B-T-C612M-M-V	1205.65
						20µm	SF-014-G-20-B-T-C612M-M-V	1205.65
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	014	Non-bypass without Valve	3µm	SF-014-H-03-B-T-C612M-O-V	1077.70
						5µm	SF-014-H-05-B-T-C612M-O-V	1063.75
						10µm	SF-014-H-10-B-T-C612M-O-V	1049.80
						20µm	SF-014-H-20-B-T-C612M-O-V	1049.80
					Bypass Valve	3µm	SF-014-H-03-B-T-C612M-B-V	1163.15
						5µm	SF-014-H-05-B-T-C612M-B-V	1149.20
						10µm	SF-014-H-10-B-T-C612M-B-V	1135.25
						20µm	SF-014-H-20-B-T-C612M-B-V	1135.25
					Reverse Flow Valve	3µm	SF-014-H-03-B-T-C612M-R-V	1232.90
						5µm	SF-014-H-05-B-T-C612M-R-V	1218.95
						10µm	SF-014-H-10-B-T-C612M-R-V	1205.00
						20µm	SF-014-H-20-B-T-C612M-R-V	1205.00
					Multi-function Valve	3µm	SF-014-H-03-B-T-C612M-M-V	1289.40
						5µm	SF-014-H-05-B-T-C612M-M-V	1275.45
						10µm	SF-014-H-10-B-T-C612M-M-V	1261.50
						20µm	SF-014-H-20-B-T-C612M-M-V	1261.50
	High Pressure Filter Assemblies Includes Visual Clogging Indicator with Manual Reset SAE Flange 6000 PSI 3/4"	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	030	Bypass Valve	3µm	SF-030-G-03-B-T-C612M-B-V	1149.20
						5µm	SF-030-G-05-B-T-C612M-B-V	1135.30
						10µm	SF-030-G-10-B-T-C612M-B-V	1121.30
						20µm	SF-030-G-20-B-T-C612M-B-V	1121.30
					Multi-function Valve	3µm	SF-030-G-03-B-T-C612M-M-V	1275.45
						5µm	SF-030-G-05-B-T-C612M-M-V	1261.55
						10µm	SF-030-G-10-B-T-C612M-M-V	1247.55
						20µm	SF-030-G-20-B-T-C612M-M-V	1247.55
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	030	Non-bypass without Valve	3µm	SF-030-H-03-B-T-C612M-O-V	1176.05
						5µm	SF-030-H-05-B-T-C612M-O-V	1162.10
						10µm	SF-030-H-10-B-T-C612M-O-V	1148.15
						20µm	SF-030-H-20-B-T-C612M-O-V	1148.15
					Bypass Valve	3µm	SF-030-H-03-B-T-C612M-B-V	1261.50
						5µm	SF-030-H-05-B-T-C612M-B-V	1247.55
						10µm	SF-030-H-10-B-T-C612M-B-V	1233.60
						20µm	SF-030-H-20-B-T-C612M-B-V	1233.60
					Reverse Flow Valve	3µm	SF-030-H-03-B-T-C612M-R-V	1331.25
						5µm	SF-030-H-05-B-T-C612M-R-V	1317.30
						10µm	SF-030-H-10-B-T-C612M-R-V	1303.35
						20µm	SF-030-H-20-B-T-C612M-R-V	1303.35
					Multi-function Valve	3µm	SF-030-H-03-B-T-C612M-M-V	1387.75
						5µm	SF-030-H-05-B-T-C612M-M-V	1373.80
						10µm	SF-030-H-10-B-T-C612M-M-V	1359.85
						20µm	SF-030-H-20-B-T-C612M-M-V	1359.85

For replacement filter elements refer to page N69

High Pressure Filter Assemblies ▪ Type SF
Includes Visual Clogging Indicator with Manual Reset - SAE Flange 6000 PSI 1-1/4"

Filter Element	Description	Filter Material	Pressure Setting	Nominal Size	Valve	Micron	Designation	Price
	High Pressure Filter Assemblies Includes Visual Clogging Indicator with Manual Reset SAE Flange 6000 PSI 1-1/4"	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	045	Bypass Valve	3µm	SF-045-G-03-B-T-C620M-B-V	1582.90
						5µm	SF-045-G-05-B-T-C620M-B-V	1568.95
						10µm	SF-045-G-10-B-T-C620M-B-V	1568.95
						20µm	SF-045-G-20-B-T-C620M-B-V	1568.95
					Multi-function Valve	3µm	SF-045-G-03-B-T-C620M-M-V	1765.55
						5µm	SF-045-G-05-B-T-C620M-M-V	1751.60
						10µm	SF-045-G-10-B-T-C620M-M-V	1751.60
						20µm	SF-045-G-20-B-T-C620M-M-V	1751.60
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	045	Non-bypass without Valve	3µm	SF-045-H-03-B-T-C620M-O-V	1590.15
						5µm	SF-045-H-05-B-T-C620M-O-V	1562.25
						10µm	SF-045-H-10-B-T-C620M-O-V	1548.30
						20µm	SF-045-H-20-B-T-C620M-O-V	1548.30
					Bypass Valve	3µm	SF-045-H-03-B-T-C620M-B-V	1737.00
						5µm	SF-045-H-05-B-T-C620M-B-V	1709.10
						10µm	SF-045-H-10-B-T-C620M-B-V	1695.15
						20µm	SF-045-H-20-B-T-C620M-B-V	1695.15
					Reverse Flow Valve	3µm	SF-045-H-03-B-T-C620M-R-V	1835.30
						5µm	SF-045-H-05-B-T-C620M-R-V	1807.40
						10µm	SF-045-H-10-B-T-C620M-R-V	1793.45
						20µm	SF-045-H-20-B-T-C620M-R-V	1793.45
					Multi-function Valve	3µm	SF-045-H-03-B-T-C620M-M-V	1919.65
						5µm	SF-045-H-05-B-T-C620M-M-V	1891.75
						10µm	SF-045-H-10-B-T-C620M-M-V	1877.80
						20µm	SF-045-H-20-B-T-C620M-M-V	1877.80
	High Pressure Filter Assemblies Includes Visual Clogging Indicator with Manual Reset SAE Flange 6000 PSI 1-1/4"	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	070	Bypass Valve	3µm	SF-070-G-03-B-T-C620M-B-V	1695.85
						5µm	SF-070-G-05-B-T-C620M-B-V	1681.95
						10µm	SF-070-G-10-B-T-C620M-B-V	1667.30
						20µm	SF-070-G-20-B-T-C620M-B-V	1667.30
					Multi-function Valve	3µm	SF-070-G-03-B-T-C620M-M-V	1878.50
						5µm	SF-070-G-05-B-T-C620M-M-V	1864.60
						10µm	SF-070-G-10-B-T-C620M-M-V	1849.95
						20µm	SF-070-G-20-B-T-C620M-M-V	1849.95
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	070	Non-bypass without Valve	3µm	SF-070-H-03-B-T-C620M-O-V	1745.00
						5µm	SF-070-H-05-B-T-C620M-O-V	1731.00
						10µm	SF-070-H-10-B-T-C620M-O-V	1717.05
						20µm	SF-070-H-20-B-T-C620M-O-V	1717.05
					Bypass Valve	3µm	SF-070-H-03-B-T-C620M-B-V	1891.85
						5µm	SF-070-H-05-B-T-C620M-B-V	1877.85
						10µm	SF-070-H-10-B-T-C620M-B-V	1863.90
						20µm	SF-070-H-20-B-T-C620M-B-V	1863.90
					Reverse Flow Valve	3µm	SF-070-H-03-B-T-C620M-R-V	1990.15
						5µm	SF-070-H-05-B-T-C620M-R-V	1976.15
						10µm	SF-070-H-10-B-T-C620M-R-V	1962.20
						20µm	SF-070-H-20-B-T-C620M-R-V	1962.20
					Multi-function Valve	3µm	SF-070-H-03-B-T-C620M-M-V	2074.50
						5µm	SF-070-H-05-B-T-C620M-M-V	2060.50
						10µm	SF-070-H-10-B-T-C620M-M-V	2046.55
						20µm	SF-070-H-20-B-T-C620M-M-V	2046.55

For replacement filter elements refer to page N69

High Pressure Filter Assemblies ▪ Type SF
Includes Visual Clogging Indicator with Manual Reset - SAE Flange 6000 PSI 1-1/2"

Filter Element	Description	Filter Material	Pressure Setting	Nominal Size	Valve	Micron	Designation	Price
	High Pressure Filter Assemblies Includes Visual Clogging Indicator with Manual Reset SAE Flange 6000 PSI 1-1/2"	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	090	Bypass Valve	3µm	SF-090-G-03-B-T-C624M-B-V	2367.95
						5µm	SF-090-G-05-B-T-C624M-B-V	2354.00
						10µm	SF-090-G-10-B-T-C624M-B-V	2340.10
						20µm	SF-090-G-20-B-T-C624M-B-V	2340.10
					Multi-function Valve	3µm	SF-090-G-03-B-T-C624M-M-V	2508.15
						5µm	SF-090-G-05-B-T-C624M-M-V	2494.20
						10µm	SF-090-G-10-B-T-C624M-M-V	2480.30
						20µm	SF-090-G-20-B-T-C624M-M-V	2480.30
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	090	Non-bypass without Valve	3µm	SF-090-H-03-B-T-C624M-O-V	2480.15
						5µm	SF-090-H-05-B-T-C624M-O-V	2452.30
						10µm	SF-090-H-10-B-T-C624M-O-V	2438.30
						20µm	SF-090-H-20-B-T-C624M-O-V	2438.30
					Bypass Valve	3µm	SF-090-H-03-B-T-C624M-B-V	2676.15
						5µm	SF-090-H-05-B-T-C624M-B-V	2648.30
						10µm	SF-090-H-10-B-T-C624M-B-V	2634.30
						20µm	SF-090-H-20-B-T-C624M-B-V	2634.30
					Reverse Flow Valve	3µm	SF-090-H-03-B-T-C624M-R-V	2732.65
						5µm	SF-090-H-05-B-T-C624M-R-V	2704.80
						10µm	SF-090-H-10-B-T-C624M-R-V	2690.80
						20µm	SF-090-H-20-B-T-C624M-R-V	2690.80
					Multi-function Valve	3µm	SF-090-H-03-B-T-C624M-M-V	2816.35
						5µm	SF-090-H-05-B-T-C624M-M-V	2788.50
						10µm	SF-090-H-10-B-T-C624M-M-V	2774.50
						20µm	SF-090-H-20-B-T-C624M-M-V	2774.50
	High Pressure Filter Assemblies Includes Visual Clogging Indicator with Manual Reset SAE Flange 6000 PSI 1-1/2"	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	130	Bypass Valve	3µm	SF-130-G-03-B-T-C624M-B-V	2884.45
						5µm	SF-130-G-05-B-T-C624M-B-V	2842.55
						10µm	SF-130-G-10-B-T-C624M-B-V	2828.60
						20µm	SF-130-G-20-B-T-C624M-B-V	2828.60
					Multi-function Valve	3µm	SF-130-G-03-B-T-C624M-M-V	3024.65
						5µm	SF-130-G-05-B-T-C624M-M-V	2982.75
						10µm	SF-130-G-10-B-T-C624M-M-V	2968.80
						20µm	SF-130-G-20-B-T-C624M-M-V	2968.80
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	130	Non-bypass without Valve	3µm	SF-130-H-03-B-T-C624M-O-V	3053.00
						5µm	SF-130-H-05-B-T-C624M-O-V	2930.15
						10µm	SF-130-H-10-B-T-C624M-O-V	2982.55
						20µm	SF-130-H-20-B-T-C624M-O-V	2982.55
					Bypass Valve	3µm	SF-130-H-03-B-T-C624M-B-V	3249.00
						5µm	SF-130-H-05-B-T-C624M-B-V	3126.15
						10µm	SF-130-H-10-B-T-C624M-B-V	3178.55
						20µm	SF-130-H-20-B-T-C624M-B-V	3178.55
					Reverse Flow Valve	3µm	SF-130-H-03-B-T-C624M-R-V	3305.50
						5µm	SF-130-H-05-B-T-C624M-R-V	3182.65
						10µm	SF-130-H-10-B-T-C624M-R-V	3235.05
						20µm	SF-130-H-20-B-T-C624M-R-V	3235.05
					Multi-function Valve	3µm	SF-130-H-03-B-T-C624M-M-V	3389.20
						5µm	SF-130-H-05-B-T-C624M-M-V	3266.35
						10µm	SF-130-H-10-B-T-C624M-M-V	3318.75
						20µm	SF-130-H-20-B-T-C624M-M-V	3318.75

For replacement filter elements refer to page N69

High Pressure Filter Assemblies ▪ Type SF
Includes Visual Clogging Indicator with Manual Reset - SAE Flange 6000 PSI 1-1/2"

Filter Element	Description	Filter Material	Pressure Setting	Nominal Size	Valve	Micron	Designation	Price
	High Pressure Filter Assemblies Includes Visual Clogging Indicator with Manual Reset SAE Flange 6000 PSI 1-1/2"	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	160	Bypass Valve	3µm	SF-160-G-03-B-T-C624M-B-V	2901.20
						5µm	SF-160-G-05-B-T-C624M-B-V	2901.20
						10µm	SF-160-G-10-B-T-C624M-B-V	2858.80
						20µm	SF-160-G-20-B-T-C624M-B-V	2858.80
					Multi-function Valve	3µm	SF-160-G-03-B-T-C624M-M-V	3041.40
						5µm	SF-160-G-05-B-T-C624M-M-V	3041.40
						10µm	SF-160-G-10-B-T-C624M-M-V	2999.00
						20µm	SF-160-G-20-B-T-C624M-M-V	2999.00
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	160	Non-bypass without Valve	3µm	SF-160-H-03-B-T-C624M-O-V	3307.60
						5µm	SF-160-H-05-B-T-C624M-O-V	3293.60
						10µm	SF-160-H-10-B-T-C624M-O-V	3195.30
						20µm	SF-160-H-20-B-T-C624M-O-V	3195.30
					Bypass Valve	3µm	SF-160-H-03-B-T-C624M-B-V	3503.60
						5µm	SF-160-H-05-B-T-C624M-B-V	3489.60
						10µm	SF-160-H-10-B-T-C624M-B-V	3391.30
						20µm	SF-160-H-20-B-T-C624M-B-V	3391.30
					Reverse Flow Valve	3µm	SF-160-H-03-B-T-C624M-R-V	3560.10
						5µm	SF-160-H-05-B-T-C624M-R-V	3546.10
						10µm	SF-160-H-10-B-T-C624M-R-V	3447.80
						20µm	SF-160-H-20-B-T-C624M-R-V	3447.80
					Multi-function Valve	3µm	SF-160-H-03-B-T-C624M-M-V	3643.80
						5µm	SF-160-H-05-B-T-C624M-M-V	3629.80
						10µm	SF-160-H-10-B-T-C624M-M-V	3531.50
						20µm	SF-160-H-20-B-T-C624M-M-V	3531.50

For replacement filter elements refer to page N69

High Pressure Filter Assemblies ▪ Type SF
Includes Electrical Clogging Indicator - SAE Flange 6000 PSI 3/4"

Filter Element	Description	Filter Material	Pressure Setting	Nominal Size	Valve	Micron	Designation	Price
	High Pressure Filter Assemblies Includes Electrical Clogging Indicator (supplied loose ie. not fitted) SAE Flange 6000 PSI 3/4"	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	014	Bypass Valve	3µm	SF-014-G-03-B-T-C612M-B-E	1233.50
						5µm	SF-014-G-05-B-T-C612M-B-E	1233.50
						10µm	SF-014-G-10-B-T-C612M-B-E	1233.50
						20µm	SF-014-G-20-B-T-C612M-B-E	1233.50
					Multi-function Valve	3µm	SF-014-G-03-B-T-C612M-M-E	1359.75
						5µm	SF-014-G-05-B-T-C612M-M-E	1359.75
						10µm	SF-014-G-10-B-T-C612M-M-E	1359.75
						20µm	SF-014-G-20-B-T-C612M-M-E	1359.75
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	014	Non-bypass without Valve	3µm	SF-014-H-03-B-T-C612M-O-E	1231.80
						5µm	SF-014-H-05-B-T-C612M-O-E	1217.85
						10µm	SF-014-H-10-B-T-C612M-O-E	1203.90
						20µm	SF-014-H-20-B-T-C612M-O-E	1203.90
					Bypass Valve	3µm	SF-014-H-03-B-T-C612M-B-E	1317.25
						5µm	SF-014-H-05-B-T-C612M-B-E	1303.30
						10µm	SF-014-H-10-B-T-C612M-B-E	1289.35
						20µm	SF-014-H-20-B-T-C612M-B-E	1289.35
					Reverse Flow Valve	3µm	SF-014-H-03-B-T-C612M-R-E	1387.00
						5µm	SF-014-H-05-B-T-C612M-R-E	1373.05
						10µm	SF-014-H-10-B-T-C612M-R-E	1359.10
						20µm	SF-014-H-20-B-T-C612M-R-E	1359.10
					Multi-function Valve	3µm	SF-014-H-03-B-T-C612M-M-E	1443.50
						5µm	SF-014-H-05-B-T-C612M-M-E	1429.55
						10µm	SF-014-H-10-B-T-C612M-M-E	1415.60
						20µm	SF-014-H-20-B-T-C612M-M-E	1415.60
	High Pressure Filter Assemblies Includes Electrical Clogging Indicator (supplied loose ie. not fitted) SAE Flange 6000 PSI 3/4"	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	030	Bypass Valve	3µm	SF-030-G-03-B-T-C612M-B-E	1303.30
						5µm	SF-030-G-05-B-T-C612M-B-E	1289.40
						10µm	SF-030-G-10-B-T-C612M-B-E	1275.40
						20µm	SF-030-G-20-B-T-C612M-B-E	1275.40
					Multi-function Valve	3µm	SF-030-G-03-B-T-C612M-M-E	1429.55
						5µm	SF-030-G-05-B-T-C612M-M-E	1415.65
						10µm	SF-030-G-10-B-T-C612M-M-E	1401.65
						20µm	SF-030-G-20-B-T-C612M-M-E	1401.65
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	030	Non-bypass without Valve	3µm	SF-030-H-03-B-T-C612M-O-E	1330.15
						5µm	SF-030-H-05-B-T-C612M-O-E	1316.20
						10µm	SF-030-H-10-B-T-C612M-O-E	1302.25
						20µm	SF-030-H-20-B-T-C612M-O-E	1302.25
					Bypass Valve	3µm	SF-030-H-03-B-T-C612M-B-E	1415.60
						5µm	SF-030-H-05-B-T-C612M-B-E	1401.65
						10µm	SF-030-H-10-B-T-C612M-B-E	1387.70
						20µm	SF-030-H-20-B-T-C612M-B-E	1387.70
					Reverse Flow Valve	3µm	SF-030-H-03-B-T-C612M-R-E	1485.35
						5µm	SF-030-H-05-B-T-C612M-R-E	1471.40
						10µm	SF-030-H-10-B-T-C612M-R-E	1457.45
						20µm	SF-030-H-20-B-T-C612M-R-E	1457.45
					Multi-function Valve	3µm	SF-030-H-03-B-T-C612M-M-E	1541.85
						5µm	SF-030-H-05-B-T-C612M-M-E	1527.90
						10µm	SF-030-H-10-B-T-C612M-M-E	1513.95
						20µm	SF-030-H-20-B-T-C612M-M-E	1513.95

For replacement filter elements refer to page N69

High Pressure Filter Assemblies ▪ Type SF
Includes Electrical Clogging Indicator - SAE Flange 6000 PSI 1-1/4"

Filter Element	Description	Filter Material	Pressure Setting	Nominal Size	Valve	Micron	Designation	Price
	High Pressure Filter Assemblies Includes Electrical Clogging Indicator (supplied loose ie. not fitted) SAE Flange 6000 PSI 1-1/4"	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	045	Bypass Valve	3µm	SF-045-G-03-B-T-C620M-B-E	1737.00
						5µm	SF-045-G-05-B-T-C620M-B-E	1723.05
						10µm	SF-045-G-10-B-T-C620M-B-E	1723.05
						20µm	SF-045-G-20-B-T-C620M-B-E	1723.05
					Multi-function Valve	3µm	SF-045-G-03-B-T-C620M-M-E	1919.65
						5µm	SF-045-G-05-B-T-C620M-M-E	1905.70
						10µm	SF-045-G-10-B-T-C620M-M-E	1905.70
						20µm	SF-045-G-20-B-T-C620M-M-E	1905.70
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	045	Non-bypass without Valve	3µm	SF-045-H-03-B-T-C620M-O-E	1744.25
						5µm	SF-045-H-05-B-T-C620M-O-E	1716.35
						10µm	SF-045-H-10-B-T-C620M-O-E	1702.40
						20µm	SF-045-H-20-B-T-C620M-O-E	1702.40
					Bypass Valve	3µm	SF-045-H-03-B-T-C620M-B-E	1891.10
						5µm	SF-045-H-05-B-T-C620M-B-E	1863.20
						10µm	SF-045-H-10-B-T-C620M-B-E	1849.25
						20µm	SF-045-H-20-B-T-C620M-B-E	1849.25
					Reverse Flow Valve	3µm	SF-045-H-03-B-T-C620M-R-E	1989.40
						5µm	SF-045-H-05-B-T-C620M-R-E	1961.50
						10µm	SF-045-H-10-B-T-C620M-R-E	1947.55
						20µm	SF-045-H-20-B-T-C620M-R-E	1947.55
					Multi-function Valve	3µm	SF-045-H-03-B-T-C620M-M-E	2073.75
						5µm	SF-045-H-05-B-T-C620M-M-E	2045.85
						10µm	SF-045-H-10-B-T-C620M-M-E	2031.90
						20µm	SF-045-H-20-B-T-C620M-M-E	2031.90
	High Pressure Filter Assemblies Includes Electrical Clogging Indicator (supplied loose ie. not fitted) SAE Flange 6000 PSI 1-1/4"	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	070	Bypass Valve	3µm	SF-070-G-03-B-T-C620M-B-E	1849.95
						5µm	SF-070-G-05-B-T-C620M-B-E	1836.05
						10µm	SF-070-G-10-B-T-C620M-B-E	1821.40
						20µm	SF-070-G-20-B-T-C620M-B-E	1821.40
					Multi-function Valve	3µm	SF-070-G-03-B-T-C620M-M-E	2032.60
						5µm	SF-070-G-05-B-T-C620M-M-E	2018.70
						10µm	SF-070-G-10-B-T-C620M-M-E	2004.05
						20µm	SF-070-G-20-B-T-C620M-M-E	2004.05
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	070	Non-bypass without Valve	3µm	SF-070-H-03-B-T-C620M-O-E	1899.10
						5µm	SF-070-H-05-B-T-C620M-O-E	1885.10
						10µm	SF-070-H-10-B-T-C620M-O-E	1871.15
						20µm	SF-070-H-20-B-T-C620M-O-E	1871.15
					Bypass Valve	3µm	SF-070-H-03-B-T-C620M-B-E	2045.95
						5µm	SF-070-H-05-B-T-C620M-B-E	2031.95
						10µm	SF-070-H-10-B-T-C620M-B-E	2018.00
						20µm	SF-070-H-20-B-T-C620M-B-E	2018.00
					Reverse Flow Valve	3µm	SF-070-H-03-B-T-C620M-R-E	2144.25
						5µm	SF-070-H-05-B-T-C620M-R-E	2130.25
						10µm	SF-070-H-10-B-T-C620M-R-E	2116.30
						20µm	SF-070-H-20-B-T-C620M-R-E	2116.30
					Multi-function Valve	3µm	SF-070-H-03-B-T-C620M-M-E	2228.60
						5µm	SF-070-H-05-B-T-C620M-M-E	2214.60
						10µm	SF-070-H-10-B-T-C620M-M-E	2200.65
						20µm	SF-070-H-20-B-T-C620M-M-E	2200.65

For replacement filter elements refer to page N69

High Pressure Filter Assemblies ▪ Type SF
Includes Electrical Clogging Indicator - SAE Flange 6000 PSI 1-1/2"

Filter Element	Description	Filter Material	Pressure Setting	Nominal Size	Valve	Micron	Designation	Price
	High Pressure Filter Assemblies Includes Electrical Clogging Indicator (supplied loose ie. not fitted) SAE Flange 6000 PSI 1-1/2"	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	090	Bypass Valve	3µm	SF-090-G-03-B-T-C624M-B-E	2522.05
						5µm	SF-090-G-05-B-T-C624M-B-E	2508.10
						10µm	SF-090-G-10-B-T-C624M-B-E	2494.20
						20µm	SF-090-G-20-B-T-C624M-B-E	2494.20
					Multi-function Valve	3µm	SF-090-G-03-B-T-C624M-M-E	2662.25
						5µm	SF-090-G-05-B-T-C624M-M-E	2648.30
						10µm	SF-090-G-10-B-T-C624M-M-E	2634.40
						20µm	SF-090-G-20-B-T-C624M-M-E	2634.40
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	090	Non-bypass without Valve	3µm	SF-090-H-03-B-T-C624M-O-E	2634.25
						5µm	SF-090-H-05-B-T-C624M-O-E	2606.40
						10µm	SF-090-H-10-B-T-C624M-O-E	2592.40
						20µm	SF-090-H-20-B-T-C624M-O-E	2592.40
					Bypass Valve	3µm	SF-090-H-03-B-T-C624M-B-E	2830.25
						5µm	SF-090-H-05-B-T-C624M-B-E	2802.40
						10µm	SF-090-H-10-B-T-C624M-B-E	2788.40
						20µm	SF-090-H-20-B-T-C624M-B-E	2788.40
					Reverse Flow Valve	3µm	SF-090-H-03-B-T-C624M-R-E	2886.75
						5µm	SF-090-H-05-B-T-C624M-R-E	2858.90
						10µm	SF-090-H-10-B-T-C624M-R-E	2844.90
						20µm	SF-090-H-20-B-T-C624M-R-E	2844.90
					Multi-function Valve	3µm	SF-090-H-03-B-T-C624M-M-E	2970.45
						5µm	SF-090-H-05-B-T-C624M-M-E	2942.60
						10µm	SF-090-H-10-B-T-C624M-M-E	2928.60
						20µm	SF-090-H-20-B-T-C624M-M-E	2928.60
	High Pressure Filter Assemblies Includes Electrical Clogging Indicator (supplied loose ie. not fitted) SAE Flange 6000 PSI 1-1/2"	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	130	Bypass Valve	3µm	SF-130-G-03-B-T-C624M-B-E	3038.55
						5µm	SF-130-G-05-B-T-C624M-B-E	2996.65
						10µm	SF-130-G-10-B-T-C624M-B-E	2982.70
						20µm	SF-130-G-20-B-T-C624M-B-E	2982.70
					Multi-function Valve	3µm	SF-130-G-03-B-T-C624M-M-E	3178.75
						5µm	SF-130-G-05-B-T-C624M-M-E	3136.85
						10µm	SF-130-G-10-B-T-C624M-M-E	3122.90
						20µm	SF-130-G-20-B-T-C624M-M-E	3122.90
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	130	Non-bypass without Valve	3µm	SF-130-H-03-B-T-C624M-O-E	3207.10
						5µm	SF-130-H-05-B-T-C624M-O-E	3084.25
						10µm	SF-130-H-10-B-T-C624M-O-E	3136.65
						20µm	SF-130-H-20-B-T-C624M-O-E	3136.65
					Bypass Valve	3µm	SF-130-H-03-B-T-C624M-B-E	3403.10
						5µm	SF-130-H-05-B-T-C624M-B-E	3280.25
						10µm	SF-130-H-10-B-T-C624M-B-E	3332.65
						20µm	SF-130-H-20-B-T-C624M-B-E	3332.65
					Reverse Flow Valve	3µm	SF-130-H-03-B-T-C624M-R-E	3459.60
						5µm	SF-130-H-05-B-T-C624M-R-E	3336.75
						10µm	SF-130-H-10-B-T-C624M-R-E	3389.15
						20µm	SF-130-H-20-B-T-C624M-R-E	3389.15
					Multi-function Valve	3µm	SF-130-H-03-B-T-C624M-M-E	3543.30
						5µm	SF-130-H-05-B-T-C624M-M-E	3420.45
						10µm	SF-130-H-10-B-T-C624M-M-E	3472.85
						20µm	SF-130-H-20-B-T-C624M-M-E	3472.85

For replacement filter elements refer to page N69

High Pressure Filter Assemblies ▪ Type SF
Includes Electrical Clogging Indicator - SAE Flange 6000 PSI 1-1/2"

Filter Element	Description	Filter Material	Pressure Setting	Nominal Size	Valve	Micron	Designation	Price
	High Pressure Filter Assemblies Includes Electrical Clogging Indicator (supplied loose ie. not fitted) SAE Flange 6000 PSI 1-1/2"	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	160	Bypass Valve	3µm	SF-160-G-03-B-T-C624M-B-E	3055.30
						5µm	SF-160-G-05-B-T-C624M-B-E	3055.30
						10µm	SF-160-G-10-B-T-C624M-B-E	3012.90
						20µm	SF-160-G-20-B-T-C624M-B-E	3012.90
					Multi-function Valve	3µm	SF-160-G-03-B-T-C624M-M-E	3195.50
						5µm	SF-160-G-05-B-T-C624M-M-E	3195.50
						10µm	SF-160-G-10-B-T-C624M-M-E	3153.10
						20µm	SF-160-G-20-B-T-C624M-M-E	3153.10
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	160	Non-bypass without Valve	3µm	SF-160-H-03-B-T-C624M-O-E	3461.70
						5µm	SF-160-H-05-B-T-C624M-O-E	3447.70
						10µm	SF-160-H-10-B-T-C624M-O-E	3349.40
						20µm	SF-160-H-20-B-T-C624M-O-E	3349.40
					Bypass Valve	3µm	SF-160-H-03-B-T-C624M-B-E	3657.70
						5µm	SF-160-H-05-B-T-C624M-B-E	3643.70
						10µm	SF-160-H-10-B-T-C624M-B-E	3545.40
						20µm	SF-160-H-20-B-T-C624M-B-E	3545.40
					Reverse Flow Valve	3µm	SF-160-H-03-B-T-C624M-R-E	3714.20
						5µm	SF-160-H-05-B-T-C624M-R-E	3700.20
						10µm	SF-160-H-10-B-T-C624M-R-E	3601.90
						20µm	SF-160-H-20-B-T-C624M-R-E	3601.90
					Multi-function Valve	3µm	SF-160-H-03-B-T-C624M-M-E	3797.90
						5µm	SF-160-H-05-B-T-C624M-M-E	3783.90
						10µm	SF-160-H-10-B-T-C624M-M-E	3685.60
						20µm	SF-160-H-20-B-T-C624M-M-E	3685.60

For replacement filter elements refer to page N69

High Pressure Filter Assemblies ▪ Type SF
Without Clogging Indicator - Toploader (with bowl in two-part style)

Filter Element	Description	Filter Material	Pressure Setting	Nominal Size	Valve	Micron	Designation	Price
	High Pressure Filter Assemblies Without Clogging Indicator (Fitted with plug) Toploader, with bowl in two-part style	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	014	Bypass Valve	3µm	SF-014-G-03-B-T-G12-B-O-TL	1154.50
						5µm	SF-014-G-05-B-T-G12-B-O-TL	1154.50
						10µm	SF-014-G-10-B-T-G12-B-O-TL	1154.50
						20µm	SF-014-G-20-B-T-G12-B-O-TL	1154.50
					Multi-function Valve	3µm	SF-014-G-03-B-T-G12-M-O-TL	1280.75
						5µm	SF-014-G-05-B-T-G12-M-O-TL	1280.75
						10µm	SF-014-G-10-B-T-G12-M-O-TL	1280.75
						20µm	SF-014-G-20-B-T-G12-M-O-TL	1280.75
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	014	Non-bypass without Valve	3µm	SF-014-H-03-B-T-G12-O-O-TL	1152.80
						5µm	SF-014-H-05-B-T-G12-O-O-TL	1138.85
						10µm	SF-014-H-10-B-T-G12-O-O-TL	1124.90
						20µm	SF-014-H-20-B-T-G12-O-O-TL	1124.90
					Bypass Valve	3µm	SF-014-H-03-B-T-G12-B-O-TL	1238.25
						5µm	SF-014-H-05-B-T-G12-B-O-TL	1224.30
						10µm	SF-014-H-10-B-T-G12-B-O-TL	1210.35
						20µm	SF-014-H-20-B-T-G12-B-O-TL	1210.35
					Multi-function Valve	3µm	SF-014-H-03-B-T-G12-M-O-TL	1364.50
						5µm	SF-014-H-05-B-T-G12-M-O-TL	1350.55
						10µm	SF-014-H-10-B-T-G12-M-O-TL	1336.60
						20µm	SF-014-H-20-B-T-G12-M-O-TL	1336.60
	High Pressure Filter Assemblies Without Clogging Indicator (Fitted with plug) Toploader, with bowl in two-part style	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	030	Bypass Valve	3µm	SF-030-G-03-B-T-G12-B-O-TL	1238.25
						5µm	SF-030-G-05-B-T-G12-B-O-TL	1224.35
						10µm	SF-030-G-10-B-T-G12-B-O-TL	1210.35
						20µm	SF-030-G-20-B-T-G12-B-O-TL	1210.35
					Multi-function Valve	3µm	SF-030-G-03-B-T-G12-M-O-TL	1364.50
						5µm	SF-030-G-05-B-T-G12-M-O-TL	1350.60
						10µm	SF-030-G-10-B-T-G12-M-O-TL	1336.60
						20µm	SF-030-G-20-B-T-G12-M-O-TL	1336.60
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	030	Non-bypass without Valve	3µm	SF-030-H-03-B-T-G12-O-O-TL	1265.10
						5µm	SF-030-H-05-B-T-G12-O-O-TL	1251.15
						10µm	SF-030-H-10-B-T-G12-O-O-TL	1237.20
						20µm	SF-030-H-20-B-T-G12-O-O-TL	1237.20
					Bypass Valve	3µm	SF-030-H-03-B-T-G12-B-O-TL	1350.55
						5µm	SF-030-H-05-B-T-G12-B-O-TL	1336.60
						10µm	SF-030-H-10-B-T-G12-B-O-TL	1322.65
						20µm	SF-030-H-20-B-T-G12-B-O-TL	1322.65
					Multi-function Valve	3µm	SF-030-H-03-B-T-G12-M-O-TL	1476.80
						5µm	SF-030-H-05-B-T-G12-M-O-TL	1462.85
						10µm	SF-030-H-10-B-T-G12-M-O-TL	1448.90
						20µm	SF-030-H-20-B-T-G12-M-O-TL	1448.90
	High Pressure Filter Assemblies Without Clogging Indicator (Fitted with plug) Toploader, with bowl in two-part style	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	045	Bypass Valve	3µm	SF-045-G-03-B-T-G20-B-O-TL	1726.60
						5µm	SF-045-G-05-B-T-G20-B-O-TL	1712.65
						10µm	SF-045-G-10-B-T-G20-B-O-TL	1712.65
						20µm	SF-045-G-20-B-T-G20-B-O-TL	1712.65
					Multi-function Valve	3µm	SF-045-G-03-B-T-G20-M-O-TL	1909.25
						5µm	SF-045-G-05-B-T-G20-M-O-TL	1895.30
						10µm	SF-045-G-10-B-T-G20-M-O-TL	1895.30
						20µm	SF-045-G-20-B-T-G20-M-O-TL	1895.30
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	045	Non-bypass without Valve	3µm	SF-045-H-03-B-T-G20-O-O-TL	1733.85
						5µm	SF-045-H-05-B-T-G20-O-O-TL	1705.95
						10µm	SF-045-H-10-B-T-G20-O-O-TL	1692.00
						20µm	SF-045-H-20-B-T-G20-O-O-TL	1692.00
					Bypass Valve	3µm	SF-045-H-03-B-T-G20-B-O-TL	1880.70
						5µm	SF-045-H-05-B-T-G20-B-O-TL	1852.80
						10µm	SF-045-H-10-B-T-G20-B-O-TL	1838.85
						20µm	SF-045-H-20-B-T-G20-B-O-TL	1838.85
					Multi-function Valve	3µm	SF-045-H-03-B-T-G20-M-O-TL	2063.35
						5µm	SF-045-H-05-B-T-G20-M-O-TL	2035.45
						10µm	SF-045-H-10-B-T-G20-M-O-TL	2021.50
						20µm	SF-045-H-20-B-T-G20-M-O-TL	2021.50

For replacement filter elements refer to page N69

High Pressure Filter Assemblies ▪ Type SF
Without Clogging Indicator - Toploader (with bowl in two-part style)

Filter Element	Description	Filter Material	Pressure Setting	Nominal Size	Valve	Micron	Designation	Price
	High Pressure Filter Assemblies Without Clogging Indicator (Fitted with plug) Toploader, with bowl in two-part style	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	070	Bypass Valve	3µm	SF-070-G-03-B-T-G20-B-O-TL	1852.85
						5µm	SF-070-G-05-B-T-G20-B-O-TL	1838.95
						10µm	SF-070-G-10-B-T-G20-B-O-TL	1824.30
						20µm	SF-070-G-20-B-T-G20-B-O-TL	1824.30
					Multi-function Valve	3µm	SF-070-G-03-B-T-G20-M-O-TL	2035.50
						5µm	SF-070-G-05-B-T-G20-M-O-TL	2021.60
						10µm	SF-070-G-10-B-T-G20-M-O-TL	2006.95
						20µm	SF-070-G-20-B-T-G20-M-O-TL	2006.95
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	070	Non-bypass without Valve	3µm	SF-070-H-03-B-T-G20-O-O-TL	1902.00
						5µm	SF-070-H-05-B-T-G20-O-O-TL	1888.00
						10µm	SF-070-H-10-B-T-G20-O-O-TL	1874.05
						20µm	SF-070-H-20-B-T-G20-O-O-TL	1874.05
					Bypass Valve	3µm	SF-070-H-03-B-T-G20-B-O-TL	2048.85
						5µm	SF-070-H-05-B-T-G20-B-O-TL	2034.85
						10µm	SF-070-H-10-B-T-G20-B-O-TL	2020.90
						20µm	SF-070-H-20-B-T-G20-B-O-TL	2020.90
					Multi-function Valve	3µm	SF-070-H-03-B-T-G20-M-O-TL	2231.50
						5µm	SF-070-H-05-B-T-G20-M-O-TL	2217.50
						10µm	SF-070-H-10-B-T-G20-M-O-TL	2203.55
						20µm	SF-070-H-20-B-T-G20-M-O-TL	2203.55
	High Pressure Filter Assemblies Without Clogging Indicator (Fitted with plug) Toploader, with bowl in two-part style	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	090	Bypass Valve	3µm	SF-090-G-03-B-T-G24-B-O-TL	2749.40
						5µm	SF-090-G-05-B-T-G24-B-O-TL	2735.45
						10µm	SF-090-G-10-B-T-G24-B-O-TL	2721.55
						20µm	SF-090-G-20-B-T-G24-B-O-TL	2721.55
					Multi-function Valve	3µm	SF-090-G-03-B-T-G24-M-O-TL	2889.60
						5µm	SF-090-G-05-B-T-G24-M-O-TL	2875.65
						10µm	SF-090-G-10-B-T-G24-M-O-TL	2861.75
						20µm	SF-090-G-20-B-T-G24-M-O-TL	2861.75
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	090	Non-bypass without Valve	3µm	SF-090-H-03-B-T-G24-O-O-TL	2861.60
						5µm	SF-090-H-05-B-T-G24-O-O-TL	2833.75
						10µm	SF-090-H-10-B-T-G24-O-O-TL	2819.75
						20µm	SF-090-H-20-B-T-G24-O-O-TL	2819.75
					Bypass Valve	3µm	SF-090-H-03-B-T-G24-B-O-TL	3057.60
						5µm	SF-090-H-05-B-T-G24-B-O-TL	3029.75
						10µm	SF-090-H-10-B-T-G24-B-O-TL	3015.75
						20µm	SF-090-H-20-B-T-G24-B-O-TL	3015.75
					Multi-function Valve	3µm	SF-090-H-03-B-T-G24-M-O-TL	3197.80
						5µm	SF-090-H-05-B-T-G24-M-O-TL	3169.95
						10µm	SF-090-H-10-B-T-G24-M-O-TL	3155.95
						20µm	SF-090-H-20-B-T-G24-M-O-TL	3155.95
	High Pressure Filter Assemblies Without Clogging Indicator (Fitted with plug) Toploader, with bowl in two-part style	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	125	Bypass Valve	3µm	SF-125-G-03-B-T-G20-B-O-TL	2329.05
						5µm	SF-125-G-05-B-T-G20-B-O-TL	2329.05
						10µm	SF-125-G-10-B-T-G20-B-O-TL	2301.15
						20µm	SF-125-G-20-B-T-G20-B-O-TL	2301.15
					Multi-function Valve	3µm	SF-125-G-03-B-T-G20-M-O-TL	2511.70
						5µm	SF-125-G-05-B-T-G20-M-O-TL	2511.70
						10µm	SF-125-G-10-B-T-G20-M-O-TL	2483.80
						20µm	SF-125-G-20-B-T-G20-M-O-TL	2483.80
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	125	Non-bypass without Valve	3µm	SF-125-H-03-B-T-G20-O-O-TL	2154.30
						5µm	SF-125-H-05-B-T-G20-O-O-TL	2616.45
						10µm	SF-125-H-10-B-T-G20-O-O-TL	2574.70
						20µm	SF-125-H-20-B-T-G20-O-O-TL	2574.70
					Bypass Valve	3µm	SF-125-H-03-B-T-G20-B-O-TL	2721.55
						5µm	SF-125-H-05-B-T-G20-B-O-TL	2763.30
						10µm	SF-125-H-10-B-T-G20-B-O-TL	2721.55
						20µm	SF-125-H-20-B-T-G20-B-O-TL	2721.55
					Multi-function Valve	3µm	SF-125-H-03-B-T-G20-M-O-TL	2904.20
						5µm	SF-125-H-05-B-T-G20-M-O-TL	2945.95
						10µm	SF-125-H-10-B-T-G20-M-O-TL	2904.20
						20µm	SF-125-H-20-B-T-G20-M-O-TL	2904.20

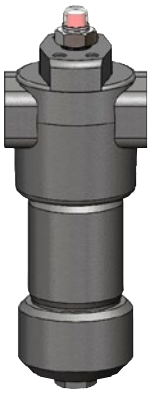
For replacement filter elements refer to page N69

High Pressure Filter Assemblies ▪ Type SF
Without Clogging Indicator - Toploader (with bowl in two-part style)

Filter Element	Description	Filter Material	Pressure Setting	Nominal Size	Valve	Micron	Designation	Price
	High Pressure Filter Assemblies Without Clogging Indicator (Fitted with plug) Toploader, with bowl in two-part style	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	160	Bypass Valve	3µm	SF-160-G-03-B-T-G24-B-O-TL	3339.10
						5µm	SF-160-G-05-B-T-G24-B-O-TL	3339.10
						10µm	SF-160-G-10-B-T-G24-B-O-TL	3296.70
						20µm	SF-160-G-20-B-T-G24-B-O-TL	3296.70
					Multi-function Valve	3µm	SF-160-G-03-B-T-G24-M-O-TL	3479.30
						5µm	SF-160-G-05-B-T-G24-M-O-TL	3479.30
						10µm	SF-160-G-10-B-T-G24-M-O-TL	3436.90
						20µm	SF-160-G-20-B-T-G24-M-O-TL	3436.90
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	160	Non-bypass without Valve	3µm	SF-160-H-03-B-T-G24-O-O-TL	3745.50
						5µm	SF-160-H-05-B-T-G24-O-O-TL	3731.50
						10µm	SF-160-H-10-B-T-G24-O-O-TL	3633.20
						20µm	SF-160-H-20-B-T-G24-O-O-TL	3633.20
					Bypass Valve	3µm	SF-160-H-03-B-T-G24-B-O-TL	3941.50
						5µm	SF-160-H-05-B-T-G24-B-O-TL	3927.50
						10µm	SF-160-H-10-B-T-G24-B-O-TL	3829.20
						20µm	SF-160-H-20-B-T-G24-B-O-TL	3829.20
					Multi-function Valve	3µm	SF-160-H-03-B-T-G24-M-O-TL	4081.70
						5µm	SF-160-H-05-B-T-G24-M-O-TL	4067.70
						10µm	SF-160-H-10-B-T-G24-M-O-TL	3969.40
						20µm	SF-160-H-20-B-T-G24-M-O-TL	3969.40
	High Pressure Filter Assemblies Without Clogging Indicator (Fitted with plug) Toploader, with bowl in two-part style	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	250	Bypass Valve	3µm	SF-250-G-03-B-T-G24-B-O-TL	4009.95
						5µm	SF-250-G-05-B-T-G24-B-O-TL	3968.10
						10µm	SF-250-G-10-B-T-G24-B-O-TL	3786.10
						20µm	SF-250-G-20-B-T-G24-B-O-TL	3786.10
					Multi-function Valve	3µm	SF-250-G-03-B-T-G24-M-O-TL	4150.15
						5µm	SF-250-G-05-B-T-G24-M-O-TL	4108.30
						10µm	SF-250-G-10-B-T-G24-M-O-TL	3926.30
						20µm	SF-250-G-20-B-T-G24-M-O-TL	3926.30
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	250	Non-bypass without Valve	3µm	SF-250-H-03-B-T-G24-O-O-TL	5354.75
						5µm	SF-250-H-05-B-T-G24-O-O-TL	5016.00
						10µm	SF-250-H-10-B-T-G24-O-O-TL	4876.50
						20µm	SF-250-H-20-B-T-G24-O-O-TL	4876.50
					Bypass Valve	3µm	SF-250-H-03-B-T-G24-B-O-TL	5550.75
						5µm	SF-250-H-05-B-T-G24-B-O-TL	5212.00
						10µm	SF-250-H-10-B-T-G24-B-O-TL	5072.50
						20µm	SF-250-H-20-B-T-G24-B-O-TL	5072.50
					Multi-function Valve	3µm	SF-250-H-03-B-T-G24-M-O-TL	5690.95
						5µm	SF-250-H-05-B-T-G24-M-O-TL	5352.20
						10µm	SF-250-H-10-B-T-G24-M-O-TL	5212.70
						20µm	SF-250-H-20-B-T-G24-M-O-TL	5212.70
	High Pressure Filter Assemblies Without Clogging Indicator (Fitted with plug) Toploader, with bowl in two-part style	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	300	Bypass Valve	3µm	SF-300-G-03-B-T-G24-B-O-TL	4488.10
						5µm	SF-300-G-05-B-T-G24-B-O-TL	4293.50
						10µm	SF-300-G-10-B-T-G24-B-O-TL	4251.60
						20µm	SF-300-G-20-B-T-G24-B-O-TL	4251.60
					Multi-function Valve	3µm	SF-300-G-03-B-T-G24-M-O-TL	4628.30
						5µm	SF-300-G-05-B-T-G24-M-O-TL	4433.70
						10µm	SF-300-G-10-B-T-G24-M-O-TL	4391.80
						20µm	SF-300-G-20-B-T-G24-M-O-TL	4391.80
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	300	Non-bypass without Valve	3µm	SF-300-H-03-B-T-G24-O-O-TL	5806.30
						5µm	SF-300-H-05-B-T-G24-O-O-TL	5666.85
						10µm	SF-300-H-10-B-T-G24-O-O-TL	5514.10
						20µm	SF-300-H-20-B-T-G24-O-O-TL	5514.10
					Bypass Valve	3µm	SF-300-H-03-B-T-G24-B-O-TL	6002.30
						5µm	SF-300-H-05-B-T-G24-B-O-TL	5862.85
						10µm	SF-300-H-10-B-T-G24-B-O-TL	5710.10
						20µm	SF-300-H-20-B-T-G24-B-O-TL	5710.10
					Multi-function Valve	3µm	SF-300-H-03-B-T-G24-M-O-TL	6142.50
						5µm	SF-300-H-05-B-T-G24-M-O-TL	6003.05
						10µm	SF-300-H-10-B-T-G24-M-O-TL	5850.30
						20µm	SF-300-H-20-B-T-G24-M-O-TL	5850.30

For replacement filter elements refer to page N69

High Pressure Filter Assemblies ▪ Type SF
Includes Visual Clogging Indicator with Automatic Reset - Toploader (with bowl in two-part style)

Filter Element	Description	Filter Material	Pressure Setting	Nominal Size	Valve	Micron	Designation	Price
	High Pressure Filter Assemblies Includes Visual Clogging Indicator with Automatic Reset Toploader, with bowl in two-part style	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	014	Bypass Valve	3µm	SF-014-G-03-B-T-G12-B-A-TL	1333.60
						5µm	SF-014-G-05-B-T-G12-B-A-TL	1333.60
						10µm	SF-014-G-10-B-T-G12-B-A-TL	1333.60
						20µm	SF-014-G-20-B-T-G12-B-A-TL	1333.60
					Multi-function Valve	3µm	SF-014-G-03-B-T-G12-M-A-TL	1459.85
						5µm	SF-014-G-05-B-T-G12-M-A-TL	1459.85
						10µm	SF-014-G-10-B-T-G12-M-A-TL	1459.85
						20µm	SF-014-G-20-B-T-G12-M-A-TL	1459.85
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	014	Non-bypass without Valve	3µm	SF-014-H-03-B-T-G12-O-A-TL	1331.90
						5µm	SF-014-H-05-B-T-G12-O-A-TL	1317.95
						10µm	SF-014-H-10-B-T-G12-O-A-TL	1304.00
						20µm	SF-014-H-20-B-T-G12-O-A-TL	1304.00
					Bypass Valve	3µm	SF-014-H-03-B-T-G12-B-A-TL	1417.35
						5µm	SF-014-H-05-B-T-G12-B-A-TL	1403.40
						10µm	SF-014-H-10-B-T-G12-B-A-TL	1389.45
						20µm	SF-014-H-20-B-T-G12-B-A-TL	1389.45
					Reverse Flow Valve	3µm	SF-014-H-03-B-T-G12-R-A-TL	1487.10
						5µm	SF-014-H-05-B-T-G12-R-A-TL	1473.15
						10µm	SF-014-H-10-B-T-G12-R-A-TL	1459.20
						20µm	SF-014-H-20-B-T-G12-R-A-TL	1459.20
					Multi-function Valve	3µm	SF-014-H-03-B-T-G12-M-A-TL	1543.60
						5µm	SF-014-H-05-B-T-G12-M-A-TL	1529.65
						10µm	SF-014-H-10-B-T-G12-M-A-TL	1515.70
						20µm	SF-014-H-20-B-T-G12-M-A-TL	1515.70
	High Pressure Filter Assemblies Includes Visual Clogging Indicator with Automatic Reset Toploader, with bowl in two-part style	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	030	Bypass Valve	3µm	SF-030-G-03-B-T-G12-B-A-TL	1417.35
						5µm	SF-030-G-05-B-T-G12-B-A-TL	1403.45
						10µm	SF-030-G-10-B-T-G12-B-A-TL	1389.45
						20µm	SF-030-G-20-B-T-G12-B-A-TL	1389.45
					Multi-function Valve	3µm	SF-030-G-03-B-T-G12-M-A-TL	1543.60
						5µm	SF-030-G-05-B-T-G12-M-A-TL	1529.70
						10µm	SF-030-G-10-B-T-G12-M-A-TL	1515.70
						20µm	SF-030-G-20-B-T-G12-M-A-TL	1515.70
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	030	Non-bypass without Valve	3µm	SF-030-H-03-B-T-G12-O-A-TL	1444.20
						5µm	SF-030-H-05-B-T-G12-O-A-TL	1430.25
						10µm	SF-030-H-10-B-T-G12-O-A-TL	1416.30
						20µm	SF-030-H-20-B-T-G12-O-A-TL	1416.30
					Bypass Valve	3µm	SF-030-H-03-B-T-G12-B-A-TL	1529.65
						5µm	SF-030-H-05-B-T-G12-B-A-TL	1515.70
						10µm	SF-030-H-10-B-T-G12-B-A-TL	1501.75
						20µm	SF-030-H-20-B-T-G12-B-A-TL	1501.75
					Reverse Flow Valve	3µm	SF-030-H-03-B-T-G12-R-A-TL	1599.40
						5µm	SF-030-H-05-B-T-G12-R-A-TL	1585.45
						10µm	SF-030-H-10-B-T-G12-R-A-TL	1571.50
						20µm	SF-030-H-20-B-T-G12-R-A-TL	1571.50
					Multi-function Valve	3µm	SF-030-H-03-B-T-G12-M-A-TL	1655.90
						5µm	SF-030-H-05-B-T-G12-M-A-TL	1641.95
						10µm	SF-030-H-10-B-T-G12-M-A-TL	1628.00
						20µm	SF-030-H-20-B-T-G12-M-A-TL	1628.00

For replacement filter elements refer to page N69

High Pressure Filter Assemblies ▪ Type SF
Includes Visual Clogging Indicator with Automatic Reset - Toploader (with bowl in two-part style)

Filter Element	Description	Filter Material	Pressure Setting	Nominal Size	Valve	Micron	Designation	Price
	High Pressure Filter Assemblies Includes Visual Clogging Indicator with Automatic Reset Toploader, with bowl in two-part style	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	045	Bypass Valve	3µm	SF-045-G-03-B-T-G20-B-A-TL	1905.70
						5µm	SF-045-G-05-B-T-G20-B-A-TL	1891.75
						10µm	SF-045-G-10-B-T-G20-B-A-TL	1891.75
						20µm	SF-045-G-20-B-T-G20-B-A-TL	1891.75
					Multi-function Valve	3µm	SF-045-G-03-B-T-G20-M-A-TL	2088.35
						5µm	SF-045-G-05-B-T-G20-M-A-TL	2074.40
						10µm	SF-045-G-10-B-T-G20-M-A-TL	2074.40
						20µm	SF-045-G-20-B-T-G20-M-A-TL	2074.40
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	045	Non-bypass without Valve	3µm	SF-045-H-03-B-T-G20-O-A-TL	1912.95
						5µm	SF-045-H-05-B-T-G20-O-A-TL	1885.05
						10µm	SF-045-H-10-B-T-G20-O-A-TL	1871.10
						20µm	SF-045-H-20-B-T-G20-O-A-TL	1871.10
					Bypass Valve	3µm	SF-045-H-03-B-T-G20-B-A-TL	2059.80
						5µm	SF-045-H-05-B-T-G20-B-A-TL	2031.90
						10µm	SF-045-H-10-B-T-G20-B-A-TL	2017.95
						20µm	SF-045-H-20-B-T-G20-B-A-TL	2017.95
					Reverse Flow Valve	3µm	SF-045-H-03-B-T-G20-R-A-TL	2158.10
						5µm	SF-045-H-05-B-T-G20-R-A-TL	2130.20
						10µm	SF-045-H-10-B-T-G20-R-A-TL	2116.25
						20µm	SF-045-H-20-B-T-G20-R-A-TL	2116.25
					Multi-function Valve	3µm	SF-045-H-03-B-T-G20-M-A-TL	2242.45
						5µm	SF-045-H-05-B-T-G20-M-A-TL	2214.55
						10µm	SF-045-H-10-B-T-G20-M-A-TL	2200.60
						20µm	SF-045-H-20-B-T-G20-M-A-TL	2200.60
	High Pressure Filter Assemblies Includes Visual Clogging Indicator with Automatic Reset Toploader, with bowl in two-part style	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	070	Bypass Valve	3µm	SF-070-G-03-B-T-G20-B-A-TL	2031.95
						5µm	SF-070-G-05-B-T-G20-B-A-TL	2018.05
						10µm	SF-070-G-10-B-T-G20-B-A-TL	2003.40
						20µm	SF-070-G-20-B-T-G20-B-A-TL	2003.40
					Multi-function Valve	3µm	SF-070-G-03-B-T-G20-M-A-TL	2214.60
						5µm	SF-070-G-05-B-T-G20-M-A-TL	2200.70
						10µm	SF-070-G-10-B-T-G20-M-A-TL	2186.05
						20µm	SF-070-G-20-B-T-G20-M-A-TL	2186.05
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	070	Non-bypass without Valve	3µm	SF-070-H-03-B-T-G20-O-A-TL	2081.10
						5µm	SF-070-H-05-B-T-G20-O-A-TL	2067.10
						10µm	SF-070-H-10-B-T-G20-O-A-TL	2053.15
						20µm	SF-070-H-20-B-T-G20-O-A-TL	2053.15
					Bypass Valve	3µm	SF-070-H-03-B-T-G20-B-A-TL	2227.95
						5µm	SF-070-H-05-B-T-G20-B-A-TL	2213.95
						10µm	SF-070-H-10-B-T-G20-B-A-TL	2200.00
						20µm	SF-070-H-20-B-T-G20-B-A-TL	2200.00
					Reverse Flow Valve	3µm	SF-070-H-03-B-T-G20-R-A-TL	2326.25
						5µm	SF-070-H-05-B-T-G20-R-A-TL	2312.25
						10µm	SF-070-H-10-B-T-G20-R-A-TL	2298.30
						20µm	SF-070-H-20-B-T-G20-R-A-TL	2298.30
					Multi-function Valve	3µm	SF-070-H-03-B-T-G20-M-A-TL	2410.60
						5µm	SF-070-H-05-B-T-G20-M-A-TL	2396.60
						10µm	SF-070-H-10-B-T-G20-M-A-TL	2382.65
						20µm	SF-070-H-20-B-T-G20-M-A-TL	2382.65

For replacement filter elements refer to page N69

High Pressure Filter Assemblies ▪ Type SF
Includes Visual Clogging Indicator with Automatic Reset - Toploader (with bowl in two-part style)

Filter Element	Description	Filter Material	Pressure Setting	Nominal Size	Valve	Micron	Designation	Price
	High Pressure Filter Assemblies Includes Visual Clogging Indicator with Automatic Reset Toploader, with bowl in two-part style	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	090	Bypass Valve	3µm	SF-090-G-03-B-T-G24-B-A-TL	2928.50
						5µm	SF-090-G-05-B-T-G24-B-A-TL	2914.55
						10µm	SF-090-G-10-B-T-G24-B-A-TL	2900.65
						20µm	SF-090-G-20-B-T-G24-B-A-TL	2900.65
					Multi-function Valve	3µm	SF-090-G-03-B-T-G24-M-A-TL	3068.70
						5µm	SF-090-G-05-B-T-G24-M-A-TL	3054.75
						10µm	SF-090-G-10-B-T-G24-M-A-TL	3040.85
						20µm	SF-090-G-20-B-T-G24-M-A-TL	3040.85
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	090	Non-bypass without Valve	3µm	SF-090-H-03-B-T-G24-O-A-TL	3040.70
						5µm	SF-090-H-05-B-T-G24-O-A-TL	3012.85
						10µm	SF-090-H-10-B-T-G24-O-A-TL	2998.85
						20µm	SF-090-H-20-B-T-G24-O-A-TL	2998.85
					Bypass Valve	3µm	SF-090-H-03-B-T-G24-B-A-TL	3236.70
						5µm	SF-090-H-05-B-T-G24-B-A-TL	3208.85
						10µm	SF-090-H-10-B-T-G24-B-A-TL	3194.85
						20µm	SF-090-H-20-B-T-G24-B-A-TL	3194.85
					Reverse Flow Valve	3µm	SF-090-H-03-B-T-G24-R-A-TL	3293.20
						5µm	SF-090-H-05-B-T-G24-R-A-TL	3265.35
						10µm	SF-090-H-10-B-T-G24-R-A-TL	3251.35
						20µm	SF-090-H-20-B-T-G24-R-A-TL	3251.35
					Multi-function Valve	3µm	SF-090-H-03-B-T-G24-M-A-TL	3376.90
						5µm	SF-090-H-05-B-T-G24-M-A-TL	3349.05
						10µm	SF-090-H-10-B-T-G24-M-A-TL	3335.05
						20µm	SF-090-H-20-B-T-G24-M-A-TL	3335.05
	High Pressure Filter Assemblies Includes Visual Clogging Indicator with Automatic Reset Toploader, with bowl in two-part style	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	125	Bypass Valve	3µm	SF-125-G-03-B-T-G20-B-A-TL	2508.15
						5µm	SF-125-G-05-B-T-G20-B-A-TL	2508.15
						10µm	SF-125-G-10-B-T-G20-B-A-TL	2480.25
						20µm	SF-125-G-20-B-T-G20-B-A-TL	2480.25
					Multi-function Valve	3µm	SF-125-G-03-B-T-G20-M-A-TL	2690.80
						5µm	SF-125-G-05-B-T-G20-M-A-TL	2690.80
						10µm	SF-125-G-10-B-T-G20-M-A-TL	2662.90
						20µm	SF-125-G-20-B-T-G20-M-A-TL	2662.90
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	125	Non-bypass without Valve	3µm	SF-125-H-03-B-T-G20-O-A-TL	2333.40
						5µm	SF-125-H-05-B-T-G20-O-A-TL	2795.55
						10µm	SF-125-H-10-B-T-G20-O-A-TL	2753.80
						20µm	SF-125-H-20-B-T-G20-O-A-TL	2753.80
					Bypass Valve	3µm	SF-125-H-03-B-T-G20-B-A-TL	2900.65
						5µm	SF-125-H-05-B-T-G20-B-A-TL	2942.40
						10µm	SF-125-H-10-B-T-G20-B-A-TL	2900.65
						20µm	SF-125-H-20-B-T-G20-B-A-TL	2900.65
					Reverse Flow Valve	3µm	SF-125-H-03-B-T-G20-R-A-TL	2998.95
						5µm	SF-125-H-05-B-T-G20-R-A-TL	3040.70
						10µm	SF-125-H-10-B-T-G20-R-A-TL	2998.95
						20µm	SF-125-H-20-B-T-G20-R-A-TL	2998.95
					Multi-function Valve	3µm	SF-125-H-03-B-T-G20-M-A-TL	3083.30
						5µm	SF-125-H-05-B-T-G20-M-A-TL	3125.05
						10µm	SF-125-H-10-B-T-G20-M-A-TL	3083.30
						20µm	SF-125-H-20-B-T-G20-M-A-TL	3083.30

For replacement filter elements refer to page N69

High Pressure Filter Assemblies ▪ Type SF
Includes Visual Clogging Indicator with Automatic Reset - Toploader (with bowl in two-part style)

Filter Element	Description	Filter Material	Pressure Setting	Nominal Size	Valve	Micron	Designation	Price
	High Pressure Filter Assemblies Includes Visual Clogging Indicator with Automatic Reset Toploader, with bowl in two-part style	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	160	Bypass Valve	3µm	SF-160-G-03-B-T-G24-B-A-TL	3518.20
						5µm	SF-160-G-05-B-T-G24-B-A-TL	3518.20
						10µm	SF-160-G-10-B-T-G24-B-A-TL	3475.80
						20µm	SF-160-G-20-B-T-G24-B-A-TL	3475.80
					Multi-function Valve	3µm	SF-160-G-03-B-T-G24-M-A-TL	3658.40
						5µm	SF-160-G-05-B-T-G24-M-A-TL	3658.40
						10µm	SF-160-G-10-B-T-G24-M-A-TL	3616.00
						20µm	SF-160-G-20-B-T-G24-M-A-TL	3616.00
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	160	Non-bypass without Valve	3µm	SF-160-H-03-B-T-G24-O-A-TL	3924.60
						5µm	SF-160-H-05-B-T-G24-O-A-TL	3910.60
						10µm	SF-160-H-10-B-T-G24-O-A-TL	3812.30
						20µm	SF-160-H-20-B-T-G24-O-A-TL	3812.30
					Bypass Valve	3µm	SF-160-H-03-B-T-G24-B-A-TL	4120.60
						5µm	SF-160-H-05-B-T-G24-B-A-TL	4106.60
						10µm	SF-160-H-10-B-T-G24-B-A-TL	4008.30
						20µm	SF-160-H-20-B-T-G24-B-A-TL	4008.30
					Reverse Flow Valve	3µm	SF-160-H-03-B-T-G24-R-A-TL	4177.10
						5µm	SF-160-H-05-B-T-G24-R-A-TL	4163.10
						10µm	SF-160-H-10-B-T-G24-R-A-TL	4064.80
						20µm	SF-160-H-20-B-T-G24-R-A-TL	4064.80
					Multi-function Valve	3µm	SF-160-H-03-B-T-G24-M-A-TL	4260.80
						5µm	SF-160-H-05-B-T-G24-M-A-TL	4246.80
						10µm	SF-160-H-10-B-T-G24-M-A-TL	4148.50
						20µm	SF-160-H-20-B-T-G24-M-A-TL	4148.50
	High Pressure Filter Assemblies Includes Visual Clogging Indicator with Automatic Reset Toploader, with bowl in two-part style	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	250	Bypass Valve	3µm	SF-250-G-03-B-T-G24-B-A-TL	4189.05
						5µm	SF-250-G-05-B-T-G24-B-A-TL	4147.20
						10µm	SF-250-G-10-B-T-G24-B-A-TL	3965.20
						20µm	SF-250-G-20-B-T-G24-B-A-TL	3965.20
					Multi-function Valve	3µm	SF-250-G-03-B-T-G24-M-A-TL	4329.25
						5µm	SF-250-G-05-B-T-G24-M-A-TL	4287.40
						10µm	SF-250-G-10-B-T-G24-M-A-TL	4105.40
						20µm	SF-250-G-20-B-T-G24-M-A-TL	4105.40
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	250	Non-bypass without Valve	3µm	SF-250-H-03-B-T-G24-O-A-TL	5533.85
						5µm	SF-250-H-05-B-T-G24-O-A-TL	5195.10
						10µm	SF-250-H-10-B-T-G24-O-A-TL	5055.60
						20µm	SF-250-H-20-B-T-G24-O-A-TL	5055.60
					Bypass Valve	3µm	SF-250-H-03-B-T-G24-B-A-TL	5729.85
						5µm	SF-250-H-05-B-T-G24-B-A-TL	5391.10
						10µm	SF-250-H-10-B-T-G24-B-A-TL	5251.60
						20µm	SF-250-H-20-B-T-G24-B-A-TL	5251.60
					Reverse Flow Valve	3µm	SF-250-H-03-B-T-G24-R-A-TL	5786.35
						5µm	SF-250-H-05-B-T-G24-R-A-TL	5447.60
						10µm	SF-250-H-10-B-T-G24-R-A-TL	5308.10
						20µm	SF-250-H-20-B-T-G24-R-A-TL	5308.10
					Multi-function Valve	3µm	SF-250-H-03-B-T-G24-M-A-TL	5870.05
						5µm	SF-250-H-05-B-T-G24-M-A-TL	5531.30
						10µm	SF-250-H-10-B-T-G24-M-A-TL	5391.80
						20µm	SF-250-H-20-B-T-G24-M-A-TL	5391.80

For replacement filter elements refer to page N69

High Pressure Filter Assemblies ▪ Type SF
Includes Visual Clogging Indicator with Automatic Reset - Toploader (with bowl in two-part style)

Filter Element	Description	Filter Material	Pressure Setting	Nominal Size	Valve	Micron	Designation	Price
	High Pressure Filter Assemblies Includes Visual Clogging Indicator with Automatic Reset Toploader, with bowl in two-part style	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	300	Bypass Valve	3µm	SF-300-G-03-B-T-G24-B-A-TL	4667.20
						5µm	SF-300-G-05-B-T-G24-B-A-TL	4472.60
						10µm	SF-300-G-10-B-T-G24-B-A-TL	4430.70
						20µm	SF-300-G-20-B-T-G24-B-A-TL	4430.70
					Multi-function Valve	3µm	SF-300-G-03-B-T-G24-M-A-TL	4807.40
						5µm	SF-300-G-05-B-T-G24-M-A-TL	4612.80
						10µm	SF-300-G-10-B-T-G24-M-A-TL	4570.90
						20µm	SF-300-G-20-B-T-G24-M-A-TL	4570.90
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	300	Non-bypass without Valve	3µm	SF-300-H-03-B-T-G24-O-A-TL	5985.40
						5µm	SF-300-H-05-B-T-G24-O-A-TL	5845.95
						10µm	SF-300-H-10-B-T-G24-O-A-TL	5693.20
						20µm	SF-300-H-20-B-T-G24-O-A-TL	5693.20
					Bypass Valve	3µm	SF-300-H-03-B-T-G24-B-A-TL	6181.40
						5µm	SF-300-H-05-B-T-G24-B-A-TL	6041.95
						10µm	SF-300-H-10-B-T-G24-B-A-TL	5889.20
						20µm	SF-300-H-20-B-T-G24-B-A-TL	5889.20
					Reverse Flow Valve	3µm	SF-300-H-03-B-T-G24-R-A-TL	6237.90
						5µm	SF-300-H-05-B-T-G24-R-A-TL	6098.45
						10µm	SF-300-H-10-B-T-G24-R-A-TL	5945.70
						20µm	SF-300-H-20-B-T-G24-R-A-TL	5945.70
					Multi-function Valve	3µm	SF-300-H-03-B-T-G24-M-A-TL	6321.60
						5µm	SF-300-H-05-B-T-G24-M-A-TL	6182.15
						10µm	SF-300-H-10-B-T-G24-M-A-TL	6029.40
						20µm	SF-300-H-20-B-T-G24-M-A-TL	6029.40

For replacement filter elements refer to page N69

High Pressure Filter Assemblies ▪ Type SF
Includes Visual Clogging Indicator with Manual Reset - Toploader (with bowl in two-part style)

Filter Element	Description	Filter Material	Pressure Setting	Nominal Size	Valve	Micron	Designation	Price
	High Pressure Filter Assemblies Includes Visual Clogging Indicator with Manual Reset Toploader, with bowl in two-part style	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	014	Bypass Valve	3µm	SF-014-G-03-B-T-G12-B-V-TL	1319.65
						5µm	SF-014-G-05-B-T-G12-B-V-TL	1319.65
						10µm	SF-014-G-10-B-T-G12-B-V-TL	1319.65
						20µm	SF-014-G-20-B-T-G12-B-V-TL	1319.65
					Multi-function Valve	3µm	SF-014-G-03-B-T-G12-M-V-TL	1445.90
						5µm	SF-014-G-05-B-T-G12-M-V-TL	1445.90
						10µm	SF-014-G-10-B-T-G12-M-V-TL	1445.90
						20µm	SF-014-G-20-B-T-G12-M-V-TL	1445.90
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	014	Non-bypass without Valve	3µm	SF-014-H-03-B-T-G12-O-V-TL	1317.95
						5µm	SF-014-H-05-B-T-G12-O-V-TL	1304.00
						10µm	SF-014-H-10-B-T-G12-O-V-TL	1290.05
						20µm	SF-014-H-20-B-T-G12-O-V-TL	1290.05
					Bypass Valve	3µm	SF-014-H-03-B-T-G12-B-V-TL	1403.40
						5µm	SF-014-H-05-B-T-G12-B-V-TL	1389.45
						10µm	SF-014-H-10-B-T-G12-B-V-TL	1375.50
						20µm	SF-014-H-20-B-T-G12-B-V-TL	1375.50
					Reverse Flow Valve	3µm	SF-014-H-03-B-T-G12-R-V-TL	1473.15
						5µm	SF-014-H-05-B-T-G12-R-V-TL	1459.20
						10µm	SF-014-H-10-B-T-G12-R-V-TL	1445.25
						20µm	SF-014-H-20-B-T-G12-R-V-TL	1445.25
					Multi-function Valve	3µm	SF-014-H-03-B-T-G12-M-V-TL	1529.65
						5µm	SF-014-H-05-B-T-G12-M-V-TL	1515.70
						10µm	SF-014-H-10-B-T-G12-M-V-TL	1501.75
						20µm	SF-014-H-20-B-T-G12-M-V-TL	1501.75
	High Pressure Filter Assemblies Includes Visual Clogging Indicator with Manual Reset Toploader, with bowl in two-part style	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	030	Bypass Valve	3µm	SF-030-G-03-B-T-G12-B-V-TL	1403.40
						5µm	SF-030-G-05-B-T-G12-B-V-TL	1389.50
						10µm	SF-030-G-10-B-T-G12-B-V-TL	1375.50
						20µm	SF-030-G-20-B-T-G12-B-V-TL	1375.50
					Multi-function Valve	3µm	SF-030-G-03-B-T-G12-M-V-TL	1529.65
						5µm	SF-030-G-05-B-T-G12-M-V-TL	1515.75
						10µm	SF-030-G-10-B-T-G12-M-V-TL	1501.75
						20µm	SF-030-G-20-B-T-G12-M-V-TL	1501.75
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	030	Non-bypass without Valve	3µm	SF-030-H-03-B-T-G12-O-V-TL	1430.25
						5µm	SF-030-H-05-B-T-G12-O-V-TL	1416.30
						10µm	SF-030-H-10-B-T-G12-O-V-TL	1402.35
						20µm	SF-030-H-20-B-T-G12-O-V-TL	1402.35
					Bypass Valve	3µm	SF-030-H-03-B-T-G12-B-V-TL	1515.70
						5µm	SF-030-H-05-B-T-G12-B-V-TL	1501.75
						10µm	SF-030-H-10-B-T-G12-B-V-TL	1487.80
						20µm	SF-030-H-20-B-T-G12-B-V-TL	1487.80
					Reverse Flow Valve	3µm	SF-030-H-03-B-T-G12-R-V-TL	1585.45
						5µm	SF-030-H-05-B-T-G12-R-V-TL	1571.50
						10µm	SF-030-H-10-B-T-G12-R-V-TL	1557.55
						20µm	SF-030-H-20-B-T-G12-R-V-TL	1557.55
					Multi-function Valve	3µm	SF-030-H-03-B-T-G12-M-V-TL	1641.95
						5µm	SF-030-H-05-B-T-G12-M-V-TL	1628.00
						10µm	SF-030-H-10-B-T-G12-M-V-TL	1614.05
						20µm	SF-030-H-20-B-T-G12-M-V-TL	1614.05

For replacement filter elements refer to page N69

High Pressure Filter Assemblies ▪ Type SF
Includes Visual Clogging Indicator with Manual Reset - Toploader (with bowl in two-part style)

Filter Element	Description	Filter Material	Pressure Setting	Nominal Size	Valve	Micron	Designation	Price
	High Pressure Filter Assemblies Includes Visual Clogging Indicator with Manual Reset Toploader, with bowl in two-part style	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	045	Bypass Valve	3µm	SF-045-G-03-B-T-G20-B-V-TL	1891.75
						5µm	SF-045-G-05-B-T-G20-B-V-TL	1877.80
						10µm	SF-045-G-10-B-T-G20-B-V-TL	1877.80
						20µm	SF-045-G-20-B-T-G20-B-V-TL	1877.80
					Multi-function Valve	3µm	SF-045-G-03-B-T-G20-M-V-TL	2074.40
						5µm	SF-045-G-05-B-T-G20-M-V-TL	2060.45
						10µm	SF-045-G-10-B-T-G20-M-V-TL	2060.45
						20µm	SF-045-G-20-B-T-G20-M-V-TL	2060.45
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	045	Non-bypass without Valve	3µm	SF-045-H-03-B-T-G20-O-V-TL	1899.00
						5µm	SF-045-H-05-B-T-G20-O-V-TL	1871.10
						10µm	SF-045-H-10-B-T-G20-O-V-TL	1857.15
						20µm	SF-045-H-20-B-T-G20-O-V-TL	1857.15
					Bypass Valve	3µm	SF-045-H-03-B-T-G20-B-V-TL	2045.85
						5µm	SF-045-H-05-B-T-G20-B-V-TL	2017.95
						10µm	SF-045-H-10-B-T-G20-B-V-TL	2004.00
						20µm	SF-045-H-20-B-T-G20-B-V-TL	2004.00
					Reverse Flow Valve	3µm	SF-045-H-03-B-T-G20-R-V-TL	2144.15
						5µm	SF-045-H-05-B-T-G20-R-V-TL	2116.25
						10µm	SF-045-H-10-B-T-G20-R-V-TL	2102.30
						20µm	SF-045-H-20-B-T-G20-R-V-TL	2102.30
					Multi-function Valve	3µm	SF-045-H-03-B-T-G20-M-V-TL	2228.50
						5µm	SF-045-H-05-B-T-G20-M-V-TL	2200.60
						10µm	SF-045-H-10-B-T-G20-M-V-TL	2186.65
						20µm	SF-045-H-20-B-T-G20-M-V-TL	2186.65
	High Pressure Filter Assemblies Includes Visual Clogging Indicator with Manual Reset Toploader, with bowl in two-part style	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	070	Bypass Valve	3µm	SF-070-G-03-B-T-G20-B-V-TL	2018.00
						5µm	SF-070-G-05-B-T-G20-B-V-TL	2004.10
						10µm	SF-070-G-10-B-T-G20-B-V-TL	1989.45
						20µm	SF-070-G-20-B-T-G20-B-V-TL	1989.45
					Multi-function Valve	3µm	SF-070-G-03-B-T-G20-M-V-TL	2200.65
						5µm	SF-070-G-05-B-T-G20-M-V-TL	2186.75
						10µm	SF-070-G-10-B-T-G20-M-V-TL	2172.10
						20µm	SF-070-G-20-B-T-G20-M-V-TL	2172.10
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	070	Non-bypass without Valve	3µm	SF-070-H-03-B-T-G20-O-V-TL	2067.15
						5µm	SF-070-H-05-B-T-G20-O-V-TL	2053.15
						10µm	SF-070-H-10-B-T-G20-O-V-TL	2039.20
						20µm	SF-070-H-20-B-T-G20-O-V-TL	2039.20
					Bypass Valve	3µm	SF-070-H-03-B-T-G20-B-V-TL	2214.00
						5µm	SF-070-H-05-B-T-G20-B-V-TL	2200.00
						10µm	SF-070-H-10-B-T-G20-B-V-TL	2186.05
						20µm	SF-070-H-20-B-T-G20-B-V-TL	2186.05
					Reverse Flow Valve	3µm	SF-070-H-03-B-T-G20-R-V-TL	2312.30
						5µm	SF-070-H-05-B-T-G20-R-V-TL	2298.30
						10µm	SF-070-H-10-B-T-G20-R-V-TL	2284.35
						20µm	SF-070-H-20-B-T-G20-R-V-TL	2284.35
					Multi-function Valve	3µm	SF-070-H-03-B-T-G20-M-V-TL	2396.65
						5µm	SF-070-H-05-B-T-G20-M-V-TL	2382.65
						10µm	SF-070-H-10-B-T-G20-M-V-TL	2368.70
						20µm	SF-070-H-20-B-T-G20-M-V-TL	2368.70

For replacement filter elements refer to page N69

High Pressure Filter Assemblies ▪ Type SF
Includes Visual Clogging Indicator with Manual Reset - Toploader (with bowl in two-part style)

Filter Element	Description	Filter Material	Pressure Setting	Nominal Size	Valve	Micron	Designation	Price
	High Pressure Filter Assemblies Includes Visual Clogging Indicator with Manual Reset Toploader, with bowl in two-part style	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	090	Bypass Valve	3µm	SF-090-G-03-B-T-G24-B-V-TL	2914.55
						5µm	SF-090-G-05-B-T-G24-B-V-TL	2900.60
						10µm	SF-090-G-10-B-T-G24-B-V-TL	2886.70
						20µm	SF-090-G-20-B-T-G24-B-V-TL	2886.70
					Multi-function Valve	3µm	SF-090-G-03-B-T-G24-M-V-TL	3054.75
						5µm	SF-090-G-05-B-T-G24-M-V-TL	3040.80
						10µm	SF-090-G-10-B-T-G24-M-V-TL	3026.90
						20µm	SF-090-G-20-B-T-G24-M-V-TL	3026.90
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	090	Non-bypass without Valve	3µm	SF-090-H-03-B-T-G24-O-V-TL	3026.75
						5µm	SF-090-H-05-B-T-G24-O-V-TL	2998.90
						10µm	SF-090-H-10-B-T-G24-O-V-TL	2984.90
						20µm	SF-090-H-20-B-T-G24-O-V-TL	2984.90
					Bypass Valve	3µm	SF-090-H-03-B-T-G24-B-V-TL	3222.75
						5µm	SF-090-H-05-B-T-G24-B-V-TL	3194.90
						10µm	SF-090-H-10-B-T-G24-B-V-TL	3180.90
						20µm	SF-090-H-20-B-T-G24-B-V-TL	3180.90
					Reverse Flow Valve	3µm	SF-090-H-03-B-T-G24-R-V-TL	3279.25
						5µm	SF-090-H-05-B-T-G24-R-V-TL	3251.40
						10µm	SF-090-H-10-B-T-G24-R-V-TL	3237.40
						20µm	SF-090-H-20-B-T-G24-R-V-TL	3237.40
					Multi-function Valve	3µm	SF-090-H-03-B-T-G24-M-V-TL	3362.95
						5µm	SF-090-H-05-B-T-G24-M-V-TL	3335.10
						10µm	SF-090-H-10-B-T-G24-M-V-TL	3321.10
						20µm	SF-090-H-20-B-T-G24-M-V-TL	3321.10
	High Pressure Filter Assemblies Includes Visual Clogging Indicator with Manual Reset Toploader, with bowl in two-part style	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	125	Bypass Valve	3µm	SF-125-G-03-B-T-G20-B-V-TL	2494.20
						5µm	SF-125-G-05-B-T-G20-B-V-TL	2494.20
						10µm	SF-125-G-10-B-T-G20-B-V-TL	2466.30
						20µm	SF-125-G-20-B-T-G20-B-V-TL	2466.30
					Multi-function Valve	3µm	SF-125-G-03-B-T-G20-M-V-TL	2676.85
						5µm	SF-125-G-05-B-T-G20-M-V-TL	2676.85
						10µm	SF-125-G-10-B-T-G20-M-V-TL	2648.95
						20µm	SF-125-G-20-B-T-G20-M-V-TL	2648.95
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	125	Non-bypass without Valve	3µm	SF-125-H-03-B-T-G20-O-V-TL	2319.45
						5µm	SF-125-H-05-B-T-G20-O-V-TL	2781.60
						10µm	SF-125-H-10-B-T-G20-O-V-TL	2739.85
						20µm	SF-125-H-20-B-T-G20-O-V-TL	2739.85
					Bypass Valve	3µm	SF-125-H-03-B-T-G20-B-V-TL	2886.70
						5µm	SF-125-H-05-B-T-G20-B-V-TL	2928.45
						10µm	SF-125-H-10-B-T-G20-B-V-TL	2886.70
						20µm	SF-125-H-20-B-T-G20-B-V-TL	2886.70
					Reverse Flow Valve	3µm	SF-125-H-03-B-T-G20-R-V-TL	2985.00
						5µm	SF-125-H-05-B-T-G20-R-V-TL	3026.75
						10µm	SF-125-H-10-B-T-G20-R-V-TL	2985.00
						20µm	SF-125-H-20-B-T-G20-R-V-TL	2985.00
					Multi-function Valve	3µm	SF-125-H-03-B-T-G20-M-V-TL	3069.35
						5µm	SF-125-H-05-B-T-G20-M-V-TL	3111.10
						10µm	SF-125-H-10-B-T-G20-M-V-TL	3069.35
						20µm	SF-125-H-20-B-T-G20-M-V-TL	3069.35

For replacement filter elements refer to page N69

High Pressure Filter Assemblies ▪ Type SF
Includes Visual Clogging Indicator with Manual Reset - Toploader (with bowl in two-part style)

Filter Element	Description	Filter Material	Pressure Setting	Nominal Size	Valve	Micron	Designation	Price
	High Pressure Filter Assemblies Includes Visual Clogging Indicator with Manual Reset Toploader, with bowl in two-part style	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	160	Bypass Valve	3µm	SF-160-G-03-B-T-G24-B-V-TL	3504.25
						5µm	SF-160-G-05-B-T-G24-B-V-TL	3504.25
						10µm	SF-160-G-10-B-T-G24-B-V-TL	3461.85
						20µm	SF-160-G-20-B-T-G24-B-V-TL	3461.85
					Multi-function Valve	3µm	SF-160-G-03-B-T-G24-M-V-TL	3644.45
						5µm	SF-160-G-05-B-T-G24-M-V-TL	3644.45
						10µm	SF-160-G-10-B-T-G24-M-V-TL	3602.05
						20µm	SF-160-G-20-B-T-G24-M-V-TL	3602.05
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	160	Non-bypass without Valve	3µm	SF-160-H-03-B-T-G24-O-V-TL	3910.65
						5µm	SF-160-H-05-B-T-G24-O-V-TL	3896.65
						10µm	SF-160-H-10-B-T-G24-O-V-TL	3798.35
						20µm	SF-160-H-20-B-T-G24-O-V-TL	3798.35
					Bypass Valve	3µm	SF-160-H-03-B-T-G24-B-V-TL	4106.65
						5µm	SF-160-H-05-B-T-G24-B-V-TL	4092.65
						10µm	SF-160-H-10-B-T-G24-B-V-TL	3994.35
						20µm	SF-160-H-20-B-T-G24-B-V-TL	3994.35
					Reverse Flow Valve	3µm	SF-160-H-03-B-T-G24-R-V-TL	4163.15
						5µm	SF-160-H-05-B-T-G24-R-V-TL	4149.15
						10µm	SF-160-H-10-B-T-G24-R-V-TL	4050.85
						20µm	SF-160-H-20-B-T-G24-R-V-TL	4050.85
					Multi-function Valve	3µm	SF-160-H-03-B-T-G24-M-V-TL	4246.85
						5µm	SF-160-H-05-B-T-G24-M-V-TL	4232.85
						10µm	SF-160-H-10-B-T-G24-M-V-TL	4134.55
						20µm	SF-160-H-20-B-T-G24-M-V-TL	4134.55
	High Pressure Filter Assemblies Includes Visual Clogging Indicator with Manual Reset Toploader, with bowl in two-part style	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	250	Bypass Valve	3µm	SF-250-G-03-B-T-G24-B-V-TL	4175.10
						5µm	SF-250-G-05-B-T-G24-B-V-TL	4133.25
						10µm	SF-250-G-10-B-T-G24-B-V-TL	3951.25
						20µm	SF-250-G-20-B-T-G24-B-V-TL	3951.25
					Multi-function Valve	3µm	SF-250-G-03-B-T-G24-M-V-TL	4315.30
						5µm	SF-250-G-05-B-T-G24-M-V-TL	4273.45
						10µm	SF-250-G-10-B-T-G24-M-V-TL	4091.45
						20µm	SF-250-G-20-B-T-G24-M-V-TL	4091.45
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	250	Non-bypass without Valve	3µm	SF-250-H-03-B-T-G24-O-V-TL	5519.90
						5µm	SF-250-H-05-B-T-G24-O-V-TL	5181.15
						10µm	SF-250-H-10-B-T-G24-O-V-TL	5041.65
						20µm	SF-250-H-20-B-T-G24-O-V-TL	5041.65
					Bypass Valve	3µm	SF-250-H-03-B-T-G24-B-V-TL	5715.90
						5µm	SF-250-H-05-B-T-G24-B-V-TL	5377.15
						10µm	SF-250-H-10-B-T-G24-B-V-TL	5237.65
						20µm	SF-250-H-20-B-T-G24-B-V-TL	5237.65
					Reverse Flow Valve	3µm	SF-250-H-03-B-T-G24-R-V-TL	5772.40
						5µm	SF-250-H-05-B-T-G24-R-V-TL	5433.65
						10µm	SF-250-H-10-B-T-G24-R-V-TL	5294.15
						20µm	SF-250-H-20-B-T-G24-R-V-TL	5294.15
					Multi-function Valve	3µm	SF-250-H-03-B-T-G24-M-V-TL	5856.10
						5µm	SF-250-H-05-B-T-G24-M-V-TL	5517.35
						10µm	SF-250-H-10-B-T-G24-M-V-TL	5377.85
						20µm	SF-250-H-20-B-T-G24-M-V-TL	5377.85

For replacement filter elements refer to page N69

High Pressure Filter Assemblies ▪ Type SF
Includes Visual Clogging Indicator with Manual Reset - Toploader (with bowl in two-part style)

Filter Element	Description	Filter Material	Pressure Setting	Nominal Size	Valve	Micron	Designation	Price
	High Pressure Filter Assemblies Includes Visual Clogging Indicator with Manual Reset Toploader, with bowl in two-part style	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	300	Bypass Valve	3µm	SF-300-G-03-B-T-G24-B-V-TL	4653.25
						5µm	SF-300-G-05-B-T-G24-B-V-TL	4458.65
						10µm	SF-300-G-10-B-T-G24-B-V-TL	4416.75
						20µm	SF-300-G-20-B-T-G24-B-V-TL	4416.75
					Multi-function Valve	3µm	SF-300-G-03-B-T-G24-M-V-TL	4793.45
						5µm	SF-300-G-05-B-T-G24-M-V-TL	4598.85
						10µm	SF-300-G-10-B-T-G24-M-V-TL	4556.95
						20µm	SF-300-G-20-B-T-G24-M-V-TL	4556.95
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	300	Non-bypass without Valve	3µm	SF-300-H-03-B-T-G24-O-V-TL	5971.45
						5µm	SF-300-H-05-B-T-G24-O-V-TL	5832.00
						10µm	SF-300-H-10-B-T-G24-O-V-TL	5679.25
						20µm	SF-300-H-20-B-T-G24-O-V-TL	5679.25
					Bypass Valve	3µm	SF-300-H-03-B-T-G24-B-V-TL	6167.45
						5µm	SF-300-H-05-B-T-G24-B-V-TL	6028.00
						10µm	SF-300-H-10-B-T-G24-B-V-TL	5875.25
						20µm	SF-300-H-20-B-T-G24-B-V-TL	5875.25
					Reverse Flow Valve	3µm	SF-300-H-03-B-T-G24-R-V-TL	6223.95
						5µm	SF-300-H-05-B-T-G24-R-V-TL	6084.50
						10µm	SF-300-H-10-B-T-G24-R-V-TL	5931.75
						20µm	SF-300-H-20-B-T-G24-R-V-TL	5931.75
					Multi-function Valve	3µm	SF-300-H-03-B-T-G24-M-V-TL	6307.65
						5µm	SF-300-H-05-B-T-G24-M-V-TL	6168.20
						10µm	SF-300-H-10-B-T-G24-M-V-TL	6015.45
						20µm	SF-300-H-20-B-T-G24-M-V-TL	6015.45

For replacement filter elements refer to page N69

High Pressure Filter Assemblies ▪ Type SF
Includes Electrical Clogging Indicator - Toploader (with bowl in two-part style)

Filter Element	Description	Filter Material	Pressure Setting	Nominal Size	Valve	Micron	Designation	Price
	High Pressure Filter Assemblies Includes Electrical Clogging Indicator (supplied loose ie. not fitted) Toploader, with bowl in two-part style	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	014	Bypass Valve	3µm	SF-014-G-03-B-T-G12-B-E-TL	1473.75
						5µm	SF-014-G-05-B-T-G12-B-E-TL	1473.75
						10µm	SF-014-G-10-B-T-G12-B-E-TL	1473.75
						20µm	SF-014-G-20-B-T-G12-B-E-TL	1473.75
					Multi-function Valve	3µm	SF-014-G-03-B-T-G12-M-E-TL	1600.00
						5µm	SF-014-G-05-B-T-G12-M-E-TL	1600.00
						10µm	SF-014-G-10-B-T-G12-M-E-TL	1600.00
						20µm	SF-014-G-20-B-T-G12-M-E-TL	1600.00
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	014	Non-bypass without Valve	3µm	SF-014-H-03-B-T-G12-O-E-TL	1472.05
						5µm	SF-014-H-05-B-T-G12-O-E-TL	1458.10
						10µm	SF-014-H-10-B-T-G12-O-E-TL	1444.15
						20µm	SF-014-H-20-B-T-G12-O-E-TL	1444.15
					Bypass Valve	3µm	SF-014-H-03-B-T-G12-B-E-TL	1557.50
						5µm	SF-014-H-05-B-T-G12-B-E-TL	1543.55
						10µm	SF-014-H-10-B-T-G12-B-E-TL	1529.60
						20µm	SF-014-H-20-B-T-G12-B-E-TL	1529.60
					Reverse Flow Valve	3µm	SF-014-H-03-B-T-G12-R-E-TL	1627.25
						5µm	SF-014-H-05-B-T-G12-R-E-TL	1613.30
						10µm	SF-014-H-10-B-T-G12-R-E-TL	1599.35
						20µm	SF-014-H-20-B-T-G12-R-E-TL	1599.35
					Multi-function Valve	3µm	SF-014-H-03-B-T-G12-M-E-TL	1683.75
						5µm	SF-014-H-05-B-T-G12-M-E-TL	1669.80
						10µm	SF-014-H-10-B-T-G12-M-E-TL	1655.85
						20µm	SF-014-H-20-B-T-G12-M-E-TL	1655.85
	High Pressure Filter Assemblies Includes Electrical Clogging Indicator (supplied loose ie. not fitted) Toploader, with bowl in two-part style	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	030	Bypass Valve	3µm	SF-030-G-03-B-T-G12-B-E-TL	1557.50
						5µm	SF-030-G-05-B-T-G12-B-E-TL	1543.60
						10µm	SF-030-G-10-B-T-G12-B-E-TL	1529.60
						20µm	SF-030-G-20-B-T-G12-B-E-TL	1529.60
					Multi-function Valve	3µm	SF-030-G-03-B-T-G12-M-E-TL	1683.75
						5µm	SF-030-G-05-B-T-G12-M-E-TL	1669.85
						10µm	SF-030-G-10-B-T-G12-M-E-TL	1655.85
						20µm	SF-030-G-20-B-T-G12-M-E-TL	1655.85
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	030	Non-bypass without Valve	3µm	SF-030-H-03-B-T-G12-O-E-TL	1584.35
						5µm	SF-030-H-05-B-T-G12-O-E-TL	1570.40
						10µm	SF-030-H-10-B-T-G12-O-E-TL	1556.45
						20µm	SF-030-H-20-B-T-G12-O-E-TL	1556.45
					Bypass Valve	3µm	SF-030-H-03-B-T-G12-B-E-TL	1669.80
						5µm	SF-030-H-05-B-T-G12-B-E-TL	1655.85
						10µm	SF-030-H-10-B-T-G12-B-E-TL	1641.90
						20µm	SF-030-H-20-B-T-G12-B-E-TL	1641.90
					Reverse Flow Valve	3µm	SF-030-H-03-B-T-G12-R-E-TL	1739.55
						5µm	SF-030-H-05-B-T-G12-R-E-TL	1725.60
						10µm	SF-030-H-10-B-T-G12-R-E-TL	1711.65
						20µm	SF-030-H-20-B-T-G12-R-E-TL	1711.65
					Multi-function Valve	3µm	SF-030-H-03-B-T-G12-M-E-TL	1796.05
						5µm	SF-030-H-05-B-T-G12-M-E-TL	1782.10
						10µm	SF-030-H-10-B-T-G12-M-E-TL	1768.15
						20µm	SF-030-H-20-B-T-G12-M-E-TL	1768.15

For replacement filter elements refer to page N69

High Pressure Filter Assemblies ▪ Type SF
Includes Electrical Clogging Indicator - Toploader (with bowl in two-part style)

Filter Element	Description	Filter Material	Pressure Setting	Nominal Size	Valve	Micron	Designation	Price
	High Pressure Filter Assemblies Includes Electrical Clogging Indicator (supplied loose ie. not fitted) Toploader, with bowl in two-part style	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	045	Bypass Valve	3µm	SF-045-G-03-B-T-G20-B-E-TL	2045.85
						5µm	SF-045-G-05-B-T-G20-B-E-TL	2031.90
						10µm	SF-045-G-10-B-T-G20-B-E-TL	2031.90
						20µm	SF-045-G-20-B-T-G20-B-E-TL	2031.90
					Multi-function Valve	3µm	SF-045-G-03-B-T-G20-M-E-TL	2228.50
						5µm	SF-045-G-05-B-T-G20-M-E-TL	2214.55
						10µm	SF-045-G-10-B-T-G20-M-E-TL	2214.55
						20µm	SF-045-G-20-B-T-G20-M-E-TL	2214.55
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	045	Non-bypass without Valve	3µm	SF-045-H-03-B-T-G20-O-E-TL	2053.10
						5µm	SF-045-H-05-B-T-G20-O-E-TL	2025.20
						10µm	SF-045-H-10-B-T-G20-O-E-TL	2011.25
						20µm	SF-045-H-20-B-T-G20-O-E-TL	2011.25
					Bypass Valve	3µm	SF-045-H-03-B-T-G20-B-E-TL	2199.95
						5µm	SF-045-H-05-B-T-G20-B-E-TL	2172.05
						10µm	SF-045-H-10-B-T-G20-B-E-TL	2158.10
						20µm	SF-045-H-20-B-T-G20-B-E-TL	2158.10
					Reverse Flow Valve	3µm	SF-045-H-03-B-T-G20-R-E-TL	2298.25
						5µm	SF-045-H-05-B-T-G20-R-E-TL	2270.35
						10µm	SF-045-H-10-B-T-G20-R-E-TL	2256.40
						20µm	SF-045-H-20-B-T-G20-R-E-TL	2256.40
					Multi-function Valve	3µm	SF-045-H-03-B-T-G20-M-E-TL	2382.60
						5µm	SF-045-H-05-B-T-G20-M-E-TL	2354.70
						10µm	SF-045-H-10-B-T-G20-M-E-TL	2340.75
						20µm	SF-045-H-20-B-T-G20-M-E-TL	2340.75
	High Pressure Filter Assemblies Includes Electrical Clogging Indicator (supplied loose ie. not fitted) Toploader, with bowl in two-part style	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	070	Bypass Valve	3µm	SF-070-G-03-B-T-G20-B-E-TL	2172.10
						5µm	SF-070-G-05-B-T-G20-B-E-TL	2158.20
						10µm	SF-070-G-10-B-T-G20-B-E-TL	2143.55
						20µm	SF-070-G-20-B-T-G20-B-E-TL	2143.55
					Multi-function Valve	3µm	SF-070-G-03-B-T-G20-M-E-TL	2354.75
						5µm	SF-070-G-05-B-T-G20-M-E-TL	2340.85
						10µm	SF-070-G-10-B-T-G20-M-E-TL	2326.20
						20µm	SF-070-G-20-B-T-G20-M-E-TL	2326.20
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	070	Non-bypass without Valve	3µm	SF-070-H-03-B-T-G20-O-E-TL	2221.25
						5µm	SF-070-H-05-B-T-G20-O-E-TL	2207.25
						10µm	SF-070-H-10-B-T-G20-O-E-TL	2193.30
						20µm	SF-070-H-20-B-T-G20-O-E-TL	2193.30
					Bypass Valve	3µm	SF-070-H-03-B-T-G20-B-E-TL	2368.10
						5µm	SF-070-H-05-B-T-G20-B-E-TL	2354.10
						10µm	SF-070-H-10-B-T-G20-B-E-TL	2340.15
						20µm	SF-070-H-20-B-T-G20-B-E-TL	2340.15
					Reverse Flow Valve	3µm	SF-070-H-03-B-T-G20-R-E-TL	2466.40
						5µm	SF-070-H-05-B-T-G20-R-E-TL	2452.40
						10µm	SF-070-H-10-B-T-G20-R-E-TL	2438.45
						20µm	SF-070-H-20-B-T-G20-R-E-TL	2438.45
					Multi-function Valve	3µm	SF-070-H-03-B-T-G20-M-E-TL	2550.75
						5µm	SF-070-H-05-B-T-G20-M-E-TL	2536.75
						10µm	SF-070-H-10-B-T-G20-M-E-TL	2522.80
						20µm	SF-070-H-20-B-T-G20-M-E-TL	2522.80

For replacement filter elements refer to page N69

High Pressure Filter Assemblies ▪ Type SF
Includes Electrical Clogging Indicator - Toploader (with bowl in two-part style)

Filter Element	Description	Filter Material	Pressure Setting	Nominal Size	Valve	Micron	Designation	Price
	High Pressure Filter Assemblies Includes Electrical Clogging Indicator (supplied loose ie. not fitted) Toploader, with bowl in two-part style	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	090	Bypass Valve	3µm	SF-090-G-03-B-T-G24-B-E-TL	3068.65
						5µm	SF-090-G-05-B-T-G24-B-E-TL	3054.70
						10µm	SF-090-G-10-B-T-G24-B-E-TL	3040.80
						20µm	SF-090-G-20-B-T-G24-B-E-TL	3040.80
					Multi-function Valve	3µm	SF-090-G-03-B-T-G24-M-E-TL	3208.85
						5µm	SF-090-G-05-B-T-G24-M-E-TL	3194.90
						10µm	SF-090-G-10-B-T-G24-M-E-TL	3181.00
						20µm	SF-090-G-20-B-T-G24-M-E-TL	3181.00
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	090	Non-bypass without Valve	3µm	SF-090-H-03-B-T-G24-O-E-TL	3180.85
						5µm	SF-090-H-05-B-T-G24-O-E-TL	3153.00
						10µm	SF-090-H-10-B-T-G24-O-E-TL	3139.00
						20µm	SF-090-H-20-B-T-G24-O-E-TL	3139.00
					Bypass Valve	3µm	SF-090-H-03-B-T-G24-B-E-TL	3376.85
						5µm	SF-090-H-05-B-T-G24-B-E-TL	3349.00
						10µm	SF-090-H-10-B-T-G24-B-E-TL	3335.00
						20µm	SF-090-H-20-B-T-G24-B-E-TL	3335.00
					Reverse Flow Valve	3µm	SF-090-H-03-B-T-G24-R-E-TL	3433.35
						5µm	SF-090-H-05-B-T-G24-R-E-TL	3405.50
						10µm	SF-090-H-10-B-T-G24-R-E-TL	3391.50
						20µm	SF-090-H-20-B-T-G24-R-E-TL	3391.50
					Multi-function Valve	3µm	SF-090-H-03-B-T-G24-M-E-TL	3517.05
						5µm	SF-090-H-05-B-T-G24-M-E-TL	3489.20
						10µm	SF-090-H-10-B-T-G24-M-E-TL	3475.20
						20µm	SF-090-H-20-B-T-G24-M-E-TL	3475.20
	High Pressure Filter Assemblies Includes Electrical Clogging Indicator (supplied loose ie. not fitted) Toploader, with bowl in two-part style	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	125	Bypass Valve	3µm	SF-125-G-03-B-T-G20-B-E-TL	2648.30
						5µm	SF-125-G-05-B-T-G20-B-E-TL	2648.30
						10µm	SF-125-G-10-B-T-G20-B-E-TL	2620.40
						20µm	SF-125-G-20-B-T-G20-B-E-TL	2620.40
					Multi-function Valve	3µm	SF-125-G-03-B-T-G20-M-E-TL	2830.95
						5µm	SF-125-G-05-B-T-G20-M-E-TL	2830.95
						10µm	SF-125-G-10-B-T-G20-M-E-TL	2803.05
						20µm	SF-125-G-20-B-T-G20-M-E-TL	2803.05
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	125	Non-bypass without Valve	3µm	SF-125-H-03-B-T-G20-O-E-TL	2473.55
						5µm	SF-125-H-05-B-T-G20-O-E-TL	2935.70
						10µm	SF-125-H-10-B-T-G20-O-E-TL	2893.95
						20µm	SF-125-H-20-B-T-G20-O-E-TL	2893.95
					Bypass Valve	3µm	SF-125-H-03-B-T-G20-B-E-TL	3040.80
						5µm	SF-125-H-05-B-T-G20-B-E-TL	3082.55
						10µm	SF-125-H-10-B-T-G20-B-E-TL	3040.80
						20µm	SF-125-H-20-B-T-G20-B-E-TL	3040.80
					Reverse Flow Valve	3µm	SF-125-H-03-B-T-G20-R-E-TL	3139.10
						5µm	SF-125-H-05-B-T-G20-R-E-TL	3180.85
						10µm	SF-125-H-10-B-T-G20-R-E-TL	3139.10
						20µm	SF-125-H-20-B-T-G20-R-E-TL	3139.10
					Multi-function Valve	3µm	SF-125-H-03-B-T-G20-M-E-TL	3223.45
						5µm	SF-125-H-05-B-T-G20-M-E-TL	3265.20
						10µm	SF-125-H-10-B-T-G20-M-E-TL	3223.45
						20µm	SF-125-H-20-B-T-G20-M-E-TL	3223.45

For replacement filter elements refer to page N69

High Pressure Filter Assemblies ▪ Type SF
Includes Electrical Clogging Indicator - Toploader (with bowl in two-part style)

Filter Element	Description	Filter Material	Pressure Setting	Nominal Size	Valve	Micron	Designation	Price
	High Pressure Filter Assemblies Includes Electrical Clogging Indicator (supplied loose ie. not fitted) Toploader, with bowl in two-part style	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	160	Bypass Valve	3µm	SF-160-G-03-B-T-G24-B-E-TL	3658.35
						5µm	SF-160-G-05-B-T-G24-B-E-TL	3658.35
						10µm	SF-160-G-10-B-T-G24-B-E-TL	3615.95
						20µm	SF-160-G-20-B-T-G24-B-E-TL	3615.95
					Multi-function Valve	3µm	SF-160-G-03-B-T-G24-M-E-TL	3798.55
						5µm	SF-160-G-05-B-T-G24-M-E-TL	3798.55
						10µm	SF-160-G-10-B-T-G24-M-E-TL	3756.15
						20µm	SF-160-G-20-B-T-G24-M-E-TL	3756.15
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	160	Non-bypass without Valve	3µm	SF-160-H-03-B-T-G24-O-E-TL	4064.75
						5µm	SF-160-H-05-B-T-G24-O-E-TL	4050.75
						10µm	SF-160-H-10-B-T-G24-O-E-TL	3952.45
						20µm	SF-160-H-20-B-T-G24-O-E-TL	3952.45
					Bypass Valve	3µm	SF-160-H-03-B-T-G24-B-E-TL	4260.75
						5µm	SF-160-H-05-B-T-G24-B-E-TL	4246.75
						10µm	SF-160-H-10-B-T-G24-B-E-TL	4148.45
						20µm	SF-160-H-20-B-T-G24-B-E-TL	4148.45
					Reverse Flow Valve	3µm	SF-160-H-03-B-T-G24-R-E-TL	4317.25
						5µm	SF-160-H-05-B-T-G24-R-E-TL	4303.25
						10µm	SF-160-H-10-B-T-G24-R-E-TL	4204.95
						20µm	SF-160-H-20-B-T-G24-R-E-TL	4204.95
					Multi-function Valve	3µm	SF-160-H-03-B-T-G24-M-E-TL	4400.95
						5µm	SF-160-H-05-B-T-G24-M-E-TL	4386.95
						10µm	SF-160-H-10-B-T-G24-M-E-TL	4288.65
						20µm	SF-160-H-20-B-T-G24-M-E-TL	4288.65
	High Pressure Filter Assemblies Includes Electrical Clogging Indicator (supplied loose ie. not fitted) Toploader, with bowl in two-part style	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	250	Bypass Valve	3µm	SF-250-G-03-B-T-G24-B-E-TL	4329.20
						5µm	SF-250-G-05-B-T-G24-B-E-TL	4287.35
						10µm	SF-250-G-10-B-T-G24-B-E-TL	4105.35
						20µm	SF-250-G-20-B-T-G24-B-E-TL	4105.35
					Multi-function Valve	3µm	SF-250-G-03-B-T-G24-M-E-TL	4469.40
						5µm	SF-250-G-05-B-T-G24-M-E-TL	4427.55
						10µm	SF-250-G-10-B-T-G24-M-E-TL	4245.55
						20µm	SF-250-G-20-B-T-G24-M-E-TL	4245.55
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	250	Non-bypass without Valve	3µm	SF-250-H-03-B-T-G24-O-E-TL	5674.00
						5µm	SF-250-H-05-B-T-G24-O-E-TL	5335.25
						10µm	SF-250-H-10-B-T-G24-O-E-TL	5195.75
						20µm	SF-250-H-20-B-T-G24-O-E-TL	5195.75
					Bypass Valve	3µm	SF-250-H-03-B-T-G24-B-E-TL	5870.00
						5µm	SF-250-H-05-B-T-G24-B-E-TL	5531.25
						10µm	SF-250-H-10-B-T-G24-B-E-TL	5391.75
						20µm	SF-250-H-20-B-T-G24-B-E-TL	5391.75
					Reverse Flow Valve	3µm	SF-250-H-03-B-T-G24-R-E-TL	5926.50
						5µm	SF-250-H-05-B-T-G24-R-E-TL	5587.75
						10µm	SF-250-H-10-B-T-G24-R-E-TL	5448.25
						20µm	SF-250-H-20-B-T-G24-R-E-TL	5448.25
					Multi-function Valve	3µm	SF-250-H-03-B-T-G24-M-E-TL	6010.20
						5µm	SF-250-H-05-B-T-G24-M-E-TL	5671.45
						10µm	SF-250-H-10-B-T-G24-M-E-TL	5531.95
						20µm	SF-250-H-20-B-T-G24-M-E-TL	5531.95

For replacement filter elements refer to page N69

High Pressure Filter Assemblies ▪ Type SF
Includes Electrical Clogging Indicator - Toploader (with bowl in two-part style)

Filter Element	Description	Filter Material	Pressure Setting	Nominal Size	Valve	Micron	Designation	Price
	High Pressure Filter Assemblies Includes Electrical Clogging Indicator (supplied loose ie. not fitted) Toploader, with bowl in two-part style	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	300	Bypass Valve	3µm	SF-300-G-03-B-T-G24-B-E-TL	4807.35
						5µm	SF-300-G-05-B-T-G24-B-E-TL	4612.75
						10µm	SF-300-G-10-B-T-G24-B-E-TL	4570.85
						20µm	SF-300-G-20-B-T-G24-B-E-TL	4570.85
					Multi-function Valve	3µm	SF-300-G-03-B-T-G24-M-E-TL	4947.55
						5µm	SF-300-G-05-B-T-G24-M-E-TL	4752.95
						10µm	SF-300-G-10-B-T-G24-M-E-TL	4711.05
						20µm	SF-300-G-20-B-T-G24-M-E-TL	4711.05
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	300	Non-bypass without Valve	3µm	SF-300-H-03-B-T-G24-O-E-TL	6125.55
						5µm	SF-300-H-05-B-T-G24-O-E-TL	5986.10
						10µm	SF-300-H-10-B-T-G24-O-E-TL	5833.35
						20µm	SF-300-H-20-B-T-G24-O-E-TL	5833.35
					Bypass Valve	3µm	SF-300-H-03-B-T-G24-B-E-TL	6321.55
						5µm	SF-300-H-05-B-T-G24-B-E-TL	6182.10
						10µm	SF-300-H-10-B-T-G24-B-E-TL	6029.35
						20µm	SF-300-H-20-B-T-G24-B-E-TL	6029.35
					Reverse Flow Valve	3µm	SF-300-H-03-B-T-G24-R-E-TL	6378.05
						5µm	SF-300-H-05-B-T-G24-R-E-TL	6238.60
						10µm	SF-300-H-10-B-T-G24-R-E-TL	6085.85
						20µm	SF-300-H-20-B-T-G24-R-E-TL	6085.85
					Multi-function Valve	3µm	SF-300-H-03-B-T-G24-M-E-TL	6461.75
						5µm	SF-300-H-05-B-T-G24-M-E-TL	6322.30
						10µm	SF-300-H-10-B-T-G24-M-E-TL	6169.55
						20µm	SF-300-H-20-B-T-G24-M-E-TL	6169.55

For replacement filter elements refer to page N69

Filter Elements

Filter Elements
Low collapse pressure - Stainless Wire Mesh

Item No.	Designation	Micron	Price
1020006065	SE-014-S-25-B/3	25µm	182.10
1020006071	SE-030-S-25-B/3	25µm	252.55
1020002405	SE-045-S-25-B/3	25µm	364.80
1020006092	SE-090-S-25-B/3	25µm	504.90
1020006110	SE-160-S-25-B/3	25µm	1065.40
1020010141	SE-250-S-25-B/3	25µm	2105.40
1020010127	SE-300-S-25-B/3	25µm	2689.90
1020007934	SE-014-S-50-B/3	50µm	182.10
1020007935	SE-030-S-50-B/3	50µm	252.55
1020007938	SE-045-S-50-B/3	50µm	364.80
1020007942	SE-090-S-50-B/3	50µm	981.00
1020007946	SE-160-S-50-B/3	50µm	1107.25
1020010142	SE-250-S-50-B/3	50µm	2271.50
1020010128	SE-300-S-50-B/3	50µm	2636.75
1020006069	SE-014-S-100-B/3	100µm	182.10
1020006075	SE-030-S-100-B/3	100µm	182.10
1020006084	SE-045-S-100-B/3	100µm	364.80
1020006096	SE-090-S-100-B/3	100µm	546.75
1020006114	SE-160-S-100-B/3	100µm	756.65
1020010143	SE-250-S-100-B/3	100µm	2045.65
1020010129	SE-300-S-100-B/3	100µm	2351.15

Low collapse pressure max. Δp* collapse 30 bar (435 PSI)
*Collapse / burst resistance as per ISO 2941

Filter Elements
High collapse pressure - Stainless Fibre

Item No.	Designation	Micron	Price
1020002254	SE-014-A-03-B/2	03µm	462.45
1020002309	SE-030-A-03-B/2	03µm	799.10
1020002417	SE-070-A-03-B/2	03µm	1401.50
1020001271	SE-090-A-03-B/2	03µm	1627.25
1020001311	SE-160-A-03-B/2	03µm	3533.35
1020002255	SE-014-A-05-B/2	05µm	350.75
1020002373	SE-045-A-05-B/2	05µm	925.25
1020001272	SE-090-A-05-B/2	05µm	1474.50
1020001312	SE-160-A-05-B/2	05µm	3320.80
1020002256	SE-014-A-10-B/2	10µm	350.75
1020002311	SE-030-A-10-B/2	10µm	546.75
1020002374	SE-045-A-10-B/2	10µm	504.90
1020002419	SE-070-A-10-B/2	10µm	827.05
1020001273	SE-090-A-10-B/2	10µm	1036.90
1020001313	SE-160-A-10-B/2	10µm	2271.50
1020002257	SE-014-A-20B/2	20µm	350.75
1020002312	SE-030-A-20-B/2	20µm	546.75
1020002375	SE-045-A-20-B/2	20µm	896.70
1020002420	SE-070-A-20-B/2	20µm	827.05
1020001274	SE-090-A-20-B/2	20µm	1036.90

High collapse pressure max. Δp* collapse 210 bar (3045 PSI)
*Collapse / burst resistance as per ISO 2941

Filter Elements
Low collapse pressure - Inorganic Glass Fibre

Item No.	Designation	Micron	Price
1020023379	SE-014-G-03-B/4	03µm	112.30
1020023450	SE-030-G-03-B/4	03µm	154.20
1020023538	SE-045-G-03-B/4	03µm	182.10
1020023578	SE-070-G-03-B/4	03µm	224.60
1020023615	SE-090-G-03-B/4	03µm	308.30
1020023650	SE-125-G-03-B/4	03µm	448.50
1020023674	SE-130-G-03-B/4	03µm	588.65
1020023691	SE-160-G-03-B/4	03µm	631.05
1020023728	SE-250-G-03-B/4	03µm	1149.10
1020023737	SE-300-G-03-B/4	03µm	1428.05
1020023381	SE-014-G-05-B/4	05µm	112.30
1020023458	SE-030-G-05-B/4	05µm	140.30
1020023541	SE-045-G-05-B/4	05µm	168.15
1020023581	SE-070-G-05-B/4	05µm	210.70
1020023619	SE-090-G-05-B/4	05µm	294.35
1020023652	SE-125-G-05-B/4	05µm	448.50
1020023676	SE-130-G-05-B/4	05µm	546.75
1020023694	SE-160-G-05-B/4	05µm	631.05
1020023729	SE-250-G-05-B/4	05µm	1107.25
1020023738	SE-300-G-05-B/4	05µm	1233.45
1020022000	SE-014-G-10-B/4	10µm	112.30
1020023463	SE-030-G-10-B/4	10µm	126.30
1020023545	SE-045-G-10-B/4	10µm	168.15
1020023585	SE-070-G-10-B/4	10µm	196.05
1020023621	SE-090-G-10-B/4	10µm	280.45
1020023655	SE-125-G-10-B/4	10µm	420.60
1020023677	SE-130-G-10-B/4	10µm	532.80
1020023700	SE-160-G-10-B/4	10µm	588.65
1020023730	SE-250-G-10-B/4	10µm	925.25
1020023739	SE-300-G-10-B/4	10µm	1191.55
1020023392	SE-014-G-20-B/4	20µm	112.30
1020023474	SE-030-G-20-B/4	20µm	126.30
1020023550	SE-045-G-20-B/4	20µm	168.15
1020023591	SE-070-G-20-B/4	20µm	196.05
1020023628	SE-090-G-20-B/4	20µm	280.45
1020023657	SE-125-G-20-B/4	20µm	420.60
1020023679	SE-130-G-20-B/4	20µm	532.80
1020023704	SE-160-G-20-B/4	20µm	588.65
1020023731	SE-250-G-20-B/4	20µm	925.25
1020023740	SE-300-G-20-B/4	20µm	1191.55

Low collapse pressure max. Δp* collapse 25 bar (363 PSI)
*Collapse / burst resistance as per ISO 2941

Filter Elements
High collapse pressure - Inorganic Glass Fibre

Item No.	Designation	Micron	Price
1020023401	SE-014-H-03-B/4	03µm	196.05
1020023482	SE-030-H-03-B/4	03µm	266.50
1020023555	SE-045-H-03-B/4	03µm	336.20
1020023597	SE-070-H-03-B/4	03µm	420.60
1020023632	SE-090-H-03-B/4	03µm	616.50
1020023680	SE-130-H-03-B/4	03µm	953.20
1020023708	SE-160-H-03-B/4	03µm	1233.45
1020023732	SE-250-H-03-B/4	03µm	2689.90
1020023737	SE-300-G-03-B/4	03µm	1428.05
1020023409	SE-014-H-05-B/4	05µm	182.10
1020023488	SE-030-H-05-B/4	05µm	252.55
1020023559	SE-045-H-05-B/4	05µm	308.30
1020023602	SE-070-H-05-B/4	05µm	406.60
1020023636	SE-090-H-05-B/4	05µm	588.65
1020023665	SE-125-H-05-B/4	05µm	882.75
1020023713	SE-160-H-05-B/4	05µm	1219.45
1020023734	SE-250-H-05-B/4	05µm	2351.15
1020023742	SE-300-H-05-B/4	05µm	2802.80
1020023413	SE-014-H-10-B/4	10µm	168.15
1020023492	SE-030-H-10-B/4	10µm	238.60
1020023564	SE-045-H-10-B/4	10µm	294.35
1020023607	SE-070-H-10-B/4	10µm	392.65
1020023641	SE-090-H-10-B/4	10µm	574.65
1020023668	SE-125-H-10-B/4	10µm	841.00
1020023685	SE-130-H-10-B/4	10µm	882.75
1020023718	SE-160-H-10-B/4	10µm	1121.15
1020023735	SE-250-H-10-B/4	10µm	2211.65
1020023743	SE-300-H-10-B/4	10µm	2650.05
1020023419	SE-014-H-20-B/4	20µm	168.15
1020023501	SE-030-H-20-B/4	20µm	238.60
1020023573	SE-045-H-20-B/4	20µm	294.35
1020023611	SE-070-H-20-B/4	20µm	392.65
1020023647	SE-090-H-20-B/4	20µm	574.65
1020023671	SE-125-H-20-B/4	20µm	841.00
1020023689	SE-130-H-20-B/4	20µm	882.75
1020023724	SE-160-H-20-B/4	20µm	1121.15
1020023736	SE-250-H-20-B/4	20µm	2211.65
1020023744	SE-300-H-20-B/4	20µm	2650.05

High collapse pressure max. Δp* collapse 210 bar (3045 PSI)
*Collapse / burst resistance as per ISO 2941

High Pressure Filters ▪ Type SF-TM

Product Description

STAUFF SF-TM series High Pressure Filters are designed for manifold block mounting hydraulic applications, with a maximum operating pressure of 315 bar / 4560 PSI.
Used together with STAUFF SE series Filter Elements, a high efficiency of contaminant removal is assured. The high dirt-hold capacity of the elements ensures long service life and, as a result, reduced maintenance costs.

Technical Data

Construction
- Designed for manifold mounting, with mounting holes and fluid ports on top of the head.

Materials
- Filter head: SF-TM-014 ... 070 Free Cutting Steel
  SF-TM-090 ... 300 Spheroidal Graphite Cast Iron
- Filter bowl: Cold Drawn Steel
- O-Rings: NBR (Buna-N®)
  FKM/FPM (Viton®)
  EPDM (Ethylene-Propylene-Diene-Monomer-Rubber)
- Support ring: PTFE (Polytetrafluoroethylene)

Operating Pressure
- Max. 315 bar / 4560 PSI

Burst Pressure
- Min. 945 bar / 13705 PSI

Temperature Range
- -10 °C ... +100 °C / +14 °F ... +212 °F

Filter Elements
- Specifications refer to Catalogue 9 - STAUFF Filtration Technology

Media Compatibility
- Mineral oils
  Other fluids on request

Options and Accessories

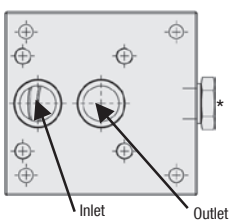
Valves
- Bypass valve: Allows unfiltered oil to bypass the contaminated element once the opening pressure has been reached, a differential pressure of $6^{+0.5}$ bar / $87^{+7.25}$ PSI Δp is the standard setting. Other settings available on request.
- Reverse flow valve: Allows reverse flow through the filter head without back flushing the element.
- Non-return valve: Prevents draining of the delivery line during element change.
- Multi-function valve: Opening pressure $6^{+0.5}$ bar / $87^{+7.25}$ PSI
  Bypass, reverse flow capability and non-return valve combined in one valve.

Clogging Indicators
- Standard actuating pressure: $5_{-0.5}$ bar / $72.5_{-7.25}$ PSI Δp
  Other actuating pressure settings are available on request.
- Available indicators: Visual
  Electrical
  Visual-electrical (24 V DC, 110 V AC, 230 V AC versions)
  Double Visual-electrical (24 V DC)

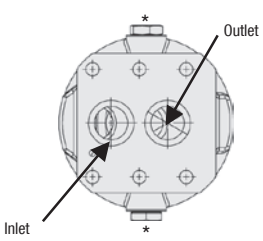
Port O-rings
- O-ring seal for manifold ports
  NBR material
  2 x O-rings supplied per filter assembly:
  (Seal-kit-SF-TM 014/030)
  (Seal-kit-SF-TM-045/070)
  (Seal-kit-SF-TM-090/160)

Mounting Layout

• SF-TM-014...125



• SF-TM-250...300-TL



* Ports for Clogging Indicator

High Pressure Filter Housings / Complete Filters ▪ Type SF-TM

SF-TM	-	014	-	G	-	10	-	B	-	B	-	B	-	P	T	230	-	TL	/	X
①		②		③		④		⑤		⑥		⑦		⑧	⑨	⑩		⑪		⑫

① Type

High Pressure Filter Top Mounted	**SF-TM**

② Group

Flow	Size
60 l/min / 14 US GPM	**014**
110 l/min / 30 US GPM	**030**
160 l/min / 45 US GPM	**045**
240 l/min / 70 US GPM	**070**
330 l/min / 90 US GPM	**090**
475 l/min / 125 US GPM	**125**
500 l/min / 132 US GPM	**130**
660 l/min / 160 US GPM	**160**
990 l/min / 250 US GPM	**250**
1135 l/min / 300 US GPM	**300**

Note: Exact flow will depend on the selected filter element. For technical data refer to Catalogue 9 - STAUFF Filtration Technology.

③ Filter Material

Material	max. Δp*collapse	Micron ratings available	Code
Without filter element	-	-	**0**
Inorg. glass fibre	25 bar / 363 PSI	3, 5, 10, 20	**G**
Inorg. glass fibre	210 bar / 3045 PSI		**H**
Stainless fibre	210 bar / 3045 PSI		**A**
Stainless mesh	30 bar / 435 PSI	25, 50, 100, 200	**S**

④ Micron Rating

Without filter element	**0**
3µm	**03**
5µm	**05**
10µm	**10**
20µm	**20**
25µm	**25**
50µm	**50**
100µm	**100**
200µm	**200**

Note: Other micron ratings are available on request.

⑤ Sealing Material

NBR (Buna-N®)	**B**
FKM/FPM (Viton®)	**V**
EPDM	**E**

Note: Other sealing materials are available on request.

⑥ Connection Size

Connection Size	Group 014 030	Code	Group 045 070 125	Code	Group 090 160 250 300	Code
Special Flange	Ø17.5mm / Ø.85in	**B**	Ø21.4mm / Ø.85in	**B**	Ø30mm / Ø1.18in	**B**

⑦ Valve

Non-bypass standard insert without valve	**0**
Bypass valve	**B**
Reverse flow valve	**R**
Non-return valve	**N**
Multi-function valve	**M**

⑧ Clogging Indicator

Without clogging indicator	**0**
Visual, with automatic reset	**A**
Visual, with manual reset	**V**
Electrical	**E**
Electrical, Deutsch plug	**ED**
Visual-electrical	**P**
Double Visual-electrical	**D024**

⑨ Thermostop

Without thermostop	**(None)**
With thermostop	**T**

⑩ Voltage (only for Code P)

24 V DC	**024**
110 V AC	**110**
230 V AC	**230**

⑪ Style Filter Bowl

With bowl in one-part style	**(None)**
Toploader, with bowl in two-part style	**TL**

Note: Group size SF-TM-125, SF-TM-250 and SF-TM-300 only available in TL-version. With drain plug available on request.
Group size SF-TM-130 only available in one-part style.

⑫ Design Code

STAUFF internal information	**X**

Filter Elements ▪ Type SE

SE	-	014	-	G	-	10	-	B	/	X
①		②		③		④		⑤		⑥

① Type

Filter Element Series	**SE**

② Group

According to filter housing

③ Filter Material

Material	max. Δp*collapse	Micron ratings available	Code
Inorganic glass fibre	25 bar / 363 PSI	3, 5, 10, 20	**G**
Inorganic glass fibre	210 bar / 3045 PSI		**H**
Stainless fibre	210 bar / 3045 PSI		**A**
Stainless mesh	30 bar / 435 PSI	25, 50, 100, 200	**S**

Note: * Collapse/burst resistance as per ISO 2941.

④ Micron Rating

3µm	**03**
5µm	**05**
10µm	**10**
20µm	**20**
25µm	**25**
50µm	**50**
100µm	**100**
200µm	**200**

Note: Other micron ratings are available on request.

⑤ Sealing Material

NBR (Buna-N®)	**B**
FKM/FPM (Viton®)	**V**
EPDM	**E**

Note: Other sealing materials are available on request

⑥ Design Code

STAUFF internal information	**X**

High Pressure Filter Assemblies Top Mounted ▪ Type SF-TM
Without Clogging Indicator

Filter Element	Description	Filter Material	Pressure Setting	Nominal Size	Valve	Micron	Designation	Price
	High Pressure Filter Assemblies Top Mounted Without Clogging Indicator (Fitted with plug)	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	014	Bypass Valve	3µm	SF-TM-014-G-03-B-B-B-0	930.85
						5µm	SF-TM-014-G-05-B-B-B-0	930.85
						10µm	SF-TM-014-G-10-B-B-B-0	930.85
						20µm	SF-TM-014-G-20-B-B-B-0	930.85
					Multi-function Valve	3µm	SF-TM-014-G-03-B-B-M-0	1057.10
						5µm	SF-TM-014-G-05-B-B-M-0	1057.10
						10µm	SF-TM-014-G-10-B-B-M-0	1057.10
						20µm	SF-TM-014-G-20-B-B-M-0	1057.10
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	014	Non-bypass without Valve	3µm	SF-TM-014-H-03-B-B-0-0	929.15
						5µm	SF-TM-014-H-05-B-B-0-0	915.20
						10µm	SF-TM-014-H-10-B-B-0-0	901.25
						20µm	SF-TM-014-H-20-B-B-0-0	901.25
					Bypass Valve	3µm	SF-TM-014-H-03-B-B-B-0	1014.60
						5µm	SF-TM-014-H-05-B-B-B-0	1000.65
						10µm	SF-TM-014-H-10-B-B-B-0	986.70
						20µm	SF-TM-014-H-20-B-B-B-0	986.70
					Multi-function Valve	3µm	SF-TM-014-H-03-B-B-M-0	1140.85
						5µm	SF-TM-014-H-05-B-B-M-0	1126.90
						10µm	SF-TM-014-H-10-B-B-M-0	1112.95
						20µm	SF-TM-014-H-20-B-B-M-0	1112.95
	High Pressure Filter Assemblies Top Mounted Without Clogging Indicator (Fitted with plug)	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	030	Bypass Valve	3µm	SF-TM-030-G-03-B-B-B-0	1000.65
						5µm	SF-TM-030-G-05-B-B-B-0	986.75
						10µm	SF-TM-030-G-10-B-B-B-0	972.75
						20µm	SF-TM-030-G-20-B-B-B-0	972.75
					Multi-function Valve	3µm	SF-TM-030-G-03-B-B-M-0	1126.90
						5µm	SF-TM-030-G-05-B-B-M-0	1113.00
						10µm	SF-TM-030-G-10-B-B-M-0	1099.00
						20µm	SF-TM-030-G-20-B-B-M-0	1099.00
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	030	Non-bypass without Valve	3µm	SF-TM-030-H-03-B-B-0-0	1027.50
						5µm	SF-TM-030-H-05-B-B-0-0	1013.55
						10µm	SF-TM-030-H-10-B-B-0-0	999.60
						20µm	SF-TM-030-H-20-B-B-0-0	999.60
					Bypass Valve	3µm	SF-TM-030-H-03-B-B-B-0	1112.95
						5µm	SF-TM-030-H-05-B-B-B-0	1099.00
						10µm	SF-TM-030-H-10-B-B-B-0	1085.05
						20µm	SF-TM-030-H-20-B-B-B-0	1085.05
					Multi-function Valve	3µm	SF-TM-030-H-03-B-B-M-0	1239.20
						5µm	SF-TM-030-H-05-B-B-M-0	1225.25
						10µm	SF-TM-030-H-10-B-B-M-0	1211.30
						20µm	SF-TM-030-H-20-B-B-M-0	1211.30
	High Pressure Filter Assemblies Top Mounted Without Clogging Indicator (Fitted with plug)	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	045	Bypass Valve	3µm	SF-TM-045-G-03-B-B-B-0	1403.80
						5µm	SF-TM-045-G-05-B-B-B-0	1389.85
						10µm	SF-TM-045-G-10-B-B-B-0	1389.85
						20µm	SF-TM-045-G-20-B-B-B-0	1389.85
					Multi-function Valve	3µm	SF-TM-045-G-03-B-B-M-0	1586.45
						5µm	SF-TM-045-G-05-B-B-M-0	1572.50
						10µm	SF-TM-045-G-10-B-B-M-0	1572.50
						20µm	SF-TM-045-G-20-B-B-M-0	1572.50
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	045	Non-bypass without Valve	3µm	SF-TM-045-H-03-B-B-0-0	1411.05
						5µm	SF-TM-045-H-05-B-B-0-0	1383.15
						10µm	SF-TM-045-H-10-B-B-0-0	1369.20
						20µm	SF-TM-045-H-20-B-B-0-0	1369.20
					Bypass Valve	3µm	SF-TM-045-H-03-B-B-B-0	1557.90
						5µm	SF-TM-045-H-05-B-B-B-0	1530.00
						10µm	SF-TM-045-H-10-B-B-B-0	1516.05
						20µm	SF-TM-045-H-20-B-B-B-0	1516.05
					Multi-function Valve	3µm	SF-TM-045-H-03-B-B-M-0	1740.55
						5µm	SF-TM-045-H-05-B-B-M-0	1712.65
						10µm	SF-TM-045-H-10-B-B-M-0	1698.70
						20µm	SF-TM-045-H-20-B-B-M-0	1698.70

For replacement filter elements refer to page N88

High Pressure Filter Assemblies Top Mounted ▪ Type SF-TM
Without Clogging Indicator

Filter Element	Description	Filter Material	Pressure Setting	Nominal Size	Valve	Micron	Designation	Price
	High Pressure Filter Assemblies Top Mounted Without Clogging Indicator (Fitted with plug)	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	070	Bypass Valve	3µm	SF-TM-070-G-03-B-B-B-0	1516.75
						5µm	SF-TM-070-G-05-B-B-B-0	1502.85
						10µm	SF-TM-070-G-10-B-B-B-0	1488.20
						20µm	SF-TM-070-G-20-B-B-B-0	1488.20
					Multi-function Valve	3µm	SF-TM-070-G-03-B-B-M-0	1699.40
						5µm	SF-TM-070-G-05-B-B-M-0	1685.50
						10µm	SF-TM-070-G-10-B-B-M-0	1670.85
						20µm	SF-TM-070-G-20-B-B-M-0	1670.85
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	070	Non-bypass without Valve	3µm	SF-TM-070-H-03-B-B-0-0	1565.90
						5µm	SF-TM-070-H-05-B-B-0-0	1551.90
						10µm	SF-TM-070-H-10-B-B-0-0	1537.95
						20µm	SF-TM-070-H-20-B-B-0-0	1537.95
					Bypass Valve	3µm	SF-TM-070-H-03-B-B-B-0	1712.75
						5µm	SF-TM-070-H-05-B-B-B-0	1698.75
						10µm	SF-TM-070-H-10-B-B-B-0	1684.80
						20µm	SF-TM-070-H-20-B-B-B-0	1684.80
					Multi-function Valve	3µm	SF-TM-070-H-03-B-B-M-0	1895.40
						5µm	SF-TM-070-H-05-B-B-M-0	1881.40
						10µm	SF-TM-070-H-10-B-B-M-0	1867.45
						20µm	SF-TM-070-H-20-B-B-M-0	1867.45
	High Pressure Filter Assemblies Top Mounted Without Clogging Indicator	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	090	Bypass Valve	3µm	SF-TM-090-G-03-B-B-B-0	1964.50
						5µm	SF-TM-090-G-05-B-B-B-0	1950.55
						10µm	SF-TM-090-G-10-B-B-B-0	1936.65
						20µm	SF-TM-090-G-20-B-B-B-0	1936.65
					Multi-function Valve	3µm	SF-TM-090-G-03-B-B-M-0	2104.70
						5µm	SF-TM-090-G-05-B-B-M-0	2090.75
						10µm	SF-TM-090-G-10-B-B-M-0	2076.85
						20µm	SF-TM-090-G-20-B-B-M-0	2076.85
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	090	Non-bypass without Valve	3µm	SF-TM-090-H-03-B-B-0-0	2076.70
						5µm	SF-TM-090-H-05-B-B-0-0	2048.85
						10µm	SF-TM-090-H-10-B-B-0-0	2034.85
						20µm	SF-TM-090-H-20-B-B-0-0	2034.85
					Bypass Valve	3µm	SF-TM-090-H-03-B-B-B-0	2272.70
						5µm	SF-TM-090-H-05-B-B-B-0	2244.85
						10µm	SF-TM-090-H-10-B-B-B-0	2230.85
						20µm	SF-TM-090-H-20-B-B-B-0	2230.85
					Multi-function Valve	3µm	SF-TM-090-H-03-B-B-M-0	2412.90
						5µm	SF-TM-090-H-05-B-B-M-0	2385.05
						10µm	SF-TM-090-H-10-B-B-M-0	2371.05
						20µm	SF-TM-090-H-20-B-B-M-0	2371.05
	High Pressure Filter Assemblies Top Mounted Without Clogging Indicator	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	130	Bypass Valve	3µm	SF-TM-130-G-03-B-B-B-0	2481.00
						5µm	SF-TM-130-G-05-B-B-B-0	2439.10
						10µm	SF-TM-130-G-10-B-B-B-0	2425.15
						20µm	SF-TM-130-G-20-B-B-B-0	2425.15
					Multi-function Valve	3µm	SF-TM-130-G-03-B-B-M-0	2621.20
						5µm	SF-TM-130-G-05-B-B-M-0	2579.30
						10µm	SF-TM-130-G-10-B-B-M-0	2565.35
						20µm	SF-TM-130-G-20-B-B-M-0	2565.35
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	130	Non-bypass without Valve	3µm	SF-TM-130-H-03-B-B-0-0	2649.55
						5µm	SF-TM-130-H-05-B-B-0-0	2526.70
						10µm	SF-TM-130-H-10-B-B-0-0	2579.10
						20µm	SF-TM-130-H-20-B-B-0-0	2579.10
					Bypass Valve	3µm	SF-TM-130-H-03-B-B-B-0	2845.55
						5µm	SF-TM-130-H-05-B-B-B-0	2722.70
						10µm	SF-TM-130-H-10-B-B-B-0	2775.10
						20µm	SF-TM-130-H-20-B-B-B-0	2775.10
					Multi-function Valve	3µm	SF-TM-130-H-03-B-B-M-0	2985.75
						5µm	SF-TM-130-H-05-B-B-M-0	2862.90
						10µm	SF-TM-130-H-10-B-B-M-0	2915.30
						20µm	SF-TM-130-H-20-B-B-M-0	2915.30

For replacement filter elements refer to page N88

High Pressure Filter Assemblies Top Mounted ▪ Type SF-TM
Without Clogging Indicator

Filter Element	Description	Filter Material	Pressure Setting	Nominal Size	Valve	Micron	Designation	Price
	High Pressure Filter Assemblies Top Mounted Without Clogging Indicator		Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	160	Bypass Valve	3µm	SF-TM-160-G-03-B-B-B-0	2497.75
						5µm	SF-TM-160-G-05-B-B-B-0	2497.75
						10µm	SF-TM-160-G-10-B-B-B-0	2455.35
						20µm	SF-TM-160-G-20-B-B-B-0	2455.35
					Multi-function Valve	3µm	SF-TM-160-G-03-B-B-M-0	2637.95
						5µm	SF-TM-160-G-05-B-B-M-0	2637.95
						10µm	SF-TM-160-G-10-B-B-M-0	2595.55
						20µm	SF-TM-160-G-20-B-B-M-0	2595.55
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	160	Non-bypass without Valve	3µm	SF-TM-160-H-03-B-B-0-0	2904.15
						5µm	SF-TM-160-H-05-B-B-0-0	2890.15
						10µm	SF-TM-160-H-10-B-B-0-0	2791.85
						20µm	SF-TM-160-H-20-B-B-0-0	2791.85
					Bypass Valve	3µm	SF-TM-160-H-03-B-B-B-0	3100.15
						5µm	SF-TM-160-H-05-B-B-B-0	3086.15
						10µm	SF-TM-160-H-10-B-B-B-0	2987.85
						20µm	SF-TM-160-H-20-B-B-B-0	2987.85
					Multi-function Valve	3µm	SF-TM-160-H-03-B-B-M-0	3240.35
						5µm	SF-TM-160-H-05-B-B-M-0	3226.35
						10µm	SF-TM-160-H-10-B-B-M-0	3128.05
						20µm	SF-TM-160-H-20-B-B-M-0	3128.05

For replacement filter elements refer to page N88

High Pressure Filter Assemblies Top Mounted ▪ Type SF-TM
Includes Visual Clogging Indicator with Automatic Reset

Filter Element	Description	Filter Material	Pressure Setting	Nominal Size	Valve	Micron	Designation	Price
	High Pressure Filter Assemblies Top Mounted Includes Visual Clogging Indicator with Automatic Reset	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	014	Bypass Valve	3µm	SF-TM-014-G-03-B-B-B-A	1109.95
						5µm	SF-TM-014-G-05-B-B-B-A	1109.95
						10µm	SF-TM-014-G-10-B-B-B-A	1109.95
						20µm	SF-TM-014-G-20-B-B-B-A	1109.95
					Multi-function Valve	3µm	SF-TM-014-G-03-B-B-M-A	1236.20
						5µm	SF-TM-014-G-05-B-B-M-A	1236.20
						10µm	SF-TM-014-G-10-B-B-M-A	1236.20
						20µm	SF-TM-014-G-20-B-B-M-A	1236.20
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	014	Non-bypass without Valve	3µm	SF-TM-014-H-03-B-B-O-A	1108.25
						5µm	SF-TM-014-H-05-B-B-O-A	1094.30
						10µm	SF-TM-014-H-10-B-B-O-A	1080.35
						20µm	SF-TM-014-H-20-B-B-O-A	1080.35
					Bypass Valve	3µm	SF-TM-014-H-03-B-B-B-A	1193.70
						5µm	SF-TM-014-H-05-B-B-B-A	1179.75
						10µm	SF-TM-014-H-10-B-B-B-A	1165.80
						20µm	SF-TM-014-H-20-B-B-B-A	1165.80
					Reverse Flow Valve	3µm	SF-TM-014-H-03-B-B-R-A	1263.45
						5µm	SF-TM-014-H-05-B-B-R-A	1249.50
						10µm	SF-TM-014-H-10-B-B-R-A	1235.55
						20µm	SF-TM-014-H-20-B-B-R-A	1235.55
					Multi-function Valve	3µm	SF-TM-014-H-03-B-B-M-A	1319.95
						5µm	SF-TM-014-H-05-B-B-M-A	1306.00
						10µm	SF-TM-014-H-10-B-B-M-A	1292.05
						20µm	SF-TM-014-H-20-B-B-M-A	1292.05
	High Pressure Filter Assemblies Top Mounted Includes Visual Clogging Indicator with Automatic Reset	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	030	Bypass Valve	3µm	SF-TM-030-G-03-B-B-B-A	1179.75
						5µm	SF-TM-030-G-05-B-B-B-A	1165.85
						10µm	SF-TM-030-G-10-B-B-B-A	1151.85
						20µm	SF-TM-030-G-20-B-B-B-A	1151.85
					Multi-function Valve	3µm	SF-TM-030-G-03-B-B-M-A	1306.00
						5µm	SF-TM-030-G-05-B-B-M-A	1292.10
						10µm	SF-TM-030-G-10-B-B-M-A	1278.10
						20µm	SF-TM-030-G-20-B-B-M-A	1278.10
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	030	Non-bypass without Valve	3µm	SF-TM-030-H-03-B-B-O-A	1206.60
						5µm	SF-TM-030-H-05-B-B-O-A	1192.65
						10µm	SF-TM-030-H-10-B-B-O-A	1178.70
						20µm	SF-TM-030-H-20-B-B-O-A	1178.70
					Bypass Valve	3µm	SF-TM-030-H-03-B-B-B-A	1292.05
						5µm	SF-TM-030-H-05-B-B-B-A	1278.10
						10µm	SF-TM-030-H-10-B-B-B-A	1264.15
						20µm	SF-TM-030-H-20-B-B-B-A	1264.15
					Reverse Flow Valve	3µm	SF-TM-030-H-03-B-B-R-A	1361.80
						5µm	SF-TM-030-H-05-B-B-R-A	1347.85
						10µm	SF-TM-030-H-10-B-B-R-A	1333.90
						20µm	SF-TM-030-H-20-B-B-R-A	1333.90
					Multi-function Valve	3µm	SF-TM-030-H-03-B-B-M-A	1418.30
						5µm	SF-TM-030-H-05-B-B-M-A	1404.35
						10µm	SF-TM-030-H-10-B-B-M-A	1390.40
						20µm	SF-TM-030-H-20-B-B-M-A	1390.40

For replacement filter elements refer to page N88

High Pressure Filter Assemblies Top Mounted ▪ Type SF-TM
Includes Visual Clogging Indicator with Automatic Reset

Filter Element	Description	Filter Material	Pressure Setting	Nominal Size	Valve	Micron	Designation	Price
	High Pressure Filter Assemblies Top Mounted Includes Visual Clogging Indicator with Automatic Reset	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	045	Bypass Valve	3µm	SF-TM-045-G-03-B-B-B-A	1582.90
						5µm	SF-TM-045-G-05-B-B-B-A	1568.95
						10µm	SF-TM-045-G-10-B-B-B-A	1568.95
						20µm	SF-TM-045-G-20-B-B-B-A	1568.95
					Multi-function Valve	3µm	SF-TM-045-G-03-B-B-M-A	1765.55
						5µm	SF-TM-045-G-05-B-B-M-A	1751.60
						10µm	SF-TM-045-G-10-B-B-M-A	1751.60
						20µm	SF-TM-045-G-20-B-B-M-A	1751.60
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	045	Non-bypass without Valve	3µm	SF-TM-045-H-03-B-B-O-A	1590.15
						5µm	SF-TM-045-H-05-B-B-O-A	1562.25
						10µm	SF-TM-045-H-10-B-B-O-A	1548.30
						20µm	SF-TM-045-H-20-B-B-O-A	1548.30
					Bypass Valve	3µm	SF-TM-045-H-03-B-B-B-A	1737.00
						5µm	SF-TM-045-H-05-B-B-B-A	1709.10
						10µm	SF-TM-045-H-10-B-B-B-A	1695.15
						20µm	SF-TM-045-H-20-B-B-B-A	1695.15
					Reverse Flow Valve	3µm	SF-TM-045-H-03-B-B-R-A	1835.30
						5µm	SF-TM-045-H-05-B-B-R-A	1807.40
						10µm	SF-TM-045-H-10-B-B-R-A	1793.45
						20µm	SF-TM-045-H-20-B-B-R-A	1793.45
					Multi-function Valve	3µm	SF-TM-045-H-03-B-B-M-A	1919.65
						5µm	SF-TM-045-H-05-B-B-M-A	1891.75
						10µm	SF-TM-045-H-10-B-B-M-A	1877.80
						20µm	SF-TM-045-H-20-B-B-M-A	1877.80
	High Pressure Filter Assemblies Top Mounted Includes Visual Clogging Indicator with Automatic Reset	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	070	Bypass Valve	3µm	SF-TM-070-G-03-B-B-B-A	1695.85
						5µm	SF-TM-070-G-05-B-B-B-A	1681.95
						10µm	SF-TM-070-G-10-B-B-B-A	1667.30
						20µm	SF-TM-070-G-20-B-B-B-A	1667.30
					Multi-function Valve	3µm	SF-TM-070-G-03-B-B-M-A	1878.50
						5µm	SF-TM-070-G-05-B-B-M-A	1864.60
						10µm	SF-TM-070-G-10-B-B-M-A	1849.95
						20µm	SF-TM-070-G-20-B-B-M-A	1849.95
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	070	Non-bypass without Valve	3µm	SF-TM-070-H-03-B-B-O-A	1745.00
						5µm	SF-TM-070-H-05-B-B-O-A	1731.00
						10µm	SF-TM-070-H-10-B-B-O-A	1717.05
						20µm	SF-TM-070-H-20-B-B-O-A	1717.05
					Bypass Valve	3µm	SF-TM-070-H-03-B-B-B-A	1891.85
						5µm	SF-TM-070-H-05-B-B-B-A	1877.85
						10µm	SF-TM-070-H-10-B-B-B-A	1863.90
						20µm	SF-TM-070-H-20-B-B-B-A	1863.90
					Reverse Flow Valve	3µm	SF-TM-070-H-03-B-B-R-A	1990.15
						5µm	SF-TM-070-H-05-B-B-R-A	1976.15
						10µm	SF-TM-070-H-10-B-B-R-A	1962.20
						20µm	SF-TM-070-H-20-B-B-R-A	1962.20
					Multi-function Valve	3µm	SF-TM-070-H-03-B-B-M-A	2074.50
						5µm	SF-TM-070-H-05-B-B-M-A	2060.50
						10µm	SF-TM-070-H-10-B-B-M-A	2046.55
						20µm	SF-TM-070-H-20-B-B-M-A	2046.55

For replacement filter elements refer to page N88

High Pressure Filter Assemblies Top Mounted ▪ Type SF-TM
Includes Visual Clogging Indicator with Automatic Reset

Filter Element	Description	Filter Material	Pressure Setting	Nominal Size	Valve	Micron	Designation	Price
	High Pressure Filter Assemblies Top Mounted Includes Visual Clogging Indicator with Automatic Reset	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	090	Bypass Valve	3µm	SF-TM-090-G-03-B-B-B-A	2143.60
						5µm	SF-TM-090-G-05-B-B-B-A	2129.65
						10µm	SF-TM-090-G-10-B-B-B-A	2115.75
						20µm	SF-TM-090-G-20-B-B-B-A	2115.75
					Multi-function Valve	3µm	SF-TM-090-G-03-B-B-M-A	2283.80
						5µm	SF-TM-090-G-05-B-B-M-A	2269.85
						10µm	SF-TM-090-G-10-B-B-M-A	2255.95
						20µm	SF-TM-090-G-20-B-B-M-A	2255.95
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	090	Non-bypass without Valve	3µm	SF-TM-090-H-03-B-B-O-A	2255.80
						5µm	SF-TM-090-H-05-B-B-O-A	2227.95
						10µm	SF-TM-090-H-10-B-B-O-A	2213.95
						20µm	SF-TM-090-H-20-B-B-O-A	2213.95
					Bypass Valve	3µm	SF-TM-090-H-03-B-B-B-A	2451.80
						5µm	SF-TM-090-H-05-B-B-B-A	2423.95
						10µm	SF-TM-090-H-10-B-B-B-A	2409.95
						20µm	SF-TM-090-H-20-B-B-B-A	2409.95
					Reverse Flow Valve	3µm	SF-TM-090-H-03-B-B-R-A	2508.30
						5µm	SF-TM-090-H-05-B-B-R-A	2480.45
						10µm	SF-TM-090-H-10-B-B-R-A	2466.45
						20µm	SF-TM-090-H-20-B-B-R-A	2466.45
					Multi-function Valve	3µm	SF-TM-090-H-03-B-B-M-A	2592.00
						5µm	SF-TM-090-H-05-B-B-M-A	2564.15
						10µm	SF-TM-090-H-10-B-B-M-A	2550.15
						20µm	SF-TM-090-H-20-B-B-M-A	2550.15
	High Pressure Filter Assemblies Top Mounted Includes Visual Clogging Indicator with Automatic Reset	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	130	Bypass Valve	3µm	SF-TM-130-G-03-B-B-B-A	2660.10
						5µm	SF-TM-130-G-05-B-B-B-A	2618.20
						10µm	SF-TM-130-G-10-B-B-B-A	2604.25
						20µm	SF-TM-130-G-20-B-B-B-A	2604.25
					Multi-function Valve	3µm	SF-TM-130-G-03-B-B-M-A	2800.30
						5µm	SF-TM-130-G-05-B-B-M-A	2758.40
						10µm	SF-TM-130-G-10-B-B-M-A	2744.45
						20µm	SF-TM-130-G-20-B-B-M-A	2744.45
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	130	Non-bypass without Valve	3µm	SF-TM-130-H-03-B-B-O-A	2828.65
						5µm	SF-TM-130-H-05-B-B-O-A	2705.80
						10µm	SF-TM-130-H-10-B-B-O-A	2758.20
						20µm	SF-TM-130-H-20-B-B-O-A	2758.20
					Bypass Valve	3µm	SF-TM-130-H-03-B-B-B-A	3024.65
						5µm	SF-TM-130-H-05-B-B-B-A	2901.80
						10µm	SF-TM-130-H-10-B-B-B-A	2954.20
						20µm	SF-TM-130-H-20-B-B-B-A	2954.20
					Reverse Flow Valve	3µm	SF-TM-130-H-03-B-B-R-A	3081.15
						5µm	SF-TM-130-H-05-B-B-R-A	2958.30
						10µm	SF-TM-130-H-10-B-B-R-A	3010.70
						20µm	SF-TM-130-H-20-B-B-R-A	3010.70
					Multi-function Valve	3µm	SF-TM-130-H-03-B-B-M-A	3164.85
						5µm	SF-TM-130-H-05-B-B-M-A	3042.00
						10µm	SF-TM-130-H-10-B-B-M-A	3094.40
						20µm	SF-TM-130-H-20-B-B-M-A	3094.40

For replacement filter elements refer to page N88

High Pressure Filter Assemblies Top Mounted ▪ Type SF-TM
Includes Visual Clogging Indicator with Automatic Reset

Filter Element	Description	Filter Material	Pressure Setting	Nominal Size	Valve	Micron	Designation	Price
	High Pressure Filter Assemblies Top Mounted Includes Visual Clogging Indicator with Automatic Reset	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	160	Bypass Valve	3µm	SF-TM-160-G-03-B-B-B-A	2676.85
						5µm	SF-TM-160-G-05-B-B-B-A	2676.85
						10µm	SF-TM-160-G-10-B-B-B-A	2634.45
						20µm	SF-TM-160-G-20-B-B-B-A	2634.45
					Multi-function Valve	3µm	SF-TM-160-G-03-B-B-M-A	2817.05
						5µm	SF-TM-160-G-05-B-B-M-A	2817.05
						10µm	SF-TM-160-G-10-B-B-M-A	2774.65
						20µm	SF-TM-160-G-20-B-B-M-A	2774.65
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	160	Non-bypass without Valve	3µm	SF-TM-160-H-03-B-B-O-A	3083.25
						5µm	SF-TM-160-H-05-B-B-O-A	3069.25
						10µm	SF-TM-160-H-10-B-B-O-A	2970.95
						20µm	SF-TM-160-H-20-B-B-O-A	2970.95
					Bypass Valve	3µm	SF-TM-160-H-03-B-B-B-A	3279.25
						5µm	SF-TM-160-H-05-B-B-B-A	3265.25
						10µm	SF-TM-160-H-10-B-B-B-A	3166.95
						20µm	SF-TM-160-H-20-B-B-B-A	3166.95
					Reverse Flow Valve	3µm	SF-TM-160-H-03-B-B-R-A	3335.75
						5µm	SF-TM-160-H-05-B-B-R-A	3321.75
						10µm	SF-TM-160-H-10-B-B-R-A	3223.45
						20µm	SF-TM-160-H-20-B-B-R-A	3223.45
					Multi-function Valve	3µm	SF-TM-160-H-03-B-B-M-A	3419.45
						5µm	SF-TM-160-H-05-B-B-M-A	3405.45
						10µm	SF-TM-160-H-10-B-B-M-A	3307.15
						20µm	SF-TM-160-H-20-B-B-M-A	3307.15

For replacement filter elements refer to page N88

High Pressure Filter Assemblies Top Mounted ▪ Type SF-TM
Includes Visual Clogging Indicator with Manual Reset

Filter Element	Description	Filter Material	Pressure Setting	Nominal Size	Valve	Micron	Designation	Price
	High Pressure Filter Assemblies Top Mounted Includes Visual Clogging Indicator with Manual Reset	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	014	Bypass Valve	3µm	SF-TM-014-G-03-B-B-B-V	1096.00
						5µm	SF-TM-014-G-05-B-B-B-V	1096.00
						10µm	SF-TM-014-G-10-B-B-B-V	1096.00
						20µm	SF-TM-014-G-20-B-B-B-V	1096.00
					Multi-function Valve	3µm	SF-TM-014-G-03-B-B-M-V	1222.25
						5µm	SF-TM-014-G-05-B-B-M-V	1222.25
						10µm	SF-TM-014-G-10-B-B-M-V	1222.25
						20µm	SF-TM-014-G-20-B-B-M-V	1222.25
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	014	Non-bypass without Valve	3µm	SF-TM-014-H-03-B-B-O-V	1094.30
						5µm	SF-TM-014-H-05-B-B-O-V	1080.35
						10µm	SF-TM-014-H-10-B-B-O-V	1066.40
						20µm	SF-TM-014-H-20-B-B-O-V	1066.40
					Bypass Valve	3µm	SF-TM-014-H-03-B-B-B-V	1179.75
						5µm	SF-TM-014-H-05-B-B-B-V	1165.80
						10µm	SF-TM-014-H-10-B-B-B-V	1151.85
						20µm	SF-TM-014-H-20-B-B-B-V	1151.85
					Reverse Flow Valve	3µm	SF-TM-014-H-03-B-B-R-V	1249.50
						5µm	SF-TM-014-H-05-B-B-R-V	1235.55
						10µm	SF-TM-014-H-10-B-B-R-V	1221.60
						20µm	SF-TM-014-H-20-B-B-R-V	1221.60
					Multi-function Valve	3µm	SF-TM-014-H-03-B-B-M-V	1306.00
						5µm	SF-TM-014-H-05-B-B-M-V	1292.05
						10µm	SF-TM-014-H-10-B-B-M-V	1278.10
						20µm	SF-TM-014-H-20-B-B-M-V	1278.10
	High Pressure Filter Assemblies Top Mounted Includes Visual Clogging Indicator with Manual Reset	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	030	Bypass Valve	3µm	SF-TM-030-G-03-B-B-B-V	1165.80
						5µm	SF-TM-030-G-05-B-B-B-V	1151.90
						10µm	SF-TM-030-G-10-B-B-B-V	1137.90
						20µm	SF-TM-030-G-20-B-B-B-V	1137.90
					Multi-function Valve	3µm	SF-TM-030-G-03-B-B-M-V	1292.05
						5µm	SF-TM-030-G-05-B-B-M-V	1278.15
						10µm	SF-TM-030-G-10-B-B-M-V	1264.15
						20µm	SF-TM-030-G-20-B-B-M-V	1264.15
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	030	Non-bypass without Valve	3µm	SF-TM-030-H-03-B-B-O-V	1192.65
						5µm	SF-TM-030-H-05-B-B-O-V	1178.70
						10µm	SF-TM-030-H-10-B-B-O-V	1164.75
						20µm	SF-TM-030-H-20-B-B-O-V	1164.75
					Bypass Valve	3µm	SF-TM-030-H-03-B-B-B-V	1278.10
						5µm	SF-TM-030-H-05-B-B-B-V	1264.15
						10µm	SF-TM-030-H-10-B-B-B-V	1250.20
						20µm	SF-TM-030-H-20-B-B-B-V	1250.20
					Reverse Flow Valve	3µm	SF-TM-030-H-03-B-B-R-V	1347.85
						5µm	SF-TM-030-H-05-B-B-R-V	1333.90
						10µm	SF-TM-030-H-10-B-B-R-V	1319.95
						20µm	SF-TM-030-H-20-B-B-R-V	1319.95
					Multi-function Valve	3µm	SF-TM-030-H-03-B-B-M-V	1404.35
						5µm	SF-TM-030-H-05-B-B-M-V	1390.40
						10µm	SF-TM-030-H-10-B-B-M-V	1376.45
						20µm	SF-TM-030-H-20-B-B-M-V	1376.45

For replacement filter elements refer to page N88

High Pressure Filter Assemblies Top Mounted ▪ Type SF-TM
Includes Visual Clogging Indicator with Manual Reset

Filter Element	Description	Filter Material	Pressure Setting	Nominal Size	Valve	Micron	Designation	Price
	High Pressure Filter Assemblies Top Mounted Includes Visual Clogging Indicator with Manual Reset	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	045	Bypass Valve	3µm	SF-TM-045-G-03-B-B-B-V	1568.95
						5µm	SF-TM-045-G-05-B-B-B-V	1555.00
						10µm	SF-TM-045-G-10-B-B-B-V	1555.00
						20µm	SF-TM-045-G-20-B-B-B-V	1555.00
					Multi-function Valve	3µm	SF-TM-045-G-03-B-B-M-V	1751.60
						5µm	SF-TM-045-G-05-B-B-M-V	1737.65
						10µm	SF-TM-045-G-10-B-B-M-V	1737.65
						20µm	SF-TM-045-G-20-B-B-M-V	1737.65
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	045	Non-bypass without Valve	3µm	SF-TM-045-H-03-B-B-O-V	1576.20
						5µm	SF-TM-045-H-05-B-B-O-V	1548.30
						10µm	SF-TM-045-H-10-B-B-O-V	1534.35
						20µm	SF-TM-045-H-20-B-B-O-V	1534.35
					Bypass Valve	3µm	SF-TM-045-H-03-B-B-B-V	1723.05
						5µm	SF-TM-045-H-05-B-B-B-V	1695.15
						10µm	SF-TM-045-H-10-B-B-B-V	1681.20
						20µm	SF-TM-045-H-20-B-B-B-V	1681.20
					Reverse Flow Valve	3µm	SF-TM-045-H-03-B-B-R-V	1821.35
						5µm	SF-TM-045-H-05-B-B-R-V	1793.45
						10µm	SF-TM-045-H-10-B-B-R-V	1779.50
						20µm	SF-TM-045-H-20-B-B-R-V	1779.50
					Multi-function Valve	3µm	SF-TM-045-H-03-B-B-M-V	1905.70
						5µm	SF-TM-045-H-05-B-B-M-V	1877.80
						10µm	SF-TM-045-H-10-B-B-M-V	1863.85
						20µm	SF-TM-045-H-20-B-B-M-V	1863.85
	High Pressure Filter Assemblies Top Mounted Includes Visual Clogging Indicator with Manual Reset	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	070	Bypass Valve	3µm	SF-TM-070-G-03-B-B-B-V	1681.90
						5µm	SF-TM-070-G-05-B-B-B-V	1668.00
						10µm	SF-TM-070-G-10-B-B-B-V	1653.35
						20µm	SF-TM-070-G-20-B-B-B-V	1653.35
					Multi-function Valve	3µm	SF-TM-070-G-03-B-B-M-V	1864.55
						5µm	SF-TM-070-G-05-B-B-M-V	1850.65
						10µm	SF-TM-070-G-10-B-B-M-V	1836.00
						20µm	SF-TM-070-G-20-B-B-M-V	1836.00
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	070	Non-bypass without Valve	3µm	SF-TM-070-H-03-B-B-O-V	1731.05
						5µm	SF-TM-070-H-05-B-B-O-V	1717.05
						10µm	SF-TM-070-H-10-B-B-O-V	1703.10
						20µm	SF-TM-070-H-20-B-B-O-V	1703.10
					Bypass Valve	3µm	SF-TM-070-H-03-B-B-B-V	1877.90
						5µm	SF-TM-070-H-05-B-B-B-V	1863.90
						10µm	SF-TM-070-H-10-B-B-B-V	1849.95
						20µm	SF-TM-070-H-20-B-B-B-V	1849.95
					Reverse Flow Valve	3µm	SF-TM-070-H-03-B-B-R-V	1976.20
						5µm	SF-TM-070-H-05-B-B-R-V	1962.20
						10µm	SF-TM-070-H-10-B-B-R-V	1948.25
						20µm	SF-TM-070-H-20-B-B-R-V	1948.25
					Multi-function Valve	3µm	SF-TM-070-H-03-B-B-M-V	2060.55
						5µm	SF-TM-070-H-05-B-B-M-V	2046.55
						10µm	SF-TM-070-H-10-B-B-M-V	2032.60
						20µm	SF-TM-070-H-20-B-B-M-V	2032.60

For replacement filter elements refer to page N88

High Pressure Filter Assemblies Top Mounted ▪ Type SF-TM
Includes Visual Clogging Indicator with Manual Reset

Filter Element	Description	Filter Material	Pressure Setting	Nominal Size	Valve	Micron	Designation	Price
	High Pressure Filter Assemblies Top Mounted Includes Visual Clogging Indicator with Manual Reset	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	090	Bypass Valve	3µm	SF-TM-090-G-03-B-B-B-V	2129.65
						5µm	SF-TM-090-G-05-B-B-B-V	2115.70
						10µm	SF-TM-090-G-10-B-B-B-V	2101.80
						20µm	SF-TM-090-G-20-B-B-B-V	2101.80
					Multi-function Valve	3µm	SF-TM-090-G-03-B-B-M-V	2269.85
						5µm	SF-TM-090-G-05-B-B-M-V	2255.90
						10µm	SF-TM-090-G-10-B-B-M-V	2242.00
						20µm	SF-TM-090-G-20-B-B-M-V	2242.00
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	090	Non-bypass without Valve	3µm	SF-TM-090-H-03-B-B-0-V	2241.85
						5µm	SF-TM-090-H-05-B-B-0-V	2214.00
						10µm	SF-TM-090-H-10-B-B-0-V	2200.00
						20µm	SF-TM-090-H-20-B-B-0-V	2200.00
					Bypass Valve	3µm	SF-TM-090-H-03-B-B-B-V	2437.85
						5µm	SF-TM-090-H-05-B-B-B-V	2410.00
						10µm	SF-TM-090-H-10-B-B-B-V	2396.00
						20µm	SF-TM-090-H-20-B-B-B-V	2396.00
					Reverse Flow Valve	3µm	SF-TM-090-H-03-B-B-R-V	2494.35
						5µm	SF-TM-090-H-05-B-B-R-V	2466.50
						10µm	SF-TM-090-H-10-B-B-R-V	2452.50
						20µm	SF-TM-090-H-20-B-B-R-V	2452.50
					Multi-function Valve	3µm	SF-TM-090-H-03-B-B-M-V	2578.05
						5µm	SF-TM-090-H-05-B-B-M-V	2550.20
						10µm	SF-TM-090-H-10-B-B-M-V	2536.20
						20µm	SF-TM-090-H-20-B-B-M-V	2536.20
	High Pressure Filter Assemblies Top Mounted Includes Visual Clogging Indicator with Manual Reset	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	130	Bypass Valve	3µm	SF-TM-130-G-03-B-B-B-V	2646.15
						5µm	SF-TM-130-G-05-B-B-B-V	2604.25
						10µm	SF-TM-130-G-10-B-B-B-V	2590.30
						20µm	SF-TM-130-G-20-B-B-B-V	2590.30
					Multi-function Valve	3µm	SF-TM-130-G-03-B-B-M-V	2786.35
						5µm	SF-TM-130-G-05-B-B-M-V	2744.45
						10µm	SF-TM-130-G-10-B-B-M-V	2730.50
						20µm	SF-TM-130-G-20-B-B-M-V	2730.50
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	130	Non-bypass without Valve	3µm	SF-TM-130-H-03-B-B-0-V	2814.70
						5µm	SF-TM-130-H-05-B-B-0-V	2691.85
						10µm	SF-TM-130-H-10-B-B-0-V	2744.25
						20µm	SF-TM-130-H-20-B-B-0-V	2744.25
					Bypass Valve	3µm	SF-TM-130-H-03-B-B-B-V	3010.70
						5µm	SF-TM-130-H-05-B-B-B-V	2887.85
						10µm	SF-TM-130-H-10-B-B-B-V	2940.25
						20µm	SF-TM-130-H-20-B-B-B-V	2940.25
					Reverse Flow Valve	3µm	SF-TM-130-H-03-B-B-R-V	3067.20
						5µm	SF-TM-130-H-05-B-B-R-V	2944.35
						10µm	SF-TM-130-H-10-B-B-R-V	2996.75
						20µm	SF-TM-130-H-20-B-B-R-V	2996.75
					Multi-function Valve	3µm	SF-TM-130-H-03-B-B-M-V	3150.90
						5µm	SF-TM-130-H-05-B-B-M-V	3028.05
						10µm	SF-TM-130-H-10-B-B-M-V	3080.45
						20µm	SF-TM-130-H-20-B-B-M-V	3080.45

For replacement filter elements refer to page N88

High Pressure Filter Assemblies Top Mounted ▪ Type SF-TM
Includes Visual Clogging Indicator with Manual Reset

Filter Element	Description	Filter Material	Pressure Setting	Nominal Size	Valve	Micron	Designation	Price
	High Pressure Filter Assemblies Top Mounted Includes Visual Clogging Indicator with Manual Reset	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	160	Bypass Valve	3µm	SF-TM-160-G-03-B-B-B-V	2662.90
						5µm	SF-TM-160-G-05-B-B-B-V	2662.90
						10µm	SF-TM-160-G-10-B-B-B-V	2620.50
						20µm	SF-TM-160-G-20-B-B-B-V	2620.50
					Multi-function Valve	3µm	SF-TM-160-G-03-B-B-M-V	2803.10
						5µm	SF-TM-160-G-05-B-B-M-V	2803.10
						10µm	SF-TM-160-G-10-B-B-M-V	2760.70
						20µm	SF-TM-160-G-20-B-B-M-V	2760.70
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	160	Non-bypass without Valve	3µm	SF-TM-160-H-03-B-B-O-V	3069.30
						5µm	SF-TM-160-H-05-B-B-O-V	3055.30
						10µm	SF-TM-160-H-10-B-B-O-V	2957.00
						20µm	SF-TM-160-H-20-B-B-O-V	2957.00
					Bypass Valve	3µm	SF-TM-160-H-03-B-B-B-V	3265.30
						5µm	SF-TM-160-H-05-B-B-B-V	3251.30
						10µm	SF-TM-160-H-10-B-B-B-V	3153.00
						20µm	SF-TM-160-H-20-B-B-B-V	3153.00
					Reverse Flow Valve	3µm	SF-TM-160-H-03-B-B-R-V	3321.80
						5µm	SF-TM-160-H-05-B-B-R-V	3307.80
						10µm	SF-TM-160-H-10-B-B-R-V	3209.50
						20µm	SF-TM-160-H-20-B-B-R-V	3209.50
					Multi-function Valve	3µm	SF-TM-160-H-03-B-B-M-V	3405.50
						5µm	SF-TM-160-H-05-B-B-M-V	3391.50
						10µm	SF-TM-160-H-10-B-B-M-V	3293.20
						20µm	SF-TM-160-H-20-B-B-M-V	3293.20

For replacement filter elements refer to page N88

High Pressure Filter Assemblies Top Mounted ▪ Type SF-TM
Includes Electrical Clogging Indicator

Filter Element	Description	Filter Material	Pressure Setting	Nominal Size	Valve	Micron	Designation	Price
	High Pressure Filter Assemblies Top Mounted Includes Electrical Clogging Indicator (supplied loose ie. not fitted)	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	014	Bypass Valve	3µm	SF-TM-014-G-03-B-B-B-E	1250.10
						5µm	SF-TM-014-G-05-B-B-B-E	1250.10
						10µm	SF-TM-014-G-10-B-B-B-E	1250.10
						20µm	SF-TM-014-G-20-B-B-B-E	1250.10
					Multi-function Valve	3µm	SF-TM-014-G-03-B-B-M-E	1376.35
						5µm	SF-TM-014-G-05-B-B-M-E	1376.35
						10µm	SF-TM-014-G-10-B-B-M-E	1376.35
						20µm	SF-TM-014-G-20-B-B-M-E	1376.35
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	014	Non-bypass without Valve	3µm	SF-TM-014-H-03-B-B-O-E	1248.40
						5µm	SF-TM-014-H-05-B-B-O-E	1234.45
						10µm	SF-TM-014-H-10-B-B-O-E	1220.50
						20µm	SF-TM-014-H-20-B-B-O-E	1220.50
					Bypass Valve	3µm	SF-TM-014-H-03-B-B-B-E	1333.85
						5µm	SF-TM-014-H-05-B-B-B-E	1319.90
						10µm	SF-TM-014-H-10-B-B-B-E	1305.95
						20µm	SF-TM-014-H-20-B-B-B-E	1305.95
					Reverse Flow Valve	3µm	SF-TM-014-H-03-B-B-R-E	1403.60
						5µm	SF-TM-014-H-05-B-B-R-E	1389.65
						10µm	SF-TM-014-H-10-B-B-R-E	1375.70
						20µm	SF-TM-014-H-20-B-B-R-E	1375.70
					Multi-function Valve	3µm	SF-TM-014-H-03-B-B-M-E	1460.10
						5µm	SF-TM-014-H-05-B-B-M-E	1446.15
						10µm	SF-TM-014-H-10-B-B-M-E	1432.20
						20µm	SF-TM-014-H-20-B-B-M-E	1432.20
	High Pressure Filter Assemblies Top Mounted Includes Electrical Clogging Indicator (supplied loose ie. not fitted)	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	030	Bypass Valve	3µm	SF-TM-030-G-03-B-B-B-E	1319.90
						5µm	SF-TM-030-G-05-B-B-B-E	1306.00
						10µm	SF-TM-030-G-10-B-B-B-E	1292.00
						20µm	SF-TM-030-G-20-B-B-B-E	1292.00
					Multi-function Valve	3µm	SF-TM-030-G-03-B-B-M-E	1446.15
						5µm	SF-TM-030-G-05-B-B-M-E	1432.25
						10µm	SF-TM-030-G-10-B-B-M-E	1418.25
						20µm	SF-TM-030-G-20-B-B-M-E	1418.25
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	030	Non-bypass without Valve	3µm	SF-TM-030-H-03-B-B-O-E	1346.75
						5µm	SF-TM-030-H-05-B-B-O-E	1332.80
						10µm	SF-TM-030-H-10-B-B-O-E	1318.85
						20µm	SF-TM-030-H-20-B-B-O-E	1318.85
					Bypass Valve	3µm	SF-TM-030-H-03-B-B-B-E	1432.20
						5µm	SF-TM-030-H-05-B-B-B-E	1418.25
						10µm	SF-TM-030-H-10-B-B-B-E	1404.30
						20µm	SF-TM-030-H-20-B-B-B-E	1404.30
					Reverse Flow Valve	3µm	SF-TM-030-H-03-B-B-R-E	1501.95
						5µm	SF-TM-030-H-05-B-B-R-E	1488.00
						10µm	SF-TM-030-H-10-B-B-R-E	1474.05
						20µm	SF-TM-030-H-20-B-B-R-E	1474.05
					Multi-function Valve	3µm	SF-TM-030-H-03-B-B-M-E	1558.45
						5µm	SF-TM-030-H-05-B-B-M-E	1544.50
						10µm	SF-TM-030-H-10-B-B-M-E	1530.55
						20µm	SF-TM-030-H-20-B-B-M-E	1530.55

For replacement filter elements refer to page N88

High Pressure Filter Assemblies Top Mounted ▪ Type SF-TM
Includes Electrical Clogging Indicator

Filter Element	Description	Filter Material	Pressure Setting	Nominal Size	Valve	Micron	Designation	Price
	High Pressure Filter Assemblies Top Mounted Includes Electrical Clogging Indicator (supplied loose ie. not fitted)	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	045	Bypass Valve	3µm	SF-TM-045-G-03-B-B-B-E	1723.05
						5µm	SF-TM-045-G-05-B-B-B-E	1709.10
						10µm	SF-TM-045-G-10-B-B-B-E	1709.10
						20µm	SF-TM-045-G-20-B-B-B-E	1709.10
					Multi-function Valve	3µm	SF-TM-045-G-03-B-B-M-E	1905.70
						5µm	SF-TM-045-G-05-B-B-M-E	1891.75
						10µm	SF-TM-045-G-10-B-B-M-E	1891.75
						20µm	SF-TM-045-G-20-B-B-M-E	1891.75
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	045	Non-bypass without Valve	3µm	SF-TM-045-H-03-B-B-O-E	1730.30
						5µm	SF-TM-045-H-05-B-B-O-E	1702.40
						10µm	SF-TM-045-H-10-B-B-O-E	1688.45
						20µm	SF-TM-045-H-20-B-B-O-E	1688.45
					Bypass Valve	3µm	SF-TM-045-H-03-B-B-B-E	1877.15
						5µm	SF-TM-045-H-05-B-B-B-E	1849.25
						10µm	SF-TM-045-H-10-B-B-B-E	1835.30
						20µm	SF-TM-045-H-20-B-B-B-E	1835.30
					Reverse Flow Valve	3µm	SF-TM-045-H-03-B-B-R-E	1975.45
						5µm	SF-TM-045-H-05-B-B-R-E	1947.55
						10µm	SF-TM-045-H-10-B-B-R-E	1933.60
						20µm	SF-TM-045-H-20-B-B-R-E	1933.60
					Multi-function Valve	3µm	SF-TM-045-H-03-B-B-M-E	2059.80
						5µm	SF-TM-045-H-05-B-B-M-E	2031.90
						10µm	SF-TM-045-H-10-B-B-M-E	2017.95
						20µm	SF-TM-045-H-20-B-B-M-E	2017.95
	High Pressure Filter Assemblies Top Mounted Includes Electrical Clogging Indicator (supplied loose ie. not fitted)	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	070	Bypass Valve	3µm	SF-TM-070-G-03-B-B-B-E	1836.00
						5µm	SF-TM-070-G-05-B-B-B-E	1822.10
						10µm	SF-TM-070-G-10-B-B-B-E	1807.45
						20µm	SF-TM-070-G-20-B-B-B-E	1807.45
					Multi-function Valve	3µm	SF-TM-070-G-03-B-B-M-E	2018.65
						5µm	SF-TM-070-G-05-B-B-M-E	2004.75
						10µm	SF-TM-070-G-10-B-B-M-E	1990.10
						20µm	SF-TM-070-G-20-B-B-M-E	1990.10
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	070	Non-bypass without Valve	3µm	SF-TM-070-H-03-B-B-O-E	1885.15
						5µm	SF-TM-070-H-05-B-B-O-E	1871.15
						10µm	SF-TM-070-H-10-B-B-O-E	1857.20
						20µm	SF-TM-070-H-20-B-B-O-E	1857.20
					Bypass Valve	3µm	SF-TM-070-H-03-B-B-B-E	2032.00
						5µm	SF-TM-070-H-05-B-B-B-E	2018.00
						10µm	SF-TM-070-H-10-B-B-B-E	2004.05
						20µm	SF-TM-070-H-20-B-B-B-E	2004.05
					Reverse Flow Valve	3µm	SF-TM-070-H-03-B-B-R-E	2130.30
						5µm	SF-TM-070-H-05-B-B-R-E	2116.30
						10µm	SF-TM-070-H-10-B-B-R-E	2102.35
						20µm	SF-TM-070-H-20-B-B-R-E	2102.35
					Multi-function Valve	3µm	SF-TM-070-H-03-B-B-M-E	2214.65
						5µm	SF-TM-070-H-05-B-B-M-E	2200.65
						10µm	SF-TM-070-H-10-B-B-M-E	2186.70
						20µm	SF-TM-070-H-20-B-B-M-E	2186.70

For replacement filter elements refer to page N88

High Pressure Filter Assemblies Top Mounted ▪ Type SF-TM
Includes Electrical Clogging Indicator

Filter Element	Description	Filter Material	Pressure Setting	Nominal Size	Valve	Micron	Designation	Price
	High Pressure Filter Assemblies Top Mounted Includes Electrical Clogging Indicator (supplied loose ie. not fitted)	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	090	Bypass Valve	3µm	SF-TM-090-G-03-B-B-B-E	2283.75
						5µm	SF-TM-090-G-05-B-B-B-E	2269.80
						10µm	SF-TM-090-G-10-B-B-B-E	2255.90
						20µm	SF-TM-090-G-20-B-B-B-E	2255.90
					Multi-function Valve	3µm	SF-TM-090-G-03-B-B-M-E	2423.95
						5µm	SF-TM-090-G-05-B-B-M-E	2410.00
						10µm	SF-TM-090-G-10-B-B-M-E	2396.10
						20µm	SF-TM-090-G-20-B-B-M-E	2396.10
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	090	Non-bypass without Valve	3µm	SF-TM-090-H-03-B-B-O-E	2395.95
						5µm	SF-TM-090-H-05-B-B-O-E	2368.10
						10µm	SF-TM-090-H-10-B-B-O-E	2354.10
						20µm	SF-TM-090-H-20-B-B-O-E	2354.10
					Bypass Valve	3µm	SF-TM-090-H-03-B-B-B-E	2591.95
						5µm	SF-TM-090-H-05-B-B-B-E	2564.10
						10µm	SF-TM-090-H-10-B-B-B-E	2550.10
						20µm	SF-TM-090-H-20-B-B-B-E	2550.10
					Reverse Flow Valve	3µm	SF-TM-090-H-03-B-B-R-E	2648.45
						5µm	SF-TM-090-H-05-B-B-R-E	2620.60
						10µm	SF-TM-090-H-10-B-B-R-E	2606.60
						20µm	SF-TM-090-H-20-B-B-R-E	2606.60
					Multi-function Valve	3µm	SF-TM-090-H-03-B-B-M-E	2732.15
						5µm	SF-TM-090-H-05-B-B-M-E	2704.30
						10µm	SF-TM-090-H-10-B-B-M-E	2690.30
						20µm	SF-TM-090-H-20-B-B-M-E	2690.30
	High Pressure Filter Assemblies Top Mounted Includes Electrical Clogging Indicator (supplied loose ie. not fitted)	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	130	Bypass Valve	3µm	SF-TM-130-G-03-B-B-B-E	2800.25
						5µm	SF-TM-130-G-05-B-B-B-E	2758.35
						10µm	SF-TM-130-G-10-B-B-B-E	2744.40
						20µm	SF-TM-130-G-20-B-B-B-E	2744.40
					Multi-function Valve	3µm	SF-TM-130-G-03-B-B-M-E	2940.45
						5µm	SF-TM-130-G-05-B-B-M-E	2898.55
						10µm	SF-TM-130-G-10-B-B-M-E	2884.60
						20µm	SF-TM-130-G-20-B-B-M-E	2884.60
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	130	Non-bypass without Valve	3µm	SF-TM-130-H-03-B-B-O-E	2968.80
						5µm	SF-TM-130-H-05-B-B-O-E	2845.95
						10µm	SF-TM-130-H-10-B-B-O-E	2898.35
						20µm	SF-TM-130-H-20-B-B-O-E	2898.35
					Bypass Valve	3µm	SF-TM-130-H-03-B-B-B-E	3164.80
						5µm	SF-TM-130-H-05-B-B-B-E	3041.95
						10µm	SF-TM-130-H-10-B-B-B-E	3094.35
						20µm	SF-TM-130-H-20-B-B-B-E	3094.35
					Reverse Flow Valve	3µm	SF-TM-130-H-03-B-B-R-E	3221.30
						5µm	SF-TM-130-H-05-B-B-R-E	3098.45
						10µm	SF-TM-130-H-10-B-B-R-E	3150.85
						20µm	SF-TM-130-H-20-B-B-R-E	3150.85
					Multi-function Valve	3µm	SF-TM-130-H-03-B-B-M-E	3305.00
						5µm	SF-TM-130-H-05-B-B-M-E	3182.15
						10µm	SF-TM-130-H-10-B-B-M-E	3234.55
						20µm	SF-TM-130-H-20-B-B-M-E	3234.55

For replacement filter elements refer to page N88

High Pressure Filter Assemblies Top Mounted ▪ Type SF-TM
Includes Electrical Clogging Indicator

Filter Element	Description	Filter Material	Pressure Setting	Nominal Size	Valve	Micron	Designation	Price
	High Pressure Filter Assemblies Top Mounted Includes Electrical Clogging Indicator (supplied loose ie. not fitted)	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	160	Bypass Valve	3µm	SF-TM-160-G-03-B-B-B-E	2817.00
						5µm	SF-TM-160-G-05-B-B-B-E	2817.00
						10µm	SF-TM-160-G-10-B-B-B-E	2774.60
						20µm	SF-TM-160-G-20-B-B-B-E	2774.60
					Multi-function Valve	3µm	SF-TM-160-G-03-B-B-M-E	2957.20
						5µm	SF-TM-160-G-05-B-B-M-E	2957.20
						10µm	SF-TM-160-G-10-B-B-M-E	2914.80
						20µm	SF-TM-160-G-20-B-B-M-E	2914.80
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	160	Non-bypass without Valve	3µm	SF-TM-160-H-03-B-B-O-E	3223.40
						5µm	SF-TM-160-H-05-B-B-O-E	3209.40
						10µm	SF-TM-160-H-10-B-B-O-E	3111.10
						20µm	SF-TM-160-H-20-B-B-O-E	3111.10
					Bypass Valve	3µm	SF-TM-160-H-03-B-B-B-E	3419.40
						5µm	SF-TM-160-H-05-B-B-B-E	3405.40
						10µm	SF-TM-160-H-10-B-B-B-E	3307.10
						20µm	SF-TM-160-H-20-B-B-B-E	3307.10
					Reverse Flow Valve	3µm	SF-TM-160-H-03-B-B-R-E	3475.90
						5µm	SF-TM-160-H-05-B-B-R-E	3461.90
						10µm	SF-TM-160-H-10-B-B-R-E	3363.60
						20µm	SF-TM-160-H-20-B-B-R-E	3363.60
					Multi-function Valve	3µm	SF-TM-160-H-03-B-B-M-E	3559.60
						5µm	SF-TM-160-H-05-B-B-M-E	3545.60
						10µm	SF-TM-160-H-10-B-B-M-E	3447.30
						20µm	SF-TM-160-H-20-B-B-M-E	3447.30

For replacement filter elements refer to page N88

Filter Elements

Filter Elements
Low collapse pressure - Stainless Wire Mesh

Item No.	Designation	Micron	Price
1020006065	SE-014-S-25-B/3	25µm	182.10
1020006071	SE-030-S-25-B/3	25µm	252.55
1020002405	SE-045-S-25-B/3	25µm	364.80
1020006092	SE-090-S-25-B/3	25µm	504.90
1020006110	SE-160-S-25-B/3	25µm	1065.40
1020007934	SE-014-S-50-B/3	50µm	182.10
1020007935	SE-030-S-50-B/3	50µm	252.55
1020007938	SE-045-S-50-B/3	50µm	364.80
1020007942	SE-090-S-50-B/3	50µm	981.00
1020007946	SE-160-S-50-B/3	50µm	1107.25
1020006069	SE-014-S-100-B/3	100µm	182.10
1020006075	SE-030-S-100-B/3	100µm	182.10
1020006084	SE-045-S-100-B/3	100µm	364.80
1020006096	SE-090-S-100-B/3	100µm	546.75
1020006114	SE-160-S-100-B/3	100µm	756.65

Low collapse pressure max. Δp* collapse 30 bar (435 PSI)
*Collapse / burst resistance as per ISO 2941

Filter Elements
High collapse pressure - Stainless Fibre

Item No.	Designation	Micron	Price
1020002254	SE-014-A-03-B/2	03µm	462.45
1020002309	SE-030-A-03-B/2	03µm	799.10
1020002417	SE-070-A-03-B/2	03µm	1401.50
1020001271	SE-090-A-03-B/2	03µm	1627.25
1020001311	SE-160-A-03-B/2	03µm	3533.35
1020002255	SE-014-A-05-B/2	05µm	350.75
1020002373	SE-045-A-05-B/2	05µm	925.25
1020001272	SE-090-A-05-B/2	05µm	1474.50
1020001312	SE-160-A-05-B/2	05µm	3320.80
1020002256	SE-014-A-10-B/2	10µm	350.75
1020002311	SE-030-A-10-B/2	10µm	546.75
1020002374	SE-045-A-10-B/2	10µm	504.90
1020002419	SE-070-A-10-B/2	10µm	827.05
1020001273	SE-090-A-10-B/2	10µm	1036.90
1020001313	SE-160-A-10-B/2	10µm	2271.50
1020002257	SE-014-A-20B/2	20µm	350.75
1020002312	SE-030-A-20-B/2	20µm	546.75
1020002375	SE-045-A-20-B/2	20µm	896.70
1020002420	SE-070-A-20-B/2	20µm	827.05
1020001274	SE-090-A-20-B/2	20µm	1036.90

High collapse pressure max. Δp* collapse 210 bar (3045 PSI)
*Collapse / burst resistance as per ISO 2941

Filter Elements
Low collapse pressure - Inorganic Glass Fibre

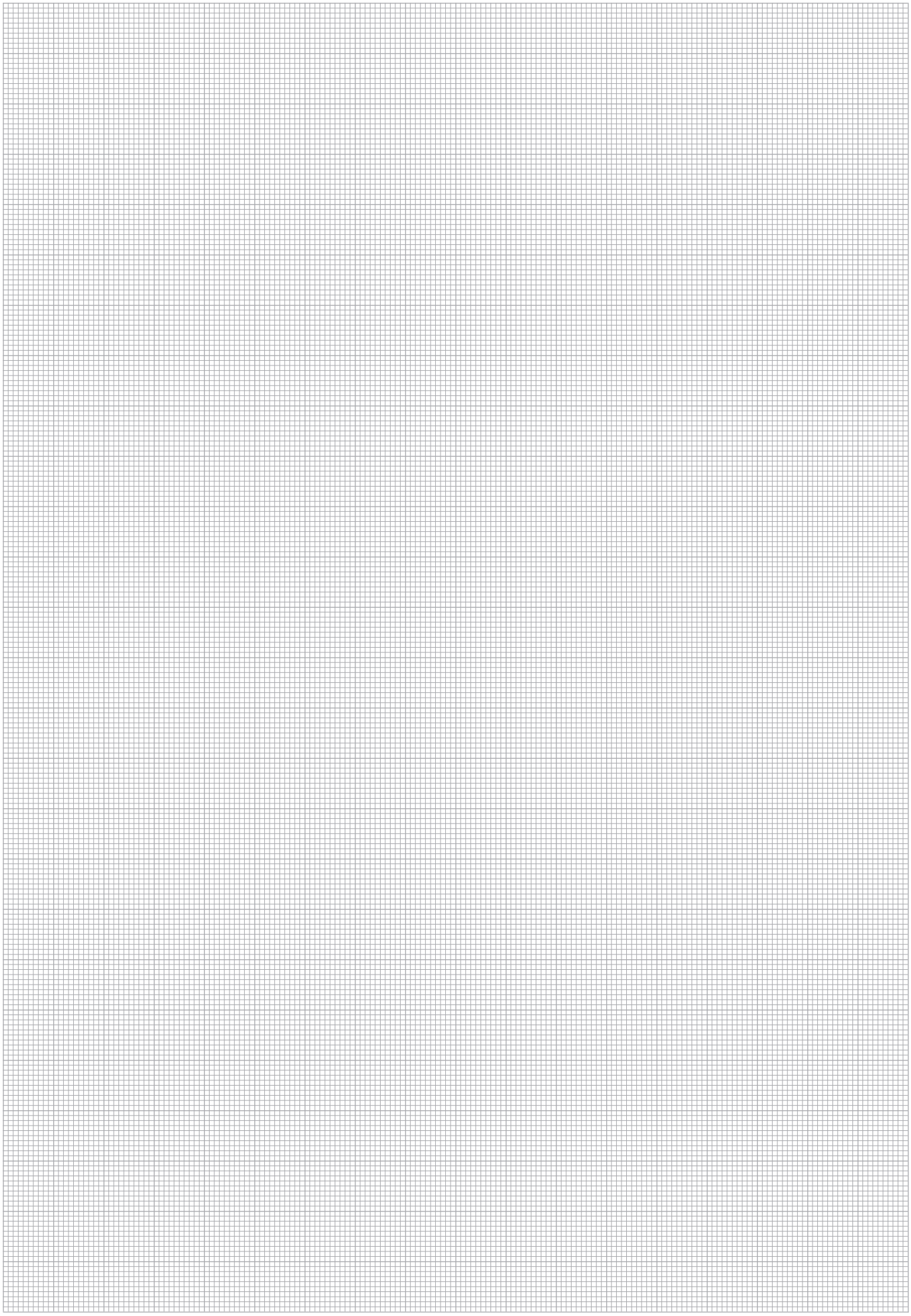
Item No.	Designation	Micron	Price
1020023379	SE-014-G-03-B/4	03µm	112.30
1020023450	SE-030-G-03-B/4	03µm	154.20
1020023538	SE-045-G-03-B/4	03µm	182.10
1020023578	SE-070-G-03-B/4	03µm	224.60
1020023615	SE-090-G-03-B/4	03µm	308.30
1020023674	SE-130-G-03-B/4	03µm	588.65
1020023691	SE-160-G-03-B/4	03µm	631.05
1020023381	SE-014-G-05-B/4	05µm	112.30
1020023458	SE-030-G-05-B/4	05µm	140.30
1020023541	SE-045-G-05-B/4	05µm	168.15
1020023581	SE-070-G-05-B/4	05µm	210.70
1020023619	SE-090-G-05-B/4	05µm	294.35
1020023676	SE-130-G-05-B/4	05µm	546.75
1020023694	SE-160-G-05-B/4	05µm	631.05
1020022000	SE-014-G-10-B/4	10µm	112.30
1020023463	SE-030-G-10-B/4	10µm	126.30
1020023545	SE-045-G-10-B/4	10µm	168.15
1020023585	SE-070-G-10-B/4	10µm	196.05
1020023621	SE-090-G-10-B/4	10µm	280.45
1020023677	SE-130-G-10-B/4	10µm	532.80
1020023700	SE-160-G-10-B/4	10µm	588.65
1020023392	SE-014-G-20-B/4	20µm	112.30
1020023474	SE-030-G-20-B/4	20µm	126.30
1020023550	SE-045-G-20-B/4	20µm	168.15
1020023591	SE-070-G-20-B/4	20µm	196.05
1020023628	SE-090-G-20-B/4	20µm	280.45
1020023679	SE-130-G-20-B/4	20µm	532.80
1020023704	SE-160-G-20-B/4	20µm	588.65

Low collapse pressure max. Δp* collapse 25 bar (363 PSI)
*Collapse / burst resistance as per ISO 2941

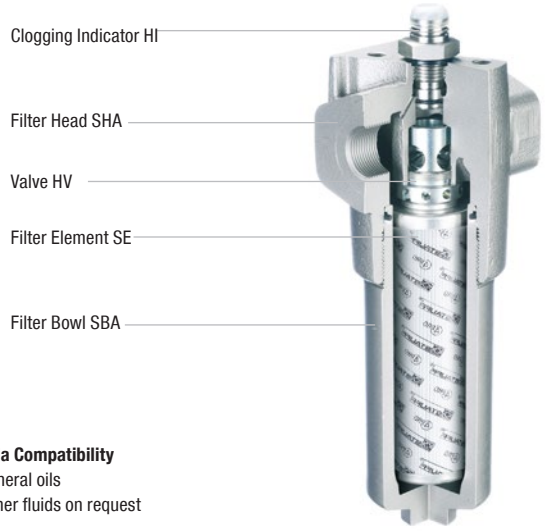
Filter Elements
High collapse pressure - Inorganic Glass Fibre

Item No.	Designation	Micron	Price
1020023401	SE-014-H-03-B/4	03µm	196.05
1020023482	SE-030-H-03-B/4	03µm	266.50
1020023555	SE-045-H-03-B/4	03µm	336.20
1020023597	SE-070-H-03-B/4	03µm	420.60
1020023632	SE-090-H-03-B/4	03µm	616.50
1020023680	SE-130-H-03-B/4	03µm	953.20
1020023708	SE-160-H-03-B/4	03µm	1233.45
1020023409	SE-014-H-05-B/4	05µm	182.10
1020023488	SE-030-H-05-B/4	05µm	252.55
1020023559	SE-045-H-05-B/4	05µm	308.30
1020023602	SE-070-H-05-B/4	05µm	406.60
1020023636	SE-090-H-05-B/4	05µm	588.65
1020023682	SE-130-H-05-B/4	05µm	830.35
1020023713	SE-160-H-05-B/4	05µm	1219.45
1020023413	SE-014-H-10-B/4	10µm	168.15
1020023492	SE-030-H-10-B/4	10µm	238.60
1020023564	SE-045-H-10-B/4	10µm	294.35
1020023607	SE-070-H-10-B/4	10µm	392.65
1020023641	SE-090-H-10-B/4	10µm	574.65
1020023685	SE-130-H-10-B/4	10µm	882.75
1020023718	SE-160-H-10-B/4	10µm	1121.15
1020023419	SE-014-H-20-B/4	20µm	168.15
1020023501	SE-030-H-20-B/4	20µm	238.60
1020023573	SE-045-H-20-B/4	20µm	294.35
1020023611	SE-070-H-20-B/4	20µm	392.65
1020023647	SE-090-H-20-B/4	20µm	574.65
1020023689	SE-130-H-20-B/4	20µm	882.75
1020023724	SE-160-H-20-B/4	20µm	1121.15

High collapse pressure max. Δp* collapse 210 bar (3045 PSI)
*Collapse / burst resistance as per ISO 2941



Medium Pressure Filters ▪ Type SFA



Product Description

STAUFF SFA series Medium Pressure Filters are designed for in-line hydraulic applications with a maximum operating pressure of 160 bar / 2320 PSI.
Used together with STAUFF SE series Filter Elements, a high efficiency of contamination removal is assured. The dirt-hold capacity of the elements ensures long service life, and as a result, reduced maintenance costs.

Technical Data

Construction
- Designed for in-line assembly, with threaded mounting holes on top of the head.

Materials
- Filter head: Cast Aluminium
- Filter bowl: Aluminium
- O-Rings: NBR (Buna-N®)
  FKM/FPM (Viton®)
  EPDM (Ethylene-Propylene-Diene-Monomer-Rubber)
- Support ring: PTFE (Polytetrafluoroethylene)

Port Connections
- BSPP
- NPT
- SAE O-Ring thread
- SAE 3000 PSI (Code 61) flange

Operating Pressure
- SFA-014/030: Max. 160 bar / 2320 PSI
  Max. 190 bar / 2755 PSI (according to ANSI T2.6.1. R2-2001)
- SFA-045/070: Max. 150 bar / 2175 PSI
  Max. 171 bar / 2480 PSI (according to ANSI T2.6.1. R2-2001)

Burst Pressure
- Min. 480 bar / 6960 PSI

Temperature Range
- -10 °C ... +100 °C / +14 °F ... +212 °F

Filter Elements
- Specifications refer to page N91

Media Compatibility
- Mineral oils
  Other fluids on request

Options and Accessories

Valves
- Bypass valve: Allows unfiltered oil to bypass the contaminated element once the opening pressure has been reached, a differential pressure of $6^{+0.5}$ bar / $87^{+7.25}$ PSI Δp is the standard setting.
  Other settings available on request.
- Reverse flow valve: Allows reverse flow through the filter head without back flushing the element.
- Non-return valve: Prevents draining of the delivery line during element change.
- Multi-function valve: Opening pressure $6^{+0.5}$ bar / $87^{+7.25}$ PSI
  Bypass, reverse flow capability and non-return valve combined in one valve.

Clogging Indicators
- Standard actuating pressure: $5_{-0.5}$ bar / $72.5_{-7.25}$ PSI Δp
  Other actuating pressure settings are available on request.
- Available indicators: Visual
  Electrical
  Visual-electrical (24 V DC, 110 V AC, 230 V AC versions)
  Double Visual-electrical (24 V DC)

Medium Pressure Filter Housings / Complete Filters ▪ Type SFA

SFA	-	014	-	G	-	10	-	V	-	T	-	G12	-	B	-	P	T	230	/	X
①		②		③		④		⑤		⑥		⑦		⑧		⑨	⑩	⑪		⑫

① Type

Medium Pressure Filter	**SFA**

② Group

Flow	Size
60 l/min / 14 US GPM	**014**
110 l/min / 30 US GPM	**030**
160 l/min / 45 US GPM	**045**
240 l/min / 70 US GPM	**070**

Note: Exact flow will depend on the selected filter element. For technical data refer to Catalogue 9 - STAUFF Filtration Technology.

③ Filter Material

Material	max. Δp*collapse	Micron ratings available	Code
Without filter element	-	-	**0**
Inorg. glass fibre	25 bar / 363 PSI	3, 5, 10, 20	**G**
Inorg. glass fibre	210 bar / 3045 PSI		**H**
Stainless fibre	210 bar / 3045 PSI		**A**
Stainless mesh	30 bar / 435 PSI	25, 50, 100, 200	**S**

Note: * Collapse/burst resistance as per ISO 2941.

④ Micron Rating

Without filter element	**0**
3µm	**03**
5µm	**05**
10µm	**10**
20µm	**20**
25µm	**25**
50µm	**50**
100µm	**100**
200µm	**200**

Note: Other micron ratings are available on request.

⑤ Sealing Material

NBR (Buna-N®)	**B**
FKM/FPM (Viton®)	**V**
EPDM	**E**

Note: Other sealing materials are available on request.

⑥ Connection Flange

Type T	**T**

⑦ Connection Style

Connection Style	Thread Style	Group 014 030	Code	Group 045 070	Code
BSPP	metric	3/4	**G12**	1-1/4	**G20**
BSPP	metric	1	G16	1-1/2	G24
NPT	UNC	3/4	N12	1-1/4	N20
SAE O-Ring Thread	UNC	1-1/16-12	U12	1-5/8-12	U20
SAE Flange 3000 PSI	metric	3/4	C312M	1-1/4	C320M
SAE Flange 3000 PSI	UNC	3/4	C312U	1-1/4	C320U
SAE Flange 3000 PSI	metric	1	C316M	-	-
SAE Flange 3000 PSI	UNC	1	C316U	-	-

Note: Other port connections on request. Bold types identify preferred connection styles.

⑧ Valve

Non-bypass standard insert without valve	**0**
Bypass valve	**B**
Reverse flow valve	**R**
Non-return valve	**N**
Multi-function valve	**M**

⑨ Clogging Indicator

Without clogging indicator	**0**
Visual, with automatic reset	**A**
Visual, with manual reset	**V**
Electrical	**E**
Electrical, Deutsch plug	**ED**
Visual-electrical	**P**
Double Visual-electrical	**D024**

⑩ Thermostop

Without thermostop	**(None)**
With thermostop	**T**

⑪ Voltage (only for Code P)

24 V DC	**024**
110 V AC	**110**
230 V AC	**230**

⑫ Design Code

STAUFF internal information	**X**

Filter Elements ▪ Type SE

SE	-	014	-	G	-	10	-	B	/	X
①		②		③		④		⑤		⑥

① Type

Filter Element Series	**SE**

② Group

According to filter housing

③ Filter Material

Material	max. Δp*collapse	Micron ratings available	Code
Inorganic glass fibre	25 bar / 363 PSI	3, 5, 10, 20	**G**
Inorganic glass fibre	210 bar / 3045 PSI		**H**
Stainless fibre	210 bar / 3045 PSI		**A**
Stainless mesh	30 bar / 435 PSI	25, 50, 100, 200	**S**

Note: Collapse/burst resistance as per ISO 2941.

④ Micron Rating

3µm	**03**
5µm	**05**
10µm	**10**
20µm	**20**
25µm	**25**
50µm	**50**
100µm	**100**
200µm	**200**

Note: Other micron ratings are available on request.

⑤ Sealing Material

NBR (Buna-N®)	**B**
FKM/FPM (Viton®)	**V**
EPDM	**E**

Note: Other sealing materials are available on request.

⑥ Design Code

STAUFF internal information	**X**

Medium Pressure Filter Assemblies ▪ Type SFA
Without Clogging Indicator

Filter Element	Description	Filter Material	Pressure Setting	Nominal Size	Valve	Micron	Designation	Price
	Medium Pressure Filter Assemblies Without Clogging Indicator (Fitted with plug)	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	014	Bypass Valve	3µm	SFA-014-G-03-B-T-G12-B-0	577.45
						5µm	SFA-014-G-05-B-T-G12-B-0	577.45
						10µm	SFA-014-G-10-B-T-G12-B-0	577.45
						20µm	SFA-014-G-20-B-T-G12-B-0	577.45
					Multi-function Valve	3µm	SFA-014-G-03-B-T-G12-M-0	703.70
						5µm	SFA-014-G-05-B-T-G12-M-0	703.70
						10µm	SFA-014-G-10-B-T-G12-M-0	703.70
						20µm	SFA-014-G-20-B-T-G12-M-0	703.70
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	014	Non-bypass without Valve	3µm	SFA-014-H-03-B-T-G12-0-0	575.75
						5µm	SFA-014-H-05-B-T-G12-0-0	561.80
						10µm	SFA-014-H-10-B-T-G12-0-0	547.85
						20µm	SFA-014-H-20-B-T-G12-0-0	547.85
					Bypass Valve	3µm	SFA-014-H-03-B-T-G12-B-0	661.20
						5µm	SFA-014-H-05-B-T-G12-B-0	647.25
						10µm	SFA-014-H-10-B-T-G12-B-0	633.30
						20µm	SFA-014-H-20-B-T-G12-B-0	633.30
					Multi-function Valve	3µm	SFA-014-H-03-B-T-G12-M-0	787.45
						5µm	SFA-014-H-05-B-T-G12-M-0	773.50
						10µm	SFA-014-H-10-B-T-G12-M-0	759.55
						20µm	SFA-014-H-20-B-T-G12-M-0	759.55
	Medium Pressure Filter Assemblies Without Clogging Indicator (Fitted with plug)	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	030	Bypass Valve	3µm	SFA-030-G-03-B-T-G12-B-0	619.35
						5µm	SFA-030-G-05-B-T-G12-B-0	605.45
						10µm	SFA-030-G-10-B-T-G12-B-0	591.45
						20µm	SFA-030-G-20-B-T-G12-B-0	591.45
					Multi-function Valve	3µm	SFA-030-G-03-B-T-G12-M-0	745.60
						5µm	SFA-030-G-05-B-T-G12-M-0	731.70
						10µm	SFA-030-G-10-B-T-G12-M-0	717.70
						20µm	SFA-030-G-20-B-T-G12-M-0	717.70
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	030	Non-bypass without Valve	3µm	SFA-030-H-03-B-T-G12-0-0	646.20
						5µm	SFA-030-H-05-B-T-G12-0-0	632.25
						10µm	SFA-030-H-10-B-T-G12-0-0	618.30
						20µm	SFA-030-H-20-B-T-G12-0-0	618.30
					Bypass Valve	3µm	SFA-030-H-03-B-T-G12-B-0	731.65
						5µm	SFA-030-H-05-B-T-G12-B-0	717.70
						10µm	SFA-030-H-10-B-T-G12-B-0	703.75
						20µm	SFA-030-H-20-B-T-G12-B-0	703.75
					Multi-function Valve	3µm	SFA-030-H-03-B-T-G12-M-0	857.90
						5µm	SFA-030-H-05-B-T-G12-M-0	843.95
						10µm	SFA-030-H-10-B-T-G12-M-0	830.00
						20µm	SFA-030-H-20-B-T-G12-M-0	830.00
	Medium Pressure Filter Assemblies Without Clogging Indicator (Fitted with plug)	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	045	Bypass Valve	3µm	SFA-045-G-03-B-T-G20-B-0	899.10
						5µm	SFA-045-G-05-B-T-G20-B-0	885.15
						10µm	SFA-045-G-10-B-T-G20-B-0	885.15
						20µm	SFA-045-G-20-B-T-G20-B-0	885.15
					Multi-function Valve	3µm	SFA-045-G-03-B-T-G20-M-0	1081.75
						5µm	SFA-045-G-05-B-T-G20-M-0	1067.80
						10µm	SFA-045-G-10-B-T-G20-M-0	1067.80
						20µm	SFA-045-G-20-B-T-G20-M-0	1067.80
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	045	Non-bypass without Valve	3µm	SFA-045-H-03-B-T-G20-0-0	906.35
						5µm	SFA-045-H-05-B-T-G20-0-0	878.45
						10µm	SFA-045-H-10-B-T-G20-0-0	864.50
						20µm	SFA-045-H-20-B-T-G20-0-0	864.50
					Bypass Valve	3µm	SFA-045-H-03-B-T-G20-B-0	1053.20
						5µm	SFA-045-H-05-B-T-G20-B-0	1025.30
						10µm	SFA-045-H-10-B-T-G20-B-0	1011.35
						20µm	SFA-045-H-20-B-T-G20-B-0	1011.35
					Multi-function Valve	3µm	SFA-045-H-03-B-T-G20-M-0	1235.85
						5µm	SFA-045-H-05-B-T-G20-M-0	1207.95
						10µm	SFA-045-H-10-B-T-G20-M-0	1194.00
						20µm	SFA-045-H-20-B-T-G20-M-0	1194.00

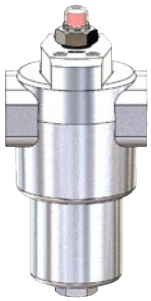
For replacement filter elements refer to page N99

Medium Pressure Filter Assemblies ▪ Type SFA
Without Clogging Indicator

Filter Element	Description	Filter Material	Pressure Setting	Nominal Size	Valve	Micron	Designation	Price
	Medium Pressure Filter Assemblies Without Clogging Indicator (Fitted with plug)	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	070	Bypass Valve	3µm	SFA-070-G-03-B-T-G20-B-0	997.35
						5µm	SFA-070-G-05-B-T-G20-B-0	983.45
						10µm	SFA-070-G-10-B-T-G20-B-0	968.80
						20µm	SFA-070-G-20-B-T-G20-B-0	968.80
					Multi-function Valve	3µm	SFA-070-G-03-B-T-G20-M-0	1180.00
						5µm	SFA-070-G-05-B-T-G20-M-0	1166.10
						10µm	SFA-070-G-10-B-T-G20-M-0	1151.45
						20µm	SFA-070-G-20-B-T-G20-M-0	1151.45
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	070	Non-bypass without Valve	3µm	SFA-070-H-03-B-T-G20-O-0	1046.50
						5µm	SFA-070-H-05-B-T-G20-O-0	1032.50
						10µm	SFA-070-H-10-B-T-G20-O-0	1018.55
						20µm	SFA-070-H-20-B-T-G20-O-0	1018.55
					Bypass Valve	3µm	SFA-070-H-03-B-T-G20-B-0	1193.35
						5µm	SFA-070-H-05-B-T-G20-B-0	1179.35
						10µm	SFA-070-H-10-B-T-G20-B-0	1165.40
						20µm	SFA-070-H-20-B-T-G20-B-0	1165.40
					Multi-function Valve	3µm	SFA-070-H-03-B-T-G20-M-0	1376.00
						5µm	SFA-070-H-05-B-T-G20-M-0	1362.00
						10µm	SFA-070-H-10-B-T-G20-M-0	1348.05
						20µm	SFA-070-H-20-B-T-G20-M-0	1348.05

For replacement filter elements refer to page N99

Medium Pressure Filter Assemblies ▪ Type SFA
Includes Visual Clogging Indicator with Automatic Reset

Filter Element	Description	Filter Material	Pressure Setting	Nominal Size	Valve	Micron	Designation	Price
	Medium Pressure Filter Assemblies Includes Visual Clogging Indicator with Automatic Reset	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	014	Bypass Valve	3µm	SFA-014-G-03-B-T-G12-B-A	756.55
						5µm	SFA-014-G-05-B-T-G12-B-A	756.55
						10µm	SFA-014-G-10-B-T-G12-B-A	756.55
						20µm	SFA-014-G-20-B-T-G12-B-A	756.55
					Multi-function Valve	3µm	SFA-014-G-03-B-T-G12-M-A	882.80
						5µm	SFA-014-G-05-B-T-G12-M-A	882.80
						10µm	SFA-014-G-10-B-T-G12-M-A	882.80
						20µm	SFA-014-G-20-B-T-G12-M-A	882.80
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	014	Non-bypass without Valve	3µm	SFA-014-H-03-B-T-G12-O-A	754.85
						5µm	SFA-014-H-05-B-T-G12-O-A	740.90
						10µm	SFA-014-H-10-B-T-G12-O-A	726.95
						20µm	SFA-014-H-20-B-T-G12-O-A	726.95
					Bypass Valve	3µm	SFA-014-H-03-B-T-G12-B-A	840.30
						5µm	SFA-014-H-05-B-T-G12-B-A	826.35
						10µm	SFA-014-H-10-B-T-G12-B-A	812.40
						20µm	SFA-014-H-20-B-T-G12-B-A	812.40
					Multi-function Valve	3µm	SFA-014-H-03-B-T-G12-M-A	966.55
						5µm	SFA-014-H-05-B-T-G12-M-A	952.60
						10µm	SFA-014-H-10-B-T-G12-M-A	938.65
						20µm	SFA-014-H-20-B-T-G12-M-A	938.65
	Medium Pressure Filter Assemblies Includes Visual Clogging Indicator with Automatic Reset	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	030	Bypass Valve	3µm	SFA-030-G-03-B-T-G12-B-A	798.45
						5µm	SFA-030-G-05-B-T-G12-B-A	784.55
						10µm	SFA-030-G-10-B-T-G12-B-A	770.55
						20µm	SFA-030-G-20-B-T-G12-B-A	770.55
					Multi-function Valve	3µm	SFA-030-G-03-B-T-G12-M-A	924.70
						5µm	SFA-030-G-05-B-T-G12-M-A	910.80
						10µm	SFA-030-G-10-B-T-G12-M-A	896.80
						20µm	SFA-030-G-20-B-T-G12-M-A	896.80
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	030	Non-bypass without Valve	3µm	SFA-030-H-03-B-T-G12-O-A	825.30
						5µm	SFA-030-H-05-B-T-G12-O-A	811.35
						10µm	SFA-030-H-10-B-T-G12-O-A	797.40
						20µm	SFA-030-H-20-B-T-G12-O-A	797.40
					Bypass Valve	3µm	SFA-030-H-03-B-T-G12-B-A	910.75
						5µm	SFA-030-H-05-B-T-G12-B-A	896.80
						10µm	SFA-030-H-10-B-T-G12-B-A	882.85
						20µm	SFA-030-H-20-B-T-G12-B-A	882.85
					Multi-function Valve	3µm	SFA-030-H-03-B-T-G12-M-A	1037.00
						5µm	SFA-030-H-05-B-T-G12-M-A	1023.05
						10µm	SFA-030-H-10-B-T-G12-M-A	1009.10
						20µm	SFA-030-H-20-B-T-G12-M-A	1009.10
	Medium Pressure Filter Assemblies Includes Visual Clogging Indicator with Automatic Reset	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	045	Bypass Valve	3µm	SFA-045-G-03-B-T-G20-B-A	1078.20
						5µm	SFA-045-G-05-B-T-G20-B-A	1064.25
						10µm	SFA-045-G-10-B-T-G20-B-A	1064.25
						20µm	SFA-045-G-20-B-T-G20-B-A	1064.25
					Multi-function Valve	3µm	SFA-045-G-03-B-T-G20-M-A	1260.85
						5µm	SFA-045-G-05-B-T-G20-M-A	1246.90
						10µm	SFA-045-G-10-B-T-G20-M-A	1246.90
						20µm	SFA-045-G-20-B-T-G20-M-A	1246.90
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	045	Non-bypass without Valve	3µm	SFA-045-H-03-B-T-G20-O-A	1085.45
						5µm	SFA-045-H-05-B-T-G20-O-A	1057.55
						10µm	SFA-045-H-10-B-T-G20-O-A	1043.60
						20µm	SFA-045-H-20-B-T-G20-O-A	1043.60
					Bypass Valve	3µm	SFA-045-H-03-B-T-G20-B-A	1232.30
						5µm	SFA-045-H-05-B-T-G20-B-A	1204.40
						10µm	SFA-045-H-10-B-T-G20-B-A	1190.45
						20µm	SFA-045-H-20-B-T-G20-B-A	1190.45
					Multi-function Valve	3µm	SFA-045-H-03-B-T-G20-M-A	1414.95
						5µm	SFA-045-H-05-B-T-G20-M-A	1387.05
						10µm	SFA-045-H-10-B-T-G20-M-A	1373.10
						20µm	SFA-045-H-20-B-T-G20-M-A	1373.10

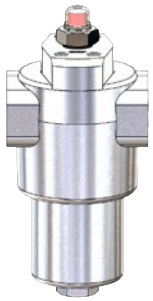
For replacement filter elements refer to page N99

Medium Pressure Filter Assemblies ▪ Type SFA
Includes Visual Clogging Indicator with Automatic Reset

Filter Element	Description	Filter Material	Pressure Setting	Nominal Size	Valve	Micron	Designation	Price
	Medium Pressure Filter Assemblies Includes Visual Clogging Indicator with Automatic Reset	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	070	Bypass Valve	3µm	SFA-070-G-03-B-T-G20-B-A	1176.45
						5µm	SFA-070-G-05-B-T-G20-B-A	1162.55
						10µm	SFA-070-G-10-B-T-G20-B-A	1147.90
						20µm	SFA-070-G-20-B-T-G20-B-A	1147.90
					Multi-function Valve	3µm	SFA-070-G-03-B-T-G20-M-A	1359.10
						5µm	SFA-070-G-05-B-T-G20-M-A	1345.20
						10µm	SFA-070-G-10-B-T-G20-M-A	1330.55
						20µm	SFA-070-G-20-B-T-G20-M-A	1330.55
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	070	Non-bypass without Valve	3µm	SFA-070-H-03-B-T-G20-O-A	1225.60
						5µm	SFA-070-H-05-B-T-G20-O-A	1211.60
						10µm	SFA-070-H-10-B-T-G20-O-A	1197.65
						20µm	SFA-070-H-20-B-T-G20-O-A	1197.65
					Bypass Valve	3µm	SFA-070-H-03-B-T-G20-B-A	1372.45
						5µm	SFA-070-H-05-B-T-G20-B-A	1358.45
						10µm	SFA-070-H-10-B-T-G20-B-A	1344.50
						20µm	SFA-070-H-20-B-T-G20-B-A	1344.50
					Multi-function Valve	3µm	SFA-070-H-03-B-T-G20-M-A	1555.10
						5µm	SFA-070-H-05-B-T-G20-M-A	1541.10
						10µm	SFA-070-H-10-B-T-G20-M-A	1527.15
						20µm	SFA-070-H-20-B-T-G20-M-A	1527.15

For replacement filter elements refer to page N99

Medium Pressure Filter Assemblies ▪ Type SFA
Includes Visual Clogging Indicator with Manual Reset

Filter Element	Description	Filter Material	Pressure Setting	Nominal Size	Valve	Micron	Designation	Price
	Medium Pressure Filter Assemblies Includes Visual Clogging Indicator with Manual Reset	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	014	Bypass Valve	3µm	SFA-014-G-03-B-T-G12-B-V	742.60
						5µm	SFA-014-G-05-B-T-G12-B-V	742.60
						10µm	SFA-014-G-10-B-T-G12-B-V	742.60
						20µm	SFA-014-G-20-B-T-G12-B-V	742.60
					Multi-function Valve	3µm	SFA-014-G-03-B-T-G12-M-V	868.85
						5µm	SFA-014-G-05-B-T-G12-M-V	868.85
						10µm	SFA-014-G-10-B-T-G12-M-V	868.85
						20µm	SFA-014-G-20-B-T-G12-M-V	868.85
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	014	Non-bypass without Valve	3µm	SFA-014-H-03-B-T-G12-O-V	740.90
						5µm	SFA-014-H-05-B-T-G12-O-V	726.95
						10µm	SFA-014-H-10-B-T-G12-O-V	713.00
						20µm	SFA-014-H-20-B-T-G12-O-V	713.00
					Bypass Valve	3µm	SFA-014-H-03-B-T-G12-B-V	826.35
						5µm	SFA-014-H-05-B-T-G12-B-V	812.40
						10µm	SFA-014-H-10-B-T-G12-B-V	798.45
						20µm	SFA-014-H-20-B-T-G12-B-V	798.45
					Multi-function Valve	3µm	SFA-014-H-03-B-T-G12-M-V	952.60
						5µm	SFA-014-H-05-B-T-G12-M-V	938.65
						10µm	SFA-014-H-10-B-T-G12-M-V	924.70
						20µm	SFA-014-H-20-B-T-G12-M-V	924.70
	Medium Pressure Filter Assemblies Includes Visual Clogging Indicator with Manual Reset	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	030	Bypass Valve	3µm	SFA-030-G-03-B-T-G12-B-V	784.50
						5µm	SFA-030-G-05-B-T-G12-B-V	770.60
						10µm	SFA-030-G-10-B-T-G12-B-V	756.60
						20µm	SFA-030-G-20-B-T-G12-B-V	756.60
					Multi-function Valve	3µm	SFA-030-G-03-B-T-G12-M-V	910.75
						5µm	SFA-030-G-05-B-T-G12-M-V	896.85
						10µm	SFA-030-G-10-B-T-G12-M-V	882.85
						20µm	SFA-030-G-20-B-T-G12-M-V	882.85
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	030	Non-bypass without Valve	3µm	SFA-030-H-03-B-T-G12-O-V	811.35
						5µm	SFA-030-H-05-B-T-G12-O-V	797.40
						10µm	SFA-030-H-10-B-T-G12-O-V	783.45
						20µm	SFA-030-H-20-B-T-G12-O-V	783.45
					Bypass Valve	3µm	SFA-030-H-03-B-T-G12-B-V	896.80
						5µm	SFA-030-H-05-B-T-G12-B-V	882.85
						10µm	SFA-030-H-10-B-T-G12-B-V	868.90
						20µm	SFA-030-H-20-B-T-G12-B-V	868.90
					Multi-function Valve	3µm	SFA-030-H-03-B-T-G12-M-V	1023.05
						5µm	SFA-030-H-05-B-T-G12-M-V	1009.10
						10µm	SFA-030-H-10-B-T-G12-M-V	995.15
						20µm	SFA-030-H-20-B-T-G12-M-V	995.15
	Medium Pressure Filter Assemblies Includes Visual Clogging Indicator with Manual Reset	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	045	Bypass Valve	3µm	SFA-045-G-03-B-T-G20-B-V	1064.25
						5µm	SFA-045-G-05-B-T-G20-B-V	1050.30
						10µm	SFA-045-G-10-B-T-G20-B-V	1050.30
						20µm	SFA-045-G-20-B-T-G20-B-V	1050.30
					Multi-function Valve	3µm	SFA-045-G-03-B-T-G20-M-V	1246.90
						5µm	SFA-045-G-05-B-T-G20-M-V	1232.95
						10µm	SFA-045-G-10-B-T-G20-M-V	1232.95
						20µm	SFA-045-G-20-B-T-G20-M-V	1232.95
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	045	Non-bypass without Valve	3µm	SFA-045-H-03-B-T-G20-O-V	1071.50
						5µm	SFA-045-H-05-B-T-G20-O-V	1043.60
						10µm	SFA-045-H-10-B-T-G20-O-V	1029.65
						20µm	SFA-045-H-20-B-T-G20-O-V	1029.65
					Bypass Valve	3µm	SFA-045-H-03-B-T-G20-B-V	1218.35
						5µm	SFA-045-H-05-B-T-G20-B-V	1190.45
						10µm	SFA-045-H-10-B-T-G20-B-V	1176.50
						20µm	SFA-045-H-20-B-T-G20-B-V	1176.50
					Multi-function Valve	3µm	SFA-045-H-03-B-T-G20-M-V	1401.00
						5µm	SFA-045-H-05-B-T-G20-M-V	1373.10
						10µm	SFA-045-H-10-B-T-G20-M-V	1359.15
						20µm	SFA-045-H-20-B-T-G20-M-V	1359.15

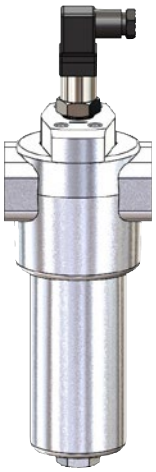
For replacement filter elements refer to page N99

Medium Pressure Filter Assemblies ▪ Type SFA
Includes Visual Clogging Indicator with Manual Reset

Filter Element	Description	Filter Material	Pressure Setting	Nominal Size	Valve	Micron	Designation	Price
	Medium Pressure Filter Assemblies Includes Visual Clogging Indicator with Manual Reset	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	070	Bypass Valve	3µm	SFA-070-G-03-B-T-G20-B-V	1162.50
						5µm	SFA-070-G-05-B-T-G20-B-V	1148.60
						10µm	SFA-070-G-10-B-T-G20-B-V	1133.95
						20µm	SFA-070-G-20-B-T-G20-B-V	1133.95
					Multi-function Valve	3µm	SFA-070-G-03-B-T-G20-M-V	1345.15
						5µm	SFA-070-G-05-B-T-G20-M-V	1331.25
						10µm	SFA-070-G-10-B-T-G20-M-V	1316.60
						20µm	SFA-070-G-20-B-T-G20-M-V	1316.60
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	070	Non-bypass without Valve	3µm	SFA-070-H-03-B-T-G20-O-V	1211.65
						5µm	SFA-070-H-05-B-T-G20-O-V	1197.65
						10µm	SFA-070-H-10-B-T-G20-O-V	1183.70
						20µm	SFA-070-H-20-B-T-G20-O-V	1183.70
					Bypass Valve	3µm	SFA-070-H-03-B-T-G20-B-V	1358.50
						5µm	SFA-070-H-05-B-T-G20-B-V	1344.50
						10µm	SFA-070-H-10-B-T-G20-B-V	1330.55
						20µm	SFA-070-H-20-B-T-G20-B-V	1330.55
					Multi-function Valve	3µm	SFA-070-H-03-B-T-G20-M-V	1541.15
						5µm	SFA-070-H-05-B-T-G20-M-V	1527.15
						10µm	SFA-070-H-10-B-T-G20-M-V	1513.20
						20µm	SFA-070-H-20-B-T-G20-M-V	1513.20

For replacement filter elements refer to page N99

Medium Pressure Filter Assemblies ▪ Type SFA
Includes Electrical Clogging Indicator

Filter Element	Description	Filter Material	Pressure Setting	Nominal Size	Valve	Micron	Designation	Price
	Medium Pressure Filter Assemblies Includes Electrical Clogging Indicator (supplied loose ie. not fitted)	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	014	Bypass Valve	3µm	SFA-014-G-03-B-T-G12-B-E	896.70
						5µm	SFA-014-G-05-B-T-G12-B-E	896.70
						10µm	SFA-014-G-10-B-T-G12-B-E	896.70
						20µm	SFA-014-G-20-B-T-G12-B-E	896.70
					Multi-function Valve	3µm	SFA-014-G-03-B-T-G12-M-E	1022.95
						5µm	SFA-014-G-05-B-T-G12-M-E	1022.95
						10µm	SFA-014-G-10-B-T-G12-M-E	1022.95
						20µm	SFA-014-G-20-B-T-G12-M-E	1022.95
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	014	Non-bypass without Valve	3µm	SFA-014-H-03-B-T-G12-O-E	895.00
						5µm	SFA-014-H-05-B-T-G12-O-E	881.05
						10µm	SFA-014-H-10-B-T-G12-O-E	867.10
						20µm	SFA-014-H-20-B-T-G12-O-E	867.10
					Bypass Valve	3µm	SFA-014-H-03-B-T-G12-B-E	980.45
						5µm	SFA-014-H-05-B-T-G12-B-E	966.50
						10µm	SFA-014-H-10-B-T-G12-B-E	952.55
						20µm	SFA-014-H-20-B-T-G12-B-E	952.55
					Multi-function Valve	3µm	SFA-014-H-03-B-T-G12-M-E	1106.70
						5µm	SFA-014-H-05-B-T-G12-M-E	1092.75
						10µm	SFA-014-H-10-B-T-G12-M-E	1078.80
						20µm	SFA-014-H-20-B-T-G12-M-E	1078.80
	Medium Pressure Filter Assemblies Includes Electrical Clogging Indicator (supplied loose ie. not fitted)	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	030	Bypass Valve	3µm	SFA-030-G-03-B-T-G12-B-E	938.60
						5µm	SFA-030-G-05-B-T-G12-B-E	924.70
						10µm	SFA-030-G-10-B-T-G12-B-E	910.70
						20µm	SFA-030-G-20-B-T-G12-B-E	910.70
					Multi-function Valve	3µm	SFA-030-G-03-B-T-G12-M-E	1064.85
						5µm	SFA-030-G-05-B-T-G12-M-E	1050.95
						10µm	SFA-030-G-10-B-T-G12-M-E	1036.95
						20µm	SFA-030-G-20-B-T-G12-M-E	1036.95
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	030	Non-bypass without Valve	3µm	SFA-030-H-03-B-T-G12-O-E	965.45
						5µm	SFA-030-H-05-B-T-G12-O-E	951.50
						10µm	SFA-030-H-10-B-T-G12-O-E	937.55
						20µm	SFA-030-H-20-B-T-G12-O-E	937.55
					Bypass Valve	3µm	SFA-030-H-03-B-T-G12-B-E	1050.90
						5µm	SFA-030-H-05-B-T-G12-B-E	1036.95
						10µm	SFA-030-H-10-B-T-G12-B-E	1023.00
						20µm	SFA-030-H-20-B-T-G12-B-E	1023.00
					Multi-function Valve	3µm	SFA-030-H-03-B-T-G12-M-E	1177.15
						5µm	SFA-030-H-05-B-T-G12-M-E	1163.20
						10µm	SFA-030-H-10-B-T-G12-M-E	1149.25
						20µm	SFA-030-H-20-B-T-G12-M-E	1149.25
	Medium Pressure Filter Assemblies Includes Electrical Clogging Indicator (supplied loose ie. not fitted)	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	045	Bypass Valve	3µm	SFA-045-G-03-B-T-G20-B-E	1218.35
						5µm	SFA-045-G-05-B-T-G20-B-E	1204.40
						10µm	SFA-045-G-10-B-T-G20-B-E	1204.40
						20µm	SFA-045-G-20-B-T-G20-B-E	1204.40
					Multi-function Valve	3µm	SFA-045-G-03-B-T-G20-M-E	1401.00
						5µm	SFA-045-G-05-B-T-G20-M-E	1387.05
						10µm	SFA-045-G-10-B-T-G20-M-E	1387.05
						20µm	SFA-045-G-20-B-T-G20-M-E	1387.05
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	045	Non-bypass without Valve	3µm	SFA-045-H-03-B-T-G20-O-E	1225.60
						5µm	SFA-045-H-05-B-T-G20-O-E	1197.70
						10µm	SFA-045-H-10-B-T-G20-O-E	1183.75
						20µm	SFA-045-H-20-B-T-G20-O-E	1183.75
					Bypass Valve	3µm	SFA-045-H-03-B-T-G20-B-E	1372.45
						5µm	SFA-045-H-05-B-T-G20-B-E	1344.55
						10µm	SFA-045-H-10-B-T-G20-B-E	1330.60
						20µm	SFA-045-H-20-B-T-G20-B-E	1330.60
					Multi-function Valve	3µm	SFA-045-H-03-B-T-G20-M-E	1555.10
						5µm	SFA-045-H-05-B-T-G20-M-E	1527.20
						10µm	SFA-045-H-10-B-T-G20-M-E	1513.25
						20µm	SFA-045-H-20-B-T-G20-M-E	1513.25

For replacement filter elements refer to page N99

Medium Pressure Filter Assemblies ▪ Type SFA
Includes Electrical Clogging Indicator

Filter Element	Description	Filter Material	Pressure Setting	Nominal Size	Valve	Micron	Designation	Price
	Medium Pressure Filter Assemblies Includes Electrical Clogging Indicator (supplied loose ie. not fitted)	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	070	Bypass Valve	3µm	SFA-070-G-03-B-T-G20-B-E	1316.60
						5µm	SFA-070-G-05-B-T-G20-B-E	1302.70
						10µm	SFA-070-G-10-B-T-G20-B-E	1288.05
						20µm	SFA-070-G-20-B-T-G20-B-E	1288.05
					Multi-function Valve	3µm	SFA-070-G-03-B-T-G20-M-E	1499.25
						5µm	SFA-070-G-05-B-T-G20-M-E	1485.35
						10µm	SFA-070-G-10-B-T-G20-M-E	1470.70
						20µm	SFA-070-G-20-B-T-G20-M-E	1470.70
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	070	Non-bypass without Valve	3µm	SFA-070-H-03-B-T-G20-O-E	1365.75
						5µm	SFA-070-H-05-B-T-G20-O-E	1351.75
						10µm	SFA-070-H-10-B-T-G20-O-E	1337.80
						20µm	SFA-070-H-20-B-T-G20-O-E	1337.80
					Bypass Valve	3µm	SFA-070-H-03-B-T-G20-B-E	1512.60
						5µm	SFA-070-H-05-B-T-G20-B-E	1498.60
						10µm	SFA-070-H-10-B-T-G20-B-E	1484.65
						20µm	SFA-070-H-20-B-T-G20-B-E	1484.65
					Multi-function Valve	3µm	SFA-070-H-03-B-T-G20-M-E	1695.25
						5µm	SFA-070-H-05-B-T-G20-M-E	1681.25
						10µm	SFA-070-H-10-B-T-G20-M-E	1667.30
						20µm	SFA-070-H-20-B-T-G20-M-E	1667.30

Filter Elements

Filter Elements
Low collapse pressure - Stainless Wire Mesh

Item No.	Designation	Micron	Price
1020006065	SE-014-S-25-B/3	25µm	182.10
1020006071	SE-030-S-25-B/3	25µm	252.55
1020002405	SE-045-S-25-B/3	25µm	364.80
1020007934	SE-014-S-50-B/3	50µm	182.10
1020007935	SE-030-S-50-B/3	50µm	252.55
1020007938	SE-045-S-50-B/3	50µm	364.80
1020006069	SE-014-S-100-B/3	100µm	182.10
1020006075	SE-030-S-100-B/3	100µm	182.10
1020006084	SE-045-S-100-B/3	100µm	364.80

Low collapse pressure max. Δp* collapse 30 bar (435 PSI)
*Collapse / burst resistance as per ISO 2941

Filter Elements
High collapse pressure - Stainless Fibre

Item No.	Designation	Micron	Price
1020002254	SE-014-A-03-B/2	03µm	462.45
1020002309	SE-030-A-03-B/2	03µm	799.10
1020002417	SE-070-A-03-B/2	03µm	1401.50
1020002255	SE-014-A-05-B/2	05µm	350.75
1020002373	SE-045-A-05-B/2	05µm	925.25
1020002256	SE-014-A-10-B/2	10µm	350.75
1020002311	SE-030-A-10-B/2	10µm	546.75
1020002374	SE-045-A-10-B/2	10µm	504.90
1020002419	SE-070-A-10-B/2	10µm	827.05
1020002257	SE-014-A-20B/2	20µm	350.75
1020002312	SE-030-A-20-B/2	20µm	546.75
1020002375	SE-045-A-20-B/2	20µm	896.70
1020002420	SE-070-A-20-B/2	20µm	827.05

High collapse pressure max. Δp* collapse 210 bar (3045 PSI)
*Collapse / burst resistance as per ISO 2941

Filter Elements
Low collapse pressure - Inorganic Glass Fibre

4PRO

Item No.	Designation	Micron	Price
1020023379	SE-014-G-03-B/4	03µm	112.30
1020023450	SE-030-G-03-B/4	03µm	154.20
1020023538	SE-045-G-03-B/4	03µm	182.10
1020023578	SE-070-G-03-B/4	03µm	224.60
1020023381	SE-014-G-05-B/4	05µm	112.30
1020023458	SE-030-G-05-B/4	05µm	140.30
1020023541	SE-045-G-05-B/4	05µm	168.15
1020023581	SE-070-G-05-B/4	05µm	210.70
1020022000	SE-014-G-10-B/4	10µm	112.30
1020023463	SE-030-G-10-B/4	10µm	126.30
1020023545	SE-045-G-10-B/4	10µm	168.15
1020023585	SE-070-G-10-B/4	10µm	196.05
1020023392	SE-014-G-20-B/4	20µm	112.30
1020023474	SE-030-G-20-B/4	20µm	126.30
1020023550	SE-045-G-20-B/4	20µm	168.15
1020023591	SE-070-G-20-B/4	20µm	196.05

Low collapse pressure max. Δp* collapse 25 bar (363 PSI)
*Collapse / burst resistance as per ISO 2941

Filter Elements
High collapse pressure - Inorganic Glass Fibre

4PRO

Item No.	Designation	Micron	Price
1020023401	SE-014-H-03-B/4	03µm	196.05
1020023482	SE-030-H-03-B/4	03µm	266.50
1020023555	SE-045-H-03-B/4	03µm	336.20
1020023597	SE-070-H-03-B/4	03µm	420.60
1020023409	SE-014-H-05-B/4	05µm	182.10
1020023488	SE-030-H-05-B/4	05µm	252.55
1020023559	SE-045-H-05-B/4	05µm	308.30
1020023602	SE-070-H-05-B/4	05µm	406.60
1020023413	SE-014-H-10-B/4	10µm	168.15
1020023492	SE-030-H-10-B/4	10µm	238.60
1020023564	SE-045-H-10-B/4	10µm	294.35
1020023607	SE-070-H-10-B/4	10µm	392.65
1020023419	SE-014-H-20-B/4	20µm	168.15
1020023501	SE-030-H-20-B/4	20µm	238.60
1020023573	SE-045-H-20-B/4	20µm	294.35
1020023611	SE-070-H-20-B/4	20µm	392.65

High collapse pressure max. Δp* collapse 210 bar (3045 PSI)
*Collapse / burst resistance as per ISO 2941

Clogging Indicators

Product Description

STAUFF Pressure Filters have a wide range of clogging indicators available. If no indicator is specified, the port is sealed by a plug (HI-0). The clogging indicators are actuated by the differential pressure (Δp) across the element. The special piston design minimizes the effects of peak pressures in the system. An optional thermal lockout (thermostop) is available to prevent false indication under cold start conditions. The fluid temperature has to be at least +20 °C / +68 °F for the indicator to function.

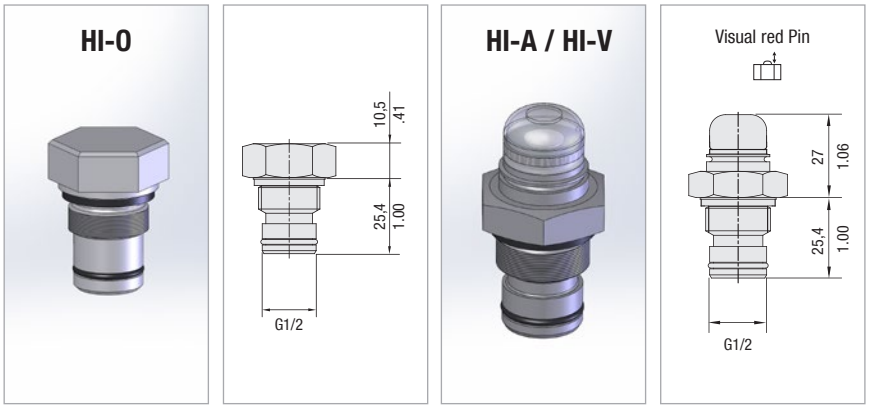
Plug Type HI-0 and visual Clogging Indicators Type HI-A and HI-V

Technical Data

Materials
- Body: Stainless Steel

The visual clogging indicators are available in the following configurations:

- Manual reset:
  The indicator continues to display the clogged signal even though the Δp may have fallen. Pressing the plastic cover down will reset the indicator.
- Automatic reset:
  The clogged signal will disappear when the Δp drops below the setting for the indicator.



Order Code

HI - A - T - B - B5.0 / X

① ② ③ ④ ⑤ ⑥

① Type

Clogging Indicator for Pressure Filters	HI

② Indicator Type

Plug	0
Visual, automatic reset	A
Visual, manual reset	V

③ Thermostop

Without thermostop	(None)
With thermostop	T

③ Sealing Material

NBR (Buna-N®)	B
FKM (Viton®)	V
EPDM	E

④ Differential Pressure Setting (only HI-A and HI-V)

1.72 bar / 25 PSI	B1.7
2.0 bar / 29 PSI	B2.0
2.5 bar / 36.3 PSI	B2.5
3.0 bar / 43.5 PSI	B3.0
5.0 bar / 72.5 PSI (standard option)	B5.0
7.0 bar / 101.5 PSI	B7.0

⑤ Design Code

STAUFF internal information	X

HI-0
(Plug)

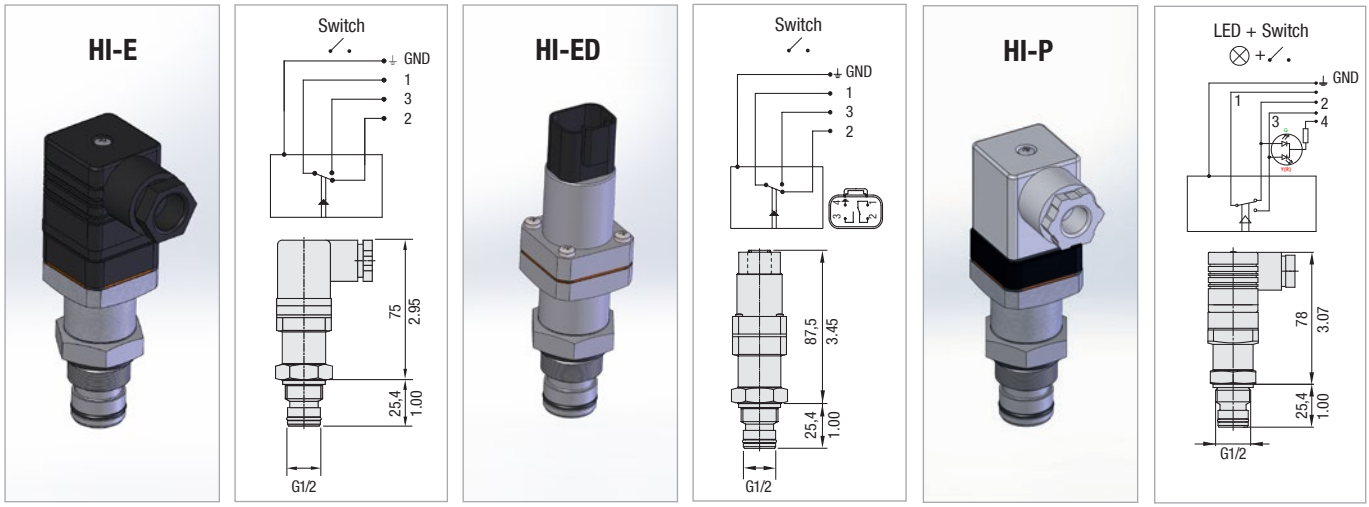
Item No.	Designation	Price
1030000010	Plug-SF-HI-0/2	16.95

HI-A / HI-V
(Visual Red Pin)

Item No.	Designation	Price
1020000147	HI-A-B-B5.0	196.05
1020000153	HI-V-B-B5.0	182.10
1020000148	HI-VT-B-B5.0	196.05
1030000660	Cap-HI	5.65

Electrical and Visual-electrical Clogging Indicators Type HI-E, HI-ED and HI-P

Continued on page N101



Dimensional drawings: All dimensions in mm/in.

Clogging Indicators

Electrical and Visual-electrical Clogging Indicators Type HI-E, HI-ED and HI-P

Technical Data

Materials
- Body: Stainless Steel

Electrical
- Plug according to DIN-EN 175301-803 A (DIN 43650-A).
- Screwed cable gland PG11
- Protection rating (DIN 40050) IP65 e.g. IP67
- Both NO and NC contacts are available in the switch, rated capacity: refer to page N100 for more information
- Deutsch plug

Note: The customer / user carries the responsibility for the electrical connection.

Rated Capacity

Voltage V	Resistive Load A	Inductive Load A
110 V AC	5A	3A
230 V AC	3A	2A
24 V DC	4A	3A
	Max. Load	
24 V AC ± 10%	1A	

High voltage peaks occur when inductive loads are switched off. Protective circuitry should be employed to reduce contact burnout.

Order Code

HI - P T 230 - B - B5.0 / X

① ② ③ ④ ⑤ ⑥ ⑦

① Type

Clogging Indicator for Pressure Filters	**HI**

② Indicator Type

Electrical	**E**
Electrical, Deutsch plug	**ED**
Visual-electrical	**P**

③ Thermostop

Without thermostop	**(None)**
With thermostop	**T**

④ Voltage (only for Code P)

24 V DC	**024**
110 V AC	**110**
230 V AC	**230**

⑤ Sealing Material

NBR (Buna-N®)	**B**
FKM (Viton®)	**V**
EPDM	**E**

⑥ Differential Pressure Setting

1.72 bar / 25 PSI	**B1.7**
2.0 bar / 29 PSI	**B2.0**
2.5 bar / 36.3 PSI	**B2.5**
3.0 bar / 43.5 PSI	**B3.0**
5.0 bar / 72.5 PSI (standard option)	**B5.0**
7.0 bar / 101.5 PSI	**B7.0**

Note: Bold types identify standard option

⑦ Design Code

STAUFF internal information	**X**

HI-E
(Switch)

Item No.	Designation	Price
1020000155	HI-E-B-B5.0	336.20
1020000154	HI-ET-B-B5.0	343.95

HI-P
(LED + Switch)

Item No.	Designation	Price
1020000166	HI-P-024-B-B5.0	350.75
1020003060	HI-P-110-B-B5.0	350.75
1020003061	HI-P-230-B-B5.0	350.75

Double Visual-electrical Clogging Indicator

Product Description

The differential pressure indicator HI-D024 is a microprocessor controlled pressure switch with two alarm outputs for pre-alarm and shut-off. It is used to monitor the capacity of oil filters in oil-circulating systems. For this purpose, a microprocessor-controlled pressure sensor observes the dynamic pressure in front of the filter element or the differential pressure at the filter element. The pressure increases depending on the cumulative clogging of the filter. To avoid false alarms due to high viscosity during start-up, the device is equipped with a temperature control and time delay function.

Technical Data

Connection Thread
- G1/2

Operating Pressure
- Max. 420 bar / 6000 PSI

Temperature Range
- -20 °C ... +80 °C / -4 °F ... +176 °F
- ready for operation > 20 °C / 68 °F

Materials
- Body: Brass
- Sealing Material: NBR (Buna-N®)

Protection Rating
- IP 67

Rated Capacity
- Max. 0,2 A, 24 V DC

Operating Voltage
- 24 V DC

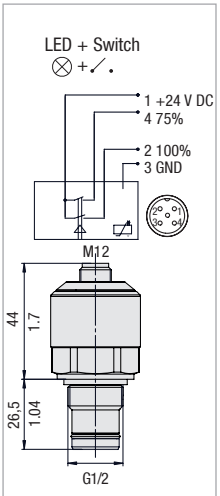
Alarm outputs (electrical)
- 3.8 $^{+10\%}$ bar / 55.1 $^{+/-10\%}$ PSI
  Δp = 75% (Pin 4)
- 5 $^{+10\%}$ bar / 72.5 $^{+/-10\%}$ PSI
  Δp = 100% (Pin 2)

Alarm outputs (visual)

Range (%FS)	Colour T>T* (Thermo-stop)
0-50	green
50-75	yellow
75-100	orange
100	red (flashing)
	T<T* (Thermo-stop)
0-100	blue

T= Temperature
T*= 20 °C / 68 °F

HI-D024



Order Code

HI-D-024-B-B5.0/2

①

① Type

Clogging Indicator for Pressure Filters	**HI-D-024-B-B5.0/2**

Double Visual-Electrical

Item No.	Designation	Price
6100155218	HI-D-024-B-B5.0/2	627.65

Valves

Product Description

The optional valves are fitted as an insert in the filter head and incorporate the spigot on which the element seals (not available for pressure filters type SFZ).
The valve is selected to suit the filter application.

HVO **Non-bypass standard insert** without any valve function.
Element collapse rating should be higher than the system pressure

HVB **Bypass valve** which allows oil to bypass the element when the differential pressure across the element reaches $6^{+0,5}$ bar / $87^{+7.25}$ PSI. (Other pressure settings available on request). The opening pressure should be higher than the Δp setting of an optional clogging indicator. Low collapse 30 bar / 435 PSI Δp elements are normally used with this valve.

HVR **Reverse flow valve** is used in systems where there is flow in reverse through the filter. It allows reverse flow without backflushing the element but does not filter in the reverse direction. Element collapse rating should be higher than the system pressure.

HVN **Non-return valve**
This valve prevents the oil in the delivery line from draining out while the filter is being serviced. Because there is no bypass, the element collapse rating should be higher than system pressure.

HVM **Multi-function valve**

This valve combines the bypass, the reverse flow and the non-return functions in one unit. The by-pass opening pressure is $6^{+0,5}$ bar / $87^{+7.25}$ PSI Δp with other opening pressures available on request. The opening pressure should be higher than the Δp setting of an optional clogging indicator. Low collapse 30 bar / 435 PSI Δp elements are normally used with this valve.

Order Code

VALVE - **HVB** - **014/030** / **X**
① ② ③ ④

① Type

Valve for Pressure Filters	**VALVE**

② Valve Type

Non-bypass standard insert without any valve	**HVO**
Bypass valve	**HVB**
Reverse flow valve	**HVR**
Non-return valve	**HVN**
Multi-function valve	**HVM**

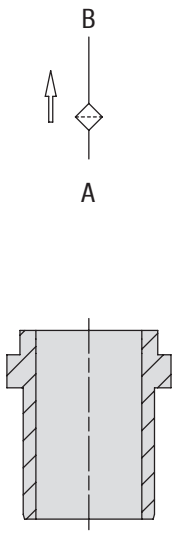
③ Filter Group

For filter size 014/030	**014/030**
For filter size 045/070/125	**045/070**
For filter size 090/160/250/300	**090/160**

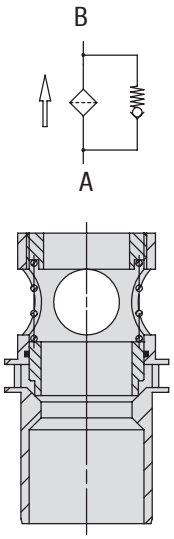
④ Design Code

Only for information	**X**

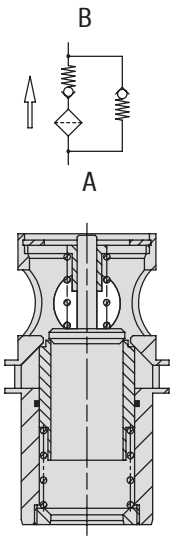
HVO



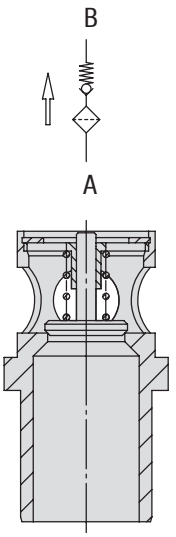
HVB



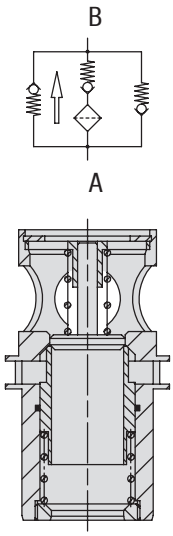
HVR



HVN



HVM



For flow characteristics of the valves refer to Catalogue 9 - STAUFF Filtration

Filter Bowls ▪ Suitable for Custom Filter Manifolds

Product Description

STAUFF offers a range of filter bowls in the standard range of sizes in two material options, steel and aluminium. The filter bowls are supplied separately for installation in custom designed and manufactured manifold housing with multiple flow ports. Detailed thread and bowl dimensions can be supplied on request.

Features

- One-piece
- Two-piece
- Lightweight aluminium material option
- Supplied with O-ring and PTFE back up ring
- Steel bowls - phosphate plated
- Complete range of SE- elements available to suit

Contact STAUFF for more information

Filter Bowl SF

Item No.	Designation	Price
1020005799	Bowl-SB-014-W2/2-ASSY	126.30
1020005801	Bowl-SB-030-W2/2-ASSY	154.20
1020005803	Bowl-SB-045-W2/2-ASSY	196.05
1020005805	Bowl-SB-070-W2/2-ASSY	266.50
1020005808	Bowl-SB-090-W2/2-ASSY	448.50
6100158419	Bowl-SB-130-W2/2-ASSY	684.65
1020005811	Bowl-SB-160-W2/2-ASSY	659.00

Supplied with NBR O-Rings (O-Ring + PTFE backup)

Filter Bowl SFA Aluminium

Item No.	Designation	Price
1020016297	Bowl-SBA-014-ASSY	112.30
1020016298	Bowl-SBA-030-ASSY	112.30
1020016299	Bowl-SBA-045-ASSY	140.30
1020016300	Bowl-SBA-070-ASSY	196.05

Supplied with NBR O-Rings (O-Ring + PTFE backup)

Filter Bowl SF-TL Two-Piece - Top Load

Item No.	Designation	Price
1020005800	Bowl-SB-014-W2/2-2PRT-ASSY	504.90
1020005802	Bowl-SB-030-W2/2-2PRT-ASSY	546.75
1020005804	Bowl-SB-045-W2/2-2PRT-ASSY	771.20
1020005806	Bowl-SB-070-W2/2-2PRT-ASSY	854.95
1020005809	Bowl-SB-090-W2/2-2PRT-ASSY	1247.35
1020012499	Bowl-SB-125-W2/2-2PRT-ASSY	1107.25
1020005812	Bowl-SB-160-W2/2-2PRT-ASSY	1514.30
1020010977	Bowl-SB-250-W2/2-2PRT-ASSY	1667.10
1020010979	Bowl-SB-300-W2/2-2PRT-ASSY	1866.30

Supplied with NBR O-Rings (O-Ring + PTFE backup)

SF / SF-TM / SFA Filter Bowl Seal Kit Spares

Item No.	Designation		Price
1020004544	Seal-kit-SF-014/030-B	(BUNA-N®)	24.05
1020004546	Seal-kit-SF-045/070-B	(BUNA-N®)	29.55
1020004548	Seal-kit-SF-090/160-B	(BUNA-N®)	45.00
1020004545	Seal-kit-SF-014/030-V	(Viton®)	32.40
1020004547	Seal-kit-SF-045/070-V	(Viton®)	38.05
1020004549	Seal-kit-SF-090/160-V	(Viton®)	56.25

Contact STAUFF for Filter Bowl port dimensions

High Pressure Filters ▪ Type SFZ

Product Description

STAUFF SFZ series High Pressure Filters are designed for sandwich plate mounting in manifold block mounting hydraulic applications, with a maximum operating pressure of 315 bar / 4560 PSI. Used together with STAUFF SE series Filter Elements, a high efficiency of contaminant removal is assured. The high dirt-hold capacity of the elements ensures long service life and, as a result, reduced maintenance costs.

Technical Data

Construction
- Designed for sandwich plate mounting

Materials
- Filter head: Free Cutting Steel
- Filter bowl: Cold Drawn Steel
- O-Rings: NBR (Buna-N®)
  FKM/FPM (Viton®)
  EPDM (Ethylene-Propylene-Diene-Monomer-Rubber)
- Support ring (bowl): PTFE (Polytetrafluoroethylene)

Connecting Port
- According to ISO 4401-03-02-0-05 NG6 / DIN24340-A6 / Cetop R 35 H (Ref.: NFPA/ANSI D03)

Operating Pressure
- Max. 315 bar / 4560 PSI

Burst Pressure
- Min. 945 bar / 13705 PSI

Temperature Range
- -10 °C ... +100 °C / +14 °F ... +212 °F

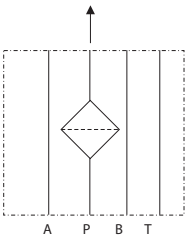
Filter Elements
- Specifications refer to page N105

Media Compatibility
- Mineral oils
  Other fluids on request

O-Ring for connection ports
- 9x1.7 (4x included in delivery)

Options and Accessories

Clogging Indicator
- Standard actuating pressure: $5\ ^{0}_{-0.5}$ bar / $72.5\ ^{0}_{-7.25}$ PSI Δp
  Other actuating pressure settings are available on request.
- Available indicators: Visual
  Electrical
  Visual-electrical (24 V DC, 110 V AC, 230 V AC versions)
  Double Visual-electrical (24 V DC)



Symbol for Hydraulic Systems - SFZ008

SFZ

Item No.	Designation	Price
1010002796	SFZ-008-0-0-B-B-0-L	1417.40
1010002644	SFZ-008-0-0-B-B-0-R	1417.40

Includes 4 x 9x1.7 O-Rings for manifold connection port
Refer to page N105 for order code example

SE Elements

Item No.	Designation	Price
1020023325	SE-008-G-03-B/4	98.25
1020023329	SE-008-G-05-B/4	84.30
1020023333	SE-008-G-10-B/4	70.30
1020023339	SE-008-G-20-B/4	70.30
1020023344	SE-008-H-03-B/4	154.20
1020023347	SE-008-H-05-B/4	140.30
1020023351	SE-008-H-10-B/4	140.25
1020023361	SE-008-H-20-B/4	140.30

Clogging Indicators

Item No.	Designation	Price
1020000153	HI-V-B-B5.0	182.10
1020000155	HI-E-B-B5.0	336.20
1020000154	HI-ET-B-B5.0	343.95
1020000166	HI-P-024-B-B5.0	350.75
1020003060	HI-P-110-B-B5.0	350.75
1020003061	HI-P-230-B-B5.0	350.75

High Pressure Filter Housings / Complete Filters ▪ Type SFZ

SFZ	-	008	-	G	-	10	-	B	-	B	-	P	T	230	-	R	/	X
①		②		③		④		⑤		⑥		⑦	⑧	⑨		⑩		⑪

① Type

High Pressure Filter for sandwich plate mounting	**SFZ**

② Group

Flow	Size
30 l/min / 8 US GPM	**008**

Note: Exact flow will depend on the selected filter element. For technical data, refer to Catalogue 9 - STAUFF Filtration Technology.

③ Filter Material

Note that the filter element is not protected by an internal bypass. Please be sure that the hydraulic system is designed with sufficient means to protect the element.

Material	max. Δp*collapse	Micron ratings available	Code
Without filter element	-	-	**0**
Inorg. glass fibre	25 bar / 363 PSI	3, 5, 10, 20	**G**
Inorg. glass fibre	210 bar / 3045 PSI		**H**
Stainless fibre	210 bar / 3045 PSI		**M**
Stainless mesh	30 bar / 435 PSI	25, 50, 100, 200	**S**

Note: * Collapse/burst resistance as per ISO 2941.

④ Micron Rating

No Element	**0**
3µm	**03**
5µm	**05**
10µm	**10**
20µm	**20**
25µm	**25**
50µm	**50**
100µm	**100**
200µm	**200**

Note: Other micron ratings are available on request.

⑤ Sealing Material

NBR (Buna-N®)	**B**
FKM/FPM (Viton®)	**V**
EPDM	**E**

Note: Other sealing materials are available on request.

⑥ Connection Size

Connection Size	Group 008	Code
Nominal Bore	NG6* (Ref.: D03)	**B**

* ISO 4401-03-02-0-05 / DIN 24340-A6 / Cetop R 35 H

⑦ Clogging Indicator

Without clogging indicator	**0**
Visual, with automatic reset	**A**
Visual, with manual reset	**V**
Electrical	**E**
Electrical, Deutsch plug	**ED**
Visual-electrical	**P**
Double Visual-electrical	**D024**

⑧ Thermostop

Without thermostop	**(None)**
With thermostop	**T**

⑨ Voltage (only for Code P)

24 V DC	**024**
110 V AC	**110**
230 V AC	**230**

⑩ Design

Version right	**R**
Version left	**L**

⑪ Design Code

STAUFF internal information	**X**

Filter Elements ▪ Type SE

SE	-	008	-	G	-	10	-	B	/	X
①		②		③		④		⑤		⑥

① Type

Filter Element Series	**SE**

② Group

Filter housing	**008**

③ Filter Material

Note that the filter element is not protected by an internal bypass. Please be sure that the hydraulic system is designed with the sufficient means to protect the element.

Material	max. Δp*collapse	Micron ratings available	Code
Inorg. glass fibre	25 bar / 363 PSI	3, 5, 10, 20	**G**
Inorg. glass fibre	210 bar / 3045 PSI		**H**
Stainless fibre	210 bar / 3045 PSI		**M**
Stainless mesh	30 bar / 435 PSI	25, 50, 100, 200	**S**

* Collapse/burst resistance as per ISO 2941.

④ Micron Rating

3µm	**03**
5µm	**05**
10µm	**10**
20µm	**20**
25µm	**25**
50µm	**50**
100µm	**100**
200µm	**200**

Note: Other micron ratings are available on request.

⑤ Sealing Material

NBR (Buna-N®)	**B**
FKM/FPM (Viton®)	**V**
EPDM	**E**

Note: Other sealing materials are available on request.

⑥ Design Code

STAUFF internal information	**X**

	Filter Elements	**N108 - N117**
	Filter Material – Quality And Properties	**N108**
	Return-Line Filters	**N109**
	Pressure Filters	**N109**
	Spin-On-Filters	**N110**
	Suction Strainers	**N110**
	Special Filter Element Solutions	**N111**
	Interchanging STAUFF Filter Elements	**N112 - N113**
	Filter Elements SE	**N115 - N117**
	To Suit SF, SF-TM, SFZ, SFA Filters	**N115**
	4PRO To Suit SF, SF-TM, SFZ, SFA Filters	**N116 - N117**

Replacement Filter Elements for Applications involving Hydraulic and Lubrication Oils

The STAUFF 4PRO Glass Fibre Elements

The PLUS for customers:
- **Longer operating times through higher dirt holding capacity**
- **Improved energy efficiency through lower differential pressure**
- **Excellent β values and outstanding β stability**

The 4Pro stands for 4 pros that characterise STAUFF glass fibre materials:

- ***pro*ACTIVE**
- ***pro*GRESSIVE**
- ***pro*FESSIONAL**
- ***pro*TECTION**

Or simply: **Fo(u)r Protection**
In terms of the β value, STAUFF elements have always exhibited excellent performance. For those who take filtration seriously, there's no other valid approach – the measured values must hold up under any inspection. The elements cannot afford any vulnerabilities. The new generation of elements also have excellent dirt holding capacities. Values that users have been looking for. Values that make it possible for the user to extend operating times, thereby providing significant reductions to purchasing costs for elements as well maintenance costs.

Protecting Filter Elements Against Direct Flow Impact

The sensitive filter bellows on filter elements are frequently prone to damage during transportation, storage and filter replacement work. In addition, large particles in the flow of fluid may harm the filter material.

STAUFF offers a solution: SE and RE series filter elements with protective sheath (only available for glass fibre elements). This is a thin, perforated plastic sheet that completely encases the pleats of the filter from the outside as well as making the element more stable. A further positive effect is that the volume of flow is distributed more evenly by the protective sheath, thus ensuring an efficient flow rate.

In its standard version, the foil is printed with the STAUFF 4PRO logo, eliminating any mix-up with other brands. Larger quantities can also be produced with a customised imprint on the sheath.

β value

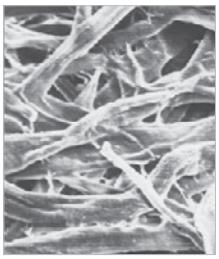
Key evaluation criteria for filter elements using glass fibre technology are the retention rate (micron rating) the β value, the β stability, the dirt holding capacity and the initial pressure differential. These values are determined using the multipass test established by ISO 16889.

The designation for STAUFF elements typically includes a rating based on filter fineness.

Filter Material – Quality And Properties

The choice of the right filter material is dependent on different criteria. Among others, this includes the type of application, the filter function, degree of contamination or alternatively the required dirt-hold capacity as well as requirements of chemical or physical resistance. Inorganic Glass Fibre, Polyester, Cellulose, Stainless Fibre Material and Stainless Steel Wire Mesh are used for hydraulic applications.

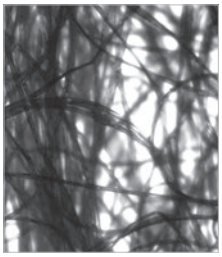
The following list gives you an overview of how these five filter materials differ with regard to specific properties:



Cellulose Fibre

- Filter material made of Cellulose Fibres with special impregnation
- Variants with the lowest price with good dirt-hold capacity
- Not suitable for water based fluids

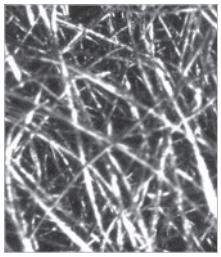
Micron rating
- 10 ... 50µm
  (alternative micron ratings are available on request)



Inorganic Glass Fibre

- Inorganic Glass Fibre based on synthetic fibres with acrylic resin binding
- Large dirt-hold capacity
- Excellent separation efficiency of the finest particles due to the three-dimensional labyrinth structure with deep-bed filtration
- Outstanding price/performance ratio

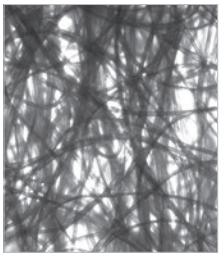
Micron rating
- 3 ... 25µm
  (alternative micron ratings available on request)



Stainless Fibre

- Sintered Stainless Fibres with three-dimensional labyrinth structure for depth filtration
- Low flow resistance with high dirt-hold capacity
- Excellent chemical and thermal resistance

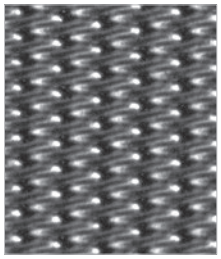
Micron rating
- 3 ... 25µm
  (alternative micron ratings are available on request)



Polyester Fibre

- 100% Polyester Fibres with thermal bonding
- High pressure differential resistance
- Good chemical resistance
- High separation efficiency of the finest particle
- Tear-proof structure

Micron rating
- 3 ... 25µm
  (alternative micron ratings are available on request)



Stainless Mesh

- Wire Mesh fabric made of material 1.4301 or 1.4305 for surface (other material on request)
- Type of weave: square weave or Dutch weave
- Low flow resistance due to large-pored screening surface
- Excellent chemical and thermal resistance

Micron rating
- 10 ... 1000µm
  (alternative micron ratings are available on request)

Replacement Filter Elements for Applications involving Hydraulic and Lubrication Oils

Replacement Filter Element for Return-Line Filters

w/o Bypass Valve

with Bypass Valve

Filter media
- Inorganic Glass Fibre
- Polyester Fibre
- Cellulose Fibre
- Stainless Fibre
- Stainless Mesh

Micron rating
- Refer to page N108 Filter Materials

max. Δp*collapse
- 10 ... 25 bar / 145 ... 362 PSI

Sealing Material
- NBR (Buna-N®)
- FKM/FPM (Viton®)
- EPDM

Bypass
- 1 ... 7 bar / 0 ... 101 PSI

End cap
- Plastic / Steel / Stainless Steel (alternative End caps available on request)

Note: * Collapse / burst resistance as per ISO 2941.

Replacement Filter Element for Pressure Filters

Filter media
- Inorganic Glass Fibre
- Polyester Fibre
- Cellulose Fibre
- Stainless Fibre
- Stainless Mesh

Micron rating
- Refer to page N108 Filter Materials

max. Δp*collapse
- 10 ... 210 bar / 145 ... 3045 PSI

Sealing Material
- NBR (Buna-N®)
- FKM/FPM (Viton®)
- EPDM

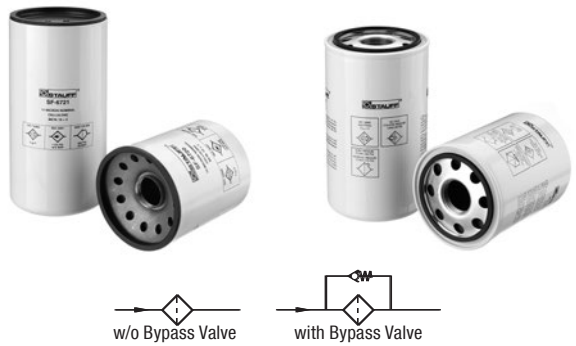
End cap
- Steel / Stainless Steel / Aluminium (alternative End caps on request)

Note: * Collapse / burst resistance as per ISO 2941.

Replacement Filter Elements for Applications involving Hydraulic and Lubrication Oils

Replacement Filter Element for Spin-On-Filters

(refer to page N148)



max. Δp*collapse
- 5 ... 10 bar / 72 ... 145 PSI

Sealing Material
- NBR (Buna-N®)

Connection Thread
- BSPP / UNF / NPT

Note: * Collapse / burst resistance as per ISO 2941.

Replacement Filter Element for Suction Strainers

Filter media
- Stainless Mesh

Micron rating
- 60, 125, 250µm

Flow Rate
- 12 - 400 l/min / 3.1 - 104 US GPM

Bypass
- 0.2 bar / 2.9 PSI

End cap
- Aluminium / Plastic

Connection Thread
- BSPP / NPT

Note: * Collapse / burst resistance as per ISO 2941.

For details refer to Section O - STAUFF Hydraulic Accessories.

Special Filter Element Solutions

Special Ammonia Filter Element

High Pressure Block with Threaded Filter Element

Special Suction Strainer

Filter Element with Bypass and Special Sealing

High Pressure Threaded Elements

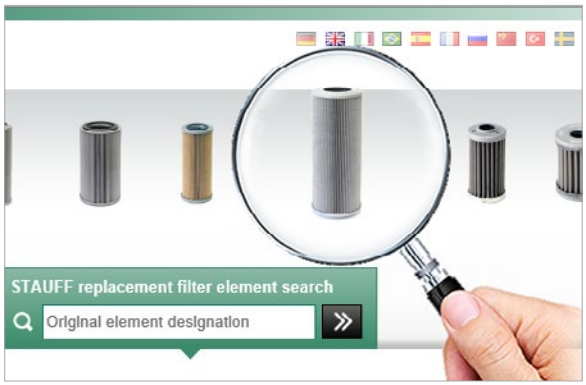
Custom designed Filter element solutions in addition to the Original-STAUFF-Filtration Technology range according to customers specifications or based on STAUFF developments. Contact STAUFF for more information.

Interchanging STAUFF Filter Elements

As well as original Filter Elements for our filter housings, STAUFF also provides access to a comprehensive range of Replacement Filter Elements. They match the quality and can be installed in the products of, for example:

- Argo-Hytos
- Donaldson
- Eppensteiner Bosch Rexroth
- Hydac
- Mahle
- Internormen
- Pall
- Parker
- Other types are available on request

Your local STAUFF Distributor will assist you interchanging to STAUFF elements.



Find the suitable STAUFF replacement filter element at

www.filterinterchange.com

It's this easy:

search — enquire — save

Your advantages:

- Over 65000 datasets from various manufacturers
- Conversion for all common filter brands and types
- Watch list function for storing search results
- Request price and delivery time with enquiry history

Order Codes

SP - 090 - E - 10 - B / 4

① ② ③ ④ ⑤ ⑥

① Type

Series	Filter Element
Argo-Hytos High Pressure Filter Element	SD
Argo-Hytos Medium Pressure Filter Element	MD
Argo-Hytos Return-Line Filter Element	RD
Argo-Hytos Suction-Line Filter Element	AD
Eppensteiner Bosch Rexroth High Pressure Filter Element	SS
Eppensteiner Bosch Rexroth Return-Line Filter Element	RS
Eppensteiner Bosch Rexroth Low Pressure Filter Element	LS
Hydac High Pressure Filter Element	SE
Hydac Return-Line Filter Element	RE
Mahle High Pressure Filter Element	SL
Mahle Low Pressure Filter Element	ML
Mahle Return-Line Filter Element	RL
Internormen High Pressure Filter Element	SN
Internormen Return-Line Filter Element	RN
Pall High Pressure Filter Element	SP
Pall Return-Line Filter Element	RP
Medium Pressure Filter Element according to standard	NL
Return-Line Filter Element according to standard	NR
Spin-On Filter Element	SFC
Special Element STAUFF	SXX

Note: Other series available on request

② Nominal Size

Depending on the nominal flow or element length

③ Filter Material and Pressure Setting

Stainless Fibre, high collapse pressure	A, M
Stainless Wire mesh, low collapse pressure	B, S
Polyester Fibre, high collapse pressure	C,
Filter Paper, low collapse pressure	D, K, L, N
Inorganic Glass Fibre, low collapse pressure	E, G
Inorganic Glass Fibre, high collapse pressure	F, H
Stainless Wire Mesh, high collapse pressure	R, T, W

④ Micron Rating

Stainless Wire Mesh	
10µm	10
20µm	20
25µm	25
40µm	40
50µm	50
60µm	60
80µm	80
100µm	100
125µm	125
150µm	150
200µm	200
500µm	500
1000µm	1000

Stainless Fibre	
3µm	03
5µm	05
10µm	10
20µm	20
25µm	25

Filter paper	
10µm	10
20µm	20
50µm	50

④ Micron Rating

Inorganic Glass Fibre	
3µm	03
5µm	05
10µm	10
15µm	15
20µm	20
25µm	25

Polyester Fibre	
3µm	03
5µm	05
10µm	10
20µm	20
25µm	25

Note: Other micron ratings available on request

⑤ Sealing Material

NBR (Buna-N®)	B
FKM/FPM (Viton®)	V
EPDM	E

Note: Other sealing materials available on request

⑥ Design Code

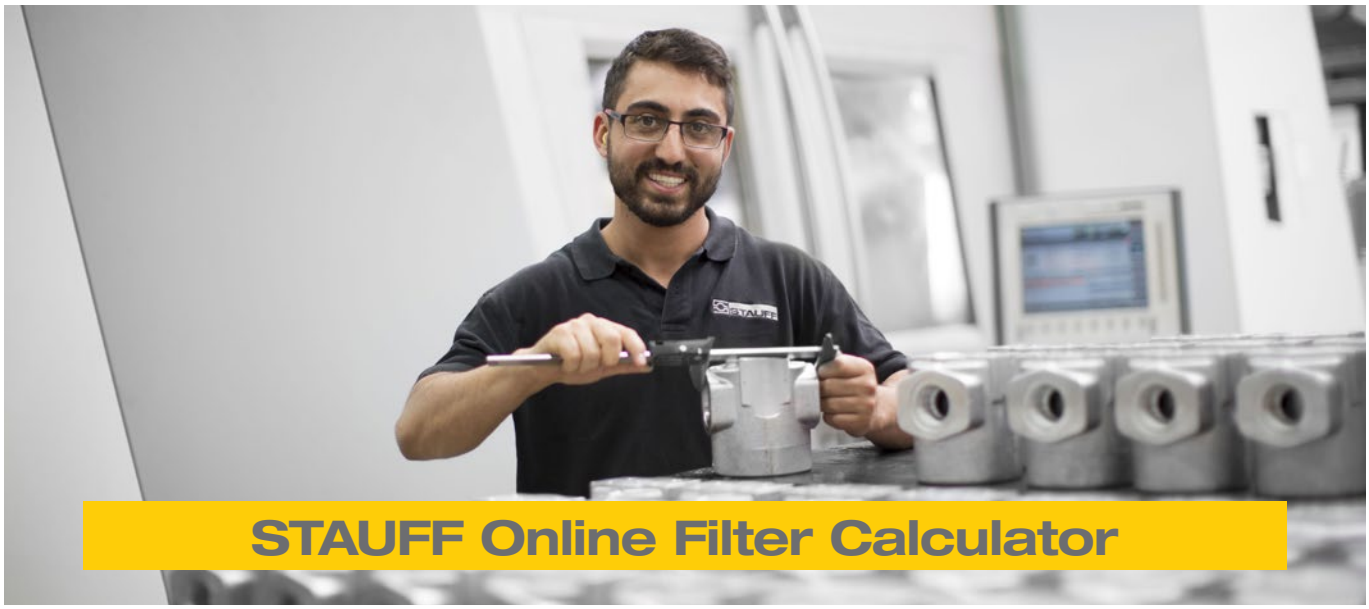
STAUFF internal information	X

⑦ STAUFF Special Number

If element varies from the standard type	X

Interchanging STAUFF Filter Elements
Stainless Wire Mesh / Filter Paper / Inorganic Glass Fibre)

Description	Filter Material	Series	Pressure Setting	Micron Rating	Nominal Size	Item No.	Designation	Price
Filter Element	Stainless Wire Mesh	Eppensteiner Bosch Rexroth High Pressure	Low collapse pressure	25µm	002	1020005796	SS-002-B-25-B	224.60
		Internormen High Pressure Filter Element			024	1020001623	SN-024-B-25-B	364.80
		Mahle High Pressure Filter Element		100µm	014	1020002547	SL-014-B-100-B	154.20
	Filter Paper	Mahle High Pressure Filter Element		10µm	020	1020002568	SL-020-D-10-B	154.20
		Mahle High Pressure Filter Element		20µm	014	1020002554	SL-014-D-20-B	112.30
		Mahle High Pressure Filter Element			020	1020002569	SL-020-D-20-B	154.20
		Pall High Pressure Filter Element		5µm	045	1020024182	SP-045-E-05-B/4	196.05
		Pall High Pressure Filter Element			070	1020024221	SP-070-E-05-B/4	266.50
		Eppensteiner Bosch Rexroth High Pressure			085	1020024639	SS-085-E-05-B/4	308.30
		Pall High Pressure Filter Element		10µm	010	1020024032	SP-010-E-10-B/4	140.30
		Mahle High Pressure Filter Element			014	1020023780	SL-014-E-10-B/4	126.30
		Mahle High Pressure Filter Element			020	1020023808	SL-020-E-10-B/4	196.05
		Pall High Pressure Filter Element			024	1020024098	SP-024-E-10-B/4	140.30
		Mahle High Pressure Filter Element			045	1020023862	SL-045-E-10-B/4	252.55
		Internormen High Pressure Filter Element				1020023988	SN-045-E-10-B/4	252.55
		Return-Line Filter Element according to standard			063	1020022263	NR-063-E-10-B/4	224.60
		Pall High Pressure Filter Element			070	1020024228	SP-070-E-10-B/4	266.50
		Pall Return-Line Filter Element			080	1020022965	RP-080-E-10-B/4	546.75
		Mahle High Pressure Filter Element			090	1020023895	SL-090-E-10-B/4	294.35
		Pall High Pressure Filter Element				1020024314	SP-090-E-10-B/4	350.75
		Mahle High Pressure Filter Element			125	1020023924	SL-125-E-10-B/4	462.45
		Mahle Return-Line Filter Element			130	1020003631	RL-130-E-10-B	1022.95
		Pall High Pressure Filter Element			140	1020024434	SP-140-E-10-B/4	645.05
	Inorganic Glass Fibre	Internormen High Pressure Filter Element	High collapse pressure	10µm	024	1020023974	SN-024-F-10-B/4	518.85
		Argo-Hytos High Pressure Filter Element		20µm	010	1020002220	SD-010-F-20-B	280.45
		Internormen High Pressure Filter Element			024	1020023976	SN-024-F-20-B/4	322.20
		Eppensteiner Bosch Rexroth High Pressure			125	1020024661	SS-125-F-20-B/4	854.95



STAUFF Online Filter Calculator

www.filtercalc.stauff.com

✓ Save Time
✓ Accurate
✓ Easy Selection
✓ Selection specification created

STAUFF Online Filter Calculator

The STAUFF Online Filter Calculator calculates the correct filter size, generates the complete technical data sheet and ordering codes.

The correct sizing of a hydraulic filter not only saves money by reducing costly downtime and avoiding the unscheduled replacement of sensitive components, it also increases the life of the entire hydraulic system.

To make the task of selecting a filter less daunting, STAUFF has developed the STAUFF Online Filter Calculator. This new web-based tool will assist in the selection of the most suitable hydraulic filter based on the application parameters entered.

Check it out at **www.filtercalc.stauff.com** and try it for yourself!
The use of this service is without obligation and free of charge.

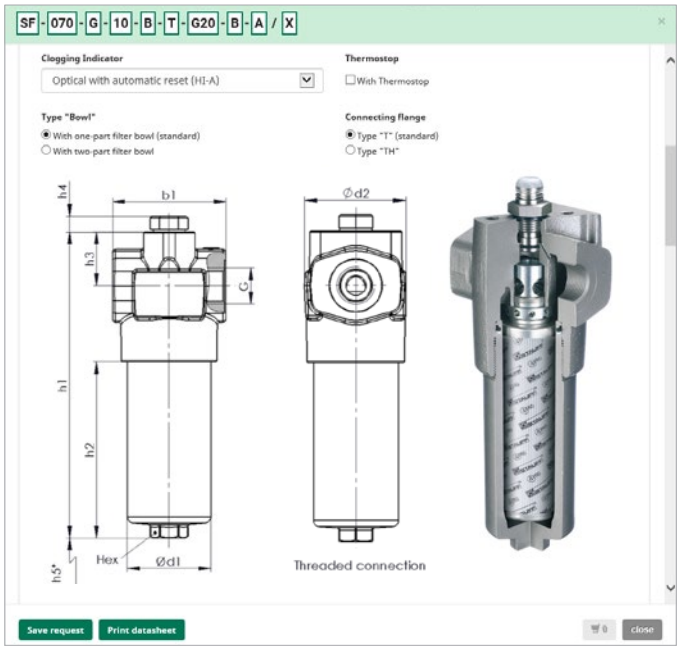
Filter Sizing

Select by:
- Pressure Filters
- Return-Line Filters
- In-Line Filters
- Spin-On Filters

Selectable Parameters (in metric or imperial units of measure):
- Select by Oil (Type, Temperature or Viscosity)
- Select by Flow
- Select by Filtration Media
- Select by Micron Rating
- Select by Pressure Limitation (cold start and operating)

Final Selection Features:
- Multiple assembly options
- Builds complete filter order code
- Product Data specification of the selected filter assembly
- Choice of sealing material
- Choice of Connection type e.g. BSPP, SAE
- Choice of Clogging Indicator e.g. Visual or Electrical
- Dimensional drawing of housing
- Calculated Differential Pressure e.g. Pressure vs Flow curve

Contact STAUFF for more information



Filter Elements ▪ Type SE
(Stainless Wire Mesh / Stainless Fibre)

Order Codes

SE - 014 - G - 10 - B / X

① ② ③ ④ ⑤ ⑥

① Type

Filter Element Series	**SE**

② Group

According to filter housing

③ Filter Material

Material	max. Δp*collapse	Micron ratings available	Code
Inorganic glass fibre	25 bar / 363 PSI	3, 5, 10, 20	**G**
Inorganic glass fibre	210 bar / 3045 PSI		**H**
Stainless fibre	210 bar / 3045 PSI		**A**
Stainless mesh	30 bar / 435 PSI	25, 50, 100, 200	**S**

Note: * Collapse/burst resistance as per ISO 2941.

④ Micron Rating

3µm	**03**
5µm	**05**
10µm	**10**
20µm	**20**
25µm	**25**
50µm	**50**
100µm	**100**
200µm	**200**

Note: Other micron ratings are available on request.

⑤ Sealing Material

NBR (Buna-N®)	**B**
FKM/FPM (Viton®)	**V**
EPDM	**E**

Note: Other sealing materials are available on request

⑥ Design Code

STAUFF internal information	**X**

Filter Element	Description	Filter Material	Pressure Setting	Micron Rating	Nominal Size	Item No.	Designation	Price
	Filter Element To suit SF, SF-TM, SFZ (008) and SFA (014-070) Filters	Stainless Wire Mesh	Low collapse pressure (S) max. Δp* collapse 30 bar (435 PSI) *Collapse / burst resistance as per ISO 2941	25µm	008	1020001156	SE-008-S-25-B/3	168.15
					014	1020006065	SE-014-S-25-B/3	182.10
					030	1020006071	SE-030-S-25-B/3	252.55
					045	1020002405	SE-045-S-25-B/3	364.80
					090	1020006092	SE-090-S-25-B/3	504.90
					160	1020006110	SE-160-S-25-B/3	1065.40
					250	1020010141	SE-250-S-25-B/3	2105.40
					300	1020010127	SE-300-S-25-B/3	2689.90
				50µm	008	1020007932	SE-008-S-50-B/3	168.15
					014	1020007934	SE-014-S-50-B/3	182.10
					030	1020007935	SE-030-S-50-B/3	252.55
					045	1020007938	SE-045-S-50-B/3	364.80
					090	1020007942	SE-090-S-50-B/3	981.00
					160	1020007946	SE-160-S-50-B/3	1107.25
					250	1020010142	SE-250-S-50-B/3	2271.50
					300	1020010128	SE-300-S-50-B/3	2636.75
				100µm	008	1020002252	SE-008-S-100-B/3	168.15
					014	1020006069	SE-014-S-100-B/3	182.10
					030	1020006075	SE-030-S-100-B/3	182.10
					045	1020006084	SE-045-S-100-B/3	364.80
					090	1020006096	SE-090-S-100-B/3	546.75
					160	1020006114	SE-160-S-100-B/3	756.65
					250	1020010143	SE-250-S-100-B/3	2045.65
					300	1020010129	SE-300-S-100-B/3	2351.15
	Filter Element To suit SF, SF-TM and SFA (014 - 070) Filters	Stainless Fibre	High collapse pressure (A) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941	3µm	014	1020002254	SE-014-A-03-B/2	462.45
					030	1020002309	SE-030-A-03-B/2	799.10
					070	1020002417	SE-070-A-03-B/2	1401.50
					090	1020001271	SE-090-A-03-B/2	1627.25
					160	1020001311	SE-160-A-03-B/2	3533.35
				5µm	014	1020002255	SE-014-A-05-B/2	350.75
					045	1020002373	SE-045-A-05-B/2	925.25
					090	1020001272	SE-090-A-05-B/2	1474.50
					160	1020001312	SE-160-A-05-B/2	3320.80
				10µm	014	1020002256	SE-014-A-10-B/2	350.75
					030	1020002311	SE-030-A-10-B/2	546.75
					045	1020002374	SE-045-A-10-B/2	504.90
					070	1020002419	SE-070-A-10-B/2	827.05
					090	1020001273	SE-090-A-10-B/2	1036.90
					160	1020001313	SE-160-A-10-B/2	2271.50
				20µm	014	1020002257	SE-014-A-20B/2	350.75
					030	1020002312	SE-030-A-20-B/2	546.75
					045	1020002375	SE-045-A-20-B/2	896.70
					070	1020002420	SE-070-A-20-B/2	827.05
					090	1020001274	SE-090-A-20-B/2	1036.90

Filter Elements ▪ Type SE (Inorganic Glass Fibre)

The STAUFF 4PRO Glass Fibre Elements

The PLUS for customers:

- **Longer operating times through higher dirt holding capacity**
- **Improved energy efficiency through lower differential pressure**
- **Excellent β values and outstanding β stability**

The 4Pro stands for 4 pros that characterise STAUFF glass fibre materials:

- ***pro*ACTIVE**
- ***pro*FESSIONAL**
- ***pro*GRESSIVE**
- ***pro*TECTION**

Or simply: **Fo(u)r Protection**

In terms of the β value, STAUFF elements have always exhibited excellent performance. For those who take filtration seriously, there's no other valid approach – the measured values must hold up under any inspection. The elements cannot afford any vulnerabilities. The new generation of elements also have excellent dirt holding capacities. Values that users have been looking for. Values that make it possible for the user to extend operating times thereby providing significant reductions to purchasing costs for elements as well maintenance costs.

Protecting Filter Elements Against Direct Flow Impact

The sensitive filter bellows on filter elements are frequently prone to damage during transportation, storage and filter replacement work. In addition, large particles in the flow of fluid may harm the filter material.

STAUFF offers a solution: SE and RE series filter elements with protective sheath (only available for glass fibre elements). This is a thin, perforated plastic sheet that completely encases the pleats of the filter from the outside as well as making the element more stable. A further positive effect is that the volume of flow is distributed more evenly by the protective sheath, thus ensuring an efficient flow rate.

In its standard version, the foil is printed with the STAUFF 4PRO logo, eliminating any mix-up with other brands. Larger quantities can also be produced with a customised imprint on the sheath.

β value

Key evaluation criteria for filter elements using glass fibre technology are the retention rate (micron rating) the β value, the β stability, the dirt holding capacity and the initial pressure differential. These values are determined using the multipass test established by ISO 16889.

The designation for STAUFF elements typically includes a rating based on filter fineness.

Filter designation β value > 200 according to ISO 4406	$\beta_{(c)} > 200$ ISO 11171	$\beta_{(c)} > 1000$ ISO 11171
03	4.0µm$_{(c)}$	4,5µm$_{(c)}$
05	5.0µm$_{(c)}$	6,0µm$_{(c)}$
10	8.8µm$_{(c)}$	11,0µm$_{(c)}$
20	21.0µm$_{(c)}$	23,0µm$_{(c)}$

Filter Element	Description	Filter Material	Pressure Setting	Micron Rating	Nominal Size	Item No.	Designation	Price
	Filter Element To suit SF, SF-TM, SFZ (008) and SFA (014 - 070) Filters	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	3µm	008	1020023325	SE-008-G-03-B/4	98.25
					014	1020023379	SE-014-G-03-B/4	112.30
					030	1020023450	SE-030-G-03-B/4	154.20
					045	1020023538	SE-045-G-03-B/4	182.10
					070	1020023578	SE-070-G-03-B/4	224.60
					090	1020023615	SE-090-G-03-B/4	308.30
					125	1020023650	SE-125-G-03-B/4	448.50
					130	1020023674	SE-130-G-03-B/4	588.65
					160	1020023691	SE-160-G-03-B/4	631.05
					250	1020023728	SE-250-G-03-B/4	1149.10
					300	1020023737	SE-300-G-03-B/4	1428.05
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941		008	1020023344	SE-008-H-03-B/4	154.20
					014	1020023401	SE-014-H-03-B/4	196.05
					030	1020023482	SE-030-H-03-B/4	266.50
					045	1020023555	SE-045-H-03-B/4	336.20
					070	1020023597	SE-070-H-03-B/4	420.60
					090	1020023632	SE-090-H-03-B/4	616.50
					130	1020023680	SE-130-H-03-B/4	953.20
					160	1020023708	SE-160-H-03-B/4	1233.45
					250	1020023732	SE-250-H-03-B/4	2689.90

Filter Element	Description	Filter Material	Pressure Setting	Micron Rating	Nominal Size	Item No.	Designation	Price
	Filter Element To suit SF, SF-TM, SFZ (008) and SFA (014 - 070) Filters	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	5µm	008	1020023329	SE-008-G-05-B/4	84.30
					014	1020023381	SE-014-G-05-B/4	112.30
					030	1020023458	SE-030-G-05-B/4	140.30
					045	1020023541	SE-045-G-05-B/4	168.15
					070	1020023581	SE-070-G-05-B/4	210.70
					090	1020023619	SE-090-G-05-B/4	294.35
					125	1020023652	SE-125-G-05-B/4	448.50
					130	1020023676	SE-130-G-05-B/4	546.75
					160	1020023694	SE-160-G-05-B/4	631.05
					250	1020023729	SE-250-G-05-B/4	1107.25
					300	1020023738	SE-300-G-05-B/4	1233.45
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941		008	1020023347	SE-008-H-05-B/4	140.30
					014	1020023409	SE-014-H-05-B/4	182.10
					030	1020023488	SE-030-H-05-B/4	252.55
					045	1020023559	SE-045-H-05-B/4	308.30
					070	1020023602	SE-070-H-05-B/4	406.60
					090	1020023636	SE-090-H-05-B/4	588.65
					125	1020023665	SE-125-H-05-B/4	882.75
					130	1020023682	SE-130-H-05-B/4	830.35
					160	1020023713	SE-160-H-05-B/4	1219.45
					250	1020023734	SE-250-H-05-B/4	2351.15
					300	1020023742	SE-300-H-05-B/4	2802.80
	Filter Element To suit SF, SF-TM, SFZ (008) and SFA (014 - 070) Filters	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	10µm	008	1020023333	SE-008-G-10-B/4	70.30
					014	1020022000	SE-014-G-10-B/4	112.30
					030	1020023463	SE-030-G-10-B/4	126.30
					045	1020023545	SE-045-G-10-B/4	168.15
					070	1020023585	SE-070-G-10-B/4	196.05
					090	1020023621	SE-090-G-10-B/4	280.45
					125	1020023655	SE-125-G-10-B/4	420.60
					130	1020023677	SE-130-G-10-B/4	532.80
					160	1020023700	SE-160-G-10-B/4	588.65
					250	1020023730	SE-250-G-10-B/4	925.25
					300	1020023739	SE-300-G-10-B/4	1191.55
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941		008	1020023351	SE-008-H-10-B/4	140.25
					014	1020023413	SE-014-H-10-B/4	168.15
					030	1020023492	SE-030-H-10-B/4	238.60
					045	1020023564	SE-045-H-10-B/4	294.35
					070	1020023607	SE-070-H-10-B/4	392.65
					090	1020023641	SE-090-H-10-B/4	574.65
					125	1020023668	SE-125-H-10-B/4	841.00
					130	1020023685	SE-130-H-10-B/4	882.75
					160	1020023718	SE-160-H-10-B/4	1121.15
					250	1020023735	SE-250-H-10-B/4	2211.65
					300	1020023743	SE-300-H-10-B/4	2650.05
	Filter Element To suit SF, SF-TM, SFZ (008) and SFA (014 - 070) Filters	Inorganic Glass Fibre	Low collapse pressure (G) max. Δp* collapse 25 bar (363 PSI) *Collapse / burst resistance as per ISO 2941	20µm	008	1020023339	SE-008-G-20-B/4	70.30
					014	1020023392	SE-014-G-20-B/4	112.30
					030	1020023474	SE-030-G-20-B/4	126.30
					045	1020023550	SE-045-G-20-B/4	168.15
					070	1020023591	SE-070-G-20-B/4	196.05
					090	1020023628	SE-090-G-20-B/4	280.45
					125	1020023657	SE-125-G-20-B/4	420.60
					130	1020023679	SE-130-G-20-B/4	532.80
					160	1020023704	SE-160-G-20-B/4	588.65
					250	1020023731	SE-250-G-20-B/4	925.25
					300	1020023740	SE-300-G-20-B/4	1191.55
			High collapse pressure (H) max. Δp* collapse 210 bar (3045 PSI) *Collapse / burst resistance as per ISO 2941		008	1020023361	SE-008-H-20-B/4	140.30
					014	1020023419	SE-014-H-20-B/4	168.15
					030	1020023501	SE-030-H-20-B/4	238.60
					045	1020023573	SE-045-H-20-B/4	294.35
					070	1020023611	SE-070-H-20-B/4	392.65
					090	1020023647	SE-090-H-20-B/4	574.65
					125	1020023671	SE-125-H-20-B/4	841.00
					130	1020023689	SE-130-H-20-B/4	882.75
					160	1020023724	SE-160-H-20-B/4	1121.15
					250	1020023736	SE-250-H-20-B/4	2211.65
					300	1020023744	SE-300-H-20-B/4	2650.05

Overview Return-Line Filters
RF / RFS / RTF / RFB / ARL — **N121**

Return-Line Filters **RF**
Max. 16 bar / 232 PSI
Max. 500 l/min / 130 US GPM — **N122 - N125**

RF
Return-Line Filters / Elements / Clogging Indicators — **N125**

Return-Line Filters **RFS**
Max. 25 bar / 365 PSI
Max. 1135 l/min / 300 US GPM — **N126 - N129**

RFS
Return-Line Filters / Elements / Clogging Indicators — **N129**

In-Line Filters (Single / Duplex) **SRFL-S / SRFL-D**
Max. 14 bar / 200 PSI
Max. 7000 l/min / 1850 US GPM — **N130**

In-Line Filters (Water) **SRFL-SW**
Max. 16 bar / 232 PSI
Max. 13330 l/min / 3521 US GPM — **N131**

Return-Line Filters **RTF**
Max. 6.9 bar / 100 PSI
Max. 340 l/min / 90 US GPM — **N133 - N135**

RTF
Return-Line Filters / Elements / Clogging Indicators — **N135**

Return-Line Filters **RFB**
Max. 10 bar / 145 PSI
Max. 185 l/min / 52 US GPM — **N136 - N139**

RFB
Return-Line Filters / Elements / Clogging Indicators — **N139**

Overview Return-Line Filters
ARL Magnetic Core N140
ATZ / TTF / BGT / GA

In-Tank Suction Filters ATZ N142

ATZ
In-Tank Suction Filter
(Magnetic Pre-Filter) N142

FE-ARL
Elements to Suit ATZ Suction Filters
Cellulose / Stainless Mesh N142

In-Tank Return Filters N142

TTF
In-Tank Return Filter
(Magnetic Pre-Filter) N142

BGT
In-Tank Return Filter
(Magnetic Pre-Filter) N142

In-Line Return Filters N142

GA
In-Line Return Filter
(Magnetic Pre-Filter) N142

Filter Elements N143

TXX
Cellulose
Suits INAGB Insert / TTF, BGT, GA Filters N143

TXW
Glass Fibre
Suits INAGB Insert N143

ST
Stainless Steel Mesh
Suits INAGB Insert N143

Magnetic Core Filter Insert N144

INAGB
Magnetic Core Filter Insert N144

Clogging Indicators N145

GV
Switch Vacuum N145

G
Switch Pressure N145

VV
Gauge Vacuum N145

V
Gauge Pressure N145

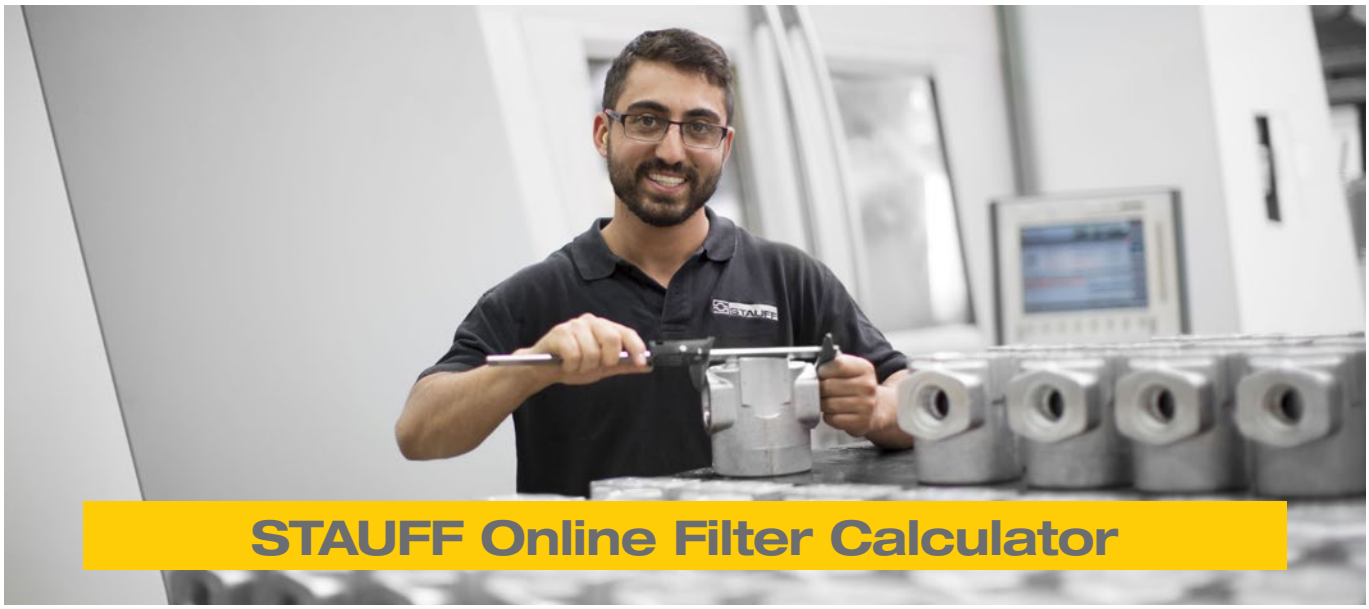
VDDPM
Visual Differential Indicator DPM Type
(GA - Mounting screws included) N145

VDDPM
Visual Differential Indicator DPM Type
(Suits Custom Built - Mounting kit with (banjo) fittings included N145

VEDPMS
Visual Electrical Differential Indicator DPM Type
(GA - Mounting screws included) N145

VEDPMS
Visual Electrical Differential Indicator DPM Type
(Suits custom built - Mounting kit with (Banjo) fittings included) N145

Filter Selector Nomogram
For Magnetic Core Filters N146 - N147



STAUFF Online Filter Calculator

www.filtercalc.stauff.com

✓ **Save Time**
✓ **Accurate**
✓ **Easy Selection**
✓ **Selection specification created**

STAUFF Online Filter Calculator

The STAUFF Online Filter Calculator calculates the correct filter size, generates the complete technical data sheet and ordering codes.

The correct sizing of a hydraulic filter not only saves money by reducing costly downtime and avoiding the unscheduled replacement of sensitive components, it also increases the life of the entire hydraulic system.

To make the task of selecting a filter less daunting, STAUFF has developed the STAUFF Online Filter Calculator. This new web-based tool will assist in the selection of the most suitable hydraulic filter based on the application parameters entered.

Check it out at **www.filtercalc.stauff.com** and try it for yourself!
The use of this service is without obligation and free of charge.

Filter Sizing

Select by:
- Pressure Filters
- Return-Line Filters
- In-Line Filters
- Spin-On Filters

Selectable Parameters (in metric or imperial units of measure):
- Select by Oil (Type, Temperature or Viscosity)
- Select by Flow
- Select by Filtration Media
- Select by Micron Rating
- Select by Pressure Limitation (cold start and operating)

Final Selection Features:
- Multiple assembly options
- Builds complete filter order code
- Product Data specification of the selected filter assembly
- Choice of sealing material
- Choice of Connection type e.g. BSPP, SAE
- Choice of Clogging Indicator e.g. Visual or Electrical
- Dimensional drawing of housing
- Calculated Differential Pressure e.g. Pressure vs Flow curve

Contact STAUFF for more information

Symbol photo

RF-014-G-10-B-G08-0-G16

Housing:	RF-014
Element:	RE-14-G-10-B
Viscosity at 40°C :	100 (mm^2/s)
Density at 40°C:	0.9 (kg/dm^3)
Viscosity - Cold Start:	584 (mm^2/s)
Density - Cold Start:	0.9 (kg/dm^3)
Viscosity - Operating:	100 (mm^2/s)
Density - Operating:	0.9 (kg/dm^3)
Cold start:	4 (Bar)
Operating DB:	0.5 (Bar)
Filtration Media:	Inorganic glass fibre - Low differential pressure (G)
Micro Rating:	10µm
Max Flow:	60 (l/min)
Max Pressure:	16 (bar)
Sealing Material:	NBR (Buna-N®)
Connection Type:	1/2 BSP
Clogging Indicator:	Without Clogging Indicator (HI-O)
Outlet Style:	1" BSP

Return-Line Filters

Description

STAUFF Return-Line Filters were designed as filters for tank top mounting, tank-inside mounting or in-line mounting. They filter the hydraulic oil before it flows back into the reservoir. This ensures that contamination arising in the components does not get into the tank. Return-Line filters maintain the targeted purity class like Pressure Filters. However, because of their arrangement, they do not fulfil the additional function of a protection filter. In contrast to a Pressure Filter, it only has to withstand low pressure levels.

The practical design of STAUFF Return-Line Filters enables quick assembly as well as an easy exchange of the filter elements.

Media Compatibility
- Mineral oils, others on request

Options and Accessories

Valves
- Bypass valve integrated in the filter element (except STAUFF Return-Line Filter RTF)

Clogging Indicators
- On request with visual clogging indicator or electrical clogging switch
- Others on request

Type RF

- Filter bowl with the option of thread connection (e.g. STAUFF Diffuser SRV) or leakage oil connection

- Operating pressure: max. 16 bar / 232 PSI
- Nominal flow rate: max. 500 l/min / 130 US GPM
- Materials: Filter head: Aluminium, Filter bowl: PA
- Connections: BSPP, NPT, SAE thread or SAE flange (ISO 6162-1)

Type RFB

- Low weight and compact design
- Filter bowl with option of thread connection
- Filter head with option of integrated air filter

- Operating pressure: max. 10 bar / 145 PSI
- Nominal flow rate: max. 185 l/min / 52 US GPM
- Materials: Filter head: Aluminium, Filter bowl: PA
- Connections: BSPP, NPT, SAE thread

Type RFS

- Robust design, suitable for high flow rates
- Filter bowl with option of BSPP or SAE flange

- Operating pressure: max. 25 bar / 365 PSI
- Nominal flow rate: max. 1135 l/min / 300 US GPM
- Materials: Filter head and bowl: Steel
- Connections: BSPP or SAE flange (ISO 6162-1)

Type ARL

- Return-Line insert filter
- Custom reservoir design with an in-tank filtering system
- Magnetic pre-filtration

- Operating pressure: max. 10 bar / 145 PSI
- Nominal flow rate: max. 500 l/min / 132 US GPM
- Materials: Flange plate: Aluminium, Magnet rod / Bypass / Diffuser: Steel

Type RTF

- Filter bowl is designed to return the oil beneath the surface thus preventing entrainment of air
- Filter head with option of integrated air filter

- Operating pressure: max. 10 bar / 49 PSI
- Nominal flow rate: max. 380 l/min / 100 US GPM
- Materials: Filter head: Aluminium, Filter bowl: PA or Steel
- Connection: BSPP or NPT, others on request

Return-Line Filters ▪ Type RF

Product Description

STAUFF RF Return-Line Filters are designed as tank top filters. They are mounted directly on the tank top, and when 100% of the system's oil is filtered, they provide the optimum removal of contaminant from the system. This provides the pump with clean oil, therefore reducing contaminant generated wear. The filter bowl is designed to return the oil beneath the surface, therefore preventing the entrainment of air by the returning oil. A high efficiency of contaminant removal is assured by using STAUFF RE Replacement Filter Elements. The high dirt-hold capacity of STAUFF Elements ensure a long service life and as a result, reduced maintenance costs.

Technical Data

Construction
- Tank Top flange mounting

Materials
- Filter head: Aluminium
- Filter bowl: Glass Fibre reinforced Polyamide
- Sealings: NBR (Buna-N®)
  FKM/FPM (Viton®)
  EPDM (Ethylene-Propylene-Diene-Monomer-Rubber)
  Other sealing materials are available on request

Port Connections
- BSPP
- NPT
- SAE O-Ring thread
- SAE flange 3000 PSI

Operating Pressure
- Max. 16 bar / 232 PSI

Temperature Range
- -10 °C ... +100 °C / +14 °F ... +212 °F

Filter Elements
- Specifications refer to page N123

Media Compatibility
- Mineral oils
  Other fluids on request

Options and Accessories

Valve
- Bypass valve (integrated in the filter element): Opening pressure 3 bar ± 0.3 bar / 43.5 PSI ± 4.35 PSI
  Other settings available on request

Clogging Indicators
- For clogging indicator types, refer to page N124

Mounting Dimensions

Mounting Dimension Table - RF

	Connection					
Size	Threaded Port	Funnel Port Thread (internal)	Bolt Hole Ø (mm)	Bolts	Flange bolt Centre (mm)	Funnel Mounting Dimension (mm)
014	G 3/4"	G 2"	6.5	4	100	78
030	G 1"	G 2"	6.5	4	100	78
045	G 1.1/4"	G 2"	9	4	135	105
070	G 1.1/2"	G 2"	9	4	135	105
090	G 2"	G 2"	10.5	4	170	131
130	G 2"	G 2"	10.5	4	170	131

All dimensions (mm)
All dimensions shown are a guide - refer to Catalogue 9 - STAUFF Filtration Technology for more information.

Return-Line Filter Housings / Complete Filters ▪ Type RF

Order Codes

RF	-	070	-	G	-	10	-	B	-	G24	-	G42NO	-	D	-	O	-	L1	/	X
①		②		③		④		⑤		⑥		⑦		⑧		⑨		⑩		⑪

① Type

Return-Line Filter	**RF**

② Group

Flow	Size
60 l/min / 14 US GPM	**014**
110 l/min / 30 US GPM	**030**
160 l/min / 45 US GPM	**045**
240 l/min / 70 US GPM	**070**
330 l/min / 90 US GPM	**090**
500 l/min / 130 US GPM	**130**

Note: Exact flow will depend on the selected filter element. For technical data Catalogue 9 - STAUFF Filtration Technology.

③ Filter Material

Material	max. Δp*collapse	Micron ratings available	Code
Without filter element	-	-	**0**
Inorg. glass fibre	25 bar / 363 PSI	3, 5, 10, 20	**G**
Stainless fibre	30 bar / 435 PSI		**A**
Filter paper	10 bar / 145 PSI	10, 20	**N**
Stainless mesh	30 bar / 435 PSI	25, 50, 100, 200	**S**

Note: *Collapse/burst resistance as per ISO 2941. Other materials available on request.

④ Micron Rating

3µm	**03**
5µm	**05**
10µm	**10**
20µm	**20**
25µm	**25**
50µm	**50**
100µm	**100**
200µm	**200**

Note: Other micron ratings are available on request.

⑤ Sealing Materials

NBR (Buna®)	**B**
FKM/FPM (Viton®)	**V**
EPDM	**E**

Note: Other sealing materials are available on request

⑥ Connection Style

Connection Style	Thread Style	Group 014	Code	Group 030	Code	Group 045	Code	Group 070	Code	Group 090	Code	Group 130	Code
BSPP	-	3/4	**G12**	1	**G16**	1-1/4	**G20**	1-1/2	**G24**	2	**G32**	2	**G32**
BSPP	-	1/2	G08	1/2	G08	1-1/2	G24	1-1/4	G20	1-1/4	G20	1-1/4	G20
BSPP	-	1	G16	3/4	G12	-	-	-	-	1-1/2	G24	1-1/2	G24
NPT	-	3/4	**N12**	1	**N16**	1-1/4	**N20**	1-1/2	**N24**	2	**N32**	2	**N32**
NPT	-	1	N16	3/4	N12	1-1/2	N24	1-1/4	N20	1-1/2	N24	1-1/2	N24
SAE O-Ring Thread	-	1-1/16	**U12**	1-5/16	**U16**	1-5/8	**U20**	1-7/8	**U24**	1-7/8	**U24**	1-7/8	**U24**
SAE O-Ring Thread	-	1-5/16	U16	1-1/16	U12	1-7/8	U24	1-5/8	U20	1-5/8	U20	1-5/8	U20
SAE Flange 3000 PSI	metric	-	-	-	-	-	-	-	-	2	**C332M**	2	**C332M**
SAE Flange 3000 PSI	UNC	-	-	-	-	-	-	-	-	2	**C332U**	2	**C332U**

Note: Bold types identify preferred connection styles.

⑦ Clogging Indicator

Without Clogging Indicator	**0**
Visual Clogging Indicator	**V12**
Electrical Clogging Switch 42 V, NO	**G42NO**
Electrical Clogging Switch 42 V, NC	**G42NC**
Electrical Clogging Switch 110 V ... 230 V, two-way contact (only for Code W)	**G230**

⑧ Clogging Indicator options for G42NO, G42NC and G230

Plug connector	**0**
M12 x 1.5	**M12**
AMP plug	**A**
Deutsch plug	**D**
Rubber boot	**S**
90 degree Polyamide cap (only for Code G230)	**W**

⑨ Outlet Style

Size	Connection thread	Code
all	Without thread (Standard outlet)	**0**
014 / 030	1" BSPP / 1" NPT	**G16 / N16**
045 / 070	1 1/4 BSPP / 1 1/4 NPT	**G20 / N20**
90 / 130	1 1/2 BSPP / 1 1/2 NPT	**G24 / N24**

⑩ Additional Features

	Position*		
Without leakage oil connection	-		**(None)**
Leakage oil connection	1	2	**L**

Note: *Position of the leakage oil connection refer to Catalogue 9 - STAUFF Filtration Technology
Without any code: assembly in the middle of the filter cover.

⑪ Design Code

STAUFF internal information	**X**

Filter Elements ▪ Type RE

RE	-	014	-	G	-	10	-	B	/	X
①		②		③		④		⑤		⑥

① Type

Filter Element Series	**RE**

② Group

According to filter housing

③ Filter Material

Material	Max. Δp*collapse	Micron ratings available	Code
Inorg. glass fibre	25 bar / 363 PSI	3, 5, 10, 20	**G**
Stainless fibre	30 bar / 435 PSI		**A**
Filter paper	10 bar / 145 PSI	10, 20	**N**
Stainless mesh	30 bar / 435 PSI	25, 50, 100, 200	**S**

Note: *Collapse/burst resistance as per ISO 2941. Other materials available on request.

④ Micron Rating

3µm	**03**
5µm	**05**
10µm	**10**
20µm	**20**
25µm	**25**
50µm	**50**
100µm	**100**
200µm	**200**

Note: Other micron ratings are available on request.

⑤ Sealing Materials

NBR (Buna®)	**B**
FKM/FPM (Viton®)	**V**
EPDM	**E**

Note: Other sealing materials are available on request.

⑥ Design Code

STAUFF internal information	**X**

Electrical Clogging Switch

The switch is used where an electrical signal is needed to indicate when the element needs to be changed. The switch can turn on a light or shut the machine down, or any further function controlled by an electric signal. The switching pressure is 2.5 bar / 36.25 PSI and this allows the element to be changed before the bypass setting of 3 bar / 43.5 PSI is reached.

Standard type with plug connector and rubber cap. Available with DEUTSCH DT04-2P plug (industrial standard), AMP Junior Timer plug (industrial standard) and five-pin circular connector M12, A-coded, according to IEC 61076-2-101.

Order Codes

Limit-Switch - G42NO - S - M10 - B2.5

① ② ③ ④ ⑤

① Type

Limit-Switch	**Limit-Switch**

② Connector Type

Electrical Clogging Switch 42 V, NO	**G42NO**
Electrical Clogging Switch 42 V, NC	**G42NC**
Electrical Clogging Switch 110 V ... 230 V, two-way contact (only for Plug Type W)	**G230**

③ Plug Type

M12 Five-Pin Connector according to IEC 61076-2-101	**M12**
AMP-Junior-Timer Plug	**A**
DEUTSCH Plug DT04-2P	**D**
Rubber boot	**S**
90 degree Polyamide cap (only for Connector Type G230)	**W**

④ Thread Type

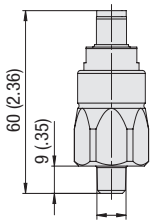
M10 x 1	**M10**

⑤ Pressure Setting

2.5 bar / 36.3 PSI	**B2.5**

Dimensions Plug Type

M12



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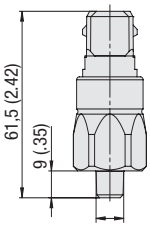

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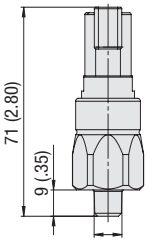

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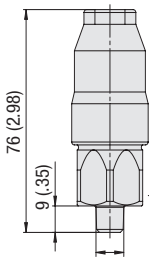

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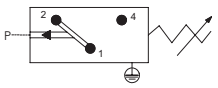
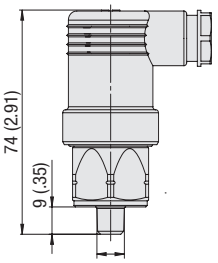




Note: The customer / user carries the responsibility for the electrical connection.

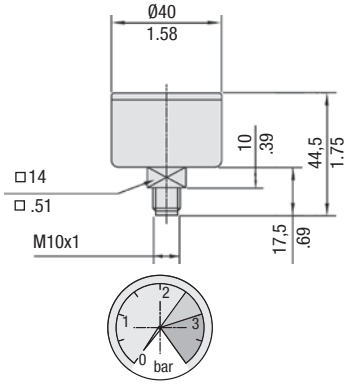
Return-Line Filters ▪ Type RF

Visual Clogging Indicator

The gauge visually displays the degree of contamination of the element.
The coloured segments allow quick visual checking.

green	0 ... 2.5 bar / 0 … 36.25 PSI	Element has service life left
yellow	2.5 ... 3.0 bar / 36.25 ... 43.5 PSI	Element is contaminated and should be changed
red	>3.0 bar / >43.5 PSI	Bypass valve open, unfiltered oil passing to tank

Visual Clogging Indicator



Order Codes

SPG-C-040-00004-02-P-M10-402922

①

① Type

Visual Clogging Indicator	**SPG-C-040-00004-02-P-M10-402922**

Dimensional drawings: All dimensions in mm/in.

Return-Line Filters ▪ Type RF

RF Tank Top Filter Assemblies
014 - 130
including Element - Filter Paper
Connection port BSPP / Outlet port BSPP

Item No.	Designation	Micron	Price
1010020132	RF-014-N-10-B-G12-O-G16	10µm	203.55
1010020133	RF-030-N-10-B-G16-O-G16	10µm	324.80
1010020136	RF-045-N-10-B-G20-O-G20	10µm	352.45
1010020140	RF-070-N-10-B-G24-O-G20	10µm	419.80
1010020143	RF-090-N-10-B-G32-O-G24	10µm	541.65
1010020272	RF-130-N-10-B-G32-O-G24	10µm	623.20

RF Tank Top Filter Assemblies
014, 030, 045
including Element - Filter Paper
Connection port BSPP / Outlet port without thread

Item No.	Designation	Micron	Price
1010020275	RF-014-N-10-B-G12	10µm	189.40
1010001130	RF-030-N-10-B-G16	10µm	311.30
1010020455	RF-045-N-10-B-G20	10µm	379.35

RF Tank Top Filter Assemblies
090, 130
including Element - Filter Paper
Connection port SAE flange / Outlet port BSPP

Item No.	Designation	Micron	Price
1010020530	RF-090-N-10-B-C332U-O-G24	10µm	534.40
1010020149	RF-130-N-10-B-C332U-G24	10µm	609.70

Visual Clogging Indicator for RF Filter Assemblies

Item No.	Designation		Price
1020000199	SPG-C-040-00004-02-P-M10-402922	V12	70.30

Refer to page N124 for more information

Replacement
Return Filter Elements - Filter Paper

Item No.	Designation	Micron	Price
1020004475	RE-014-N-10-B/2	10µm	81.40
1020003436	RE-030-N-10-B/2	10µm	94.90
1020003452	RE-045-N-10-B/2	10µm	149.00
1020007435	RE-070-N-10-B/2	10µm	175.95
1020003782	RE-090-N-10-B/2	10µm	244.00
1020003500	RE-130-N-10-B/2	10µm	297.85
1020003732	RE-014-N-20-B/2	20µm	81.40
1020003437	RE-030-N-20-B/2	20µm	98.25
1020003453	RE-045-N-20-B/2	20µm	154.20
1020003767	RE-070-N-20-B/2	20µm	182.10
1020003784	RE-090-N-20-B/2	20µm	244.00
1020003501	RE-130-N-20-B	20µm	308.30

Replacement
Return Filter Elements
Inorganic Glass Fibre

Item No.	Designation	Micron	Price
1020022489	RE-030-G-03-B/4	3µm	182.10
1020022517	RE-045-G-03-B/4	3µm	210.70
1020022556	RE-070-G-03-B/4	3µm	280.45
1020022586	RE-090-G-03-B/4	3µm	350.75
1020022494	RE-030-G-05-B/4	5µm	168.15
1020022521	RE-045-G-05-B/4	5µm	196.05
1020022559	RE-070-G-05-B/4	5µm	266.50
1020022591	RE-090-G-05-B/4	5µm	322.20
1020022631	RE-130-G-05-B/4	5µm	448.50
1020022467	RE-014-G-10-B/4	10µm	112.30
1020022501	RE-030-G-10-B/4	10µm	140.30
1020022525	RE-045-G-10-B/4	10µm	182.10
1020022566	RE-070-G-10-B/4	10µm	252.55
1020022599	RE-090-G-10-B/4	10µm	322.20
1020022637	RE-130-G-10-B/4	10µm	406.60
1020022478	RE-014-G-20-B/4	20µm	112.30
1020022512	RE-030-G-20-B/4	20µm	140.30
1020022536	RE-045-G-20-B/4	20µm	182.10
1020022574	RE-070-G-20-B/4	20µm	252.55
1020022615	RE-090-G-20-B/4	20µm	322.20
1020022644	RE-130-G-20-B/4	20µm	462.45

Electrical Clogging Indicator for RF Filter Assemblies

Item No.	Designation		Price
1020000590	Limit-Switch-G42NO-S-M10-B2.5	E01	112.30
1020005566	Limit-Switch-G230-W-M10-B2.5	E02	266.50

Refer to page N124 for more information

Return-Line Filters ▪ Type RFS / RFS-D

Optional STAUFF RFS-D (Double)

Product Description

STAUFF RFS and RFS-D Carbon Steel Return-Line Filters are designed as tank top or in-line filters. They are mounted directly on the tank top, and if 100% of the system oil is filtered, they provide the optimum removal of contaminants from the system. This provides the pump with clean oil therefore reducing contaminant generated wear. The filter bowl is designed with a connection, threaded or flanged, for extending the return oil beneath the surface thus preventing the entrainment of air. A high efficiency of contaminant removal is assured by using STAUFF RE Replacement Filter Elements. The high dirt-hold capacity of STAUFF Elements ensures a long service life and as a result reduced maintenance costs.

Technical Data

Construction
- Tank Top mounting or in-line mounting

Materials
- Filter Housing: Carbon Steel
- Sealings: NBR (Buna-N®)
  FKM/FPM (Viton®)
  EPDM (Ethylene Propylene Diene Monomer Rubber)
  Other sealing materials are available on request

Port Connections
- BSPP
- SAE flange 3000 PSI

Flow Rating
- Up to 1135 l/min / 300 US GPM

Operating Pressure
- Max. 25 bar / 365 PSI

Proof Pressure
- Min. 37.5 bar / 545 PSI

Temperature Range
- -10 °C ... +100 °C / +14 °F ... +212 °F

Filter Elements
- Specifications refer to page N127

Media Compatibility
- Mineral oils
  Other fluids on request

Options and Accessories

Valve
- Bypass valve (integrated in the filter element) — Opening pressure 3 bar ± 0.3 bar / 43.5 PSI ± 4.35 PSI
  Other settings available on request

Clogging Indicators
- For clogging indicator types, refer to page N128

Mounting Dimension Table - RFS

	Connection					
Size	Inlet Threaded Port	Outlet Port	Bolt Hole Ø (mm)	Bolts	Flange Bolt Centre (mm)	Funnel Mounting Dimension (mm)
045	G 1.1/2"	G 1.1/2"	6.5	4	95.5	100
090	G 2"	G 2"	9	4	120	135
160	3" SAE (61)	G 3"	13.5	4	155.5	180
250	3.1/2" SAE (61)	3.1/2" SAE (61)	17.5	4	205	208
300	4" SAE (61)	4" SAE (61)	17.5	4	205	208

All dimensions (mm)
All dimensions shown are a guide - refer to Catalogue 9 - STAUFF Filtration Technology for more information.

Return-Line Filter Housings / Complete Filters ▪ Type RFS

Order Codes

RFS	-	045	-	G	-	10	-	B	-	G24	-	G42NO	-	D	-	G24	-	BK
①		②		③		④		⑤		⑥		⑦		⑧		⑨		⑩

① Type

Single Carbon Steel Return-Line Filter	**RFS**
Double Carbon Steel Return-Line Filter	**RFS-D**

② Group

Flow	Size
170 l/min / 45 US GPM (not for RFS-D)	**045**
340 l/min / 90 US GPM	**090**
600 l/min / 160 US GPM	**160**
945 l/min / 250 US GPM	**250**
1135 l/min / 300 US GPM	**300**

Note: Exact flow will depend on the selected filter element. For technical data refer to Catalogue 9 - STAUFF Filtration Technology.

③ Filter Material

Material	Max. Δp*collapse	Micron ratings available	Code
Without filter element	-	-	**0**
Inorg. glass fibre	25 bar / 363 PSI	3, 5, 10, 20	**G**
Stainless fibre	30 bar / 435 PSI		**A**
Filter paper	10 bar / 145 PSI	10, 20	**N**
Stainless mesh	30 bar / 435 PSI	25, 50, 100, 200	**S**

Note: *Collapse/burst resistance as per ISO 2941. Other materials are available on request.

④ Micron Rating

No Element	**0**
3µm	**03**
5µm	**05**
10µm	**10**
20µm	**20**
25µm	**25**
50µm	**50**
100µm	**100**
200µm	**200**

Note: Other micron ratings are available on request.

⑤ Sealing Material

NBR (Buna®)	**B**
FKM/FPM (Viton®)	**V**
EPDM	**E**

Note: Other sealing materials are available on request.

⑥ Connection Style

Connection Style	Thread Style	Group 045	Code	Group 090	Code	Group 160	Code	Group 250	Code	Group 300	Code
BSPP	-	1-1/4	**G20**	2	**G32**	-	**-**	-	**-**	-	**-**
SAE Flange 3000 PSI	metric	-	**-**	2	**C332M**	3	**C348M**	3-1/2	**C356M**	4	**C364M**
SAE Flange 3000 PSI	UNC	-	**-**	2	**C332U**	3	**C348U**	3-1/2	**C356U**	4	**C364U**

⑦ Clogging Indicator

Without Clogging Indicator	**0**
Visual Clogging Indicator	**V12**
Electrical Clogging Switch 42 V, NO	**G42NO**
Electrical Clogging Switch 42 V, NC	**G42NC**
Electrical Clogging Switch 110 V ... 230 V, two-way contact (only for Code W)	**G230**

⑧ Clogging Indicator options for G42NO, G42NC and G230

Plug connector	**0**
M12 x 1,5	**M12**
AMP plug	**A**
Deutsch plug	**D**
Rubber boot	**S**
90 degree Polyamide cap (only for Code G230)	**W**

⑨ Outlet Style

Connection Style	Thread Style	Group 045	Code	Group 090	Code	Group 160	Code	Group 250	Code	Group 300	Code
BSPP	-	1-1/4	**G20**	2	**G32**	3	**G48**	-	**-**	-	**-**
SAE Flange 3000 PSI	metric	-	**-**	-	**-**	-	**-**	3-1/2	**C356M**	4	**C364M**
SAE Flange 3000 PSI	UNC	-	**-**	-	**-**	-	**-**	3-1/2	**C356U**	4	**C364U**

⑩ Additional Information

Housing Colour - Black	**BK**

Filter Elements ▪ Type RE

RE	-	045	-	G	-	10	-	B	/	X
①		②		③		④		⑤		⑥

① Type

Filter Element Series	**RE**

② Group

According to filter housing

③ Filter Material

Material	Max. Δp*collapse	Micron ratings available	Code
Inorg. glass fibre	25 bar / 363 PSI	3, 5, 10, 20	**G**
Stainless fibre	30 bar / 435 PSI		**M**
Filter paper	10 bar / 145 PSI	10, 20	**N**
Stainless mesh	30 bar / 435 PSI	25, 50, 100, 200	**S**

Note: *Collapse/burst resistance as per ISO 2941. Other materials are available on request.

④ Micron Rating

3µm	**03**
5µm	**05**
10µm	**10**
20µm	**20**
25µm	**25**
50µm	**50**
100µm	**100**
200µm	**200**

Note: Other micron ratings are available on request.

⑤ Sealing Material

NBR (Buna®)	**B**
FKM/FPM (Viton®)	**V**
EPDM	**E**

Note: Other sealing materials are available on request.

⑥ Design Code

STAUFF internal information	**X**

Return-Line Filters ▪ Type RFS

Visual Clogging Indicator

The gauge visually displays the degree of contamination of the element.
The coloured segments allow quick visual checking.

green	0 ... 2.5 bar / 0 … 36.25 PSI	Element has service life left
yellow	2.5 ... 3.0 bar / 36.25 ... 43.5 PSI	Element is contaminated and should be changed
red	>3.0 bar / >43.5 PSI	Bypass valve open, unfiltered oil passing to tank

Order Codes

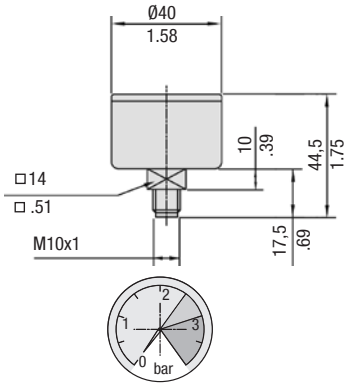
SPG-C-040-00004-02-P-M10-402922

①

① Type

Visual Clogging Indicator	**SPG-C-040-00004-02-P-M10-402922**

Visual Clogging Indicator



Return-Line Filters ▪ Type RFS

Includes Element

RFS Steel Return Filter Assemblies
BSPP Inlet / BSPP Outlet

Item No.	Designation	Price
6100181846	RFS-045-N-10-B-G20-O-G20-BK	717.40
6100181847	RFS-045-N-20-B-G20-O-G20-BK	722.60
6100181848	RFS-045-G-03-B-G20-O-G20-BK	779.10
6100181849	RFS-045-G-05-B-G20-O-G20-BK	764.45
6100181850	RFS-045-G-10-B-G20-O-G20-BK	750.50
6100181851	RFS-045-G-20-B-G20-O-G20-BK	750.50
6100181835	RFS-090-N-10-B-G32-O-G32-BK	916.25
6100181836	RFS-090-N-20-B-G32-O-G32-BK	916.25
6100181837	RFS-090-G-03-B-G32-O-G32-BK	1023.00
6100181838	RFS-090-G-05-B-G32-O-G32-BK	994.45
6100181839	RFS-090-G-10-B-G32-O-G32-BK	994.45
6100181828	RFS-090-G-20-B-G32-O-G32-BK	994.45

Clogging Indicator sold separately

Return Filter Elements 10µm
Filter Paper

Item No.	Designation	Micron	Price
1020003452	RE-045-N-10-B/2	10µm	149.00
1020003782	RE-090-N-10-B/2	10µm	244.00
1020006213	RE-160-N-10-B/2	10µm	448.50
1020001685	RE-250-N-10-B/2	10µm	672.90
1020003589	RE-300-N-10-B/2	10µm	785.15
1020003453	RE-045-N-20-B/2	20µm	154.20
1020003784	RE-090-N-20-B/2	20µm	244.00
1020003821	RE-160-N-20-B/2	20µm	448.50
1020001686	RE-250-N-20-B/2	20µm	672.90
1020003591	RE-300-N-20-B/2	20µm	785.15

Includes Element

RFS Steel Return Filter Assemblies
SAE Inlet / SAE Outlet

Item No.	Designation	Price
6100181821	RFS-250-N-10-B-C356M-O-C356M-BK	4416.85
6100181822	RFS-250-N-20-B-C356M-O-C356M-BK	4416.85
6100181823	RFS-250-G-03-B-C356M-O-C356M-BK	4598.90
6100181824	RFS-250-G-05-B-C356M-O-C356M-BK	4571.00
6100181825	RFS-250-G-10-B-C356M-O-C356M-BK	4557.00
6100181826	RFS-250-G-20-B-C356M-O-C356M-BK	4557.00
6100181813	RFS-300-N-10-B-C364M-O-C364M-BK	5234.90
6100181814	RFS-300-N-20-B-C364M-O-C364M-BK	5234.90
6100181815	RFS-300-G-03-B-C364M-O-C364M-BK	5486.65
6100181817	RFS-300-G-05-B-C364M-O-C364M-BK	5416.85
1010002371	RFS-300-G-10-B-C364M-O-C364M-BK	5389.00
6100181818	RFS-300-G-20-B-C364M-O-C364M-BK	5389.00

Refer to Section I Fluid Connectors for SAE Flange adaptors to suit inlet / outlet port
Clogging Indicator sold separately

Return Filter Elements
Inorganic Glass Fibre

Item No.	Designation	Micron	Price
1020022517	RE-045-G-03-B/4	3µm	210.70
1020022586	RE-090-G-03-B/4	3µm	350.75
1020022657	RE-160-G-03-B/4	3µm	574.65
1020022730	RE-250-G-03-B/5	3µm	854.95
1020022749	RE-300-G-03-B/5	3µm	1036.90
1020022521	RE-045-G-05-B/4	5µm	196.05
1020022591	RE-090-G-05-B/4	5µm	322.20
1020022661	RE-160-G-05-B/4	5µm	546.75
1020022733	RE-250-G-05-B/5	5µm	827.05
1020022756	RE-300-G-05-B/5	5µm	967.10
1020022525	RE-045-G-10-B/4	10µm	182.10
1020022599	RE-090-G-10-B/4	10µm	322.20
1020022673	RE-160-G-10-B/4	10µm	518.85
1020022739	RE-250-G-10-B/5	10µm	813.05
1020022766	RE-300-G-10-B/5	10µm	939.25
1020022536	RE-045-G-20-B/4	20µm	182.10
1020022615	RE-090-G-20-B/4	20µm	322.20
1020022689	RE-160-G-20-B/4	20µm	518.85
1020022745	RE-250-G-20-B/5	20µm	813.05
1020022777	RE-300-G-20-B/5	20µm	939.25

Includes Element

RFS Steel Return Filter Assemblies
SAE Inlet / BSPP Outlet

Item No.	Designation	Price
6100181840	RFS-090-N-10-B-C332M-O-G32-BK	2011.60
6100181841	RFS-090-N-20-B-C332M-O-G32-BK	2011.60
6100181842	RFS-090-G-03-B-C332M-O-G32-BK	2118.35
6100181843	RFS-090-G-05-B-C332M-O-G32-BK	2089.80
6100181844	RFS-090-G-10-B-C332M-O-G32-BK	2089.80
6100181845	RFS-090-G-20-B-C332M-O-G32-BK	2089.80
6100181829	RFS-160-N-10-B-C348M-O-G48-BK	3666.30
6100181830	RFS-160-N-20-B-C348M-O-G48-BK	3666.30
6100181831	RFS-160-G-03-B-C348M-O-G48-BK	3792.45
6100181832	RFS-160-G-05-B-C348M-O-G48-BK	3764.55
6100181833	RFS-160-G-10-B-C348M-O-G48-BK	3736.65
6100181834	RFS-160-G-20-B-C348M-O-G48-BK	3736.65

Refer to Section I Fluid Connectors for SAE Flange adaptors to suit inlet port
Clogging Indicator sold separately

Clogging Indicator for RFS Filter Assemblies

Item No.	Designation		Price
1020000199	SPG-C-040-00004-02-P-M10-402922	V12	70.30

Refer to page N128 for more information

In-Line Filters ▪ Type SRFL-S / SRFL-D

Product Description

STAUFF In-Line Simplex Filters SRFL-S and Duplex Filters SRFL-D are designed for in-line hydraulic applications. With their compact construction and easily maintained assembly, the SRFL-S and SRFL-D Filters are suitable for flow rates up to 7000 l/min / 1850 US GPM. The two housings of the Duplex Filter SRFL-D are connected with a special gate valve that is operated with a level or hand wheel. Therefore the filter may be serviced without shutting down the hydraulic system. A high efficiency of contaminant removal is assured by using STAUFF RE series Replacement Filter Elements. The high dirt-hold capacity of STAUFF Elements ensure a long service life and, as a result, reduced maintenance costs.

Technical Data

Construction
- In-line assembly, base mounted

Materials
- Filter housing: Carbon Steel
  Stainless Steel (available on request)
- Sealings: NBR (Buna-N®)
  FKM/FPM (Viton®)
  Other sealing materials are available on request

Port Connections
- DIN flange
- ANSI flange
- SAE flange

Operating Pressure
- Max. 14 bar / 200 PSI

Flow Rating
- Up to 7000 l/min / 1850 US GPM

Temperature Range
- -10 °C ... +100 °C / +14 °F ... +212 °F

Filter Elements
- Specifications refer to Catalogue 9 - STAUFF Filtration Technology

Media Compatibility
- Mineral oils, lubrication oils, other fluids available on request

Price on application - contact STAUFF for more information

Options and Accessories

Valve
- Bypass valve: (integrated in the filter element) Opening pressure 3 bar ± 0.3 bar / 43.5 PSI ± 4.35 PSI
  Other settings available on request

Clogging Indicators
- Differential pressure switch incl. visual indicator, setting 1,6 bar / 23 PSI
  Other clogging indicators available on request

Filter Size	Flow	Flange			Filter Element quantity		Arrangement of filter elements
	l/min/ US GPM	DIN 2501	ANSI B 16.5	SAE 3000 PSI	SRFL-S	SRFL-D	
SRFL-S/D-160	900/240	DN 40	1-1/2	1-1/2	1x RE-160	2x RE-160	
SRFL-S/D-200	900/240	DN 50	2	2	1x RE-200	2x RE-200	
SRFL-S/D-300	1400/370	DN 65	2-1/2	2-1/2	1x RE-300	2x RE-300	
SRFL-S/D-600	1400/370	DN 80	3	3	1x RE-600	2x RE-600	
SRFL-S/D-1200	4000/1050	DN 100	4	4	2x RE-600	4x RE-600	
SRFL-S/D-1800	4000/1050	DN 125	5	5	3x RE-600	6x RE-600	
SRFL-S/D-2400	6000/1580	DN 150	6	6	4x RE-600	8x RE-600	
SRFL-S/D-3600	7000/1850	DN 200	8	8	6x RE-600	12x RE-600	

In-Line Filters ▪ Type SRFL-SW

Product Description

STAUFF In-Line Filters SRFL-SW are specially developed for direct installation into the pipelines of industrial water cycles. Depending on their size, SRFL-SW filter housings are suitable for nominal flow rates up to 13330 l/min / 3521 US GPM at a maximum operating pressure of 16 bar / 232 PSI. The SRFL-SW have been designed to be used in the steel industry for pre-filtering or coarse filtering in descaling plants. For use with demineralised water, STAUFF recommend the In-Line Filters SRFL-SW in Stainless Steel. The filter element construction as a Stainless Steel basket screen filter ensures a long service life.

Technical Data

Construction
- Designed for direct installation into pipelines
- Simplex version, Duplex on request

Materials
- Filter housing: Carbon Steel
  Stainless Steel (on request)
- Sealing: PTFE / NBR (Buna-N®)
  PTFE / FKM (Viton®)

Port Connections
- ANSI or DIN flange

Operating Pressure
- Max. 16 bar / 232 PSI

Flow Rating
- Max. 13330 l/min / 3521 US GPM

Temperature Range
- -10 °C ... +100 °C / +14 °F ... +212 °F

Media Compatibility
- Water
- Coolant
- Others on request

Price on application - contact STAUFF for more information

Options and Accessories

Filter Elements
Stainless Steel basket screen filters from STAUFF's REL product line are used as filter elements, which are designed for flow from the inside to the outside. The filter elements are available in micron ratings between 50µm and 200µm. Solid particles collected in the basket are prevented from reaching the clean side of the water cycle when being replaced.

Clogging Indicator
- Differential Pressure Gauge
- Visual / Electrical / Visual-Electrical (refer to Catalogue 9 - STAUFF Filtration Technology)

Drain Valve
- Available as an option: Integrated into the filter housing

Return-Line Filters ▪ Type RTF

Product Description

STAUFF RTF Return-Line Filters are designed as tank top filters with a maximum operating pressure of 3.4 bar / 49 PSI.

Technical Data

Construction
- Tank Top flange mounting

Materials
- Filter head: Aluminium
- Filter bowl: Polyamide
- Sealings: NBR (Buna-N®)
  FKM/FPM (Viton®)
  Other sealing materials are available on request

Port Connections
- BSPP
- NPT
- SAE O-Ring thread

Flow Rating
- Up to 220 l/min / 56 US GPM

Operating Pressure
- Max. 3.4 bar / 49 PSI

Burst Pressure
- Min. 10 bar / 145 PSI

Temperature Range
- -25 °C ... +95 °C / -13 °F ... +203 °F

Filter Elements
- Specifications refer to page N134

Media Compatibility
- Mineral oils
  Other fluids on request

Options and Accessories

Valve
- Bypass valve: (integrated in the filter element) Opening pressure 1.7 bar / 25 PSI
  Other settings available on request

Clogging Indicators
- For clogging indicator types, refer to page N135

Mounting Dimension Table - RTF

Size	Connection		Bolt Hole Ø (mm)	Bolts	Flange Bolt Centre (mm)	Tank Hole Machining Ø (mm)
	Threaded Port	Funnel Port Ø				
10	G 1/2"	24.5	7	2	90	68
15	G 1/2"	30	9	2	115	88
23	G 3/4"	30	9	2	115	88
25	G 1"	30	9	2	115	88
40	G 1"	40	11	3	175	131
50	G 1.1/4"	40	11	3	175	131
80	G 1.1/2"	51	11	4	220	175
90	G 2"	51	11	4	220	175

All dimensions (mm)
All dimensions shown are a guide only, refer to Catalogue 9 - STAUFF Filtration Technology for more information.

Return-Line Filter Housings / Complete Filters ▪ Type RTF

Order Codes

RTF - 25 - D - 10 - B - G16 - V01 / X

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

① Type

Return-Line Filter	RTF

② Group

Flow	Size
40 l/min / 10 US GPM	10
81 l/min / 21 US GPM	15
100 l/min / 26 US GPM	25
214 l/min / 56 US GPM	50
319 l/min / 84 US GPM	80
380 l/min / 100 US GPM	90

Note: Flow rates are nominal for housing only. Exact flow will depend on the selected filter element.
For technical data, refer to Catalogue 9 - STAUFF Filtration Technology.

③ Filter Material

Material	Max. Δp*collapse	Micron ratings available	Code
Without filter element	-	-	0
Inorg. glass fibre	3 bar / 43.5 PSI	10, 25	G
Filter paper	3 bar / 43.5 PSI	10, 25	D

*Note: Collapse/burst resistance as per ISO 2941
Other materials available on request

④ Micron Rating

10µm	10
25µm	25

Note: Other micron ratings available on request

⑤ Sealing Material

NBR (Buna®)	B
FKM/FPM (Viton®)	V

Note: Other sealing materials are available on request

⑥ Connection Style

Connection Style	Group 10 / 15	Code	Group 15 / 25	Code	Group 25 / 50	Code	Group 50	Code	Group 80	Code	Group 90	Code
BSPP	1/2	G08	3/4	G12	1	G16	1-1/4	G20	1-1/2	G24	2	G32
NPT	1/2	N08	3/4	N12	1	N16	1-1/4	N20	1-1/2	N24	2	N32

⑦ Clogging Indicator

Without clogging indicator	(None)
Visual clogging indicator	V01
Electrical clogging indicator	E

Note: Contact STAUFF for more information.

⑧ Design Code

STAUFF internal information	X

Filter Elements ▪ Type RTE

RTE - 25 - D - 10 - B / X

① ② ③ ④ ⑤ ⑥

① Type

Filter Element Series	RTE

② Group

According to filter housing

③ Filter Material

Material	Max. Δp*collapse	Micron ratings available	Code
Inorg. glass fibre	3 bar / 43.5 PSI	10, 25	G
Filter paper	3 bar / 43.5 PSI	10, 25	D

* Note: Collapse/burst resistance as per ISO 2941
Other materials on request

④ Micron Rating

10µm	10
25µm	25

Note: Other micron ratings on request

⑤ Sealing Material

NBR (Buna®)	B
FKM/FPM (Viton®)	V

Note: Other sealing materials are available on request

⑥ Design Code

STAUFF internal information	X

Return-Line Filters ▪ Type RTF

Includes Element

RTF Filter Assemblies including Element and Integral By-Pass

Item No.	Designation	Micron	Price
1010021588	RTF-10-D-10-B-G08	10µm	108.50
1010021589	RTF-15-D-10-B-G08	10µm	135.55
6100192141	RTF-25-D-10-B-G12	10µm	135.55
1010021590	RTF-25-D-10-B-G16	10µm	149.00
6100192142	RTF-50-D-10-B-G16	10µm	257.50
1010021696	RTF-50-D-10-B-G20	10µm	270.95
1010021697	RTF-80-D-10-B-G24	10µm	419.80
1010021698	RTF-90-D-10-B-G32	10µm	446.75

For RTF-23 and RTF-25 filter assemblies use RTE-25 element
For RTF-40 and RTF-50 filter assemblies use RTE-50 element

Replacement Elements for RTF with Integral 1.5 Bar By-Pass

Item No.	Designation	Micron	Price
1020013415	RTE-10-D-10-B	10µm	36.75
1020013419	RTE-15-D-10-B	10µm	50.25
1020013423	RTE-25-D-10-B	10µm	50.25
1020026230	RTE-50-D-10-B	10µm	81.40
1020026231	RTE-80-D-10-B	10µm	122.05
1020026232	RTE-90-D-10-B	10µm	135.55

RTE-25 Element suits RTF-23 and RTF-25 filter assemblies
RTE-50 Element suits RTF-40 and RTF-50 filter assemblies

Visual Clogging Indicator for RTF Filter Assemblies

Item No.	Designation		Price
1010002341	SPG-C-040-00004-02-P-T02-402923	V01	44.65

Contact STAUFF for more information

Electrical Clogging Indicator for RTF Filter Assemblies

Item No.	Designation		Price
1910000459	Limit-Switch-G42NO-S-B02-B1.3	E08	154.20
1910000460	Limit-Switch-G42NC-S-B02-B1.3	E09	154.20

Contact STAUFF for more information

Return-Line Filters ▪ Type RFB

Product Description

STAUFF RFB Return-Line Filters are designed as tank top filters. They are mounted directly on the tank top, and if 100% of the system oil is filtered, they provide the optimum removal of contaminant from the system. This provides the pump with clean oil therefore reducing contaminant generated wear. Because of its low weight and compact design, the STAUFF RFB Filters are ideally suited for mobile hydraulic applications. A high efficiency of contaminant removal is assured by using STAUFF RE Replacement Filter Elements. The high dirt-hold capacity of STAUFF Elements ensures a long service life and as a result reduced maintenance costs.

Technical Data

Construction
- Tank Top flange mounting

Materials
- Filter head: Aluminium
- Filter bowl & cap: Glass Fibre Reinforced Polyamide
- Sealings: NBR (Buna-N®)
  FKM/FPM (Viton®)
  EPDM (Ethylene Propylene Diene Monomer Rubber)
  Other sealing materials are available on request

Port Connections
- BSPP
- NPT
- SAE O-Ring thread

Operating Pressure
- Max. 10 bar / 145 PSI

Temperature Range
- -10 °C ... +100 °C / +14 °F ... +212 °F

Filter Elements
- Specifications refer to page N137

Media Compatibility
- Mineral oils
  Other fluids on request

Options and Accessories

Valve
- Bypass valve (integrated in the filter element): Opening pressure 3 bar ± 0.3 bar / 43.5 PSI ± 4.35 PSI
  Other settings available on request

Clogging Indicators
- For clogging indicator types, refer to page N138

Mounting Dimension Table - RFB

	Connection					
Size	Threaded Port	Funnel Port Thread (internal)	(mm)	No. of bolts	Flange bolt Centre (mm)	Funnel Mounting Dimension (mm)
022	G 3/4"	G 1"	11	2	115.5	84.8
046	G 3/4"	G 1"	11	2	115.5	84.8
052	G 3/4"	G 1"	11	2	115.5	84.8

All dimensions (mm)
All dimensions shown are a guide
Refer to Catalogue 9 - STAUFF Filtration Technology for more information

Return-Line Filter Housings / Complete Filters ▪ Type RFB

Order Codes

RFB - 022 - G - 10 - B - G16 - G42NO - D - G - L10 / X

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪

① Type

Return-Line Filter	**RFB**

② Group

Flow	Size
75 l/min / 22 US GPM	**022**
165 l/min / 46 US GPM	**046**
185 l/min / 52 US GPM	**052**

Note: Exact flow will depend on the selected filter element. For technical data, refer to Catalogue 9 - STAUFF Filtration Technology.

③ Filter Material

Material	Max. Δp*collapse	Micron ratings available	Code
Without filter element	-	-	**0**
Inorg. glass fibre	25 bar / 363 PSI	3, 5, 10, 20	**G**
Stainless fibre	30 bar / 435 PSI		**A**
Filter paper	10 bar / 145 PSI	10, 20	**N**
Stainless mesh	30 bar / 435 PSI	10, 25, 50, 100, 200	**S**

Note: *Collapse/burst resistance as per ISO 2941. Other materials are available on request.

④ Micron Rating

3µm	**03**
5µm	**05**
10µm	**10**
20µm	**20**
25µm	**25**
50µm	**50**
100µm	**100**
200µm	**200**

Note: Other micron ratings are available on request.

⑤ Sealing Material

NBR (Buna®)	**B**
FKM/FPM (Viton®)	**V**
EPDM	**E**

Note: Other sealing materials are available on request.

⑥ Connection Style

Connection Style		Code
BSPP	1	**G16**
BSPP	3/4	G12
NPT	1	**N16**
NPT	3/4	N12
SAE-O-Ring Thread	1-5/16–12	**U16**

Note: Bold types identify preferred connection style.

⑦ Clogging Indicator

Without Clogging Indicator	**0**
Visual Clogging Indicator	**V12**
Electrical Clogging Switch 42 V, NO	**G42NO**
Electrical Clogging Switch 42 V, NC	**G42NC**
Electrical Clogging Switch 110 V ... 230 V, two-way contact (only for Code W)	**G230**

⑧ Clogging Indicator options for G42NO, G42NC and G230

Plug connector	**0**
M12 x 1,5	**M12**
AMP plug	**A**
Deutsch plug	**D**
Rubber boot	**S**
90 degree Polyamide cap (only for Code G230)	**W**

⑨ Outlet Style

With 1" BSPP thread	**G16**
With 1" NPT thread	**N16**

⑩ Air Filter Element

Without Air Filter Element	**(None)**
Filter paper 10 micron	**L10**

Other materials and micron ratings on request.

⑪ Design Code

STAUFF internal information	**X**

Filter Elements ▪ Type RE

RE - 022 - G - 10 - B / X

① ② ③ ④ ⑤ ⑥

① Type

Filter Element Series	**RE**

② Group

According to filter housing

③ Filter Material

Material	Max. Δp*collapse	Micron ratings available	Code
Inorg. glass fibre	25 bar / 363 PSI	3, 5, 10, 20	**G**
Stainless fibre	30 bar / 435 PSI		**M**
Filter paper	10 bar / 145 PSI	10, 20	**N**
Stainless mesh	30 bar / 435 PSI	25, 50, 100, 200	**S**

Note: *Collapse/burst resistance as per ISO 2941. Other materials are available on request.

④ Micron Rating

3µm	**03**
5µm	**05**
10µm	**10**
20µm	**20**
25µm	**25**
50µm	**50**
100µm	**100**
200µm	**200**

Note: Other micron ratings are available on request.

⑤ Sealing Material

NBR (Buna®)	**B**
FKM/FPM (Viton®)	**V**
EPDM	**E**

Note: Other sealing material on request.

⑥ Design Code

STAUFF internal information	**X**

Air Filter Elements ▪ Type RFB

Kit-RFB-Air - L - 10

① ② ③

① Type

Air filter for RFB-022/046/052	**KIT-RFB-AIR**

② Filter Material

Filter Paper	**L**

Note: Other materials are available on request.

③ Micron Rating

10µm	**10**

Note: Other micron ratings are available on request.

Electrical Clogging Switch

The switch is used where an electrical signal is needed to indicate when the element needs to be changed. The switch can turn on a light, or shut the machine down, or any further function controlled by an electric signal. The switching pressure is 2.5 bar / 36.25 PSI and this allows the element to be changed before the bypass setting of 3 bar / 43.5 PSI is reached.

Standard type with plug connector and rubber cap. Available with DEUTSCH DT04-2P plug (industrial standard), AMP Junior Timer plug (industrial standard) and five-pin circular connector M12, A-coded, according to IEC 61076-2-101.

Order Codes

Limit-Switch - G42NO - S - M10 - B2.5

① ② ③ ④ ⑤

① Type

Limit-Switch	**Limit-Switch**

② Connector Type

Electrical Clogging Switch 42 V, NO	**G42NO**
Electrical Clogging Switch 42 V, NC	**G42NC**
Electrical Clogging Switch 110 V ... 230 V, two-way contact (only for Plug Type W)	**G230**

③ Plug Type

M12 Five-Pin Connector according to IEC 61076-2-101	**M12**
AMP-Junior-Timer Plug	**A**
DEUTSCH Plug DT04-2P	**D**
Rubber boot	**S**
90 degree Polyamide cap (only for Connector Type G230)	**W**

④ Thread Type

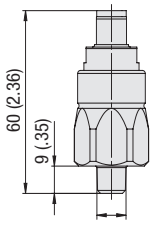
M10 x 1	**M10**

⑤ Pressure Setting

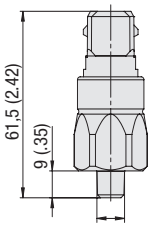
2.5 bar / 36.3 PSI	**B2.5**

Dimensions Plug Type

M12



A



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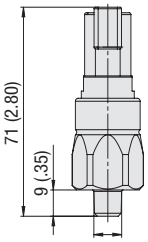

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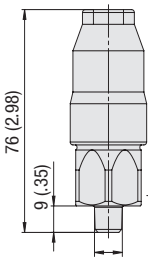

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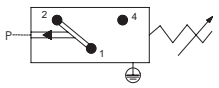
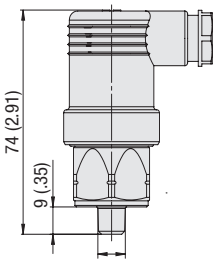




Note: The customer / user carries the responsibility for the electrical connection.

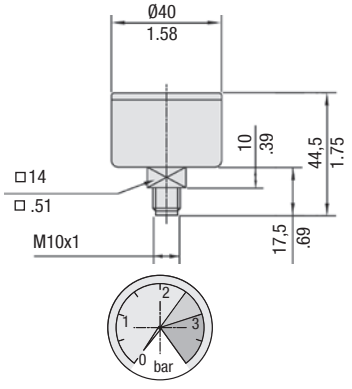
Return-Line Filters ▪ Type RFB

Visual Clogging Indicator

The gauge visually displays the degree of contamination of the element.
The coloured segments allow quick visual checking.

green	0 ... 2.5 bar / 0 … 36.25 PSI	Element has service life left
yellow	2.5 ... 3.0 bar / 36.25 ... 43.5 PSI	Element is contaminated and should be changed
red	>3.0 bar / >43.5 PSI	Bypass valve open, unfiltered oil passing to tank

Visual Clogging Indicator



Order Codes

SPG-C-040-00004-02-P-M10-402922

①

① Type

Visual Clogging Indicator	**SPG-C-040-00004-02-P-M10-402922**

Dimensional drawings: All dimensions in mm/in.

Return-Line Filters ▪ Type RFB

RFB Tank Top Filter Assemblies
with Integral Air Breather
including 10µm Inorganic Glass Fibre Element

Integral Breather

Item No.	Designation	Price
1010021687	RFB-022-G-10-B-G16-O-G16-L10	336.85
1010002678	RFB-046-G-10-B-G16-O-G16-L10	392.35
1010021112	RFB-052-G-10-B-G16-O-G16-L10	478.70

Return Filter Elements
Inorganic Glass Fibre

Item No.	Designation	Micron	Price
1020022486	RE-022-G-10-B/4	10µm	154.20
1020022543	RE-046-G-10-B/4	10µm	168.15
1020022554	RE-052-G-10-B/4	10µm	252.55
1020022555	RE-052-G-20-B/4	20µm	252.55

Return Filter Elements - Filter Paper

Item No.	Designation	Micron	Price
1020020523	RE-022-N-10-B/2	10µm	138.60
1020020529	RE-046-N-10-B/2	10µm	140.30
1020020535	RE-052-N-10-B/2	10µm	182.10

Visual Clogging Indicator for RF Filter Assemblies

Item No.	Designation		Price
1020000199	SPG-C-040-00004-02-P-M10-402922	V12	70.30

Refer to page N138 for more information

Electrical Clogging Indicator for RF Filter Assemblies

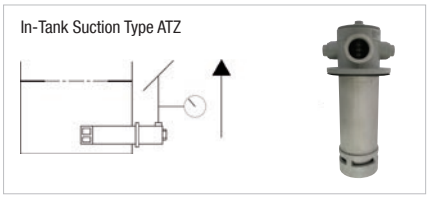
Item No.	Designation		Price
1020000590	Limit-Switch-G42NO-S-M10-B2.5	E01	112.30
1020005566	Limit-Switch-G230-W-M10-B2.5	E02	266.50

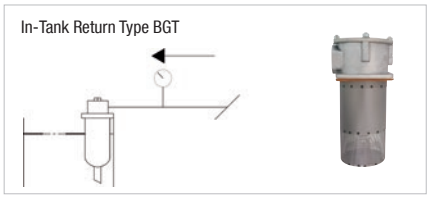
Refer to page N138 for more information

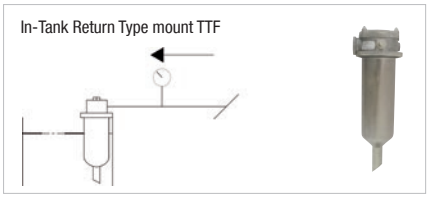
Air Breather for RFB Filters (supplied with screw cap)

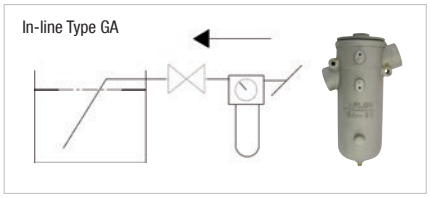
Item No.	Designation	Price
1020014501	Kit-RFB-Air-L-10	29.55

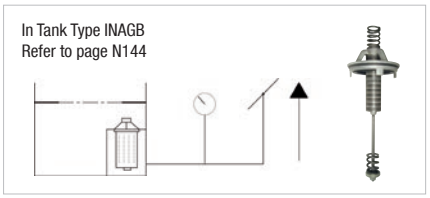
Housing - Suction and Return Filters

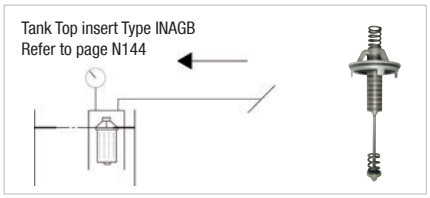












Product Description

STAUFF Magnetic range of Filters provide a combination of magnetic pre-filtration and high filtration efficiency results in a cost effective and versatile filtration system. The range of Return line or Suction line filter assemblies and inserts offer a choice of installation configurations from custom reservoir design for an in-tank filtering system to externally mounted options. The filtration flow is from inside to the outside of the element which ensures that all the containment is pre-filtered by the high-strength magnets mounted on the filter insert shaft and final pass is through the element itself.

Technical Data

Construction
- Insert
- Housing

Materials
- Housing: Aluminium
- Magnetic rod: Steel
- Bypass spring: Steel
- Diffuser: Steel
- Sealings: NBR (Buna-N)
  Other sealing materials are available on request

Flow Rating
- Up to 2000 l/min (533 US GPM)

Operating Pressure
- Range from Max. 25 Bar / 362 PSI

Temperature Range
- - 40˚C….+ 120˚C

Media Compatibility

- Mineral oils
- Other fluids available on request

Options and Accessories

Filter Elements
- TXX - Cellulose
- TXW - Glass Fibre
- ST - Wire Mesh

Clogging Indicator
- Differential Visual or Visual / Electrical Indicator

Selection Information
Refer to pages N146 - N147

Contact your local STAUFF office for more information

Suction and Return Magnetic Core Filter Housings / Complete Filters ▪ Type ARL

Order Codes

Housing-ARL	-	ATZ	-	0300	-	C340M	-	5A	-	FXX	-	010	-	B0.8
①		②		③		④		⑤		⑥		⑦		⑧

① Filter Housing

Filter Housing	Housing-ARL

② Type

In-Tank Suction	300 l/min / 79 US GPM max.	ATZ
In-Tank Return	10 Bar 300 l/min / 79 US GPM max.	TTF
In-Tank Return	10 Bar 1000 l/min / 264 US GPM max.	BGT
In-line	16 Bar 230 l/min / 61 US GPM max.	GA

③ Group

Flow	Insert Size	Size
30 l/min / 8 US GPM	1	0030
60 l/min / 16 US GPM	1	0060
90 l/min / 24 US GPM	1	0090
120 l/min / 32 US GPM	1	0120
125 l/min / 33 US GPM	1	0125
230 l/min / 61 US GPM	2	0230
270 l/min / 71 US GPM	3	0270
300 l/min / 79 US GPM	2	0300
390 l/min / 103 US GPM	3	0390
500 l/min / 132 US GPM	3	0500
600 l/min / 159 US GPM	4	0600
800 l/min / 211 US GPM	4	0800
1000 l/min / 264 US GPM	4	1000
1500 l/min / 396 US GPM	4	1500
2000 l/min / 528 US GPM	4	2000

④ Port Connection - Multiple Ports optional

G 3/4" Female	G12
G 1" Female	G16
G 1-1/4" Female	G20
G 1-1/2" Female	G24
SAE Flange Code 61 Flat face 1-1/2"	C324M
SAE Flange Code 61 Flat face 2"	C332M
SAE Flange Code 61 Flat face 21/2"	C340M
SAE Flange Code 61 Flat face 3"	C348M
ANSI 150Lb. Flange 11/2"	A24
ANSI 150Lb. Flange 2"	A32
ANSI 150Lb. Flange 3"	A48
DIN Flange PN16 NB 40	D40
DIN Flange PN16 NB 50	D50
DIN Flange PN16 NB 80	D80

⑤ Element - Flow Rate

Without element	(None)
Nominal l/min	refer to table below

⑥ Element - Filter Material

Without element	(None)
Element Media	refer to table below

⑦ Element - Micron Rating

Without element	(None)
Micron rating	refer to table below

⑧ Filter Housing

0.2 Bar Cracking pressure	B0.2
0.4 Bar Cracking pressure	B0.4
0.8 Bar Cracking pressure	B0.8
1.5 Bar Cracking pressure	B1.5
Bypass Blocked	BB

To select a Filter for specific applications refer to the Filter Selector Nomogram pages N146 - N147

Filter Elements ▪ Type FE-ARL

FE-ARL	-	TXW	-	3D	-	010
①		②		③		④

① Type

Filter Element	FE-ARL

② Filter Material

Cellulose suits INAGB, TTF, BGT,GA	TXX
Glass Fibre suits INAGB insert	TXW
Glass Fibre LEIF media suits INAGB insert	TXWL
LEIF sleeve suits INAGB insert	TXSL
Water absorbing suits INAGB insert	TXA
Stainless steel mesh suits INAGB insert	ST
Cellulose suits ATZ suction housing	FXX
Glass Fibre suits ATZ suction housing	FXW
Stainless steel mesh suits ATZ suction housing	SF

③ Flow Rate

Flow	Size
30 l/min / 8 US GPM	0
60 l/min / 16 US GPM	2
90 l/min / 24 US GPM	3
120 l/min / 32 US GPM	3D
125 l/min / 33 US GPM	3E
170 l/min / 45 US GPM	4
230 l/min / 61 US GPM	5
300 l/min / 79 US GPM	5A
500 l/min / 132 US GPM	5C
270 l/min / 71 US GPM	6A
390 l/min / 103 US GPM	8A
500 l/min / 132 US GPM	8C
600 l/min / 159 US GPM	10
800 l/min / 211 US GPM	11
1000 l/min / 264 US GPM	12
1500 l/min / 396 US GPM	13
2000 l/min / 528 US GPM	14
120 l/min 32 US GPM Open Both Ends (ATZ)	F1
300 l/min 79 US GPM Open Both Ends (ATZ)	F2

④ Micron Rating

Flow	Size
2µm	002
3µm	003
5µm	005
10µm	010
20µm	020
25µm	025
40µm	040
60µm	060
80µm	080
100µm	100
120µm	120
250µm	250

In-Tank Suction Filter and Elements

ATZ
Complete Assembly
Housing & Element (Magnetic Pre-Filter)

Integrated Check Valve

Item No.	Designation	Price
1010021599	Housing-ARL-ATZ-0300-C340M-5A-FXX-010-B0.8	3048.05

Refer to pages N146 - N147 for Filter Selector Nomogram

ATZ
In-Tank Suction Filters
(Magnetic Pre-Filter)

Integrated Check Valve

Item No.	Designation	Price
1010021598	Housing-ARL-ATZ-0120-G24-B0.8	2072.75

Refer to pages N146 - N147 for Filter Selector Nomogram

Cellulose - FXX

Item No.	Designation	Price
1020026207	FE-ARL-FXX-F1-010	135.55
1020026209	FE-ARL-FXX-F3-010	175.95

Stainless Mesh - SF

Item No.	Designation	Price
1020026238	FE-ARL-SF-F1-060	213.25
1020026236	FE-ARL-SF-F1-120	149.00
1020026242	FE-ARL-SF-F3-060	759.60
1020026240	FE-ARL-SF-F3-100	311.30
1020026241	FE-ARL-SF-F3-120	297.85

In-Tank Return

TTF
In-Tank Return (Magnetic Pre-Filter)

Item No.	Designation	Price
1010021691	Housing-ARL-TTF-0060-G12-B1.5	311.30
1010021673	Housing-ARL-TTF-0060-G16-B1.5	324.80
1010021692	Housing-ARL-TTF-0090-G12-B1.5	365.90
1010021592	Housing-ARL-TTF-0090-G16-B1.5	297.85
1010021689	Housing-ARL-TTF-0120-G12-B1.5	338.90
1010021593	Housing-ARL-TTF-0120-G16-B1.5	338.90
1010021594	Housing-ARL-TTF-0125-G16-B1.5	352.45
1010021595	Housing-ARL-TTF-0230-G20-B1.5	568.70
1010021596	Housing-ARL-TTF-0230-G24-B1.5	568.70
1010021693	Housing-ARL-TTF-0300-G20-B1.5	568.70
1010021597	Housing-ARL-TTF-0300-G24-B1.5	568.70

Refer to pages N146 - N147 for Filter Selector Nomogram

BGT
In-Tank Return (Magnetic Pre-Filter)

Item No.	Designation	Price
1010021608	Housing-ARL-BGT-0270-C332M-B1.5	1501.60
1010021609	Housing-ARL-BGT-0390-C332M-B1.5	1527.30
1010021610	Housing-ARL-BGT-0500-C332M-B1.5	1559.40
1010021612	ARL-BGT-1000-C348M-TXW12-10-B1.5-O	4671.50

Refer to pages N146 - N147 for Filter Selector Nomogram

In-line

GA
In-line (Magnetic Pre-Filter)

Item No.	Designation	Price
1010021614	Housing-ARL-GA-0030-G12-B1.5	690.60
1010021615	Housing-ARL-GA-0060-G16-B1.5	731.05
1010021616	Housing-ARL-GA-0090-G16-B1.5	772.00
1010021613	Housing-ARL-GA-0120-G20-B1.5	880.50
1010021619	Housing-ARL-GA-0230-G24-B1.5	1649.15

Custom designed and manufactured in-line filter housing

STAUFF can design, build and test custom inline filter housings integrating magnetic core filter technology

Design specification options;

- Materials - steel or stainless steel
- Flanges - DIN, ANSI, mounting options, certified and tested
- Mounting - foot stand or flange base
- Connection - inline or off-set
- Surface coating - plated or painted
- Compliance - pressure testing and certification

Contact STAUFF for more information

Filter Elements

To suit Filter Housing TTF, BGT, GA

TXX
10µm Element, Cellulose
(to suit INAGB Insert / TTF, BGT, GA Filters)

Item No.	Designation	Price
1020026361	FE-ARL-TXX-0-010	162.45
1020026369	FE-ARL-TXX-2-010	81.40
1020026370	FE-ARL-TXX-3-010	94.90
1020026371	FE-ARL-TXX-3D-010	94.90
1020026372	FE-ARL-TXX-3E-010	122.05
1020026373	FE-ARL-TXX-4-010	122.05
1020026374	FE-ARL-TXX-5-010	122.05
1020026375	FE-ARL-TXX-5A-010	175.95
1020026376	FE-ARL-TXX-6A-010	149.00
1020026377	FE-ARL-TXX-8A-010	162.45
1020026379	FE-ARL-TXX-8C-010	162.45
1020026362	FE-ARL-TXX-10-010	324.80
1020026363	FE-ARL-TXX-11-010	379.35
1020026365	FE-ARL-TXX-12-010	609.70
1020026366	FE-ARL-TXX-13-010	856.10
1020026367	FE-ARL-TXX-14-010	1332.55

TXW
10µm Element, Microglass
(to suit INAGB Insert)

Item No.	Designation	Price
1020026341	FE-ARL-TXW-0-010	108.50
1020026306	FE-ARL-TXW-2-010	122.05
1020026317	FE-ARL-TXW-3-010	122.05
1020026311	FE-ARL-TXW-3D-010	149.00
1020026314	FE-ARL-TXW-3E-010	149.00
1020026320	FE-ARL-TXW-4-010	203.55
1020026327	FE-ARL-TXW-5-010	203.55
1020026324	FE-ARL-TXW-5A-010	297.85
1020026333	FE-ARL-TXW-8A-010	284.40
1020026338	FE-ARL-TXW-8C-010	244.00
1020026293	FE-ARL-TXW-10-010	636.65
1020026296	FE-ARL-TXW-12-010	961.35
1020026299	FE-ARL-TXW-13-010	1559.40
1020026303	FE-ARL-TXW-14-010	1950.90

ST
Stainless Steel Mesh Elements
(to suit INAGB Insert)

Item No.	Designation	Price
1020026258	FE-ARL-ST-3-040	135.55
1020026259	FE-ARL-ST-3-060	122.05
1020026257	FE-ARL-ST-3-100	122.05
1020026261	FE-ARL-ST-3D-025	514.75
1020026262	FE-ARL-ST-3D-040	175.95
1020026263	FE-ARL-ST-3D-060	135.55
6100031785	FE-ARL-ST-3D-100	135.55
1020026260	FE-ARL-ST-3D-120	122.05
1020026266	FE-ARL-ST-5-010	1341.20
1020026269	FE-ARL-ST-5-025	1245.60
1020026271	FE-ARL-ST-5-040	678.40
1020026272	FE-ARL-ST-5-060	244.00
1020026267	FE-ARL-ST-5-100	230.55
1020026268	FE-ARL-ST-5-120	217.00
1020026270	FE-ARL-ST-5-250	230.55
1020026274	FE-ARL-ST-5A-040	528.20
1020026275	FE-ARL-ST-5A-060	419.80
1020026273	FE-ARL-ST-5A-100	406.35
1020026276	FE-ARL-ST-6A-040	324.80
1020026278	FE-ARL-ST-8A-040	446.75
1020026277	FE-ARL-ST-8A-100	311.30
1020026280	FE-ARL-ST-8C-040	772.00
1020026281	FE-ARL-ST-8C-060	582.15
1020026279	FE-ARL-ST-8C-120	501.30
1020026248	FE-ARL-ST-11-040	1218.65
1020026249	FE-ARL-ST-11-080	663.65
1020026252	FE-ARL-ST-13-060	1623.55
1020026255	FE-ARL-ST-14-060	2624.60
1020026254	FE-ARL-ST-14-100	1937.95

Diffusers

Diffusers with perforated plate area available on request.
Contact your local STAUFF office for more information.

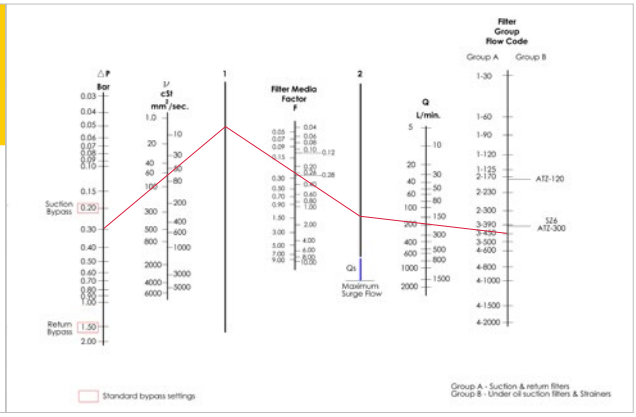
Magnetic Core Filter Insert

Refer to page N144 for Magnetic Core Filter Insert to suit In-Tank Suction, In-Tank Return and In-line Filters.

Filter Selector Nomogram for Magnetic Core Filters

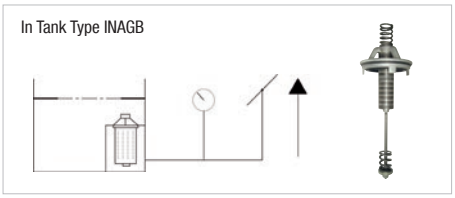
To select a Magnetic Core Filter for specific applications, refer to the Filter Selector Nomogram pages N146 - N147

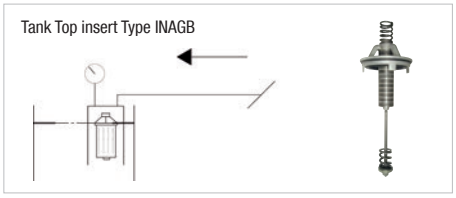
Contact your local STAUFF office for more information



Magnetic Core Filter Insert

Typical Applications





Suction and Return Magnetic Core Filter Inserts ▪ Type INAGB

Order Codes

Insert-ARL - **INAGB** - **2** - **0060**

① ② ③ ④

① Filter Housing

Filter Insert	Insert-ARL

② Type

Insert	INAGB

③ Group

Insert Major Diameter	Size
O.D. Ø 88mm	**1**
O.D. Ø 126mm	**2**
O.D. Ø 151mm	**3**
O.D. Ø 231mm	**4**

④ Flow Rate

Flow	Insert Length	Size
30 l/min / 8 US GPM	122mm	**0030**
60 l/min / 16 US GPM	173mm	**0060**
90 l/min / 24 US GPM	217mm	**0090**
120 l/min / 32 US GPM	267mm	**0120**
125 l/min / 33 US GPM	381mm	**0125**
170 l/min / 45 US GPM	284mm	**0170**
230 l/min / 61 US GPM	360mm	**0230**
270 l/min / 71 US GPM	380mm	**0270**
300 l/min / 79 US GPM	559mm	**0300**
390 l/min / 103 US GPM	405mm	**0390**
500 l/min / 132 US GPM	595mm	**0500**
600 l/min / 159 US GPM	505mm	**0600**
800 l/min / 211 US GPM	615mm	**0800**
1000 l/min / 264 US GPM	720mm	**1000**
1500 l/min / 396 US GPM	1000mm	**1500**
2000 l/min / 528 US GPM	1265mm	**2000**

INAGB
Magnetic Core Insert
To suit In-Tank Suction, In-Tank Return and In-line Filters

Magnetic Pre-Filtration

Item No.	Designation	Price
1010021620	Insert-ARL-INAGB-1-0060	217.00
1010021621	Insert-ARL-INAGB-1-0090	257.50
6100019548	Insert-ARL-INAGB-1-0120	270.95
1010021622	Insert-ARL-INAGB-2-0230	365.90
1010021623	Insert-ARL-INAGB-2-0300	600.45
1010021625	Insert-ARL-INAGB-3-0390	460.15
1010021626	Insert-ARL-INAGB-3-0500	419.80
6100026761	Insert-ARL-INAGB-4-0800	2720.80
1010021627	Insert-ARL-INAGB-4-1000	2842.70
1010021628	Insert-ARL-INAGB-4-2000	4049.05

Refer to pages N146 - N147 for Filter Selector Nomogram

Clogging Indicators ▪ Type ARL

Order Codes

Indicator-ARL - **V** - **0000.7** - **T04** - **SC**

① ② ③ ④ ⑤

① Filter Clogging Indicator

Filter Clogging Indicator	**Indicator-ARL**

② Type

Gauge Pressure	**V**
Gauge Vacuum	**VV**
Switch Pressure	**G**
Switch Vacuum	**GV**
Visual Differential Indicator 0376 Type	**VD0376**
Visual Electrical Differential Indicator 0376 Type	**VE0376**
Visual Differential Indicator DPM Type	**VDDPM**
Visual Electrical Differential Indicator DPM Type	**VEDPMS**

③ Indicator Setting

-0.15 Bar(g)	**(-00000.15)**
-0.30 Bar(g)	**(-00000.3)**
0.30 Bar(g)	**00000.3**
0.70 Bar(g)	**00000.7**
1.0 Bar(g)	**00001**
1.2 Bar(g)	**00001.2**
1.3 Bar(g)	**00001.3**

④ Port / Mounting

1/8" BSPT Male	**T02**
1/4" BSPT Male	**T04**
M10 x 1 Male	**M10**
1/8" BSPP Male banjo mounting without kit Available for 0376 or DPM(S) style	**BM**
1/8" BSPP Male banjo mounting complete with kit Available for 0376 or DPM(S) style	**BMK**
Surface mounting available for DPM(S) only	**SM**

⑤ Port / Mounting

Multiple contacts	**(None)**
Single contact Earth return (Old technology)	**SC**

Electrical Clogging Indicator Switch M10x1

Item No.	Designation	Price
1020025900	Indicator-ARL-GV-(-00000.15)-M10	189.40
1020025901	Indicator-ARL-GV-(-00000.3)-M10	189.40
1020025902	Indicator-ARL-G-00000.7-M10	419.80
1020025903	Indicator-ARL-G-00001.2-M10	419.80

GV - Switch Vacuum. Suits ATZ Filters
G - Switch Pressure. Suits TTF and BGT Filters

VDDPM Indicator Visual

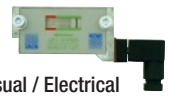
Item No.	Designation	Price
1020025915	Indicator-ARL-VDDPM-00000.7-SM	217.00
1020025917	Indicator-ARL-VDDPM-00001.2-SM	217.00
1020025914	Indicator-ARL-VDDPM-00000.7-BMK	379.35
1020025916	Indicator-ARL-VDDPM-00001.2-BMK	379.35

SM - Surface mounting (mounting screws included). Suits GA filters
BMK - 1/8" Male banjo mounting complete with kit. Suits custom built in-line housing

Visual Type Clogging Indicator M10x1

Item No.	Designation	Price
1020025904	Indicator-ARL-VV-(-00000.15)-M10	175.95
1020025905	Indicator-ARL-VV-(-00000.3)-M10	175.95
1020025906	Indicator-ARL-V-00000.7-M10	175.95
1020025907	Indicator-ARL-V-00001.2-M10	175.95

VV - Gauge Vacuum. Suits Housing-ARL-ATZ
V - Gauge Pressure. Suits Housing-ARL-TTF and Housing-ARL-BGT

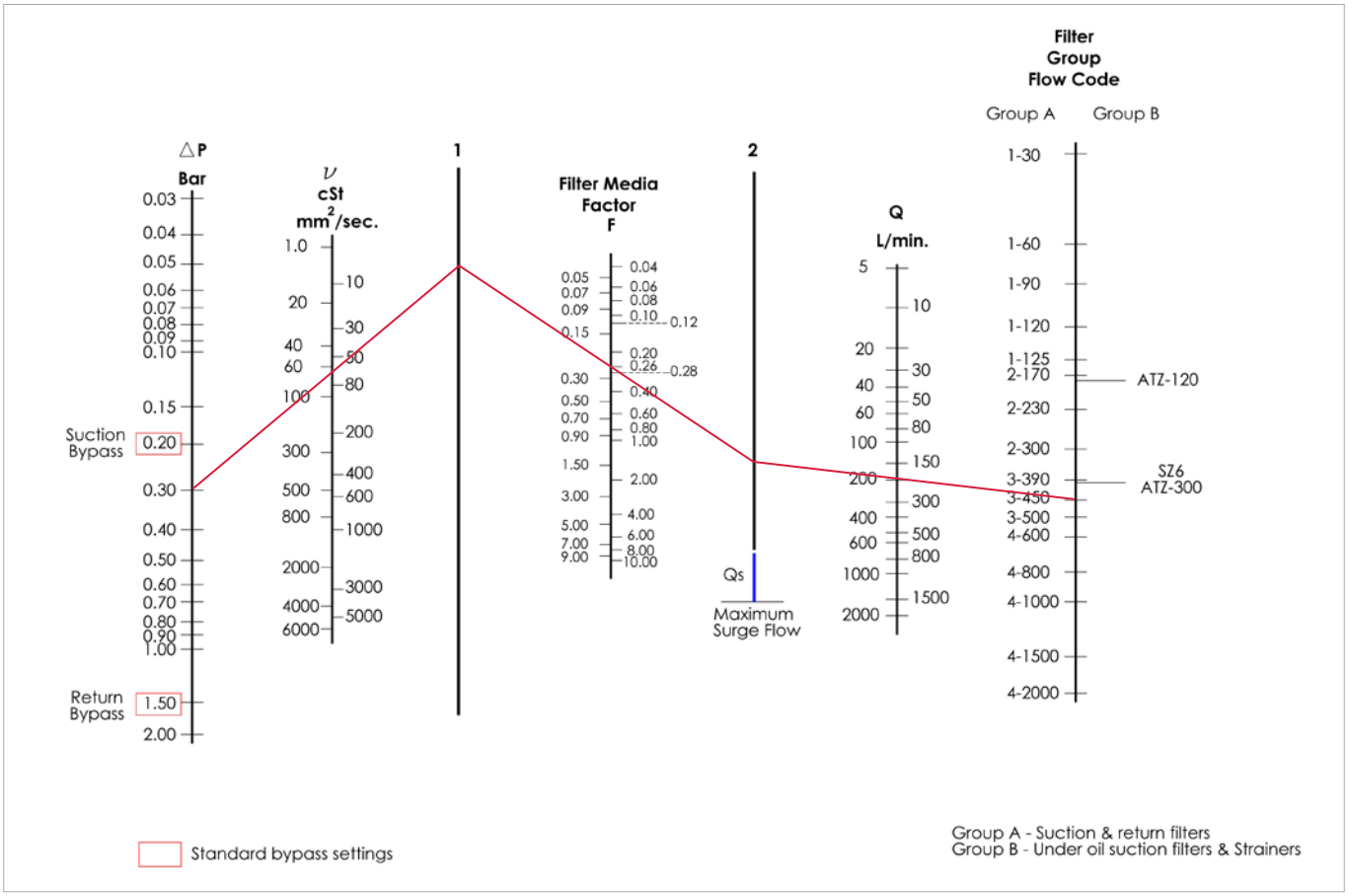


VEDPMS Indicator Visual / Electrical

Item No.	Designation	Price
1020025909	Indicator-ARL-VEDPMS-00000.7-SM	311.30
1020025912	Indicator-ARL-VEDPMS-00001.2-SM	311.30
1020025908	Indicator-ARL-VEDPMS-00000.7-BMK	487.80
1020025911	Indicator-ARL-VEDPMS-00001.2-BMK	487.80

SM - Surface mounting (mounting screws included). Suits Housing-ARL-GA
BMK - 1/8" Male banjo mounting complete with kit. Suits custom built in-line housing

Filter Selector Nomogram for Magnetic Core Filters



Filter Factor					
TXW - Micro Glass		TXX - Cellulose	ST - Stainless Mesh Elements		
3	: 0.12	:1.5	Mesh 5 micron	: 0.1	Mesh 60 micron : 3.0
6	: 0.28		Mesh 10 micron	: 0.3	Mesh 100 micron : 6.0
10	: 0.26		Mesh 25 micron	: 0.9	Mesh 120 micron : 7.0
20	: 0.6		Mesh 40 micron	: 2.0	

Example			
Requested pressure drop clean element	0.3 bar (20% of Standard Return Bypass)	**Viscosity**	65 cSt
Filtration fineness	10 micron (microglass)	**Flow capacity**	200 l/min
Filter type required	Select type and Filter Group Flow Code line e.g. INAGB Type (line A)	**Flow**	450 l/min - select: 500 Note: It is recommended to upsize flow to the nearest standard filter type
Solution	**Item No.**	**Designation**	
	1010021626	Insert-ARL-INAGB-3-0500	

Nomogram

① Select pressure drop

② Select viscosity

③ From the given pressure drop value draw a straight line through the viscosity value to join to the intersecting line (1)

④ Select the filter media factor

⑤ From intersecting line (1) draw a straight line through the filter media factor to intersecting line (2)

⑥ Select flow rate

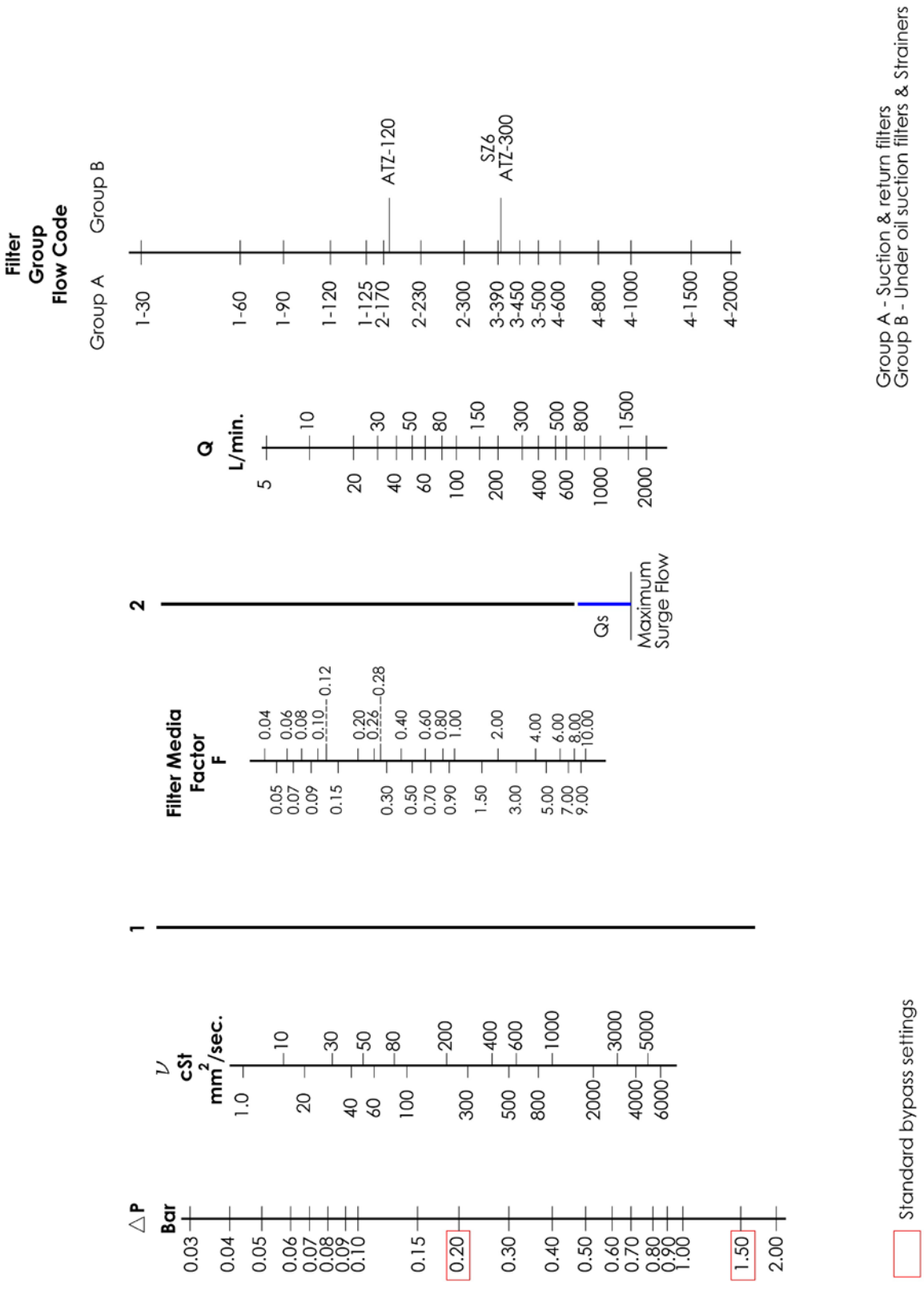
⑦ From intersecting line (2) draw a straight line through the filter media factor to intersecting line (3)
Note: If the intersecting line intersects into the Q zone, surge flows may occur. Consider reviewing the pressure drop or viscosity value to avoid this zone.

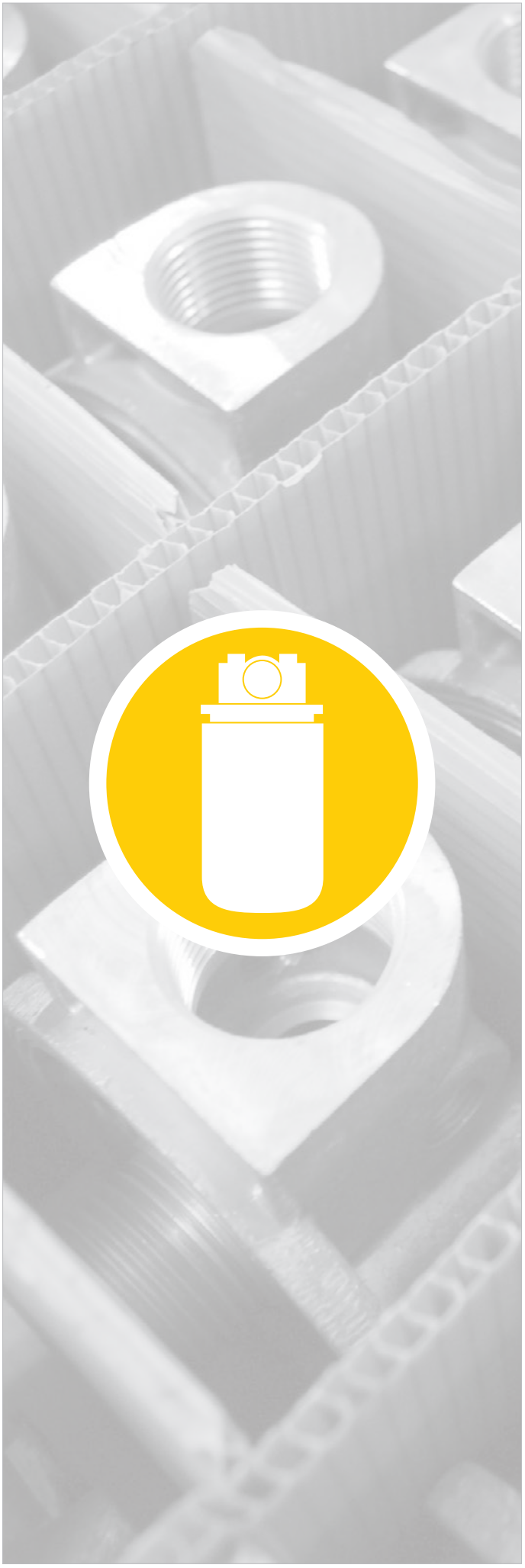
⑧ Final selection on intersecting line (3) determines the filter group and flow code. It is recommended the greater capacity is selected.

Note: This nomogram is to be used as a guide only. System parameters may vary with each application.

Element Flow Code	Max l/min	TXX 10µm Cellulose	CC3 / 10 / 25 Fibreglass	ST Wire Mesh
①				
-	30	660	335	225
2	60	1.360	690	430
3	90	1.965	995	610
3D	120	2.635	1.345	815
3E	180	4.030	2.040	1.215
②				
4	170	4.885	3.740	1.385
5	230	6.765	5.180	1.895
5A	300	12.270	9.395	3.390
③				
6A	270	6.685	5.250	1.950
8A	390	9.330	7.330	2.695
8B	450	12.640	9.930	3.625
8C	500	15.620	12.280	4.460
④				
10	600	21.300	13.560	6.390
11	800	28.600	18.230	8.520
12	1000	35.600	22.680	10.550
13	1500	53.600	34.130	15.970
14	2000	71.250	45.360	21.100

Filter Selector Nomogram for Magnetic Core Filters





Spin-On Filter Assemblies N150 - N154

Overview / Order code examples N150 - N151

SLF-02 / 03
Filter Head / Element / Indicator
N152

SAF-05 / 07 / 10
Filter Head / Element / Indicator
(Short and Long Element)
N152

SSF-100 / 120 / 150
Filter Head / Element / Indicator
(Short and Long Element)
N153

SSF-12
Threaded Spigot
Filter Head / Element / Indicator
N153

SSF-20
Dual Threaded Spigot
Filter Head / Element / Indicator
N153

SSF-24
Top & Bottom Dual Threaded Spigot
Double Filter Head / Element / Indicator
N153

SSF-25
Side by Side Dual Threaded Spigot
Double Filter Head / Element / Indicator
N153

SMF-2215
Dual Threaded Spigot
Double Filter Head / Element / Indicator
N154

SSFT-12B
Tank top Filter Head / Element / Indicator
N154

SSFT-20B
Dual Threaded Spigot
Tank top Filter Head / Element / Indicator
N154

Spin-On Filters Quick Reference Guide N156
Spin-On Filter Heads / Elements

Spin-On Filter Heads N157

SLF-02 / 03 / 04 N157
Max. 14 bar / 200 PSI
Max. 26 l/min / 7 US GPM

SAF-05 / 07 N157
Max. 14 bar / 200 PSI
Max. 90 l/min / 25 US GPM

SAF-10 / 13 N157
Max. 14 bar / 200 PSI
Max. 128 l/min / 34 US GPM

SSF-12 N157
Max. 12 bar / 174 PSI
Max. 90 l/min / 25 US GPM

SSF-20L N157
Max. 12 bar / 174 PSI
Max. 225 l/min / 60 US GPM

SSF-100 / 120 / 160 N157
Max. 12 bar / 174 PSI
Max. 225 l/min / 60 US GPM

SSF-150 / 180 N157
Max. 14 bar / 200 PSI
Max. 300 l/min / 80 US GPM

Double Spin-On Filter Heads N157

SSF-24B N157
Max. 12 bar / 174 PSI
Max. 454 l/min / 120 US GPM

SSF-25B N157
Max. 12 bar / 174 PSI
Max. 454 l/min / 120 US GPM

SMF-2215 N157
Max. 10 bar / 150 PSI
Max. 450 l/min / 119 US GPM

Tank Top Spin-On Filter Heads N157

SSFT-12B N157
Max. 7 bar / 100 PSI
Max. 75 l/min / 20 US GPM

SSFT-20B N157
Max. 7 bar / 100 PSI
Max. 200 l/min / 53 US GPM

Spin-On Filter Elements N159 - N170

Overview Spin-On Filter Elements N159

SFC-35 / 36
SFCT-35 / 36 N160 - N161

SFC-57 / 58
SFCT-57 / 58 N162 - N163

SF-63 N164

SF-65 N166 - N167

SF-67 N168 - N170

Clogging Indicators N170 - N171

Visual Pressure Clogging Indicators N170
SPG-C

Visual Vacuum Clogging Indicators N170
SPG-C

Electrical Clogging Switch N171
Limit-Switch

Spin-On Filter Assemblies

Description

STAUFF provides a complete range of Spin-On Filters which can be used either as Suction-Line filters or as Return-Line filters for low pressure applications.
The various ranges meet international standards.

Material
- Filter head: Aluminium

Media Compatibility
- Mineral oils, others on request

Connections
- BSPP
- NPT
- SAE flange
- SAE thread
- Other ports connections are available on request

Operating Pressure
- Max. 14 bar / 200 PSI

Temperature Range
- -30 °C ... +100 °C / -22 °F ... +212 °F

Nominal Flow Rate
- Max. 460 l/min / 120 US GPM

Options and Accessories

Clogging Indicators
- Visual clogging indicator with coloured segments
- Electrical clogging switch
- Other types are available on request

Private Labelling
- On request, the filter elements can be printed with a private label

Type SLF-02 / 03
page N152

Type SAF-05 / 07 / 10
page N152

Type SSF-100 / 120 / 150
page N153

Type SSF-12
page N153

Type SSF-20
page N153

Type SSF-24
page N153

Type SSF-25
page N153

Type SMF-2215
page N154

Type SSFT-12B
page N154

Type SSFT-20B
page N154

Spin-On Filter Assembly Components

Spin-On Filter Heads, refer to page N157
Spin-On Elements, refer to page N159
Visual Clogging Indicators, refer to page N170
Electrical Clogging Switch, refer to page N171

Spin-On Filter Assemblies

Order Codes

SSF - **24B** - **B1.7** - **4** - **B** - **SFC-5710-E** - **V01**

① ② ③ ④ ⑤ ⑥ ⑦

① Spin-On Filter Combination

Spin-On Head with 3/4"-16 UN spigot (for use with 3in diameter spin on elements)	**SLF**
Spin-On Head with 1-12 UNF spigot (for use with 3.67in diameter spin on elements)	**SAF**
Spin-On Head (Double) with Dual Threaded 1 1/4" BSPP / 1 1/2"-16 UN spigot (for use with 6in diameter spin on elements)	**SMF**
Spin-On Head (Single or Double) with G1-1/4 and / or 1 1/2-16UN spigot (for use with 5in diameter spin on elements)	**SSF**
Spin-On Head for Tank Top Return Filter	**SSFT**

② Filter Head Group Size

Series	Filter Head	Port	Spigot	Seal Contour	Size
SLF	Single	1/4 NPT	3/4–16 UNF	A	**02**
SLF	Single	3/8 NPT	3/4–16 UNF	A	**03**
SLF	Single	9/16–18 UN	3/4–16 UNF	A	**04**
SAF	Single	1/2 NPT	1–12 UNF	A	**05**
SAF	Single	3/4 NPT	1–12 UNF	A	**07**
SAF	Single	1 NPT	1–12 UNF	A	**10**
SAF	Single	1-5/16–12 UN	1–12 UNF	A	**13**
SSF	Single	G3/4	G3/4	A	**12**
SSF	Single	G1-1/4	G1-1/4 + 1-1/2–16 UN	A / B	**20L**
SSF	Single	1 NPT	G1-1/4 + 1-1/2–16 UN	A / B	**100**
SSF	Single	1-1/4 NPT	G1-1/4 + 1-1/2–16 UN	A / B	**120**
SSF	Single	1-5/8–12 UN	G1-1/4 + 1-1/2–16 UN	A / B	**160**
SSF	Single	1-1/2 NPT	1-1/2–16 UN	B	**150**
SSF	Single	1-7/8–12 UN	1-1/2–16 UN	B	**180**
SSF	Double	G1-1/2	G1-1/4 + 1-1/2–16 UN	A / B	**24B**
SSF	Double	G1-1/2	G1-1/4	A / B	**25B**
SSF	Single	1-1/2 SAE Code 61	G1-1/4	A / B	**25FM**
SSFT	Tank Top	G3/4	G3/4	A / B	**12B**
SSFT	Tank Top	G1-1/2	G1-1/4 + 1-1/2–16 UN	A	**20B**
SMF	Double	1-1/2 NPT (2" SAE)	G1-1/4 + 1-1/2–16 UN	A	**2215**

Seal Contour:
Type A: Spin-On Filter with seal contour A for filter elements with inner seal
Type B: Spin-On Filter with seal contour B for filter elements with outer seal

③ Bypass Pressure (optional)

No bypass	**0**
0.2 Bar / 3 PSI	**B0.2**
0.35 Bar / 5 PSI	**B0.35**
1 Bar / 15 PSI	**B1**
1.7 Bar / 25 PSI	**B1.7**

④ Clogging Indicator Position

No clogging indicator	**0**
Drilled for return line application	**1**
Drilled for suction line application	**2**
All clogging indicator ports drilled	**4**
Special configuration	**9**

⑤ Seal Material

NBR (Buna-N®)	**B**

⑥ STAUFF Group Size / Material / Element / Micron Rating

Size	Material	Element	Length(mm)	Micron	
35	Filter Paper	without bypass valve	145	10	**SFC-3510-E**
			145	25	**SFC-3525-E**
		with bypass valve	145	10	**SFCT-3510-E**
			145	25	**SFCT-3525-E**
	Inorganic Glass Fibre	without bypass valve	145	03	**SFC-3503-AE**
			145	10	**SFC-3510-AE**
			145	25	**SFC-3525-AE**
		with bypass valve	145	10	**SFCT-3510-AE**
			145	25	**SFCT-3525-AE**
	Wire Mesh	without bypass valve	145	60	**SFC-3560-E**
	Brass Mesh	without bypass valve	145	125	**SFC-35125-E**
36	Filter Paper	without bypass valve	210	10	**SFC-3610-E**
			210	25	**SFC-3625-E**
		with bypass valve	210	10	**SFCT-3610-E**
			210	25	**SFCT-3625-E**
	Inorganic Glass Fibre	without bypass valve	210	03	**SFC-3603-AE**
			210	10	**SFC-3610-AE**
			210	25	**SFC-3625-AE**
		with bypass valve	210	10	**SFCT-3610-AE**
			210	25	**SFCT-3625-AE**
	Wire Mesh	without bypass valve	210	60	**SFC-3660-E**
	Brass Mesh	without bypass valve	210	125	**SFC-36125-E**
57	Filter Paper	without bypass valve	177	10	**SFC-5710-E**
			177	25	**SFC-5725-E**
		with bypass valve	177	10	**SFCT-5710-E**
			177	25	**SFCT-5725-E**
	Inorganic Glass Fibre	without bypass valve	177	03	**SFC-5703-AE**
			177	10	**SFC-5710-AE**
			177	25	**SFC-5725-AE**
		with bypass valve	177	10	**SFCT-5710-AE**
			177	25	**SFCT-5725-AE**
	Wire Mesh	without bypass valve	177	60	**SFC-5760-E**
	Brass Mesh	without bypass valve	177	125	**SFC-57125-E**
58	Filter Paper	without bypass valve	226	10	**SFC-5810-E**
			226	25	**SFC-5825-E**
		with bypass valve	226	10	**SFCT-5810-E**
			226	25	**SFCT-5825-E**
	Inorganic Glass Fibre	without bypass valve	226	03	**SFC-5803-AE**
			226	10	**SFC-5810-AE**
			226	25	**SFC-5825-AE**
		with bypass valve	226	10	**SFCT-5810-AE**
			226	25	**SFCT-5825-AE**
	Wire Mesh	without bypass valve	226	60	**SFC-5860-E**
	Brass Mesh	without bypass valve	226	125	**SFC-58125-E**
63	Filter Paper	with bypass valve	73.2	10	**SF-6310-18**
			73.2	25	**SF-6325-10**
65	Filter Paper	without bypass valve	147	10	**SF-6520**
			147	25	**SF-6510**
			204	10	**SF-6521**
			204	25	**SF-6511**
	Inorganic Glass Fibre	without bypass valve	147	3	**SF-6549**
			147	12	**SF-6505**
			147	25	**SF-6504**
	Water Absorbing	without bypass valve	133	10	**SF-6520-W**
67	Inorganic Glass Fibre	without bypass valve	270	1	**SF-6702-MG**
			168	3	**SF-6703-MG**
			270	3	**SF-6704-MG**
			168	6	**SF-6706-MG**
			270	6	**SF-6707-MG**
			168	12	**SF-6730-MG**
			270	12	**SF-6731-MG**
			168	25	**SF-6728-MG**
			270	25	**SF-6726-MG**
	Filter Paper	without bypass valve	168	10	**SF-6720**
			270	10	**SF-6721**
			168	25	**SF-6710**
			270	25	**SF-6711**
	Stainless Wire Mesh	without bypass valve	168	144	**SF-6790**
			270	144	**SF-6791**
	Water Absorbing	without bypass valve	270	10	**SF-6721-W**

⑦ Clogging Indicator

	Type	Green	Yellow	Red	
Visual Pressure 0-4 bar 1/8 BSPT	Return	0 ... 1.25	1.25 ... 1.5	1.5 ... 4	**V01**
Visual Pressure 0-2.5 bar 1/8 BSPP	Return	0 ... 1.2	1.2 ... 1.5	1.5 ... 2.5	**V02**
Visual Pressure 0-4 bar 1/8 BSPP	Return	0 ... 2.5	2.5 ... 3	3 ... 4	**V03**
Visual Pressure 0-4 bar 1/8 BSPP	Return	0 ... 2.5	2.5 ... 3	3 ... 4	**V04**
Visual Pressure 0-12 bar 1/8 BSPP	Return	without coloured segments			**V05**
Visual Pressure 0-100 PSI 1/8 NPT	Return	0 ... 13	13 ... 15	15 ... 100	**V06**
Visual Pressure 0-100 PSI 1/8 NPT	Return	0 ... 21	21 ... 25	25 ... 100	**V07**
Visual Vacuum -76 ... 0 cm Hg 1/8 BSPT	Suction	-13 ... 0	-18 ... -13	-76 ... -18	**V08**
Visual Vacuum -76 ... 0 cm Hg 1/8 BSPP	Suction	-13 ... 0	-18 ... -13	-76 ... -18	**V09**
Visual Vacuum -30 ... 0 in Hg 1/8 NPT	Suction	-9 ... 0	-11 ... -9	-30 ... 11	**V10**
Visual Vacuum -30 ... 0 in Hg 1/8 NPT	Suction	-4 ... 0	-6 ... -4	-30 ... -6	**V11**

Spin-On Filter Assemblies

SLF-02 / 03 Spin-On Filter Assemblies
Filter Head, Element & Indicator

Item No.	Designation	Port Connection		Price
1010020655	SLF-02-1-SF-6310-V06	1/4" NPT	R	136.85
1010020671	SLF-03-1-SF-6310-V06	3/8" NPT	R	136.85

R - Return

SAF-05 / 07 / 10 Spin-On Filter Assemblies
Filter Head, Short Element & Indicator

Item No.	Designation	Port Connection		Price
1010020657	SAF-05-B1.7-1-SF-6520-V07	1/2" NPT	R	136.85
1010020658	SAF-05-B1.7-1-SF-6510-V07	1/2" NPT	R	136.85
1010020659	SAF-07-B1.7-1-SF-6520-V07	3/4" NPT	R	136.85
1010020660	SAF-07-B1.7-1-SF-6510-V07	3/4" NPT	R	136.85
1010020661	SAF-10-B1.7-1-SF-6520-V07	1" NPT	R	150.40
1010020662	SAF-10-B1.7-1-SF-6510-V07	1" NPT	R	150.40

R - Return

SAF-05 / 07 / 10 Spin-On Filter Assemblies
Filter Head, Long Element & Indicator

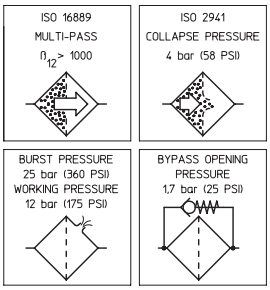
Item No.	Designation	Port Connection		Price
1010021036	SAF-05-B1.7-1-SF-6521-V07	1/2" NPT	R	151.70
1010021037	SAF-05-B1.7-1-SF-6511-V07	1/2" NPT	R	151.70
1010021038	SAF-07-B1.7-1-SF-6521-V07	3/4" NPT	R	151.70
1010021039	SAF-07-B1.7-1-SF-6511-V07	3/4" NPT	R	151.70
1010021040	SAF-10-B1.7-1-SF-6521-V07	1" NPT	R	165.25
1010021041	SAF-10-B1.7-1-SF-6511-V07	1" NPT	R	165.25

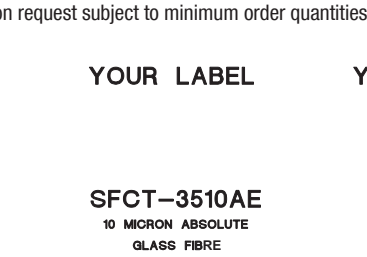
R - Return

Private Labelling - Spin-On Elements

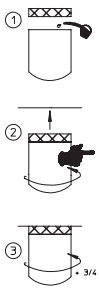
This service enables you to print you company logo, contact information and product details on Spin-On elements.
(Elements are available in white or black. Additional colours available on request subject to minimum order quantities)
Contact your local STAUFF office for more information.

Blank Spin-On element





Check indicator at operating pressure and replace the element if necessary. Replace the element initially after the first 50 hours. If no indicator is installed, replace the element every 250 hours thereafter.



Spin-On element with your label

Spin-On Filter Assemblies

SSF-100 / 120 / 150 Spin-On Filter Assemblies
Filter Head, Short Element & Indicator

Item No.	Designation	Port Connection		Price
1010020663	SSF-100-B1.7-1-B-SF-6720-V07	1" NPT	R	203.55
1010020664	SSF-100-B1.7-1-B-SF-6710-V07	1" NPT	R	205.85
1010020665	SSF-120-B1.7-4-B-SF-6720-V07	1 ¼" NPT	R	219.45
1010020666	SSF-120-B1.7-4-B-SF-6710-V07	1 ¼" NPT	R	219.45
1010020667	SSF-150-B1.7-4-B-SF-6720-V07	1 ½" NPT	R	257.50
1010020668	SSF-150-B1.7-4-B-SF-6710-V07	1 ½" NPT	R	259.95

R - Return

SSF-20 Spin-On Filter Assemblies
Filter Head, Element & Indicator
Dual Threaded Spigot - G1 1/4" BSPP / 1 1/2"-16 UNF

Item No.	Designation	Port Connection		Price
1010020702	SSF-20L-B1.7-4-B-SFC-5710-E-V01	1 ¼" BSPP	R	241.25
1010020699	SSF-20L-B1.7-4-B-SFC-5710-AE-V01	1 ¼" BSPP	R	297.25
1010020705	SSF-20L-B1.7-4-B-SFC-5725-E-V01	1 ¼" BSPP	R	241.25
1010020703	SSF-20L-B0.2-4-B-SFC-5710-E-V09	1 ¼" BSPP	S	241.25
1010020700	SSF-20L-B0.2-4-B-SFC-5710-AE-V0	1 ¼" BSPP	S	297.25
1010020706	SSF-20L-B0.2-4-B-SFC-5725-E-V09	1 ¼" BSPP	S	241.25
1010020701	SSF-20L-O-4-B-SFC-5710-E-V01	1 ¼" BSPP	N	241.25
1010020704	SSF-20L-O-4-B-SFC-5725-E-V01	1 ¼" BSPP	N	241.25

R - Return I S - Suction I N - Non Bypass

SSF-100 / 120 / 150 Spin-On Filter Assemblies
Filter Head, Long Element & Indicator

Item No.	Designation	Port Connection		Price
1010021042	SSF-100-B1.7-1-B-SF-6721-V07	1" NPT	R	246.50
1010021043	SSF-100-B1.7-1-B-SF-6711-V07	1" NPT	R	274.10
1010021044	SSF-120-B1.7-4-B-SF-6721-V07	1 ¼" NPT	R	260.10
1010021045	SSF-120-B1.7-4-B-SF-6711-V07	1 ¼" NPT	R	287.70
1010021046	SSF-150-B1.7-4-B-SF-6721-V07	1 ½" NPT	R	300.60
1010021047	SSF-150-B1.7-4-B-SF-6711-V07	1 ½" NPT	R	328.20

R - Return

SSF-24 Spin-On Filter Assemblies
Double Filter Head, Element & Indicator
Top & Bottom Dual Threaded Spigot - 1 1/4" BSPP / 1 1/2"-16 UNF

Item No.	Designation	Port Connection		Price
1010020710	SSF-24B-B1.7-4-B-SFC-5710-E-V01	1 ½" BSPP	R	367.35
1010020707	SSF-24B-B1.7-4-B-SFC-5710-AE-V01	1 ½" BSPP	R	479.35
1010020713	SSF-24B-B1.7-4-B-SFC-5725-E-V01	1 ½" BSPP	R	367.35
1010020711	SSF-24B-B0.2-4-B-SFC-5710-E-V09	1 ½" BSPP	S	367.35
1010020708	SSF-24B-B0.2-4-B-SFC-5710-AE-V0	1 ½" BSPP	S	479.35
1010020714	SSF-24B-B0.2-4-B-SFC-5725-E-V09	1 ½" BSPP	S	367.35
1010020709	SSF-24B-O-4-B-SFC-5710-E-V01	1 ½" BSPP	N	367.35
1010020712	SSF-24B-O-4-B-SFC-5725-E-V01	1 ½" BSPP	N	367.35

R - Return I S - Suction I N - Non Bypass

SSF-12 Spin-On Filter Assemblies
Filter Head, Element & Indicator
Threaded Spigot - 3/4" BSPP

Item No.	Designation	Port Connection		Price
1010020694	SSF-12-B1.7-4-B-SFC-3510-E-V01	3/4" BSPP	R	167.00
1010020691	SSF-12-B1.7-4-B-SFC-3510-AE-V01	3/4" BSPP	R	199.25
1010020696	SSF-12-B1.7-4-B-SFC-3525-E-V01	3/4" BSPP	R	167.00
1010020698	SSF-12-B1.7-4-B-SFC-3610-E-V01	3/4" BSPP	R	199.25
1910000505	SSF-12-B0.2-4-B-SFC-3510-E-V09	3/4" BSPP	S	167.00
1010020697	SSF-12-B0.2-4-B-SFC-3525-E-V09	3/4" BSPP	S	167.00
1010020692	SSF-12-B1.7-4-B-SFC-3510-AE-V09	3/4" BSPP	S	199.25
1010020693	SSF-12-O-B-4-SFC-3510-E-V01	3/4" BSPP	N	167.00
1010020695	SSF-12-O-4-B-SFC-3525-E-V01	3/4" BSPP	N	167.00

R - Return I S - Suction I N - Non Bypass

SSF-25 Spin-On Filter Assemblies
Double Filter Head, Element & Indicator
Side by Side Dual Threaded Spigot - 1 1/4" BSPP 1 1/2" SAE CODE 61

Item No.	Designation	Port Connection		Price
1010020716	SSF-25B-B1.7-4-B-SFC-5710-E-V01	1 ½" SAE/BSPP	R	686.55
1010020717	SSF-25B-B0.2-4-B-SFC-5710-E-V09	1 ½" BSPP	S	676.20
1010020715	SSF-25B-O-4-B-SFC-5710-E-V01	1 ½" BSPP	N	676.20

R - Return I S - Suction I N - Non Bypass

Spin-On Filter Assemblies

SSFT-12B Spin-On Filter Assemblies
Tank top Filter Head, Element & Indicator

Item No.	Designation	Port Connection		Price
1010020719	SSFT-12B-B1.7-4-B-SFC-3510-E-V01	3/4" BSPP	R	168.40
1010020718	SSFT-12B-B1.7-4-B-SFC-3510-AE-V01	3/4" BSPP	R	210.40
1010020720	SSFT-12B-B1.7-4-B-SFC-3525-E-V01	3/4" BSPP	R	196.35

R - Return

SSFT-20B Spin-On Filter Assemblies
Tank top Filter Head, Element & Indicator
Dual Threaded Spigot - G1¼" / 1½"-16 UN

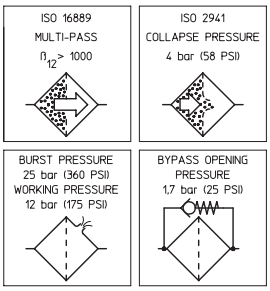
Item No.	Designation	Port Connection		Price
1010020722	SSFT-20B-B1.7-4-B-SFC-5710-E-V01	3/4" BSPP	R	233.15
1010020721	SSFT-20B-B1.7-4-B-SFC-5710-AE-V01	3/4" BSPP	R	324.95
1010020723	SSFT-20B-B1.7-4-B-SFC-5725-E-V01	3/4" BSPP	R	246.60

R - Return

Private Labelling - Spin-On Elements

This service enables you to print you company logo, contact information and product details on Spin-On elements.
(Elements are available in white or black. Additional colours available on request subject to minimum order quantities)
Contact your local STAUFF office for more information.

Blank Spin-On element



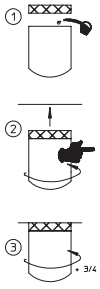
YOUR LOGO

YOUR LABEL

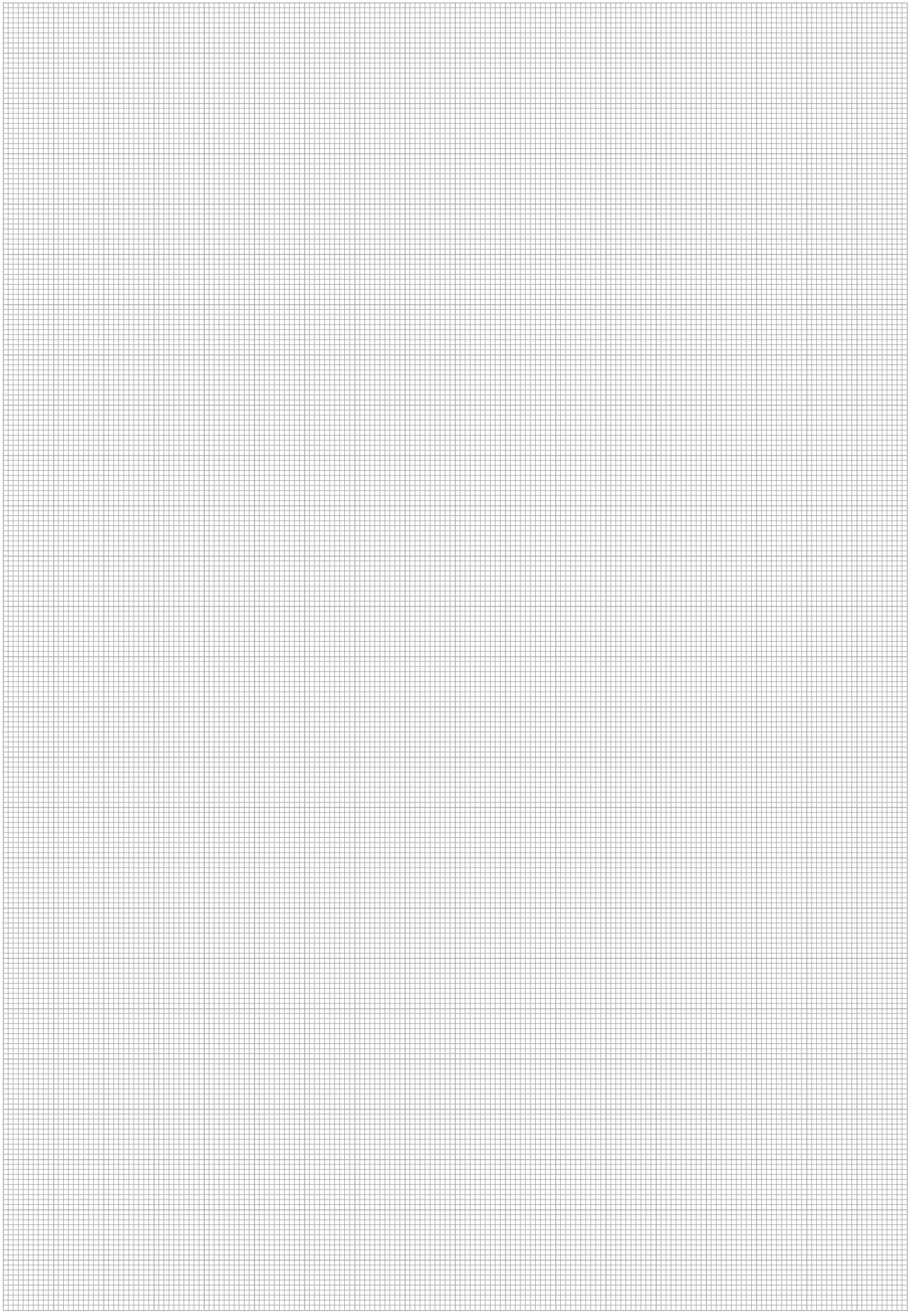
YOUR LOGO

SFCT–3510AE
10 MICRON ABSOLUTE
GLASS FIBRE

Check indicator at operating pressure and replace the element if necessary. Replace the element initially after the first 50 hours. If no indicator is installed, replace the element every 250 hours thereafter.



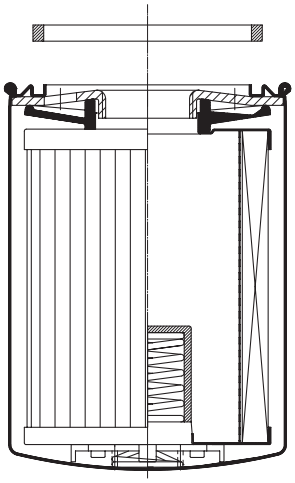
Spin-On element with your label



Spin-On Filters ▪ Quick Reference Guide

Type A

Spin-On Filter with seal contour A
for filter elements with inner seal

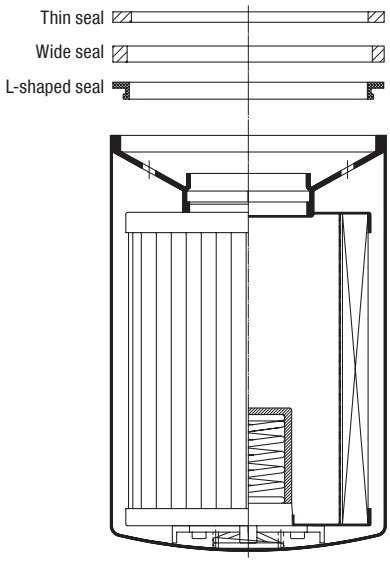


A

Type B

Spin-On Filter with seal contour B
for filter elements with outer seal

Allowed seal types for Spin-On elements



B

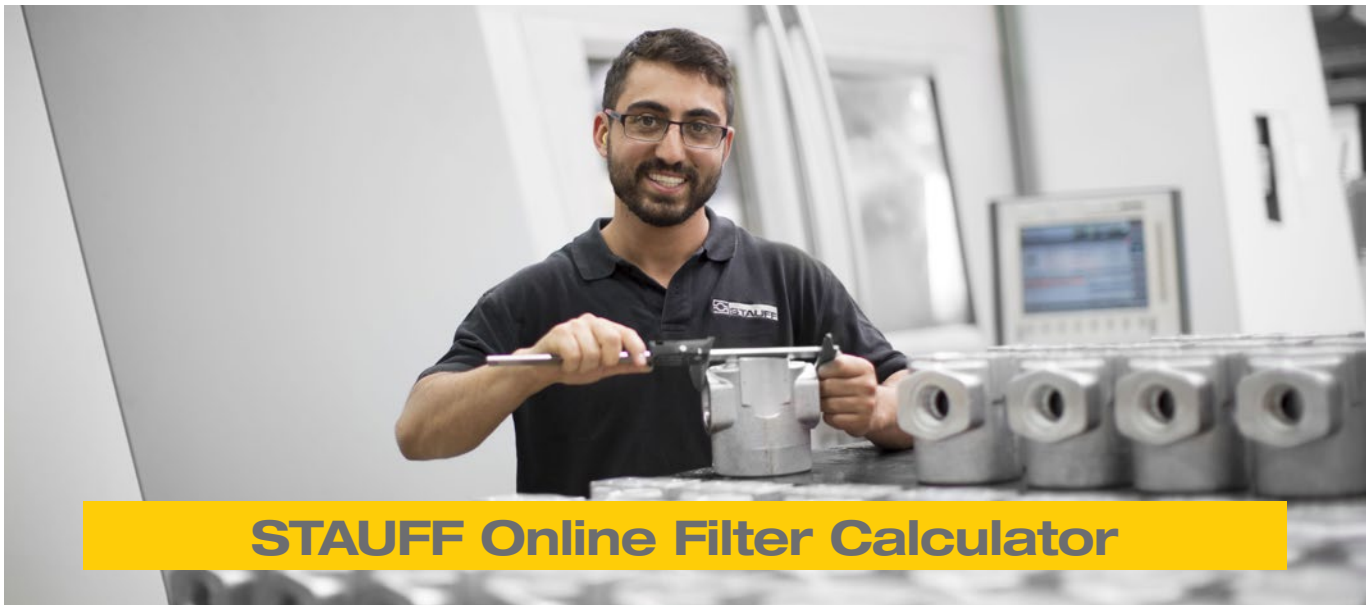
Spin-On Filters Quick Reference Guide

Spin-On Filter Heads								Spin-On Filter Elements (refer to pages noted below)						
Series	Size	Port	Spigot	Max. Flow Rate* l/min	US GPM	Seal Contour Type A	Type B	SF-63	SF-65	SF-67	SFC-35 SFC-36	SFC-57 SFC-58	SFCT-35 SFCT-36	SFCT-57 SFCT-58
SLF	02	1/4 NPT	3/4–16 UNF	19	5	x		N164						
SLF	03	3/8 NPT	3/4–16 UNF	19	5	x		N164						
SLF	04	9/16–18 UN	3/4–16 UNF	26	7	x		N164						
SAF	05	1/2 NPT	1–12 UNF	57	15	x			N166					
SAF	07	3/4 NPT	1–12 UNF	90	25	x			N166					
SAF	10	1 NPT	1–12 UNF	128	34	x			N166					
SAF	13	1-5/16–12 UN	1–12 UNF	128	34	x			N166					
SSF	12	G3/4	G3/4	90	25	x					N160			
SSF	20L	G1-1/4	G1-1/4 + 1-1/2–16 UN	225	60	x	x			N168		N162		
SSF	100	1 NPT	G1-1/4 + 1-1/2–16 UN	170	45	x	x			N168		N162		
SSF	120	1-1/4 NPT	G1-1/4 + 1-1/2–16 UN	225	60	x	x			N168		N162		
SSF	160	1-5/8–12 UN	G1-1/4 + 1-1/2–16 UN	225	60	x	x			N168		N162		
SSF	150	1-1/2 NPT	1-1/2–16 UN	300	80		x			N168				
SSF	24B	G1-1/2	G1-1/4 + 1-1/2–16 UN	454	120	x	x			N168		N162		
SSF	25B	G1-1/2	G1-1/4	454	120	x	x			N168		N162		
SMF	2215	1-1/2 NPT (2" SAE)	G1-1/4 + 1-1/2–16 UN	450	119	x				N168				
SSFT	12B	G3/4	G3/4	75	20	x	x						N160	
SSFT	20B	G1-1/2	G1-1/4 + 1-1/2–16 UN	200	53	x								N162

* Note: Reflects nominal flow rate for Return-Line application. Actual flow rate will depend on selected element and the viscosity of the fluid.
For more information refer to Catalogue 9 - STAUFF Filtration Technology.

Spin-On Filter Heads

Spin-On Filter Heads	Description	Port Connections	Flow Rate	Operating Pressure	Bypass	Spin-On Filter Element	Item No.	Designation	Price
	SLF-02 In-line	1/4" NPT	▪ 26 l/min / 7 US GPM for Return-Line application ▪ 7 l/min / 2 US GPM for Suction-Line application	▪ Max. 14 bar / 200 PSI ▪ Max. 5.5 bar / 80 PSI differential pressure (for any application without bypass valve)	Integrated in the filter element	SF-63	1010003008	SLF-02-1	54.30
	SLF-03 In-line	3/8" NPT					1010020670	SLF-03-1	54.30
	SLF-04 In-line	9/16–18" UN					6100006601	SLF-04-01	POA
	SAF-05 In-line	1/2" NPT	▪ 90 l/min / 25 US GPM for Return-Line application ▪ 23 l/min / 6 US GPM for Suction-Line application	▪ Max. 14 bar / 200 PSI ▪ Max. 5.5 bar / 80 PSI differential pressure (for any application without bypass valve)	1.7 bar / 25 PSI	SF-65	1010020669	SAF-05-B1.7-1	54.30
	SAF-07 In-line	3/4" NPT					1010002762	SAF-07-B1.7-1	54.30
	SAF-10 In-line	1" NPT	▪ 128 l/min / 34 US GPM for Return-Line application ▪ 30 l/min / 8 US GPM for Suction-Line application	▪ Max. 14 bar / 200 PSI ▪ Max. 5.5 bar / 80 PSI differential pressure (for any application without bypass valve)	1.7 bar / 25 PSI	SF-65	1010021026	SAF-10-B1.7-1	67.85
	SAF-13 In-line	1-5/16–12" UN					1010021432	SAF-13-B1.7-1	67.85
	SSF-12 In-line	3/4" BSPP	▪ 90 l/min / 25 US GPM for Return-Line application ▪ 23 l/min / 6 US GPM for Suction-Line application	▪ Max. 12 bar / 174 PSI ▪ Max. 5 bar / 72.5 PSI differential pressure (for any application without bypass valve)	No Bypass	SFC-35 SFC-36	6100023111	SSF-12-0-4/4	70.30
					0.2 bar / 3 PSI		6100023112	SSF-12-B0.2-4/4	70.30
					1.7 bar / 25 PSI		6100043000	SSF-12-B1.7-4/4	70.30
	SSF-20L In-line	1-1/4" BSPP	▪ 225 l/min / 60 US GPM for Return-Line application ▪ 46 l/min / 12 US GPM for Suction-Line application	▪ Max. 12 bar / 174 PSI ▪ Max. 5 bar / 72.5 PSI differential pressure (for any application without bypass valve)	No Bypass	SF-67 SFC-57 SFC-58	6100023114	SSF-20L-0-4/4	126.30
					0.2 bar / 3 PSI		6100023115	SSF-20L-B0.2-4/4	126.30
					1.7 bar / 25 PSI		6100023116	SSF-20L-B1.7-4/4	126.30
	SSF-100 In-line	1" NPT	▪ 225 l/min / 60 US GPM for Return-Line application ▪ 46 l/min / 12 US GPM for Suction-Line application	▪ Max. 12 bar / 174 PSI ▪ Max. 5 bar / 72.5 PSI differential pressure (for any application without bypass valve)	1.7 bar / 25 PSI	SF-67 SFC-57 SFC-58	1010002929	SSF-100-B1.7-1	94.90
	SSF-120 In-line	1-1/4" NPT					1010021027	SSF-120-B1.7-4	108.50
	SSF-160 In-line	1-5/8–12" UN					1010021444	SSF-160-B1.7-4	94.90
	SSF-150 / 180 In-line	1-1/2" NPT	▪ 300 l/min / 80 US GPM for Return-Line application ▪ 113 l/min / 30 US GPM for Suction-Line application	▪ Max. 14 bar / 200 PSI ▪ Max. 5.5 bar / 80 PSI differential pressure (for any application without bypass valve)	1.7 bar / 25 PSI	SF-67	1010021028	SSF-150-B1.7-4	149.00
Double Spin-On Filter Heads									
	SSF-24B In-line Double	1-1/2" BSPP	▪ 454 l/min / 120 US GPM for Return-Line application ▪ 132 l/min / 35 US GPM for Suction-Line application	▪ Max. 12 bar / 174 PSI ▪ Max. 5 bar / 72.5 PSI differential pressure (for any application without bypass valve)	No Bypass	SF-67 SFC-57 SFC-58	1010002596	SSF-24B-0-4/3	182.10
					0.2 bar / 3 PSI		1010002597	SSF-24B-B0.2-4/3	182.10
					1.7 bar / 25 PSI		1010002598	SSF-24B-B1.7-4/3	182.10
	SSF-25B In-line Double (side by side)	1-1/2" BSPP	▪ 454 l/min / 120 US GPM for Return-Line application ▪ 132 l/min / 35 US GPM for Suction-Line application	▪ Max. 12 bar / 174 PSI ▪ Max. 5 bar / 72.5 PSI differential pressure (for any application without bypass valve)	No Bypass	SF-67 SFC-57 SFC-58	6100023117	SSF-25B-0-4/4	490.95
					0.2 bar / 3 PSI		6100023118	SSF-25B-B0.2-4/4	490.95
					1.7 bar / 25 PSI		6100023119	SSF-25B-B1.7-4/4	490.95
Tank Top Spin-On Filter Heads									
	SSFT-12B Tank Top Spin-On Filter Head	3/4" BSPP	▪ 75 l/min / 20 US GPM	▪ Max. 7 bar / 100 PSI	Integrated in the filter element	SFCT-35 SFCT-36	6100049348	SSFT-12B-1/4	53.45
	SSFT-20B Tank Top Spin-On Filter Head	1-1/2" BSPP	▪ 200 l/min / 53 US GPM	▪ Max. 7 bar / 100 PSI	Integrated in the filter element	SFCT-57 SFCT-58	6100049349	SSFT-20B-1/4	84.30



STAUFF Online Filter Calculator

www.filtercalc.stauff.com

- ✓ **Save Time**
- ✓ **Accurate**
- ✓ **Easy Selection**
- ✓ **Selection specification created**

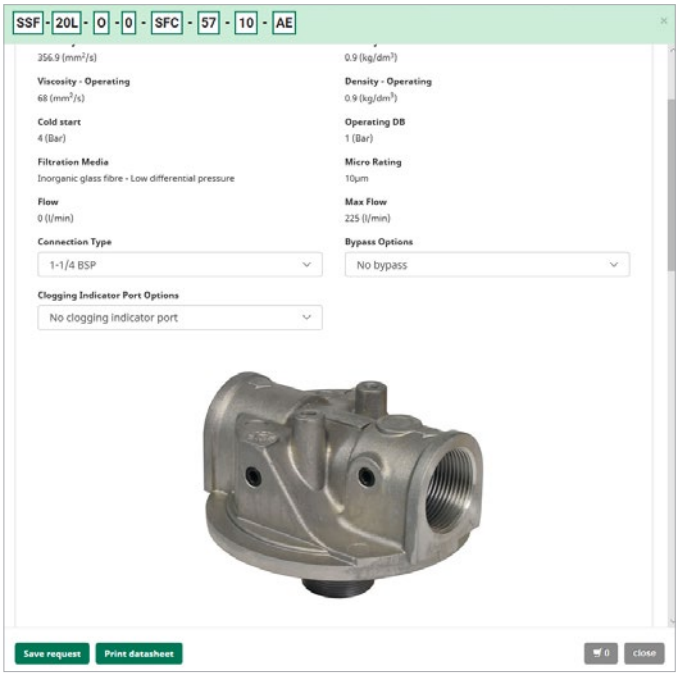
STAUFF Online Filter Calculator

The STAUFF Online Filter Calculator calculates the correct filter size, generates the complete technical data sheet and ordering codes.

The correct sizing of a hydraulic filter not only saves money by reducing costly downtime and avoiding the unscheduled replacement of sensitive components, it also increases the life of the entire hydraulic system.

To make the task of selecting a filter less daunting, STAUFF has developed the STAUFF Online Filter Calculator. This new web-based tool will assist in the selection of the most suitable hydraulic filter based on the application parameters entered.

Check it out at **www.filtercalc.stauff.com** and try it for yourself!
The use of this service is without obligation and free of charge.



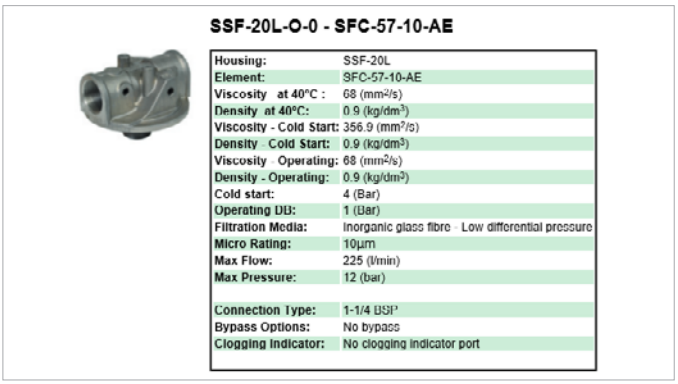
Filter Sizing

Select by:
- Pressure Filters
- Return-Line Filters
- In-Line Filters
- Spin-On Filters

Selectable Parameters (in metric or imperial units of measure):
- Select by Oil (Type, Temperature or Viscosity)
- Select by Flow
- Select by Filtration Media
- Select by Micron Rating
- Select by Pressure Limitation (cold start and operating)

Final Selection Features:
- Multiple assembly options
- Builds complete filter order code
- Product Data specification of the selected filter assembly
- Choice of sealing material
- Choice of Connection type e.g. BSPP, SAE
- Choice of Clogging Indicator e.g. Visual or Electrical
- Dimensional drawing of housing
- Calculated Differential Pressure e.g. Pressure vs Flow curve

Contact STAUFF for more information



SSF-20L-O-0 - SFC-57-10-AE

Housing:	SSF-20L
Element:	SFC-57-10-AE
Viscosity at 40°C :	68 (mm²/s)
Density at 40°C:	0.9 (kg/dm³)
Viscosity - Cold Start:	356.9 (mm²/s)
Density - Cold Start:	0.9 (kg/dm³)
Viscosity - Operating:	68 (mm²/s)
Density - Operating:	0.9 (kg/dm³)
Cold start:	4 (Bar)
Operating DB:	1 (Bar)
Filtration Media:	Inorganic glass fibre - Low differential pressure
Micro Rating:	10µm
Max Flow:	225 (l/min)
Max Pressure:	12 (bar)
Connection Type:	1-1/4 BSP
Bypass Options:	No bypass
Clogging Indicator:	No clogging indicator port

Spin-On Filter Elements

Description

STAUFF offers a wide range of Spin-On filter heads and Spin-On filter elements.

Sealing Material
- NBR (Buna-N®)

Media Compatibility
- Mineral oils
  Other fluids on request

Temperature Range
- -30 °C ... +100 °C / -22 °F ... +212 °F

Filter Materials
- Wire Mesh, Brass Mesh, Filter Paper, Inorganic Glass Fibre, Stainless Wire Mesh and Water Absorbing Filter Material

Options and Accessories

Valves
- Filter elements type SFCT have an internal bypass and anti-drain back diaphragm

Types SFC-35/36, SFCT-35/36, pages N160 - N161

- Use with Spin-On filter heads SSF-12, SSFT-12 and SSFT-12B

- Connection thread: G3/4
- Operating pressure: SFC: max. 12 bar / 174 PSI
  SFCT: max 7 bar / 100 PSI
- Differential Pressure: SFC: max. 4 bar / 58 PSI
  SFCT: max. 3 bar / 43,5 PSI
- Burst Pressure: SFC: min. 25 bar / 363 PSI
  SFCT: min 21 bar / 305 PSI

Types SFC-57/58, SFCT-57/58, pages N162 - N163

- Use with Spin-On filter heads SSF-20L/100/120/120L/130/160 SSF-24B/24N/24S/25B/25FM/25 and SSFT-20B/20

- Connection thread: G1-1/4
- Operating pressure: SFC: max. 12 bar / 174 PSI
  SFCT: max 7 bar / 100 PSI
- Differential Pressure: SFC: max. 4 bar / 58 PSI
  SFCT: max. 3 bar / 43,5 PSI
- Burst Pressure: SFC: min. 25 bar / 363 PSI
  SFCT: min 21 bar / 305 PSI

Type SF-63, page N164

- Use with Spin-On filter head SLF

- Connection thread: 3/4–16 UNF
- Operating pressure: max. 14 bar / 200 PSI
- Differential Pressure: max. 5.5 bar / 80 PSI
- Burst Pressure: min. 20 bar / 290 PSI

Type SF-65, pages N166 - N167

- Use with Spin-On filter head SAF

- Connection thread: 1–12 UNF
- Operating pressure: max. 14 bar / 200 PSI
- Differential Pressure: max. 5.5 bar / 80 PSI
- Burst Pressure: min. 20 bar / 290 PSI

Type SF-67, pages N168 - N170

- Use with Spin-On filter heads SSF-20L/100/120/120L/130/150/160/180 SSF-24B/24N/24S/25B/25FM/25

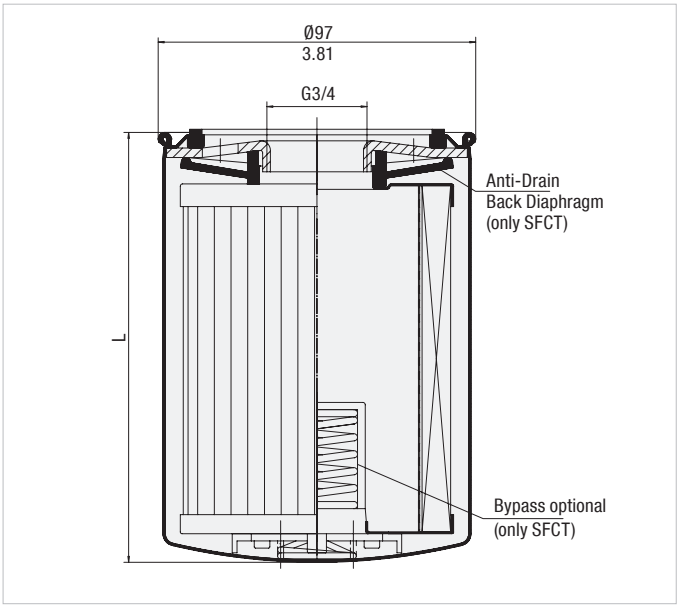
- Connection thread: 1/2–16 UNF
- Operating pressure: max. 14 bar / 200 PSI
- Differential Pressure: max. 5.5 bar / 80 PSI
- Burst Pressure: min. 20 bar / 290 PSI

Private Labelling

- On request, the filter elements can be printed with a private label

Refer to page N152 or contact STAUFF for more information.

Spin-On Filter Elements ▪ Type SFC-35 / 36 and SFCT-35 / 36



Dimensions in mm / in

Product Description

STAUFF SFC-35/36 series Spin-On Elements are used with the STAUFF SSF-12 Spin-On Filters with G3/4 threaded ports.

STAUFF SFCT-35/36 series Spin-On Elements have an internal 1.7 bar / 25 PSI bypass and anti-drain back diaphragm for use with STAUFF SSFT-12 and SSFT-12B Tank Top Spin-On Filters.

Technical Data

Connection Thread
- G3/4

Operating Pressure
- Max. 12 bar / 174 PSI

Burst Pressure
- Min. 20 bar / 290 PSI

Temperature Range
- -30 °C ...+100 °C / -22 °F ... +212 °F

Seal Contour
- Type A (refer to page N156)

Differential Pressure
- Paper: Max. 5 bar / 72.5 PSI
  Glass Fibre / Wire Mesh: Max. 10 bar / 145 PSI
  (for any application without bypass valve)

Bypass Pressure
- 1.7 bar / 25 PSI (only SFCT-series)

Media Compatibility
- Mineral oils
  Other fluids on request

Sealing Material
- NBR (Buna-N®)

Dimensions

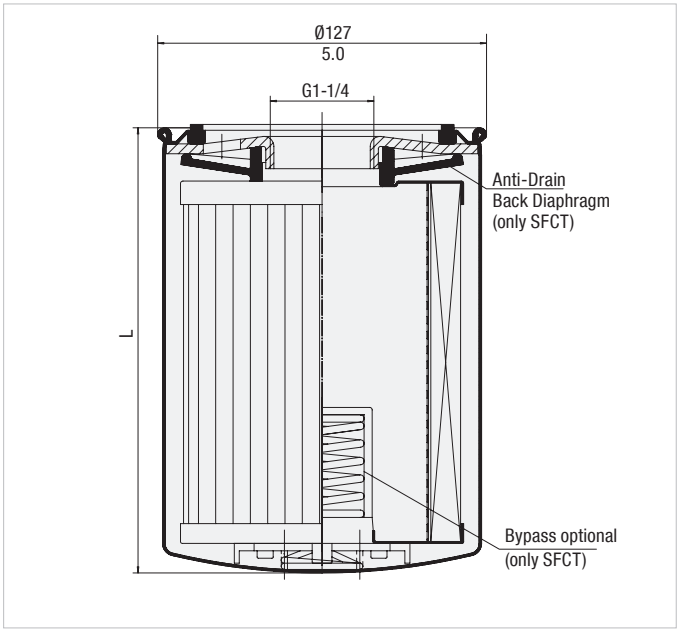
Spin-On Filter Elements	Length L (mm/in)	Diameter Ø (mm/in)	ß-Ratio	Carton Quantity	Carton Weight (kg/lbs)		Item No.	Designation	Price
Wire Mesh									
60µm	145 / 5.7	97 / 3.81	N/A	1	0.9 / 2	Element without bypass valve	1910000854	SFC-3560-E	126.30
60µm	210 / 8.27	97 / 3.81	N/A	1	1.3 / 2.6	Element without bypass valve	1910000990	SFC-3660-E	154.20
Brass Mesh									
125µm	145 / 5.7	97 / 3.81	N/A	1	0.9 / 2	Element without bypass valve	1910000871	SFC-35125-E	98.25
125µm	210 / 8.27	97 / 3.81	N/A	1	1.3 / 2.6	Element without bypass valve	1910000991	SFC-36125-E	127.00

Spin-On Filter Elements ▪ Type SFC-35 / 36 and SFCT-35 / 36

Dimensions

Spin-On Filter Elements	Length L (mm/in)	Diameter Ø (mm/in)	ß-Ratio	Carton Quantity	Carton Weight (kg/lbs)		Item No.	Designation	Price
Filter Paper									
10µm	145 / 5.7	97 / 3.81	$ß_{10} \geq 2$	1	0.9 / 2	Element without bypass valve	1910000439	SFC-3510-E	52.05
						Element with bypass valve	1910000446	SFCT-3510-E	70.30
10µm	210 / 8.27	97 / 3.81	$ß_{10} \geq 2$	1	1.3 / 2.6	Element without bypass valve	1910000667	SFC-3610-E	84.30
						Element with bypass valve	1910000672	SFCT-3610-E	74.35
25µm	145 / 5.7	97 / 3.81	$ß_{25} \geq 2$	1	0.9 / 2	Element without bypass valve	1910000666	SFC-3525-E	52.05
						Element with bypass valve	1910000671	SFCT-3525-E	98.25
25µm	210 / 8.27	97 / 3.81	$ß_{25} \geq 2$	1	1.3 / 2.6	Element without bypass valve	1910000668	SFC-3625-E	84.30
						Element with bypass valve	1910000673	SFCT-3625-E	83.15
Inorganic Glass Fibre									
3µm	145 / 5.7	97 / 3.81	$ß_{3} \geq 200$	1	0.9 / 2	Element without bypass valve	1020013979	SFC-3503-AE	183.50
3µm	210 / 8.27	97 / 3.81	$ß_{3} \geq 200$	1	1.3 / 2.6	Element without bypass valve	1020016132	SFC-3603-AE	184.60
10µm	145 / 5.7	97 / 3.81	$ß_{10} \geq 200$	1	0.9 / 2	Element without bypass valve	1910000438	SFC-3510-AE	84.30
						Element with bypass valve	1910000445	SFCT-3510-AE	112.30
10µm	210 / 8.27	97 / 3.81	$ß_{10} \geq 200$	1	1.3 / 2.6	Element without bypass valve	1910000906	SFC-3610-AE	171.45
						Element with bypass valve	1020013982	SFCT-3610-AE	143.65
25µm	145 / 5.7	97 / 3.81	$ß_{25} \geq 200$	1	0.9 / 2	Element without bypass valve	1910001423	SFC-3525-AE	112.30
						Element with bypass valve	1910001426	SFCT-3525-AE	131.65
25µm	210 / 8.27	97 / 3.81	$ß_{25} \geq 200$	1	1.3 / 2.6	Element without bypass valve	1020013984	SFCT-3625-AE	171.50
						Element with bypass valve	1020013984	SFCT-3625-AE	171.50

Spin-On Elements ▪ Type SFC-57 / 58 and SFCT-57 / 58



Dimensions in mm / in

Product Description

STAUFF Spin-On Filter Elements of the SFC-/SFCT-57/58 series are used with the STAUFF SSF-20L/100/120/120L/130/160 and SSF-24B/24N/24S/25B/25FM/25 series Spin-On Filters with G1-1/4 threaded ports.

STAUFF SFCT-57/58 series Spin-On Elements have an internal 1.7 bar / 25 PSI bypass and anti-drain back diaphragm for use with STAUFF SSFT-20B/20 Tank Top Spin-On Filters.

Technical Data

Connection Thread
- G1-1/4

Operating Pressure
- Max. 12 bar / 174 PSI

Burst Pressure
- Min. 17 bar / 247 PSI

Temperature Range
- -30 °C ...+100 °C / -22 °F ... +212 °F

Seal Contour
- Type A (refer page N156)

Differential Pressure
- Paper: Max. 5 bar / 72.5 PSI
  Glass Fibre / Wire Mesh:
  Max. 10 bar / 145 PSI
  (for any application without bypass valve)

Bypass Pressure
- 1.7 bar / 25 PSI
  (only SFCT-series)

Media Compatibility
- Mineral oils
  Other fluids on request

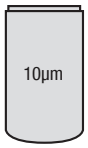
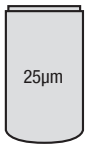
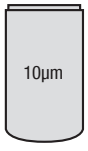
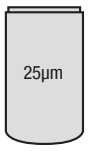
Sealing Material
- NBR (Buna-N®)

Dimensions

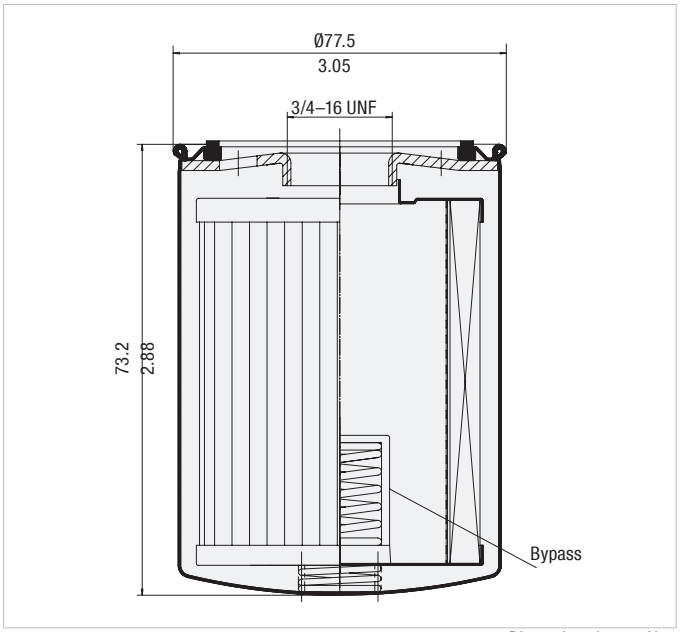
Spin-On Filter Elements	Length L (mm/in)	Diameter Ø (mm/in)	ß-Ratio	Carton Quantity	Carton Weight (kg/lbs)		Item No.	Designation	Price
Wire Mesh									
60µm	177 / 6.97	127 / 5.0	N/A	1	0.9 / 2	Element without bypass valve	1910000992	SFC-5760-E	196.05
60µm	226 / 8.9	127 / 5.0	N/A	1	1.3 / 2.6	Element without bypass valve	1910000993	SFC-5860-E	157.55
Brass Mesh									
125µm	177 / 6.97	127 / 5.0	N/A	1	0.9 / 2	Element without bypass valve	1910000442	SFC-57125-E	154.20
125µm	226 / 8.9	127 / 5.0	N/A	1	1.3 / 2.6	Element without bypass valve	1910000912	SFC-58125-E	182.10

Spin-On Elements ▪ Type SFC-57 / 58 and SFCT-57 / 58

Dimensions

Spin-On Filter Elements	Length L (mm/in)	Diameter Ø (mm/in)	ß-Ratio	Carton Quantity	Carton Weight (kg/lbs)		Item No.	Designation	Price
Filter Paper									
10µm	177 / 6.97	127 / 5.0	$ß_{10} \geq 2$	1	1.4 / 3	Element without bypass valve	1910000441	SFC-5710-E	70.30
						Element with bypass valve	1910000448	SFCT-5710-E	112.30
 10µm	226 / 8.9	127 / 5.0	$ß_{10} \geq 2$	1	1.85 / 4	Element without bypass valve	1910000444	SFC-5810-E	112.30
						Element with bypass valve	1910000675	SFCT-5810-E	127.00
25µm	177 / 6.97	127 / 5.0	$ß_{25} \geq 2$	1	1.4 / 3	Element without bypass valve	1910000443	SFC-5725-E	70.30
						Element with bypass valve	1910000674	SFCT-5725-E	126.30
 25µm	226 / 8.9	127 / 5.0	$ß_{25} \geq 2$	1	1.85 / 4	Element without bypass valve	1910000670	SFC-5825-E	112.30
						Element with bypass valve	1910000676	SFCT-5825-E	127.00
Inorganic Glass Fibre									
3µm	177 / 6.97	127 / 5.0	$ß_{3} \geq 200$	1	1.4 / 3	Element without bypass valve	1910000881	SFC-5703-AE	259.20
3µm	226 / 8.9	127 / 5.0	$ß_{3} \geq 200$	1	1.85 / 4	Element without bypass valve	1910001654	SFC-5803-AE	210.70
10µm	177 / 6.97	127 / 5.0	$ß_{10} \geq 200$	1	1.4 / 3	Element without bypass valve	1910000440	SFC-5710-AE	126.30
						Element with bypass valve	1910000447	SFCT-5710-AE	196.05
 10µm	226 / 8.9	127 / 5.0	$ß_{10} \geq 200$	1	1.85 / 4	Element without bypass valve	1910000836	SFC-5810-AE	168.15
						Element with bypass valve	1020013987	SFCT-5810-AE	241.30
25µm	177 / 6.97	127 / 5.0	$ß_{25} \geq 200$	1	1.4 / 3	Element without bypass valve	1910001033	SFC-5725-AE	157.55
						Element with bypass valve	1910001428	SFCT-5725-AE	184.20
 25µm	226 / 8.9	127 / 5.0	$ß_{25} \geq 200$	1	1.85 / 4	Element without bypass valve	1020013981	SFC-5825-AE	196.75
						Element with bypass valve	1020013988	SFCT-5825-AE	254.55

Spin-On Elements ▪ Type SF-63



Dimensions in mm / in

Product Description

STAUFF SF-63-series Spin-On Elements are used with the STAUFF SLF Spin-On Filters.

Technical Data

Connection Thread
- 3/4–16 UNF

Seal Contour
- Type A (refer to page N156)

Sealing Material
- NBR (Buna-N®)

Operating Pressure
- Max. 14 bar / 200 PSI

Differential Pressure
- Max. 5.5 bar / 80 PSI
  (for any application without bypass valve)

Burst Pressure
- Min. 20 bar / 290 PSI

Bypass Pressure
- SF-6310-18 1.24 bar / 18 PSI
- SF-6325-10 0.70 bar / 10 PSI

Temperature Range
- -30 °C ... +100 °C / -22 °F ... +212 °F

Media Compatibility
- Mineral oils
  Other fluids on request

Dimensions

Spin-On Filter Elements	Length L (mm/in)	Diameter Ø (mm/in)	ß-Ratio	Dirt Holding Capacity (g)	Carton Quantity	Carton Weight (kg/lbs)		Item No.	Designation	Price
Filter Paper										
10µm	73.2 / 2.88	77.5 / 3.05	$ß_{10} \geq 2$	6	12	3.6 / 8	Element without bypass valve	1020013540	SF-6310-18	39.45
25µm	73.2 / 2.88	77.5 / 3.05	$ß_{25} \geq 2$	6	12	3.6 / 8	Element without bypass valve	1020013964	SF-6325-10	30.45

Contamination Control and Monitoring

Description

Fluid analysis is a crucial component of any oil management program. Early detection of potential problems can prevent costly repairs and downtime. STAUFF's range of products for controlling and monitoring contamination makes it possible to detect the ISO Cleanness levels of the hydraulic media.
The LasPaC-II devices feature a twin laser system or with the LPM-II Series an LED laser and eight channels for different particle sizes in order to guarantee high accuracy and repeatability. These compact units are easy to handle on-site for mobile and in-line applications.

Alternatively, STAUFF's KIT-SFS Oil sampling kit offers an instant method of oil sampling and using the supplied post-pack, send the sample for laboratory particle contamination analysis of the oil.

Contact STAUFF for more information.

Laser Particle Counter ▪ Type LasPaC-II-P (Portable)

The LasPaC-II-P is a fully equipped portable laser particle counter with a complete QWERTY keyboard, an integrated thermal printer, an internal rechargeable battery and a large LCD display.

- Portable, campact and robust design
- Low pressure measurements starting with 2 bar / 29 PSI and high pressure tests up to 400 bar / 5801 PSI
- Independent Use - Rechargeable Battery Mode
- Option: Bottle Sampling Unit

Laser Particle Counter ▪ Type LasPaC-II-M (Mobile)

The LasPaC-II-M is a highly accurate laser particle counter. With a competitive price it is the best compromise between lower cost and brilliant accuracy/reliability.

- Lightweight, mobile and compact design
- Low pressure measurements starting with 2 bar / 29 PSI and high pressure tests up to 400 bar / 5801 PSI
- Easy handling thanks to Display and Buttons
- Independent Use - Rechargeable Battery Mode
- Option: Bottle Sampling Unit

Particle Monitor ▪ LPM-II-plus

The LPM-II-plus is an automatic, optical particle counter with high-performance LEDs that work on the light obscuration principle.

- Robust design for inline applications
- Easy handling thanks to Display and Buttons
  Internal data storage

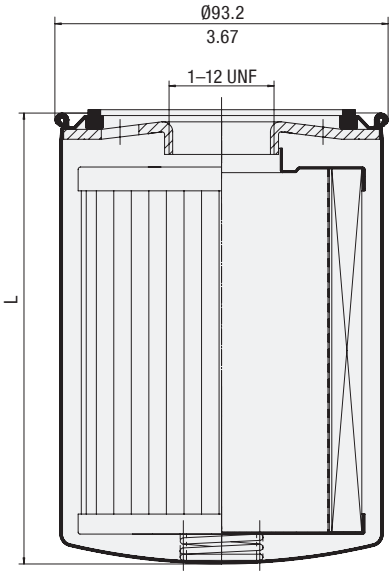
- Options and Accessories:
  Interface Module with USB or Ethernet Interface
  Remote Display Unit
  Flow Control Valve
- ATEX version available

Oil Sampling Kit ▪ Type KIT-SFS

STAUFF KIT-SFS oil analysis kits provide the means to take a sample from either a STAUFF test coupling (fitted in-line in a hydraulic system using a STAUFF test adaptor SHA and plastic hose), or directly from a reservoir, sump or drum (drawing fluid using the vacuum pump into the cleaned sample bottle).

- Heavy duty plastic vacuum pump
- Two sample bottles
- STAUFF test points and adaptor allows oil sample to be taken from STAUFF Test 20 test points
- Magnetic clip (for mounting pump on hydraulic tank or steel drum during sampling)

Spin-On Elements ▪ Type SF-65



Dimensions in mm / in

Product Description

STAUFF SF-65-series Spin-On Elements are used with the STAUFF SAF series Spin-On Filters.

Technical Data

Connection Thread
- 1–12 UNF

Seal Contour
- Type A (refer to page N156)

Sealing Material
- NBR (Buna-N®)

Operating Pressure
- Max. 14 bar / 200 PSI
- SF-6520-W: Max. 7 bar / 101.5 PSI

Differential Pressure
- Max. 5.5 bar / 80 PSI
  (for any application without bypass valve)

Burst Pressure
- Min. 20 bar / 290 PSI

Temperature Range
- -30 °C ... +100 °C / -22 °F ... +212 °F

Media Compatibility
- Mineral oils
  Other fluids on request

Dimensions

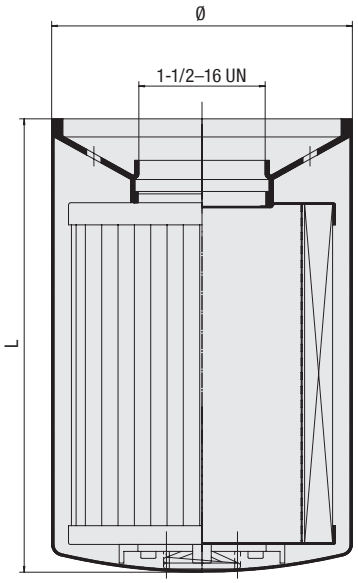
Spin-On Filter Elements	Length L (mm/in)	Diameter Ø (mm/in)	ß-Ratio	Dirt Holding Capacity ACFTD (g)	Carton Quantity	Carton Weight (kg/lbs)	Item No.	Designation	Price
Filter Paper									
10µm	147 / 5.76	93.2 / 3.67	$ß_{10} \geq 2$	14.4	12	6.3 / 13.9	1020013116	SF-6520	39.45
10µm	204 / 8.00	93.2 / 3.67	$ß_{10} \geq 2$	22	12	8.4 / 18.5	1020013536	SF-6521	54.30
25µm	147 / 5.76	93.2 / 3.67	$ß_{25} \geq 2$	20.4	12	6.4 / 14.2	1020013534	SF-6510	39.45
25µm	204 / 8.00	93.2 / 3.67	$ß_{25} \geq 2$	31.2	12	8.8 / 19.4	1020013535	SF-6511	54.30

Spin-On Elements ▪ Type SF-65

Dimensions

Spin-On Filter Elements	Length L (mm/in)	Diameter Ø (mm/in)	ß-Ratio	Dirt Holding Capacity ACFTD (g)	Carton Quantity	Carton Weight (kg/lbs)	Item No.	Designation	Price
Inorganic Glass Fibre									
	147 / 5.76	93.2 / 3.67	$ß_3 \geq 200$	19	12	8.6 / 19	1020013537	**SF-6549**	135.55
	147 / 5.76	93.2 / 3.67	$ß_{12} \geq 200$	11	12	8.6 / 19	1020013533	**SF-6505**	108.50
	147 / 5.76	93.2 / 3.67	$ß_{25} \geq 200$	26	12	8.6 / 19	1020013532	**SF-6504**	108.50
Water Absorbing									
	133 / 5.25	93.2 / 3.67	$ß_{10} \geq 2$	Water holding capacity 162 ml 5.5 oz	12	8.6 / 19	1020013539	**SF-6520-W**	122.05

Spin-On Elements ▪ Type SF-67



Dimensions in mm / in

Product Description

STAUFF SF-67-series Spin-On Elements are used with the STAUFF SSF-20L/100/120/120L/130/150/160/180 and SSF-24B/24N/24S/25B/25FM/25 Spin-On Filters.

Technical Data

Connection Thread
- 1-1/2–16 UN

Seal Contour
- Type B (refer to page N156)

Sealing Material
- NBR (Buna-N®)

Operating Pressure
- Max. 14 bar / 200 PSI
- SF-6721-W: Max. 7 bar / 101.5 PSI

Differential Pressure
- Max. 5.5 bar / 80 PSI
  (for any application without bypass valve)

Burst Pressure
- Min. 20 bar / 290 PSI

Temperature Range
- -30 °C ... +100 °C / -22 °F ... +212 °F

Media Compatibility
- Mineral oils
  Other fluids on request

Dimensions

Spin-On Filter Elements	Length L (mm/in)	Diameter Ø (mm/in)	ß-Ratio	Dirt Holding Capacity ACFTD (g)	Carton Quantity	Carton Weight (kg/lbs)	Item No.	Designation	Price
Filter Paper									
10µm	168 / 6.6	128.5 / 5.06	$ß_{10} \geq 2$	34	6	6.6 / 14.6	1020013117	SF-6720	67.85
10µm	270 / 10.6	128.5 / 5.06	$ß_{10} \geq 2$	62	6	7.9 / 17.5	1020013527	SF-6721	108.50
25µm	168 / 6.6	128.5 / 5.06	$ß_{25} \geq 2$	34	6	6.7 / 14.9	1020013525	SF-6710	67.85
25µm	270 / 10.6	128.5 / 5.06	$ß_{25} \geq 2$	62	6	9.3 / 20.6	1020013526	SF-6711	136.10

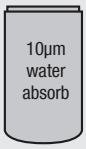
Spin-On Elements ▪ Type SF-67

Dimensions

Spin-On Filter Elements	Length L (mm/in)	Diameter Ø (mm/in)	ß-Ratio	Dirt Holding Capacity ACFTD (g)	Carton Quantity	Carton Weight (kg/lbs)	Item No.	Designation	Price
Inorganic Glass Fibre									
1µm	270 / 10.6	129 / 5.08	$ß_1 \geq 200$	30	6	11.8 / 26.1	1020013837	SF-6702-MG	352.45
3µm	168 / 6.6	129 / 5.08	$ß_3 \geq 200$	31	6	8.2 / 18	1020013522	SF-6703-MG	217.00
3µm	270 / 10.6	129 / 5.08	$ß_3 \geq 200$	47	6	11.8 / 26.1	1020013321	SF-6704-MG	338.90
6µm	168 / 6.6	129 / 5.08	$ß_6 \geq 200$	35	6	8.2 / 18	1020013523	SF-6706-MG	217.00
6µm	270 / 10.6	129 / 5.08	$ß_6 \geq 200$	54	6	11.8 / 26.1	1020013524	SF-6707-MG	324.80
12µm	168 / 6.6	129 / 5.08	$ß_{12} \geq 200$	38	6	8.2 / 18	1020013528	SF-6730-MG	217.00
12µm	270 / 10.6	129 / 5.08	$ß_{12} \geq 200$	59	6	11.8 / 26.1	1020013529	SF-6731-MG	297.85
25µm	168 / 6.6	129 / 5.08	$ß_{25} \geq 200$	50	6	8.2 / 18	1020013530	SF-6728-MG	217.00
25µm	270 / 10.6	129 / 5.08	$ß_{25} \geq 200$	76	6	11.8 / 26.1	1020013531	SF-6726-MG	297.85

Spin-On Elements ▪ Type SF-67

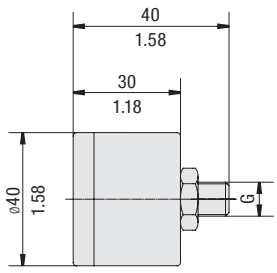
Dimensions

Spin-On Filter Elements	Length L (mm/in)	Diameter Ø (mm/in)	ß-Ratio	Dirt Holding Capacity ACFTD (g)	Carton Quantity	Carton Weight (kg/lbs)	Item No.	Designation	Price
Stainless Wire Mesh									
144µm	168 / 6.6	128.5 / 5.06	N/A	30	6	8.2 / 18	1020013541	SF-6790	203.55
144µm	270 / 10.6	128.5 / 5.06	N/A	31	6	11.8 / 26.1	1020013543	SF-6791	257.50
Water Absorbing									
 10µm water absorb	270 / 10.6	128.5 / 5.06	$ß_{10} \geq 2$	Water holding capacity 444 ml 15 oz	6	11.8 / 26.1	1020013538	SF-6721-W	175.95

Clogging Indicators

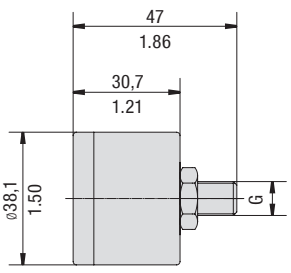
Visual Indicators

SPG-C-...-B02-...



Material for movement and pressure element: Brass

SPG-C-...-N02-...



Material for movement and pressure element: Brass

Visual Pressure Clogging Indicators

Visual Vacuum Clogging Indicators

Visual Pressure Clogging Indicators (for Spin-On Filter in Return-Line applications)						
Thread Connection G		Unit of scale	Range of scale	Coloured Segments		
				Green	Yellow	Red
BSPT	1/8	bar	0 ... 4	0 ... 1.25	1.25 ... 1.5	1.5 ... 4
BSPP	1/8	bar	0 ... 2.5	0 ... 1.2	1.2 ... 1.5	1.5 ... 2.5
	1/8	bar	0 ... 4	0 ... 2.5	2.5 ... 3	3 ... 4
	1/8	bar	0 ... 12	without coloured segments		
NPT	1/8	PSI	0 ... 100	0 ... 13	13 ... 15	15 ... 100
	1/8	PSI	0 ... 100	0 ... 21	21 ... 25	25 ... 100
Visual Vacuum Clogging Indicators (for Spin-On Filter in Suction-Line applications)						
BSPT	1/8	cm Hg	-76 ... 0	-13 ... 0	-18 ... -13	-76 ... -18
NPT	1/8	in Hg	-30 ... 0	-4 ... 0	-6 ... -4	-30 ... -6
	1/8	in Hg	-30 ... 0	-9 ... 0	-11 ... -9	-30 ... -11

Item No.	Designation	Code	Price
1010002341	SPG-C-040-00004-02-P-T02-402923	V01	44.65
1910001081	SPG-C-040-00002.5-02-P-B02-402923	V02	44.65
1910000948	SPG-C-040-00004-02-P-B02-402922	V04	44.65
1910000457	SPG-C-040-00012-02-P-B02-402955	V05	44.65
1020013949	SPG-C-040-00100-03-P-N02-402927	V06	43.10
1020013952	SPG-C-040-00100-03-P-N02-402928	V07	43.10
1910000458	SPG-C-040-(-00076)-00000-22-P-T02-40294	V08	44.65
1020013962	SPG-C-040-(-30)-00000-23-P-N02-402925	V11	43.10
1020013960	SPG-C-040-(-30)-00000-23-P-N02-402926	V10	43.10

Electrical Clogging Switch

Order Codes

Limit-Switch - **G42NO** - **S** - **G02** - **B1.3**

① ② ③ ④ ⑤

① Type

Limit-Switch	**Limit-Switch**

② Connector Type

Electrical Clogging Switch 42 V, NO	**G42NO**
Electrical Clogging Switch 42 V, NC	**G42NC**
Electrical Clogging Switch 110 V ... 230 V, two-way contact (only for Plug Type W)	**G230**

③ Plug Type

M12 Five-Pin Connector according to IEC 61076-2-101	**M12**
AMP-Junior-Timer Plug	**A**
DEUTSCH Plug DT04-2P	**D**
Rubber boot	**S**
90 degree Polyamide cap (only for Connector Type G230)	**W**

④ Thread Type

1/8 BSPP	**B02**
M10x1	**M10**
1/8 NPT	**N02**

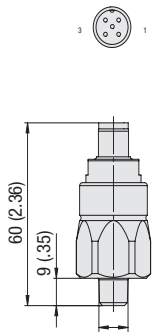
⑤ Pressure Setting

1.3 bar / 18.8 PSI	**B1.3**
2.5 bar / 36.2 PSI	**B2.5**
-0.1 bar / -1.45 PSI*	**B-0.1**

*(only for Plug Type W and Connector Type G230)

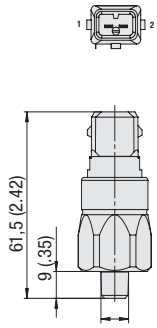
Dimensions Plug Type

M12



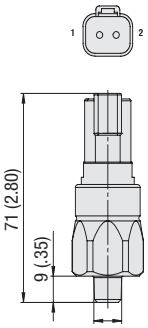
1/8 BSPP
1/8 NPT

A



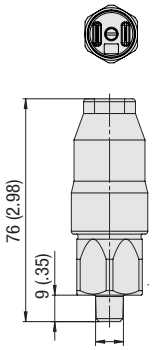
1/8 BSPP
1/8 NPT

D



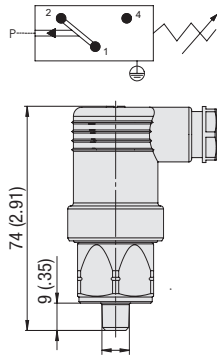
1/8 BSPP
1/8 NPT

S



1/8 BSPP
1/8 NPT

W



1/8 BSPP
1/8 NPT

Note: The customer/user carries the responsibility for the electrical connection
Contact STAUFF for more information

Visual Pressure Clogging Indicators

Visual Vacuum Clogging Indicators

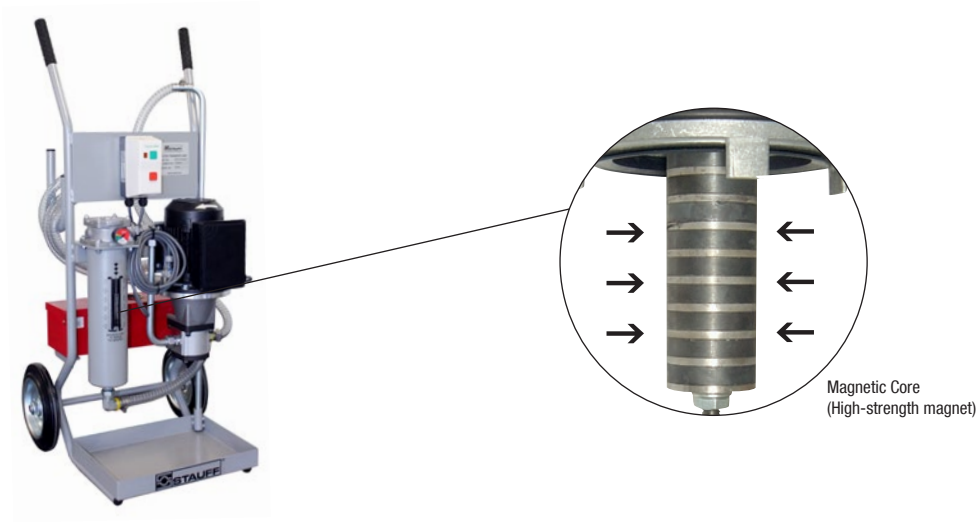
Electrical Clogging Switch (for Spin-On Filter in Return-Line applications)			
Thread Connection		**Pressure Setting**	**Type**
M10	M10x1	2.5 bar / 36.2 PSI	42 V Normally Open
	M10x1	2.5 bar / 36.2 PSI	110 V ... 230 V, two-way contact
BSPP	1/8 BSPP	1.3 bar / 18.8 PSI	110 V ... 230 V, two-way contact
NPT	1/8 NPT	1.3 bar / 18.8 PSI	110 V ... 230 V, two-way contact
M10	M10x1	2.5 bar / 36.2 PSI	42 V Normally Closed
BSPP	1/8 BSPP	1.3 bar / 18.8 PSI	42 V Normally Open
	1/8 BSPP	1.3 bar / 18.8 PSI	42 V Normally Closed
Electrical Clogging Switch (for Spin-On Filter in Suction-Line applications)			
NPT	1/8 NPT	-0.1 bar / -1.45 PSI	110 V ... 230 V, two-way contact
BSPP	1/8 BSPP	-0.1 bar / -1.45 PSI	110 V ... 230 V, two-way contact

Item No.	Designation	Code	Price
1020000590	Limit-Switch-G42NO-S-M10-B2.5	E01	112.30
1020005566	Limit-Switch-G230-W-M10-B2.5	E02	266.50
1020013955	Limit-Switch-G230-W-B02-B1.3	E03	308.30
1020013954	Limit-Switch-G230-W-N02-B1.3	E04	324.80
1020020657	Limit-Switch-G42NC-S-M10-B2.5	E07	98.25
1910000459	Limit-Switch-G42NO-S-B02-B1.3	E08	154.20
1910000460	Limit-Switch-G42NC-S-B02-B1.3	E09	154.20
1020013956	Limit-Switch-G230-W-N02-B-0.1	E05	461.55
1020013957	Limit-Switch-G230-W-B02-B-0.1	E06	461.55

Dimensional drawings: All dimensions in mm/in.

	Filtration Systems	**N174 - N175**
	Off-Line Filters & Oil Transfer Carts	**N174**
	Oil Sampling Kit KIT-SFS	**N175**

Off-line Filters & Oil Transfer Carts



Product Description

STAUFF Mobile Filtration Systems type SPFC is designed to cover a wide application range in the area of offline-filtration. This is an essential tool for preventive maintenance, either when transferring new oils or purifying existing hydraulic and lubrication oil systems.

The STAUFF Portable Filter Cart type SPFC is a complete and practical unit utilising dual stage filtration: 1. Pre-filtration through magnetic core
2. Final filtration through a 10 micron micro-glass element

This system is designed for the transfer, draining or filling of reservoirs, or filtration of mineral oil based fluids for hydraulic systems and gearboxes limited to a viscosity range of 10-150 mm^2/sec (cSt).

The application of the SPFC offers excellent mobility for maintenance, resulting in clean oil changes therefore increasing the lifetime of the components and availability of machinery.

Type SPFC

- Flow: 23 l/min / 6 US GPM - Nominal
- Voltage: 240 V / 50 Hz
- Start / Stop station with 3 m / 9.84 ft cable
- Electric motor: 1450 RPM 0.55 KW
- Pump: Gear type 23 LPM @ 1450 RPM
- Filter: Magnetic Core (integral pre-filter)
- Element: 10µm
- Bypass valve opens @ 1.5 bar / 18.12 PSI
- Seals / O-Rings: Buna-N® Rubber
- Clogging Indicator: Clean ΔP=1.25 bar / 18.12 PSI
- Weight: 53 kg / 117 lbs
- Dimensions (H x W x D): 1300 x 620 x 500 mm / 51.18 x 24.40 x 19.68 in
- Suction / Delivery Hoses: 3/4“ ID x 3 m / 9.84 ft
  (Suction hose fitted with drum lance H: 900 mm / 35.43 in)
- Heavy-duty frame with solid rubber wheels
- Operation & maintenance manual
- Lockable storage box
- Drip tray
- Hose storage hooks
- Oil resistant rubber handle grips

Portable Filtration Cart

Item No.	Designation		Price
1010021716	SPFC-21-A-B/X-BVA	Includes Element	4876.80
1020026225	RA-125-G-10-B	Replacement Element	150.55

Custom Manufactured Filter Carts Available

Custom manufactured filter systems available to meet customer specifications and applications.
Contact your local STAUFF office for more information.

Oil Sampling Kit ▪ Type KIT-SFS

Product Description

Fluid analysis is a crucial component of any oil management program. Early detection of potential problems can prevent costly repairs and downtime of plant, equipment or machinery.

STAUFF KIT-SFS oil analysis kits provide the means to take a sample from either a STAUFF test coupling (fitted in-line in a hydraulic system using a STAUFF test adaptor SHA and plastic hose), or directly from a reservoir, sump or drum (drawing fluid using the vacuum pump into the cleaned sample bottle).

Suitable for sampling oil in any hydraulic fluid system application eg. Mining (surface or underground), steel mills, mobile machinery, stationary plant and equipment or in systems hydraulic or lube oil is used.

Features

- Heavy duty plastic vacuum pump
- Two sample bottles
- STAUFF test points and adaptor allows oil sample to be taken from STAUFF Test 20 test points
- Magnetic clip (for mounting pump on hydraulic tank or steel drum during sampling)

Components

KIT-SFS

- 1 x Plastic fluid sampling vacuum pump PUMP-SFS-38P
- 1 x Hose adaptor SHA-20-5.5 mm
- 2 x 1 m / 3.28 ft Push on 1/4" hose
- 1 x SMK-20-G1/4-B-C-W3
- 1 x SMK-20-M10x1-B-A-W3
- 2 x Sample bottles 110 ml (cleaned to ISO 13/8/7)
- 2 x Mailing kits (prepaid express postage satchels)
- 1 x Magnetic clip (for mounting pump on hydraulic tank or steel drum during sampling)

Order Codes

KIT-SFS	-	02	-	110	C	-	MCP-38P
①		②		③	④		⑤

① Type

Fluid Sampling Kit	**KIT-SFS**
Fluid Sampling Bottle	**BOTTLE-SFS**

② Series

BSPP (only for KIT-SFS)	**02**

③ Bottle Size

110 ml	**110**

④ Cleanliness Tested IOS4406.99

Bottle cleaned to ISO 13/8/7	**C**

⑤ Additional Information

(for multiple options use a dash (-) between each option)

Mailing Container including pre-paid postage satchel (KIT-SFS) Oil sampling form included	**MCP**
Mailing Container (BOTTLE-SFS) - Oil sampling form included	**MC**
Pump Diameter 38 mm (plastic parts)	**38P**

KIT-SFS

Item No.	Designation	Price
6100154363	KIT-SFS-02-110C-MCP-38P	518.80

Replacement
Oil Sampling Bottle

Item No.	Designation		Price
1020026451	BOTTLE-SFS-110C-MCP	(including pre-paid postage satchel)	67.85

Introduction	02 - 03
Fluid Level and Temperature Indicators	04 - 015
Tank Filler Breathers	016 - 031
Giant and Desiccant Air Breathers	032 - 041
Suction Strainers	042 - 045
Diffusers	046 - 049
Bell Housings and Couplings	050 - 055

STAUFF Hydraulic Accessories

The consistently developed and enhanced STAUFF Hydraulic Accessories product range contains well-thought-out and sophisticated components suited to meet or exceed the increasing requirements of designing and building tanks, reservoirs, power packs and gearboxes for industrial and mobile hydraulic applications.

Whether you require visual or visual/electrical fluid level and temperature indicators, tank filler breathers in a variety of designs made of plastic or metal, or desiccant air breathers to protect your reservoir from contamination and moisture: STAUFF Hydraulic Accessories will provide you with the product you need.

The programme is completed by suction strainers and diffusers that are positioned within the reservoir and connected directly to the suction and return lines.

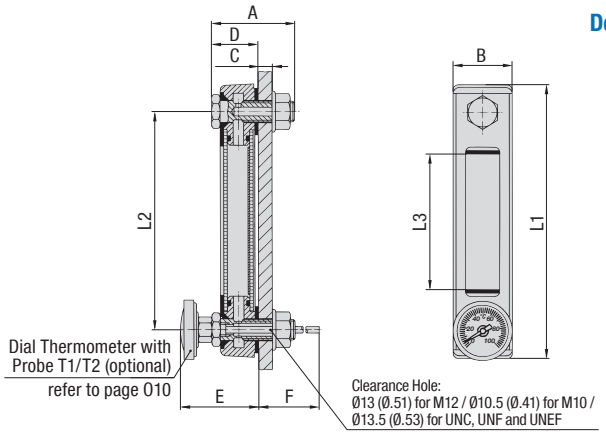
For challenging applications, STAUFF is able to provide technically modified product versions, which, for example, convince with their outstanding resistance to external influences (such as high or low temperatures, aggressive media or UV exposure) or their compact and light-weight design.

STAUFF guarantees prompt service, even for customised solutions according to customer's specifications or based on our in-house development.

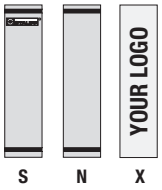
STAUFF

	Level Gauge	**06 - 09**
	SNA	**06**
	SNK	**07**
	SNA/SNK (Special Options)	**08**
	SNKK	**09**
	Accessories / Options	**010 - 014**
	Thermo Switch TS	**010**
	Dial Thermometer with Probe T1 / T2	**010**
	Temperature Sensor TS-SNA/SNK-PT100	**011**
	Temperature Sensor with Direct Installation Set TS-SNA/SNK-PT100-T	**011**
	Anti-Drain Valve SDV-SNA/SNK	**012**
	Deutsch Adaptor Cable DT04-4P	**012**
	Level-Temperature Switch SLTS	**013**
	Oil Level Gauge OLG	**014**

Level Gauge Type SNA



Design of Scale Plates



Thermometer Options

Capillary Tube Thermometer with a dual Celsius / Fahrenheit scale up to +80 °C / +180 °F

Characteristics

Visual fluid level indication in hydraulic reservoirs with maximum tank pressures not exceeding 2 bar / 29 PSI

Nominal Sizes and Designs

- 7 nominal sizes from 76 mm / 2.99 in to 381 mm / 15.00 in
- Display either undivided (SNA-076 ... 176) or subdivided by strut(s) into 2 (SNA-254) or 3 sections (SNA-305 and SNA-381)

Media Compatibility

- Suitable for use with Mineral and Petroleum based hydraulic fluids (HL and HLP)

Technical Data

- IP 65 protection rating: Dust tight and protected against water jets
- Operating temperature range: -30 °C ... +80 °C / -22 °F ... +176 °F
- Recommended tightening torque: 8 N·m / 5.9 ft·lb

Materials & Accessories / Options

Refer to Catalogue 10 - STAUFF Hydraulic Accessories

Spare seal kits (NBR or Viton®) available on request

Order Codes

SNA	-	127	-	B	-	S	-	O	-	12	-	O	-	60
①		②		③		④		⑤		⑥		⑦		⑧

① Type

Level Gauge with visual fluid level indication	**SNA**

② Nominal Size

SNA-076 (nominal size of 76 mm / 2.99 in)	**076**
SNA-127 (nominal size of 127 mm / 5.00 in)	**127**
SNA-150 (nominal size of 150 mm / 5.91 in)	**150**
SNA-176 (nominal size of 176 mm / 6.93 in)	**176**
SNA-254 (nominal size of 254 mm / 10.00 in)	**254**
SNA-305 (nominal size of 305 mm / 12.00 in)	**305**
SNA-381 (nominal size of 381 mm / 15.00 in)	**381**

③ Sealing Material

NBR (Buna-N®) (standard option)	**B**
FKM (Viton®)	**V**

④ Design of Scale Plate

With STAUFF logo (standard option)	**S**
Neutral design without any logo	**N**
Custom-designed scale plate (please specify)	**X**

⑤ Thermometer Option

Supplied without thermometer (standard option)	**O**
Red Capillary Tube thermometer on scale plate	**T**
Blue Capillary Tube thermometer on scale plate	**TB**
Dial thermometer with probe (200 mm / 7.87 in) and a Celsius scale up to 100 °C	**T1C**
Dial thermometer with probe (300 mm / 11.81 in) and a Celsius scale up to 100 °C	**T2C**
Dial thermometer with probe (200 mm / 7.87 in) and a dual scale up to 100 °C / 200 °F	**T1CF**
Dial thermometer with probe (300 mm / 11.81 in) and a dual scale up to 100 °C / 200 °F	**T2CF**

⑥ Banjo Bolt Size

Metric ISO thread M12 (standard option)	**12**
Metric ISO thread M10	**10**
Unified coarse thread 1/2–13 UNC	**U1**
Unified fine thread 1/2–20 UNF	**U2**
Unified extra-fine thread 1/2–28 UNEF	**U3**

⑦ Thermo Switch / Temperature Sensor / Anti Drain-Valve Option

Supplied without Thermo Switch / Temperature Sensor / Anti-Drain Valve	**(None)**
Thermo Switch TS-SNA/SNK; Break contact (normally closed); Equipped with standard connector	**O**
Thermo Switch TS-SNA/SNK; Break contact (normally closed); Equipped with connector M12	**OD**
Thermo Switch TS-SNA/SNK; Make contact (normally open); Equipped with standard connector	**C**
Thermo Switch TS-SNA/SNK; Make contact (normally open); Equipped with connector M12	**CD**
Temperature Sensor TS-SNA/SNK-PT100; Equipped with connector M12	**PT100**
Anti-Drain Valve Set A	**DA**
Anti-Drain Valve Set B	**DB**

Thermo Switches / Temperature Sensors only available for banjo bolt size M12.

⑧ Switching Temperature Option

Contact switches at +60 °C / +140 °F	**60**
Contact switches at +70 °C / +158 °F	**70**
Contact switches at +80 °C / +176 °F	**80**
Contact switches at +90 °C / +194 °F	**90**

Only to be indicated when using a Thermo Switch.

Options T1C/CF and T2C/CF are not available for banjo bolt size M10 and not be used in conjunction with Thermo Switches or Temperature Sensors.

SNA
Visual Fluid Level Indicators

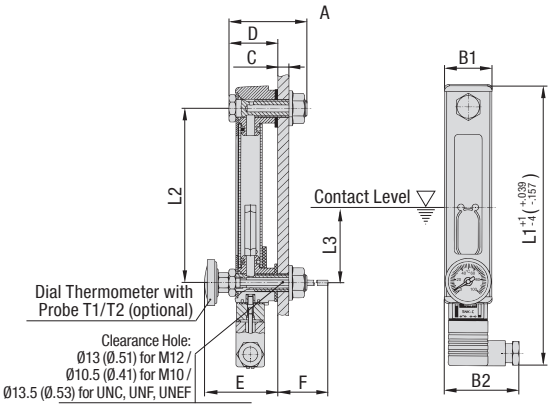
Item No.	Designation	Thread	Price
1910000086	SNA-076-B-S-O-10	M10	39.45
1910000072	SNA-076-B-S-O-12	M12	39.45
1910000106	SNA-127-B-S-O-10	M10	47.80
1910000092	SNA-127-B-S-O-12	M12	47.80
1910000571	SNA-176-B-S-O-12	M12	52.05
1910000126	SNA-254-B-S-O-10	M10	61.80
1910000112	SNA-254-B-S-O-12	M12	61.80
1910020042	SNA-305-B-S-O-12	M12	160.25

SNA
Visual Fluid Level Indicators with Thermometer

Item No.	Designation	Thread	Price
1910000557	SNA-076-B-S-T-10	M10	52.05
1910000757	SNA-076-B-S-T-12	M12	52.05
1910000708	SNA-127-B-S-T-10	M10	57.60
1910000329	SNA-127-B-S-T-12	M12	57.60
1910000575	SNA-176-B-S-T-12	M12	56.25
1910000758	SNA-254-B-S-T-10	M10	80.10
1910000330	SNA-254-B-S-T-12	M12	82.90
1910002375	SNA-305-B-S-T-12	M12	194.75

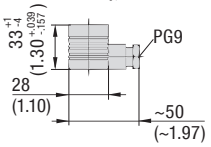
Dimensional drawings: All dimensions in mm (in).

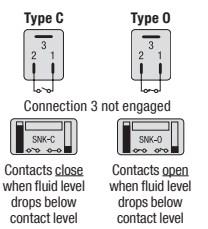
Level Gauge Type SNK



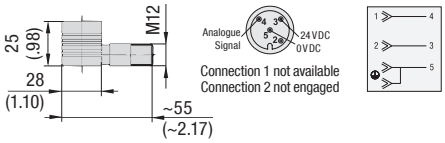
Connection Details and Electrical Functions

Types C and O: Industrial standard connector (contact gap: 11 mm / .43 in), similar to DIN EN 175301-803-B / ISO 6952





Types CD and OD: Five-pin circular connector M12, A-coded, according to IEC 61076-2-101



Characteristics

Visual / electrical fluid level indication in hydraulic reservoirs with maximum tank pressures not exceeding 2 bar / 29 PSI

Nominal Sizes and Designs

- 6 nominal sizes from 127 mm / 5.00 in to 381 mm / 15.00 in
- Display either undivided (SNK-127 ... 176) or subdivided by strut(s) into 2 (SNK-254) or 3 sections (SNK-305 and SNK-381)

Media Compatibility

- Suitable for use with Mineral and Petroleum based hydraulic fluids (HL and HLP)

Technical Data

- IP 65 protection rating: Dust tight and protected against water jets (IP 67 on request)
- Operating temperature range: -30 °C ... +80 °C / -22 °F ... +176 °F
- Recommended tightening torque: 8 N·m / 5.9 ft·lb
- Minimum lateral distance to other magnetic components and cables: 10 mm / .39 in

Materials, Electrical Specifications & Accessories / Options

Refer to Catalogue 10 - STAUFF Hydraulic Accessories

Spare seal kits (NBR or Viton®) available on request

Order Codes

SNK	-	127	-	V	-	C	-	O	-	12	-	O	-	60
①		②		③		④		⑤		⑥		⑦		⑧

① Type

Level Gauge with visual / electrical fluid level indication	**SNK**

② Nominal Size

SNK-127 (nominal size of 127 mm / 5.00 in)	**127**
SNK-150 (nominal size of 150 mm / 5.91 in)	**150**
SNK-176 (nominal size of 176 mm / 6.93 in)	**176**
SNK-254 (nominal size of 254 mm / 10.00 in)	**254**
SNK-305 (nominal size of 305 mm / 12.00 in)	**305**
SNK-381 (nominal size of 381 mm / 15.00 in)	**381**

Contact STAUFF for alternative nominal sizes and designs.

③ Sealing Material

FKM (Viton®)	**V**

④ Electrical Function

Break contact, opens at contact level (normally closed); Equipped with standard connector	**O**
Break contact, opens at contact level (normally closed); Equipped with connector M12	**OD**
Make contact, closes at contact level (normally open); Equipped with standard connector	**C**
Make contact, closes at contact level (normally open); Equipped with connector M12	**CD**

⑤ Thermometer Option

Supplied without thermometer (standard option)	**O**
Dial thermometer with probe (200 mm / 7.87 in) and a Celsius scale up to 100 °C	**T1C**
Dial thermometer with probe (300 mm / 11.81 in) and a Celsius scale up to 100 °C	**T2C**
Dial thermometer with probe (200 mm / 7.87 in) and a dual scale up to 100 °C / 200 °F	**T1CF**
Dial thermometer with probe (300 mm / 11.81 in) and a dual scale up to 100 °C / 200 °F	**T2CF**

⑥ Banjo Bolt Size

Metric ISO thread M12 (standard option)	**12**
Metric ISO thread M10	**10**
Unified coarse thread 1/2–13 UNC	**U1**
Unified fine thread 1/2–20 UNF	**U2**
Unified extra-fine thread 1/2–28 UNEF	**U3**

⑦ Thermo Switch / Temperature Sensor / Anti-Drain Valve Option

Supplied without Thermo Switch / Temperature Sensor / Anti-Drain Valve	**(None)**
Thermo Switch TS-SNA/SNK; Break contact (normally closed); Equipped with standard connector	**O**
Thermo Switch TS-SNA/SNK; Break contact (normally closed); Equipped with connector M12	**OD**
Thermo Switch TS-SNA/SNK; Make contact (normally open); Equipped with standard connector	**C**
Thermo Switch TS-SNA/SNK; Make contact (normally open); Equipped with connector M12	**CD**
Temperature Sensor TS-SNA/SNK-PT100; Equipped with connector M12	**PT100**
Anti-Drain Valve Set A	**DA**
Anti-Drain Valve Set B	**DB**

Thermo Switches / Temperature Sensors only available for banjo bolt size M12.

⑧ Switching Temperature

Contact switches at +60 °C / +140 °F	**60**
Contact switches at +70 °C / +158 °F	**70**
Contact switches at +80 °C / +176 °F	**80**
Contact switches at +90 °C / +194 °F	**90**

Only to be indicated when using a Thermo Switch.

Options T1C/CF and T2C/CF are not available for banjo bolt size M10 and not be used in conjunction with Thermo Switches or Temperature Sensors.

SNK
Level Gauge with Visual / Electrical Fluid Level Indication

Item No.	Designation	Thread	Price
1910000052	SNK-127-V-C-O-10	M10	280.45
1910000040	SNK-127-V-C-O-12	M12	303.00
1910000593	SNK-176-V-C-O-12	M12	347.45
1910000056	SNK-254-V-C-O-12	M12	352.15
1910000054	SNK-127-V-O-O-10	M10	283.05
1910000042	SNK-127-V-O-O-12	M12	303.00
1910000331	SNK-176-V-O-O-12	M12	357.45
1910000058	SNK-254-V-O-O-12	M12	352.15

SNK
Level Gauge with Visual / Electrical Fluid Level Indication
Thermometer Option

Item No.	Designation	Thread	Price
1910000044	SNK-127-V-C-T1C-12	M12	415.25
1910000048	SNK-127-V-C-T2C-12	M12	440.50
1910000598	SNK-176-V-C-T1C-12	M12	520.15
1910000060	SNK-254-V-C-T1C-12	M12	522.85
1910000046	SNK-127-V-O-T1C-12	M12	415.25
1910000050	SNK-127-V-O-T2C-12	M12	448.50
1910000600	SNK-176-V-O-T1C-12	M12	530.10
1910000062	SNK-254-V-O-T1C-12	M12	522.85

Dimensional drawings: All dimensions in mm (in).

Level Gauge (Special Options)
Type SNA / SNK

Characteristics

Visual fluid level indication in hydraulic reservoirs with maximum tank pressures not exceeding 2 bar / 29 PSI; ideal for custom applications in terms of reservoir capacities and dimensions

Nominal Sizes
- Special sizes beyond the normal of 305 mm / 12 in up to a maximum nominal size of 950 mm / 37.4 in – even for small and medium quantities
- High-precision manufacturing within 1 mm tolerance to customer requirements

Design
- Robust design thanks to one or more struts that subdivide the display into 2 or more sections
- Positioning of the strut(s) based on engineering considerations and/or according to particular customer requirements
- Precise visual indication of the fluid level by use of scale plates (only available for nominal sizes smaller than 670 mm / 26.4 in) or by use of a coloured Floating Ball (recommended option for nominal sizes larger than 670 mm / 26.4 in)
- Plastic dampening clips to reduce vibration of the sight tube are used for nominal sizes larger than 450 mm / 17.7 in

Materials
Depending on the specific application, several different materials are available for the individual components of the level gauge (sight glass, housing, sealings, and bolts); refer to the Inquiry Checklist below for details.

STAUFF is always at your service if you need support in choosing the right materials or material combination for improved UV or chemical resistance or for low-temperature applications down to -50°C / -58°F and use with special media (such as biodegradable fluids, diesel oils, and gasoline).

Accessories / Options
- Red / blue capillary tube thermometers with a temperature display range of up to +80 °C / +180 °F
- Dial thermometers with probe and a Celsius or a dual Celsius / Fahrenheit scale with a temperature display range of up to +100 °C / +200 °F
- Thermo switches
- Temperature sensors
- Anti-Drain Valve
- Deutsch Adaptor Cable

Refer to page 010 / 011 / 012 for details.

Inquiry Checklist (copy and email to your local STAUFF office)

In case that you require a special property or custom-designed level gauge, please use this checklist to provide us with details. If necessary, please also include further details, like the type of fluid in use, its temperature and viscosity.

Nominal Size ☐ Bolt centre distance (in mm)

Housing Material ☐ Aluminium ☐ Steel ☐ Stainless Steel

Housing Design ☐ Regular housing design with positioning of strut(s) based on engineering considerations

Please provide additional details / drawing for custom housing designs.

Banjo Bolt Size ☐ M12 ☐ M10 ☐ 1/2–13 UNC ☐ 1/2–20 UNF ☐ 1/2–28 UNEF

Banjo Bolt Material ☐ Steel ☐ Stainless Steel

Sealing Material ☐ NBR (Buna-N®) ☐ FKM (Viton®) ☐ EPDM

Alternative sealing materials to be defined separately.

Level Indication ☐ Scale plate (only for nominal sizes smaller than 382 mm / 15.03 in)

☐ Scale plate made of PVC
☐ Scale plate made of Aluminium

☐ With STAUFF logo
☐ Neutral design without any logo
☐ Custom-design (please specify)

☐ Without thermometer on scale plate
☐ Capillary tube thermometer with dual Celsius / Fahrenheit scale up to +80 °C / +180 °F

☐ Floating Ball (recommended option for nominal sizes larger than 381 mm / 15.0 in)

Other types of level indication (magnetic floats, etc.) to be defined separately.

Options ☐ Dial thermometer with probe

☐ Celsius scale up to +100 °C
☐ Dual scale up to +100 °C / +200 °F

☐ Length of probe: 200 mm / 7.87 in
☐ Length of probe: 300 mm / 11.81 in

☐ Thermo Switch TS-SNA/SNK

☐ Break contact; Standard connector
☐ Break contact; Connector M12
☐ Make contact; Standard connector
☐ Make contact; Connector M12

☐ Contact switches at +60 °C / +140 °F
☐ Contact switches at +70 °C / +158 °F
☐ Contact switches at +80 °C / +176 °F
☐ Contact switches at +90 °C / +194 °F

☐ Temperature Sensor TS-SNA/SNK-PT100 ☐ Deutsch Adaptor Cable

☐ Anti-Drain Valve ☐ Set A ☐ Set B

Also available:

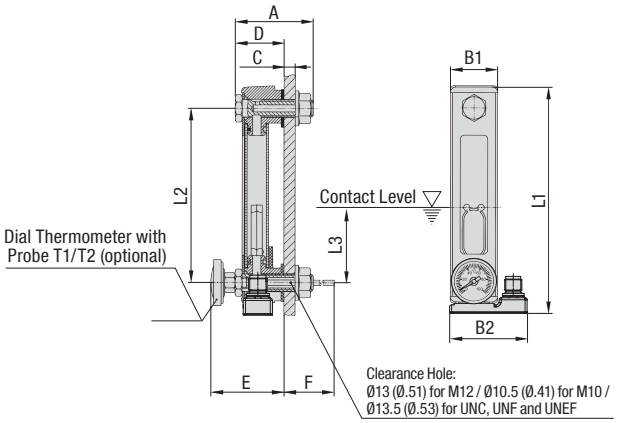
Level Gauges ▪ Type SNK in Special Lengths

Visual / electrical fluid level indication in hydraulic reservoirs with level gauges up to a maximum nominal size of 950 mm / 37.4 in.

Contact STAUFF for more information.

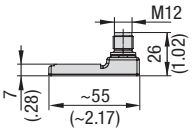
Level Gauge (Compact Design)
Type SNKK

– 40 mm / – 1.57 in
in comparison with
Level Gauges SNK



Connection Details and Electrical Functions

Type DD: Five-pin circular connector M12, A-coded, according to IEC 61076-2-101



1 Contact opens and 1 contact closes when fluid level drops below contact level

Pin assignment at empty reservoir (default setting at point of delivery)

Characteristics

Visual / electrical fluid level indication in hydraulic reservoirs with maximum tank pressures not exceeding 2 bar / 29 PSI; ideal for applications in which space is limited

Nominal Sizes and Designs

- 6 nominal sizes from 127 mm / 5.00 in to 381 mm / 15.00 in
- Compact design allows space-saving installation: Always 40 mm / 1.57 in shorter than Level Gauges SNK of the comparable nominal size
- Display either undivided (SNKK-127 ... 176) or subdivided by strut(s) into 2 (SNKK-254) or 3 sections (SNKK-305 and SNKK-381)

Media Compatibility

- Suitable for use with Mineral and Petroleum based hydraulic fluids (HL and HLP)

Technical Data

- IP 67 protection rating: Dust tight and protected against powerful water jets; even immersion (up to 1 m / 3.28 ft) in water is possible under defined conditions of pressure and time (IP 69K on request)
- Operating temperature range: -30 °C ... +80 °C / -22 °F ... +176 °F
- Recommended tightening torque: 8 N·m / 5.9 ft·lb
- Minimum lateral distance to other magnetic components and cables: 10 mm / .39 in

Materials, Electrical Specifications & Accessories / Options

Refer to Catalogue 10 - STAUFF Hydraulic Accessories

Spare seal kits (NBR or Viton®) available on request

Order Codes

SNKK - 127 - V - DD - O - 12 - O - 60

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

① Type

Level Gauge with visual / electrical fluid level indication (compact design)	**SNKK**

② Nominal Size

SNKK-127 (nominal size of 127 mm / 5.00 in)	**127**
SNKK-150 (nominal size of 150 mm / 5.91 in)	**150**
SNKK-176 (nominal size of 176 mm / 6.93 in)	**176**
SNKK-254 (nominal size of 254 mm / 10.00 in)	**254**
SNKK-305 (nominal size of 305 mm / 12.00 in)	**305**
SNKK-381 (nominal size of 381 mm / 15.00 in)	**381**

Contact STAUFF for alternative nominal sizes and designs.

③ Sealing Material

FKM (Viton®)	**V**

④ Electrical Function

SPDT (Single Pole Double Throw) contacts, 1 contact opens and 1 contact closes at contact level; Equipped with connector M12	**DD**

⑤ Thermometer Option

Supplied without thermometer (standard option)	**O**
Dial thermometer with probe (200 mm / 7.87 in) and a Celsius scale up to 100 °C	**T1C**
Dial thermometer with probe (300 mm / 11.81 in) and a Celsius scale up to 100 °C	**T2C**
Dial thermometer with probe (200 mm / 7.87 in) and a dual scale up to 100 °C / 200 °F	**T1CF**
Dial thermometer with probe (300 mm / 11.81 in) and a dual scale up to 100 °C / 200 °F	**T2CF**

⑥ Banjo Bolt Size

Metric ISO thread M12 (standard option)	**12**
Metric ISO thread M10	**10**
Unified coarse thread 1/2–13 UNC	**U1**
Unified fine thread 1/2–20 UNF	**U2**
Unified extra-fine thread 1/2–28 UNEF	**U3**

⑦ Thermo Switch / Temperature Sensor / Anti-Drain Valve Option

Supplied without Thermo Switch / Temperature Sensor / Anti-Drain Valve	**(None)**
Break Contact, opens at contact level (normally closed); Equipped with standard connector	**O**
Break Contact, opens at contact level (normally closed); Equipped with connector M12	**OD**
Make Contact, closes at contact level (normally open); Equipped with standard connector	**C**
Make Contact, closes at contact level (normally open); Equipped with connector M12	**CD**
Temperature Sensor TS-SNA/SNK-PT100; Equipped with connector M12	**PT100**
Anti-Drain Valve Set A	**DA**
Anti-Drain Valve Set B	**DB**

Thermo Switches / Temperature Sensors only available for banjo bolt size M12. Refer to pages 010 and 011 for details.

⑧ Switching Temperature

Contact switches at +60 °C / +140 °F	**60**
Contact switches at +70 °C / +158 °F	**70**
Contact switches at +80 °C / +176 °F	**80**
Contact switches at +90 °C / +194 °F	**90**

Only to be indicated when using a Thermo Switch.

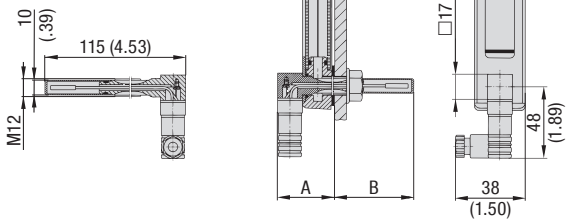
Options T1C/CF and T2C/CF are not available for banjo bolt size M10 and not be used in conjunction with Thermo Switches or Temperature Sensors.

SNKK
Level Gauge with Visual / Electrical Fluid Level Indication
Compact Design

Item No.	Designation	Thread	Price
1910002594	SNKK-127-V-DD-O-12	M12	265.15
1910002595	SNKK-176-V-DD-O-12	M12	280.45
1910002596	SNKK-254-V-DD-O-12	M12	294.35

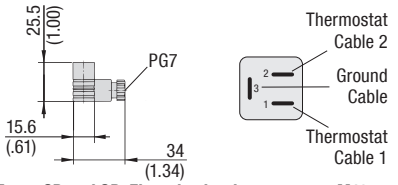
Dimensional drawings: All dimensions in mm (in).

Thermo Switch
Type TS

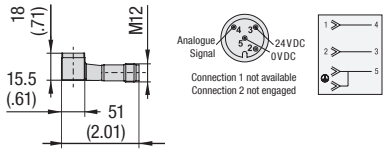


Connection Details and Electrical Functions

Types C and O: Industrial standard connector (contact gap: 9.4 mm / .37 in), similar to DIN EN 175301-803-C / ISO 6952



Types CD and OD: Five-pin circular connector M12, A-coded, according to IEC 61076-2-101



Characteristics

Fluid temperature measurement in conjunction with STAUFF Level Gauges SNA, SNK and SNKK

Installation
- Replaces the lower banjo bolt of the Level Gauge
- Available for bolt size M12 only
- Clearance hole: Ø13 mm / Ø.51 in

Materials
- Metal parts made of Steel (1.0718)
- Plastic parts made of glass-fibre reinforced Polyamide (PA)

Electrical Specifications (General)
- Thermo switch is activated when the fluid temperature reaches the respective switching temperature
- Available with switching temperatures of +60 °C / +140 °F, +70 °C / +158 °F, +80 °C / +176 °F or +90 °C / +194 °F (with a switching tolerance of ±5 °C / ±9 °F and a hysteresis of 35 °C / 63 °F)
- Available as a break contact (normally closed) or make contact (normally open)
- Either equipped with industrial standard connector (types C / O) or five-pin circular connector M12 (types CD / OD)
- Thermo switch can be rotated by 360° to its final direction

Electrical Specifications (Alternating Current)
- Maximum voltage: 250 V, 2.5 (1.6) A, 50 Hz
- Maximum current at 2000 operations: 4.0 A at cos φ = 4.45 / 250 V, 135 °C
- Maximum current at 10000 operations: 2.5 A at cos φ = 1.00 / 250 V, 150 °C
- Minimum current: 20 mA

Electrical Specifications (Direct Current)
- Maximum voltage: 42 V

TS
Temperature Switch

Item No.	Designation	Price
1920000044	TS-SNA/SNK-0-60	303.00
1920000045	TS-SNA/SNK-0-70	303.00
1920000046	TS-SNA/SNK-0-80	303.00

Order Codes

TS-SNA/SNK - 0 - 60
① ② ③

① Type

Thermo Switch TS for use with Level Gauges SNA, SNK and SNKK	**TS-SNA/SNK**

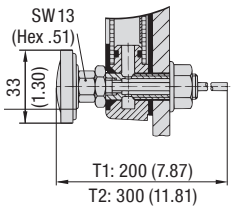
② Electrical Function

Break contact, opens at switching temperature (normally closed); Equipped with standard connector	**0**
Break contact, opens at switching temperature (normally closed); Equipped with connector M12	**OD**
Make contact, closes at switching temperature (normally open); Equipped with standard connector	**C**
Make contact, closes at switching temperature (normally open); Equipped with connector M12	**CD**

③ Switching Temperature

Contact switches at +60 °C / +140 °F	**60**
Contact switches at +70 °C / +158 °F	**70**
Contact switches at +80 °C / +176 °F	**80**
Contact switches at +90 °C / +194 °F	**90**

Dial Thermometer with Probe
Types T1 / T2



Order Codes

Thermometer - T1 - C - B
① ② ③ ④

① Type

Dial thermometer with probe	**Thermometer**

② Length

Probe length 200mm	**T1**
Probe length 300mm	**T2**

③ Sale

Celsius	**C**
Fahrenheit	**F**
Dual scale - Celsius/Fahrenheit	**CF**

③ Mounting Type

With O-Ring seal	**B**
Dial Thermometer only	**(None)**

Characteristics

Visual fluid temperature measurement in conjunction with STAUFF Level Gauges SNA, SNK and SNKK

Nominal Sizes and Designs
- Probe lengths of 200 mm / 7.87 in or 300 mm / 11.81 in
- Scale diameter of 33 mm / 1.30 in

Contact STAUFF for special versions

Scale Options
- Celsius scale of 0°C ... +100 °C
- Dual Celsius / Fahrenheit scale of up to +100 °C / +200 °F

Materials
- Probe made of Stainless Steel V4A (1.4571)

Technical Data
- IP 65 protection rating: Dust tight and protected against water jets

Installation
- Requires a special banjo bolt (with internal M8 port for the dial thermometer with probe) to replace the lower standard banjo bolt of the Level Gauge
- Use suitable wrench SW 13 (Hex .51) to fasten; turning on the body itself may damage the product

T1/T2
Dial Thermometer with Probe

Item No.	Designation	Price
1920000032	THERMOMETER-T1-C-B	103.90
1920000033	THERMOMETER-T2-C-B	112.30
1930000107	Banjo-bolt-SNA-T-M12	29.55

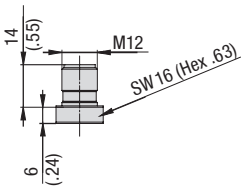
Include Banjo Bolt when ordering Dial Thermometer.
Note: Dial Thermometers with Probe can only be ordered in conjunction with Level Gauges SNA, SNK and SNKK.

Dimensional drawings: All dimensions in mm (in).

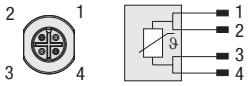
Temperature Sensor
Type TS-SNA/SNK-PT100

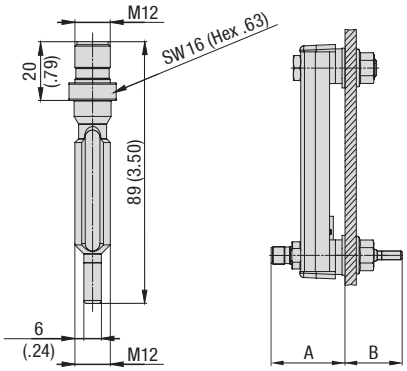
Connection Details and Electrical Functions

Four-pin circular connector M12,
A-coded, according to IEC 61076-2-101



Pin Assignment





Characteristics

Fluid temperature measurement in conjunction with STAUFF Level Gauges SNA, SNK and SNKK; Analysis of signals with required equipment, simply connect to your onboard control unit or PLC.

Installation
- Replaces the lower banjo bolt of the Level Gauge
- Available for bolt size M12 only
- Clearance hole: Ø13 mm / Ø.51 in

Materials
- Metal parts (including all fluid-affected parts) made of Stainless Steel V2A (1.4305)

Electrical Specifications
- Measuring temperature range:
  -40 °C ... +150 °C / -40 °F ... +302 °F
- Platinum measuring element PT100 according to DIN EN 60751, class A
- Accuracy: ±(0.15 K + 0.002 x |t|)
- Max. contact current: 2.0 mA
- Equipped with four-pin circular connector M12 with gold-plated contacts

Dimensions

	Dimensions (mm/in)	
	A	B
In conjunction with Level Gauge **SNA**	43.5	45.5
	1.71	1.79
In conjunction with Level Gauge **SNK**	51	38
	2.01	1.50
In conjunction with Level Gauge **SNKK**	51	38
	2.01	1.50

Technical Data
- Operating temperature range (for the connector area):
  -25 °C ... +80 °C / -13 °F ... +176 °F
- IP 68 protection rating: Dust tight and protected against powerful water jets; even immersion (beyond 1 m / 3.28 ft) in water is possible under defined conditions of pressure and time

Accessories / Options
- Deutsch Adaptor Cable

Refer to page 012 for details.

Order Codes

TS-SNA/SNK-PT100 - C
① ②

① Type

Temperature Sensor PT100	**TS-SNA/SNK-PT100**

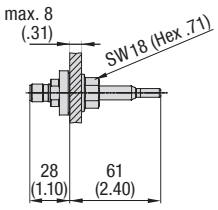
② Signal Converter

Without signal converter	**(None)**
Signal converter	**C**

Temperature Sensor

Item No.	Designation	Price
1920000266	TS-SNA/SNK-PT100	389.95
1930001612	TS-SNA/SNK-PT100-C	490.95

Temperature Sensor with Direct Installation Set
Type TS-SNA/SNK-PT100-T



Characteristics

Direct fluid temperature measurement without STAUFF Level Gauges SNA, SNK and SNKK; Analysis of signals with required equipment, simply connect to your on board control unit or PLC.

Installation
- Direct installation to the outer wall of the hydraulic reservoir or gearbox
- Compact design and easy installation
- Clearance hole: Ø13 mm / Ø.51 in

Materials
- Fluid-affected parts made of Stainless Steel V2A (1.4305)
- M12 screw nut made of Steel, zinc-plated
- Front ring made of Stainless Steel V2A (1.4305)
- O-Ring and gasket made of NBR (Buna-N®) (standard option), FKM (Viton®) or EPDM

Refer to the top of this page for Technical Details and Electrical Specifications for the Temperature Sensor.

Accessories / Options
- Deutsch Adaptor Cable

Refer to page 012 for details.

Order Codes

TS-SNA/SNK-PT100 - T - B
① ② ③

① Type

Temperature Sensor PT100	**TS-SNA/SNK-PT100**

② Direct Adaptor

Direct installation set including M12 screw nut, gasket, front ring and O-Ring	**T**

③ Sealing Material

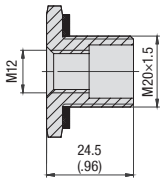
NBR (Buna-N®) standard option	**B**
FKM (Viton®)	**V**
EPDM	**E**

The direct installation set can also be used in conjunction with Thermo Switches TS (refer to page 010). Contact STAUFF for price and availability.

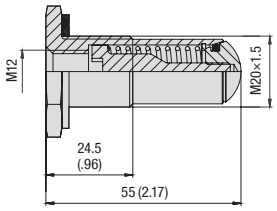
Dimensional drawings: All dimensions in mm (in).

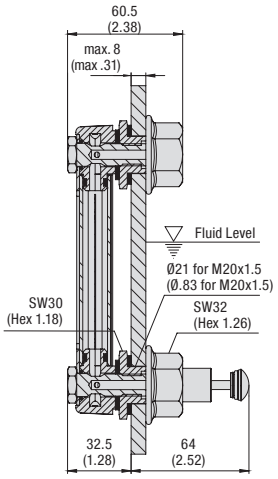
Anti-Drain Valve
Type SDV-SNA/SNK

Distance Adaptor

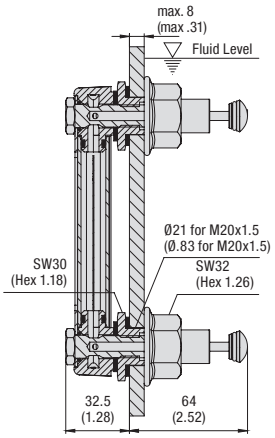


Anti-Drain Valve





Set A
(Max. fluid level of the hydraulic reservoir between the banjo bolts)



Set B
(Max. fluid level of the hydraulic reservoir above the banjo bolts)

Characteristics

Anti-drain valve to be used in conjunction with banjo bolts of level gauges, allowing these to be removed and replaced quickly and easily without spillage of fluid from the hydraulic reservoir

Features
- Used in conjunction with either the lower or both the lower and the upper banjo bolts of the Level Gauge
- Distance adaptor for the upper banjo bolt available when the check valve is used with the lower banjo bolt only
- Available for bolt size M12 only

Materials
- Housing made of Stainless Steel V2A (1.4301)
- Hexagon head nuts made of Steel, zinc/nickel-plated (Fe/Zn Ni 6)
- Sealings made of NBR (Buna-N®)

Contact STAUFF for alternative materials.

Order Codes

SDV-SNA/SNK - M12/M20x1.5 - B - W4 - A
① ② ③ ④ ⑤

① Type
Anti-Drain Valve for use with Level Gauges SNA, SNK and SNKK	**SDV-SNA/SNK**

② Banjo Bolt Size
M12 (screw in side) / M20x1.5 (other side)	**M12/M20x1.5**

③ Sealing Material
NBR (Buna-N®)	**B**

④ Housing Material
Stainless Steel V2A (1.4301)	**W4**

⑤ Set Type
Set A consisting of 1 anti-drain valve to be used with the lower banjo bolt and 1 distance adaptor to be used with the upper banjo bolt	**A**
Set B consisting of 2 anti-drain valves to be used with both banjo bolts	**B**

SDV-SNA/SNK
Anti-Drain Valve

Item No.	Designation	Price
1910020983	SDV-SNA/SNK-M12/M20x1.5-B-W4-A	242.55
1910020984	SDV-SNA/SNK-M12/M20x1.5-B-W4-B	331.00

Deutsch Adaptor Cable
Type DT04-4P

Characteristics

Deutsch adaptor to use for adaption from M12 to Deutsch Plug DT04-4P.

Installation
- Adapts to cable box M12 of SNK
- Adapts to M12 connector of SNKK and TS-SNA/SNK …
- Adapts to M12 connector of TS-SNA/SNK-PT100
- Adapts to any electrical M12 connector in other STAUFF series

Technical Data
- IP 68 protection rating: Dust tight and protected against powerful water jets
- Length: 100 mm (3.93 in)
- Operating temperature range: -30 °C ... +80 °C / -22 °F ... +176 °F

Order Codes

EACC-CAB-M12A/5-4FL-5
①

① Type
Deutsch Adaptor Cable	**EACC-CAB-M12A/5-4FL-5**

EACC-CAB
Deutsch Adaptor Cable

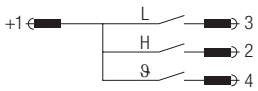
Item No.	Designation	Price
1810011009	EACC-CAB-M12A/5-4FL-5	81.40

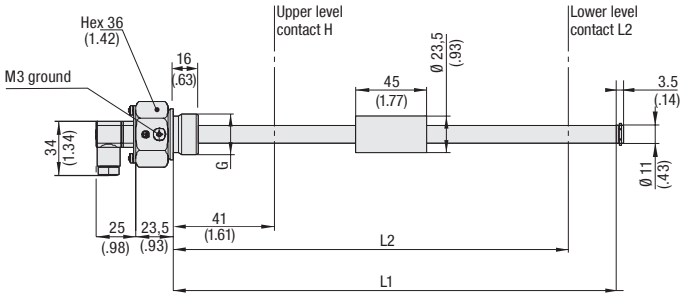
Level-Temperature Switch Type SLTS

Schemes for float in low position

Wiring Scheme (CB)

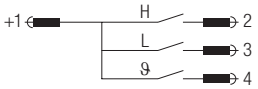
two level contacts
one temperature contact

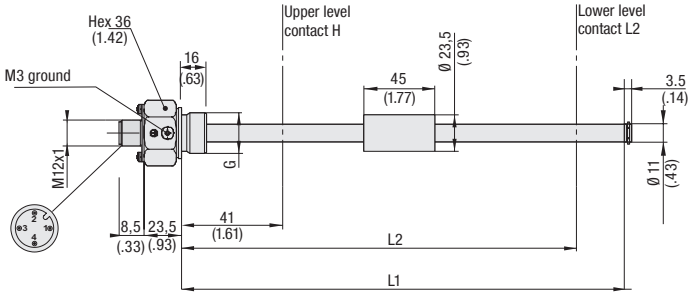




Wiring Scheme (M12)

two level contacts
one temperature contact





Characteristics

The STAUFF Level-Temperature Switches (SLTS Series) are unique in their design and modularity. One of the greatest advantages is the ability of the end-user to adjust the switching level. The internal support wire carrying the level and temperature switches makes it a simple and quick job to change the level switch position.

Level contact positions (L, H) are set as given in the order code. They can be adjusted individually later on. Consider a minimum distance of 40 mm / 1.57 in between the switching points.

Features

- Suitable for Mineral Oil and HFC fluids, other fluids on request
- Either 1 or 2 level contacts available
- 1 integrated temperature switch (optional)
- Standard electrical function:
  Level contacts: Normally closed, opens with falling level
  Temperature contacts: Normally closed, opens with rising temperature

STAUFF Level-Temperature Switches SLTS are available with other electrical functions on request.

Options

- 1 NPT and others available on request
- max. 115 Volt switching (for thread N16 only)
- Deutsch Adaptor Cable

Refer to page 012 for details.

Materials

- Stem: Brass
- Float/Sealing: NBR (Buna-N®)

- Max. operating temp.: +80 °C / +176 °F

Electrical Data and Output

- Max. current level contact: 0.5 A
- Max. current temp. contact: 2.0 A
- Contact load level contact: 10 VA
- Max. operating voltage: (See ordering code)

- Specific gravity of fluid: ≥0.8 kg/dm³
- Hysteresis: +18 °C / +64.4 °F

Protection Rating

- IP 65 protection rating: Dust tight and protected against water jets

Order Codes

SLTS	-	12	-	060	-	H41	-	L251	-	B12	-	G048	-	CB	/	2
①		②		③		④		⑤		⑥		⑦		⑧		⑨

① Series and Type

Level-Temperature Switch	**SLTS**

② Stem Length

L1: 305 mm / 12 in L2: 251 mm / 9.88 in	**12**
L1: 457 mm / 18 in L2: 403 mm / 15.87 in	**18**

③ Switching Temperature

Without temperature switch	**O**
+60 °C / +140 °F	**060**
+70 °C / +158 °F	**070**

④ H (Upper Level Contact)

Without upper level contact	**O**
41 mm / 1.61 in	**H41**

⑤ L (Lower Level Contact)

Without lower level contact	**O**
251 mm / 9.88 in (SLTS-12 only)	**L251**
403 mm / 15.87 in (SLTS-18 only)	**L403**

⑥ Thread Connection

G3/4 (standard option)	**B12**
1 NPT	**N16**
Note: Others on request	

⑦ Voltage (Volt AC/DC)

48 Volt max. (standard option)	**G048**
115 Volt max. (for thread N16 only)	**G115**

⑧ Electrical Connection

similar DIN VDE 0627 / IEV 61984	**CB**
M12 pin terminal	**M12**

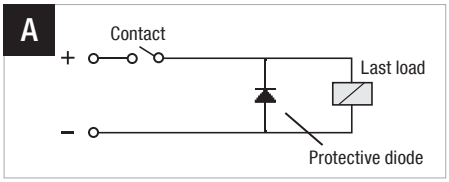
⑨ Design Code

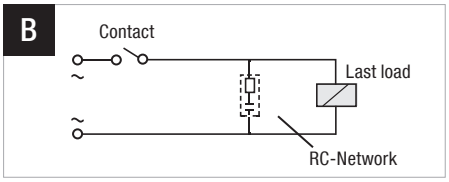
Design code 2	**2**

Contact Protection

To reduce the high reverse voltage produced when a reed switch opens, the following contact protection can be applied.

- DC voltage: a diode parallel to the load, see figure A
- AC voltage: a RC-network parallel to the load, see figure B and table below





Open contact voltage V	10 VA		25 VA		50 VA		75 VA		100 VA	
	R (Ω)	C (µF)	R (Ω)	C (µF)	R (Ω)	C (µF)	R (Ω)	C (µF)	R (Ω)	C (µF)
24	22	0.022	1	0.1	1	0.47	1	1	1	1
48	120	0.0047	22	0.022	1	0.1	1	0.47	1	0.47
110	470	0.001	120	0.0047	22	22	22	0.047	22	0.1

SLTS Level-Temperature Switch

Item No.	Designation	Price
1910000471	SLTS-12-060-O-L251-B12-G048-CB/2	496.30
1910000473	SLTS-12-070-O-L251-B12-G048-CB/2	496.30
1910000475	SLTS-18-060-O-L403-B12-G048-CB/2	496.30
1910000477	SLTS-18-070-O-L403-B12-G048-CB/2	496.30
1910000472	SLTS-12-060-H41-L251-B12-G048-CB/2	553.35
1910000474	SLTS-12-070-H41-L251-B12-G048-CB/2	553.35
1910000476	SLTS-18-060-H41-L403-B12-G048-CB/2	553.35
1910000478	SLTS-18-070-H41-L403-B12-G048-CB/2	553.35

Oil Level Gauge
Type OLG

Characteristics

The OLG Series of fluid level sight glasses are utilised as oil level indicators in oil tanks, gearboxes and general machinery.

Features

- Transparent high density polyamide providing good mechanical resistance to oil, gasoline, lubricants, and most petroleum solvents
- The back contrast screen gives clearer visibility of oil level indication
- Seal gasket is Asbestos free
- Hot painted red point in the centre for clearer indication (PA version)
- Hex. nut for easy assembly by spanner
- Good chemical resistance. Chemical compatibility tables are available on request, contact STAUFF for more information.
  Note: Avoid contact with alcohol, ethanol, methanol, and fluids with a high concentration of glycol

Technical Data

- Body materials of construction Polyamide or Aluminium
- Window materials of construction Polyamide
- Seal asbestos-free gasket
- Max. temperature 100°C / 212°F
- Max. pressure 3 bar / 43 PSI (PA version)
- Max. pressure 10 bar / 145 PSI (AL version)

Options

- High Pressure version to 20 bar / 290 PSI available
- Alternative materials available
  Contact STAUFF for more information

Order Codes

OLG - B08 - PA - FR

① ② ③ ④

① Type

STAUFF Oil Level Gauge	**OLG**

② Connection

1/4 BSPP Male	**B04**
3/8 BSPP Male	**B06**
1/2 BSPP Male	**B08**
3/4 BSPP Male	**B12**
1 BSPP Male	**B16**
1 1/4 BSPP Male	**B20**
1 1/2 BSPP Male	**B24**
1/4 NPT Male	**N04**
3/8 NPT Male	**N06**
1/2 NPT Male	**N08**
3/4 NPT Male	**N12**
1 NPT Male	**N16**
1 1/4 NPT Male	**N20**
1 1/2 NPT Male	**N24**
M14 X 1.5	**M14**
M16 X 1.5	**M16**
M18 X 1.5	**M18**
M20 X 1.5	**M20**
M22 X 1.5	**M22**
M26 X 1.5	**M26**
M27 X 1.5	**M27**
M40 X 1.5	**M40**

③ Body Material

Polyamide with red indicator / Polyamide clear window	**PA**
Aluminium with reflector / Polyamide clear window	**AL**
Aluminium with reflector / Glass clear window (High Pressure version)	**ALH**
Brass (available on request)	**W69**

④ Seal Material

Fibre gasket (asbestos-free) - standard	**FR**
NBR (Buna-N®)	**B**
FKM (Viton®)	**V**
Without Seal	**O**

OLG
Oil Level Gauge - Polyamide

Item No.	Designation	Price
1910021225	OLG-B06-PA-FR	6.10
1910021226	OLG-B08-PA-FR	10.20
1910021227	OLG-B12-PA-FR	11.45
1910021228	OLG-B16-PA-FR	17.70
1910021229	OLG-B20-PA-FR	17.70
1910020893	OLG-B24-PA-FR	24.55

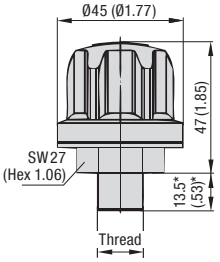
OLG
Oil Level Gauge - Aluminium

Item No.	Designation	Price
1910021230	OLG-B08-AL-FR	16.40
1910021231	OLG-B12-AL-FR	17.70
1910021232	OLG-B16-AL-FR	25.85
1910021233	OLG-B20-AL-FR	50.25
6100254343	OLG-M14-AL-FR	9.50
6100253325	OLG-M16-AL-FR	11.50
6100253326	OLG-M18-AL-FR	11.80
6100253327	OLG-M22-AL-FR	14.25
6100253974	OLG-M20-AL-FR	14.80
6100253330	OLG-M26-AL-FR	68.60

	Plastic Filler Breather	**018 - 021**
	SPB-1 / 2 / 3 (Threaded Version)	**018**
	SPB-4 / 5 (Flange Version)	**019**
	Accessories / Options Plastic Dipstick	**020**
	SES (Threaded Version)	**021**
	SES (Welded Version)	**021**
	Metal Filler Breather	**022 - 028**
	SMBT-47 (Threaded Version)	**022**
	SMBB-47 (Bayonet Version)	**023**
	SMBT-80 (Threaded Version)	**024**
	SMBP-80 (Push-On Version)	**025**
	SMBB-80 (Bayonet Version)	**026 - 027**
	Metal Basket Length 80 mm / 150 mm	**027**
	Lockable Metal Filler Breather SMBL (Clamping, Threaded and Push-On Version)	**028**

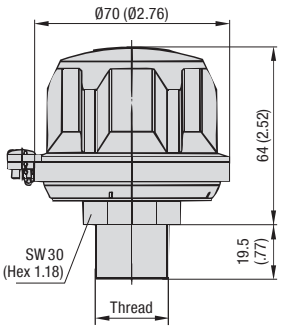
	Accessories / Options	**029 - 031**
	Side Mount Bracket SMBB-ASMB-1 (Polyamide Version)	**029**
	Side Mount Bracket SMBB-ASMB-2 (Aluminium Version)	**029**
	Extended Bayonet Flange EBF	**030**
	Weld Riser WR	**030**
	Filler Breather Adaptor (Aluminium)	**031**

Plastic Filler Breather
Types SPB-1 / 2 / 3
(Threaded Version)



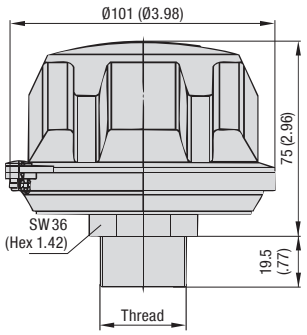
SPB-1

* for thread type N12: 16.0 (.63)



SPB-2

(Refer to Catalogue 10 - STAUFF Hydraulic Accessories for compact version SPBN)



SPB-3

Characteristics

Designed to be used as filler ports for hydraulic reservoirs, allowing the reservoir to breathe whilst protecting it from contamination found in harsh environments

Features
- Available with 3 different cap diameters
- Threaded version, equipped with male BSPP thread (ISO 228) or male NPT thread (ANSI B1.20.1)
- Operating temperature range: -40 °C ... +120 °C / -40 °F ... +248 °F

Materials
- Made of non-corrosive materials
- Body and cap made of glass-fibre reinforced Polyamide (PA)
- Sealings made of NBR (Buna-N®)

Contact STAUFF for alternative materials.

Accessories / Options
- Pressurisation up to 0.7 bar / 10 PSI (not available for SPB-1)
- Air filter element
- Anti-splash feature
- Plastic dipstick with integrated anti-splash feature
- Plastic dipstick with integrated magnet
- Oil Demister (not available for SPB-1)

Refer to page 020 for details.

Maximum Air Flow Rate
- 0.15 m³/min / 5.30 cfm for SPB-1
- 0.40 m³/min / 14.13 cfm for SPB-2
- 1.00 m³/min / 35.31 cfm for SPB-3

Refer to Catalogue 10 - STAUFF Hydraulic Accessories for detailed air flow curves.

Installation
- Recommended mounting spaces: Ø48 mm / Ø1.89 in for SPB-1, Ø90 mm / Ø3.54 in for SPB-2, and Ø122 mm / Ø4.80 in for SPB-3

Dimensional drawings: All dimensions in mm (in).

Order Codes

SPB	-	2	-	O	-	10	-	B12	-	O	-	D200
①		②		③		④		⑤		⑥		⑦

① Type

Plastic Filler Breather	**SPB**

② Version

Threaded version; Cap diameter Ø45 mm (Ø1.77 in)	**1**
Threaded version; Cap diameter Ø70 mm (Ø2.76 in)	**2**
Threaded version; Cap diameter Ø101 mm (Ø3.98 in)	**3**

③ Pressurisation

Without pressurisation (standard option)	**O**
Pressurised at 0.2 bar / 3 PSI	**B0.2**
Pressurised at 0.35 bar / 5 PSI	**B0.35**
Pressurised at 0.7 bar / 10 PSI	**B0.7**

Type SPB-1 is only available without pressurisation. Refer to Catalogue 10 - STAUFF Hydraulic Accessories for details.

④ Air Filter Element (Material / Micron Rating)

10 µm Foam / PUR (standard option)	**10**
40 µm Foam / PUR	**40**
3 µm Inorganic Glass-Fibre, pleated	**E03**
10 µm Filter Paper, pleated	**L10**

Options E03 and L10 are only available for type SPB-3. Contact STAUFF for alternative materials / micron ratings.

⑤ Connection Thread (Male)

G1/4 (for SPB-1 only)	**B04**
G3/8 (for SPB-1 and 2 only)	**B06**
G1/2 (for SPB-1, 2 and 3)	**B08**
G3/4 (for SPB-2 and 3 only)	**B12**
G1 (for SPB-3 only)	**B16**
1/4 NPT (for SPB-1 only)	**N04**
3/8 NPT (for SPB-1 only)	**N06**
1/2 NPT (for SPB-1 only)	**N08**
3/4 NPT (for SPB-1, 2 and 3)	**N12**
1 NPT (for SPB-3 only)	**N16**
Male BSPP Thread (ISO 228)	
Male NPT Thread (ANSI B1.20.1)	

⑥ Anti-Splash Feature

With anti-splash feature (standard option)	**A**
Without anti-splash feature	**O**

The anti-splash feature for the SPB-1, can only be achieved in conjunction with a dipstick, though is not available for the SPB-1 with connection sizes B04 and N04. Refer to page 020 for details.

⑦ Dipstick

Plastic dipstick (200 mm / 7.88 in) with integrated anti-splash feature	**D200**
Plastic dipstick (300 mm / 11.81 in) with integrated anti-splash feature	**D300**
Plastic dipstick (300 mm / 11.81 in) with integrated magnet	**D300M**
Without dipstick	**(None)**

Note: A shorter dipstick length can be achieved by simply cutting down the total length according to individual requirements.

SPB 1 SPB 2 & 3

SPB-2 / 3
Plastic Filler Breather
without pressurisation (with anti-splash feature)

Item No.	Designation	Price
1910000561	SPB-2-0-10-B06-A	46.20
1910000562	SPB-2-0-10-B08-A	46.20
1910000435	SPB-2-0-10-B12-A	46.20
1910001268	SPB-3-0-10-B08-A	46.20
1910000434	SPB-3-0-10-B12-A	55.60
1910020130	SPB-3-0-10-B16-A	60.65

SPB-1 / 3
Plastic Filler Breather without pressurisation (without anti-splash feature)

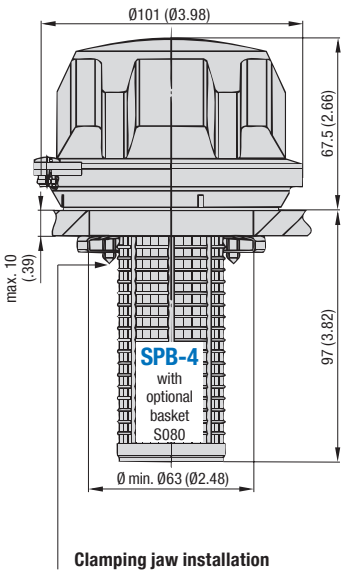
Item No.	Designation	Price
1910000433	SPB-1-0-10-B04-0	21.80
1910000866	SPB-1-0-10-B06-0	21.80
1910001527	SPB-1-0-10-B08-0	21.80
1910020050	SPB-3-0-10-B12-0	50.25

SPB 2

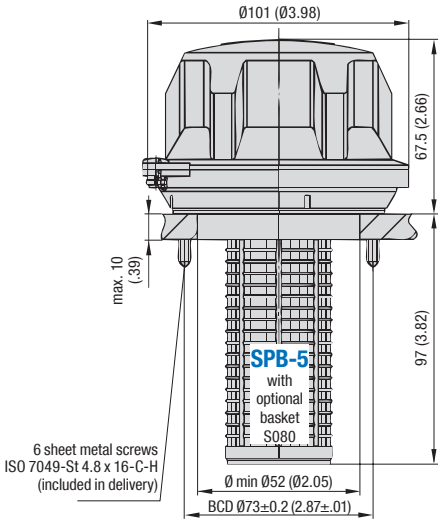
SPB-2
Plastic Filler Breather
(Pressurised 0.2 bar / 3 PSI)

Item No.	Designation	Price
1910000681	SPB-2-B0.2-10-B06-A	45.00
1910000740	SPB-2-B0.2-10-B12-A	54.30

Plastic Filler Breather
Types SPB-4 / 5
(Flange Version)



Clamping jaw installation to a single mounting hole



Installation to a six-hole bolt pattern with flange interface similar to DIN 24557, Part 2

Characteristics

Designed to be used as filler ports for hydraulic reservoirs, allowing the reservoir to breathe whilst protecting it from contamination found in harsh environments

Features
- Cap diameter of Ø101 mm / Ø3.98 in
- Either for clamping installation (with 3 clamping jaws and cross-drive screws) or with a six-hole bolt pattern
- Operating temperature range: -40 °C ... +120 °C / -40 °F ... +248 °F

Materials
- Made of non-corrosive materials
- Body and cap made of glass-fibre reinforced Polyamide (PA)
- Sealings made of NBR (Buna-N®)

Contact STAUFF for alternative materials.

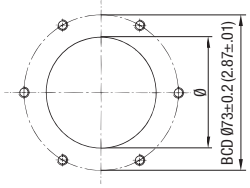
Accessories / Options
- Plastic basket (800 µm)
- Pressurisation up to 0.7 bar / 10 PSI
- Air filter element
- Anti-splash feature
- Plastic dipstick with integrated anti-splash feature
- Plastic dipstick with integrated magnet

Refer to page 020 for details.

Maximum Air Flow Rate
- 1.00 m³/min / 35.31 cfm for SPB-4 / 5

Refer to Catalogue 10 - STAUFF Hydraulic Accessories for detailed air flow curves.

Installation
- Recommended mounting space: Ø122 mm / Ø4.80 in
- Six-hole bolt pattern for flange interfaces similar to DIN 24557, part 2 (type SPB-5):



- 6 sheet metal screws (ISO 7049-St 4.8 x 16-C-H) are included in delivery (type SPB-5); can be replaced by regular M5 socket cap screws (ISO 4762), if required
- Recommended diameters of the screw holes, depending on the sheet thickness of the reservoir (type SPB-5): Ø4.0 mm / Ø.16 in at a thickness of 1.20 mm / .05 in, Ø4.1 mm / Ø.16 in at a thickness of 2.00 mm / .08 in, Ø4.3 mm / Ø.17 in at a thickness of 4.00 mm / .16 in, and Ø4.4 mm / Ø.17 in at a thickness of 5.00 mm / .20 in

Dimensional drawings: All dimensions in mm (in).

Order Codes

SPB	-	4	-	O	-	10	-	S080	-	A	-	D200
①		②		③		④		⑤		⑥		⑦

① Type

Plastic Filler Breather	**SPB**

② Version

Bayonet version for clamping jaw installation to a single mounting hole; Cap diameter Ø101 mm (Ø3.98 in)	**4**
Bayonet Version with six-hole bolt pattern for flange interfaces similar to DIN 24557, part 2; Cap diameter Ø101 mm (Ø3.98 in)	**5**

③ Pressurisation

Without pressurisation (standard option)	**O**
Pressurised at 0.2 bar / 3 PSI	**B0.2**
Pressurised at 0.35 bar / 5 PSI	**B0.35**
Pressurised at 0.7 bar / 10 PSI	**B0.7**

Refer to Catalogue 10 - STAUFF Hydraulic Accessories for details.

④ Air Filter Element (Material / Micron Rating)

10 µm Foam / PUR (standard option)	**10**
40 µm Foam / PUR	**40**
3 µm Inorganic Glass-Fibre, pleated	**E03**
10 µm Filter Paper, pleated	**L10**

Contact STAUFF for alternative materials / micron ratings.

⑤ Basket Option

Plastic basket (105 mm / 4.13 in)	**S080**
Telescopic plastic basket (max. 205 mm / max. 8.07 in)	**S200**
Plastic basket with flange interface similar to DIN 24557, part 2 (95 mm / 3.74 in)	**S095P**
Without basket	**X**

Option S095P is only available for type SPB-5.
Refer to Catalogue 10 - STAUFF Hydraulic Accessories for details.

⑥ Anti-Splash Feature

With anti-splash feature (standard option)	**A**
Without anti-splash feature	**O**

⑦ Dipstick

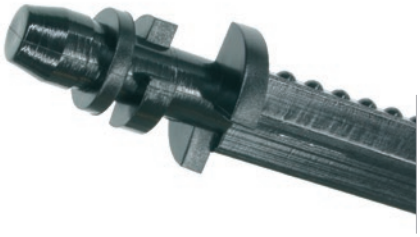
Plastic dipstick (200 mm / 7.88 in) with integrated anti-splash feature	**D200**
Plastic dipstick (300 mm / 11.81 in) with integrated anti-splash feature	**D300**
Plastic dipstick (300 mm / 11.81 in) with integrated magnet	**D300M**
Without dipstick	**(None)**

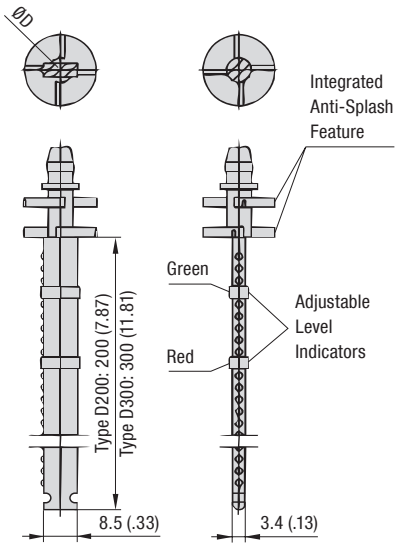
A shorter dipstick length can be achieved by simply cutting down the total length according to individual requirements. When choosing a combination of a basket and a dipstick, the dipstick has to be at least 15 mm / .59 in shorter than the basket.
Refer to page 020 for details.

SPB-4 / 5
Plastic Filler Breather - Flange Version (without pressurisation)

Item No.	Designation	Price
1910000238	SPB-4-O-10-S080-A	52.95
1910000661	SPB-5-O-10-S080-A	74.60

Plastic Dipstick
Types DS-1 / 2 / 3
Anti-Splash Feature





Connection		Code	For Type	Suitable Dipstick*	ØD (mm/in)
Male BSPP Thread (ISO 228)	G1/4	B04	SPB-1	Dipstick Option Not Available	
	G3/8	B06	SPB-1/2	DS-1	10 / .39
	G1/2	B08	SPB-1/2/3	DS-2	14 / .55
			SPBM		
	G3/4	B12	SPB-1/2	DS-3	18 / .71
			SMBT-80	DS-1	10 / .39
	G1	B16	SPB-3	DS-3	18 / .71
			SMBT-80	DS-1	10 / .39
Male NPT Thread (ANSI B1.20.1)	1/4	N04	SPB-1	Dipstick Option Not Available	
	3/8	N06	SPB-1	DS-1	10 / .39
	1/2	N08	SPB-1	DS-2	14 / .55
	3/4	N12	SPB-1/2/3	DS-3	18 / .71
			SMBT-80	DS-1	10 / .39
	1	N16	SPB-3	DS-3	18 / .71
			SMBT-80	DS-1	10 / .39
Plastic Basket	S080		SPB-4/5	DS-3	18 / .71
	S095-P		SPB-5	DS-3	18 / .71
	S200		SPB-4/5	DS-3	18 / .71
w/o Basket		X	SPB-4/5	DS-3	18 / .71
			SMBB-80	DS-1	10 / .39

* When ordered separately, add the length of the dipstick (in mm) to the ordering code (e.g. DS-2-300).

Characteristics

Plastic Dipstick for all Plastic Filler Breathers (except type SPB-1 with connection sizes B04 and N04)

Features

- Integrated Anti-Splash featured design preventing Breather from back-splashing of fluid
- A shorter dipstick length can be achieved by simply cutting down the total length according to individual requirements
- The markings are at 25.4 mm / 1.00 in to assist cutting down the length
- Equipped with two adjustable level indicators in green and red colour
- Two standard lengths of 200 mm / 7.87 in and 300 mm / 11.81 in

Materials

- Polypropylene standard
- Polyamide available as an option
- Optional powerful magnet to collect metal particles from the oil

Note: When choosing a combination of a dipstick and a basket (refer to page 027 for basket options), the dipstick has to be at least 15 mm / .59 in shorter than the basket.

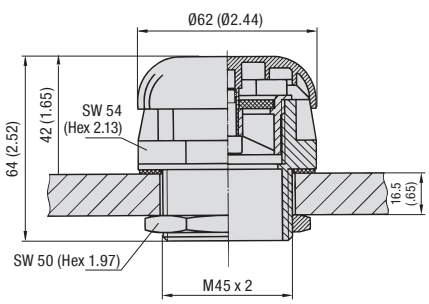
DS-1 / 2 / 3
Plastic Dipstick

Item No.	Designation	Price
1910000644	DS-1-300	13.40
1910000645	DS-2-300	9.00
1910000646	DS-3-300	9.00

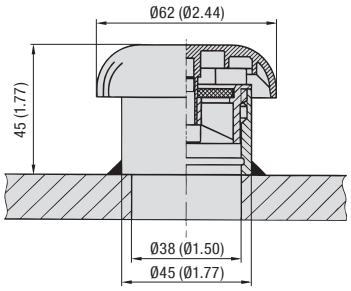
Special designs and alternative materials are available on request. Contact STAUFF for more information.

Dimensional drawings: All dimensions in mm (in).

Plastic Filler Breather
Type SES
(Threaded and Welded Versions)



Threaded Version



Welded Version

Characteristics

Designed to be used as filler ports for hydraulic reservoirs, allowing the reservoir to breathe whilst protecting it from contamination found in harsh environments

Features

- Cap diameter of Ø62 mm / Ø2.44 in
- Threaded version, equipped with male Metric ISO thread M45 x 2 and lock nut, or welded version with welding socket made of Steel (1.0718), untreated
- Supplied with 45 µm air filter element
- Operating temperature range: -40 °C ... +120 °C / -40 °F ... +248 °F

Materials

- Breather cap made of Polyamide (PA)
- Breather body / stud made of Polyamide (PA)
- Nut (type SES-1) made of Steel (1.0718); Polyamide (PA) available on request
- Welding socket (type SES-2) made of Steel (1.0718), untreated; Stainless Steel (V2A) available on request
- Air filter element made of Sintered Bronze
- Basket made of Polyamide (PA)
- Dipstick made of Steel (1.0718)
- Sealings made of NBR (Buna-N®)

Contact STAUFF for alternative materials.

Accessories / Options

- Plastic basket (300 µm)
- Metal dipstick

Maximum Air Flow Rate

- 0.30 m³/min / 10.60 cfm

Contact STAUFF for detailed air flow curves.

Order Codes

SES - 1 - M300

① ② ③

① Type

Plastic Filler Breather	**SES**

② Version

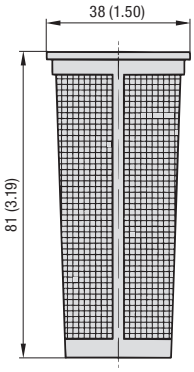
Threaded version	**1**
Welded version	**2**

③ Basket / Dipstick Option

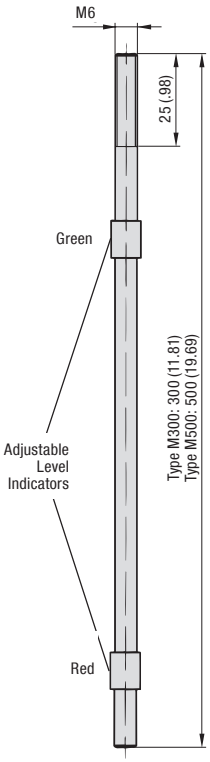
Plastic basket (81 mm / 3.19 in)	**S**
Metal dipstick (300 mm / 11.81 in)	**M300**
Metal dipstick (500 mm / 19.69 in)	**M500**
Without basket / dipstick	**O**

Accessories

Plastic Basket



Metal Dipstick



SES-1
Plastic Filler Breather - Threaded version

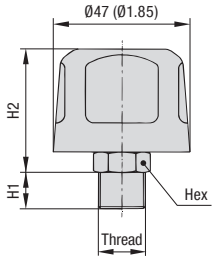
Item No.	Designation	Price
1910000220	SES-1-O	46.40
1910000223	SES-1-S	53.45
1910000221	SES-1-M300	54.85
1910000222	SES-1-M500	57.60

SES-2
Plastic Filler Breather - Welded version

Item No.	Designation	Price
1910000225	SES-2-O	40.85
1910000230	SES-2-S	53.45
1910000226	SES-2-M300	49.20
1910000228	SES-2-M500	50.60

Dimensional drawings: All dimensions in mm (in).

Metal Filler Breather
Type SMBT-47
(Threaded Version)



Characteristics

Designed to be used as filler ports for hydraulic reservoirs, allowing the reservoir to breathe whilst protecting it from contamination found in harsh environments

Features
- Cap diameter of Ø47 mm / Ø1.85 in
- Threaded version, equipped with male BSPP thread (ISO 228) or male NPT thread (ANSI B1.20.1)
- Operating temperature range: -30 °C ... +120 °C / -22 °F ... +248 °F

Materials
- Breather cap made of Steel, zinc/nickel-plated (Fe/Zn Ni 6) and free of hexavalent chromium CrVI (standard option); chrome-plated and epoxy-coated versions available
- Threaded socket made of Steel, zinc-plated

Contact STAUFF for alternative materials.

Accessories / Options
- Air filter element

Maximum Air Flow Rate
- 0.40 m³/min / 14.13 cfm

Contact STAUFF for detailed air flow curves.

Dimensions

Thread	Dimensions (mm/in)		
	H1	H2	Hex
Male G1/4 BSPP (ISO 228)	10 / .39	41 / 2.38	17 / .67
Male G3/8 BSPP (ISO 228)	13 / .51	41 / 2.38	19 / .74
Male G1/2 BSPP (ISO 228)	14 / .55	41 / 2.38	22 / .88

Thread	Dimensions (mm/in)		
	H1	H2	Hex
Male 1/4 NPT (ANSI B1.20.1)	13 / .51	41 / 2.38	17 / .67
Male 3/8 NPT (ANSI B1.20.1)	15 / .59	41 / 2.38	19 / .74

Contact STAUFF for alternative threads.

Order Codes

SMBT - 47C - S - 10 - O - B04 - O

① ② ③ ④ ⑤ ⑥ ⑦

① Type / Version

Metal Filler Breather; Threaded version	**SMBT**

② Cap Diameter / Material / Surface Finishing

Cap diameter Ø47 mm (Ø1.85 in); Breather cap made of Steel, zinc/nickel-plated (standard option)	**47**
Cap diameter Ø47 mm (Ø1.85 in); Breather cap made of Steel, chrome-plated	**47C**
Cap diameter Ø47 mm (Ø1.85 in); Breather cap made of Steel, epoxy-coated	**47E**

③ Label

With STAUFF logo (standard option)	**S**
Neutral design without any logo	**N**

④ Air Filter Element (Material / Micron Rating)

Without Breather Function	**O**
3 µm Filter Paper	**03**
10 µm Foam / PUR (standard option)	**10**
40 µm Foam / PUR	**40**

Contact STAUFF for alternative materials / micron ratings.

⑤ Pressurisation

Without pressurisation (standard option)	**O**

No pressurisation available for this cap diameter.

⑥ Connection Thread (Male)

G1/4	**B04**
G3/8	**B06**
G1/2	**B08**
1/4 NPT	**N04**
3/8 NPT	**N06**

Contact STAUFF for alternative threads.

⑦ Dipstick

Without Dipstick	**O**

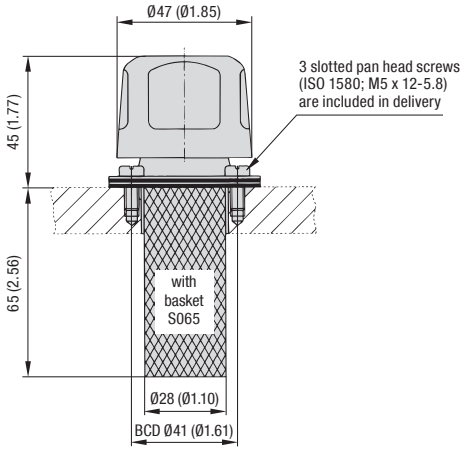
Dipstick SMBT-80 refer to page 024 for more information

SMBT-47
Metal Filler Breather (Threaded Version)

Item No.	Designation	Price
1910002894	SMBT-47C-S-10-O-B04-O	25.45
1910002905	SMBT-47C-S-10-O-B06-O	32.40
1910002906	SMBT-47C-S-10-O-B08-O	33.80
1910002909	SMBT-47C-S-10-O-B12-O	42.20
1910002908	SMBT-47C-S-10-O-B16-O	39.45
1910002917	SMBT-47C-S-10-O-N04-O	22.60
1910003567	SMBT-47C-S-10-O-N06-O	34.00

Dimensional drawings: All dimensions in mm (in).

Metal Filler Breather
Type SMBB-47
(Bayonet Version)



Characteristics

Designed to be used as filler ports for hydraulic reservoirs, allowing the reservoir to breathe whilst protecting it from contamination found in harsh environments

Features
- Cap diameter of Ø47 mm / Ø1.85 in
- Bayonet version with a three-hole bolt pattern
- Operating temperature range:
  -30 °C ... +120 °C / -22 °F ... +248 °F

Materials
- Breather cap made of Steel, zinc/nickel-plated (Fe/Zn Ni 6) and free of hexavalent chromium CrVI (standard option); chrome-plated and epoxy-coated versions available
- Bayonet flange made of Steel, zinc-plated
- Basket made of Steel, zinc-plated
- Sealings made of Cork

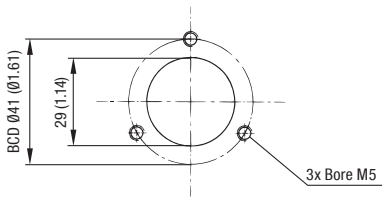
Contact STAUFF for alternative materials.

Accessories / Options
- Metal basket (800 µm)
- Air filter element

Maximum Air Flow Rate
- 0.40 m³/min / 14.13 cfm

Contact STAUFF for detailed air flow curves.

Installation
- Three-hole bolt pattern for flange interfaces:



- 3 slotted pan head screws (ISO 1580 M5 x 12-5.8) are included in delivery; can be replaced by regular M5 bolts, if required

Order Codes

SMBB - 47 - S - 10 - O - C - S065

① ② ③ ④ ⑤ ⑥ ⑦

① Type / Version

Metal Filler Breather; Bayonet version	**SMBB**

② Cap Diameter / Material / Surface Finishing

Cap diameter Ø47 mm (Ø1.85 in); Breather cap made of Steel, zinc/nickel-plated (standard option)	**47**
Cap diameter Ø47 mm (Ø1.85 in); Breather cap made of Steel, chrome-plated	**47C**
Cap diameter Ø47 mm (Ø1.85 in); Breather cap made of Steel, epoxy-coated	**47E**

③ Label

With STAUFF logo (standard option)	**S**
Neutral design without any logo	**N**

④ Air Filter Element (Material / Micron Rating)

Without Breather Function	**O**
3 µm Filter Paper	**03**
10 µm Foam / PUR (standard option)	**10**
40 µm Foam / PUR	**40**

Contact STAUFF for alternative materials / micron ratings.

⑤ Pressurisation

Without pressurisation (standard option)	**O**

No pressurisation available for this cap diameter.

⑥ Sealing Material

Cork (standard option)	**C**

⑦ Basket Option

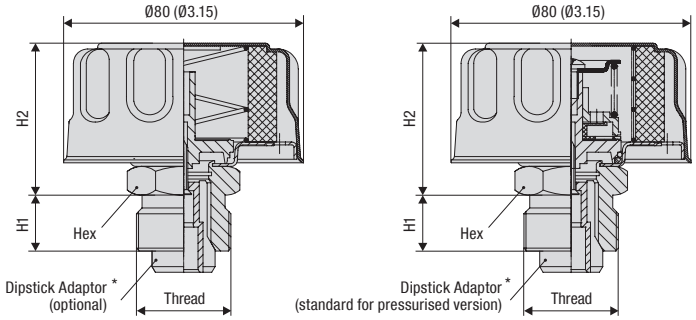
Metal basket (65 mm / 2.56 in) (standard option)	**S065**
Without basket	**O**

SMBB-47
Metal Filler Breather (Bayonet Version)

Item No.	Designation	Price
1910000566	SMBB-47-S-10-O-C-S065	34.95
1910000430	SMBB-47-S-40-O-C-S065	28.60
1910002902	SMBB-47C-S-10-O-C-S065	33.80
6100113300	SMBB-47C-S-40-O-C-S065	26.75

Dimensional drawings: All dimensions in mm (in).

Metal Filler Breather
Type SMBT-80
(Threaded Version)



Without Pressurisation **Pressurised**

* Note: The dipstick adaptor is not available for connection threads G1/2 and 1/2 NPT

Characteristics

Designed to be used as filler ports for hydraulic reservoirs, allowing the reservoir to breathe whilst protecting it from contamination found in harsh environments

Features
- Cap diameter of Ø80 mm / Ø3.15 in
- Threaded version, equipped with male BSPP thread (ISO 228) or male NPT thread (ANSI B1.20.1)
- Operating temperature range: -30 °C ... +120 °C / -22 °F ... +248 °F

Materials
- Breather cap made of Steel, zinc/nickel-plated (Fe/Zn Ni 6) and free of hexavalent chromium CrVI (standard option); chrome-plated and epoxy-coated versions available
- Threaded socket made of Steel, zinc-plated
- Dipstick adaptor made of Polyamide (PA)

Contact STAUFF for alternative materials.

Accessories / Options
- Pressurisation up to 0.7 bar / 10 PSI
- Air filter element
- Dipstick adaptor suitable for plastic dipstick DS-1 (not for connection threads G1/2 and 1/2 NPT), refer to page 020 for details
- Plastic dipstick DS-1 with integrated anti-splash feature (not for connection threads G1/2 and 1/2 NPT)
- Plastic dipstick with integrated magnet
- Oil Demister

Maximum Air Flow Rate
- 0.45 m³/min / 15.89 cfm

Contact STAUFF for detailed air flow curves.

Dimensions

Thread	Dimensions (mm/in)		
	H1	H2	Hex
Male G1/2 BSPP (ISO 228)	14 / .55	54 / 2.13	24 / .94
Male G3/4 BSPP (ISO 228)	16 / .63	54 / 2.13	30 / 1.18
Male G1 BSPP (ISO 228)	19 / .75	54 / 2.13	36 / 1.42

Thread	Dimensions (mm/in)		
	H1	H2	Hex
Male 1/2 NPT (ANSI B1.20.1)	14 / .51	52.5 / 2.07	24 / .94
Male 3/4 NPT (ANSI B1.20.1)	16 / .59	52.5 / 2.07	30 / 1.18
Male G1 NPT (ANSI B1.20.1)	19 / .75	52.5 / 2.07	36 / 1.42

Order Codes

SMBT - 80 - S - 10 - O - B08 - O

① ② ③ ④ ⑤ ⑥ ⑦

① Type / Version

Metal Filler Breather; Threaded version	**SMBT**

② Cap Diameter / Material / Surface Finishing

Cap diameter Ø80 mm (Ø3.15 in); Breather cap made of Steel, zinc/nickel-plated (standard option)	**80**
Cap diameter Ø80 mm (Ø3.15 in); Breather cap made of Steel, chrome-plated	**80C**
Cap diameter Ø80 mm (Ø3.15 in); Breather cap made of Steel, epoxy-coated	**80E**

③ Label

With STAUFF logo (standard option)	**S**
Neutral design without any logo	**N**

④ Air Filter Element (Material / Micron Rating)

Without Breather Function	**O**
3 µm Filter Paper	**03**
10 µm Foam / PUR (standard option)	**10**
40 µm Foam / PUR	**40**

Contact STAUFF for alternative materials / micron ratings.

⑤ Pressurisation

Without pressurisation (standard option)	**O**
Pressurised at 0.35 bar / 5 PSI	**B0.35**
Pressurised at 0.7 bar / 10 PSI	**B0.7**

Refer to Catalogue 10 - STAUFF Hydraulic Accessories for details.

⑥ Connection Thread (Male)

G1/2	**B08**
G3/4	**B12**
G1	**B16**
1/2 NPT	**N08**
3/4 NPT	**N12**
1 NPT	**N16**

Contact STAUFF for alternative threads.

⑦ Dipstick

Without dipstick (standard option)	**O**
With dipstick adaptor suitable for dipstick DS-1 (not for connection threads G1/2 and 1/2 NPT)	**A**
With dipstick adaptor and plastic dipstick DS-1 (300 mm / 11.81 in) with integrated anti-splash feature (not for connection threads G1/2 and 1/2 NPT)	**D300**
Plastic dipstick (300 mm / 11.81 in) with integrated magnet	**D300M**

A shorter dipstick length can be achieved by simply cutting down the total length according to individual requirements.

Note: The dipstick adaptor is required for the subsequent installation of plastic dipsticks DS-1 (refer to page 020 for details), and is included in delivery when ordering a pressurised version. The dipstick adaptor is not available for connection threads G1/2 and 1/2 NPT.

SMBT-80
Metal Filler Breather (without pressurisation)

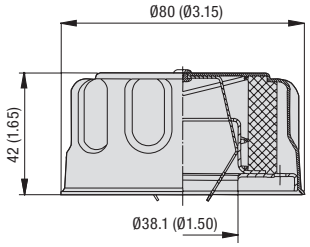
Item No.	Designation	Price
1910002986	SMBT-80C-S-03-O-B08-O	45.00
1910002914	SMBT-80C-S-03-O-B12-O	60.35
1910002903	SMBT-80C-S-10-O-B08-O	36.60
1910002893	SMBT-80C-S-10-O-B12-O	36.60
1910002904	SMBT-80C-S-10-O-B16-O	40.85

SMBT-80
Metal Filler Breather (Pressurised)

Item No.	Designation	Price
1910002899	SMBT-80C-S-10-B0.35-B12-A	57.60
1910002900	SMBT-80C-S-10-B0.7-B12-A	57.60

Dimensional drawings: All dimensions in mm (in).

Metal Breather
Type SMBP-80
(Push-On Version)



Characteristics

Designed to be used as filler ports for hydraulic reservoirs, allowing the reservoir to breathe whilst protecting it from contamination found in harsh environments

Features
- Cap diameter of Ø80 mm / Ø3.15 in
- Push-on version, suitable for pipe diameters up to 38 mm/ 1.50 in
- Operating temperature range: -30 °C ... +120 °C / -22 °F ... +248 °F

Materials
- Breather cap made of Steel, zinc/nickel-plated (Fe/Zn Ni 6) and free of hexavalent chromium CrVI (standard option); chrome-plated and epoxy-coated versions available

Contact STAUFF for alternative materials.

Accessories / Options
- Air filter element

Maximum Air Flow Rate
- 0.45 m³/min / 15.89 cfm

Contact STAUFF for detailed air flow curves.

Order Codes

SMBP - 80 - S - 10 - O

① ② ③ ④ ⑤

① Type / Version

Metal Breather; Push-on version	**SMBP**

② Cap Diameter / Material / Surface Finishing

Cap diameter Ø80 mm (Ø3.15 in); Breather cap made of Steel, zinc/nickel-plated (standard option)	**80**
Cap diameter Ø80 (Ø3.15 in); Breather cap made of Steel, chrome-plated	**80C**
Cap diameter Ø80 (Ø3.15 in); Breather cap made of Steel, epoxy-coated	**80E**

③ Label

With STAUFF logo (standard option)	**S**
Neutral design without any logo	**N**

④ Air Filter Element (Material / Micron Rating)

Without Breather Function	**O**
10 µm Foam / PUR (standard option)	**10**
40 µm Foam / PUR	**40**

Contact STAUFF for alternative materials / micron ratings.

⑤ Dipstick

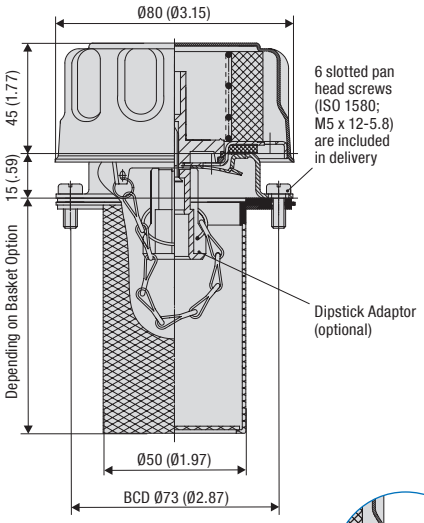
Without dipstick (standard option)	**O**

SMBP-80
Metal Breather (Push-On Version)

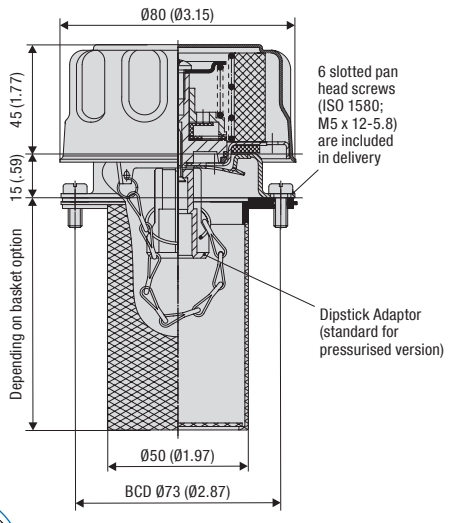
Item No.	Designation	Price
6100112116	SMBP-80C-S-10-0	47.70
1910002912	SMBP-80C-S-40-0	45.00

Dimensional drawings: All dimensions in mm (in).

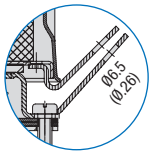
Metal Filler Breather
Type SMBB-80
(Bayonet Version)



Without Pressurisation



Pressurised



Locking Feature

(Recommended mounting space: Ø126 mm / Ø4.96 in)

Characteristics

Designed to be used as filler ports for hydraulic reservoirs, allowing the reservoir to breathe whilst protecting it from contamination found in harsh environments

Features

- Cap diameter of Ø80 mm / Ø3.15 in
- Bayonet version with a six-hole bolt pattern for flange interfaces similar to DIN 24557, part 2
- Operating temperature range: -30 °C ... +120 °C / -22 °F ... +248 °F

Materials

- Breather cap made of Steel, zinc/nickel-plated (Fe/Zn Ni 6) and free of hexavalent chromium CrVI (standard option); chrome-plated and epoxy-coated versions available
- Bayonet flange made of Steel, zinc-plated
- Basket made of Steel, zinc-plated or Polyamide (PA)
- Dipstick adaptor made of Polyamide (PA)
- Sealings made of Cork (for filler breathers without pressurisation) or NBR (Buna-N®) (for pressurised filler breathers)

Contact STAUFF for alternative materials.

Accessories / Options

- Metal or plastic basket (800 µm)
- Pressurisation up to 0.7 bar / 10 PSI
- Air filter element
- Locking feature
- Dipstick adaptor (suitable for plastic dipstick DS-1), refer to page O20 for details
- Plastic dipstick with integrated anti-splash feature
- Plastic dipstick with integrated magnet
- Weld Riser, refer to page O30 for details

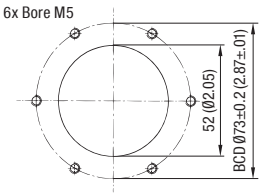
Maximum Air Flow Rate

- 0.45 m³/min / 15.89 cfm

Contact STAUFF for detailed air flow curves.

Installation

- Six-hole bolt pattern for flange interfaces similar to DIN 24557, part 2:



- 6 slotted pan head screws (ISO 1580 M5 x 12-5.8) are included in delivery; can be replaced by regular M5 bolts, if required

Dimensional drawings: All dimensions in mm (in).

Order Codes

SMBB	-	80C	-	S	-	O	-	10	-	O	-	C	-	S080	-	O
①		②		③		④		⑤		⑥		⑦		⑧		⑨

① Type / Version

Metal Filler Breather; Bayonet version	**SMBB**

② Cap Diameter / Material / Surface Finishing

Cap diameter Ø80 mm (Ø3.15 in); Breather cap made of Steel, zinc/nickel-plated (standard option)	**80**
Cap diameter Ø80 mm (Ø3.15 in); Breather cap made of Steel, chrome-plated	**80C**
Cap diameter Ø80 mm (Ø3.15 in); Breather cap made of Steel, epoxy-coated	**80E**

③ Label

With STAUFF logo (standard option)	**S**
Neutral design without any logo	**N**

④ Locking Feature

Without locking feature (standard option)	**O**
With locking feature (see drawing above)	**L**

⑤ Air Filter Element (Material / Micron Rating)

Without Breather Function	**O**
3 µm Filter Paper	**03**
10 µm Foam / PUR (standard option)	**10**
40 µm Foam / PUR	**40**

Contact STAUFF for alternative materials / micron ratings.

⑥ Pressurisation

Without pressurisation (standard option)	**O**
Pressurised at 0.35 bar / 5 PSI	**B0.35**
Pressurised at 0.7 bar / 10 PSI	**B0.7**

Refer to Catalogue 10 - STAUFF Hydraulic Accessories for details.

⑦ Sealing Material

Cork (for filler breathers without pressurisation)	**C**
NBR (Buna-N®) (for pressurised filler breathers)	**B**

⑧ Basket Option

Without basket	**O**
Metal basket (80 mm / 3.15 in) (standard option)	**S080**
Plastic basket (95 mm / 3.74 in)	**S095P**
Metal basket (100 mm / 3.94 in)	**S100**
Metal basket (150 mm / 5.91 in)	**S150**
Metal basket (200 mm / 7.87 in)	**S200**

⑨ Dipstick

Without dipstick (standard option)	**O**
Dipstick adaptor (suitable for dipstick DS-1)	**A**
With metal dipstick (200mm / 7.87 in)	**M200**
With dipstick adaptor and plastic dipstick DS-1 (300 mm / 11.81 in) with integrated anti-splash feature	**D300**
Plastic dipstick (300 mm / 11.81 in) with integrated magnet	**D300M**

A shorter dipstick length can be achieved by simply cutting down the total length according to individual requirements.

The dipstick adaptor is required for the installation of plastic dipsticks DS-1.
Note: The dipstick adaptor is supplied standard for pressurised version.

Metal Filler Breather
Type SMBB-80
(without Pressurisation)

SMBB-80
Metal Filler Breather (without pressurisation)

Item No.	Designation	Price
1910002890	SMBB-80C-S-0-10-0-C-S080-0	59.00
1910002889	SMBB-80C-S-0-10-0-C-S150-0	64.65

SMBB-80
Metal Filler Breather (without pressurisation)
with Locking Device

Item No.	Designation	Price
1910002891	SMBB-80C-S-L-10-0-C-S080-0	66.00
1910002980	SMBB-80C-S-L-10-0-C-S150-0	68.80

SMBB-80
Metal Filler Breather (without pressurisation)
Metal Basket & Dipstick

Item No.	Designation	Price
6100081073	SMBB-80C-N-0-10-0-B-S200-M200	134.90

Spare
Metal Basket
Length 80 mm / 150 mm

Item No.	Designation	Price
1930000276	S-080-M-F-SMBB-80	11.35
1930000605	S-150-M-F-SMBB-80	14.80

Metal Filler Breather
Type SMBB-80
(Pressurised)

SMBB-80
Metal Filler Breather (Pressurised)

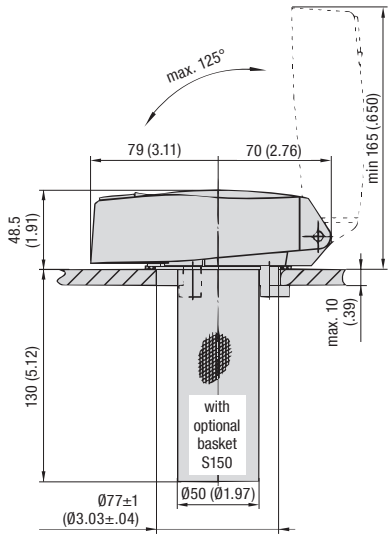
Item No.	Designation	Price
1910002895	SMBB-80C-S-0-10-B0.35-B-S080-A	63.25
1910002897	SMBB-80C-S-0-10-B0.7-B-S080-A	64.65
1910002896	SMBB-80C-S-0-10-B0.35-B-S150-A	68.80
1910002898	SMBB-80C-S-0-10-B0.7-B-S150-A	68.80

SMBB-80
Metal Filler Breather (Pressurised)
with Locking Device

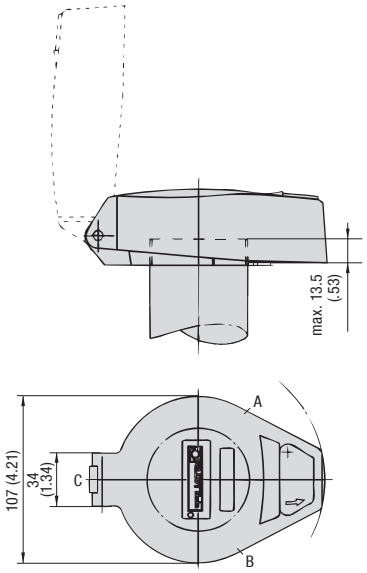
Item No.	Designation	Price
1910002911	SMBB-80C-S-L-10-B0.35-B-S080-A	68.80
1910002913	SMBB-80C-S-L-10-B0.7-B-S150-A	78.75

Lockable Metal Filler Breather
Type SMBL
(Clamping, Threaded and Push-On Version)

Clamping version
with metal basket
(150 mm / 5.91 in)



Clamping Version



Threaded Version

Recommended mounting space: Ø162 mm / Ø6.38 in
2 locking screws M6 x 6 (DIN 916) at positions A and B

Push-On Version

3 locking screws M6 x 6 (DIN 916) at positions A, B and C

Characteristics

Designed to be used as lockable filler ports for hydraulic reservoirs, allowing the reservoir to breathe whilst protecting it from contamination found in harsh environments

Features

- Available as clamping version (with 3 clamping jaws), as a threaded version (with female BSPP thread) or push-on version, suitable for standpipe mounting with pipe diameters up to 77.5 mm/ 3.05 in (secured by 3 locking screws)
- Key-lockable cap (2 keys included)
- Lock protected by rotating flap
- Operating temperature range: -30 °C ... +100 °C / -22 °F ... +212 °F
- Air flow in both directions, one direction only or no direction

Materials

- Breather cap made of Aluminium, lacquered (light-grey, RAL 9022)
- Breather body made of Aluminium and Steel, zinc-plated
- Basket made of Steel, zinc-plated or Polypropylene (PP)
- Sealings made of NBR (Buna-N®) (standard option); FKM (Viton®) sealed version available

Contact STAUFF for alternative materials.

Accessories / Options

- Metal or plastic basket (800 µm; telescopic)
- Air filter element

Order Codes

SMBL	-	C	-	10	-	1	-	S150	-	B	-	O
①		②		③		④		⑤		⑥		⑦

① Type

Lockable Metal Filler Breather	**SMBL**

② Version

Clamping version with 3 clamping jaws; Installation to a tank mounting hole of Ø77±1 mm / Ø3.03±.04 in	**C**
Threaded version with female G2 BSPP thread	**G32**
Threaded version with female G2-1/2 BSPP thread	**G40**
Push-on version for standpipe mounting	**P**

③ Air Filter Element (Material / Micron Rating)

Without Breather Function	**0**
10µm Foam / PUR (standard option)	**10**
40µm Foam / PUR	**40**

Contact STAUFF for alternative materials / micron ratings

④ Air Flow

Air flow in both directions (standard option)	**1**
No air flow	**2**
Air flow only into the tank	**3**

⑤ Basket Option

Without basket	**O**
Metal basket (150 mm / 5.91 in) (standard option)	**S150**
Plastic basket (80 mm / 3.15 in)	**S080**
Telescopic plastic basket (max. 205 mm / max. 8.07 in)	**S200**

The baskets of the SMBB-47/80 series cannot be used in conjunction with the SMBL series.

⑥ Sealing Material

NBR (Buna-N®) (standard option)	**B**
FKM (Viton®)	**V**

⑦ Cap Design

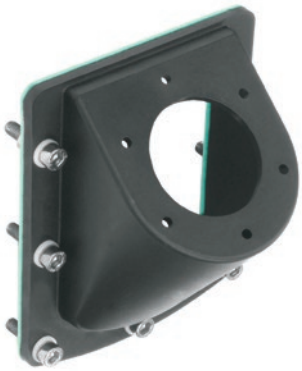
Breather cap made of Aluminium, lacquered (light-grey, RAL 9022)	**O**

SMBL
Lockable Metal Breather
(Clamping, Threaded and Push-On Version)

Item No.	Designation	Price
1910001712	SMBL-C-0-2-S150-B-0	308.75
1910001713	SMBL-C-10-1-S150-B-0	340.20
1910002133	SMBL-C-10-3-S150-B-0	352.15
1910001714	SMBL-C-40-1-S150-B-0	329.35

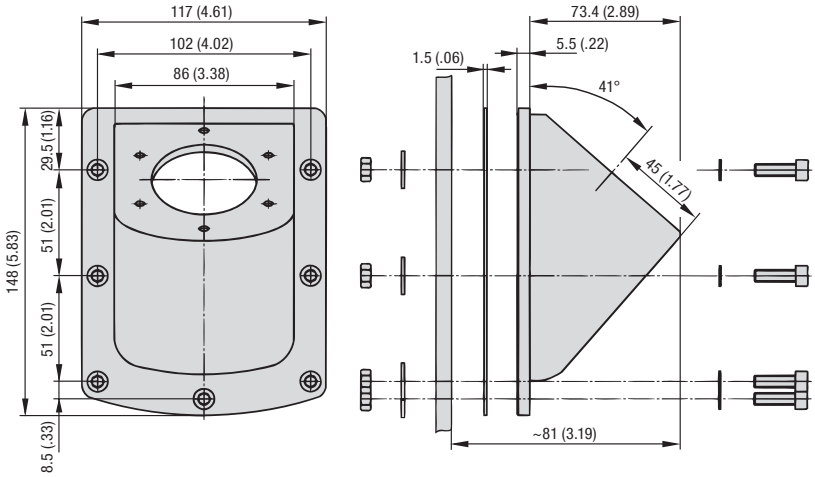
Dimensional drawings: All dimensions in mm (in).

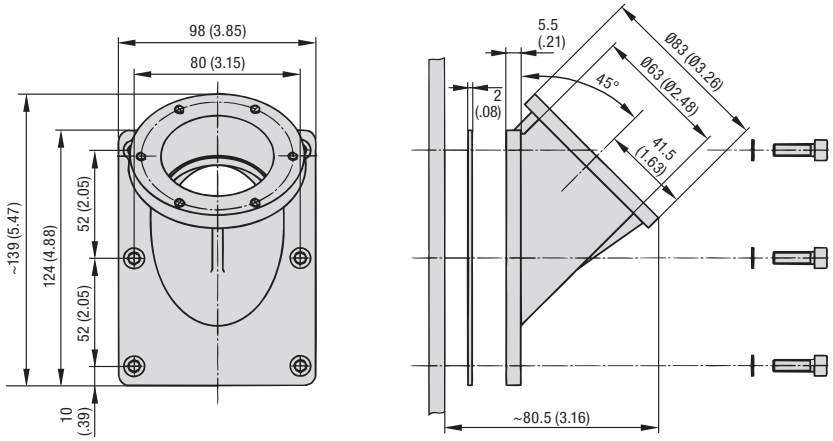
Side Mount Bracket
Type SMBB-ASMB-1 / 2



Type SMBB-ASMB-1
Polyamide (PA) Version

Type SMBB-ASMB-2
Aluminium Version





Characteristics

Lateral fastening of filler breathers with a six-hole flange connection similar to DIN 24557, part 2 to vertical or sloped walls of hydraulic reservoirs; ideal for applications in which space is limited

SMBB-ASMB-1 (Polyamide)

Suitability
- Suitable for Plastic Filler Breathers SPB-5 and SPBN (bayonet version) and Metal Filler Breathers SMBB-80

Materials
- Mounting bracket made of Polyamide (PA)
- Seal plate made of Klingerit
- Screws and hex nuts made of Steel, zinc-plated
- Washers made of Steel, zinc-plated
- Plastic spacers made of Polyamide (PA)

Scope of Delivery
- 1 mounting bracket
- 1 seal plate
- 7 socket cap screws M6 x 25 (ISO 4762)
- 7 plastic spacers 6.4 (DIN 125)
- 7 hex nuts M6 (ISO 4032)
- 7 washers 6.4 (DIN 9021)
- 6 sheet metal screws 4.8x13 (ISO 7049)

Installation
- Bolted to the side of the reservoir
- Bayonet flange of filler breather is placed on top
- Flange interface similar to DIN 24557, part 2 with 6 equally spaced mounting bores Ø4.5 mm / Ø.18 in (BCD Ø71±0.2 mm / Ø2.80±.01 in)

SMBB-ASMB-2 (Aluminium)

Suitability
- Suitable for Plastic Filler Breathers SPB-5 and SPBN (bayonet version) and Metal Filler Breathers SMBB-80

Materials
- Mounting bracket made of Aluminium
- Seal plate made of NBR (Buna-N®)
- Screws made of Steel, phosphated
- Washers made of gasket paper

Scope of Delivery
- 1 mounting bracket
- 1 seal plate
- 6 socket cap screws M6 x 20 (ISO 4762)
- 6 plastic spacers 6.4 (DIN 125)

Installation
Bolted to the side of the reservoir
- Bayonet flange of filler breather is placed on top
- Flange interface similar to DIN 24557, part 2 with 6 equally spaced bores M5 (BCD Ø73±0.2 mm / Ø2.87±.01 in)

Order Codes

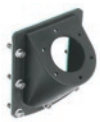
SMBB-ASMB - 1
① ②

① Type

Side Mount Bracket	**SMBB-ASMB**

② Housing Material

Polyamide (PA)	**1**
Aluminium	**2**



SMBB-ASMB Polyamide
Side Mount Bracket

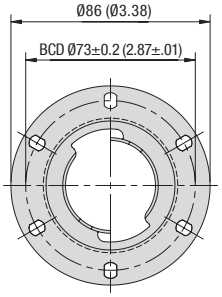
Item No.	Designation	Price
1910000696	SMBB-ASMB-1	70.30

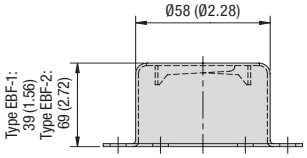
SMBB-ASMB Aluminium
Side Mount Bracket

Item No.	Designation	Price
1910000698	SMBB-ASMB-2	168.15

Dimensional drawings: All dimensions in mm (in).

Extended Bayonet Flange
Type EBF





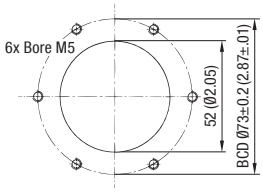
Characteristics

Designed to raise filler breathers either 24 mm / .94 in or 54 mm / 2.12 in above the actual mounting surface of the reservoir to prevent contamination from blocking the filter element

Suitability
- Suitable for Metal Filler Breathers SMBB-80 and Plastic Filler Breathers SPBN (bayonet version)
- Replaces the existing bayonet flanges of these breathers

Materials
- Bayonet flange made of Steel, zinc-plated

Installation
- Six-hole bolt pattern for flange interfaces similar to DIN 24557, part 2:



- Supplied without gaskets and bolts

Order Codes

EBF - 2 - A
① ② ③

① Type

Extended Bayonet Flange	**EBF**

② Size

Total height of 39 mm (1.56 in)	**1**
Total height of 69 mm (2.72 in)	**2**

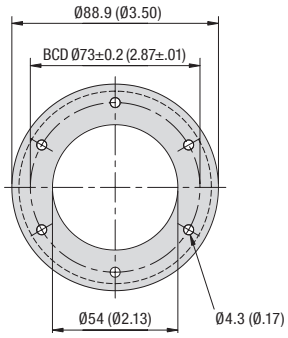
③ Anti-Splash Feature

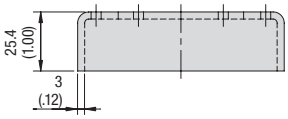
Without anti-splash feature (standard option)	**(None)**
With anti-splash feature	**A**

EBF
Extended Bayonet Flange

Item No.	Designation	Price
1910003586	EBF-1	21.70
1910002884	EBF-2	24.05
1910021021	EBF-2-A	63.25

Weld Riser
Type WR





Characteristics

Designed to raise filler breathers 25.4 mm / 1.00 in above the actual mounting surface of the reservoir to prevent contamination from blocking the filter element whilst eliminating the requirement to drill and tap on the reservoir

Suitability
- Suitable for Metal Filler Breathers SMBB-80 (refer to page 026) as well as Plastic Filler Breathers SPB-5 (refer to page 019) and SPBN (bayonet version) and all components with a six-hole flange connection similar to DIN 24557, part 2

Materials
- Weld riser made of Steel, untreated

Installation
- Welded to the top of the reservoir
- No requirement to drill and tap on the reservoir
- Bayonet flange of filler breather is placed on top

Order Code

WR - 1
① ②

① Type

Weld Riser	**WR**

② Size

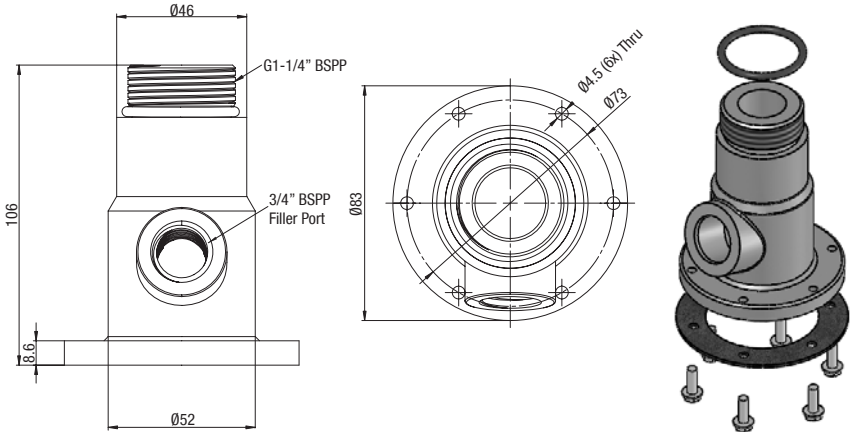
Total height of 25.4 mm (1.00 in)	**1**

WR
Weld Riser

Item No.	Designation	Price
1910003587	WR-1	35.20

Dimensional drawings: All dimensions in mm (in).

Filler Breather Adaptor (Aluminium)
BA-06-G20-B



Product Description

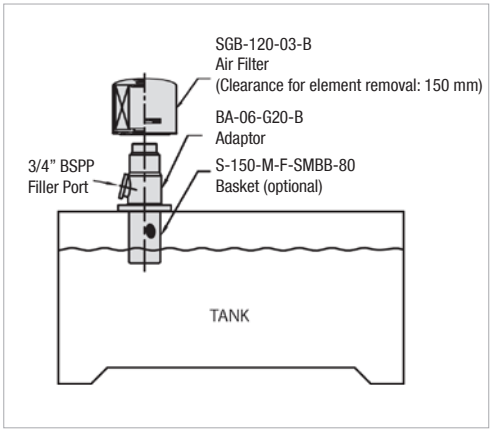
Designed to be used as filler ports for hydraulic reservoirs, allowing the reservoir to breathe whilst protecting it from contamination found in harsh environments.

Features
- Filler Plug 3/4" BSPP
- Six hole bolt pattern for flange interfaces similar to DIN 24557 part 2

Material
- Cast Aluminium
- Supplied with O-Ring, gasket and mounting hardware

Accessories / Options
- Air Breather 3 micron
- Metal Basket

Application Example



Order Code

BA - 06 - G20 - B
① ② ③ ④

① Type
Filler Breather Adaptor (Aluminium)	**BA**

② Mounting
6 Mounting Holes	**06**

③ Thread
1-1/4" BSPP for BA-06 with 3/4" BSPP filler port	**G20**

④ Seal Material
NBR (Buna-N®) standard	**B**

Note: Supplied with O-Ring, gasket and mounting hardware

Order Codes - Assembly

SGB - 120 - 03 - BA-06 - S-150
① ② ③ ④ ⑤

① Type
Giant Air Breather	**SGB**

② Size
Diameter of Ø130 mm (Ø5.12 in)	**120**

③ Filter Material / Micron Rating
3µm Synthetic Fibre	**03**

④ Adaptor Option
Filler Breather Adaptor (Aluminium) 6 Mounting Holes 1-1/4" BSPP for BA-06 with 3/4" BSPP filler port NBR (Buna-N®) standard	**BA-06**

⑤ Basket Option
Without Basket	**(None)**
Metal Basket (150 mm / 5.91 in)	**S-150**

Contact STAUFF for more information

Metal Filler Breather Adaptor and Assembly

BA
Filler Breather Adaptor

Item No.	Designation	Price
6100218016	BA-06-G20-B	142.60

SGB Air Breather (3µm)
and BA Filler Breather Adaptor

Item No.	Designation	Price
6100218025	SGB-120-03-BA-06	276.80

Accessories

Air Breather

Item No.	Designation	Price
1910000486	SGB-120-03-B	134.20

Metal Basket
Length 150 mm

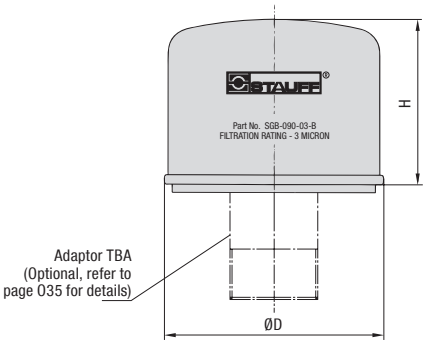
Item No.	Designation	Price
1930000605	S-150-M-F-SMBB-80	14.80

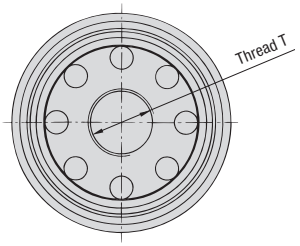
Dimensional drawings: All dimensions in mm (in).

Kommissionier-Shuttl
WALTER II
STAUFF

	Giant Air Breathers	**034 - 035**
	Giant Air Breather SGB	**034**
	Breather Adaptor TBA	**035**
	Desiccant Air Breathers	**036 - 041**
	SDB	**036**
	SVDB (Disposable Version)	**037**
	SDB-CV (with Check Valves)	**038 - 039**
	Adaptor Plate AP	**040**
	Visual Contamination Indicator FM	**040**
	Drying Agent / Refilling Material / Replacement Washer RD / RC / Washer-SDB	**041**

Giant Air Breather
Type SGB





Characteristics

Originally designed to be used as replaceable air filter elements for STAUFF Desiccant Breathers, they can also be used as separate air filters for hydraulic reservoirs

Features

- Diameter of Ø68 mm / Ø2.68 in (SGB-060), Ø100 mm / Ø3.94 in (SGB-090) or Ø130 mm / Ø5.12 in (SGB-120)
- Equipped with female BSPP thread (ISO 228)
- Including sealing made of NBR (Buna-N®)
- Operating temperature range: -32 °C ... +100 °C / -25 °F ... +212 °F

Accessories / Options

- Adaptors (for direct installation on top of hydraulic reservoirs)

For adaptors refer to page 031 (Filler Breather Adaptor) and 035 (Breather Adaptor), or contact STAUFF for more information.

Air Flow

- Maximum air flow rates: 0.05 m³/min / 1.77 cfm for SGB-060, 0.70 m³/min / 24.71 cfm for SGB-090, and 1.50 m³/min / 52.97 cfm for SGB-120

Dimensions and Filter Specifications

Type	Thread T*	Dimensions (mm/in) ØD	H	Filter Material	Micron Rating	Filter Surface	Max. Air Flow Rate
SGB-060-03-B	Female M20 x 1.5 (ISO 13-2)	68	60	Synthetic Fibre	3 µm	415 cm²	0.05 m³/min
		2.68	2.36			63 in²	1.77 cfm
SGB-090-03-B	Female G3/4 BSPP (ISO 228)	100	64	Synthetic Fibre	3 µm	752 cm²	0.70 m³/min
		3.94	2.52			115 in²	24.71 cfm
SGB-120-03-B	Female G1-1/4 BSPP (ISO 228)	130	100	Synthetic Fibre	3 µm	2095 cm²	1.50 m³/min
		5.12	3.94			320 in²	52.97 cfm

Use adaptors TBA to change female BSPP thread into male BSPP or male NPT thread. Refer to page 035 for details.

Order Codes

SGB - 090 - 03 - B - A

① ② ③ ④ ⑤

① Type

Giant Air Breather	**SGB**

② Size

Diameter of Ø68 mm (Ø2.68 in)	**060**
Diameter of Ø100 mm (Ø3.94 in)	**090**
Diameter of Ø130 mm (Ø5.12 in)	**120**

③ Filter Material / Micron Rating

3 µm Synthetic Fibre	**03**

Contact STAUFF for alternative materials / micron ratings.

④ Connection Thread

Female BSPP thread (according to dimensions table above)	**B**

⑤ Adaptor Option

Without adaptor	**(None)**
With adaptor TBA-075-B (for SGB-090-03-B) or TBA-125-B (for SGB-120-03-B)	**AD**
With adaptor BA-06-G20-B (for SGB-120-03-B) refer to page 031 for details	**A-06**

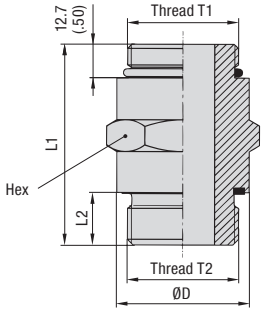
Option A is only available for type SGB-090 and SGB 120

If required, Giant Air Breathers SGB can also be supplied in combination with a range of additional adaptors. Contact STAUFF for more information.

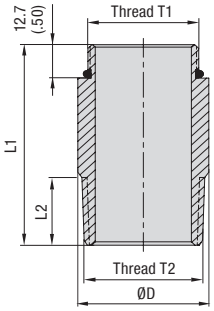
SGB
Giant Air Breather

Item No.	Designation	Price
1910003480	SGB-060-03-B	106.70
1910000485	SGB-090-03-B	103.05
1910000890	SGB-090-03-B-A	174.65
1910000486	SGB-120-03-B	134.20
1910000891	SGB-120-03-B-A	195.30

Breather Adaptor
Type TBA



TBA-038-B
TBA-075-B
TBA-125-B



TBA-075
TBA-120
TBA-125

Characteristics

Converts from female threaded Giant Air Breather or Spin-On Filter Element to a male thread, and therefore allows for direct installation on top of hydraulic reservoirs

Features
- Several thread combinations available to suit most common Spin-On filter elements
- Versions with male BSPP threads on both ends are equipped with hex to simplify installation
- Sealings included in delivery

Materials
- Adaptor made of Steel, zinc-plated
- Sealings made of NBR (Buna-N®)

Contact STAUFF for alternative materials.

Order Codes and Dimensions

Thread T1	Thread T2	Dimensions (mm/in) L1	L2	ØD	Hex	For Use with
Male G3/4 BSPP (ISO 228)	Male G3/4 BSPP (ISO 228)	57	16	32	32	Giant Air Breathers SGB-090 Desiccant Air Breathers SVDB-093 Desiccant Air Breathers SVDB-096 Spin-On Series SF-35 Spin-On Series SF-36
		2.24	.63	1.26	1.26	
Male 1-1/2–16 UNF (ANSI B1.1)	Male 1-1/4 NPT (ANSI B1.20.1)	76	26	45		Spin-On Series SF-67
		3.00	1.01	1.77		
Male G1-1/4 BSPP (ISO 228)	Male G1-1/4 BSPP (ISO 228)	76	20	50	50	Giant Air Breathers SGB-120 Spin-On Series SF-57 Spin-On Series SF-58
		3.00	.79	1.97	1.97	

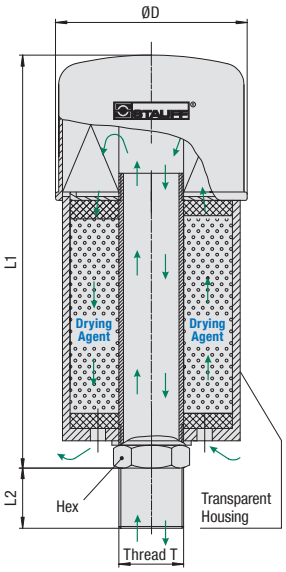
Refer to Catalogue 9 - STAUFF Filtration Technology for technical details on Spin-On filter elements.

Breather Adaptor
TBA

Item No.	Designation	Price
1910000707	TBA-075-B12-B12-B	71.60
1910021163	TBA-125-U24-N20-B	65.10
1910000706	TBA-125-B20-B20-B	221.25

Dimensional drawings: All dimensions in mm (in).

Desiccant Air Breather including Air Filter Element Type SDB



Drying Agent

Capable of changing colours with increasing moisture

ACTIVE

REPLACE

This product does not contain any dangerous substances, according to EC Council directives 99/45/EC and 2001/60/EC.

Characteristics

Combination of air breather and water removal filter

When a reservoir or gearbox breathes, air containing water vapour is ingested into the system. Temperature fluctuations will cause this water vapour to condense, which can speed up the oxidation of the fluid and lead to damage in the system.

While inhaling, Desiccant Air Breathers SDB first dry the air as it passes through the drying agent. The air then passes through a 3µm air filter element to remove any solid contamination particles.

As moisture is absorbed, the drying agent will gradually change from red to orange. When it is orange, replace the drying agent. If required, an optional visual indicator gives an indication of the status of the air breather. With the moisture absorbed, the oxidation process can be decreased and the lifetime of the oil and the entire machinery will be extended.

Desiccant Air Breathers SDB can also be re-fitted with a layer of active carbon (1/3) and a layer of regular drying agent (2/3) for vapour filtration.

Features

- Available in 4 different sizes
- Diameter of Ø100 mm / Ø3.94 in or Ø130 mm / Ø5.12 in
- Refillable with drying agent (non-toxic ZR gel grain) or a mix of drying agent and active carbon
- Replaceable air filter element SGB
- Connection: Male BSPP thread (ISO 228) on Stainless Steel tube
- Available with adaptor plate to simplify installation and to enable the use of a visual contamination indicator
- Operating temperature range: -40 °C ... +90 °C / -40 °F ... +194 °F*

* Note: The operation of the Desiccant Air Breather may vary at temperatures below 0°C / 32°F due to very low humidity %.

Accessories / Spare Parts

Adaptor plate
- for SDB-093/2 and SDB-096/2: **AP-1**
- for SDB-121/2 and SDB-122/2: **AP-2**

Visual contamination indicator
- for all sizes (in conjunction with adaptor plate only): **FM**

Drying agent refilling material (supplied in air tight container, refer to page 041).
- for SDB-093/2 (300 cm³ / 18.3 in³): **RD-093**
- for SDB-096/2 (600 cm³ / 26.6 in³): **RD-096**
- for SDB-121/2 (1000 cm³ / 61.0 in³): **RD-121**
- for SDB-122/2 (2000 cm³ / 122.0 in³): **RD-122**

Active carbon refilling material (supplied in airtight container)
- for SDB-093/2, SDB-096/2 and SDB-121/2 (300 cm³ / 18.3 in³): **RC-093/096/121**
- for SDB-122/2 (600 cm³ / 18.3 in³): **RC-122**

Note: Use one layer of active carbon (1/3) and one layer of regular drying agent (2/3).

Replacement air filter element (sealing included)
- for SDB-093/2 and SDB-096/2: **SGB-090-03-B**
- for SDB-121/2 and SDB-122/2: **SGB-120-03-B**

Order Codes

SDB - 122 - RC - AP - FM / 2

① ② ③ ④ ⑤ ⑥

① Type

Desiccant Air Breather	**SDB**

② Max. Water Absorption and Size

86 g / .19 lbs at Ø100 mm / Ø3.94 in	**093**
172 g / .38 lbs at Ø100 mm / Ø3.94 in	**096**
288 g / .63 lbs at Ø130 mm / Ø5.12 in	**121**
576 g / 1.27 lbs at Ø130 mm / Ø5.12 in	**122**

Refer to the table below for further technical details.

③ Drying Agent Material

Regular drying agent (standard option)	**(None)**
One layer of active carbon (1/3) and one layer of regular drying agent (2/3) for vapour filtration	**RC**

④ Adaptor Plate

Without adaptor plate	**(None)**
With adaptor plate	**AP**

⑤ Contamination Indicator

Without contamination indicator	**(None)**
With visual contamination indicator FM (in conjunction with adaptor plate AP only) Refer to page 040 for details.	**FM**

⑥ Design Code

Design Code 2	**2**

Dimensions and Technical Data

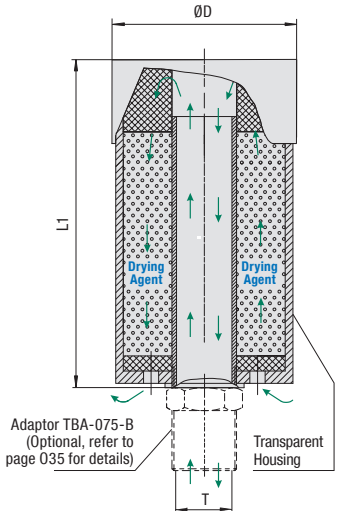
Thread T	Dimensions (mm/in)				Weight (g/lbs)		Volume (cm³/in³)	Max. Water Absorption	Air Filter Elements				
	ØD	L1*	L2*	Hex	Complete Unit	Drying Agent	Drying Agent	(g/lbs)	Type	Filter Material	Micron Rating	Filter Surface	Max. Air Flow Rate
Male G3/4 BSPP (ISO 228)	98	160	18	32	1200	225	300	86	SGB-090-03-B	Synthetic Fibre	3µm	752 cm²	0.70 m³/min
	3.86	6.30	.71	1.26	2.65	.50	18.3	.19				115 in²	24.71 cfm
Male G3/4 BSPP (ISO 228)	98	220	18	32	1500	450	600	172	SGB-090-03-B	Synthetic Fibre	3µm	752 cm²	0.70 m³/min
	3.86	8.66	.71	1.26	3.31	.99	36.6	.38				115 in²	24.71 cfm
Male G1-1/4 BSPP (ISO 228)	130	258	25	50	2700	750	1000	288	SGB-120-03-B	Synthetic Fibre	3µm	2095 cm²	1.50 m³/min
	5.12	10.16	.98	1.98	5.92	1.65	61.0	.63				320 in²	52.97 cfm
Male G1-1/4 BSPP (ISO 228)	130	355	25	50	4000	1500	2000	576	SGB-120-03-B	Synthetic Fibre	3µm	2095 cm²	1.50 m³/min
	5.12	13.98	.98	1.98	8.82	3.31	122.0	1.27				320 in²	52.97 cfm

* ± 2 mm / .08 in

SDB Desiccant Air Breather

Item No.	Designation	Price
1910000481	SDB-093/2	460.15
1910000482	SDB-096/2	494.25
1910000483	SDB-121/2	571.25
1910000484	SDB-122/2	759.85

Desiccant Air Breather (Economy Version)
Type SVDB



Drying Agent
Capable of changing colours with increasing moisture

ACTIVE

REPLACE

This product does not contain any dangerous substances according to EC Council directives 99/45/EC and 2001/60/EC.

Characteristics

Combination of air breather and water removal filter

When a reservoir or gearbox breathes, air containing water vapour is ingested into the system. Temperature fluctuations will cause this water vapour to condense which can speed up the oxidation of the fluid and lead to damage in the system.

Desiccant Air Breathers SVDB are a light-weight alternative to the proven SDB series, offering an almost identical filtration and absorption performance.
While inhaling, Desiccant Air Breathers SVDB also first dry the air as it passes through the drying agent. The air then passes through a 10µm coarse filter to remove any solid contamination particles.

As moisture is absorbed, the drying agent will gradually change from red to orange. When it is orange, replace the entire unit. If required, an optional visual indicator gives an indication of the status of the air breather. With the moisture absorbed, the oxidation process can be decreased, and the lifetime of the oil and the entire machinery will be extended.

Features
- Light-weight alternative to the SDB series
- Available in 2 different sizes
- Diameter of Ø94 mm / Ø3.70 in
- Filled with drying agent (non-toxic ZR gel grain)
- Connection: Female BSPP thread (ISO 228) in Plastic housing
- Operating temperature range:
  -40 °C ... +90 °C / -40 °F ... +194 °F*
  * Note: The operation of the Desiccant Air Breather may vary at temperatures below 0°C / 32°F due to very low humidity %.

  Note that neither the air filter element nor the drying agent can be replaced when saturated.

Accessories / Spare Parts

Connection adaptor (refer to page 035 for details)
- for all sizes: **TBA-075-B**

Adaptor plate
- for all sizes (in conjunction with adaptor plate only): **AP-1**

Visual contamination indicator
- for all sizes (in conjunction with adaptor plate only): **FM**

Order Codes

SVDB - 096 - A - AP - FM
① ② ③ ④ ⑤

① Type
Desiccant Air Breather (Economy Version)	**SVDB**

② Max. Water Absorption and Size
86 g / .19 lbs at Ø94 mm / Ø3.70	**093**
172 g / .38 lbs at Ø94 mm / Ø3.70	**096**

Refer to the table below for further technical details.

③ Connection Adaptor
Without connection adaptor	**(None)**
With connection adaptor TBA-075-B	**A**

Refer to page 035 for details.
Contact STAUFF for alternative adaptors.

④ Adaptor Plate
Without adaptor plate	**(None)**
With adaptor plate (in conjunction with connection adaptor A only)	**AP**

⑤ Contamination Indicator
Without contamination indicator	**(None)**
With visual contamination indicator FM (in conjunction with adaptor plate AP only)	**FM**

Refer to page 040 for details.

Dimensions and Technical Data

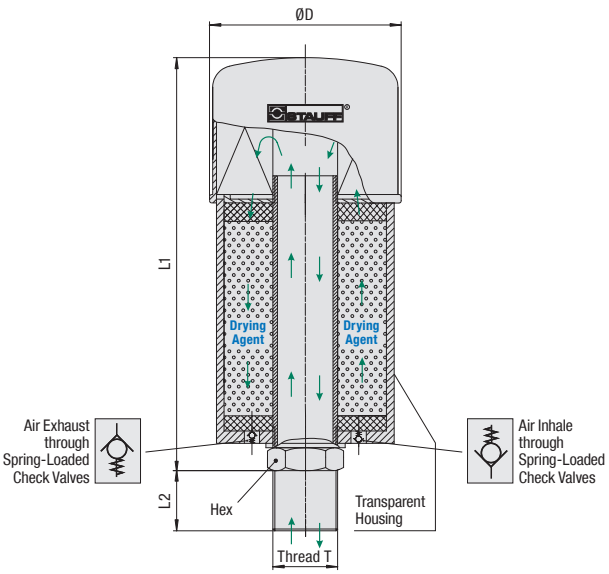
Thread T	Dimensions (mm/in)			Weight (g/lbs)		Volume (cm³/in³)	Max. Water Absorption (g/lbs)	Max. Air Flow Rate
	ØD	L1*	L2*	Complete Unit	Drying Agent	Drying Agent		
Female G3/4 BSPP (ISO 228)	94	109	18	400	225	300	86	0.70 m³/min
	3.70	4.68	.71	.88	.50	18.3	.19	24.71 cfm
Female G3/4 BSPP (ISO 228)	94	179	18	700	450	600	172	0.70 m³/min
	3.70	7.05	.71	1.54	.99	36.9	.38	24.71 cfm

* ± 2 mm / .08 in

SVDB Desiccant Air Breather

Item No.	Designation	Price
1910003185	SVDB-093	438.55
1910002029	SVDB-096	480.95

Desiccant Air Breather with Check Valves
Type SDB-CV



Drying Agent

Capable of changing colours with increasing moisture

This product does not contain any dangerous substances according to EC Council directives 99/45/EC and 2001/60/EC.

Characteristics

Combination of air breather and water removal filter with integrated check valves to increase the lifetime of the desiccant material; particularly suited for gearbox applications

When a reservoir or gearbox breathes, air containing water vapour is ingested into the system. Temperature fluctuations will cause this water vapour to condense which can speed up the oxidation of the fluid and lead to damage in the system.

While inhaling, Desiccant Air Breathers SDB-CV first dry the air as it passes through the drying agent. The air then passes through a 3 µm air filter element to remove any solid contamination particles.

Due to the spring-loaded check valves with an opening pressure of 0.01 bar / .15 PSI, the drying agent will be isolated from the atmosphere unless inhaling or exhaling, which increases the lifetime of the Desiccant Air Breather SDB-CV as well.

As moisture is absorbed, the drying agent will gradually change from red to orange. When it is orange, replace the drying agent. If required, an optional visual indicator (not for the SDB-061-CV) gives an indication of the status of the air breather. With the moisture absorbed, the oxidation process can be decreased, and the lifetime of the oil and the entire machinery will be extended.
Desiccant Air Breathers SDB-CV can also be re-fitted with a layer of active carbon (1/3) and a layer of regular drying agent (2/3) for vapour filtration (refer to page 041).

Features

- Available in 4 different sizes with a diameter of Ø68 mm / Ø2.68 in, Ø100 mm / Ø3.94 in or Ø130 mm / Ø5.12 in
- Equipped with spring-loaded check valves in opposing directions with an opening pressure of 0.01 bar / .15 PSI
- Refillable with drying agent (non-toxic ZR gel grain) or a mix of drying agent and active carbon
- Replaceable air filter element SGB (refer to page 034)
- Connection: BSPP thread (ISO 228)
- Operating temperature range: -40 °C ... +90 °C / -40 °F ... +194 °F*

Note: Using a Desiccant Air Breather with integrated spring-loaded check valves may cause an under or over pressure of 0.01 bar / .15 PSI inside the system, which does not cause any problems for the majority of gearboxes and reservoirs. In case of doubt, contact your equipment supplier.

Accessories / Spare Parts

Adaptor plate
- for SDB-096-CV: **AP-1**
- for SDB-121-CV and SDB-122-CV: **AP-2**

Visual contamination indicator
- for SDB-096-CV, SDB-121-CV and SDB-122-CV (in conjunction with adaptor plate only): **FM**

Drying agent refilling material (supplied in air tight container)
- for SDB-061-CV (100 cm³ / 6.1 in³): **RD-061**
- for SDB-096-CV (600 cm³ / 26.6 in³): **RD-096**
- for SDB-121-CV and SDB-122-CV (1000 cm³ / 61.0 in³): **RD-121**
- for SDB-122-CV (2000 cm³ / 122.0 in³): **RD-122**

Active carbon refilling material (supplied in air tight container)
- for SDB-096-CV and SDB-121-CV (300 cm³ / 18.3 in³): **RC-093/096/121**
- for SDB-122-CV (600 cm³ / 18.3 in³): **RC-122**

Note: Use one layer of active carbon (1/3) and one layer of regular drying agent (2/3).

Replacement air filter element (sealing included)
- for SDB-061-CV: **SGB-060-03-B**
- for SDB-096-CV: **SGB-090-03-B**
- for SDB-121-CV and SDB-122-CV: **SGB-120-03-B**

Desiccant Air Breather with Check Valves
Type SDB-CV

Order Codes

SDB - 121 - CV - RC - AP - FM / 2

① ② ③ ④ ⑤ ⑥ ⑦

① Type

Desiccant Air Breather	**SDB**

② Max. Water Absorption and Size

29 g / .06 lbs at Ø68 mm / Ø2.68 in	**061**
172 g / .38 lbs at Ø100 mm / Ø3.94 in	**096**
288 g / .63 lbs at Ø130mm / Ø5.12 in	**121**
576 g / 1.27 lbs at Ø130mm / Ø5.12 in	**122**

Refer to the table below for further technical details.

③ Check Valves

With integrated spring-loaded check valves (0.01 bar / .15 PSI)	**CV**

④ Drying Agent

Regular drying agent (standard option)	**(None)**
One layer of active carbon (1/3) and one layer of regular drying agent (2/3) for vapour filtration	**RC**

⑤ Adaptor Plate

Without adaptor	**(None)**
With adaptor plate (not for SDB-061-CV)	**AP**

⑥ Contamination Indicator

Without contamination indicator	**(None)**
With visual contamination indicator FM (in conjunction with adaptor plate AP only)	**FM**

⑦ Design Code

Design Code 2	**2**

* Note: The operation of the Desiccant Air Breather may vary at temperatures below 0°C / 32°F due to very low % humidity.

Dimensions and Technical Data

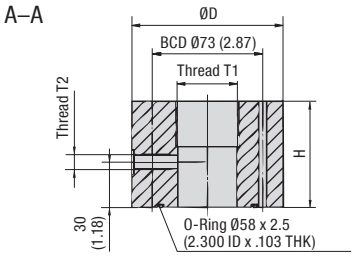
Thread T	Dimensions (mm/in)				Weight (g/lbs)		Volume (cm³/in³)	Max. Water Absorption	Air Filter Elements				
	ØD	L1	L2	Hex	Complete Unit	Drying Agent	Drying Agent	(g/lbs)	Type	Filter 67	Micron Rating	Filter Surface	Max. Air Flow Rate
Female G3/8 BSPP (ISO 228)	68	143	14	22	350	75	100	29	SGB-060-03-B	Synthetic Fibre	3µm	415 cm²	0.05 m³/min
	2.68	5.63	.55	.87	.77	.17	6.1	.06				63 in²	1.77 cfm
Male G3/4 BSPP (ISO 228)	98	220	18	32	1500	450	600	172	SGB-090-03-B	Synthetic Fibre	3µm	752 cm²	0.70 m³/min
	3.86	8.66	.71	1.26	3.31	.99	36.6	.38				115 in²	24.71 cfm
Male G1-1/4 BSPP (ISO 228)	130	258	25	50	2700	750	1000	288	SGB-120-03-B	Synthetic Fibre	3µm	2095 cm²	1.50 m³/min
	5.12	10.16	.98	1.98	5.92	1.65	61.0	.63				320 in²	52.97 cfm
Male G1-1/4 BSPP (ISO 228)	130	355	25	50	4000	1500	2000	576	SGB-120-03-B	Synthetic Fibre	3µm	2095 cm²	1.50 m³/min
	5.12	13.98	.98	1.98	8.82	3.31	122.0	1.27				320 in²	52.97 cfm

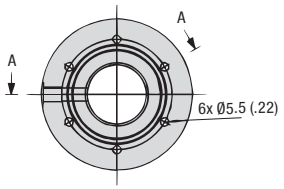
SDB-CV Desiccant Air Breather with Check Valves

Item No.	Designation	Price
1910020543	SDB-061-CV/2	314.55
1910003169	SDB-096-CV/2	740.65
1910020444	SDB-121-CV/2	1348.30
1910003176	SDB-122-CV/2	1454.55

Adaptor Plate
Type AP

Desiccant Air Breather SDB with Adaptor Plate AP





Characteristics

Designed to simplify the installation of Desiccant Air Breathers and enable the use of a visual contamination indicator

With Adaptor Plates AP, desiccant air breathers can be directly mounted to existing connections with a six-hole bolt pattern for flange interfaces similar to DIN 24557, part 2.

They are also equipped with a female G1/8 BSPP thread (ISO 228) to connect with the Visual Contamination Indicator FM.

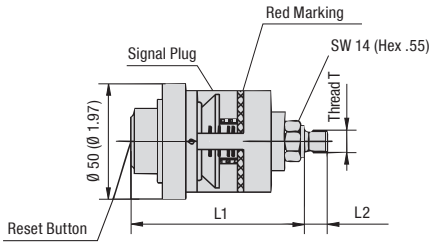
Components
Supplied standard
- Adaptor Plates made of Polyamide (PA)
- Blind plug
- O-Ring made of NBR (Buna-N®)
- 6 socket cap screws (ISO 4762)

Order Code and Dimensions

Thread T1 (Breather Port)	Thread T2 (Indicator Port)	Dimensions (mm/in) H	Dimensions (mm/in) ØD	Socket Cap Screws included	For Use with Desiccant Air Breathers	Item No.	Designation	Price
Female G3/4 BSPP (ISO 228)	Female G1/8 BSPP (ISO 228)	50	88	M5 x 60 - 8.8 (Steel, zinc-plated)	SDB-096/2 SDB-093/2 SVDB-096 SVDB-093 SDB-096-CV	1910000487	AP-1	151.50
		1.98	3.46					
Female G1-1/4 BSPP (ISO 228)	Female G1/8 BSPP (ISO 228)	70	100	M5 x 80 - 8.8 (Steel, zinc-plated)	SDB-121/2 SDB-122/2 SDB-121-CV SDB-122-CV	1910000488	AP-2	199.35
		2.76	3.94					

Visual Contamination Indicator
Type FM

Desiccant Air Breather SDB with Adaptor Plate AP and Visual Contamination Indicator FM



Characteristics

Designed to indicate the status of air filter elements

Visual Contamination Indicators FM – the so-called Filter Minders® – are connected to the female G1/8 BSPP thread (ISO 228) of the Adaptor Plate AP and give a visual indication of the contamination level of the air filter element SGB. A red marking indicates when the air filter element has to be replaced.

Visual Contamination Indicators FM can be reset afterwards.

Materials
- Housing made of Polycarbonate

Technical Data
- Operating temperature range: -40 °C ... +121 °C (-40 °F ... +250 °F)
- Accuracy: ±10% at red marking

Order Code and Dimensions

Thread T	Dimensions (mm/in) L1	Dimensions (mm/in) L2	Item No.	Designation	Price
Male G1/8 BSPP (ISO 228)	75	10	1910000489	FM	157.45
	2.54	.39			

Dimensional drawings: All dimensions in mm (in).

Drying Agent / Refilling Material
Type RD / RC

RD
Drying Agent / Refilling Material

Item No.	Designation	Price
1910000490	RD-093	55.60
1910000491	RD-096	62.45
1910000492	RD-121	94.90
1910000493	RD-122	172.15

It is recommended washer be replaced when refilling material.

RC
Drying Agent / Refilling Material - Activated Carbon

Item No.	Designation	Price
1910020441	RC-093/096/121	64.65
1910020420	RC-122	87.05

For absorbing oil vapours and gases.
One-third of the regular gel beads are removed and replaced by a layer of activated carbon.

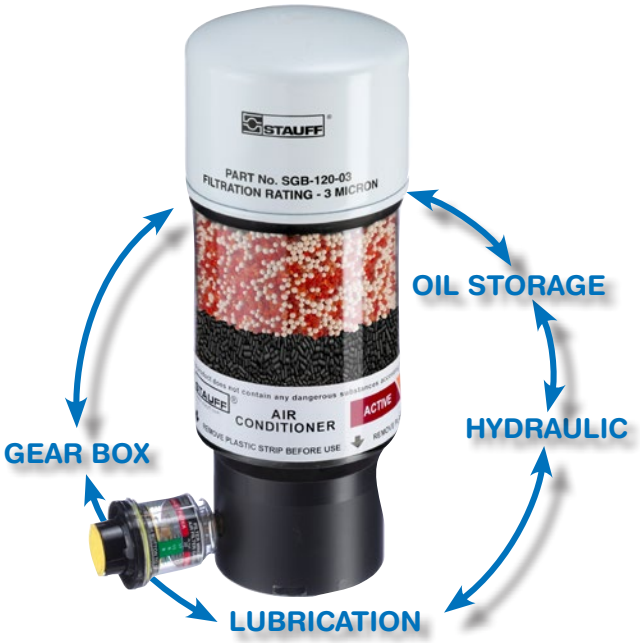
Replacement Washer
Type SDB

Replacement Washer
for SDB Desiccant Breathers

Item No.	Designation	Price
1930001305	Washer-SDB-093/096-PU	7.45
1930001488	Washer-SDB-121/122-PU	11.70

It is recommended RD drying agent refilling material be replaced when replacing the washer.

SDB Desiccant Air Breathers
UV Stabilised Housing



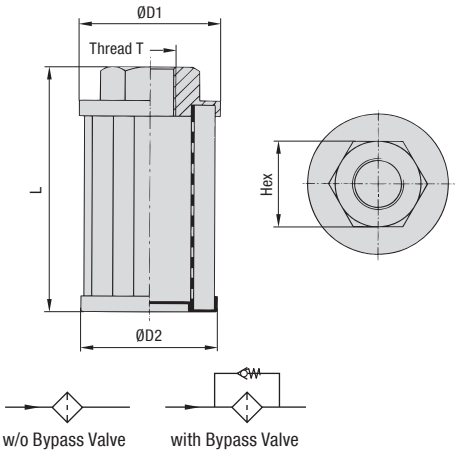
Drying Agent Indicator

The colour changes with increasing moisture, indicating time to replace drying agent.

This product does not contain any dangerous substances according to EC Council directives 99/45/EC and 2001/60/EC.

	Suction Strainers	**044 - 045**
	SUS (Polyamide End Cap)	**044 - 045**

Suction Strainer (Polyamide End Cap)
Type SUS



w/o Bypass Valve with Bypass Valve

Characteristics

Designed as in-tank suction strainer elements for direct installation into suction lines of pumps; should always be installed below the minimum fluid level of the reservoir

Features
- Available with female BSPP thread (ISO 228) or female NPT thread (ANSI B1.20.1)
- Operating temperature range: -20 °C ... +100 °C / -4 °F ... +212 °F

Media Compatibility
- Suitable for use with Mineral and Petroleum based hydraulic fluids (HL and HLP)

Materials
- Threaded end cap made of glass-fibre reinforced Polyamide (PA); refer to Catalogue 10 Hydraulic Accessories for Aluminium end cap version.
- Lower end cap and support tube made of Steel, zinc-plated
- Standard filter material is Stainless Steel Mesh (125 µm); alternative micron ratings of 60 µm and 250 µm available on request

Contact STAUFF for alternative materials.

Options
- Integrated bypass valve with an opening pressure of 0.2 bar / 3 PSI to reduce the risks of high-pressure drops that can be caused by contaminated strainer elements or high-viscosity fluids

Special sizes, designs, materials and configurations are available on request.
Contact STAUFF for more information.

Order Codes

SUS - 088-G24-140 - 125 - P - O

① ② ③ ④ ⑤

① Type

Suction Strainer for direct installation into suction lines of pumps	**SUS**

② Group Size

Select 'Group Size' from the Dimensions and Technical Data table, page M45

The group size is defined by the diameter ØD1 of the threaded end cap, the thread code (type and size) and the total length of the suction strainer element (e.g. 050-G08-105). Refer to page 045 for technical information.

③ Filter Material / Micron Rating

Stainless Steel Mesh, 125 µm (standard option)	**125**
Stainless Steel Mesh, 60 µm	**060**
Stainless Steel Mesh, 250 µm	**250**

Contact STAUFF for alternative materials / micron ratings.

④ Material of Threaded End Cap

Glass-fibre reinforced Polyamide	**P**
Aluminium (for female NPT threaded version only)	**A**

⑤ Bypass Option

Without bypass valve (standard option)	**O**
Integrated bypass valve with opening pressure of 0.2 bar / 3 PSI	**B0.2**

Aluminium (for female NPT threaded version) available on request.
Contact STAUFF for more information.

Suction Strainer (Polyamide End Cap)
Type SUS

Dimensions and Technical Data (Female BSPP Threaded Version)

Thread T	Dimensions (mm/in)				Filter	Max.	Group Size
	ØD1	ØD2	L	Hex	Surface	Flow Rate	
G3/8 BSPP	50	49	67	26	296 cm²	12 l/min	050-G06-067
	1.97	1.93	2.64	1.02	46 in²	3.1 US GPM	
G1/2 BSPP	50	49	105	26	518 cm²	15 l/min	050-G08-105
	1.97	1.93	4.13	1.02	80 in²	3.9 US GPM	
G3/4 BSPP	68	66	105	34	676 cm²	25 l/min	068-G12-105
	2.68	2.60	4.13	1.34	105 in²	6.5 US GPM	
G1 BSPP	68	66	140	42	930 cm²	50 l/min	068-G16-140
	2.68	2.60	5.51	1.65	144 in²	13.0 US GPM	
G1-1/4 BSPP	88	85	140	50	1172 cm²	65 l/min	088-G20-140
	3.46	3.35	5.51	1.97	182 in²	16.9 US GPM	
G1-1/2 BSPP	88	85	140	60	1172 cm²	140 l/min	088-G24-140
	3.46	3.35	5.51	2.36	182 in²	36.4 US GPM	
G1-1/2 BSPP	102	100	200	72	2427 cm²	140 l/min	102-G24-200
	4.02	3.94	7.87	2.83	376 in²	36.4 US GPM	
G2 BSPP	102	100	260	72	3249 cm²	230 l/min	102-G32-260
	4.02	3.94	10.24	2.83	504 in²	59.8 US GPM	
G2 BSPP	102	100	300	72	3798 cm²	230 l/min	102-G32-300
	4.02	3.94	11.81	2.83	589 in²	59.8 US GPM	
G2-1/2 BSPP	131	128	212	86	2748 cm²	340 l/min	131-G40-212
	5.16	5.04	8.35	3.39	426 in²	88.4 US GPM	
G3 BSPP	131	128	272	96	3626 cm²	400 l/min	131-G48-272
	5.16	5.04	10.71	3.78	562 in²	104 US GPM	
G2 BSPP	150	145	151	70	1812 cm²	400 l/min	150-G32-151
	5.91	5.71	5.94	2.76	281 in²	104 US GPM	

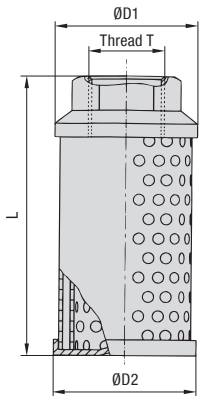
Aluminium (for female NPT threaded version) available on request.
Contact STAUFF for more information.

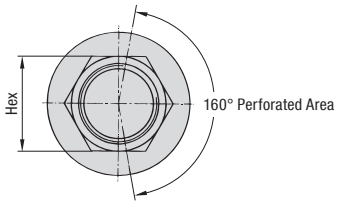
SUS
Suction Strainer (Polyamide End Cap)

Item No.	Designation	Price
1910000637	SUS-050-G06-067-125-P-0	33.80
1910000647	SUS-050-G08-105-125-P-0	50.60
1910000648	SUS-068-G12-105-125-P-0	57.00
1910000844	SUS-068-G12-105-125-P-B0.2	61.80
1910000649	SUS-068-G16-140-125-P-0	63.25
1910000845	SUS-068-G16-140-125-P-B0.2	64.65
1910000638	SUS-088-G20-140-125-P-0	80.10
1910000846	SUS-088-G20-140-125-P-B0.2	77.35
1910000650	SUS-088-G24-140-125-P-0	101.75
1910000691	SUS-088-G24-140-125-P-B0.2	70.30
1910000651	SUS-102-G24-200-125-P-0	104.40
1910000652	SUS-102-G32-260-125-P-0	168.25
1910000911	SUS-102-G32-300-125-P-0	177.25
1910000639	SUS-131-G40-212-125-P-0	217.35
1910001035	SUS-131-G40-212-125-P-B0.2	140.30
1910000653	SUS-131-G48-272-125-P-0	231.80
1910001034	SUS-131-G48-272-125-P-B0.2	257.50
1910000528	SUS-150-G32-151-125-P-0	130.35
1910000799	SUS-150-G32-151-125-P-B0.2	117.85

	Diffusers	**048 - 049**
	SRV	**048**
	Return Line Bushing SRF	**049**

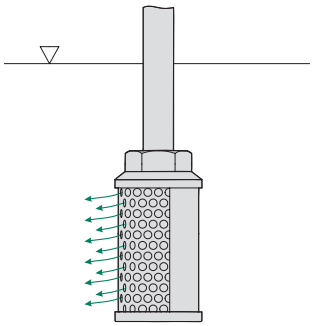
Diffuser
Type SRV
(Female BSPP & NPT Threaded Version)





Typical Installation

Installation below the minimum fluid level of the reservoir with the plain area facing the pump inlet



Characteristics

Designed for direct installation into return lines to reduce fluid aeration, foaming and noise; should always be installed below the minimum fluid level

Features

- Available with female BSPP thread (ISO 228)
  Operating temperature range:
  -20 °C ... +100 °C / -4 °F ... +212 °F
- Max. working pressure: 20 bar / 290 PSI

Media Compatibility

- Suitable for use with Mineral and Petroleum based hydraulic fluids (HL and HLP)

Construction and Materials

- 2 concentric tubes with inner spaced holes
- Threaded end cap made of Aluminium
- Other components made of Steel, zinc-plated

Special sizes, designs, materials and configurations are available on request. Contact STAUFF for more information.

Diffusers SRV are ideally suited for use with STAUFF Return Line Filters of the RF series with threaded connection.

For details refer to Catalogue 9 - STAUFF Filtration Technology.

Order Codes

SRV - 050 - G12

① ② ③

① Type

Diffuser	**SRV**

② Max. Flow Rate

50 l/min / 13 US GPM	**050**
114 l/min / 30 US GPM	**114**
200 l/min / 52 US GPM	**200**
227 l/min / 59 US GPM	**227**
454 l/min / 118 US GPM	**454**
650 l/min / 169 US GPM	**650**
950 l/min / 247 US GPM	**950**

③ Connection Thread (Female BSPP)

G3/4	**G12**
G1	**G16**
G1-1/4	**G20**
G1-1/2	**G24**
G2	**G32**
G2-1/2	**G40**
G3	**G48**

③ Connection Thread (Female NPT)

3/4 NPT	**N12**
1 NPT	**N16**
1-1/4 NPT	**N20**
1-1/2 NPT	**N24**
2 NPT	**N32**
2-1/2 NPT	**N40**
3 NPT	**N48**

Contact STAUFF for more information

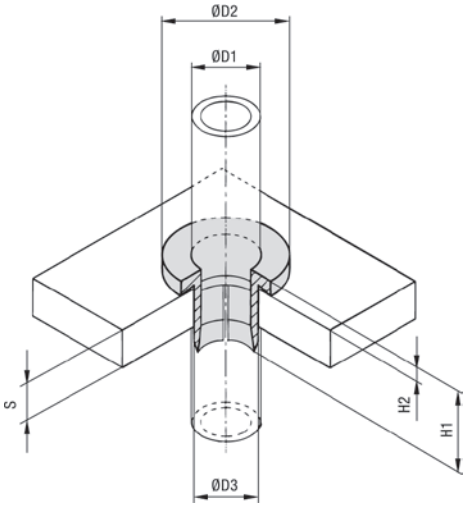
Dimensions and Order Codes (Female BSPP Threaded Version)

Thread T	Dimensions (mm/in)				Max.
	ØD1	ØD2	L	Hex	Flow Rate
G3/4	64	62	109	36	50 l/min
	2.52	2.44	4.29	1.42	13 US GPM
G1	64	62	139	46	114 l/min
	2.52	2.44	5.47	1.81	30 US GPM
G1-1/4	86	84	139	60	200 l/min
	3.39	3.31	5.47	2.36	52 US GPM
G1-1/2	86	84	200	60	227 l/min
	3.39	3.31	7.87	2.36	59 US GPM
G2	86	84	260	70	454 l/min
	3.39	3.31	10.24	2.76	118 US GPM
G2-1/2	150	148	212	90	650 l/min
	5.91	5.83	8.35	3.54	169 US GPM
G3	150	148	272	100	950 l/min
	5.91	5.83	10.71	3.94	247 US GPM

NPT option available on request

Item No.	Designation	Price
1910000420	SRV-050-G12	56.25
1910000421	SRV-114-G16	61.80
1910000422	SRV-200-G20	80.10
1910000423	SRV-227-G24	80.10
1910000424	SRV-454-G32	87.05
1910000425	SRV-650-G40	96.95
1910000426	SRV-950-G48	147.60

Return Line Bushing
SRF



Order Codes

SRF - 014 - PP

① ② ③

① Type

STAUFF Return Line Bushing	**SRF**

② Pipe / Tube Diameter

Outside diameter pipe/tube ØD1 (mm) according to order table	**refer to table**

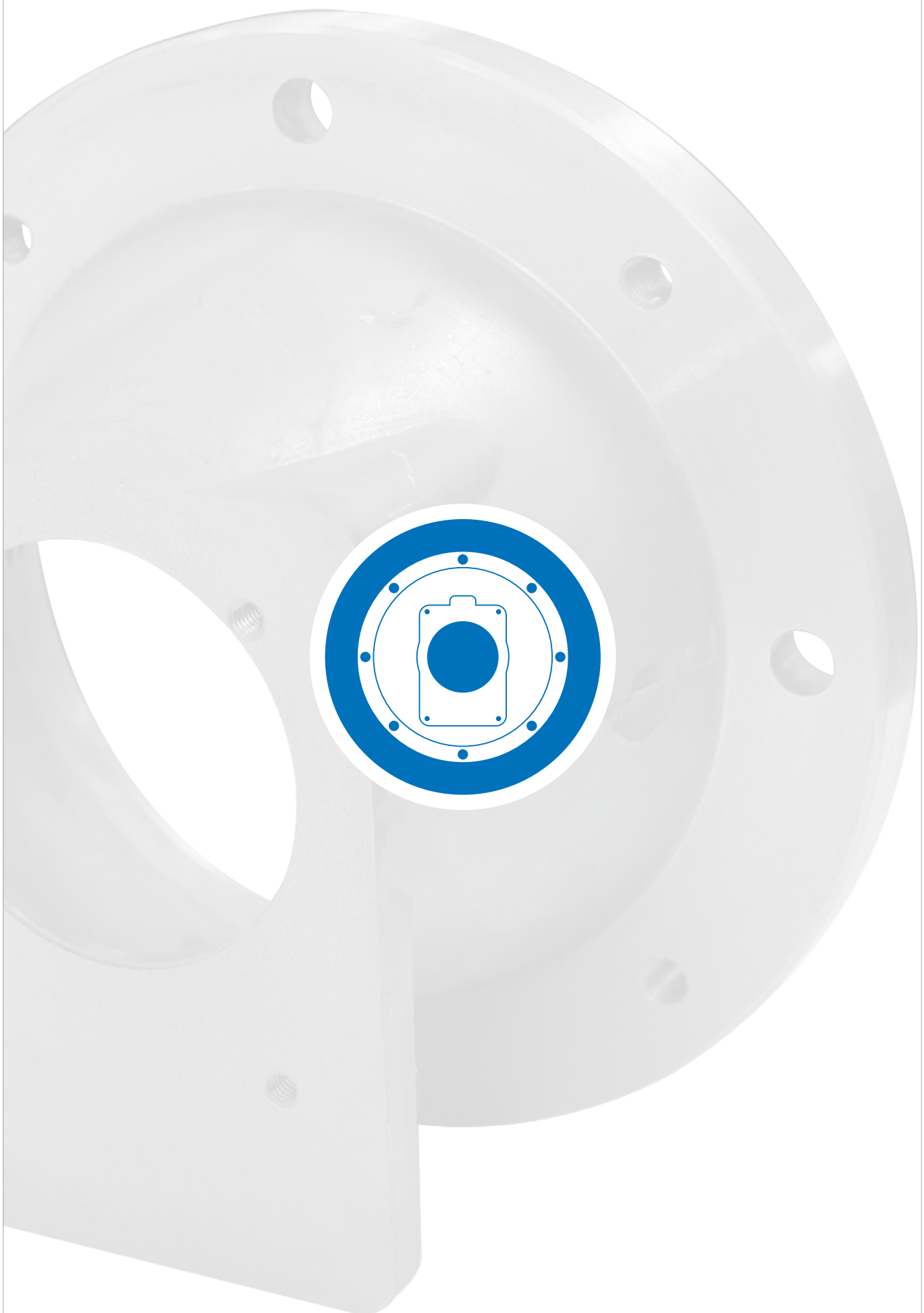
③ Material

Polypropylene	**PP**

SRF
Return Line Bushing

Item No.	Designation	Outside Diameter ØD1 (mm)	Mounting Bore ØD3 (mm)	Price
1930000205	SRF-06-PP	6	10	5.75
1930000207	SRF-08-PP	8	12	5.75
1930000209	SRF-10-PP	10	14	5.75
1930000211	SRF-12-PP	12	16	5.75
1930000213	SRF-14-PP	14	18	5.75
1930000215	SRF-15-PP	15	20	6.05
1930000217	SRF-16-PP	16	20	6.05
1930000219	SRF-18-PP	18	22	6.05
1930000221	SRF-20-PP	20	24	6.45
1930000223	SRF-22-PP	22	26	6.85
1930000225	SRF-25-PP	25	30	6.85
1930000227	SRF-28-PP	28	33	6.85
1930000229	SRF-30-PP	30	34	7.25
1930000231	SRF-35-PP	35	40	7.25
1930000233	SRF-38-PP	38	43	7.25
1930000235	SRF-42-PP	42	47	7.25

For supporting rigid tube lines entering hydraulic reservoirs



	Bell Housing and Couplings	**052 - 055**
	Bell Housing and Couplings SBH - Metric Series 4 Bolts	**052**
	Bell Housing and Couplings SBH - SAE Series 2 Bolts	**053**
	Coupling Motor Hub SBH-MH	**052 - 053**
	Coupling Pump Hub SBH-PH	**052 - 053**
	Coupling Spider Insert SBH-SI	**052 - 053**
	Motor Couplings Gear Couplings - SET SMCG	**054**
	Motor Couplings Gear Couplings Bored and Keyed (Metric / Imperial) SMCG	**055**

Bell Housing and Couplings
Metric Series 4 Bolt

STAUFF Bell Housing Metric Series - Order Codes

SBH - M4 - D063 - 005

① ② ③ ④

① Type

STAUFF Bell Housing	**SBH**

② Series

Metric 4 Bolt	**M4**

③ Frame Size

63	**D063**
71	**D071**
80	**D080**
90	**D090**
100	**D100**
100/112	**D100/112**
132	**D132**
160	**D160**
200	**D200**

④ Pump Group

Frame Size D063 & D071 centring ring not required	**005**
Frame Size D071, D080, D090, D100	**010**
Frame Size D080, D90, D100/112, D132, D180	**020**
Frame Size D100/112 (Longer Housing - Suits 086 Coupling)	**020L**
Frame Size D112, D132, D160, D180, D200	**030**

010, 020, 020L, 030 supplied with centring ring (standard)

Suitable for 2, 4, and 6 Pole Motors

Coupling Motor Hub - Order Codes

SBH-MH - 048 - 11 - GS

① ② ③ ④

① Type

Coupling Motor Hub	**SBH-MH**

② Series

1.5kW	**048**
4.5kW	**065**
12kW	**086**
33kW	**108**

③ Hub Bore Ø

Ø 11	**11**
Ø 14	**14**
Ø 19	**19**
Ø 24	**24**
Ø 28	**28**
Ø 38	**38**
Ø 42	**42**
Ø 48	**48**
Ø 55	**55**

④ Hub Bore Ø

Grub Screw	**GS**

Coupling Pump Hub - Order Codes

SBH-PH - 048 - T010

① ② ③

① Type

Coupling Pump Hub	**SBH-PH**

② Series

0.18kW (D063)	**486**
0.37kW (D071)	**486**
1.5kW	**048**
4.5kW	**065**
12kW	**086**
33kW	**108**

③ Pump Shaft Group (Tapered Shaft T=1:8)

Frame Size D063 & D071	**T005**
Frame Size D071, D080, D090, D100/112, D132, D160, D180	**T010**
Frame Size D080, D090, D100/112, D132, D160, D180	**T020**
Frame Size D100/112, D132, D160, D180	**T030**
Frame Size D200	**T030L**

Coupling Spider Insert - Order Codes

SBH-SI - 048

① ②

① Type

Coupling Spider Insert	**SBH-SI**

② Series

1.5kW	**048**
4.5kW	**065**
12kW	**086**
33kW	**108**

STAUFF Bell Housing

Item No.	Designation	Price
1910021261	SBH-M4-D063-005	61.10
1910021262	SBH-M4-D071-005	71.80
1910021263	SBH-M4-D071-010	71.80
1910021264	SBH-M4-D080-010	61.10
1910021265	SBH-M4-D080-020	80.05
1910021264	SBH-M4-D080-010	61.10
1910021265	SBH-M4-D080-020	80.05
1910021239	SBH-M4-D100-010	101.75
1910021240	SBH-M4-D100/112-020	101.75
1910021241	SBH-M4-D100/112-020L	105.80
1910021242	SBH-M4-D100/112-030	105.80
1910021246	SBH-M4-D132-020	168.25
1910021247	SBH-M4-D132-030	168.25
1910021252	SBH-M4-D160-020	311.30
1910021253	SBH-M4-D160-030	311.30
1910021252	SBH-M4-D160-020	311.30
1910021253	SBH-M4-D160-030	311.30
1910021257	SBH-M4-D200-030	541.65

Coupling Motor Hub

Item No.	Designation	Price
1910021443	SBH-MH-048-11	17.70
1910021444	SBH-MH-048-14	20.50
1910021444	SBH-MH-048-14	20.50
1910021445	SBH-MH-048-19	23.20
6100250394	SBH-MH-065-19-GS	38.65
6100250393	SBH-MH-065-24-GS	41.70
6100250393	SBH-MH-065-24-GS	41.70
1910021450	SBH-MH-065-28	31.30
1910021450	SBH-MH-065-28	31.30
1910021452	SBH-MH-086-28	57.00
1910021452	SBH-MH-086-28	57.00
1910021453	SBH-MH-086-38	82.75
1910021453	SBH-MH-086-38	82.75
1910021439	SBH-MH-108-42	147.70
1910021439	SBH-MH-108-42	147.70
1910021440	SBH-MH-108-48	185.60
1910021440	SBH-MH-108-48	185.60
1910021441	SBH-MH-108-55	185.60

Coupling Pump Hub

Item No.	Designation	Price
1910021466	SBH-PH-486-T005	19.10
1910021466	SBH-PH-486-T005	19.10
1910021467	SBH-PH-048-T010	19.10
1910021467	SBH-PH-048-T010	19.10
1910021473	SBH-PH-065-T020	27.25
1910021472	SBH-PH-065-T010	27.25
1910021473	SBH-PH-065-T020	27.25
1910021472	SBH-PH-065-T010	27.25
1910021473	SBH-PH-065-T020	27.25
1910021478	SBH-PH-086-T020	44.80
1910021479	SBH-PH-086-T030	44.80
1910021478	SBH-PH-086-T020	44.80
1910021479	SBH-PH-086-T030	44.80
1910021461	SBH-PH-108-T020	63.75
1910021462	SBH-PH-108-T030	63.75
1910021461	SBH-PH-108-T020	63.75
1910021462	SBH-PH-108-T030	63.75
1910021463	SBH-PH-108-T030L	76.05

Coupling Spider Insert

Item No.	Designation	Price
1910021483	SBH-SI-048	5.45
1910021483	SBH-SI-048	5.45
1910021483	SBH-SI-048	5.45
1910021483	SBH-SI-048	5.45
1910021484	SBH-SI-065	10.20
1910021484	SBH-SI-065	10.20
1910021484	SBH-SI-065	10.20
1910021484	SBH-SI-065	10.20
1910021484	SBH-SI-065	10.20
1910021485	SBH-SI-086	15.05
1910021485	SBH-SI-086	15.05
1910021485	SBH-SI-086	15.05
1910021485	SBH-SI-086	15.05
1910021481	SBH-SI-108	20.50
1910021481	SBH-SI-108	20.50
1910021481	SBH-SI-108	20.50
1910021481	SBH-SI-108	20.50
1910021481	SBH-SI-108	20.50

Bell Housing and Couplings
SAE Series 2 Bolt

STAUFF Bell Housing SAE Series - Order Codes

SBH - S2 - D080 - AA

① ② ③ ④

① Type

STAUFF Bell Housing	**SBH**

② Series

SAE 2 Bolt	**S2**

③ Frame Size

80	**D080**
100	**D100**
100/112	**D100/112**
132	**D132**
160	**D160**
200	**D200**

④ Pump Group

Frame Size D080, D090, D100/112	**AA**
Frame Size D080, D090, D100/112, D132, D160	**A**
Frame Size D080, D090, D100/112, D132, D160, D180, D200	**B**
Frame Size D080, D090, D132, D160, D180, D200	**C**

Suitable for 2, 4, and 6 Pole Motors

Coupling Motor Hub - Order Codes

SBH-MH - 048 - 11

① ② ③

① Type

Coupling Motor Hub	**SBH-MH**

② Series

1.5kW	**048**
4.5kW	**065**
12kW	**086**
33kW	**108**

③ Hub Bore Ø

Ø 11	**11**
Ø 14	**14**
Ø 19	**19**
Ø 24	**24**
Ø 28	**28**
Ø 38	**38**
Ø 42	**42**
Ø 48	**48**
Ø 55	**55**

④ Hub Bore Ø

Grub Screw	**GS**

Coupling Pump Hub - Order Codes

SBH-PH - 048 - PAA - 012

① ② ③ ④

① Type

Coupling Pump Hub	**SBH-PH**

② Series

1.5kW	**048**
4.5kW	**065**
12kW	**086**
33kW	**108**

③ Pump Shaft Bore Size

Frame Size D080, D090, D100/112, D132, D160	**None**
Frame Size D080, D090, D100/112	**PAA**
Frame Size D080, D090, D100/112, D132, D160	**PA**
Frame Size D080, D090, D100/112, D132, D160, D180, D200	**PB**
Frame Size D132, D160, D180, D200	**PC**

④ Pump Shaft Bore Size

Ø 1/2" (only for sizes D80, 90, 100/112)	**012**
Ø 5/8" (only for sizes D80,90,100/112,132,160)	**058**
Ø 3/4" (only for sizes D80,90,100/112,132,160)	**034**
Ø 7/8" (only for sizes D80, 90, 100/112, 132, 160, 180, 200)	**078**
Ø 1 1/4" (only for sizes D132, 160, 180, 200)	**114**

Coupling Spider Insert - Order Codes

SBH-SI - 048

① ②

① Type

Coupling Spider Insert	**SBH-SI**

② Series

1.5kW	**048**
4.5kW	**065**
12kW	**086**
33kW	**108**

STAUFF Bell Housing

Item No.	Designation	Price
1910021268	SBH-S2-D080-AA	104.40
1910021268	SBH-S2-D080-AA	104.40
1910021244	SBH-S2-D100/112-AA	158.65
1910021267	SBH-S2-D080-A	104.40
1910021267	SBH-S2-D080-A	104.40
1910021269	SBH-S2-D080-B	128.45
1910021267	SBH-S2-D080-A	104.40
1910021267	SBH-S2-D080-A	104.40
1910021269	SBH-S2-D080-B	128.45
1910021243	SBH-S2-D100/112-A	158.65
1910021243	SBH-S2-D100/112-A	158.65
1910021245	SBH-S2-D100/112-B	158.65
1910021245	SBH-S2-D100/112-B	158.65
1910021249	SBH-S2-D132-A	209.95
1910021250	SBH-S2-D132-B	209.95
1910021251	SBH-S2-D132-C	209.95
1910021254	SBH-S2-D160-A	295.30
1910021254	SBH-S2-D160-A	295.30
1910021255	SBH-S2-D160-B	295.30
1910021256	SBH-S2-D160-C	295.30
1910021255	SBH-S2-D160-B	295.30
1910021256	SBH-S2-D160-C	295.30
1910021258	SBH-S2-D200-B	580.85
1910021259	SBH-S2-D200-C	580.85

Coupling Motor Hub

Item No.	Designation	Price
1910021445	SBH-MH-048-19	23.20
1910021446	SBH-MH-048-24	23.20
1910021450	SBH-MH-065-28	31.30
6100250394	SBH-MH-065-19-GS	38.65
6100250394	SBH-MH-065-19-GS	38.65
6100250394	SBH-MH-065-19-GS	38.65
6100250393	SBH-MH-065-24-GS	41.70
6100250393	SBH-MH-065-24-GS	41.70
6100250393	SBH-MH-065-24-GS	41.70
1910021452	SBH-MH-086-28	57.00
1910021452	SBH-MH-086-28	57.00
1910021452	SBH-MH-086-28	57.00
1910021452	SBH-MH-086-28	57.00
1910021453	SBH-MH-086-38	82.75
1910021453	SBH-MH-086-38	82.75
1910021453	SBH-MH-086-38	82.75
1910021439	SBH-MH-108-42	147.70
1910021439	SBH-MH-108-42	147.70
1910021439	SBH-MH-108-42	147.70
1910021439	SBH-MH-108-42	147.70
1910021440	SBH-MH-108-48	185.60
1910021440	SBH-MH-108-48	185.60
1910021441	SBH-MH-108-55	185.60
1910021441	SBH-MH-108-55	185.60

Coupling Pump Hub

Item No.	Designation	Price
1910021465	SBH-PH-048-PAA-012	47.50
1910021465	SBH-PH-048-PAA-012	47.50
1910021468	SBH-PH-065-PAA-012	31.30
1910021470	SBH-PH-065-058	46.20
1910021469	SBH-PH-065-PA-034	46.20
1910021471	SBH-PH-065-PB-078	46.20
1910021470	SBH-PH-065-058	46.20
1910021469	SBH-PH-065-PA-034	46.20
1910021471	SBH-PH-065-PB-078	46.20
1910021476	SBH-PH-086-058	59.70
1910021475	SBH-PH-086-PA-034	59.70
1910021477	SBH-PH-086-PB-078	59.70
1910021476	SBH-PH-086-058	59.70
1910021475	SBH-PH-086-PA-034	59.70
1910021477	SBH-PH-086-PB-078	59.70
1910021474	SBH-PH-086-PC-114	59.70
1910021457	SBH-PH-108-058	81.40
1910021456	SBH-PH-108-PA-034	81.40
1910021458	SBH-PH-108-PB-078	81.40
1910021455	SBH-PH-108-PC-114	81.40
1910021458	SBH-PH-108-PB-078	81.40
1910021455	SBH-PH-108-PC-114	81.40
1910021458	SBH-PH-108-PB-078	81.40
1910021455	SBH-PH-108-PC-114	81.40

Coupling Spider Insert

Item No.	Designation	Price
1910021483	SBH-SI-048	5.45
1910021483	SBH-SI-048	5.45
1910021484	SBH-SI-065	10.20
1910021484	SBH-SI-065	10.20
1910021484	SBH-SI-065	10.20
1910021484	SBH-SI-065	10.20
1910021484	SBH-SI-065	10.20
1910021484	SBH-SI-065	10.20
1910021484	SBH-SI-065	10.20
1910021485	SBH-SI-086	15.05
1910021485	SBH-SI-086	15.05
1910021485	SBH-SI-086	15.05
1910021485	SBH-SI-086	15.05
1910021485	SBH-SI-086	15.05
1910021485	SBH-SI-086	15.05
1910021485	SBH-SI-086	15.05
1910021481	SBH-SI-108	20.50
1910021481	SBH-SI-108	20.50
1910021481	SBH-SI-108	20.50
1910021481	SBH-SI-108	20.50
1910021481	SBH-SI-108	20.50
1910021481	SBH-SI-108	20.50
1910021481	SBH-SI-108	20.50
1910021481	SBH-SI-108	20.50

Motor Couplings
Gear Coupling ▪ Type SMCG

Order Codes

SMCG - 28 - SET - BK - M - 12 - 04

① ② ③ ④ ⑤ ⑥ ⑦

① Type

STAUFF Motor Coupling - Gear Coupling	SMCG

② Series

28 mm Bore Size	28
42 mm Bore Size	42
55 mm Bore Size	55

③ Version

Hub	HUB
Sleeve	SLV
Set (2 x hubs and sleeve)	SET

④ Hub Bore Diameter

Pilot Bored (standard)	PB
Bored and Keyed	BK

⑤ Unit

Metric	M
Imperial	I

⑥ Bore Diameter (mm) Metric

Ø 12 (suits series 28,42,55)	12
Ø 14 (suits series 28,42,55)	14
Ø 15 (suits series 28,42,55)	15
Ø 16 (suits series 28,42,55)	16
Ø 18 (suits series 28,42,55)	18
Ø 19 (suits series 28,42,55)	19
Ø 20 (suits series 28,42,55)	20
Ø 22 (suits series 28,42,55)	22
Ø 24 (suits series 28,42,55)	24
Ø 25 (suits series 28,42,55)	25
Ø 26 (suits series 28,42,55)	26
Ø 28 (suits series 28,42,55)	28
Ø 30 (suits series 42,55)	30
Ø 32 (suits series 42,55)	32
Ø 35 (suits series 42,55)	35
Ø 38 (suits series 42,55)	38

⑥ Bore Diameter (mm) Imperial

Ø 1/2" (suits series 28,42,55)	1/2
Ø 5/8" (suits series 28,42,55)	5/8
Ø 3/4" (suits series 28,42,55)	3/4
Ø 7/8" (suits series 28,42,55)	7/8
Ø 1" (suits series 28,42,55)	1
Ø1-1/8" (suits series 28,42,55)	1-1/8
Ø1-1/4" (suits series 42,55)	1-1/4
Ø1-3/8" (suits series 42,55)	1-3/8
Ø1-1/2" (suits series 42,55)	1-1/2

⑦ Keyway (mm) Metric

4 mm (suits series 28,55)	04
5 mm (suits series 28,42,55)	05
6 mm (suits series 28,42,55)	06
8 mm (suits series 28,42,55)	08
10 mm (only for M38 bore series 42)	10

⑦ Keyway (mm) Imperial

1/8" (suits series 28,42,55)	1/8
3/16" (suits series 28,42,55)	3/16
1/4" (suits series 28,42,55)	1/4
5/16" (suits series 28,42,55)	5/16
3/8" (suits series 42,55)	3/8

Complete

Item No.	Designation	Price
1910021355	SMCG-28-SET-PB	233.05
1910021358	SMCG-42-SET-PB	332.15

Hub

Item No.	Designation	Price
1910021354	SMCG-28-HUB-PB	96.25
1910021357	SMCG-42-HUB-PB	132.95
1910021360	SMCG-55-HUB-PB	230.55

Sleeve

Item No.	Designation	Price
1910021356	SMCG-28-SLV	40.55
1910021359	SMCG-42-SLV	66.25
1910021362	SMCG-55-SLV	197.80

Motor Couplings
Gear Coupling ▪ Type SMCG
Bored and Keyed

Bored and Keyed
Metric

Item No.	Designation	Price
1910021373	SMCG-28-HUB-BK-M-12-04	166.95
1910021374	SMCG-28-HUB-BK-M-14-05	166.95
1910021375	SMCG-28-HUB-BK-M-15-05	166.95
1910021376	SMCG-28-HUB-BK-M-16-05	166.95
1910021377	SMCG-28-HUB-BK-M-18-06	166.95
1910021378	SMCG-28-HUB-BK-M-19-06	166.95
1910021379	SMCG-28-HUB-BK-M-20-06	166.95
1910021380	SMCG-28-HUB-BK-M-22-06	166.95
1910021381	SMCG-28-HUB-BK-M-24-08	166.95
1910021382	SMCG-28-HUB-BK-M-25-08	166.95
1910021383	SMCG-28-HUB-BK-M-26-08	166.95
1910021384	SMCG-28-HUB-BK-M-28-08	166.95
1910021399	SMCG-42-HUB-BK-M-14-05	203.55
1910021400	SMCG-42-HUB-BK-M-15-05	203.55
1910021401	SMCG-42-HUB-BK-M-16-05	203.55
1910021402	SMCG-42-HUB-BK-M-18-06	203.55
1910021403	SMCG-42-HUB-BK-M-19-06	203.55
1910021404	SMCG-42-HUB-BK-M-20-06	203.55
1910021405	SMCG-42-HUB-BK-M-22-06	203.55
1910021406	SMCG-42-HUB-BK-M-24-08	203.55
1910021407	SMCG-42-HUB-BK-M-25-08	203.55
1910021408	SMCG-42-HUB-BK-M-26-08	203.55
1910021409	SMCG-42-HUB-BK-M-28-08	203.55
1910021410	SMCG-42-HUB-BK-M-30-08	203.55
1910021411	SMCG-42-HUB-BK-M-32-08	203.55
1910021412	SMCG-42-HUB-BK-M-35-08	203.55
1910021413	SMCG-42-HUB-BK-M-38-10	203.55
1910021426	SMCG-55-HUB-BK-M-12-04	302.35
1910021427	SMCG-55-HUB-BK-M-14-05	302.35
1910021428	SMCG-55-HUB-BK-M-15-05	302.35
1910021429	SMCG-55-HUB-BK-M-16-05	302.35
1910021430	SMCG-55-HUB-BK-M-18-06	302.35
1910021431	SMCG-55-HUB-BK-M-19-06	302.35
1910021432	SMCG-55-HUB-BK-M-20-06	302.35
1910021433	SMCG-55-HUB-BK-M-22-06	302.35
1910021434	SMCG-55-HUB-BK-M-24-08	302.35
1910021435	SMCG-55-HUB-BK-M-25-08	302.35
1910021436	SMCG-55-HUB-BK-M-26-08	302.35
1910021437	SMCG-55-HUB-BK-M-28-08	302.35
1910021438	SMCG-55-HUB-BK-M-30-08	302.35

Bored and Keyed
Imperial

Item No.	Designation	Price
1910021364	SMCG-28-HUB-BK-I-1/2-1/8	166.95
1910021369	SMCG-28-HUB-BK-I-5/8-3/16	166.95
1910021368	SMCG-28-HUB-BK-I-3/4-3/16	166.95
1910021371	SMCG-28-HUB-BK-I-7/8-1/4	166.95
1910021365	SMCG-28-HUB-BK-I-1-1/4	166.95
1910021366	SMCG-28-HUB-BK-I-1-1/8-5/16	166.95
1910021386	SMCG-42-HUB-BK-I-1/2-1/8	203.55
1910021396	SMCG-42-HUB-BK-I-5/8-3/16	203.55
1910021395	SMCG-42-HUB-BK-I-3/4-3/16	203.55
1910021397	SMCG-42-HUB-BK-I-7/8-1/4	203.55
1910021398	SMCG-42-HUB-BK-I-7/8-3/16	203.55
1910021388	SMCG-42-HUB-BK-I-1-1/4	203.55
1910021391	SMCG-42-HUB-BK-I-1-1/8-1/4	203.55
1910021392	SMCG-42-HUB-BK-I-1-1/8-5/16	203.55
1910021390	SMCG-42-HUB-BK-I-1-1/4-5/16	203.55
1910021393	SMCG-42-HUB-BK-I-1-3/8-1/4	203.55
1910021394	SMCG-42-HUB-BK-I-1-3/8-3/8	203.55
1910021387	SMCG-42-HUB-BK-I-1-1/2-3/8	203.55
1910021415	SMCG-55-HUB-BK-I-1/2-1/8	302.35
1910021424	SMCG-55-HUB-BK-I-5/8-3/16	302.35
1910021423	SMCG-55-HUB-BK-I-3/4-3/16	302.35
1910021425	SMCG-55-HUB-BK-I-7/8-1/4	302.35
1910021418	SMCG-55-HUB-BK-I-1-1/4	302.35
1910021421	SMCG-55-HUB-BK-I-1-1/8-5/16	302.35
1910021419	SMCG-55-HUB-BK-I-1-1/4-5/16	302.35
1910021422	SMCG-55-HUB-BK-I-1-3/8-3/8	302.35
1910021416	SMCG-55-HUB-BK-I-1-1/2-1/8	302.35

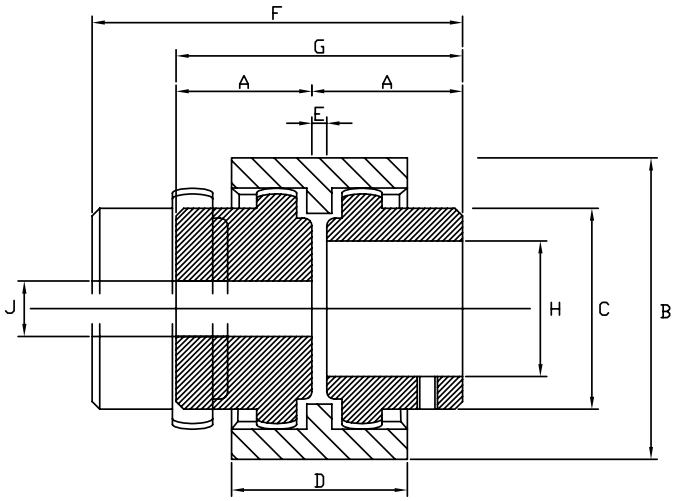


Table 2

Series	Max Speed RPM	Rating 100 RPM		A	B	C	D	E	F	G	H		J	Weight
		HP	kW	mm	mm	mm	mm	mm	mm	mm	Max	Min	mm	
28	5000	1.00	0.75	40	68	44	38	4	104	80	28	9	7-12	0.40 Kg
42	5000	1.75	1.32	43	90	60	52	4	115	89	42	13	12-15	0.75 Kg
55	4000	8.00	6.00	59	124	83	65	4	155	119	55	15	15	2.05 Kg

Load Factor F

Table 1

Application	Electric	Petrol / Diesel
Uniform Load	1.00	1.20
Medium Shock	1.25	1.50
Heavy Shock	1.75	2.00

To select coupling model check application to establish running load condition.

Take Load Factor (F) from Table 1 and enter value into Power Formula. Then use HP/kW per 100 RPM from Table 2 in same formula to determine allowable rating of coupling.

It is advisable to always check shaft sizes being used on application and check with dimension 'H'.

* Rating of coupling = $\frac{\text{HP/kW of application x 100 x F}}{\text{rev/min of application}}$

Tolerances

Maximum angular misalignment is + 2°
Maximum parallel misalignment is + .020

Introduction	P2 - P7
Bladder Accumulators	P8 - P18
Diaphragm Accumulators	P19 - P21
Accumulator Accessories	P22 - P29
Pre-charging and Testing Equipment	P30 - P41

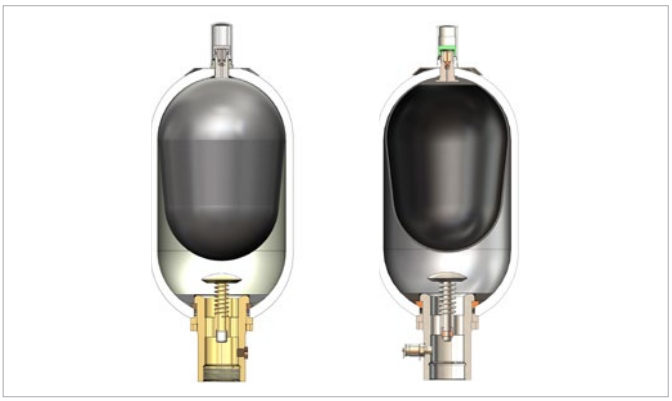
Accumulators

Product Description

STAUFF's range of hydraulic accumulators is designed to store energy, regulate the performance and enhance the operational efficiency of hydraulic systems. Available in a comprehensive range of sizes, materials, port configurations and pressure ratings, STAUFF accumulators are suitable for pressure storage, backup energy for emergency and safety functions, absorbing hydraulic shock, noise reduction, and dampening pump pulsations and fluctuations. STAUFF accumulators also provide excellent gas and fluid separation, ensuring dependable performance, maximum efficiency and increased service life of machinery.

STAUFF Accumulator Advantages

STAUFF's range of accumulators has been designed to include additional benefits and features for modern mobile and stationary hydraulic systems.
These include:



Bladder Accumulators

▪ Gas valves	STAUFF offer a range of gas valves to suit different applications and customer requirements
▪ Dual design approval	STAUFF accumulators have both Australian (AS1210) and International (ASME) approvals
▪ Bleed valve	STAUFF offers a fluid port with a STAUFF test coupling at the bleed valve > 4 Litres
▪ Flat face seal connection	STAUFF offers a fluid port with a standard BSPP flat face seal connection

STAUFF Test Coupling Gas Valve

STAUFF test coupling gas valves are exclusive only to STAUFF accumulators for checking gas pressure pre-charge.

▪ Easy connection	Allows easy connection of other equipment using a STAUFF test coupling without having to use special manifolds; therefore reducing the risk of potential leakage points
▪ Easy removal	Accessory equipment connected to the gas valve can be easily removed without needing to drain the pre-charge from the accumulator
▪ Checking pre-charge (without the need for a charging kit)	Exclusive accumulator gas valve test coupling allows for pre-charge checking using a STAUFF safety pattern pressure gauge and direct gauge adaptor; therefore a charging kit is not required
▪ Permanent gauge mounting	Mounted on to the accumulator gas valve a gauge and gauge adaptor can be easily attached

AS1349 Safety pattern pressure gauge

STAUFF PT-RF Wireless Pressure Tester

STAUFF PT-RF wireless pressure tester has been developed to measure and record temperature and pressure data without the use of a gauge or charge kit.

▪ Test multiple accumulators	Each PT-RF sensor has a unique identifiable serial number, therefore, each accumulator can be logged separately using the one PT-RF reader
▪ Data storage	The PT-RF Reader can store over 15,000 measurement recordings (recording pressure and temperature data)
▪ No power required	The measurement recordings are delivered from the PT-RF transmitter to the PT-RF reader using RFID technology; therefore, the pressure transmitter requires no internal or external power supply
▪ Quick and easy to use	The PT-RF transmitter is activated by the press of a button and the measured value is determined within only 0.5 seconds. A maximum distance of only 1.5 cm is required from the antenna to the tip of the PT-RF transmitter for the duration of the measurement
▪ Checking pre-charge (manually with a gauge)	The PT-RF transmitter is easily removed without draining the accumulator pre-charge when installed with a STAUFF Permanent Charging Head (as required to check the pre-charge pressure with a gauge)

Permanent Charging Head

STAUFF Permanent Charging Heads allow auxiliary equipment such as a gauge or PT-RF sensor to be fitted to the gas side for both STAUFF Bladder (STBA) and Diaphragm (STDA) accumulators, so the pre-charge pressure can be monitored without the use of a charging kit.

Refer to page P24 - P27 for more information.

Integrated Gas Valve and Gauge (Option T)

STAUFF US Style Gas Valve and Pressure Transmitter (Option Y)

Hydraulic Accumulators

Bladder Accumulators

Bladder accumulators operate as a hydraulic spring by using the system hydraulic fluid to compress nitrogen gas stored in the accumulator. The gas and system fluid are separated by a rubber bladder containing nitrogen gas. When the system's hydraulic pressure becomes greater than the nitrogen gas pre-charge pressure, the system fluid enters the accumulator. The fluid is then stored as potential energy inside the accumulator, due to the compressibility of the gas. When the systems fluid pressure drops, the nitrogen gas pressure expands and delivers the fluid stored in the accumulator back to the system. Operating pressures of up to 400 bar enable a liquid under pressure to be accumulated, stored and recovered at any time.

Bladder accumulators consist of:

- Forged steel shell (pressure vessel)
- Bladder (pressurised with nitrogen gas)
- Gas valve (used to charge the accumulator with nitrogen gas)
- Fluid port (incorporating a poppet valve to enable connection of the accumulator to the hydraulic system)
- Poppet valve (to prevent the bladder from being extruded)

Diaphragm Accumulators

Diaphragm accumulators operate in a similar way to bladder accumulators; however, they are supplied assembled as a welded vessel with a pre-installed rubber diaphragm. In comparison to bladder accumulators, diaphragm accumulators are normally manufactured to a lower design pressure.

The benefits of STAUFF's diaphragm accumulators are based on the considerable difference in compressibility between a gas and a liquid, enabling a large quantity of energy to be stored in an extremely compact form. Operating pressures of up to 350 bar enable a liquid under pressure to be accumulated, stored and recovered at any time.

Diaphragm accumulators consist of:

- Full seam welded construction
- Diaphragm
- Fluid port
- Gas valve connection incorporating a standard hexagon key valve to suit a range of optional adaptors

Operating Principles

Stage A

The unit contains no nitrogen gas pre-charge pressure and no hydraulic pressure.

Stage B

The unit is pre-charged with nitrogen gas to the correct pressure (P0). At this stage, the gas volume is the same as the effective volume of the accumulator (V0).

Stage C

Upon the hydraulic system pressure exceeding the pre-charge (P0), the bladder / diaphragm is then compressed and hydraulic oil starts to flow into the accumulator. When the hydraulic system pressure peaks or reaches the maximum desired pressure (P2), the accumulator is then filled with oil according to the design capacity. The nitrogen gas has been compressed and the gas volume is now (V2).

Stage D

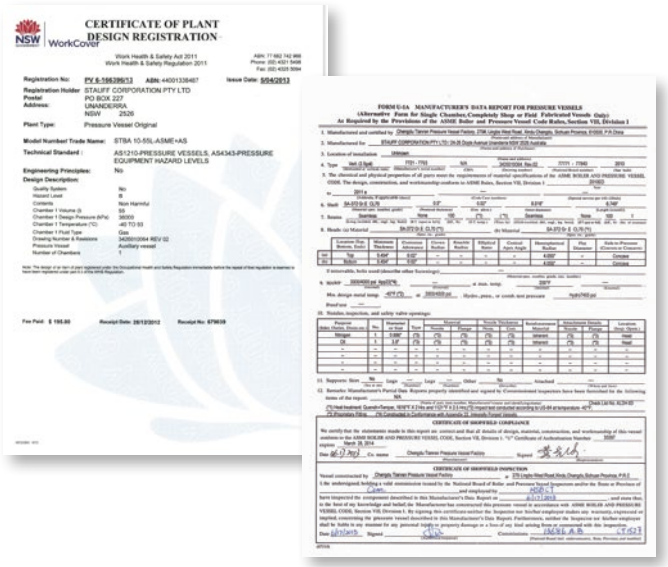
Hydraulic system pressure falls and the nitrogen gas expands, forcing the stored hydraulic oil back into the hydraulic circuit. The minimum operating pressure of the hydraulic circuit is reached (P1). The accumulator has discharged its stored volume down from the maximum pressure (P2) to the minimum pressure (P1).

Certifications

Accumulators are pressure vessels that can be subject to extreme operating conditions, large pressure and temperature variations, rapid cycles and aggressive environments.

Pressure vessels are regulated through their design worldwide in order to ensure that they are safe. Major accumulator designs are ASME, PED CE, AS1210 and GB/T.

Most design codes are specific to the region or country where the accumulator is manufactured. However, in some cases where machinery is exported, the design code may not be recognised in the region or country of import. In this case, it is the responsibility of the importer and end user to ensure that the accumulator meets the requirements of local law and vessel design requirements.



Australian Design Code Standard - AS1210

For Australia and New Zealand, the pressure vessel design code is AS1210. Accumulators for service in Australia, pressure vessels with a hazard level of A, B, C and D (according to AS4343) must be design registered with a State work safe authority.

AS4343 specifies the hazard level of a pressure vessel into categories A through to D based on design pressure MPa x Volume (Litres) and design temperature.

Some work safe authorities currently recognise overseas standards such as ASME, PED and CE; however, the design still needs to be verified and then registered by the local authority.

In Australia, once accumulators are design registered, they then need to have regular inspections in order to ensure that the equipment remains safe. AS3788 outlines guidelines with regard to a pressure vessel in service inspections.

According to Australian law, each pressure vessel that is design registered should be marked or stamped with the design registration number. In the case of AS1210, design registration AS1210 must also be stamped on the vessel. It is important to understand that local laws are designed to ensure safety when operating and servicing hydraulic accumulators. If laws are followed the potential risk of failure or harm is minimised.

ASME Design

ASME (American Society of Mechanical Engineers) is an organisation that regulates the design and manufacture of pressure vessels. Accumulators are classified under the category 'unfired pressure vessels' and fall under the jurisdiction of the ASME boiler and pressure vessel code.

Accumulators specifically fall under the section of the code which refers to Section VIII Division 1. This section requires certification on vessels with an internal diameter greater than 152 mm (6 in) and with the 'U' stamp as evidence that the vessel has been manufactured in accordance with the ASME design code.

The basic requirement of the ASME code is one of design strength and traceability. Accumulators must be manufactured with materials that meet the requirement of the code and safety factor. Appendix 22 in the code allows for a reduction in the safety factor, especially for hydraulic accumulators that have been manufactured with a forged shell.

Under the ASME code, each manufactured batch of accumulator shells is to be registered with the USA national board of inspectors using form U1a.

Applications

General

Accumulators are used in many different applications, providing energy savings through a reduction of equipment operating costs, and offering increased reliability and performance of system components.

Accumulator Application Examples

Reduction in Installed Power

In the case of a system that has a variable demand for oil, a hydraulic accumulator can be used to reduce installed power by supplementing pump flow and therefore allowing a smaller pump and drive motor to be used.

Emergency Operation

Used in systems when something needs to be operated without the use of power or electricity:

- Braking systems
- Power steering systems
- Lubrication systems
- Systems for closing or opening a gate
- Rapid closure of oil and gas valves

Leakage Compensator

Compensates for losses in a hydraulic system due to internal or external leakage that might occur over an extended period, and reduces the operational frequency of the pump.

Hydraulic Spring

Used in suspension systems and transport vehicles to enhance the operator comfort level. Fitted to crusher and roller press systems in order to maintain a required force whilst allowing for a variation in material density and thickness.

Hydraulic Shock Absorber

Eliminate shock (fluid hammer) in hydraulic systems caused by fast closing valves.

Hydraulic Separator

When two separate fluids must interact in the same hydraulic system, an accumulator can function as a separator.

Thermal Expansion

Thermal expansion in pipelines can be caused by temperature changes and can lead to induced pressures that result in pipe failures and leakages. Accumulators can be used as thermal compensator's to prevent damage to pipe-work.

High-Speed Actuation

Accumulators have the capacity to produce high flow rates for short periods of time, particularly in the case of accumulator stations. They are often used in applications such as die casting and injection moulding.

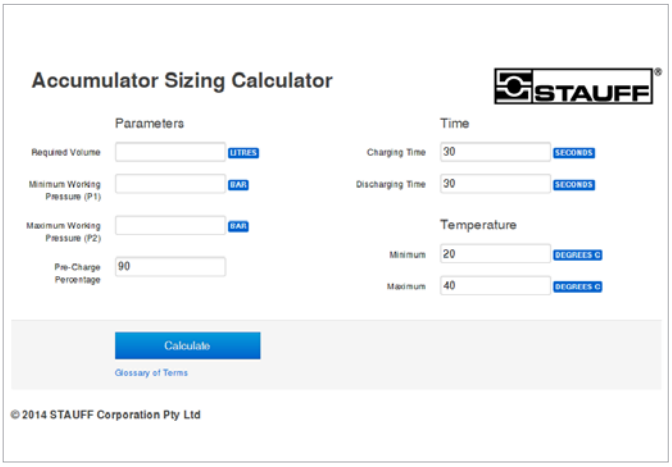
Accumulator Selection and Sizing

The following factors should be considered when selecting an accumulator to optimise operating efficiency and equipment service life:

▪ Required volume:	The volume required to be stored in the accumulator
▪ Minimum working pressure (P1):	The minimum system pressure (or minimum load pressure) to operate the actuator
▪ Maximum working pressure (P2):	Maximum system pressure is normally controlled by a pressure switch (or in some cases a relief valve) to shut off the hydraulic pump
▪ Pre-charge pressure:	Normally 80% - 90% of the minimum operating pressure (P1) or load pressure
▪Charge time:	Time in seconds to charge the accumulator with hydraulic fluid from the system (normally controlled by pump flow). In shock applications, this can be the valve closure or load actuation time
▪ Discharge time:	Time to operate the actuator or valve based on the output flow rate required from the accumulator. In shock applications, this can be the valve closure or load actuation time
▪ Minimum temperature:	Minimum ambient temperature
▪ Maximum temperature:	Maximum ambient temperature
▪ Effective gas volume:	Actual gas volume of the accumulator required in Litres (example: 20 Litre accumulator has an effective gas volume of 18.4 Litres). Accumulator volume selected must have an effective gas volume above that as requested by the calculation program
▪ Pre-charge pressure:	The specified pre-charge pressure at 20°C which allows for a rise in operating temperature

The following factors should also be considered when selecting an accumulator:

- Cycle time
- Fluid type
- Flow rate
- Maximum design pressure
- Operating frequency
- Shock suppression
- Certification requirements



Accumulator Sizing Calculator:

Visit http://accumulatorsizing.stauff.com.au for STAUFF's accumulator sizing calculator or contact STAUFF for more information.

Accumulator Pre-charge

Accumulators must first be pre-charged with nitrogen gas to the correct pressure before the accumulator can be operated in a hydraulic system. This is imperative in order to achieve a long service life and optimum operational performance of the system.

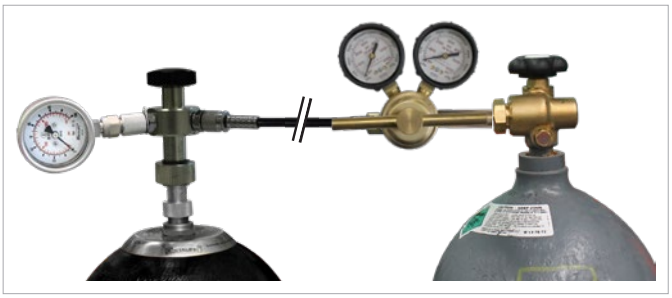
Pre-charge pressure determines the amount of fluid still retained in the accumulator at minimum operating pressure. This is important so that the bladder / diaphragm does not cycle on the bottom of the accumulator at minimum operating pressure. In a typical storage application where the minimum and maximum pressures are always defined, the pre-charge gas pressure should be set to 80 - 90% of the minimum operating pressure at operating temperature. If the pre-charge pressure is set too low, then this will result in a reduction of usable gas volume and reduced stored capacity. This could also lead to a reduction in bladder life.

Accumulators lose some pre-charge after a period of time. The loss of the nitrogen gas through the bladder or diaphragm is called gas permeation. The effects of gas permeation can be varied depending on the particular application. In some applications, the loss of pre-charge can be quite dramatic over several months, whilst in others, there is little or no effect over the same period of time.

The gas permeation rate is affected by several factors, primarily:

- Cycle time
- Temperature
- Stored volume
- System oil capacity / tank volume

When an accumulator is first installed in a hydraulic system, it is important that the pre-charge pressure be monitored initially. STAUFF recommend that the pre-charge gas pressure is inspected after 1 month, 3 months and 6 months. Depending on the results of the pressures recorded, a scheduled program of checking the pre-charge gas pressure can then be introduced.



Mounting

The optimum mounting position for an accumulator is the vertical position with the oil port mounted at the bottom. Bladder accumulators can be mounted in the horizontal position; however, it is not recommended as it may result in a slight reduction in stored capacity, and in cases of a high cycle or rapid discharge applications a reduction in bladder life may be experienced. In cases where it is not possible to mount the accumulator vertically, contact STAUFF to verify suitability.

Note: Diaphragm accumulators are less affected by horizontal mounting due to the nature of their design and smaller size.

Refer to page P28 for mounting accessories.

WARNING
BEFORE ATTEMPTING MAINTENANCE ON SYSTEM, ISOLATE OR EXHAUST ACCUMULATOR.
BEFORE REMOVAL OF ACCUMULATOR, EXHAUST LIQUID PRESSURE.
NITROGEN PRECHARGED TO
BAR
NEXT INSPECTION TO AS3788 DUE
/
STAUFF
WARNING
NITROGEN PRECHARGED TO
STAUFF

Bladder Accumulator Assemblies for Standard Applications STBA — P10 - P13

Gas Valve ▪ Integrated 7/8–14 UNF
Fluid Port ▪ BSPP Female Flat Face — P12
STBA-...-360A1-BT-U10S-G-A

Gas Valve ▪ 1/4" BSPP
Fluid Port ▪ BSPP Female Flat Face — P12
STBA-...-360A1-BA-U10S-G-A

Gas Valve ▪ STAUFF US Style Gas Valve 0.305" x 32 UNS 2A
Fluid Port ▪ BSPP Female Flat Face — P13
STBA-...-360A1-BY-U10S-G-A

Gas Valve ▪ STAUFF SKK-20 Gas Valve
Fluid Port ▪ BSPP Female Flat Face — P13
STBA-...-360A1-BS-U10S-G-A

Gas Valve ▪ Integrated 7/8–14 UNF
Fluid Port ▪ 1-1/2" SAE Code 62 — P13
STBA-...-360A1-BT-U10S-F624-A

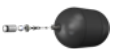
Bladder Accumulator Assemblies for Special Applications STBA — P13

Special 40 Litre / 11 Gal Accumulators
Suitable for Oil and Gas Industry — P13
STBA-...-360A1-BT-U10S-U-C

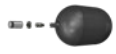
Gas Valve ▪ Integrated 7/8–14 UNF
Suitable for Water Service — P13
STBA-...-360A1-BT-U10S-G-P

Bladder Kits STB — P14 - P15

Gas Valve ▪ Integrated 7/8–14 UNF
NBR (Buna-N®) — P15
STB-...-B-T-W4-U10S-W3-O



Gas Valve ▪ 1/4" BSPP
NBR (Buna-N®) — P15
STB-...-B-A-W4-U10S-W3-O



Gas Valve ▪ STAUFF US Style Gas Valve 0.305" x 32 UNS 2A
NBR (Buna-N®) — P15
STB-...-B-Y-W4-U10S-W3-O

Gas Valve ▪ STAUFF SKK-20 Gas Valve
NBR (Buna-N®) — P15
STB-...-B-S-W5-U10S-W3-O

Gas Valve Assemblies — P16

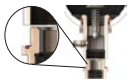
Gas Valve Assembly
Integrated 7/8–14 UNF — P16
STA-GV-ASSY-T-W4

Gas Valve Assembly
1/4" BSPP — P16
STA-GV-ASSY-A-W4

Gas Valve Assembly
STAUFF US Style Gas Valve 0.305" x 32 UNS 2A — P16
STA-GV-ASSY-Y-W4

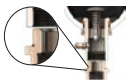
Gas Valve Assembly
STAUFF SKK-20 Gas Valve — P16
SKK-20-1/2UNF-V-E-GAS-W5

Fluid Port Assemblies STA-FPA — P16



Fluid Port ▪ BSPP Female Flat Face
Steel — P16
STA-FPA-...-G..-W3-S20-B

Fluid Port ▪ BSPP Female Flat Face
Stainless Steel — P16
STA-FPA-...-G..-W79-S20-B



Fluid Port ▪ BSPP O-Ring seal
Steel — P16
STA-FPA-...-G..-O-W3-S20-B

Fluid Port ▪ 1-1/2" SAE Code 62
Steel — P16
STA-FPA-...-F624-W3-S20-B

Fluid Port ▪ 1-1/2" SAE Code 62
Stainless Steel — P16
STA-FPA-...-F624-W79-S20-B

Fluid Port Anti-Extrusion Rings STA-AER — P17

NBR (Buna-N®)
Steel — P17
STA-AER-...-B-W3-IT

NBR (Buna-N®)
Stainless Steel — P17
STA-AER-...-B-W79

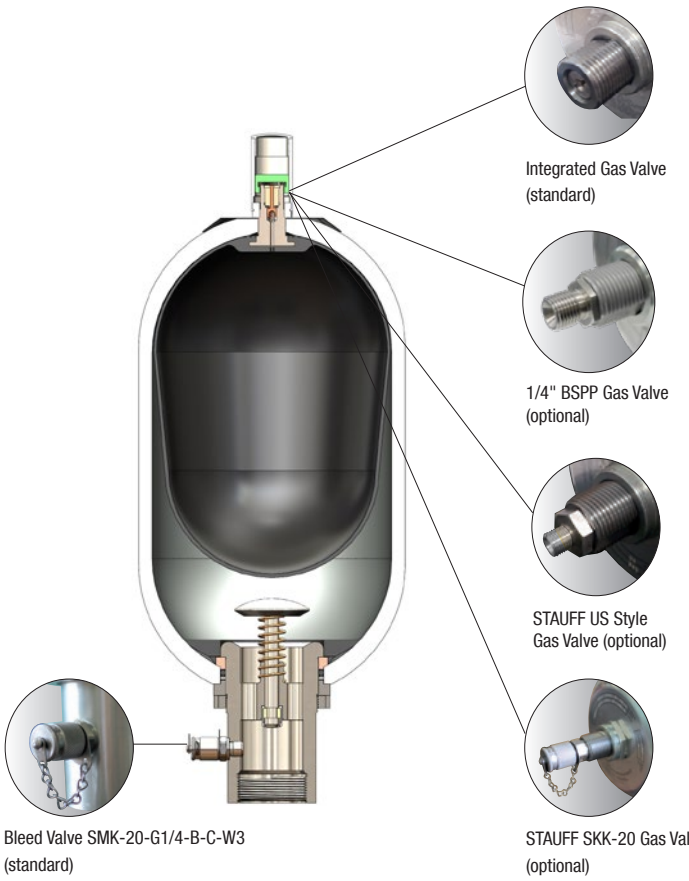
Fluid Port Clamps and Adaptors — P17 - P18

SAE Flange Clamps to suit Accumulators
with 1-1/2" SAE Code 62 Fluid Ports — P17
DB-605-..

Fluid Port Adaptors — P18
FI-RED-R-...-WD-R...-B-W3

Fluid Port Adaptors — P18
ADP-C-G32WD/G..-MFX-W66-A-WD-U-MA-GK

Bladder Accumulator Assemblies
Type STBA



Fluid Port
BSPP Female Flat Face
(standard)

Fluid Port
1-1/2" SAE Code 62
(optional)

Product Description

STAUFF bladder accumulator assemblies consist of three key components; shell, bladder, fluid port assembly, and are available in sizes 1 - 55 Litres with pressures up to 400 bar. STAUFF bladder accumulators can be used in applications such as pulsation dampening, surge alleviation, thermal expansion and energy storage.
STAUFF bladder accumulators comply with AS1210 standards and are suitable in all states of Australia, New Zealand and are accepted throughout Asia.

Features

- Meets AS1210 and ASME VIII Div 1 specifications
- Full flow fluid port
- STAUFF Test coupling and Integrated gas valve options
- Standard Nitrile rubber high strength bladder
- High flow bladder / port design
- Bottom repairable accumulators via the fluid port
- High strength chrome molybdenum / alloy steel shell
- Corrosion resistant black acrylic polyurethane coating
- 4:1 design factor at normal operating pressure
- Interchangeable with most competitors units
- Fluid port assembly high-grade steel, zinc plated
- Fluid bleed port connection supplied standard with STAUFF Test coupling
- Assembled and tested in Australia

Technical Data

- Range of connections from G3/4" to 2" BSPP and 1-1/2" SAE flange
- NBR (Buna-N®) diaphragm material (standard)
- Maximum compression ratio 4:1
- Operating temperature shell -40°C … +93°C
- Operating temperature bladder - according to material used
- Operating pressure to 360 Bar AS1210 (standard) 4000 PSI ASME APP 22 (standard)
- Capacity up to 55 Litres
- Bladder compatibility to most common fluids, refer to page P11
- Fluid bleed port connection G1/4"

Options

- Housing materials
- Fluid ports
- Gas valves
- Bladder materials
- Private branding
- Brackets, charging kits and accessories

Applications

- Mobile and stationary hydraulic systems
- Test benches
- Light and heavy industrial plants
- Transport equipment

Components and Material

Main Components	Standard Material		Material Options	
Shell	Chrome-Molybdenum Alloy Steel SA 372 - 34 CrMo4 Black RAL 9017 Acrylic Polyurethane		Internal PTFE lined shell Stainless Steel shell	
Bladder	NBR (Buna-N®)	Temperature	Material	Temperature
		-15°C ... +100°C	FKM (Viton®)	-20°C ... +140°C
			Butyl	-15°C ... +120°C
			EPDM	-40°C ... +120°C
			Hydrin (ECO)	-32°C ... +115°C
Fluid Port Assembly	Steel SCM 440 material specification with Zinc Plating		Stainless Steel 630 Grade	

Gas Valve Connections

Option T

Integrated Gas Valve (standard)

Option A

1/4" BSPP Gas Valve (optional)

Option Y

STAUFF US Style Gas Valve (optional)

Option S

STAUFF SKK-20 Gas Valve (optional)

Option T
Integrated Gas Valve (standard)

The valve seats internally inside the bladder stem. Direct coupling to the bladder stem is via the 7/8–14 UNF connection. The valve cannot become loose when removing the charging head; therefore, it is impossible to remove the gas valve whilst the accumulator is pre-charged.

Option A
1/4" BSPP Gas Valve

The 1/4" BSPP gas valve, used extensively in Australia, is being phased out and replaced by STAUFF's integrated gas valve.

Option Y
STAUFF US Style Gas Valve

The STAUFF US style gas valve provides a robust connection (0.305"-32 UNS 2A) as the valve seals deep inside the bladder stem (if the male connection is damaged the valve still retains its seal and prevents the loss of the nitrogen gas).

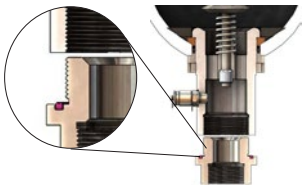
Option S
STAUFF SKK-20 Gas Valve

The STAUFF SKK-20 gas valve (gas rated) allows easy connection to the accumulator using a standard test fitting. The advantage is that the pre-charge can be checked by simply using a STAUFF safety pattern gauge fitted with a direct gauge adaptor. The safety pattern gauge and gauge adaptor can either be installed on the accumulator permanently or used to check the pre-charge during service intervals. No charge kit is required to check pre-charge pressure.

Note: Gas valve options T, A, Y and S are designed to suit STAUFF bladders only

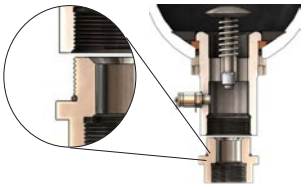
Fluid Port Connections

Option B



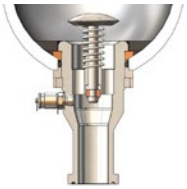
BSPP Female Connection Flat Face (standard)

Option G



BSPP Female Connection O-Ring seal (optional)

Option F



1-1/2" SAE Code 62 (optional)

Option B
BSPP Female Connection Flat Face seal (Steel)

Designed to connect a fitting that can incorporate either a bonded washer or encapsulated seal. Also available in stainless steel.

Available for sizes:

1 and 2.5 Litre - G3/4" BSPP

4 and 6 Litre - G1-1/4" BSPP

10 - 55 Litres - G2" BSPP

Option G
BSPP Female Connection O-Ring seal

This connection is fitted with an O-Ring seal positioned at the root of the male thread. This is a European style adaptor and is not suitable for use with a bonded washer.

Available for sizes:

10 - 55 Litres - G2" BSPP only

Option F
1-1/2" SAE Code 62

This Fluid Port is manufactured with a 1-1/2" SAE code 62 connection and is ideally suited to allow connection directly onto a manifold without requiring adaptors. Also available in stainless steel.

Available for sizes:

10 - 55 Litres only

Refer to page P17 for the range of SAE Flange Clamps

Option U

1-7/8" UNF (special)

Option N

2" NPT (special)

Option U
1-7/8" UNF

Designed to take a UNF fitting commonly used in the U.S

Only available in Carbon Steel to suit accumulator sizes 10 - 55 Litres

Option N
2" NPT

Designed to a NPT fitting commonly used in the U.S

Only available in Carbon Steel to suit accumulator sizes 10 - 55 Litres

STBA Assemblies
Order Codes

STBA	-	020	-	360A1	-	B	T	-	U10S	-	G	-	A
①		②		③		④	⑤		⑥		⑦		⑧

① Type

Bladder Accumulator	STBA

② Size Code

1 Ltr / 1 qrt	001
2.5 Ltr / 2.5 qrt	002
4 Ltr / 1 Gal	004
6 Ltr / 1.5 Gal	006
10 Ltr / 2.5 Gal	010
20 Ltr / 5 Gal	020
35 Ltr / 10 Gal	035
40 Ltr / 11 Gal	040
50 Ltr / 13 Gal	050
55 Ltr / 15 Gal	055

③ Pressure Rating and Design Code

AS1210 (only)	360A
AS1210 360 Bar + ASME 4000 PSI	360A1

④ Bladder Material

NBR (Buna-N®) (standard)	B
NBR (Buna-N®) (Low Permeation) For Special Fuels	B40
EPDM	E
Butyl II R	I
FKM (Viton®)	V
NBR (Buna-N®) Special High Flexibility	W

⑤ Gas Valve Connection

Integrated Gas Valve 7/8–14 UNF (standard)	T
1/4" BSPP	A
STAUFF US Style Gas Valve 0.305"-32 UNS 2A	Y
STAUFF SKK-20 Gas Valve	S
Gas Valve USA 3000 PSI 0.305" x 32 TPI	U
Not Fitted	0

⑥ Bladder Stem Size

7/8–14 UNF (standard)	U10S
2–12 UNF	U26S

⑦ Fluid Port Connection

BSPP Flat Face Seal (standard)	G
BSPP O-Ring Seal	GO
SAE Threaded	U
NPT	N
1-1/2" SAE Code 61 Flanged	F324
1-1/2" SAE Code 62 Flanged	F624

⑧ Material / Surface Protection

Gas Valve	Bladder Stem	Fluid Port	Shell		
Stainless Steel	Carbon Steel / Zinc-Nickel	Carbon Steel	Carbon Steel	(standard)	A
Carbon Steel / Zinc-Nickel	Carbon Steel / Zinc-Nickel	Carbon Steel	Carbon Steel		B
Carbon Steel / Zinc-Nickel	Carbon Steel / Zinc-Nickel	Zinc Phosphate	Carbon Steel	(USA standard)	C
Stainless Steel	Carbon Steel / Zinc-Nickel	17/4 PH Stainless Steel	Carbon Steel		D
Stainless Steel	Stainless Steel	17/4 PH Stainless Steel	Carbon Steel		F
Stainless Steel	Stainless Steel	17/4 PH Stainless Steel	Carbon Steel Internally PTFE Lined		P

Bladder Accumulator Assemblies for Standard Applications Type STBA

Gas Valve ▪ Integrated 7/8–14 UNF
Fluid Port ▪ BSPP Female Flat Face
360 bar AS1210 ▪ 4000 PSI ASME
Type STBA-...-360A1-BT-U10S-G-A

Item No.	Designation	Price
3426010622	STBA-001-360A1-BT-U10S-G-A	993.15
3426010623	STBA-002-360A1-BT-U10S-G-A	1106.25
3426010624	STBA-004-360A1-BT-U10S-G-A	1211.90
6100043538	STBA-006-360A1-BT-U10S-G-A	1527.95
3426010625	STBA-010-360A1-BT-U10S-G-A	2114.50
3426010626	STBA-020-360A1-BT-U10S-G-A	2603.40
3426010628	STBA-035-360A1-BT-U10S-G-A	3184.00
3426010629	STBA-040-360A1-BT-U10S-G-A	3617.90
3426010630	STBA-050-360A1-BT-U10S-G-A	4137.35
3426010631	STBA-055-360A1-BT-U10S-G-A	4461.20

Gas Valve ▪ 1/4" BSPP
Fluid Port ▪ BSPP Female Flat Face
360 bar AS1210 ▪ 4000 PSI ASME
Type STBA-...-360A1-BA-U10S-G-A

Item No.	Designation	Price
3426010612	STBA-001-360A1-BA-U10S-G-A	1018.85
3426010613	STBA-002-360A1-BA-U10S-G-A	1132.45
3426010614	STBA-004-360A1-BA-U10S-G-A	1240.65
6100043615	STBA-006-360A1-BA-U10S-G-A	1527.95
3426010615	STBA-010-360A1-BA-U10S-G-A	2139.05
3426010616	STBA-020-360A1-BA-U10S-G-A	2627.85
3426010618	STBA-035-360A1-BA-U10S-G-A	3208.45
6100206842	STBA-040-360A1-BA-U10S-G-A	3660.65
3426010620	STBA-050-360A1-BA-U10S-G-A	4167.85
3426010648	STBA-055-360A1-BA-U10S-G-A	4461.20

Bladder Accumulator Assemblies for Standard Applications Type STBA

Gas Valve ▪ STAUFF USA Gas Valve 0.305" x 32 TP
Fluid Port ▪ BSPP Female Flat Face
360 bar AS1210 ▪ 4000 PSI ASME
Type STBA-...-360A1-BY-U10S-G-A

Item No.	Designation	Price
3426010771	STBA-001-360A1-BY-U10S-G-A	993.15
3426010772	STBA-002-360A1-BY-U10S-G-A	1106.25
3426010773	STBA-004-360A1-BY-U10S-G-A	1211.90
6100043545	STBA-006-360A1-BY-U10S-G-A	1527.95
3426010774	STBA-010-360A1-BY-U10S-G-A	2114.50
3426010775	STBA-020-360A1-BY-U10S-G-A	2603.40
3426010777	STBA-035-360A1-BY-U10S-G-A	3184.00
6100206843	STBA-040-360A1-BY-U10S-G-A	3660.65
3426010779	STBA-050-360A1-BY-U10S-G-A	4137.35
3426010873	STBA-055-360A1-BY-U10S-G-A	4461.20

Gas Valve ▪ STAUFF SKK-20 Gas Valve
Fluid Port ▪ BSPP Female Flat Face
360 bar AS1210 ▪ 4000 PSI ASME
Type STBA-...-360A1-BS-U10S-G-A

Item No.	Designation	Price
3426010945	STBA-001-360A1-BS-U10S-G-A	1031.65
3426010946	STBA-002-360A1-BS-U10S-G-A	1138.65
3426010947	STBA-004-360A1-BS-U10S-G-A	1240.65
6100043570	STBA-006-360A1-BS-U10S-G-A	1552.35
3426010948	STBA-010-360A1-BS-U10S-G-A	2151.20
3426010949	STBA-020-360A1-BS-U10S-G-A	2634.00
3426010950	STBA-035-360A1-BS-U10S-G-A	3251.20
6100039506	STBA-040-360A1-BS-U10S-G-A	3660.65
3426010951	STBA-050-360A1-BS-U10S-G-A	4253.40
3426010874	STBA-055-360A1-BS-U10S-G-A	4461.20

Gas Valve ▪ Integrated 7/8–14 UNF
Fluid Port ▪ 1-1/2" SAE Code 62
360 bar AS1210 ▪ 4000 PSI ASME
Type STBA-...-360A1-BT-U10S-F624-A

Item No.	Designation	Price
3426010649	STBA-010-360A1-BT-U10S-F624-A	2359.00
3426010650	STBA-020-360A1-BT-U10S-F624-A	2860.10
3426010652	STBA-035-360A1-BT-U10S-F624-A	3416.15
3426010654	STBA-050-360A1-BT-U10S-F624-A	4369.55
3426010655	STBA-055-360A1-BT-U10S-F624-A	4693.40

Bladder Accumulator Assemblies for Special Applications Type STBA

Special 40 Litre ▪ 11 Gallon Accumulators
Suitable for Oil and Gas Industry
360 bar AS1210 ▪ 4000 PSI ASME
Type STBA-040-360A1-..

Item No.	Designation	Price
6100039512	STBA-040-360A1-BY-U10S-U-C	3740.05
6100039516	STBA-040-360A1-BT-U10S-U-C	3740.05
6100039517	STBA-040-360A1-BS-U10S-U-C	3740.05
6100062734	STBA-040-360A1-BY-U10S-N-C	3740.05

Suitable for Water Service
Gas Valve ▪ Integrated 7/8–14 UNF
Fluid Port ▪ BSPP Female Flat Face
360 bar AS1210 ▪ 4000 PSI ASME
Type STBA-...-360A1-BT-U10S-G-P

Item No.	Designation	Price
6100105333	STBA-001-360A1-BT-U10S-G-P	1839.50
6100105334	STBA-004-360A1-BT-U10S-G-P	2915.10
6100105335	STBA-010-360A1-BT-U10S-G-P	4137.35
6100105336	STBA-020-360A1-BT-U10S-G-P	4852.35
6100105338	STBA-035-360A1-BT-U10S-G-P	5787.35
6100105337	STBA-050-360A1-BT-U10S-G-P	6685.65

Bladder Kits
Type STB

Integrated Gas Valve
(standard)

1/4" BSPP Gas Valve
(optional)

STAUFF US Style Gas Valve
(optional)

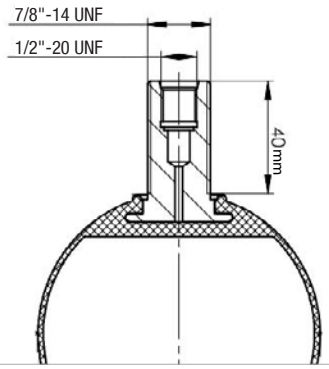
STAUFF SKK-20 Gas Valve
(optional)

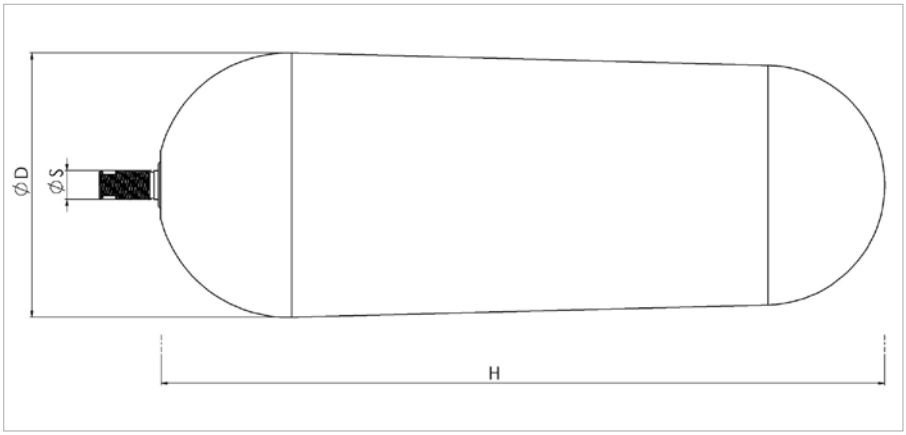
Specifications

- Bladders are supplied in NBR (Buna-N®) rubber with a 7/8–14 UNF steel stem
  Other options available on request
- Supplied with integrated gas valve (standard)
  Other options available on request

1. Bladder and stem
2. Gas valve (integrated valve is shown)
3. Bladder lock nut
4. Gas valve cap
5. Protection cap
6. Fluid port O-Ring
7. Back-up washer

1 & 2.5 Ltr bladder kits supplied with a fluid port O-Ring	4 - 55 Litre bladder kits supplied with a fluid port O-Ring and back-up ring





Dimensions

Volume (Litre)	Height (H) (mm)	Diameter (D) (mm)	Stem Thread (S)
1	149	100	7/8–14 UNF
3	331	100	7/8–14 UNF
4	208	150	7/8–14 UNF
6	316	150	7/8–14 UNF
10	286	200	7/8–14 UNF
20	590	200	7/8–14 UNF
35	1114	200	7/8–14 UNF
40	1215	200	7/8–14 UNF
50	1611	200	7/8–14 UNF
55	1733	200	7/8–14 UNF

Bladder Kits
Order Codes

STB	-	020	-	B	-	T	-	W4	-	U10S	-	W3	-	0
①		②		③		④		⑤		⑥		⑦		⑧

① Type

Bladder	STB

② Size Code

1 Ltr / 1 qrt	001
2.5 Ltr / 2.5 qrt	002
4 Ltr / 1 Gal	004
6 Ltr / 1.5 Gal	006
10 Ltr / 2.5 Gal	010
20 Ltr / 5 Gal	020
35 Ltr / 10 Gal	035
40 Ltr / 11 Gal	040
50 Ltr / 13 Gal	050
55 Ltr / 15 Gal	055

③ Bladder Material

NBR (Buna-N®) (standard)	B
NBR (Buna-N®) (Low Permeation) For Special Fuels	B40
EPDM	E
Butyl II R	I
FKM (Viton®)	V
NBR (Buna-N®) Special High Flexibility	W

④ Gas Valve Connection

Integrated Gas Valve 7/8–14 UNF (standard)	T
1/4" BSPP	A
STAUFF US Style Gas Valve 0.305"-32 UNS 2A	Y
STAUFF SKK-20 Gas Valve	S
Gas Valve USA 3000 PSI 0.305" x 32 TPI	U

⑤ Gas Valve Material

Stainless steel 1.4301 / 1.4305 (AISI 304 / 303)	W4
Stainless steel 1.4271 (316)	W5

⑥ Bladder Stem Size

7/8–14 UNF (standard)	U10S

⑦ Bladder Stem Material

Steel / zinc-nickel plated	W3
Stainless steel 1.4301 / 1.4305 (AISI 304 / 303)	W4

⑧ Bladder Kit Type

Bladder Assembly without Anti-Extrusion Ring (AER)	0
Bladder Assembly with Anti-Extrusion Ring (AER)	A

Gas Valve ▪ Integrated 7/8–14 UNF
NBR
Type STB-...-B-T-W4-U10S-W3-0

Item No.	Designation	Price
6100218102	STB-001-B-T-W4-U10S-W3-0	476.20
6100218108	STB-002-B-T-W4-U10S-W3-0	515.85
6100218114	STB-004-B-T-W4-U10S-W3-0	537.85
6100218128	STB-006-B-T-W4-U10S-W3-0	664.35
6100218133	STB-010-B-T-W4-U10S-W3-0	603.25
6100218140	STB-020-B-T-W4-U10S-W3-0	911.90
6100218149	STB-035-B-T-W4-U10S-W3-0	1289.55
6100218154	STB-040-B-T-W4-U10S-W3-0	1442.30
6100218158	STB-050-B-T-W4-U10S-W3-0	2047.30
6100218164	STB-055-B-T-W4-U10S-W3-0	2352.90

Gas Valve ▪ STAUFF US Style
NBR
Type STB-...-B-Y-W4-U10S-W3-0

Item No.	Designation	Price
6100218104	STB-001-B-Y-W4-U10S-W3-0	496.35
6100218110	STB-002-B-Y-W4-U10S-W3-0	536.70
6100218116	STB-004-B-Y-W4-U10S-W3-0	558.70
6100218129	STB-006-B-Y-W4-U10S-W3-0	664.35
6100218135	STB-010-B-Y-W4-U10S-W3-0	624.10
6100218142	STB-020-B-Y-W4-U10S-W3-0	932.65
6100218151	STB-035-B-Y-W4-U10S-W3-0	1314.05
6100218155	STB-040-B-Y-W4-U10S-W3-0	1472.90
6100218160	STB-050-B-Y-W4-U10S-W3-0	2077.90
6100218165	STB-055-B-Y-W4-U10S-W3-0	2352.90

Gas Valve ▪ 1/4" BSPP
NBR
Type STB-...-B-A-W4-U10S-W3-0

Item No.	Designation	Price
6100218100	STB-001-B-A-W4-U10S-W3-0	496.35
6100218106	STB-002-B-A-W4-U10S-W3-0	536.70
6100218112	STB-004-B-A-W4-U10S-W3-0	558.70
6100218126	STB-006-B-A-W4-U10S-W3-0	664.35
6100218130	STB-010-B-A-W4-U10S-W3-0	624.10
6100218137	STB-020-B-A-W4-U10S-W3-0	932.65
6100218146	STB-035-B-A-W4-U10S-W3-0	1314.05
6100136018	STB-040-B-A-W4-U10S-W3-0	1472.90
6100218156	STB-050-B-A-W4-U10S-W3-0	2077.90
6100218162	STB-055-B-A-W4-U10S-W3-0	2352.90

Gas Valve ▪ STAUFF SKK-20 Gas Valve
NBR
Type STB-...-B-S-W5-U10S-W3-0

Item No.	Designation	Price
6100218101	STB-001-B-S-W5-U10S-W3-0	507.95
6100218107	STB-002-B-S-W5-U10S-W3-0	548.25
6100218113	STB-004-B-S-W5-U10S-W3-0	570.25
6100218127	STB-006-B-S-W5-U10S-W3-0	690.10
6100218132	STB-010-B-S-W5-U10S-W3-0	635.65
6100218139	STB-020-B-S-W5-U10S-W3-0	944.25
6100218148	STB-035-B-S-W5-U10S-W3-0	1320.15
6100218153	STB-040-B-S-W5-U10S-W3-0	1472.90
6100218157	STB-050-B-S-W5-U10S-W3-0	2083.95
6100218163	STB-055-B-S-W5-U10S-W3-0	2389.50

Note: Bladder kits are not supplied with an anti-extrusion ring (STA-AER) as this can be re-used in most cases. Refer to page P17

Gas Valve Assemblies

Gas Valve Assemblies
Type STA-GV

Item No.	Designation	Price
3426010228	1 STA-GV-ASSY-T-W4	113.60
6100018949	2 STA-GV-ASSY-A-W4	127.80
3426010598	3 STA-GV-ASSY-Y-W4	127.80
1210024743	4 SKK-20-1/2UNF-V-E-GAS-W5	180.80

1 Integrated 7/8" UNF 2 1/4" BSPP 3 US Style Gas Valve 4 STAUFF SKK-20 Gas Valve

Fluid Port Assemblies
Order Codes

STA - FPA - 010 - G32 - W3 - S20 - B
1 2 3 4 5 6 7

① Type

Bladder Accumulator	**STA**

② Series

Fluid Port Assembly - 5000 PSI	**FPA**

③ Group Size

1 & 2.5 Ltr / 1 & 2.5 qrt	**001**
4 & 6 Ltr / 1 & 1.5 Gal	**004**
10 - 55 Ltr / 2.5 - 15 Gal	**010**

④ Connection Type

3/4" BSPP Flat seal (Group 001 only)	**G12**
1-1/4" BSPP Flat seal (Group 004 only)	**G20**
2" BSPP Flat seal (Group 010 only)	**G32**
2" BSPP O-Ring seal (Group 010 only)	**G32-O**
1-1/2" SAE Flange Code 62	**F624**

⑤ Material / Surface Protection

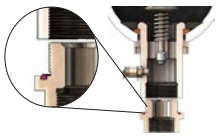
Steel / zinc-nickel plated	**W3**
Stainless steel 17/4 PH or equivalent	**W79**

⑥ Bleed Plug

STAUFF Test SKK-20 fitted	**S20**

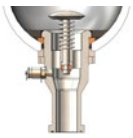
⑦ AER Rubber Material

NBR (standard)	**B**



BSPP Female Flat Face ▪ Steel
Type STBA-FPA-...-G..-W3-S20-B

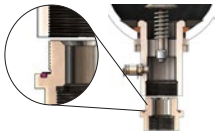
Item No.	Designation	Price
3426010189	STA-FPA-001-G12-W3-S20-B	374.15
3426010238	STA-FPA-004-G20-W3-S20-B	415.05
3426010239	STA-FPA-010-G32-W3-S20-B	563.55



1-1/2" SAE Code 62 ▪ Steel
Type STBA-FPA-...-F624-W3-S20-B

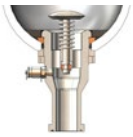
Item No.	Designation	Price
3426010606	STA-FPA-010-F624-W3-S20-B	737.70

Refer to page P17 for the range of SAE Flange Clamps



BSPP Female Flat Face ▪ Stainless Steel
Type STBA-FPA-...-G..-W79-S20-B

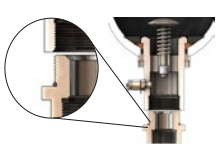
Item No.	Designation	Price
3426010602	STA-FPA-001-G12-W79-S20-B	871.55
3426010603	STA-FPA-004-G20-W79-S20-B	1705.10
3426010604	STA-FPA-010-G32-W79-S20-B	2255.10



1-1/2" SAE Code 62 ▪ Stainless Steel
Type STBA-FPA-...-F624-W79-S20-B

Item No.	Designation	Price
3426010605	STA-FPA-010-F624-W79-S20-B	2267.35

Refer to page P17 for the range of SAE Flange Clamps



BSPP O-Ring seal ▪ Steel
Type STBA-FPA-...-G..-O-W3-S20-B

Item No.	Designation	Price
3426010609	STA-FPA-010-G32-O-W3-S20-B	563.55

Note: All fluid ports are supplied with an anti-extrusion ring, STAUFF Test bleed valve, fluid port O-Ring, and back-up ring.

Fluid Port Anti-Extrusion Rings
Order Codes

STA	-	AER	-	010	-	B	-	W3	-	IT
①		②		③		④		⑤		⑥

① Type
Bladder Accumulator	**STA**

② Series
Fluid Port Assembly	**AER**

③ Group Size
1 & 2.5 Ltr / 1 & 2.5 qrt	**001**
4 & 6 Ltr / 1 & 1.5 Gal	**004**
10 - 55 Ltr / 2.5 - 15 Gal	**010**

④ Rubber Material
NBR (standard)	**B**

⑤ Metal Ring Material
Carbon steel / zinc-nickel plated	**W3**
17/4 PH Stainless steel (1.4542) or equivalent	**W79**

⑥ Special Options
No options	**(None)**
CHARPY Impact (V-notch) Test -40 °C	**IT**

NBR ▪ Steel
Type STA-AER-...-B-W3-IT

Item No.	Designation	Price
3426010113	STA-AER-001-B-W3-IT	100.70
3426010116	STA-AER-004-B-W3-IT	113.60
3426010119	STA-AER-010-B-W3-IT	125.35

NBR ▪ Stainless Steel
Type STA-AER-...-B-W79

Item No.	Designation	Price
3426010382	STA-AER-001-B-W79	121.30
3426010384	STA-AER-004-B-W79	161.45
3426010386	STA-AER-010-B-W79	281.25

Note: Anti-extrusion rings have a split metal ring to allow for folding during installation.

SAE Flange Clamps for Fluid Port

SAE Flange (Split) Clamps
to suit Accumulators with 1-1/2" SAE Code 62 Fluid Ports
Type DB-605-..

Item No.	Designation	Price
1730000036	DB-605-W66	53.90
1730000153	DB-605-W5	368.55

W66 = Steel Galvanised, thick layer passivated
W5 = Stainless Steel
Sold as pair

Metric Bolt Kits for SAE Flanges
Bolts - ISO 4762 ▪ Spring Rings - DIN 7980
Type KIT-BFX-IS-M16-ISO4762-8.8-W66

Item No.	Designation	Price
1720000076	Kit-BFX-IS-M16x55-ISO4762-8.8-W66	27.40

Bolt kits consist of 4 hexagon socket head cap bolts and 4 spring rings

Fluid Port
1-1/2" SAE Code 62

Fluid Port Adaptors to suit sizes
1 and 2.5 Litre - G3/4" BSPP
4 and 6 Litre - G1-1/4" BSPP

FI	-	RED	-	R3/4	-	WD	-	R1/4	-	B	-	W3
①		②		③		④		⑤		⑥		⑦

① Series
Fittings	FI

② Type
Thread Reducer	RED

③ Male Thread Type / Size
Whitworth Parallel Pipe Thread 3/4" BSPP	R3/4
Whitworth Parallel Pipe Thread 1-1/4" BSPP	R1-1/4

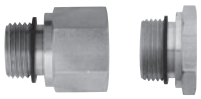
④ Sealing Type
Elastomeric seal	WD

⑤ Female Thread Type / Size
Whitworth Parallel Pipe Thread 1/4" BSPP	R1/4
Whitworth Parallel Pipe Thread 1/2" BSPP	R1/2
Whitworth Parallel Pipe Thread 3/4" BSPP	R3/4
Whitworth Parallel Pipe Thread 1" BSPP	R1
Whitworth Parallel Pipe Thread 1-1/4" BSPP	R1-1/4

⑥ Sealing Material
NBR (Buna-N®)	B

⑦ Surface Material
Steel / zinc-nickel plated	W3

Fluid Port Adaptor - Threaded Reducer
BSPP with Profile Sealing Ring
Type FI-RED-R-...-WD-R-...-B-W3



Item No.	Designation	PN (bar)	Price
6020000333	FI-RED-R3/4-WD-R1/4-B-W3	400	10.70
6020000329	FI-RED-R3/4-WD-R1/2-B-W3	400	12.85
6020000326	FI-RED-R3/4-WD-R1-1/4-B-W3	400	89.85
6020000349	FI-RED-R1-1/4-WD-R1/2-B-W3	400	45.00
6020000347	FI-RED-R1-1/4-WD-R3/4-B-W3	400	31.00
6020000345	FI-RED-R1-1/4-WD-R1-B-W3	400	39.45

Fluid Port Adaptors to suit sizes
10 - 55 Litre - G2" BSPP only

ADP	-	C	-	G32WD/G12	-	MFX	-	W66	A	-	WD-U	-	MA-GK
①		②		③		④		⑤	⑥		⑦		⑧

① Adaptor
Adaptor	ADP

② Type
Connector	C

③ Thread Types
BSPP Parallel	G
BSPP Parallel with a WD Sealing face	G..WD

③ Thread Sizes
3/4" BSPP	12
1" BSPP	16
1-1/4" BSPP	20
1-1/2" BSPP	24
2" BSPP	32

④ Gender Types
Male / Female Fixed	MFX

⑤ Surface Protection
Steel Galvanised, thick layer passivated	W66

⑥ Manufacturer
STAUFF	(None)
Externally Bought	A

⑦ Assembly Status
Polyurethane Elastomeric sealing	WD-U

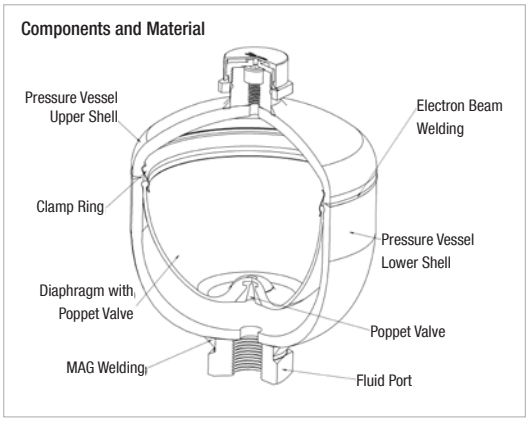
⑧ Additional Information
Machined flat body - Capped	MA-GK

Fluid Port Adaptor - Connector
with Captive Seal
Type ADP-C-G32WD/G..-MFX-W66A-WD-U-MA-GK

Item No.	Designation	PN (bar)	Price
6100114279	ADP-C-G32WD/G12-MFX-W66A-WD-U-MA-GK	360	144.25
6100114280	ADP-C-G32WD/G16-MFX-W66A-WD-U-MA-GK	360	181.05
6100114281	ADP-C-G32WD/G20-MFX-W66A-WD-U-MA-GK	360	181.05
6100114282	ADP-C-G32WD/G24-MFX-W66A-WD-U-MA-GK	360	181.05

Diaphragm Accumulators
0.075 Litre - 2.8 Litre
STDA
P20 - P21

Diaphragm Accumulators
Type STDA



Product Description

STAUFF diaphragm accumulators (non-repairable compact type) are used to store low volumes for oil service for 0.075 - 2.8 Litre models, with pressure up to 350 bar. The compact design and construction includes a 1/2" or 3/4" BSPP fluid port connection (depending on accumulator size) as standard, fitted with a resilient diaphragm and the housing made of high tensile steel construction.

Features

- Full flow fluid port
- Standard Nitrile rubber high strength bladder
- High flow button style bladder / port design
- Non-repairable diaphragm accumulator
- Electron beam welded steel shell
- Paint Specification:
  UV Lacquer (0.075 - 1.4 Litre)
  zinc phosphating spray-type UV-lacquer and UV-hardening
  2K-Epoxy Resin Varnish (2 - 2.8 Litre)
  iron phosphating spray-paint with 2K-Epoxy resin varnish

Technical Data

- M28x1.5 connection with socket head cap screw (standard)
- NBR (Buna-N®) diaphragm material (standard)
- Maximum compression ratio of
  8:1 up to 1.4 Litres
  6:1 2 and 2.8 Litres
- Operating temperature -10°C ... +80°C
- Operating pressure to 250 - 350 bar
- Capacity up to 2.8 Litres

Options

Gas Port

- USA Schrader Valve

Oil Port

- BSPP, metric, male / female metric combination

Oil Port Adaptors (for 0.075 -1.4 Litres)

- 1/2 BSPP - M27x2 metric male / male adaptor

Diaphragm Material

- NBR (Buna-N®)
- FKM (Viton®)

Other materials available on request

Applications

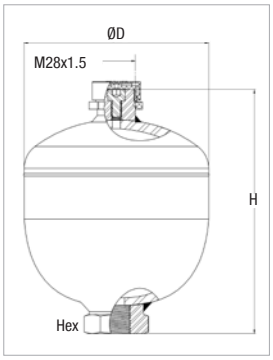
- Mobile and stationary hydraulics
- Light industrial
- Transport

Components and Material

Main Components	Standard Material		Material Options	
Shell	High strength alloy steel black enamel coating (non-repairable electron-beam welded construction)		Other materials available on request	
Diaphragm	NBR (Buna-N®)	Temperature Rating -10°C ... +80°C	Hydrin (ECO)	Temperature Rating -32°C ... +115°C
			FKM (Viton®)	-20°C ... +140°C
Gas Valve	Connection M28 with M6 socket head cap screw		G1/4" with US style gas core	
Fluid Port Shut-Off Valve	Delrin		–	

Maximum Flow Rates

Size (Ltr)	Maximum Recommended Flow			
	Normal Operation		Fully Discharging	
	GPM	LPM	GPM	LPM
0.075 & 0.16	11	40	2.6	10
0.32 & 1.40	26	100	11	40
2.00 & 2.80	42	160	16	60



Refer to page P28 for accumulator clamps

Refer to page P21 for dimensions

Diaphragm Accumulators
Type STDA

STDA - 075 - NBR - P3 - B - M - N - 1

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

① Type

STAUFF Diaphragm Non Repairable Accumulator	**STDA**

② Accumulator Volume

0.075 Litre	250 bar	**007**
0.16 Litre	250 bar	**016**
0.32 Litre	210 bar	**032**
0.5 Litre	210 bar	**050**
0.75 Litre	210 or 350 bar	**075**
1 Litre	210 bar	**100**
1.4 Litre	210 bar	**140**
2 Litre	250 bar	**200**
2.8 Litre	250 bar	**280**

Other pressures available on request

③ Diaphragm Material

Nitrile NBR (Buna-N®)	**NBR**
Hydrin for Low Temp ECO	**ECO**
Fluoroelastomer FKM (Viton®)	**FKM**

④ Maximum Working Pressure

210 bar	**P3**
250 bar	**P4**
350 bar	**P5**

⑤ Oil Port Connection

Refer Table Below

⑥ Gas Port Connection

M28x1.5 (standard)	**M**
US Style Gas Valve (adaptor)	**U**

⑦ Non-Repairable

Non-Repairable	**N**

⑧ Special Option

Standard	**1**
25 bar Pre-charge	**25**
50 bar Pre-charge	**50**

⑤

Connection Type	Volume (Ltr)									Note	Code
	0.075	0.16	0.32	0.5	0.75	1	1.4	2	2.8		
BSPP	G1/2"	G1/2"	G1/2"	G1/2"	G1/2"	G1/2"	G1/2"	G3/4"	G3/4"	Standard for Australia, Brazil, China and Europe	**B**
Metric Male					M33x2.0						**D**
BSPP Female					G1/2"						
UNF	9/16–18	9/16–18	9/16–18	3/4–16	3/4–16	3/4–16	3/4–16	1-1/6–12	1-1/6–12	Standard for North America	**U**

Order Codes and Dimensions

Nominal Capacity (Litre)	Maximum Working Pressure (bar)	Gas Valve Connection	Fluid Port Connection	Dimensions (mm)			Weight (kg)
				D	H	Maximum Pre-Charge (bar)	
0.075	250	M28x1.5	G1/2	64	111	130	0.7
0.16	250	M28x1.5	G1/2	75	119	130	1
0.32	210	M28x1.5	G1/2	92.5	134	130	1.4
0.5	210	M28x1.5	G1/2	107	151	130	2
0.75	210	M28x1.5	G1/2	121	166	130	2.6
0.75	350	M28x1.5	M33x2.0 (M) / G1/2 (F)	128.5	184	130	4.4
1	210	M28x1.5	G1/2	136	180	130	3.5
1.4	210	M28x1.5	G1/2	147	191	130	6.6
2	250	M28x1.5	G3/4	156	252	130	9.2
2.8	250	M28x1.5	G3/4	174	267	125	10

Item No.	Designation	Price
3426001010	STDA-007-NBR-P4-B-M-N-1	147.40
3426001011	STDA-016-NBR-P4-B-M-N-1	167.55
3426001012	STDA-032-NBR-P3-B-M-N-1	172.65
3426001013	STDA-050-NBR-P3-B-M-N-1	226.80
3426001014	STDA-075-NBR-P3-B-M-N-1	253.10
3426001015	STDA-075-NBR-P5-D-M-N-1	412.65
3426001016	STDA-100-NBR-P3-B-M-N-1	300.75
3426001017	STDA-140-NBR-P3-B-M-N-1	405.25
3426001018	STDA-200-NBR-P4-B-M-N-1	795.80
3426001019	STDA-280-NBR-P4-B-M-N-1	857.50

WARNING
NITROGEN
PRECHARGED TO
NEXT INSPECTION

Permanent Charging Heads
for Bladder Accumulators with 19 mm A/F P24 - P25
STBA-A-CV

Option T
Integrated Gas Valve with SKK-20 only P24
STBA-A-CV-U10-T-SKK-20-W3

Option A
1/4" BSPP Gas Valve with SKK-20 only P24
STBA-A-CV-U10-A-SKK-20-W3

Option Y
STAUFF US Style Gas Valve with SKK-20 only P24
STBA-A-CV-U10-Y-SKK-20-W3

Option T
Integrated Gas Valve and Gauge P25
STBA-A-CV-U10-T-SKK-20-...SG-W3

Option A
1/4" BSPP Gas Valve and Gauge P25
STBA-A-CV-U10-A-SKK-20-...SG-W3

Option Y
STAUFF US Style Gas Valve and Gauge P25
STBA-A-CV-U10-Y-SKK-20-...SG-W3

Option T
Integrated Gas Valve and Pressure Transmitter P25
STBA-A-CV-U10-T-SKK-20-B...R-W3

Option A
1/4" BSPP Gas Valve and Pressure Transmitter P25
STBA-A-CV-U10-A-SKK-20-B...R-W3

Option Y
STAUFF US Style Gas Valve and Pressure Transmitter P25
STBA-A-CV-U10-Y-SKK-20-B...R-W3

1/4" Gas Valve to suit
STBA-A-CV Permanent Charging Heads P24
SKK-20-G1/4-V-C-GAS-W3

Permanent Charging Heads
for Bladder Accumulators with 16 mm A/F P26
STBA-A-FV

Option Y
STAUFF US Style Gas Valve with SKK-20 only P26
STBA-A-FV-U10-Y-SKK-20-W3

Option Y
STAUFF US Style Gas Valve and Gauge P26
STBA-A-FV-U10-Y-SKK-20-...SG-W3

Option Y
STAUFF US Style Gas Valve and Pressure Transmitter P26
STBA-A-FV-U10-Y-SKK-20-B...R-W3

1/4" Gas Valve to suit
STBA-A-FV Permanent Charging Heads P26
SKK-20-G1/4-V-C-GAS-W3

Permanent Charging Heads
for Diaphragm Accumulators P27
STDA-A

Option M28
M28 Gas Valve with SKK-20 only P27
STDA-A-M28-M28-SKK-20-W3

Option M28
M28 Gas Valve and Gauge P27
STDA-A-M28-M28-SKK-20-...SG-W3

Option M28
M28 Gas Valve and Pressure Transmitter P27
STDA-A-M28-M28-SKK-20-B...R-W3

1/4" Gas Valve to suit
STDA-A Permanent Charging Heads P27
SKK-20-G1/4-V-C-GAS-W3

Accumulator Clamps P28
STA-AMP

Accumulator Clamps ▪ Steel
to suit STBA and STDA Accumulators P28
STA-AMP-..

Accumulator Clamps ▪ Stainless Steel
to suit STBA and STDA Accumulators P28
STA-AMP-...-W5

Accumulator Clamps ▪ Steel
to suit STBA & STDA Accumulators P28
STA-AMP-...-LIGHT

Accumulator Supports P28
STA-BRK

Accumulator Supports ▪ Steel
to suit STBA Accumulators P28
STA-BRK-ASSY

Accumulator Supports ▪ Stainless Steel
to suit STBA Accumulators P28
STA-BRK-ASSY-...-W5

Accumulator Lifting Lug
to suit STBA Accumulators P28
STA-LIFTLUG

Safety Blocks P29
BS

Safety Block P29
BS-10

Safety Block P29
BS-25

Safety Block P29
BS-32

Burst Discs
Pressure P29
STA-DR

Fuse Discs
Temperature P29
STA-DF

Permanent Charging Heads
Bladder Accumulators with 19 mm A/F ▪ STBA-A-CV

Order Codes

STBA-A - CV - U10 - T - SKK-20 - 100SG - W3

① ② ③ ④ ⑤ ⑥ ⑦

① Series

STAUFF Accumulator Bladder Adaptor	**STBA-A**

② Bladder Stem

Bladders with 19mm A/F (standard)	**CV**

③ Accumulator Connection

7/8–14 UNF	**U10**

④ Gas Valve Type

Integrated Gas Valve (standard)	**T**
1/4" BSPP Gas Valve	**A**
STAUFF US Style Gas Valve	**Y**

⑤ Adaptor Port Connection

SKK-20 Test Coupling	**SKK-20**

⑥ Additional Equipment Connecting to Adaptor Port

100 bar/PSI Pressure Gauge with SMD Adaptor	**100SG**
250 bar/PSI Pressure Gauge with SMD Adaptor	**250SG**
400 bar/PSI Pressure Gauge with SMD Adaptor	**400SG**
160 bar PT-RF Pressure Transmitter	**B160R**
400 bar PT-RF Pressure Transmitter	**B400R**
Without Additional Equipment	**(None)**

⑦ Material

Carbon steel / zinc-nickel plated	**W3**

Product Description

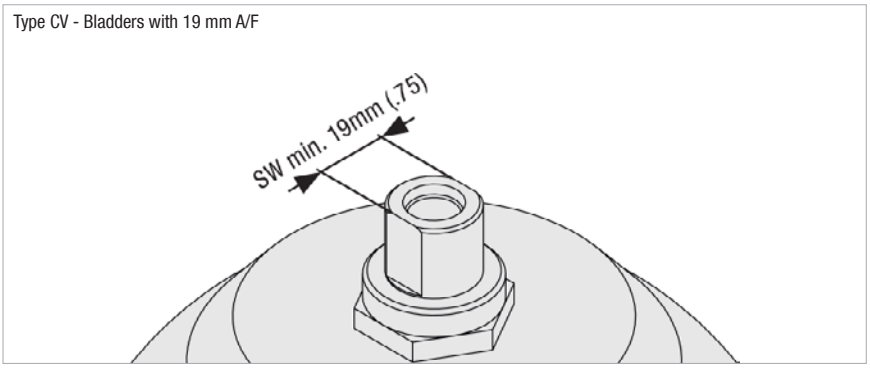
The STAUFF permanent charge head allows accessory equipment to be mounted directly onto the gas side of a bladder accumulator. For accumulators already installed in a system, the pre-charge pressure must be at zero pressure, then the existing gas valve fitted to the accumulator can then be removed. The permanent charge head is then fitted directly to accumulator's 7/8" UNF bladder stem connection with 19 mm A/F.

The STAUFF permanent charge head is supplied as standard with a STAUFF SKK-20 test coupling, which can easily allow other STAUFF accessories, e.g. Safety pattern analogue pressure gauge, PT-RF pressure sensor or DIGI gauge to be fitted to the charging head.

Features

1. Allows accessory equipment such as pressure gauges, PT-RF pressure sensors or DIGI gauge to be mounted to the gas side of either the bladder accumulator
2. Safety Patten analogue pressure gauge enables the checking of the pre-charge without having to use an accumulator charging kit
3. Suits most common brands of bladder accumulators fitted with a 7/8–14 UNF bladder stem connection

Type CV - Bladders with 19 mm A/F



Permanent Charging Heads with SKK-20 only
Suitable for Bladder Accumulators with 19mm A/F

Option T
Integrated Gas Valve with SKK-20 only
Type STBA-A-CV-U10-T-SKK-20-W3

Item No.	Designation	Price
6100087028	STBA-A-CV-U10-T-SKK-20-W3	440.15

Option Y
STAUFF US Style Gas Valve with SKK-20 only
Type STBA-A-CV-U10-Y-SKK-20-W3

Item No.	Designation	Price
6100087032	STBA-A-CV-U10-Y-SKK-20-W3	440.15

Option A
1/4" BSPP Gas Valve with SKK-20 only
Type STBA-A-CV-U10-A-SKK-20-W3

Item No.	Designation	Price
6100087033	STBA-A-CV-U10-A-SKK-20-W3	440.15

1/4" Gas Valve to suit STBA-A-CV Permanent Charging Heads
Type SKK-20-G1/4-V-C-GAS-W3

Item No.	Designation	Price
1210026812	SKK-20-G1/4-V-C-GAS-W3	74.35

Permanent Charging Heads with Pressure Gauge Suitable for Bladder Accumulators with 19 mm A/F

Option T
Integrated Gas Valve and Gauge
Type STBA-A-CV-U10-T-SKK-20-...SG-W3

Item No.	Designation	Price
6100162739	STBA-A-CV-U10-T-SKK-20-100SG-W3	654.00
6100162740	STBA-A-CV-U10-T-SKK-20-250SG-W3	654.00
6100162736	STBA-A-CV-U10-T-SKK-20-400SG-W3	654.00

Option A
1/4" BSPP Gas Valve and Gauge
Type STBA-A-CV-U10-A-SKK-20-...SG-W3

Item No.	Designation	Price
6100162737	STBA-A-CV-U10-A-SKK-20-100SG-W3	654.00
6100162738	STBA-A-CV-U10-A-SKK-20-250SG-W3	654.00
6100162734	STBA-A-CV-U10-A-SKK-20-400SG-W3	654.00

Option Y
STAUFF US Style Gas Valve and Gauge
Type STBA-A-CV-U10-Y-SKK-20-...SG-W3

Item No.	Designation	Price
6100162735	STBA-A-CV-U10-Y-SKK-20-100SG-W3	654.00
6100162742	STBA-A-CV-U10-Y-SKK-20-250SG-W3	654.00
6100162741	STBA-A-CV-U10-Y-SKK-20-400SG-W3	654.00

Permanent Charging Heads with Pressure Transmitter Suitable for Bladder Accumulators with 19 mm A/F

Option T
Integrated Gas Valve and Pressure Transmitter
Type STBA-A-CV-U10-T-SKK-20-B...R-W3

Item No.	Designation	Price
6100087624	STBA-A-CV-U10-T-SKK-20-B160R-W3	837.35
6100087625	STBA-A-CV-U10-T-SKK-20-B400R-W3	837.35

Option A
1/4" BSPP Gas Valve and Pressure Transmitter
Type STBA-A-CV-U10-A-SKK-20-B...R-W3

Item No.	Designation	Price
6100087621	STBA-A-CV-U10-A-SKK-20-B160R-W3	837.35
6100087620	STBA-A-CV-U10-A-SKK-20-B400R-W3	837.35

Option Y
STAUFF US Style Gas Valve and Pressure Transmitter
Type STBA-A-CV-U10-Y-SKK-20-B...R-W3

Item No.	Designation	Price
6100087626	STBA-A-CV-U10-Y-SKK-20-B160R-W3	837.35
6100087622	STBA-A-CV-U10-Y-SKK-20-B400R-W3	837.35

Permanent Charging Heads
Bladder Accumulators with 16 mm A/F ▪ STBA-A-FV

Order Codes

STBA-A - FV - U10 - T - SKK-20 - 100SG - W3

① ② ③ ④ ⑤ ⑥ ⑦

① Series
STAUFF Accumulator Bladder Adaptor	**STBA-A**

② Bladder Stem
Bladders with 16mm A/F	**FV**

③ Accumulator Connection
7/8–14 UNF	**U10**

④ Gas Valve Type
STAUFF US Style Gas Valve (standard)	**Y**

⑤ Adaptor Port Connection
SKK-20 Test Coupling	**SKK-20**

⑥ Additional Equipment Connecting to Adaptor Port
100 bar/PSI Pressure Gauge with SMD Adaptor	**100SG**
250 bar/PSI Pressure Gauge with SMD Adaptor	**250SG**
400 bar/PSI Pressure Gauge with SMD Adaptor	**400SG**
160 bar PT-RF Pressure Transmitter	**B160R**
400 bar PT-RF Pressure Transmitter	**B400R**
Without Additional Equipment	**(None)**

⑦ Material
Carbon steel / zinc-nickel plated	**W3**

Product Description

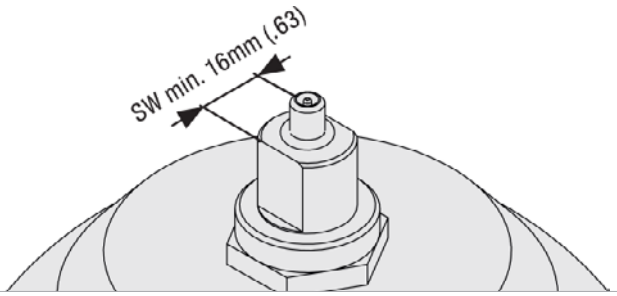
The STAUFF permanent charge head allows accessory equipment to be mounted directly onto the gas side of a bladder accumulator. For accumulators already installed in a system, the pre-charge pressure must be at zero pressure, then the existing gas valve fitted to the accumulator can then be removed. The permanent charge head is then fitted directly to accumulator's 7/8" UNF bladder stem connection with 16 mm A/F.

The STAUFF permanent charge head is supplied as standard with a STAUFF SKK-20 test coupling, which can easily allow other STAUFF accessories, e.g. Safety pattern analogue pressure gauge, PT-RF pressure sensor or DIGI gauge to be fitted to the charging head.

Features

1. Allows accessory equipment such as pressure gauges, PT-RF pressure sensors or DIGI gauge to be mounted to the gas side of either the bladder accumulator
2. Safety Patten analogue pressure gauge enables the checking of the pre-charge without having to use an accumulator charging kit
3. Suits most common brands of bladder accumulators fitted with a 7/8–14 UNF bladder stem connection

Type FV - Bladders with 16 mm A/F



Permanent Charging Heads with SKK-20 only
Suitable for Bladder Accumulators with 16 mm A/F

Option Y
STAUFF US Style Gas Valve with SKK-20 only
Type STBA-A-FV-U10-Y-SKK-20-W3

Item No.	Designation	Price
6100205126	STBA-A-FV-U10-Y-SKK-20-W3	440.15

Permanent Charging Heads with Pressure Gauge
Suitable for Bladder Accumulators with 16 mm A/F

Option Y
STAUFF US Style Gas Valve and Gauge
Type STBA-A-FV-U10-Y-SKK-20-...SG-W3

Item No.	Designation	Price
6100162743	STBA-A-FV-U10-Y-SKK-20-100SG-W3	654.00
6100162744	STBA-A-FV-U10-Y-SKK-20-250SG-W3	654.00
6100162745	STBA-A-FV-U10-Y-SKK-20-400SG-W3	654.00

Permanent Charging Heads with Pressure Transmitter
Suitable for Bladder Accumulators with 16 mm A/F

Option Y
STAUFF US Style Gas Valve and Pressure Transmitter
Type STBA-A-FV-U10-Y-SKK-20-B...R-W3

Item No.	Designation	Price
6100134467	STBA-A-FV-U10-Y-SKK-20-B160R-W3	837.35
6100134468	STBA-A-FV-U10-Y-SKK-20-B400R-W3	837.35

1/4" Gas Valve to suit STBA-A-FV Permanent Charging Heads
Type SKK-20-G1/4-V-C-GAS-W3

Item No.	Designation	Price
1210026812	SKK-20-G1/4-V-C-GAS-W3	74.35

Permanent Charging Heads
Diaphragm Accumulators ▪ STDA Series

Order Codes

STDA-A - M28 - M28 - SKK-20 - 100SG - W3

① ② ③ ④ ⑤ ⑥

① Series

STAUFF Accumulator Diaphragm Adaptor	**STDA-A**

② Accumulator Connection

M28x1.5	**M28**

③ Gas Valve Type

M28 with M8 female Socket Head Cap Screw	**M28**

④ Adaptor Port Connection

1/4" BSPP	**G04**
SKK-20 Test Coupling	**SKK-20**

⑤ Additional Equipment Connecting to Adaptor Port

100 bar/PSI Pressure Gauge with SMD Adaptor	**100SG**
250 bar/PSI Pressure Gauge with SMD Adaptor	**250SG**
400 bar/PSI Pressure Gauge with SMD Adaptor	**400SG**
160 bar PT-RF Pressure Transmitter	**B160R**
400 bar PT-RF Pressure Transmitter	**B400R**
Without Additional Equipment	**(None)**

⑥ Material

Carbon steel / zinc-nickel plated	**W3**

Product Description

The STAUFF permanent charge head allows accessory equipment to be mounted directly onto the gas side of a diaphragm accumulator. For accumulators already installed in a system, the pre-charge pressure must be at zero pressure, then the existing gas valve (typically a 6mm socket head cap screw) and sealing washer fitted to the accumulator can then be removed. The removed gas valve and sealing washer must then be fitted to the permanent charge head to allow normal pre-charge of the unit. The permanent charge head can then be fitted to any Diaphragm Accumulators that have a M28x1.5 gas valve connection.

The STAUFF permanent charge head is supplied as standard with a STAUFF SKK-20 test coupling, which can easily allow other STAUFF accessories, e.g. Safety pattern analogue pressure gauge, PT-RF pressure sensor or DIGI gauge to be fitted to the charging head.

Features

1. Allows accessory equipment such as pressure gauges, PT-RF pressure sensors or DIGI gauge to be mounted to the gas side of the diaphragm accumulator
2. Safety Patten analogue pressure gauge enables the checking of the pre-charge without having to use an accumulator charging kit
3. Suits most common brands of diaphragm accumulators fitted with a M28x1.5 connection

Permanent Charging Heads with SKK-20 only Suitable for Diaphragm Accumulators

Option M28
M28 Gas Valve with SKK-20 only
Type STDA-A-M28-M28-SKK-20-W3

Item No.	Designation	Price
6100087023	STDA-A-M28-M28-SKK-20-W3	348.45

Permanent Charging Heads with Pressure Gauge Suitable for Diaphragm Accumulators

Option M28
M28 Gas Valve and Gauge
Type STDA-A-M28-M28-SKK-20-...SG-W3

Item No.	Designation	Price
6100162733	STDA-A-M28-M28-SKK-20-100SG-W3	605.10
6100162732	STDA-A-M28-M28-SKK-20-250SG-W3	605.10
6100162731	STDA-A-M28-M28-SKK-20-400SG-W3	605.10

Permanent Charging Heads with Pressure Transmitter Suitable for Diaphragm Accumulators

Option M28
M28 Gas Valve and Pressure Transmitter
Type STDA-A-M28-M28-SKK-20-B...R-W3

Item No.	Designation	Price
6100087616	STDA-A-M28-M28-SKK-20-B160R-W3	788.45
6100087615	STDA-A-M28-M28-SKK-20-B400R-W3	788.45

1/4" Gas Valve to suit STDA-A Permanent Charging Heads
Type SKK-20-G1/4-V-C-GAS-W3

Item No.	Designation	Price
1210026812	SKK-20-G1/4-V-C-GAS-W3	74.35

Accumulator Clamps

Accumulator Clamps ▪ Steel
to suit STBA and STDA Accumulators
Type STA-AMP

Item No.	Designation	To Suit Accumulator Size	Price
3426010280	STA-AMP-108-1	STDA 0.5 Litre	83.95
3426010230	STA-AMP-114-1	STBA 1 & 2.5 Litre	96.85
3426010285	STA-AMP-126-1	STDA 0.75 Litre	96.85
3426010793	STA-AMP-136-1	STDA 1 Litre	106.00
3426010290	STA-AMP-146-1	STDA 1.4 Litre	103.30
6100004125	STA-AMP-156-1	STDA 2 Litre	117.10
3426010240	STA-AMP-172-1	STDA 2.8 Litre / STBA 4 Litre	103.30
3426010247	STA-AMP-228-2	STBA 10 - 55 Litre	118.75

Rubber mouldings fitted to supports are made from Nitrile rubber

Accumulator Clamps ▪ Steel
to suit STBA and STDA Accumulators
Type STA-AMP-LIGHT

Item No.	Designation	To Suit Accumulator Size	Price
3426010887	STA-AMP-108-LIGHT	STDA 0.5 Litre	77.50
3426010791	STA-AMP-126-LIGHT	STDA 0.75 Litre	83.95
3426010792	STA-AMP-136-LIGHT	STDA 1 Litre	87.85

Rubber mouldings fitted to supports are made from Nitrile rubber

Accumulator Clamps ▪ Stainless Steel
to suit STBA and STDA Accumulators
Type STA-AMP-...-W5

Item No.	Designation	To Suit Accumulator Size	Price
6100236313	STA-AMP-228-2-W5-3	STBA 10 - 55 Litre	333.10

Rubber mouldings fitted to supports are made from Nitrile rubber

Typical Installation

Accumulator Supports

Accumulator Supports ▪ Steel
to suit STBA Accumulators
Type STA-BRK-ASSY

Item No.	Designation	To Suit Accumulator Size	Price
3426010725	STA-BRK-ASSY-004	STBA 4 & 6 Litre	167.55
3426010726	STA-BRK-ASSY-010	STBA 10 - 55 Litre	206.65

Supplied with Nitrile rubber cushion ring

Accumulator Supports ▪ Stainless Steel
to suit STBA Accumulators
Type STA-BRK-ASSY-...-W5

Item No.	Designation	To Suit Accumulator Size	Price
6100007696	STA-BRK-ASSY-010-W5-01	STBA 10 - 55 Litre	806.15

Supplied with Nitrile rubber cushion ring

Accumulator Lifting Lugs

Accumulator Lifting Lug
to suit STBA Accumulators
Type STA-LIFTLUG

Item No.	Designation	Price
3426010520	STA-LIFTLUG-U10-W2-150	550.10

Suitable to lift up to maximum 140 kg

Safety Blocks

Safety Block
Type BS-10

Item No.	Designation	Price
3426000314	BS-10-MP-360-A5-G4-C-P	2021.40

Isolation valve, manual drain, relief valve 360 bar
Accumulator connection 3/4" BSPP
System connection 1/2" BSPP

Safety Block
Type BS-25

Item No.	Designation	Price
6100011938	BS-25-MP-360-A7-G6-C-P	2811.60

Isolation valve, manual drain, relief valve 360 bar
Accumulator connection 1-1/4" BSPP
System connection 1" BSPP

Safety Block
Type BS-32

Item No.	Designation	Price
3426000119	BS-32-MP-360-A9-G8-C-P	2395.65

Isolation valve, manual drain, relief valve 360 bar
Accumulator connection 2" BSPP
System connection 1-1/2" BSPP

Order Codes

BS - 10 - M - P - 360 - A - 5 - G - 4 - C - P
① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪

① Type

STAUFF Safety Block	BS

② Internal Nominal Diameter

10 mm	10
25 mm	25
32 mm	32

③ Discharge

Manual operation only	M
Manual operation only with a plugged port for solenoid (dump) valve	F

④ Relief Valve

Valve Type DBDS (CE certified)	P

⑤ Valve Relief Setting Pressure

360 bar relief	360

⑥ Accumulator Side Connection Thread

BSPP ISO 228 with O-Ring chamfer	A

⑦ Accumulator Side Connection Adaptor

3/4" BSPP O-Ring seal	5
1-1/4" BSPP O-Ring seal	7
2" BSPP O-Ring seal	9

⑧ Installation Side Connection Thread

BSPP ISO 228 with O-Ring chamfer	G

⑨ System Side Connection

1/2" BSPP for BS10	4
1" BSPP for BS25	6
1-1/2" BSPP for BS32	8

⑩ Block Material

Carbon Steel + Phosphated	C

⑪ Seal Material

NBR (Buna-N®)	P

Note: Other safety block combinations available on request

Burst and Fuse Discs

Burst Discs
Pressure
Type STA-DR

Item No.	Designation	Price
6100157828	STA-DR-08-B0210-W5-G04	846.30
6100157831	STA-DR-08-B0330-W5-G04	846.30
6100157833	STA-DR-08-B0360-W5-G04	846.30

The function of a burst disc is to protect the accumulator from any excessive pressure that may exceed the accumulator's maximum design limits.

Fuse Discs
Temperature
Type STA-DF

Item No.	Designation	Price
6100157857	STA-DF-08-T0142-W5-G04	760.30

The function of a fuse disc is to release the nitrogen gas pressure of an accumulator securely when the temperature exceeds a maximum level of 142°C.

Order Codes

STA - DR - 08 - B0210 - W5 - G04
① ② ③ ④ ⑤ ⑥

① Series

STAUFF Accumulator Component	STA

② Type

Burst Disc Pressure Operated	DR
Fuse Disc Temperature Operated	DF

③ Orifice Size

8 mm	08

④ Pressure / Temperature Rating

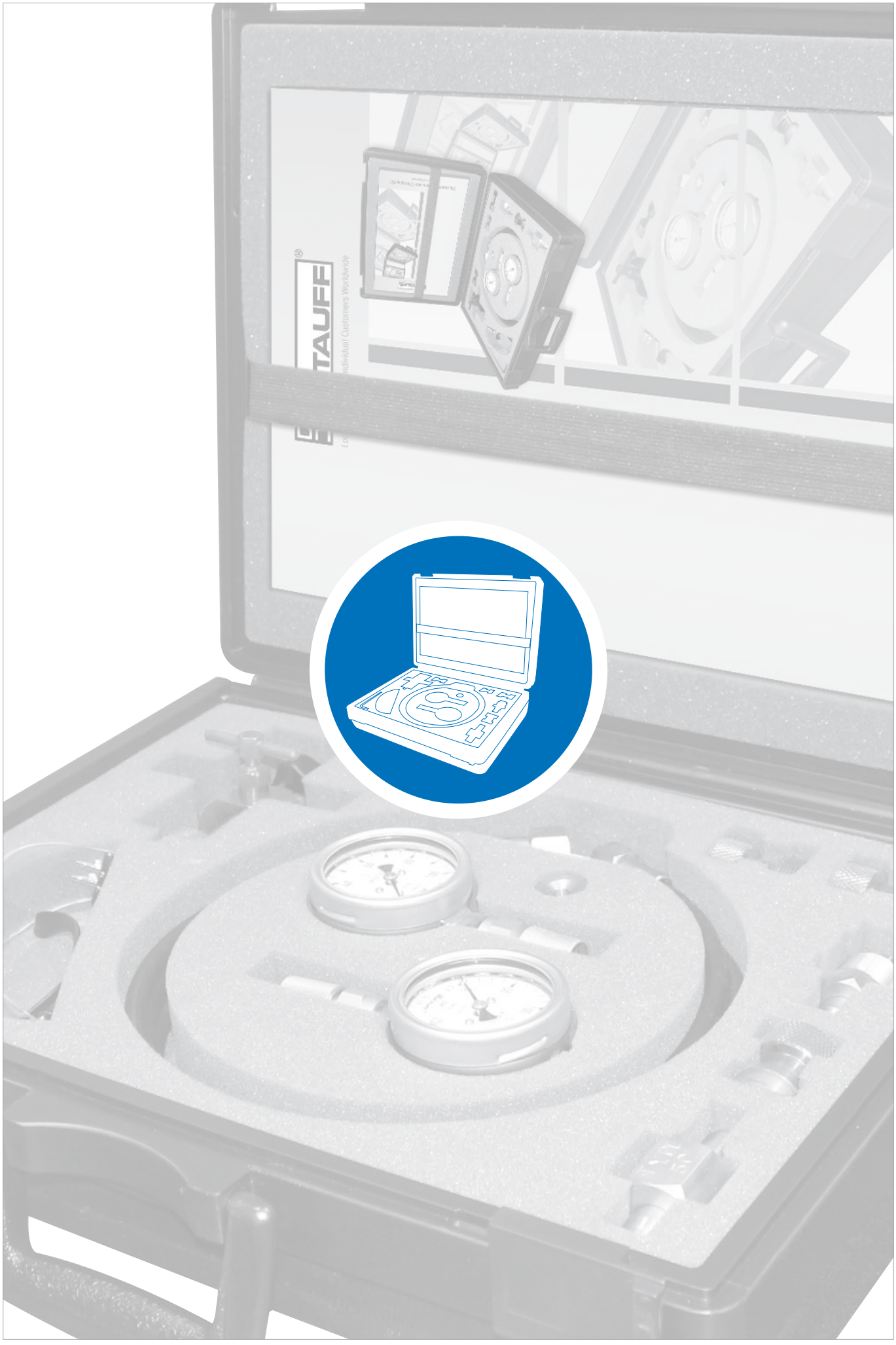
210 bar (DR)	B0210
330 bar (DR)	B0330
360 bar (DR)	B0360
142 °C (DF)	T0150

⑤ Material

316 Stainless Steel (standard)	W5

⑥ Connection Port

1/4 BSPP	G04


STAUFF
Individuel Customers Worldwide

Universal Accumulator Charging Kit
STA-CK
P32 - P33

Direct Accumulator Charging Kit for SKK-20 Gas Valve
STA-CK-SKK-20
P34 - P35

Direct Accumulator Charging Kit for USA Gas Valve
STA-CK-SKK-20-305
P34 - P35

Accumulator Pre-charging Service
PRECHARGE
P36

Nitrogen Gas Regulators
STA-NR
P37

PT-RF Pressure Transmitter and Reader
PT-RF
P38 - P40

Safety Pattern Pressure Gauges in accordance with AS1349
SPG-063-...-B04-490179
P41

Safety Pattern Pressure Gauge
1/4" BSPP Stem Mount
SPG-063-...-01-S-B04-490179
P41

Safety Pattern Pressure Gauge
1/4" BSPP Panel Mount
SPG-063-...-01-P-B04-490179
P41

Universal Accumulator Charging Kit

Analogue

Digital

Product Description

STAUFF universal accumulator charging kit is an essential instrument for the verification, pressurisation and gas bleeding of hydraulic accumulators, suitable for most common bladder and diaphragm accumulators.

Features - Analogue Gauges

The standard kit is delivered in a storage case containing the following:

1. 1 x Charging head for testing and pressurising (swivel connection M28x1.5)
2. 1 x Adaptor 1/4" BSPP
3. 1 x Adaptor 5/8–18 UNF
4. 1 x Adaptor (long) 7/8–14 UNF
6. 1 x Adaptor (short) Integrated 7/8–14 UNF
8. 1 x 0 - 100 bar/PSI safety pattern pressure gauge + adaptor SMD-20-G1/4-B-OR-W3
9. 1 x 0 - 250 bar/PSI safety pattern pressure gauge + adaptor SMD-20-G1/4-B-OR-W3
10. 1 x Adaptor 5/8–18 UNF - 0.305"
11. 1 x High-pressure gas hose (2000 mm long) for connecting to a nitrogen gas source - SKK-20-1/4" BSPP female
12. 1 x Safety goggles
13. 1 x Hex key 6 mm
14. 1 x Operating instructions

Features - Digital Gauge

15. 1 x 0 - 400 bar digital pressure gauge + adaptor SDA-20-G1/4-W3

Optional Bottle Adaptors

- Type 50 gas bottle adaptor (17,000 kPa)
- Type 51 gas bottle adaptor (30,000 kPa)

Refer to page P33

Application

- For checking and pre-charging common types of accumulators

⚠ Maximum working pressure of this equipment (excluding individual pressure rating of gauges) is 400 bar.

Order Codes

STA-CK - 250/100S-G - HA21 - A1 - 0

① ② ③ ④ ⑤

① Type

STAUFF Accumulator Charge Kit	**STA-CK**

② Pressure Gauges Including Gauge Adaptor

0 - 250 bar/PSI + 0 - 100 bar/PSI (standard)	**250/100S-G**
0 - 400 bar/PSI + 0 - 250 bar/PSI	**400/250S-G**
0 - 400 bar (digital pressure gauge)	**B0400D-G**

③ Charging Hose

SGS-D Test 20 - 1/4" BSPP DN4 Gas Hose 2000 mm (standard)	**HA21**

④ Charging Adaptors

1/4" BSPP (STAUFF – Olaer)	**A1**
5/8–18 UNF (EPE)	
7/8–14 UNF Long (Hydac)	
7/8–14 UNF Short (STAUFF – Olaer Integrated)	
0.305" x 32 TPI (USA)	

⑤ Gas Bottle Adaptors

Without Gas Bottle Adaptors (standard)	**0**

Universal Accumulator Charging Kit
to suit STBA and STDA Accumulators
Analogue Gauges
Type STA-CK

Item No.	Designation	Price
6100162729	STA-CK-250/100S-G-HA21-A1-0	1717.30
6100162730	STA-CK-400/250S-G-HA21-A1-0	1717.30

Charging Kit Weight: 4 kg

Universal Accumulator Charging Kit
to suit STBA and STDA Accumulators
Digital Gauge
Type STA-CK

Item No.	Designation	Price
6100045971	STA-CK-B0400D-G-HA21-A1-0	2035.10

Charging Kit Weight: 4 kg

Note: STAUFF pressure gauges are safety pattern type according to AS1349 with safety glass, solid baffle wall, and a stainless steel construction with excellent stability and shock resistance.

Universal Accumulator Charging Kit ▪ Spare Parts

Charging Head
Type STA-CK-CHRG-HEAD

Item No.	Designation	Price
3426010190	STA-CK-CHRG-HEAD-M28	567.25

Charging Adaptors
Type STA-CK-ADP

Item No.	Designation		Price
3426010223	STA-CK-ADP-M28-1/4	1	116.20
3426010220	STA-CK-ADP-M28-5/8	2	116.20
3426010852	STA-CK-ADP-M28-7/8L	3	116.20
3426010215	STA-CK-ADP-M28-7/8S	4	116.20
3426010854	STA-CK-ADP-5/8-0.305	5	64.60

Safety Pattern Pressure Gauge
in accordance with AS1349
Type SPG-063-...-01-S-B04-490179

Item No.	Designation	Price
6100161936	SPG-063-00100-01-S-B04-490179	223.40
6100161938	SPG-063-00250-01-S-B04-490179	223.40
6100161940	SPG-063-00400-01-S-B04-490179	223.40

Digital Pressure Gauge
Type SPG-DIGI

Item No.	Designation	Price
1810000168	SPG-DIGI-B0400-B	629.30

Adaptor to suit Safety Pattern Pressure Gauge
Type SMD-20

Item No.	Designation	Price
1210026219	SMD-20-G1/4-B-OR-W3	46.40

Adaptor to suit Digital Pressure Gauge
Type SDA-20

Item No.	Designation	Price
1210026153	SDA-20-G1/4-W3	52.05

Nitrogen Gas Bottle Adaptors
Type STA-N2-ADP

Item No.	Designation	Price
6100065980	STA-N2-ADP-M07-50-N04	108.45
6100065981	STA-N2-ADP-M07-51-N04	108.45

Type 50: N2 Bottle Adaptor (17,000 kPa)
Type 51: EHP N2 Bottle Adaptor (30,000 kPa)
Material: Brass

Charging Kit Hose
Test 20 / 1/4" BSPP Connection x 2 metre
with anti-kink bend protection
Type SGS

Item No.	Designation	Price
6100017542	SGS-20/B1/4-2000-C-W3	144.65

Direct Accumulator Charging Kits

SKK-20 Gas Valve

USA Gas Valve

Product Description - SKK-20 Gas Valve

STAUFF accumulator direct charging kit - SKK-20 is an essential instrument for the verification, pressurisation and nitrogen gas bleeding of STAUFF accumulators that are fitted with a SKK-20 gas valve connection. Pre-charge pressure can be easily checked by coupling the safety gauge directly to the SKK-20 gas valve connection on the STAUFF accumulator.

Features

The standard kit is delivered in a storage case containing the following:

1. 1 x Charging valve
2. 1 x SKK-20 Test coupling 1/4" NPT (for regulator connection)
3. 1 x Safety pattern pressure gauge 0 - 250 bar (standard) according to AS1349
4. 1 x 2000 mm hose
5. 1 x Safety goggles
6. 1 x Operating instructions

Available on request

- 0 - 25, 0 - 100 and 0 - 400 bar kit

Application

- For checking and pre-charging of accumulators with M16x2.0 (Test 20) STAUFF Test coupling connection

⚠ Maximum working pressure of this equipment (excluding individual pressure rating of gauges) is 400 bar.

Order Codes

STA-CK	-	SKK-20	-	250S	-	HA21	-	N04	-	CA
①		②		③		④		⑤		⑥

① Type

STAUFF Accumulator Charge Kit	**STA-CK**

② Charge Head Connection

Test 20 Coupling (standard)	**SKK-20**
Accumulator USA Charge Head 0.305" x 32 TPI with SKK-20 Test Connection	**305**

③ Safety Gauges Including Gauge Adaptor

0 - 25 bar/PSI	**025**
0 - 100 bar/PSI (AS1349)	**100S**
0 - 250 bar/PSI (AS1349) (standard)	**250S**
0 - 400 bar/PSI (AS1349)	**400S**

Other options available on request.

AS1349 Safety pattern pressure gauges

④ Charging Adaptors

SGS-D Test 20 - 1/4" BSPP DN4 Gas Hose 2000 mm (standard)	**HA21**
No hose supplied	**HA00**

⑤ Outlet Connection to Regulator

1/4" NPT male (standard)	**N04**
1/4" BSPT male	**T04**

⑥ Case

Supplied with case	**CA**

Product Description - USA Gas Valve

STAUFF's accumulator charging kit is designed to suit accumulators fitted with gas valve type USA 0.305" x 32 TPI. It allows for the verification, pressurisation and nitrogen gas bleeding of the accumulator. Pre-charge pressure can be easily checked by using STAUFF charging valve (1) which combines a bleed valve, safety pattern gauge and 0.305" x 32 TPI charging chuck adaptor.

Features

The USA gas valve kit is delivered in a storage case containing the same components as standard SKK-20 gas valve option with the addition of the following:

7. 1 x STA-CK-CHRG-HEAD-0.305-SKK20 (for accumulator connection)

Available on request

- 0 - 25 and 0 - 100 bar kit

Application

- For checking and pre-charging of accumulators with gas valve type USA 0.305" x 32 TPI

⚠ Maximum working pressure of this equipment (excluding individual pressure rating of gauges) is 207 bar.

Direct Accumulator Charging Kit to suit STBA Accumulator with SKK-20 Gas Valve Type STA-CK-SKK-20-...S-HA21-N04-CA

Item No.	Designation	Price
6100162717	STA-CK-SKK-20-100S-HA21-N04-CA	1041.05
6100162718	STA-CK-SKK-20-250S-HA21-N04-CA	1041.05
6100162719	STA-CK-SKK-20-400S-HA21-N04-CA	1041.05

Charging Kit Weight: 1.6 kg

Direct Accumulator Charging Kit to suit STBA Accumulator with USA Gas Valve Type STA-CK-305-250S-HA21-N04-CA

Item No.	Designation	Price
6100156904	STA-CK-305-250S-HA21-N04-CA	1163.85

Charging Kit Weight: 1.6 kg

Note: STAUFF pressure gauges are safety pattern type according to AS1349 with safety glass, solid baffle wall, and a stainless steel construction with excellent stability and shock resistance.

Direct Accumulator Charging Kit ▪ Spare Parts

Charging Head
Type STA-CK-SKK-20

Item No.	Designation	Price
6100011999	STA-CK-CHRG-HEAD-SKK-20	232.35

Charging Adaptor
Type SKK-20

Item No.	Designation	Price
1210026178	SKK-20-1/4NPT-D-W3	35.20

Safety Pattern Pressure Gauge
in accordance with AS1349
Type SPG-063-...-01-S-B04-490179

Item No.	Designation	Price
6100161936	SPG-063-00100-01-S-B04-490179	223.40
6100161938	SPG-063-00250-01-S-B04-490179	223.40
6100161940	SPG-063-00400-01-S-B04-490179	223.40

Adaptor to suit Safety Pattern Pressure Gauge
Type SMD-20

Item No.	Designation	Price
1210026219	SMD-20-G1/4-B-OR-W3	46.40

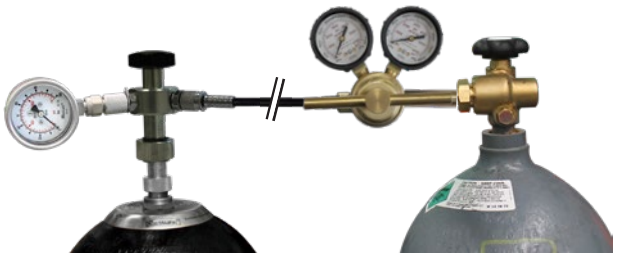
Charging Kit Hose
Test 20 / 1/4" BSPP Connection x 2 metre
with anti-kink bend protection
Type SGS

Item No.	Designation	Price
6100017542	SGS-20/B1/4-2000-C-W3	144.65

Charging Adaptor
Type STA-CK-CHRG-HEAD-0.305-SKK20

Item No.	Designation	Price
6100156902	STA-CK-CHRG-HEAD-0.305-SKK20	204.80

Accumulator Pre-charging Service

Bladder and Diaphragm Accumulator Pre-charging Service	Size (Litre)	Max. Working Pressure (Bar / PSI)	Pre-charge Pressure Range		Price (Net)
			Bar	PSI	
Diaphragm Accumulator Size 0.075 - 2.8 Litre	0 to 0.75	up to 250 / up to 3626	1-70	14.5-1015	29.90
			71-140	1029-2030	35.80
	1 to 1.4	360 / 5221	1-70	14.5-1015	33.30
			71-140	1029-2030	40.60
			141-210	2045-3045	48.80
			211-280	3060-4061	58.40
	2 to 2.8	360 / 5221	1-70	14.5-1015	44.10
			71-140	1029-2030	48.80
			141-210	2045-3045	58.40
			211-280	3060-4061	69.00
	4	360 / 5221	1-70	14.5-1015	51.20
			71-140	1029-2030	65.50
			141-210	2045-3045	78.50
			211-280	3060-4061	90.40
	6	360 / 5221	1-70	14.5-1015	58.40
			71-140	1029-2030	70.20
			141-210	2045-3045	86.90
			211-280	3060-4061	103.40
	10	360 / 5221	1-70	14.5-1015	61.80
			71-140	1029-2030	78.50
			141-210	2045-3045	96.40
			211-280	3060-4061	115.30
	20	360 / 5221	1-70	14.5-1015	78.50
			71-140	1029-2030	114.10
			141-210	2045-3045	163.90
			211-280	3060-4061	213.80
 Bladder Accumulator Size 1 - 55 Litre	35	360 / 5221	1-70	14.5-1015	123.50
			71-140	1029-2030	184.10
			141-210	2045-3045	300.40
			211-280	3060-4061	415.50
	40	360 / 5221	1-70	14.5-1015	155.70
			71-140	1029-2030	226.90
			141-210	2045-3045	326.50
			211-280	3060-4061	427.30
	50	360 / 5221	1-70	14.5-1015	137.80
			71-140	1029-2030	226.90
			141-210	2045-3045	363.30
			211-280	3060-4061	501.00
	55	360 / 5221	1-70	14.5-1015	149.80
			71-140	1029-2030	238.70
			141-210	2045-3045	375.10
			211-280	3060-4061	512.80

Note: Price excludes freight. Pre-charged accumulators are classified as dangerous goods and freight charges apply accordingly.
Contact STAUFF for Premium Services (including urgent orders) and pre-charging of Extra High Pressure (EHP bottles).

Order Codes

PRECHARGE - **00100** - **B075**

① ② ③

① Service

Accumulator Pre-charging Service	**PRECHARGE**

② Accumulator Volume

0.075 Litre	**00007**
0.16 Litre	**00016**
0.32 Litre	**00032**
0.5 Litre	**00050**
0.75 Litre	**00075**
1 Litre	**00100**
1.4 Litre	**00140**
2 Litre	**00200**
2.5 Litre	**00250**
2.8 Litre	**00280**
4 Litre	**00400**
6 Litre	**00600**
10 Litre	**01000**
20 Litre	**02000**
35 Litre	**03500**
40 Litre	**04000**
50 Litre	**05000**
55 Litre	**05500**

③ Bar

Bar	**B**

Pre-charge Pressure (bar)

Actual Pre-charge pressure required (bar)	**XXX**

Order code example: PRECHARGE-00100-B075
1 Litre Accumulator pre-charged to 75 bar

Contact STAUFF for more information.

Nitrogen Gas Regulators ▪ Type STA-NR

Product Description

Nitrogen gas regulators are used to control the pressure and incoming gas flow from the nitrogen cylinder or bank of cylinders. The dual gauge allows visual control of both the inlet and outlet pressure.

Application

When pre-charging hydraulic accumulators, it is important that initially the accumulator is charged slowly. This is due to the fact that the bladder / diaphragm has to expand and stretch uniformly to take up the volume of the vessel internally. The pressure required to do this properly is less than 1 bar. Pre-charging an accumulator too quickly and/or without the correct lubrication can damage or in some cases cause failure of the bladder / diaphragm. In order to pre-charge an accumulator properly, STAUFF recommends the use of a nitrogen gas regulator.

Technical Data

Specifications

Max inlet pressure:	400 bar
Max outlet pressure:	300 bar
Flow rate:	360 M3/Hr @ 10,000 kPa outlet pressure
Inlet connection:	AS 2473
Operating temp:	-20°C ... +50°C
Gauges:	AS 4706-2001
Outlet connection:	1/4" BSPP

Materials

Body:	Machined brass
Bonnet:	Machined brass
Pressure Gauges:	Mild steel with copper and brass internals. Plastic lens.
Seat:	Polyurethane
O-Rings - Oxygen:	FKM (Viton®)
O-Rings - Other Gases:	NBR (Buna-N®)
Safety Relief Valve:	Brass housing, steel spring, FKM (Viton®) seal
Filter:	Sintered bronze
Stem O-Ring:	FKM (Viton®)

⚠ For use with nitrogen (N_2) gas only

⚠ Safety goggles must be worn at all times

Order Codes

STA-NR	-	400	-	300	-	T51	-	400S	-	400S	-	G04
①		②		③		④		⑤		⑥		⑦

① Type

STAUFF Nitrogen Gas Regulator	**STA-NR**

② Inlet Pressure Rating

400 bar	**400**

③ Outlet Pressure Rating

300 bar	**300**

④ Nitrogen Gas Cylinder Connection

(AS2473 Type 51) EHP N2 Bottle (standard)	**T51**

⑤ Regulator Inlet Pressure Gauge (AS4706)

40,000 kPa	**400S**

⑥ Regulator Outlet Pressure Gauge (AS4706)

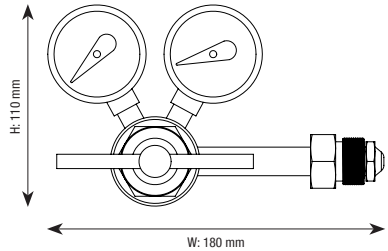
40,000 kPa	**400S**

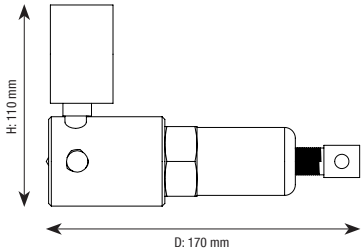
⑦ Output Connection

1/4" BSPP male (standard)	**G04**

Nitrogen Gas Regulator
Type STA-NR

Item No.	Designation	Price
6100206346	STA-NR-400-300-T51-400S-400S-N04	1147.75





Safety Information

High-pressure nitrogen gas regulators are not fitted with safety relief valves. In the event of internal failure of the regulator, the outlet connection and the accumulator could potentially see the full pressure from the nitrogen gas cylinder. In cases where the nitrogen gas bottle pressure is greater than the pressure rating of the accumulator, a safety relief device should be fitted between the nitrogen gas regulator and the accumulator.

Nitrogen Gas Bottle Adaptors
Type STA-N2-ADP are available.
Refer to page P33

Type 50 Type 51

Reader Set ▪ Type PT-RF-SET

Applications

Connected through SKK test coupling

Connected through fluid port

Product Description

STAUFF PT-RF readers combined with STAUFF PT-RF transmitters are used to measure and record temperature and pressure data. The energy required for a measurement is transferred to the pressure transmitter via the antenna of the PT-RF reading device using wireless RFID technology. A maximum distance of only 1.5cm is required from the antenna to the tip of the PT-RF transmitter for the duration of the measurement. The PT-RF transmitter is activated by the press of a button (the measured value is determined within only 0.5 seconds), and then the data is transmitted immediately to the PT-RF reader together with additional relevant information, displayed on the screen and recorded. Over 15,000 measurement recordings can be stored in the internal memory of the device.

The PT-RF reader, along with PT-RF transmitter, is an ideal tool to check the pre-charge pressure of an accumulator fitted with a STAUFF SKK gas valve. Each PT-RF transmitter has its own identifiable serial number that can be recorded by the PT-RF reader; therefore, each accumulator can be logged separately and the data can be downloaded to a computer at a later date.

Technical Data

Material

Housing made of ABS

Dimensions / Weight

Dimensions:	76 x 35 x 240 mm
Weight:	220 g

Measurements / Display

Pressure:	in bar and PSI
Temperature:	in °C and °F
Display:	graphic, LED backlit
Visible area:	55 x 46 mm
Resolution:	128 x 64 Pixels

Power Supply

Battery:	Lithium-Ion (3,7 V DC / 900 mAh)
	Operating time approx. 6 hours (approx. 1800 individual measurements)

Temperature Range

Ambient temp.:	-20°C ... +70°C
Storage temp.:	-25°C ... +60°C

CE certified

Electrical Data / Interface

Sampling rate:	typ. 250 ms / max. 400 ms
Interface:	Micro USB
EMV:	EN 61326-1:2013 EN 300330

Protection Rating

IP65 protection rating:	Dust tight and protected against water jets

Order Code

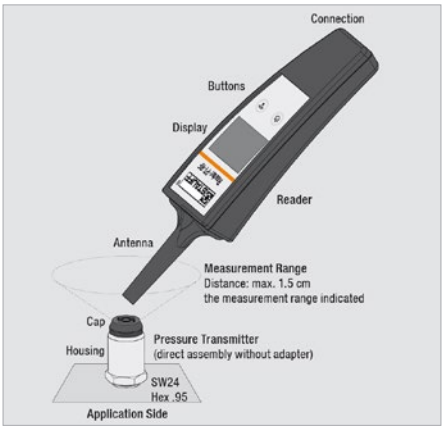
PT-RF-SET

① Series and Type

Reader (standard)	**PT-RF-SET**

- Reader-PT-RF
- Manual and software on CD
- Quick guide
- USB 2.0 cable (1 m / 3.28 ft)
- 5 V DC / 1 A power supply including country-specific adaptors
- Case

Set Up



PC Software

The software included allows transmission of the stored measured values from the reading device to the PC, subsequent evaluation and export, e.g. to Microsoft Excel®.

Item No.	Designation	Price
6100104678	PT-RF-SET	1485.90

Supplied with charger and software

Spare Parts / Accessories

Order Code

Reader-PT-RF

① Type

Reader (standard)	**Reader-PT-RF**

- Reader-PT-RF
- Manual and software on CD
- Quick guide
- USB 2.0 cable (1 m / 3.28 ft)
- 5 V DC / 1 A power supply including country-specific adaptors

Order Code

Case-Reader-PT-RF

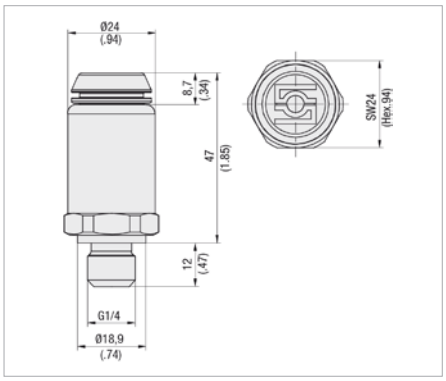
① Type

Case, small	**Case-Reader-PT-RF**

Item No.	Designation	Price
1810011067	Reader-PT-RF	1191.55
6100000353	Case-Reader-PT-RF	294.35

Reader supplied with charger and software

Pressure Transmitter ▪ Type PT-RF



Process connection G1/4" (B04)
Dimensional drawings: All dimensions in mm

Product Description

STAUFF PT-RF pressure transmitters are integrated into fluid technology plants and systems (temporarily or permanently) using the appropriate process connection adapters to measure and record temperature and pressure data. The energy required for a measurement is transferred to the pressure transmitter via the antenna of the STAUFF PT-RF reading device using wireless RFID technology. As a result, the pressure transmitter requires neither internal nor external power supply, is completely maintenance free, and the recording process is automated; therefore minimising the possibilities of human error.

The pressure transmitter for the PT-RF along with the PT-RF reader is an ideal tool to check the pre-charge pressure of an accumulator fitted with a STAUFF SKK gas valve. Each PT-RF transmitter has its own identifiable serial number that can be recorded by the PT-RF reader; therefore, each accumulator can be logged separately and the data can be downloaded to a computer at a later date.

Technical Data

Wetted Parts

Suitable for liquid and gaseous media

Materials

Housing:	Stainless Steel 1.4305
Sealing (B04):	FKM (Viton®)
Cap:	Polyamide (glass fibre-reinforced)

Dimensions / Weight

Dimensions:	59 x 26 mm
Weight:	80 g

Temperature Range

Media temp.:	-40°C ... +85°C
Ambient temp.:	-40°C ... +85°C
Storage temp.:	-55°C ... +125°C

Electrical Data

Sampling rate:	typ. 250 ms / max. 400 ms
Long-term stability:	according to IEC EN 60770-1 max. ± 0.25 % FS* /a
Load cycles (106):	10
Vibration loading:	acc. to IEC 60068-2-6 (20 g)
Shock loading:	acc. to IEC 60068-2-27 (30 g) 11ms

Protection Rating

IP69 protection rating:	Dust tight and protected against high-pressure water and steam cleaning

Order Codes

PT - RF - B00400 - B04 - SDA-20

① ② ③ ④ ⑤

① Series and Type

Pressure Transmitter	**PT**

② Version

Signal transmission via RFID technology	**RF**

③ Pressure Range

0-16 bar (refer to table below)	**B00016**
0-60 bar (refer to table below)	**B00060**
0-160 bar (refer to table below)	**B00160**
0-400 bar (refer to table below)	**B00400**
0-600 bar (refer to table below)	**B00600**

④ Process Connection

G1/4"	**B04**

⑤ Test Adaptor

G1/4 Test 20 Adaptor	**SDA-20**

③ Pressure Range and Accuracies

Version	Pressure Range and Accuracies					
Pressure Transmitter PT-RF	Pressure Range (bar/PSI)	Type of Measurement	Maximum Pressure (bar)	Burst Pressure (bar)	Accuracy (±% FS*) typ.	Accuracy (±% FS*) max.
B00016	0 ...16	Relative pressure	32	48	0.25	0.5
	0 ... 232		464	696		
B00060	0 ... 60	Relative pressure	120	180	0.25	0.5
	0 ... 870		1740	2610		
B00160	0 ... 160	Relative pressure	320	480	0.25	0.5
	0 ... 2320		4641	6961		
B00400	0 ... 400	Relative pressure	800	1200	0.25	0.5
	0 ... 5801		11603	17405		
B00600	0 ... 600	Relative pressure	1200	1800	0.25	0.5
	0 ... 8702		17404	26107		

Process Connection Adaptors for Pressure Transmitter PT-RF

Various adaptors are available in addition to the pressure transmitters from the PT-RF series allowing easy connection to the STAUFF Test 20 system as well as installation in pipes.

SDA-20-G1/4-W3
Adaptor for process connection G1/4 on test coupling STAUFF Test 20 (connection thread M16 x 2)

Pressure Transmitter with Test Adaptor Type PT-RF-...-B04-SDA-20

Item No.	Designation	Price
6100046234	PT-RF-B00016-B04-SDA-20	346.40
6100046235	PT-RF-B00060-B04-SDA-20	346.40
6100046248	PT-RF-B00160-B04-SDA-20	346.40
6100046269	PT-RF-B00400-B04-SDA-20	346.40
6100046270	PT-RF-B00600-B04-SDA-20	346.40

Pressure Transmitter Type PT-RF-...-B04

Item No.	Designation	Price
1810011057	PT-RF-B00016-B04	294.35
1810011058	PT-RF-B00060-B04	294.35
1810011059	PT-RF-B00160-B04	294.35
1810011060	PT-RF-B00400-B04	294.35
1810011061	PT-RF-B00600-B04	294.35

Test Adaptor Type SDA-20

Item No.	Designation	Price
1210026153	SDA-20-G1/4-W3	52.05

PT-RF Software Monitoring System

Application Information

Accumulator pre-charge pressure must be regularly checked and maintained to maintain peak system performance and full bladder/diaphragm life. The STAUFF PT-RF system digitally monitors and records accumulator pre-charge pressure without incurring incremental pressure loss through traditional connect /disconnect processes. Additionally, as each PT-RF transducer is individually serially traced, uncertainty arising from manual records is permanently eliminated.

The natural effect of gas permeation through the bladder/diaphragm causes a loss of pre-charge pressure, the amount of which varies from system to system. Gas permeation loss is dependent on factors such as:

- Operating pressures
- Operating temperatures
- System fluid type
- Cycles times
- Tank volume

To prevent the bladder / diaphragm or piston coming into contact with the bottom of the accumulator shell and causing damage to these components, accumulator pre-charge pressure should be set to 80% - 90% of system minimum operating pressure.

If pre-charge pressure falls below the recommended range, accumulators suffer from reduced storage capacity, affecting overall hydraulic system performance.

Once the operating pressure ratio (max system pressure / pre-charge pressure) exceeds 4:1 for bladder accumulators or 6:1/8:1 for diaphragm accumulators, the bladder / diaphragm then has a high risk of failure.

Bladder / diaphragm failure and reduced system operating performance can also result if pre-charge pressure is set too high, or if ambient temperature variation (pre-charge ambient temperature versus operating ambient temperature) is not managed.

Additionally, STAUFF PT-RF allows accurate comparison of pre-charge pressure at a recorded ambient temperature vs. specified pre-charge pressure and temperature. You can similarly set a pre-charge pressure tolerance and use this to highlight if the nitrogen pre-charge has fallen below your nominated range.

PT-RF Software Functions

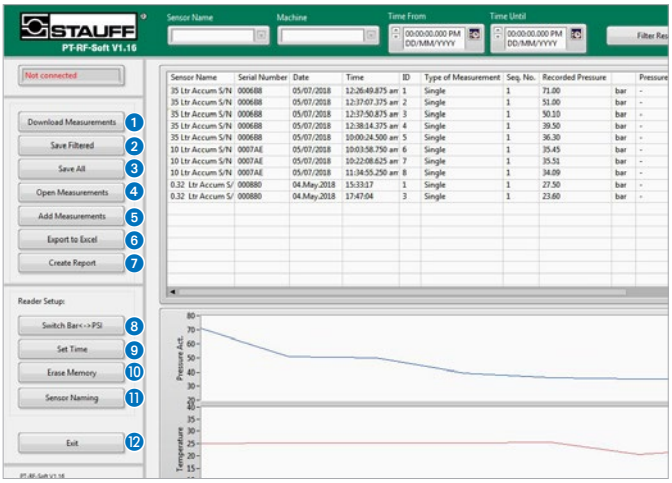
Sort Function

The software incorporates a sort function which can be filtered by:

1. Each sensor with a unique serial number
2. Machine name (Set-up in the Sensor Naming function Initially – see Sensor Naming Function below)
3. By date

Operation Functions

1. Download measurements
2. Save filtered measurements
3. Save all
4. Open measurements
5. Add measurements
6. Export to Excel
7. Create report (Using existing Excel templates)
8. Switch bar <-> PSI
9. Set time
10. Erase memory
11. Sensor naming function (See below)
12. Exit



PT-RF Software

Sensor Naming Function

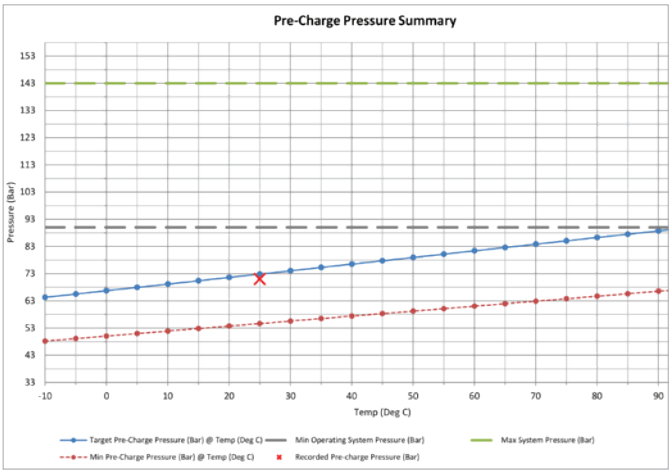
The sensor naming function plays an important role in creating customised reports and using the PT-RF equipment as a data logger.

It allows you to store customised information about each sensor with regard to where the sensor is installed – including technical information, such as operating pressures of the equipment.

Once this information is added to the software and saved, the information will be retained for future use and is specific to each sensor.

Key naming functions that can be set:

- Sensor serial number
- Sensor name
- Desired pressure
- Tolerance +%
- Tolerance -%
- Machine name
- Minimum system pressure
- Maximum system pressure
- Customer



Pre-charge Pressure Summary Graph

Safety Pattern Pressure Gauge (analogue) ▪ Type SPG in accordance with AS1349

Type SPG (Stem Mounting)

Type SPG (Panel Mounting)

Application

Mechanical pressure measurement of nitrogen gas pre-charge in accumulators

Features

- Increased safety requirements for personal protection
- Solid baffle wall
- Suitable for gaseous media compatible with stainless steel
- Available in nominal sizes 63 mm / 2.5 in
- Thread form: for BSPP (G1/4"),
- Stainless Steel 316L housing
- Laminated safety glass
- Dual scales with pressure indication in bar/PSI
- Excellent load cycle stability and shock resistance

Note: Contact STAUFF before using SPG-490179 with other media.

Technical Data

- Pressure gauge according to EN 837-1
- Subject to technical modifications

Accuracy

SPG-063: 1.6%

Permissible Temperatures

Ambient: -40 °C ... +60 °C without liquid
Media: max. +200 °C without liquid

Protection Ratings

IP 65: IP 65 protection rating: Dust tight and protected against water jets per IEC/EN 60529

Order Codes

SPG	-	063	-	00100	-	01	-	S	-	B04	-	490179
①		②		③		④		⑤		⑥		⑦

① Series and Type

Stainless Steel Pressure Gauge	**SPG**

② Size

Ø 63 mm with G1/4" connection	**063**

③ Outlet Pressure Rating

0 ... 100 bar / 0 ... 1450 PSI	**00100**
0 ... 250 bar / 0 ... 3625 PSI	**00250**
0 ... 400 bar / 0 ... 5801 PSI	**00400**

Note: Additional Pressure Ranges available on request

④ Styles of Scales

bar / PSI (bar outside/PSI inside)	**01**

⑤ Adaption

Stem mounting	**S**
Panel mounting	**P**

⑥ Process Connection

G1/4"	**B04**

⑦ Special Type

Safety Pattern Gauge (Pressure gauge according to Safety series EN 837-1, Measuring system XrNi-steel, without glycerine)	**490179**

Safety Pattern Pressure Gauge
1/4" BSPP Stem Mount
Type SPG-063-...-01-S-B04-490179

Ø 63mm

Item No.	Designation	Price
6100161936	SPG-063-00100-01-S-B04-490179	223.40
6100161938	SPG-063-00250-01-S-B04-490179	223.40
6100161940	SPG-063-00400-01-S-B04-490179	223.40

Safety Pattern Pressure Gauge
1/4" BSPP Panel Mount
Type SPG-063-...-01-P-B04-490179

Ø 63mm

Item No.	Designation	Price
6100161935	SPG-063-00100-01-P-B04-490179	256.75
6100161937	SPG-063-00250-01-P-B04-490179	256.75
6100161939	SPG-063-00400-01-P-B04-490179	256.75

Product-Specific Abbreviations Q2 - Q12

Product-Specific Abbreviations

Abbreviation	Product Category	Product Description	Page
ACT	STAUFF ACT Clamps: Anti-Corrosion Technology	Clamp Body - Standard Series	A60
ACT	STAUFF ACT Clamps: Anti-Corrosion Technology	Clamp Body - Twin Series	A61
ADP-B45-J..-MM-W66A-SKM	JIC - Bulkhead Adaptors	Bulkhead Union Elbow 45° - JIC - JIC	D14
ADP-B90-J..-MM-W66A-SKM	JIC - Bulkhead Adaptors	Bulkhead Union Elbow 90° - JIC - JIC	D14
ADP-BBT-J..-MMM-W66A-SKM	JIC - Bulkhead Adaptors	Bulkhead Branch Tee - JIC - JIC	D15
ADP-B-J../T..-MFX-W66A-SKM	JIC - Bulkhead Adaptors	Female Bulkhead Connector - JIC - BSPT (F)	D14
ADP-B-J../T..-MM-W66A-SKM	JIC - Bulkhead Adaptors	Male Bulkhead Connector - JIC - BSPT(M)	D13
ADP-B-J..-MM-W66A-SKM	JIC - Bulkhead Adaptors	Bulkhead Union - JIC - JIC	D13
ADP-BRT-J..-MMM-W66A-SKM	JIC - Bulkhead Adaptors	Bulkhead Run Tee - JIC - JIC	D15
ADP-C-.../J..-MM-W111A-MS	JIC - Connectors	Male Connector - Metric with DIN 2353 Nut and 24° Cutting Ring - JIC	D11
ADP-CE45-J..-MF-FG-W66A	JIC - Swivel Adaptors	Male / Female Swivel Elbow 45° - JIC (M) - JIC (F)	D22
ADP-CE45-T../J..MM-FG-W66A	JIC - Elbow / Tee Adaptors	Male Elbow 45° - BSPT - JIC	D18
ADP-CE90-J../T..-MFX-FG-W66A	JIC - Elbow / Tee Adaptors	Female Elbow 90° - BSPT - JIC	D18
ADP-CE90-J..-FF-FG-W66A	JIC - Swivel Adaptors	Female Swivel Elbow 90° - JIC (F) - JIC (F)	D22
ADP-CE90-J..-MF-FG-W66A	JIC - Swivel Adaptors	Male / Female Swivel Elbow 90° - JIC (M) - JIC (F)	D22
ADP-CE90-J..-MM-FG-W66A	JIC - Elbow / Tee Adaptors	Union Elbow 90° - JIC - JIC	D17
ADP-CE90-T..-J..-MM-FG-W66A	JIC - Elbow / Tee Adaptors	Male Elbow 90° - BSPT - JIC	D17
ADP-C-G..WD/J..-MF-W66A-WD-B	JIC - Swivel Adaptors	Male Swivel Straight - BSPP with Profile Sealing Ring - JIC (F)	D21
ADP-C-G..WD/J..-MM-W66A-WD-B	JIC - Connectors	Male Connector - BSPP with Profile Sealing Ring - JIC	D10
ADP-C-G32WD/G	Bladder Accumulators	Fluid Port Adaptors	P18
ADP-C-J../G..-MFX-W66A	JIC - Connectors	Female Connector - JIC - BSPP	D11
ADP-C-J../J..-MM-W66A	JIC - Connectors	Reducing Union - JIC - JIC	D9
ADP-C-J../N..-MM-W66A	JIC - Connectors	Male Connector - JIC - NPT	D10
ADP-C-J../T..-MFX-W66A	JIC - Connectors	Female Connector - JIC - BSPT	D11
ADP-C-J../U..-MM-W66A-OR-B	JIC - Connectors	Male Connector - JIC - UNO with O-Ring	D10
ADP-C-J..-FF-W66A	JIC - Swivel Adaptors	Female Swivel Straight - JIC - JIC	D21
ADP-C-J..-MM-W66A	JIC - Connectors	Union - JIC - JIC	D9
ADP-CP-J..-F-W66A	JIC - Spare Parts / Accessories	Cap - JIC	D26
ADP-C-T../J..-MF-W66A	JIC - Swivel Adaptors	Male Swivel Straight - BSPT (M) - JIC (F)	D21
ADP-C-T../J..-MM-W66A	JIC - Connectors	Male Connector - BSPT - JIC	D10
ADP-GC	Pressure Gauges	Gauge Swivel Adaptors	M11
ADP-HP-J..-M-W66A	JIC - Spare Parts / Accessories	Plug - JIC	D26
ADP-N-J..-W66A	JIC - Spare Parts / Accessories	Nut - JIC - SAE J514	D25
ADP-N-J..-W66A-8434	JIC - Spare Parts / Accessories	Nut - JIC - ISO 8434	D26
ADP-NS-J..-W66A	JIC - Spare Parts / Accessories	Nut + Sleeve - JIC - SAE J514	D25
ADP-NS-J..-W66A-8434	JIC - Spare Parts / Accessories	Nut + Sleeve - JIC - ISO 8434	D26
ADP-PCE90-G../J..-MM-FG-W66A-OKOR-B	JIC - Elbow / Tee Adaptors	Male Positional Elbow 90° - BSPP - JIC	D18
ADP-PCE90-J../U..-MM-FG-W66A-OKOR-B	JIC - Elbow / Tee Adaptors	Male Positional Elbow 90° - JIC - UNF	D18
ADP-S-J..OD-W66A	JIC - Spare Parts / Accessories	Sleeve - JIC	D26
ADP-S-J..OD-W66A-SVS	JIC - Spare Parts / Accessories	Sleeve - JIC - Short Version	D26
ADP-T-J../J../T..-MMM-FG-W66A	JIC - Elbow / Tee Adaptors	Male Branch Tee - JIC - JIC - BSPT	D19
ADP-T-J..-MFM-FG-W66A	JIC - Swivel Adaptors	Swivel Run Tee - JIC - JIC (F) - JIC	D22
ADP-T-J..-MMF-FG-W66A	JIC - Swivel Adaptors	Swivel Branch Tee - JIC - JIC - JIC (F)	D22
ADP-T-J..-MMM-FG-W66A	JIC - Elbow / Tee Adaptors	Union Tee - JIC - JIC - JIC	D19
ADP-T-T../J../J..-MMM-FG-W66A	JIC - Elbow / Tee Adaptors	Male Run Tee - BSPT - JIC - JIC	D19
ADP-X-J..-MMMM-FG-W66A	JIC - Elbow / Tee Adaptors	Union Cross - JIC	D19
AF	Standard Series according to DIN 3015, Part 1	Stacking Bolt	A19
AF	Heavy Series according to DIN 3015, Part 2	Stacking Bolt	A39
AF	Twin Series according to DIN 3015, Part 3	Stacking Bolt	A49
AF	Heavy Twin Series	Stacking Bolt	A54
AL	Standard Series according to DIN 3015, Part 1	Aluminium Clamp Body - Profiled Bore - Standard Series	A17
AL	Heavy Series according to DIN 3015, Part 2	Aluminium Clamp Body - Profiled Bore - Heavy Series	A37
AL	Technical Appendix	Standard Clamp Body Material Information	A76
AP	Giant and Desiccant Air Breathers	Adaptor Plate	O40
AS	Standard Series according to DIN 3015, Part 1	Hexagon Head Bolt	A19
AS	Heavy Series according to DIN 3015, Part 2	Hexagon Head Bolt	A39
AS	Twin Series according to DIN 3015, Part 3	Hexagon Head Bolt	A49
AS	Heavy Twin Series	Hexagon Head Bolt	A54
ATZ	Return-Line Filters	In-Tank Suction Filters - Magnetic Pre-Filter	N142
BA	Metal Filler Breather Adaptor	Metal Filler Breather Adaptor (Aluminium)	O31
BAS-...-CP	Accessories for SAE Flanges	SAE Single-Part Blanking Counterflange	I 16
BAS-ES	SAE Flange / Counterflange Adaptors	SAE Single-Part Socket-Weld Counterflange	I 13
BAS-G	SAE Flange / Counterflange Adaptors	SAE Single-Part Counterflange with Female BSPP Thread	I 10
BAS-N	SAE Flange / Counterflange Adaptors	SAE Single-Part Counterflange with Female NPT Thread	I 11
BAS-ST	SAE Flange / Counterflange Adaptors	SAE Single-Part Butt-Weld Counterflange for High Pressure Tubes	I 12
BBV-2-F3	Two-Way Ball Valves	High-Pressure Block Body Ball Valve with SAE Split Flange Connections 3000 PSI Series (ISO 6162-1)	K10
BBV-2-F6	Two-Way Ball Valves	High-Pressure Block Body Ball Valve with SAE Split Flange Connections 6000 PSI Series (ISO 6162-2)	K10
BBV-2-G	Two-Way Ball Valves	High-Pressure Block Body Ball Valve with Female BSPP Threads	K7
BBV-2-L/S	Two-Way Ball Valves	High-Pressure Block Body Ball Valve with 24° Cone Connections	K7
BBV-2-N	Two-Way Ball Valves	High-Pressure Block Body Ball Valve with Female NPT Thread	K7
BD-Ring-Kit-..	Tube and Fittings Accessories	Bonded Washer Seal Kits	F20
BENDING-PROTECTION-HE	Test Hoses and Connectors	Hose End Protector	L44
BFX-...-CP	Accessories for SAE Flanges	SAE Single-Part Blanking Flange	I 16
BFX90-ES	SAE Flange / Counterflange Adaptors	SAE 90° Single-Part Socket-Weld Flange	I 14
BFX90-G	SAE Flange / Counterflange Adaptors	SAE 90° Single-Part Flange with Female BSPP Thread	I 14
BFX-ES	SAE Flange / Counterflange Adaptors	SAE Single-Part Socket-Weld Flange	I 13
BFX-FL-ES	SAE Flange / Counterflange Adaptors	SAE Single-Part Socket-Weld Flange (Flat Style)	I 13

Product-Specific Abbreviations

Abbreviation	Product Category	Product Description	Page
BFX-G	SAE Flange / Counterflange Adaptors	SAE Single-Part Flange with Female BSPP Thread	I 10
BFX-J	SAE Flange / Counterflange Adaptors	SAE Single-Part Flange with Male UN/UNF Thread and 37° JIC Taper (acc. to ISO 8434-2 / SAE J514)	I 14
BFX-L/S	SAE Flange / Counterflange Adaptors	SAE Single-Part Flange with Male Metric Thread and 24° Conical Bore (Shape W acc. to DIN 3861)	I 14
BFX-N	SAE Flange / Counterflange Adaptors	SAE Single-Part Flange with Female NPT Thread	I 11
BFX-ST	SAE Flange / Counterflange Adaptors	SAE Single-Part Butt-Weld Flange for High Pressure Tubes	I 12
BGT	Return-Line Filters	In-Tank Return Filters - Magnetic Pre-Filter	N142
BM	SAE Split Flange Halves / Flange Clamps	SAE Flange Clamp	I 4
BOTTLE-SFS	Filtration Systems	Fluid Sampling Bottle	N175
Bowl-SB	Pressure Filters	Filter Bowl	N103
Bowl-SBA	Pressure Filters	Filter Bowl Aluminium	N103
BS	Accumulator Accessories	Safety Blocks	P29
BSP	Standard Series according to DIN 3015, Part 1	Bridge Weld Plate	A18
BV0L-3-L	Multi-Way Ball Valves	Low-Pressure Ball Valve (L-Bore) with Female BSPP Threads	K28
BV0L-3-T	Multi-Way Ball Valves	Low-Pressure Ball Valve (T-Bore) with Female BSPP Threads	K28
BV-2-C36	Two-Way Ball Valves	High-Pressure Round Body Ball Valve SAE Flange Connections 3000/6000 PSI Series (ISO 6162-1/2) - Dual Pattern	K12
BV2L-2	Two-Way Ball Valves	Low-Pressure Ball Valve with Female BSPP Threads	K14
Cable-PPC-04/12	Hydraulic Testers	PPC Series Connection Cable	M48
Cable-PPC-CAN	Hydraulic Testers	PPC Series CAN Connection Cable	M48
Cable-PPC-CAN-Y	Hydraulic Testers	PPC Series CAN-Y Splitter Cable	M48
CAG90-L/S	SAE Single-Part Flanges / Counterflanges	SAE 90° Flange Adaptor with Male Metric Thread and 24° Conical Bore (Shape W acc. to DIN 3861)	I 7
CAG-BP	Accessories for SAE Flanges	SAE Blindplug (Standard)	I 17
CAG-L/S	SAE Single-Part Flanges / Counterflanges	SAE Flange Adaptor with Male Metric Thread and 24° Conical Bore (Shape W acc. to DIN 3861)	I 7
CAG-ST	SAE Single-Part Flanges / Counterflanges	SAE Butt-Weld Flange Adaptor	I 6
CBVL-3-G	Multi-Way Ball Valves	High-Pressure Block Body Ball Valve with Female BSPP Threads - L-Bore Three-Way Selector	K20
CBVSL-3-G	Multi-Way Ball Valves	High-Pressure Block Body Ball Valve with Female BSPP Threads - L-Bore Three-Way Selector	K22
CBVST-3-G	Multi-Way Ball Valves	High-Pressure Block Body Ball Valve with Female BSPP Threads - T-Bore Three-Way Selector	K23
CBVT-3-G	Multi-Way Ball Valves	High-Pressure Block Body Ball Valve with Female BSPP Threads - T-Bore Three-Way Selector	K21
CPL	Accessories for SAE Flanges	SAE Cover Plate	I 17
CRA	Standard Series according to DIN 3015, Part 1	Channel Rail Adaptor	A18
CRA	Heavy Series according to DIN 3015, Part 2	Channel Rail Adaptor	A38
CRA	Twin Series according to DIN 3015, Part 3	Channel Rail Adaptor	A49
CRA	Heavy Twin Series	Channel Rail Adaptor	A54
CRA	Pressure Gauges	Mounting Clamp - Channel Rail Mount	M29
CSG-ES	SAE Single-Part Flanges / Counterflanges	SAE Socket-Weld Counterflange Adaptor	I 7
CSG-ST	SAE Single-Part Flanges / Counterflanges	SAE Butt-Weld Counterflange Adaptor	I 6
DB	SAE Split Flange Halves / Flange Clamps	SAE Split Flange Halves	I 4
DB-605	Bladder Accumulators	Fluid Port Adaptors - SAE Flanges to suit Accumulators with 1-1/2" SAE Code 62 Fluid Ports	P17
DB-FL	SAE Split Flange Halves / Flange Clamps	SAE Split Flange Halves (Flat Style)	I 4
DIN1592	Metal DIN Clamps	Heavy Saddle with Tension Clearance - Single-Bolt Design	A69
DIN1593	Metal DIN Clamps	Heavy Saddle with Tension Clearance - Two-Bolt Design	A69
DIN1596	Metal DIN Clamps	Light Saddle with Tension Clearance - Single-Bolt Design	A69
DIN1597	Metal DIN Clamps	Light Saddle with Tension Clearance - Two-Bolt Design	A69
DIN3567-A	Metal DIN Clamps	Metal Pipe Clamp with Tension Clearance	A69
DIN3567-B	Metal DIN Clamps	Metal Pipe Clamp with Tension Clearance (Extended to One Side)	A69
DKS	Construction Series	Construction Series Clamp	A68
DKSV	Construction Series	Construction Series Clamp (for Anchor Bolt Fastening)	A68
DP	Standard Series according to DIN 3015, Part 1	Cover Plate	A19
DPAD	Heavy Twin Series	Cover Plate	A54
DPAL	Heavy Series according to DIN 3015, Part 2	Cover Plate for Single Clamps	A39
DPAS	Heavy Series according to DIN 3015, Part 2	Cover Plate for Double Clamps	A39
DPL	Light Series	Cover Plate	A65
DRV	Flow Control Valves	Flow Control Valve (In-Line Assembly)	K32
DS	Plastic Dipstick	Plastic Dipstick with Anti-splash Feature	O20
DSP	Standard Series according to DIN 3015, Part 1	Twin Weld Plate	A18
DV	Flow Control Valves	Throttle and Shut-Off Valve (In-Line Assembly)	K32
EACC-CAB	Fluid Level and Temperature Indicators	Deutsch Adaptor Cable	O12
EBF	Tank Filler Breathers	Extended Bayonet Flange	O30
EMV	Test Adaptors	Adjustable Gauge Fitting	L32
EP	Standard Series according to DIN 3015, Part 1	Insert	A19
EPDM	Technical Appendix	Standard Clamp Insert Materials	A77
ES	Standard Series according to DIN 3015, Part 1	Insert	A19
FB	Flat Steel and Round Steel U-Bolt Clamps	Flat Steel U-Bolt	A69
FBV-2-F3	Two-Way Ball Valves	High-Pressure Forged Body Ball Valve with SAE Split Flange Connections 3000 PSI Series (ISO 6162-1)	K11
FBV-2-F6	Two-Way Ball Valves	High-Pressure Forged Body Ball Valve with SAE Split Flange Connections 6000 PSI Series (ISO 6162-2)	K11
FBV-2-G	Two-Way Ball Valves	High-Pressure Forged Body Ball Valve with Female BSPP Threads	K8
FBV-2-L/S	Two-Way Ball Valves	High-Pressure Forged Body Ball Valve with 24° Cone Connections	K8
FBV-2-N	Two-Way Ball Valves	High-Pressure Forged Body Ball Valve with Female NPT Thread	K8
FE-ARL	Return-Line Filters	Elements to suit ATZ Suction Filters	N142
FE-ARL	Return-Line Filters	Filter Elements Type FE-ARL	N142
FI-AB	Steel - Connecting Parts	37° Flared Tube Fitting Set	B11
FI-AR	Steel - Connecting Parts	STAUFF Form Adaptor Ring	B10
FI-AR	Stainless Steel - Connecting Parts	STAUFF Form Adaptor Ring	C4
FI-AS	Steel - Weld Fittings	Straight Weld Fitting	B28
FI-AS	Stainless Steel - Weld Fittings	Straight Weld Fitting	C16
FI-BA	Steel - Connecting Parts	24°/37° Flared Cone Adaptor with O-Rings	B11
FI-BH	Steel - Connecting Parts	Support Sleeve for 37° Flared Tube Fittings	B11
FI-BM	Steel - Connecting Parts	Union Nut for 37° Flared Tube Fittings	B11

Product-Specific Abbreviations

Abbreviation	Product Category	Product Description	Page
FI-DIR	Steel - Spare Parts / Accessories	Retaining Ring with Captive Seal	**B49**
FI-DKI	Steel - Spare Parts / Accessories	Internal Metallic Sealing Ring	**B49**
FI-DKR	Steel - Spare Parts / Accessories	External Metallic Sealing Ring	**B49**
FI-DS	Steel - Connecting Parts	Double Edge Cutting Ring	**B10**
FI-DS	Stainless Steel - Connecting Parts	Double Edge Cutting Ring	**C4**
FI-EGED-...-M-WD	Steel - Fittings with 24° Taper / O-Ring (DKO)	Straight Male Stud Fitting with 24° Taper / O-Ring with Metric Parallel Thread / Profile Sealing Ring	**B32**
FI-EGED-...-M-WD	Stainless Steel - Fittings with 24° Taper / O-Ring (DKO)	Straight Male Stud Fitting with 24° Taper / O-Ring with Metric Parallel Thread / Profile Sealing Ring	**C20**
FI-EGED-...-R-WD	Steel - Fittings with 24° Taper / O-Ring (DKO)	Straight Male Stud Fitting with 24° Taper / O-Ring with Whitworth Parallel Pipe Thread (BSPP) / Profile Sealing Ring	**B32**
FI-EGED-...-R-WD	Stainless Steel - Fittings with 24° Taper / O-Ring (DKO)	Straight Male Stud Fitting with 24° Taper / O-Ring with Whitworth Parallel Pipe Thread (BSPP) / Profile Sealing Ring	**C20**
FI-ELD	Steel - Fittings with 24° Taper / O-Ring (DKO)	Adjustable Barrel Tee with 24° Taper / O-Ring	**B34**
FI-ELD	Stainless Steel - Fittings with 24° Taper / O-Ring (DKO)	Adjustable Barrel Tee with 24° Taper / O-Ring	**C22**
FI-EMAD-...-R	Steel - Female Stud / Gauge Fittings	Gauge Fitting with 24° Taper / O-Ring & Female Whitworth Parallel Pipe Thread (BSPP) / Internal Metallic Sealing Ring	**B30**
FI-EMAD-...-R	Stainless Steel - Female Stud / Gauge Fittings	Gauge Fitting with 24° Taper / O-Ring & Female Whitworth Parallel Pipe Thread (BSPP) / Internal Metallic Sealing Ring	**C18**
FI-ES	Steel - Bulkhead Fittings	Straight Bulkhead Weld Fitting	**B26**
FI-ETD	Steel - Fittings with 24° Taper / O-Ring (DKO)	Adjustable Branch Tee with 24° Taper / O-Ring	**B34**
FI-ETD	Stainless Steel - Fittings with 24° Taper / O-Ring (DKO)	Adjustable Branch Tee with 24° Taper / O-Ring	**C22**
FI-EVD	Steel - Fittings with 24° Taper / O-Ring (DKO)	Adjustable Elbow (45°) with 24° Taper / O-Ring	**B34**
FI-EWD	Steel - Fittings with 24° Taper / O-Ring (DKO)	Adjustable Elbow (90°) with 24° Taper / O-Ring	**B34**
FI-EWD	Stainless Steel - Fittings with 24° Taper / O-Ring (DKO)	Adjustable Elbow (90°) with 24° Taper / O-Ring	**C22**
FI-FK	Assembly Tools / Devices	Final Assembly Stud for the Manual Cutting Ring Assembly	**F5**
FI-G	Steel - Tube Fittings / Unions	Straight Union	**B22**
FI-G	Stainless Steel - Tube Fittings / Unions	Straight Union	**C10**
FI-G../..	Steel - Tube Fittings / Unions	Straight Reducer	**B22**
FI-G../..	Stainless Steel - Tube Fittings / Unions	Straight Reducer	**C10**
FI-GA-...-M	Steel - Female Stud / Gauge Fittings	Straight Female Stud Fitting with Female Metric Parallel Thread	**B30**
FI-GA-...-R	Steel - Female Stud / Gauge Fittings	Straight Female Stud Fitting with Female Whitworth Parallel Pipe Thread (BSPP)	**B30**
FI-GA-...-R	Stainless Steel - Female Stud / Gauge Fittings	Straight Female Stud Fitting with Female Whitworth Parallel Pipe Thread (BSPP)	**C18**
FI-GE-...-M	Steel - Male Stud Fittings	Straight Male Stud Fitting with Metric Parallel Thread / Metallic Sealing Edge	**B15**
FI-GE-...-Mk	Steel - Male Stud Fittings	Straight Male Stud Fitting with Metric Taper Thread	**B17**
FI-GE-...-M-OR	Steel - Male Stud Fittings	Straight Male Stud Fitting with Metric Parallel Thread / O-Ring	**B16**
FI-GE-...-M-WD	Steel - Male Stud Fittings	Straight Male Stud Fitting with Metric Parallel Thread / Profile Sealing Ring	**B16**
FI-GE-...-N	Steel - Male Stud Fittings	Straight Male Stud Fitting with NPT Thread	**B17**
FI-GE-...-N	Stainless Steel - Male Stud Fittings	Straight Male Stud Fitting with NPT Thread	**C7**
FI-GE-...-R	Steel - Male Stud Fittings	Straight Male Stud Fitting with Whitworth Parallel Pipe Thread (BSPP) / Metallic Sealing Edge	**B15**
FI-GE-...-R	Stainless Steel - Male Stud Fittings	Straight Male Stud Fitting with Whitworth Parallel Pipe Thread (BSPP) / Metallic Sealing Edge	**C6**
FI-GE-...-R-DF	Steel - Male Stud Fittings	Straight Male Stud Fitting with BSPP Thread / 60° Conical Bore / Sealing Surface for Gaskets	**B16**
FI-GE-...-Rk	Steel - Male Stud Fittings	Straight Male Stud Fitting with Whitworth Taper Pipe Thread (BSPT)	**B17**
FI-GE-...-Rk	Stainless Steel - Male Stud Fittings	Straight Male Stud Fitting with Whitworth Taper Pipe Thread (BSPT)	**C6**
FI-GE-...-R-WD	Steel - Male Stud Fittings	Straight Male Stud Fitting with Whitworth Parallel Pipe Thread (BSPP) / Profile Sealing Ring	**B15**
FI-GE-...-R-WD	Stainless Steel - Male Stud Fittings	Straight Male Stud Fitting with Whitworth Parallel Pipe Thread (BSPP) / Profile Sealing Ring	**C7**
FI-GE-...-U	Steel - Male Stud Fittings	Straight Male Stud Fitting with UN/UNF / Thread O-Ring	**B17**
FI-GP-...-PRC	Assembly Tools / Devices	Support Plate for Machine-Assisted Assembly	**F10**
FI-GS	Steel - Bulkhead Fittings	Straight Bulkhead Fitting	**B26**
FI-GS	Stainless Steel - Bulkhead Fittings	Straight Bulkhead Fitting	**C14**
FI-K	Steel - Tube Fittings / Unions	Equal Cross	**B23**
FI-K	Stainless Steel - Tube Fittings / Unions	Equal Cross	**C11**
FI-KB-...-PRC	Assembly Tools / Devices	Clamping Jaws for 37° Flaring	**F11**
FI-LE-...-R	Steel - Male Stud Fittings	Male Stud Barrel Tee with Whitworth Parallel Pipe Thread (BSPP) / Metallic Sealing Edge	**B19**
FI-LE-...-Rk	Steel - Male Stud Fittings	Male Stud Barrel Tee with Whitworth Taper Pipe Thread (BSPT)	**B19**
FI-M	Steel - Connecting Parts	Union Nut	**B11**
FI-M	Stainless Steel - Connecting Parts	Union Nut	**C4**
FI-MA-...-N	Stainless Steel - Female Stud / Gauge Fittings	Gauge Fitting with Female NPT Thread / Gauge Fitting with Internal Metallic Sealing Ring	**C18**
FI-MA-...-R	Steel - Female Stud / Gauge Fittings	Gauge Fitting with Female Whitworth Parallel Pipe Thread (BSPP) / Gauge Fitting with Internal Metallic Sealing Ring	**B30**
FI-MA-...-R	Stainless Steel - Female Stud / Gauge Fittings	Gauge Fitting with Female Whitworth Parallel Pipe Thread (BSPP) / Gauge Fitting with Internal Metallic Sealing Ring	**C18**
FI-MVK-...-PRC	Assembly Tools / Devices	Cutting Ring Assembly Stud for Machine-Assisted Assembly	**F10**
FI-MVK-...-PRC-H-M	Assembly Tools / Devices	Cutting Ring Assembly Stud for Machine-Assisted Assembly	**F7**
FI-RED-...-R-WD	Steel - Spare Parts / Accessories	Thread Reducer with Whitworth Parallel Pipe Thread (BSPP) / Profile Sealing Ring	**B44**
FI-RED-...-R-WD	Stainless Steel - Spare Parts / Accessories	Thread Reducer with Whitworth Parallel Pipe Thread (BSPP) / Profile Sealing Ring	**C24**
FI-RED-R	Bladder Accumulators	Fluid Port Adaptors	**P18**
FI-REDSD	Steel - Fittings with 24° Taper / O-Ring (DKO)	Straight Reducer for Tube Ends with 24° Taper / O-Ring	**B33**
FI-REDSD	Stainless Steel - Fittings with 24° Taper / O-Ring (DKO)	Straight Reducer for Tube Ends with 24° Taper / O-Ring	**C21**
FI-RSW-...-M-DK	Steel - Banjo Fittings	Banjo Elbow (High-Pressure Version) with Metric Parallel Thread / External Metallic Sealing Ring	**B38**
FI-RSW-...-M-WD	Steel - Banjo Fittings	Banjo Elbow (High-Pressure Version) with Metric Parallel Thread / Retaining Ring with Captive Seal	**B39**
FI-RSW-...-R-DK	Steel - Banjo Fittings	Banjo Elbow (High-Pressure Version) with Whitworth Parallel Pipe Thread (BSPP) / External Metallic Sealing Ring	**B38**
FI-RSW-...-R-WD	Steel - Banjo Fittings	Banjo Elbow (High-Pressure Version) with Whitworth Parallel Pipe Thread (BSPP) / Retaining Ring with Captive Seal	**B39**
FI-RV	Steel - Hydraulic Valves	Check Valve	**B42**
FI-S	Steel - Connecting Parts	Single Edge Cutting Ring	**B10**
FI-S	Stainless Steel - Connecting Parts	Single Edge Cutting Ring	**C4**
FI-SN	Steel - Weld Fittings	24° Weld Cone with O-Ring	**B28**
FI-SN	Stainless Steel - Weld Fittings	24° Weld Cone with O-Ring	**C16**
FI-SNR	Steel - Weld Fittings	24° Weld Cone Reducer with O-Ring	**B28**
FI-SNV	Steel - Fittings with 24° Taper / O-Ring (DKO)	Straight Fitting with 24° Taper / O-Ring	**B33**
FI-SNV	Stainless Steel - Fittings with 24° Taper / O-Ring (DKO)	Straight Fitting with 24° Taper / O-Ring	**C21**
FI-T	Steel - Tube Fittings / Unions	Equal Tee	**B23**
FI-T	Stainless Steel - Tube Fittings / Unions	Equal Tee	**C11**
FI-TE-...-R	Steel - Male Stud Fittings	Male Stud Branch Tee with Whitworth Parallel Pipe Thread (BSPP) / Metallic Sealing Edge	**B19**
FI-TE-...-Rk	Steel - Male Stud Fittings	Male Stud Branch Tee with Whitworth Taper Pipe Thread (BSPT)	**B19**

Product-Specific Abbreviations

Abbreviation	Product Category	Product Description	Page
FI-TIB	Assembly Tools / Devices	Thread Identification Board	F16
FI-VD	Steel - Spare Parts / Accessories	Blanking Plug with 24° Taper / O-Ring (DKO)	B45
FI-VD	Stainless Steel - Spare Parts / Accessories	Blanking Plug with 24° Taper / O-Ring (DKO)	C25
FI-VH	Steel - Connecting Parts	Support Sleeve	B10
FI-VS-...-M-WD	Steel - Spare Parts / Accessories	Blanking Screw for Ports with Metric Parallel Thread / Profile Sealing Ring	B45
FI-VS-...-M-WD	Stainless Steel - Spare Parts / Accessories	Blanking Screw for Ports with Metric Parallel Thread / Profile Sealing Ring	C25
FI-VS-...-R-WD	Steel - Spare Parts / Accessories	Blanking Screw for Ports with Whitworth Parallel Pipe Thread (BSPP) / Profile Sealing Ring	B45
FI-VS-...-R-WD	Stainless Steel - Spare Parts / Accessories	Blanking Screw for Ports with Whitworth Parallel Pipe Thread (BSPP) / Profile Sealing Ring	C25
FI-VSK	Steel - Spare Parts / Accessories	Blanking Plug for Tube Ends	B45
FI-VSK	Stainless Steel - Spare Parts / Accessories	Blanking Plug for Tube Ends	C25
FI-W	Steel - Tube Fittings / Unions	Equal Elbow	B23
FI-W	Stainless Steel - Tube Fittings / Unions	Equal Elbow	C11
FI-WDDS	Steel - Connecting Parts	Soft-Sealing Cutting Ring	B10
FI-WE-...-Mk	Steel - Male Stud Fittings	Male Stud Elbow with Metric Taper Thread	B18
FI-WE-...-N	Steel - Male Stud Fittings	Male Stud Elbow with NPT Thread	B18
FI-WE-...-R	Steel - Male Stud Fittings	Male Stud Elbow with Whitworth Parallel Pipe Thread (BSPP) / Metallic Sealing Edge	B18
FI-WE-...-Rk	Steel - Male Stud Fittings	Male Stud Elbow with Whitworth Taper Pipe Thread (BSPT)	B18
FI-WE-...-Rk	Stainless Steel - Male Stud Fittings	Male Stud Elbow with Whitworth Taper Pipe Thread (BSPT)	C7
FI-WEE-...-R-OK	Steel - Fittings with Lock Nut	Adjustable Male Stud Elbow (90°) with Lock Nut & Whitworth Parallel Pipe Thread (BSPP) / O-Ring and Retaining Ring (Small)	B36
FI-WS	Steel - Bulkhead Fittings	Elbow Bulkhead Fitting	B26
FI-WS	Stainless Steel - Bulkhead Fittings	Elbow Bulkhead Fitting	C14
FI-WV	Steel - Hydraulic Valves	Alternating Valve	B42
Flow-Meter-PPC-04/12	Hydraulic Testers	Flow Turbine	M42
Flow-Meter-PPC-CAN	Hydraulic Testers	CAN Flow Turbine	M43
FM	Giant and Desiccant Air Breathers	Visual Contamination Indicator	O40
GA	Return-Line Filters	In-Line Return Filters - Magnetic Pre-Filter	N142
GD	Twin Series according to DIN 3015, Part 3	Cover Plate	A49
GMV	Heavy Series according to DIN 3015, Part 2	Mounting Rail Nut	A38
GMV	Heavy Twin Series	Mounting Rail Nut	A54
HBV-2-N	Two-Way Ball Valves	High-Pressure 800 bar / 12000 PSI Block Body Ball Valve with Female BSPP Thread	K9
HE-10	Test Hoses and Connectors	STAUFF Test Plug in-type	L46
HE-20 / 15 / 12	Test Hoses and Connectors	STAUFF Test Screw-type	L46
HE-A	Test Hoses and Connectors	Gauge adaptor NPT-thread, 90° elbow, Hose End	L47
HE-B	Test Hoses and Connectors	Sealing head with swivel nut for cone fitting according to DIN EN 560, Hose Ends	L50
HE-C	Test Hoses and Connectors	Male thread for 24° cone fitting according to ISO 8434-1 / DIN 2353, Hose End	L49
HE-D	Test Hoses and Connectors	Universal sealing head with swivel nut for 24° cone fitting according to ISO 8434-1 / DIN 2353, Hose End	L49
HE-E	Test Hoses and Connectors	Sealing head with swivel nut according to SAE J 514, 37° cone, 90° elbow, Hose End	L50
HE-ER	Test Hoses and Connectors	Sealing head with swivel nut according to SAE J 516, 45° cone, 90° elbow, Hose End	L50
HE-F	Test Hoses and Connectors	Male thread NPT according to ANSI Standard, Hose End	L49
HE-G	Test Hoses and Connectors	Male thread according to DIN 3852-B, Hose End	L48
HE-H	Test Hoses and Connectors	Sealing head with swivel nut, 60° cone, Hose End	L51
HE-J	Test Hoses and Connectors	Male thread according to SAE J 514, Hose End	L49
HE-K	Test Hoses and Connectors	Seal with O-Ring for 24° cone fitting according to ISO 8434-1 / DIN 2353 ,c/w swivel nut, Hose End	L48
HE-L	Test Hoses and Connectors	Seal with O-Ring for 24° cone fitting according to ISO 8434-1 / DIN 2353, c/w swivel nut, 90° elbow, Hose End	L48
HE-M	Test Hoses and Connectors	Gauge adaptor BSP-thread, Hose End	L46
HE-N	Test Hoses and Connectors	Gauge adaptor NPT-thread, Hose End	L47
HE-O	Test Hoses and Connectors	STAUFF Test Screw-type, 90° elbow, suitable for test points, Hose End	L46
HE-OX	Test Hoses and Connectors	STAUFF Test Screw-type, 90° elbow, suitable for test points (short wire version), Hose End	L46
HE-P	Test Hoses and Connectors	Test hose for air brake systems, Hose End	L51
HE-R	Test Hoses and Connectors	Seal with O-Ring for 24° cone fitting according to ISO 8434-1 / DIN 2353, c/w swivel nut, 45° elbow, Hose End	L48
HE-RV	Test Hoses and Connectors	Hose End with integrated check valve, Hose End	L51
HE-S	Test Hoses and Connectors	Standpipe for compression ring fittings according to ISO 8434-1 / DIN 2353, Hose End	L47
HE-SG	Test Hoses and Connectors	Standpipe for compression ring fittings according to ISO 8434-1 / DIN 2353, 90° elbow, Hose End	L47
HE-T	Test Hoses and Connectors	Screw-type ORFS according to SAE J 1453, Hose End	L51
HE-U	Test Hoses and Connectors	Sealing head with swivel nut according to SAE J 514, 37° cone, Hose End	L50
HE-UR	Test Hoses and Connectors	Sealing head with swivel nut according to SAE J 516, 45° cone, Hose End	L50
HE-V	Test Hoses and Connectors	Screw-type ORFS according to SAE J 1453, 90° elbow, Hose End	L51
HE-W	Test Hoses and Connectors	Gauge adaptor BSP-thread, 90° elbow, Hose End	L47
HI-A	Pressure Filters	Visual Clogging Indicator for Pressure Filters - Automatic Reset	N100
HI-D	Pressure Filters	Double Visual-Electrical Clogging Indicator for Pressure Filters	N101
HI-E	Pressure Filters	Electrical Clogging Indicator for Pressure Filters	N101
HI-ED	Pressure Filters	Electrical Clogging Indicator for Pressure Filters, Deutsch plug	N100
HI-O	Pressure Filters	Clogging Indicator for Pressure Filters - Plug Type	N100
HI-P	Pressure Filters	Visual Electrical Clogging Indicator for Pressure Filters	N101
HI-V	Pressure Filters	Visual Clogging Indicator for Pressure Filters - Manual Reset	N100
HOSE-SGS	Test Hoses and Connectors	Test Hose (Perforated Outer Sheath)	L44
HOSE-SMS	Test Hoses and Connectors	Test Hose	L44
Housing-ARL	Return-Line Filters	Suction and Return Magnetic Core Filter Housings	N142
Indicator-ARL-G	Return-Line Filters	Clogging Indicators Type ARL - Switch Pressure	N145
Indicator-ARL-GV	Return-Line Filters	Clogging Indicators Type ARL - Switch Vacuum	N145
Indicator-ARL-V	Return-Line Filters	Clogging Indicators Type ARL - Gauge Pressure	N145
Indicator-ARL-VDDPM	Return-Line Filters	Clogging Indicators Type ARL - Visual Differential Indicator DPM Type	N145
Indicator-ARL-VEDPMS	Return-Line Filters	Clogging Indicators Type ARL - Visual Electrical Differential Indicator DPM Type	N145
Indicator-ARL-VV	Return-Line Filters	Clogging Indicators Type ARL - Gauge Vacuum	N145
Insert-ARL-INAGB	Return-Line Filters	Suction and Return Magnetic Core Filter Inserts Type INAGB	N144
IS	Standard Series according to DIN 3015, Part 1	Socket Cap Screw	A19
KIT-BFX-IS	Accessories for SAE Flanges	Bolt Kit	I 18

Product-Specific Abbreviations

Abbreviation	Product Category	Product Description	Page
KIT-RFB	Return-Line Filters	Air Breather for RFB Filters	N139
KIT-SFS	Oil Analysis Equipment	Oil Sampling Kit	M66
KIT-SFS	Filtration Systems	Fluid Sampling Kit	N175
KS	Construction Series	Construction Series Clamp	A68
KSV	Construction Series	Construction Series Clamp (for Anchor Bolt Fastening)	A68
LasPaC-II-P	Oil Analysis Equipment	Laser Particle Counter (Portable)	M65
LB	Light Series	Clamp Body - Single Design	A64
LBG	Light Series	Clamp Body - Twin Design	A64
LBV-3-G	Multi-Way Ball Valves	High-Pressure Block Body Ball Valve with Female BSPP Threads - L-Bore Three-Way Selector	K24
LD	Spare Parts / Accessories	Locking Devices	K43
Lever-BV	Spare Parts / Accessories	Levers - Straight and Off-Set Designs	K42
LI	Standard Series according to DIN 3015, Part 1	Slotted Head Screw	A19
Limit-Switch	Return-Line Filters	Electrical Clogging Switch for RF Series	N125
Limit-Switch	Return-Line Filters	Electrical Clogging Switch for RFB Series	N139
Limit-Switch	Return-Line Filters	Electrical Clogging Switch for RTF Series	N135
Limit-Switch	Spin-On Filters	Electrical Clogging Switch for Spin-On Filters	N171
LN	Light Series	Clamp Body - Single Design	A65
LNGF	Light Series	Clamp Body - Twin Design	A65
LNUF	Light Series	Clamp Body - Twin Design	A65
LOK-A-IA	LOK - Adapter Fittings	Adapter - Male BSPP to Female NPT Thread	E16
LOK-A-IFE	LOK - Adapter Fittings	Female Elbow - NPT Thread	E18
LOK-A-IFT	LOK - Adapter Fittings	Female Tee - NPT Thread	E18
LOK-A-IHC-N..	LOK - Adapter Fittings	Hex Coupling - NPT Thread	E17
LOK-A-IHC-T..	LOK - Adapter Fittings	Hex Coupling - BSPT Thread	E17
LOK-A-IHN-N..	LOK - Adapter Fittings	Hex Nipple - NPT Thread	E17
LOK-A-IHN-T..	LOK - Adapter Fittings	Hex Nipple - BSPT Thread	E17
LOK-A-IHRC-N..	LOK - Adapter Fittings	Hex Reducing Coupling - NPT Thread	E17
LOK-A-IHRN-N..	LOK - Adapter Fittings	Hex Reducing Nipple - NPT Thread	E17
LOK-A-IHRN-T..	LOK - Adapter Fittings	Hex Reducing Nipple - BSPT Thread	E17
LOK-A-IME	LOK - Adapter Fittings	Male Elbow - NPT Thread	E18
LOK-A-IMT	LOK - Adapter Fittings	Male Tee - NPT Thread	E18
LOK-A-IPC	LOK - Adapter Fittings	Pipe Cap - NPT Thread	E18
LOK-A-IPP-N..	LOK - Adapter Fittings	Pipe Plug - NPT Thread	E18
LOK-A-IPP-T..	LOK - Adapter Fittings	Pipe Plug - BSPT Thread	E18
LOK-A-IRA	LOK - Adapter Fittings	Reducing Adapter - Male to Female NPT Thread	E16
LOK-A-IRHB-N..	LOK - Adapter Fittings	Reducing Hex Bushing - Male to Female NPT Thread	E16
LOK-A-IRHB-T..	LOK - Adapter Fittings	Reducing Hex Bushing - Male to Female BSPT Thread	E16
LOK-A-IRSE	LOK - Adapter Fittings	Reducing Street Elbow - NPT Thread	E18
LOK-A-ISE	LOK - Adapter Fittings	Street Elbow - NPT Thread	E18
LOK-F-SAU-..-U	LOK - Twin Ferrule Fittings	AN Union - UNF Thread	E12
LOK-F-SBF	LOK - Twin Ferrule Fittings	Back Ferrule	E13
LOK-F-SBHU	LOK - Twin Ferrule Fittings	Bulkhead Union	E7
LOK-F-SC	LOK - Twin Ferrule Fittings	Cap	E13
LOK-F-SFA-..-N	LOK - Twin Ferrule Fittings	Female Adapter - NPT Thread	E12
LOK-F-SFBT-..-N	LOK - Twin Ferrule Fittings	Female Branch Tee - NPT Thread	E11
LOK-F-SFC-..-G	LOK - Twin Ferrule Fittings	Female Connector - BSPP Thread	E9
LOK-F-SFC-..-N	LOK - Twin Ferrule Fittings	Female Connector - NPT Thread	E9
LOK-F-SFC-..-T	LOK - Twin Ferrule Fittings	Female Connector - BSPT Thread	E9
LOK-F-SFCB-..-N	LOK - Twin Ferrule Fittings	Bulkhead Female Connector - NPT Thread	E9
LOK-F-SFE-..-N	LOK - Twin Ferrule Fittings	Female Elbow - NPT Thread	E10
LOK-F-SFF	LOK - Twin Ferrule Fittings	Front Ferrule	E13
LOK-F-SFRT-..-N	LOK - Twin Ferrule Fittings	Female Run Tee - NPT Thread	E11
LOK-F-SFS	LOK - Twin Ferrule Fittings	Ferrule Set	E13
LOK-F-SGMC-..-G	LOK - Twin Ferrule Fittings	Male Connector for Bonded Washer Seal - BSPP Thread	E8
LOK-F-SMA-..-N	LOK - Twin Ferrule Fittings	Male Adapter - NPT Thread	E12
LOK-F-SMBT-..-N	LOK - Twin Ferrule Fittings	Male Branch Tee - NPT Thread	E11
LOK-F-SMC-..-G	LOK - Twin Ferrule Fittings	Male Connector - BSPP Thread	E8
LOK-F-SMC-..-N	LOK - Twin Ferrule Fittings	Male Connector - NPT Thread	E7
LOK-F-SMC-..-T	LOK - Twin Ferrule Fittings	Male Connector - BSPT Thread	E7
LOK-F-SMCB-..-N	LOK - Twin Ferrule Fittings	Bulkhead Male Connector - NPT Thread	E8
LOK-F-SME-..-N	LOK - Twin Ferrule Fittings	Male Elbow - NPT Thread	E10
LOK-F-SME-..-T	LOK - Twin Ferrule Fittings	Male Elbow - BSPT Thread	E10
LOK-F-SMRT-..-N	LOK - Twin Ferrule Fittings	Male Run Tee - NPT Thread	E11
LOK-F-SN	LOK - Twin Ferrule Fittings	Nut	E13
LOK-F-SOPC-..-N	LOK - Twin Ferrule Fittings	O-Seal Pipe Thread Connector - NPT Thread	E8
LOK-F-SOSC-..-U	LOK - Twin Ferrule Fittings	O-Seal Straight Thread Connector - UNF Thread	E8
LOK-F-SP	LOK - Twin Ferrule Fittings	Plug	E13
LOK-F-SPC	LOK - Twin Ferrule Fittings	Port Connector	E12
LOK-F-SPWC-..-..P	LOK - Twin Ferrule Fittings	Male Pipe Weld Connector	E9
LOK-F-SR	LOK - Twin Ferrule Fittings	Reducer	E9
LOK-F-SRPC	LOK - Twin Ferrule Fittings	Reducing Port Connector	E12
LOK-F-SRU	LOK - Twin Ferrule Fittings	Reducing Union	E7
LOK-F-SRUT	LOK - Twin Ferrule Fittings	Reducing Union Tee	E11
LOK-F-SSMC-..-U	LOK - Twin Ferrule Fittings	SAE / MS Male Connector - UNF Thread	E8
LOK-F-SU	LOK - Twin Ferrule Fittings	Union	E7
LOK-F-SUC	LOK - Twin Ferrule Fittings	Union Cross	E11
LOK-F-SUE	LOK - Twin Ferrule Fittings	Union Elbow	E10

Product-Specific Abbreviations

Abbreviation	Product Category	Product Description	Page
LOK-F-SUT	LOK - Twin Ferrule Fittings	Union Tee	E11
LOK-T-IGG	LOK - Twin Ferrule Fittings	Inspection Gap Gauge	E13
LUBRICANT-ANTI-SEIZE-LCT-37566	Tube and Fittings Accessories	Anti-Seize Thread Sealing Compund	F20
MBBV-2	Two-Way Ball Valves	High-Pressure Block Body Ball Valve for Manifold Mounting	K13
MCBVL-3	Multi-Way Ball Valves	High-Pressure Block Body Ball Valve for Manifold Mounting	K18
MCBVSL-3	Multi-Way Ball Valves	High-Pressure Block Body Ball Valve for Manifold Mounting	K19
NRC	Standard Series according to DIN 3015, Part 1	Noise Reduction Clamp	A21
OLG	Fluid Level and Temperature Indicators	Oil Level Gauge (Aluminium)	O14
OLG	Fluid Level and Temperature Indicators	Oil Level Gauge (Polyamide)	O14
O-Ring	Steel - Spare Parts / Accessories	O-Ring	B47 - B48
O-Ring	Stainless Steel - Spare Parts / Accessories	O-Ring	C27
O-Ring	Accessories for SAE Flanges	O-Ring	I 18
	JIC - Spare Parts / Accessories	O-Ring - UNO - NBR	D27
O-Ring-..-V..	JIC - Spare Parts / Accessories	O-Ring - UNO - FKM	D27
O-Ring-Kit-..	Tube and Fittings Accessories	90 Duro O-Ring Seal Kits	F20
PA	Standard Series according to DIN 3015, Part 1	Polyamide Clamp Body - Profiled Bore - Standard Series	A16
PA	Heavy Series according to DIN 3015, Part 2	Polyamide Clamp Body - Profiled Bore - Heavy Series	A36
PA	Twin Series according to DIN 3015, Part 3	Polyamide Clamp Body - Profiled Bore - Twin Series	A48
PA	Technical Appendix	Standard Clamp Body Material Information	A76
PA-V0	Technical Appendix	Special Clamp Body Material Information	A78
PC-SET-PPC	Hydraulic Testers	PC Connection Cable and PC Software	M48
PNDRV	Flow Control Valves	Pressure Compensated Flow Control Valve (In-Line Assembly)	K33
PP	Standard Series according to DIN 3015, Part 1	Polypropylene Clamp Body - Profiled Bore - Standard Series	A16
PP	Heavy Series according to DIN 3015, Part 2	Polypropylene Clamp Body - Profiled Bore - Heavy Series	A36
PP	Twin Series according to DIN 3015, Part 3	Polypropylene Clamp Body - Profiled Bore - Twin Series	A48
PP	Heavy Twin Series	Polypropylene Clamp Body - Profiled Bore - Heavy Twin Series	A54
PP	Technical Appendix	Standard Clamp Body Material Information	A76
PP6853	Technical Appendix	Special Clamp Body Material Information	A79
PPC-04-CAN-SET	Hydraulic Testers	Complete Systems for Analogue Hydraulic Testers PPC-04-CAN	M51
PPC-04-plus	Hydraulic Testers	Hydraulic Testers	M37
PPC-04-plus-CAN	Hydraulic Testers	Hydraulic Testers	M37
PPC-04-SET	Hydraulic Testers	Complete Systems for Analogue Hydraulic Testers	M50
PPC-Pad	Hydraulic Testers	Hydraulic Testers	M38
PPC-Pad-SET-102	Hydraulic Testers	Complete Systems	M52
PP-DA	Technical Appendix	Special Clamp Body Material Information	A78
PP-H	Standard Series according to DIN 3015, Part 1	Polypropylene Clamp Body - Smooth Bore - Standard Series	A16
PP-H	Heavy Series according to DIN 3015, Part 2	Polypropylene Clamp Body - Smooth Bore - Heavy Series	A36
PP-H	Twin Series according to DIN 3015, Part 3	Polypropylene Clamp Body - Profiled Bore - Twin Series	A48
PP-R	Standard Series according to DIN 3015, Part 1	Polypropylene Clamp Body - Profiled Bore & Elastomer Insert- Standard Series	A17
PP-R	Heavy Series according to DIN 3015, Part 2	Polypropylene Clamp Body - Profiled Bore & Elastomer Insert- Heavy Series	A37
PP-VK	Standard Series according to DIN 3015, Part 1	Clamp Body - Rectangular Design for Proximity Switches	A17
PP-V0	Technical Appendix	Special Clamp Body Material Information	A79
PRECHARGE	Pre-charging and Testing Equipment	Accumulator Pre-charging Service	P36
PT-RF	Hydraulic Testers	Pressure Transmitter	M54
PT-RF	Pre-charging and Testing Equipment	PT-RF Pressure Transmitter and Reader	P38 - P40
PT-RF-SET	Hydraulic Testers	Pressure Transmitter (Complete Systems)	M56
QRC-FF-06	Push-to-Connect Couplings	Series FF - BG 1 - Nominal Size 6.3	J10
QRC-FF-10	Push-to-Connect Couplings	Series FF - BG 2 - Nominal Size 10	J10
QRC-FF-12	Push-to-Connect Couplings	Series FF - BG 3 - Nominal Size 12	J10
QRC-FF-16	Push-to-Connect Couplings	Series FF - BG 4 - Nominal Size 16	J10
QRC-FF-19	Push-to-Connect Couplings	Series FF - BG 6 - Nominal Size 19	J10
QRC-FF-25	Push-to-Connect Couplings	Series FF - BG 8 - Nominal Size 25	J10
QRC-FF-38	Push-to-Connect Couplings	Series FF - BG 12 - Nominal Size 38	J10
QRC-FH/FU/FF Dust Protection	Push-to-Connect Couplings	Series FH/FU/FF - Dust Protection	J10
QRC-FH-10-...-W5	Push-to-Connect Couplings	Series FH-W5 - BG 2 - Nominal Size 10 - Stainless Steel	J10
QRC-FH-12-...-W5	Push-to-Connect Couplings	Series FH-W5 - BG 3 - Nominal Size 12 - Stainless Steel	J10
QRC-FH-19-...-W5	Push-to-Connect Couplings	Series FH-W5 - BG 6 - Nominal Size 19 - Stainless Steel	J10
QRC-FT Dust Protection	Screw-to-Connect Couplings	Series FT - Dust Protection	J19
QRC-FT-10	Screw-to-Connect Couplings	Series FT - BG 2 - Nominal Size 10	J19
QRC-FT-12	Screw-to-Connect Couplings	Series FT - BG 3 - Nominal Size 12	J19
QRC-FT-16	Screw-to-Connect Couplings	Series FT - BG 4 - Nominal Size 16	J19
QRC-FT-19	Screw-to-Connect Couplings	Series FT - BG 6 - Nominal Size 19	J19
QRC-FT-25	Screw-to-Connect Couplings	Series FT - BG 8 - Nominal Size 25	J19
QRC-FU-10	Push-to-Connect Couplings	Series FU - BG 2 - Nominal Size 10 - Connect under Pressure	J10
QRC-FU-12	Push-to-Connect Couplings	Series FU - BG 3 - Nominal Size 12 - Connect under Pressure	J10
QRC-FU-19	Push-to-Connect Couplings	Series FU - BG 6 - Nominal Size 19 - Connect under Pressure	J10
QRC-HI Dust Protection	Screw-to-Connect Couplings	Series HI - Dust Protection	J19
QRC-HI-10	Screw-to-Connect Couplings	Series HI - BG 2 - Nominal Size 10	J19
QRC-HP/HU Dust Protection	Push-to-Connect Couplings	Series HP and Series HU - Dust Protection	J11
QRC-HP-12	Push-to-Connect Couplings	Series HP - BG 3 - Nominal Size 12.5	J11
QRC-HS Dust Protection	Screw-to-Connect Couplings	Series HS - Dust Protection	J18
QRC-HS-06	Screw-to-Connect Couplings	Series HS - BG 1 - Nominal Size 6.3	J18
QRC-HS-10	Screw-to-Connect Couplings	Series HS - BG 2 - Nominal Size 10	J18
QRC-HS-12	Screw-to-Connect Couplings	Series HS - BG 3 - Nominal Size 12.5	J18
QRC-HS-19	Screw-to-Connect Couplings	Series HS - BG 6 - Nominal Size 19	J18
QRC-HS-25	Screw-to-Connect Couplings	Series HS - BG 8 - Nominal Size 25	J18
QRC-HS-38	Screw-to-Connect Couplings	Series HS - BG 12 - Nominal Size 38	J18

Product-Specific Abbreviations

Abbreviation	Product Category	Product Description	Page
QRC-HU-12	Push-to-Connect Couplings	Series HU - BG 3 - Nominal Size 12.5	J11
QRC-HUS Dust Protection	Push-to-Connect Couplings	Series HUS - Dust Protection	J11
QRC-HUS-10	Push-to-Connect Couplings	Series HUS - BG 2 - Nominal Size 10	J11
QRC-HUS-12	Push-to-Connect Couplings	Series HUS - BG 3 - Nominal Size 12	J11
QRC-HUS-19	Push-to-Connect Couplings	Series HUS - BG 6 - Nominal Size 19	J11
QRC-HUS-25	Push-to-Connect Couplings	Series HUS - BG 8 - Nominal Size 25	J11
QRC-HV Dust Protection	Screw-to-Connect Couplings	Series HV - Dust Protection	J19
QRC-HV-19	Screw-to-Connect Couplings	Series HV - BG 6 - Nominal Size 19	J19
QRC-HV-25	Screw-to-Connect Couplings	Series HV - BG 8 - Nominal Size 25	J19
QRC-HV-31	Screw-to-Connect Couplings	Series HV - BG 10 - Nominal Size 31	J19
QRC-HV-38	Screw-to-Connect Couplings	Series HV - BG 12 - Nominal Size 38	J19
QRC-HV-51	Screw-to-Connect Couplings	Series HV - BG 14 - Nominal Size 51	J19
QRC-IA-06	Push-to-Connect Couplings	Series IA - BG 1 - Nominal Size 10	J11
QRC-IA-10	Push-to-Connect Couplings	Series IA - BG 2 - Nominal Size 12.5	J11
QRC-IA-12	Push-to-Connect Couplings	Series IA - BG 3 - Nominal Size 12.5	J11
QRC-IA-12-...-W5	Push-to-Connect Couplings	Series IA-W5 - BG 3 - Nominal Size 12.5 - Stainless Steel	J11
QRC-IA-19	Push-to-Connect Couplings	Series IA - BG 6 - Nominal Size 19	J11
QRC-IA-25	Push-to-Connect Couplings	Series IA - BG 8 - Nominal Size 25	J11
QRC-IA-38	Push-to-Connect Couplings	Series IA - BG 12 - Nominal Size 38	J11
QRC-ID-06	Push-to-Connect Couplings	Series ID - BG 1 - Nominal Size 6.3	J11
QRC-ID-10	Push-to-Connect Couplings	Series ID - BG 2 - Nominal Size 10	J11
QRC-ID-19	Push-to-Connect Couplings	Series ID - BG 6 - Nominal Size 19	J11
QRC-MK-Q-10/4	Multi Couplings	Series MK 24 - BG 2 - Nominal Size 10	J13
QRC-MK-R-10/4	Multi Couplings	Series MK 74 - BG 2 - Nominal Size 10	J13
QRC-RH/RK Dust Protection	Screw-to-Connect Couplings	Series RH/RK - Dust Protection	J18
QRC-RH-10	Screw-to-Connect Couplings	Series RH - BG 2 - Nominal Size 10	J18
QRC-RH-12	Screw-to-Connect Couplings	Series RH - BG 3 - Nominal Size 12.5	J18
QRC-RK-20	Screw-to-Connect Couplings	Series RK - BG 6 - Nominal Size 20	J18
QRC-UX-L-12	Push-to-Connect Couplings	Series UX - BG 3 - Nominal Size 6.3	J11
RAP	Standard Series according to DIN 3015, Part 1	Group Weld Plate	A18
RAP	Twin Series according to DIN 3015, Part 3	Group Weld Plate	A49
RAP-MGR	Standard Series according to DIN 3015, Part 1	Multi-Group Weld Plate	A22
RB	Flat Steel and Round Steel U-Bolt Clamps	Round Steel U-Bolt	A68
RBD	Flat Steel and Round Steel U-Bolt Clamps	Round Steel U-Bolt (DIN 3570, Type A)	A68
RC	Giant and Desiccant Air Breathers	Drying Agent / Refilling Material (Activated Carbon)	041
RD	Giant and Desiccant Air Breathers	Drying Agent / Refilling Material	041
RE	Return-Line Filters	Filter Elements for Return-Line Filters RF	N125
RE	Return-Line Filters	Filter Elements for Return-Line Filters RFB	N139
RE	Return-Line Filters	Filter Elements for Return-Line Filters RFS	N129
Reader-PT-RF	Hydraulic Testers	Pressure Transmitter Reader	M55
Resistor-PPC-CAN	Hydraulic Testers	PPC Series CAN Terminating Resistor	M48
RF	Return-Line Filters	Return-Line Filters for Tank-Top Mounting	N125
RFB	Return-Line Filters	Return-Line Filters for Tank-Top Mounting	N139
RFS	Return-Line Filters	Return-Line Filters for Tank-Top Mounting	N129
RFS-D	Return-Line Filters	Return-Line Filters for Tank-Top Mounting	N126
RI	Standard Series according to DIN 3015, Part 1	Elastomer Insert	A17
RI	Heavy Series according to DIN 3015, Part 2	Elastomer Insert	A37
RI	Heavy Twin Series	Clamp Body with Elastomer Inserts	A53
RTF	Return-Line Filters	Return-Line Filters for Tank-Top Mounting	N135
RUK	Flat Steel and Round Steel U-Bolt Clamps	Plastic Pipe Saddle (Short) for Flat Steel U-Bolts	A69
RUK	Flat Steel and Round Steel U-Bolt Clamps	Plastic Pipe Saddle (Short) for Round Steel U-Bolts	A68
RUL	Flat Steel and Round Steel U-Bolt Clamps	Plastic Pipe Saddle (Long) for Round Steel U-Bolts	A68
RV	Flow Control Valves	Heavy-Duty Check Valve (In-Line Assembly)	K35
RVR	Flow Control Valves	Check Valve (In-Line Assembly) with Round Body	K34
S-080	Metal Basket	Spare Metal Basket 80mm	027
S-150	Metal Basket	Spare Metal Basket 150mm	027
SA	Technical Appendix	Standard Clamp Body Material Information	A76
SA	Technical Appendix	Standard Clamp Insert Material Information	A77
SAD-12	Test Coupling STAUFF Test 12	Test Adaptor	L26
SAD-15	Test Coupling STAUFF Test 15	Test Adaptor	L21
SAD-20	Test Coupling STAUFF Test 20	Test Adaptor	L10
SAF-05 / 07 / 10	Spin-On Filters	Spin-On Filter Assemblies	N152
SAF-05 / 07 / 10 / 13	Spin-On Filters	Spin-On Filter Heads	N157
SAS	Test Adaptors	Welding Adaptor	L32
SA-V0	Technical Appendix	Special Clamp Body Material Information	A79
SBH-M4	Bell Housings and Couplings	Bell Housing (Metric Series 4 Bolt)	052
SBH-MH	Bell Housings and Couplings	Coupling Motor Hub	052
SBH-PH	Bell Housings and Couplings	Coupling Pump Hub	052
SBH-S2	Bell Housings and Couplings	Bell Housing (SAE Series 2 Bolt)	053
SBH-SI	Bell Housings and Couplings	Coupling Spider Insert	052
SC	Assembly Tools / Devices	STAUFF Clean Pipe, Tube and Hose Cleaning System	F12 - F15
SC-..	Assembly Tools / Devices	STAUFF Clean Launchers / Launcher Kits	F13
SCN-..	Assembly Tools / Devices	STAUFF Clean Nozzles / Nozzle Kits	F14
SCP-..	Assembly Tools / Devices	STAUFF Clean Projectiles	F15
SDA-20	Test Coupling STAUFF Test 20	Male Adaptor	L10
SDB	Giant and Desiccant Air Breathers	Desiccant Air Breathers	036
SDB-CV	Giant and Desiccant Air Breathers	Desiccant Air Breathers (with Check Valves)	039

Product-Specific Abbreviations

Abbreviation	Product Category	Product Description	Page
SDM	Hydraulic Testers	Flow Indicators	M57
SDMKR	Hydraulic Testers	Flow Indicators	M57
SDV-SNA/SNK	Fluid Level and Temperature Indicators	Anti-Drain Valve	O12
SE	Replacement Filter Elements	Filter Elements for High Pressure Filters	N115
SE	Pressure Filters	Filter Elements for High Pressure Filters for SF Series	N69
SE	Pressure Filters	Filter Elements for High Pressure Filters for SFA Series	N99
SE	Pressure Filters	Filter Elements for High Pressure Filters for SF -TM Series	N88
SE	Pressure Filters	Filter Elements for High Pressure Filters for SFZ Series	N104
Seal-Kit-SF	Pressure Filters	SF Filter Bowl Seal Kit	N103
Sensor-PPC-04/12	Hydraulic Testers	Temperature Sensors	M45
Sensor-PPC-04/12-P	Hydraulic Testers	Pressure Sensors	M44
Sensor-PPC-04/12-SDS-CAB	Hydraulic Testers	Rotational Speed Sensor	M47
Sensor-PPC-CAN-P	Hydraulic Testers	CAN Pressure Sensors	M44
Sensor-PPC-CAN-T	Hydraulic Testers	CAN Temperature Sensors	M46
SES-1	Tank Filler Breathers	Plastic Filler Breather (Threaded Version)	O21
SES-2	Tank Filler Breathers	Plastic Filler Breather (Welded Version)	O21
SF	Pressure Filters	High Pressure Filters (Inline)	N14
SF… (SAE Flange)… A	Pressure Filters	High Pressure Filters Assemblies - Includes Visual Clogging Indicator with Automatic Reset - SAE Flange 6000 PSI	N36
SF… (SAE Flange)… E	Pressure Filters	High Pressure Filters Assemblies - Includes Electrical Clogging Indicator - SAE Flange 6000 PSI	N44
SF… (SAE Flange)… O	Pressure Filters	High Pressure Filters Assemblies - Without Clogging Indicator - SAE Flange 6000 PSI	N32
SF… (SAE Flange)… V	Pressure Filters	High Pressure Filters Assemblies - Includes Visual Clogging Indicator with Manual Reset - SAE Flange 6000 PSI	N40
SF… A	Pressure Filters	High Pressure Filters Assemblies - Includes Visual Clogging Indicator with Automatic Reset	N20
SF… A-TL	Pressure Filters	High Pressure Filters Assemblies - Includes Visual Clogging Indicator with Automatic Reset Toploader	N52
SF… E	Pressure Filters	High Pressure Filters Assemblies - Includes Electrical Clogging Indicator	N28
SF… E-TL	Pressure Filters	High Pressure Filters Assemblies - Includes Electrical Clogging Indicator Toploader, with bowl in two-part style	N64
SF… O	Pressure Filters	High Pressure Filters Assemblies - Without Clogging Indicator	N16
SF… O-TL	Pressure Filters	High Pressure Filters Assemblies - Without Clogging Indicator Toploader, with bowl in two-part style	N48
SF… V	Pressure Filters	High Pressure Filters Assemblies - Includes Visual Clogging Indicator with Manual Reset	N24
SF… V-TL	Pressure Filters	High Pressure Filters Assemblies - Includes Visual Clogging Indicator with Manual Reset Toploader	N58
SF-63	Spin-On Filters	Spin-On Filter Elements	N164
SF-65	Spin-On Filters	Spin-On Filter Elements	N166
SF-67	Spin-On Filters	Spin-On Filter Elements	N168
SFA	Pressure Filters	Medium Pressure Filters (Inline)	N90
SFA… A	Pressure Filters	Medium Pressure Filter Assemblies - Includes Visual Clogging Indicator with Automatic Reset	N94
SFA… E	Pressure Filters	Medium Pressure Filter Assemblies - Electrical Clogging Indicator	N98
SFA… O	Pressure Filters	Medium Pressure Filter Assemblies - Without Clogging Indicator	N92
SFA… V	Pressure Filters	Medium Pressure Filter Assemblies - Includes Visual Clogging Indicator with Manual Reset	N96
SFC-35 / 36	Spin-On Filters	Spin-On Filter Elements	N160
SFC-57 / 58	Spin-On Filters	Spin-On Filter Elements	N162
SFCT-35 / 36	Spin-On Filters	Spin-On Filter Elements	N161
SFCT-57 / 58	Spin-On Filters	Spin-On Filter Elements	N163
SFF	Hydraulic Testers	In-line Flow Meter	M61
SFFM	Hydraulic Testers	In-line Flow Meter Mining Version	M61
SF-TM	Pressure Filters	High Pressure Filters (Top-mounted)	N70
SF-TM… A	Pressure Filters	High Pressure Filter Assemblies Top Mounted - Includes Visual Clogging Indicator with Automatic Reset	N76
SF-TM… E	Pressure Filters	High Pressure Filter Assemblies Top Mounted - Includes Electrical Clogging Indicator	N84
SF-TM… O	Pressure Filters	High Pressure Filter Assemblies Top Mounted - Without Clogging Indicator	N72
SF-TM… V	Pressure Filters	High Pressure Filter Assemblies Top Mounted - Includes Visual Clogging Indicator with Manual Reset	N80
SFZ	Pressure Filters	High Pressure Filters (for sandwich plate mounting)	N104
SGB	Giant and Desiccant Air Breathers	Giant Air Breather	O34
SGV-BSPP Type FM	Test Coupling STAUFF Test 20	Swivel Run Tee with 60°BSPP Connection	L8
SGV-JIC Type FM	Test Coupling STAUFF Test 15	Swivel Run Tee with 37° JIC Connection	L20
SGV-JIC Type FM	Test Coupling STAUFF Test 12	Swivel Run Tee with 37° JIC Connection	L26
SGV-JIC Type FM	Test Coupling STAUFF Test 20	Swivel Run Tee with 37° JIC Connection	L8
SHA	Test Hoses and Connectors	Sampling Hose Adaptor	L49
SI	Standard Series according to DIN 3015, Part 1	Safety Washer	A19
SI	Heavy Series according to DIN 3015, Part 2	Safety Washer	A39
SI	Twin Series according to DIN 3015, Part 3	Safety Locking Plate	A49
SIG	Standard Series according to DIN 3015, Part 1	Safety Locking Plate	A19
SIP	Heavy Series according to DIN 3015, Part 2	Safety Locking Plate	A39
SIPD	Heavy Twin Series	Safety Locking Plate	A54
SIV	Twin Series according to DIN 3015, Part 3	Safety Locking Plate	A49
SKK-12	Test Coupling STAUFF Test 12	Test Coupling with Male Threaded Stud	L24
SKK-20	Test Coupling STAUFF Test 20	Test Coupling with Male Threaded Stud	L14
SKP-SMK-15	Test Coupling STAUFF Test 15	Coupling Cap	L21
SKP-SMK-20	Test Coupling STAUFF Test 20	Coupling Cap	L10
SLF-02 / 03	Spin-On Filters	Spin-On Filter Assembly	N152
SLF-02 / 03 / 04	Spin-On Filters	Spin-On Filter Heads	N157
SLTS	Fluid Level and Temperature Indicators	Level-Temperature Switch	O13
SM	Standard Series according to DIN 3015, Part 1	Hexagon Rail Nut	A18
SM	Twin Series according to DIN 3015, Part 3	Hexagon Rail Nut	A49
SMA-20	Test Coupling STAUFF Test 20	Gauge Adaptor	L10
SMB-20	Pressure Gauges	Analogue Pressure Test Kit	M12
SMBB-47	Tank Filler Breathers	Metal Filler Breather (Bayonet Version)	O23
SMBB-80	Tank Filler Breathers	Metal Filler Breather (Bayonet Version)	O26
SMBB-ASMB-1	Tank Filler Breathers	Side Mount Bracket (Polyamide Version)	O29
SMBB-ASMB-2	Tank Filler Breathers	Side Mount Bracket (Aluminium Version)	O29

Product-Specific Abbreviations

Abbreviation	Product Category	Product Description	Page
SMB-DIGI	Pressure Gauges	Digital Pressure Test Kit	M22
SMBL	Tank Filler Breathers	Lockable Metal Filler Breather (Clamping, Threaded and Push-On Version)	O28
SMBM-20	Pressure Gauges	Analogue Pressure Test Kit - Metal Case	M16
SMBP-80	Tank Filler Breathers	Metal Filler Breather (Push-On Version)	O25
SMBT-47	Tank Filler Breathers	Metal Filler Breather (Threaded Version)	O22
SMBT-80	Tank Filler Breathers	Metal Filler Breather (Threaded Version)	O24
SMCG	Bell Housings and Couplings	Motor Coupling - Gear Coupling Bored and Keyed (Imperial)	O55
SMCG	Bell Housings and Couplings	Motor Coupling - Gear Coupling Bored and Keyed (Metric)	O55
SMCG-HUB	Bell Housings and Couplings	Motor Coupling - Gear Coupling (Hub)	O54
SMCG-SET	Bell Housings and Couplings	Motor Coupling - Gear Coupling (Complete)	O54
SMCG-SLV	Bell Housings and Couplings	Motor Coupling - Gear Coupling (Sleeve)	O54
SMD-12	Test Coupling STAUFF Test 12	Direct Gauge Adaptor	L26
SMD-15	Test Coupling STAUFF Test 15	Direct Gauge Adaptor	L21
SMD-20	Test Coupling STAUFF Test 20	Direct Gauge Adaptor	L10
SMF-2215	Spin-On Filters	Spin-On Filter Assemblies	N154
SMF-2215	Spin-On Filters	Spin-On Filter Heads	N157
SMG	Standard Series according to DIN 3015, Part 1	Hexagon Rail Nut	A18
SMG	Twin Series according to DIN 3015, Part 3	Hexagon Rail Nut	A49
SMK-15	Test Coupling STAUFF Test 15	Test Coupling with Male Threaded Stud	L18
SMK-15 Type K	Test Coupling STAUFF Test 15	Test Coupling with 24° Taper / O-Ring (DKO)	L20
SMK-20	Test Coupling STAUFF Test 20	Test Coupling with Male Threaded Stud	L6
SMK-20 Type G	Test Coupling STAUFF Test 20	Test Coupling with Straight 24° Fitting	L8
SMK-20 Type K	Test Coupling STAUFF Test 20	Test Coupling with 24° Taper / O-Ring (DKO)	L8
SMK-20 Type ORFS	Test Coupling STAUFF Test 20	Test Coupling with ORFS Connection	L10
SMK-20-JIC Type FM	Test Coupling STAUFF Test 20	Test Coupling with 37° JIC Connection	L8
SMK-20-JIC Type FM	Test Coupling STAUFF Test 20	Test Coupling with 60°BSPP Connection	L8
SMK-20-JIC Type G	Test Coupling STAUFF Test 20	Test Coupling with Straight 37° JIC Connection	L8
SMK-20-JIC Type K	Test Coupling STAUFF Test 20	Test Coupling with 37° JIC Connection	L8
SMM-GSB	Pressure Gauges	Gauge Saver - Brass	M11
SMS-12	Test Hoses and Connectors	Test Hose Assemblies	L42
SMS-20	Test Hoses and Connectors	Test Hose Assemblies	L40
SNA	Fluid Level and Temperature Indicators	Level Gauge with visual fluid level indication	O6
SNK	Fluid Level and Temperature Indicators	Level Gauge with visual / electrical fluid level indication	O7
SNKK	Fluid Level and Temperature Indicators	Level Gauge with visual / electrical fluid level indication compact design)	O9
SP	Standard Series according to DIN 3015, Part 1	Weld Plate	A18
SP	Twin Series according to DIN 3015, Part 3	Single Weld Plate	A49
SPAD	Heavy Twin Series	Weld Plate	A54
SPAL	Heavy Series according to DIN 3015, Part 2	Weld Plate for Single Clamps	A38
SPAL-DUEB	Heavy Series according to DIN 3015, Part 2	Elongated Weld Plate for Single Clamps	A38
SPAS	Heavy Series according to DIN 3015, Part 2	Weld Plate for Double Clamps	A38
SPB-1 / 2 / 3	Tank Filler Breathers	Plastic Filler Breather (Threaded Version)	O18
SPB-4 / 5	Tank Filler Breathers	Plastic Filler Breather (Flange Version)	O19
SPFC	Filtration Systems	Portable Filtration Cart	N174
SPG	Pressure Gauges	Analogue Pressure Gauge & Accessories	M8
SPG-063-...-B04-490179	Pre-charging and Testing Equipment	Safety Pattern Pressure Gauges in accordance with AS1349	P41
SPG-C	Return-Line Filters	Visual Clogging Indicator for RF Series	N125
SPG-C	Return-Line Filters	Visual Clogging Indicator for RFB Series	N139
SPG-C	Return-Line Filters	Visual Clogging Indicator for RFS Series	N129
SPG-C	Return-Line Filters	Visual Clogging Indicator for RTF Series	N135
SPG-C	Spin-On Filters	Visual Clogging Indicator for Spin-On Filters	N170
SPG-DIGI	Pressure Gauges	Digital Pressure Gauge	M20
SPL	Accessories for SAE Flanges	SAE Sandwich Plate	I 17
SPL-G04-L	Accessories for SAE Flanges	SAE Sandwich Plate with Female BSPP Port	I 17
SPLM-TOOL-ORING-EXTRACTION	Tube and Fittings Accessories	O-Ring Extraction Tool (Set)	F20
SPR-PRC-H-M-MH	Assembly Tools / Devices	Mounting Brackets for Portable Cutting Ring Assembly Machine	F7
SPR-PRC-H-M-TP	Assembly Tools / Devices	Tripod Stand for Portable Cutting Ring Assembly Machine	F7
SPR-PRC-H-M-TS	Assembly Tools / Devices	Table Stand for Portable Cutting Ring Assembly Machine	F7
SPR-PRC-H-SET-M642	Assembly Tools / Devices	Portable Cutting Ring Assembly Machine with Manual Pressure Setting (Set)	F6 - F7
SPR-PRC-MA	Assembly Tools / Devices	Cutting Ring Pre-Assembly and 37° Flaring Machine	F8
SPR-PRC-TH-C-mA	Assembly Tools / Devices	Tooling Head for Cutting Ring Assembly (Automatic)	F10
SPR-PRC-TH-C-M	Assembly Tools / Devices	Tooling Head for Cutting Ring Assembly (Manual)	F10
SPR-PRC-TH-F-M	Assembly Tools / Devices	Tooling Head for 37° Flaring Machine (Manual)	F10
SPR-TM	Assembly Tools / Devices	Assembly Tool Magazine	F10
SPV	Standard Series according to DIN 3015, Part 1	Elongated Weld Plate	A18
SPV	Pressure Gauges	Mounting Clamp - Screw Fixing Mount	M29
SPW-DM	Pressure Gauges	Pressure Switch Diaphragm Type	M30
SPW-PI	Pressure Gauges	Pressure Switch Piston Type	M28
SPW-PI	Pressure Gauges	Pressure Switch Piston Type	M30
SQG	Pressure Gauges	Quadrigauge	M10
SRF	Diffusers	Return Line Bushing	O49
SRFL-D	In-Line Filters	In-Line Filters - Duplex Housing	N130
SRFL-S	In-Line Filters	In-Line Filters - Simplex Housing	N130
SRFL-SW	In-Line Filters	In-Line Filters for Industrial Water	N131
SRS-15	Test Adaptors	Thread Adaptor	L30
SRS-20	Test Adaptors	Thread Adaptor	L30
SRV	Diffusers	Diffusers (Female BSPP Threaded Version)	O48
SSF- 12 / 20 / 24 / 25 / 100 / 120 / 150	Spin-On Filters	Spin-On Filter Assemblies	N153

Product-Specific Abbreviations

Abbreviation	Product Category	Product Description	Page
SSF-12 / 20L / 24B / 25B / 100 / 120 / 150 / 160 180	Spin-On Filters	Spin-On Filter Heads	N157
SSFT- 12B / 20B	Spin-On Filters	Tank Top Spin-On Filter Assemblies	N154
SSFT- 12B / 20B	Spin-On Filters	Spin-On Filter Head (Tank Top)	N157
SSK-20	Test Coupling STAUFF Test 20	Bulkhead	L10
SSKK-12	Test Coupling STAUFF Test 12	Bulkhead	L26
SSP-..-BL	Tube and Fittings Accessories	STAUFF Aqualine Plug	F18 - F19
SSP-..-WH	Tube and Fittings Accessories	STAUFF Foodline Plug	F18 - F19
SSP-..-YE	Tube and Fittings Accessories	STAUFF Serviceline Plug	F18 - F19
SSV	Test Hoses and Connectors	Hose Connector	L41
ST	Return-Line Filters	Filter Elements Stainless Steel Mesh - to suit INAGB Insert	N143
STA-AER	Bladder Accumulators	Fluid Port Anti-Extrusion Rings	P17
STA-AMP	Accumulator Accessories	Accumulator Clamps	P28
STA-BRK	Accumulator Accessories	Accumulator Supports	P28
STA-CK	Pre-charging and Testing Equipment	Universal Accumulator Charging Kit	P32 - P33
STA-CK-305	Pre-charging and Testing Equipment	Direct Accumulator Charging Kit for USA Gas Valve	P34 - P35
STA-CK-SKK-20	Pre-charging and Testing Equipment	Direct Accumulator Charging Kit for SKK-20 Gas Valve	P34 - P35
STA-DF	Accumulator Accessories	Fuse Discs - Temperature	P29
STA-DR	Accumulator Accessories	Burst Discs - Pressure	P29
STA-FPA	Bladder Accumulators	Fluid Port Assemblies	P16
STA-GV-ASSY	Bladder Accumulators	Gas Valve Assemblies	P16
STA-LIFTLUG	Accumulator Accessories	Accumulator Lifting Lug to suit STBA Accumulators	P28
STA-NR	Pre-charging and Testing Equipment	Nitrogen Gas Regulators	P37
STB	Bladder Accumulators	Bladder Kits	P14 - P15
STBA	Bladder Accumulators	Bladder Accumulator Assemblies for Standard Applications	P12 - P13
STBA	Bladder Accumulators	Bladder Accumulator Assemblies for Special Applications	P13
STBA-A-CV	Accumulator Accessories	Permanent Charging Heads for Bladder Accumulators with 19 mm A/F	P24 - P25
STBA-A-FV	Accumulator Accessories	Permanent Charging Heads for Bladder Accumulators with 16 mm A/F	P26
STDA	Diaphragm Accumulators	Diaphragm Accumulators - 0.075 Ltr - 2.8 Ltr	P20 - P21
STDA-A	Accumulator Accessories	Permanent Charging Heads for Diaphragm Accumulators	P27
STSV	Heavy Series according to DIN 3015, Part 2	Mounting Rail	A38
STSV	Heavy Twin Series	Mounting Rail	A54
SUS	Suction Strainers	Suction Strainers (Polyamide End Cap)	O44
SVDB	Giant and Desiccant Air Breathers	Desiccant Air Breathers (Disposable Version)	O37
SWS-A1	Gauge Isolator Valves	Gauge Isolator Needle Valve (Single Station)	K39
SWS-A1	Pressure Gauges	Gauge Isolator Needle Valve (Single Station - In-line Version)	M11
SWS-A2	Gauge Isolator Valves	Gauge Isolator Needle Valve (Single Station)	K39
SWS-A2	Pressure Gauges	Gauge Isolator Needle Valve (Single Station - 90° Version)	M11
SWS-M	Gauge Isolator Valves	Gauge Isolator Valve (Multi Station)	K38
SWS-M	Pressure Gauges	Gauge Isolator Valve (Multi Station)	M11
SWS-S1	Gauge Isolator Valves	Gauge Isolator Valve (Single Station)	K38
SWS-S1	Pressure Gauges	Gauge Isolator Valve (Single Station)	M11
T1 / T2	Fluid Level and Temperature Indicators	Dial Thermometer with Probe	O10
TBA	Giant and Desiccant Air Breathers	Air Breather Adaptor	O35
TBV-3-G	Multi-Way Ball Valves	High-Pressure Block Body Ball Valve with Female BSPP Threads - T-Bore Three-Way Selector	K25
TBV-4-G	Multi-Way Ball Valves	High-Pressure Block Body Ball Valve with Female BSPP Threads - T-Bore Four-Four Selector	K26
TS	Standard Series according to DIN 3015, Part 1	Mounting Rail	A18
TS	Twin Series according to DIN 3015, Part 3	Mounting Rail	A49
TS-SNA/SNK	Fluid Level and Temperature Indicators	Thermo Switch	O10
TS-SNA/SNK-PT100	Fluid Level and Temperature Indicators	Temperature Sensor	O11
TS-SNA/SNK-PT100-T	Fluid Level and Temperature Indicators	Temperature Sensor with Direct Installation Set	O11
TTF	Return-Line Filters	In-Tank Return Filters - Magnetic Pre-Filter	N142
TUB-MA-...-LV-KIT	Assembly Tools / Devices	Manual Tube Bend Kit - Lever Vice Mount	F4
TUD-M-02-S648-D	Tube and Fittings Accessories	Table Top Deburring Machine	F22
TUD-T-..	Tube & Fittings Accessories	Manual Tube Deburring Tools	F21
TUI-...-W5/07-AP	STAUFF Tube - Stainless Steel	Imperial Stainless Steel - Annealed & Pickled Tube	H9
TUI-...-W5/10-BA	STAUFF Tube - Stainless Steel	Imperial Stainless Steel - Bright Annealed Tube	H11
TUI-...-W66/01	STAUFF Tube - Steel	Imperial Carbon Steel - Zinc Plated Tube	H5
TUM-...-W5/07-AP	STAUFF Tube - Stainless Steel	Metric Stainless Steel - Annealed & Pickled Tube	H8
TUM-...-W5/10-BA	STAUFF Tube - Stainless Steel	Metric Stainless Steel - Bright Annealed Tube	H10
TUM-...-W66/01	STAUFF Tube - Steel	Metric Carbon Steel - Zinc Plated Tube	H4
TXW	Return-Line Filters	Filter Elements Glass Fibre - to suit INAGB Insert	N143
TXX	Return-Line Filters	Filter Elements Cellulose - to suit INAGB Insert / TTF, BGT, GA Filters	N143
VALVE-HVB	Pressure Filters	Valve for Pressure Filters - Bypass Valve	N102
VALVE-HVM	Pressure Filters	Valve for Pressure Filters - Multi-function Valve	N102
VALVE-HVN	Pressure Filters	Valve for Pressure Filters - Non-return Valve	N102
VALVE-HVO	Pressure Filters	Valve for Pressure Filters - Non-bypass (standard insert without any valve)	N102
VALVE-HVR	Pressure Filters	Valve for Pressure Filters - Reverse Flow Valve	N102
Washer-SDB	Giant and Desiccant Air Breathers	Replacement Washer SDB Desiccant Breathers	O41
WDG	Steel - Spare Parts / Accessories	Profile Sealing Ring	B46
WDG	Stainless Steel - Spare Parts / Accessories	Profile Sealing Ring	C26
WDG-..-B..	JIC - Spare Parts / Accessories	Profile Sealing Ring - BSPP - NBR	D27
WDG-..-V..	JIC - Spare Parts / Accessories	Profile Sealing Ring - BSPP - FKM	D27
WR	Tank Filler Breathers	Weld Riser	O30
WSP	Standard Series according to DIN 3015, Part 1	Angled Weld Plate	A18
WT-DHCR	Hydraulic Testers	Digital Hydraulic Control Readout	M58
WT-DHM	Hydraulic Testers	Digital Hydraulic Multimeter	M58
WT-DHT	Hydraulic Testers	Digital Hydraulic Tester	M58

Product-Specific Abbreviations

Abbreviation	Product Category	Product Description	Page
WT-HT	Hydraulic Testers	Analogue Hydraulic Tester	**M58**
WTS-CAB	Hydraulic Testers	Cables	**M60**
WTS-DISC-BURST	Hydraulic Testers	Burst Disc for Tester with Load Valve Fitted	**M59**
WT-SFM-FM	Hydraulic Testers	Flow Turbine	**M60**
WTS-TACHO	Hydraulic Testers	Photo Tachometer	**M59**
XBV-4-G	Multi-Way Ball Valves	High-Pressure Block Body Ball Valve with Female BSPP Threads - Double L-Bore Four-Way Selector	**K27**
ZR-518	Saddle / Piggyback Clamps	Saddle / Piggyback Clamp	**A64**

Terms and Conditions R2 - R3

General Terms of Sale and Contract Conditions

1. General

(a) All quotations, offers, sales and contracts are subject to the following Terms and Conditions (STAUFF - Terms & Conditions of Sale 2014-07). These Terms and Conditions form part of and should be read in conjunction with each and every quotation, offer, sale or contract.

(b) All clerical and typographical errors and omissions shall be subject to subsequent correction on the quotation and subsequent contracts between the parties. These shall at all times be subject to this right on the part of the Company.

(c) "Company" means STAUFF Corporation Pty Ltd. ABN: 44 001 338 487

(d) These conditions (which may only be waived in writing signed by the Company) shall prevail over all conditions of the purchaser's order to the extent of any inconsistency.

2. Quotation Period

Unless previously withdrawn, any quotation is valid for a period of thirty (30) days from its date. The Company reserves the right to refuse any order based on this quotation within seven (7) days after receipt of the order.

3. Terms of Payment

All payments are strictly net cash payable thirty (30) days from date of invoice except as provided in clause 4 herein.

4. Progress Payments

On any sale or contract where total quoted price exceeds one thousand dollars ($1,000.00) and where the price is expressed to be payable by progress payments, the Company shall be entitled to monthly progress payments as follows:

(a) During manufacture, supply and/or erection - progress claims with payments of up to ninety percent (90%) of the total material purchased work done or erection completed payable seven (7) days from date of invoice; and

(b) on completion of the contract the full outstanding portion of the adjusted contract value, payable thirty (30) days from date of invoice.

5. Goods and Services Tax

(a) Unless otherwise stated, all prices and all other moneys payable by and on behalf of the purchaser are exclusive of Goods and Services Tax or like impost (GST).

(b) Liability for GST (payable in respect of any taxable supply) is additional. It is payable by the purchaser to the Company at the same time the price and other moneys are payable.

6. Rights in Relation to Goods

(a) Ownership of goods supplied will not pass to you until you have paid for them in full.

(b) You acknowledge that until that time you are in possession of the goods solely as bailee for us.

(c) Your right to possession of the goods shall cease if payment for the goods is due under clause 3 but not paid. In such event, we may enter any premises where the goods are or are reasonably thought to be and repossess them.

7. Where Goods Have Not Been Paid for in Full:

(a) Until you use or sell the goods, you must store them separately and so they are clearly identifiable as the property of STAUFF Corporation Pty Ltd.

(b) You may sell the goods in the ordinary course of your business on the following conditions;

(i) you make the sale as our agent and bailee;

(ii) the proceeds of the sale are held by you in trust for us and you keep them separately and so that they are clearly identifiable as ours; and

(iii) if you have not received the proceeds of the sale, you will, immediately upon request assign to us all your rights arising out of the sale.

8. Personal Property Securities Act 2009 ("PPSA")

(a) In this clause:

1) financing statement has the meaning given to it by the PPSA;
2) financing change statement has the meaning given to it by the PPSA;
3) security agreement means the security agreement under the PPSA created between the purchaser and the Company by these terms and conditions; and
4) security interest has the meaning given to it by the PPSA.

(b) Upon assenting to these terms and conditions in writing the purchaser acknowledges and agrees that these terms and conditions:

1) constitute a security agreement for the purposes of the PPSA; and
2) create a security interest in:
   i. all Goods previously supplied by the Company to the purchaser (if any); and
   ii. all Goods that will be supplied in the future by the Company to the purchaser.

(c) The purchaser undertakes to:

1) promptly sign any further documents and/or provide any further information (such information to be complete, accurate and up-to-date in all respects) which the Company may reasonably require to:
   i. register a financing statement or financing change statement in relation to a security interest on the Personal Property Securities Register ("PPSR");
   ii. register any other document required to be registered by the PPSA; or
   iii. correct a defect in a statement referred to in clause 8(3)(i) or 8(3)(a)(ii);
2) indemnify, and upon demand reimburse, the Company for all expenses incurred in registering a financing statement or financing change statement on the PPSR established by the PPSA or releasing any Goods charged thereby;
3) not register a financing change statement in respect of a security interest without the prior written consent of the Company;
4) not register, or permit to be registered, a financing statement or a financing change statement in relation to the Goods in favour of a third party without the prior written consent of the Company and;
5) immediately advise the Company of any material change in its business practices of selling the Goods which would result in a change in the nature of proceeds derived from such sales.

(d) The Company and the purchaser agree that sections 96, 115 and 125 of the PPSA do not apply to the security agreement created by these terms and conditions.

(e) The purchaser hereby waives its rights to receive notices under sections 95, 118, 121(4), 130, 132(3)(d) and 132(4) of the PPSA.

(f) The purchaser waives its rights as a grantor and/or a debtor under sections 142 and 143 of the PPSA.

(g) Unless otherwise agreed to in writing by the Company, the purchaser waives its rights to receive a verification statement in accordance with section 157 of the PPSA.

(h) The purchaser shall unconditionally ratify any actions taken by the Company under clause 8(3) to 8(5).

General Terms of Sale and Contract Conditions

9. Delivery

(a) The Company will endeavour to effect delivery in the time stated, but does not accept any responsibility if the delivery is not effected in the time stated. In case the procuring and/or shipment or delivery of the goods to the purchaser is prevented or delayed through any cause beyond the Company's control, the delivery and/or shipment may be suspended partially or totally and this shall not be a breach of nor in any way invalidate this contract and the period of shipment and/or delivery shall be extended accordingly.

(b) The Company does not accept orders that include a penalty for late delivery, unless specifically agreed to in writing.

10. Default in Payment

Should the purchaser make any default in payment or commit any act of bankruptcy or assign their estate or make any arrangements with their creditors or go into liquidation or become subject to a receivership, the Company may at its option cancel any undelivered portion of the order and shall be entitled to recover from the purchaser all losses and damages suffered and all expenses incurred by reason of any such default.

11. Claims

All claims with regard to quality, quantity or conditions etc., shall be made in writing within ten (10) days of delivery, otherwise the goods delivered will be deemed to be in accordance with the contract. Any defective goods are to be returned freight paid to the Company at the purchaser's risk. In no instance shall any claim for damage or loss, whether direct or indirect, in respect of the goods howsoever arising out of them or their use be greater in amount than the actual invoice value of the goods in respect of which the claim is made. All damage or loss over and above such invoice price shall be borne by the purchaser.

12. Charges for Designs

Where a sketch, model or other experimental or preliminary work is made or performed by the Company at the request of the purchaser and an order therefrom does not eventuate, the cost thereof will be charged to the purchaser.

13. Liability

The Company is not the manufacturer of the goods and gives no guarantee as to quality nor as to fitness thereof for any particular purpose and accepts no liability in respect of or resulting from any defect in or failure of the goods supplied. The purchaser accepts the guarantee of the manufacturer of the goods is the only guarantee given to the Purchaser in respect of the goods. The Company agrees to assign to the purchaser on request the benefit of any warranty or entitlement to the goods that the manufacturer has granted to the Company under any contract or by implication or operation of law to the extent that the benefit of any warranty or entitlement is assignable.

14. Limitation of Liability

To the extent permitted by the Australian Consumer Law the total liability of the Company to the purchaser for any claims is limited to one or more of the following:

(a) In the case of services supplied or offered by the Company:
- i. the re-supply of the services; or
- ii. the payment of the cost of having the services re-supplied.

(b) In the case of goods supplied or offered by the Company:
- i. the replacement of the goods or the supply of equivalent goods; or
- ii. the repair of the goods; or
- iii. the payment of the cost of having the goods replaced; or
- iv. the payment of the cost of having the goods repaired.

15. Specifications

Unless otherwise stated in the quotation, all information contained in drawings, and catalogues and other advertisement matter, is intended merely to present a general idea of the goods described therein and dimensions, weight, and other particulars must be taken as approximate only. Certified drawings will be furnished if required. All drawings are the exclusive property of our principals, and must not be lent, copied, or otherwise used without the written consent of our principals or of this Company and must be returned on demand. We reserve the right to amend specifications to such extent as may be thought fit by the manufacturer during the course of manufacture.

16. Alterations, Faulty Information

All equipment supplied and delivered under this quotation will be completed strictly within the terms of the specification and drawings referred to. If the purchaser should for any reason, require any alteration or amendment thereto, such amendment and/or alteration shall be arranged and agreed upon in writing prior to commencement or during the currency of the contract. And further that a price allowance and amended delivery schedule therefore shall have been agreed to by the Company in writing.

17. Default in Payment

Failure to make payment when due constitutes a breach of the contract and the Company may repudiate the whole contract without in any way jeopardising its right of payment for work done or money expended, or its other legal rights.

18. Price Variations

All quotations for goods of overseas manufacture and quoted on indent basis, are subject to any variation in exchange rates, custom duty, overseas freight charges and government charges which may be imposed, other than those in effect as at the date of this quotation.

19. Risk

The purchaser's property while in the possession of the Company shall be entirely at the purchaser's risk in all respects. The Company accepts no responsibility for any loss or damage occurring to the property while in the Company's possession or through its failure to re-deliver the property or any part thereof to the purchaser.

20. Cancellation

Orders can only be cancelled with the Company's written consent, which consent the Company shall be entitled to withhold in its absolute discretion. Any consent will be on terms which indemnify the Company against all losses.

You can find detailed contact information in the introduction of this price list or at www.stauff.com.au

Disclaimer: Unless otherwise stated, all data, figures, diagrams and measurements in this price list are approximate values only. While every effort has been made to ensure the accuracy of these figures, diagrams and measurements they should only be used as general references and you should not rely on them for any technical or critical application. If you require precise measurements please contact us to discuss the individual product you are interested in prior to deciding to purchase it.

All customers are fully responsible for verifying the product(s) they purchase are suitable for their intended use or application (including that by third parties) prior to the time of purchase and we do not provide any warranties as to fitness additional to those implied by law. We do not take responsibility for any liability arising from incorrect product selection or application.

Whilst every effort has been taken to ensure accuracy, prices are subject to change without notification. Errors and omissions at time of printing may occur and are exempted. For products with POA, contact your local STAUFF office for price and stocking details.

Publication of this price list voids all offers and deals contained in previous editions.

Introduction

STAUFF Clamps

STAUFF Connect:
Tube Connectors - Steel

STAUFF Connect:
Tube Connectors - Stainless Steel

STAUFF Connect:
JIC 37° Adaptors

STAUFF Connect:
Instrumentation Fittings

STAUFF Connect:
Assembly Tools / Devices

STAUFF Technology Centre

STAUFF Tube

STAUFF Flanges

STAUFF Quick Release Couplings

STAUFF Valves

STAUFF Test

STAUFF Diagtronics

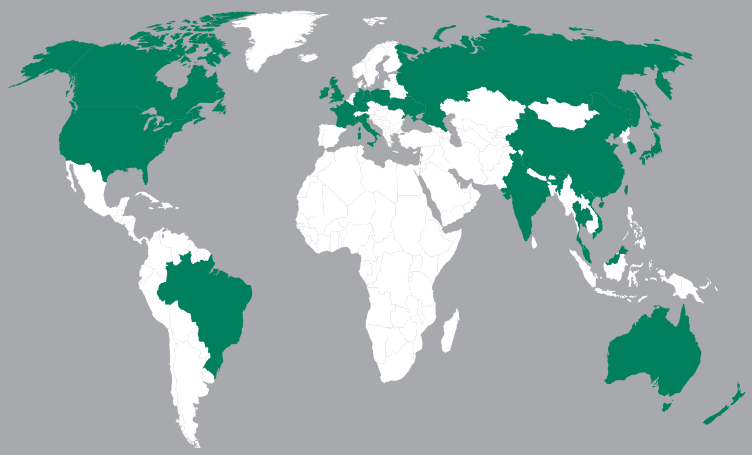
STAUFF Filtration Technology

STAUFF Hydraulic Accessories

STAUFF Accumulators

Appendix

Terms and Conditions



Australia

Adelaide
SA Australia
Tel: (08) 8415 1000
E-Mail: sant.sales@stauff.com.au

Brisbane
QLD Australia
Tel: (07) 3716 1000
E-Mail: qld.sales@stauff.com.au

Melbourne
VIC Australia
Tel: (03) 8542 5400
E-Mail: vic.sales@stauff.com.au

Sydney
NSW Australia
Tel: (02) 8787 8000
E-Mail: nsw.sales@stauff.com.au

Wollongong
NSW Australia
Tel: (02) 4271 9000
E-Mail: una.sales@stauff.com.au

www.stauff.com.au