



Hydraulic Distributors Catalogue 2019

- Pumps • Motors • Industrial Valves
- Manifolds & Sub plates • Mobile Valves
- Cartridge Valves & Bodies • Inline & Cartridge Valves
- Hydraulic Tanks & Accessories
- Bell Housing & Coupling • Pressure Switches
- Power Pack • Cylinders • Hose & fittings
- Oil • Filters • Gauges
- Hoist • PTO's

Hydraulic Distributors

www.hydraulicdistributors.com.au

27 Altair Place, Penrith

T: 02 4721 5544

An Australian
Owned Company

Important Notice

Warning

Hydraulic failures, incorrect or improper use of components and system design by person without sufficient expertise may cause serious injury, property damage and even Deaths.

Disclaimer

By using this Price List you acknowledge that you have read, understand and you agree to be bound by the following terms and conditions.

This Price List Catalogue is provided by Hydraulic Distributors Pty Ltd to give general product information only. It is the responsibility of the user to have the technical expertise, to evaluate, assess and make final decision. Due to the complexity and diversity of possible hydraulic systems, circuits and working conditions, Hydraulic Distributors and its employees can only offer general product information. It is the sole responsibility for the user to ensure that all product specifications, safety warnings, government regulations and correct procedures are considered and met.

Hydraulic Distributors Pty Ltd has endeavoured to produce accurate information in this Price List and shall not be responsible for any incorrect information that results from unintentional oversight.

Due to the continuous improvement of products, the product specifications in this Price List are subject to change by Hydraulic Distributors Pty Ltd at any times, without notice.

All Prices in this Price List exclude Goods and Services Tax (GST)

All Prices in this Price List are subject to change without notice.

VISION

To be Australia's leading supplier of high-end hydraulic solutions and quality components, providing industry-leading customer service and technical know-how.

Warren Mottram, Managing Director says

"We have very close working relationships with our customers and pride ourselves on "old-fashioned" quality workmanship whilst looking forward to new technologies and the latest product developments."

HD has 20 years' experience in the Hydraulic industry. An Australian owned company, located at Penrith NSW, Hydraulic Distributors has 12 full time, dedicated team members who are passionate about working in the hydraulics industry.

EXPERIENCE THAT COUNTS

The majority of our work comes from repeat customers. Operating since 1985, Hydraulic Distributors has an impressive reputation for both quality and workmanship. Over the past 20 years we've worked with hundreds of companies and industries including:

The Department of Defence (design and repair work on military equipment)

News Limited (supplied equipment for ink pump system in Western Australia Operation)

Ezi Automation (supplied equipment to be used to power opening and closing of gates for Security Crash Protection at Embassies in Australia)



RANGE OF SERVICES

SALES

- Over 2,500 total line items in stock
- Over 20,000 total items in stock
- Experienced Internal and External Sales Team provide technical know-how with before and after sales service and support
- If you need it, we've got it (if we don't have it, we can get it!) We stock major brands like: **Altatec** PTO's and Truck Hydraulic Equipment

BHA Hydraulic Components

Char-Lynn Low Speed High Torque Motors **Eaton Pumps** Motors and Transmissions

Hawe High Pressure Hydraulic Pumps and Valves **Hydac** Hydraulic Accessories and Monitoring Equipment **Monarch** DC Power Units

Oilpath Australian Made Hydraulic Valves and Manifolds

Ryco Hose, Adaptors and Fittings

Stauff Hydraulic Accessories

Sterling Hydraulics Hydraulic Cartridge Valves

Sun Hydraulics Hydraulic Cartridge Valves and Manifolds

Valvoline Oils and Lubricants

Vickers Industrial Components

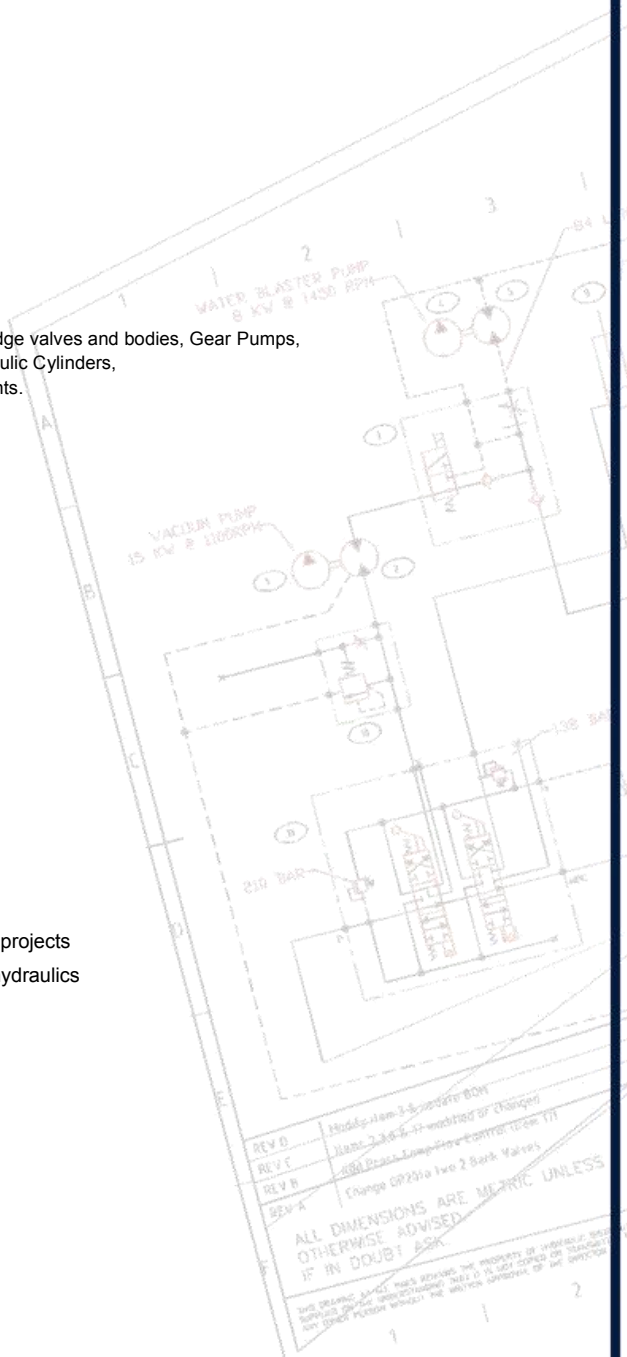
Products we offer: Hose & Fittings, Mono Block Valves, Standard and custom built manifolds, Cartridge valves and bodies, Gear Pumps, Piston Pumps, Piston Motors, Gerola Motors, AC and DC Power Units, Custom and Standard Hydraulic Cylinders, Hydraulic Accessories, Truck PTO's and Pumps, Truck Hoists, Truck Accessories, Oils and Lubricants.

SERVICE

- » Our custom-designed Mobile Service Vans provide on-site service facility
- » Experienced and Qualified Service Technicians
- » Full workshop facilities:
 - Undercover
 - 3.5 Tonne overhead crane
 - Machine Shop facilities
 - High clearance truck access
 - EPA and water board approved wash facilities
 - Certified Hydraulic Testing Equipment

DESIGN AND ENGINEERING

- » Computer generated drawing and design facility
- » Extensive design and technical experience
- » Capacity to design everything from the smallest application to large million dollar turn key projects
- » We understand and make allowances for mechanical design issues outside mainstream hydraulics

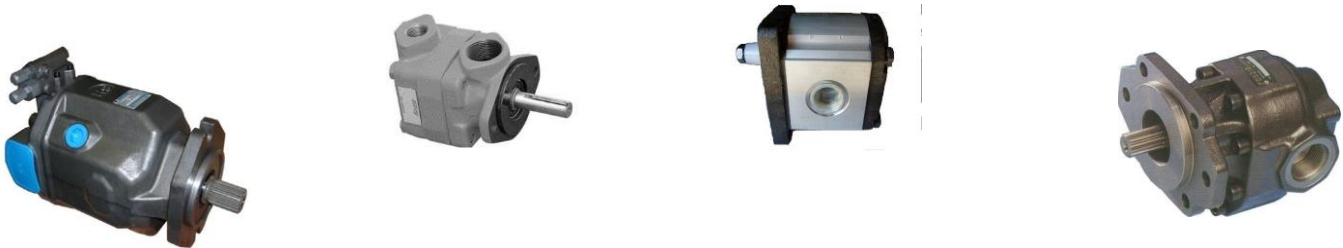




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PUMP SECTION

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HA10VSO Variable Displacement Pumps

Splined or Straight Keyed Shaft

280 Bar

Mechanical Displacement Limiter

P/Comp & Load Sense Control

The HA10VSO Open Loop Variable displacement Piston pump has numerous controller, shafts and mounting options. The single pump comes standard with a Maximum Displacement adjustment and SAE flanged ports. There is a through drive version that offers an SAE mounting for a Rear Pump.

SAE Splined Shafts

Part Number	Description	Mounting	Flange Ports	Shafts	
HA10VSO18DFR/31RPSC12NOO	18cc Piston Pump L/Sense	SAE A 2 Bolt	3/4" & 1"	3/4" 11T	
HA10VSO28DFR/31RPSC12NOO	28cc Piston Pump L/Sense	SAE B 2 Bolt	3/4" & 1 1/4"	7/8" 13T	
HA10VSO45DFR/31RPSC12NOO	45cc Piston Pump L/Sense	SAE B 2 Bolt	1" & 1 1/2"	1" 15T	
HA10VSO71DFR/31RPSC12NOO	71cc Piston Pump L/Sense	SAE C 2 Bolt	1" & 2"	1 1/4" 14T	
HA10VSO100DFR/31RPSC12NOO	100cc Piston Pump L/Sense	SAE C 2 Bolt	1 1/4" & 2 1/2"	1 1/2" 17T	
HA10VSO140DFR/31RPSC12NOO	140cc Piston Pump L/Sense	SAE D 4 Bolt	1 1/4" & 2 1/2"	1 3/4" 13T	

Straight Keyed

Part Number	Description	Mounting	Flange Ports	Shafts	
HA10VSO18DFR/31RPPC12NOO	18cc Piston Pump L/Sense	SAE A 2 Bolt	3/4" & 1"	18mm Str Key	
HA10VSO28DFR/31RPPC12NOO	28cc Piston Pump L/Sense	SAE B 2 Bolt	3/4" & 1 1/4"	22mm Str Key	
HA10VSO45DFR/31RPPC12NOO	45cc Piston Pump L/Sense	SAE B 2 Bolt	1" & 1 1/2"	25mm Str Key	
HA10VSO71DFR/31RPPC12NOO	71cc Piston Pump L/Sense	SAE C 2 Bolt	1" & 2"	32mm Str Key	
HA10VSO100DFR/31RPPC12NOO	100cc Piston Pump L/Sense	SAE C 2 Bolt	1 1/4" & 2 1/2"	45mm Str Key	



HA10VSO Variable Displacement Pumps 280 Bar

Pressure Compensated, Load Sense
and Remote Pressure

Through Drive

Part Number	Description	Through Drive		
			Splined Shaft	
HA10VSO28DFR/31RPSC12K01	28cc Piston Pump	SAE A 2 Bolt	5/8" 9T	
HA10VSO28DFR/31RPSC12K52	28cc Piston Pump	SAE A 2 Bolt	3/4" 11T	
HA10VSO28DFR/31RPSC12K02	28cc Piston Pump	SAE B 2 Bolt	7/8" 13T	
HA10VSO45DFR/31RPSC12K01	45cc Piston Pump	SAE A 2 Bolt	5/8" 9T	
HA10VSO45DFR/31RPSC12K52	45cc Piston Pump	SAE A 2 Bolt	3/4" 11T	
HA10VSO45DFR/31RPSC12K04	45cc Piston Pump	SAE B 2 Bolt	1" 15T	
HA10VSO71DFR/31RPSC12K01	71cc Piston Pump	SAE A 2 Bolt	5/8" 9T	
HA10VSO71DFR/31RPSC12K52	71cc Piston Pump	SAE A 2 Bolt	3/4" 11T	
HA10VSO71DFR/31RPSC12K04	71cc Piston Pump	SAE B 2 Bolt	7/8" 13T	
HA10VSO71DFR/31RPSC12K07	71cc Piston Pump	SAE C 2 Bolt	1 1/4" 14T	
HA10VSO100DFR/31RPSC12K07	100cc Piston Pump	SAE C 2 Bolt	1 1/2" 17T	
HA10VSO140DFR/31RPSC12K07	140cc Piston Pump	SAE D 4 Bolt	1 3/4" 13T	

Horse Power Control

Part Number	Description	SET @ Kw	Splined Shaft	
HA10VSO28DFLR/31RPSC12NOO	28cc Piston Pump H/Power Control	5.5Kw	7/8" 13T	
HA10VSO45DFLR/31RPSC12NOO	45cc Piston Pump H/Power Control	7.5Kw	1" 15T	
HA10VSO71DFLR/31RPSC12NOO	71cc Piston Pump H/Power Control	11Kw	1 1/4" 14T	
HA10VSO100DFLR/31RPSC12NOO	100cc Piston Pump H/Power Control	*	1 1/2" 17T	



HA10VSO

Variable Displacement Pump

Splined or Keyed Shaft

280 Bar

Mechanical Displacement Limiter

HA10VS	O	71	DR	/31	R	-P	P	A	12	NOO
Axial piston unit	Type of operation	Size	Control device	Series	Rotation	Seals	Shaft end	Mounting Flange	Service line connections	Through drives
HA10VS Variable swashplate design, for industrial applications Nominal pressure 28MPa, Peak Pressure 35 MPa	O: Pump in Open circuits	18	DR: Pressure control DRG: Pressure control, remotely controlled DFR: Pressure/Flow control DFR1: Pressure/flow control, without orifice in X-Line	31	(View on shaft end) R: Clockwise L: Anticlockwise	P: NBR nitril~ caoutchouc to Din ISO1629 (Shaft seal in FKM) V: FKM fluor~ caoutchouc to Din ISO1629	See below	A: ISO 2-hole B: ISO 4-hole C: SAE 2 Hole	12: Pressure port B, Suction Port S (SAE ports at opposite sides Metric fixing thread)	
		28								
		45								
		71								
		100								
		140								

*Theoretical Values Only

Size		28	45	71	100	140
Displacement	$V_{g \max}$ mL/r	28	45	71	100	140
Max. speed ¹⁾	at $V_{g \max}$ $n_{o \max}$ rpm	3000	2600	2200	2000	1800
Max. permitted speed (limit speed) with increased input pressure P_{abs} bzw. $V_g < V_{g \max}$	$n_{o \max}$ rpm	3600	3100	2600	2400	2100
Max. flow	at $n_{o \max}$ $q_{vo \max}$ L/min	84	117	156	200	252
	at $n_E=1500 \text{ min}^{-1}$ L/min	42	68	107	150	210
Max. power ($\Delta P=28 \text{ MPa}$)	at $n_{o \max}$ $P_{o \max}$ kW	39	55	73	93	118
	at $n_E=1500 \text{ min}^{-1}$ kW	20	32	50	70	98
Max. torque ($\Delta P=28 \text{ MPa}$)	at $V_{q \max}$ $T_{\max}$ Nm	125	200	316	445	623
Torque ($\Delta P=10 \text{ MPa}$)	at $V_{q \max}$ T Nm	45	72	113	159	223
Moment of inertia about drive axis	J kgm^2	0.0017	0.0033	0.0083	0.0167	0.0242
Case volume	L	0.7	1.0	1.6	2.2	3.0
Weight (without fluid)	m kg	15	12	33	45	60
Permissible loading of drive shaft: max. axial force	$F_{ax \max}$ N	1000	1500	2400	4000	4800
Max. permissible radial force ²⁾	$F_{q \max}$ N	1200	1500	1900	2300	2800

HA10VSO Spare Parts

Seal Kits

Part Number		Size	18	28	45	71	100	140
HA10VSO(size)-SK								



Shafts

Part Number	Description	Size	18	28	45	71	100	140
HA10VSO(size)-Shaft-U	SAE Splined		5/8" 9T					
HA10VSO(size)-Shaft-S	SAE Splined		3/4" 11T	7/8" 13T	1" 15T	1 1/4" 14T	1 1/2" 17T	1 3/4" 13T
HA10VSO(size)-Shaft-P	Metric Straight Keyed		18mm	22mm	25mm	32mm	40mm	45mm



Rotating Groups

Part Number	Description	Size	18	28	45	71	100	140
HA10VSO(size)-RG								



Valve Plates

Part Number	Description	Size	18	28	45	71	100	140
HA10VSO(size)-VP-RH								
HA10VSO(size)-VP-LH								



Bearings

Part Number	Description	Size	18	28	45	71	100	140
HA10VSO(size)-Brg Front	Front Shaft Bearing							
HA10VSO(size)-Brg Rear	Rear Shaft Bearing							
HA10VSO(size)-Brg -SP	Swash Plate Saddle Brgs							

VANEPUMPS



V10 and V20 Series Vane Pumps

Model	Ring Size Delivery US Gpm @ 1200 Rpm	Displacement cc/rev	Max speed rpm	Max Pressure Bar	
V10	1	3.3	4800	172	
	2	6.6	4500	172	
	3	9.8	4000	172	
	4	13.1	3400	172	
	5	16.4	3200	172	
	6	19.5	3000	152	
	7	22.8	2800	138	
V20	6	19.5	3400	172	
	7	22.8	3000	172	
	8	26.5	2800	172	
	9	29.7	2800	172	
	11	36.4	2500	172	
	12	39.0	2400	152	
	13	42.4	2400	152	
V10P	Including Priority Flow and Relief Head				
V20P	Including Priority Flow and Relief Head				

Spare Parts

Cartridges				Shafts and Seal Kits		
Part Number	Ring Size Delivery US Gpm @ 1200 Rpm	cc/ rev		Part Number	Description	
PC-V10-1-R-20	1	3.3		PS-V10-1-20	Shaft 3/4" Straight Keyed	
PC-V10-2-R-20	2	6.6		PS-V10-11-20	Shaft SAE A 5/8" 9T Splined	
PC-V10-3-R-20	3	9.8		PS-V10-38-20	Shaft 3/4" 11T Splined	
PC-V10-4-R-20	4	13.1				
PC-V10-5-R-20	5	16.4		PS-V20-1-20	Shaft 3/4" Straight Keyed	
PC-V10-6-R-20	6	19.5		PS-V20-11-20	Shaft 3/4" 11T Splined	
PC-V10-7-R-20	7	22.8		PS-V20-62-20	Shaft SAE A 5/8" 9T Splined	
PC-V20-6-R-20	6	19.5				
PC-V20-7-R-20	7	22.8		PSK-V10-20	V10 Seal Kit	
PC-V20-8-R-20	8	26.5				
PC-V20-9-R-20	9	29.7		PSK-V20-10	V20 Seal Kit	
PC-V20-11-R-20	11	36.4				
PC-V20-12-R-20	12	39.0				
PC-V20-13-R-20	13	42.4				

OrderingCodes

V10 and V20 Ordering Code

(F3-)	V10	-P	7	S	-1	C	20	-L
Prefix	Series	Inlet Port Connections	Code	Outlet Port Connections	Shafts	Outlet Positions	Design	Rotation
Omit-Using antiwear oil Water glycol fluid F3- Phosphate ester fluid	V10	P-1" NPT thread S-1.3125-12 straight thread (1 5/16" UNO) B-G1" thread	1,2,3, 4, 5,6,7	P-1/2" NPT thread S-0.750-16 straight thread (3/4" UNO) B-G1/2" thread	1-3/4" Str. Keyed 11- 9T Spline	Viewed from Cover end of pump A-Opposite inlet port B-90°CCW from inlet	20	Viewed from shaft end of Pump L-Left Hand for counter clockwise
	V20	P-1-1/4"NPT thread S-1.625-12 straight thread (1 5/8" UNO) B-G1-1/4" thread	6,7,8, 9 10,11, 12, 13,14	P-3/4" NPT thread S-1.0625-12 straight thread (1 1/6" UNO) B-G3/4" thread	38- 11 tooth -3/4" OD 62- Spline (V20 only)	C-Inline with inlet D-90° CW from inlet	10	R-Right Hand for clockwise

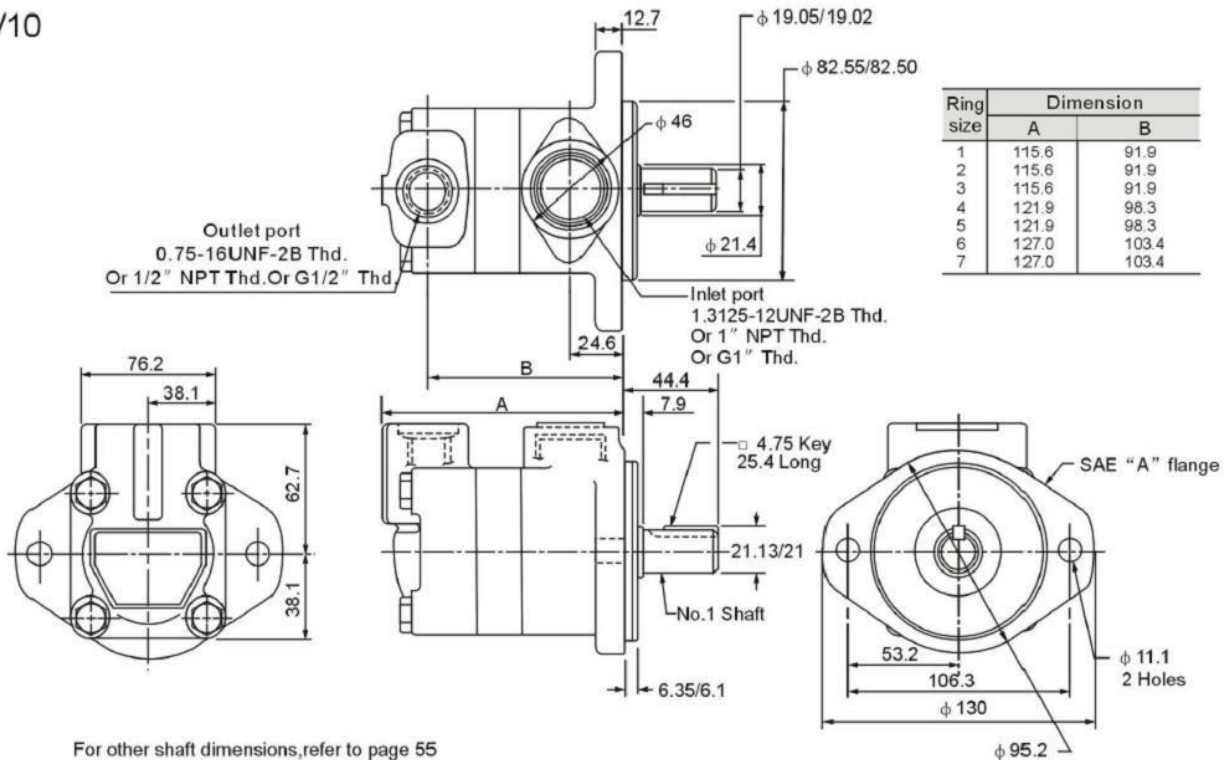
V10F & P and V20F & P Ordering Code

(F3-)	V20	F	-P	13	S	-1	A	8H	22	-L
Prefix	Series	Integral Valves	Inlet Port Connections	Code	Outlet Port Connections	Shafts	Outlet Positions	Integral Valves	De-sign	Rotation
Omit-Using antiwear oil Water glycol fluid F3- Phosphate ester fluid	V10	F: Flow Control & Relief P: Priority valve & Relief	D: 1 5/16-12 str. Thd (V20 Only) P: 1" NPT thrd (V10 Only) 1 1/4" NPT thrd (V20 only)	1 2 3 4 5 6 7	See Chart Below	1-3/4" Str. Keyed 3: Threaded with Woodruff Key 11:Splined 12: Splined V10 only 38: Splined 62- SAE A Spline (V20 only) See Charts	Viewed from Cover end of pump A-Opposite inlet port B-90°CCW from inlet C-Inline with inlet D-90° CW from inlet	Orifice No. Flow Rate LPM 2-8 3-11 4-15 5-19 6-23 7-27 8-30	Relief Valve Setting MPa A -1.7 B - 3.5 C - 5.2 D - 7 E - 8.6 F - 10 G - 12.1 H - 14 J - 15.5 K - 17.5	Viewed from shaft end of Pump L-Left Hand for counter clockwise R-Right Hand for clockwise
	V20			6 7 8 9 10 11 12 13						

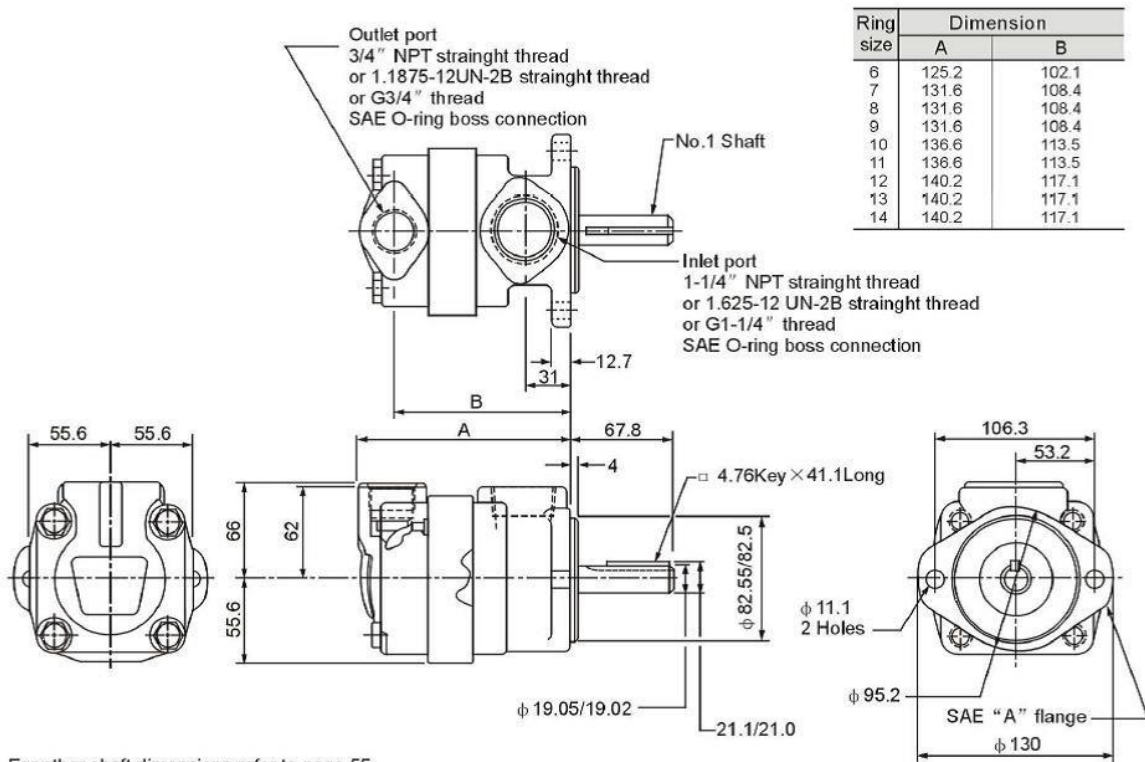
Porting

Code	Flow Control Cover		Priority Valve Cover		
	Pressure	Tank	Primary Outlet	Secondary Outlet	Tank
K	-	-	9/16-18 (V10P)	3/4-16 (V10P)	9/16-18 (V10P)
P	9/16-18 (V10F & V20F)	1/2" NPT (V10F & V20F)	-	-	-
S	3/4-16 (V10F)	1-1/16-12 (V20F)			
T	3/4-16 (V10F)	3/4-16 (V10F)	3/4-16 (V20P)	7/8-14 (V20P)	3/4-16 (V20P)

V10



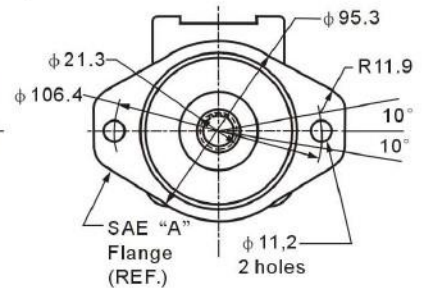
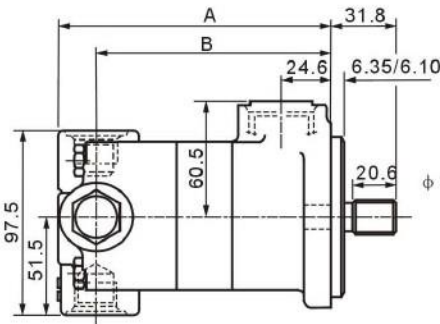
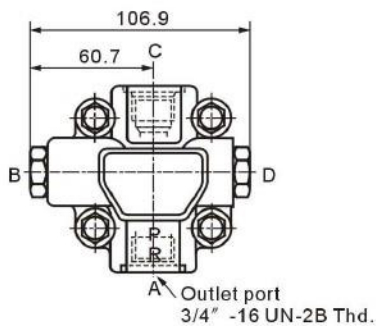
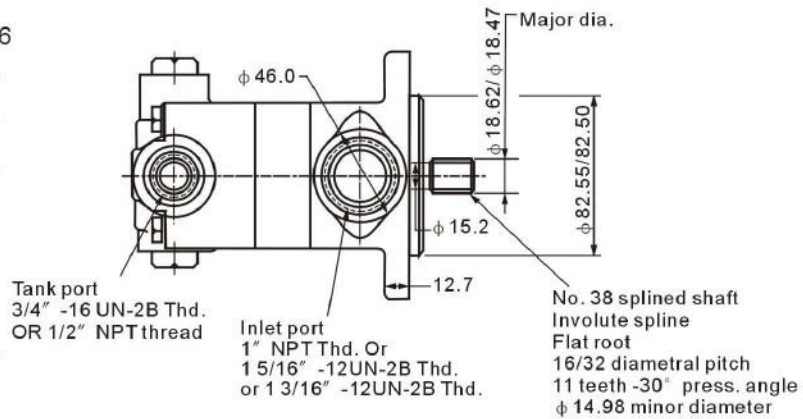
V20



V10F Series

Shaft options shown on page 6

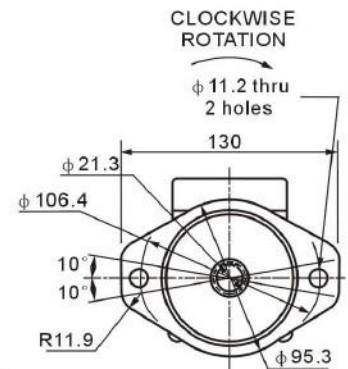
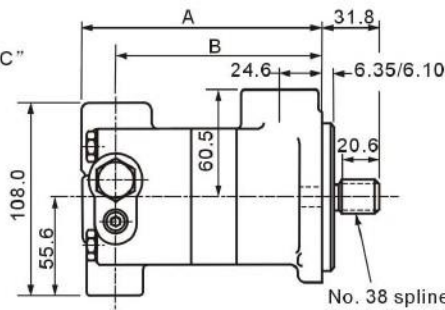
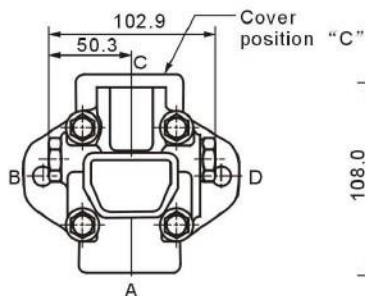
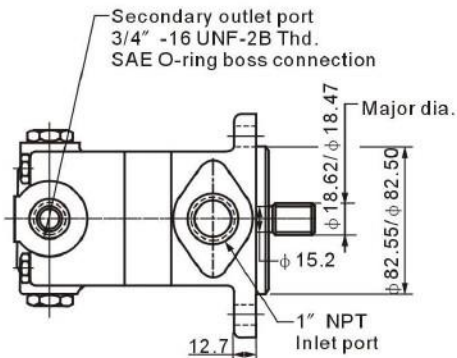
Ring size	Dimensions	
	A	B
1	128.8	109.5
2	128.8	109.5
3	128.8	109.5
4	135.1	115.8
5	135.1	115.8
6	140.2	120.9
7	140.2	120.9



V10P Series

Shaft options shown on page 6

Ring size	Dimensions	
	A	B
1	130.0	109.5
2	130.0	109.5
3	130.0	109.5
4	136.4	115.8
5	136.4	115.8
6	141.5	120.9
7	141.5	120.9



VQSINGLEVANEPUMPS



Model	Cartridge Code	CC per Rev	Max RPM	Max Press BAR	
20VQ	2	7	2700	210	
	3	11.7	2700	210	
	4	15	2700	210	
	5	18	2700	210	
	6	19	2700	210	
	7	22	2700	210	
	8	27	2700	210	
	9	30	2700	210	
	10	31.5	2700	210	
	11	36	2700	210	
	12	40	2700	160	
	14	45	2700	140	
25VQ	10	32.5	2700	210	
	12	38.3	2700	210	
	14	43.3	2700	210	
	15	47.3	2500	210	
	17	52.5	2500	210	
	19	60	2500	210	
	21	65	2500	210	
35VQ	21	64	2500	210	
	25	79.2	2500	210	
	30	95	2500	210	
	32	101	2500	210	
	35	109	2400	210	
	38	118	2400	210	
	45	140	2400	210	
45VQ	42	134	2400	175	
	45	147	2200	175	
	50	156	2200	175	
	57	180	2200	175	
	60	189	2200	175	
	66	208	2200	175	
	75	237	2200	140	

* Refer Next Page for Ordering Code

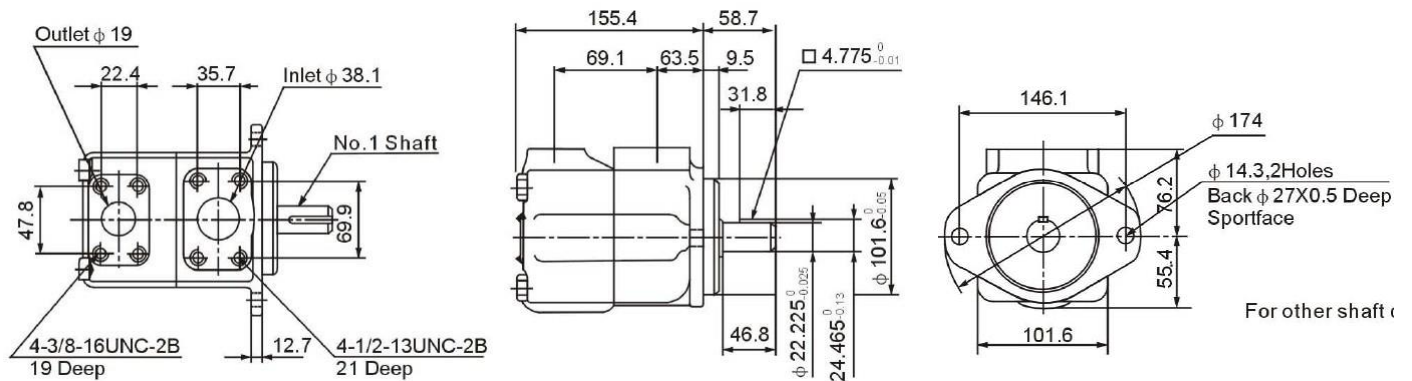
Spare Parts

Cartridges & Seal Kits			Shafts		
Part Number	Description		Part Number	Description	
F3-PC-20VQ-**-R-10	Cartridge 20VQ		PS-20VQ-1-30	Shaft 7/8" Straight Keyed	
F3-PC-25VQ-**-R-10	Cartridge 25VQ		PS-20VQ-151-30	Shaft SAE B 7/8" 13T Splined	
F3-PC-35VQ-**-R-10	Cartridge 35VQ		PS-25VQ-1-20	Shaft 7/8" Straight Keyed	
F3-PC-45VQ-**-R-10	Cartridge 45VQ		PS-25VQ-11-20	Shaft SAE B 7/8" 13T Splined	
			PS-25VQ-86-20	Shaft 1" Straight Keyed	
			PS-35VQ-1-20	Shaft 11/4" Straight Keyed	
PSK-20VQ-10	20VQ Seal Kit		PS-35VQ-11-20	Shaft SAE C 11/4" 14T Splined	
PSK-25VQ-10	25VQ Seal Kit		PS-35VQ-86-20	13/8" Straight Keyed	
PSK-35VQ-10	35VQ Seal Kit		PS-45VQ-1-20	Shaft 11/4" Straight Keyed	
PSK-45VQ-10	45VQ Seal Kit		PS-45VQ-11-20	Shaft SAE C 11/4" 14T Splined	
			PS-45VQ-86-20	Shaft 11/2" Straight Keyed	

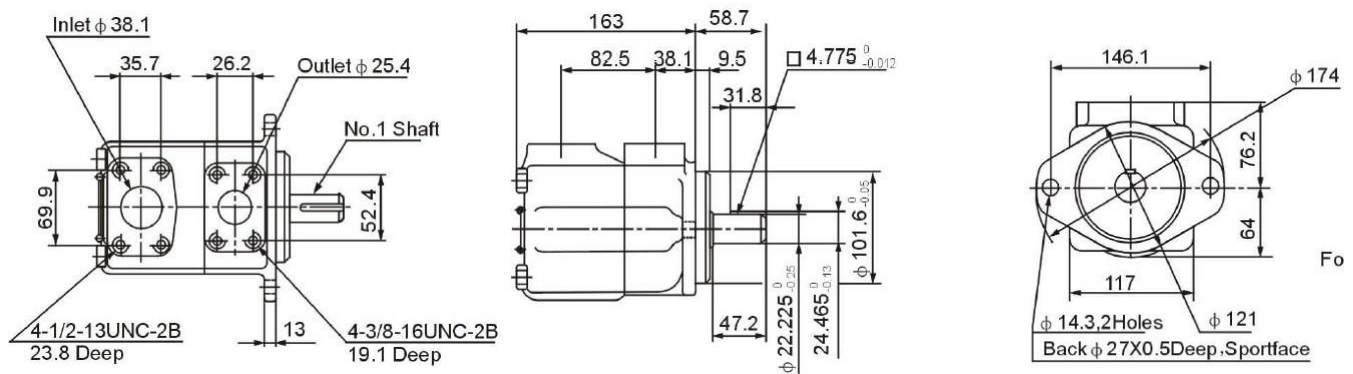
Ordering Code

(F3-)	20VQ	11	A	(F)	-1	A	30	*
Prefix	Series	Cartridge Code	Port Connections	Mounting	Shaft	Outlet Position	Design	Rotation
Omit- Using antiwear oil water Glycol Fluid F3- Phosphate Ester Fluid	20VQ	2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14	A-SAE 4 Bolt Flange	Omit- Flange Mtg F- Foot Mtg	1-Str Key 151-Spline	Viewed from cover end of pump	30	Viewed from shaft end of pump
	25VQ	10, 12, 14, 15, 17, 19, 21			1- Str Key 86-HD Str Key 11-Spline	A-Opposite inlet port B-90° CCW from Inlet C-Inline with Inlet D-90° CW from Inlet	20	Omit-RH L-LH
	35VQ	21, 25, 30, 32, 35, 38, 45						
	45VQ	42, 45, 50, 57, 60, 66, 75						

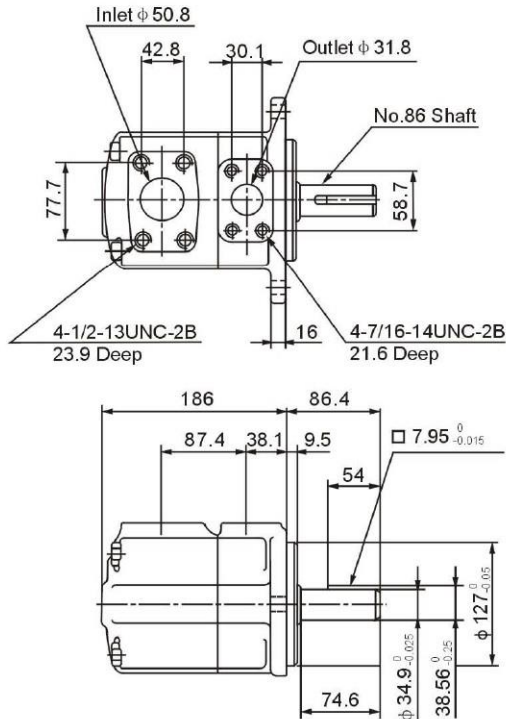
20VQ Flange Mounting



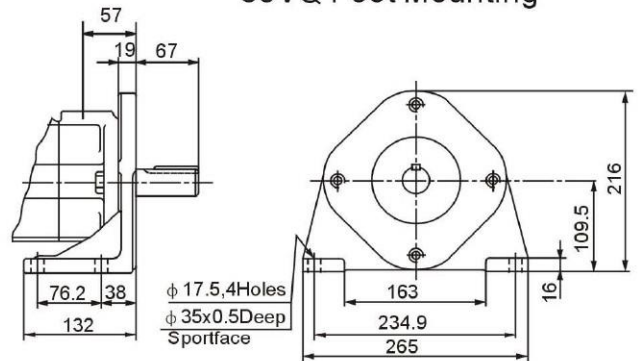
25VQ Flange Mounting



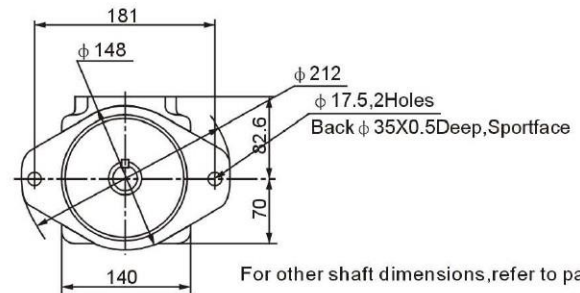
35VQ Flange Mounting



35VQ Foot Mounting

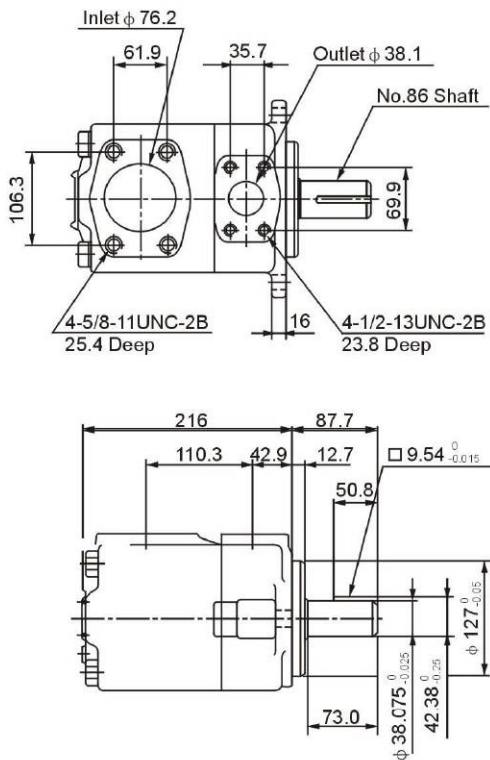


For other dimensions, refer to "Flange Mounting" type.

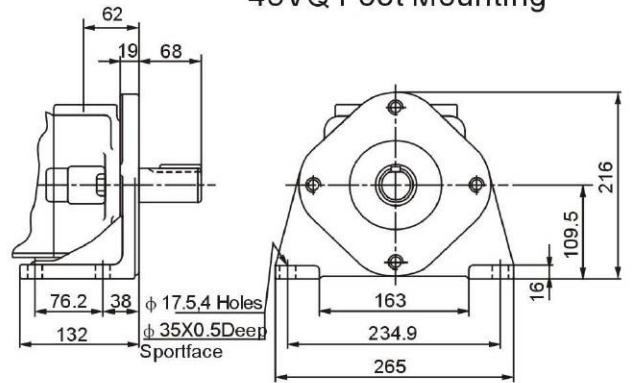


For other shaft dimensions, refer to page 49

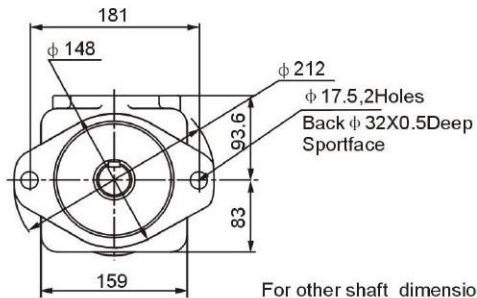
45VQ Flange Mounting



45VQ Foot Mounting



For other dimensions, refer to "Flange Mounting" type.



For other shaft dimensions, refer to page 49

VANEPUMPS



Double VQ Vane Pumps

Model	Frt Section (cc/rev)	Ports SAE Flanged	Rear Section (cc/rev)	Frt Flange Mount	Shaft	
2520VQ	32.5, 38.3, 43.3, 47.3, 52.5, 60, 65	2 1/2" Suction 1" Pressure Front 3/4" Pressure Rear	7, 11.7, 15, 18, 19, 22, 27, 30, 31.5, 36, 40, 45	SAE B 2 Bolt	7/8" Keyed	
3520VQ	64, 79.2, 95, 101, 109, 118	3" Suction 1 1/4" Pressure Front 3/4" Pressure Rear	7, 11.7, 15, 18, 19, 22, 27, 30, 31.5, 36, 40, 45	SAE C 2 Bolt	1 1/4" Keyed Or 1 1/2" Keyed or SAE C 14T Splined	
3525VQ	64, 79.2, 95, 101, 109, 118	3" Suction 1 1/4" Pressure Front 1" Pressure Rear	32.5, 38.3, 43.3, 47.3, 52.5, 60, 65			
4520VQ	134, 147, 156, 180, 189, 208, 237	3 1/2" Suction 1 1/2" Pressure Front 3/4" Pressure Rear	7, 11.7, 15, 18, 19, 22, 27, 30, 31.5, 36, 40, 45			
4525VQ	134, 147, 156, 180, 189, 208, 237	3 1/2" Suction 1 1/2" Pressure Front 1" Pressure Rear	32.5, 38.3, 43.3, 47.3, 52.5, 60, 65			
4535VQ	134, 147, 156, 180, 189, 208, 237	4" Suction 1 1/2" Pressure Front 1 1/4" Pressure Rear	64, 79.2, 95, 101, 109, 118			

Specifications refer next page of Catalogue

Spare Parts

Cartridges & Seal Kits			Shafts		
Part Number	Description		Part Number	Description	
F3-PC20VQ-**-R-10	Frt Cartridge 20VQ		PS-2520VQ-1-20	Shaft 7/8" Straight Keyed	
F3-PC25VQ-**-R-10	Frt Cartridge 25VQ		PS-2520VQ-11-20	Shaft SAE B 7/8" 13T Splined	
F3-PC35VQ-**-R-10	Frt Cartridge 35VQ		PS-2520VQ-86-20	Shaft 1" Straight Keyed	
F3-PC45VQ-**-R-10	Frt Cartridge 45VQ		PS-352*VQ-1-20	Shaft 1 1/4" Straight Keyed	
			PS-352*VQ-11-20	Shaft SAE C 1 1/4" 14T Splined	
F3-PCT20VQ-**-R-10	Rear Cartridge 20VQ		PS-352*VQ-86-20	1 3/8" Straight Keyed	
F3-PCT25VQ-**-R-10	Rear Cartridge 25VQ		PS-45**VQ-1-20	Shaft 1 1/4" Straight Keyed	
			PS-45**VQ-11-20	Shaft SAE C 1 1/4" 14T Splined	
PSK-2520VQ-10	2520VQ Seal Kit		PS-45**VQ-86-20	Shaft 1 1/2" Straight Keyed	
PSK-3520VQ-10	3520VQ Seal Kit				
PSK-3525VQ-10	3525VQ Seal Kit				
PSK-4520VQ-10	4520VQ Seal Kit				
PSK-4525VQ-10	4525VQ Seal Kit				
PSK-4535VQ-10	4535VQ Seal Kit				

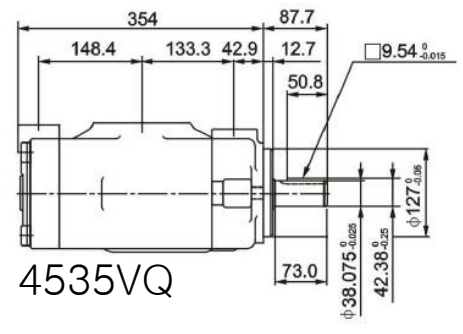
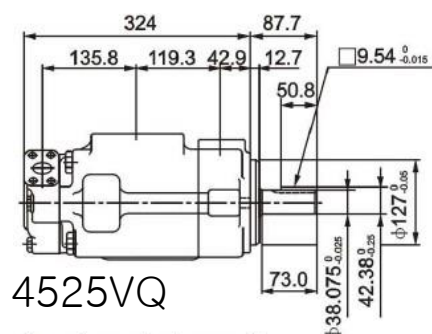
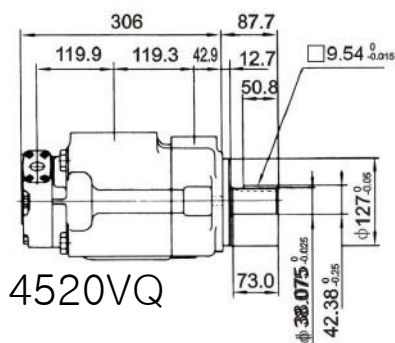
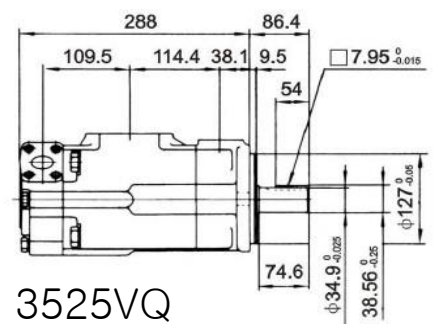
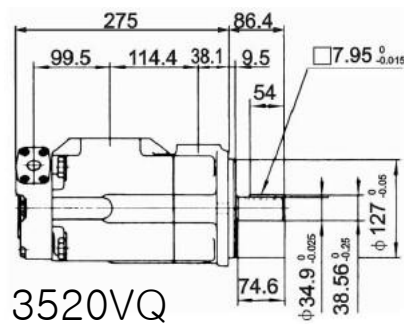
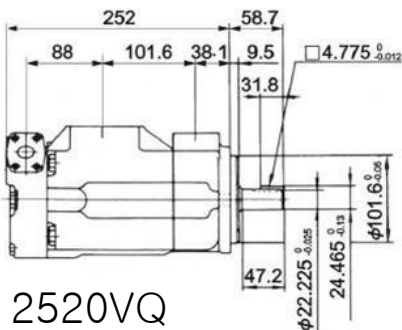
VANEPUMPS

Specifications

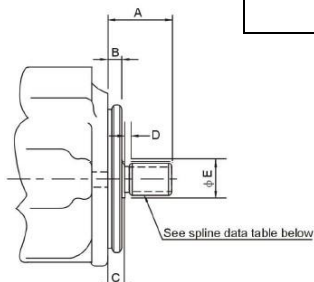
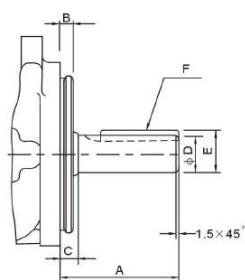


Ordering Code

(F3-)	****VQ	** Cartridge Code	A	** Cartridge Code	(F)	-*	**	20	*
Prefix	Series	Front Pump (Shaft End)	Port Connections	Rear Pump (Cover End)	Mounting	Shaft	Port Orientation	Design	Rotation
Omit- Using antiwear oil water Glycol Fluid F3- Phosphate Ester Fluid	2520VQ	10, 12, 14, 15, 17, 19, 21	A-SAE 4 Bolt Flange	2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14	Omit- Flange Mtg F--Foot Mtg	1-Str Key 86-HD Str Key 11-Spline	CC Std See Catalogue	20	Viewed from shaft end of pump Omit-RH L-LH
	3525VQ	21, 25, 30, 32, 35, 38, 45		10, 12, 14, 15, 17, 19, 21					
	4525VQ	42, 45, 50, 57, 60, 66, 75		10, 12, 14, 15, 17, 19, 21					
	3520VQ	21, 25, 30, 32, 35, 38, 45		2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14					
	4520VQ	42, 45, 50, 57, 60, 66, 75		2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14					
	4535VQ	42, 45, 50, 57, 60, 66, 75		21, 25, 30, 32, 35, 38, 45					



Specifications



Model	Cartridge Code	CC per Rev	Max RPM	Max Press BAR
20VQ	2	7	2700	210
	3	11.7	2700	210
	4	15	2700	210
	5	18	2700	210
	6	19	2700	210
	7	22	2700	210
	8	27	2700	210
	9	30	2700	210
	10	31.5	2700	210
	11	36	2700	210
	12	40	2700	160
	14	45	2700	140
25VQ	10	32.5	2700	210
	12	38.3	2700	210
	14	43.3	2700	210
	15	47.3	2500	210
	17	52.5	2500	210
	19	60	2500	210
	21	65	2500	210
35VQ	21	64	2500	210
	25	79.2	2500	210
	30	95	2500	210
	32	101	2500	210
	35	109	2400	210
	38	118	2400	210
	45	140	2400	210
45VQ	42	134	2400	175
	45	147	2200	175
	50	156	2200	175
	57	180	2200	175
	60	189	2200	175
	66	208	2200	175
	75	237	2200	140

ShaftData

Straight Keyed Shafts

Model VQ	Shaft Code	A	B	C	D	E	F Key Width X Length
20VQ	1	59	9.53	12.1	22.23/22.20	24.5/24.4	4.76 x 32
25VQ	1	59	9.53	11.1	22.23/22.20	24.5/24.4	4.76 x 32
2520VQ	86	78	9.53	11.1	25.37/25.35	28.3/28.1	6.36 x 50.8
35VQ	1	73.2	9.53	11.1	31.75/31.70	35.36/34.10	7.94 x 38.1
352*VQ	86	86	9.53	11.1	34.90/34.87	38.6/38.3	7.94 x 54
45VQ	1	62	12.7	14.22	21.75/31.70	35.36/34.10	7.94 x 28.5
45**VQ	86	87.4	12.7	14.22	38.07/38.05	42.4/42.1	9.54 x 50.8

Splined Shafts

20VQ	151	41.1	9.53	11.1	3.9	27.8	7/8" Dia 13T 16/32
25VQ 2520VQ	11	44.5	9.53	11.1	3.9	27.8	7/8" Dia 13T 16/32
35VQ 352*VQ	11	58.7	9.53	11.1	6.35	35.1	11/4" Dia 14T 12/24
45VQ 45**VQ	11	61.9	12.7	14.3	9.7	39.6	11/4" Dia 14T 12/24

GROUP1GEARPUMPS

GROUP 1

TAPER SHAFT 1:8

3/8" BSPP THREADED PORTS

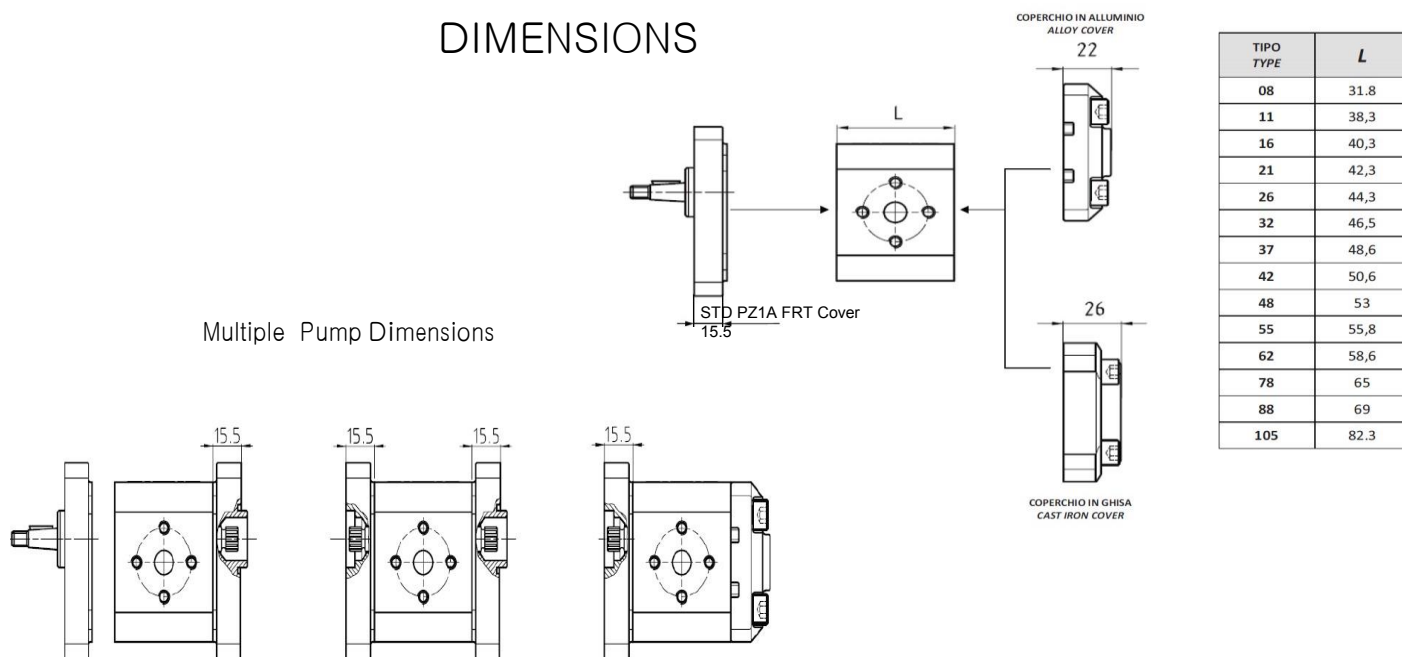


PART NUMBER		CC P/REV	PORTS		
RH ROT	LH ROT		PRESSURE	SUCTION	
PZ1A11C401D	PZ1A11C401S	1.1CC	3/8" BSPP	3/8" BSPP	
PZ1A16C401D	PZ1A16C401S	1.6CC	3/8" BSPP	3/8" BSPP	
PZ1A21C401D	PZ1A21C401S	2.1CC	3/8" BSPP	3/8" BSPP	
PZ1A26C401D	PZ1A26C401S	2.6CC	3/8" BSPP	3/8" BSPP	
PZ1A32C401D	PZ1A32C401S	3.2CC	3/8" BSPP	3/8" BSPP	
PZ1A37C401D	PZ1A37C401S	3.7CC	3/8" BSPP	3/8" BSPP	
PZ1A42C401D	PZ1A42C401S	4.2CC	3/8" BSPP	3/8" BSPP	
PZ1A48C401D	PZ1A48C401S	4.8CC	3/8" BSPP	3/8" BSPP	
PZ1A55C401D	PZ1A55C401S	5.5CC	3/8" BSPP	3/8" BSPP	
PZ1A62C401D	PZ1A62C401S	6.2CC	3/8" BSPP	3/8" BSPP	
PZ1A78C401D	PZ1A78C401S	7.8CC	3/8" BSPP	3/8" BSPP	
PZ1A88C401D	PZ1A88C401S	8.8CC	3/8" BSPP	3/8" BSPP	

MAIN CHARACTERISTICS

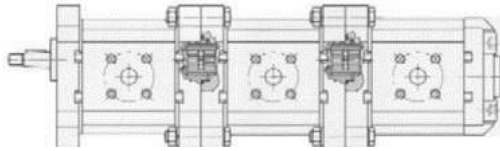
Type		1.1	1.6	2.1	2.6	3.2	3.7	4.2	4.8	5.5	6.2	7.8	8.8
Capacity	cc/rev.	1,08	1,59	2,09	2,59	3,15	3,68	4,19	4,79	5,49	6,2	7,81	8,82
Max. working pressure	bar bar	210	210	210	210	210	210	190	180	160	140	120	100
Peak pressure	r.p.m.	250	250	250	250	250	250	230	220	200	180	160	140
Max. speed for P1 press Max.	r.p.m.	6000	6000	6000	5500	4500	4000	3800	3500	3500	3000	3000	3000
speed without load Min.speed	r.p.m.	8000	8000	8000	8000	7000	6000	5500	5000	4500	4500	4000	4000
for P1(undirect.) .	A	1100	950	800	700	600	500	450	400	400	400	400	400
Overall dimensions	B	73,8	75,8	77,8	79,8	82	84,1	86,1	88,5	91,3	94,1	100,5	104,5
		34,6	35,6	36,6	37,6	38,7	39,8	40,8	42	43,4	44,8	48	50

DIMENSIONS



High Pressure Pumps Cast Iron End Plates available on Request

MULTIPLEGEARPUMPS



GROUP 1 THREADED PORTS

MAX TORQUE 27NM

FRONT PUMP

PART NUMBER RH ROT	CC P/ REV	L DIM	PORTS		
			PRESSURE	SUCTION	
PZ1A11C401AD	1.1CC	38.3	3/8" BSPP	3/8" BSPP	
PZ1A16C401AD	1.6CC	40.3	3/8" BSPP	3/8" BSPP	
PZ1A21C401AD	2.1CC	42.3	3/8" BSPP	3/8" BSPP	
PZ1A26C401AD	2.6CC	44.3	3/8" BSPP	3/8" BSPP	
PZ1A32C401AD	3.2CC	46.5	3/8" BSPP	3/8" BSPP	
PZ1A37C401AD	3.7CC	48.6	3/8" BSPP	3/8" BSPP	
PZ1A42C401AD	4.2CC	50.6	3/8" BSPP	3/8" BSPP	
PZ1A48C401AD	4.8CC	53	3/8" BSPP	3/8" BSPP	
PZ1A55C401AD	5.5CC	55.8	3/8" BSPP	3/8" BSPP	
PZ1A62C401AD	6.2CC	58.6	3/8" BSPP	3/8" BSPP	
PZ1A78C401AD	7.8CC	65	3/8" BSPP	3/8" BSPP	
PZ1A88C401AD	8.8CC	69	3/8" BSPP	3/8" BSPP	

NOTE: CONNECTION KIT INCLUDED IN MULTIPLE PUMP ASSEMBLIES

INTERMEDIATE PUMP

PART NUMBER RH ROT	CC P/REV	PORTS		
		PRESSURE	SUCTION	
PZ1A110001ID	1.1CC	3/8" BSPP	3/8" BSPP	
PZ1A160001ID	1.6CC	3/8" BSPP	3/8" BSPP	
PZ1A210001ID	2.1CC	3/8" BSPP	3/8" BSPP	
PZ1A260001ID	2.6CC	3/8" BSPP	3/8" BSPP	
PZ1A320001ID	3.2CC	3/8" BSPP	3/8" BSPP	
PZ1A370001ID	3.7CC	3/8" BSPP	3/8" BSPP	
PZ1A420001ID	4.2CC	3/8" BSPP	3/8" BSPP	
PZ1A480001ID	4.8CC	3/8" BSPP	3/8" BSPP	
PZ1A550001ID	5.5CC	3/8" BSPP	3/8" BSPP	
PZ1A620001ID	6.2CC	3/8" BSPP	3/8" BSPP	
PZ1A780001ID	7.8CC	3/8" BSPP	3/8" BSPP	
PZ1A880001ID	8.8CC	3/8" BSPP	3/8" BSPP	

REAR

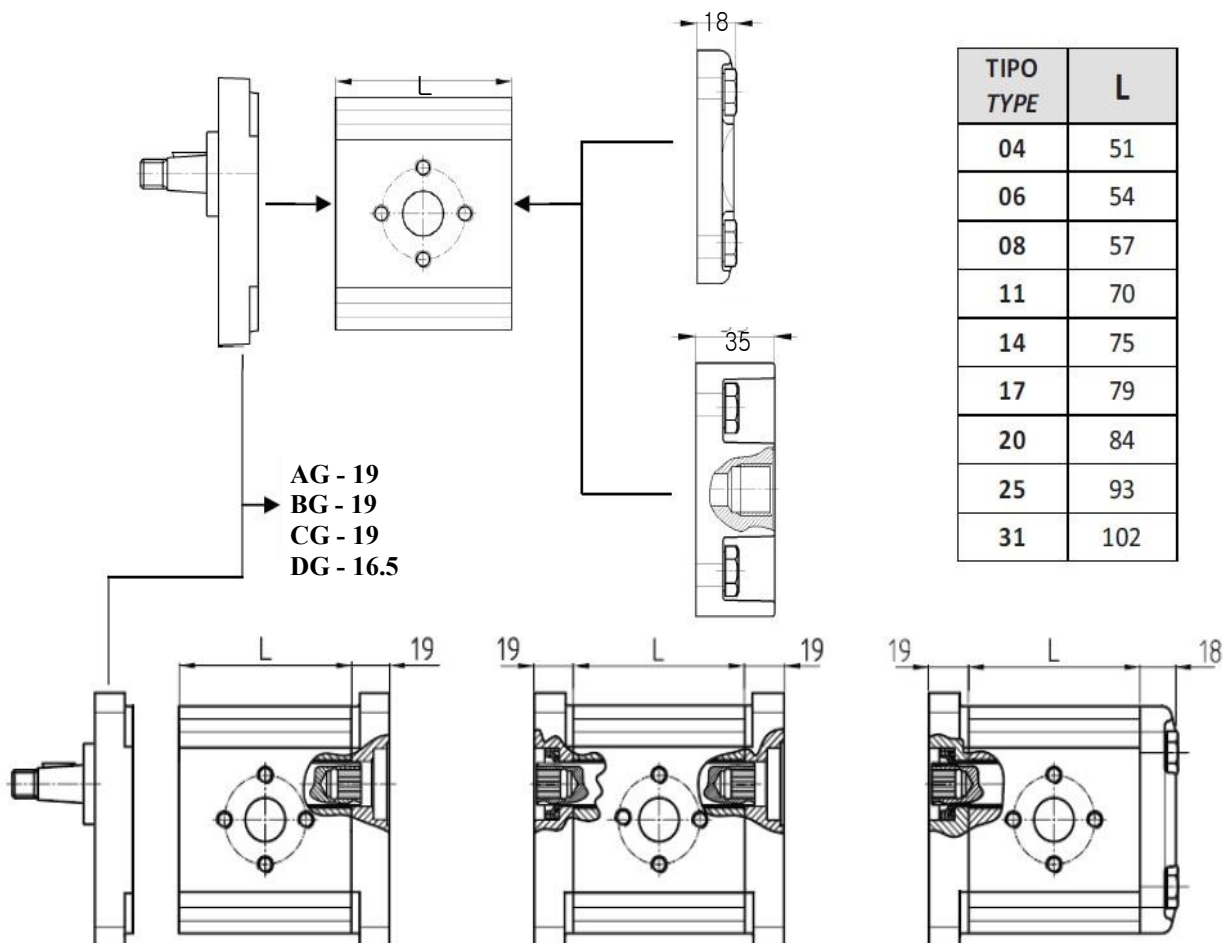
PART NUMBER RH ROT	CC P/REV	PORTS		
		PRESSURE	SUCTION	
PZ1A0110001PD	1.1CC	3/8" BSPP	3/8" BSPP	
PZ1A0160001PD	1.6CC	3/8" BSPP	3/8" BSPP	
PZ1A0210001PD	2.1CC	3/8" BSPP	3/8" BSPP	
PZ1A0260001PD	2.6CC	3/8" BSPP	3/8" BSPP	
PZ1A0320001PD	3.2CC	3/8" BSPP	3/8" BSPP	
PZ1A0370001PD	3.7CC	3/8" BSPP	3/8" BSPP	
PZ1A0420001PD	4.2CC	3/8" BSPP	3/8" BSPP	
PZ1A0480001PD	4.8CC	3/8" BSPP	3/8" BSPP	
PZ1A0550001PD	5.5CC	3/8" BSPP	3/8" BSPP	
PZ1A0620001PD	6.2CC	3/8" BSPP	3/8" BSPP	
PZ1A0780001PD	7.8CC	3/8" BSPP	3/8" BSPP	
PZ1A0880001PD	8.8CC	3/8" BSPP	3/8" BSPP	

CONNECTING KITS SUPPLIED WITH MULTIPLE PUMPS

PZ2AG

MODEL IDENTIFICATION CODE

PZ2-AG	04	C	0	34	D
MODEL PZ2-AG ITALIAN STYLE PZ2-BG GERMAN STYLE PZ2-CG SAE STYLE PZ2-DG DEUTZ/IHC STYLE REAR/TANGE PZ2-EG DRIVE SHAFT A TAPER 1:5 B SPLINED 9T DIN C TAPER 1:8 E PARALLEL 15MM F TANG L PARALLEL 5/8" S SPLINED 9T SAE A MODEL 0= PZ2-AG 1= PZ2-BG 2= PZ2-EG 3= PZ2-DG 4= PZ2-CG ROTATION D=RIGHT HAND S=LEFT HAND R=REVERSIBLE					
TYPE - CAPACITY - cc p/rev 04/06/08/11/14/17/20/25/31 PORTS 32-FLANGE TYPE-4/6/8/11 TYPE-14/17/20/25/31 33-FLANGE TYPE-4/6/8/11 TYPE-14/17/20/25/31 34-BSPP TYPE-4/6/8/11 TYPE-14/17/20/25/31 35-BSPP TYPE-4/6/8/11 TYPE-14/17/20/25/31 36-FLANGE ALL TYPE-14/17/20/25/31 41-BSPP TYPE-4/6/8/11 TYPE-14/17/20/25/31					



UseConditionsforGroup2Pumps

Hydraulic Fluids	Mineral Oil (DIN 51524) For use with fire resistant fluids like water glycol, water – emulsion and phosphate esters, contact our technical or commercial office		
Inlet Pressure	0.7 - 3 Bar (Absolute)		
Oil Speed on Suction Line	0.5 - 1.5 m/s		
Oil Speed on pressure line	6 - 10 m/s		
Oil Temperature	-10 Deg C - 80 Deg C		
Oil Viscosity	20 - 120 mm ² /s (Cst)		
Max starting viscosity	700 mm ² /s (Cst)		
	Pressure	< 200 Bar	> 200 Bar
Oil Filtration	Contamination Class NAS 1638	10	9
	Contamination Class ISO 4406	19/16	18/15
	Ratio <i>Bx</i>	25µm	15µm

MainSpecifications

TYPE		04	06	08	11	14	17	20	25	31
Capacity	Cm ³ / Rev	4.4	6.28	8.16	11.3	14.45	16.95	20.1	25.75	31.4
P1 Max Working Pressure	Bar	300	300	300	300	300	250	210	160	130
P2 Max Peak Pressure	Bar	360	360	360	360	330	310	270	210	150
Max Speed for P1 Pressure	Rpm	4500	4500	3700	3300	2700	2500	2500	2500	2200
Max Speed without Load	Rpm	5500	5500	4700	4000	3300	3000	3000	3000	2700
Min Speed for P1 Pressure	Rpm	1000	700	550	450	400	350	300	250	200

With bidirectional pumps or motors, pressure is reduced by 15% and the case drain must be fitted

Shaft Load Capacity

Shaft Code	Shaft Description	Max Torque (Nm)	Important When applying a multiple pump, the drive shaft load is the sum of torque of each section. This value can not exceed the value in the table.
A	1:5 Taper	110	
B	Din 5482 B17x 14 Spline	110	
C	1:8 Taper	150	
E	15mm Str Keyed	75	
F	Tang	75	
L	5/8" Str Keyed	75	
M	Tang	75	
N	19mm Str Keyed	110	
S	SAE A 9T Spline	75	

PZ2AG

GROUP 2
THREADED PORTS
1:8 TAPER SHAFT



CAST IRON COVERS AND SPECIAL BUSHINGS, PROJECTED FOR HEAVY DUTY

PART NUMBER		CC P/REV	Length MM	PORTING		
RH ROT	LH ROT			PRESSURE	SUCTION	
PZ2AG04C034TD	PZ2AG04C034TS	4.40	88	½" BSPP	½" BSPP	
PZ2AG06C034TD	PZ2AG06C034TS	6.28	91	½" BSPP	½" BSPP	
PZ2AG08C034TD	PZ2AG08C034TS	8.16	94	½" BSPP	½" BSPP	
PZ2AG11C034TD	PZ2AG11C034TS	11.30	107	½" BSPP	½" BSPP	
PZ2AG14C035TD	PZ2AG14C035TS	14.45	112	½" BSPP	¾" BSPP	
PZ2AG17C035TD	PZ2AG17C035TS	16.95	116	½" BSPP	¾" BSPP	
PZ2AG20C035TD	PZ2AG20C035TS	20.10	121	½" BSPP	¾" BSPP	
PZ2AG25C035TD	PZ2AG25C035TS	25.75	130	½" BSPP	¾" BSPP	
PZ2AG31C035TD	PZ2AG31C035TS	31.40	139	½" BSPP	¾" BSPP	

TYPE		04	06	08	11	14	17	20	25	31
Capacity	Cm³ / Rev	4.4	6.28	8.16	11.3	14.45	16.95	20.1	25.75	31.4
P1 Max Working Pressure	Bar	300	300	300	300	300	250	210	160	130
P2 Max Peak Pressure	Bar	360	360	360	360	330	310	270	210	150
Max Speed for P1 Pressure	Rpm	4500	4500	3700	3300	2700	2500	2500	2500	2200
Max Speed without Load	Rpm	5500	5500	4700	4000	3300	3000	3000	3000	2700
Min Speed for P1 Pressure	Rpm	1000	700	550	450	400	350	300	250	200

SEALKITS

Part Number	Description	
PZ2A-SK	Group 2 Body Seal Kit	
PZ2A-SS	Group 2 Shaft Seal	

OPTIONS-Add to List Price

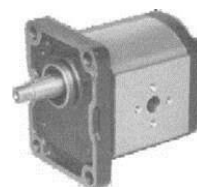
A	1:5 TAPER SHAFT	
C	1:8 TAPER SHAFT	
L	5/8" STRAIGHT KEYED SHAFT	
S	9T SAE A SPLINED SHAFT	
B	9T DIN 5482 B17 SPLINED SHAFT	
AG	FRONT FLANGE - GROUP 2 36MM SPIGOT	
BG	FRONT FLANGE - GERMAN 4 BOLT, 80MM SPIGOT	
DG	FRONT FLANGE KHD (DEUTZ) 50MM SPIGOT, 2 BOLT THROUGH	
CG	FRONT FLANGE SAE A 2 BOLT , 82.55MM SPIGOT	

GROUP2PUMPS

PZ2AG

GROUP 2
FLANGED PORTS
1:8 TAPER SHAFT

Flanged Ports



CAST IRON COVERS AND SPECIAL BUSHINGS, PROJECTED FOR HEAVY DUTY

PART NUMBER		CC P/ REV	DIM A	DIM B	FLANGED PORTING						
RH ROT	LH ROT				PRESSURE			SUCTION			
					D	E	F	D	E	F	
PZ2AG04C032D	PZ2AG04C032S	4.40	44.5	88	30	13	M6	30	13	M6	
PZ2AG06C032D	PZ2AG06C032S	6.28	46	91	30	13	M6	30	13	M6	
PZ2AG08C032D	PZ2AG08C032S	8.16	47.5	94	30	13	M6	30	13	M6	
PZ2AG11C033D	PZ2AG11C033S	11.30	54	107	30	13	M6	30	13	M6	
PZ2AG14C033D	PZ2AG14C033S	14.45	56.5	112	30	13	M6	40	20	M8	
PZ2AG17C033D	PZ2AG17C033S	16.95	58.5	116	30	13	M6	40	20	M8	
PZ2AG20C033D	PZ2AG20C033S	20.10	61	121	30	13	M6	40	20	M8	
PZ2AG25C033D	PZ2AG25C033S	25.75	65.5	130	30	13	M6	40	20	M8	
PZ2AG31C033D	PZ2AG31C033S	31.40	70	139	30	13	M6	40	20	M8	

TYPE		04	06	08	11	14	17	20	25	31
Capacity	Cm ³ / Rev	4.4	6.28	8.16	11.3	14.45	16.95	20.1	25.75	31.4
P1 Max Working Pressure	Bar	300	300	300	300	300	250	210	160	130
P2 Max Peak Pressure	Bar	360	360	360	360	330	310	270	210	150
Max Speed for P1 Pressure	Rpm	4500	4500	3700	3300	2700	2500	2500	2500	2200
Max Speed without Load	Rpm	5500	5500	4700	4000	3300	3000	3000	3000	2700
Min Speed for P1 Pressure	Rpm	1000	700	550	450	400	350	300	250	200

SEALKITS

Part Number	Description	
PZ2A-SK	Group 2 Body Seal Kit	
PZ2A-SS	Group 2 Shaft Seal	

OPTIONS-Add to List Price

A	1:5 TAPER SHAFT	
C	1:8 TAPER SHAFT	
L	5/8" STRAIGHT KEYED SHAFT	
S	9T SAE A 5/8" SPLINED SHAFT	
B	9T DIN 5482 B17 Ø16.5 SPLINED SHAFT	
AG	FRONT FLANGE - GROUP 2 36MM SPIGOT	
BG	FRONT FLANGE - GERMAN 4 BOLT, 80MM SPIGOT	
DG	FRONT FLANGE KHD (DEUTZ) 50MM SPIGOT, 2 BOLT THROUGH	
CG	FRONT FLANGE SAE A 2 BOLT , 82.55MM SPIGOT	

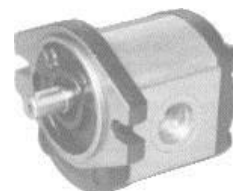
Pumps

1.20

PZ2CG

SAE A 2 BOLT MOUNT
THREADED PORTS
SAE 5/8" KEYED SHAFT 5/32" Key
OR
SAE 9T SPLINED SHAFT

SAE A



CAST IRON COVERS AND SPECIAL BUSHINGS, PROJECTED FOR HEAVY DUTY

PART NUMBER		CC P/REV	DIM A	DIM B	THREADED PORTING		
5/8" KEYED SHAFT	9T SAE A SPLINED SHAFT				PRESSURE	SUCTION	
PZ2CG04L4034T*	PZ2CG04S4034T*	4.40	44.5	88	½" BSPP	½" BSPP	
PZ2CG06L4034T*	PZ2CG06S4034T*	6.28	46	91	½" BSPP	½" BSPP	
PZ2CG08L4034T*	PZ2CG08S4034T*	8.16	47.5	94	½" BSPP	½" BSPP	
PZ2CG11L4034T*	PZ2CG11S4034T*	11.30	54	107	½" BSPP	½" BSPP	
PZ2CG14L4041T*	PZ2CG14S4041T*	14.45	56.5	112	¾" BSPP	¾" BSPP	
PZ2CG17L4041T*	PZ2CG17S4041T*	16.95	58.5	116	¾" BSPP	¾" BSPP	
PZ2CG20L4041T*	PZ2CG20S4041T*	20.10	61	121	¾" BSPP	¾" BSPP	
PZ2CG25L4041T*	PZ2CG25S4041T*	25.75	65.5	130	¾" BSPP	¾" BSPP	
PZ2CG31L4041T*	PZ2CG31S4041T*	31.40	70	139	¾" BSPP	¾" BSPP	

* PLEASE NOMINATE RIGHT (D) OR LEFT (S) HAND ROTATION

TYPE		04	06	08	11	14	17	20	25	31
Capacity	Cm ³ / Rev	4.4	6.28	8.16	11.3	14.45	16.95	20.1	25.75	31.4
P1 Max Working Pressure	Bar	300	300	300	300	300	250	210	160	130
P2 Max Peak Pressure	Bar	360	360	360	360	330	310	270	210	150
Max Speed for P1 Pressure	Rpm	4500	4500	3700	3300	2700	2500	2500	2500	2200
Max Speed without Load	Rpm	5500	5500	4700	4000	3300	3000	3000	3000	2700
Min Speed for P1 Pressure	Rpm	1000	700	550	450	400	350	300	250	200

SEALKITS

Part Number	Description	
PZ2A-SK	Group 2 Body Seal Kit	
PZ2A-SS	Group 2 Shaft Seal	

OPTIONS – ADD TO LIST PRICE

A	1:5 TAPER SHAFT	
C	1:8 TAPER SHAFT	
L	5/8" STRAIGHT KEYED SHAFT	
S	9T SAE A SPLINED SHAFT	
B	9T DIN 5482 B17 SPLINED SHAFT	
AG	FRONT FLANGE - GROUP 2 36MM SPIGOT	
BG	FRONT FLANGE - GERMAN 4 BOLT, 80MM SPIGOT	
DG	FRONT FLANGE KHD (DEUTZ) 50MM SPIGOT, 2 BOLT THROUGH	
CG	FRONT FLANGE SAE A 2 BOLT , 82.55MM SPIGOT	

PZ2BG

GERMAN STYLE
80MM SPIGOT
1:5 TAPER SHAFT

1:5 Taper

German Style



PART NUMBER		CC P/Rev	SHAFT	DIM A	DIM B	PRESS PORT			SUCTION PORT			
RH Rotation	LH Rotation					C	D	E	C	D	E	
PZ2BG04A136D	PZ2BG04A136S	4.40	TAPER	44.5	88	35	15	M6	40	20	M6	
PZ2BG06A136D	PZ2BG06A136S	6.28	TAPER	46	91	35	15	M6	40	20	M6	
PZ2BG08A136D	PZ2BG08A136S	8.16	TAPER	47.5	94	35	15	M6	40	20	M6	
PZ2BG11A136D	PZ2BG11A136S	11.30	TAPER	54	107	35	15	M6	40	20	M6	
PZ2BG14A136D	PZ2BG14A136S	14.45	TAPER	56.5	112	35	15	M6	40	20	M6	
PZ2BG17A136D	PZ2BG17A136S	16.95	TAPER	58.5	116	35	15	M6	40	20	M6	
PZ2BG20A136D	PZ2BG20A136S	20.10	TAPER	61	121	35	15	M6	40	20	M6	
PZ2BG25A136D	PZ2BG25A136S	25.75	TAPER	65.5	130	35	15	M6	40	20	M6	

PZ2BG

GERMAN STYLE
80MM Spigot
SPLINED SHAFT 9T DIN

Splined 9T DIN

German Style



PART NUMBER		CC P/Rev	SHAFT	DIM A	DIM B	PRESS PORT			SUCTION PORT			
RH Rotation	LH Rotation					C	D	E	C	D	E	
PZ2BG04B136D	PZ2BG04B136S	4.40	TAPER	44.5	88	35	15	M6	40	20	M6	
PZ2BG06B136D	PZ2BG06B136S	6.28	TAPER	46	91	35	15	M6	40	20	M6	
PZ2BG08B136D	PZ2BG08B136S	8.16	TAPER	47.5	94	35	15	M6	40	20	M6	
PZ2BG11B136D	PZ2BG11B136S	11.30	TAPER	54	107	35	15	M6	40	20	M6	
PZ2BG14B136D	PZ2BG14B136S	14.45	TAPER	56.5	112	35	15	M6	40	20	M6	
PZ2BG17B136D	PZ2BG17B136S	16.95	TAPER	58.5	116	35	15	M6	40	20	M6	
PZ2BG20B136D	PZ2BG20B136S	20.10	TAPER	61	121	35	15	M6	40	20	M6	
PZ2BG25B136D	PZ2BG25B136S	25.75	TAPER	65.5	130	35	15	M6	40	20	M6	

Seal Kits

PZ2A-SK	Group 2 Body Seal Kit	
PZ2A-SS	Group 2 Shaft Seal	
Port Adaptors		
EBP-2	35mm PCD Port Adaptor 1/2" BSPP	
EBP-4	40mm PCD Port Adaptor 3/4" BSPP	

OPTIONS – ADD TO LIST PRICE

A	1:5 TAPER SHAFT	
C	1:8 TAPER SHAFT	
L	5/8" STRAIGHT KEYED SHAFT	
S	9T SAE A SPLINED SHAFT	
B	9T DIN 5482 B17 SPLINED SHAFT	
AG	FRONT FLANGE - GROUP 2 36MM SPIGOT	
BG	FRONT FLANGE - GERMAN 4 BOLT, 80MM SPIGOT	
DG	FRT FLGE KHD (DEUTZ) 50mm Spigot, 2 Bolt through	
CG	FRONT FLANGE SAE A 2 BOLT, 82.55MM SPIGOT	

PZ2DG

GERMAN STYLE
50MM SPIGOT
1:5 TAPER SHAFT

1:5 Taper

Deutz Style



PART NUMBER		CC P/Rev	SHAFT	DIM A	DIM B	PRESS PORT			SUCTION PORT			
RH Rotation	LH Rotation					C	D	E	C	D	E	
PZ2DG04A136D	PZ2DG04A136S	4.40	TAPER	44.5	88	35	15	M6	40	20	M6	
PZ2DG06A136D	PZ2DG06A136S	6.28	TAPER	46	91	35	15	M6	40	20	M6	
PZ2DG08A136D	PZ2DG08A136S	8.16	TAPER	47.5	94	35	15	M6	40	20	M6	
PZ2DG11A136D	PZ2DG11A136S	11.30	TAPER	54	107	35	15	M6	40	20	M6	
PZ2DG14A136D	PZ2DG14A136S	14.45	TAPER	56.5	112	35	15	M6	40	20	M6	
PZ2DG17A136D	PZ2DG17A136S	16.95	TAPER	58.5	116	35	15	M6	40	20	M6	
PZ2DG20A136D	PZ2DG20A136S	20.10	TAPER	61	121	35	15	M6	40	20	M6	
PZ2DG25A136D	PZ2DG25A136S	25.75	TAPER	65.5	130	35	15	M6	40	20	M6	

PZ2DG

GERMAN STYLE
50MM Spigot
SPLINED SHAFT 9T DIN

Splined 9T DIN

Deutz Style



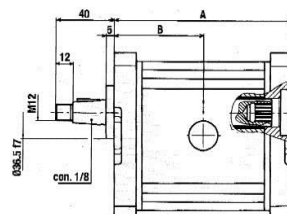
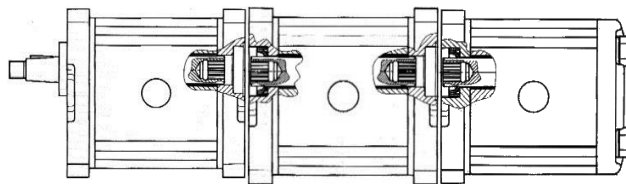
PART NUMBER		CC P/Rev	SHAFT	DIM A	DIM B	PRESS PORT			SUCTION PORT			
RH Rotation	LH Rotation					C	D	E	C	D	E	
PZ2DG04B136D	PZ2DG04B136S	4.40	TAPER	44.5	88	35	15	M6	40	20	M6	
PZ2DG06B136D	PZ2DG06B136S	6.28	TAPER	46	91	35	15	M6	40	20	M6	
PZ2DG08B136D	PZ2DG08B136S	8.16	TAPER	47.5	94	35	15	M6	40	20	M6	
PZ2DG11B136D	PZ2DG11B136S	11.30	TAPER	54	107	35	15	M6	40	20	M6	
PZ2DG14B136D	PZ2DG14B136S	14.45	TAPER	56.5	112	35	15	M6	40	20	M6	
PZ2DG17B136D	PZ2DG17B136S	16.95	TAPER	58.5	116	35	15	M6	40	20	M6	
PZ2DG20B136D	PZ2DG20B136S	20.10	TAPER	61	121	35	15	M6	40	20	M6	
PZ2DG25B136D	PZ2DG25B136S	25.75	TAPER	65.5	130	35	15	M6	40	20	M6	

Seal Kits		
PZ2A-SK	Group 2 Body Seal Kit	
PZ2A-SS	Group 2 Shaft Seal	
Port Adaptors		
EBP-2	35mm PCD Port Adaptor 1/2" BSPP	
EBP-4	40mm PCD Port Adaptor 3/4" BSPP	

	OPTIONS – ADD TO LIST PRICE	
A	1:5 TAPER SHAFT	
C	1:8 TAPER SHAFT	
L	5/8" STRAIGHT KEYED SHAFT	
S	9T SAE A SPLINED SHAFT	
B	9T DIN 5482 B17 SPLINED SHAFT	
AG	FRONT FLANGE - GROUP 2 36MM SPIGOT	
BG	FRONT FLANGE - GERMAN 4 BOLT, 80MM SPIGOT	
DG	FRT FLGE KHD (DEUTZ) 50mm Spigot, 2 Bolt through	
CG	FRONT FLANGE SAE A 2 BOLT, 82.55MM SPIGOT	

MULTIPLEPUMPS

FRONTPUMPS



Group 2
1:8 Taper Shaft
BSPP Threaded Ports

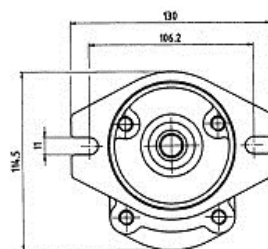
Group 2

PART NUMBER		CC P/REV	PORTING		DIMENSION		
RH ROT	LH ROT		PRESSURE	SUCTION	A	B	
PZ2AG04C034TD	PZ2AG04C034TS	4.40	½" BSPP	½" BSPP	89	44.5	
PZ2AG06C034TD	PZ2AG06C034TS	6.28	½" BSPP	½" BSPP	92	46	
PZ2AG08C034TD	PZ2AG08C034TS	8.16	½" BSPP	½" BSPP	95	47.5	
PZ2AG11C034TD	PZ2AG11C034TS	11.30	½" BSPP	½" BSPP	108	54	
PZ2AG14C035TD	PZ2AG14C035TS	14.45	½" BSPP	¾" BSPP	113	56.5	
PZ2AG17C035TD	PZ2AG17C035TS	16.95	½" BSPP	¾" BSPP	117	58.5	
PZ2AG20C035TD	PZ2AG20C035TS	20.10	½" BSPP	¾" BSPP	122	61	
PZ2AG25C035TD	PZ2AG25C035TS	25.75	½" BSPP	¾" BSPP	131	65.5	
PZ2AG31C035TD	PZ2AG31C035TS	31.40	½" BSPP	¾" BSPP	140	70	

SAEA

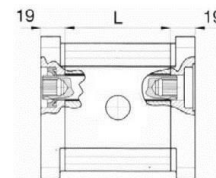
SAE A 2 Bolt Mount
5/8" Straight Keyed
or
9T SAE A Spline
BSPP Threaded Ports

FRONT PUMP



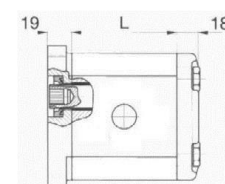
PART NUMBER		CC P/REV	THREADED PORTING		DIMENSION		
5/8" KEYED SHAFT	9T SAE A SPLINED SHAFT		PRESSURE	SUCTION	A	B	
PZ2CG04L4034TD	PZ2CG04S4034TS	4.40	½" BSPP	½" BSPP	89	44.5	
PZ2CG06L4034TD	PZ2CG06S4034TS	6.28	½" BSPP	½" BSPP	92	46	
PZ2CG08L4034TD	PZ2CG08S4034TS	8.16	½" BSPP	½" BSPP	95	47.5	
PZ2CG11L4034TD	PZ2CG11S4034TS	11.30	½" BSPP	½" BSPP	108	54	
PZ2CG14L4041TD	PZ2CG14S4041TS	14.45	¾" BSPP	¾" BSPP	113	56.5	
PZ2CG17L4041TD	PZ2CG17S4041TS	16.95	¾" BSPP	¾" BSPP	117	58.5	
PZ2CG20L4041TD	PZ2CG20S4041TS	20.10	¾" BSPP	¾" BSPP	122	61	
PZ2CG25L4041TD	PZ2CG25S4041TS	25.75	¾" BSPP	¾" BSPP	131	65.5	
PZ2CG31L4041TD	PZ2CG31S4041TS	31.40	¾" BSPP	¾" BSPP	140	70	

MULTIPLEPUMPS



INTERMEDIATE

PART NUMBER		CC P/REV	PORTING		DIM L	
RH ROT	LH ROT		PRESSURE	SUCTION		
PZ2AG04O034ID	PZ2AG04O034IS	4.40	1/2" BSPP	1/2" BSPP	51	
PZ2AG06O034ID	PZ2AG06O034IS	6.28	1/2" BSPP	1/2" BSPP	54	
PZ2AG08O034ID	PZ2AG08O034IS	8.16	1/2" BSPP	1/2" BSPP	57	
PZ2AG11O034ID	PZ2AG11O034IS	11.30	1/2" BSPP	1/2" BSPP	70	
PZ2AG14O035ID	PZ2AG14O035IS	14.45	1/2" BSPP	3/8" BSPP	75	
PZ2AG17O035ID	PZ2AG17O035IS	16.95	1/2" BSPP	3/8" BSPP	79	
PZ2AG20O035ID	PZ2AG20O035IS	20.10	1/2" BSPP	3/8" BSPP	84	
PZ2AG25O035ID	PZ2AG25O035IS	25.75	1/2" BSPP	3/4" BSPP	93	
PZ2AG31O035ID	PZ2AG31O035IS	31.40	1/2" BSPP	3/4" BSPP	102	



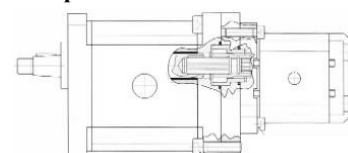
REARPUMP

PART NUMBER		CC P/REV	PORTING		DIM L	
RH ROT	LH ROT		PRESSURE	SUCTION		
PZ2AG04O034ID	PZ2AG04O034IS	4.40	1/2" BSPP	1/2" BSPP	51	
PZ2AG06O034ID	PZ2AG06O034IS	6.28	1/2" BSPP	1/2" BSPP	54	
PZ2AG08O034ID	PZ2AG08O034IS	8.16	1/2" BSPP	1/2" BSPP	57	
PZ2AG11O034ID	PZ2AG11O034IS	11.30	1/2" BSPP	1/2" BSPP	70	
PZ2AG14O035ID	PZ2AG14O035IS	14.45	1/2" BSPP	3/8" BSPP	75	
PZ2AG17O035ID	PZ2AG17O035IS	16.95	1/2" BSPP	3/8" BSPP	79	
PZ2AG20O035ID	PZ2AG20O035IS	20.10	1/2" BSPP	3/8" BSPP	84	
PZ2AG25O035ID	PZ2AG25O035IS	25.75	1/2" BSPP	3/4" BSPP	93	
PZ2AG31O035ID	PZ2AG31O035IS	31.40	1/2" BSPP	3/4" BSPP	102	

Maximum torque loading must conform to the limitations of splined shaft. Max torque is 100Nm

GROUP1Rear

REARPUMP



PART NUMBER		CC P/ REV	PORTS		+ ADAPTOR
RH ROT	LH ROT		PRESSURE	SUCTION	
PZ1A0110001PD	PZ1A0110001PS	1.1CC	3/8" BSPP	3/8" BSPP	
PZ1A0160001PD	PZ1A0160001PS	1.6CC	3/8" BSPP	3/8" BSPP	
PZ1A0210001PD	PZ1A0210001PS	2.1CC	3/8" BSPP	3/8" BSPP	
PZ1A0260001PD	PZ1A0260001PS	2.6CC	3/8" BSPP	3/8" BSPP	
PZ1A0320001PD	PZ1A0320001PS	3.2CC	3/8" BSPP	3/8" BSPP	
PZ1A0370001PD	PZ1A0370001PS	3.7CC	3/8" BSPP	3/8" BSPP	
PZ1A0420001PD	PZ1A0420001PS	4.2CC	3/8" BSPP	3/8" BSPP	
PZ1A0480001PD	PZ1A0480001PS	4.8CC	3/8" BSPP	3/8" BSPP	
PZ1A0550001PD	PZ1A0550001PS	5.5CC	3/8" BSPP	3/8" BSPP	
PZ1A0620001PD	PZ1A0620001PS	6.2CC	3/8" BSPP	3/8" BSPP	
PZ1A0780001PD	PZ1A0780001PS	7.8CC	3/8" BSPP	3/8" BSPP	
PZ1A0880001PD	PZ1A0880001PS	8.8CC	3/8" BSPP	3/8" BSPP	
ADAPTOR KIT GRP 2 TO GRP 1					
PART NUMBER		FRT PUMP SIZE			
K2000003		11, 14, 17, 20, 25, 31			
K2000004		4, 6, 8			

Maximum torque loading must conform to the limitations of splined shaft. Max torque is 27Nm

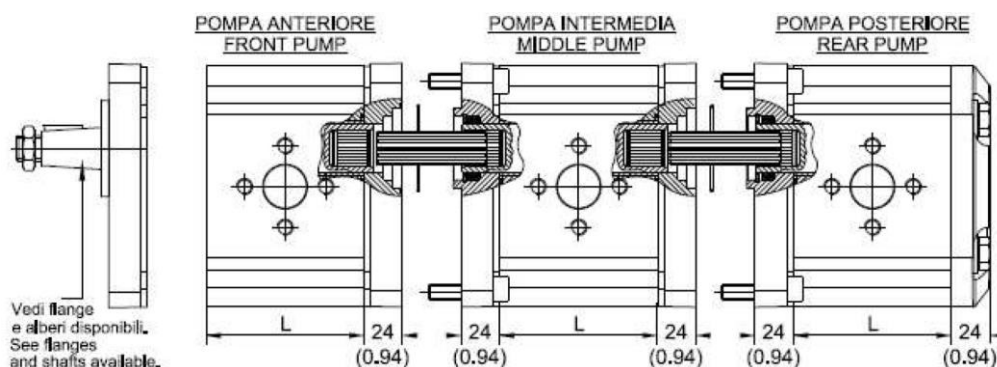
PZ3AG



MODEL IDENTIFICATION CODE

PZ3-AG	25	C	0	64	D
MODEL PZ3-AG ITALIAN STYLE PZ3-BG SAE B		SHAFT B Splined 7/8" 13T C Taper 1:8 L Straight Keyed 7/8"		MODEL 0 European Mtg 3 SAE B Mtg	
TYPE - CAPACITY - cc/rev 20, 25, 30, 35, 40, 45, 55, 64, 80				ROTATION D=RIGHT HAND S=LEFT HAND R=REVERSIBLE	
				PORTS 64 BSPP Ports	

TYPE		20	25	30	35	40	45	55	64	80
Capacity	Cm ³ / Rev	19.9	24.9	29.9	34.3	40.5	45.2	54.5	63.9	78.7
P1 Max Working Pressure	Bar	280	280	280	280	250	250	230	200	170
P2 Max Peak Pressure	Bar	310	310	310	310	280	280	250	220	190
Max Speed for P1 Pressure	Rpm	450	450	350	350	350	350	350	350	350
Max Speed without Load	Rpm	3000	3000	3000	3000	2700	2700	2200	2000	1800
Nm		26.9	33.7	40.4	46.4	54.8	61.1	73.7	86.4	106.5
Kg		10.6	10.8	11	11.2	11.4	11.5	11.9	12.2	12.7
L	mm	77	80	83.2	86	90	93	99	105	114.6



GROUP3PUMPS

PZ3AG GROUP 3

1:8 Taper Shaft

BSPP Threaded Ports

1:8TaperShaft



CAST IRON COVERS AND SPECIAL BUSHINGS, PROJECTED FOR HEAVY DUTY

PART NUMBER	CC P/REV	Max Working Pressure	PORTS	
RH ROT				
PZ3AG25C064TD	25	280 Bar	1" BSPP	
PZ3AG30C064TD	30	280 Bar	1" BSPP	
PZ3AG35C064TD	35	280 Bar	1" BSPP	
PZ3AG40C064TD	40	250 Bar	1" BSPP	
PZ3AG45C064TD	45	250 Bar	1" BSPP	
PZ3AG55C065TD	55	230 Bar	1 1/4" Suction 1" BSPP Pressure	
PZ3AG64C065TD	64	200 Bar	1 1/4" Suction 1" BSPP Pressure	
PZ3AG80C067TD	80	190 Bar	1 1/2" Suction 1 1/4" BSPP Pressure	

PZ3BG SAE B

SAE B 2 Bolt Mount

7/8" Straight Keyed Shaft

BSPP Threaded Ports

7/8" StraightKeyedShaft



CAST IRON COVERS AND SPECIAL BUSHINGS, PROJECTED FOR HEAVY DUTY

PART NUMBER	CC P/REV	Max Working Pressure	PORTS	
RH ROT				
PZ3BG25L364TD	25	280 Bar	1" BSPP	
PZ3BG30L364TD	30	280 Bar	1" BSPP	
PZ3BG35L364TD	35	280 Bar	1" BSPP	
PZ3BG40L364TD	40	250 Bar	1" BSPP	
PZ3BG45L364TD	45	250 Bar	1" BSPP	
PZ3BG55L365TD	55	230 Bar	1 1/4" Suction 1" BSPP Pressure	
PZ3BG64L365TD	64	200 Bar	1 1/4" Suction 1" BSPP Pressure	
PZ3BG80L367TD	80	190 Bar	1 1/2" Suction 1 1/4" BSPP Pressure	

PZ3BG SAE B

SAE B 2 Bolt Mount

7/8" 13T Splined Shaft

BSPP Threaded Ports

7/8"13TSplinedShaft



CAST IRON COVERS AND SPECIAL BUSHINGS, PROJECTED FOR HEAVY DUTY

PART NUMBER	CC P/REV	Max Working Pressure	PORTS	
RH ROT				
PZ3BG25B364TD	25	280 Bar	1" BSPP	
PZ3BG30B364TD	30	280 Bar	1" BSPP	
PZ3BG35B364TD	35	280 Bar	1" BSPP	
PZ3BG40B364TD	40	250 Bar	1" BSPP	
PZ3BG45B364TD	45	250 Bar	1" BSPP	
PZ3BG55B365TD	55	230 Bar	1 1/4" Suction 1" BSPP Pressure	
PZ3BG64B365TD	64	200 Bar	1 1/4" Suction 1" BSPP Pressure	
PZ3BG80B367TD	80	190 Bar	1 1/2" Suction 1 1/4" BSPP Pressure	

CAST IRON PUMPS

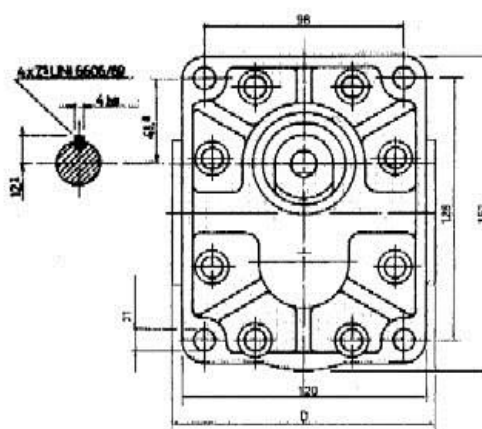
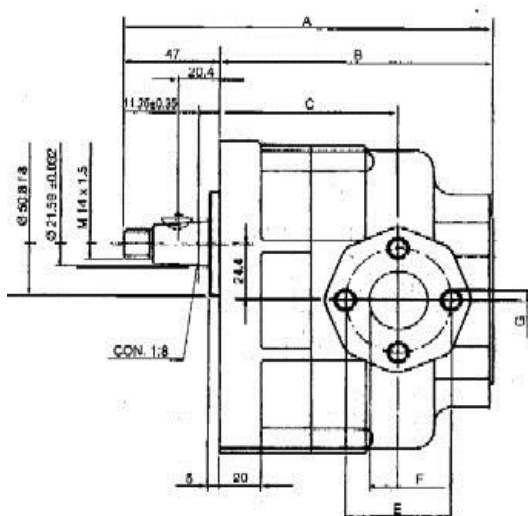
Flanged Ports
1:8 Taper Shaft



PART NUMBER		CC P/REV	PORTING						
RH ROT	LH ROT		PRESSURE			SUCTION			
			E	F	G	E	F	G	
PW325DAC	PW325SAC	24.9	40	20	M8	51	28	M10	
PW335DAC	PW335SAC	34.3	40	20	M8	51	28	M10	
PW345DAC	PW345SAC	45.2	40	20	M8	51	28	M10	
PW355DAC	PW355SAC	54.5	40	20	M8	51	28	M10	
PW364DAC	PW364SAC	63.9	51	28	M10	62	33	M12	
PW380DAC	PW380SAC	78.7	51	28	M10	62	33	M12	

SPECIFICATIONS

Type		25	35	45	55	64	80
Capacity	cc/rev.	24.9	34.3	45.2	54.5	63.9	78.7
Max. working pressure	bar	300	280	250	230	200	170
Peak pressure	bar	350	330	300	270	240	210
Max. speed for P1 press	r.p.m.	3000	2500	2200	2000	2000	1800
Max. speed without load	r.p.m.	3500	3000	2800	2500	2500	2200
Min.speed for P1(undirect.)	r.p.m	450	350	350	300	250	200
Overall dimensions	A	169	175	182	188	193	203
	B	122	128	135	141	146	156
	C	76	82	89	95	85	95
	D	127	127	127	127	132	132



CAST IRON PUMPS

SAE B Mount
Splined Shaft
Threaded Ports



PART NUMBER		CC P/REV	PORTING		
RH ROT	Stamped		PRESSURE	SUCTION	
PW315SAEBDAS	030W0015BOD	15.6	7/8 UNO	1 1/16 UNO	
PW325SAEBDAS	030W0025BOD	24.9	7/8 UNO	1 1/16 UNO	
PW335SAEBDAS	030W0035BOD	34.3	1 1/16 UNO	1 5/16 UNO	
PW345SAEBDAS	030W0045BOD	45.2	1 1/16 UNO	1 5/8 UNO	
PW355SAEBDAS	030W0055BOD	54.5	1 1/16 UNO	1 5/8 UNO	
PW364SAEBDAS	030W0064BOD	63.9	1 5/16 UNO	1 5/8 UNO	
PW380SAEBDAS	030W0080BOD	78.7	1 5/8 UNO	1 7/8 UNO	



NFA Chelsea Mount

13T 7/8" Splined Shaft
Optional Rear Suction Port LH

PART NUMBER		CC P/REV	PORTING		
LH ROT	Stamped		PRESSURE	SUCTION	
NFA35DPHS	032NF035DOS	34.3	1 1/16 UNO	1 5/16 UNO	
NFA45DPHS	032NF045DOS	45.2	1 1/16 UNO	1 5/8 UNO	
NFA55DPHS	032NF055DOS	54.5	1 1/16 UNO	1 5/8 UNO	
NFA64DPHS	032NF064DOS	63.9	1 5/16 UNO	1 5/8 UNO	
NFA80DPHS	032NF080DOS	78.7	1 5/8 UNO	1 7/8 UNO	

SPECIFICATIONS

Type		15	25	35	45	55	64	80
Capacity	cc/rev.	15.6	24.9	34.3	45.2	54.5	63.9	78.7
Max. working pressure	bar	300	300	280	250	230	200	170
Peak pressure	bar	350	350	330	300	270	240	210
Max. speed for P1 press	r.p.m.	3000	3000	2500	2200	2000	2000	1800
Max. speed without load	r.p.m.	3500	3500	3000	2800	2500	2500	2200
Min.speed for P1(undirect.)	r.p.m	450	450	350	350	300	250	200
Overall dimensions	A	152	157	163	176	176	182	191
	B	107	111	117	124	130	121	130
	C	130	130	130	130	130	135	135

GROUP3MULTIPLEPUMPS

PZ3AG GROUP 3

1:8 Taper Shaft
BSPP Threaded Ports

FRONTPUMP



CAST IRON COVERS AND SPECIAL BUSHINGS, PROJECTED FOR HEAVY DUTY

PART NUMBER	CC P/REV	Max Working Pressure	PORTS	
RH ROT				
PZ3AG25C064TD	25	280 Bar	1" BSPP	
PZ3AG30C064TD	30	280 Bar	1" BSPP	
PZ3AG35C064TD	35	280 Bar	1" BSPP	
PZ3AG40C064TD	40	250 Bar	1" BSPP	
PZ3AG45C064TD	45	250 Bar	1" BSPP	
PZ3AG55C065TD	55	230 Bar	1 1/4" Suction 1" BSPP Pressure	
PZ3AG64C065TD	64	200 Bar	1 1/4" Suction 1" BSPP Pressure	
PZ3AG80C067TD	80	190 Bar	1 1/2" Suction 1 1/4" BSPP Pressure	

PZ3BG SAE B

SAE B 2 Bolt Mount
7/8" Straight Keyed Shaft

FRONT PUMP



BSPP Threaded Ports

7/8" Straight Keyed Shaft

CAST IRON COVERS AND SPECIAL BUSHINGS, PROJECTED FOR HEAVY DUTY

PART NUMBER	CC P/REV	Max Working Pressure	PORTS	
RH ROT				
PZ3BG25L364TD	25	280 Bar	1" BSPP	
PZ3BG30L364TD	30	280 Bar	1" BSPP	
PZ3BG35L364TD	35	280 Bar	1" BSPP	
PZ3BG40L364TD	40	250 Bar	1" BSPP	
PZ3BG45L364TD	45	250 Bar	1" BSPP	
PZ3BG55L365TD	55	230 Bar	1 1/4" Suction 1" BSPP Pressure	
PZ3BG64L365TD	64	200 Bar	1 1/4" Suction 1" BSPP Pressure	
PZ3BG80L367TD	80	190 Bar	1 1/2" Suction 1 1/4" BSPP Pressure	

PZ3BG SAE B

SAE B 2 Bolt Mount
7/8" 13T Splined Shaft

FRONT PUMP



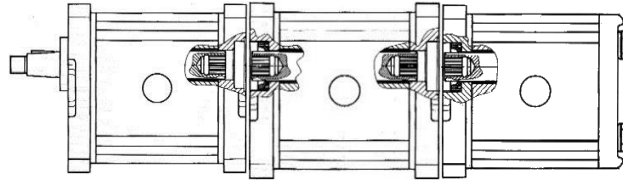
BSPP Threaded Ports

7/8" 13T Splined Shaft

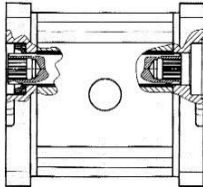
CAST IRON COVERS AND SPECIAL BUSHINGS, PROJECTED FOR HEAVY DUTY

PART NUMBER	CC P/REV	Max Working Pressure	PORTS	
RH ROT				
PZ3BG25B364TD	25	280 Bar	1" BSPP	
PZ3BG30B364TD	30	280 Bar	1" BSPP	
PZ3BG35B364TD	35	280 Bar	1" BSPP	
PZ3BG40B364TD	40	250 Bar	1" BSPP	
PZ3BG45B364TD	45	250 Bar	1" BSPP	
PZ3BG55B365TD	55	230 Bar	1 1/4" Suction 1" BSPP Pressure	
PZ3BG64B365TD	64	200 Bar	1 1/4" Suction 1" BSPP Pressure	
PZ3BG80B367TD	80	190 Bar	1 1/2" Suction 1 1/4" BSPP Pressure	

GROUP3MULTIPLEPUMPS

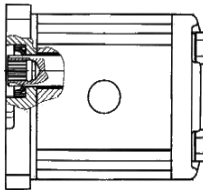


Intermediate Pump



PART NUMBER	CC P/REV	PORTS		
RH ROT				
PZ3AG250064ID	25	1" BSPP		
PZ3AG300064ID	30	1" BSPP		
PZ3AG350064ID	35	1" BSPP		
PZ3AG400064ID	40	1" BSPP		
PZ3AG450064ID	45	1" BSPP		
PZ3AG550065ID	55	1 1/4" BSPP	1" BSPP	
PZ3AG640065ID	64	1 1/4" BSPP	1" BSPP	
PZ3AG800067ID	80	1 1/2" BSPP	1 1/4" BSPP	

Rear Pump



PART NUMBER	CC P/REV	PORTS		
RH ROT				
PZ3AG250064PD	25	1" BSPP		
PZ3AG300064PD	30	1" BSPP		
PZ3AG350064PD	35	1" BSPP		
PZ3AG400064PD	40	1" BSPP		
PZ3AG450064PD	45	1" BSPP		
PZ3AG550065PD	55	1 1/4" BSPP	1" BSPP	
PZ3AG640065PD	64	1 1/4" BSPP	1" BSPP	
PZ3AG800067PD	80	1 1/2" BSPP	1 1/4" BSPP	

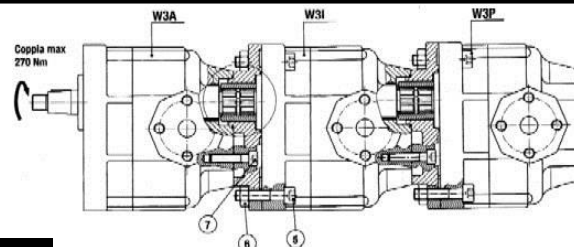
Assembly Kits

PART NUMBER	DESCRIPTION	
K3000029	PZ3 to PZ1 Group 3 to Group 1 Assembly Kit	
K3000030	PZ3 to PZ2 Group 3 to Group 2 Assembly Kit	
K3000034	PZ3 to PZ3 Group 3 to Group 3 Assembly Kit	

Specifications (PZ3AG)

	25	30	35	40	45	55	64	80
CC P/Rev	24.9	29.9	34.3	40.5	45.2	54.5	63.9	78.7
P1 Max working Pressure	280	280	280	250	250	230	200	170
P2 Peak Pressure for 5"	310	310	310	280	280	250	220	190
Min Speed for P1	450	350	350	350	350	350	350	350
Max Speed for P1	3000	3000	3000	2700	2700	2200	2000	1800
KG	10.8	11	11.2	11.4	11.5	11.9	12.2	12.7
Oil Viscosity @ 50°C	2.5-6.5"E							

GROUP3MULTIPLECASTPUMPS



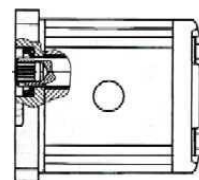
Group 3
Flanged Ports
1:8 Taper Shaft

FrontPump

PART NUMBER		CC P/REV	DIMENSION		PORTING						
RH ROT	LH ROT				PRESSURE			SUCTION			
			A	B	E	F	G	E	F	G	
PW3A25DAC	PW3A25SAC	24.9	120.5	85	40	20	M8	51	28	M10	
PW3A35DAC	PW3A35SAC	34.3	124.5	82	40	20	M8	51	28	M10	
PW3A45DAC	PW3A45SAC	45.2	131.5	89	40	20	M8	51	28	M10	
PW3A55DAC	PW3A55SAC	54.5	137.5	95	40	20	M8	51	28	M10	
PW3A64DAC	PW3A64SAC	63.9	143.5	85.5	51	28	M10	62	33	M12	
PW3A80DAC	PW3A80SAC	78.7	153	95	51	28	M10	62	33	M12	

RearPump

PART NUMBER		CC P/REV	DIMENSION		PORTING						
RH ROT	LH ROT				PRESSURE			SUCTION			
			A	B	E	F	G	E	F	G	
PW3P25DAC	PW3P25SAC	24.9	120.5	85	40	20	M8	51	28	M10	
PW3P35DAC	PW3P35SAC	34.3	124.5	82	40	20	M8	51	28	M10	
PW3P45DAC	PW3P45SAC	45.2	131.5	89	40	20	M8	51	28	M10	
PW3P55DAC	PW3P55SAC	54.5	137.5	95	40	20	M8	51	28	M10	
PW3P64DAC	PW3P64SAC	63.9	143.5	85.5	51	28	M10	62	33	M12	
PW3P80DAC	PW3P80SAC	78.7	153	95	51	28	M10	62	33	M12	

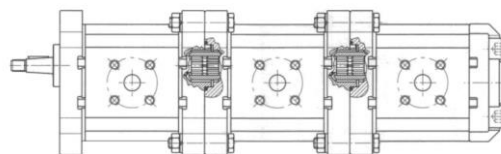


STDGroup2Rear

Aluminium

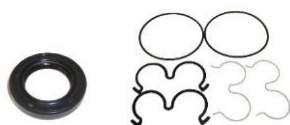
PART NUMBER		CC P/REV	PORTING		DIM L	
RH ROT	LH ROT		PRESSURE	SUCTION		
PZ2AG04O034ID	PZ2AG04O034IS	4.40	½" BSPP	½" BSPP	51	
PZ2AG06O034ID	PZ2AG06O034IS	6.28	½" BSPP	½" BSPP	54	
PZ2AG08O034ID	PZ2AG08O034IS	8.16	½" BSPP	½" BSPP	57	
PZ2AG11O034ID	PZ2AG11O034IS	11.30	½" BSPP	½" BSPP	70	
PZ2AG14O035ID	PZ2AG14O035IS	14.45	½" BSPP	¾" BSPP	75	
PZ2AG17O035ID	PZ2AG17O035IS	16.95	½" BSPP	¾" BSPP	79	
PZ2AG20O035ID	PZ2AG20O035IS	20.10	½" BSPP	¾" BSPP	84	
PZ2AG25O035ID	PZ2AG25O035IS	25.75	½" BSPP	¾" BSPP	93	
PZ2AG31O035ID	PZ2AG31O035IS	31.40	½" BSPP	¾" BSPP	102	
ADAPTOR KITS GRP 3 TO GRP 2						
PART NUMBER		GRP 2 REAR PUMP SIZE				
K3000001		11, 14, 17, 20, 25, 31				
K3000002		4, 6, 8				

Maximum torque loading must conform to the limitations of the splined shaft. Max Torque is 100NM



Assembly Kits

PART NUMBER	DESCRIPTION	PUMP TYPE	+	PUMP TYPE	
K1000000	GRP1 TO GRP1	PZ1A ALL		PZ1A ALL	
K2000000	GRP2 TO GRP 2	PZ2A31,25,20,17,14,11		PZ2A 31,25,20,17,14,11	
K2000001	GRP2 TO GRP 2	PZ2A31,25,20,17,14,11		PZ2A 8, 6, 4	
K2000002	GRP2 TO GRP 2	PZ2A 8, 6, 4		PZ2A 8, 6, 4	
K2000003	GRP2 TO GRP1	PZ2A31,25,20,17,14,11		PZ1A-ALL	
K2000004	GRP2 TO GRP1	PZ2A 8, 6, 4		PZ1A-ALL	
K3000000	GRP3 TO GRP3	PW3 CAST		PW3	
K3000001	GRP3 TO GRP2	PW3 CAST		PZ2A31,25,20,17,14,11	
K3000002	GRP3 TO GRP2	PW3 CAST		PZ2A 8, 6, 4	
K3000029	GRP 3 to GRP 1	PZ3 to PZ1 Alloy			
K3000030	GRP 3 to GRP 2	PZ3 to PZ2 Alloy			
K3000034	GRP 3 to GRP 3	PZ3 to PZ3 Alloy			

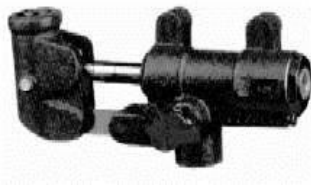


Seal Kits



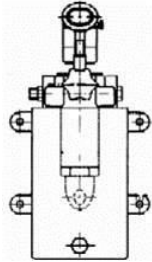
PART NUMBER	DESCRIPTION	
PZ1A-SK	GRP1 SEAL KIT	
PZ1A-SS	GRP1 SHAFT SEAL	
PZ2A-SK	GRP2 SEAL KIT	
PZ2A-SS	GRP2 SHAFT SEAL	
PZ3A-SK	GRP3 SEAL KIT	
PZ3A-SS	GRP3 SHAFT SEAL	
PW3-SK	GRP3 SEAL KIT	
PW3-SS	GRP3 SHAFT SEAL	
MZ2A-SK	GRP2 MOTOR SEAL KIT	
MZ2A-SS	GRP2 MOTOR SHAFT SEAL	
MW3-SK	GRP3 MOTOR SEAL KIT	
MW3-SS	GRP3 MOTOR SHAFT SEAL	

HANDPUMPS



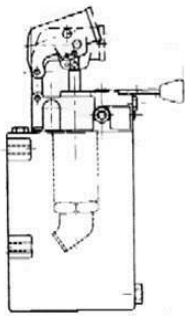
Tankless with Lever No Relief

PART NUMBER	DESCRIPTION	DISP CM3/CYCLE	MAX PRESSURE	
HP1-20	TANKLESS HAND PUMP	20 CC	350	
HP1-50	TANKLESS HAND PUMP	45CC	260	



PART NUMBER	DESCRIPTION	DISP CM3/CYCLE	MAX PRESSURE	
HPT1-2-1	S/ACTING - 2 LITRE TANK	12	380	
HPT2-2-1	S/ACTING - 2 LITRE TANK	25	350	
HPT3-2-1	S/ACTING - 2 LITRE TANK	45	280	

SINGLE ACTING WITH TANK & LEVER NO RELIEF



PART NUMBER	DESCRIPTION	DISP CM3/CYCLE	MAX PRESSURE	
HPTD1-2-1	D/ACTING - 2 LITRE TANK	12	380	
HPTD2-2-1	D/ACTING - 2 LITRE TANK	25	350	
HPTD3-2-1	D/ACTING - 2 LITRE TANK	45	280	

DOUBLE ACTING WITH TANK & LEVER NO RELIEF

OPTIONAL TANKS

PART NUMBER	DESCRIPTION	
HP-2	2 LITRE	
HP-3	3 LITRE	
HP-5	5 LITRE	
HP-7	7 LITRE	
HP-10	10 LITRE	

Motor section

Including Brakes and Gear Boxes

	Page
MZ2AG & PZ2CG Gear Motors	2.01
BMM	2.02
BMP & BMPH Specifications	2.03
BMP Motors	2.04
BMPH Motors	2.05
BMR & BMRS Specifications	2.06
BMR Motors	2.07
BMRS Motors	2.08
BMS Specifications	2.09
BMS Motors	2.010
BMT Motors	2.011
BMV Motors	2.012
BK2 Brake	2.013
HGB Gear Box	2.014
Special Motors	2.015

GEARMOTORS

MZ2AG

GROUP 2
THREADED PORTS
1:8 TAPER SHAFT
CASE DRAIN

GROUP 2 Mount



CASE DRAIN MUST BE FITTED

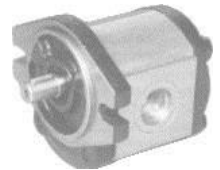
CAST IRON COVERS AND SPECIAL BUSHINGS, PROJECTED FOR HEAVY DUTY

PART NUMBER RH ROT	CC P/REV	PORTING			
		PRESSURE	SUCTION	DRAIN	
MZ2AG06C034R	6.28	1/2" BSPP	1/2" BSPP	1/4" BSPP	
MZ2AG08C034R	8.16	1/2" BSPP	1/2" BSPP	1/4" BSPP	
MZ2AG11C034R	11.30	1/2" BSPP	1/2" BSPP	1/4" BSPP	
MZ2AG14C041R	14.45	3/4" BSPP	3/4" BSPP	1/4" BSPP	
MZ2AG17C041R	16.95	3/4" BSPP	3/4" BSPP	1/4" BSPP	
MZ2AG20C041R	20.10	3/4" BSPP	3/4" BSPP	1/4" BSPP	
MZ2AG25C041R	25.75	3/4" BSPP	3/4" BSPP	1/4" BSPP	
MZ2AG31C041R	31.40	3/4" BSPP	3/4" BSPP	1/4" BSPP	

PZ2-CG

SAE A 2 BOLT MOUNT
THREADED PORTS
SAE 5/8" KEYED SHAFT
OR
SAE 9T SPLINED SHAFT

SAEAMount



BI ROTATIONAL

CASE DRAIN MUST BE FITTED

CAST IRON COVERS AND SPECIAL BUSHINGS, PROJECTED FOR HEAVY DUTY

PART NUMBER		CC P/REV	THREADED PORTING			
5/8" KEYED SHAFT	9T SAE A SPLINED SHAFT		PRESSURE	SUCTION	DRAIN	
PZ2-CG06L4034R	PZ2-CG06S4034R	6.28	1/2" BSPP	1/2" BSPP	7/16 UNF	
PZ2-CG08L4034R	PZ2-CG08S4034R	8.16	1/2" BSPP	1/2" BSPP	7/16 UNF	
PZ2-CG11L4034R	PZ2-CG11S4034R	11.30	1/2" BSPP	1/2" BSPP	7/16 UNF	
PZ2-CG14L4041R	PZ2-CG14S4041R	14.45	3/4" BSPP	3/4" BSPP	7/16 UNF	
PZ2-CG17L4041R	PZ2-CG17S4041R	16.95	3/4" BSPP	3/4" BSPP	7/16 UNF	
PZ2-CG20L4041R	PZ2-CG20S4041R	20.10	3/4" BSPP	3/4" BSPP	7/16 UNF	
PZ2-CG25L4041R	PZ2-CG25S4041R	25.75	3/4" BSPP	3/4" BSPP	7/16 UNF	
PZ2-CG31L4041R	PZ2-CG31S4041R	31.40	3/4" BSPP	3/4" BSPP	7/16 UNF	

SEALKITS

PART NUMBER	DESCRIPTION	
MZ2A-SK	GRP2 MOTOR SEAL KIT	
MZ2A-SS	GRP2 MOTOR SHAFT SEAL	
MW3-SK	GRP3 MOTOR SEAL KIT	
MW3-SS	GRP3 MOTOR SHAFT SEAL	



BMM MOTORS

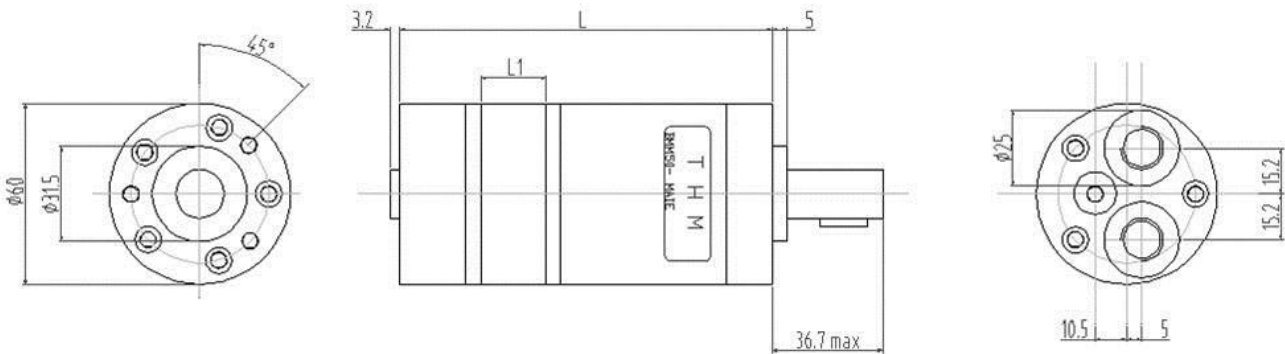


Rear Ports
3/8" BSPP

CC/REV	PART NUMBER	L	L1	
8cc/Rev	BMM8-M-A-IE-00	104	3.5	
20cc/Rev	BMM20-M-A-IE-00	109	8.5	
32cc/Rev	BMM32-M-A-IE-00	114	13.5	
40cc/Rev	BMM40-M-A-IE-00	117.5	17	
50cc/Rev	BMM50-M-A-IE-00	122	21.5	
BMM-SK	Seal Kit			

Side Ports
3/8" BSPP

CC/REV	PART NUMBER	L	L1	
8cc/Rev	BMM8-M-A-E-00	105	3.5	
20cc/Rev	BMM20-M-A-E-00	110	8.5	
32cc/Rev	BMM32-M-A-E-00	115	13.5	
40cc/Rev	BMM40-M-A-E-00	118.5	17	
50cc/Rev	BMM50-M-A-E-00	123	21.5	
BMM-SK	Seal Kit			



Pos 1	2	3	4	5	6	7
Code	Disp cc/rev	Flange	Output Shaft	Ports	Rotation	Paint
BMM	8	3-M6 Circle Flange, pilot 31.5x5	M ShaftØ16, parallel key 5x5x16	A G3/8,G38	E STD	None
	12.5					
	16	3-1/4-28UNF Circle Flange, pilot 31.5x5	U ShaftØ15.875,parallel key 4.8x4.8x19.35	B 9/16-18UNF,3/8-24UNF	IE Oppo- site	R
	20					
	32	2-9mm flange, pilot 63 x 2	F ShaftØ16.5,involute B17x14,DIN5482	C Back port G3/8,G1/8	IU	No Paint
	40					
	50			Back port 9/16-18UNF, 3/8-24UNF		00

BMP & BMPH HYDRAULIC MOTORS



ORDERING CODE

1	2	3	4	5	6	7	8		
BMP		-		-		-		-	

POS 1	2	3		4		5	
Code	Disp	Flange		Shaft		Ports	
None	36	SAE A 2 Bolt	2	25mm Metric Parallel Key 8x7x32	A	½" BSPP	D
	50	SAE A 4 Bolt	4	1" (25.4mm) Parallel Key 6.35x6.35x31.75	C		
	80	Magneto					
	100	4 Bolt Square M10	H5	SAE 6B Splined 1" (25.4mm)	E		
	125						
H	160						
	200						
	250	SAE A 2 Bolt	H2			7/8"-14 Oring	S
	315	4 Bolt Square M10	H4	1" (25.4mm) Woodruff Key 25.4 x6.35	K		
	400						

Main Specifications

		BMP50	BMP80	BMP100	BMP125	BMP160	BMP200	BMP250	BMP315	BMP400
Geometric Displacement (cm ³ /rev)		51.7	77.7	96.2	117.9	155.5	189.9	231	311.7	386.2
Max speed (rpm)	Rated	850	650	520	390	310	260	200	156	130
	Cont	879	740	589	475	370	296	237	189	149
	Int	975	827	673	594	463	370	297	236	185
Max Torque (N-m)	Rated	81	129	161	202	204	259	325	345	435
	Cont	81	129	161	202	245	286	360	406	435
	Int	106	171	213	268	342	390	456	505	533
Max Output (Kw)	Rated	7	8.6	8.6	8	6.5	6.9	6.6	5.5	5.8
	Cont	7	9.1	9	9.1	8.7	8.1	8.2	7.2	6.1
	Int	8.9	11.8	11.9	11.8	11.9	10.9	10.1	8.6	7.2
Max Pressure Drop (Mpa)	Rated	12.5	12.5	12.5	12.5	10	10	10	8.5	8.5
	Cont	12.5	12.5	12.5	12.5	12.5	11	11	11	10
	Int	16.5	16.5	16.5	16.5	16.5	16.5	14	12.5	10.5
	Peak	16.5	16.5	16.5	16.5	16.5	16.5	14	12.5	10.5
Max Flow (L/min)	Rated	45	55	55	55	55	55	55	55	55
	Cont	45	60	60	60	60	60	60	60	60
	Int	50	75	75	75	75	75	75	75	75
Weight (Kg)		5.6	5.7	5.9	6	6.2	6.4	6.6	6.9	7.4

GEROTOR MOTOR

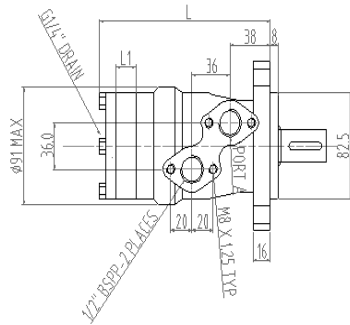
2 BOLT SAE A MOUNT



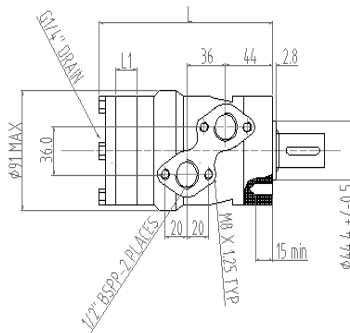
BMP

**SAE A 2 BOLT MOUNT
1" STRAIGHT KEYED SHAFT
½" BSPP PORTS**

NEEDLE BEARINGS



CC/REV	PART NUMBER	L	L1	
36CC	BMP36-2-C-D	136	7	
50CC	BMP50-2-C-D	137	7	
80CC	BMP80-2-C-D	140.5	10.5	
100CC	BMP100-2-C-D	143	13	
125CC	BMP125-2-C-D	146	16	
160CC	BMP160-2-C-D	151	21	
200CC	BMP200-2-C-D	157	26	
250CC	BMP250-2-C-D	162	32	
315CC	BMP315-2-C-D	172	42	
400CC	BMP400-2-C-D	182	52	



OPTIONS	ADD TO LIST PRICE
1. 100% Cash	
2. 100% Cash	
3. 100% Cash	
4. 100% Cash	
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97. 100% Cash	
98. 100% Cash	
99. 100% Cash	
100. 100% Cash	

MOUNTS

- | | |
|----|-----------------------------|
| 2 | 2 Bolt SAE A Mount STANDARD |
| H5 | 4 Bolt Square Mount M10 |
| 4 | 4 Bolt Magneto Mount |

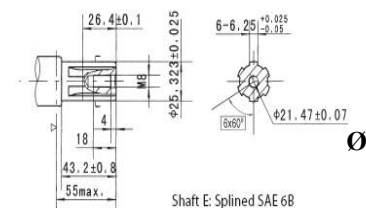
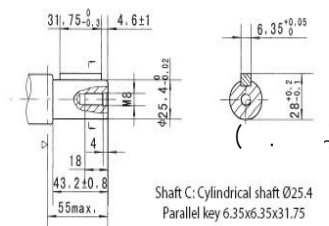
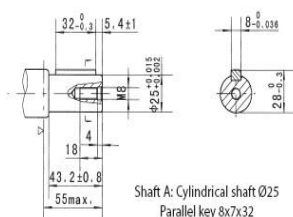
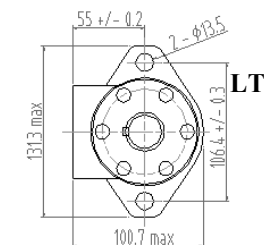
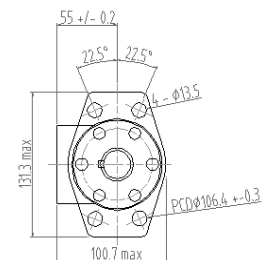
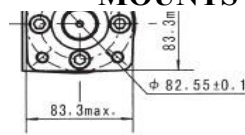
SHAFTS

- C Ø 1" Keyed Shaft 25.4 (Key 6.35x6.35x31.75)
 A Ø 25mm Keyed Shaft (Key 8x7x32)
 E 6B 1" Ø SAE 6B Splined Shaft

SEAL KIT

BMP-SK SEAL KIT

MOUNTS



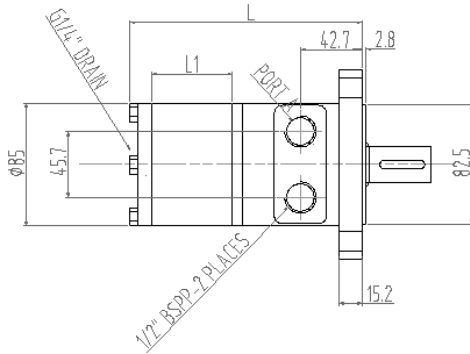
GEROTOR MOTOR

2 BOLT SAE A MOUNT

BMPH

SAE A 2 BOLT MOUNT
1" STRAIGHT KEYED SHAFT
7/8" O-ring PORTS

NEEDLE BEARINGS



CC/REV	PART NUMBER	L	L1	
50CC	BMPH50-H2-K-S	141	7	
80CC	BMPH80-H2-K-S	144.5	10.5	
100CC	BMPH100-H2-K-S	147	13	
125CC	BMPH125-H2-K-S	150	16	
160CC	BMPH160-H2-K-S	155	21	
200CC	BMPH200-H2-K-S	160	26	
250CC	BMPH250-H2-K-S	166	32	
315CC	BMPH315-H2-K-S	176	42	
400CC	BMPH400-H2-K-S	186	52	

OPTIONS ADD TO LIST PRICE

MOUNTS

H2 2 Bolt SAE A Mount STANDARD
H4 4 Bolt Square Mount 3/8" unc

SHAFTS **K** Ø 1" Keyed Shaft 25.4 (Woodruff Key 6.35)

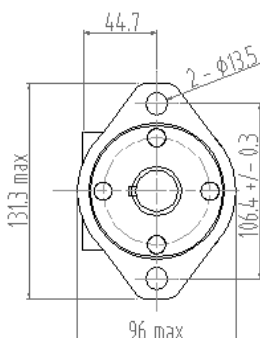
SEAL KIT

BMPH-SK SEAL KIT

MOUNTS

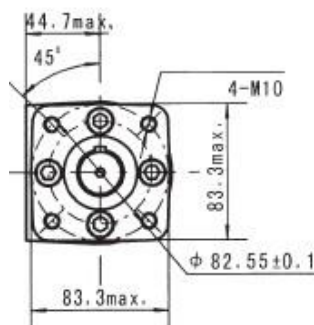
H2

SAE A 2 BOLT
Standard



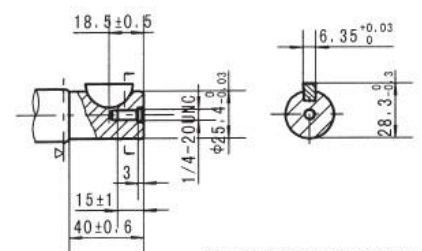
H4

4 BOLT SQUARE

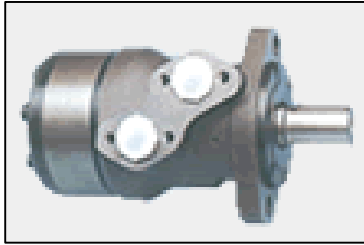


SHAFTS

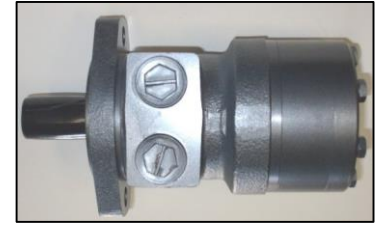
K Ø 1" (25.4mm)



Shaft K: Cylindrical shaft Ø25.4
Woodruff key Ø25.4x6.35



BMR & BMRS HYDRAULIC MOTORS



ORDERING CODE

1	2	3	4	5	6	7	8		
BMR		-		-		-		-	

POS 1	2	3		4		5	
Code	Disp	Flange		Shaft		Ports	
None	36	SAE A 2 Bolt	2	25mm Metric Parallel Key 8x7x32	A	$\frac{1}{2}$ " BSPP	D
	50	SAE A 4 Bolt	4	1" (25.4mm) Parallel Key 6.35x6.35x31.75	C		
	80	Magneto					
	100	4 Bolt Square M10	H5	SAE 6B Splined 1" (25.4mm)	E		
S	125					7/8"-14 Oring	S
	160						
	200						
	250						
	315	SAE A 2 Bolt	H2	1" (25.4mm) Parallel Key 6.35x6.35x31.75	K		
	400	4 Bolt Square M10	H4				

Main Specifications

		BMR50	BMR80	BMR100	BMR125	BMR160	BMR200	BMR250	BMR315	BMR400
Geometric Displacement (cm ³ /rev)		51.3	80.6	100.8	124.9	157.2	199.2	252	314.5	370
Max speed (rpm)	Rated	755	750	600	475	375	300	240	190	160
	Cont	970	940	750	600	470	375	300	240	200
Max Torque (N-m)	Rated	100	160	200	250	320	330	352	360	420
	Cont	100	190	240	292	363	358	352	360	420
	Int	126	220	280	340	430	448	470	470	548
Max Output (Kw)	Rated	7.7	12.3	12.3	12	12.3	10	9	7	6.5
	Cont	7.7	15	15	14	14	11	9	7	6.6
	Int	9.7	17	17	16	16	14	12	9	12
Max Pressure Drop (Mpa)	Rated	14	14	14	14	14	12	11	8.5	8.5
	Cont	14	17.5	17.5	17.5	16.5	13	11	8.5	8.5
	Int	17.5	20	20	20	20	17.5	14	11.5	11.5
Max Flow (L/min)	Cont	40	60	60	60	60	60	60	60	60
	Int	50	75	75	75	75	75	75	75	75
Weight (Kg)		6.7	6.9	6.9	7.2	7.5	8.0	8.5	9	9.3

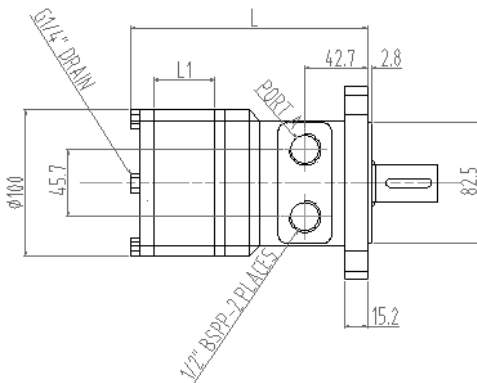
GEROLER MOTOR
2 BOLT SAE A MOUNT



BMRS

SAE A 2 BOLT MOUNT
1" STRAIGHT KEYED SHAFT
7/8 UNO PORTS

NEEDLE BEARINGS



CC/REV	PART NUMBER	L	L1	
50CC	BMRS50-H2-K-S	144	10	
80CC	BMRS80-H2-K-S	150	16	
100CC	BMRS100-H2-K-S	154	20	
125CC	BMRS125-H2-K-S	159	25	
160CC	BMRS160-H2-K-S	165	31.5	
200CC	BMRS200-H2-K-S	174	40	
250CC	BMRS250-H2-K-S	184	50	
315CC	BMRS315-H2-K-S	196	62	
400CC	BMRS400-H2-K-S	208	74	

OPTIONS ADD TO LIST PRICE

MOUNTS

H2 2 Bolt SAE A Mount STANDARD
H4 4 Bolt Square Mount 3/8" unc

SHAFTS **K** Ø 1" Keyed Shaft 25.4 (Woodruff Key 6.35)

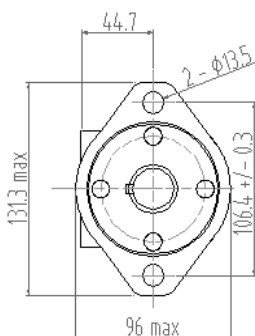
SEAL KIT

BMRS-SK SEAL KIT

Mounts

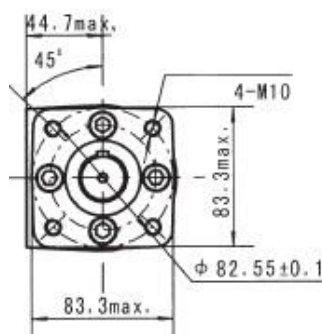
H2

SAE A 2 BOLT
Standard



H4

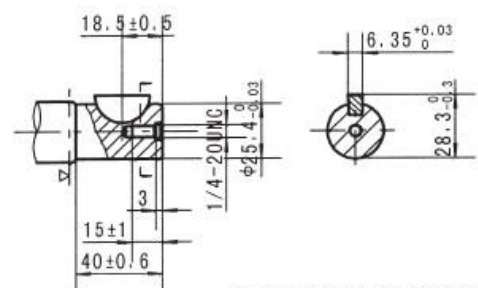
4 BOLT SQUARE



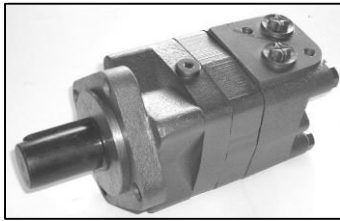
Shafts

K

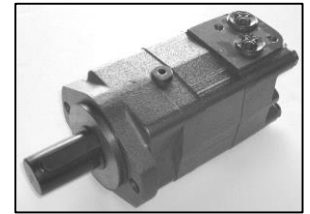
Ø 1" (25.4mm)



Shaft K: Cylindrical shaft Ø25.4
Woodruff key Ø25.4x6.35



BMS



ORDERING CODE

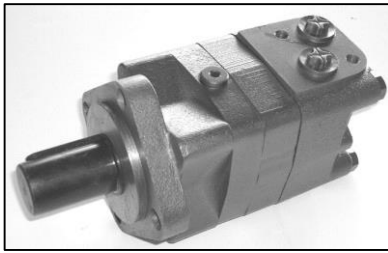
1	2	3	4	5	6	7	8
BMS		-		-		-	

POS 1	2	3		4		5	
Code	Disp	Flange		Shaft		Ports	
None	80	SAE A 2 Bolt	E2	32mm Metric Parallel Key 10X8X45	B	½" BSPP	D
	100			11/4" (31.75mm) Parallel Key 7.96X7.96X31.75	G		
	125	SAE A 4 Bolt	E4				
	160			SAE C 14T Splined 14-DP12/24	F		
	200						
	250						
	315						
	400						

Main Specifications

		BMS80	BMS100	BMS125	BMS160	BMS200	BMS250	BMS315	BMS400
Geometric Displacement (cm ³ /rev)		80.6	100.8	125	157.2	200	252	314.5	370
Max speed (rpm)	Rated	675	540	432	337	270	216	171	145
	Cont	800	748	600	470	375	300	240	200
	Int	988	900	720	560	450	360	280	240
Max Torque (N-m)	Rated	175	220	273	316	340	450	560	576
	Cont	190	240	310	316	400	450	560	576
	Int	240	300	370	430	466	540	658	700
	Peak	260	320	400	472	650	690	840	740
Max Output (Kw)	Rated	12.4	12.4	12.4	11.2	9.6	10.2	10	8.6
	Cont	15.9	18.8	19.5	15.6	15.7	14.1	14.1	11.8
	Int	20.1	23.5	23.2	21.2	18.3	17	18.9	17
Max Pressure Drop (Mpa)	Rated	16	16	16	15	12.5	12.5	12	10
	Cont	17.5	17.5	17.5	15	14	12.5	12	10
	Int	21	21	21	21	16	16	14	12
	Peak	22.5	22.5	22.5	22.5	22.5	20	18.5	14
Max Flow (L/min)	Cont	65	75	75	75	75	75	75	75
	Int	80	90	90	90	90	90	90	90
Max Inlet Pressure	Rated	21	21	21	21	21	21	21	21
	Cont	25	25	25	25	25	25	25	25
	Int	30	30	30	30	30	30	30	30
Weight (Kg)		9.8	10	10.3	10.7	11.1	11.6	12.3	12.6

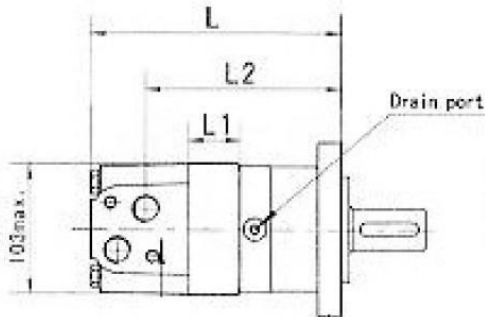
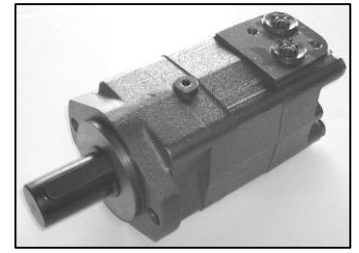
LOWSPEEDHIGHTORQUEMOTORS



MOTOR **SAE A 2 & 4 BOLT MOUNT**

BMS

SAE A 2 & 4 BOLT MOUNT
11/4" STRAIGHT KEYED SHAFT
1/2" BSPP PORTS



CC/REV	PART NUMBER	L	L1	L2	
80CC	BMS80-E4-G-D	168	16	124	
100CC	BMS100-E4-G-D	172	20	128	
125CC	BMS125-E4-G-D	177	25	133	
160CC	BMS160-E4-G-D	183.5	31.5	139.5	
200CC	BMS200-E4-G-D	192	40	148	
250CC	BMS250-E4-G-D	202	50	158	
315CC	BMS315-E4-G-D	214	62	170	
400CC	BMS400-E4-G-D	226	74	182	

OPTIONS ADD TO LIST PRICE

MOUNTS

E2 2 Bolt SAE A Mount
E4 4 Bolt Square Mount 3/8" unc

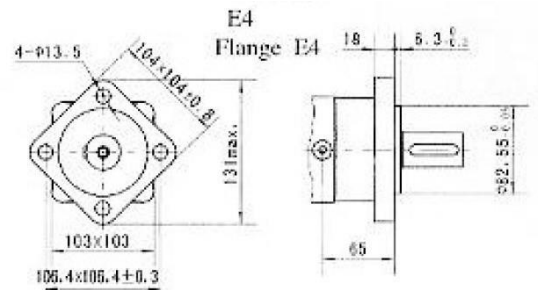
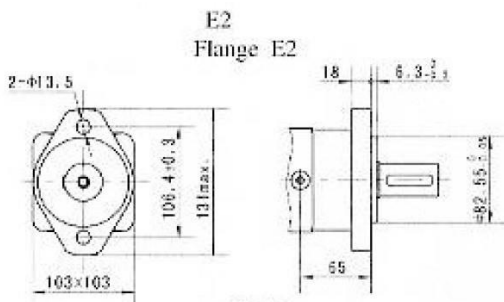
SHAFTS

B Ø 32mm Metric Keyed Shaft 10x8x45
F Ø 1 1/4" (31.75mm) SAE C 14T Splined Shaft
G Ø 1 1/4" (31.75mm) Keyed Shaft 7.96x7.96x31.75 STD

SEAL KIT

BMS-SK SEAL KIT

MOUNTS

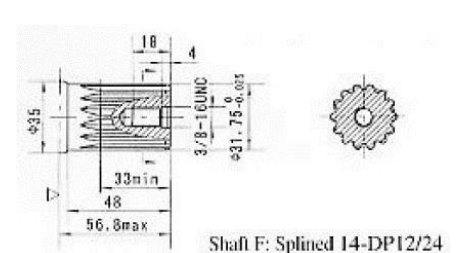
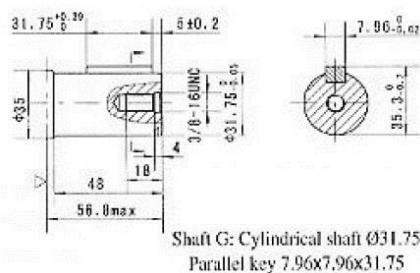
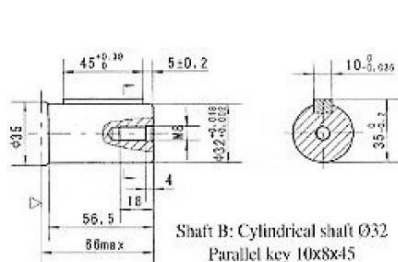


SHAFTS

B

G

F



BMT

**4 BOLT MOUNT
40mm (Std) or 1 1/2" STRAIGHT KEYED SHAFT
3/4" BSPP PORTS**

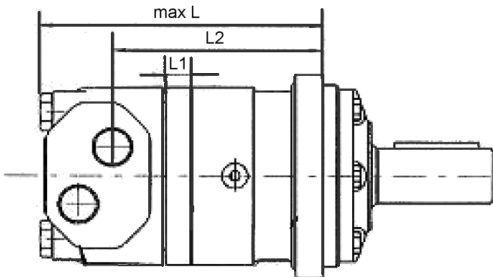


40mm Straight Keyed Shaft

CC/REV	PART NUMBER	L	L1	L2	
160	BMT160-4-M-G-00	193	17	142.5	
200	BMT200-4-M-G-00	197	21	146.5	
250	BMT250-4-M-G-00	203	27	152.5	
315	BMT315-4-M-G-00	210	20	158.5	
400	BMT400-4-M-G-00	217	27	165.5	
500	BMT500-4-M-G-00	225	35	173.5	
630	BMT630-4-M-G-00	237	47	185.5	
800	BMT800-4-M-G-00	248	58	196.5	
BMT-SK		Seal Kit			

1 1/2" Straight Keyed Shaft

CC/REV	PART NUMBER	L	L1	L2	
160	BMT160-4-G-G-00	193	17	142.5	
200	BMT200-4-G-G-00	197	21	146.5	
250	BMT250-4-G-G-00	203	27	152.5	
315	BMT315-4-G-G-00	210	20	158.5	
400	BMT400-4-G-G-00	217	27	165.5	
500	BMT500-4-G-G-00	225	35	173.5	
630	BMT630-4-G-G-00	237	47	185.5	
800	BMT800-4-G-G-00	248	58	196.5	
BMT-SK		Seal Kit			



		BMT160	BMT200	BMT250	BMT315	BMT400	BMT500	BMT630	BMT800
Geometric Displacement (cm ³ /rev)		161.1	201.4	251.8	326.3	410.9	523.6	629.1	801.8
Max speed (rpm)	Rated	470	475	381	294	228	183	150	121
	Cont	614	615	495	380	302	237	196	154
	Int	770	743	592	458	364	284	233	185
Max Torque (N-m)	Rated	379	471	582	758	896	1063	1156	1207
	Cont	471	589	727	962	1095	1245	1318	1464
	Int	573	718	888	1154	1269	1409	1498	1520
	Peak	669	838	1036	1346	1450	1643	1618	1665
Max Output (Kw)	Rated	18.7	23.4	23.2	23.3	21.4	20.4	18.2	15.3
	Cont	27.7	34.9	34.5	34.9	31.2	28.8	25.3	22.2
	Int	32	40	40	40	35	35	27.5	26.8
Max Pressure Drop (Mpa)	Rated	16	16	16	16	15	14	12	10.5
	Cont	20	20	20	20	18	16	14	12.5
	Int	24	24	24	24	21	18	16	13
	Peak	28	28	28	28	24	21	19	16
Max Flow (L/min)	Rated	80	100	100	100	100	100	100	100
	Cont	100	125	125	125	125	125	125	125
	Int	125	150	150	150	150	150	150	150
Max Inlet Pressure	Rated	21	21	21	21	21	21	21	21
	Cont	21	21	21	21	21	21	21	21
	Int	25	25	25	25	25	25	25	25
	Peak	30	30	30	30	30	30	30	30
Weight (Kg)		19.5	20	20.4	21	22	23	24	25

LOWSPEEDHIGHTORQUEMOTORS

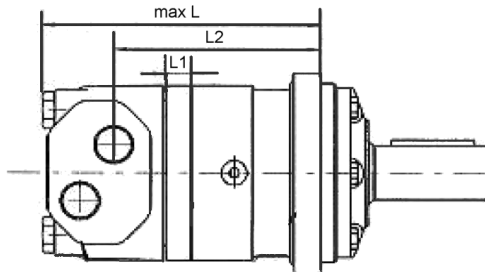
BMV

4 BOLT MOUNT
50mm (Std) STRAIGHT KEYED SHAFT
1" BSPP PORTS



50mm Straight Keyed Shaft

CC/REV	PART NUMBER	L	L1	L2	
315	BMV315-4-A-G-00	217	27	161.5	
400	BMV400-4-A-G-00	224	34	168.5	
500	BMV500-4-A-G-00	232	42	176.5	
630	BMV630-4-A-G-00	244	54	188.5	
800	BMV800-4-A-G-00	255	65	199.5	
BMV-SK		Seal Kit			



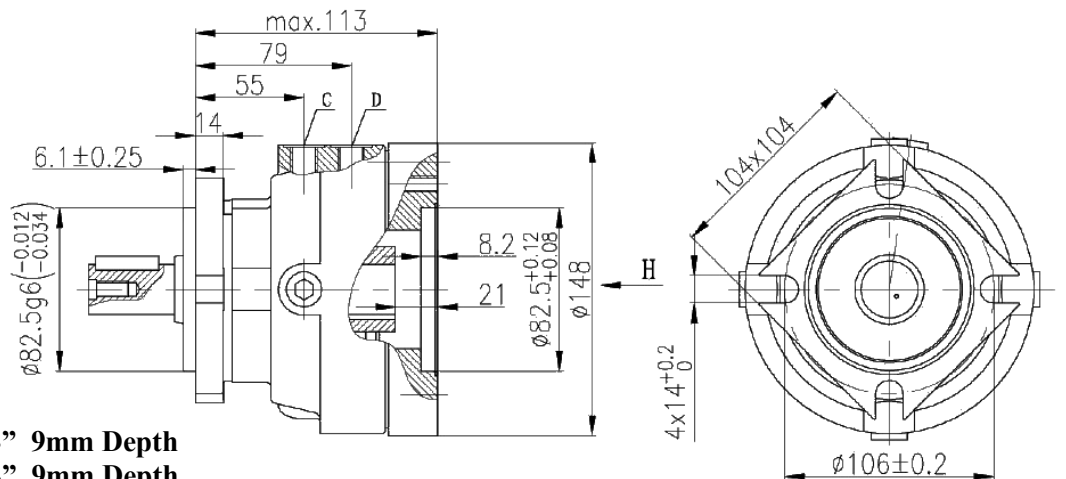
		BMV315	BMV400	BMV500	BMV630	BMV800
Geometric Displacement (cm ³ /rev)		333	419	518	666	801
Max speed (rpm)	Rated	335	270	215	170	140
	Cont	446	354	386	223	185
	Int	649	526	425	331	275
Max Torque (N-m)	Rated	730	1020	1210	1422	1590
	Cont	925	1220	1450	1640	1810
	Int	1100	1439	1780	2000	2110
	Peak	1349	1700	2121	2338	2470
Max Output (Kw)	Rated	25.6	28.8	27.2	25.3	23.3
	Cont	43	45.2	58.6	38.3	35.1
	Int	52	52	52	46	40
Max Pressure Drop (Mpa)	Rated	16	16	16	16	14
	Cont	20	20	20	18	16
	Int	24	24	24	21	18
	Peak	28	28	28	24	21
Max Flow (L/min)	Rated	110	110	110	110	110
	Cont	150	150	150	150	150
	Int	225	225	225	225	225
Max Inlet Pressure	Rated	21	21	21	21	21
	Cont	21	21	21	21	21
	Int	25	25	25	25	25
	Peak	30	30	30	30	30
Weight (Kg)		31.8	32.6	33.5	34.9	36.5

Hydraulic Brake



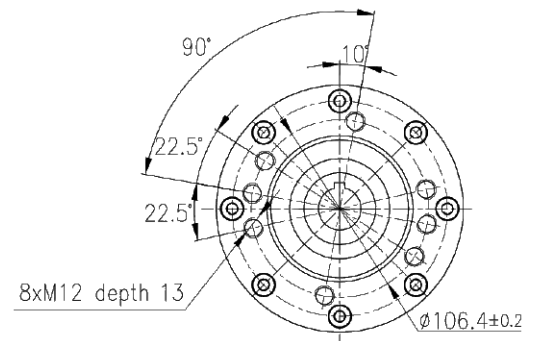
Model	Input Shaft	Output Shaft	Torque	Max Pressure	
BK2-1-430-E-B	1" 6B Spline	32mm Str Keyed	410-450 Nm	300 Bar	
BK2-1-430-E-C	1" 6B Spline	1" Str Keyed			
BK2-1-430-B-B	32mm Str Keyed	32mm Str Keyed			
BK2-1-430-C-C	1" Str Keyed	1" Str Keyed			
BK2-1-430-G-G	1 1/4" Str Keyed	1 1/4" Str Keyed			

Pos 1	2	3		4		5	
Series	Type	Torque		Input Shaft		Output Shaft	
BK2	1	200-220 NM	210	25mm Parallel key 8x7x32	A	25mm Parallel key 8x7x32	A
				32mm Parallel Key 10x8x45	B	32mm Parallel Key 10x8x45	B
		410-450 NM	430	1" Parallel Key 6.35x6.35x31.75	C	1" Parallel Key 6.35x6.35x31.75	C
				1" 6B Spline	E	1" 6B Spline	E
				1 1/4" Parallel key 7.96x7.96x31.75	G	1 1/4" Parallel key 7.96x7.96x31.75	G
	2	410-450NM	430	6T Splined Shaft 6-30x26x6	N	6T Splined Shaft 6-30x26x6	N



C Drain Port - G1/4" 9mm Depth
D Brake Release Port - G1/4" 9mm Depth

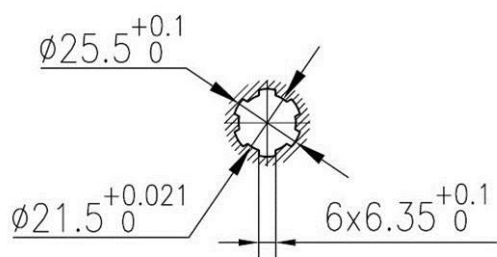
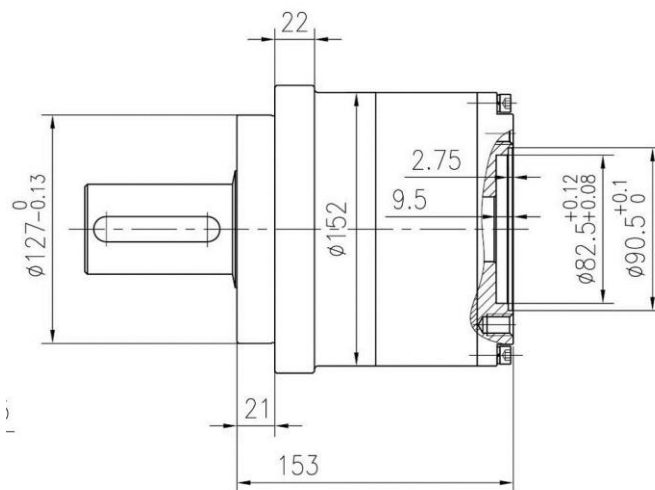
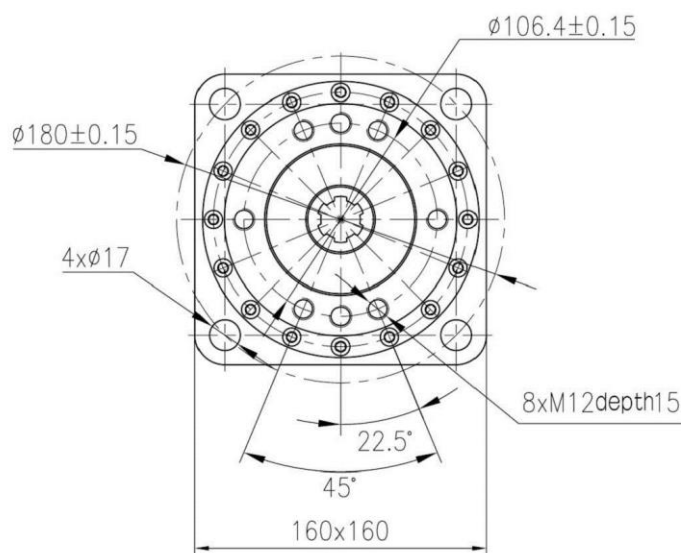
Item	BK2-1		BK2-2
Min static Torque NM	200-230	410-450	410.450
Min Opening Pressure MPa	1.7-2.3		
Max Opening Pressure MPa	30		
Min oil quantity for brake releasing cm3	7-8		
Oil Volume cm3	50-120		
Max Pressure in drain space MPa	0.05		
Weight Kg	9		9.5



*Static torque is obtained at 0 MPa working pressure

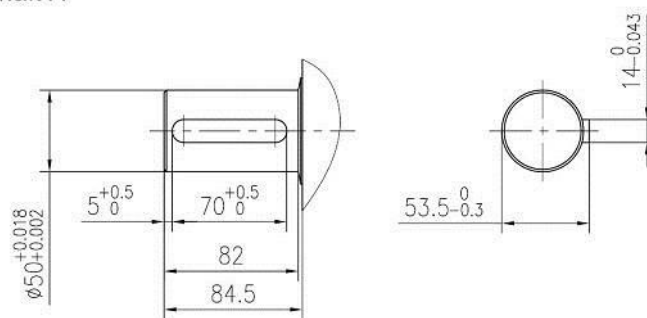
PlanetaryGearBox

Model	Input Shaft	Output Shaft	Max Torque	Ratio	
HGB3.65EA	1" 6B Splined	50mm Str Keyed	2000NM	3.65:1	



Input shaft hole E

shaft A OUTPUT SHAFT



Group3Bi-directionalGearMotor



Group 3 Cast Iron Gear Motor
With Group 3.5 Flange
64cc
30mm Straight Keyed Shaft
1" BSPP Ports
3/8" BSPP Case Drain

030W0MD64G564XR0BN

Screen Motors

Group3LeftHandGearMotor



Group 3 Cast Iron Gear Motor
35cc
1:8 Tapered Keyed Shaft
Flanged Ports
No Case Drain

MW335-S
03MW003500S

Milk Tanker Motors

Industrial Valve Section

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4WE6 Solenoid Operated Directional Valve



CETOP 3 (NG 6) INDUSTRIAL VALVES



Each valve is supplied with LED Din Plugs and bolts

SYMBOL	@ v = 41mm ² /s and t = 50 °C		Kg	PART NUMBER	VOLTAGE	
	Switching Power Limits Max Flow @ 200 Bar	Approx Pressure drop at 30LPM				
SOL	70 LPM	3 Bar	1.65	4WE6C60/E(voltage)N9K4Z5LS		
SOL	70 LPM	3 Bar	1.65	4WE6D60/E(voltage)N9K4Z5LS	G12	
SOL	80 LPM	3 Bar	1.65	4WE6EA60/E(voltage)N9K4Z5LS		
SOL	50 LPM	5 Bar	1.65	4WE6GA60/E(voltage)N9K4Z5LS	G24	
SOL	50 LPM	3 Bar	1.65	4WE6HA60/E(voltage)N9K4Z5LS		
SOL	80 LPM	3 Bar	1.65	4WE6JA60/E(voltage)N9K4Z5LS	RAC110	
	80 LPM	3 Bar	2.25	4WE6E60/E(voltage)N9K4Z5LS		
	50 LPM	5 Bar	2.25	4WE6G60/E(voltage)N9K4Z5LS	RAC220	
	50 LPM	3 Bar	2.25	4WE6H60/E(voltage)N9K4Z5LS		
	80 LPM	3 Bar	2.25	4WE6J60/E(voltage)N9K4Z5LS		

The switching power limits given are for featuring two flow directions. (eg. from P to A and simultaneous return flow from B to T) Due to the flow forces active within the valves the permitted power limit may be considerably less where there is only one direction of flow. The power limit was determined using solenoids at their operating temperature, 10% under voltage and with no preloading of the tank.

Note: Refer technical data sheet for precise specifications. Copies can be supplied on request.



Cetop 3 Lever Operated Spring Centered or Detented

SYMBOL	@ v = 41mm ² /s and t = 50 °C		Kg	Part Number	Spool Control	
	Max Flow	Approx Pressure drop at 30LPM				
	60 LPM	3 Bar	1.4	4WMM6D	Spring Return	
	60 LPM	3 Bar	1.4	4WMM6E	Spring Return	
	40 LPM	5 Bar	1.4	4WMM6G	Spring Return	
	60 LPM	3 Bar	1.4	4WMM6H	Spring Return	
	60 LPM	3 Bar	1.4	4WMM6J	Spring Return	
	60 LPM	3 Bar	1.4	4WMM6D-F	2 Pos Detent	
	60 LPM	3 Bar	1.4	4WMM6E-F	3 Pos Detent	
	40 LPM	5 Bar	1.4	4WMM6G-F	3 Pos Detent	
	60 LPM	3 Bar	1.4	4WMM6H-F	3 Pos Detent	
	60 LPM	3 Bar	1.4	4WMM6J-F	3 Pos Detent	



Subplates

Part Number	Material	Ports	Description	
THSPC3SA	Alloy	3/8"	Subplate Side Ports A,B,P&T	
THSPC3BA	Alloy	3/8"	Subplate Rear Ports A,B,P&T	
BEC3VLP4002	Alloy	3/8"	Rear P&T, Side A&B with Relief	
BEC3VLP40RFP50	Alloy	3/8"	Subplate with Relief & Priority Flow	

Multi Station Manifolds

Part Number	Material	P & T	A & B	Description	
THMC3P1AC	Alloy	1/2"	3/8"	Manifold Single Station with relief Cavity	
THMC3P2AC	Alloy	1/2"	3/8"	2 Station	
THMC3P3AC	Alloy	1/2"	3/8"	3 Station	
THMC3P4AC	Alloy	1/2"	3/8"	4 Station	
THMC3P5AC	Alloy	1/2"	3/8"	5 Station	
THMC3P6AC	Alloy	1/2"	3/8"	6 Station	
LPSRV2-10	Pilot Operated Relief Valve				
THRC-PLUG	Blanking Plug Relief Cavity				

**Steel Subplates and Manifolds available
See Section 4**

SPARE PARTS

BOLTS		COILS			DIN PLUGS		
PART NO		PART NO	VOLT		DESCRIPTION	PART NO	
M5X45 SHCS		4WE6A-D12	12VDC		DIN PLUG - BLACK	18209N	
M5X50 SHCS		4WE6A-D24	24VDC		DIN PLUG - GREY	18209G	
M5X70 SHCS		4WE6A-R110	110VAC		12V or 24VDC LED	18209-10-50V	
M5X80 SHCS		4WE6A-R220	240VAC		12V or 24V LED & Supp	18209-10-50V-S	
M5X90 SHCS					110V LED	18209-110V	
M5X110 SHCS		4WE6-NUT			240V LED	18209-240V	
M5X130 SHCS					RECTIFIER 110V	18209-110RAC	
M5X140 SHCS					RECTIFIER 240V	18209-240RAC	

4WE10 Solenoid Operated Directional Valve



CETOP 5 (NG 10) INDUSTRIAL VALVES



Each valve is supplied with LED Din Plugs and bolts

SYMBOL	@ v = 41mm ² /s and t = 50 °C		Kg	PART NUMBER	VOLTAGE	
	Switching Power Limits Max Flow @ 200 Bar	Approx Pressure drop at 60LPM				
SOL	120 LPM	2.5 Bar	4.8	4WE10C60/C(voltage)N9K4Z5LS		
SOL	120 LPM	2.5Bar	4.8	4WE10D60/C(voltage)N9K4Z5LS	G12	
SOL	120 LPM	2.5 Bar	4.8	4WE10EA60/C(voltage)N9K4Z5LS		
SOL	75 LPM	5 Bar	4.8	4WE10GA60/C(voltage)N9K4Z5LS	G24	
SOL	100 LPM	3 Bar	4.8	4WE10HA60/C(voltage)N9K4Z5LS		
SOL	115 LPM	2 Bar	4.8	4WE10JA60/C(voltage)N9K4Z5LS	RAC110	
	120 LPM	2.5 Bar	6.15	4WE10E60/C(voltage)N9K4Z5LS		
	75 LPM	5 Bar	6.15	4WE10G60/C(voltage)N9K4Z5LS	RAC220	
	100 LPM	3 Bar	6.15	4WE10H60/C(voltage)N9K4Z5LS		
	115 LPM	2 Bar	6.15	4WE10J60/C(voltage)N9K4Z5LS		

The switching power limits given are for featuring two flow directions. (eg. from P to A and simultaneous return flow from B to T) Due to the flow forces active within the valves the permitted power direction of flow. The power limit was determined using age and with no preloading of the tank.

Spare Parts

Part Number	Description	
4WE10A-D12	12VDC Coil	
4WE10A-D24	24VDC Coil	
4WE10A-R110	110V Rectified AC Coil	
4WE10A-R220	220V Rectified AC Coil	

		4WE-6	4WE-10
Weight	Single Solenoid Valve	kg	1.65
	Valve with 2 Solenoids	kg	2.25
Operating Pressure Ports A, B, P		MPA	35
Port T		MPA	Up to 21
Flow Max (see Power Limit Charts)		L/Min	Up to 80 L/Min
Ambient Temperature		Max	Up to 120 L/Min
Fluid Temperature Range		°C	Up to 50°C
Viscosity Range		mm ² /S	-30 to + 80 (NBR seals)
Degree of fluid contamination			2.8 to 500
		Maximum permissible degree of contamination of fluid is to NAS 1638 class 9. We, therefore recommend a minimum retention of 10.	



Subplates					
Part Number	Material	Ports		Description	
THSPC5SA	Alloy	1/2"		Subplate Side Ports A,B,P&T	
THSPC5BA	Alloy	1/2"		Subplate Rear Ports A,B,P&T	
BEC5VLP8002	Alloy	1/2"		Rear P&T, Side A&B with Relief	
Multi Station Manifolds					
Part Number	Material	P & T	A & B	Description	
THMC5P1AC	Alloy	3/4"	1/2"	Manifold Single Station with relief Cavity	
THMC5P2AC	Alloy	3/4"	1/2"	2 Station	
THMC5P3AC	Alloy	3/4"	1/2"	3 Station	
THMC5P4AC	Alloy	3/4"	1/2"	4 Station	
THMC5P5AC	Alloy	3/4"	1/2"	5 Station	
THMC5P6AC	Alloy	3/4"	1/2"	6 Station	
LPSRV2-10	Pilot Operated Relief Valve				
THRC-PLUG	Blanking Plug Relief Cavity				



**Steel Subplates and Manifolds available
See Section 4**



SPARE PARTS

BOLTS		COILS			DIN PLUGS		
PART NO		PART NO	VOLT		DESCRIPTION	PART NO	
M6X40 SHCS (STD)		4WE10A-D12	12VDC		DIN PLUG - BLACK	18209N	
M6X50 SHCS		4WE10A-D24	24VDC		DIN PLUG - GREY	18209G	
M6X70 SHCS		4WE10A-R110	110VAC		12V or 24VDC LED	18209-10-50V	
M6X80 SHCS		4WE610-R220	240VAC		12V or 24V LED & Supp	18209-10-50V-S	
M6X90 SHCS					110V LED	18209-110V	
M6X140 SHCS		4WE10-NUT			240V LED	18209-240V	
M6X150 SHCS					RECTIFIER 110V	18209-110RAC	
					RECTIFIER 240V	18209-240RAC	

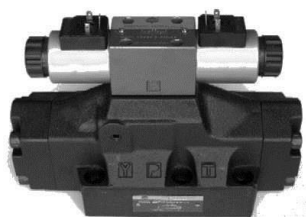


4WE16 Solenoid Operated Directional Valve

CETOP 7 (NG 16) INDUSTRIAL VALVES

Each Valve includes Solenoid pilot Valve, LED Din Plugs and bolts

SYMBOL	@ v = 41mm ² /s and t = 50 °C		Kg	PART NUMBER	VOLTAGE	
	Switching Power Limits Max Flow @ 210 Bar	Approx Pressure drop at 200LPM				
SOL	260 LPM	5Bar	8.3	4WEH16D-A-(voltage)-6X	D12	
SOL	300 LPM	4 Bar	8.3	4WEH16EA-A-(voltage)-6X		
SOL	240 LPM	7 Bar	8.3	4WEH16GA-A-(voltage)-6X		
SOL	300 LPM	5 Bar	8.3	4WEH16HA-A-(voltage)-6X	D24	
SOL	300 LPM	5 Bar	8.3	4WEH16JA-A-(voltage)-6X		
	300 LPM	4 Bar	8.6	4WEH16E-A-(voltage)-6X		
	240 LPM	7 Bar	8.6	4WEH16G-A-(voltage)-6X	R110	
	300 LPM	5 Bar	8.6	4WEH16H-A-(voltage)-6X		
	300 LPM	5 Bar	8.6	4WEH16J-A-(voltage)-6X		
PILOT PRESSURE INSERT				4WH16PI		



4WE22 Solenoid Operated Directional Valve

CETOP 8 (NG 22) INDUSTRIAL VALVES

Each Valve includes Solenoid pilot Valve, LED Din Plugs and bolts

SYMBOL	@ v = 41mm ² /s and t = 50 °C		Kg	PART NUMBER	VOLTAGE	
	Switching Power Limits Max Flow @ 210 Bar	Approx Pressure drop at 300LPM				
SOL	450 LPM	5Bar	11.5	4WEH22D-A-(voltage)-6X	D12	
SOL	450 LPM	6 Bar	11.5	4WEH22EA-A-(voltage)-6X		
SOL	250 LPM	8 Bar	11.5	4WEH22GA-A-(voltage)-6X		
SOL	300 LPM	5 Bar	11.5	4WEH22HA-A-(voltage)-6X	D24	
SOL	450 LPM	5 Bar	11.5	4WEH22JA-A-(voltage)-6X		
	450 LPM	6 Bar	11.9	4WEH22E-A-(voltage)-6X		
	250 LPM	8 Bar	11.9	4WEH22G-A-(voltage)-6X	R110	
	300 LPM	5 Bar	11.9	4WEH22H-A-(voltage)-6X		
	450 LPM	5 Bar	11.9	4WEH22J-A-(voltage)-6X		

Valves include Solenoid pilot valve, LED Din plugs. They come standard as external pilot and external drain. Other configurations are available by removing or replacing plugs as required. For the G and H spools a pilot pressure insert is available for internal pilot. The pilot pressure insert transfers the required pilot pressure to the solenoid pilot valve which activates the main stage.



Subplates						
Part Number	Material	Ports		Description		
THSPC7SS	Steel	1" and 1/4" X&Y		Subplate Side Ports A,B,P,T.X &Y		
THSPC7BS	Steel	1" and 1/4" X&Y		Subplate Rear Ports A,B,P,T. X &Y		
Manifolds						
Part Number	Material	P,A &B	T	X &Y	Description	
THMC7P1SC	Steel	3/4"	1"	1/4" & 3/8"	Manifold Single Station with relief Cavity	
THMC7P2SC	Steel	3/4"	1"	1/4" & 3/8"	2 Station	
THMC7P3SC	Steel	3/4"	1"	1/4" & 3/8"	3 Station	
LPSRV2-10	Pilot Operated Relief Valve					
THRC-PLUG	Blanking Plug Relief Cavity					

SOFT SWITCH

4WE6S Solenoid Operated Directional Valve



**CETOP 3 (NG 6)
INDUSTRIAL VALVES
WITH SOFT SWITCHING**



SYMBOL	@ v = 41mm ² /s and t = 50 °C		Kg	PART NUMBER	VOLTAGE	
	Switching Power Limits Max Flow @ 200 Bar	Approx Pressure drop at 30LPM				
	80 LPM	3 Bar	2.25	4WE6SE60/E(Voltage)N9K4Z5LS	G12	
	50 LPM	5 Bar	2.25	4WE6SG60/E(Voltage)N9K4Z5LS	G24	
	50 LPM	3 Bar	2.25	4WE6SH60/E(Voltage)N9K4Z5LS	RAC110	
	80 LPM	3 Bar	2.25	4WE6SJ60/E(Voltage)N9K4Z5LS	RAC220	

4WE10S Solenoid Operated Directional Valve



**CETOP 5 (NG 10)
INDUSTRIAL VALVES
WITH SOFT SWITCHING**



SYMBOL	@ v = 41mm ² /s and t = 50 °C		Kg	PART NUMBER	VOLTAGE	
	Switching Power Limits Max Flow @ 200 Bar	Approx Pressure drop at 60LPM				
	120 LPM	2.5 Bar	6.15	4WE10SE60/C(Voltage)N9K4Z5LS	G12	
	75 LPM	5 Bar	6.15	4WE10SG60/C(Voltage)N9K4Z5LS	G24	
	100 LPM	3 Bar	6.15	4WE10SH60/C(Voltage)N9K4Z5LS	RAC110	
	120 LPM	2.5 Bar	6.15	4WE10SJ60/C(Voltage)N9K4Z5LS	RAC220	

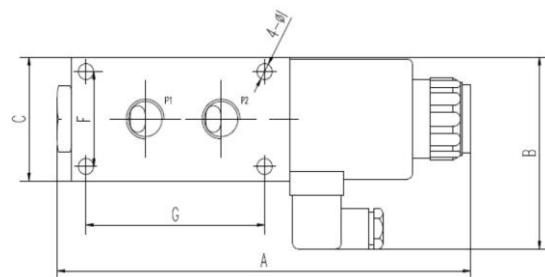
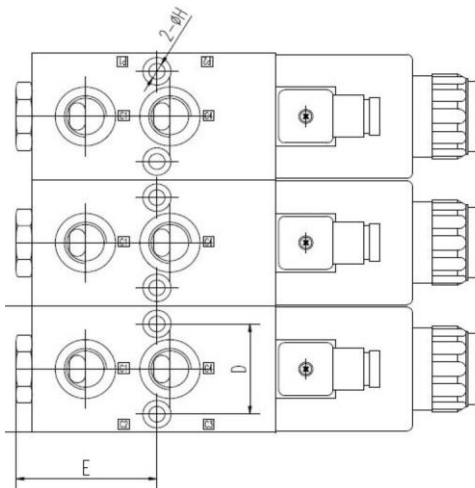
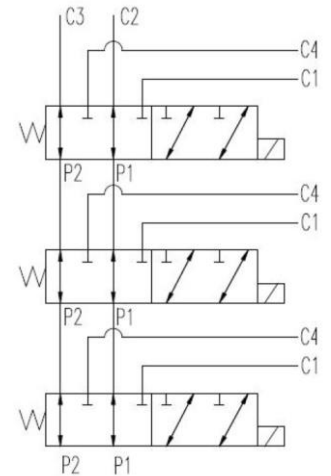
6PortSolenoidOperatedSelectorValves

Single or Stackable
6 Port Selector Valves
3/8" or 1/2" BSPP Ports
12 & 24 VDC



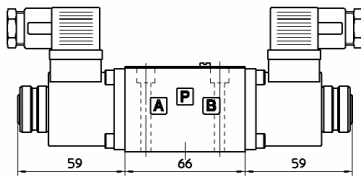
Part Number	Ports	Max Flow	Max Pressure	Voltage	
HYE6238-D12	3/8" BSPP	40 LPM	250 Bar	12 VDC	
HYE6238-D24	3/8" BSPP	40 LPM	250 Bar	24 VDC	
HYE6212-D12	1/2" BSPP	60 LPM	250 Bar	12 VDC	
HYE6212-D24	1/2" BSPP	60 LPM	250 Bar	24 VDC	

Specifications	E6238	E6212
Max Pressure	250 Bar	
Max Flow Rate	40 LPM	60 LPM
Hydraulic Fluid	Mineral oil, Phosphate Ester	
Fluid Temperature Range	-20~80°C	
Recommended Viscosity	10~400mm²	

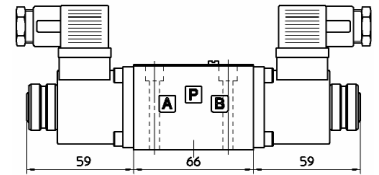


	A	B	C	D	E	F	G	H	I	J
E6238	175.2	84	52	36	57.5	38	42	6.4	6	52
E6212	229	100.6	65	46	70	50	99	8	8.4	65

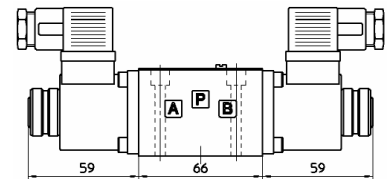
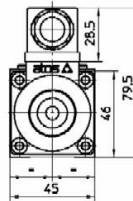
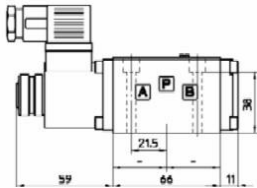
ATOSCetop3and5(NG6&10)SolenoidValves



CETOP 3 (NG 6)

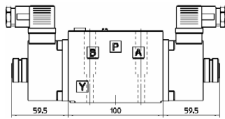


SYMBOL	TRANSITION	SPOOL	Kg	PART NUMBER		VOLTAGE	
		0	1.8	DHI-0710-X-	(VOLTAGE)	12DC	
		1	1.8	DHI-0711-X-	(VOLTAGE)		
		3	1.8	DHI-0713-X-	(VOLTAGE)		
		4	1.8	DHI-0714-X-	(VOLTAGE)	24DC	
		8	1.8	DHI-0718-X-	(VOLTAGE)		
Sol		0-2	1.5	DHI-0630/2-X-	(VOLTAGE)	110AC	
Sol		1-2	1.5	DHI-0631/2-X-	(VOLTAGE)		
Sol		1-2A	1.5	DHI-0631/2-A-X-	(VOLTAGE)		
Sol		0	1.5	DHI-0610-X-	(VOLTAGE)	240AC	
Sol		1	1.5	DHI-0611-X-	(VOLTAGE)		
Sol		3	1.5	DHI-0613-X-	(VOLTAGE)		
Sol		4	1.5	DHI-0614-X-	(VOLTAGE)		

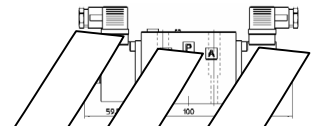


SPARE PARTS

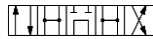
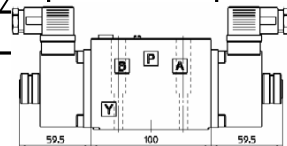
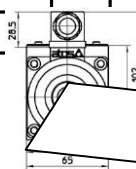
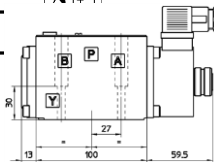
BOLTS		COILS			DIN PLUGS		
PART NO		PART NO	VOLT		DESCRIPTION	PART NO	
M5X45 SHCS		SP-COU-12DC	12VDC		DIN PLUG - BLACK	18209N	
M5X50 SHCS		SP-COU-24DC	24VDC		DIN PLUG - GREY	18209G	
M5X70 SHCS		SP-COI-110AC	110VAC		12V or 24VDC LED	18209-10-50V	
M5X80 SHCS		SP-COI-240AC	240VAC		12V or 24V LED & Supp	18209-10-50V-S	
M5X90 SHCS					110V LED	18209-110V	
M5X110 SHCS					240V LED	18209-240V	
M5X130 SHCS					RECTIFIER 110V	18209-110RAC	
M5X140 SHCS					RECTIFIER 240V	18209-240RAC	



CETOP 5 (NG10) (DKI OLD SERIES)



SYMBOL	TRANSITION	SPOOL	Kg	PART NUMBER		VOLTAGE	
		0	4.4	DKI-1710-X-	(VOLTAGE)	12DC	
		1	4.4	DKI-1711-X-	(VOLTAGE)		
		3	4.4	DKI-1713-X-	(VOLTAGE)		
		4	4.4	DKI-1714-X-	(VOLTAGE)		
		8	4.4	DKI-1718-X-	(VOLTAGE)	24DC	
Sol		0-2	3.8	DKI-1630/2-X-	(VOLTAGE)		
Sol		1-2	3.8	DKI-1631/2-X-	(VOLTAGE)	110AC	
Sol		1-2A	3.8	DKI-1631/2-A-X-	(VOLTAGE)		
Sol		0	3.8	DKI-1610-X-	(VOLTAGE)		
Sol		1	3.8	DKI-1611-X-	(VOLTAGE)		
Sol		3	3.8	DKI-1613-X-	(VOLTAGE)	240AC	
Sol		4	3.8	DKI-1614-X-	(VOLTAGE)		



SOFT SWITCH OPTION (DC ONLY)

		0	4.4	DKU-1710/L1-X-	(VOLTAGE)	12DC	
		1	4.4	DKU-1711/L1-X-	(VOLTAGE)		
		3	4.4	DKU-1713/L1-X-	(VOLTAGE)	24DC	
		4	4.4	DKU-1714/L1-X-	(VOLTAGE)		

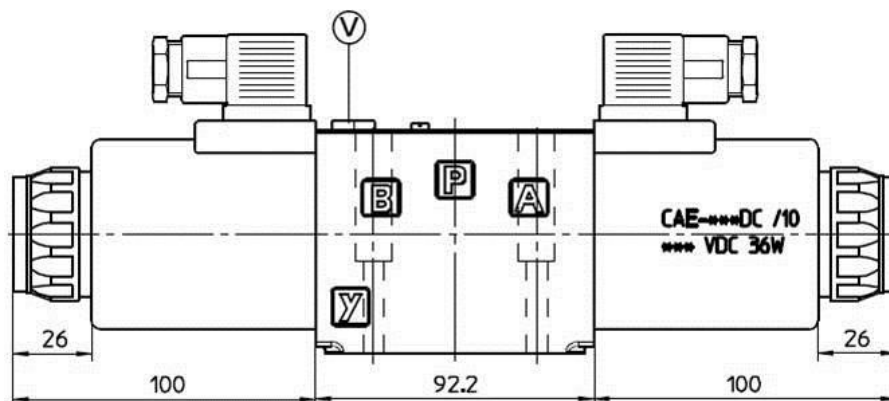
SPARE PARTS

BOLTS		COILS		DIN PLUGS	
PART NO		PART NO	VOLT	DESCRIPTION	PART NO
M6X40 SHCS (STD)		SP-CAU-12DC	12VDC	DIN PLUG - BLACK	18209N
M6X50 SHCS		SP-CAU-24DC	24VDC	DIN PLUG - GREY	18209G
M6X70 SHCS		SP-CAI-110AC	110VAC	12V or 24VDC LED	18209-10-50V
M6X80 SHCS		SP-CAI-240AC	240VAC	12V or 24V LED & Supp	18209-10-50V-S
M6X90 SHCS				110V LED	18209-110V
M6X140 SHCS				240V LED	18209-240V
M6X150 SHCS				RECTIFIER 110V	18209-110RAC
				RECTIFIER 240V	18209-240RAC



CETOP 5 (NG10) INDUSTRIAL VALVES (DKE NEW SERIES)

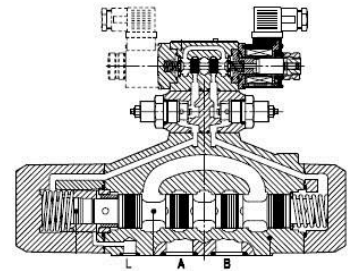
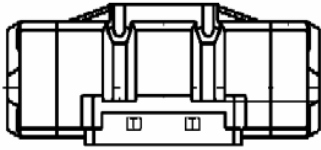
SYMBOL	TRANSITION	SPOOL	Kg	PART NUMBER		VOLTAGE	
		0	4.4	DKE-1710-X-	(VOLTAGE)	12DC	
		1	4.4	DKE-1711-X-	(VOLTAGE)		
		3	4.4	DKE-1713-X-	(VOLTAGE)		
		4	4.4	DKE-1714-X-	(VOLTAGE)	24DC	
		8	4.4	DKE-1718-X-	(VOLTAGE)		
Sol		0-2	3.8	DKE-1630/2-X-	(VOLTAGE)	110 RAC	
Sol		1-2	3.8	DKE-1631/2-X-	(VOLTAGE)		
Sol		1-2A	3.8	DKE-1631/2-A-X-	(VOLTAGE)		
Sol		0	3.8	DKE-1610-X-	(VOLTAGE)	220 RAC	
Sol		1	3.8	DKE-1611-X-	(VOLTAGE)		
Sol		3	3.8	DKE-1613-X-	(VOLTAGE)		
Sol		4	3.8	DKE-1614-X-	(VOLTAGE)		



SPARE PARTS

BOLTS		COILS			DIN PLUGS		
PART NO		PART NO	VOLT		DESCRIPTION	PART NO	
M6X40 SHCS (STD)		SP-CAE-12DC	12VDC		DIN PLUG - BLACK	18209N	
M6X50 SHCS		SP-CAE-24DC	24VDC		DIN PLUG - GREY	18209G	
M6X70 SHCS		SP-CAE-110AC	110VAC		12V or 24VDC LED	18209-10-50V	
M6X80 SHCS		SP-CAE-240AC	240VAC		12V or 24V LED & Supp	18209-10-50V-S	
M6X90 SHCS					110V LED	18209-110V	
M6X140 SHCS					240V LED	18209-240V	
M6X150 SHCS					RECTIFIER 110V	18209-110RAC	
					RECTIFIER 240V	18209-240RAC	

CETOP 7 (NG16) INDUSTRIAL VALVES



Includes Pilot Valve
OTHER OPTIONS AVAILABLE

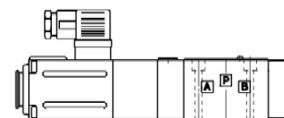
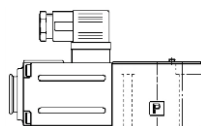
SYMBOL	TRANSITION	SPOOL	Kg	PART NUMBER	VOLT-AGE	
		1	10	DP-2711-X- (VOLTAGE)	12DC	
		3	10	DP-2713-X- (VOLTAGE)	24DC	
		4	10	DP-2714-X- (VOLTAGE)	110AC	
					240AC	
PILOT INSERT TO SUIT TYPE 4 SPOOL				SP-/RDP-2-30		

SPARE PARTS

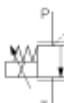
BOLTS		COILS			DIN PLUGS		
PART NO		PART NO	VOLT		DESCRIPTION	PART NO	
M5X50 SHCS		SP-COU-12DC	12VDC		DIN PLUG - BLACK	18209N	
M5X70 SHCS		SP-COU-24DC	24VDC		DIN PLUG - GREY	18209G	
M5X80 SHCS		SP-COI-110AC	110VAC		12V or 24VDC LED	18209-10-50V	
M5X90 SHCS		SP-COI-240AC	240VAC		12V or 24V LED & Supp	18209-10-50V-S	
M6X40 SHCS		SP-COU-48DC	48VDC		110V LED	18209-110V	
M10X50 SHCS					240V LED	18209-240V	
					RECTIFIER 110V	18209-110RAC	
					RECTIFIER 240V	18209-240RAC	

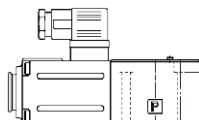
STANDARD PROPORTIONAL VALVES

(NO FEED BACK)

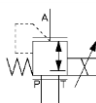


PRESSURE RELIEF

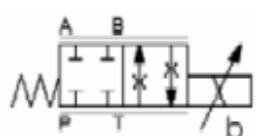
	SIZE	MAX PRESS BAR	MAX FLOW LPM	AMP REQ	KG	PART NUMBER	
	NG6	315	4	1,2 or 4	1.8	RZMO-A-010/315	
	NG6	315	40	1,2 or 4	2.8	RZMO-A-030/315	



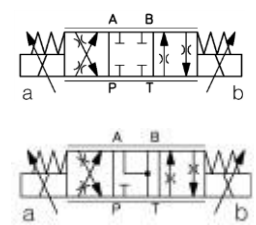
PRESSURE REDUCING

	SIZE	MAX PRESS BAR	MAX FLOW LPM	AMP REQ	KG	PART NUMBER	
	NG6	315	12	1,2 or 4	1.8	RZGO-A-010/210	
	NG6	315	40	1,2 or 4	2.7	RZGO-A-033/210	

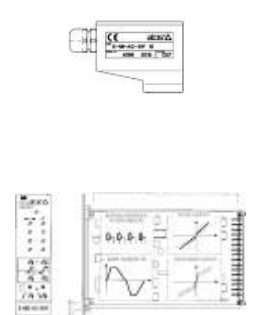
FLOW CONTROL

	SIZE	MAX PRESS BAR	MAX FLOW @DP=30BAR	AMP REQ	KG	PART NUMBER	
	NG6	350	50 LPM	1,2 or 4	1.9	DHZO-A-051-L5	
	NG10	315	105 LPM	1,2 or 4	3.8	DKZOR-A-151-L5	

DIRECTIONAL VALVE

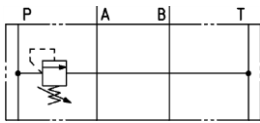
	SIZE	MAX PRESS BAR	MAX FLOW @DP=30BAR	AMP REQ	KG	PART NUMBER	
	NG6	350	50 LPM	1,3 or 5	2.6	DHZO-A-071-L5	
	NG6	350	50 LPM	1,3 or 5	2.6	DHZO-A-073-L5	
	NG10	315	105 LPM	1,3 or 5	4.5	DKZOR-A-171-L5	
	NG10	315	105 LPM	1,3 or 5	4.5	DKZOR-A-173-L5	

AMP CARDS

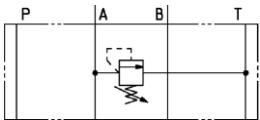
	TO SUIT VALVES	AMP	TYPE	PART NUMBER	
	SINGLE OR DOUBLE SOLENOIDS	1	DIN PLUG	E-MI-AC-01F	
	SINGLE SOLENOID	2	FAST PLUG IN	E-BM-AC-01F	
	DOUBLE SOLENOID	3	FAST PLUG IN	E-BM-AC-05F	
	CONNECTOR FOR FAST PLUG IN VERSION			E-K-11B	
	SINGLE SOLENOID	4	EURO CARD	E-ME-AC-01F	
	DOUBLE SOLENOID	5	EURO CARD	E-ME-AC-05F	

CETOPMODULARVALVES

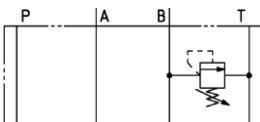
ModularReliefValves



P Port to T



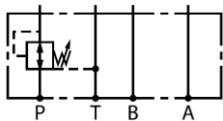
A Port to T



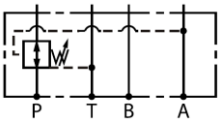
B Port to T

PART NUMBER	DESCRIPTION	P/ADJ RANGE	MAX FLOW	Bolts +	Kg	
CETOP 3						
RV-02M-P-1-B	P PORT TO T	7-70 BAR	35 LPM	40mm	1.2	
RV-02M-P-2-B	P PORT TO T	35 - 140 BAR	35 LPM	40mm	1.2	
RV-02M-P-3-B	P PORT TO T	70 - 210 BAR	35 LPM	40mm	1.2	
RV-02M-A-3-B	A PORT TO T	70 - 210 BAR	35 LPM	40mm	1.2	
RV-02M-B-3-B	B PORT TO T	70 - 210 BAR	35 LPM	40mm	1.2	
CETOP 5						
RV-03M-P-3-B	P PORT TO T	70 - 210 BAR	70 LPM	55mm	2.7	

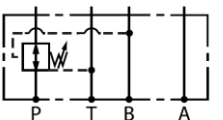
ModularReducingValves



Pilot from P Port



Pilot from A Port

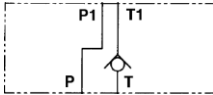
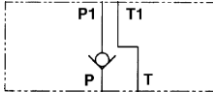


Pilot from B Port

PART NUMBER	DESCRIPTION	P/ADJ RANGE	MAX FLOW	Bolts +	Kg	
CETOP 3						
BRV-02M-P-1-B	Pilot from P PORT	7-70 BAR	35 LPM	40mm	1.2	
BRV-02M-P-2-B	Pilot from P PORT	35 - 140 BAR	35 LPM	40mm	1.2	
BRV-02M-A-2-B	Pilot from A PORT	35 - 140 BAR	35 LPM	40mm	1.2	
BRV-02M-B-2-B	Pilot from B PORT	35 - 140 BAR	35 LPM	40mm	1.3	
CETOP 5						
BRV-03M-P-3-B	Pilot from P PORT	70 - 210 BAR	50 LPM	55mm	2.8	

Other Pressure Ranges Available on Request

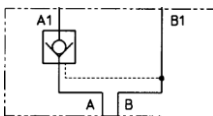
ModularCheckValves



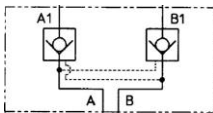
PART NUMBER	DESCRIPTION	CRACK PRESS	MAX FLOW	Bolts +	Kg	
CETOP 3						
CV-02M-P-05	P PORT	3.5 BAR	35 LPM	40mm	1.1	
CV-02M-T-05	T PORT	3.5 BAR	35 LPM	40mm	1.1	
CETOP 5						
CV-03M-P-05	P PORT	3.5 BAR	70 LPM	55mm	2.8	
CV-03M-T-05	T PORT	3.5 BAR	70 LPM	55mm	2.8	



ModularPilotOperatedCheckValves



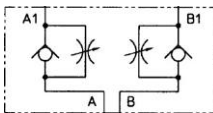
Single Lock Valve



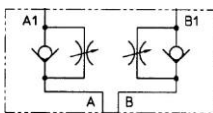
Dual Lock Valve

PART NUMBER	DESCRIPTION	P/ADJ RANGE	MAX FLOW	Bolts +	Kg	
CETOP 3						
PCV-02M-A-05	Check on A	3.5	35 LPM	40mm	1.1	
PCV-02M-B-05	Check on B	3.5	35 LPM	40mm	1.1	
PCV-02M-W-05	Check on A & B	3.5	35 LPM	40mm	1.1	
CETOP 5						
PCV-03M-W-05	Check on A & B	3.5	70 LPM	55mm	2.8	

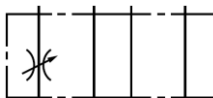
ModularFlowControlValves



Meter Into Actuator



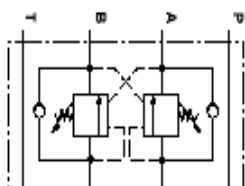
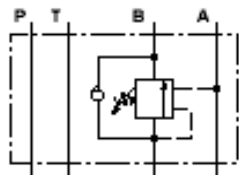
Meter Into Actuator



Flow Control on P

PART NUMBER	DESCRIPTION	MAX FLOW	Bolts +	Kg	
CETOP 3					
TCV-02M-W-I	Dual Flow Control (In to Actuator)	35 LPM	40mm	1.3	
TCV-02M-W-O	Dual Flow Control (Out of Actuator)	35 LPM	40mm	1.3	
TV-02M-P	Flow Control on P	35 LPM	40mm	1.2	
CETOP 5					
TCV-03M-W-I	Flow Control (In to Actuator)	70 LPM	55mm	2.8	
TCV-03M-W-O	Flow Control (Out of Actuator)	70 LPM	55mm	2.8	

ModularOvercentreValves(Counterbalance)



PART NUMBER	DESCRIPTION	P/ADJ RANGE	RATIO	MAX FLOW	Bolts +	
CETOP 3						
OVCSEFC301	Single	5 - 200 Bar	4.25:1	35 LPM	40mm	
OVCSEFC302	Single	40 - 350 Bar	4.25:1	35 LPM	40mm	
OVCDEFC301	Dual	5 - 200 Bar	4.25:1	35 LPM	40mm	
OVCDEFC302	Dual	40 - 350 Bar	4.25:1	35 LPM	40mm	
CETOP 5						
OVCSEFC502	Single	40-350 Bar	4.25:1	80 LPM	70mm	
OVCDEFC502	Dual	40-350 Bar	4.25:1	80 LPM	70mm	

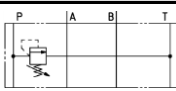
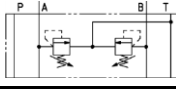
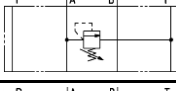
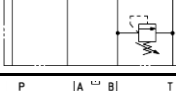
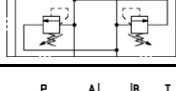
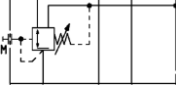
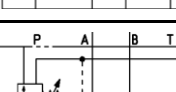
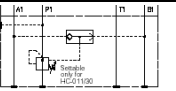
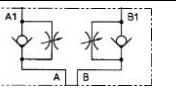
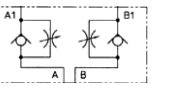
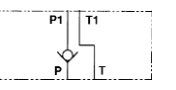
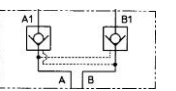
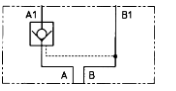
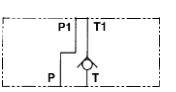
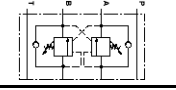
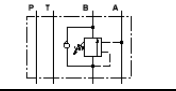
ATOSModularValves

CETOP 3 (NG6)

SYMBOL	DESCRIPTION	RANGE	PART NUMBER	BOLTS	
	RELIEF VALVE P PORT TO T	3-100 BAR	HMP-011/100	40	
		10-210 BAR	HMP-011/210		
		15-350 BAR	HMP-011/350		
	RELIEF VALVE A, B PORTS to T	3-100 BAR	HMP-012/100	40	
		10-210 BAR	HMP-012/210		
		15-350 BAR	HMP-012/350		
	RELIEF VALVE A PORT to T	3-100 BAR	HMP-013/100	40	
		10-210 BAR	HMP-013/210		
		15-350 BAR	HMP-013/350		
	RELIEF VALVE B PORT to T	3-100 BAR	HMP-014/100	40	
		10-210 BAR	HMP-014/210		
		15-350 BAR	HMP-014/350		
	CROSSLINE RELIEF VALVE In A & B	3-100 BAR	HMP-015/100	40	
		10-210 BAR	HMP-015/210		
		15-350 BAR	HMP-015/350		
	PRESSURE REDUCER PILOT ON P PORT	3-32 BAR	HG-031/32	40	
		2-50 BAR	HG-031/50		
		20-100 BAR	HG-031/100		
		50-210 BAR	HG-031/210		
	PRESSURE REDUCER PILOT ON A PORT	3-32 BAR	HG-033/32	40	
		2-50 BAR	HG-033/50		
		20-100 BAR	HG-033/100		
		50-210 BAR	HG-033/210		
	PRESSURE REDUCER PILOT ON B PORT	3-32 BAR	HG-034/32	40	
		2-50 BAR	HG-034/50		
		20-100 BAR	HG-034/100		
		50-210 BAR	HG-034/210		
	PRESSURE COMPENSATOR	ADJUSTABLE Dp 5 - 35 BAR	HC-011/30	40	
	FLOW CONTROL OUT OF ACTUATOR	METER OUT	HQ-012	40	
	FLOW CONTROL INTO ACTUATOR	METER IN	HQ-022	40	
	CHECK ON P PORT	DIRECT OPERATED	HR-011	40	
	CHECK ON A & B PORTS	PILOT OPERATED	HR-012	40	
	CHECK ON A PORT	PILOT OPERATED	HR-013	40	
	CHECK ON T PORT	DIRECT OPERATED	HR-016	40	
	SINGLE COUNTERBALANCE	5-200 BAR	OVCSEFC3A01	40	
		40-350 BAR	OVCSEFC3A02		
	DUAL COUNTERBALANCE	5-200 BAR	OVCDEFC301	40	
		40-350 BAR	OVCDEFC302		

ATOSModularValves

CETOP 5 (NG10)

SYMBOL	DESCRIPTION	RANGE	PART NUMBER	BOLTS	
	RELIEF VALVE P PORT TO T	3-100 BAR	KM-011/100	50	
		10-210 BAR	KM-011/210		
		15-350 BAR	KM-011/350		
	RELIEF VALVE A, B PORTS to T	3-100 BAR	KM-012/100	50	
		10-210 BAR	KM-012/210		
		15-350 BAR	KM-012/350		
	RELIEF VALVE A PORT to T	3-100 BAR	KM-013/100	50	
		10-210 BAR	KM-013/210		
		15-350 BAR	KM-013/350		
	RELIEF VALVE B PORT to T	3-100 BAR	KM-014/100	50	
		10-210 BAR	KM-014/210		
		15-350 BAR	KM-014/350		
	CROSSLINE RELIEF VALVE In A & B	3-100 BAR	KM-015/100	50	
		10-210 BAR	KM-015/210		
		15-350 BAR	KM-015/350		
	PRESSURE REDUCER PILOT ON P PORT	7-100 BAR	KG-031/100	50	
		8-210 BAR	KG-031/210		
	PRESSURE REDUCER PILOT ON A PORT	7-100 BAR	KG-033/100	50	
		8-210 BAR	KG-033/210		
	PRESSURE REDUCER PILOT ON B PORT	7-100 BAR	KG-034/100	50	
		8-210 BAR	KG-034/210		
	PRESSURE COMPENSATOR	ADJUSTABLE Dp 5 – 35 BAR	KC-011/30	50	
	FLOW CONTROL OUT OF ACTUATOR	METER OUT	KQ-012	50	
	FLOW CONTROL INTO ACTUATOR	METER IN	KQ-022	50	
	CHECK ON P PORT	DIRECT OP- ERATED	KR-011	50	
	CHECK ON A & B PORTS	PILOT OPER- ATED	KR-012	50	
	CHECK ON A PORT	PILOT OPER- ATED	KR-013	50	
	CHECK ON T PORT	DIRECT OP- ERATED	KR-016	50	
 CBF	SINGLE COUNTERBALANCE	5-200 BAR	OVCSEFC501	50	
		40-350 BAR	OVCSEFC502		
 CBF	DUAL COUNTERBALANCE	5-200 BAR	OVCDEFC501	50	
		40-350 BAR	OVCDEFC502		



STEEL and ALLOY

MANIFOLDS & SUBPLATES

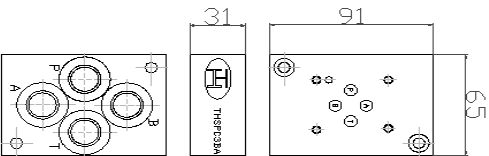
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BEC3VLP4002

Part Number	Material	Ports	Description	
THSPC3SA	ALLOY	3/8" BSPP	Side Ports A,B,P&T	
THSPC3BA	ALLOY	3/8" BSPP	Rear Ports A,B,P&T	
THSPC3SS	STEEL	3/8" BSPP	Side Ports A,B,P&T	
THSPC3BS	STEEL	3/8" BSPP	Rear Ports A,B,P&T	
BEC3VLP4002	ALLOY	3/8" BSPP	Rear P&T, Side A&B with Relief	



THSPC3BA
THSPC3BS
Bottom Ported



Tank Manifold

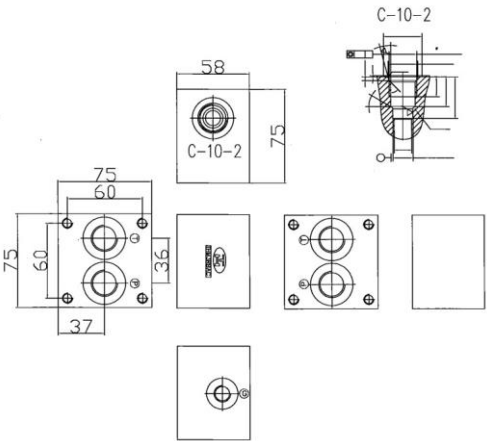
Relief or Unloading Valve

Part Number	Material	Ports	Description	
THM3RBAC	ALLOY	1/2" BSPP	Tank Manifold with C10-2 Cavity	

P & T Ports
With C10-2 Cavity



THM3RBAC



CETOPMANIFOLDS&SUBPLATES

CETOP3Manifolds

ALLOY

Parallel With Plugged Relief Cavity



Part Number	Ports		Description	L Dim	
	P & T	A & B			
THM3RBAC	1/2" BSPP	NONE	P&T Block only	58	
THMC3P1AC	1/2" BSPP	3/8" BSPP	Single Station	90	
THMC3P2AC	1/2" BSPP	3/8" BSPP	2 Station	137	
THMC3P3AC	1/2" BSPP	3/8" BSPP	3 Station	192	
THMC3P4AC	1/2" BSPP	3/8" BSPP	4 Station	247	
THMC3P5AC	1/2" BSPP	3/8" BSPP	5 Station	302	
THMC3P6AC	1/2" BSPP	3/8" BSPP	6 Station	357	
LPSRV2-10	Pilot Operated Relief Valve				

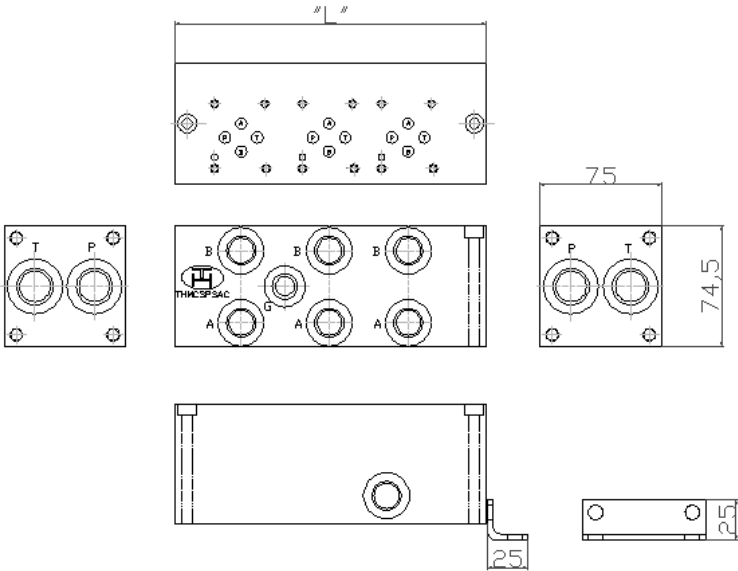
CETOP3Manifolds

STEEL

Parallel With Plugged Relief Cavity



Part Number	Ports		Description	L Dim mm	
	P & T	A & B			
THMC3P1SC	1/2" BSPP	3/8" BSPP	Single Station	90	
THMC3P2SC	1/2" BSPP	3/8" BSPP	2 Station	137	
THMC3P3SC	1/2" BSPP	3/8" BSPP	3 Station	192	
THMC3P4SC	1/2" BSPP	3/8" BSPP	4 Station	247	
THMC3P5SC	1/2" BSPP	3/8" BSPP	5 Station	302	
THMC3P6SC	1/2" BSPP	3/8" BSPP	6 Station	357	
LPSRV2-10	Pilot Operated Relief Valve				



CETOPMANIFOLDS&SUBPLATES

SERIES

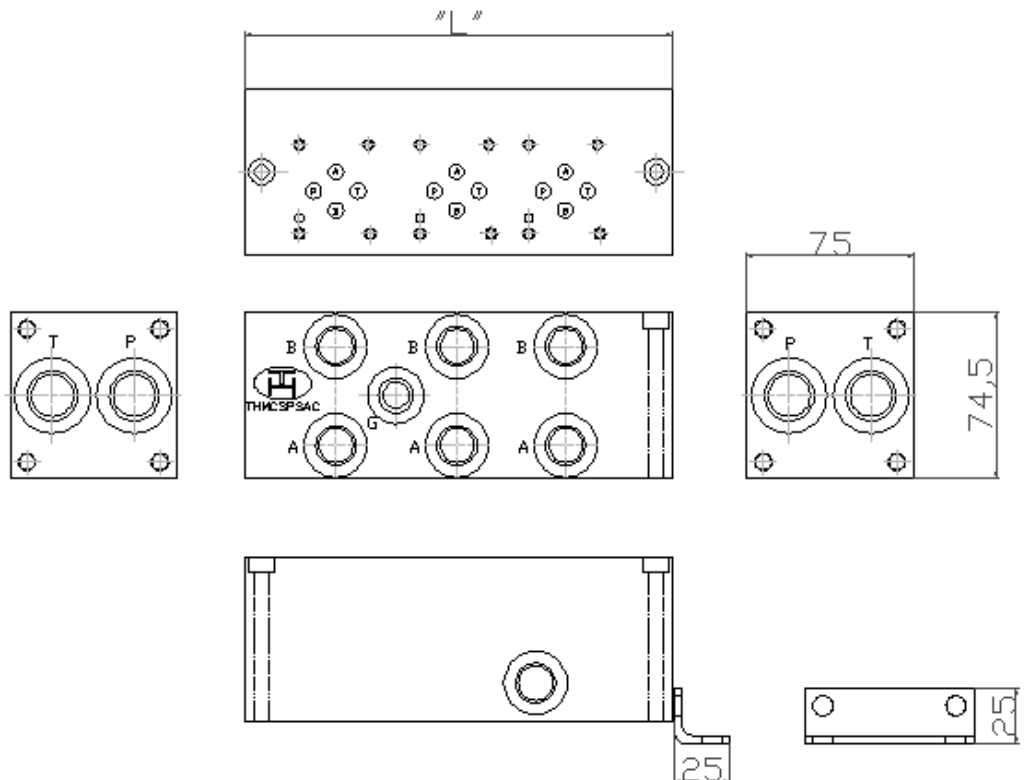
CETOP3Manifolds

ALLOY

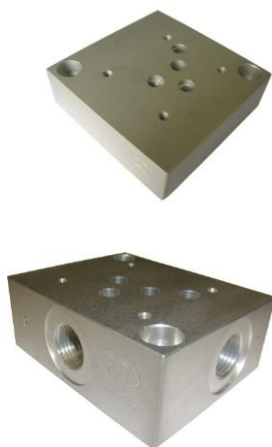
Series With Plugged Relief Cavity



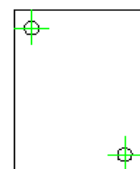
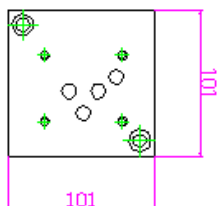
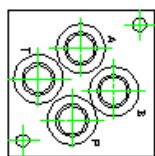
Part Number	Ports		Description	L Dim mm	
	P & T	A & B			
THMC3S2AC	1/2" BSPP	3/8" BSPP	2 Station	137	
THMC3S3AC	1/2" BSPP	3/8" BSPP	3 Station	192	
THMC3S4AC	1/2" BSPP	3/8" BSPP	4 Station	247	
THMC3S5AC	1/2" BSPP	3/8" BSPP	5 Station	302	
THMC3S6AC	1/2" BSPP	3/8" BSPP	6 Station	357	
LPSRV2-10	Pilot Operated Relief Valve				



CETOP5SUBPLATES



Part Number	Material	Ports	Description	
THSPC5SA	ALLOY	1/2" BSPP	Side Ports A,B,P&T	
THSPC5BA	ALLOY	1/2" BSPP	Rear Ports A,B,P&T	
THSPC5SS	STEEL	1/2" BSPP	Side Ports A,B,P&T Steel	
THSPC5BS	STEEL	1/2" BSPP	Rear Ports A,B,P&T Steel	
BEC5VLP801202	ALLOY	1/2" BSPP	Rear P&T, Side A&B with Relief	



Tank Manifold

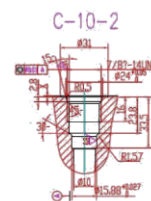
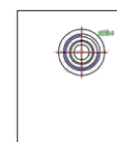
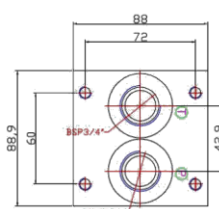
Relief or Unloading Valve

Part Number	Material	Ports	Description	
THM5RBAC	ALLOY	3/4" BSPP	Tank Manifold with C10-2 Cavity	

P & T Ports
With C10-2 Cavity



THM5RBAC



CETOPMANIFOLDS&SUBPLATES

CETOP5Manifolds

ALLOY

Parallel With Plugged Relief Cavity



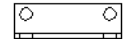
Part Number	Ports		Description	L Dim mm	
	P & T	A & B			
THMC5P1AC	3/4" BSPP	1/2" BSPP	Single Station	108	
THMC5P2AC	3/4" BSPP	1/2" BSPP	2 Station	191	
THMC5P3AC	3/4" BSPP	1/2" BSPP	3 Station	273	
THMC5P4AC	3/4" BSPP	1/2" BSPP	4 Station	355	
THMC5P5AC	3/4" BSPP	1/2" BSPP	5 Station	437	
THMC5P6AC	3/4" BSPP	1/2" BSPP	6 Station	519	
LPSRV2-10	Pilot Operated Relief Valve				

CETOP5Manifolds

STEEL

Parallel With Plugged Relief Cavity

Part Number	Ports		Description	L Dim mm	
	P & T	A & B			
THMC5P1SC	3/4" BSPP	1/2" BSPP	Single Station	108	
THMC5P2SC	3/4" BSPP	1/2" BSPP	2 Station	191	
THMC5P3SC	3/4" BSPP	1/2" BSPP	3 Station	273	
THMC5P4SC	3/4" BSPP	1/2" BSPP	4 Station	355	
THMC5P5SC	3/4" BSPP	1/2" BSPP	5 Station	437	
THMC5P6SC	3/4" BSPP	1/2" BSPP	6 Station	519	
LPSRV2-10	Pilot Operated Relief Valve				



All Dimensions and specifications are for reference only. For critical information please contact Timalco.

CETOPMANIFOLDS&SUBPLATES

SERIES

CETOP5Manifolds

ALLOY



Series With Plugged Relief Cavity

Part Number	Ports		Description	L Dim mm	
	P & T	A & B			
THMC5S2AC	3/4" BSPP	1/2" BSPP	2 Station	191	
THMC5S3AC	3/4" BSPP	1/2" BSPP	3 Station	273	
THMC5S4AC	3/4" BSPP	1/2" BSPP	4 Station	355	
LPSRV2-10	Pilot Operated Relief Valve				

BLANKINGPLATES

Cetop3and5

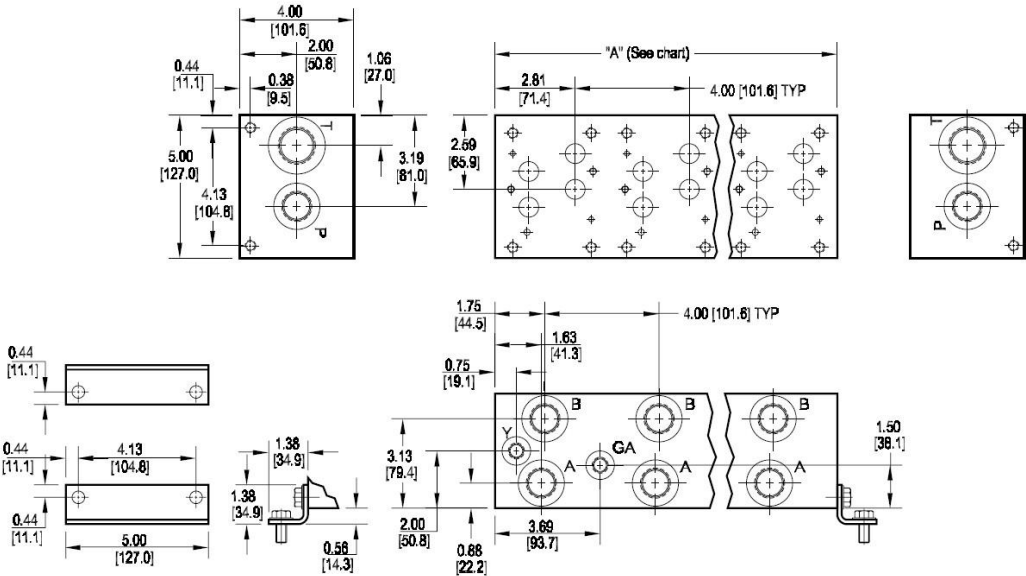
Part Number	Description	
THBPC3S	Cetop 3 Blanking Plate all ports blocked	
THBPC5S	Cetop 5 Blanking Plate all ports blocked	

CETOPMANIFOLDS&SUBPLATES

CETOP7Manifolds

STEEL

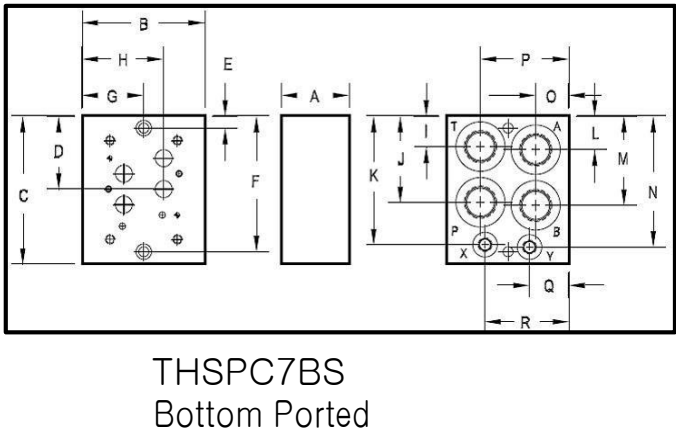
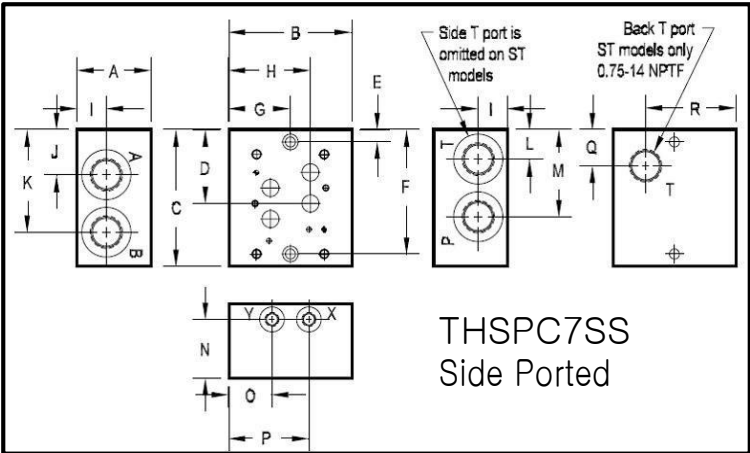
Part Number	Ports (BSPP)				Description	A Dim mm	
	P A & B	T	X	Y			
THMC7P1SC	3/4"	1"	1/4"	3/8"	Manifold 1 Station	101.6	
THMC7P2SC	3/4"	1"	1/4"	3/8"	Manifold 2 Stations	203.2	
THMC7P3SC	3/4"	1"	1/4"	3/8"	Manifold 3 Stations	304.8	
LPSRV2-10	Relief Valve C10-2 Cav						

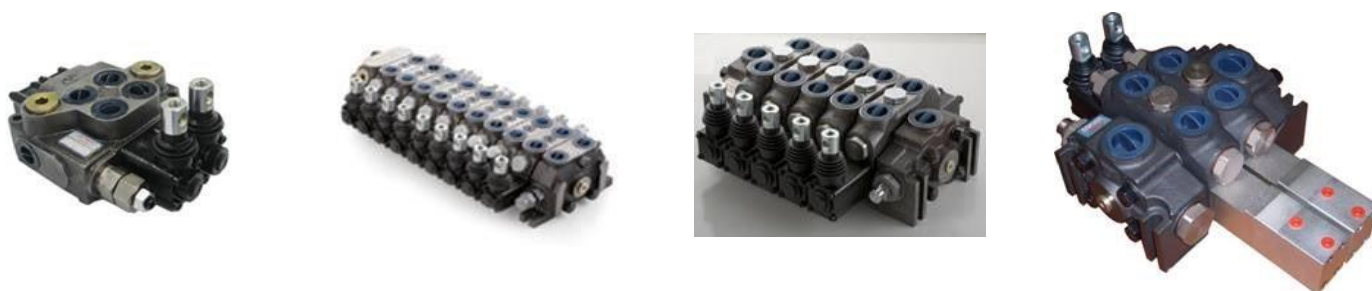


CETOP7Subplates

STEEL

Part Number	Ports (BSPP)		Description	
	P, T,A & B	X & Y		
THSPC7SS	1" BSPP	1/4" BSPP	Side Ports	
THSPC7BS	1" BSPP	1/4" BSPP	Bottom Ports	





MOBILE VALVES

	Page
Manual DCV Monoblock DCV20	5.01
Manual DCV Monoblock DCV40	5.02
Manual DCV Sectional DCV60	5.03
Manual DCV Sectional DCV100	5.04
Manual DCV Sectional DCV100 Sections	5.05
Manual DCV Sectional DCV140	5.06
Manual DCV Sectional DCV140 Sections	5.07
Manual DCV Sectional DCV200	5.08
Manual DCV Sectional DCV200 Sections	5.09

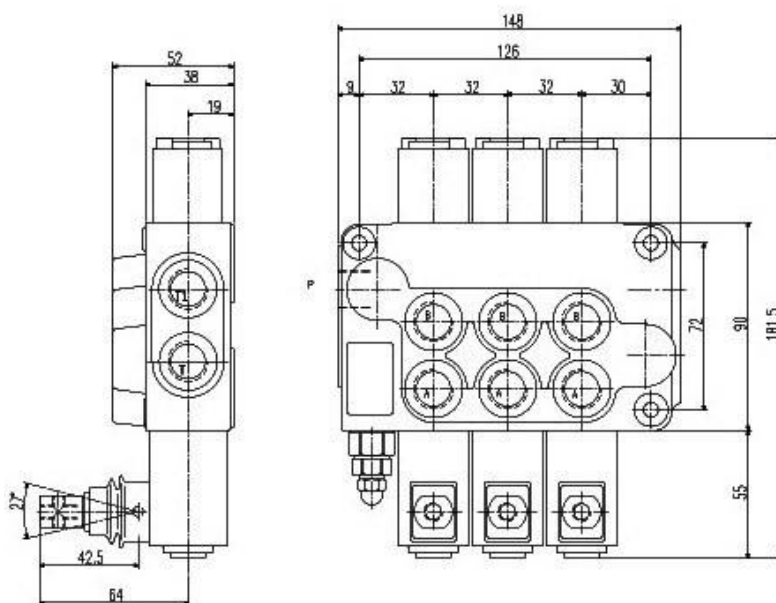


DCV20

Manually Operated Directional Control Valve
Double Acting – Spring Centred
35LPM
350 BAR

Common Load Hold Check

Part Number	Max Flow	Max Pressure	Ports	
DCV20/1-E7(140)-S1C1A1-U1-G06	35 LPM	350 BAR	3/8" BSPP	
DCV20/2-E7(140)-S1C1A1-U1-G06				
DCV20/3-E7(140)-S1C1A1-U1-G06				
DCV20/4-E7(140)-S1C1A1-U1-G06				
DCV20/5-E7(140)-S1C1A1-U1-G06				
DCV20/6-E7(140)-S1C1A1-U1-G06				



OPTIONS

Part Number	Description	
DCV20-A1	3 Pos Spring Kit	
DCV20-A2	Detent Kit 3 Position	
DCV20-A3	Detent Kit 2 Position - Detent in A	
DCV20-A4	Detent Kit 2 Position - Detent in B	
DCV20-A14	Pneumatic Control Kit	
DCV20-A171	Electric Pneumatic On/Off Kit 12VDC	
DCV20-A172	Electric Pneumatic On/Off Kit 24VDC	
DCV20-C1	Lever Box	
DCV20/40-U2	HPCO Plug	
DCV20-S1	D/Acting Spool	
DCV20-S4	Motor Spool	
DCV20-S8	Single Acting	

MANUAL DIRECTIONAL VALVES



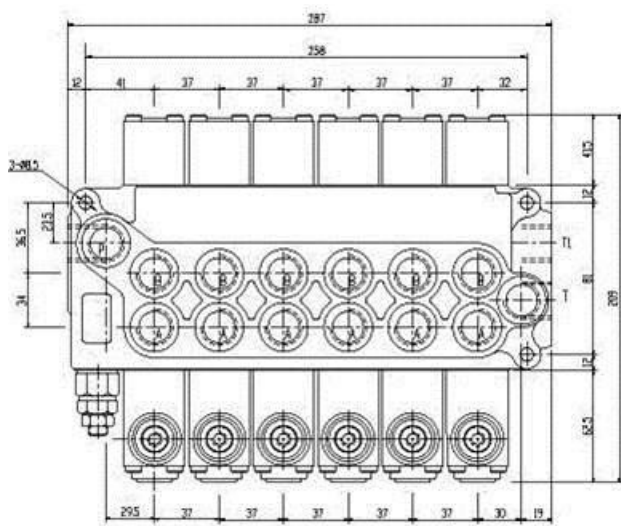
DCV40

Manually Operated Directional Control Valve
Double Acting – Spring Centred
60LPM
350 BAR



Common Load Hold Check

Part Number	Max Flow	Max Pressure	Ports
DCV40/1-E7(140)-S1C1A1-U1-G08	60 LPM	350 BAR	1/2" BSPP
DCV40/2-E7(140)-S1C1A1-U1-G08			
DCV40/3-E7(140)-S1C1A1-U1-G08			
DCV40/4-E7(140)-S1C1A1-U1-G08			
DCV40/5-E7(140)-S1C1A1-U1-G08			
DCV40/6-E7(140)-S1C1A1-U1-G08			



Options

Part Number	Description	
DCV40/60-A1	3 Pos Spring Kit	
DCV40/60-A2	Detent Kit 3 Position	
DCV40/60-A3	Detent Kit 2 Position - Detent in A	
DCV40/60-A4	Detent Kit 2 Position - Detent in B	
DCV40/60-A8	Spring Kit 2 Pos A&O	
DCV40/60-A9	Spring Kit 2 Pos B&O	
DCV40/60-A10	Detent Kit 2 Position Spring Centred Detent in B	
DCV40/60-A11	Detent Kit 2 Position Spring Centred Detent in A	
DCV40/60-A14	Pneumatic Control Kit	
DCV40/60-A171	Electric Pneumatic ON/OFF 12VDC	
DCV40/60-A172	Electric Pneumatic ON/OFF 24VDC	
DCV40/60-C1	Lever Box	
DCV20/40-U2	HPCO Plug	
DCV40-S1	Double Acting Spool	
DCV40-S4	Motor Spool	
DCV40-S8	Single Acting Spool in A	
DCV40-S9	Single Acting Spool in B	



DCV60

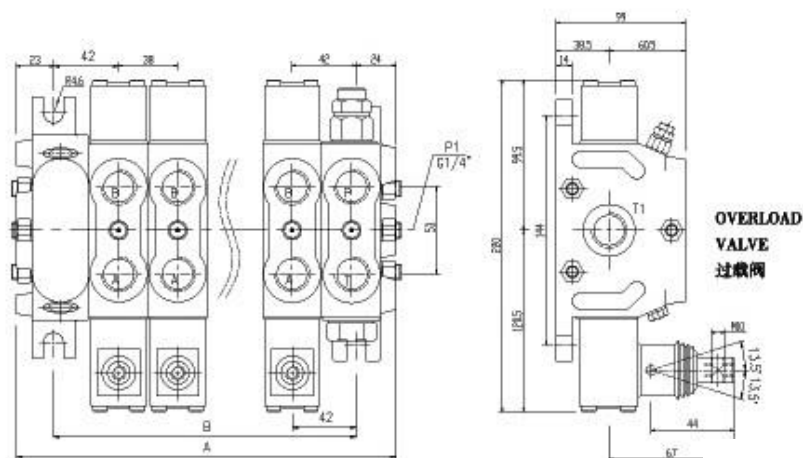
Sectional

1-12 Sections

Manually Operated Directional Control Valve
Double Acting – Spring Centred
60LPM
315 BAR

Load Hold Checks

Part Number	Max Flow	Max Pressure	Ports	
DCV60/1-E2(140)-S1C1A1-U1-G08	60 LPM	315 BAR	1/2" BSPP	
DCV60/2-E2(140)-S1C1A1-U1-G08				
DCV60/3-E2(140)-S1C1A1-U1-G08				
DCV60/4-E2(140)-S1C1A1-U1-G08				
DCV60/5-E2(140)-S1C1A1-U1-G08				
DCV60/6-E2(140)-S1C1A1-U1-G08				



Options

Part Number	Description	
DCV60-S*-Section	Add per extra Section	
DCV40/60-A1	Spring Kit	
DCV40/60-A2	Detent Kit 3 Position	
DCV40/60-A3	Detent Kit 2 Position - Det in A	
DCV40/60-A4	Detent Kit 2 Position - Det in B	
DCV40/60-A8	Spring Kit 2 Pos A&O	
DCV40/60-A9	Spring Kit 2 Pos B&O	
DCV40/60-A10	Detent Kit 2 Pos S/Cent Detent in B	
DCV40/60-A11	Detent Kit 2 Pos S/Cent Detent in A	
DCV40/60-A14	Pneumatic Kit	
DCV40/60-A171	Electric Pneumatic ON/OFF 12VDC	
DCV40/60-A172	Electric Pneumatic ON/OFF 24VDC	

Part Number	Description	
DCV40/60-C1	Lever Box	
DCV60-E2(140)	Inlet with Relief	
DCV60-RV	Std Relief Valve	
DCV60-S1	Double Acting Spool	
DCV60-S4	Motor Spool	
DCV60-S7	Single Act Spool in A	
DCV60-S8	Single Act Spool in B	
DCV60-V*1-B	140 Bar Port Relief	
DCV60-V*1-C	200 Bar Port Relief	
DCV60-U2	HPCO Plug	
DCV60-U2-G08	Outlet Section	

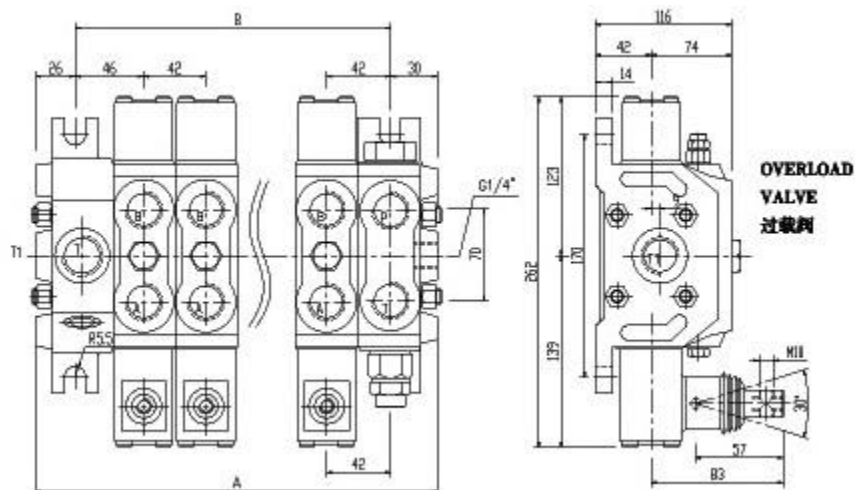


DCV100 Sectional 1-12 Sections

Manually Operated Directional Control Valve
Double Acting – Spring Centred
100LPM
315 BAR



Part Number	Dim A	Dim B	Max Flow	Max Pressure	Ports	
DCV100/1-E2(140)-S1C1A1-U1-G12	158	88	100 LPM	315 BAR	3/4" BSPP	
DCV100/2-E2(140)-S1C1A1-U1-G12	200	130				
DCV100/3-E2(140)-S1C1A1-U1-G12	242	172				
DCV100/4-E2(140)-S1C1A1-U1-G12	284	214				
DCV100/5-E2(140)-S1C1A1-U1-G12	326	256				
DCV100/6-E2(140)-S1C1A1-U1-G12	370	298				



Part Number	Description	
DCV100/140-A1	Spring Kit	
DCV100/140-A2	Detent Kit 3 Position	
DCV100/140-A3	Detent Kit 2 Position - Detent in A	
DCV100/140-A4	Detent Kit 2 Position - Detent in B	
DCV100/140-A14	Pneumatic Kit	
DCV100/140-A17	Electric Pneumatic ON/OFF	
DCV100/140-C1	Handle End Cover	
DCV100-U2	HPCO Plug	
DCV100-S1	D/Acting Spool	
DCV100-S4	Motor Spool	
DCV100-S7	Single Acting Spool	
DCV100-S8	Single Acting Spool	
DCV100/140-Va1/Vb1-B	A & B Port Relief Valves (80-160 Bar)	
DCV100/140-Va1/Vb1-C	A & B Port Relief Valves (140-220 Bar)	
DCV100/140-Va3/Vb3-B	Combined Anti Cav + Port Relief Valves (80-160 Bar)	
DCV100/140-Va3/Vb3-C	Combined Anti Cav + Port Relief Valves (140-220 Bar)	



DCV100 Sectional 1-12 Sections

Manually Operated Directional
Control Valve



Inlet Section		
Part Number	Description	
DCV100-E2(200)-G12	Inlet Section with Relief	



Working Sections		
Part Number	Description	
DCV100-S1C1A1-G12	Double Acting Valve Section Only	
DCV100-S1C1A2-G12	Double Acting Valve Section with 3 Pos Detent	
DCV100-S1C1A14-G12	Double Acting Valve Section with Pneumatic Controls	
DCV100-S4C1A1-G12	D/Act Motor Spool Valve Section	
DCV100-S4C1A2-G12	D/Act Motor Spool Valve Section with 3 Pos Detent	
DCV100-S4C1A14-G12	D/Act Motor Spool Valve Section with Pneumatic Controls	
DCV100-S7C1A1-G12	Single Acting Valve Section in A	
DCV100-S7C1A14-G12	Single Acting Valve Section in A with Pneumatic Controls	
DCV100-S8C1A1-G12	Single Acting Valve Section in B	
DCV100-S8C1A14-G12	Single Acting Valve Section in B with Pneumatic Controls	

Outlet Section		
Part Number	Description	
DCV100-U1-G12	Outlet Section Open Centre	
DCV100-U2-G12	Outlet Section Closed Centre & Power Beyond	

Bolt Kits		
Part Number	Description	
DCV100-BK1	4 Bolts per Kit (10X158) to suit 1 Section	
DCV100-BK2	4 Bolts per Kit (10X200) to suit 2 Section	
DCV100-BK3	4 Bolts per Kit (10X242) to suit 3 Section	
DCV100-BK4	4 Bolts per Kit (10X284) to suit 4 Section	
DCV100-BK5	4 Bolts per Kit (10X326) to suit 5 Section	
DCV100-BK6	4 Bolts per Kit (10X370) to suit 6 Section	



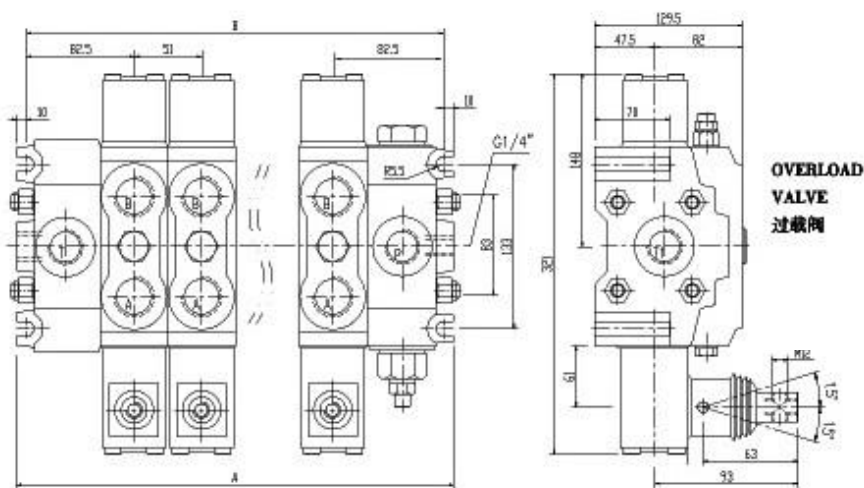
DCV140

Sectional

1-12 Sections

Manually Operated Directional Control Valve
Double Acting – Spring Centred
140LPM
315 BAR

Part Number	Max Flow	Max Pressure	Ports		
DCV140/1-E2(140)-S1C1A1-U1-G16	140 LPM	315 BAR	P and T 1" BSPP	A and B 3/4" BSPP	
DCV140/2-E2(140)-S1C1A1-U1-G16					
DCV140/3-E2(140)-S1C1A1-U1-G16					
DCV140/4-E2(140)-S1C1A1-U1-G16					
DCV140/5-E2(140)-S1C1A1-U1-G16					
DCV140/6-E2(140)-S1C1A1-U1-G16					



Part Number	Description	
DCV100/140-A1	Spring Kit	
DCV100/140-A2	Detent Kit 3 Position	
DCV100/140-A3	Detent Kit 2 Position - Detent in A	
DCV100/140-A4	Detent Kit 2 Position - Detent in B	
DCV100/140-A14	Pneumatic Kit	
DCV100/140-A17	Electric Pneumatic ON/OFF	
DCV100/140-C1	Handle End Cover	
DCV140-U2	HPCO Plug	
DCV140-S1	D/Acting Spool	
DCV140-S4	Motor Spool	
DCV140-S7	Single Acting Spool	
DCV140-S8	Single Acting Spool	
DCV100/140-Va1/Vb1-B	A & B Port Relief Valves (80-160 Bar)	
DCV100/140-Va1/Vb1-C	A & B Port Relief Valves (140-220 Bar)	
DCV100/140-Va3/Vb3-B	Combined Anti Cav + Port Relief Valves (80-160 Bar)	
DCV100/140-Va3/Vb3-C	Combined Anti Cav + Port Relief Valves (140-220 Bar)	



DCV140 Sectional 1-12 Sections

Manually Operated Directional
Control Valve



Inlet Section

Part Number	Description	
DCV140-E2(200)-G16	Inlet Section with Relief	

Working Sections

Part Number	Description	
DCV140-S1C1A1-G16	Double Acting Valve Section Only	
DCV140-S1C1A2-G16	Double Acting Valve Section with 3 Pos Detent	
DCV140-S1C1A14-G16	Double Acting Valve Section with Pneumatic Controls	
DCV140-S4C1A1-G16	D/Act Motor Spool Valve Section	
DCV140-S4C1A2-G16	D/Act Motor Spool Valve Section with 3 Pos Detent	
DCV140-S4C1A14-G16	D/Act Motor Spool Valve Section with Pneumatic Controls	
DCV140-S7C1A1-G16	Single Acting Valve Section in A	
DCV140-S7C1A14-G16	Single Acting Valve Section in A with Pneumatic Controls	
DCV140-S8C1A1-G16	Single Acting Valve Section in B	
DCV140-S8C1A14-G16	Single Acting Valve Section in B with Pneumatic Controls	

Outlet Section

Part Number	Description	
DCV140-U1-G16	Outlet Section Open Centre	
DCV140-U2-G16	Outlet Section Closed Centre & Power Beyond	

Bolt Kits

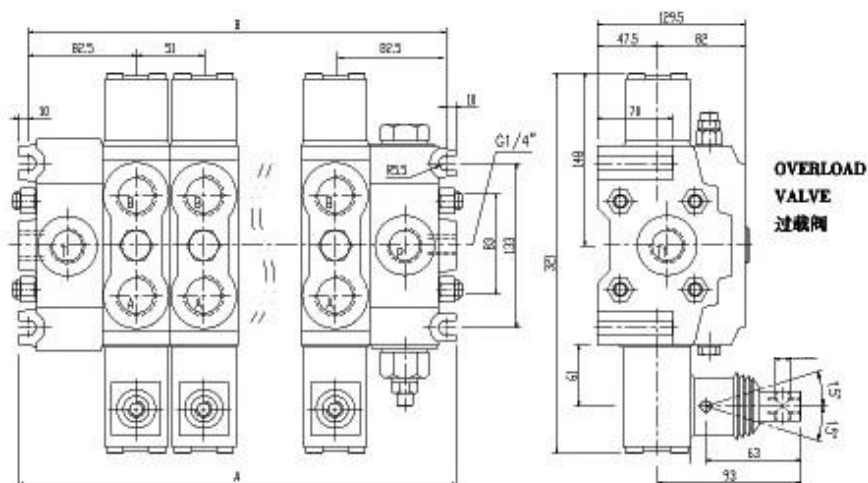
Part Number	Description	
DCV140-BK1	4 Bolts per Kit (10X158) to suit 1 Section	
DCV140-BK2	4 Bolts per Kit (10X200) to suit 2 Section	
DCV140-BK3	4 Bolts per Kit (10X242) to suit 3 Section	
DCV140-BK4	4 Bolts per Kit (10X284) to suit 4 Section	
DCV140-BK5	4 Bolts per Kit (10X326) to suit 5 Section	
DCV140-BK6	4 Bolts per Kit (10X370) to suit 6 Section	



DCV200 Sectional 1-12 Sections

Manually Operated Directional Control Valve
Double Acting – Spring Centred
200LPM
315 BAR

Part Number	Max Flow	Max Pressure	Ports	
DCV200/1-E2(140)-S1C1A1-U1-G16	200 LPM	315 BAR	1" BSPP	
DCV200/2-E2(140)-S1C1A1-U1-G16				
DCV200/3-E2(140)-S1C1A1-U1-G16				
DCV200/4-E2(140)-S1C1A1-U1-G16				
DCV200/5-E2(140)-S1C1A1-U1-G16				
DCV200/6-E2(140)-S1C1A1-U1-G16				



Part Number	Description	
DCV200-A1	Spring Kit	
DCV200-A2	Detent Kit 3 Position	
DCV200-A3	Detent Kit 2 Position - Detent in A	
DCV200-A4	Detent Kit 2 Position - Detent in B	
DCV200-A14	Pneumatic Kit	
DCV200-A17	Electric Pneumatic ON/OFF	
DCV200-C1	Handle End Cover	
DCV200-U2	HPCO Plug	
DCV200-S1	D/Acting Spool	
DCV200-S4	Motor Spool	
DCV200-S7	Single Acting Spool	
DCV200-S8	Single Acting Spool	
DCV200-Va1/Vb1-B	A & B Port Relief Valves (80-160 Bar)	
DCV200-Va1/Vb1-C	A & B Port Relief Valves (140-220 Bar)	



DCV200 Sectional 1-12 Sections

Manually Operated Directional Control Valve
200LPM
315 BAR



Inlet Section

Part Number	Description	
DCV200-E2(200)-G16	Inlet Section with Relief	

Working Sections

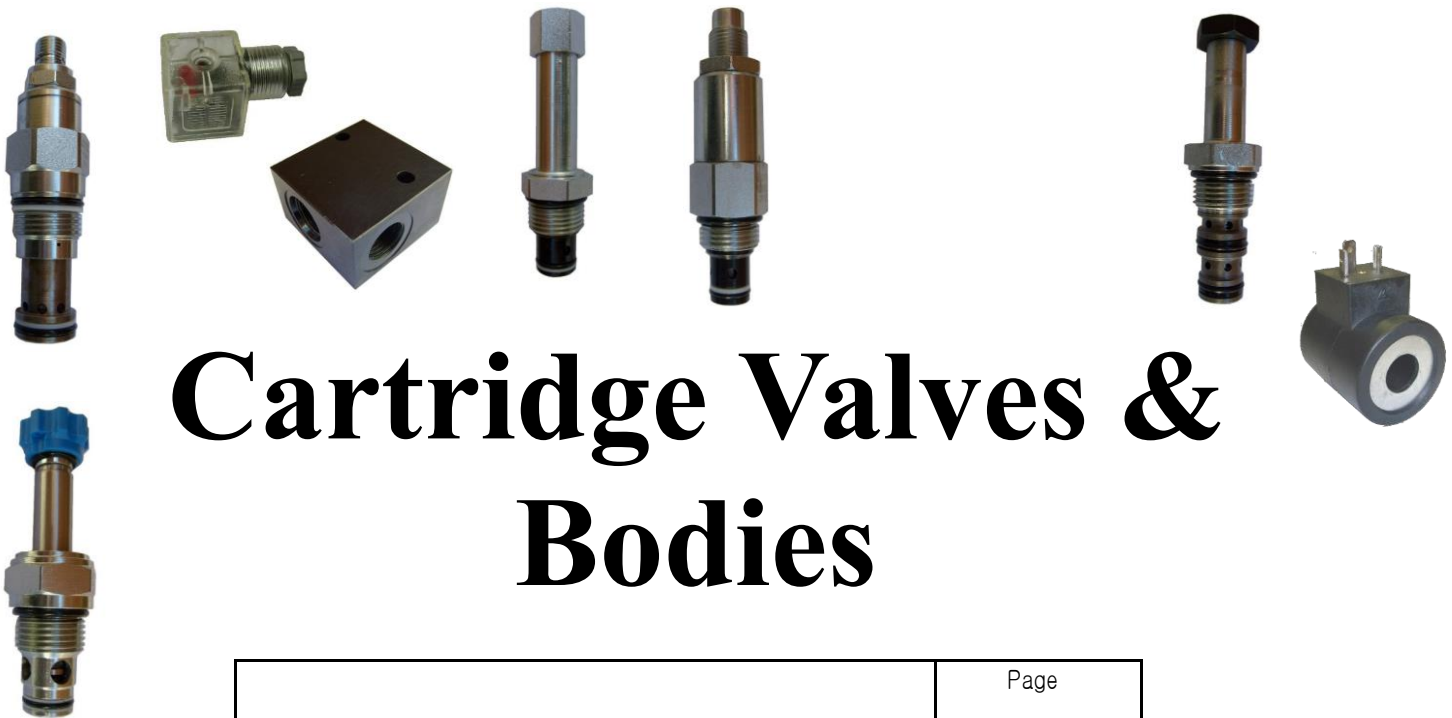
Part Number	Description	
DCV200-S1C1A1-G16	Double Acting Valve Section Only	
DCV200-S1C1A2-G16	Double Acting Valve Section with 3 Pos Detent	
DCV200-S1C1A14-G16	Double Acting Valve Section with Pneumatic Controls	
DCV200-S4C1A1-G16	D/Act Motor Spool Valve Section	
DCV200-S4C1A2-G16	D/Act Motor Spool Valve Section with 3 Pos Detent	
DCV200-S4C1A14-G16	D/Act Motor Spool Valve Section with Pneumatic Controls	
DCV200-S7C1A1-G16	Single Acting Valve Section in A	
DCV200-S7C1A14-G16	Single Acting Valve Section in A with Pneumatic Controls	
DCV200-S8C1A1-G16	Single Acting Valve Section in B	
DCV200-S8C1A14-G16	Single Acting Valve Section in B with Pneumatic Controls	

Outlet Section

Part Number	Description	
DCV200-U1-G16	Outlet Section Open Centre	
DCV200-U2-G16	Outlet Section Closed Centre & Power Beyond	

Bolt Kits

Part Number	Description	
DCV200-BK1	4 Bolts per Kit (12X190) to suit 1 Section	
DCV200-BK2	4 Bolts per Kit (12X241) to suit 2 Section	
DCV200-BK3	4 Bolts per Kit (12X292) to suit 3 Section	
DCV000-BK4	4 Bolts per Kit (12X343) to suit 4 Section	
DCV200-BK5	4 Bolts per Kit (12X394) to suit 5 Section	
DCV200-BK6	4 Bolts per Kit (12X445) to suit 6 Section	

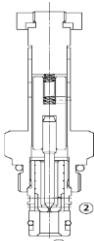
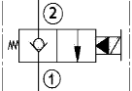


Cartridge Valves & Bodies

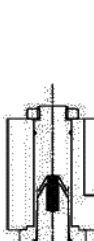
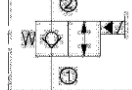
	Page
Normally Closed 2 Pos Cartridges	6.01
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Quick Hitch	6.012

Normally Closed 2 Position Solenoid Operated Cartridge Valves

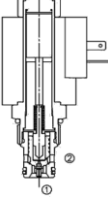
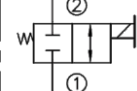
Normally Closed - No Reverse Flow when Energised.

  	Part Number	Flow Rate (LPM)	Pressure (Bar)	Common Cavity	Coil	
	LSV-08-2NCP	18	210	08-2 3/4-16 2 Way	LC2-08-C-*H	
	LSV2-08-2NCP	30	250	08-2 3/4-16 2 Way	LC2-08-*-*H	
	LSV6-08-2NCP	50	350	08-2 3/4-16 2 Way	LC6-08-S-*H	
	LSV2-10-2NCP	60	250	10-2 7/8-14 2 Way	LC2-10-C-*H	
	LSV2-12-2NCP	113	250	12-2 1-1/16-12 2 Way	LC2-10-C-*H	
	LSV6-16-2NCP	150	350	16-2 1-5/16-12 2 Way	LC6-08-S-*H	

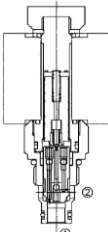
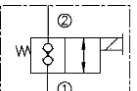
Normally Closed - With Reverse Flow when Energised.

  	Part Number	Flow Rate (LPM)	Pressure (Bar)	Common Cavity	Coil	
	LSV2-08-2NCRP	22	250	08-2 3/4-16 2 Way	LC2-08-*-*H	
	LSV6-08-2NCRP	50	350	08-2 3/4-16 2 Way	LC6-08-S-*H	
	LSV2-10-2NCRP	56	250	10-2 7/8-14 2 Way	LC2-10-C-*H	
	LSV6-10-2NCRP	70	350	10-2 7/8-14 2 Way	LC6-08-S-*H	
	LSV2-12-2NCRP	113	250	12-2 1-1/16-12 2 Way	LC2-10-C-*H	
	LSV6-16-2NCRP	150	350	16-2 1-5/16-12 2 Way	LC6-08-S-*H	

Normally Closed - 2 Way, 2 Position, Spool Type, Bi-Directional

  	Part Number	Flow Rate (LPM)	Pressure (Bar)	Common Cavity	Coil	
	LSV2-08-2NCS	16	207	08-2 3/4-16 2 Way	LC2-08-C-*H	
	LSV2-10-2NCS	36	207	10-2 7/8-14 2 Way	LC2-08-C-*H	

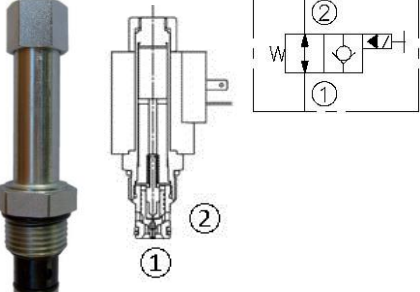
Normally Closed - 2 Way, 2 Position, Bi-Directional

  	Part Number	Flow Rate (LPM)	Pressure (Bar)	Common Cavity	Coil	
	LSV6-08-2NCSP	40	350	08-2 3/4-16 2 Way	LC6-08-S-*H	
	LSV6-10-2NCSP	70	350	10-2 7/8-14 2 Way	LC6-08-S-*H	
	LSV6-16-2NCSP	150	350	16-2 1-5/16-12 2 Way	LC6-08-S-*H	

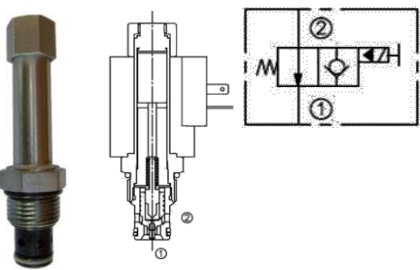
Coils, Din Plugs and Bodies supplied separately
Refer Data sheets for Flow Rates and Pressure Drops

Normally Open 2 Position Solenoid Operated Cartridge Valves

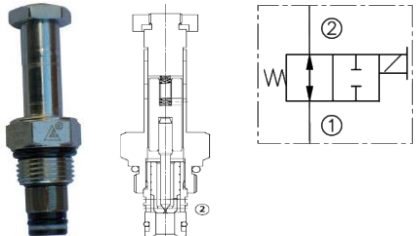
Normally Open—with reverse flow when de-energized

	Part Number	Flow Rate (LPM)	Pressure (Bar)	Common Cavity	Coil to suit	
	LSV2-08-2NORP	38	250	08-2 3/4-16 2 Way	LC2-08-*H	
	LSV2-10-2NORP	68	250	10-2 7/8-14 2 Way	LC2-10-C*H	
	LSV2-12-2NORP	113	250	12-2 1-1/16-12 2 Way	LC2-10-C*H	

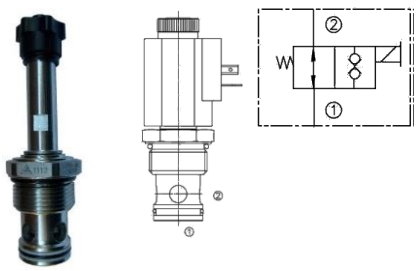
Normally Open - Restricted Reverse Flow when energized.

	Part Number	Flow Rate (LPM)	Pressure (Bar)	Common Cavity	Coil to suit	
	LSV2-08-2NOP	38	250	08-2 3/4-16 2 Way	LC2-08-C*H	
	LSV2-10-2NOP	66	250	10-2 7/8-14 2 Way	LC2-10-C*H	
	LSV2-12-2NOP	113	250	12-2 1-1/16-12 2 Way	LC2-10-C*H	

Normally Open - Restricted Reverse Flow when energized.

	Part Number	Flow Rate (LPM)	Pressure (Bar)	Common Cavity	Coil to suit	
	LSV2-08-2NOS	11	207	08-2 3/4-16 2 Way	LC2-08-C*H	
	LSV2-10-2NOS	22	207	10-2 7/8-14 2 Way	LC2-10-C*H	

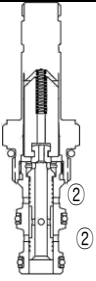
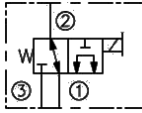
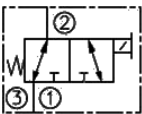
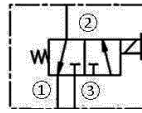
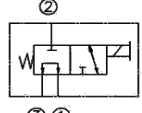
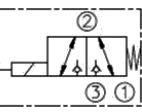
Normally Open - Reverse Free Flow, Checked 1 & 2 when energized.

	Part Number	Flow Rate (LPM)	Pressure (Bar)	Common Cavity	Coil to suit	
	LSV6-08-2NOSP	50	350	08-2 3/4-16 2 Way	LC3-10-C*H	
	LSV6-10-2NOSP	70	350	10-2 7/8-14 2 Way	LC3-10-C*H	
	LSV6-16-2NOSP	150	350	16-2 1-5/16-12 2 Way	LC3-10-C*H	

Coils, Din Plugs and Bodies supplied separately
Refer Data sheets for Flow Rates and Pressure Drops

3 & 4 Port, 2 & 3 Position Solenoid Operated Cartridge Valves

3 Way 2 position

						
						
Part Number	Flow Rate (LPM)	Pressure (Bar)	Common Cavity		Coil to suit	
LSV2-08-3	11	207	08-3	3/4-16 3 Way	LC2-08-*H	
LSV2-10-3	22	207	10-3	7/8-14 3 Way	LC2-10-C-*H	
LSV2-08-3A	11	207	08-3	3/4-16 3 Way	LC2-08-*H	
LSV2-08-3B	18	207	08-3	3/4-16 3 Way	LC2-08-*H	
LSV2-10-3B	22	207	10-3	7/8-14 3 Way	LC2-10-C-*H	
LSV2-08-3C	11	207	08-3	3/4-16 3 Way	LC2-08-*H	
LSV-08-3L	20	350	08-3	3/4-16 3 Way	LC3-10-C-*H	
LSV-10-3-L	25	250	10-3	7/8-14 3 Way	LC3-10-C-*H	

4 Way Valves

		Part Number	Flow rate (LPM)	Pressure (Bar)	Common Cavity		Coil to Suit	
		LSV2-08-4-CO	11	207	08-4	3/4-16 4 Way	LC2-08-*H	
		LSV2-10-4-CO	22	207	10-4	7/8-14 4 Way	LC2-10-*H	
		LSV2-08-4-NC	11	207	08-4	3/4-16 4 Way	LC2-08-*H	
		LSV2-10-4-NO	22	207	10-4	7/8-14 4 Way	LC2-10-*H	
		LSV-08-34-T	11	207	08-4	3/4-16 4 Way	LC2-08-*H X2	
		LSV-08-34-M	11	207	08-4	3/4-16 4 Way	LC2-08-*H X2	
		LSV-08-34-C	11	207	08-4	3/4-16 4 Way	LC2-08-*H X2	
		LSV-08-34-O	11	207	08-4	3/4-16 4 Way	LC2-08-*H X2	

Solenoid Operated Coils & Din Plug Connectors

Coils

	Part Number	Coil Type	Voltage	Dimensions Width x Length	Stem Dia approx	
	LC-08-S-1H	Square	12VDC	30.4 x 38.8	13 mm	
	LC-08-S-2H	Square	24VDC	30.4 x 38.8	13 mm	
	LC-08-S-4H	Square	220VAC	30.4 x 38.8	13 mm	
	LC2-08-C-1H	Cylindrical	12VDC	34.3 x 37	13 mm	
	LC2-08-C-2H	Cylindrical	24VDC	34.3 x 37	13 mm	
	LC2-08-C-4H	Cylindrical	220VAC	34.3 x 37	13 mm	
	LC2-10-C-1H	Cylindrical	12VDC	44 x 51.3	16 mm	
	LC2-10-C-2H	Cylindrical	24VDC	44 x 51.3	16 mm	
	LC2-10-C-4H	Cylindrical	220VAC	44 x 51.3	16 mm	
	LC3-08-S-1H	Square	12VDC	36 x 38.8	13 mm	
	LC3-08-S-2H	Square	24VDC	36 x 38.8	13 mm	
	LC3-08-S-4H	Square	220VAC	36 x 38.8	13 mm	
	LC3-10-C-1H	Cylindrical	12VDC	37.7 x 50.5	16 mm	
	LC3-10-C-2H	Cylindrical	24VDC	37.7 x 50.5	16 mm	
	LC3-10-C-4H	Cylindrical	220VAC	37.7 x 50.5	16 mm	
	LC6-08-S-1H	Square	12VDC	36 x 38.5	13 mm	
	LC6-08-S-2H	Square	24VDC	36 x 38.5	13 mm	
	LC6-08-S-4H	Square	220VAC	36 x 38.5	13 mm	

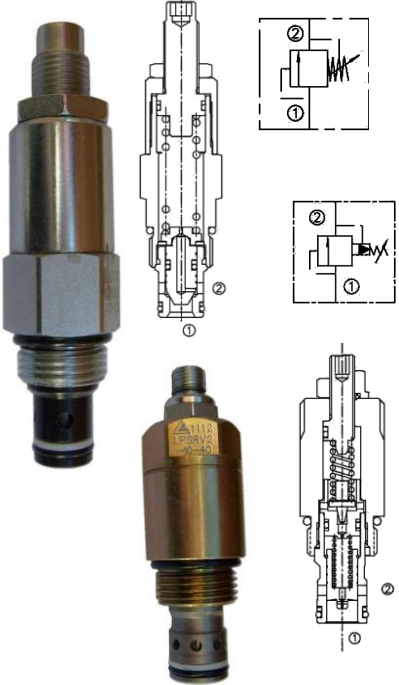
DIN Plug

	PART NO	DESCRIPTION		
	18209N	DIN PLUG - BLACK		
	18209G	DIN PLUG – GREY		
	18209-10-50V	12V or 24VDC LED		
	18209-10-50V-S	12V or 24V LED & Supp		
	18209-110V	110V LED		
	18209-240V	240V LED		
	18209-110RAC	RECTIFIER 110V		
	18209-240RAC	RECTIFIER 240V		

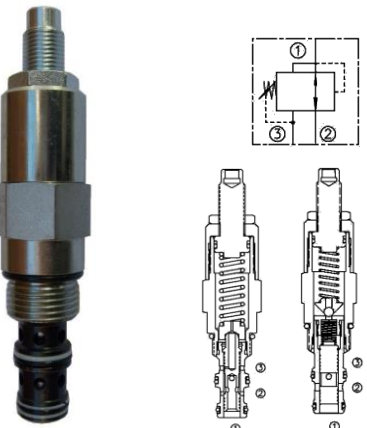
Common Cavity Cartridge Valves



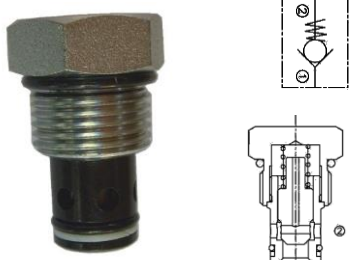
Relief Valve Cartridges

	Part Number	Type	Adjustment range	Common Cavity	Max Flow rate	
	LADRV2-08-23	Direct Acting	17-159 Bar	08-2 3/4-16 2 Way	22 LPM	
	LADRV2-08-37	Direct Acting	17-260 Bar	08-2 3/4-16 2 Way	22 LPM	
	LADRV2-10-23	Direct Acting	17-161 Bar	10-2 7/8-14 2 Way	37 LPM	
	LADRV2-10-30	Direct Acting	20-210 Bar	10-2 7/8-14 2 Way	37 LPM	
	LNRV-08M-2-14	Direct Acting	30-100 Bar	08M-2 M20X1.5-7H 2 Way	30 LPM	
	LNRV-08M-2-30	Direct Acting	50-210 Bar	08M-2 M20X1.5-7H 2 Way	30 LPM	
	LNRV-08M-2-50	Direct Acting	100-350 Bar	08M-2 M20X1.5-7H 2 Way	30 LPM	
	LPSRV2-08-30	Pilot Operated	3.5-207 Bar	08-2 3/4-16 2 Way	37 LPM	
	LPSRV2-10-40	Pilot Operated	70-280 Bar	10-2 7/8-14 2 Way	120 LPM	
	LPSRV2-16-60	Pilot Operated	10-420 Bar	16-2 1-5/16-12 2 Way	400 LPM	

Pressure Reducing/Relieving Cartridges

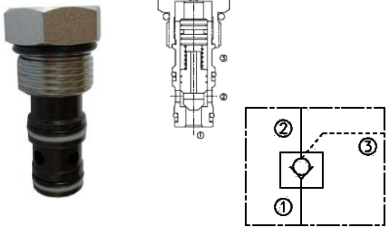
	Part Number	Type	Adjustment Range	Common Cavity	Max Flow rate	
	LDPR-08-12	Direct Acting	21-82 Bar	08-3 3/4-16 3 Way	11 LPM	
	LDPR-10-15	Direct Acting	20-103 Bar	10-3 7/8-14 3 Way	30LPM	
	Reducing Cartridge Only					
	LPRPS-10-30	Pilot Operated	4-207 Bar	10-3 7/8-14 3 Way	38 LPM	
	LPPR2-10-30	Pilot Operated	28-207 Bar	10-3 7/8-14 3 Way	56 LPM	

Check Valves—Poppet Type

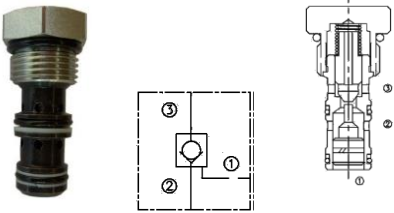
	Part Number	Cracking Pressure	Pressure	Common Cavity	Flow rate	
	LCV-08-P-0.7	.7 Bar	250 Bar	08-2 3/4-16 2 Way	20 LPM	
	LCV-10-P-0.7	.7 Bar	250 Bar	10-2 7/8-14 2 Way	38 LPM	
	LCV-12-P-1.7	1.7 Bar	250 Bar	12-2 1-1/16-12 2 Way	120 LPM	
	LCV-16-P-1.7	1.7 Bar	350 Bar	16-2 1-5/16-12 2 Way	220 LPM	

Common Cavity Cartridge Valves

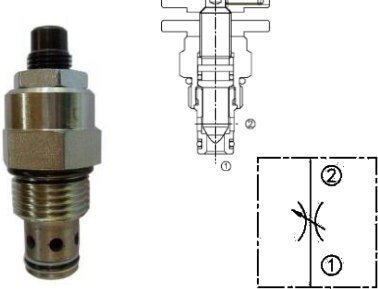
Check Valves—Pilot to Close

	Part Number	Cracking Pressure	Pressure	Common Cavity	Flow rate	
	LPC2-10-N-2.1	2.1 Bar	250 Bar	10-3 7/8-14 3 Way	45 LPM	

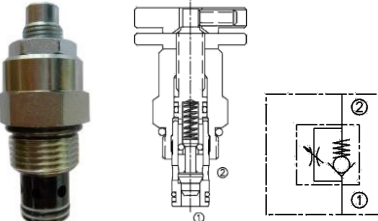
Check Valves—Pilot to Open

	Part Number	Cracking Pressure	Pressure	Common Cavity	Flow rate	
	LPC-08-N-1.4	1.4 Bar	250 BAR	08-3 3/4-16 3 Way	25	
	LPOC1-10-3S-2.0	2 Bar	350 BAR	10-3S 7/8-14 3 Way	56	

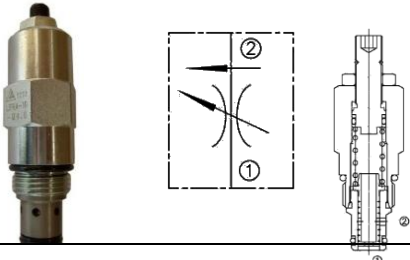
Needle Valve Cartridges

	Part Number		Pressure	Common Cavity	Flow rate	
	LNV2-08		250 Bar	08-2 3/4-16 2 Way	16	
	LNV2-10		250 Bar	10-2 7/8-14 2 Way	30	
	LNV2-12		250 Bar	12-2 1-1/16-12 2 Way	100	

Flow Control Cartridges with reverse free flow

	Part Number		Pressure	Common Cavity	Flow rate	
	LFC-08		250 Bar	08-2 3/4-16 2 Way	20	
	LFC-10		250 Bar	10-2 7/8-14 2 Way	40	

Flow Control—Pressure Compensated

	Part Number		Pressure	Common Cavity	Reg Flow	
	LFRA-08		240 Bar	08-2 3/4-16 2 Way	1-20 LPM	
	LFRA-10		240 Bar	10-2 7/8-14 2 Way	3-26 LPM	

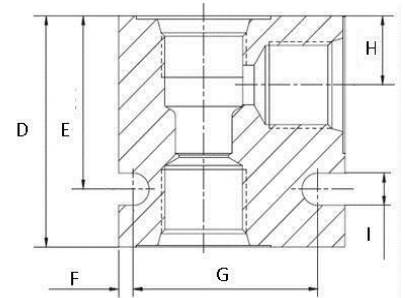
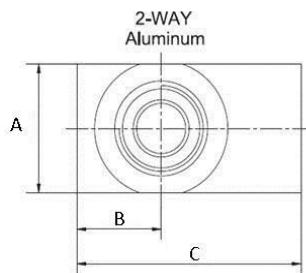
Cartridge Valves

Bodies BSPP Ports

Aluminium and Steel Housings to suit Cartridge Valves
Common Cavities

2 Port Aluminium Bodies

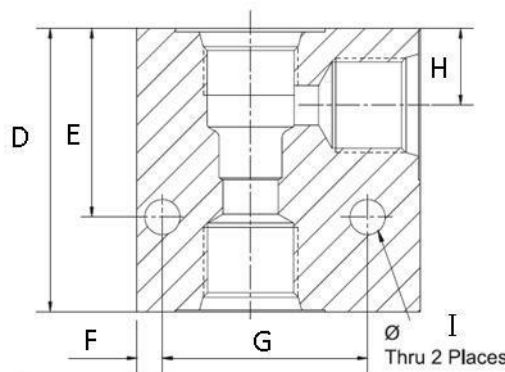
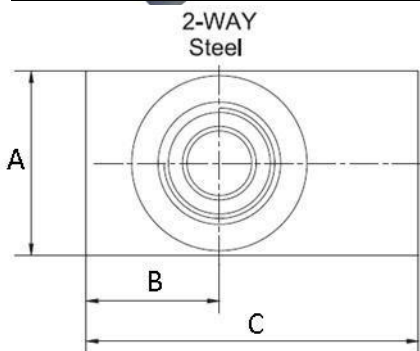
	Part Number	Max Press	Common Cavity		Ports	
	LB08-2-A-2G	210 BAR	08-2	3/4-16 2 Way	1/4" BSPP	
	LB08-2-A-3G	210 BAR	08-2	3/4-16 2 Way	3/8" BSPP	
	LB10-2-A-3G	210 BAR	10-2	7/8-14 2 Way	3/8" BSPP	
	LB10-2-A-4G	210 BAR	10-2	7/8-14 2 Way	1/2" BSPP	
	LB12-2-A-4G	210 BAR	12-2	1-1/16-12 2 Way	1/2" BSPP	
	LB12-2-A-6G	210 BAR	12-2	1-1/16-12 2 Way	3/4" BSPP	
	LB12-2-A-8G	210 BAR	12-2	1-1/16-12 2 Way	1" BSPP	



	A	B	C	D	E	F	G	H	I
LB08-2-A-**-	28.7	19.05	50.8	50.8	38.1	3.3	41.4	15.2	7.11
LB10-2-A-**-	31.75	19.05	50.8	50.8	38.1	3.3	41.4	19.05	7.11
LB12-2-A-**-	50.8	28.7	76.2	76.2	57.2	4.1	65	26.2	8.6

2 Port Steel Bodies

 STEEL BODY	Part Number	Max Press	Cavity		Ports	
	LB08-2-S-2G	350 BAR	08-2	3/4-16 2 Way	1/4" BSPP	
	LB08-2-S-3G	350 BAR	08-2	3/4-16 2 Way	3/8" BSPP	
	LB10-2-S-3G	350 BAR	10-2	7/8-14 2 Way	3/8" BSPP	
	LB10-2-S-4G	350 BAR	10-2	7/8-14 2 Way	1/2" BSPP	
	LB12-2-S-6G	350 BAR	12-2	1-1/16-12 2 Way	3/4" BSPP	
	LB12-2-S-8G	350 BAR	12-2	1-1/16-12 2 Way	1" BSPP	
	LB16-2-S-6G	350 BAR	16-2	1-5/16-12 2 Way	3/4" BSPP	
	LB16-2-S-8G	350 BAR	16-2	1-5/16-12 2 Way	1" BSPP	



	A	B	C	D	E	F	G	H	I
LB08-2-S-**-	31.75	22.9	57.15	57.15	38.1	5.08	41.4	15.49	7.14
LB10-2-S-**-	35.05	22.86	57.15	57.15	38.1	5.08	41.4	19.08	7.14
LB12-2-S-**-	50.8	33.7	82.6	88.9	57.2	8.9	65	26.9	8.6
LB16-2-S-**-	50.8	33.8	82.6	88.9	57.2	8.9	65	25.4	8.6

Cartridge Valves

Bodies BSPP Ports

Aluminium and Steel Housings to suit Cartridge Valves
Common Cavities

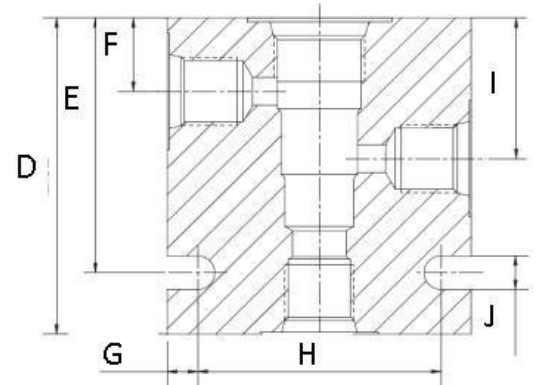
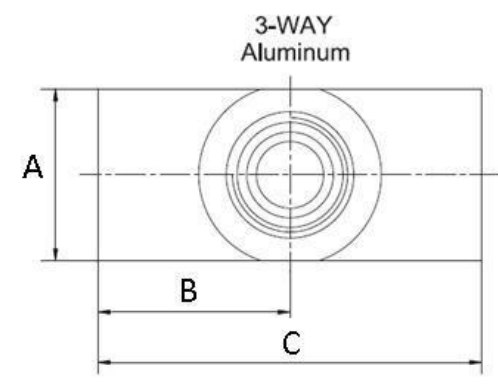
Cartridge Valves

Bodies BSPP Ports

Aluminium and Steel Housings to suit Cartridge Valves
Common Cavities

3 Port Aluminium Bodies

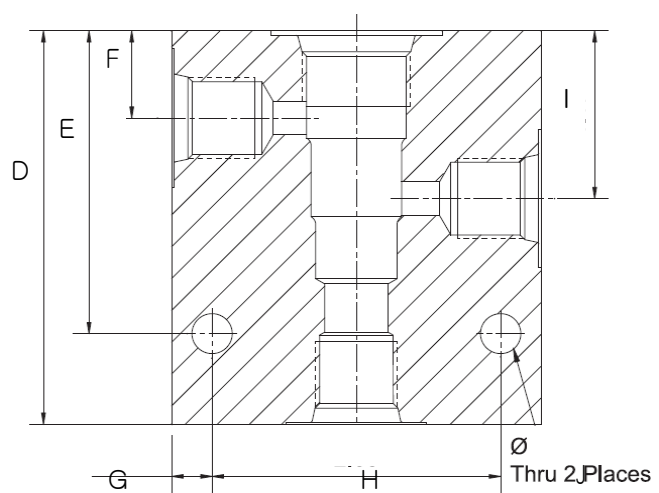
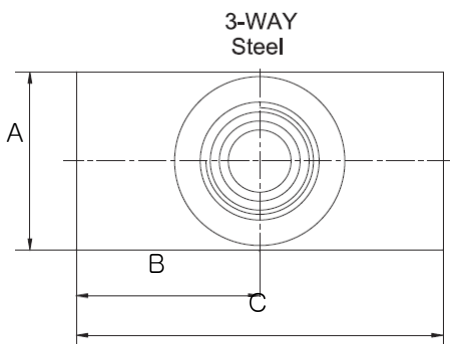
	Part Number	Max Press	Cavity		Ports	
	LB08-3-A-3G	210 Bar	08-3	3/4-16 3 Way	3/8" BSPP	
	LB10-3-A-2G	210 Bar	10-3	7/8-14 3 Way	1/4" BSPP	
	LB10-3-A-3G	210 Bar	10-3	7/8-14 3 Way	3/8 BSPP	



	A	B	C	D	E	F	G	H	I	J
LB08-3-A-**	28.7	31.75	63.5	66.5	53.8	15.2	6.35	50.8	29.7	7.11
LB10-3-A-**	31.75	31.75	63.5	66.5	53.8	18.8	6.35	50.8	34.5	7.11

3 Port Steel Bodies

	Part Number	Max Press	Cavity		Ports	
	LB08-3-S-2G	350 Bar	08-3	3/4-16 3 Way	1/4" BSPP	
	LB08-3-S-3G	350 Bar	08-3	3/4-16 3 Way	3/8" BSPP	
	LB10-3-S-2G	350 Bar	10-3	7/8-14 3 Way	1/4" BSPP	
	LB10-3-S-3G	350 Bar	10-3	7/8-14 3 Way	3/8 BSPP	



Cartridge Valves

Bodies BSPP Ports

Aluminium and Steel Housings to suit Cartridge Valves
Common Cavities

	A	B	C	D	E	F	G	H	I	J
LB08-3-S-**	31.75	32.5	65	69.8	53.8	15.5	7.11	50.8	29.7	7.14
LB10-3-S-**	35.1	33	65	69.8	53.8	19.05	7.11	50.8	34.5	7.14

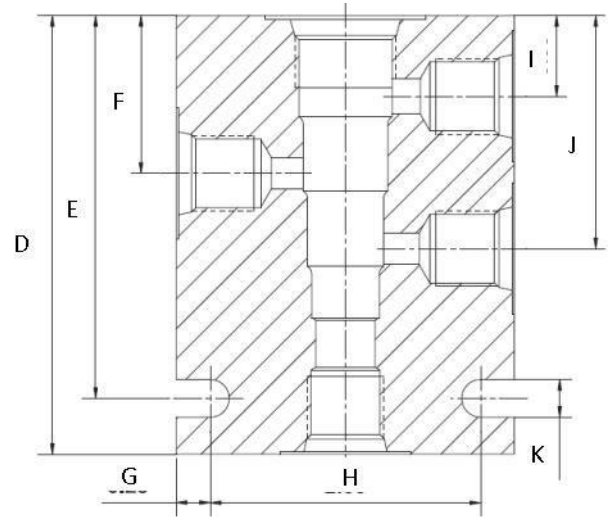
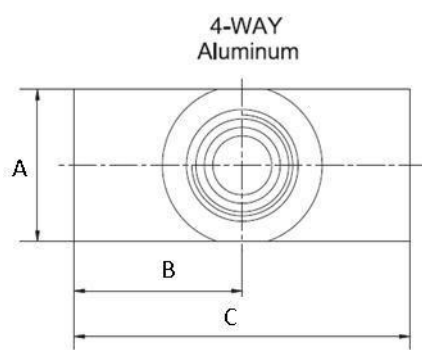
Cartridge Valves

Bodies BSPP Ports

Aluminium and Steel Housings to suit Cartridge Valves
Common Cavities

4 Port Aluminium Bodies

	Part Number	Max Press	Cavity		Ports	
	LB08-4-A-2G	210 Bar	08-4	3/4-16 4 Way	1/4" BSPP	
	LB08-4-A-3G	210 Bar	08-4	3/4-16 4 Way	3/8" BSPP	
	LB10-4-A-2G	210 Bar	10-4	7/8-14 4 Way	1/4" BSPP	
	LB10-4-A-3G	210 Bar	10-4	7/8-14 4 Way	3/8 BSPP	



	A	B	C	D	E	F	G	H	I	J	K
LB08-4-A-**-	28.7	31.75	63.5	82.5	72.1	29.7	6.35	50.8	15.2	43.9	7.11
LB10-4-A-**-	31.75	31.75	63.5	82.5	72.1	34.5	6.35	50.8	18.8	50.5	7.11

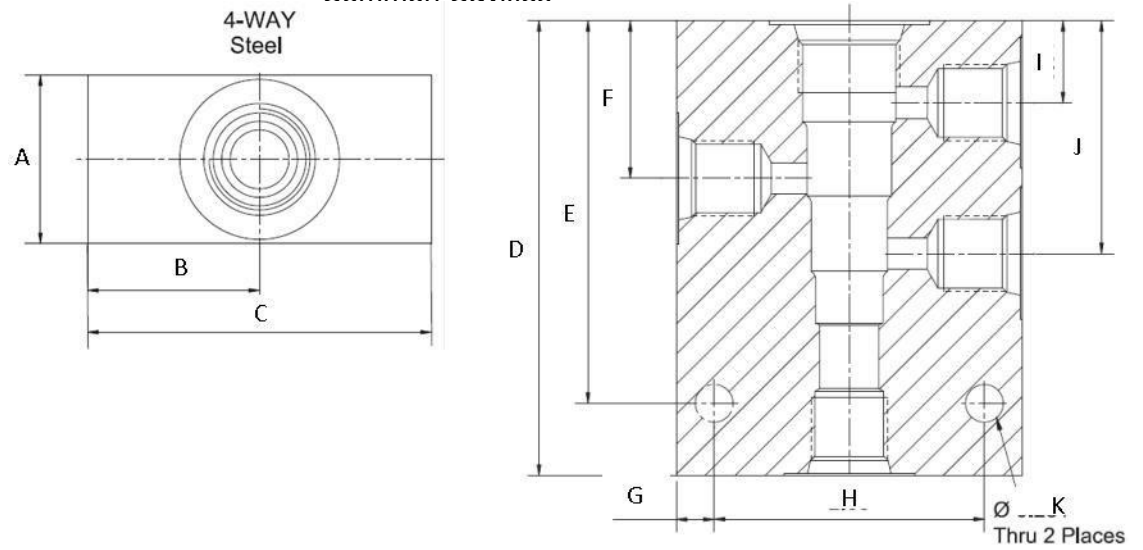
4 Port Steel Bodies

	Part Number	Max Press	Cavity		Ports	
	LB08-4-S-2G	350 Bar	08-4	3/4-16 4 Way	1/4" BSPP	
	LB08-4-S-3G	350 Bar	08-4	3/4-16 4 Way	3/8" BSPP	
	LB10-4-S-2G	350 Bar	10-4	7/8-14 4 Way	1/4" BSPP	
	LB10-4-S-3G	350 Bar	10-4	7/8-14 4 Way	3/8 BSPP	

Cartridge Valves

Bodies BSPP Ports

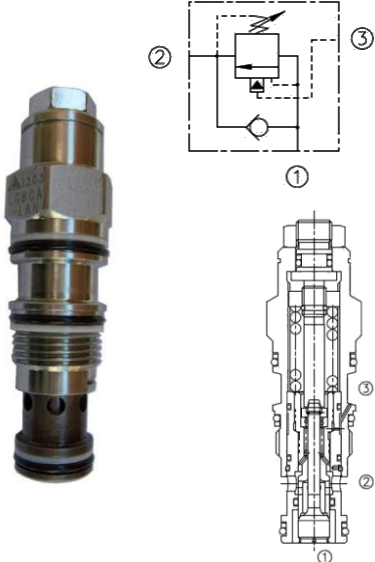
Aluminium and Steel Housings to suit Cartridge Valves
Common Cavities



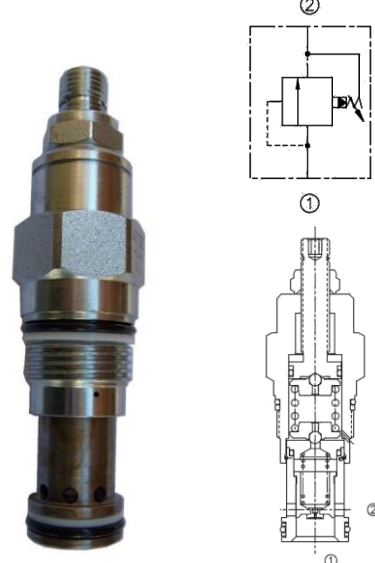
	A	B	C	D	E	F	G	H	I	J	K
LB08-4-S-**-	31.75	32.5	65	85.9	72.1	29.7	7.11	50.8	15.5	43.9	7.14
LB10-4-S-**-	35	32	65	85.9	72.1	34.5	7.11	50.8	19	50.5	7.14

Sun Type Cavity Cartridges and Bodies Aluminum and Steel

Counterbalance Cartridge - Sun Type Cavity

	Part Number	Description	Range Bar	Ratio	Cavity	Check	Max Flow Rate	
	LCBCA-LAN	Counter Balance	70-280	3:1	T-11A	0.3 Bar	60 LPM	
	LCBCA-LHN	Counter Balance	70-280	3:1	T-11A	1.7Bar	60 LPM	
	LCBEA-LAN	Counter Balance	70-280	3:1	T-2A	0.3 Bar	120 LPM	
Bodies to Suit on Page 11								

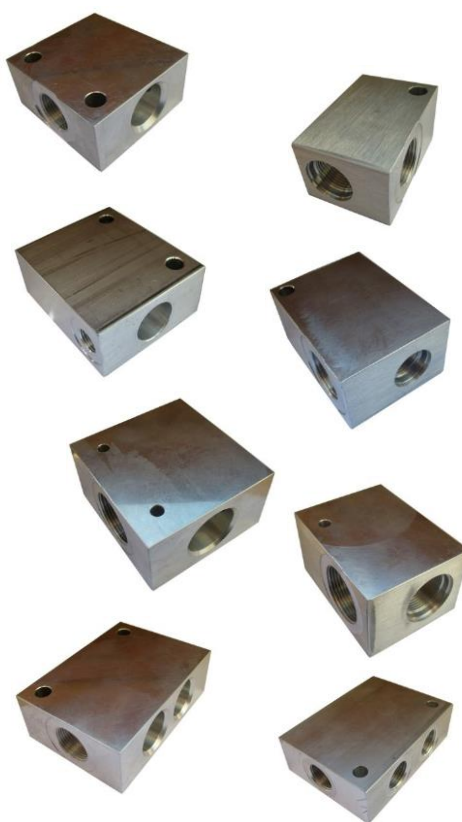
Relief Valve Cartridge - Sun Type Cavity

	Part Number	Description	Range	Cavity	Flow Rate	
	LRPEC-LCN	Pilot Op Relief	10-350 Bar	T-10A	100 LPM	
	LRPEE-LAN	Pilot op Relief	7 -210 Bar	T-10A	95 LPM	
	LRPGC-LAN	Pilot op Relief	7- 210 Bar	T-3A	200 LPM	
Bodies to Suit on Page 11						

Other Cartridges Available on Request

Sun Type Cavity Bodies Aluminum and Steel

Aluminium Bodies

	Part Number	Description	Cavity	Ports	
	LBCV	3 Port Body	T-2A	1/2" BSPP	
	LBCW	3 Port Body	T-2A	3/4" BSPP	
	LCAV	2 Port Body	T-3A	1/2" BSPP	
	LCAW	2 Port Body	T-3A	3/4" BSPP	
	LCAX	2 Port Body	T-3A	1" BSPP	
	LECU	3 Port Body	T-11A	3/8" BSPP	
	LECV	3 Port Body	T-11A	1/2" BSPP	
	LFAT	2 Port Body	T-10A	1/4" BSPP	
	LFAU	2 Port Body	T-10A	3/8" BSPP	
	LFAV	2 Port Body	T-10A	1/2" BSPP	
	LFAW	2 Port Body	T-10A	3/4" BSPP	
	LHCW	3 Port Body	T-17A	3/4" BSPP	
	LHCY	3 Port Body	T-17A	1 1/4" BSPP	
	LIAW	2 Port Body	T-16A	3/4" BSPP	
	LIAX	2 Port Body	T-16A	1" BSPP	
	LIAY	2 Port Body	T-16A	1 1/4" BSPP	
	LYAV	4 Port Body	T-2A	1/2" BSPP	
	LYAW	4 Port Body	T-2A	3/4" BSPP	
	LYEV	4 Port Body	T-11A	1/2" BSPP	

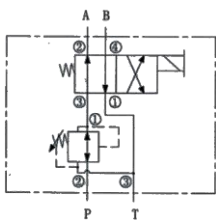
Steel Bodies

	Part Number	Description	Cavity	Flow Rate	
	LBCW-S	3 Port Body	T-2A	3/4" BSPP	
	LCAW-S	2 Port Body	T-3A	3/4" BSPP	
	LCAW-S	2 Port Body	T-3A	1" BSPP	
	LECV-S	3 Port Body	T-11A	1/2" BSPP	
	LFAV-S	2 Port Body	T-10A	1/2" BSPP	
	LHCY-S	3 Port Body	T-17A	1 1/4" BSPP	
	LIAX-S	2 Port Body	T-16A	1" BSPP	
	LYAW-S	4 Port Body	T-2A	3/4" BSPP	
	LYEV-S	4 Port Body	T-11A	1/2" BSPP	

Special Purpose Valves & Blocks

HD supply and design special purpose blocks and manifolds in Steel and Alloy.
We supply to your drawings & circuits or we can offer

Quick Hitch Valve Steel Body, 3/8" BSPP Ports, 207 Bar including LED Din Plug					
	Part Number	Description	Cavity	Flow Rate	
	QHV-08-4-12V	12V 2 Position	08-4	11 LPM	
	QHV-08-4-24V	24V 2 Position	08-4	11 LPM	



Quick Hitch Valve with Pressure Reducer Steel Body, 3/8" BSPP Ports, 350 Bar including LED Din Plug					
	Part Number	Description	Cavity	Flow Rate	
	QHV-R-08-4-12V	12V 2 Position	08-4	11 LPM	
	QHV-R-08-4-24V	24V 2 Position	08-4	11 LPM	



INLINE & CARTRIDGE VALVES

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Priority Flow Valves Lever or Knob	7.03
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Inline Reducing Valves CBF	7.05
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FLOWCONTROLVALVES

Needle Valves



PART NUMBER	MAX FLOW	MAX PRESS	PORTS	
STB-G14 (DV-8)	15 LPM	350	¼" BSPP	
STB-G38 (DV-10)	30 LPM	350	3/8" BSPP	
STB-G12 (DV-12)	45 LPM	350	½" BSPP	
STB-G34 (DV-16)	60 LPM	300	¾" BSPP	
STB-G1 (DV-20)	76 LPM	300	1" BSPP	

Flow Control with reverse free flow



PART NUMBER	MAX FLOW	MAX PRESS	PORTS	
STU-G14 (DRV-8)	15 LPM	350	¼" BSPP	
STU-G38 (DRV-10)	30 LPM	350	3/8" BSPP	
STU-G12 (DRV-12)	45 LPM	350	½" BSPP	
STU-G34 (DRV-16)	60 LPM	350	¾" BSPP	
STU-G1 (DRV-20)	76 LPM	300	1" BSPP	

Mounting Nuts

PART NUMBER	Panel Mount Nuts	
ST-14-Nuts	To Suit STB & STU -14	
ST-38-Nuts	To Suit STB & STU -38	
ST-12-Nuts	To Suit STB & STU -12	
ST-34-Nuts	To Suit STB & STU -34	
ST-1-Nuts	To Suit STB & STU -1	

Needle Valves



PART NUMBER	MAX FLOW	MAX PRESS	PORTS	
LG-8 (DV-8)	15 LPM	315	¼" BSPP	
LG-10 (DV-10)	30 LPM	315	3/8" BSPP	
LG-12 (DV-12)	45 LPM	315	½" BSPP	
LG-16 (DV-16)	60 LPM	315	¾" BSPP	

Flow Control with reverse free flow



PART NUMBER	MAX FLOW	MAX PRESS	PORTS	
LAG-8 (DRV-8)	15 LPM	315	¼" BSPP	
LAG-10 (DRV-10)	30 LPM	315	3/8" BSPP	
LAG-12 (DRV-12)	45 LPM	315	½" BSPP	
LAG-16 (DRV-16)	60 LPM	315	¾" BSPP	

INLINE&CARTRIDGEVALVES

HIGH PRESSURE BALL VALVES

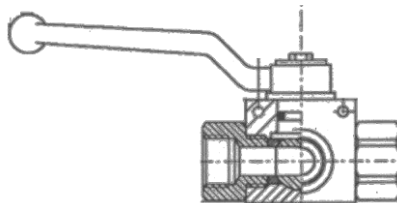
2 WAY BALL VALVES



PART NUMBER	MAX FLOW	MAX PRESS	PORTS	
KHB-G14	15 LPM	500	¼" BSPP	
KHB-G38	30 LPM	500	3/8" BSPP	
KHB-G12	60 LPM	500	½" BSPP	
KHB-G34	80 LPM	380	¾" BSPP	
KHB-G1	125 LPM	350	1" BSPP	
KHB-G114	125 LPM	280	1 ¼" BSPP	
KHB-G112	125 LPM	220	1 ½" BSPP	

3 WAY BALL VALVES

PART NUMBER	MAX FLOW	MAX PRESS	PORTS	
KHB3K-G14	15 LPM	380	¼" BSPP	
KHB3K-G38	30 LPM	380	3/8" BSPP	
KHB3K-G12	60 LPM	320	½" BSPP	
KHB3K-G34	80 LPM	300	¾" BSPP	
KHB3K-G1	125 LPM	280	1" BSPP	





Lever Operated Priority Flow
BSPP Ports
With or Without Relief



PART NUMBER	PORTS	MAX FLOW P	CF FLOW PRIORITY	RELIEF	
FC51-12	1/2" BSPP	80	0-80 LPM	No Relief	
FC51-34	3/4" BSPP	100	0-100 LPM	No Relief	
FCR51-12	1/2" BSPP	80	0-80 LPM	With Relief	
FCR51-34	3/4" BSPP	100	0-100 LPM	With Relief	

220 LPM



Priority Flow
220 LPM Max
With Relief

PART NUMBER	P	T	C	MAX FLOW P	MAX FLOW C PRIORITY	MAX PRESS	
RFAVLP10-12C	$\frac{1}{2}$ BSPP			100 LPM	65 LPM	250	
RFAVLP10-10C	1" BSPP			220 LPM	190 LPM	250	

Steel



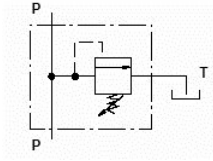
Steel Priority Flow
With or without Relief

PART NUMBER	P	T	B	C	MAX FLOW P	MAX FLOW C PRIORITY	MAX PRESS	
RFG	$\frac{3}{4}$ BSPP		$\frac{1}{2}$ BSPP		90 LPM	50 LPM	350 BAR	
RFGV	$\frac{3}{4}$ BSPP		$\frac{1}{2}$ BSPP		90 LPM	50 LPM	350 BAR	

More Priority Flow Valves
on Page 6.011 & 6.012

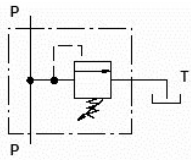
RELIEFVALVES

INLINERELIEFVALVES



PART NUMBER	P	T	MAX FLOW	MAX PRESS	
VLP401402	$\frac{1}{4}$ BSPP		25 LPM	250 BAR	
VLP403802	$\frac{3}{8}$ BSPP		35 LPM	250 BAR	
VLP401202	$\frac{1}{2}$ BSPP		40 LPM	250 BAR	
VLP803402	$\frac{3}{4}$ BSPP		80 LPM	250 BAR	
VLP1303402	$\frac{3}{4}$ BSPP		100 LPM	250 BAR	
VLP1301002	1" BSPP		130 LPM	250 BAR	

INLINE OR TANK MOUNTED RELIEF VALVES



PART NUMBER	P	T	MAX FLOW	MAX PRESS	
VLP40L3802	$\frac{3}{8}$ BSPP		35 LPM	250 BAR	
VLP40L1202	$\frac{1}{2}$ BSPP		40 LPM	250 BAR	
VLP80L1202	$\frac{1}{2}$ BSPP		80 LPM	250 BAR	
VLP80L3402	$\frac{3}{4}$ BSPP		80 LPM	250 BAR	
VLP130L3402	$\frac{3}{4}$ BSPP		100 LPM	250 BAR	
VLP130L1002	1" BSPP		130 LPM	250 BAR	

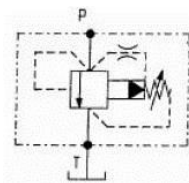
Molle - Springs			
Codice Code	Taratura standard Standard setting bar (Q=5 l/min)	Campo di taratura Adj. pressure range bar	Colore Colour
01	80	20 + 100	Bianco / White
02	180	40 + 250	Giallo / Yellow
03	250	60 + 350	Nero / Black

200LPMRELIEFVALVE STEEL

STEEL



PART NUMBER	P	T	MAX FLOW	MAX PRESS	
VLP200P1003	1" BSPP		200 LPM	350 BAR	



Pilot Operated

SPRINGS			
CODE	STD Setting Bar (Q=5L/min)	Adj Pressurre Range (Bar)	COLOUR
03	250	60 - 350	BLACK

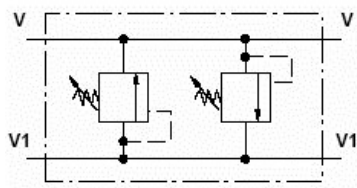
INLINE&CARTRIDGEVALVES

INLINE VALVES

CROSSLINERELIEF VALVES



PART NUMBER	V	V1	MAX FLOW	MAX PRESS	
VLP40DIL3802	3/8 BSPP		40 LPM	250 BAR	
VLP40DIL1202	1/2 BSPP		40 LPM	250 BAR	
VLP80DIL3402	3/4 BSPP		80 LPM	250 BAR	
VLP130DIL1002	1" BSPP		130 LPM	250 BAR	

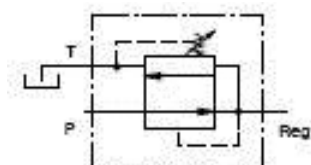


Springs			
Code	Std Setting (Q=5 Lpm)	Adj Pressure Range (Bar)	Colour
01	80	20-100	White
02	180	40-250	Yellow
03	250	60-350	Black



INLINE PRESSURE REDUCER

PART NUMBER	P	T	R eg	Max Flow LPM	Max inlet working pressure Bar	Max regulated pressure Bar	
RP251201A	1/2 BSPP			25	250	100	
RP251202A	1/2 BSPP			25	250	180	

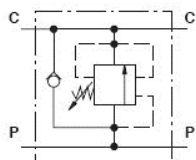


SPRINGS			
CODE	STD Setting Bar(Q=5L/min)	Adj Pressurre Range Bar	COLOUR
01	80	20 - 100	YELLOW
02	150	40 - 180	BLACK

INLINE SEQUENCE VALVE



PART NUMBER	P	C	MAX FLOW	MAX PRESS	
VSQ40LCC1202	1/2 BSPP		40 LPM	250 BAR	
VSQ80LCC1202	1/2 BSPP		80 LPM	250 BAR	



Molle - Springs			
Codice Code	Taratura standard Standard setting bar (Q=5 l/min)	Campo di taratura Adj. pressure range bar	Colore Colour
01	80	20 + 100	Bianco / White
02	180	40 + 250	Giallo / Yellow
03	250	60 + 350	Nero / Black

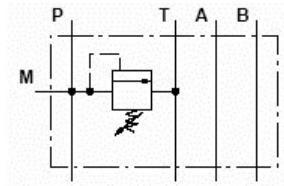
INLINE&CARTRIDGE VALVES

SUBPLATES&MANIFOLDS

CETOP 3 SUBPLATE INCLUDING RELIEF



PART NUMBER	PORTS BSPP					MAX FLOW	MAX PRESS	
	P	T	A	B	M			
BEC3VLP4002	3/8				1/4	40 LPM	250 BAR	

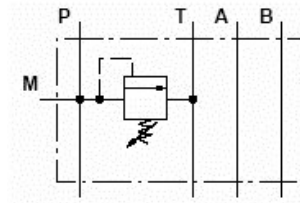


Springs			
Code	Std Setting (Q=5 Lpm)	Adj Pressure Range (Bar)	Colour
01	80	20-100	White
02	180	40-250	Yellow
03	250	60-350	Black

CETOP 5 SUBPLATE INCLUDING RELIEF



PART NUMBER	PORTS BSPP					MAX FLOW	MAX PRESS	
	P	T	A	B	M			
BEC5VLP801202	1/2 BSPP				1/4	80 LPM	250 BAR	

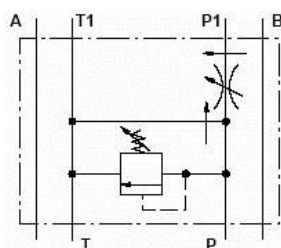


Springs			
Code	Std Setting (Q=5 Lpm)	Adj Pressure Range (Bar)	Colour
01	80	20-100	White
02	180	40-250	Yellow
03	250	60-350	Black

CETOP 3 SUBPLATE INC RELIEF AND PRIORITY FLOW



PART NUMBER	PORTS BSPP					Regulated flow LPM	MAX FLOW	MAX PRESS	
	P	T	A	B	M				
BEC3VLP40RFP50	3/8				1/4	0 - 25	40 LPM	250 BAR	



Springs			
Code	Std Setting (Q=5 Lpm)	Adj Pressure Range (Bar)	Colour
01	80	20-100	White
02	180	40-250	Yellow
03	250	60-350	Black

INLINE&CARTRIDGEVALVES

MANIFOLDBLOCKS

CETOP 3 Manifolds Including Relief Valve

Parallel Manifolds



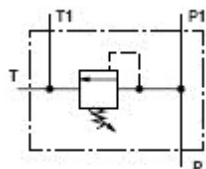
PART NUMBER	STATIONS	P & T	A & B	MAX FLOW	MAX PRESS	
BEC3VLP40AL	1	1/2" BSPP	3/8" BSPP	40 LPM	250 BAR	
BEC3VLP402AL	2	1/2" BSPP	3/8" BSPP	40 LPM	250 BAR	
BEC3VLP403AL	3	1/2" BSPP	3/8" BSPP	40 LPM	250 BAR	
BEC3VLP404AL	4	1/2" BSPP	3/8" BSPP	40 LPM	250 BAR	
BEC3VLP405AL	5	1/2" BSPP	3/8" BSPP	40 LPM	250 BAR	
BEC3VLP406AL	6	1/2" BSPP	3/8" BSPP	40 LPM	250 BAR	

CETOP 3 Relief Block

Stackable



PART NUMBER	PORTS BSPP		MAX FLOW	MAX PRESS	
	P & T	P1 & T1			
BPC3VLP4002	1/2" BSPP	3/8" BSPP	30 LPM	250 BAR	

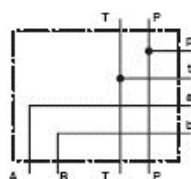


CETOP 3 Mounting Block

Stackable



PART NUMBER	PORTS BSPP			MAX FLOW	MAX PRESS	
	P	T	A & B			
PC3	1/4"	3/8"	3/8"	30 LPM	250 BAR	



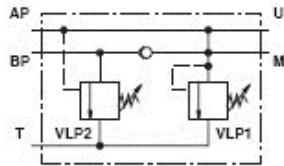
High low Valves

DOUBLE PUMP

INLINE



PART NUMBER	PORTS BSPP					BP Low pressure valve setting	MAX FLOW LPM	MAX PRESS BAR	
	AP	BP	T	U	M				
VEPVLP403802	1/4	3/8	1/2	3/8	1/4	20 - 100 BAR	40	250	
VEPVLP801202	3/8	1/2	3/4	1/2	1/4	20 - 100 BAR	80	250	

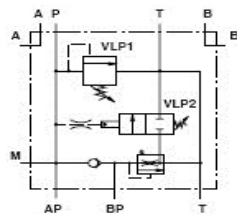


DOUBLE PUMP

CETOP3



PART NUMBER	PORTS BSPP						BP Low pressure valve setting	MAX FLOW LPM	MAX PRESS BAR	
	AP	BP	T	A	B	M				
VEPBEC3VLP403802	1/4	3/8	1/2	3/8	3/8	1/4	20 - 100 BAR	30 LPM	250 BAR	

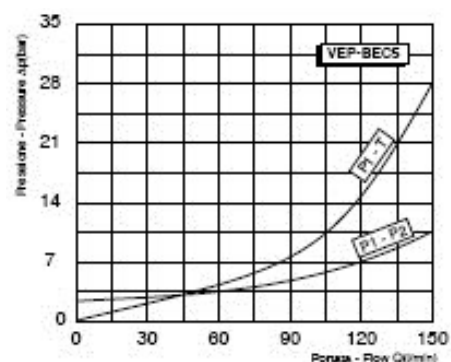
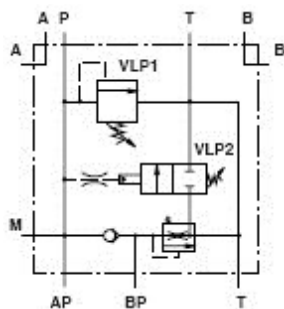


DOUBLE

CETOP5

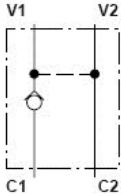


PART NUMBER	PORTS BSPP						BP Low pressure valve setting	MAX FLOW LPM	MAX PRESS BAR	
	AP	BP	T	A	B	M				
VEPBEC53402	3/4					1/4	20 - 100 BAR	100 LPM	250 BAR	



LOCKVALVESInline

Aluminium



Single Lock Valve

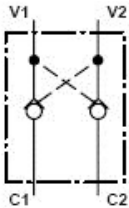
PART NUMBER	V1 V2 C1 C2	PILOT RATIO	MAX FLOW	MAX PRESS	
VBSL14	1/4" BSPP	4:1	20 LPM	250 BAR	
VBSL38	3/8 BSPP	4:1	35 LPM	250 BAR	
VBSL12	1/2 BSPP	4:1	50 LPM	250 BAR	
VBSL34	3/4" BSPP	4:1	80 LPM	250 BAR	

STEEL

Single Lock Valve

PART NUMBER	V1 V2 C1 C2	PILOT RATIO	MAX FLOW	MAX PRESS	
VBSL14A	1/4" BSPP	4:1	20 LPM	250 BAR	
VBSL38A	3/8 BSPP	4:1	35 LPM	250 BAR	
VBSL12A	1/2 BSPP	4:1	50 LPM	250 BAR	
VBSL34A	3/4" BSPP	4:1	80 LPM	250 BAR	

Aluminium



Double Lock Valve

PART NUMBER	V1 V2 C1 C2	PILOT RATIO	MAX FLOW	MAX PRESS	
VBDL14	1/4" BSPP	4:1	25 LPM	250 BAR	
VBDL38	3/8 BSPP	4:1	35 LPM	250 BAR	
VBDL12	1/2 BSPP	4:1	50 LPM	250 BAR	
VBDL34	3/4" BSPP	4:1	80 LPM	250 BAR	

STEEL

Double Lock Valve

PART NUMBER	V1 V2 C1 C2	PILOT RATIO	MAX FLOW	MAX PRESS	
VBDL14A	1/4" BSPP	4:1	25 LPM	250 BAR	
VBDL38A	3/8 BSPP	4:1	35 LPM	250 BAR	
VBDL12A	1/2 BSPP	4:1	50 LPM	250 BAR	
VBDL34A	3/4" BSPP	4:1	80 LPM	250 BAR	

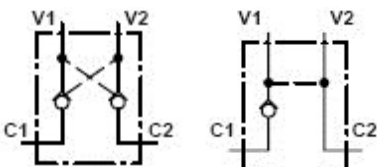
CYLINDERMOUNTINLINELOCKVALVES

Aluminium



PART NUMBER	V1 V2 C1 C2	TYPE	PILOT RATIO	MAX FLOW	MAX PRESS	
VBS14SF	1/4" BSPP	Single	4:1	20 LPM	250 BAR	
VBS38SF	3/8" BSPP	Single	4:1	35 LPM	250 BAR	
VBS12SF	1/2 BSPP	Single	4:1	50 LPM	250 BAR	
VBS34SP	3/4" BSPP	Single	4:1	80 LPM	250 BAR	
VBD14SF	1/4" BSPP	Double	4:1	20 LPM	250 BAR	
VBD38SF	3/8" BSPP	Double	4:1	35 LPM	250 BAR	
VBD12SF	1/2" BSPP	Double	4:1	50 LPM	250 BAR	
VBD34SP	3/4" BSPP	Double	4:1	80 LPM	250 BAR	

STEEL



PART NUMBER	V1 V2 C1 C2	PILOT RATIO	MAX FLOW	MAX PRESS	
VBS14SFA	1/4" BSPP	4:1	20 LPM	250 BAR	
VBS38SFA	3/8" BSPP	4:1	35 LPM	250 BAR	
VBS12SFA	1/2 BSPP	4:1	50 LPM	250 BAR	
VBS34SPA	3/4" BSPP	4:1	80 LPM	250 BAR	
VBD14SFA	1/4" BSPP	4:1	20 LPM	250 BAR	
VBD38SFA	3/8" BSPP	4:1	35 LPM	250 BAR	
VBD12SFA	1/2" BSPP	4:1	50 LPM	250 BAR	
VBD34SPA	3/4" BSPP	4:1	80 LPM	250 BAR	

OVERCENTREVALVES

COUNTERBALANCE

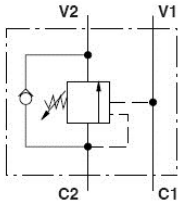
SINGLEOVERCENTREVALVES ExternalPilot



PART NUMBER	V2 C2	PILOT	PILOT RATIO	MAX FLOW	MAX PRESS	
OVCSE3802	3/8 BSPP	1/4 BSPP	4.25:1	40 LPM	250 BAR	
OVCSE1202	1/2 BSPP	1/4 BSPP	4.25:1	60 LPM	250 BAR	
OVCSE3402	3/4 BSPP	1/4 BSPP	4.25:1	100 LPM	250 BAR	

Low Pressure 20 - 200 Bar Range Available

SINGLEOVERCENTREVALVES InternalPilot



PART NUMBER	V1 V2 C1 C2	PILOT RATIO	MAX FLOW	MAX PRESS	
OVCSEL3802	3/8 BSPP	4.25:1	40 LPM	250 BAR	
OVCSEL1202	1/2 BSPP	4.25:1	60 LPM	250 BAR	
OVCSEL3402	3/4 BSPP	4.25:1	100 LPM	250 BAR	

Low Pressure 20 - 200 Bar Range Available

DOUBLEOVERCENTREVALVES



PART NUMBER	V1 V2 C1 C2	PILOT RATIO	MAX FLOW	MAX PRESS	
OVCDEL3802	3/8 BSPP	4.25:1	40 LPM	250 BAR	
OVCDEL1202	1/2 BSPP	4.25:1	60 LPM	250 BAR	
OVCDEL3402	3/4 BSPP	4.25:1	100 LPM	250 BAR	
OVCDEL1002	1" BSPP	4.25:1	120 LPM	250 BAR	

Low Pressure 20 - 200 Bar Range Available

MODULAR OVERCENTRE VALVES

CETOP 3 and
CETOP 5

SINGLE



PART NUMBER	MOUNT	PILOT RATIO	MAX FLOW	MAX PRESS	AJUSTMENT RANGE	
OVCSEFC301	CETOP 3	4.25:1	35 LPM	250 BAR	20- 200 BAR	
OVCSEFC302	CETOP 3	4.25:1	35 LPM	250 BAR	50 - 350 BAR	

DOUBLE

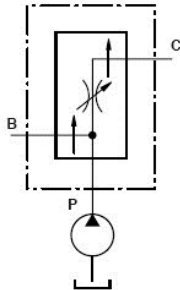


PART NUMBER	MOUNT	PILOT RATIO	MAX FLOW	MAX PRESS	AJUSTMENT RANGE	
OVCDEFC301	CETOP 3	4.25:1	35 LPM	250 BAR	20- 200 BAR	
OVCDEFC302	CETOP 3	4.25:1	35 LPM	250 BAR	50 - 350 BAR	
OVCDEFC502	CETOP 5	4.25:1		250 BAR	50-350 BAR	

INLINE&CARTRIDGEVALVES

PRIORITYFLOW VALVES

PRIORITYFLOW INLINE



PART NUMBER	C	B	P	MAX FLOW P	MAX FLOW C PRIORITY	MAX PRESS	
RFP5012B	$\frac{1}{2}$ BSPP			40 LPM	25 LPM	250 BAR	
RFP9034B	$\frac{3}{4}$ BSPP			90 LPM	50 LPM	250 BAR	



PART NUMBER	P	B	C	MAX FLOW P	MAX FLOW C PRIORITY	MAX PRESS	
RFPA38A	$\frac{3}{8}$ BSPP			60 LPM	35 LPM	250	
RFPA12A	$\frac{1}{2}$ BSPP			90 LPM	55 LPM	250	

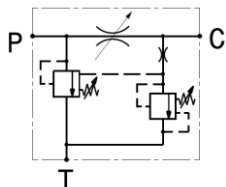
Upto220LPM



PART NUMBER	P	T	C	MAX FLOW P	MAX FLOW C PRIORITY	MAX PRESS	
RFAVLP10-12C	$\frac{1}{2}$ BSPP			100 LPM	65 LPM	250	
RFAVLP10-10C	1" BSPP			220 LPM	190 LPM	250	

PRIORITY VALVES & FLOW DIVIDERS

STEEL



PART NUMBER	P	T	B	C	MAX FLOW P	MAX FLOW C PRIORITY	MAX PRESS	
RFG	$\frac{3}{4}$		$\frac{1}{2}$	$\frac{1}{2}$	90 LPM	50 LPM	350 BAR	
RFGV	$\frac{3}{4}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	90 LPM	50 LPM	350 BAR	

Modular Cetop Priority Flow

Cetop



PART NUMBER	CETOP	MAX FLOW P	MAX FLOW PRIORITY	MAX PRESS	
RFP50FC3A01	CETOP 3	40 LPM	25 LPM	250 BAR	
RFP90FC5A01	CETOP 5	90 LPM	50 LPM	250 BAR	

Inline 50/50 Flow Divider



PART NUMBER	V	C1	C2	RATIO	RANGE	MAX PRESS	
DFR1202	$\frac{1}{2}$ BSPP	3/8 BSPP	3/8 BSPP	50%-50%		210 BAR	
DFR1203	$\frac{1}{2}$ BSPP	3/8 BSPP	3/8 BSPP	50%-50%		210 BAR	
DFR1204	$\frac{1}{2}$ BSPP	3/8 BSPP	3/8 BSPP	50%-50%	26 - 40 LPM	210 BAR	
DFR1205	$\frac{1}{2}$ BSPP	3/8 BSPP	3/8 BSPP	50%-50%	40 - 70 LPM	210 BAR	



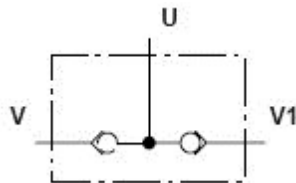
Campo di portata / Flow range		
Codice Code	DFR-38 Q (l/min)	DFR-12 Q (l/min)
01	3 ÷ 6	-
02	7 ÷ 12	-
03	13 ÷ 25	-
04	-	26 ÷ 40
05	-	40 ÷ 70

SHUTTLE&CHECKVALVES

INLINE SHUTTLE VALVES



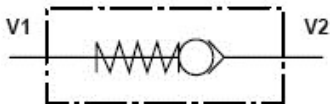
PART NUMBER	V V1 U	MAX FLOW	MAX PRESS	
VSF14	$\frac{1}{4}$ BSPP	20 LPM	250 BAR	
VSF38	$\frac{3}{8}$ BSPP	40 LPM	250 BAR	
VSF12	$\frac{1}{2}$ BSPP	60 LPM	250 BAR	



INLINE CHECK VALVES

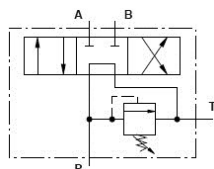


1 BAR CRACKING				
PART NUMBER	V1 V2	MAX FLOW	MAX PRESS	
VU14SF01	$\frac{1}{4}$ BSPP	15 LPM	500 BAR	
VU38SF01	$\frac{3}{8}$ BSPP	30 LPM	500 BAR	
VU12SF01	$\frac{1}{2}$ BSPP	50 LPM	500 BAR	
VU34SF01	$\frac{3}{4}$ BSPP	90 LPM	350 BAR	
VU10SP01	1" BSPP	150 LPM	350 BAR	



5 BAR CRACKING				
PART NUMBER	V1 V2	MAX FLOW	MAX PRESS	
VU14SF03	$\frac{1}{4}$ BSPP	15 LPM	500 BAR	
VU38SF03	$\frac{3}{8}$ BSPP	30 LPM	500 BAR	
VU12SF03	$\frac{1}{2}$ BSPP	50 LPM	500 BAR	
VU34SF03	$\frac{3}{4}$ BSPP	90 LPM	350 BAR	
VU10SP03	1" BSPP	150 LPM	350 BAR	

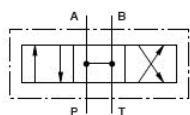
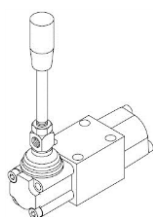
MANUAL LEVER OPERATED DIRECTIONAL VALVES



Compact Manual Control Valves with Relief

PART NUMBER	POSI-TIONS	SPOOL	CON-TROL	MAX FLOW	MAX PRESS	
DM1A1	3	1	A	30 LPM	350 BAR	
DM1A2	3	2	A	30 LPM	350 BAR	
DM1A3	3	3	A	30 LPM	350 BAR	
DM1D1	3	1	D	30 LPM	350 BAR	
DM1D3	3	3	D	30 LPM	350 BAR	
DM1Q2	2	2	D	30 LPM	350 BAR	

CETOP 3 (NG6)

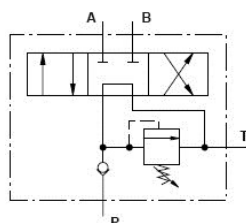


PART NUMBER	POSI-TIONS	SPOOL	CON-TROL	MAX FLOW	MAX PRESS	
DC3A1	3	1	A	30 LPM	350 BAR	
DC3A2	3	2	A	30 LPM	350 BAR	
DC3A3	3	3	A	30 LPM	350 BAR	
DC3D1	3	1	D	30 LPM	350 BAR	
DC3D3	3	3	D	30 LPM	350 BAR	
DC3Q2	2	2	Q	30 LPM	350 BAR	
DC3R2	2	2	R	30 LPM	350 BAR	

Cod.	Schema / Scheme
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	

Cod.	Schema / Scheme	
A		Posizione ritorno molla Position of spring return
B		
C		
D		Molla Spring
E		
F		
H		Posizione fissa Detent
L		
Q		
R		
S		

MANUAL ROTARY DIRECTIONAL VALVE



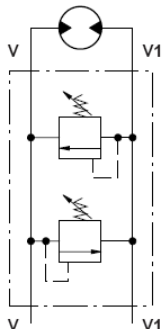
PART NUMBER	MAX FLOW	MAX PRESS	
DM4	10 LPM	400	

MOTORMOUNTED VALVES



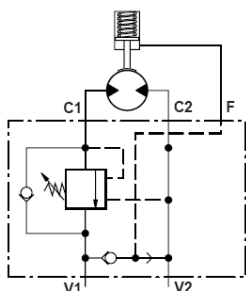
Crossline Relief

PART NUMBER	V	V1	MAX FLOW	MAX PRESS	
VLP40DFMD02OMP	$\frac{1}{2}$ BSPP		40 LPM	250 BAR	
VLP40DFMD102OMS	$\frac{1}{2}$ BSPP		40 LPM	250 BAR	



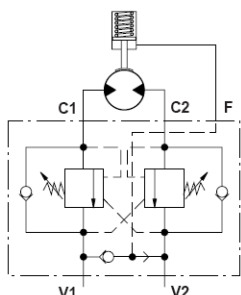
Single Overcentre Valves with Brake Release Shuttle

PART NUMBER	V1 V2	F	PILOT RATIO	MAX FLOW	MAX PRESS	
OVCSEFMDSF1202OMP	$\frac{1}{2}$ BSPP	$\frac{1}{4}$ "	4.25:1	60 LPM	250 BAR	
OVCSEFMDSF12102OMS	$\frac{1}{2}$ BSPP	$\frac{1}{4}$ "	4.25:1	60 LPM	250 BAR	
OVCSEFMDSFC1202OMP	$\frac{1}{2}$ BSPP	$\frac{1}{4}$ "	4.25:1	60 LPM	250 BAR	

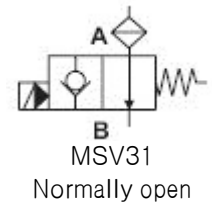
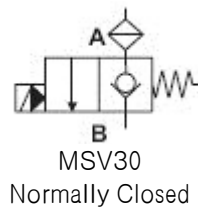
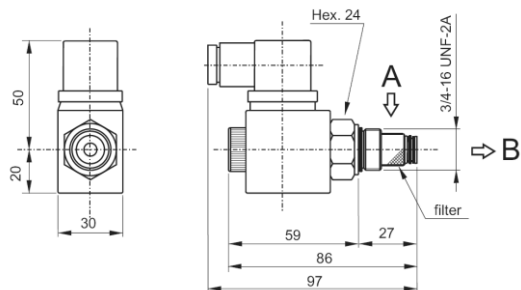


Dual Overcentre Valves with Brake Release Shuttle

PART NUMBER	V1 V2	F	PILOT RATIO	MAX FLOW	MAX PRESS	
OVCDEFMDSF1202OMP	$\frac{1}{2}$ BSPP	$\frac{1}{4}$ "	4.25:1	60 LPM	250 BAR	
OVCDEFMDSF12102OMS	$\frac{1}{2}$ BSPP	$\frac{1}{4}$ "	4.25:1	60 LPM	250 BAR	
OVCDEFMDSFC1202OMP	$\frac{1}{2}$ BSPP	$\frac{1}{4}$ "	4.25:1	60 LPM	250 BAR	

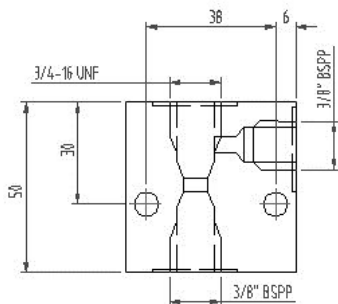


SOLENOID CARTRIDGE VALVES



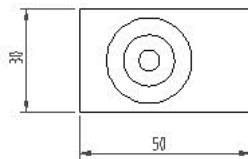
CARTRIDGES

PART NUMBER		Max Flow	Max Pressure	
MSV30-0-0000-0	Normally Closed	20 LPM	210 Bar	
MSV31-0-0000-0	Normally Open	20 LPM	210 Bar	



BODIES

PART NUMBER	PORTS	Max Flow	Max Pressure	
BFC 3/4-16 38	3/8" BSPP	20 LPM	210 Bar	

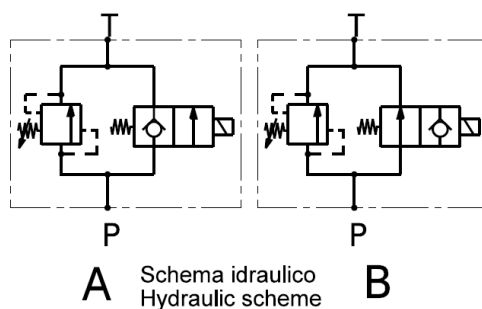


SOLENOIDS

PART NUMBER	VOLTAGE		
M13040001	12VDC		
M13040002	24VDC		
M13040006	110VAC		
M13040007	240VAC		

Solenoid Unloading Relief Valve

PART NUMBER	PORTS	Max Flow	Max Pressure	
EV70VLP803402A-12VDC	3/4" BSPP	70 LPM	210 Bar	
EV70VLP803402A-24VDC	3/4" BSPP	70 LPM	210 Bar	



SPAREPARTS**RELIEF VALVE CARTRIDGES**

PART NUMBER	PRESSURE RANGE	NOM FLOW RATE	
VLP40C01A	20-100 BAR	40 LPM	
VLP40C02A	40-250 BAR	40 LPM	
VLP40C03A	60-350 BAR	40 LPM	
VLP80C01A	20-100 BAR	80 LPM	
VLP80C02A	40-250 BAR	80 LPM	
VLP80C03A	60-350 BAR	80 LPM	
VLP130CD01A	20-100 BAR	130 LPM	
VLP130CD02A	40-250 BAR	130 LPM	
VLP130CD03A	60-350 BAR	130 LPM	
VLP200PC03A	60-350 BAR	200 LPM	

KNOB KIT

PART NUMBER	TO SUIT CARTRIDGE	
VLP-KNOB KIT M8	VLP40	
VLP-KNOB KIT M10	VLP80 & VLP130	

SPRINGS

PART NUMBER	RANGE	TO SUIT CARTRIDGE	
M022	20-100 BAR	VLP40	
M023	40-250 BAR	VLP40	
M024	60-350 BAR	VLP40	
M025	20-100 BAR	VLP80/130	
M026	40-250 BAR	VLP80/130	
M027	60-350 BAR	VLP80/130	
M059	20-200 BAR	OVC	

SEAL KITS

VLP40SK		
VLP80SK		
VLP130SK		

PRIORITY FLOW CARTRIDGES

RFP50CB	50 LPM	
RFP90CB	90 LPM	



Hydraulic Tanks & Accessories

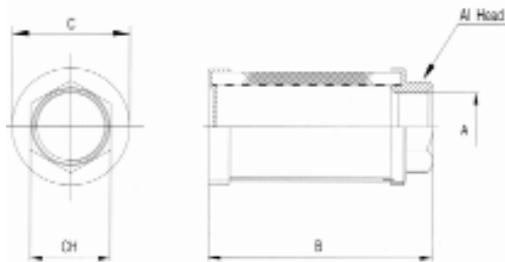
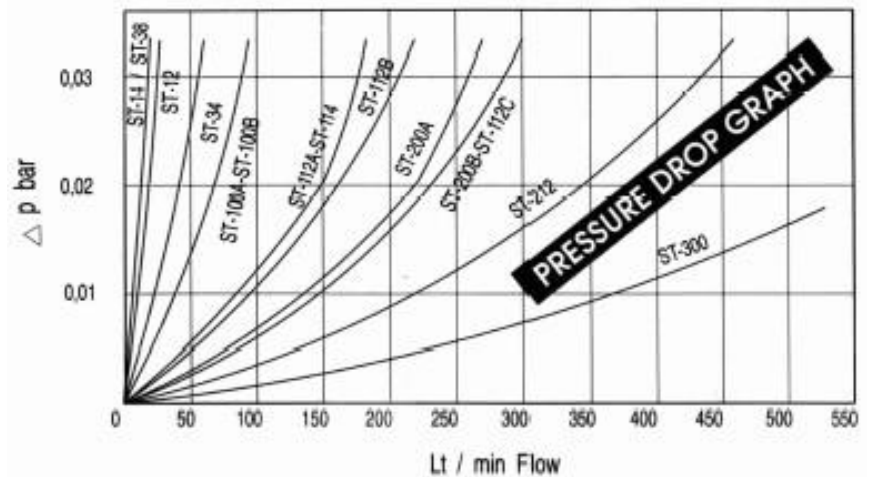
	Page
Suction Strainers	8.01
Level and Temp gauges	8.02
EYE Type Sight Glass	8.02
Filler Breathers	8.03
Return Tank Top Filters	8.04
Return Under Tank Top Filters	8.05
Hydraulic Tanks Steel	8.06
Hydraulic Tanks Aluminium	8.07
Spin On Filters	8.08
Spin On Filter Data	8.09
Tank Top Spin On Filter	8.010
Suction Spin On Filters	8.010
Pressure Gauges	8.011
COOLERS	8.012

SUCTION STRAINERS

Standard filtration is 149 micron nominal
Working temperature -40 to +80 degrees Celsius

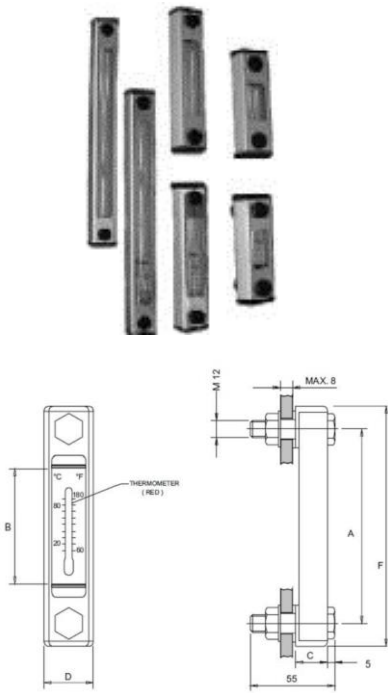


PART NUMBER	Old Type	NOM. FLOW	MICRON	PORT	
SC3-002	ST14BB	8 LPM	149	1/4" BSP	
SC3-003	ST38BB	12 LPM	149	3/8" BSP	
SC3-005	ST12BB	20 LPM	149	1/2" BSP	
SC3-007	ST34BB	28 LPM	149	3/4" BSP	
SC3-010	ST100ABB	40 LPM	149	1" BSP	
SC3-015	ST114BB	60 LPM	149	1 1/4" BSP	
SC3-020	ST112ABB	80 LPM	149	1 1/2" BSP	
SC3-030	ST112BB	120 LPM	149	1 1/2" BSP	
SC3-050	ST200ABB	200 LPM	149	2" BSP	
SC3-075	ST212BB	300 LPM	149	2 1/2" BSP	
SC3-100	ST300BB	400 LPM	149	3" BSP	



125 MICRON			A	B	C	CH
Part Number	Old Type	LPM	BSP			
SC3-002	ST-14	8	1/4	90	46	24
SC3-003	ST-38	12	3/8	90	46	24
SC3-005	ST-12	20	1/2	105	46	30
SC3-007	ST-34	28	3/4	109	64	36
SC3-010	ST-100A	40	1	139	64	46
SC3-015	ST-114	60	1 1/4	139	86	52
SC3-020	ST-112A	80	1 1/2	168	86	60
SC3-030	ST-112B	120	1 1/2	200	86	60
SC3-050	ST-200A	200	2	260	100	70
SC3-075	ST-212	300	2 1/2	211	150	90
SC3-100	ST-300	400	3	272	150	100

LEVELANDTEMPERATUREINDICATORS



PART NUMBER	Old Series	SIZE	TYPE	
LG2-03-M10	LI-1-M10	76MM	LEVEL ONLY	
LG2-03-M12	LI-1-M12	76MM	LEVEL ONLY	
LG2-03T-M10	LI/T-1-M10	76MM	LEVEL & TEMP	
LG2-03T-M12	LI/T-1-M12	76MM	LEVEL & TEMP	
LG2-05-M10	LI-2-M10	127MM	LEVEL ONLY	
LG2-05-M12	LI-2-M12	127MM	LEVEL ONLY	
LG2-05T-M10	LI/T-2-M10	127MM	LEVEL & TEMP	
LG2-05T-M12	LI/T-2-M12	127MM	LEVEL & TEMP	
LG2-10-M12	LI-3	254MM	LEVEL ONLY	
LG2-10T-M12	LI/T-3	254MM	LEVEL & TEMP	
LIE (M12)	LIE	127MM	ELECTRICAL LOW LEVEL	

Type	A	B	C	D	E	F	Kgs
LG2-03	76	37	20	34	M10 / M12	108	0.20
LG2-05	127	76	20	34	M10 / M12	159	0.25
LG2-10	254	203	20	34	M10 / M12	286	0.30

CAST ALLOY BODY



PART NUMBER	SIZE	TYPE	THREAD	
LG6-03T-M12	76mm	LEVEL & TEMP	M12	
LG6-05T-M12	127mm	LEVEL & TEMP	M12	
LG6-10T-M12	254mm	LEVEL & TEMP	M12	

SG1 SIGHT GLASS



PART NUMBER	SIZE	THREAD	
SG1-03B	3/8	3/8" BSPP	
SG1-04B	1/2	1/2" BSPP	
SG1-06B	3/4	3/4" BSPP	
SG1-08B	1	1" BSPP	
SG1-10B	1 1/4	1 1/4" BSPP	
SG1-12B	1 1/2	1 1/2" BSPP	

SGP PLASTIC SIGHT GLASS

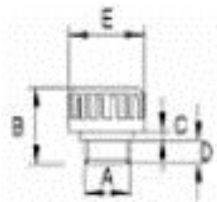


PART NUMBER	SIZE	THREAD	
SGP-03B	3/8	3/8" BSPP	
SGP-04B	1/2	1/2" BSPP	
SGP-06B	3/4	3/4" BSPP	
SGP-08B	1	1" BSPP	
SGP-10B	1 1/4	1 1/4" BSPP	
SGP-12B	1 1/2	1 1/2" BSPP	

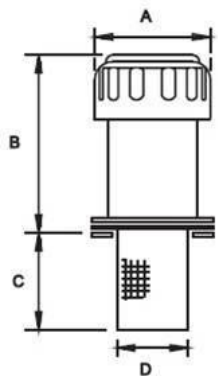
FILLERBREATHERS



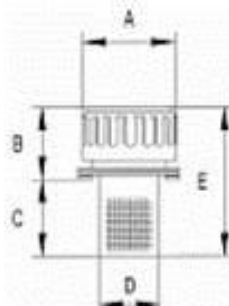
PART NUMBER	RATED FLOW	MOUNTING TYPE	
FB-1	0.30 M3/MIN	41MM DIA FLANGE	
FB-1P	0.30 M3/MIN	41MM PRESSURISED	
FB-2	0.75 M3/MIN	73MM DIA FLANGE	
FB-2P	0.75 M3/MIN	73MM PRESSURISED	
FB-3	0.75 M3/MIN	73MM DIA FLANGE	
FBC-2	0.75 M3/MIN	73MM LOCKING	
FB-3P	0.75 M3/MIN	73MM PRESSURISED	
AB-1	0.30 M3/MIN	1/4" BSPP	
AB-2	0.75 M3/MIN	3/4" BSPP	
FSB-25BM	0.75 M3/MIN	SIDE MOUNT	
FSB-25HN	0.75 M3/MIN	HIGH NECK	
PB-25 (ABT)	0.75 M3/MIN	1 1/2" PUSH ON	



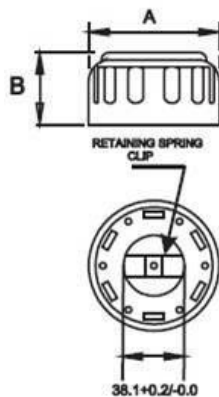
**FLANGE TYPE
HIGH NECK**



FSB-25 HN



PUSH ON TYPE

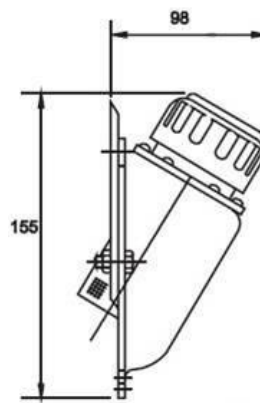


PB-25

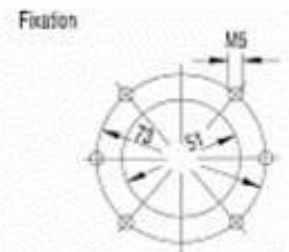


FB1

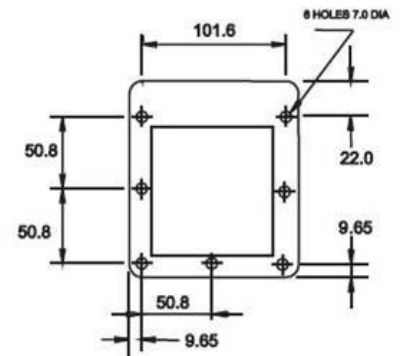
SIDE MOUNT



FSB - 25 BM



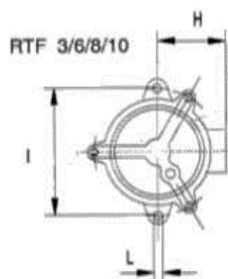
FB2-FB3



TYPE	Rated Flow	Rating	A	B	C	D	E	WEIGHT Kg
AB-1	0.30m3/min	40	1/4" BSPP	55	7	13	47	0.06
AB-2	0.75m3/min	40	3/4" BSPP	71	7	16	80	0.20

TYPE	Rated Flow	Rating	A	B	C	D	E	WEIGHT Kg	SCREWS
FB-1	0.30m3/min	40	52	48	63	29	111	0.10	3 M5X12
FB-2	0.75m3/min	40	83	56	78	50	134	0.30	6 M5X12
FB-3	0.75m3/min	40	83	56	148	50	204	0.35	6 M5X12

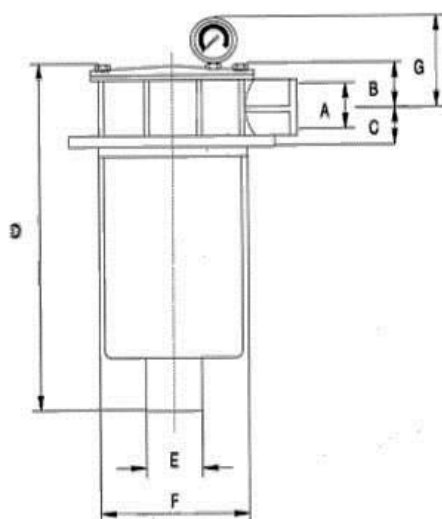
Max. working pressure 3 bar
Working temperature -40 to +90 degrees Celsius



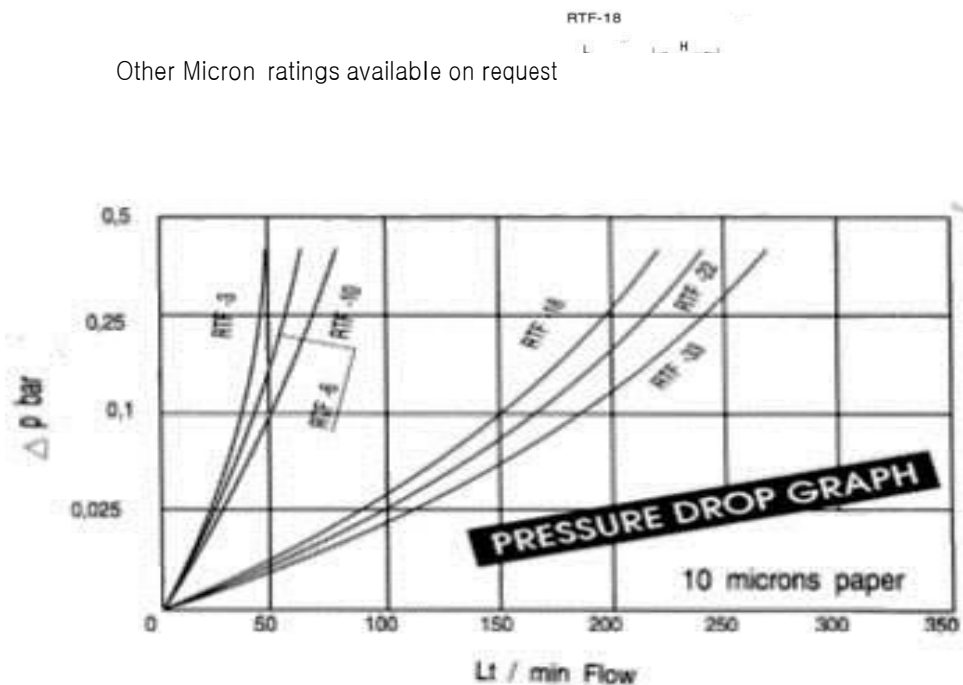
PART NUMBER	NOM. FLOW	MICRON	PORT	
RTF3-10	40 LPM	10	1/2" BSP	
RTF6-10	60 LPM	10	3/4" BSP	
RTF10-10	85 LPM	10	1" BSP	
RTF18-10	200 LPM	10	1 1/4" BSP	
RTF22-10	220LPM	10	1 1/4" BSP	
RTF33-10	250 LPM	10	1 1/2" BSP	
RTF60-10	320 LPM	10	1 1/2" BSP	

ELEMENTs to suit

PART NUMBER	NOM. FLOW	MICRON		
RTFE3-10	40 LPM	10		
RTFE6-10	60 LPM	10		
RTFE10-10	85 LPM	10		
RTFE18-10	200 LPM	10		
RTFE22-10	220LPM	10		
RTFE33-10	250 LPM	10		
RTFE60-10	320 LPM	10		

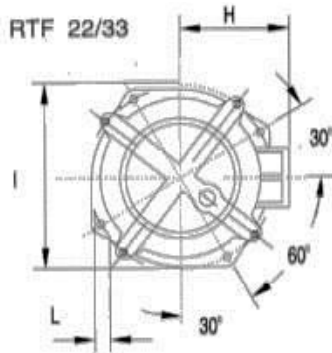


Other Micron ratings available on request



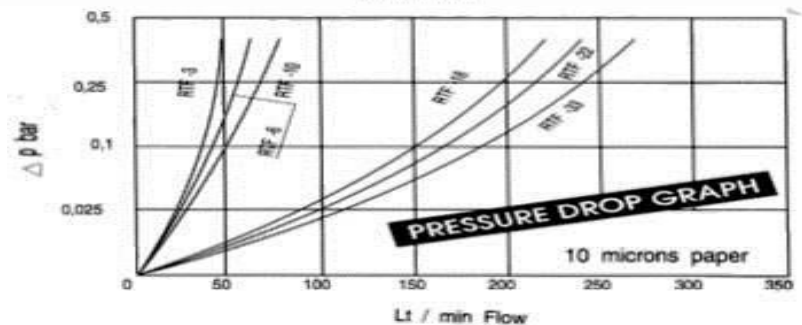
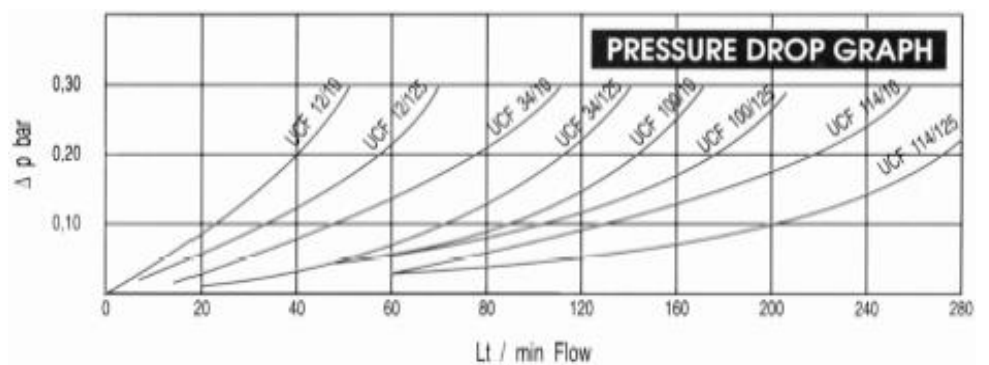
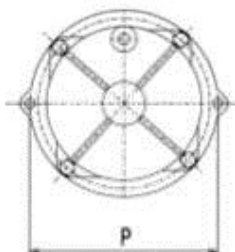
UNDERTANKTOPRETURNLINEFILTERS

Filter	Element	A BSP P	B	C	D	E	F	G	H	I	L	Weight Kg
RTF-3	RTFE-3	1/2"	33	22	136	24	66	76	51	90	7	.5
RTF-6	RTFE-6	3/4"	44	28	170	28	88	87	67	115	8.5	1
RTF-8	RTFE-10	3/4"	44	28	215	28	88	87	67	115	8.5	1.1
RTF-10	RTFE-10	1"	44	28	215	28	88	87	67	115	8.5	1.1
RTF-18	RTFE-18	1 1/4"	54		335	40	129	97	96	175	10.7	2.2
RTF-22	RTFE-22	1 1/4"	60	38.5	272	50	173	103	115	220	11.5	3
RTF-33	RTFE-33	1 1/2"	60	38.5	332	50	173	103	115	220	11.5	3.4
RTF-60	RTFE-60	1 1/2"	60	38.5	375	50	173	103	115	220	11.5	3.4

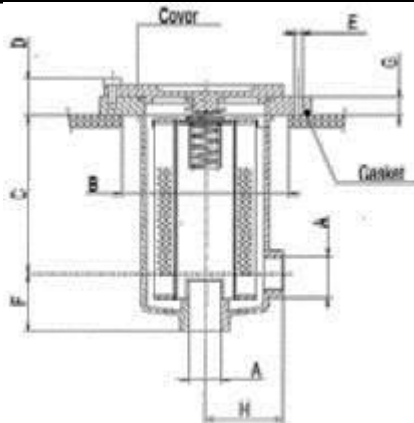


Under tank lid plumbing for direct connections
to pump or manifold return line
MAX WORKING PRESSURE 25 BAR
FLOWS UPTO 250LPM

PART NUMBER	PORTING	NOM FLOW	MICRON	
UCF12-10	1/2" BSPP	40 LPM	10	
UCF34-10	3/4" BSPP	60 LPM	10	
UCF100-10	1" BSPP	85 LPM	10	
UCF114-10	1 1/4" BSPP	200 LPM	10	



UNDERTANKTOPRETURNLINESFILTERS



Model	A BSPP	B	C	D	E	F	G	H	P
UCF 12	$\frac{1}{2}$ "	88	72	29	7	40	11	49	100
UCF 34	$\frac{3}{4}$ "	110	68	38	9	52	14	61	126
UCF 100	1"	110	110	38	9	54	14	61	126
UCF 114	1 $\frac{1}{4}$ "	156	191	48	9	62	18	83	175



ELEMENTS to suit

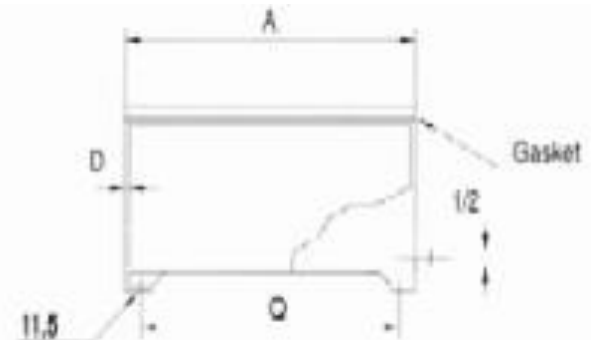
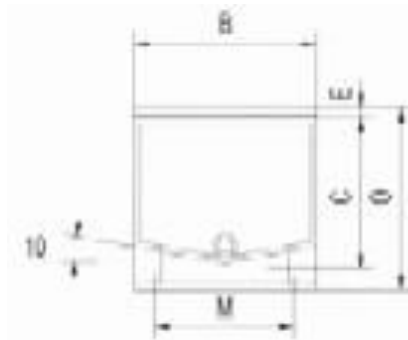
PART NUMBER	NOM FLOW	MICRON	
UE12-10	40 LPM	10	
UE34-10	60 LPM	10	
UE100-10	85 LPM	10	
UE114-10	200 LPM	10	

RESERVOIRS AND LIDS

Not Including Lid

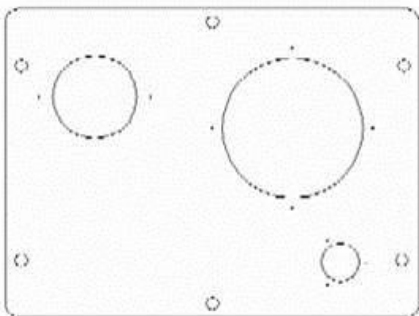


PART NUMBER	NOM. CAPACITY	LENGTH	WIDTH	HEIGHT INC FEET	
OT-12	13	335	270	290	
OT-16	20	410	325	305	
OT-30	30	470	375	335	
OT-55	55	600	470	365	
OT-75	72	600	470	455	
OT-100	98	675	520	505	
OT-180	160	805	620	555	



Oil Tank	Capacity Lt	A	B	C	D	E	M	O	Q	Cover Fix
OT-12	13	335	270	235	1.5	4	208	290	286	6XM8
OT-16	20	410	325	250	1.5	4	270	305	364	6XM8
OT-30	30	470	375	280	1.5	4	312	335	428	6XM8
OT-55	55	600	470	310	2	4	401	365	548	6XM8
OT-75	75	600	470	400	2	4	401	455	548	10XM8
OT-100	98	675	520	450	2.5	5	455	505	625	10XM8
OT-180	160	805	620	500	2.5	5	555	555	755	10XM8

PRE-CUT AND BLANK RESERVOIR LIDS



PART NUMBER	FRAME	FILTER	FILLER BREATHER	
OTC-12 BLANK				
OTC-12-71FR	71	RTF3	FB-1	
OTC-12-80/90FR	80 90 FR	RTF3	FB-1	
OTC-16 BLANK				
OTC-16-80/90FR	80 90 FR	RTF3	FB-1	
OTC-16-100/112FR	100 112 FR	RTF3	FB-1	
OTC-30 BLANK				
OTC-30-80/90FR	80 90 FR	RTF3	FB-2	
OTC-30-100/112FR	100 112 FR	RTF3	FB-2	
OTC-55-75 BLANK				
OTC-55-75-100/112FR	100 112 FR	RTF6&10	FB-2	
OTC-55-75-132FR	132 FR	RTF6&10	FB-2	
OTC-100 BLANK				
OTC-180 BLANK				



Aluminum Tanks

PART NUMBER	NOM. CAPACITY	LENGTH	WIDTH	HEIGHT INC FEET	
CP3	3 Liters	220	160	150	
CP6	6 Liters	280	200	176	
CP10	10 Liters	340	247	220	
CP16	16 Liters	368	290	243	
CP25	25 Liters	490	340	285	
CP55	55 Liters	595	450	345	
CP75	75 Liters	595	450	465	

Blank Steel Lids

PART NUMBER	Description	
CCP3	Blank Lid	
CCP6	Blank Lid	
CCP10	Blank Lid	
CCP16	Blank Lid	
CCP25	Blank Lid	
CCP55	Blank Lid	
CCP75	Blank Lid	

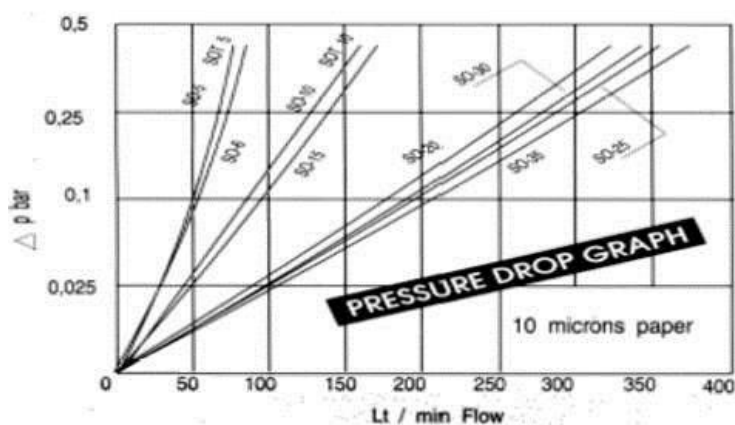
Gaskets

PART NUMBER	Description	
GCP3	Gasket to Suit CP3	
GCP6	Gasket to Suit CP6	
GCP10	Gasket to Suit CP10	
GCP16	Gasket to Suit CP16	
GCP25	Gasket to Suit CP25	
GCP55	Gasket to Suit CP55	
GCP75	Gasket to Suit CP75	

SPINONFILTERS



PART NUMBER	NOM. FLOW	MICRON	TYPE	PORTS	
S05-10	75LPM	10	RETURN	3/4" BSP	
S05-25	85LPM	25	RETURN	3/4" BSP	
S06-10	85LPM	10	RETURN	3/4" BSP	
S06-25	95LPM	25	RETURN	3/4" BSP	
S010-10	160LPM	10	RETURN	1 1/4" BSP	
S010-25	200LPM	25	RETURN	1 1/4" BSP	
S015-10	180LPM	10	RETURN	1 1/4" BSP	
S015-25	220LPM	25	RETURN	1 1/4" BSP	
S020-10	325LPM	10	RETURN	1 1/2" BSP	
S030-10	380LPM	10	RETURN	1 1/2" BSP	



ELEMENTS to suit



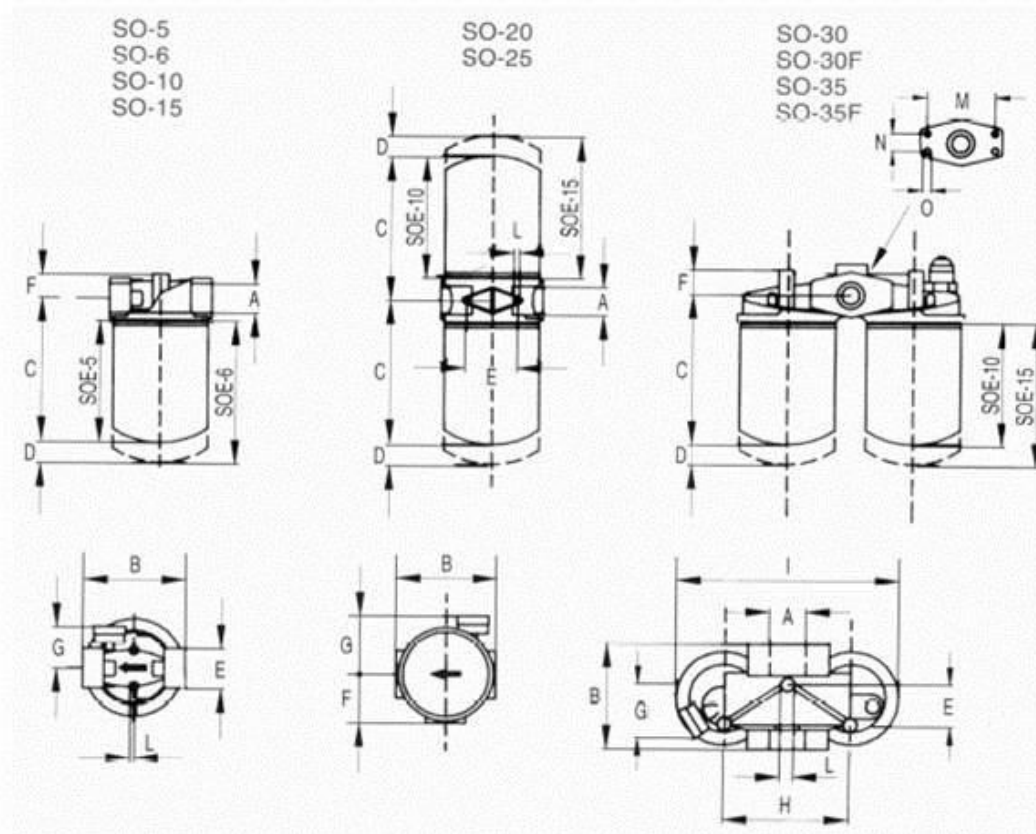
PART NUMBER	NOM FLOW	MICRON	TYPE	
S0E5-10	75 LPM	10	INLINE	
S0E5-25	85 LPM	25	INLINE	
S0E5-125		125	INLINE	
S0E6-10	85 LPM	10	INLINE	
S0E6-25	95 LPM	25	INLINE	
S0E10-10	160 LPM	10	INLINE	
S0E10-25	200 LPM	25	INLINE	
S0E10-125		125	INLINE	
S0E15-10	180 LPM	10	INLINE	
S0E15-25	220 LPM	25	INLINE	
S0ET5-10	60 LPM	10	TANKTOP	
SOET10-10	130 LPM	10	TANKTOP	
GSOE5-25	85 LPM	25	INLINE	
GSOE10-25	200 LPM	25	INLINE	

FILTER HEADS



PART NUMBER	DESCRIPTION	PORTS	
S0H-5	S05 & S06 HEAD	3/4" BSPP	
S0H-10	S010 & S015 HEAD	1 1/4" BSPP	
S0H-20	S020 HEAD	1 1/2" BSPP	
S0H-30	S030 HEAD	1 1/2" BSPP	

SPINONFILTERS

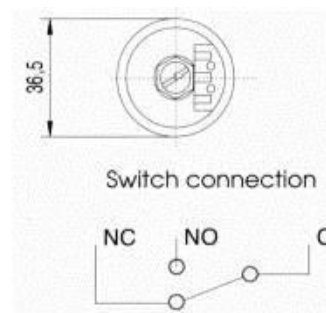
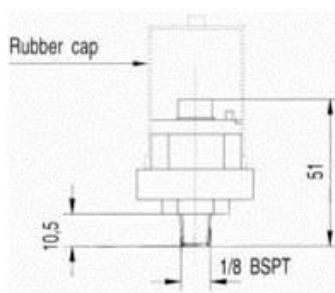
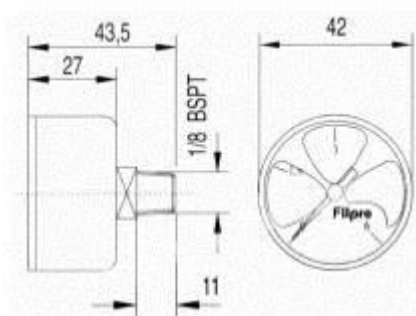


Filter	Head	Element	A	B	C	D	E	F	G	H	I	L	M	N	O	WEIGHT
SO-5	SOH-5	SOE-5	$\frac{3}{4}$ "	95	160	20	38	22	65			M8				0.9
SO-6	SOH-5	SOE-6	$\frac{3}{4}$ "	95	230	20	38	22	65			M8				1
SO-10	SOH-10	SOE-10	$1 \frac{1}{4}$ "	133	210	25	50	30	80			M8				1.9
SO-15	SOH-10	SOE-15	$1 \frac{1}{4}$ "	133	255	25	50	30	80			M8				2.2
SO-20	SOH-20	SOE-10	$1 \frac{1}{2}$ "	140	215	25	65	70	80			M10				3.6
SO-25	SOH-20	SOE-15	$1 \frac{1}{2}$ "	140	260	25	65	70	80			M10				4
SO-30	SOH-30	SOE-10	$1 \frac{1}{2}$ "	130	220	25	60	45	90	150	285	M10				4.7
SO-30F	SOH-30	SOE-10		130	220	25	60	45	90	150	285	M10	70	35.7	M12	4.7
SO-35	SOH-30	SOE-15	$1 \frac{1}{2}$ "	130	265	25	60	45	90	150	285	M10	70	35.7	M12	5.4
SO-35F	SOH-30	SOE-15		130	265	25	60	45	90	150	285	M10	70	35.7	M12	5.4

CLOGGING INDICATORS



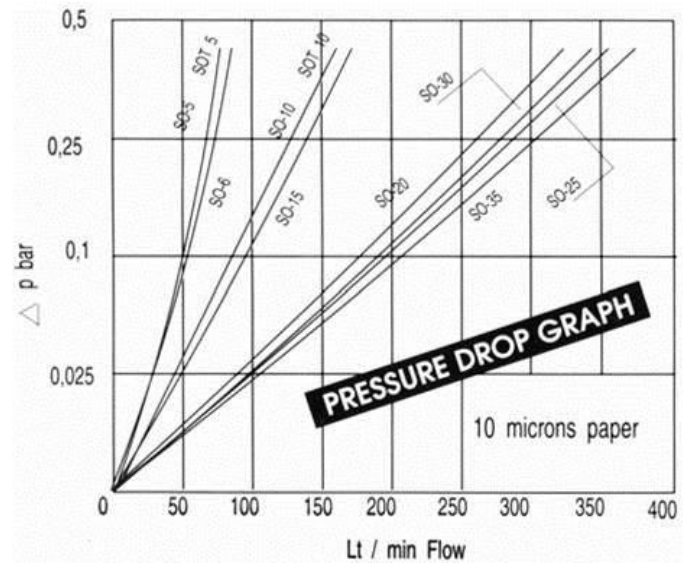
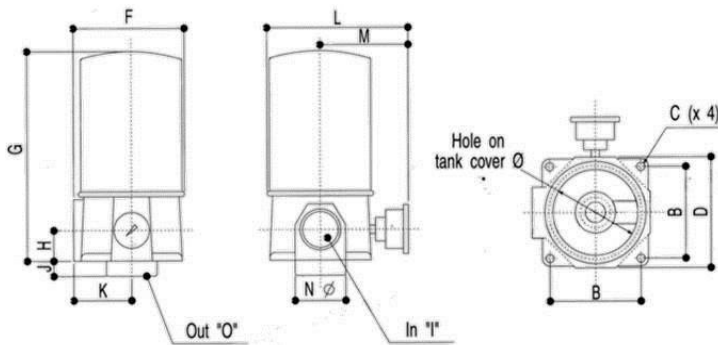
PART NUMBER	DESCRIPTION	MOUNTING TYPE	
VCIP/COLOUR	PRESSURE	1/8" BSP REAR	
VCIV/COLOUR	VACUUM	1/8" BSP REAR	
EIP	ELECTRIC	1/8" BSP REAR	



TANKTOPFILTERS

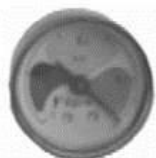


PART NUMBER	NOM. FLOW	MICRON	TYPE	PORTS	
SOT5-10	75 LPM	10	RETURN	$\frac{3}{4}$ " BSP	
SOT10-10	130 LPM	10	RETURN	1 $\frac{1}{4}$ " BSP	
ELEMENTS					
SOET5-10	75 LPM	10	RETURN		
SOET10-10	130 LPM	10	RETURN		



Filter	Element	A	B	C	D	E	F	G	H	J	K	L	M	N	Ø	P	I / O BSP / NPT
SOT 5	SOET 5	74	70	7	90	25	98	201	25	20	50	129	80	36	52	95	3/4
SOT 10	SOET 10	105	100	9	123	25	136	254	36	20	70	166	100	60	90	129	1 1/4

SUCTIONFILTERS



PART NUMBER		MI-CRON	TYPE	PORTS	
S05-25S		25	SUCTION	3/4" BSP	
S05-125S		125	SUCTION	3/4" BSP	
S010-25S		25	SUCTION	1 1/4" BSP	
S010-125S		125	SUCTION	1 1/4" BSP	
PART NUMBER		MI-CRON	TYPE		
S0E5-25		25	SUCTION		
S0E5-125		125	SUCTION		
S0E10-25		25	SUCTION		
S0E10-125		125	SUCTION		

PART NUMBER	COLOURED	TYPE	PORT	
VCIV/COLOUR	GREEN/YELLOW/RED	SUCTION	1/8" BSP	

PRESSURE GAUGES (DUAL SCALE)

AISI 304 STAINLESS STEEL CASE 63MM DIAMETER GLYCERINE FILLED BOTTOM ENTRY



PART NUMBER	RANGE	TYPE	
PG63-B-006-B	0-6 BAR	1/4" BOTTOM ENTRY	
PG63-B-010-B	0-10 BAR	1/4" BOTTOM ENTRY	
PG63-B-016-B	0-16 BAR	1/4" BOTTOM ENTRY	
PG63-B-025-B	0-25 BAR	1/4" BOTTOM ENTRY	
PG63-B-040-B	0-40 BAR	1/4" BOTTOM ENTRY	
PG63-B-060-B	0-60 BAR	1/4" BOTTOM ENTRY	
PG63-B-100-B	0-100 BAR	1/4" BOTTOM ENTRY	
PG63-B-160-B	0-160 BAR	1/4" BOTTOM ENTRY	
PG63-B-250-B	0-250 BAR	1/4" BOTTOM ENTRY	
PG63-B-315-B	0-315 BAR	1/4" BOTTOM ENTRY	
PG63-B-400-B	0-400 BAR	1/4" BOTTOM ENTRY	

AISI 304 STAINLESS STEEL CASE 63MM DIAMETER GLYCERINE FILLED REAR ENTRY WITH PANEL MOUNT CLAMP INCLUDED



PART NUMBER	RANGE	TYPE	
PG63-C-010-B	0-10 BAR	1/4" REAR WITH CLAMP	
PG63-C-016-B	0-16 BAR	1/4" REAR WITH CLAMP	
PG63-C-025-B	0-25 BAR	1/4" REAR WITH CLAMP	
PG63-C-060-B	0-60 BAR	1/4" REAR WITH CLAMP	
PG63-C-100-B	0-100 BAR	1/4" REAR WITH CLAMP	
PG63-C-160-B	0-160 BAR	1/4" REAR WITH CLAMP	
PG63-C-250-B	0-250 BAR	1/4" REAR WITH CLAMP	
PG63-C-315-B	0-315 BAR	1/4" REAR WITH CLAMP	
PG63-C-400-B	0-400 BAR	1/4" REAR WITH CLAMP	

AISI 304 STAINLESS STEEL CASE 100MM DIAMETER GLYCERINE FILLED BOTTOM ENTRY



PART NUMBER	RANGE	TYPE	
PG100-B-010-B	0-10 BAR	1/2" REAR WITH CLAMP	
PG100-B-016-B	0-16 BAR	1/2" REAR WITH CLAMP	
PG100-B-025-B	0-25 BAR	1/2" REAR WITH CLAMP	
PG100-B-060-B	0-60 BAR	1/2" REAR WITH CLAMP	
PG100-B-100-B	0-100 BAR	1/2" REAR WITH CLAMP	
PG100-B-160-B	0-160 BAR	1/2" REAR WITH CLAMP	
PG100-B-250-B	0-250 BAR	1/2" REAR WITH CLAMP	
PG100-B-315-B	0-315 BAR	1/2" REAR WITH CLAMP	
PG100-B-400-B	0-400 BAR	1/2" REAR WITH CLAMP	

AISI 304 STAINLESS STEEL CASE 100MM DIAMETER GLYCERINE FILLED FLANGE MOUNT



PART NUMBER	RANGE	TYPE	
PG100-F-010-B	0-10 BAR	1/2" REAR WITH CLAMP	
PG100-F-016-B	0-16 BAR	1/2" REAR WITH CLAMP	
PG100-F-025-B	0-25 BAR	1/2" REAR WITH CLAMP	
PG100-F-060-B	0-60 BAR	1/2" REAR WITH CLAMP	
PG100-F-100-B	0-100 BAR	1/2" REAR WITH CLAMP	
PG100-F-160-B	0-160 BAR	1/2" REAR WITH CLAMP	
PG100-F-250-B	0-250 BAR	1/2" REAR WITH CLAMP	
PG100-F-315-B	0-315 BAR	1/2" REAR WITH CLAMP	
PG100-F-400-B	0-400 BAR	1/2" REAR WITH CLAMP	

12 and 24 Volt DC
Single and 3 Phase





Bell Housings and Couplings

	Page
Bell Housings—Metric Frame to Group 05, 1 and 2 Pumps	9.01
Bell Housings—Metric Frame to Group 3 Pumps	9.02
Bell Housings—Metric Frame to SAE A 2 Bolt Pumps	9.03
Bell Housings—Metric Frame to SAE B 2 Bolt Pumps	9.04
Bell Housings—Metric Frame to SAE C 2 & 4 Bolt Pumps	9.05
Bell Housings—Metric Frame to SAE D4 Bolt Pumps	9.06
Bell Housing Gaskets	9.06
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Couplings - 100 Series	9.09
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PETROL ENG Bell Housings & Couplings	9.014

BELLHOUSINGS

GROUP05SIZEPUMPS



FRAME	KW @ 1440	KW @ 2900	PART NUMBER		
			BELL HOUSING	ADAPTOR	
D71	0.37	0.55	BH161-02-01	AR1-01	

GROUP1SIZEPUMPS

GROUP 1 PUMP - 4 BOLT MOUNT - 25.4 MM SPIG-

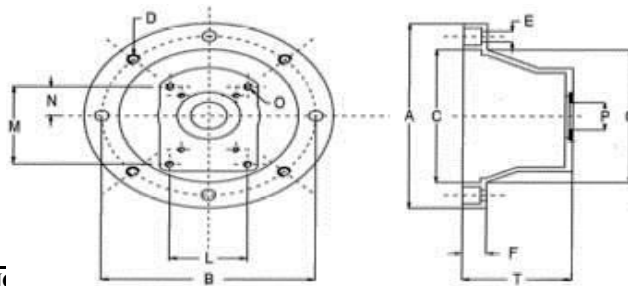


FRAME	KW @ 1440	KW @ 2900	PART NUMBER		
			BELL HOUSING	ADAPTOR	
D71	0.37	0.55	BH161-02-01	AR1-02	
D80	.55 / .75	.75 / 1.1	BH202-04-02	AR3-02	
D90	1.1 / 1.5	1.5 / 2.2	BH202-04-02	AR3-02	
D100	2.2 / 3	3	BH252-04-02	AR3-02	
D112	4	4	BH252-04-02	AR3-02	

Group 2 Size Pumps

GROUP 2 PUMP - 4 BOLT MOUNT - 36.5 MM SPIGOT

FRAME	KW @ 1440	KW @ 2900	PART NUMBER		
			BELL HOUSING	ADAPTOR	
D80	.55 / .75	.75 / 1.1	BH202-04-02	AR3-04	
D90	1.1 / 1.5	1.5 / 2.2	BH202-04-02	AR3-04	
D100	2.2 / 3	3	BH252-04-02	AR3-04	
D112	4	4	BH252-04-02	AR3-04	
D132	5.5 / 7.5	7.5 / 11	BH303-06-04	AR3-04	
160	11 / 15	15 / 18.5	B350A	F24P033-06-04	
180	18.5 / 22	22	B350A	F24P033-06-04	
200	30		B400A	F24P033-06-04	
225	37 / 45		B450A	F24P033-06-04	



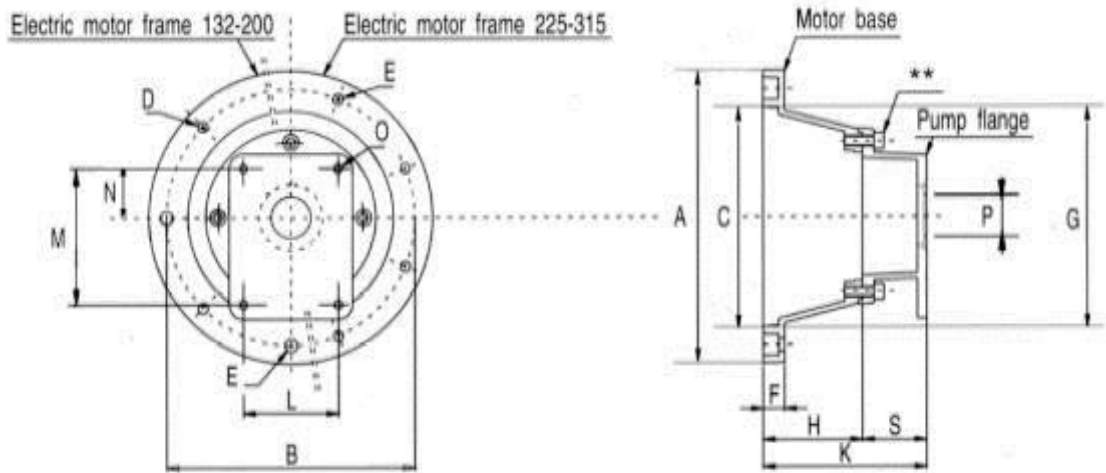
ELEC MOTOR		BELL HOUSING																	
		PUMP	PART NO	ADAPTOR RING	A	B	C	D	E	F	G	L	M	N	O	P	T		
FRAME	KW	71	0.27 0.37	GRP 05	BH161-02-01	AR1-01	160	130	110	M8	9	14	110	-	66	25.6	M6	22	70
				GRP 1		AR1-02								52.4	72	26.2	M6	25.4	
80	0.75			GRP 1	BH202-04-02	AR3-02	200	165	130	M10	11.5	16	136	52.4	72	26.2	M6	25.4	98
				GRP 2		AR3-04								71.5	96	32.5	M8	36.5	
90	1.1 1.5			GRP 1	BH202-04-02	AR3-02	200	165	130	M10	11.5	16	136	52.4	72	26.2	M6	25.4	98
				GRP 2		AR3-04								71.5	96	32.5	M8	36.5	
100 112	2.2 3.4			GRP 1	BH252-04-02	AR3-02	250	215	180	M12	13.5	20	182	52.4	72	26.2	M6	25.4	110
				GRP 2		AR3-04								71.5	96	32.5	M8	36.5	
132	5.5 7.5			GRP 2	BH303-06-04	AR3-04	300	265	230	M12	13.5	20	237	71.5	96	32.5	M8	36.5	139
				GRP 3		AR3-06								98.5	128	42	M10	50.8	

BELL HOUSINGS & COUPLINGS

GROUP3SIZEPUMPS



FRAME	KW @ 1440	KW @ 2900	PART NUMBER		
			BELL HOUSING	ADAPTOR	
132	5.5 / 7.5	7.5 / 11	BH303-06-04	AR3-06	
132	5.5 / 7.5	7.5 / 11	B300A	F24P033-06-04	
160	11 / 15	15 / 18.5	B350A	F24P033-06-04	
180	18.5 / 22	22	B350A	F24P033-06-04	
200	30		B400A	F24P033-06-04	
225	37 / 45		B450A	F24P033-06-04	



ELEC MOTOR		MODULAR BELL HOUSINGS																				
4 POLES		ELECTRIC MOTOR BASE									PUMP MTG	PUMP FLANGE										
FRAME	KW	PART NO.	A	B	C	D	E	F	G	H		PART NO.	L	M	N	O	P	S	K			
132	5.5 7.5 9	B300A	300	265	230	M12	13.5	20	234	106	GRP 2	F24P033-06-04	71.5	96	32.5	M8	36.5	33	139			
											GRP 3	F24P033-06-04	98.5	128	42	M10	50.8	33	139			
160	11 15	B350A	350	300	250	M16	17.5	30	260	136	GRP 2	F24P033-06-04	71.5	96	32.5	M8	36.5	33	169			
											GRP 3	F24P033-06-04	98.5	128	42	M10	50.8	33	169			
180	18.5 22	B350A	350	300	250	M16	17.5	30	260	136	GRP 2	F24P033-06-04	71.5	96	32.5	M8	36.5	33	169			
											GRP 3	F24P033-06-04	98.5	128	42	M10	50.8	33	169			
200	30	B400A	400	350	300	M16	17.5	30	300	140	GRP 2	F24P033-06-04	71.5	96	32.5	M8	36.5	33	173			
											GRP 3	F24P033-06-04	98.5	128	42	M10	50.8	33	173			
225	37 45	B450A	450	400	350	M16	-	30	350	170	GRP 2	F24P033-06-04	71.5	96	32.5	M8	36.5	33	203			
											GRP 3	F24P033-06-04	98.5	128	42	M10	50.8	33	203			

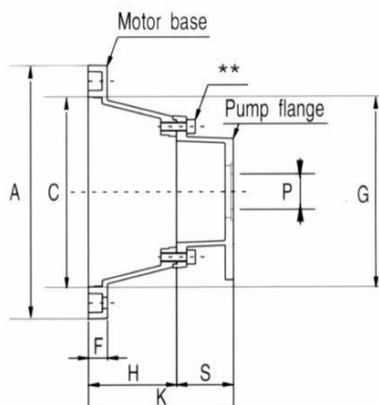
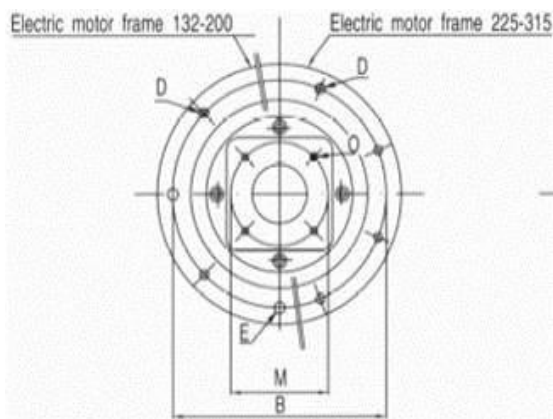
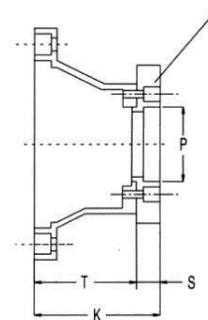
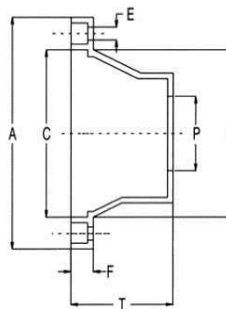
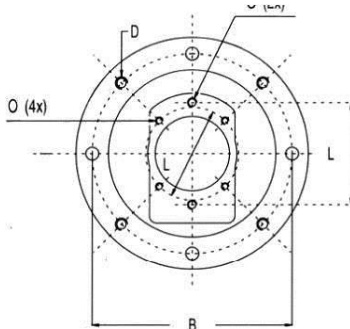
BELLHOUSINGS

SAE A 2 BOLT

SAE "A" - 2 BOLT MOUNT PUMPS - 82.55 MM SPIGOT



FRAME	KW @ 1440	KW @ 2900	LENGT H	PART NUMBER		
				BELL HSG	ADAPTOR	
D80	.55 / .75	.75 / 1.1	98MM	BH202-82A		
D80	.55 / .75	.75 / 1.1	127MM	BH202-17/080U	FR50-082A	
D90	1.1 / 1.5	1.5 / 2.2	98MM	BH202-82A		
D90	1.1 / 1.5	1.5 / 2.2	127MM	BH202-17/080U	FR50-082A	
D100	2.2 / 3	3	110MM	BH252-82A		
D100	2.2 / 3	3	139MM	BH252-17/080U	FR50-082A	
D112	4	4	110MM	BH252-82A		
D112	4	4	139MM	BH252-17/080U	FR50-082A	
D132	5.5 / 7.5	7.5 / 11	139MM	BH303-82A		
D132	5.5 / 7.5	7.5 / 11	152MM	B300A	F24P046-082A	
160	11 / 15	15 / 18.5	182MM	B350A	F24P046-082A	
180	18.5 / 22	22	182MM	B350A	F24P046-082A	
200	30		186MM	B400A	F24P046-082A	
225	37 / 47		216MM	B450A	F24P046-082A	



ELEC MOTOR		PUMP MTG	BELL HOUSING	ADDITIONAL PUMP FLANGE	A	B	C	D	E	F	G	H	L	Nº HOLES	O	P	T	S	K
80 90	0.55, 0.75 1.1, 1.5	SAE A	BH202-082A	-	200	165	130	M10	11.5	16	145		106.4	2	M10	82.55	98	-	-
			BH202-17/080U	FR50-082A									106.4	2	M10	82.55	98	29	127
100 112	2.2 3, 4	SAE A	BH252-082A	-	250	215	180	M12	13.5	20	190		106.4	2	M10	82.55	110	-	-
			BH252-17/080U	FR50-082A									106.4	2	M10	82.55	110	29	139
132	5.5, 7.5, 9	SAE A	BH303-082A		300	265	230	M12	13.5	20	234		106.4	2	M10	82.55	110	-	-
132	5.5, 7.5, 9	SAE A	B300A	F24P046-082A	300	265	230	M12	13.5	20	234		106.4	2	M10	82.55		46	152
160,180	11,15, 18.5, 22	SAE A	B350A	F24P046-082A	350	300	250	M16	17.5	30	260	136	106.4	2	M10	82.55		46	182
200	30	SAE A	B400A	F24P046-082A	400	350	300	M16	17.5	30	300	140	106.4	2	M10	82.55		46	186
225	37,45	SAE A	B450A	F24P046-082A	450	400	350	M16	17.5	30	350	170	106.4	2	M10	82.55		46	216

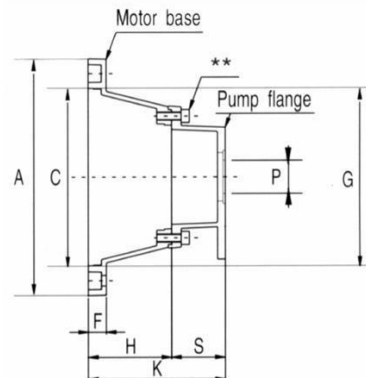
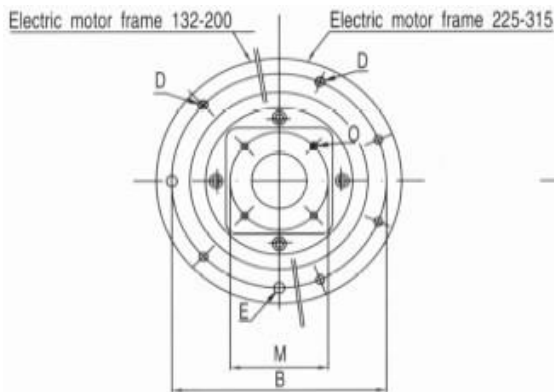
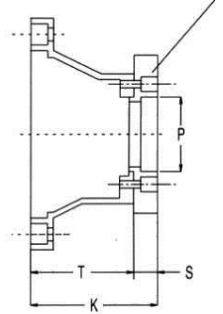
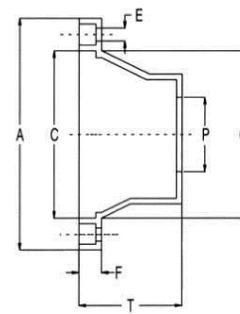
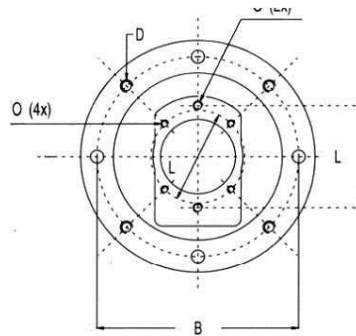
BELLHOUSINGS

SAE B 2 BOLT

SAE "B" - 2 BOLT MOUNT PUMPS - 101.6 MM SPIGOT



FRAME	KW @		LENGTH	PART NUMBER		
	1440	2900		BELL HSG	ADAPTOR	
D80	.55 / .75	.75 / 1.1	127MM	BH202-17/080U	FR60-101B	
D90	1.1 / 1.5	1.5 / 2.2	127MM	BH202-17/080U	FR60-101B	
D100	2.2 / 3	3	139MM	BH252-17/080U	FR60-101B	
D112	4	4	139MM	BH252-17/080U	FR60-101B	
D132	5.5 / 7.5	7.5 / 11	139MM	BH303-101B		
D132	5.5 / 7.5	7.5 / 11	165MM	B300A	F24P059-101B	
160	11 / 15	15 / 18.5	195MM	B350A	F24P059-101B	
180	18.5 / 22	22	195MM	B350A	F24P059-101B	
200	30		199MM	B400A	F24P059-101B	
225	37 / 45		229MM	B450A	F24P059-101B	



ELEC MOTOR		PUMP MTG	BELL HOUSING	ADDITIONAL PUMP FLANGE	A	B	C	D	E	F	G	H	L	Nº HOLES	O	P	T	S	K
80 90	0.55, 0.75 1.1, 1.5	SAE B	BH202-17/080U	FR60-101B	200	165	130	M10	11.5	16	145		146	2	M12	101.6	98	29	127
100 112	2.2 3.4	SAE B	BH252-17/080U	FR60-101B	250	215	180	M12	13.5	20	182		146	2	M12	101.6	110	29	139
132	5.5, 7.5 9	SAE B	BH303-101B		300	265	230	M12	13.5	20	234		146	2	M12	101.6	139	-	-
132	5.5, 7.5 9	SAE B	B300A	F24P059-101B	300	265	230	M12	13.5	20	234		146	2	M12	101.6		59	165
160 180	11.15 18.5, 22	SAE B	B350A	F24P059-101B	350	300	250	M16	17.5	30	260	136	146	2	M12	101.6		59	195
200	30	SAE B	B400A	F24P059-101B	400	350	300	M16	17.5	30	300	140	146	2	M12	101.6		59	199
225	37 45	SAE B	B450A	F24P059-101B	450	400	350	M16	17.5	30	350	170	146	2	M12	101.6		59	229

BELLHOUSINGS

SAE C 2 BOLT

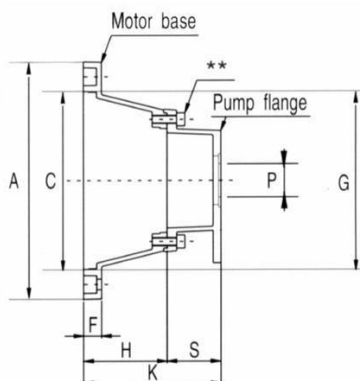
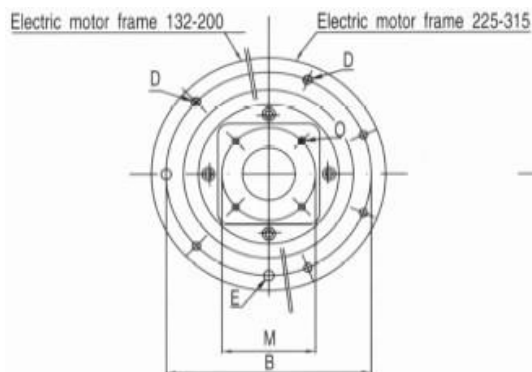


FRAME	KW @ 1440	KW @ 2900	PART NUMBER		
			BELL HOUSING	ADAPTOR	
132	5.5 / 7.5	7.5 / 11	B300A	F24P059-127A	
160	11 / 15	15 / 18.5	B350A	F24P059-127A	
180	18.5 / 22	22	B350A	F24P059-127A	
200	30		B400A	F24P059-127A	
225	37 / 45		B450A	F24P059-127A	

SAE C 4 BOLT



FRAME	KW @ 1440	KW @ 2900	PART NUMBER		
			BELL HOUSING	ADAPTOR	
132	5.5 / 7.5	7.5 / 11	B300A	F24P059-127C	
160	11 / 15	15 / 18.5	B350A	F24P059-127C	
180	18.5 / 22	22	B350A	F24P059-127C	
200	30		B400A	F24P059-127C	
225	37/45		B450A	F24P059-127C	



SAE C 2 BOLT

ELEC MOTOR	PUMP MTG	BELL HOUSING	ADDITIONAL PUMP FLANGE	A	B	C	D	E	F	G	H	L	NO HOLES	O	P	T	S	K
132	5.5, 7.5 g	SAE C	B300A	F24P059-127A	300	265	230	M12	13.5	20	234	127	2	M16	181.2		59	165
160	11, 15	SAE C	B350A	F24P059-127A	350	300	250	M16	17.5	30	260	136	2	M16	181.2		59	195
180	18.5, 22																	
200	30	SAE C	B400A	F24P059-127A	400	350	300	M16	17.5	30	300	140	2	M16	181.2		59	199
225	37 / 45	SAE C	B450A	F24P059-127A	450	400	350	M16	17.5	30	350	170	2	M16	181.2		59	229

SAE C 4 BOLT

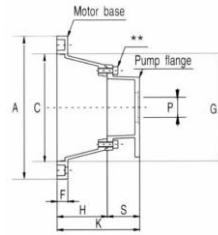
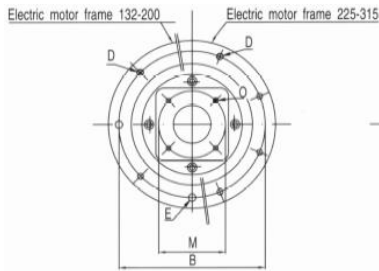
ELEC MOTOR	PUMP MTG	BELL HOUSING	ADDITIONAL PUMP FLANGE	A	B	C	D	E	F	G	H	L	NO HOLES	O	P	T	S	K
132	5.5, 7.5 g	SAE C	B300A	F24P059-127C	300	265	230	M12	13.5	20	234	127	4	M14	161.5		59	165
160	11, 15	SAE C	B350A	F24P059-127C	350	300	250	M16	17.5	30	260	136	4	M14	161.5		59	195
180	18.5, 22																	
200	30	SAE C	B400A	F24P059-127C	400	350	300	M16	17.5	30	300	140	4	M14	161.5		59	199
225	37 / 45	SAE C	B450A	F24P059-127C	450	400	350	M16	17.5	30	350	170	4	M14	161.5		59	229

BELLHOUSINGS

SAE D 4 BOLT PUMPS 152.4mm SPIGOT

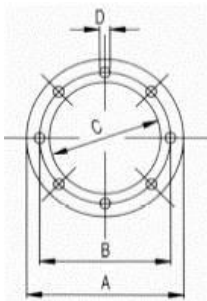


FRAME	KW @ 1440	KW @ 2900	PART NUMBER		
			BELL HOUSING	ADAPTOR	
132	5.5 / 7.5	7.5 / 11	B300A	F24C124-152G	
160	11 / 15	15 / 18.5	B350A	F24C124-152G	
180	18.5 / 22	22	B350A	F24C124-152G	
200	30		B400A	F24C124-152G	
225	37/45		B450A	F24C124-152G	



ELEC MOTOR		PUMP MTG	BELL HOUS- ING	ADDITIONAL PUMP FLANGE	A	B	C	D	E	F	G	H	L	Nº HOLES	O	P	T	S	K
132	5.5, 7.5	SAE D	B300A	F24C124-152G	300	265	230	M12	13.5	20	234		152.4	4	M20	228.6		124	230
160 180	11,15 18.5, 22	SAE D	B350A	F24C124-152G	350	300	250	M16	17.5	30	260	136	152.4	4	M20	228.6		124	260
200	30	SAE D	B400A	F24C124-152G	400	350	300	M16	17.5	30	300	140	152.4	4	M20	228.6		124	264
225	37 45	SAE D	B450A	F24C124-152G	450	400	350	M16	17.5	30	350	170	152.4	4	M20	228.6		124	294

BELLHOUSINGGASKETS



PART NO	ELEC MOTOR FRAME	A	B	C	D	
BHG160	71	160	130	111	9	
BHG200	80, 90	200	165	146	11	
BHG250	100, 112	250	215	191	14	
BHG300	132	300	265	235	14	
BHG350	160, 180	350	300	261	18	

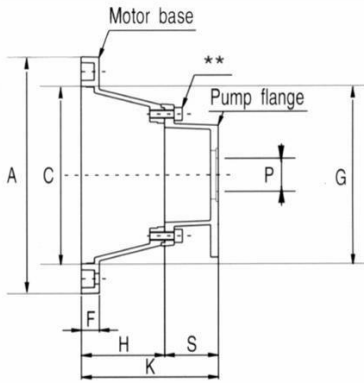
132FrameSinglePieceAluminiumBellHousings



FRAME	KW @ 1440	KW @ 2900	LENGTH			
				PUMP MOUNT	Part Number	
D132	5.5 / 7.5	7.5 / 11	170MM	SAE A 2 Bolt	TH3825A	
				SAE B 2 Bolt	TH3101A	
				SAE B 4 Bolt	TH3101B	
				SAE C 2 Bolt	TH3127A	
				SAE C 4 Bolt	TH3127C	

BELLHOUSINGS

BASE - Electric Motor Half



PART NUMBER	FRAME	A	B	C	D	E	F	G	H	
B300A	132	300	265	230	M12	14	20	234	106	
B350A	160/180	350	300	250	M16	18	30	260	136	
B400A	200	400	350	300	M16	18	30	300	140	
B450A	225	450	400	350	M16	18	30	350	170	

ADAPTORS - Pump Half

PART NUMBER	PUMP FLANGE	CODE	S	P SPIGOT	
* FR50-082A	SAE A 2 BOLT	082A	29	82.55	
* FR60-101B	SAE B 2 BOLT	101B	29	101.3	
F24P033-06-04	GROUP 2 ITALIAN		33	36.45	
F24P033-06-04	GROUP 3 ITALIAN		33	50.75	
F24A033-17	BOSCH F SERIES		33	80	
F24A033-18	BOSCH G SERIES		33	105	
F24P046-082A	SAE A 2 BOLT	082A	46	82.55	
F24P059-101B	SAE B 2 BOLT	101B	59	101.6	
F24P059-127A	SAE C 2 BOLT	127A	59	127	
F24P059-127C	SAE C 4 BOLT	127C	59	127	
F24C124-152G	SAE D 4 BOLT	152G	124	152	

* To suit BH***-17/080U Type Bell Housings

BELLHOUSINGSTOSUITGERMANSTYLEPUMPS

FRAME	KW @ 1440	PUMP TYPE	PART NUMBER		
			BELL HOUSING	ADAPTOR	
71	.37	B SERIES	BH161-16		
80, 90	.55,.75,1.1,1.5	B SERIES	BH202-16		
80, 90	.55,.75,1.1,1.5	F SERIES	BH202-17/080U		
110, 112	2.2, 3, 4	F SERIES	BH252-17/080U		
132	5.5, 7.5	F SERIES	BH303-17/080U		
132	5.5, 7.5	F SERIES	B300A	F24A033-17	
160, 180	11,15,18.5,22	F SERIES	B350A	F24A033-17	
200	30	F SERIES	B400A	F24A033-17	
225	37,45	F SERIES	B450A	F24A033-17	
132	5.5, 7.5	G SERIES	B300A	F24A033-18	
160, 180	11,15,18.5,22	G SERIES	B350A	F24A033-18	
200	30	G SERIES	B400A	F24A033-18	
225	37,45	G SERIES	B450A	F24A033-18	

NOISELESSBELLHOUSINGS



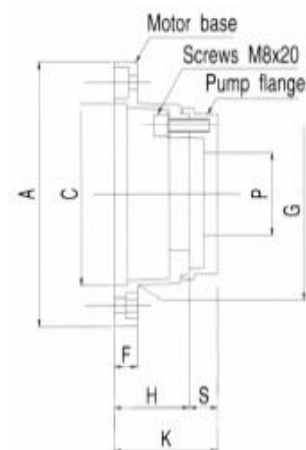
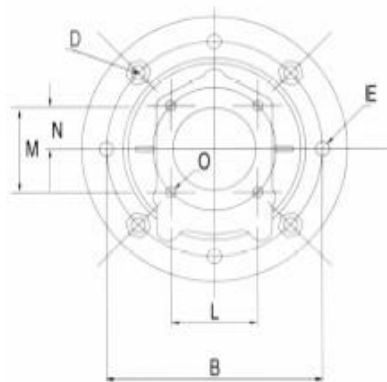
Significant noise reduction compared with all metal bell-housings.
 No separate damping flange required.
 Complete electrical insulation electric motor/pump
 High impact resistance 100 % recyclable.
 2 Piece construction

ELECTRIC MOTOR BASE ONLY

ELEC MOTOR		BELL HOUSING	A	B	C	D	E	F	G	H	
FRAME	KW	PART NO									
63	.12, .25	BHP140	140	115	95	8.5	8.5	14	100	46	
71	.25, .37	BHP160	160	130	110	8.5	8.5	14	110	53	
80	0.75	BHP200	200	165	130	11	11	16	130	73	
90	1.1, 1.5	BHP200	200	165	130	11	11	16	130	73	
100, 112	2.2, 3, 4	BHP250	250	215	180	13.5	13.5	20	180	85	
132	5.5, 7.5	BHP300	300	265	230	13.5	13.5	20	234	106	
160	11, 15	BHP350	350	300	250	M16	17.5	30	260	136	
180	18.5, 22	BHP350	350	300	250	M16	17.5	30	260	136	

EXAMPLEFORORDERING

BHP200 + F10A-04
 80 FRAME TO GRP 2 PUMP



PUMP FLANGE ONLY

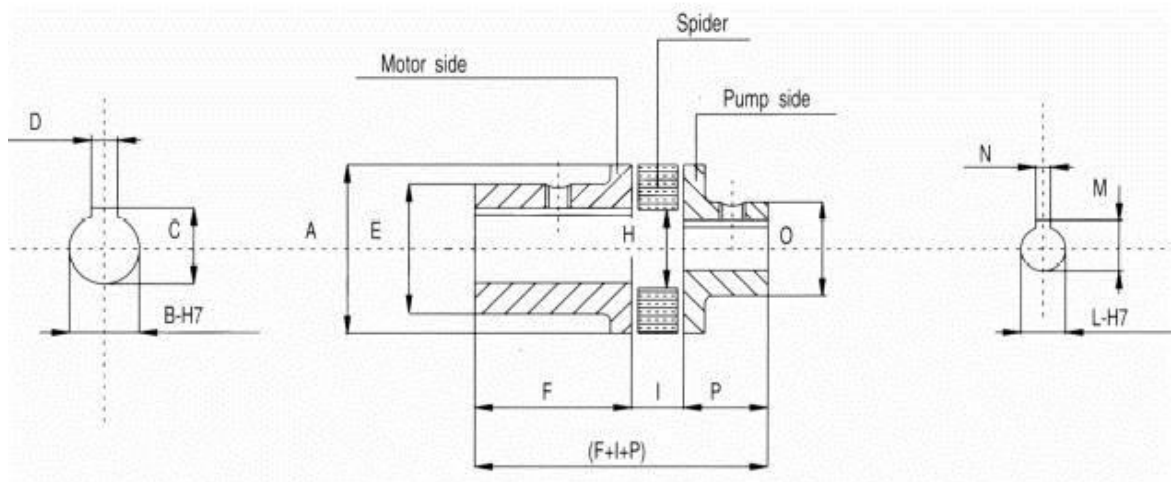
TO SUIT BELL HOUSING BASES	PUMP FLANGE	PUMP TYPE	L	M	N	O	P	S	
	PART NO								
BHP140 BHP160 BHP200 BHP250	F10A-01	GRP 05	-	66	25.6	M6	22	17	
	F10A-02	GROUP 1	52.4	72	26.2	M6	25.4	17	
	F10B-04	GROUP 2	71.5	96	32.5	M8	36.5	25	
	F10B-082A	SAE 2	106.4	-		M10	82.55	25	
	F10E-082M	SAE A EXTENDED	106.4	-		M10	82.55	54	
BHP300 BHP350	F24PA033-06-04	GROUP 2	71.5	96	32.5	M8	36.5	33	
	F24PA033-06-04	GROUP 3	98.5	128	42	M10	50.8	33	
	F24PA046-082A	SAE A	106.4			M10	82.55	46	
	F24PA059-101B	SAE B	146			M12	101.6	59	
	F24PA059-127A	SAE C 2 BOLT	181.2			M16	127	59	
	F24PA059-127C	SAE C 4 BOLT	161.5	161.5		M14	127	59	

**100 SERIES
42MM DIA**

Torque Max 20NM



PART NUMBER	PUMP TYPE	MOTOR FRAME	PREBORED	KEYWAY	
HC101A	GROUP 1		1 : 8 TAPER	2.4 MM	
HC101D	B SERIES		1 : 5 TAPER	2 MM	
HC105A	GROUP 05		6 MM	2 MM	
HC105B	GROUP 05		7MM	2 MM	
HC1110		D63	11 MM	4	
HC112H30			12.7MM ½"	3.17	
HC1140		D71	14 MM	5	
HC1190		D80	19 MM	6	
HC1240		D90	24 MM	8	
ER100	INSERT				



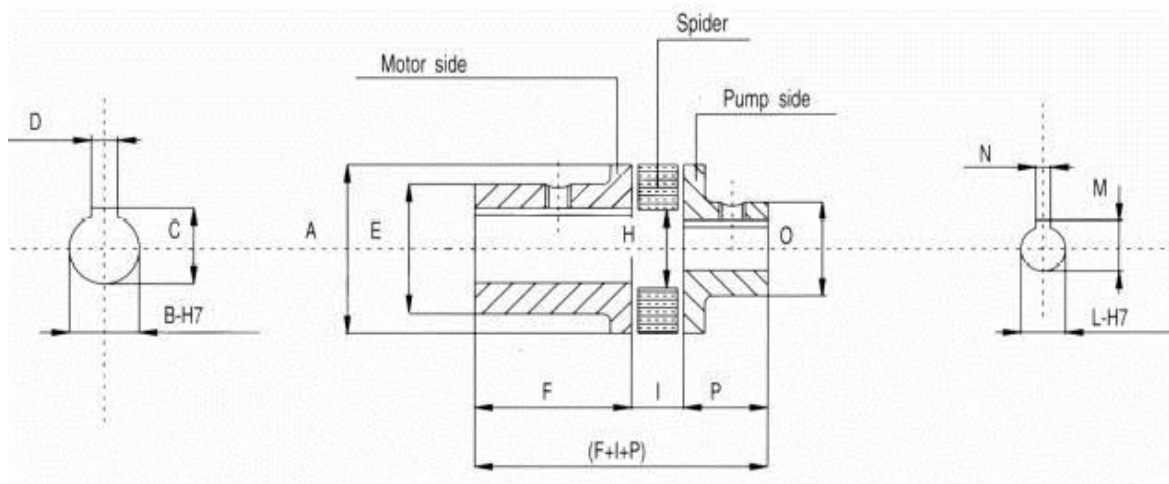
ELEC MOTOR		PUMP TYPE	A	B	C	D	E	F	H	I	L	TAPER	M	N	O	P	PART NUMBER
FRAME	KW																
		GROUP 05	42							15	6		7	2	28	20	HC105A
		GROUP 05	42							15	7		8	2	28	20	HC105B
		GROUP 1	42							15	9.8	1:8	10.8	2.4	28	20	HC101A
		B SERIES	42							15	9.6	1:5	10.7	2	28	17	HC101D
63	.12, .18	-	42	11	11.8	4	28	23	22	15							HC1110
71	.25, .37	-	42	14	16.3	5	28	30	22	15							HC1140
80	.55, .75	-	42	19	21.8	6	36	50	22	15							HC1190
90	1.1, 1.5	-	42	24	27.3	8	36	50	22	15							HC1240
			42							15	12.7		14.3	3.17	28	30	HC112H30

**200 SERIES
55MM DIA**

Torque Max NM



PART NUMBER	PUMP TYPE	MOTOR FRAME	PREBORED	KEYWAY	
HC201A	GROUP 1		1:8 TAPER	2.4 MM	
HC201D	B SERIES		1:5 TAPER	2 MM	
HC202AB	GROUP 2		1:8 TAPER	3.2, 4MM	
HC2140		D71	14 MM	5 MM	
HC2190		D80	19 MM	6 MM	
HC2240		D90	24 MM	8 MM	
HC2280		100 / 112	28 MM	8 MM	
ER200	INSERT				



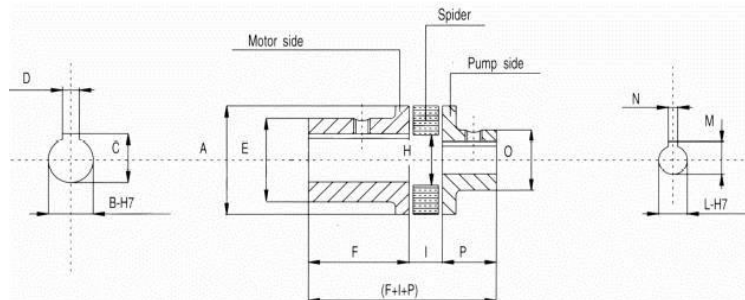
ELEC MOTOR		PUMP TYPE	A	B	C	D	E	F	H	I	L	TAPER	M	N	O	P	PART NUMBER
FRAME	KW																
		GROUP 1	55							18	9.8	1:8	10.8	2.4	34	25	HC201A
		B SERIES	55							18	9.6	1:5	10.7	2	34	23	HC201D
		GROUP 2	55							18	17.2	1:8	18.3	3.2,4	36	23	HC202AB
71	.25, .37	-	55	14	16.3	5	36	21	27	18							HC2140
80	.55, .75	-	55	19	21.8	6	38	49	27	18							HC2190
90	1.1, 1.5	-	55	24	27.3	8	46	49	27	18							HC2240
100, 112	2.2, 3, 4	-	55	28	31.3	8	50	61	27	18							HC2280

**300 SERIES
65MM DIA**

Torque Max 190 NM



PART NUMBER	PUMP TYPE	MOTOR FRAME	PREBORED	KEYWAY	
HC301A	GROUP 1		1:8 TAPER	2.4 MM	
HC302AB	GROUP 2		1:8 TAPER	3.2, 4 MM	
HC302D	F SERIES		1:5 TAPER	3 MM	
HC303A	GROUP 3		1:8 TAPER	4 MM	
HC312H22	1/2" STR KEY		1/2" STR KEY	1/8"	
HC3140		D71	14MM	5MM	
HC315L22	5/8" STR KEY		5/8" STR KEY	5/32"	
HC315M22	5/8" STR KEY		5/8" STR KEY	3/16"	
HC3190		D80	19 MM	6 MM	
HC319M22	3/4" STR KEY		3/4" STR KEY	3/16"	
HC320A35	20MM STR KEY		20MM STR KEY	6MM	
HC322A35	22MM STR KEY		22MM STR KEY	6MM	
HC322M35	7/8" STR KEY		7/8" STR KEY	3/16"	
HC322M45	7/8" STR KEY		7/8" STR KEY	3/16"	
HC322N45	7/8" STR KEY		7/8" STR KEY	1/4"	
HC3240		D90	24 MM	8 MM	
HC325A45	25MM STR KEY		25 MM	8 MM	
HC325N45	1" STR KEY		1" STR KEY	1/4"	
HC331P45	1 1/4" KEYED		1 1/4" KEYED	5/16"	
HC3280		100 / 112	28 MM	8 MM	
HC3380		D132	38 MM	10 MM	
HCG3SAEA35	SAE A 9T SPLINE		9 T SPLINE		
HCG3SAEB35	SAE B 13T SPLINE		13T SPLINE		
ER300	INSERT				



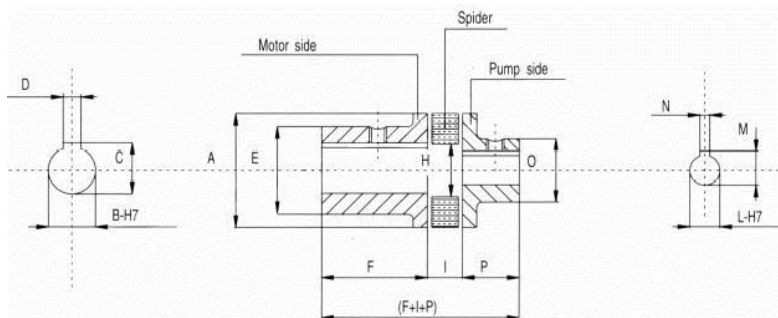
ELEC MOTOR		PUMP TYPE	A	B	C	D	E	F	H	I	L	TA- PER	M	N	O	P	PART NUMBER
FRAME	KW																
		GROUP 1	65						30	20	9.7	1:8	10.8	2.4	36	26	HC301A
		GROUP 2	65						30	20	17.2	1:8	18.3	3.2, 4	36	22	HC302AB
		F SERIES	65						30	20	16.9	1:5	18.1	3	36	22	HC302D
		GROUP 3	65						30	20	22.1	1:8	23.5	4	46	38	HC303A
			65						30	20	12.7		14.3	3.17	36	22	HC312H22
			65						30	20	15.87		18.1	4.76	36	22	HC315M22
80	.55, .75		65	19	21.8	6	38	48	30	20							HC3190
			65						30	20	19.05		21.3	4.76	36	22	HC319M22
			65						30	20	20		22.8	6	46	35	HC320A35
			65						30	20	22		24.8	6	46	35	HC322A35
			65						30	20	22.22		24.5	4.76	46	35	HC322M35
			65						30	20	22.22		24.5	4.76	46	45	HC322M45
			65						30	20	22.22		25.2	6.35	46	45	HC322N45
90	1.1, 1.5		65	24	27.3	8	46	48	30	20							HC3240
			65						30	20	25		28.3	8	46	45	HC325A45
			65						30	20	25.4		28.4	6.35	46	45	HC325N45
			65						30	20	31.75		35.4	7.94	46	45	HC331P45
100, 112	2.2, 3, 4		65	28	31.3	8	50	60	30	20							HC3280
132	5.5, 7.5		65	38	41.3	10	64	89	30	20							HC3380

**500 SERIES
95MM DIA**

Torque Max 530 NM



PART NUMBER	PUMP TYPE	MOTOR FRAME	PREBORED	KEYWAY	
HC502AB	GROUP 2		1:8 TAPER	3.2, 4 MM	
HC502D	F SERIES		1:5 TAPER	3 MM	
HC503A	GROUP 3		1:8 TAPER	4 MM	
HC503D	G SERIES		1:5 TAPER	5 MM	
HC515L35	5/8" STR KEY		5/8" STR KEY	5/32"	
HC515M35	5/8" STR KEY		5/8" STR KEY	3/16"	
HC519M35	3/4" STR KEY		3/4" STR KEY	3/16"	
HC520A35	20MM STR KEY		20MM STR KEY	6MM	
HC522M35	7/8" STR KEY		7/8" STR KEY	3/16"	
HC522N35	7/8" STR KEY		7/8" STR KEY	1/4"	
HC522N48	7/8" STR KEY		7/8" STR KEY	1/4"	
HC525A35	25MM STR KEY		25MM STR KEY	8MM	
HC525N48	1" STR KEY		1" STR KEY	1/4"	
HC528A48	28 MM		28 MM	8 MM	
HC531P48	1 1/4" STR KEY		1 1/4" STR KEY	5/16"	
HC532A48	32MM STR KEY		32MM STR KEY	10 MM	
HC535A48	35MM		35MM	10 MM	
HC545A48	45MM		45MM	14MM	
HC5380		132	38 MM	10 MM	
HC5420		160	42 MM	12 MM	
HC5480		180	48 MM	14 MM	
HCG5SAEA50	SAE A 9T 5/8"		SPLINED 9T		
HCG5SAEB50	SAE B 13T 7/8"		SPLINED 13T		
HCG5SAEC50	SAE C 14T 1 1/4"		SPLINED 14T		
ER500	INSERT				



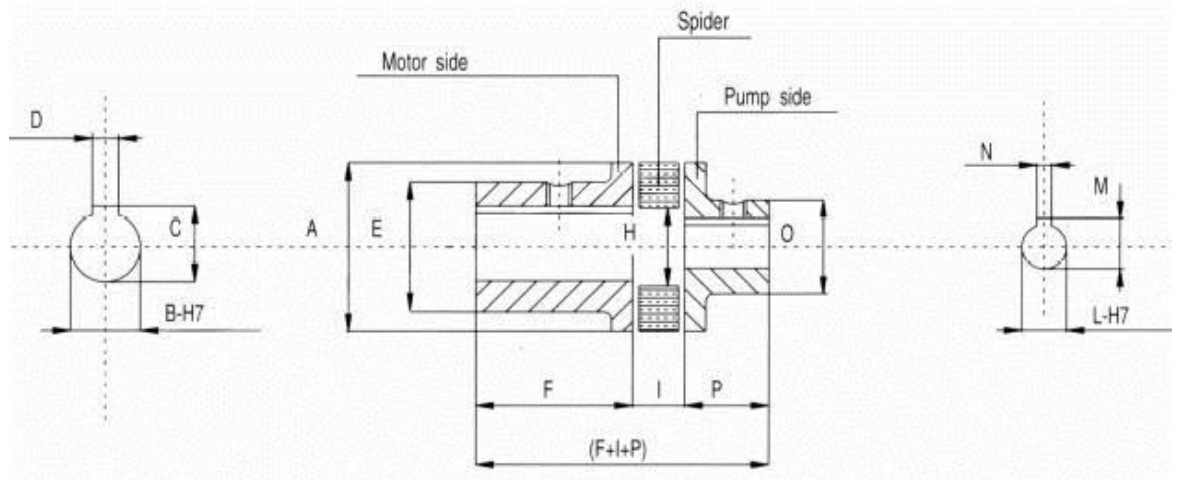
ELEC MOTOR		PUMP TYPE	A	B	C	D	E	F	H	I	L	TAPER	M	N	O	P	PART NUMBER
FRAME	KW																
		GROUP 2	95						46	26	17.2	1:8	18.3	3.2, 4	50	25	HC502AB
		F SERIES	95						46	26	16.9	1:5	18.1	3	50	25	HC502D
		GROUP 3	95						46	26	22.1	1:8	23.5	4	50	25	HC503A
			95						46	26	25.6	1:5	27.7	5	50	25	HC503D
			95						46	26	15.87		18.1	4.76	56	35	HC515M35
			95						46	26	19.05		21.3	4.76	56	35	HC519M35
			95						46	26	20		22.8	6	56	35	HC520A35
			95						46	26	22.22		24.5	4.76	56	35	HC522M35
			95						46	26	22.22		25.2	6.35	56	35	HC522N35
			95						46	26	25		28.3	8	56	35	HC525A35
			95						46	26	25.4		28.4	6.35	70	48	HC525N48
			95						46	26	28		31.3	8	70	48	HC528A48
			95						46	26	31.75		35.4	7.94	70	48	HC531P48
			95						46	26	32		35.3	10	70	48	HC532A48
			95						46	26	35		38.3	10	70	48	HC535A48
			95						46	26	45		48.8	14	70	48	HC545A48
132	5.5, 7.5		95	38	41.3	10	70	80	46	26							HC5380
160	11, 15		95	42	45.3	12	85	110	46	26							HC5420
180	18.5, 22		95	48	51.8	14	85	110	46	26							HC5480

**700 SERIES
120MM DIA**

Torque Max 750 NM

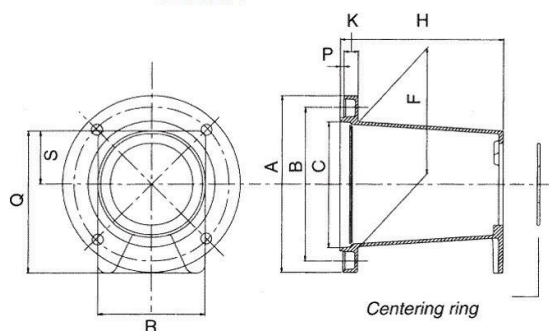


PART NUMBER	PUMP TYPE	MOTOR FRAME	PREBORED	KEYWAY	
HC703A	GROUP 3		1:8 TAPER	4 MM	
HC703D	G SERIES		1:5 TAPER	5 MM	
HC722N48	7/8" KEYED		7/8" STR KEYED	1/4"	
HC725N48	1" KEYED		1" STR KEYED	1/4"	
HC731P48	1 1/4" KEYED		1 1/4" STR KEY	5/16"	
HC738R48	1 1/2" KEYED		1 1/2" STR KEY	3/8"	
HC745A65	45MM KEYED		45MM STR KEY	14 MM	
HC7480		180	48 MM	14 MM	
HC7550		200	55 MM	16 MM	
HC7600		225	60 MM	18 MM	
HCG7SAEB65	SAE B 13T 7/8"		SPLINED 13T		
HCG7SAEC65	SAE C 14T 1 1/4"		SPLINED 14T		
ER700	INSERT				

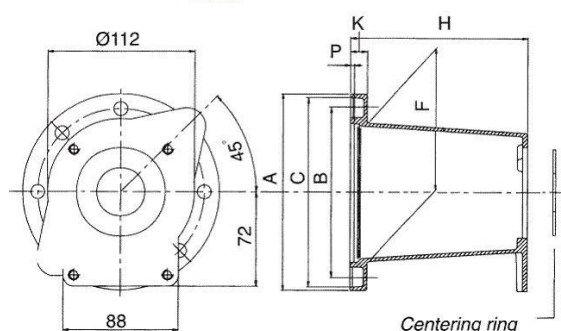


ELEC MOTOR		PUMP TYPE	A	B	C	D	E	F	H	I	L	TAPER	M	N	O	P	PART NUMBER
FRAME	KW																
		GROUP 3	120						60	30	22.1	1:8	23.5	4	50	25	HC703A
		G SERIES	120						60	30	25.6	1:5	27.7	5	50	25	HC703D
			120						60	30	22.22		25.2	6.35	56	35	HC722N35
			120						60	30	25.4		28.4	6.35	70	48	HC725N48
			120						60	30	31.75		35.4	7.94	70	48	HC731P48
			120						60	30	38.1		42.5	9.52	70	48	HC738R48
			120						60	30	45		48.8	14	70	48	HC745A48
180	18.5, 22		120	48	51.8	14	85	110	60	30							HC7480
200			120	55	59.3	16	105	110	60	30							HC7550
225			120	60	64.4	18	105	110	60	30							HC7600

LMH



LB



Petrol Engine Bell Housings

PART NUMBER	A	B	C	H	Pump Type	Power Kw (HP)	Engine Spigot	
LMH151	110	92	78.5	98	Grp 1 4 Bolt	2.2-4 (3-5.5)	Male 41.3mm	
LMH401	146	127	110	134	Grp 1 4 Bolt	5-13.5 (7-18)	Male 110mm	
LMH403	146	127	110	134	Grp 2 4 Bolt	5-13.5 (7-18)	Male 110mm	
LB152U1P	152	128	146	142	Grp 1 4 Bolt	5-13.5 (7-18)	Female 146mm	
LB1522	152	128	146	142	Grp 2 4 Bolt	5-13.5 (7-18)	Female 146mm	
LB15825A	152	128	146	142	SAE A 2 Bolt	5-13.5 (7-18)	Female 146mm	
LB152101A	152	128	146	142	SAE B 2 Bolt	5-13.5 (7-18)	Female 146mm	
LB170U1P	170	128	163.5	142	Grp 1 4 Bolt	13.5Kw (18Hp)	Female 163.5mm	
LB1702	170	128	163.5	142	Grp 2 4 Bolt	13.5Kw (18Hp)	Female 163.5mm	
LB1703U	170	128	163.5	142	Grp 3 4 Bolt	13.5Kw (18Hp)	Female 163.5mm	
LB170825A	170	127	163.5	142	SAE A 2 Bolt	13.5Kw (18Hp)	Female 163.5mm	
LB170101A	170	127	163.5	142	SAE B 2 Bolt	13.5Kw (18Hp)	Female 163.5mm	

Couplings to Suit



PART NUMBER	Pump Shaft	To Suit Bell Housing	Power Kw (HP)	Engine Shaft Ø	
ND48CC22	3/4" Keyed	LMH151	2.2-4 (3-5.5)	3/4" KEYED	
ND48PU1P	Grp 1 Taper				
R42	Insert				
ND65MC35	1" Keyed	LMH401	5-13.5 (7-18)	1" KEYED	
ND65PU1P	Grp 1 Taper				
R62	Insert				
ND65MC35	1" Keyed	LB1522	5-13.5 (7-18)	1" KEYED	
ND65P2	Grp 2 Taper				
R62	Insert				
ND65MC35	1" Keyed	BHE152-082A	5-13.5 (7-18)	1" KEYED	
ND65QD10	5/8" Keyed				
R62	Insert				



Pressure Switches

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Low Cost F4 Pressure Switches	10.01
K5 Series Adjustable Pressure Switches	10.02
Cetop Adaptors	10.02
Digital Display	10.03
KL Electronic Pressure Switches	10.04
Electronic Pressure Switches with Relay (Display)	10.05
Pressure Transducers	10.06
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LOW COST

F4 SERIES ADJUSTABLE PRESSURE SWITCH INCLUDING CAP



PART NUMBER	SWITCHING PRESSURE RANGE	MAXIMUM PRES-SURE	PORT	
F4T1/P2	5-50 BAR	200 BAR	$\frac{1}{4}$ " BSPP	
F4V1/P2	10 – 100 BAR	300 BAR	$\frac{1}{4}$ " BSPP	
F4Z1/P2	20 – 200 BAR	300 BAR	$\frac{1}{4}$ " BSPP	
F4Y1/P2	50 – 400 BAR	600 BAR	$\frac{1}{4}$ " BSPP	



F4 SERIES ADJUSTABLE PRESSURE SWITCH INCLUDING M2 DIN PLUG

PART NUMBER	SWITCHING PRESSURE RANGE	MAXIMUM PRES-SURE	PORT	
F4T1/M2	5-50 BAR	200 BAR	$\frac{1}{4}$ " BSPP	
F4V1/M2	10 – 100 BAR	300 BAR	$\frac{1}{4}$ " BSPP	
F4Z1/M2	20 – 200 BAR	300 BAR	$\frac{1}{4}$ " BSPP	
F4Y1/M2	50 – 400 BAR	600 BAR	$\frac{1}{4}$ " BSPP	

Technical Features

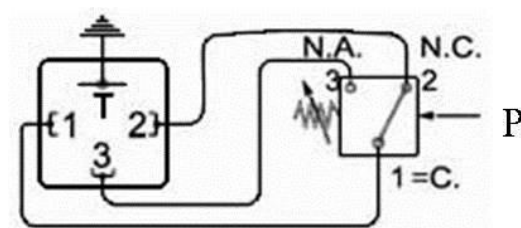
Body: 24mm hexagonal in tropicalized carbon steel

Assembly: in every position

Working temperature: from -25deg C to +85deg C

Switching frequency: 90 cycles/min

Switching accuracy: +or- 4% of the pressure settled to 20deg C



PRESSURESWITCHES



PART NUMBER	SWITCHING PRES-SURE RANGE	MAXIMUM PRESSURE	PORT	
K53	2 – 40 BAR	200 BAR	¼" BSPP	
K54	5 – 100 BAR	300 BAR	¼" BSPP	
K55	20 – 200 BAR	400 BAR	¼" BSPP	
K57	30 – 300 BAR	500 BAR	¼" BSPP	
K59	40 – 400 BAR	600 BAR	¼" BSPP	

K5 adjustable piston pressure switches activate a micro-switch once a preset pressure value is reached. The pressure is set by a set screw located on top of the unit. Mechanical stops protect both the spring and the micro-switch from over pressurization.

Technical Features:

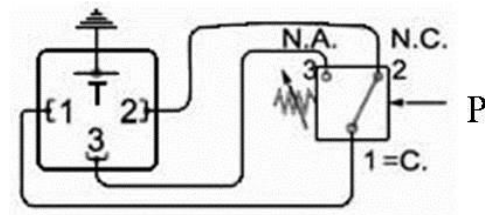
Anodized aluminium body that can be connected to the system with a 1/4" BSP male threaded port or to a CETOP manifold without the need of adaptors.

Installation: it can be mounted in any position.
Working temperature: from -20°C to + 80°C
Commutation frequency: 120 cycles/min.
Switching accuracy: ± 3% of set pressure
Fixed hysteresis value : about 12% of set value
Weight : 0,35 Kg.

Electric Features:

Electric connection according to
Electric protection according to
Maximum contact load:

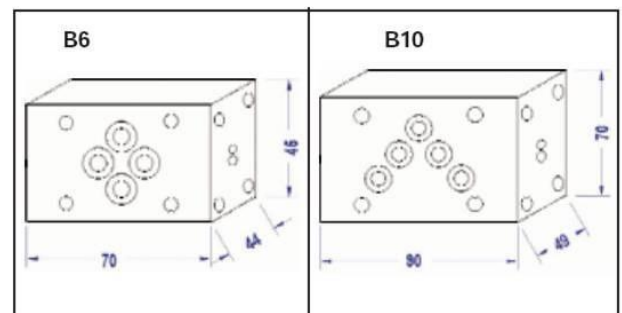
DIN 43650
DIN 40050: IP65
up to 250 VAC - 5Amp
up to 110 VDC - 0,25 Amp



CETOP ADAPTORS

“B6 and B10” CETOP MODULAR MANIFOLD FOR ATTACHMENT TO ELECTROVALVES CETOP 3 AND 5

With just one manifold it is possible to connect the outlet pressure to P, A or B. Made in anodized aluminium they can be used for a maximum working pressure of 350 Bar. They are supplied complete with screws to fix the pressure switch, and grubs to close the pressure ports not in use and o-ring.



PART NUMBER	CETOP	CONNECTED PORTS	
B6	CETOP 3 (NG6)	A & B OR P	
B10	CETOP 5 (NG10)	A & B OR P	

DIGITAL DISPLAY

EDV5 Digital display links together with the TR5 and TR6 pressure transducer. It has an adjustable zero and range of adjustment, providing opportunity to display various functions eg Pressure in BARS or PSI, Weight in Kilos or pounds



Technical features

Body: in ABS

Assembly: fixed to panel dimensions 72mm x 36mm

Maximum dimensions: 100 mm of depth

Working temperature: from -20 deg C to +70 deg C

Display: 3 numbers of 13mm

Linearization: 9 control points

Weight: 0.06 Kg

Electric Features:

Power supply: from 19 to 29Volt DC

Output: 17 Volt DC for connection to TR4 or TR5

Electrical connection: according to DIN 43650

Electric protection: according to DIN 40050: IP65

Stocking temperature: from -40 deg C to +90 deg C

Input: No 1

PART NUMBER	PRESSURE RANGE	DISPLAY RANGE	
ED55V	0 - 200 BAR	0 - 999	
ED59V	0 - 400 BAR	0 - 999	

PRESSURESWITCHES

WITH ADJUSTABLE DIFFERENTIAL THROUGH FULL ADJUSTMENT RANGE DIGITAL READ OUT



PART NUMBER	SWITCHING PRES-SURE RANGE	MAXIMUM PRESSURE		
KLV59	20 – 400 BAR	600 BAR		

KLV5 electronic pressure switches permit the actuation of an electronic micro-switch upon reaching an adjustable preset value and allows the regulation of the hysteresis value through the full adjustment range.

The display mounted on the instrument permits continuous viewing of the working pressure as a digital gauge and the setting of pressure values in the programmer.

The maximum and minimum set points are adjustable by two buttons on top of the instrument, protected by a cover.

The instrument is completely solid state. It is totally devoid of electromechanical or dynamic parts.

Technical Features

Anodized aluminium body with AISI 316 stainless steel process fitting. It can be connected to the system with a 1/4" BSP female threaded port or to a manifold (Cetop) without need of an adaptor.

Installation : it can be mounted in any position.

Working temperature : from -20°C to +80°C

Commutation frequency : 200 cycles/min.

Switching accuracy : 1% of set pressure

Adjustable hysteresis value : from 2% and 90% of set value

Weight : 0,45 Kg.

Electric Features

Power supply: 15/30V DC

12V DC *on request.

Electric connection according to DIN 43650

Electric protection according to DIN 40050 : IP65

Maximum contact load : 2 Amp

Medium consumption : 20mA

Involatile memory : EEPROM

ELECTRONIC PRESSURE SWITCH



WITH ADJUSTABLE DIFFERENTIAL PART NUMBER	SWITCHING PRES-SURE RANGE	MAXIMUM PRESSURE		
KL55	10 – 200 BAR	500 BAR		

KL5 electronic pressure switches permit the actuation of an electronic micro-switch upon reaching an adjustable preset value and allows the regulation of the hysteresis value. The right hand lever mounted on the instrument that is rotated forward to increase and reverse to decrease controls the maximum set point. The minimum set point of pressure hysteresis is adjusted by

Technical Features

Anodized aluminium body with AISI 316 stainless steel process fitting. It can be connected to the system with a 1/4" BSP female threaded port or to a CETOP manifold without need of adaptors.

Installation : in any position.

Working temperature : from -20°C to +80°C

Commutation frequency: 200 cycles/min.

Switching accuracy: ± 1% of set pressure

Adjustable hysteresis value: from 2% to 95% of set value

Weight : 0,38 Kg.

Electric Features

Power supply: 15/30V DC

12V DC *on request.

Electric connection according to DIN 43650

Electric protection according to DIN 40050: IP65

Maximum contact load: 2 Amp

Medium consumption: 20mA

Involatile memory: EEPROM

rotating the left hand lever of the instrument.

**ELECTRONIC PRESSURE SWITCH**

WITH ADJUSTABLE DIFFERENTIAL

PART NUMBER	SWITCHING PRESSURE RANGE	MAXIMUM PRESSURE		
KTR55	10 – 200 BAR	500 BAR		

KTR5 electronic pressure switches actuate a relay once a preset pressure value is reached and allow regulation of the hysteresis value.

Maximum preset pressure is adjusted by operating the right trimmer located on the instrument, by rotating the screw clockwise to increase and counter-clockwise to decrease.

Minimum preset pressure (hysteresis) is found analogously by operating on the left trimmer of the instrument. The instrument, which is totally solid state, has the relay adjustment separate from alimentation.

ELECTRONIC PRESSURE SWITCH

WITH ADJUSTABLE DIFFERENTIAL AND 4 ALARM SETTINGS

DIGITAL READ OUT

PART NUMBER	SWITCHING PRESSURE RANGE	DISPLAY INDICATION		
KD59-FX	0 – 400 BAR	400 BAR		

KD5-FX electronic pressure switches can work together the TR4, TR5 e TR6 transducers, or with other devices with output signals 4-20mA, and also with the non-amplified transducers of the TD 6 series, which are more economical but which offer the same performance. Suitable for installation in front mounted panels with a hole diameter of 63 mm.. In addition to indicating pressure value, it permits up to 4 set alarms, in solid state, with adjustable hysteresis and programmable NO or NC contacts.

The instrument can substitute for four pressure switches with adjustable hysteresis through the full scale range and as a gauge, it can be programmed in different measurement units and it can display four inputs with differential pressure and four programmable alarms. It is also possible to select, for example, two different set points, with an NC or NO alarm and a readout of one or more of the other pressures with the added ability to see the different value between these two and then select another alarm point. In the meantime, the third channel, connected to the temperature transducer can show the working temperature with relative alarm.

PRESSURE TRANSDUCERS



PART NUMBER	SWITCHING PRESSURE RANGE	MAXIMUM PRESSURE	TYPE	
TR45/2	0 – 200 BAR	400 BAR	4-20mA	
TR45/3	0 - 200 BAR	400 BAR	0-10V	
TR49/2	0 - 400 BAR	600 BAR	4-20mA	
TR49/3	0 – 400 BAR	600 BAR	0-10V	

TR 4 pressure transducers give out a current signal directly proportional to the value of the input pressure to which they are connected.

Standard available signals: 4/20mA or 0-10 Volts

On request : 0-5V / 0-10V / 1-5V / 1-10V / 0-20mA // minimum batches

Technical features:

TR4: body in plated carbon steel

TR4/M12: body in plated carbon steel and connector M12x1

TR4X: body in AISI 316 stainless steel

TR4X/M12: body in AISI 316 stainless steel and connector M12x1

It also can be connected by 1/4"BSP male threaded and mounted in any position.

Working temperature: from -25°C to +85°C

Non linearit + hysteresis: <0,5% of F.S.

Zero thermic drift: <2% F.S. from 0 C° to +70° C

Weight: 0.1 Kg.

Electric features:

Electric connection according to Din 43650

Electric connection according to DIN 40050: IP 65

Electronic working temperature: from -20°C to +80°C

Stocking temperature: from -35°C to +110°C

External charge: 100 OHMS

Electric connections:

4/20mA 2 wires: 1>positive / 2>signal

0-10V 3 wires: 1>supply + / 3>GND / 2>out 0-10V

Power supply:

For all types: from 15 to 30 VCC

PRESSURE TRANSDUCERS – TR5 SERIES



PART NUMBER	SWITCHING PRESSURE RANGE	MAXIMUM PRESSURE	TYPE	
TR55/2	0 - 200 BAR	500 BAR	4-20mA	
TR55/3	0 - 200 BAR	500 BAR	0-10V	
TR59/2	0 - 400 BAR	600 BAR	4-20mA	
TR59/3	0 – 400 BAR	600 BAR	0-10V	

TR5 pressure transducers give out a current signal directly proportional to the value of the input pressure to which they are connected.

Standards available signals are : 4-20 mA or 0-10Volts

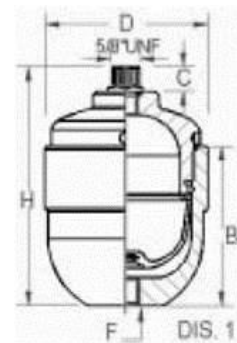


PART NUMBER		MAXIMUM PRESSURE	PORT	
HST-0.1		300 BAR	M18X1.5	
HST-0.35		300 BAR	M18X1.5	
HST-0.5		300 BAR	M18X1.5	
HST-0.7		300 BAR	M18X1.5	
HST-0.8		300 BAR	M18X1.5	
HST-1.3		300 BAR	M18X1.5	
HST-1.5		300 BAR	M18X1.5	
HST-2.3		300 BAR	M18X1.5	

Standard Execution:

Body in forged steel, profile turned and tropicalized internally as well as externally, constructed in two parts and united with a special threading that under conditions of dynamic pressure tends to self-block. The diaphragm is suitable for operation with mineral oils and non aggressive fluids in a temperature range from -20°C to +80°C.

Installation Position: Can be mounted in any position.



Compression Ratio:

Recommended: P2:P0 = 2,5:1

Maximum P2:P0 = 6:1

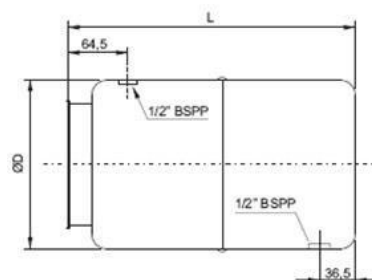
Tipo	Pressione max BAR	Volume Azoto LT	H mm	D mm	B mm	C mm	F BSP	Portata max L/min	Peso KG	Dis.N°
HST 0,1	300	0,12	141	80	94	22	M 18x1,5	45	2,1	1
HST 0,35	300	0,35	152	101	100	22	M 18x1,5	50	3,2	1
HST 0,5	300	0,5	175	124	120	22	M 18x1,5	60	5	1
HST 0,7	300	0,7	207	101	160	22	M 18x1,5	55	5,5	1
HST 0,8	300	0,8	182	138	85	22	M 18x1,5	60	5,8	2
HST 1,3	300	1,3	232	120	180	22	M 18x1,5	55	7,9	1
HST 1,5	300	1,5	270	138	160	22	M 18x1,5	55	8,7	2
HST 2,3	300	2,3	340	138	160	22	M 18x1,5	55	10,5	2

**12&24VDC****HorizontalStandard****Vertical on Request**

PART NUMBER	DESCRIPTION	CONTROL	VOLTS	STEEL TANK SIZE	
PPC1612DCSAK26D200G5B	PUMP/MOTOR & TANK P and T Ports Includes Relief Valve	NONE	12	5 LITRE ROUND	
PPC2224DCSAK26D200G5B			24		

OPTIONS

PART NUMBER	DESCRIPTION	TYPE	VOLTS	
MSV30000+M13040001+18209N	Single Acting Control	Solenoid	12	
MSV30000+M13040002+18209N			24	
CM04M0000	Single Acting Control	Manual Lever	12 OR 24	
E60403010+4WE6D-A-D12	Double Acting Control	2 Pos Cetop 3 & Adaptor	12	
E60403010+4WE6D-A-D24			24	
E60403010+4WE6G-A-D12	Double Acting Control	3 Pos Cetop 3 & Adaptor	12	
E60403010+4WE6G-A-D24			24	
E60543006	Foot Mount Bracket			
E60543007	Foot Mount H/duty Long			

**SteelTanks**

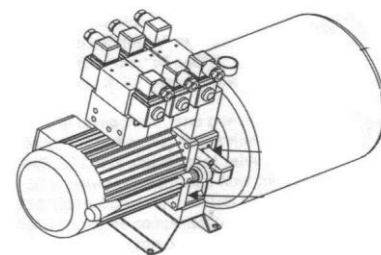
PART NUMBER	CAPACITY	MOUNT	SHAPE	LENGTH	WIDTH	HEIGHT	ØD	WEIGHT	
E60303004	2.5 Litre	Horizontal Vertical	Round	235mm			130mm	1.05Kg	
E60303006	5 Litre	Horizontal Vertical	Round	275mm			180mm	1.70Kg	
E60303011	10 Litre	Horizontal Vertical	Round	262mm			220mm	1.90Kg	
E60303012	12 Litre	Horizontal Vertical	Round	295mm			240mm	2.40Kg	
E60303041	8 Litre	Vertical	Squared	306mm	256mm	133mm		3.75Kg	
E60303014	15 Litre	Vertical	Squared	306mm	256mm	237mm		5.20Kg	
E60303015	20 Litre	Vertical	Squared	350mm	280mm	293mm		8.00Kg	
E60303048	30 Litre	Vertical	Squared	350mm	280mm	423mm		9.40Kg	

AC Single & 3 Phase

Horizontal Standard

Vertical on Request

Standard Power Units
240 Volt Single Phase with P & T Ports



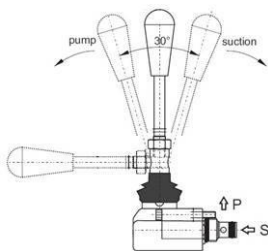
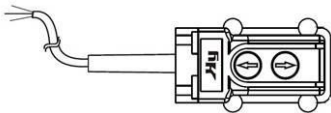
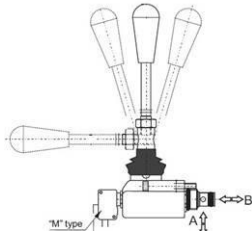
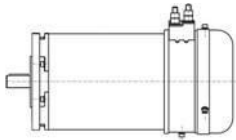
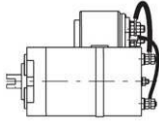
PART NUMBER	KW	FRAME	VOLTS	FLOW	MAX PRESS	STEEL TANK SIZE	
1PPC-0.37-AK11D200G5B	.37	71FR	240	1.5 LPM	140 BAR	5 LITRE	
1PPC-0.55-AK16D200G5B	.55	80FR	240	2.3 LPM	140 BAR	5 LITRE	
1PPC-0.75-AK21D200G5B	.75	80FR	240	3 LPM	140 BAR	5 LITRE	
1PPC-1.10-AK32D200G5B	1.1	80FR	240	4.6 LPM	140 BAR	5 LITRE	
1PPC-1.50-AK42D200G5B	1.5	90FR	240	6 LPM	140 BAR	5 LITRE	
1PPC-2.20-AK49D200G5B	2.2	100FR	240	7 LPM	170 BAR	5 LITRE	

Standard Power Units
415 Volt 3 Phase with P & T Ports

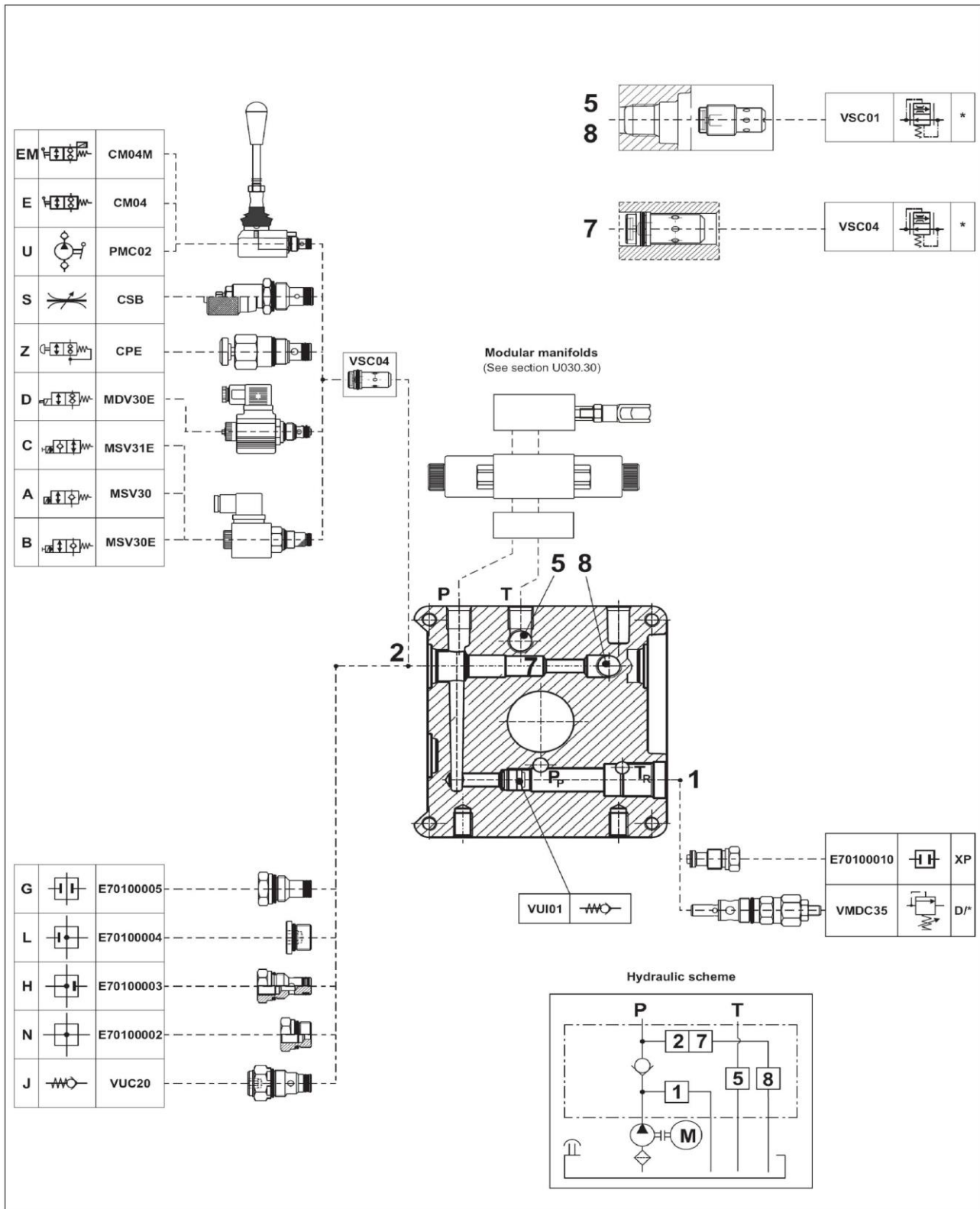
PART NUMBER	KW	FRAME	VOLTS	FLOW	MAX PRESS	STEEL TANK SIZE	
3PPC-0.37-AK11D200G5B	.37	71FR	415	1.5 LPM	140 BAR	5 LITRE	
3PPC-0.55-AK16D200G5B	.55	80FR	415	2.3 LPM	140 BAR	5 LITRE	
3PPC-0.75-AK21D200G5B	.75	80FR	415	3 LPM	140 BAR	5 LITRE	
3PPC-1.10-AK32D200G5B	1.1	80FR	415	4.6 LPM	140 BAR	5 LITRE	
3PPC-1.50-AK42D200G5B	1.5	90FR	415	6 LPM	140 BAR	5 LITRE	
3PPC-2.20-AK49D200G5B	2.2	100FR	415	7 LPM	170 BAR	5 LITRE	



OPTIONS

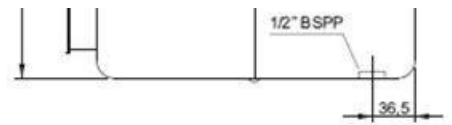
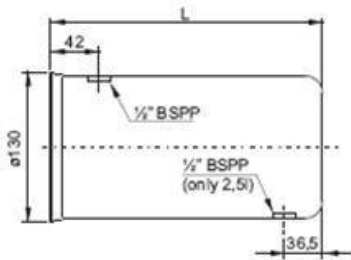


PART NUMBER	DESCRIPTION	
M46C1S008	800 W 12VDC Electric Motor	
M46C2S008	800 W 24VDC Electric Motor	
MB14C2ST40	4KW 24VDC H/Duty E/Motor with Fan	
MSV3000000	Normally Closed Cartridge	
MSV3100000	Normally Open Cartridge	
M13040001	12VDC Coil	
M13040002	24VDC Coil	
M13040006	110VAC Coil	
M13040007	220VAC Coil	
18209N	Din Plug Connector	
CM04M0000	Manual Lever with Microswitch	
E701000005	Cavity Plug	
VSC01A	1 LPM P/Comp Flow Control Cartridge 1/4" BSP	
VSC01B	2 LPM P/Comp Flow Control Cartridge 1/4" BSP	
VSC01C	3 LPM P/Comp Flow Control Cartridge 1/4" BSP	
VSC040102	1 LPM P/Comp Flow Control Cartridge Oring	
VSC040202	2 LPM P/Comp Flow Control Cartridge Oring	
VSC040302	3 LPM P/Comp Flow Control Cartridge Oring	
E60403001	Cetop 3 Adaptor 3/8" Bsp Rear Ports	
E60403010	Cetop 3 Adaptor 3/8" Bsp Side Ports	
E60403004	Spacer Manifold	
E60403005	90 Degree Rotational Manifold	
E60403030	Body to suit MSV Cartridge	
F16000001	Plastic Cover 114 DC Motor	
PO2.1	4 Metre Cord Set Single Acting	
PO2.2	4 Metre Cord Set Double Acting	
PMC020000	2cc Cartridge Hand Pump	
E60543006	Foot Mount Bracket	
E60543007	Foot Mount H/duty Long	
C34100001	Suction Filter 3/8" BSP	
C34100002	Suction Filter D80	
C34100003	Suction Filter D63	
C34100005	Suction Filter Square	
C34200001	Return Filter	
C86100001	Breather 1/2" BSP	
C86100001E	Filling Plug 1/2" BSP	
C86100002	Breather 3/4" BSP	
C86200001	Breather 18mm	
C86200002	Breather Push On	
SPE-P14N	Dampener 1/4" BSP Return Line	



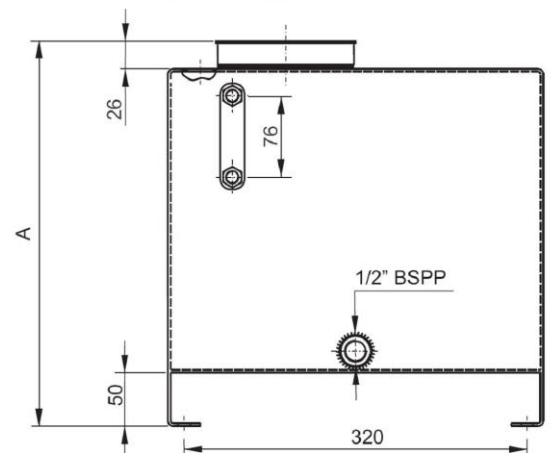
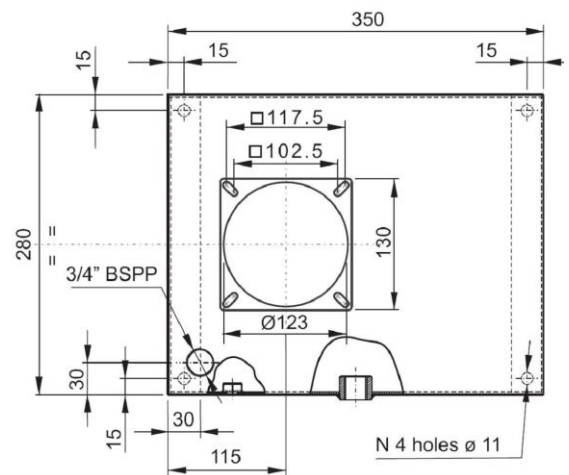
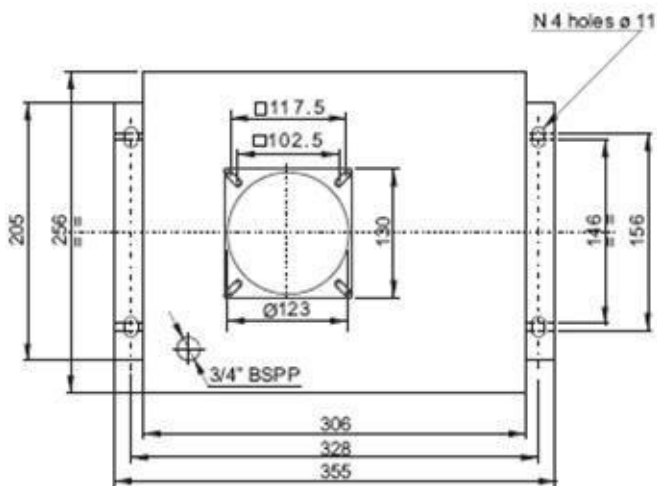
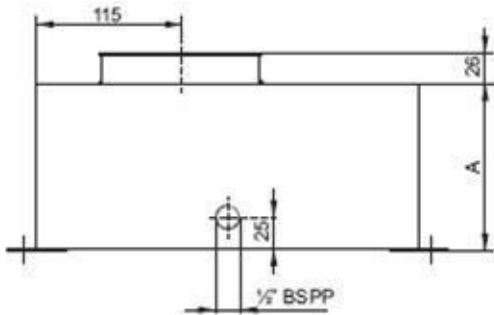
TankOptions

Round



PART NO.	DESCRIPTION	L	Weight		PART NO.	DESCRIPTION	L	Weight
E60303001	1.5 Lt Cylindrical Horizontal / Vertical Mounting	150mm	.75Kg		E60303006	5 Lt Cylindrical Horizontal / Vertical Mounting	275mm	1.70Kg
E60303004	2.5 Lt Cylindrical Horizontal / Vertical Mounting	235mm	1.05Kg		E60303011	10 Lt Cylindrical Horizontal / Vertical Mounting	262mm	1.90Kg
					E60303012	12 Lt Cylindrical Horizontal / Vertical Mounting	295mm	2.40Kg

Square



PART NO.	DESCRIPTION	A	Weight		PART NO.	DESCRIPTION	A	Weight
E60303041	8L Squared Vertical Mount	133mm	3.75Kg		E60303015	20L Squared Vertical Mount	293mm	8.00Kg
E60303014	15Lt Squared Vertical Mount	237mm	5.20Kg		E60303048	30 Lt Squared Vertical Mount	423mm	9.40Kg

Power Units

Base Power Units include

3 Phase Electric Motor (240V Single Phase on request)
 Powder coated Blue Tank
 Laser cut, White Powder coated Lid
 Level Gauge & Filler Breather
 Bell Housing & Coupling
 High Quality Ronzio Gear Pump.
 10 Micron Tank top filter with Under tank porting (Easy access Element)
 Tank top Relief Block with BSPP P, T and Gauge Ports
 Relief Set to 140 Bar
 (Easy changeable to Cetop Single or Multi-station Manifold)

Options

Single & Multi-Station Cetop Manifolds
 Cetop Valves and Modular Valves
 Gauges
 Suction Strainers

Important

All Flows, Pressures and Power requirements are theoretical only.

Based on $Kw \times 600 = \text{Pressure} \times \text{Flow}$

Electric motor speed based on 1450RPM

Standard Power Units with Gear Pumps

Ordering Code

PU	-	30	-	3	-	2.2KW	-	9 LPM	-	140
STD Power Unit		Nom Tank Size		Single or 3 Phase		Electric Motor & Frame Size		Approx Max Flow @ 140 Bar		Pressure Setting
		12 Litre				0.37Kw (71FR)		1.6 LPM		Std =140Bar
		16 Litre				.55Kw (80FR)		2.3 LPM		
		30 Litre				.75Kw (80FR)		3 LPM		
		55 Litre		1 PH (240V) Or 3 PH (415V)		1.1 Kw (90FR)		4 LPM		
		75 Litre				1.5Kw (90FR)		6 LPM		
		100 Litre				2.2Kw (100FR)		9 LPM		
		180 Litre				3Kw (100FR)		11 LPM		
						4 Kw (112FR)		16 LPM		
						5.5 Kw (132FR)		24 LPM		
						7.5 Kw (132FR)		29 LPM		
						11 Kw (160FR)		43 LPM		
						15 Kw (160FR)		64 LPM		
						18.5 Kw (180FR)		79 LPM		

3 Phase 415V

12 Litre Industrial Power Units

Part Number	Tank Size	Phase	KW	Frame	Flow @1450RPM	Relief Setting	
PU12-3-.37KW-1.6-140	12 Litre Nom	3 PH	0.37Kw	71	1.6 LPM	140 Bar (2000PSI)	

Different Pumps, Flows and Pressure Settings Available

16 Litre Industrial Power Units

Part Number	Tank Size	Phase	KW	Frame	Flow @1450 RPM	Relief Setting	
PU16-3-.55KW-2.3-140	16 Litre Nom	3 PH	.55	80	2.3 LPM	140 Bar (2000 PSI)	
PU16-3-.75KW-3-140			.75	80	3 LPM		
PU16-3-1.1KW-4-140			1.1	90	4 LPM		
PU16-3-1.5KW-6-140			1.5	90	6 LPM		
PU16-3-2.2KW-9-140			2.2	100	9 LPM		
PU16-3-3KW-11-140			3	100	11 LPM		
PU16-3-4KW-16-140			4	112	16 LPM		

Different Pumps, Flows and Pressure Settings Available




3 Phase 415V

30 Litre Industrial Power Units

Part Number	Tank Size	Phase	KW	Frame	Flow @1450 RPM	Relief Setting	
PU30-3-.75KW-3-140	30 Litre Nom	3 Ph	.75Kw	80	3 LPM	140 Bar (2000 PSI)	
PU30-3-1.5KW-6-140			1.5Kw	90	6 LPM		
PU30-3-2.2KW-9-140			2.2Kw	100	9 LPM		
PU30-3-3KW-11-140			3Kw	100	11 LPM		
Different Pumps, Flows and Pressure Settings Available							

55 Litre Industrial Power Units

Part Number	Tank Size	Phase	KW	Frame	Flow @1450 RPM	Relief Setting	
PU55-3-3KW-11-140	55 Litre Nom	3 Ph	3Kw	100	11 LPM	140 Bar (2000 PSI)	
PU55-3-4KW-16-140			4 Kw	112	16 LPM		
PU55-3-5.5KW-24-140			5.5 Kw	132	24 LPM		
PU55-3-7.5KW-29-140			7.5Kw	132	29 LPM		
Different Pumps, Flows and Pressure Settings Available							

75 Litre Industrial Power Units

Part Number	Tank Size	Phase	KW	Frame	Flow @1450 RPM	Relief Setting	
PU75-3-3KW-11-140	55 Litre Nom	3 Ph	3Kw	100	11 LPM	140 Bar (2000 PSI)	
PU75-3-4KW-16-140			4 Kw	112	16 LPM		
PU75-3-5.5KW-24-140			5.5 Kw	132	24 LPM		
PU75-3-7.5KW-29-140			7.5Kw	132	29 LPM		
Different Pumps, Flows and Pressure Settings Available							

Part Number	Tank Size	Phase	K W	Frame	Flow @1450 RPM	Relief Setting	
PU100-3-5.5KW-24-140	100 Litre Nom	3 Ph	5.5Kw	132	24 LPM	140 Bar	
PU100-3-7.5KW-29-140			7.5Kw	132	29 LPM	140 Bar	
PU100-3-11KW-44-140			11 Kw	160	44 LPM	140 Bar	
PU100-3-15KW-44-200			15 Kw	160	44 LPM	200 Bar	
PU100-3-18.5KW-51-200			18.5Kw	180	51 LPM	200 Bar	
PU100-3-22KW-66-200			22	180	66 LPM	200 Bar	

Different Pumps, Flows and Pressure Settings Available

Part Number	Tank Size	Phase	KW	Frame	Flow @1450 RPM	Relief Setting	
PU180-3-5.5KW-24-140	180 Litre Nom	3 Ph	5.5	132	24 LPM	140 Bar (2000 PSI)	
PU180-3-7.5KW-29-140			7.5	132	29 LPM		
PU180-3-11KW-43-140			11	160	43 LPM		
PU180-3-15KW-64-140			15	160	64 LPM		
PU180-3-18.5KW-79-140			18.5	180	79 LPM		
PU180-3-22KW-92-140			22	180	92 LPM		

Different Pumps, Flows and Pressure Settings Available

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Email: sales@hydraulicdistributors.com.au

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