# **FO3MSV-ND\*** FLOW CONTROL VALVE, NON-COMPENSATED WITH CHECK







PO Box 38 Strathfieldsaye, VIC, 3551 1800 OIL SOL 1800 645 765 sales@oilsolutions.com.au www.oilsolutions.com.au "For All Your Hydraulic Needs"

### DESCRIPTION

This modular stack valve is a non-compensated flow control valve with a check valve for reverse free flow.

### **OPERATIONS**

This valve increases its orifice value from fully closed to fully open with counter-clockwise rotation.

Meter-in or meter-out configuration is determined by the orientation of the body to mounting surface.

Available with flow control function on line A, B, or both A + B.

#### **TYPICAL PERFORMANCE SPECIFICATIONS**

MAXIMUM OPERATING I	PRESSURE	5000 psi	350 bar		
CRACKING PRESSURE		7 psi	0.5 bar		
MAXIMUM FLOW Rate	Controlled Lines	13 gpm	50 l/min		
	Free Lines	20 gpm	75 l/min		
MINIMUM FLOW RATE	Controlled Lines with $\Delta P = 145$ psi	≤ 0.015 gpm	≤0.06 l/min		
MOUNTING SURFACE		NFPA D03 ISO 4401-03-02-0-05			
WEIGHT		2.87 lbs	1.3 kg		

## **AVAILABLE VERSIONS**







WWW.CONTINENTALHYDRAULICS.COM - SALES@CONTHYD.COM

### **IDENTIFICATION CODE**



### **PERFORMANCE CURVES**

#### **CONTROLLED PORT ADJUSTMENT**







CURVE	FLOW PATH
1	P port, T port
2	A port or B port w/o flow control
3	Reverse free flow thru check

#### NOTE:

Values obtained with oil viscosity of 36 cSt at 122°F (50°C).

1800-OILSOL <u>https://oilsolutions.com.au/</u> 1800-645765 sales@oilsolutions.com.au





F03MSV-NDC





Meter-Out

NOTE: Remove directional control valve locator pin when configuring for meter-in.



1800-OILSOL 1800-645765

LSOL <u>https://oilsolutions.com.au/</u>

sales@oilsolutions.com.au

WWW.CONTINENTALHYDRAULICS.COM - SALES@CONTHYD.COM

# **APPLICATION DATA**

#### FLUIDS

All pressure drops shown on these data pages are based on 170 SUS fluid viscosity and 0.87 specific gravity. For any other specific gravity (G1) the pressure drop ( $\Delta P$ ) will be approx.  $\Delta P1 = \Delta P$  (G1/G). See the chart for other viscosities.

FLUID	Cst	10	14.5	32	36	43	54	65	76	86	108	216	324	400
VISCOSITIES	SUS	60	75	150	170	200	250	300	350	400	500	1000	1500	1900
MULTIPIER		0.77	0.81	0.97	1.00	1.04	1.10	1.15	1.20	1.24	1.31	1.56	1.72	1.83

Use mineral oil-based hydraulic fluids HL or HM type, according to ISO 6743-4. For these fluids, use NBR seals. For fluids HFDR type (phosphate esters) use FPM seals (code G). For the use of other kinds of fluid such as HFA, HFB, HFC, please consult our technical department.

Using fluids at temperatures higher than 180 °F causes the accelerated degradation of seals as well as degradation of the fluids physical and chemical properties.

From a safety standpoint, temperatures above 130 degrees F are not recommended.

DANCE TEMDEDATUDES.	Ambient	- 4 to +130 °F	-20 to +54 °C		
	Fluid	4 to +180 °F	-20 to +82 °C		
	Range	60 -1900 SUS	10 400 cSt		
	Recommended	120 SUS	25 cSt		
FLUID CONTAMINATION		ISO 4406:1999 Class 20/18/15			

#### **SEAL KIT**

BUNA SEAL KIT	1013661
VITON SEAL KIT	1013662



1800-OILSOL <u>https://oilsolutions.com.au/</u> 1800-645765 sales@oilsolutions.com.au

### SALES@CONTHYD.COM

#### 4895 12TH AVENUE EAST SHAKOPEE, MN 55379/ PH: 952.895.6400 / FAX: 952.895.6444 / WWW.CONTINENTALHYDRAULICS.COM

FORM NO.1013015. REV.04/2020.© 2011 CONTINENTAL HYDRAULICS.ALL RIGHTS RESERVED. PRODUCT SPECIFICATIONS AND APPEARANCE ARE SUBJECT TO CHANGE WITHOUT NOTICE