

F03MSV-CI/CO

# F03MSV-CI/CO

## **Pressure Compensated Flow Control** with Reverse Flow Check Valve

MODULAR VERSION NFPA D03 ISO 4401-03

 P max
 3000 PSI
 210 bar

 Q max
 12 GPM
 55 l/min

#### DESCRIPTION

Pressure compensated, fully adjustable flow control valves with an integral reverse flow check valve. Valve conforms to NFPA D03/ISO 4401-03 standard for mounting interface. This valve maintains a constant flow rate regardless of system pressure or load changes. Sharp edge orifice minimizes flow variation due to changes in viscosity. Reverse flow will open the check at about 10 psi [.7 bar]. Minimum leakage is .1 gpm [0.4 l/min] at shutoff. Balanced adjustment screw for easy adjustment at all pressures. Five turns of adjustment closed to fully open.

#### Key Features:

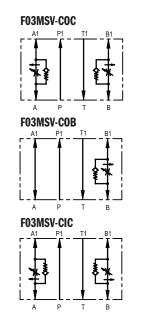
- Maximum operating pressure: 3000 psi
- Maximum flow rate: 6 gpm for F03MSV-C\* A,B,C 12 gpm for F03MSV-CIP

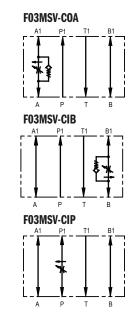
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Max operating pressure:	PSI [bar]	3000 (210)		
Flow adjustment range	GPM [I/min] A,B,C GPM [I/min] CIP	.1 - 6 [0.4 - 23] .2 - 12 [0.4 - 55]		
Adjustment Range	No. of CCW turns from close to open	5		
Ambient temperature range	°F [°C]	-4 to 140 [-20 to +60]		
Fluid temperature range	°F [°C]	-4 to 176 [-20 to +80]		
Fluid viscosity range	cSt	10 - 400		
Recommended viscosity	cSt	25		
Fluid contamination degree	According to ISO 4406:1999 class 19/17/14			
Mass: F03MSV-C*C F03MSV-C*A, C*B, P	lbs [kg] 1.45 [0.66] 1.0 [0.45]			

#### PERFORMANCE (Measured with mineral oil of viscosity 36cSt at 120°F [50°C])



#### HYDRAULIC SYMBOLS







## F03MSV-CI/CO

#### **IDENTIFICATION CODE:**

	F03	BMSV - C			-	<b>A</b> - 🗌			DESIGN LETTER
		VALVE TYPE PRESSURE CONTROL							
	V	ALVE SERIES			SEA	L MATERIAL		MATER	IAL SELECTION
	CODE	NFFA SIZE			CODE	DESCRIPTION		CODE	DESCRIPTION
	03	D03 INTERFACE			A	BUNA-N		A	ALUMINUM
r.					G	VITON			
		COMPENSATION							
	CODE	FUNCTION							
	C	PRESSURE COMP							
		VALVE FUNCTION				PORTS			
F	CODE	FUNCTION	AVAIL WIT	H PORTS	CODE	PORT	1	AVAIL WITH FUN	C
	I	METER IN WITH REV CHK	В, С,	, P	A	А		0	
- H							1		

0 METER OUT WITH REV CHK A, B, C

PORTS				
CODE	PORT	AVAIL WITH FUNC		
Α	A	0		
В	В	I, 0		
C	A & B	I, 0		
Р	Р	I		

\*All options have ADJ screw w/socket head

#### **HYDRAULIC FLUIDS**

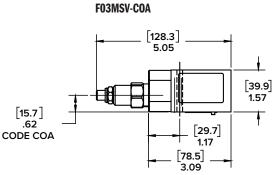
Use mineral oil-based hydraulic fluids HL or HM type, according to ISO 6743-4. For these fluids, use NBR seals (code A). For fluids HFDR type (phosphate esters) use FPM seals (code G). For the use of other kinds of fluid such as HFA, HFB, HFC, please consult our technical department. Using fluids at temperatures higher than 176°F [80°C] causes a faster degradation of the fluid and of the seals characteristics.

The fluid must be preserved in its physical and chemical characteristics.

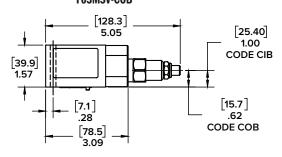


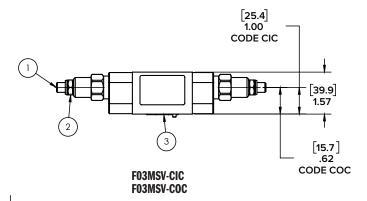
F03MSV-CI/CO

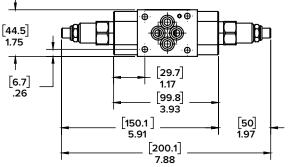
### OVERALL AND MOUNTING DIMENSIONS Dimensions inch [mm]



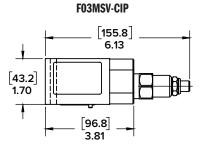




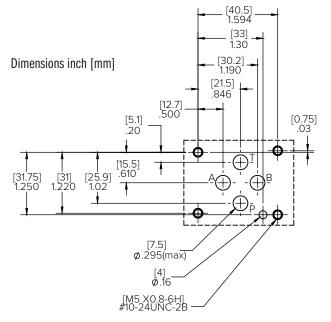




1	Countersunk hex adjustment screw: 5/32" [4mm] allen wrench Rotate counterclockwise to increase flow.
2	Locking nut: 9/16" wrench
3	Qty. 4 0-rings - size AS568-012 (.364 ID x .070 CS) 90 Shore



#### **MOUNTING INTERFACE**





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#### **FLOW CURVES:**

0

1000

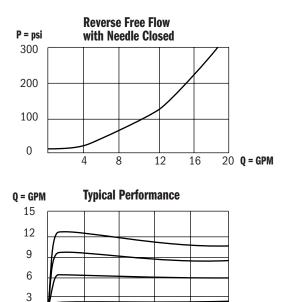
2000

3000

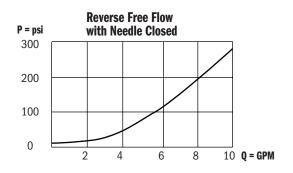
4000

5000 **P = psi** 

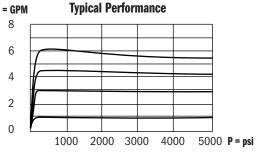
#### F03MSV-CI



F03MSV-C0







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