

# 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

### PERFORMANCE

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

Max operating pressure:	PSI [bar]	3000 (210)
Flow adjustment range	GPM [l/min] A,B,C	.1 - 6 [0.4 - 23]
	GPM [l/min] CIP	.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]

F03MSV-COA



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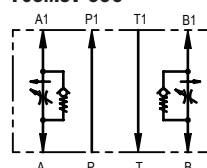
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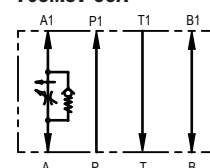
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### HYDRAULIC SYMBOLS

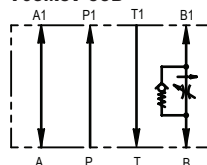
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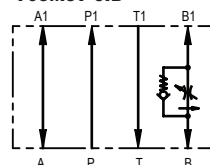
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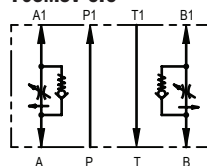
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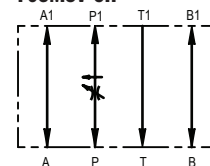
F03MSV-CIB



F03MSV-CIC

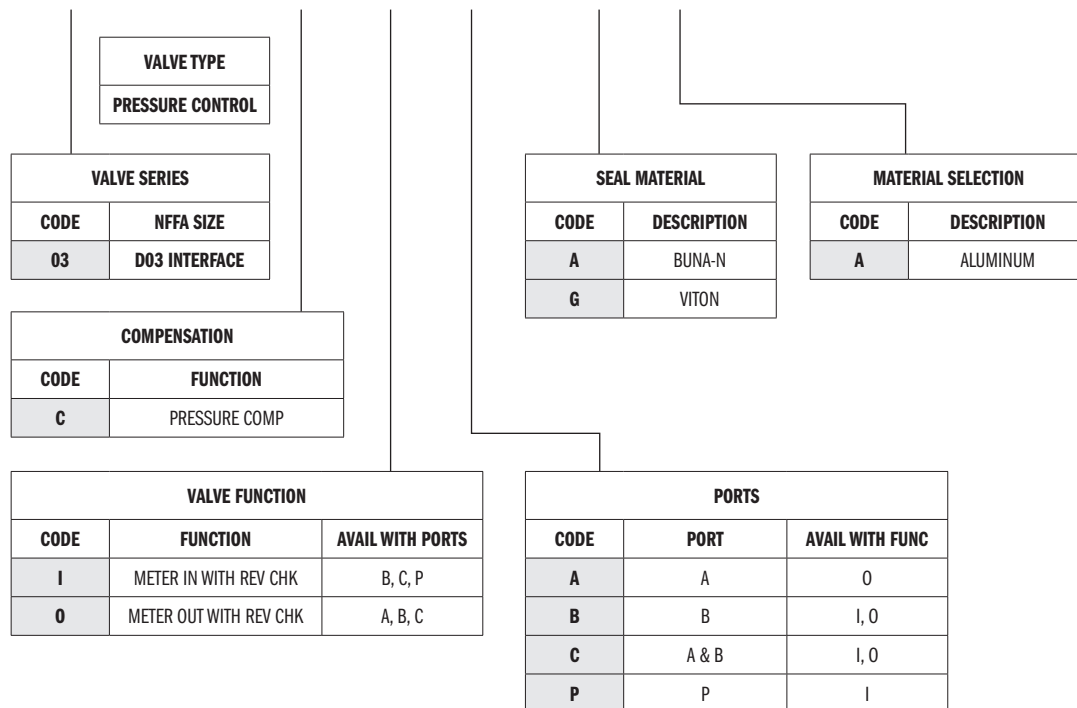


F03MSV-CIP



### IDENTIFICATION CODE:

**F03MSV - C**     -   **A** -   ————— DESIGN LETTER



\*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.

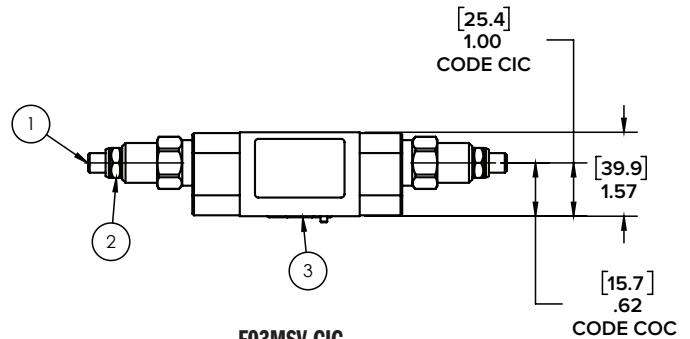
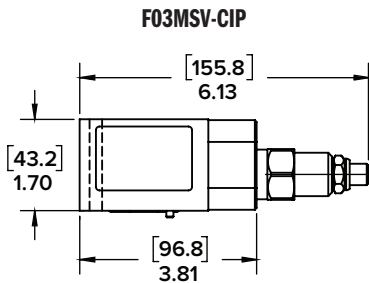
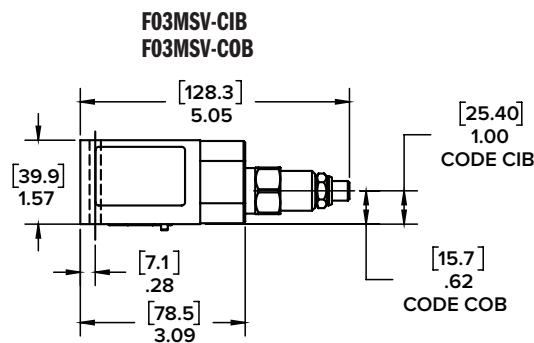
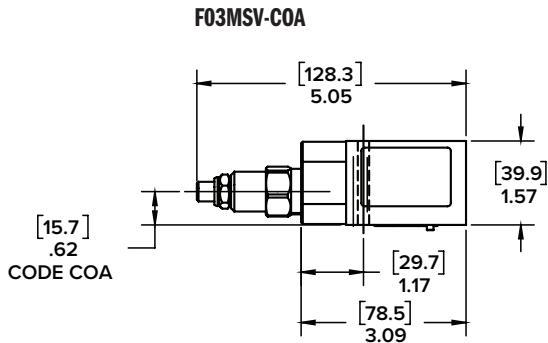


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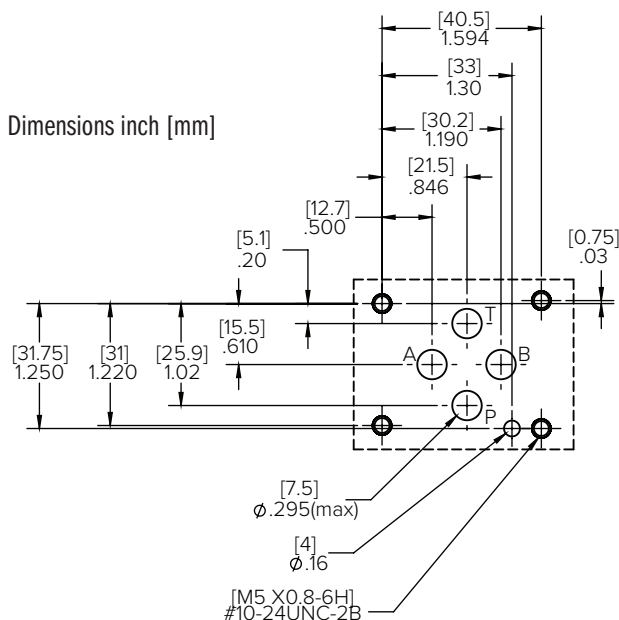
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### OVERALL AND MOUNTING DIMENSIONS Dimensions inch [mm]



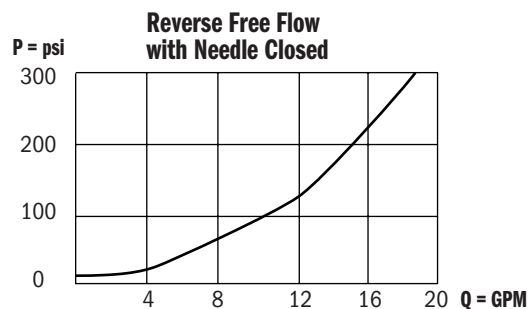
1	Countersunk hex adjustment screw: 5/32" [4mm] allen wrench Rotate counterclockwise to increase flow.
2	Locking nut: 9/16" wrench
3	Qty. 4 O-rings - size AS568-012 (.364 ID x .070 CS) 90 Shore

### MOUNTING INTERFACE Dimensions inch [mm]

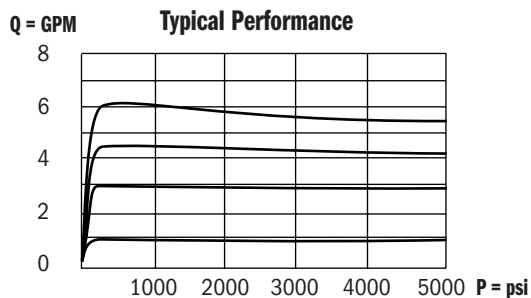
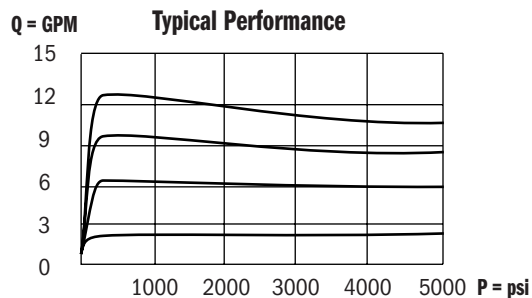
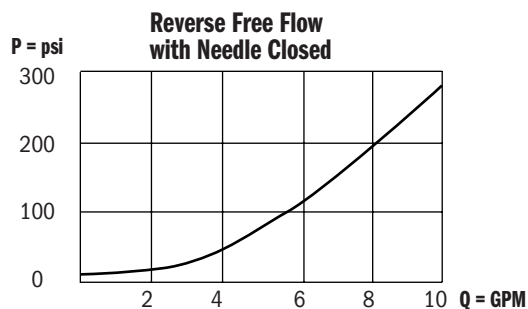


### FLOW CURVES:

#### F03MSV-CI



#### F03MSV-C0



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