

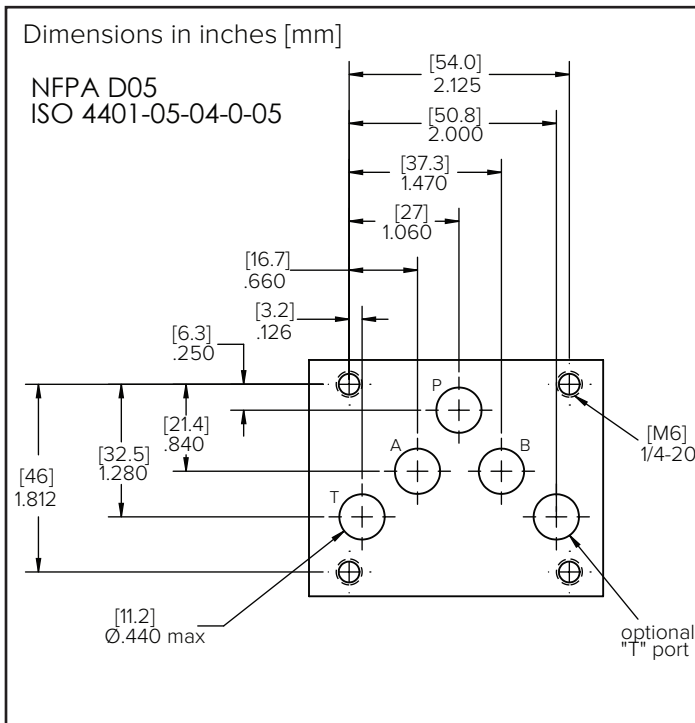
P05MSV-RCC/BCC

RESTRICTIVE AND BYPASS STYLE PRESSURE COMPENSATORS

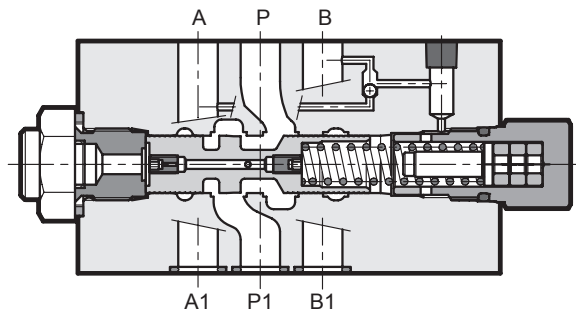
P max **5000 PSI 350 bar**
Q max **26 GPM 100 l/min**

MODULAR VERSION
NFPA D05 ISO 4401-05

MOUNTING INTERFACE



OPERATING PRINCIPLE

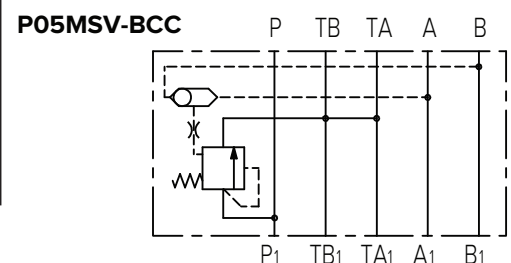
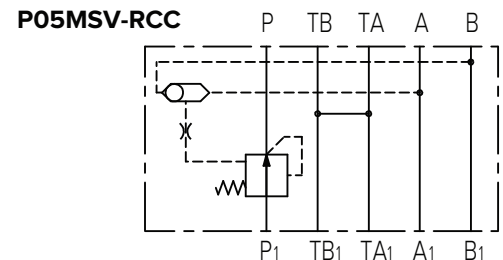


- The P05MSV-RCC/BCC pressure compensator stack valves are available in a restrictive or bypass style. The mounting interface is according to NFPA D05/ISO 4401-05 standards.
- Its function is to maintain the pressure drop across P port and the active cylinder port at a constant level.
- It is used together with a proportional directional control valve in order to control the flow rate independent of pressure variations.
- The selection of the pilot pressure on the A and B is carried out automatically with a shuttle check valve built into the compensator.
- The fixed adjustment compensator is available with pressure drop settings of 58 psi [4 bar] and 116 psi [8 bar].

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

Maximum operating pressure	PSI [bar]	5000 [350]
Characteristic p: fixed adjustment	PSI [bar]	58 & 116 [4 & 8]
Maximum flow rate	GPM [l/min]	26 [100]
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
Fluid contamination degree	According to ISO 4406:1999 class 20/18/15	
Recommended viscosity	cSt	25
Mass:	lbs [kg]	6.0 [2,7]

HYDRAULIC SYMBOLS

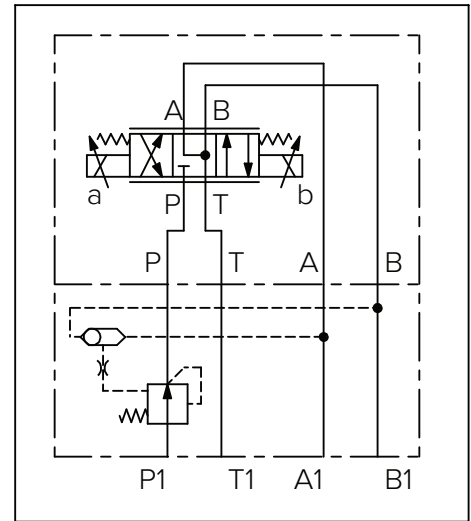


P05MSV-RCC/BCC

APPLICATION EXAMPLES

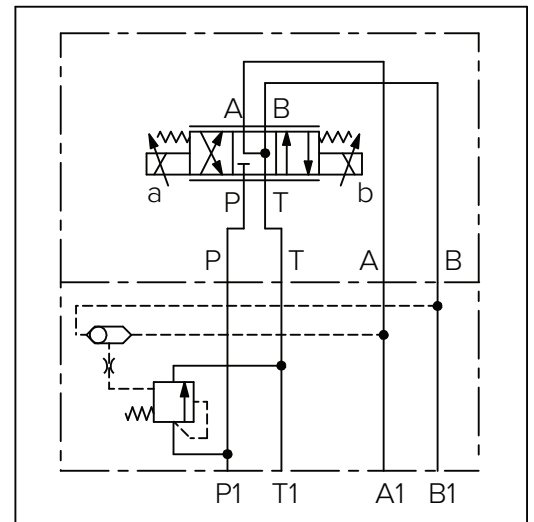
Restrictive (two-way) compensator with fixed adjustment, combined with a proportional valve model VED05M-3FC-*

RESTRICTIVE - 2 WAY



Bypass (three way) compensator with fixed adjustment, combined with a proportional valve model VED05M-3FC-*

BYPASS - 3 WAY



1 • IDENTIFICATION CODE

P05MSV - - **C** - - - **C** - **E**

VALVE TYPE	
PRESSURE CONTROL	

VALVE SERIES	
CODE	NFPA SIZE
05	D05 INTERFACE

PORT	
CODE	PORT
C	P

SEAL MATERIAL	
CODE	DESC.
A	BUNA-N
G	VITON

PRESSURE ADJUSTMENT RANGE		
CODE	PSI	BAR
F4	58	4
F8	100	8

MATERIAL SELECTION	
CODE	DESCRIPTION
C	CAST IRON

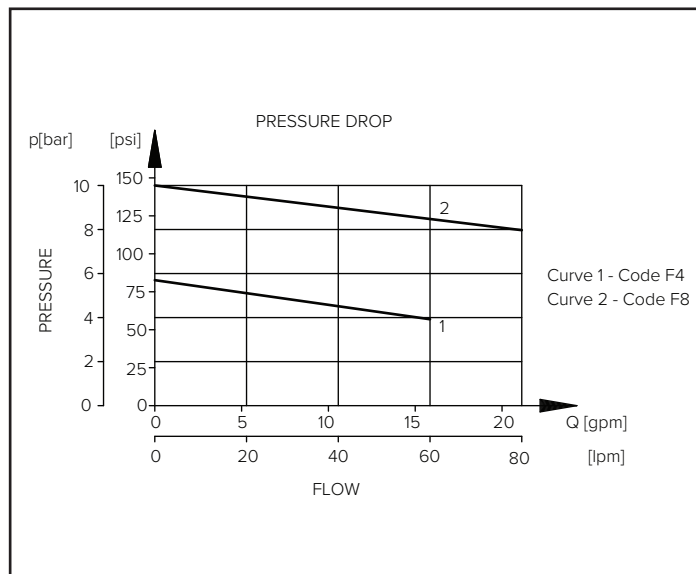
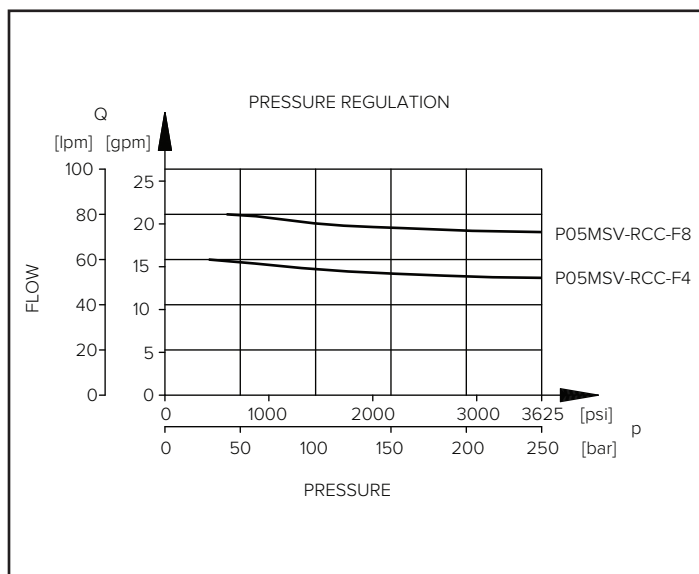
VALVE FUNCTION		
CODE	FUNCTION	AVAIL WITH PORTS
RC	RESTRICTIVE (2-way)	A & B
BC	BYPASS (3-way)	A & B

DESIGN LETTER	
E	

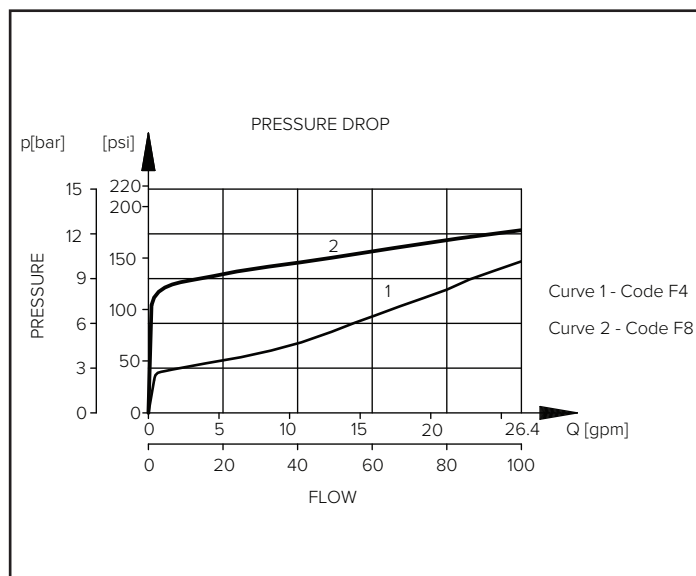
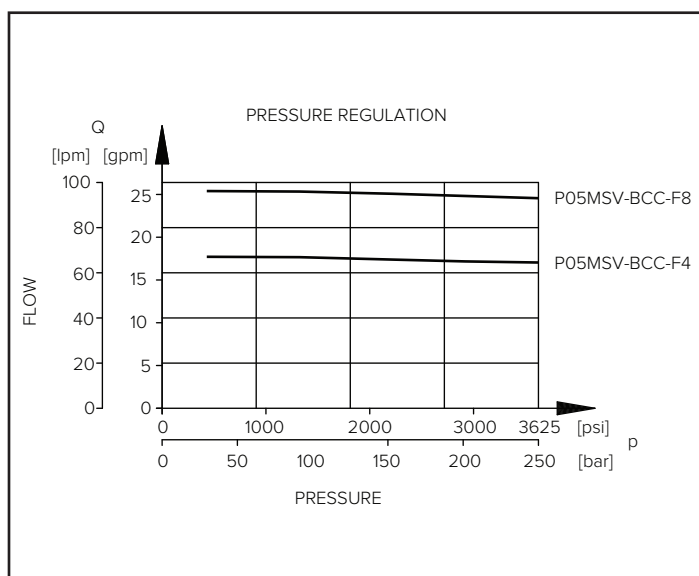
P05MSV-RCC/BCC

2 • CHARACTERISTIC CURVES (values obtained with viscosity of 36 cSt at 120°F [50°C])

2.1 RESTRICTIVE (2-WAY) COMPENSATOR



2.2 BYPASS (3-WAY) COMPENSATOR



3 • HYDRAULIC FLUIDS

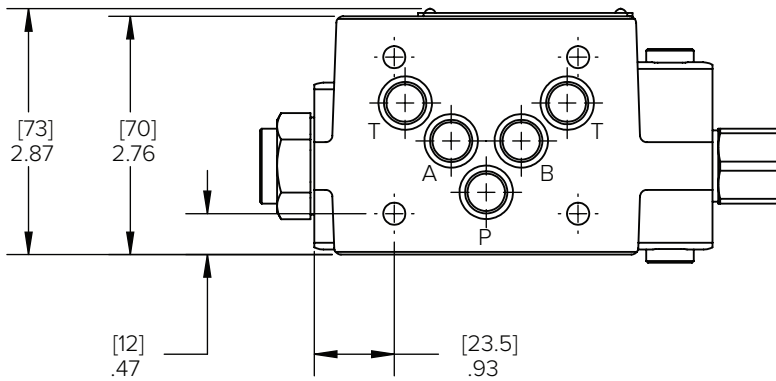
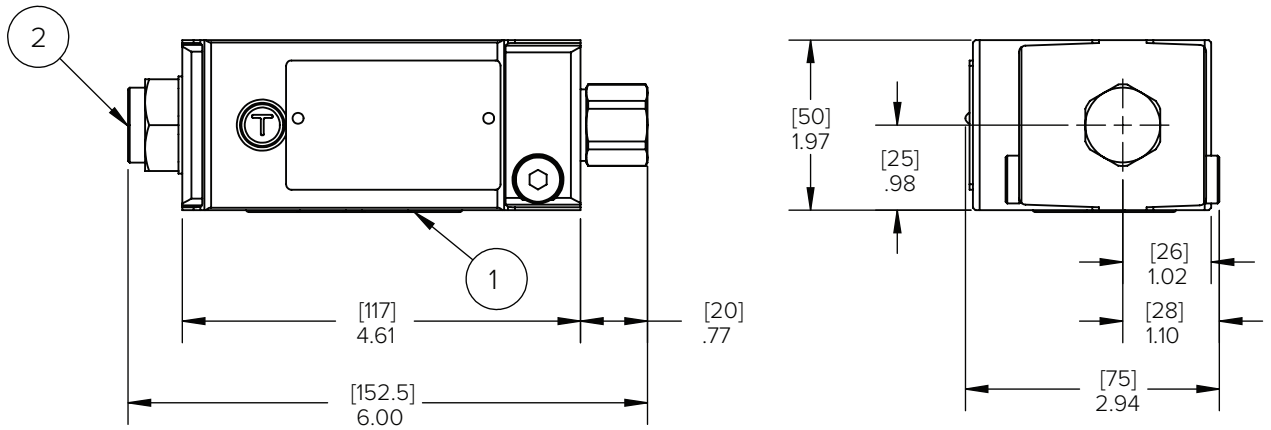
Use mineral oil-based hydraulic fluids HL or HM type, according to ISO 6743-4. For these fluids, use NBR seals (code A). For fluids HFDR type (phosphate esters) use FPM seals (code G). For the use of other kinds of fluid such as HFA, HFB, HFC, please consult our technical department. Using fluids at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

P05MSV-RCC/BCC

4 • OVERALL AND MOUNTING DIMENSIONS

DIMENSIONS IN INCHES [mm]



1	QTY. 5 O-Rings - Size AS568 - 014 (.489 ID x .070 CS) 90 Shore
2	Pressure gauge port SAE-04