

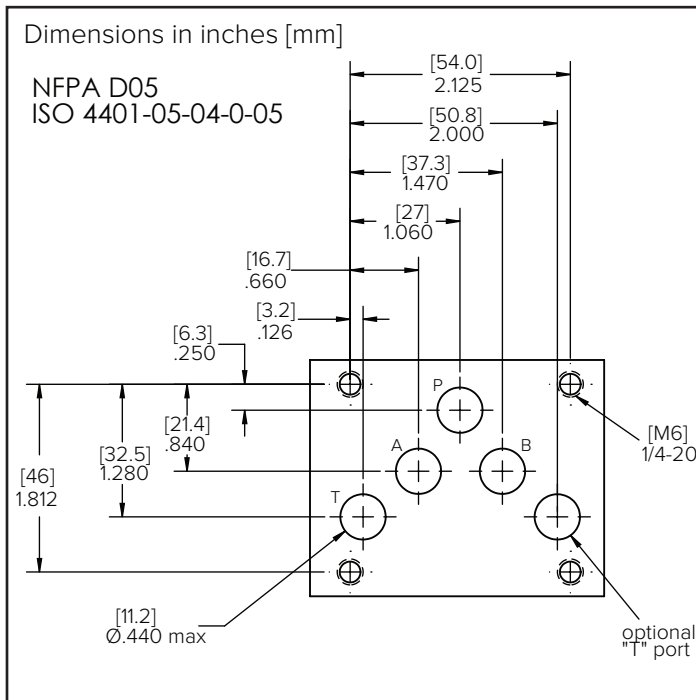
P05MSV-XC/XCT

WORKPORT PILOT OPERATED PRESSURE RELIEF VALVE

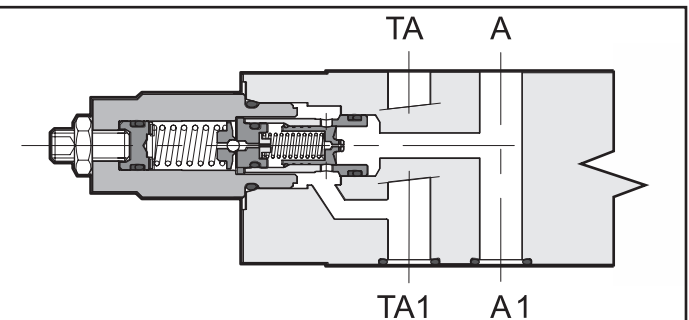
MODULAR VERSION
NFPA D05 ISO 4401-05

P max **5000 PSI 350 bar**
Q max **32 GPM 120 l/min**

MOUNTING INTERFACE



OPERATING PRINCIPLE



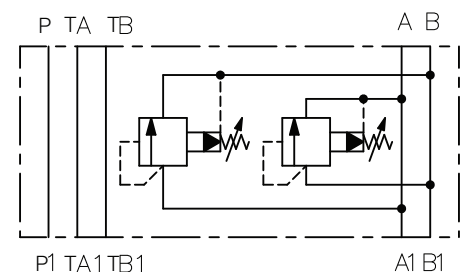
- The P05MSV-XC and XCT are pilot operated modular pressure relief valves with mounting surface according to NFPA D05/ISO 4401-05 standards.
- Typically, it mounts sandwiched between a directional control valve and a subplate/manifold and functions as a pressure limiting device in A and B ports.
- Code XC functions as a cross port relief valve. Code XCT relieves each work port to T independently.
- The valves can be assembled in a stack with additional modular valves using suitable tie rods or bolts.
- It is supplied with a hex socket head adjustment screw and locknut. The maximum travel of the adjustment screw is limited.

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

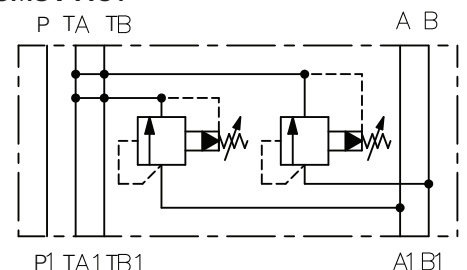
Maximum operating pressure	PSI [bar]	5000 [350]
Minimum controlled pressure	PSI [bar]	200 [14]
Maximum flow rate in controlled lines and in the free lines	GPM [l/min]	32 [75]
Ambient temperature range	°F [°C]	-4 to 140 [-20 to +60]
Fluid temperature range	°F [°C]	-4 to 176 [-20 to +80]
Fluid viscosity range	cSt	10 - 400
Fluid contamination degree	According to ISO 4406:1999 class 20/18/15	
Recommended viscosity	cSt	25
Mass: P05MSV-RP	lbs [kg]	6.6 [3]

HYDRAULIC SYMBOLS

P05MSV-XC



P05MSV-XCT

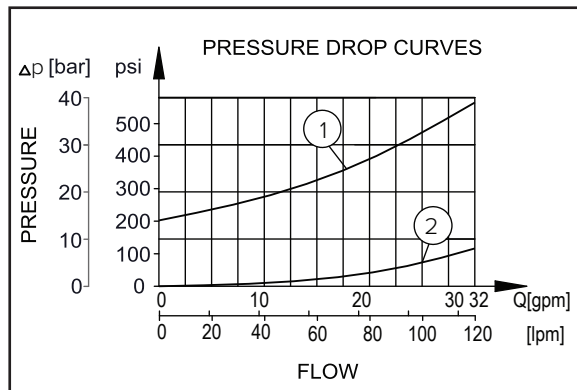
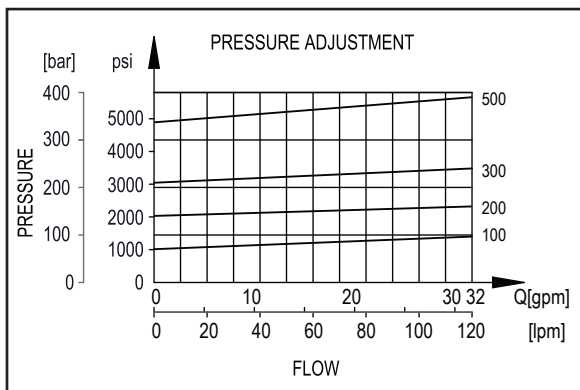


1 • IDENTIFICATION CODE

P05MSV - [] - [] - [] [] - **C - **D****

VALVE TYPE		VALVE SERIES		PRESSURE ADJUSTMENT RANGE			MATERIAL SELECTION		DESIGN LETTER	
PRESSURE CONTROL		CODE NFPA SIZE		CODE	PSI	BAR	CODE	DESCRIPTION		
		05 D05 INTERFACE		100	200 to 1000	14 to 70	C	CAST IRON		
VALVE FUNCTION			SEAL MATERIAL		MECHANICAL					
CODE	FUNCTION	AVAIL WITH PORTS		CODE	DESC.		CODE	DESCRIPTION		
XC	CROSS PORT RELIEF	A to B, B to A		A	BUNA-N		OMIT	STD W/ SOC HEAD ADJ.		
XCT	RELIEF - CYL PORTS TO TANK	A to T, B to T		G	VITON					

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



- 1) pressure drops on controlled lines
- 2) pressure drops on free lines

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.

4 • OVERALL AND MOUNTING DIMENSIONS

Top view: 1.96 [50] height, 2.76 [70] width.

Side view: 4.72 [120] length, 6.66 [170] total length.

Bottom view: .47 [12] height, 1.57 [40] width.

DIMENSIONS IN INCHES [mm]

1	Countersunk hex adjustment screw: 4mm allen wrench Rotate clockwise to increase pressure
2	Locking nut: 13mm wrench
3	Qty. 5 O-rings - size AS568-014 (.489 ID x .070 CS) 90 Shore