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"For All Your Hydraulic Needs"

CONTINENTAL



HYDRAULICS

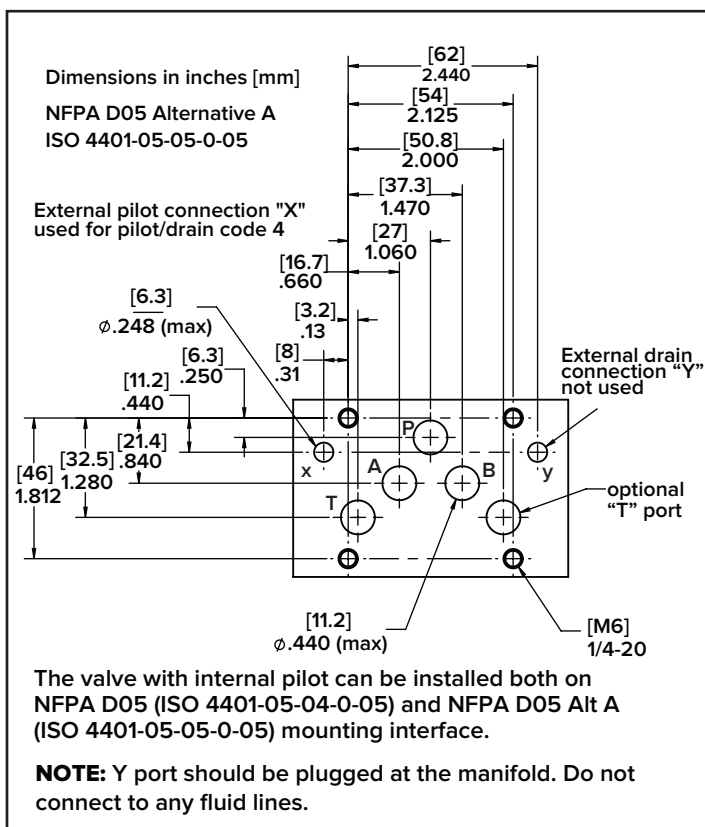
**P05MSV-SP**

**DIRECT OPERATED  
SEQUENCE VALVE**

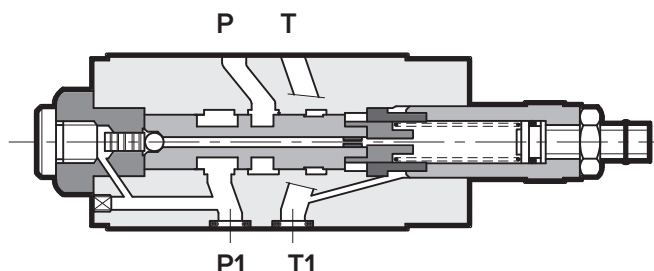
**MODULAR VERSION  
NFPA D05 ISO 4401-05**

**P max 4600 PSI 320 bar**  
**Q max 26 GPM 100 l/min**

## MOUNTING INTERFACE



## OPERATING PRINCIPLE



- The P05MSV-SP is a direct operated spool type sequence valve and is used to control two or more actuators in succession. The mounting surface conforms to NFPA D05/ISO 4401-05 standards.

It is normally closed at system pressures below the valve pressure setting. The line pressure, P1, acts on a small piston, which exerts force on one end of the spool. The adjustment spring acts on the other end of the spool opposing the piston force. The valve remains closed until the piston force exceeds the adjustment spring force.

The valve will stay open until the pressure drops below the valve pressure setting.

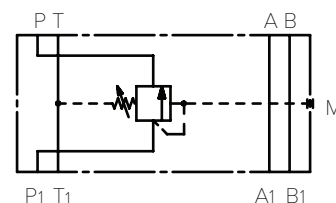
- Typically, it mounts sandwiched between a directional control valve and a subplate/manifold. It can be assembled in a stack with additional modular valves using suitable tie rods of bolts.
- Versions with internal or external pilot are available. The version with external pilot includes a "X" port according to the NFPA D05 Alternative A/ISO 4401-05-05-0-05 mounting interface.
- It is normally 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])

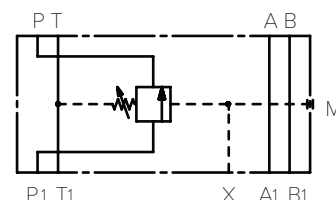
Maximum operating pressure	PSI [bar]	4600 [320]
Maximum pressure on port T	PSI [bar]	145 [10]
Maximum flow rate in controlled lines	GPM [l/min]	21 [80]
Maximum flow rate in the free lines		26 [100]
Ambient temperature range	°F [°C]	-4 to 140 [-20 to +60]
Fluid temperature range	°F [°C]	-4 to 176 [-20 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: P05MSV-RP	lbs [kg]	6.0 [2,7]

## HYDRAULIC SYMBOLS

P05MSV-SP



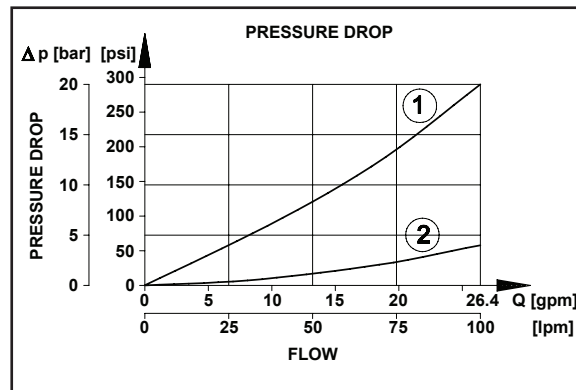
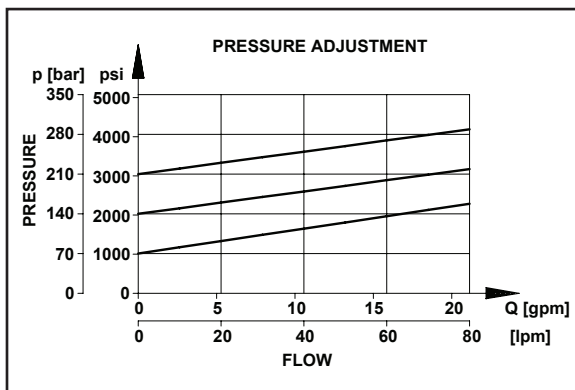
P05MSV-SP-4



## 1 • IDENTIFICATION CODES

<b>P05MSV -</b>			<b>S</b>	<b>P</b>	-	-	-	-	<b>C</b>	-	<b>D</b>
<b>VALVE TYPE</b> PRESSURE CONTROL			<b>PORT</b>		<b>SEAL MATERIAL</b>		<b>PILOT/DRAIN</b>		<b>DESIGN LETTER</b>		
<b>VALVE SERIES</b>			CODE PORT		CODE DESC.		CODE DESC.		<b>MATERIAL SELECTION</b>		
CODE NFPA SIZE			P P		A BUNA-N		OMIT INTERNAL PILOT INTERNAL DRAIN		CODE DESCRIPTION		
05 D05 INTERFACE					G VITON		4 EXTERNAL PILOT INTERNAL DRAIN		C CAST IRON		
<b>VALVE FUNCTION</b>			<b>PRESSURE ADJUSTMENT RANGE</b>			<b>MECHANICAL</b>					
CODE FUNCTION AVAIL WITH PORTS			CODE PSI BAR			CODE DESCRIPTION					
S SEQUENCE P			100 up to 1000 up to 70			OMIT STD W/ SOC HEAD ADJ.					
			200 up to 2000 up to 140								
			300 up to 3000 up to 210								

## 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

