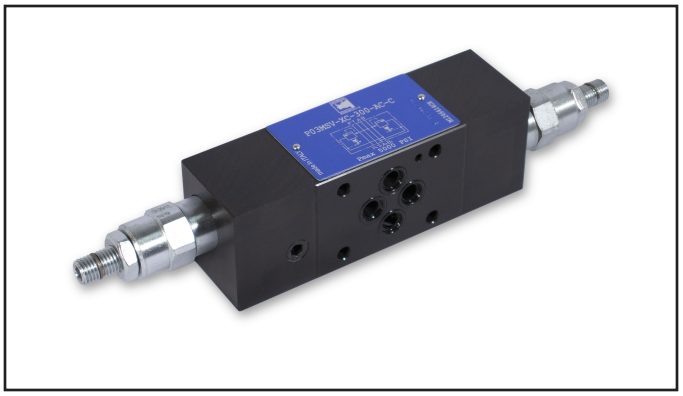


CONTINENTAL HYDRAULICS

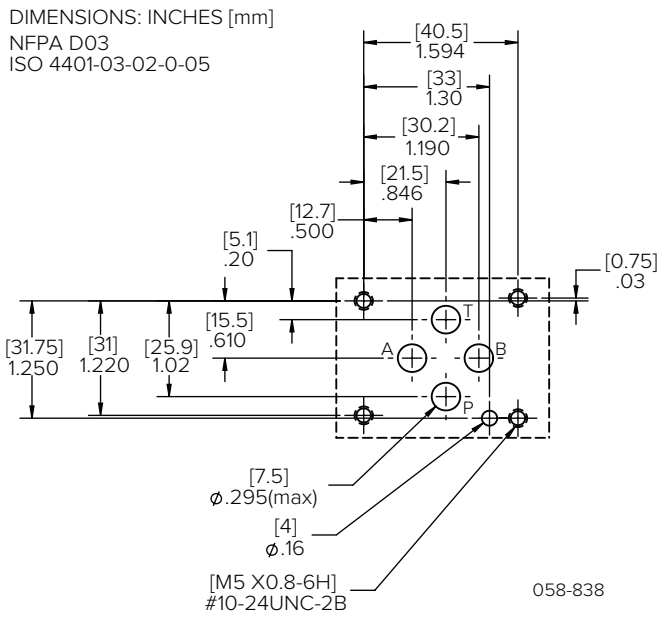
P03MSV-XC/XCT

WORK PORT PILOT OPERATED PRESSURE RELIEF VALVE

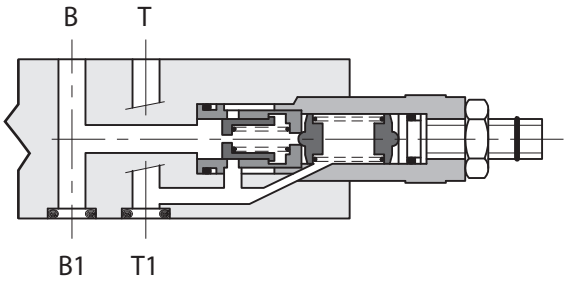
MODULAR VERSION
NFPA D03 ISO 4401-03

P	max	**5000 PSI**	**350 bar**
Q	max	**20 GPM**	**75 l/min**

MOUNTING INTERFACE



OPERATING PRINCIPLE



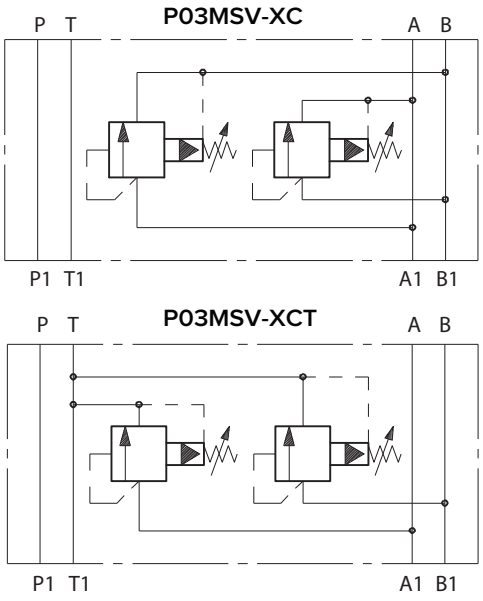
- The P03MSV-XC and XCT are pilot operated modular pressure relief valves with mounting surface according to NFPA D03/ISO 4401-03 standards.
- Typically, the valves mount sandwiched between a directional control valve and a subplate/manifold and functions as pressure limiting devices in A and B ports.
- Code XC functions as a cross port relief valve. Code XCT relieves each work port to T independently.
- These valves can be assembled in a stack with additional modular valves using suitable tie rods or bolts.
- They are 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]	72 [5]
Maximum flow rate in controlled lines and in the free lines	GPM [l/min]	20 [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: P03MSV-XC, XCT	lbs [kg]	4.6 [2,1]

HYDRAULIC SYMBOLS



1 • IDENTIFICATION CODE

P03MSV - ☐ - ☐ - ☐ ☐ C - C

VALVE TYPE
PRESSURE CONTROL

VALVE SERIES	
CODE	NFPA SIZE
03	D03 INTERFACE

PRESSURE ADJUSTMENT RANGE		
CODE	PSI	BAR
100	72 to 1000	5 to 70
200	72 to 2000	5 to 140
300	72 to 3000	5 to 210
500	72 to 5000	5 to 350

VALVE FUNCTION		
CODE	FUNCTION	AVAIL WITH PORTS
XC	CROSS PORT RELIEF	A to B, B to A
XCT	RELIEF - CYL PORTS TO TANK	A to T, B to T

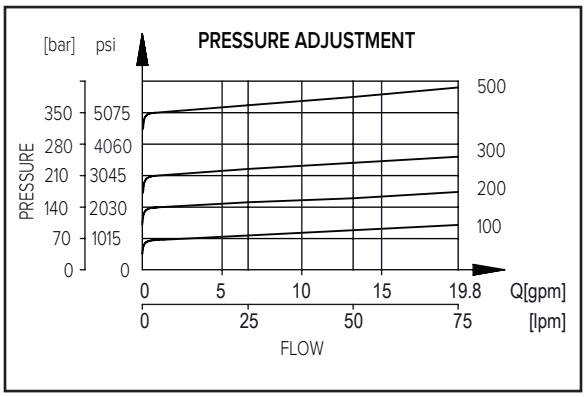
SEAL MATERIAL	
CODE	DESC.
A	BUNA-N
G	VITON

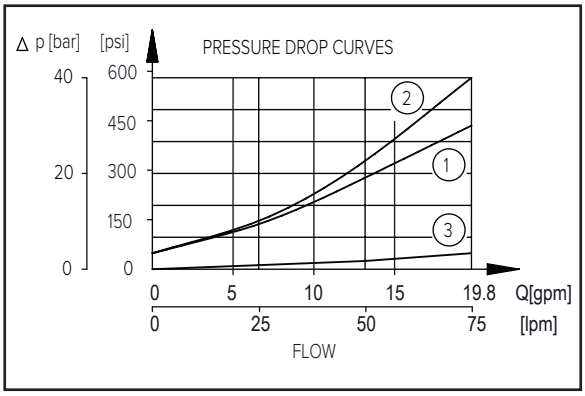
MECHANICAL	
CODE	DESCRIPTION
OMIT	STD W/ SOC HEAD ADJ.

MATERIAL SELECTION	
CODE	DESCRIPTION
C	CAST IRON

DESIGN LETTER

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 controlled line code P03MSV-XC only

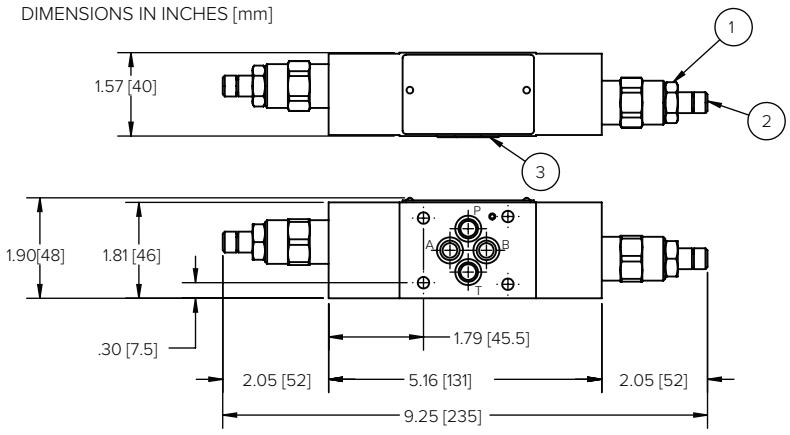
3) pressure drops on free lines

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



1	Locking nut: 3/4 [19 mm] wrench
2	Countersunk hex adjustment screw: 5mm allen wrench Rotate clockwise to increase pressure
3	Qty. 4 O-rings - size AS568-012 (.364 ID x .070 CS) 90 Shore

P03MSV-XC
P03MSV-XCT

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