High Pressure Valve

Series 4140

Features

- Original Shear-Seal® technology
- All stainless steel construction
- SAE porting standard
- NPT porting available
- Pressures to 15,000 psi
- Low pressure drop
- Low handle load

Applications

- Offshore drilling equipment
- Refineries and chemical processing plants
- Gas compression systems
- Marine umbilical reels



General Specifications*

- Main Valve

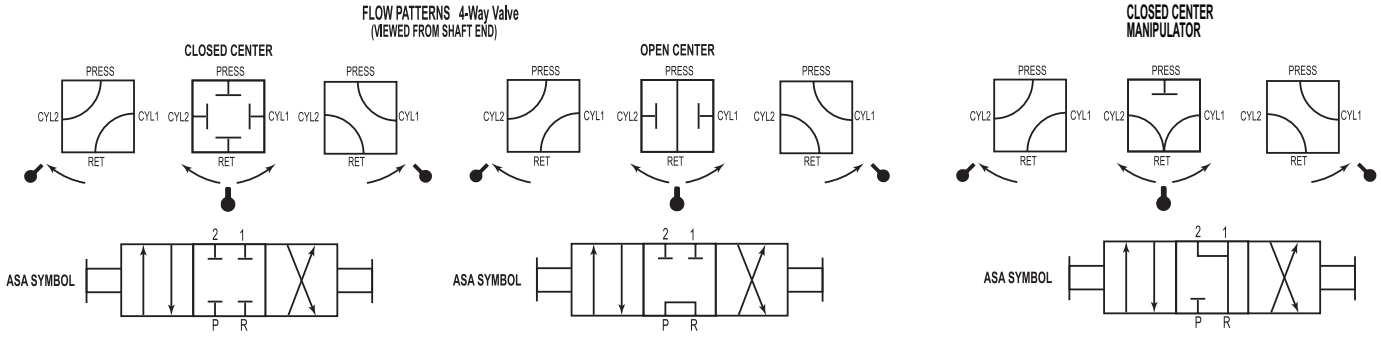
Working Pressure:	10,000 psi (700 bar) standard 15,000 psi option with appropriate port size and port type
Flow Capacity, Cv:	See table
Back Pressure:	Must not exceed 250 psi (17.2 bar) at return port for satisfactory operation
Pressure Drop:	14 psi (0.96 bar) at 20 ft/s
Proof Pressure:	1-1/2 times working pressure except at return port
Burst Pressure:	2-1/2 times working pressure except at return port (3,000 psi [206 bar]) maximum
Media Temperature Range:	-40° to +250°F (-40° to +121°C)
Rotor:	400 series stainless steel
Pressure Seals:	Stainless steel

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Shaft:	Stainless steel
All External Components:	300 series stainless steel
Standard O-ring:	Buna N
Back-up Rings:	Teflon®

- Pilot Actuator

Media:	Air
Working Pressure:	80-100 psi (5.2-6.90 Bar)
Material:	Epoxy coated aluminum
Pressure Ports:	1/4"- 18 NPT Female (2)

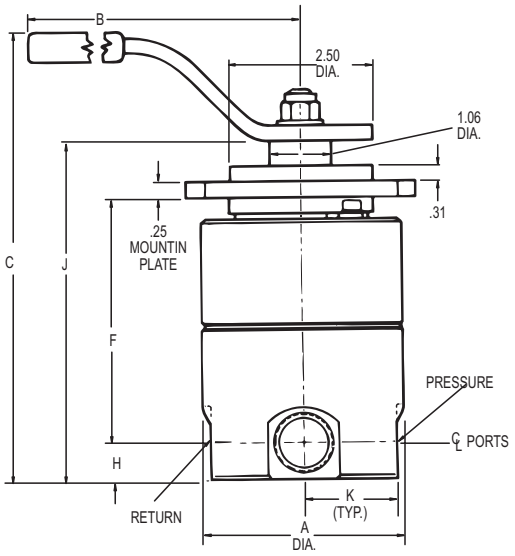
* See product configurator for additional options and Supplemental Guide for more detailed information.

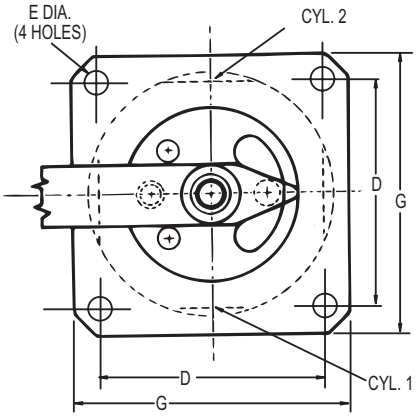


Main Valve Port Size	Flow Capacity (Approx.) Service: Oil and Lubricated Water 20 ft/sec gpm (l/min)	40 ft/sec gpm (l/min)	60 ft/sec gpm (l/min)	Min. Flow Passage Dia.	Cv Factor	Approx. Shipping Weight lbs (kgs)
1/4" or SAE-4	4 (15)	8 (30)	12 (45)	9/32"	0.95	13.5 (6.2)
3/8" or SAE-6	4 (15)	8 (30)	12 (45)	9/32"	0.95	13.5 (6.2)
1/2" or SAE-8	4 (15)	8 (30)	12 (45)	9/32"	0.95	13.5 (6.2)

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Technical Drawings





Port Size	A Dia.	B	C	D	E Dia.	F	G	H	J	K
1/4" or SAE-4	3.50 (89)	7.00 (178)	7.69 (195)	3.25 (83)	0.28 (7)	4.22 (107)	4.00 (102)	0.63 (16)	5.81(148)	1.63 (41)
3/8" or SAE-6	3.50 (89)	7.00 (178)	7.69 (195)	3.25 (83)	0.28 (7)	4.22 (107)	4.00 (102)	0.63 (16)	5.81(148)	1.63 (41)
1/2" or SAE-8	3.50 (89)	7.00 (178)	7.69 (195)	3.25 (83)	0.28 (7)	4.22 (107)	4.00 (102)	0.63 (16)	5.81(148)	1.63 (41)

Product Configurator

Example:	A	414	1	R	9	W	C	3	-MS	

Actuator

A[1]	Air Actuator (Optional)

Series

414	Basic 3 position 4 way

Port Size

1	1/4" NPT ports
2	3/8" NPT ports
3	1/2" NPT ports

Operating Pressure

9	10,000 psi

Service

W	Lubricated water or hydraulic oil

Style

R	Regular (side) porting

Flow Pattern

C	Closed center
O	Open center (tandem center)
Q	Closed center manipulator (float center) (Not available in 15,000 psi)

Options

-MC	Spring centering	
-O	15,000 psi	
	Size	Type
	1/4"	NPT, MS, MP
	3/8"	MS, MP
	9/16"	MS, MP
-NF	Non-Interflow (Consult factory)	

Port Type

blank	NPT porting
-MS	SAE J1926 porting
-MP	Medium pressure porting (1/2" is actually 9/16")

Position

2[1]	Three position

Note:
1. Air Actuator. Manual override for center position by removing air pressure on actuator.
Not available with -MC and -NF options. Two position only available with Air actuator and vice versa.