

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

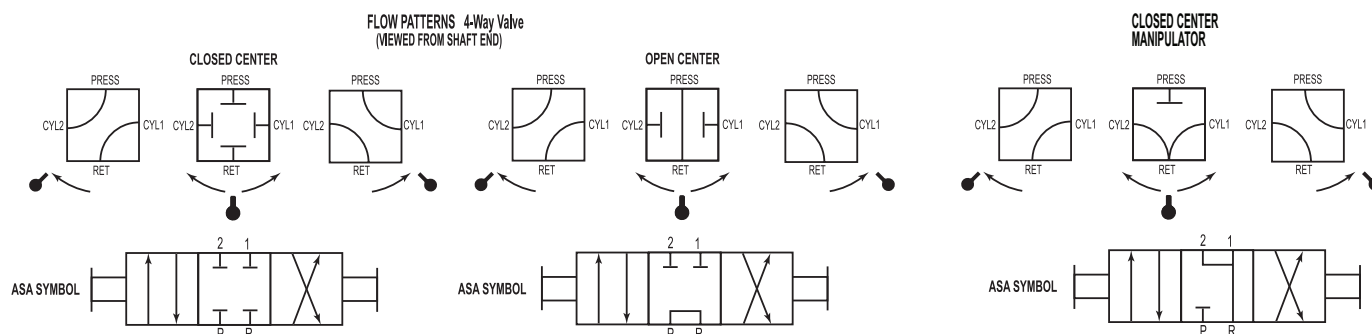
Working Pressure:	10,000 psi (700 bar) standard 15,000 psi option with appropriate port size and port type
Flow Capacity, Cv:	See table
Back Pressure:	Must not exceed 250 psi (17.2 bar) at return port for satisfactory operation
Pressure Drop:	14 psi (0.96 bar) at 20 ft/s
Proof Pressure:	1-1/2 times working 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

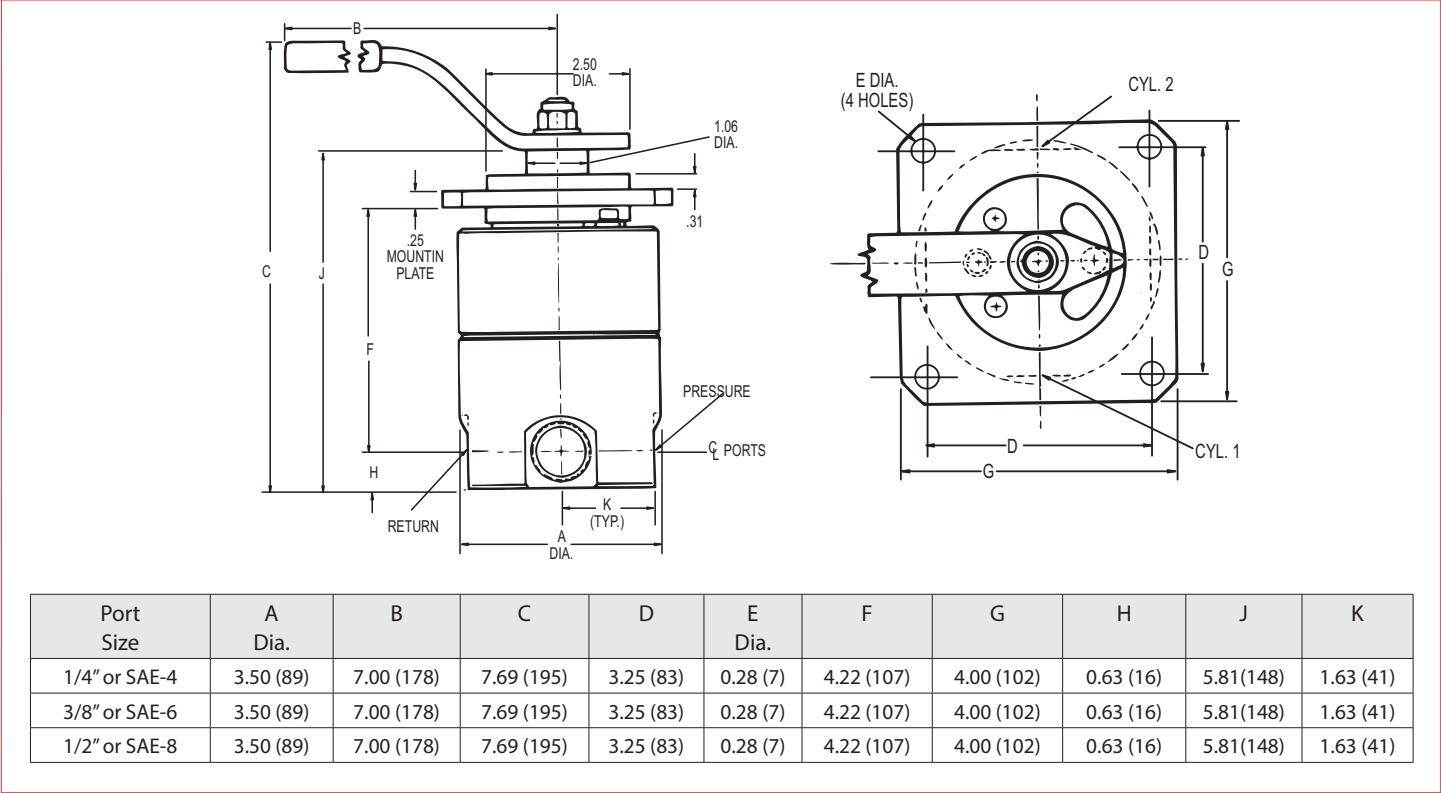
Media:	Air
Working Pressure:	80-100 psi (5.2-6.90 Bar)
Material:	Epoxy coated aluminum
Pressure Ports:	1/4"- 18 NPT Female (2)

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



Flow Capacity (Approx.)						
Service: Oil and Lubricated Water						
Main Valve Port Size	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)

Technical Drawings



Product Configurator

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

Actuator: A' 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, 15,000 psi, -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' 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.