

## Shear-Seal® Directional Control Valve

Series 9000, 9020

### Features

- ▶ Original Shear-Seal® technology
- ▶ Interflow/non interflow
- ▶ Easy panel mounting
- ▶ Tolerates contaminants
- ▶ Spring return option

### Applications

- ▶ Pilot valve for pneumatic valve actuators
- ▶ Gas manifold controls
- ▶ Manual control of 2-position cylinder



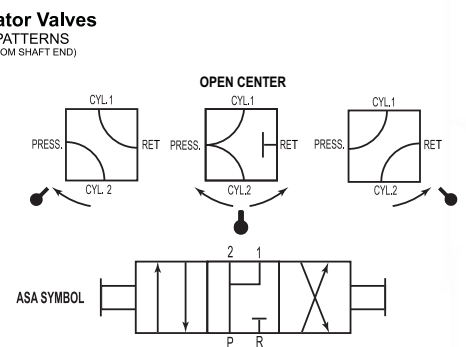
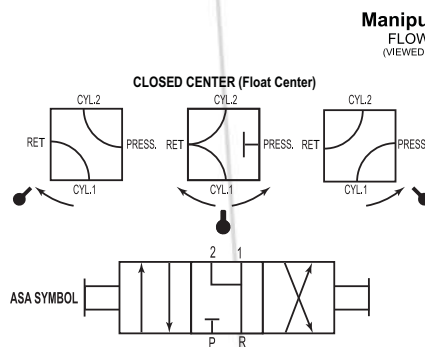
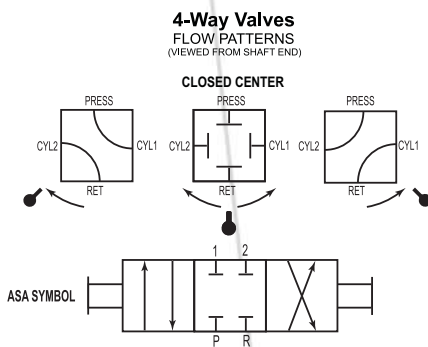
Shown with option "D" red ball type handle

### General Specifications\*

<b>Working Pressure:</b>	Pneumatic or hydraulic from 150 psi to 350 psi (10.3 to 24.1 bar); see table
<b>Cv, Minimum Orifice:</b>	See table
<b>Back Pressure:</b>	Must not exceed 250 psi (17.2 bar) at return port for satisfactory operation
<b>Proof Pressure:</b>	1-1/2 times working pressure except at return port (without damage to valve)
<b>Burst Pressure:</b>	2-1/2 times working pressure except at return port (300 psi, 20.7 bar)

<b>Media Temperature Range:</b>	-40° to +250°F (-40° to +121°C)
<b>Wetted Material:</b>	
Body:	Anodized aluminum
Standard O-Rings:	Buna N
Pressure Seals:	Brass
Rotor:	Hard anodized aluminum
<b>Handle Rotation:</b>	90°; 45° each side of center
<b>Detent:</b>	3-position detent (except -MC, -MR options)

\* See product configurator for additional options.

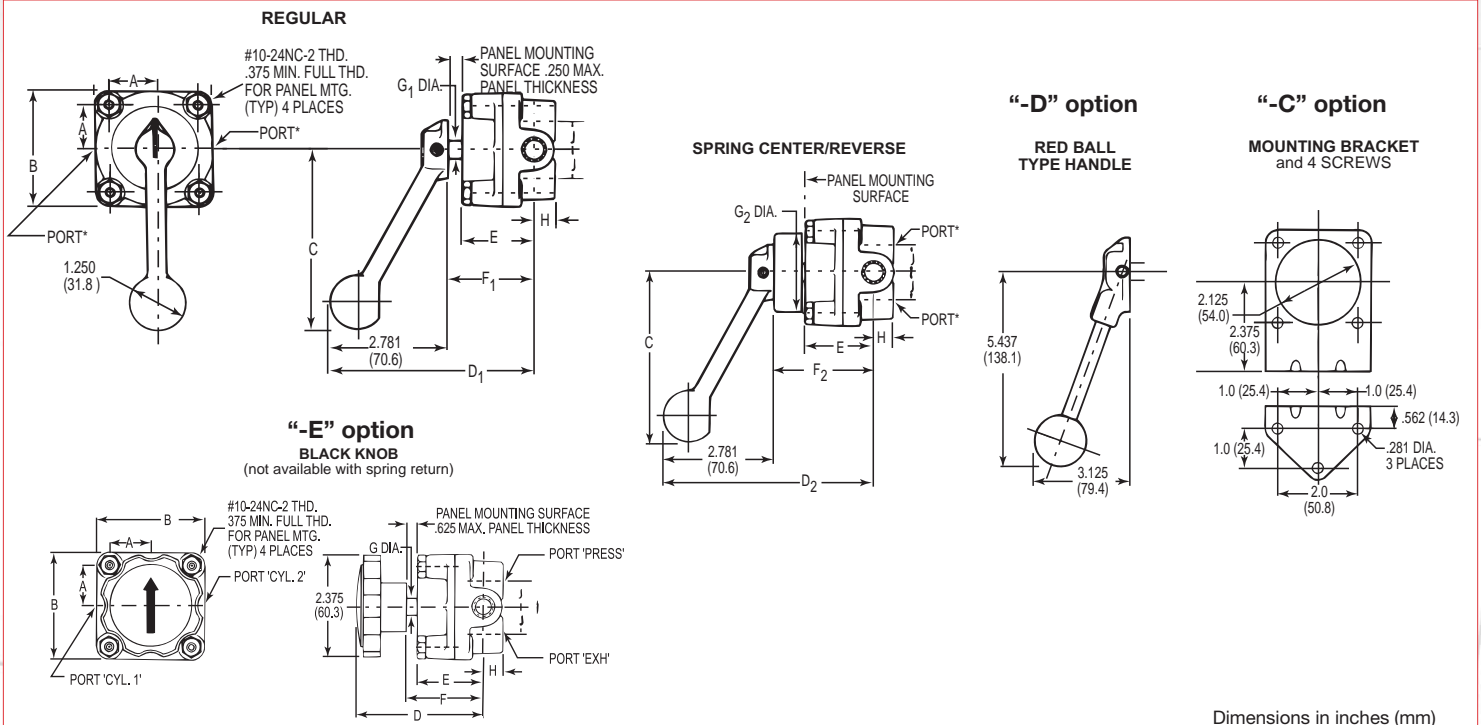


	Port Size NPT	Min. Flow Passage Dia.	Cv Factor	Air and Oil Rated Pressure psi (bar)	Manipulator Rated Pressure psi (bar)	Approx. Shipping Weight lbs. (kg)
9000 Series Non Interflow	1/4"	3/16"	0.52	150 (10.3)	150 (10.3)	2 (0.9)
	3/8"	3/16"	0.52	150 (10.3)	150 (10.3)	2 (0.9)
9020 Series Interflow	1/4"	3/8"	2.3	350 (24.1)	250 (17.2)	2 (0.9)
	3/8"	3/8"	2.3	350 (24.1)	250 (17.2)	2 (0.9)
	1/2"	3/8"	2.3	350 (24.1)	250 (17.2)	2 (0.9)

# Shear-Seal<sup>®</sup> Directional Control Valve

## Series 9000, 9020

### Technical Drawings



Dimensions in inches (mm)

PORT SIZE NPT	A	B	C	Black Knob	Regular	Spring Center/Rever	E	Black Knob	Regular	Spring Center/Rever	Black Knob	Regular	Spring Center/Rever	H	J
1/4 & 3/8	1.000 (25.4)	2.625 (66.7)	4.125 (104.8)	3.656 (92.9)	4.781 (121.4)	5.188 (133.8)	1.688 (42.9)	2.062 (52.4)	2.000 (50.8)	2.406 (61.1)	0.437 (11.1)	0.437 (11.1)	1.906 (48.4)	0.531 (13.5)	0.656 (16.7)
1/2	1.000 (25.4)	3.125 (79.4)	4.125 (104.8)	3.718 (94.4)	4.843 (123.0)	5.250 (133.4)	1.750 (44.5)	2.125 (54.0)	2.062 (52.4)	2.468 (62.7)	0.437 (11.1)	0.437 (11.1)	1.906 (48.4)	0.625 (15.9)	0.937 (23.8)

### Product Configurator

Example: 902 2 -M

#### Series

- 900 Non interflow
- 902 Interflow

#### Port Size

- 1 1/4" pressure port
- 2 3/8" pressure port
- 3 1/2" pressure port (interflow only)

#### Operation

- M Manual operation
- MC Manual (spring return to center)
- MR Manual (spring return to reverse)

#### Optional O-ring Material

-Zxx See supplemental guide

#### Options

- B 2-position 90° rotation (no center position)
- C Mounting bracket w/ 4 screws
- D Red ball type handle
- CD Mounting bracket & red ball type handle
- E Black knob (not available for spring return)

#### Flow Pattern

- Blank if closed center selector
- A Closed center manipulator
- G Open center manipulator