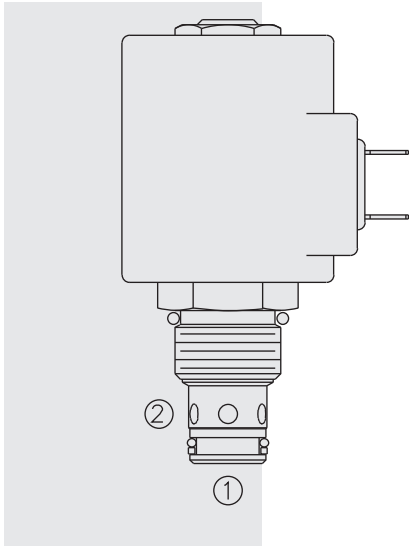


# SV10-28 Poppet, 2-Way, N.C., Bi-Directional Blocking



## DESCRIPTION

A solenoid-operated, 2-way, normally closed, internally piloted, poppet-type, bi-directional blocking, screw-in hydraulic cartridge valve, designed for low leakage in load-holding applications.

## OPERATION

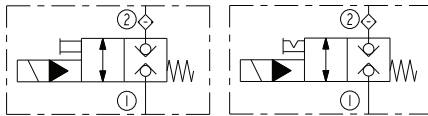
When de-energized, the **SV10-28** blocks flow in both directions. When energized, the valve's poppet opens on its seat, allowing flow from ② to ① or ① to ②.

**Note:** Minimum differential pressure required 2.8 bar (20 psid)

## FEATURES

- Bidirectional operation.
- Manual override options.
- Screen option.
- Optional coil voltages and terminations.
- Cartridges are voltage interchangeable.
- Optional waterproof E-Coils rated up to IP69K.
- Hardened seat for long life and low leakage.
- Continuous-duty rated coil.
- Industry common cavity.

## ISO SYMBOLS



SV10-28 with manual override J/Y and screen options

SV10-28 with manual override M and screen options

## RATINGS

**Operating Pressure:** 241 bar (3500 psi)

**Minimum Differential Pressure Required:** 2.8 bar (20 psid) See Performance graph.

**Flow:** Flow required to reseal the internal poppet check balls when increasing the differential pressure across a de-energized valve from zero psid: 2.8 lpm (0.75 gpm) maximum

**Maximum Internal Leakage:** 0.25 cc/minute (5 drops/minute) max. at 207 bar (3000 psi)

**Force Required to Manually Actuate SV10-28Y/J:** 15 kg (33 lb)

**Operating Temperature:** -40 to 100 °C (-40 to 212 °F) with standard Buna seals; -26 to 204 °C (-15 to 400 °F) with fluorocarbon seals; -54 to 107 °C (-65 to 225 °F) with polyurethane seals

**Filtration:** See page 9.010.1

**Fluids:** Mineral-based or synthetics with lubricating properties at viscosities of 7.4 to 420 cSt (50 to 2000 sus); See Temperature and Oil Viscosity, page 9.060.1

**Installation:** No restrictions; See page 9.020.1

**Cavity:** VC10-2; See page 9.110.1

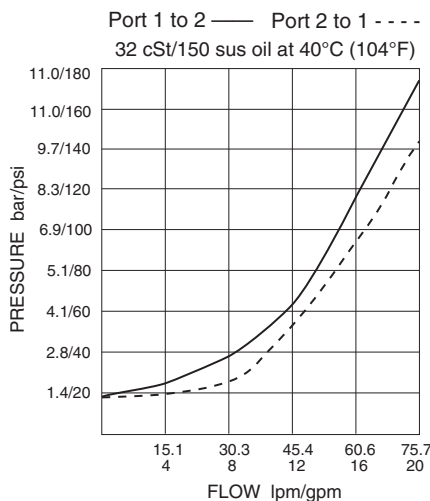
**Cavity Tool:** CT10-2XX; See page 8.600.1

**Seal Kit:** SK10-2X-M; See page 8.650.1

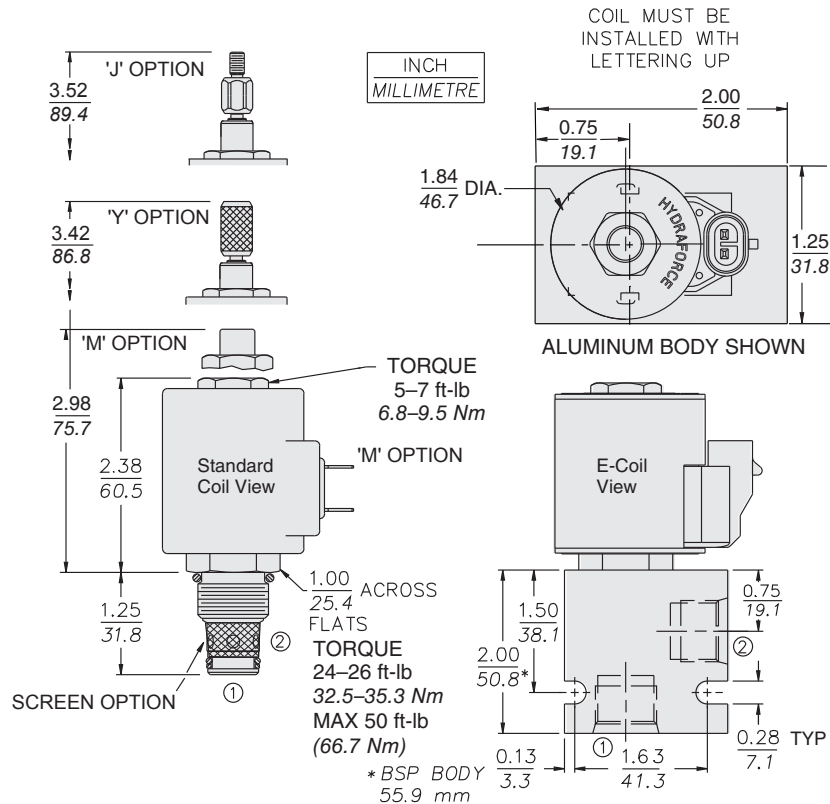
**Coil Nut:** Part No. 7004400;

For E-coils manufactured prior to 1-1-04, see page 3.400.1 for coil nut info.

## PERFORMANCE (Cartridge Only)



## DIMENSIONS



## MATERIALS

**Cartridge:** Weight: 0.15 kg (0.34 lb) Steel with hardened work surfaces. Zinc-plated exposed surfaces. Buna N O-rings and polyester elastomer back-up standard.

**Standard Ported Body:** Weight: 0.16 kg (0.35 lb) Anodized high-strength aluminum alloy, rated to 207 bar (3000 psi). Ductile iron bodies available; dimensions may differ. See page 8.010.1

**Standard Coil:** Weight: 0.27 kg (0.60 lb) Unitized thermoplastic encapsulated, Class H high temperature magnet wire. See page 3.200.1

**E-Coil:** Weight: 0.41 kg (0.9 lb) Fully encapsulated with rugged external metal shell. Rated up to IP69K with integral connectors. **Note: See page 3.400.1 for all E-Coil retrofit applications.**

## TO ORDER

<b>SV10-28</b>					
<b>Manual Override Option</b>					
None (Blank)					
Manual Override	<b>M</b>				
Manual Override	<b>Y</b>				
Manual Override	<b>J</b>				
For Manual Override options see page 1.001.1					
<b>Screen Option</b>					
None (Blank)					
Screen Option	<b>S</b>				
<b>Porting</b>					
Cartridge Only	<b>0</b>				
SAE 8	<b>8T</b>				
3/8 in. BSP*	<b>3B</b>				
*BSP Body; U.K. Mfr. Only					
<b>Seals</b>					
Buna N (Std.)	<b>N</b>				
Fluorocarbon	<b>V</b>				
Polyurethane	<b>P</b>				
		<b>Voltage</b>		<b>Termination (VDC)</b>	
		<b>Std. Coil</b>		<b>Std. Coil</b>	
		<b>0</b> Less Coil**		<b>DS</b> Dual Spades	
		<b>10</b> 10 Vdc <sup>†</sup>		<b>DG</b> DIN 43650	
		<b>12</b> 12 Vdc		<b>DL</b> Leadwires (2)	
		<b>24</b> 24 Vdc		<b>DL/W</b> Leads w/Weatherpak® Connectors	
		<b>36</b> 36 Vdc		<b>DR</b> Deutsch DT04-2P	
		<b>48</b> 48 Vdc			
		<b>24</b> 24 Vac		<b>Termination (VAC)</b>	
		<b>115</b> 115 Vac		<b>Std. Coil</b>	
		<b>230</b> 230 Vac		<b>AG</b> DIN 43650	
		**Includes Std. Coil Nut		<b>AP</b> 1/2 in. Conduit	
		<sup>†</sup> DS, DW or DL terminations only.		<b>Termination (VDC)</b>	
		<b>E-Coil</b>		<b>E-Coil</b>	
		<b>10</b> 10 Vdc		<b>ER</b> Deutsch DT04-2P (IP69K Rated)	
		<b>12</b> 12 Vdc		<b>EY</b> Metri-Pack® 150 (IP69K Rated)	
		<b>20</b> 20 Vdc			
		<b>24</b> 24 Vdc			
				Coils with internal diode are available. Consult factory.	