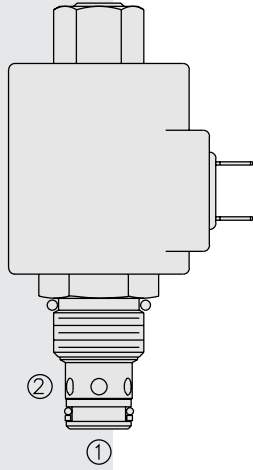


# SV10-29 Poppet, 2-Way, N.O., Bi-Directional Blocking



### DESCRIPTION

A solenoid-operated, 2-way, normally open, 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 **SV10-29** allows flow in both directions. When energized, the valve's poppet closes on its seat, blocking flow from ② to ① or ① to ②.

### FEATURES

- Continuous-duty rated coil.
- 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.
- Manual override option.
- Industry common cavity.

### RATINGS

**Operating Pressure:** 240 bar (3500 psi)

**Proof Pressure:** 345 bar (5000 psi)

**Flow:** 75.7 lpm (20 gpm)

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

**Temperature:** -40 to 120°C with standard Buna seals

**Coil Duty Rating:** Continuous from 85% to 115% of nominal voltage

**Response Time:** First indication of change of state with 100% voltage supplied at 80% of nominal flow rating: Energized: 40 msec.; De-energized: 32 msec.

**Initial Coil Current Draw at 20°C:** Standard Coil: 1.67 amps at 12 VDC; 0.18 amps at 115 VAC (full wave rectified).  
E-Coil: 1.7 amps at 12 VDC; 0.85 amps at 24 VDC

**Minimum Pull-in Voltage:** 85% of nominal at 240 bar (3500 psi)

**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

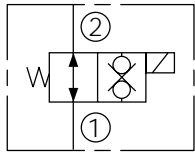
**Seal Kit:** SK10-2X-M; See page 8.650.1

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

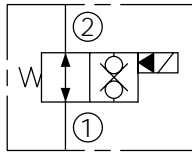
For E-coils manufactured prior to 1-1-04, see page 3.400.1 for coil nut info.

### SYMBOLS

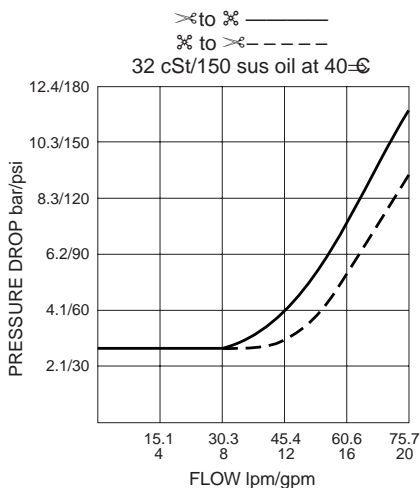
**USASI/ISO:**



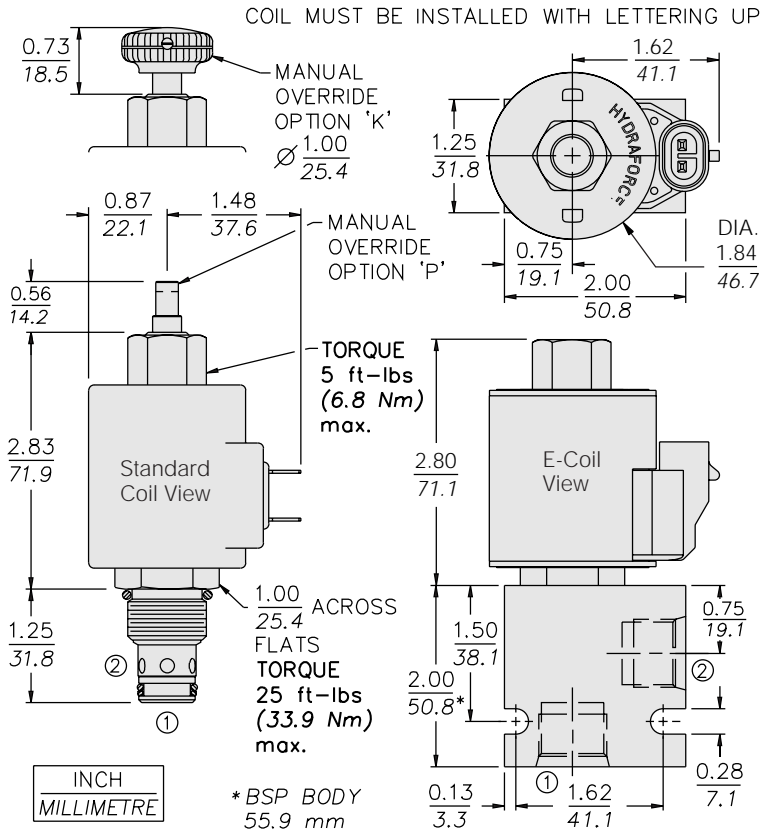
**ISO:**



### PERFORMANCE (Cartridge Only)



**DIMENSIONS**



**MATERIALS**

**Cartridge:** Weight: 0.16 kg. (0.35 lbs.) 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 lbs.) Anodized high-strength 6061 T6 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 lbs.) Unitized thermoplastic encapsulated, Class H high temperature magnetwire. See page 3.200.1

**E-Coil:** Weight: 0.41 kg. (0.9 lbs.) 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>SV10-29</b>		-	-	-	-	-
<b>Option</b>						
None (Blank)						
Manual Override without knob	<b>P</b>					
Manual Override with knob	<b>K</b>					
For Manual Override options see page 1.001.1						
<b>Porting</b>						
Cartridge Only	<b>0</b>					
SAE 6	<b>6T</b>					
SAE 8	<b>8T</b>					
1/4 in. BSP*	<b>2B</b>					
3/8 in. BSP*	<b>3B</b>					
1/2 in. BSP*	<b>4B</b>					
*BSP Body; U.K. Mfr. Only						
<b>Seals</b>						
Buna N (Std.)	<b>N</b>					
Fluorocarbon	<b>V</b>					
		<b>Voltage</b>				
		<b>Std. Coil</b>				
		<b>0</b>	Less Coil**			
		<b>10</b>	10 VDC†			
		<b>12</b>	12 VDC			
		<b>24</b>	24 VDC			
		<b>36</b>	36 VDC			
		<b>48</b>	48 VDC			
		<b>24</b>	24 VAC			
		<b>115</b>	115 VAC			
		<b>230</b>	230 VAC			
		**Includes Std. Coil Nut				
		† DS, DW or DL terminations only.				
		<b>E-Coil</b>				
		<b>10</b>	10 VDC			
		<b>12</b>	12 VDC			
		<b>20</b>	20 VDC			
		<b>24</b>	24 VDC			
				<b>Termination (VDC) Std. Coil</b>		
				<b>DS</b>	Dual Spades	
				<b>DG</b>	DIN 43650	
				<b>DL</b>	Leadwires (2)	
				<b>DL/W</b>	Leads w/Weatherpak® Connectors	
				<b>DR</b>	Deutsch DT04-2P	
					<b>Termination (VAC) Std. Coil</b>	
				<b>AG</b>	DIN 43650	
				<b>AP</b>	1/2 in. Conduit	
					<b>Termination (VDC) E-Coil</b>	
				<b>ER</b>	Deutsch DT04-2P (IP69K Rated)	
				<b>EY</b>	Metri-Pack® 150 (IP69K Rated)	
				Coils with internal diode are available. Consult factory.		