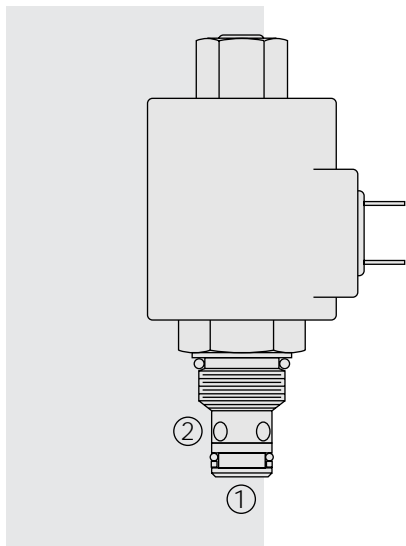


## SV38-28 Poppet, 2-Way, N.C., Bi-Directional Blocking



### DESCRIPTION

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

### OPERATION

When de-energized, the **SV38-28** blocks flow in both directions. When energized, the valve's poppet opens on its seat, allowing flow from ② to ① and ① to ②.

Consult factory if used serially with orifice disc.

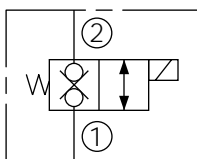
**Operation of Manual Override Option:** To override, push and hold override button.

### FEATURES

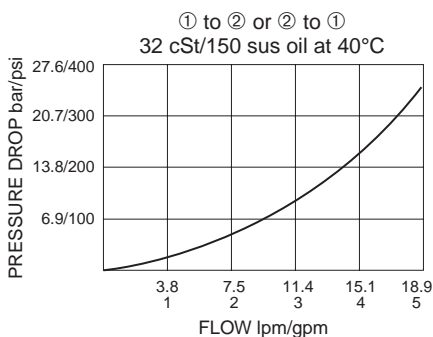
- Continuous-duty rated coil.
- Hardened seat for long life and low leakage.
- Optional coil voltages and terminations.
- Efficient wet-armature construction.
- Cartridges are voltage interchangeable.
- Unitized, molded coil design.
- Manual override option.
- Optional waterproof E-Coils rated up to IP69K.
- Industry common cavity.

### SYMBOLS

#### USASI/ISO:



### PERFORMANCE (Cartridge Only)



### RATINGS

**Operating Pressure:** 207 bar (3000 psi)

**Flow:** See Performance Chart

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

**Cycle Life:** 500,000 cycles minimum at rated pressure  
(due to internal dynamic seal life)

**Temperature:** -40 to 100°C with standard Buna N seals

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

**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 207 bar (3000 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:** VC08-2; See page 9.108.1

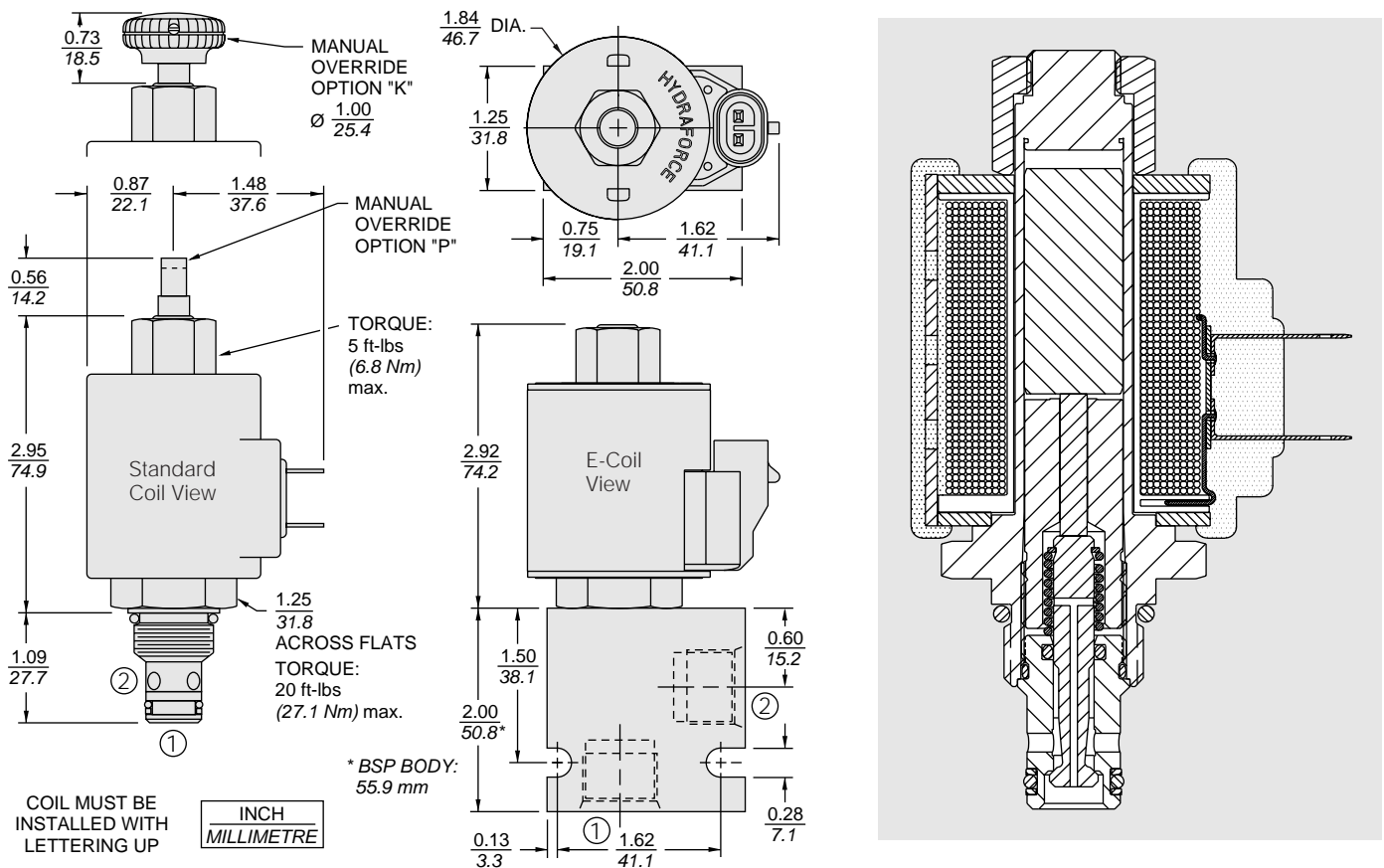
**Cavity Tool:** CT08-2XX; See page 8.600.1

**Seal Kit:** SK08-2x-M; See page 8.650.1

**Coil Nut:** Part No. 7004420;

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

**DIMENSIONS**



**MATERIALS**

**Cartridge:** Weight: 0.15 kg. (0.33 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 8.008.1

**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**

**SV38-28**

<b>Option</b>		<b>Voltage</b>	<b>Termination (VDC)</b>
None (Blank)		<b>Std. Coil</b>	<b>Std. Coil</b>
Screen	<b>S</b>	<b>0</b> Less Coil**	<b>DS</b> Dual Spades
Manual Override without Knob	<b>P</b>	<b>10</b> 10 VDC <sup>†</sup>	<b>DG</b> DIN 43650
Manual Override with Knob	<b>K</b>	<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>Porting</b>		<b>24</b> 24 VAC	<b>Termination (VAC)</b>
Cartridge Only	<b>0</b>	<b>115</b> 115 VAC	<b>Std. Coil</b>
SAE 4	<b>4T</b>	<b>230</b> 230 VAC	<b>AG</b> DIN 43650
SAE 6	<b>6T</b>		<b>AP</b> 1/2 in. Conduit
1/4 in. BSP*	<b>2B</b>		<b>Termination (VDC)</b>
3/8 in. BSP*	<b>3B</b>		<b>E-Coil</b>
*BSP Body; U.K. Mfr. Only		<b>E-Coil</b>	<b>ER</b> Deutsch DT04-2P (IP69K Rated)
		<b>10</b> 10 VDC	<b>EY</b> Metri-Pack® 150 (IP69K Rated)
<b>Seals</b>		<b>12</b> 12 VDC	
Buna N (Std.)	<b>N</b>	<b>20</b> 20 VDC	
Fluorocarbon	<b>V</b>	<b>24</b> 24 VDC	

\*\*Includes Std. Coil Nut

<sup>†</sup> DS, DW or DL terminations only.

Coils with internal diode are available. Consult factory.