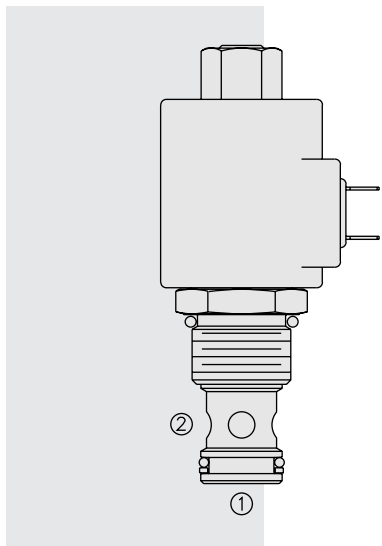


## SV12-23 Poppet, 2-Way, Normally Open



### DESCRIPTION

A solenoid-operated, two-way, normally open, poppet-type, screw-in hydraulic cartridge valve, designed to function as a load holding or blocking valve in applications requiring low internal leakage.

### OPERATION

When de-energized, the **SV12-23** allows bidirectional flow from ② to ①.

When energized, the valve's poppet closes to block flow from ② to ①. In this mode, the cartridge allows free reverse flow from ① to ② after overcoming the solenoid force (requires 3.4 to 10.3 bar / 50 to 150 psi).

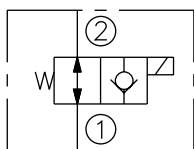
**Operation of Manual Override Option:** To override, push and hold override button.

### FEATURES

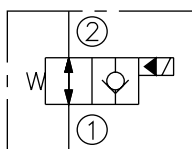
- Continuous-duty rated solenoid.
- Hardened seat for long life and low leakage.
- Optional coil voltages and terminations.
- Efficient wet-armature construction.
- Cartridges are voltage interchangeable.
- Unitized, molded coil design.
- Manual override option.
- Optional waterproof E-Coils rated up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

### SYMBOLS

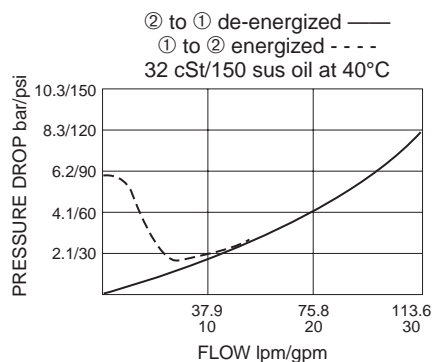
#### USASI:



#### ISO:



### PERFORMANCE (Cartridge Only)



### RATINGS

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

**Flow:** See Performance Chart

**Internal Leakage:** 0.15 cc/minute (3 drops/minute) max. at 240 bar (3500 psi)

**Temperature:** -40 to 120°C with standard Buna 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:** VC12-2; See page 9.112.1

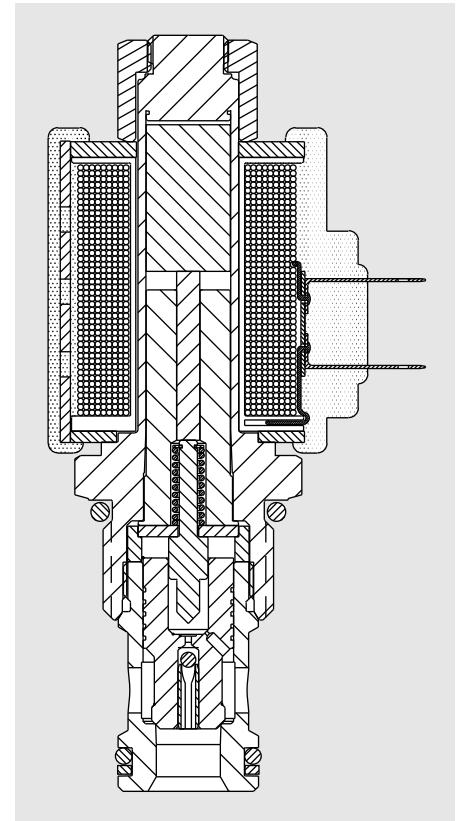
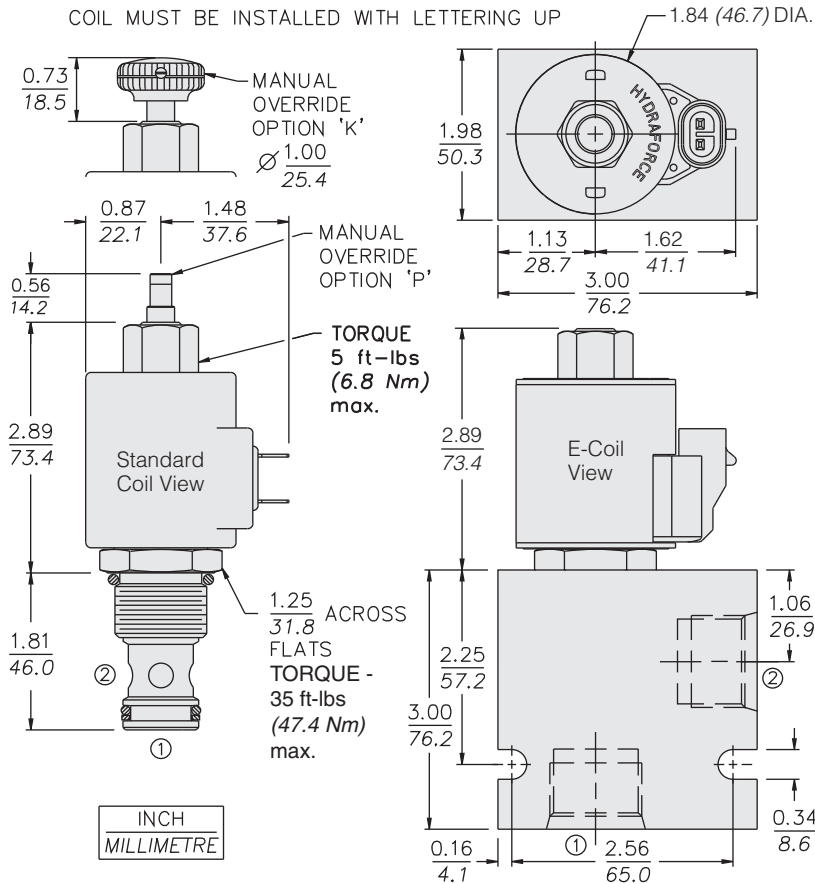
**Cavity Tool:** CT12-2XX; See page 8.600.1

**Seal Kit:** SK12-2X-T; 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: 0.25 kg. (0.55 lbs.) Steel with hardened work surfaces. Zinc-plated exposed surfaces. Buna N O-rings and polyester elastomer back-up standard.

**Standard Ported Body:** Weight: 0.57 kg. (1.25 lbs.) Anodized high-strength 6061 T6 aluminum alloy, rated to 207 bar (3000 psi). Ductile iron bodies available; dimensions may differ. See page 8.012.1

**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>SV12-23</b>			-	-	-
<b>Option</b>		<b>Voltage</b>		<b>Termination (VDC)</b>	
None (Blank)		<b>Std. Coil</b>		<b>Std. Coil</b>	
Manual Override without knob	<b>P</b>	<b>0</b> Less Coil**		<b>DS</b> Dual Spades	
Manual Override with knob	<b>K</b>	<b>10</b> 10 VDC†		<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>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 10	<b>10T</b>	<b>230</b> 230 VAC		<b>AG</b> DIN 43650	
SAE 12	<b>12T</b>			<b>AP</b> 1/2 in. Conduit	
SAE 16	<b>16T</b>			<b>Termination (VDC)</b>	
3/4 in. BSP*	<b>6B</b>			<b>E-Coil</b>	
1 in. BSP*	<b>8B</b>			<b>ER</b> Deutsch DT04-2P (IP69K Rated)	
*BSP Body; U.K. Mfr. Only		<b>E-Coil</b>		<b>EY</b> Metri-Pack® 150 (IP69K Rated)	
<b>Seals</b>		<b>10</b> 10 VDC			
Buna N (Std.)	<b>N</b>	<b>12</b> 12 VDC			
Fluorocarbon	<b>V</b>	<b>20</b> 20 VDC			
		<b>24</b> 24 VDC			

\*\*Includes Std. Coil Nut

† DS, DW or DL terminations only.

Coils with internal diode are available. Consult factory.