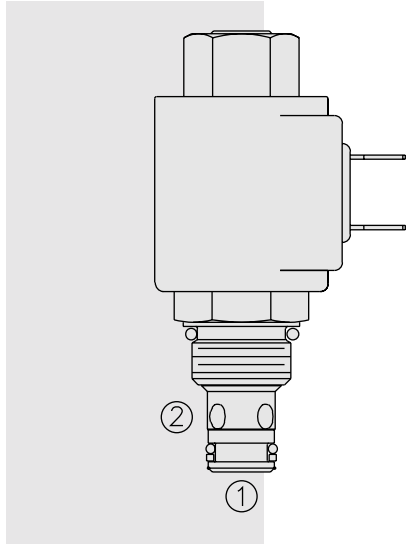


# SOLENOID VALVES

## SV08-23 Poppet, 2-Way, Normally Open



### DESCRIPTION

A solenoid-operated, 2-way, poppet-type, normally open, screw-in, hydraulic cartridge valve designed for low leakage in load-holding applications.

### OPERATION

When de-energized, the **SV08-23** poppet lifts to open flow from ② to ①. Flow is also open from ① to ②.

When energized, the cartridge acts as a check valve, allowing flow from ① to ②, while blocking flow from ② to ① after overcoming the solenoid force (requires 3.4 to 10.3 bar [50 to 150 psi]).

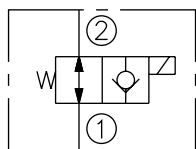
**Operation of Manual Override Option:** To override, push and hold override button.

### FEATURES

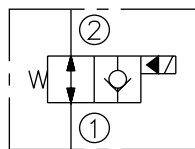
- Continuous-duty rated solenoid.
- Hardened seat for long life and low leakage.
- Optional coil voltages and terminations.
- Efficient wet-armature construction.
- Cartridges are voltage interchangeable.
- Unitized, molded coil design.
- Manual override option.
- Optional waterproof E-Coils rated up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

### SYMBOLS

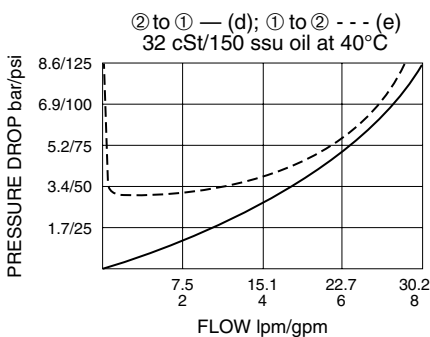
#### USASI:



#### ISO:



### PERFORMANCE (Cartridge Only)



### RATINGS

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

**Flow:** See Performance Chart

**Internal Leakage:** 0.15 cc/minute (3 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: 30 msec.; De-energized: 60 msec.

**Initial Coil Current Draw at 20°C:** Standard Coil: 1.2 amps at 12 VDC; 0.13 amps at 115 VAC (full wave rectified). E-Coil: 1.4 amps at 12 VDC; 0.7 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 ssu)

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

**Cavity:** VC08-2; See page 9.108.1

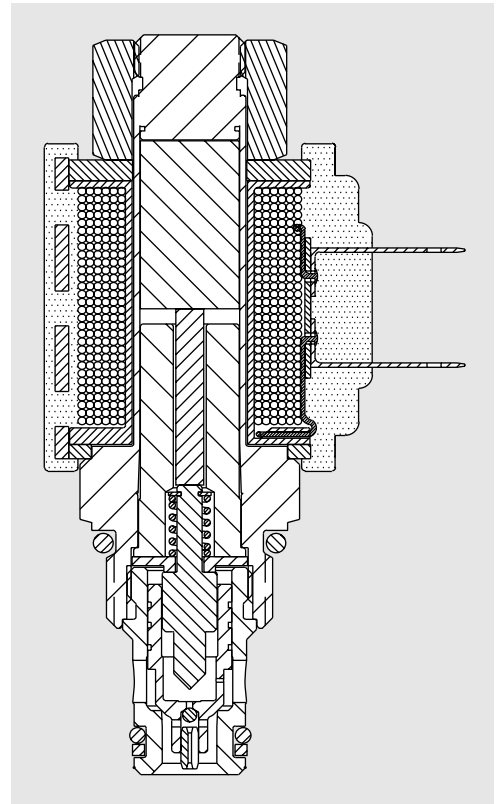
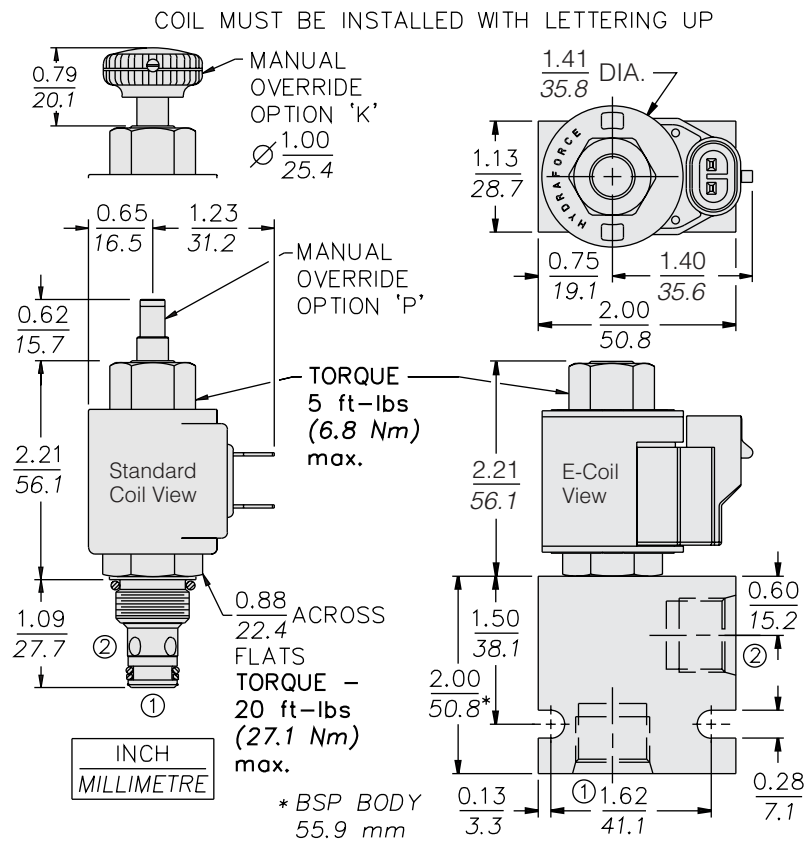
**Cavity Tool:** CT08-2XX; See page 8.600.1

**Seal Kit:** SK08-2X-T; See page 8.650.1

**Coil Nut:** Part No. 7004410;

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

## DIMENSIONS



## MATERIALS

**Cartridge:** Weight: 0.09 kg. (0.20 lbs.); Steel with hardened work surfaces. Zinc-plated exposed surfaces; Buna N O-rings and back-up standard.

**Standard Ported Body:** Weight: 0.16 kg. (0.35 lbs.); Anodized high-strength 6061 T6 aluminum alloy, rated to 240 bar (3500 psi); See page 8.008.1. Ductile iron and steel bodies available; dimensions may differ; consult factory.

**Standard Coil:** Weight: 0.11 kg. (0.25 lbs.); Unitized thermoplastic encapsulated, Class H high temperature magnetwire; See page 3.200.1.

**E-Coil:** Weight: 0.14 kg. (0.3 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

### SV08-23

<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 <sup>®</sup> Connectors
<b>Porting</b>		<b>36</b> 36 VDC	<b>DR</b> Deutsch DT04-2P
Cartridge Only	<b>0</b>	<b>48</b> 48 VDC	<b>Termination (VAC)</b>
SAE 4	<b>4T</b>	<b>24</b> 24 VAC	<b>Std. Coil</b>
SAE 6	<b>6T</b>	<b>115</b> 115 VAC	<b>AG</b> DIN 43650
SAE 8	<b>8T</b>	<b>230</b> 230 VAC	<b>AP</b> 1/2 in. Conduit
1/4 in. BSP*	<b>2B</b>	**Includes Std. Coil Nut	<b>Termination (VDC)</b>
3/8 in. BSP*	<b>3B</b>	<sup>†</sup> DS, DW or DL terminations only	<b>Std. Coil</b>
1/2 in. BSP*	<b>4B</b>	<b>E-Coil</b>	<b>E-Coil</b>
*BSP Body; U.K. Mfr. Only		<b>10</b> 10 VDC	<b>ER</b> Deutsch DT04-2P (IP69K Rated)
<b>Seals</b>		<b>12</b> 12 VDC	<b>EY</b> Metri-Pack <sup>®</sup> 150 (IP69K Rated)
Buna N (Std.)	<b>N</b>	<b>20</b> 20 VDC	
Fluorocarbon	<b>V</b>	<b>24</b> 24 VDC	

Coils with internal diode are available. Consult factory.