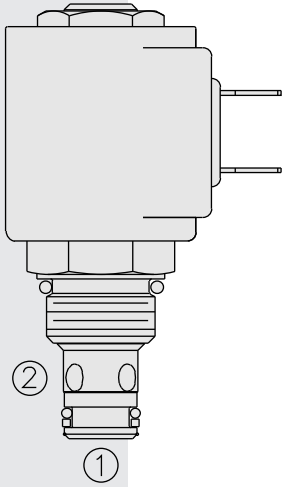


## SV08-22 Poppet, 2-Way, Normally Closed



### DESCRIPTION

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

### OPERATION

When de-energized, the **SV08-22** acts as a check valve, allowing flow from 1 to 2, while blocking flow from 2 to 1.

When energized, the poppet lifts to open the 2 to 1 flow path. In this mode, bidirectional flow is allowed.

**Operation of Manual Override Option:** To override, push button in, twist counter-clockwise 180° and release. In this position, the valve will remain open.

To return to normal operation, push button in, twist clockwise 180° and release. Override will be detented in this position.

### 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.
- Manual override option.
- Optional waterproof E-Coils rated up to IP69K.
- Unitized, molded coil design.
- Industry common cavity.
- Compact size.

### 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

**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 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

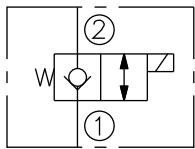
**Seal Kit:** SK08-2X-T; See page 8.650.1

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

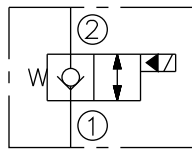
For E-coils manufactured prior to 1-1-04, see page 3.400.1 for coil nut info.

### SYMBOLS

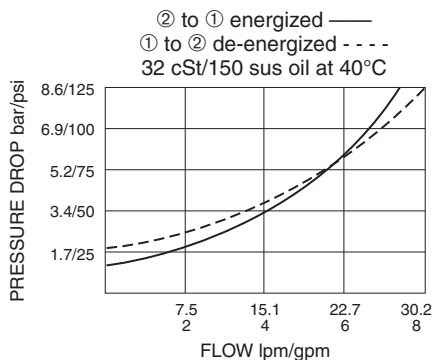
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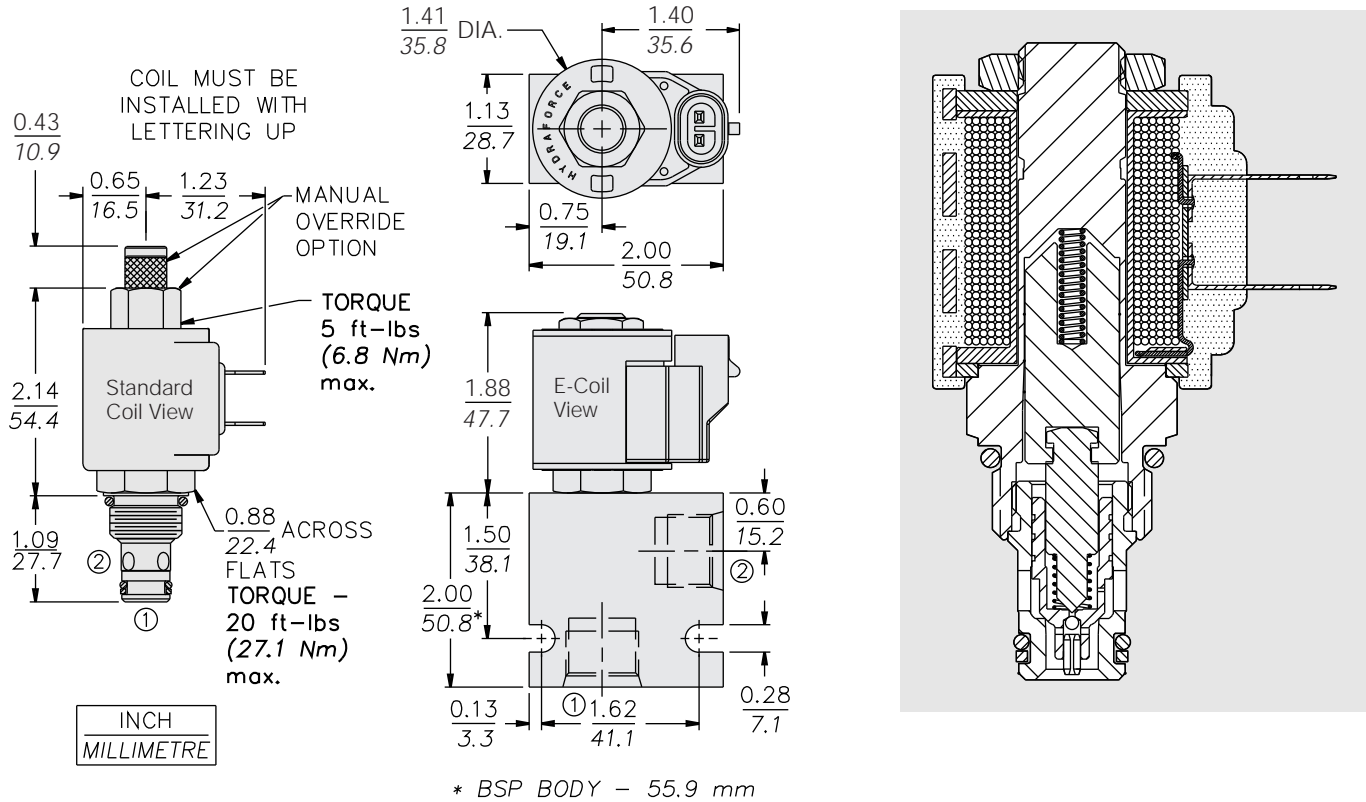
#### ISO:



### PERFORMANCE (Cartridge Only)



**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-ups 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: 0.11 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.); Perfect wound, 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>SV08-22</b> - - - - -  |           |                      |  |
| <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           | <b>M</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>Porting</b>            |           | <b>36</b> 36 VDC     | <b>DR</b> Deutsch DT04-2P                  |
| Cartridge Only            | <b>0</b>  | <b>48</b> 48 VDC     |  |
| SAE 4                     | <b>4T</b> | <b>24</b> 24 VAC     | <b>Termination (VAC)</b>                   |
| SAE 6                     | <b>6T</b> | <b>115</b> 115 VAC   | <b>Std. Coil</b>                           |
| 1/4 in. BSP*              | <b>2B</b> | <b>230</b> 230 VAC   | <b>AG</b> DIN 43650                        |
| 3/8 in. BSP*              | <b>3B</b> |                      | <b>AP</b> 1/2 in. Conduit                  |
| *BSP Body; U.K. Mfr. Only |           |                      | <b>Termination (VDC)</b>                   |
|                           |           |                      | <b>E-Coil</b>                              |
| <b>Seals</b>              |           | <b>E-Coil</b>        | <b>ER</b> Deutsch DT04-2P (IP69K Rated)    |
| Buna N (Std.)             | <b>N</b>  | <b>10</b> 10 VDC     | <b>EY</b> Metri-Pack® 150 (IP69K Rated)    |
| Fluorocarbon              | <b>V</b>  | <b>12</b> 12 VDC     |  |
|                           |           | <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.