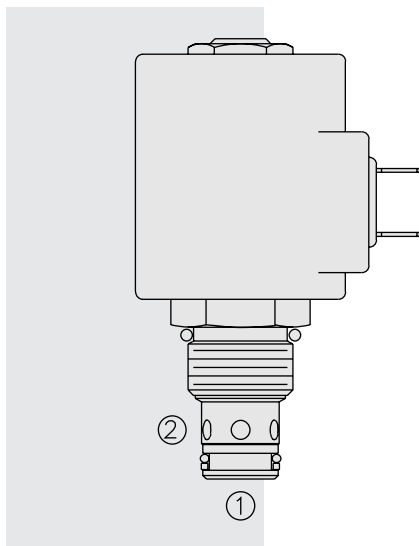


## SV10-22 Poppet, 2-Way, Normally Closed



### 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 **SV10-22** acts as a check valve, allowing flow to pass 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, flow is also allowed from ① to ②.

**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.

### RATINGS

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

**Proof Pressure:** 350 bar (5075 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: 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 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:** VC10-2; See page 9.110.1

**Cavity Tool:** CT10-2XX; See page 8.600.1

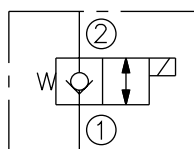
**Seal Kit:** SK10-2X-T; See page 8.650.1

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

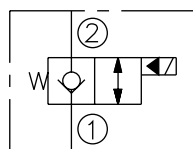
For E-coils manufactured prior to 1-1-04, see page 3.400.1 for coil nut info.

### SYMBOLS

#### USASI:

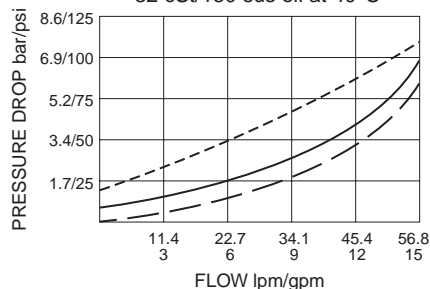


#### ISO:

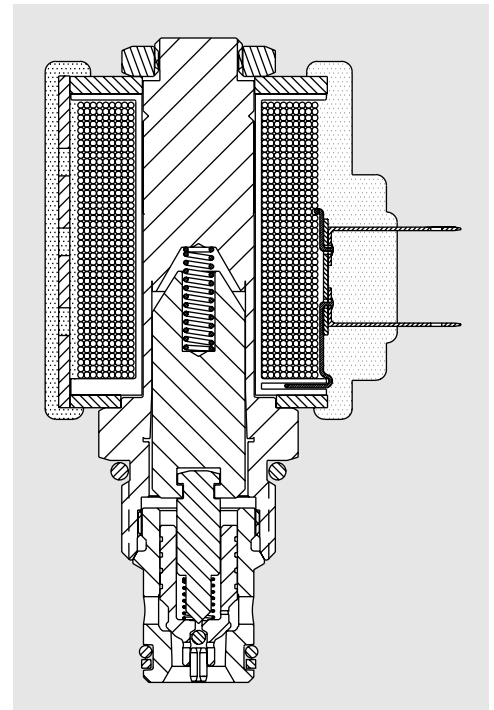
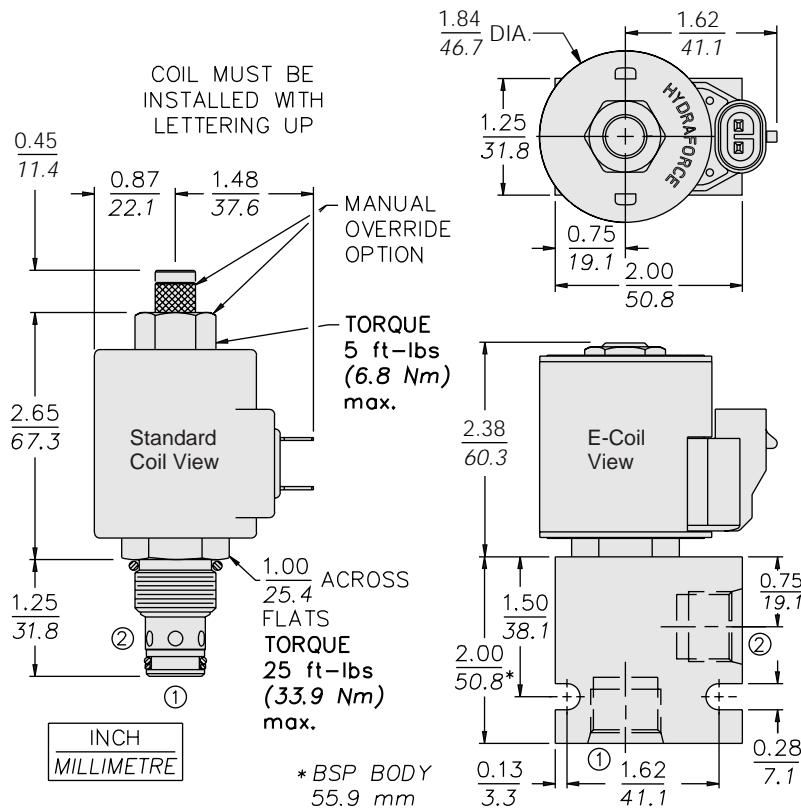


### PERFORMANCE (Cartridge Only)

- ① to ② de-energized - - - -
  - ① to ② energized - - - -
  - ② to ① energized - - - -
- 32 cSt/150 sus oil at 40°C



**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**

**SV10-22**

- Option**
- None (Blank)
- Screen **S**
- Manual Override **M**
- Manual Override **Y**
- Manual Override **J**
- For Manual Override options see page 1.001.1
- Porting**
- Cartridge Only **0**
- SAE 6 **6T**
- SAE 8 **8T**
- 1/4 in. BSP\* **2B**
- 3/8 in. BSP\* **3B**
- 1/2 in. BSP\* **4B**
- \*BSP Body; U.K. Mfr. Only
- Seals**
- Buna N (Std.) **N**
- Fluorocarbon **V**

- Voltage Std. Coil**
- 0** Less Coil\*\*
- 10** 10 VDC<sup>†</sup>
- 12** 12 VDC
- 24** 24 VDC
- 36** 36 VDC
- 48** 48 VDC
- 24** 24 VAC
- 115** 115 VAC
- 230** 230 VAC
- \*\*Includes Std. Coil Nut
- <sup>†</sup> DS, DW or DL terminations only.
- E-Coil**
- 10** 10 VDC
- 12** 12 VDC
- 20** 20 VDC
- 24** 24 VDC

- Termination (VDC) Std. Coil**
- DS** Dual Spades
- DG** DIN 43650
- DL** Leadwires (2)
- DL/W** Leads w/Weatherpak® Connectors
- DR** Deutsch DT04-2P
- Termination (VAC) Std. Coil**
- AG** DIN 43650
- AP** 1/2 in. Conduit
- Termination (VDC) E-Coil**
- ER** Deutsch DT04-2P (IP69K Rated)
- EY** Metri-Pack® 150 (IP69K Rated)

Coils with internal diode are available. Consult factory.