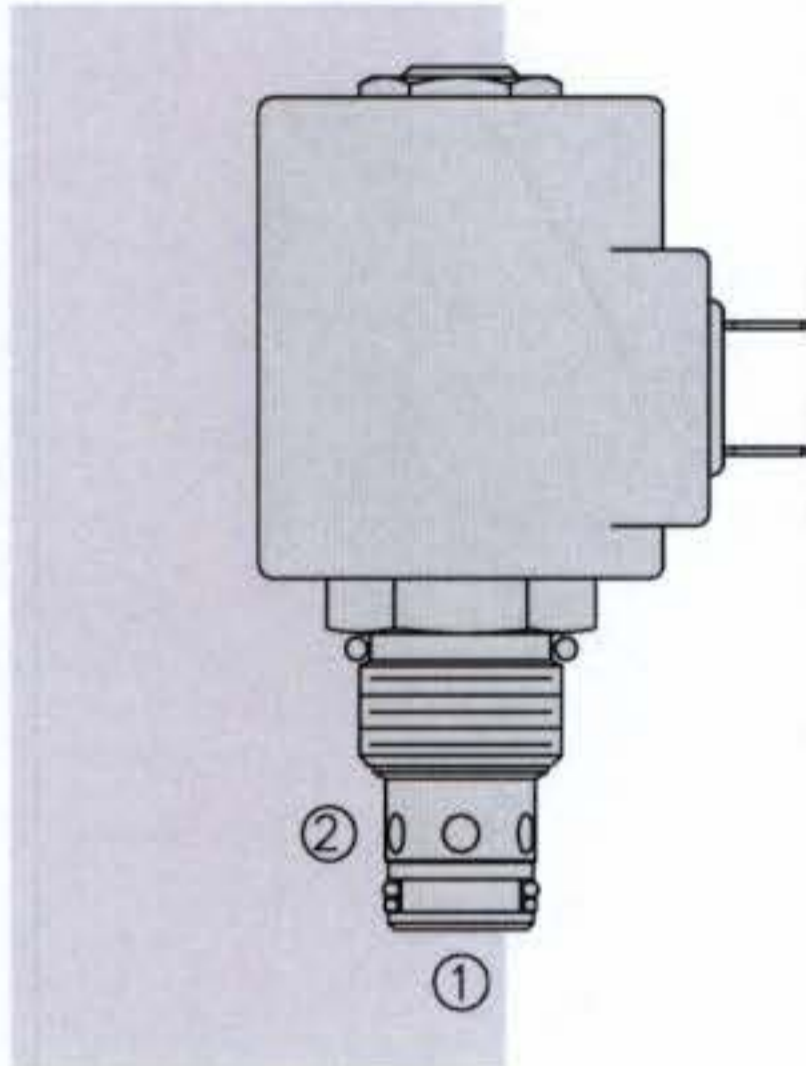


SOLENOID VALVES

Blue rectangles are links to other catalog pages.

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

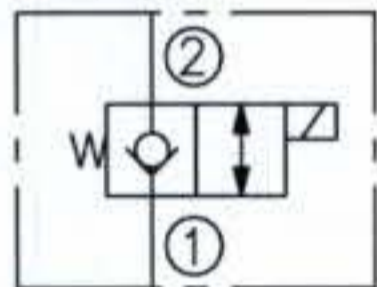
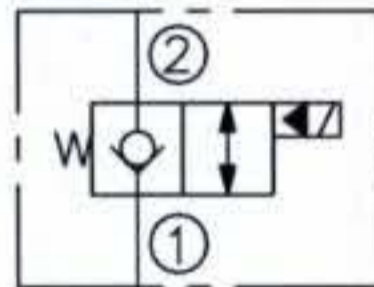
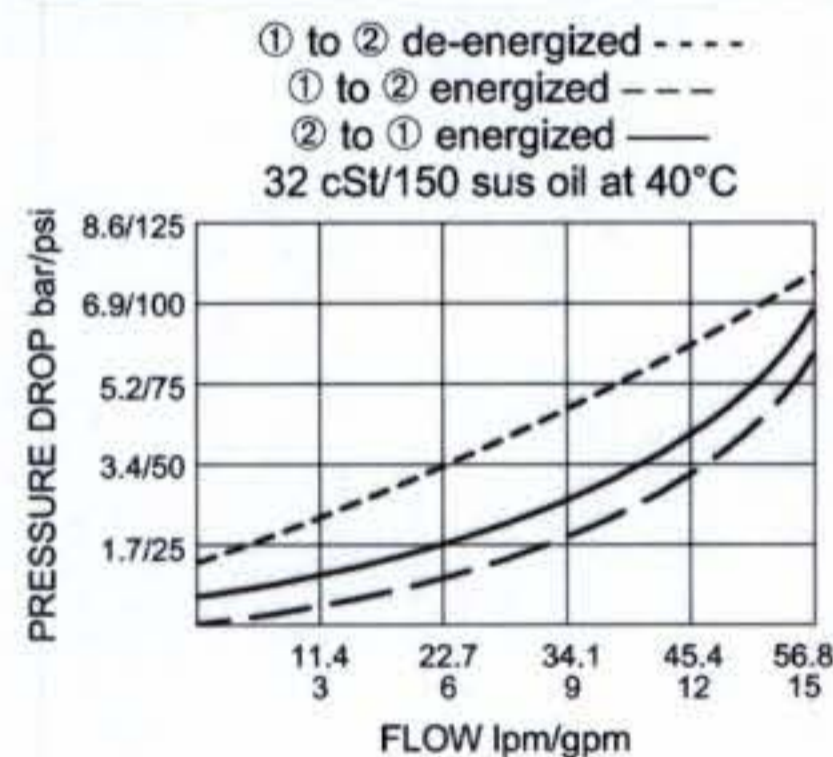
Cavity: VC10-2; See page 9.110.1

Cavity Tool: CT10-2XX; See page 8.600.1

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

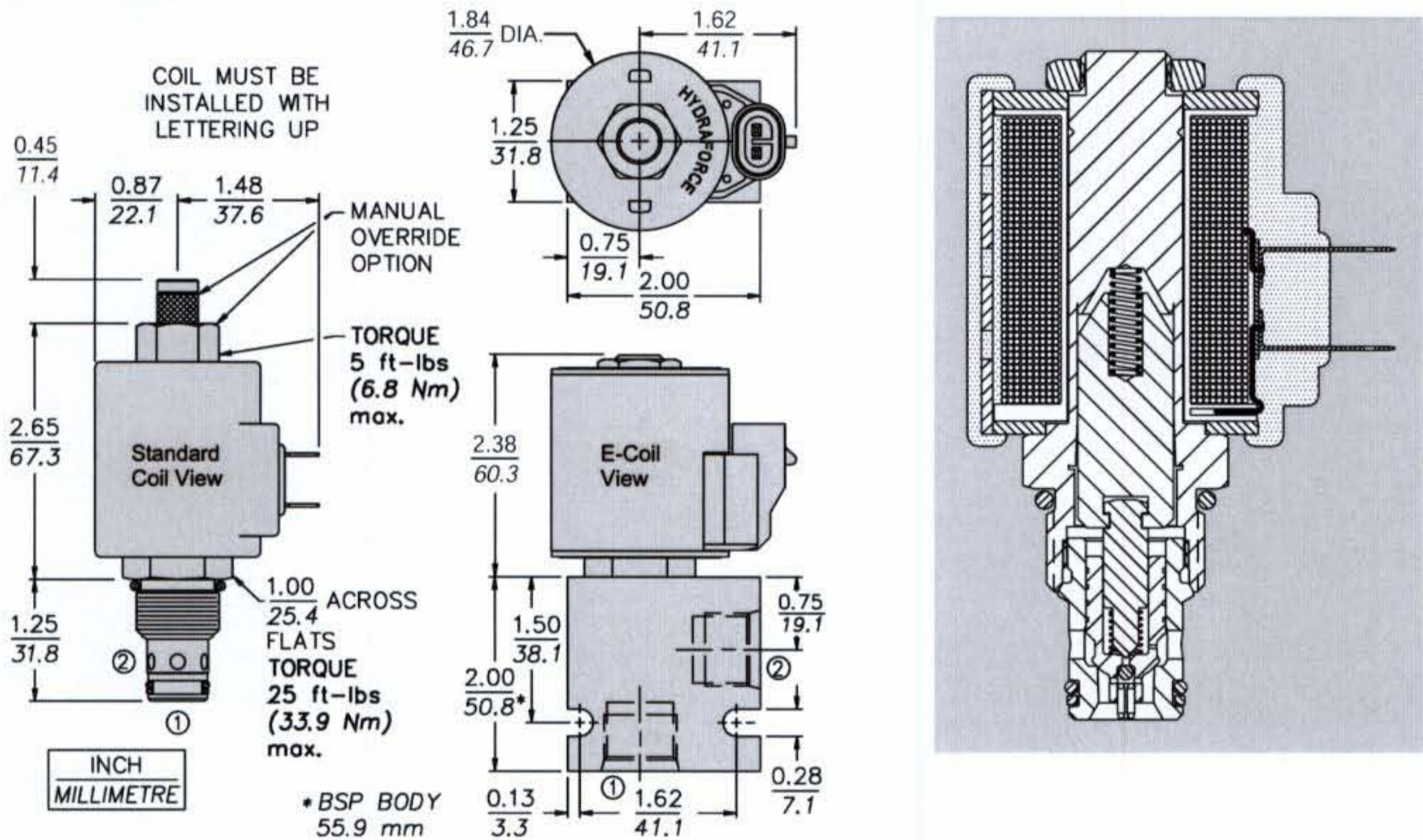
Coil Nut: Part No. 7004400;

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

SYMBOLS**USASI:****ISO:****PERFORMANCE (Cartridge Only)**

SV10-22

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†
- 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
- †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)
- DLW** 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.