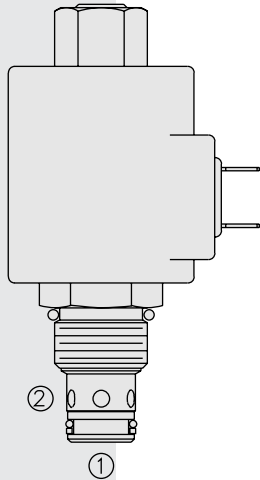


SV10-29 Poppet, 2-Way, N.O., Bi-Directional Blocking



DESCRIPTION

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

OPERATION

When de-energized, the **SV10-29** allows flow in both directions. When energized, the valve's poppet closes on its seat, blocking flow from ② to ① or ① to ②.

FEATURES

- Continuous-duty rated coil.
- Optional coil voltages and terminations.
- Cartridges are voltage interchangeable.
- Optional waterproof E-Coils rated up to IP69K.
- Hardened seat for long life and low leakage.
- Manual override option.
- Industry common cavity.

RATINGS

Operating Pressure: 240 bar (3500 psi)

Proof Pressure: 345 bar (5000 psi)

Flow: 75.7 lpm (20 gpm)

Internal Leakage: 0.25 cc/minute (5 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 240 bar (3500 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

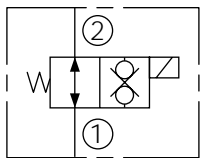
Seal Kit: SK10-2X-M; See page 8.650.1

Coil Nut: Part No. 7004400;

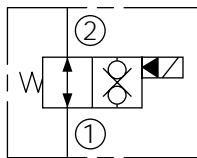
For E-coils manufactured prior to 1-1-04, see page 3.400.1 for coil nut info.

SYMBOLS

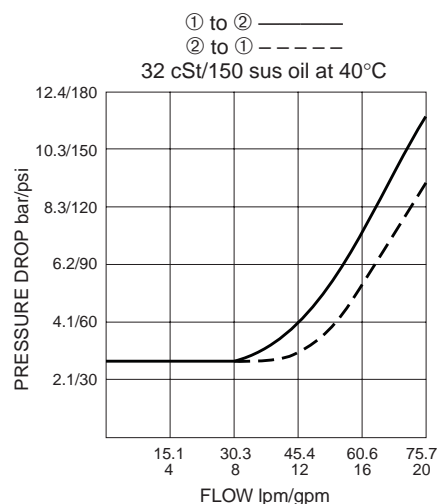
USASI/ISO:



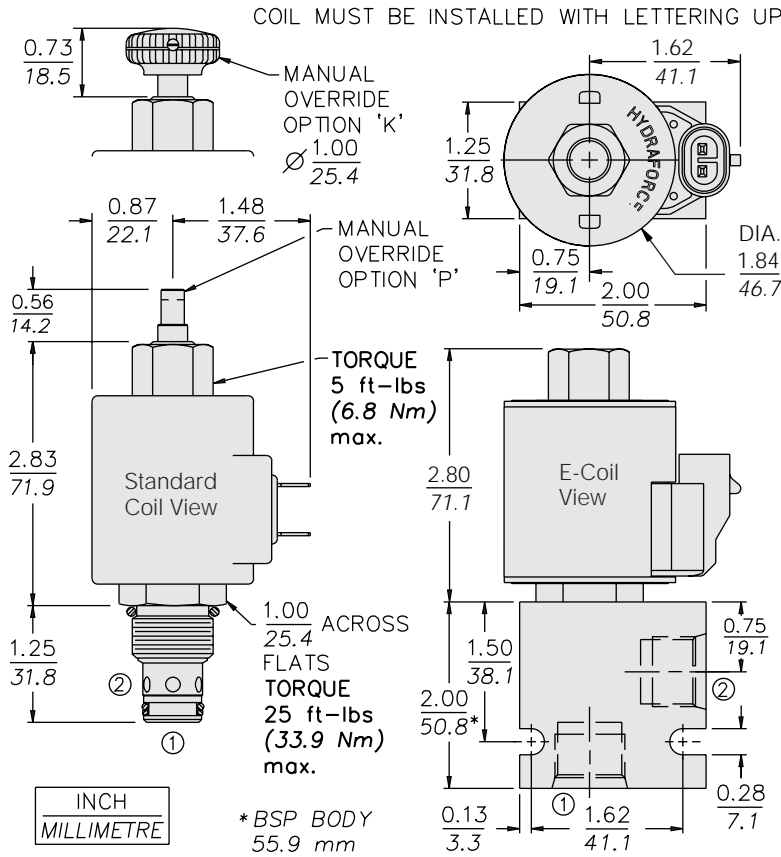
ISO:



PERFORMANCE (Cartridge Only)



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

SV10-29

- Option**
- None (Blank)
 - Manual Override without knob **P**
 - Manual Override with knob **K**
- 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)
 - 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.