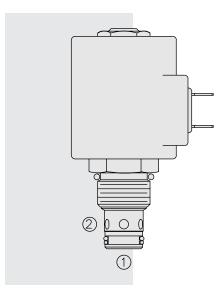
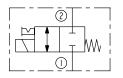
# SV10-24 Spool, 2-Way, Normally Closed

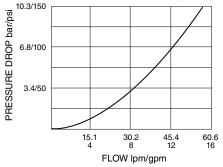


#### ISO SYMBOL

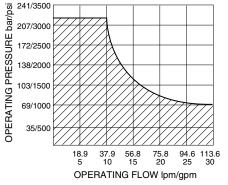


#### PERFORMANCE (Cartridge Only)

Pressure Drop vs. Flow 32 cSt/150 sus oil at 40°C (104°F)



Performance Range (Shaded)



#### DESCRIPTION

A solenoid-operated, two-port, normally closed, direct-acting, spool-type, screw-in hydraulic cartridge valve, designed to operate as a bidirectional blocking valve.

#### OPERATION

When de-energized, the SV10-24 blocks flow in both directions.

When energized, the cartridge's spool shifts to open the bidirectional flow path.

**Operation of Manual Override Option:** To override, push button in and twist counterclockwise 180°. The internal spring will push the button out. In this position, the valve may be only partially shifted. To assure full override shift, pull the button out to its fullest extension and hold it in this position.

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

### **FEATURES**

- Bi-directional flow path.
- Both ports may be fully pressurized.
- Manual override options.
- Hardened precision spool and cage for long life.
- Optional coil voltages and terminations.
- Continuous-duty rated solenoid.
- Efficient wet-armature construction.
- Optional coil voltages and terminations.
- Unitized, molded coil design.
- Industry common cavity.

#### RATINGS

Pressure Rating: 207 bar (3000 psi)

Proof Pressure: 276 bar (4000 psi)

Burst Pressure: 620 bar (9000 psi)

Flow Rating: See Performance Chart

Internal Leakage: 82 ml/minute (5 cu. in./minute) max. at 207 bar (3000 psi)

- Temperature: -40 to 100°C (-40 to 212°F) with standard Buna seals;
  - -26 to 204°C (-15 to 400°F) with fluorocarbon seals;
  - -54 to 107°C (-65 to 225°F) with polyurethane 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: 50 msec. De-energized: 30 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-M; See page 8.650.1

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

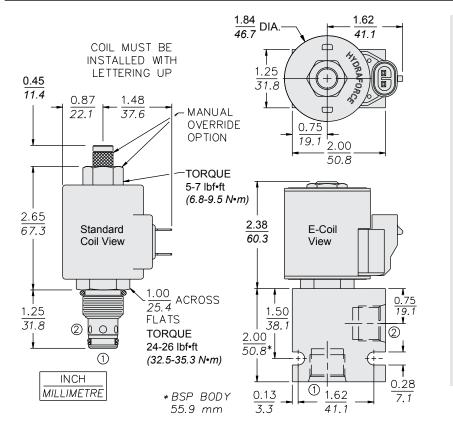
For E-coils manufactured prior to 1-1-04, see page 3.400.1 for coil nut info.

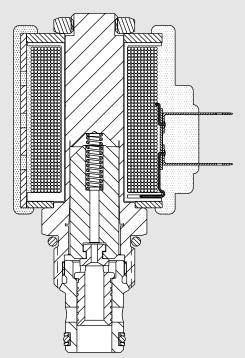


SV10-24

## **Bi-Directional**

#### 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 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 magnet wire. 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**

SV10-24		
OptionNone(Blank)Manual OverrideMManual OverrideYManual OverrideJFor Manual Override options see page 1.001.1	36 36 VDC	<ul> <li>DIN 43650</li> <li>Leadwires (2)</li> <li>W Leads w/Weatherpak® Connectors</li> </ul>
Porting Cartridge Only 0 SAE 8 8T 3/8 in. BSP* 3B *BSP Body; U.K. Mfr. Only	48         48 VDC         DF           24         24 VAC         115         115 VAC           230         230 VAC         AC           **Includes Std. Coil Nut         AF           † DS, DW or DL         terminations only.	Termination (VAC) Std. Coil DIN 43650
Seals Buna N (Std.) N Fluorocarbon V Polyurethane P	_	Deutsch DT04-2P (IP69K Rated)