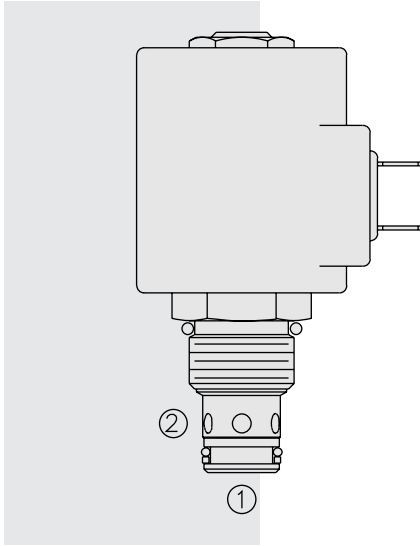
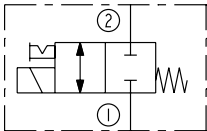


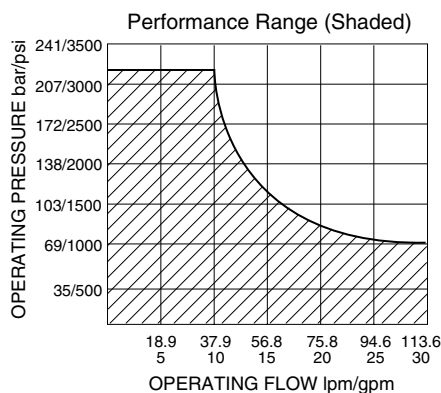
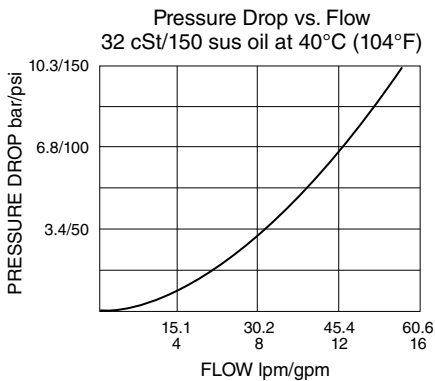
SV10-24 Spool, 2-Way, Normally Closed



ISO SYMBOL



PERFORMANCE (Cartridge Only)



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 counter-clockwise 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 valve 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

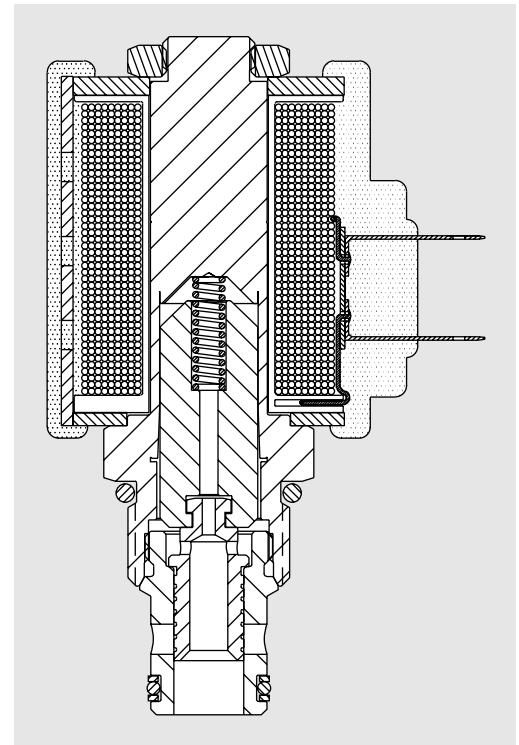
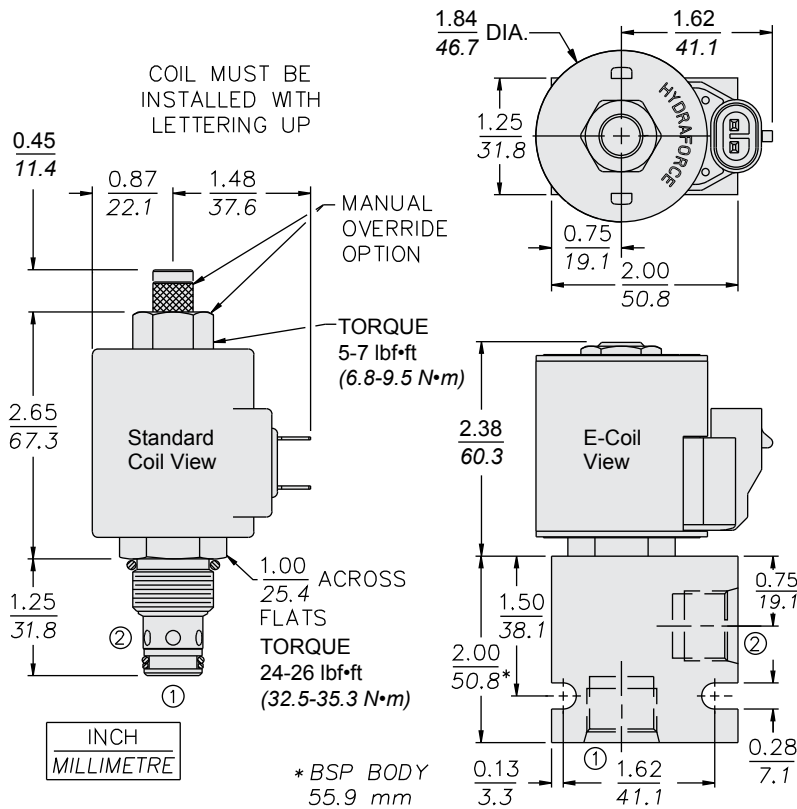
Coil Nut: Part No. 7004400;

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

Bi-Directional

SV10-24

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

Option	Voltage	Termination (VDC)
None (Blank)	Std. Coil	Std. Coil
Manual Override M	0 Less Coil**	DS Dual Spades
Manual Override Y	10 10 VDC†	DG DIN 43650
Manual Override J	12 12 VDC	DL Leadwires (2)
	24 24 VDC	DL/W Leads w/Weatherpak® Connectors
	36 36 VDC	DR Deutsch DT04-2P
	48 48 VDC	
	24 24 VAC	Termination (VAC)
	115 115 VAC	Std. Coil
	230 230 VAC	AG DIN 43650
		AP 1/2 in. Conduit
		Termination (VDC)
		E-Coil
		ER Deutsch DT04-2P (IP69K Rated)
		EY Metri-Pack® 150 (IP69K Rated)

For Manual Override options see page 1.001.1

Porting
 Cartridge Only 0
 SAE 8 8T
 3/8 in. BSP* 3B
 *BSP Body; U.K. Mfr. Only

Seals
 Buna N (Std.) N
 Fluorocarbon V
 Polyurethane P

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.