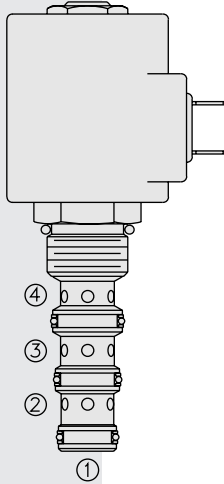


SV10-42 Spool, 4-Way, 2-Position



DESCRIPTION

A solenoid-operated, 4-way, 2-position, direct-acting, spool-type, screw-in hydraulic cartridge valve.

OPERATION

When de-energized, the **SV10-42** allows flow from ③ to ④, as well as from ② to ①. When energized, the spool shifts to block flow at all ports.

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 valve function, push button in, twist clockwise 180°, and release. Override will be detented in this position.

FEATURES

- Continuous-duty rated solenoid.
- Hardened precision spool and cage for long life.
- Optional coil voltages and terminations.
- Efficient wet-armature construction.
- All ports may be fully pressurized.
- 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: 82 cc/minute (5 cu. in./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

Initial Coil Current Draw at 20 °C: Standard Coil: 1.67 A at 12 Vdc;
0.18 A at 115 Vac (full wave rectified).

E-Coil: 1.7 A at 12 Vdc; 0.85 A 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: VC10-4; See page 9.110.1

Cavity Tool: CT10-4XX; See page 8.600.1

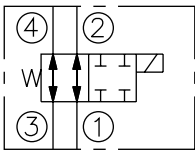
Seal Kit: SK10-4X-MMM; See page 8.650.1

Coil Nut: Part No. 7004400;

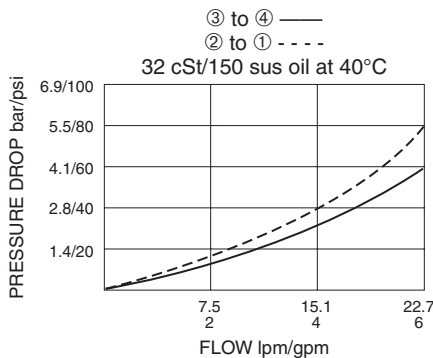
For E-coils manufactured prior to 1-1-04, see page 3.400.1 for coil nut info.

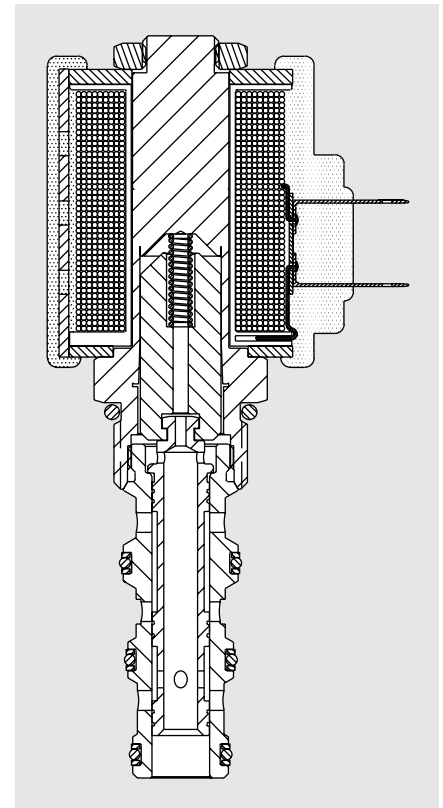
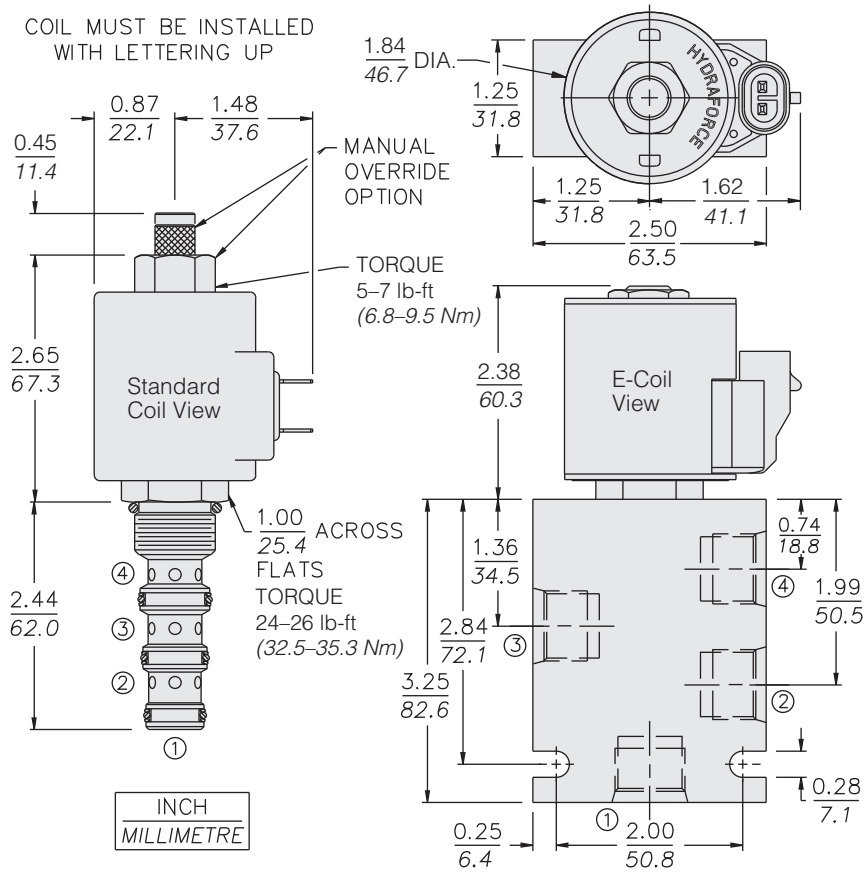
SYMBOLS

USAS/ISO:



PERFORMANCE (Cartridge Only)





MATERIALS

Cartridge: Weight: 0.20 kg (0.45 lb); Steel with hardened work surfaces. Zinc-plated exposed surfaces. Buna N O-rings and polyester elastomer back-up standard.

Standard Ported Body: Weight: 0.36 kg (0.80 lb); 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 lb); Unitized thermoplastic encapsulated, Class H high temperature magnet wire. See page 3.200.1.

E-Coil: Weight: 0.41 kg (0.9 lb); 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

SV10-42

Option	
None (Blank)	
Manual Override	M
Manual Override	Y
Manual Override	J
For Manual Override options see page 1.001.1	
Porting	
Cartridge Only	0
SAE 8	8T
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.