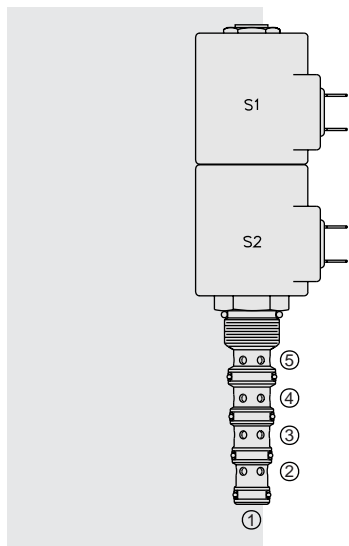


SV10-57D Spool, 5-Way, 3-Position . . .



DESCRIPTION

A solenoid-operated, five-way, three-position, screw-in hydraulic cartridge valve with integral load-sense port.

OPERATION

When de-energized, the **SV10-57D** blocks flow at ⑤ while allowing flow from both ② and ④ to ③. When coil #1 is energized, flow is allowed from ⑤ to ②, and from ④ to ③. When coil #2 is energized, flow is allowed from ⑤ to ④ and from ② to ③. Load sense is connected to port ⑤ when the spool is in shifted positions.

FEATURES

- Continuous-duty rated solenoid.
- Hardened precision spool and cage for long life.
- Optional coil voltages and terminations.
- Optional waterproof E-Coils rated up to IP69K.
- Optional manual override.
- Efficient wet-armature construction.
- Cartridges are voltage interchangeable.
- Unitized, molded coil design.

RATINGS

Operating Pressure: 247 bar (3625 psi) with standard Buna N seals

Flow: 20 lpm (4 gpm) max. See performance chart

Internal Leakage: 164 cc/minute (10 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 amps at 12 VDC;
0.18 amps at 115 VAC (full wave rectified).

E-Coil: 1.6 amps at 12 VDC; 0.8 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: VC10-5; See page 9.110.1

Cavity Tool: CT10-5XX; See page 8.600.1

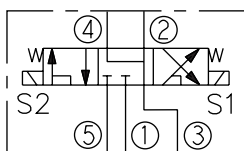
Seal Kit: SK10-5X-MMMM; See page 8.650.1

Coil Nut: Part No. 7004400; **Coil Spacer** for E-Coils: Part No. 4539700

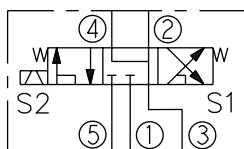
For E-coils manufactured prior to 1-1-04, see page 3.400.1 for coil nut & spacer info.

SYMBOLS

USASI:

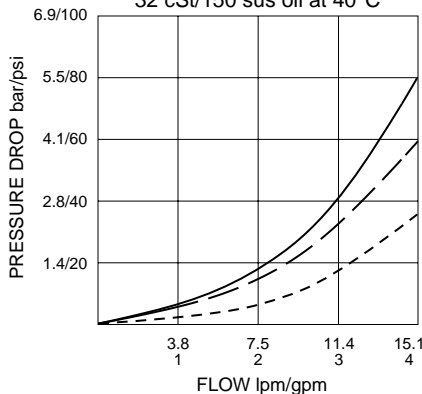


ISO:



PERFORMANCE (Cartridge Only)

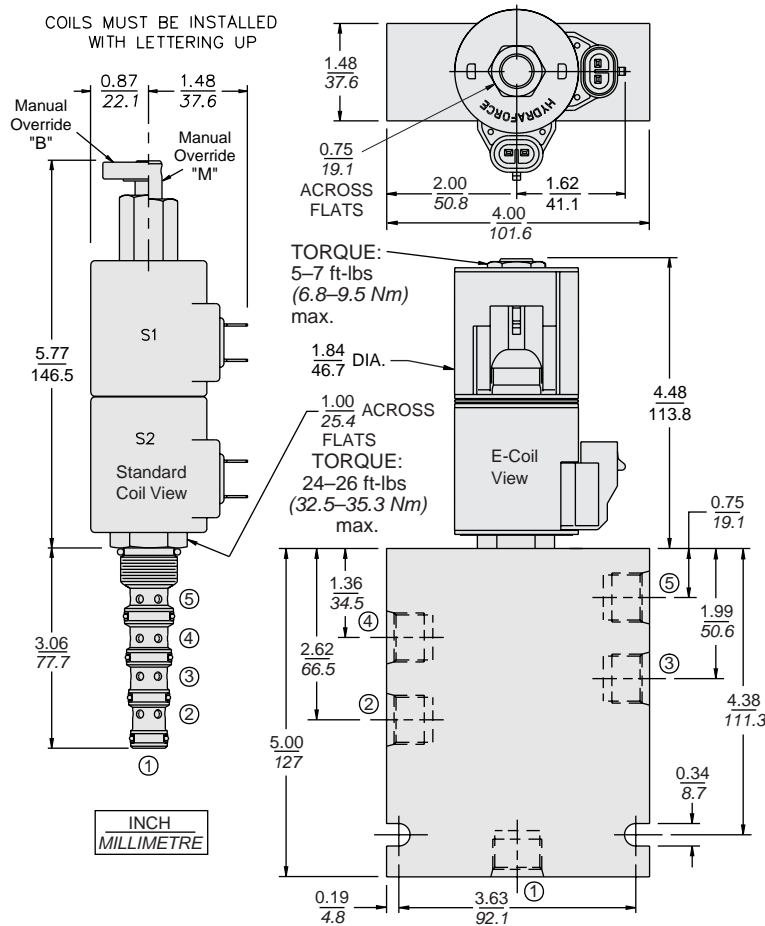
- ⑤ to ②, S1 energized: ———
 ⑤ to ④, S2 energized: - - - -
 ④ to ③, S1 energized
 or ② to ③, S2 energized: - - - - -
 32 cSt/150 sus oil at 40°C



for Load Sense Applications

SV10-57D

DIMENSIONS



MATERIALS

Cartridge: Weight: 0.36 kg. (0.80 lbs.); Steel with hardened work surfaces. Zinc-plated exposed surfaces; Buna N O-rings and back-ups standard.

Standard Ported Body: Weight: 0.41 kg. (0.85 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 each: 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.); Perfect wound, fully encapsulated with rugged external metal shell; Rated up to IP69K with integral connectors.

See page 3.400.1 for all E-Coil retrofit applications.

TO ORDER

SV10-57D

Option
None (Blank)
Manual Override **B**
Manual Override **M**
For Manual Override options see page 1.001.1

Porting
Cartridge Only **0**
SAE 6 **6T**
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.