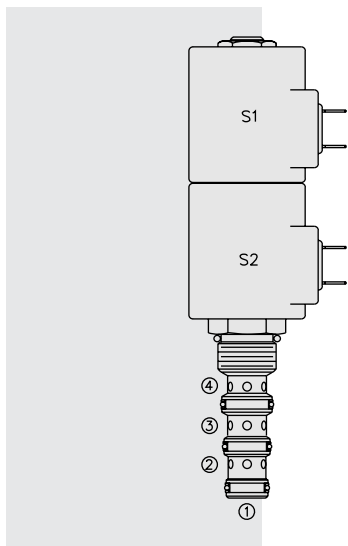


# SV10-47C Spool, 4-Way, 3-Position, Closed Center



## DESCRIPTION

A solenoid-operated, 4-way, 3-position, direct-acting, spool-type, closed center, screw-in hydraulic cartridge valve.

## OPERATION

When de-energized, the **SV10-47C** blocks flow to all ports. When coil #1 is energized, flow is allowed from ③ to ④, and from ② to ①. When coil #2 is energized, flow is allowed from ③ to ②, and from ④ to ①.

In circuits where work port flows are unequal due to cylinder ratios, the higher return flow should be directed to port ②.

**While ① may be fully pressurized, it is not intended for use as the valve's inlet.**

**Operation of Manual Override Option:** To override, push the knurled button to activate the coil #2 (S2) function, or pull the knob to activate the coil #1 (S1) function.

## FEATURES

- Continuous-duty rated solenoid.
- Hardened precision spool and cage for long life.
- Optional coil voltages and terminations.
- Manual override option.
- Optional waterproof E-Coils rated up to IP69K.
- Efficient wet-armature construction.
- All ports may be fully pressurized.
- Cartridges are voltage interchangeable.
- Unitized, molded coil design.
- Industry common cavity.

## RATINGS

**Operating Pressure:** 240 bar (3500 psi)

**Proof Pressure:** 390 bar (5700 psi)

**Flow:** 23 lpm (6 gpm) max.

**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: 1.7 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:** VC10-4; See page 9.110.1

**Cavity Tool:** CT10-4XX; See page 8.600.1

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

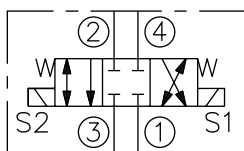
**Coil Nut:** Part No. 7004400; **Manual Override Coil Nut:** Part No. 4528180

**Coil Spacer:** Part No. 4539700

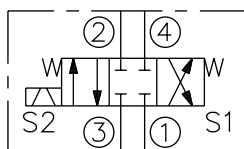
For E-coils manufactured prior to 1-1-04, see page 3.400.1 for coil nut & spacer info.

## SYMBOLS

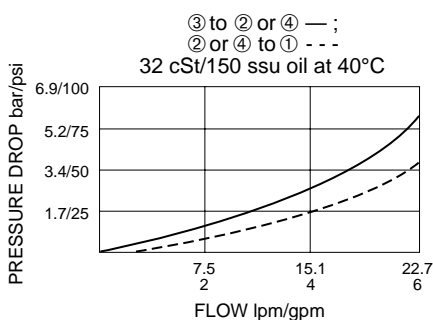
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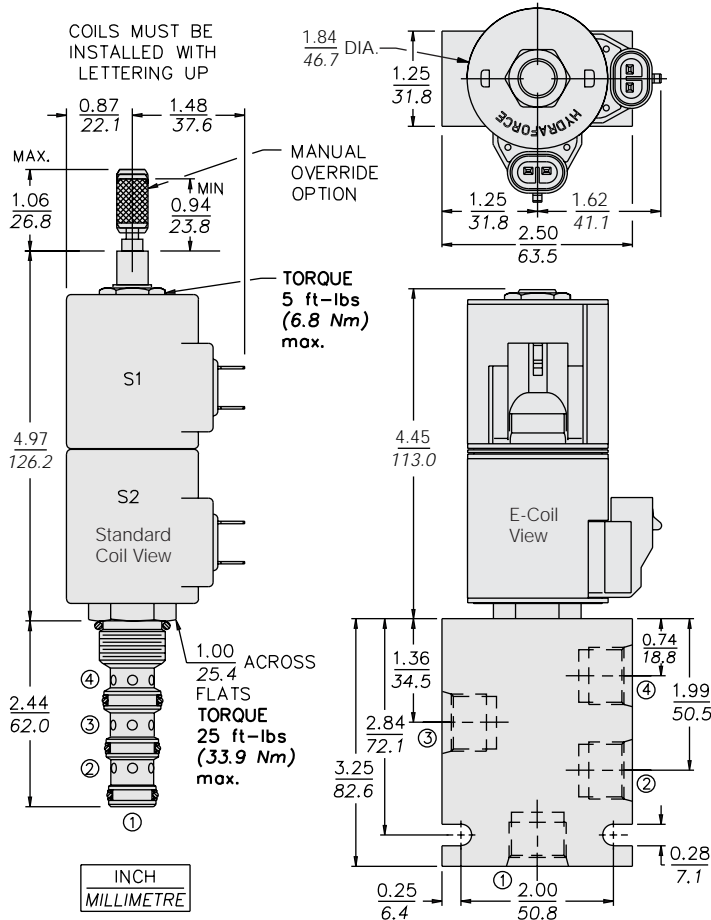
### ISO:



## PERFORMANCE (Cartridge Only)



**DIMENSIONS**



**MATERIALS**

**Cartridge:** Weight: 0.30 kg. (0.65 lbs.); Steel with hardened work surfaces. Zinc-plated exposed surfaces; Buna N O-rings and back-ups standard.

**Standard Ported Body:** Weight: 0.36 kg. (0.80 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**

**SV10-47C**

**Option**  
None (Blank)  
Manual Override **M**  
Manual Override **T**  
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**  
\*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.