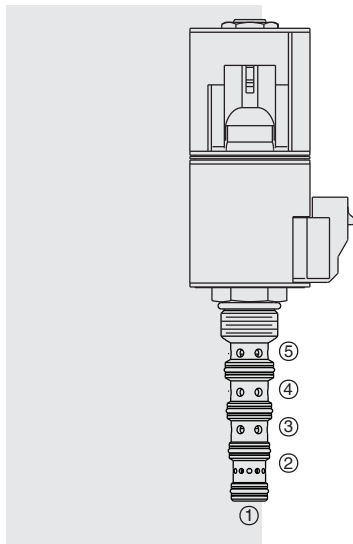
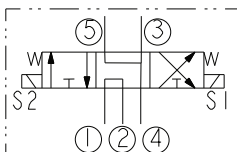


# SV10-59D Spool, 5-Way, 3-Position, Motor Spool



## ISO SYMBOL



## DESCRIPTION

A solenoid-operated, five-way, three-position, direct-acting, spool-type, screw-in hydraulic cartridge valve with a "power beyond" port.

## OPERATION

When de-energized, the **SV10-59D** allows flow between ports 3, 4, and 5 and with a "power beyond" between ports 1 and 2. When coil #1 is energized, flow is allowed from 1 to 3 and from 5 to 4 with "power beyond" blocked. When coil #2 is energized, flow is allowed from 1 to 5 and from 3 to 4 with "power beyond" blocked.

## FEATURES

- "Power Beyond" feature allows multiple functions, less hose, fewer drillings.
- Motor spool.
- 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.
- Cartridges are voltage interchangeable.

## RATINGS

**Operating Pressure:** 207 bar (3000 psi)

**Flow Rating:** 15.1 lpm (4 gpm) maximum

**Internal Leakage:** 328 ml/minute (20 cu.in./minute) max. at 207 bar (3000 psi) from port 1 to 3 with ports 2, 4 and 5 blocked, valve in neutral and from port 1 to ports 2 and 4 combined with ports 5 and 3 blocked, valve energized S1 then S2.

**Temperature:** -40 to 100 °C (-40 to 212 °F) with standard Buna seals; -26 to 204 °C (-15 to 400 °F) with viton seals; -54 to 107 °C (-65 to 225 °F) with polyurethane seals

**Coil Duty Rating:** Continuous from 85% to 115% of nominal voltage

**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

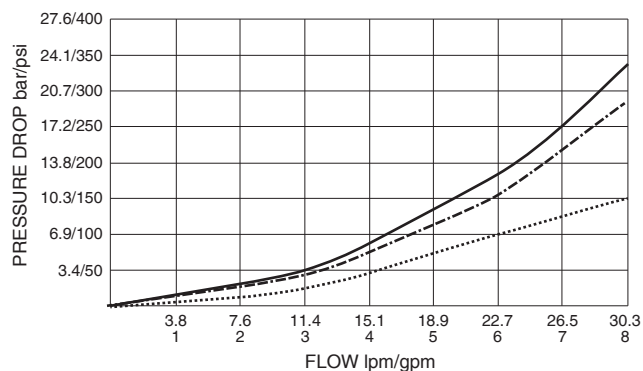
**Coil Nut:** Part No. 7004400

**Coil Spacer:** Std. D-Coil Spacer Part No. 7009280; E-Coil Spacer Part No. 4539700; If cartridge is ordered "Less Coil," D-Coil spacer will be provided unless an E is specified in the Coil Termination To Order section.

## PERFORMANCE (Cartridge Only)

Pressure Drop vs. Flow  
32 cSt/150 sus oil at 40°C

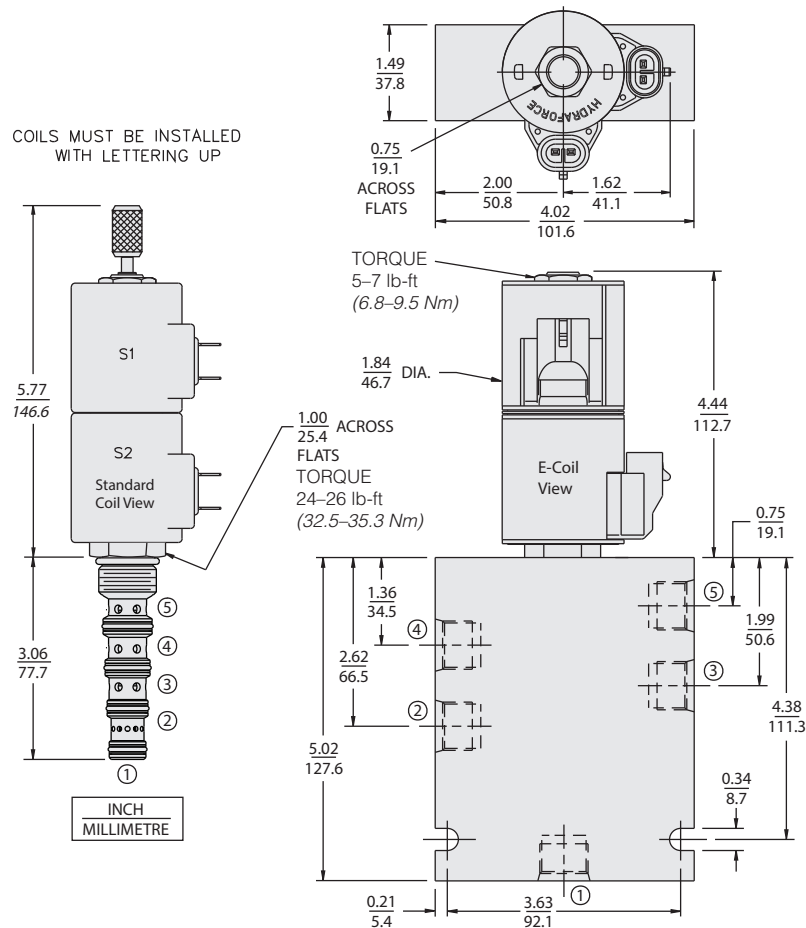
— 1-3 Coil S1, Energized; - - - 1-5 Coil S2, Energized, 1-2 Neutral  
..... 3-4 Coil S2, Energized, 5-4 Coil S1, Energized



# with Power Beyond Port

## SV10-59D

### DIMENSIONS



### MATERIALS

**Cartridge:** Weight: 0.29 kg (0.65 lb); 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 lb); 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 each: 0.27 kg (0.60 lb); Unitized thermoplastic encapsulated, high temperature magnet wire. See page 3.200.1

**E-Coil:** Weight: 0.41 kg (0.9 lb); Perfect wound, fully encapsulated with rugged external metal shell; **Rated up to IP69K with integral connectors. See page 3.400.1**

### TO ORDER

SV10-59D							
1,000 Hour Salt Spray Coating							
Option							
None (Blank)							
Manual Override							
For Manual Override options see page 1.001.1							
Porting							
Cartridge Only							
SAE 8							