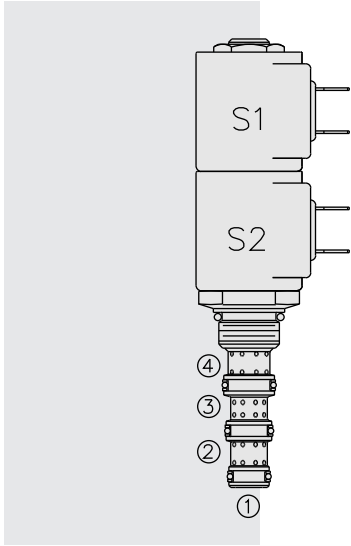


# SV08-47B Spool, 4-Way, 3-Position, Open Center



## DESCRIPTION

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

## OPERATION

When de-energized, the **SV08-47B** allows 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.
- Efficient wet-armature construction.
- All ports may be fully pressurized.
- Cartridges are voltage interchangeable.
- Unitized, molded coil design.
- Compact size.
- Optional waterproof E-Coils rated up to IP69K.
- Manual override option.

## RATINGS

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

**Flow:** 11.4 lpm (3 gpm) max.

**Internal Leakage:** 328 ml/minute (20 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: 1.2 amps at 12 VDC;

0.13 amps at 115 VAC (full wave rectified).

E-Coil: 1.4 amps at 12 VDC; 0.7 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:** VC08-4; See page 9.108.1

**Cavity Tool:** CT08-4XX; See page 8.600.1

**Seal Kit:** SK08-4X-MMM; See page 8.650.1

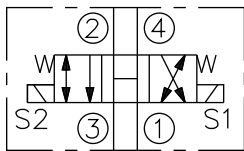
**Coil Nut:** Part No. 7004400; **Manual Override Coil Nut:** Part No. 4528180;

**Coil Spacer:** Std D-Coil Spacer Part No. 7012940; E-Coil Spacer Part No. 4534720;

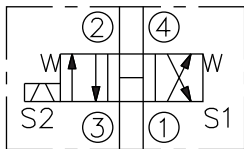
If cartridge is ordered "Less Coil," D-Coil spacer will be provided unless an E is specified in the Coil Termination To Order section.

## SYMBOLS

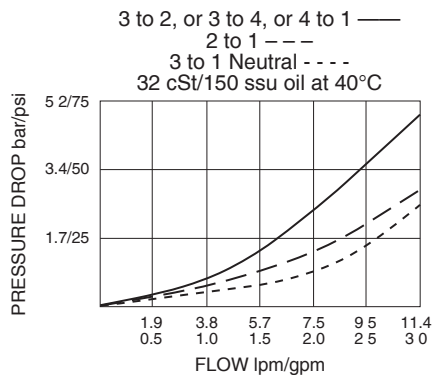
### USASI:



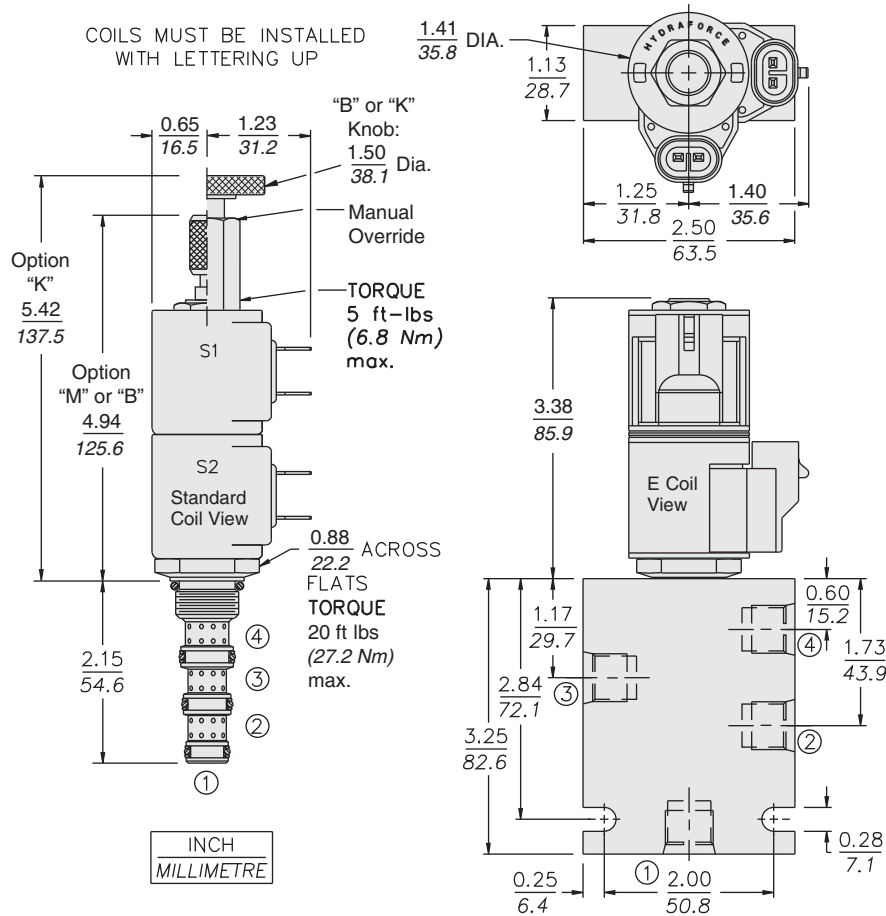
### ISO:



## PERFORMANCE (Cartridge Only)



## DIMENSIONS



## MATERIALS

**Cartridge:** Weight: 0.13 kg. (0.28 lbs.); Steel with hardened work surfaces. Zinc-plated exposed surfaces; Buna N O-rings and back-ups standard.

**Standard Ported Body:** Weight: 0.27 kg. (0.60 lbs.); Anodized high-strength 6061 T6 aluminum alloy, rated to 207 bar (3000 psi); Ductile iron bodies available; dimensions may differ. See page 8.008.1.

**Standard Coil:** Weight each: 0.11 kg. (0.25 lbs.); Unitized thermoplastic encapsulated, Class H high temperature magnetwire. See page 3.200.1

**E-Coil:** Weight: 0.14 kg. (0.3 lbs.); Perfect wound, fully encapsulated with rugged external metal shell; Rated up to IP69K with integral connectors. See page 3.400.1

## TO ORDER

### SV08-47B

**Option**  
None (Blank)

Manual Override **M**

Manual Override **B**

Manual Override **K**

For Manual Override options see page 1.001.1

**Porting**

Cartridge Only **0**

SAE 6 **6T**

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. D-Coil**

**00** Less Coil\*\*

**10** 10 VDC†

**12** 12 VDC

**20** 20 VDC

**24** 24 VDC

**36** 36 VDC

**48** 48 VDC

**24** 24 VAC

**115** 115 VAC

**230** 230 VAC

\*\*Includes D-Coil Nut and Spacer.

† DS, DW or DL terminations only.

**E-Coils:** 10, 12, 20, 24 VDC only.

**Coil Termination**

Coil Termination	E-Coil	D-Coil
Less Coil "E" Spacer	<b>E</b>	—
Deutsch DT04-2P	<b>ER</b> (IP69K)	<b>DR</b> (IP65)
Metri-Pack® 150	<b>EY</b> (IP69K)	<b>DY</b> (IP65)
Dual Lead Wires	<b>EL</b> (IP69K)	<b>DL</b> (IP65)
Amp Jr. Timer	<b>EJ</b> (IP67)	—
DIN 43650	<b>EG</b> (IP65)	<b>DG</b> (IP65)
Dual Spades	—	<b>DS</b> (IP65)

For Coils with Zener Diode, add "Z" to option code. For example: "ER/Z". Not available on all models. See coil option info. on pages 3.200.1 & 3.400.1