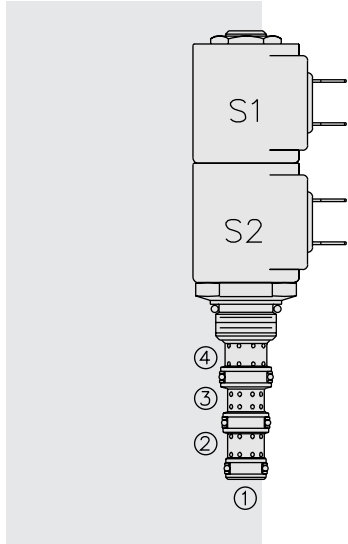


# SV08-47A Spool, 4-Way, 3-Position, Tandem Center



## DESCRIPTION

A solenoid-operated, four-way, three-position, direct-acting, spool-type, tandem center, screw-in hydraulic cartridge valve.

## OPERATION

When de-energized, the **SV08-47A** blocks cylinder ports, while allowing flow from ③ to ①. When coil #1 is energized, flow is allowed from ③ to ②, and from ④ to ①. When coil #2 is energized, flow is allowed from ③ to ④, and from ② 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 knob to activate the coil #2 (S2) function; 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.
- Manual override option.
- Optional waterproof E-Coils rated up to IP69K.

## RATINGS

**Operating Pressure:** 210 bar (3000 psi)

**Flow:** 11.4 lpm (3.0 gpm) max.

**Internal Leakage:** 278 cc/minute (17 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

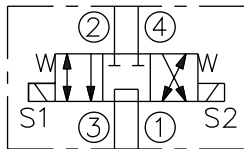
**Coil Nut:** Part No. 7004400; **Manual Override Coil Nut:** Part No. 4528180;

**Coil Spacer:** Part No. 4534720

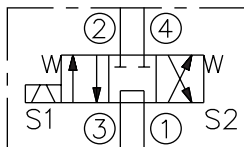
For E-coils manufactured prior to 1-1-04, see page 3.400.1 for coil nut & spacer info.

## SYMBOLS

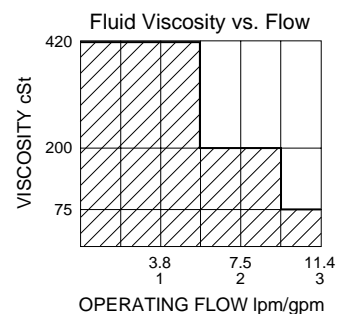
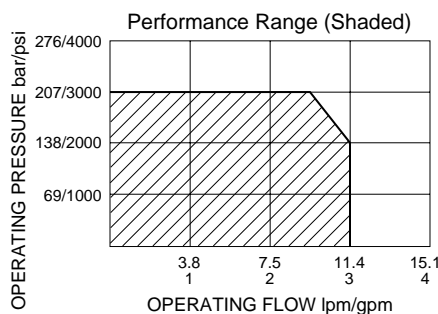
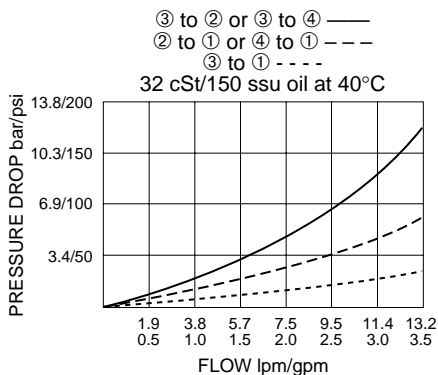
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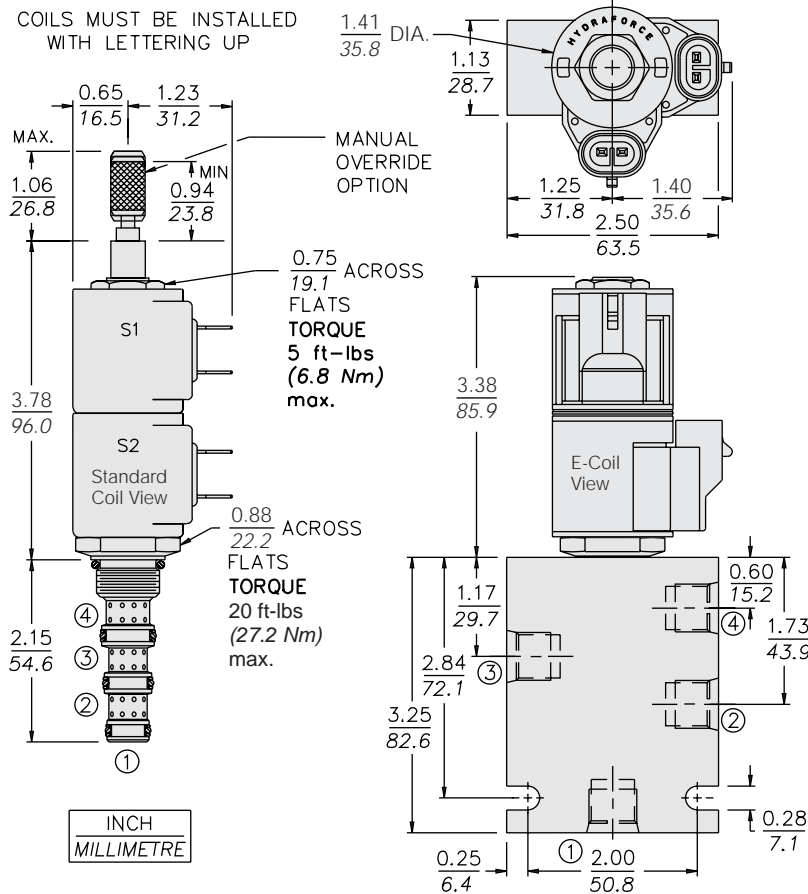
### ISO:



## PERFORMANCE (Cartridge Only)



**DIMENSIONS**



**MATERIALS**

**Cartridge:** Weight: 0.13 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 for all E-Coil retrofit applications.

**TO ORDER**

**SV08-47A**

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