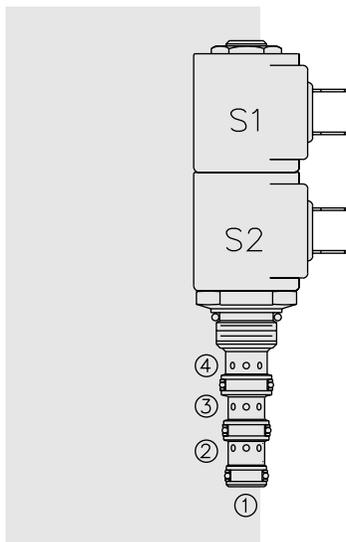


# SOLENOID VALVES

## SV08-47D Spool, 4-Way, 3-Position, "Motor Spool"



### DESCRIPTION

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

### OPERATION

When de-energized, the **SV08-47D** blocks flow to ③, while allowing flow from ② to ①, and from ④ to ①. 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:** 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: 1.2 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 ssu)

**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

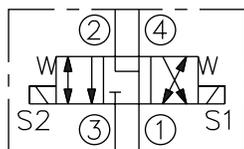
**Coil Nut:** Part No. 7004400; **Manual Override Coil Nut:** Part No. 4528180;

**Coil Spacer:** Part No. 4534720

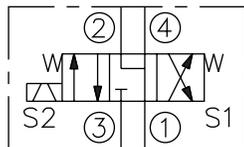
For E-coils manufactured prior to 1-1-04, see page 3.400.1 for coil nut & spacer info.

### SYMBOLS

#### USASI:

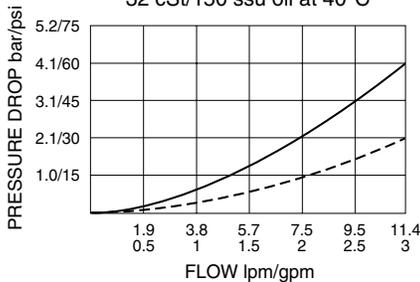


#### ISO:



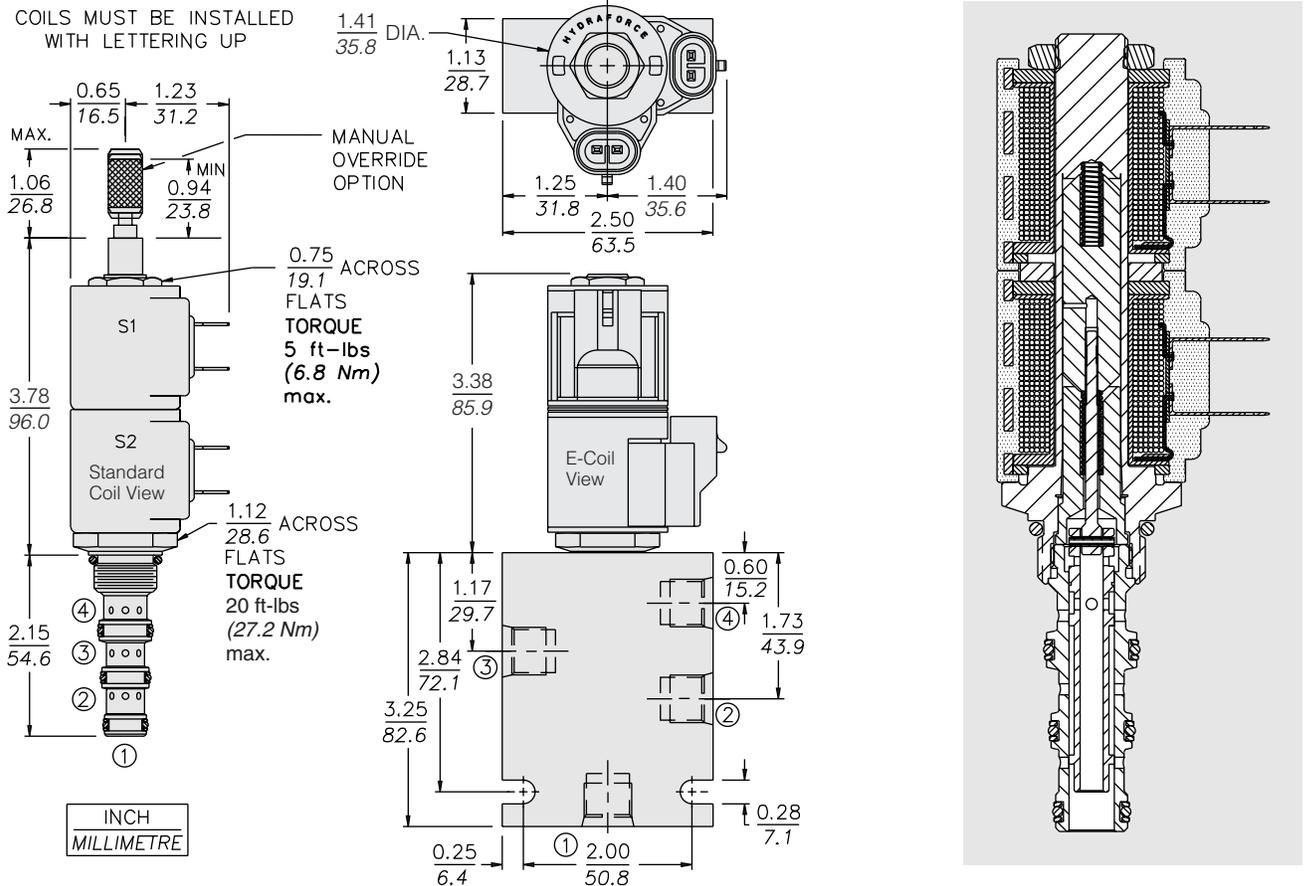
### PERFORMANCE (Cartridge Only)

③ to ②, ③ to ④, ④ to ① — ;  
② to ① - - -  
32 cSt/150 ssu oil at 40°C



**SV08-47D**

**DIMENSIONS**



**MATERIALS**

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

**Standard Ported Body:** Weight: 0.27 kg. (0.60 lbs.); Anodized high-strength 6061 T6 aluminum alloy, rated to 240 bar (3500 psi); See page 8.008.1. Ductile iron and steel bodies available; consult factory.

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

**E-Coil:** Weight each: 0.14 kg. (0.3 lbs.); Fully encapsulated with rugged external metal shell; Rated up to IP69K with integral connectors; **Note: See page 3.400.1 for all E-Coil retrofit applications.**

**TO ORDER**

<b>SV08-47D</b>		-		-		-		-		-	
<b>Option</b>		<b>Porting</b>		<b>Seals</b>		<b>Voltage Std. Coil</b>		<b>E-Coil</b>		<b>Termination (VDC) Std. Coil</b>	
None (Blank)		Cartridge Only	SAE 6	Buna N (Std.)	10	12	24	36	48	DS	DG
Manual Override	<b>M</b>	1/4 in. BSP*	<b>2B</b>	Fluorocarbon	<b>V</b>	115	230	10	12	DL	DL/W
		3/8 in. BSP*	<b>3B</b>			24	24	20	24	DR	
		*BSP Body; U.K. Mfr. Only				24	24	20	24	<b>Termination (VAC) Std. Coil</b>	
						24	24	20	24	AG	AP
						24	24	20	24	<b>Termination (VDC) E-Coil</b>	
						24	24	20	24	ER	EY
						24	24	20	24	Coils with internal diode are available. Consult factory.	