

SV08-47E Spool, 4-Way, 3-Position



DESCRIPTION

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

OPERATION

When de-energized, the **SV08-47E** blocks flow at ③ and ④, while allowing flow from ② to ①. When coil #1 (S1) is energized, the spool shifts to allow flow from ③ to ④ and ② to ①. When coil #2 (S2) is energized flow is allowed from ② to ③ 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.

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.
- Industry common cavity.
- Optional waterproof E-Coils rated up to IP69K.

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 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

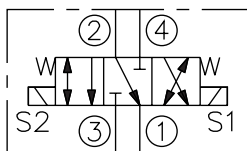
Seal Kit: SK08-4X-MMM; See page 8.650.1

Coil Nut: Part No. 7004400; **Coil Spacer:** Part No. 4534720

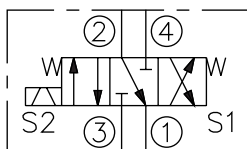
For E-coils manufactured prior to 1-1-04, see page 3.400.1 for coil nut & spacer info.

SYMBOLS

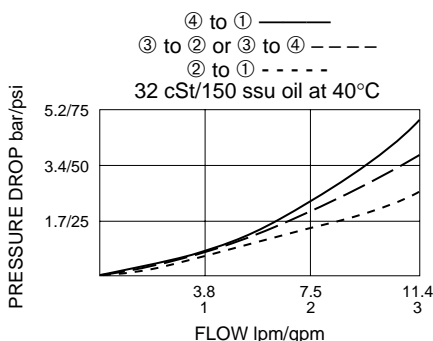
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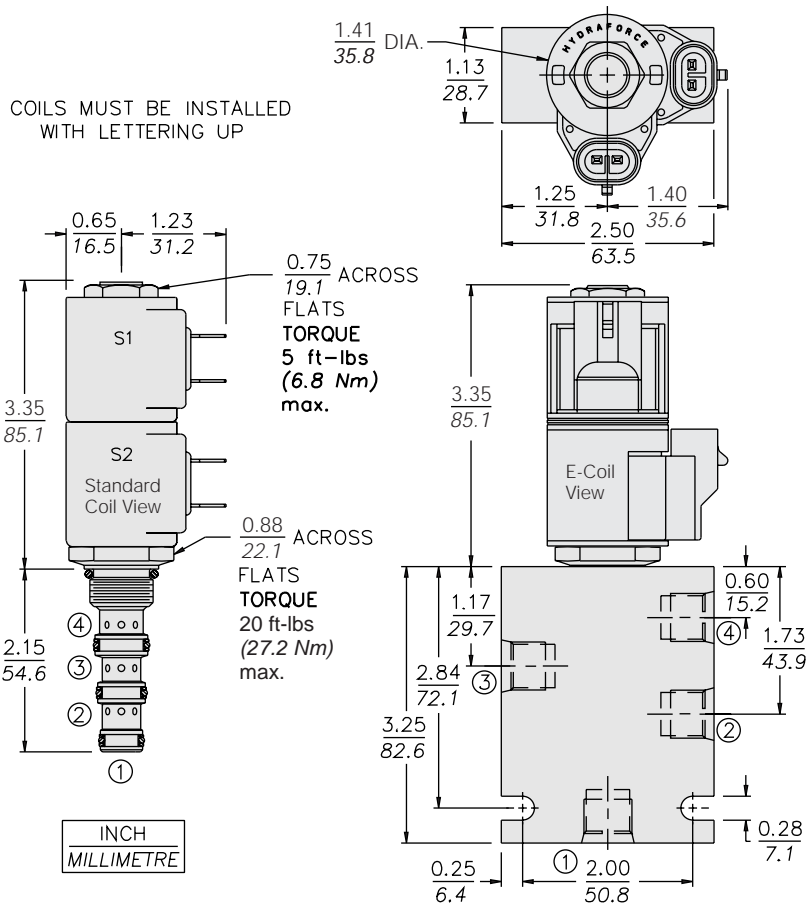
ISO:



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

SV08-47E

Option	None (Blank)	Voltage Std. Coil	Termination (VDC) Std. Coil
		0 Less Coil**	DS Dual Spades
		10 10 VDC†	DG DIN 43650
		12 12 VDC	DL Leadwires (2)
		24 24 VDC	DL/W Leads w/Weatherpak® Connectors
		36 36 VDC	DR Deutsch DT04-2P
		48 48 VDC	
		24 24 VAC	Termination (VAC) Std. Coil
		115 115 VAC	AG DIN 43650
		230 230 VAC	AP 1/2 in. Conduit
		**Includes Std. Coil Nut	Termination (VDC) E-Coil
		† DS, DW or DL terminations only.	ER Deutsch DT04-2P (IP69K Rated)
Porting	Cartridge Only 0	E-Coil	EY Metri-Pack® 150 (IP69K Rated)
	SAE 6 6T	10 10 VDC	
	1/4 in. BSP* 2B	12 12 VDC	
	3/8 in. BSP* 3B	20 20 VDC	
	*BSP Body; U.K. Mfr. Only	24 24 VDC	
Seals	Buna N (Std.) N		
	Fluorocarbon V		

Coils with internal diode are available. Consult factory.