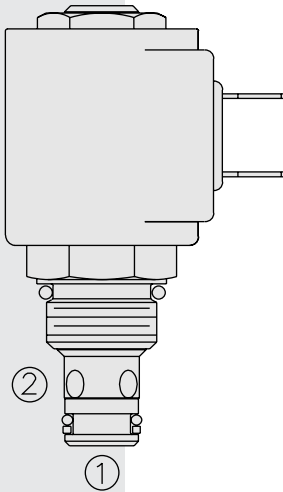


## SV08-20 Poppet, 2-Way, Normally Closed



### DESCRIPTION

A solenoid-operated, 2-way, normally closed, piloted poppet-type, screw-in hydraulic cartridge valve, intended to act as a blocking or load-holding device for low flow circuits.

### OPERATION

When de-energized, the **SV08-20** acts as a check valve, allowing flow from ① to ②, while blocking flow from ② to ①.

When energized, the cartridge's poppet lifts to open the ② to ① flow path. In this mode, flow from ① to ② is severely restricted. If this path is required, see model SV08-22, page 1.041.1.

**Operation of Manual Override Option:** To override, push button in, twist counter-clockwise 180°, and release. In this position, the valve will remain open.

To return to normal operation, push button in, twist clockwise 180°, and release. Override will be detented in this position.

### FEATURES

- Continuous-duty rated coil.
- Hardened seat for long life and low leakage.
- Optional coil voltages and terminations.
- Cartridges are voltage interchangeable.
- Unitized, molded coil design.
- Manual override option.
- Optional waterproof E-Coils rated up to IP69K.
- Industry common cavity.
- Compact size.

### RATINGS

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

**Proof Pressure:** 255 bar (3700 psi)

**Flow:** See Performance Chart

**Internal Leakage:** 0.15 cc/minute (3 drops/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

**Response Time:** First indication of change of state with 100% voltage supplied at 80% of nominal flow rating: Energized: 40 msec. De-energized: 46 msec.

**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:** VC08-2; See page 9.108.1

**Cavity Tool:** CT08-2XX; See page 8.600.1

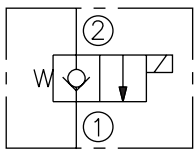
**Seal Kit:** SK08-2X-T; See page 8.650.1

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

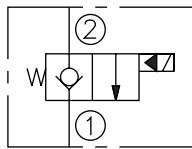
For E-coils manufactured prior to 1-1-04, see page 3.400.1 for coil nut info.

### SYMBOLS

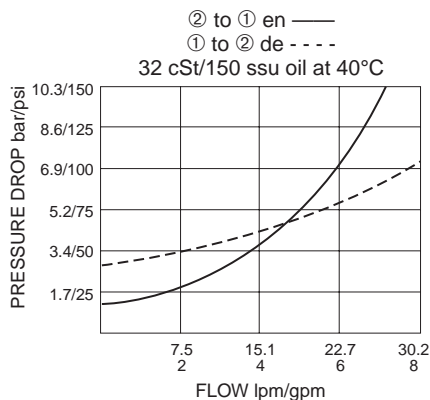
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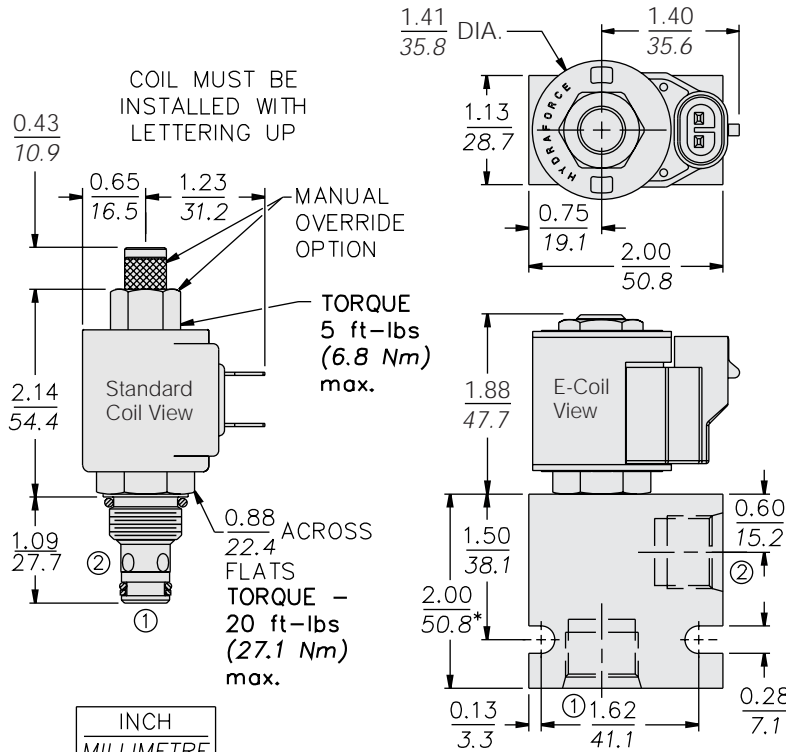
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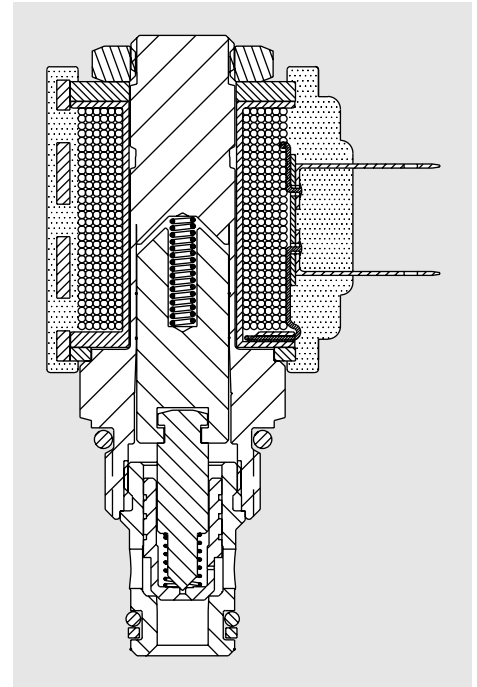
### PERFORMANCE (Cartridge Only)



**DIMENSIONS**



\* BSP BODY - 55.9 mm



**MATERIALS**

**Cartridge:** Weight: 0.09 kg. (0.20 lbs.); Steel with hardened work surfaces. Zinc-plated exposed surfaces; Buna N O-rings and back-ups standard.

**Standard Ported Body:** Weight: 0.16 kg. (0.35 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: 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.

**Note:** See page 3.400.1 for all E-Coil retrofit applications.

**TO ORDER**

SV08-20

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

\*\*Includes Std. Coil Nut

<sup>†</sup> DS, DW or DL terminations only.

Coils with internal diode are available. Consult factory.