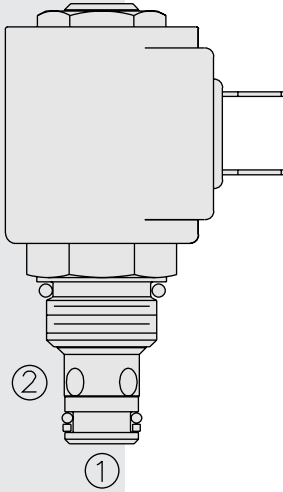


## SV08-20 Poppet, 2-Way, Normally Closed



### 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 ms De-energized: 46 ms

**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

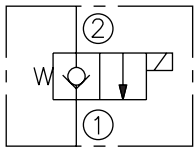
**Seal Kit:** SK08-2X-T; See page 8.650.1

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

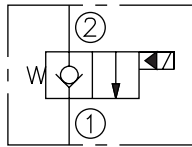
For E-coils manufactured prior to 1-1-04, see page 3.400.1 for coil nut info.

### SYMBOLS

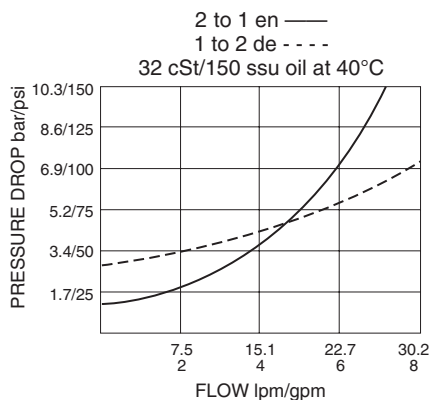
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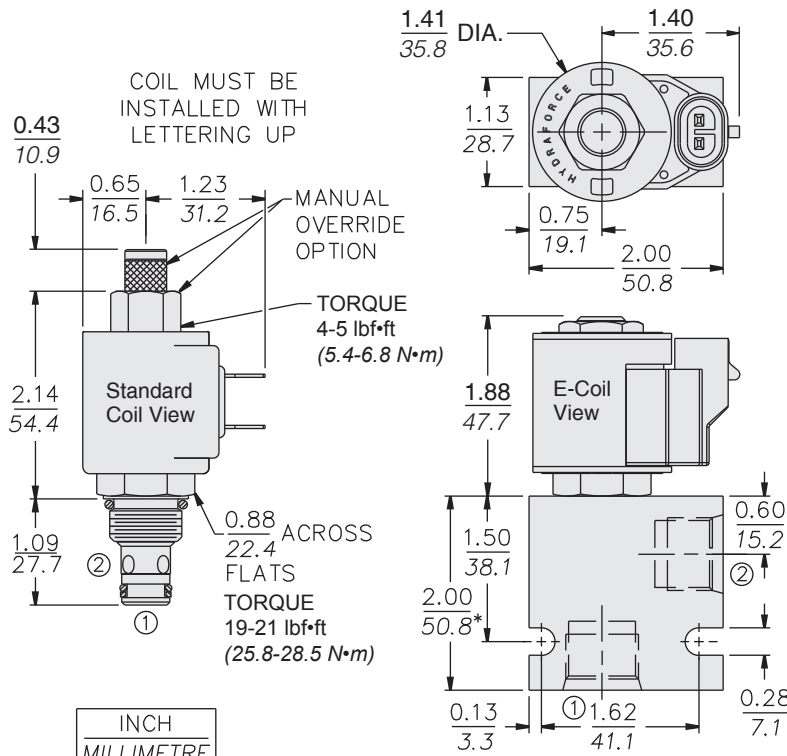
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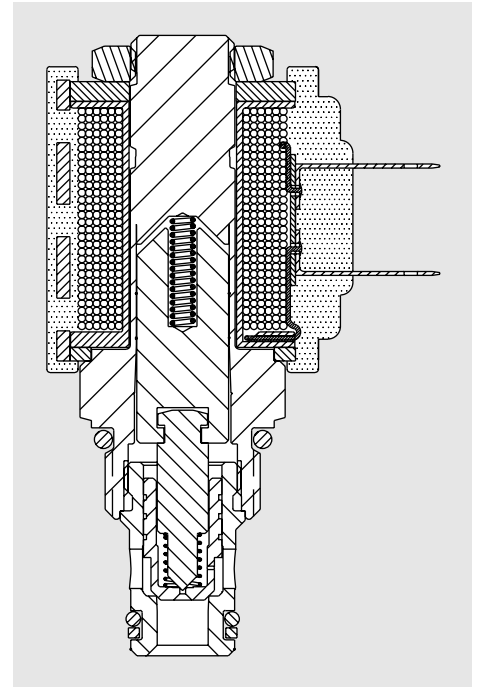
### PERFORMANCE (Cartridge Only)



**DIMENSIONS**



\* BSP BODY - 55.9 mm



**MATERIALS**

**Cartridge:** Weight: 0.09 kg (0.20 lb); 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 lb); 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 lb); Unitized thermoplastic encapsulated, Class H high temperature magnet wire. See page 3.200.1.

**E-Coil:** Weight: 0.14 kg (0.3 lb); 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**

<b>SV08-20</b> - - - - -			
<b>Option</b>	<b>Voltage Std. Coil</b>	<b>Termination (VDC) Std. Coil</b>	
None (Blank)	<b>0</b> Less Coil**	<b>DS</b> Dual Spades	
150µ Screen <b>S</b>	<b>10</b> 10 Vdc†	<b>DG</b> DIN 43650	
Manual Override <b>M</b>	<b>12</b> 12 Vdc	<b>DL</b> Leadwires (2)	
	<b>24</b> 24 Vdc	<b>DL/W</b> Leads w/Weatherpak® Connectors	
<b>Porting</b>	<b>36</b> 36 Vdc	<b>DR</b> Deutsch DT04-2P	
Cartridge Only <b>0</b>	<b>48</b> 48 Vdc	<b>Termination (VAC) Std. Coil</b>	
SAE 8 <b>8T</b>	<b>24</b> 24 Vac	<b>AG</b> DIN 43650	
3/8 in. BSP* <b>3B</b>	<b>115</b> 115 Vac	<b>AP</b> 1/2 in. Conduit	
*BSP Body; U.K. Mfr. Only	<b>230</b> 230 Vac	<b>Termination (VDC) E-Coil</b>	
	**Includes Std. Coil Nut	<b>ER</b> Deutsch DT04-2P (IP69K Rated)	
	† DS, DW or DL terminations only.	<b>EY</b> Metri-Pack® 150 (IP69K Rated)	
<b>Seals</b>	<b>E-Coil</b>		
Buna N (Std.) <b>N</b>	<b>10</b> 10 Vdc		
Fluorocarbon <b>V</b>	<b>12</b> 12 Vdc		
	<b>20</b> 20 Vdc		
	<b>24</b> 24 Vdc		

Coils with internal diode are available. Consult factory.