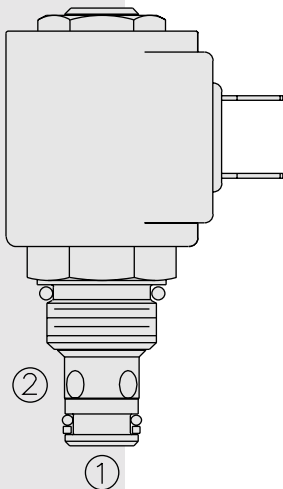


SOLENOID VALVES

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 ssu)

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

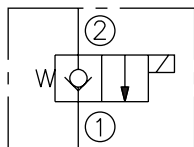
Seal Kit: SK08-2X-T; See page 8.650.1

Coil Nut: Part No. 7004400;

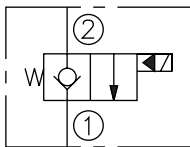
For E-coils manufactured prior to 1-1-04, see page 3.400.1 for coil nut info.

SYMBOLS

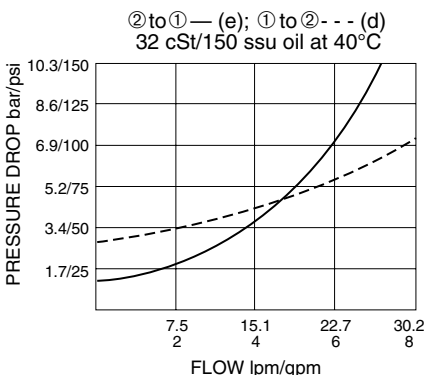
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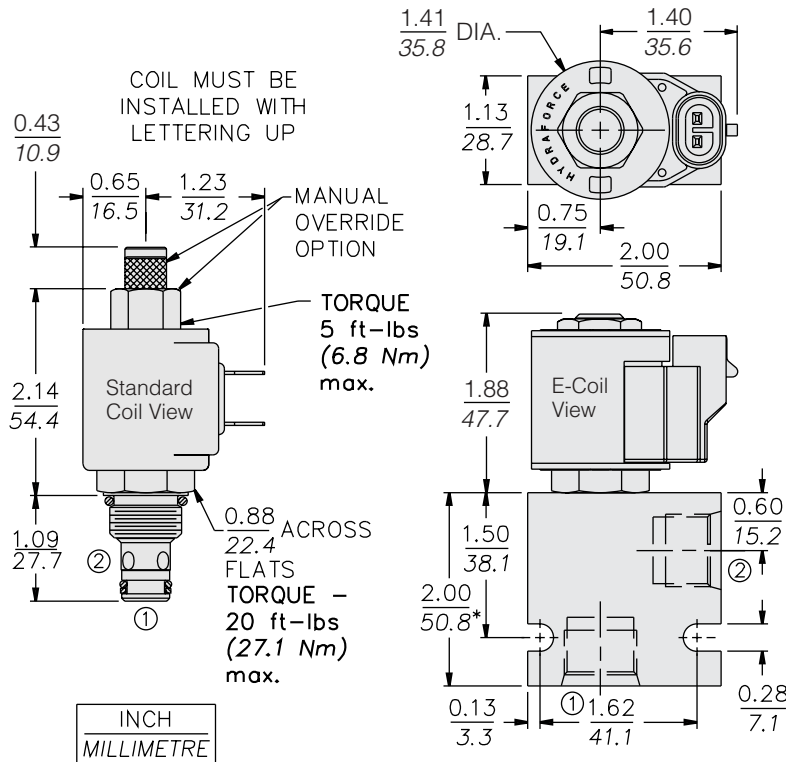
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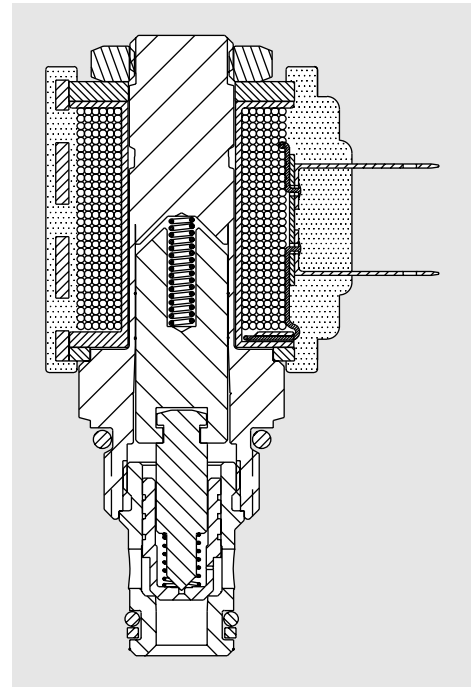
PERFORMANCE (Cartridge Only)



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 240 bar (3500 psi); See page 8.008.1. Ductile iron and steel bodies available; dimensions may differ; consult factory.

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