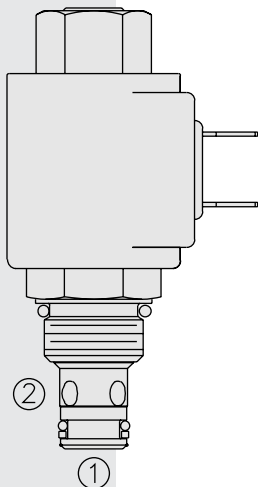


SV08-21 Poppet, 2-Way, Normally Open



DESCRIPTION

A solenoid-operated, 2-way, piloted, poppet-type, normally open, screw-in, hydraulic cartridge valve designed for low leakage in load-holding applications.

OPERATION

When de-energized, the **SV08-21** allows flow from ② to ①. Flow from ① to ② is severely restricted in this mode. If the ② to ① path is required see model SV08-23, page 1.050.1.

When energized, the valve's poppet closes on its seat, blocking flow from ② to ①. In this mode the cartridge will allow ① to ② flow after overcoming the solenoid force (requires 3.4 to 10.3 bar / 50 to 150 psi).

Operation of Manual Override Option: To override, push and hold override button.

FEATURES

- Continuous-duty rated coil.
- Hardened seat for long life and low leakage.
- Optional coil voltages and terminations.
- Efficient wet-armature construction.
- 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)

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: 50 msec.; De-energized: 16 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

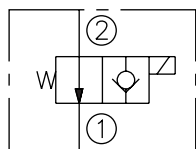
Seal Kit: SK08-2X-T; See page 8.650.1

Coil Nut: Part No. 7004410;

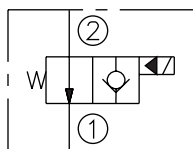
For E-coils manufactured prior to 1-1-04, see page 3.400.1 for coil nut info.

SYMBOLS

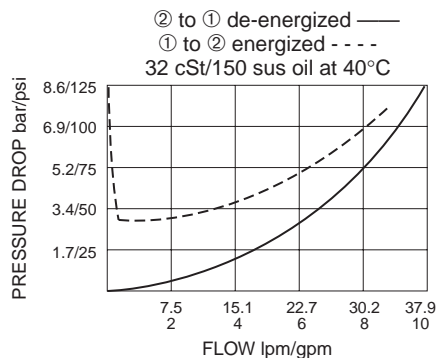
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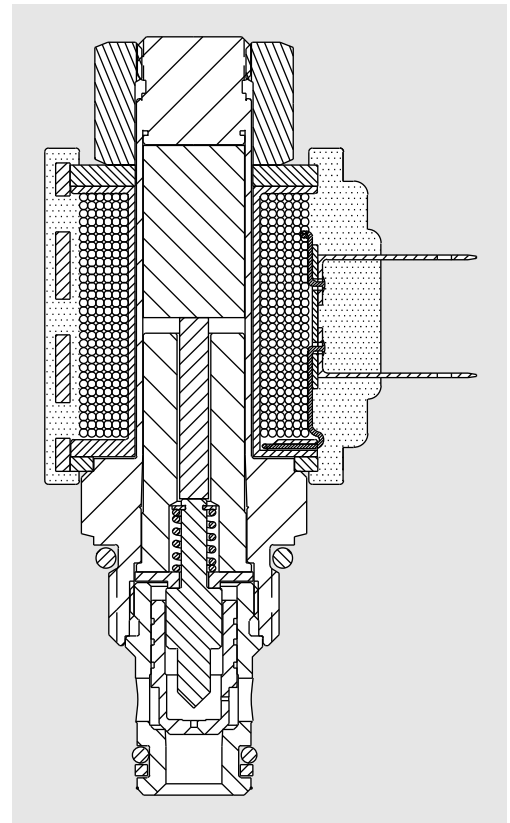
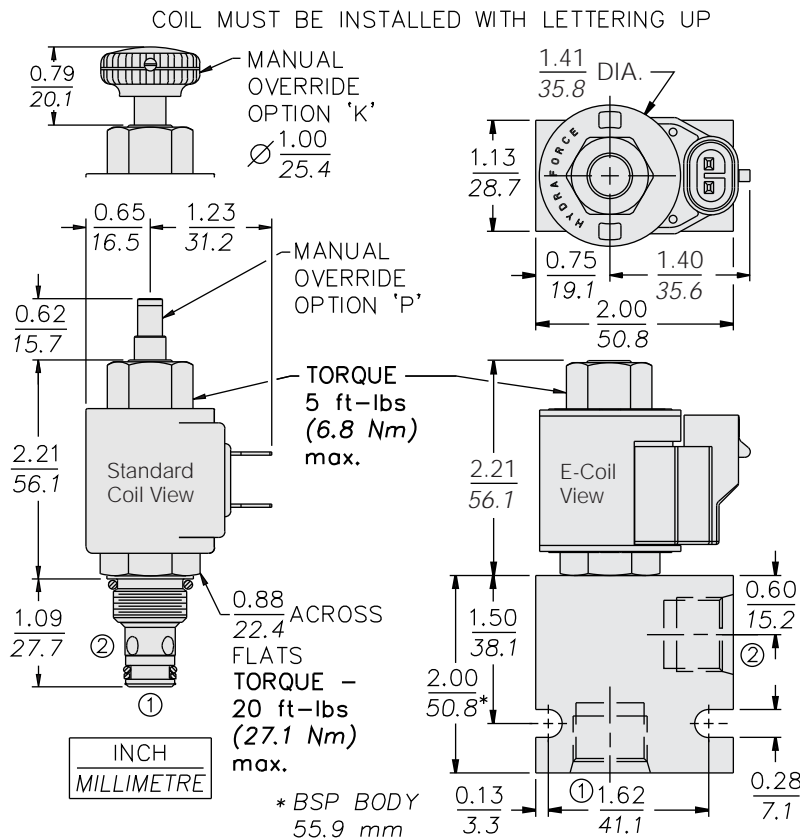
ISO:



PERFORMANCE (Cartridge Only)



DIMENSIONS



MATERIALS

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

SV08-21 - - -

Option	Voltage	Termination (VDC)
None (Blank)	Std. Coil	Std. Coil
Manual Override without Knob P	0 Less Coil**	DS Dual Spades
Manual Override with Knob K	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)
	115 115 VAC	Std. Coil
	230 230 VAC	AG DIN 43650
		AP 1/2 in. Conduit
		Termination (VDC)
		E-Coil
	E-Coil	ER Deutsch DT04-2P (IP69K Rated)
	10 10 VDC	EY Metri-Pack® 150 (IP69K Rated)
	12 12 VDC	
	20 20 VDC	
	24 24 VDC	

Porting

Cartridge Only **0**

SAE 4 **4T**

SAE 6 **6T**

1/4 in. BSP* **2B**

3/8 in. BSP* **3B**

*BSP Body; U.K. Mfr. Only

Seals

Buna N (Std.) **N**

Fluorocarbon **V**

Polyurethane **P**

**Includes Std. Coil Nut

† DS, DW or DL terminations only.

Coils with internal diode are available. Consult factory.