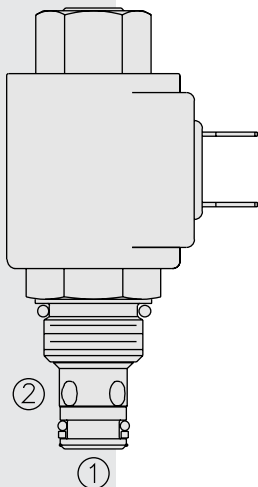


SV08-23 Poppet, 2-Way, Normally Open



DESCRIPTION

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

OPERATION

When de-energized, the **SV08-23** poppet lifts to open flow from ② to ①. Flow is also open from ① to ②.

When energized, the cartridge acts as a check valve, allowing flow from ① to ②, while blocking flow from ② to ① 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 solenoid.
- 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: 30 msec.; De-energized: 60 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

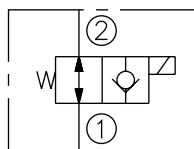
Seal Kit: SK08-2X-T; See page 8.650.1

Coil Nut: Part No. 7004410;

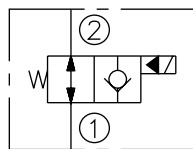
For E-coils manufactured prior to 1-1-04, see page 3.400.1 for coil nut info.

SYMBOLS

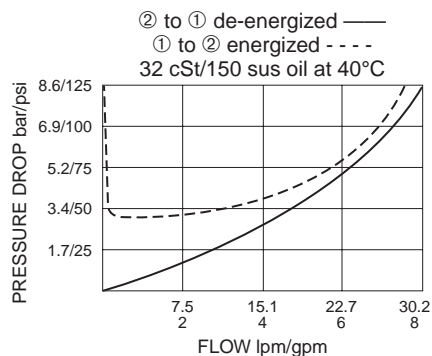
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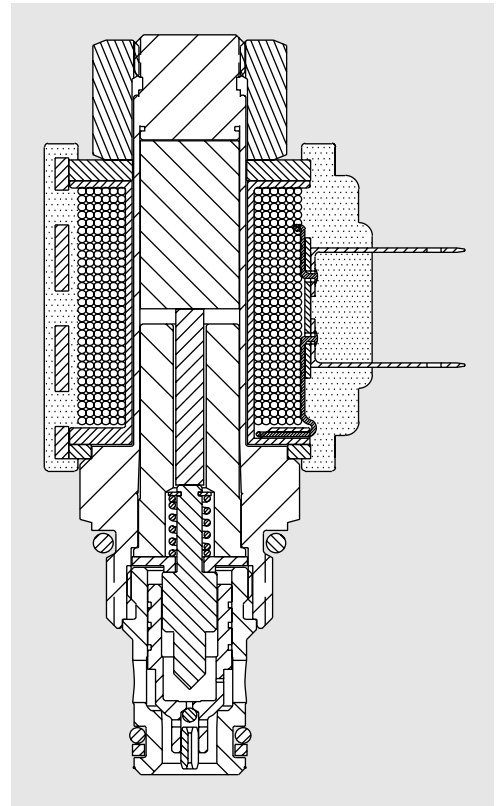
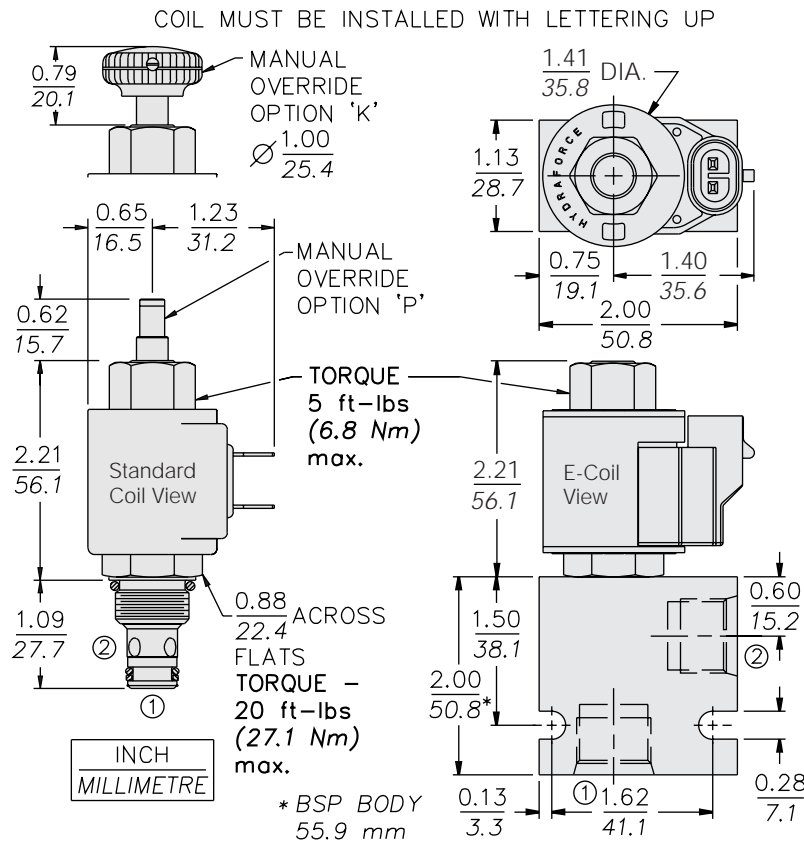
ISO:



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 polyester elastomer 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

SV08-23

Option		Voltage Std. Coil	Termination (VDC) Std. Coil
None (Blank)		0 Less Coil**	DS Dual Spades
152µ Screen	S	10 10 VDC†	DG DIN 43650
Manual Override without knob	P	12 12 VDC	DL Leadwires (2)
Manual Override with knob	K	24 24 VDC	DL/W Leads w/Weatherpak® Connectors
		36 36 VDC	DR Deutsch DT04-2P
		48 48 VDC	
Porting		24 24 VAC	Termination (VAC) Std. Coil
Cartridge Only	0	115 115 VAC	AG DIN 43650
SAE 4	4T	230 230 VAC	AP 1/2 in. Conduit
SAE 6	6T		Termination (VDC) E-Coil
1/4 in. BSP*	2B		ER Deutsch DT04-2P (IP69K Rated)
3/8 in. BSP*	3B		EY Metri-Pack® 150 (IP69K Rated)
1/2 in. BSP*	4B		
*BSP Body; U.K. Mfr. Only		E-Coil	
		10 10 VDC	
Seals		12 12 VDC	
Buna N (Std.)	N	20 20 VDC	
Fluorocarbon	V	24 24 VDC	

**Includes Std. Coil Nut
† DS, DW or DL terminations only.

Coils with internal diode are available. Consult factory.