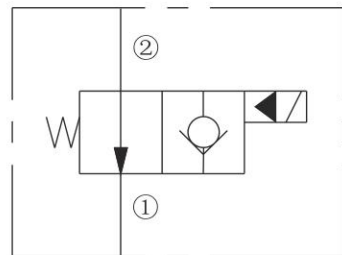
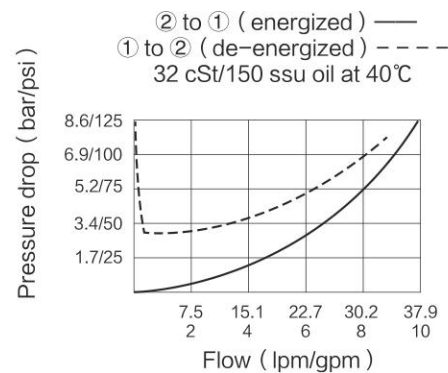


ISO SYMBOL



PERFORMANCE (Cartridge Only)



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, INSV08-21 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 INSV08-23, 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.

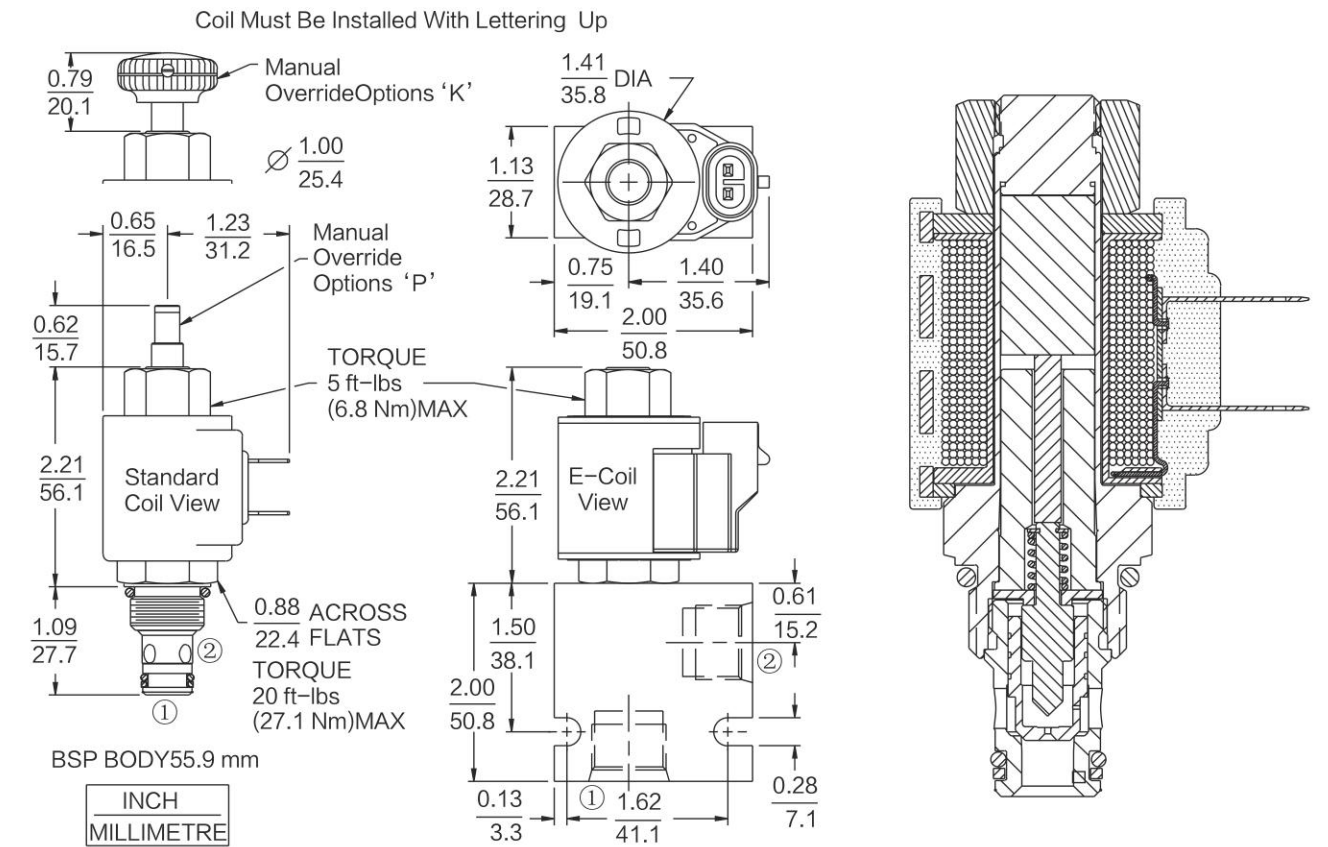
FEATURES

- 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 Options.
- 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 Buna N 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)
Fluids: Mineral-based or synthetics with lubricating properties at viscosities of 7.4 to 420 cSt (50 to 2000 ssu)
Cavity: T08-2E; See bottom of this catalog.

DIMENSIONS



MATERIALS

Cartridge: Weight: 0.09kg (0.20lbs) INSV08-21

Steel with hardened work surfaces.
 Zinc-plated exposed surfaces;
 Buna N O-rings and back-standard.

Standard Ported Body: Weight:

0.16kg (0.35lbs) ; Anodized high strength 6061 T6 aluminum alloy, rated to 240 bar (3500 psi); Ductile iron bodies available; dimensions may differ.

Standard Coil: Weight:

0.11kg (0.25lbs) ; Unitized thermoplastic encapsulated, Class H high-temperature magnet wire.

E-Coil: Weight: 0.14kg (0.3lbs) ;

Perfect wound, fully encapsulated with rugged external metal shell; Rated up to IP69K with integral connectors.

TO ORDER

Options	Voltage Std. Coil	Termination (VDC) Std. Coil
None (Blank)	0 Less Coil**	DS Dual Spades
Manual Override Without Knob P	10 10 VDC†	DG DIN 43650
Manual Override with Knob K	12 12 VDC	DL Leadwires (2)
	24 24 VDC	DL/W Leads w/ Weatherpak® Connectors
	36 3 VDC	DR Deutsch DT04-2P
	48 48 VDC	
	24 24 VAC	Termination (VAC) Std. Coil
	115 115 VAC	AG DIN 43650
	230 230 VAC	AP 1/2 in. Conduit
		Termination (VDC) E-Coil
		ER Deutsch DT04-2P (IP69K Rated)
		EL Leadwires (2)
		EY Metri-Pack® 150 (IP69K Rated)

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

Porting	Seals
Cartridge Only 0	Buna N (Std.) N
SAE 4 4T	Fluorocarbon V
SAE 6 6T	
SAE 8 8T	
1/4 in. BSP* 2B	
3/8 in. BSP* 3B	

Coils with internal diode are