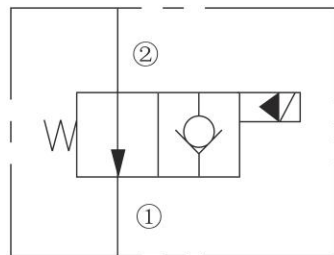
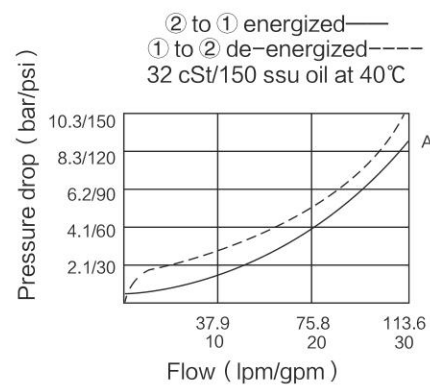


ISO SYMBOL



PERFORMANCE (Cartridge Only)



DESCRIPTION

A solenoid-operated, 2-way, normally open, poppet-type, screw-in hydraulic cartridge valve, designed to function as a load holding or blocking valve in applications requiring low internal leakage.

OPERATION

When energized, INSV12-21 acts as a check valve, allowing flow to pass from ① to ②, while blocking flow in the reverse direction. When de-energized, the poppet lifts to open the ② to ① flow path after overcoming the solenoid force (requires 3.4 to 10.3 bar / 50 to 150 psi). In this mode, flow from ① to ② is severely restricted. If this path is required, see model INSV12-23, Operation of Manual Override Option: To override, push and hold override button.

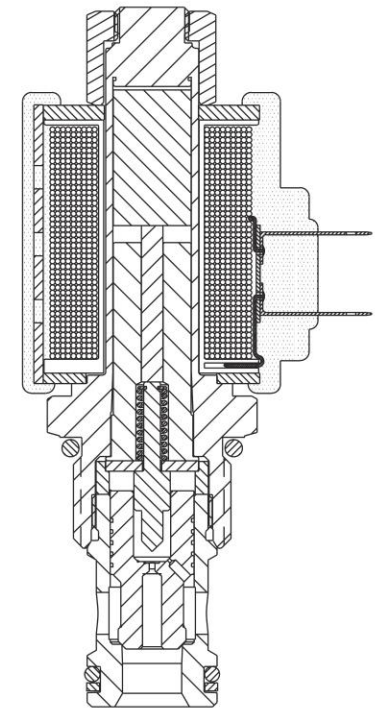
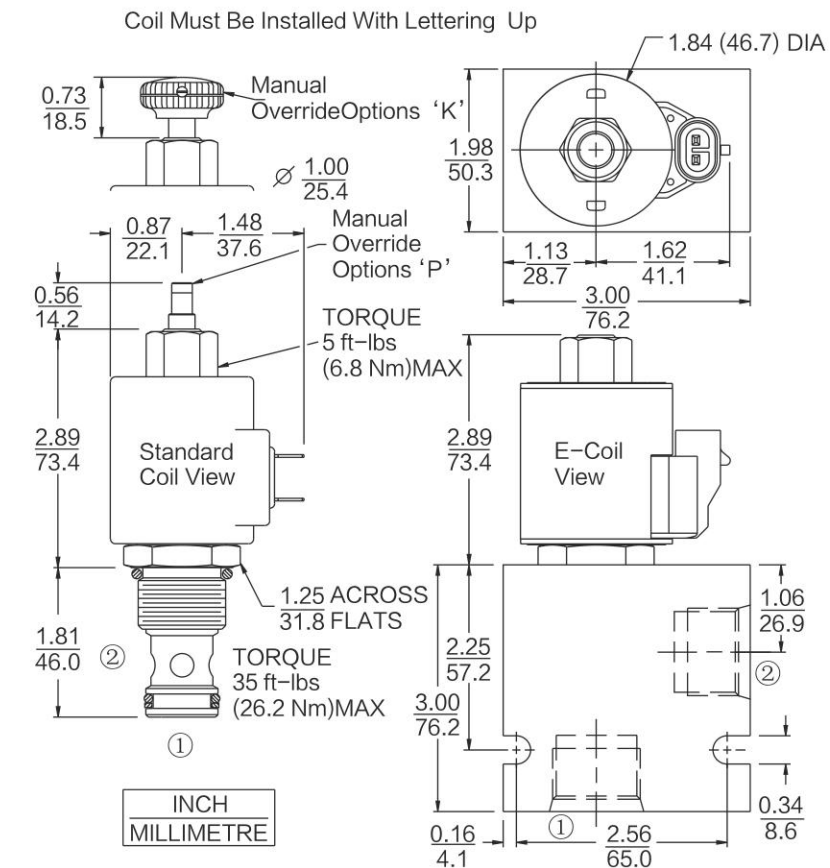
FEATURES

- 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 Options.
- Optional waterproof E-Coils rated up to IP69K.
- Cost effective cavity.

RATINGS

Operating Pressure: 240 bar (3500 psi)
Flow: See Performance Chart
Internal Leakage: 0.15 cc/minute (3 drops/minute) max. at 240 bar (3500 psi)
Temperature: -40°C 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: 110 msec.; De-energized: 40 msec.
Initial Coil Current Draw at 20°C :
Standard Coil: Standard Coil: 1.67 amps at 12 VDC; 0.18 amps at 115 VAC (full wave rectified).
E-Coil: 1.7 amps at 12 VDC; 0.85 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: T12-2A; See bottom of this catalog.

DIMENSIONS



MATERIALS

Cartridge: Weight: 0.25kg (0.55lbs)
 Steel with hardened work surfaces.
 Zinc-plated exposed surfaces;
 Buna N O-rings and back-ups standard.

Standard Ported Body: Weight: 0.57kg (1.25lbs) ; Anodized high strength 6061 T6 aluminum alloy, rated to 240 bar (3500 psi); Ductile iron bodies available; dimensions may differ.

Standard Coil: Weight: 0.27kg (0.60lbs) ; Unitized thermoplastic encapsulated, Class H high temperature magnet wire.

E-Coil: Weight: 0.41kg (0.9lbs) ; 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
Without Knob	10 10 VDC†	DG DIN 43650
Manual Override	12 12 VDC	DL Leadwires (2)
With Knob	24 24 VDC	DL/W Leads w/ Weatherpak® Connectors
	36 36 VDC	DR Deutsch DT04-2P
	48 48 VDC	
	24 24 VAC	Termination (VAC) Std. Coil
	115 115 VA	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)

Coils with internal diode are