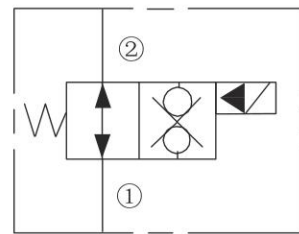


ISO SYMBOL



DESCRIPTION

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

OPERATION

When de-energized, INSV10-29 allows flow in both directions. When energized, the valve's poppet closes on its seat, blocking flow from 2 to 1 or 1 to 2.

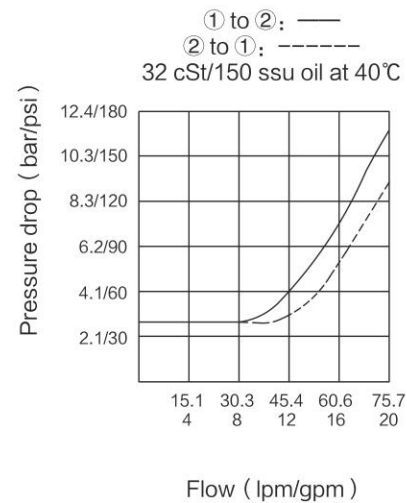
FEATURES

- Continuous-duty rated coil.
- Optional coil voltages and terminations.
- Efficient wet-armature construction.
- Manual Override Options.
- Cartridges are voltage interchangeable.
- Optional waterproof E-Coils rated up to IP69K.
- Hardened seat for long life and low leakage.
- Unitized, molded coil design.
- Cost effective cavity.

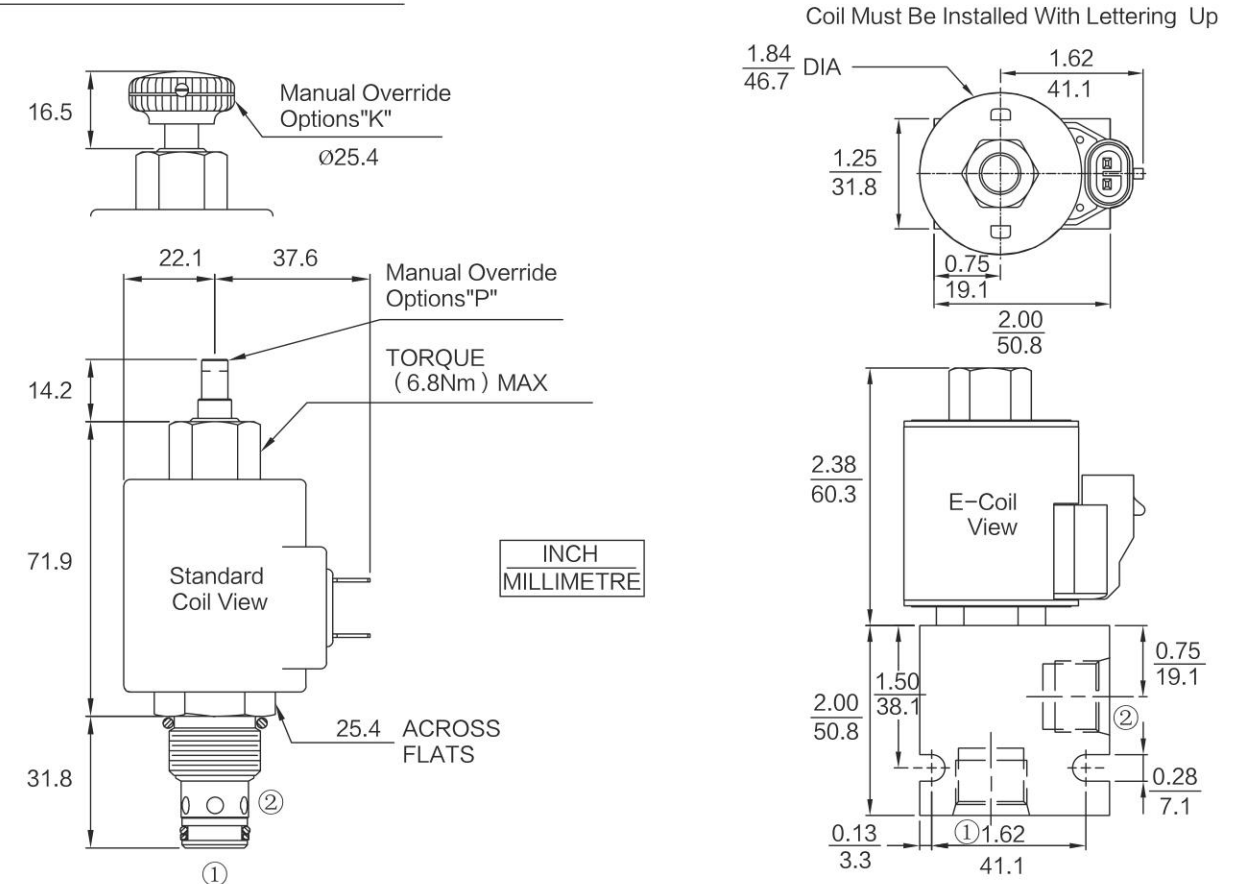
RATINGS

**Operating Pressure:** 240bar.  
**Proof Pressure:** 345bar.  
**Flow:** 75.7L/min.  
**Internal Leakage:** 0.25 ml/minute (5 drops/minute) max. at 207 bar (3000 psi)  
**Temperature:** -40°C 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 ms; Energized: 40 ms; De-energized: 32 ms  
**Initial Coil Current Draw at 20°C :**  
**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 240 bar (3500 psi)  
**Fluids:** Mineral-based or synthetics with lubricating properties at viscosities of 7.4 to 420 cSt (50 to 2000 sus)  
**Cavity:** T10-2B, See bottom of this catalog.

PERFORMANCE (Cartridge Only)



DIMENSIONS



MATERIALS

**Cartridge:** Weight: 0.18kg (0.40lbs) ;  
 Steel with hardened work surfaces. Zinc-plated exposed surfaces; Buna N O-rings and back-ups standard.

**Standard Ported Body:** Weight: 0.16kg (0.35lbs) ; Anodized high strength aluminum alloy, rated to 207 bar (3000 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 (0.90lb) ; Perfect wound, fully encapsulated with rugged external metal shell; Rated up to IP69K with integral connectors.

TO ORDER

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

Coils with internal diode are