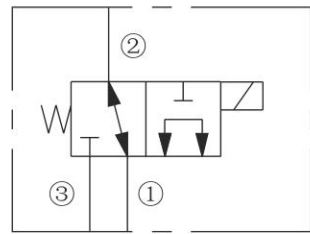
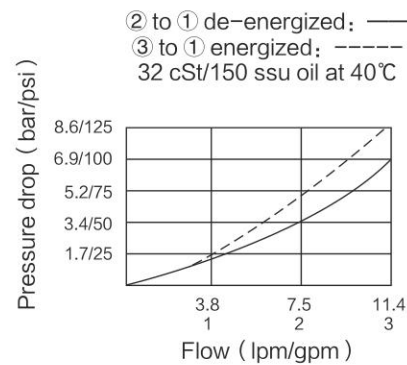


ISO SYMBOL



PERFORMANCE (Cartridge Only)



DESCRIPTION

A solenoid-operated, three-way, direct-acting, spool-type, screw-in hydraulic cartridge valve.

OPERATION

When de-energized, INSV08-31 allows flow from ② to ①, while blocking flow at ③. When energized, the valve's spool shifts to open from ① to ③, while blocking at ②. While port 1 may be fully pressurized, it is not intended to be used as the inlet. Operation of Manual Override Option: To override, push button in and twist counterclockwise 180°. The internal spring will push the button out. In this position, the valve may be only partially shifted. To assure full override shift, pull the button out to its fullest extension and hold it in this position. To return to normal valve function, push button in, twist clockwise 180° and release. Override will be detented in this position.

FEATURES

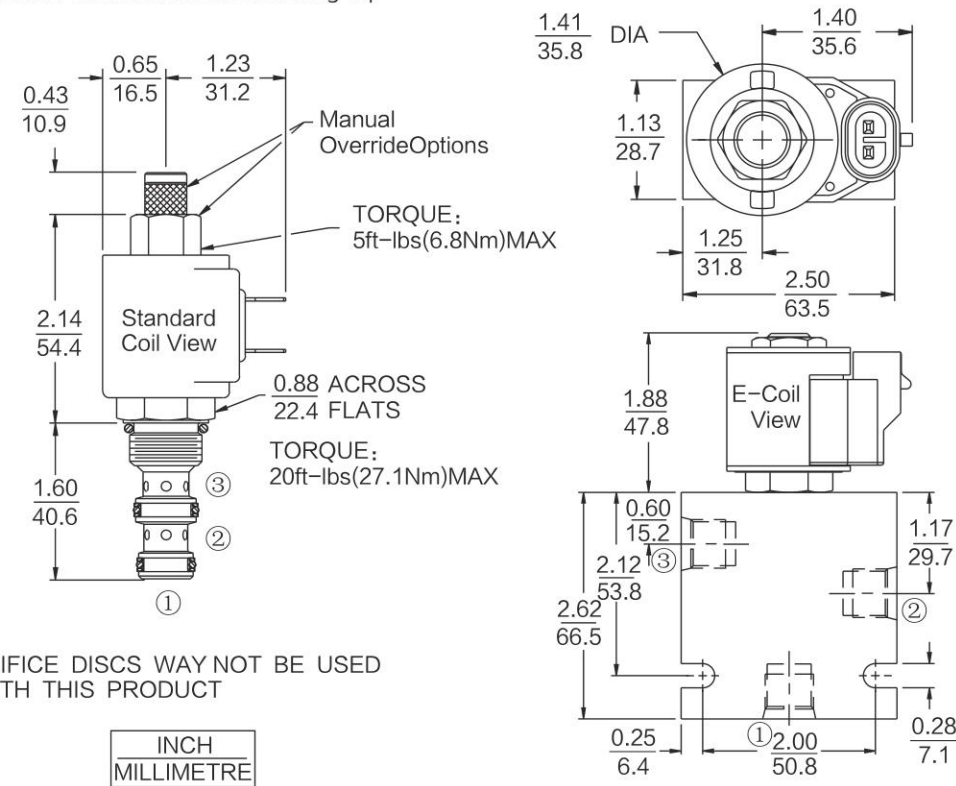
- Continuous-duty rated solenoid.
- Hardened precision spool and cage for long life.
- Optional coil voltages and terminations.
- Efficient wet-armature construction.
- Cartridges are voltage interchangeable.
- All ports may be fully pressurized.
- Manual Override Options.
- Optional waterproof E-Coils rated up to IP69K.
- Unitized, molded coil design.
- Compact size.

RATINGS

Operating Pressure: 207 bar (3000 psi)
Flow: See Performance Chart; Note: Under certain operating conditions this valve may be rated for higher flow. Consult factory.
Internal Leakage: 82 cc/minute (5 cu. in./minute) max. at 207 bar (3000 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: 30 ms; De-energized: 25 ms
Initial Coil Current Draw at 20°C:
Standard Coil: 1.2 A at 12 VDC; 0.13 A 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: T08-3A; See bottom of this catalog.

DIMENSIONS

Coil Must Be Installed With Lettering Up



ORIFICE DISCS WAY NOT BE USED WITH THIS PRODUCT

MATERIALS

Cartridge: Weight: 0.13kg (0.28lbs); Steel with hardened work surfaces. Zinc-plated exposed surfaces; Buna N O-rings and back-ups standard.
Standard Ported Body: Weight: 0.27kg (0.60lbs); 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); 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 M	10 10 VDC†	DG DIN 43650
	12 12 VDC	DL Leadwires (2)
	24 24 VDC	DLW Leads w/ Weatherpak® Connectors
	36 36 VDC	DR Deutsch DT04-2P
	48 48 VDC	
	24 24 VAC	
	115 115 VAC	
	230 230 VAC	
		Termination (VAC) Std. Coil
		AG DIN 43650
		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.