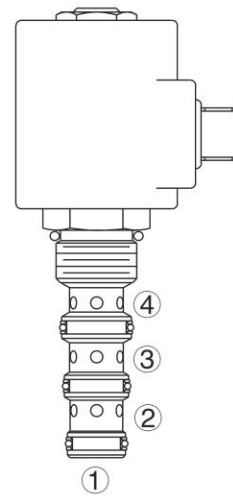
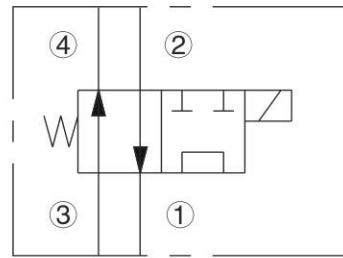


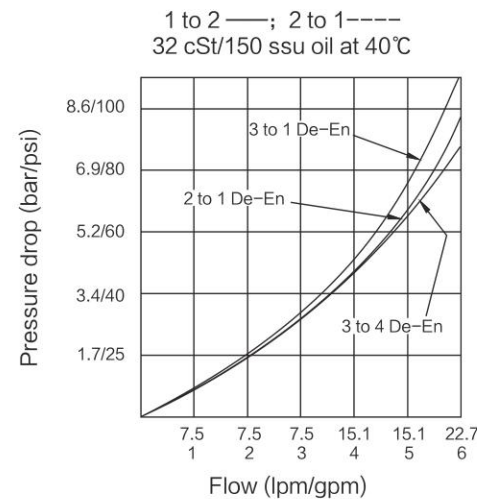
INSV10-44 Spool, 4-Way, 2-Position



ISO SYMBOL



PERFORMANCE (Cartridge Only)



DESCRIPTION

A solenoid-operated, 4-way, 2-position, direct-acting, spool-type, screw-in hydraulic cartridge valve.

OPERATION

When de-energized, the INSV10-44 allows flow from 3 to 4, as well as from 2 to 1. When energized, the cartridge's spool shifts to open 3 to 1 while blocking 4 and 2. 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

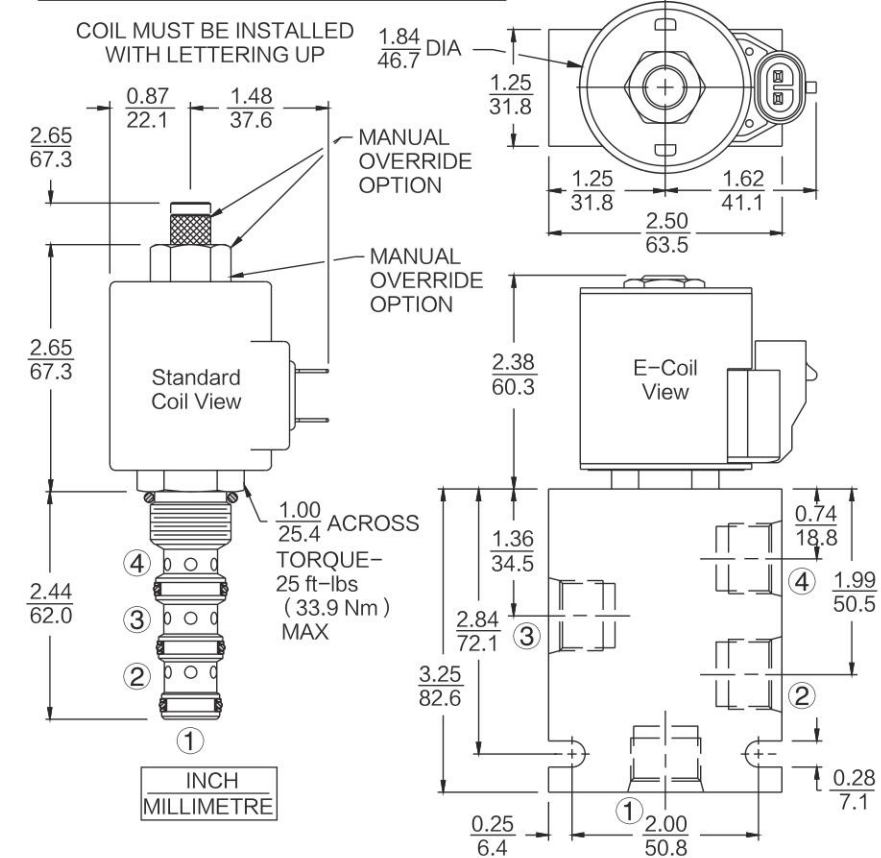
- Continuous-duty rated solenoid.
- Hardened precision spool and cage for long life.
- Optional coil voltages and terminations.
- Efficient wet-armature construction.
- All ports may be fully pressurized.
- Cartridges are voltage interchangeable.
- Manual override option.
- Optional waterproof E-Coils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

RATINGS

- Operating Pressure:** 207 bar (3000 psi)
- Proof Pressure:** 350 bar (5075 psi)
- Flow:** 23 lpm (6 gpm) max.
- Internal Leakage:** 82 cc/minute (5 cu. in./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
- 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 207 bar (3000 psi)
- Fluids:** Mineral-based or synthetics with lubricating properties at viscosities of 7.4 to 420 cSt (50 to 2000 sus)
- Installation:** No restrictions
- Cavity:** T10-4A; See bottom of this catalog.

INSV10-44

DIMENSIONS



MATERIALS

- Cartridge:** Weight: 0.20 kg. (0.45 lbs.); Steel with hardened work surfaces. Zinc-plated exposed surfaces. Buna N O-rings and polyester elastomer back-up standard.
- Standard Ported Body:** Weight: 0.36 kg. (0.80 lbs.); Anodized high-strength 6061 T6 aluminum alloy, rated to 207 bar (3000 psi). Ductile iron bodies available; dimensions may differ.
- Standard Coil:** Weight: 0.27 kg. (0.60 lbs.); Unitized thermoplastic encapsulated, Class H high temperature magnetwire.
- E-Coil:** Weight: 0.41 kg. (0.9 lbs.); Fully encapsulated with rugged external metal shell. Rated up to IP69K with integral connectors.

TO ORDER

INSV10-44		Termination (VDC) Std. Coil	
Porting	None (Blank)	DS	Dual Spades
Manual Override M	M	DG	DIN 43650
Manual Override Y	Y	DL	Leadwires (2)
Manual Override J	J	DL/W	Leads w/Weatherpak® Connectors
For Manual Override options see page 1.001.1		DR	Deutsch DT04-2P
Porting	Cartridge Only 0		Termination (VAC) Std. Coil
SAE 6	6T	AG	DIN 43650
SAE 8	8T	AP	1/2 in. Conduit Termination (VDC) E-Coil
1/4 in. BSP*	2B	EG	Deutsch DT04-2P (IP69K Rated)
3/8 in. BSP*	3B	EY	Metri-Pack® 150 (IP69K Rated)
*BSP Body; U.K. Mfr. Only			Coils with internal diode are available. Consult factory.
Seals	Buna N (Std.) N		
	Fluorocarbon V		
		Voltage Std. Coil	
		0	Less Coil**
		10	10 VDC†
		12	12 VDC
		24	24 VDC
		36	36 VDC
		48	48 VDC
		24	24 VAC
		115	115 VAC
		230	230 VAC
			**Includes Std. Coil Nut † DS, DW or DL terminations only.