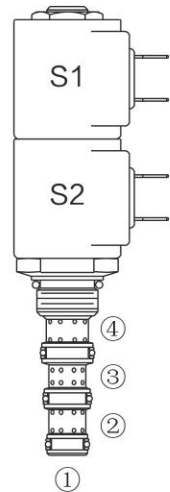
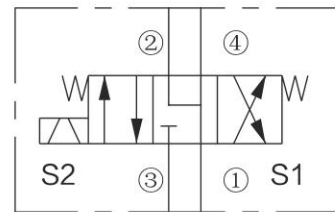


# INSV08-47D Spool, 4-Way, 3-Position, "Motor Spool"

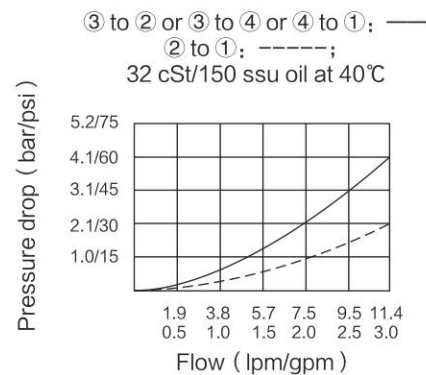
# INSV08-47D



ISO SYMBOL



## PERFORMANCE (Cartridge Only)



## DESCRIPTION

A solenoid-operated, 4-way, 3-position, direct-acting, spool-type, motor spool, screw-in hydraulic cartridge valve.

## OPERATION

When de-energized, INSV08-47D blocks flow to ③, while allowing flow from ② to ①, and from ④ to ①.

When coil #1 is energized, flow is allowed from ③ to ④, and from ② to ①. When coil #2 is energized, flow is allowed from ③ to ②, and from ④ to ①.

In circuits where work port flows are unequal due to cylinder ratios, the higher return flow should be directed to port ②. While ① may be fully pressurized, it is not intended for use as the valve's inlet.

Operation of Manual Override Option: To override, push the knurled button to activate the coil #2 (S2) function, or pull the knob to activate the coil #1 (S1) function.

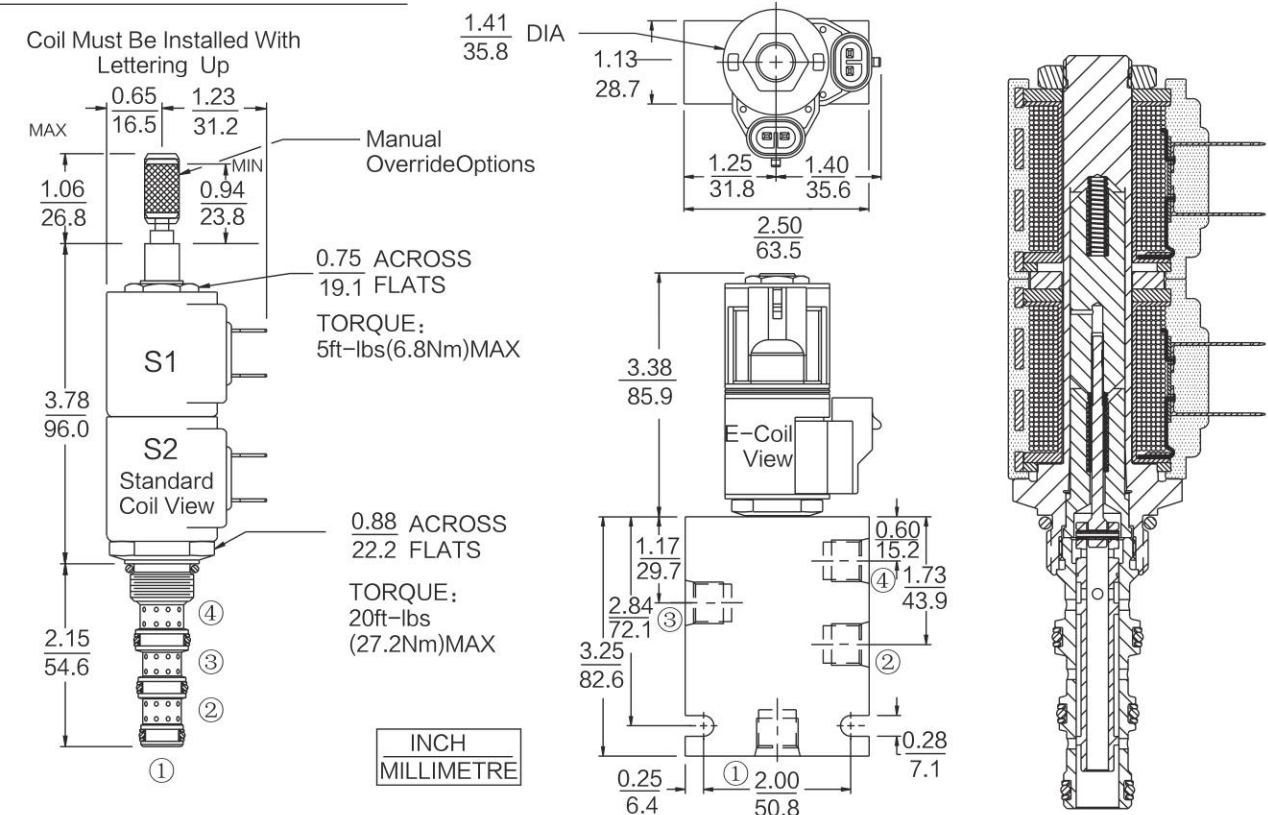
## FEATURES

- 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.
- Unitized, molded coil design.
- Compact size.
- Optional waterproof E-Coils rated up to IP69K.
- Manual Override Options.

## RATINGS

- Operating Pressure:** 207 bar (3000 psi)
- Flow:** MAX 11.4 lpm (3 gpm)
- Internal Leakage:** 164 cc/minute (10 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
- 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 A at 12 VDC; 0.7 A 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:** T08-4A; See bottom of this catalog.

## DIMENSIONS



## MATERIALS

**Cartridge:** Weight: 0.13kg (0.28lbs); INSV08-47D

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	Porting	Voltage Std. Coil	Termination (VDC) Std. Coil
None (Blank)	Cartridge Only	0 Less Coil**	DS Dual Spades
Manual Override M	SAE 6	10 10 VDC†	DG DIN 43650
	6T	12 12 VDC	DL Leadwires (2)
	2B	24 24 VDC	DLW Leads w/ Weatherpak® Connectors
	2B	24 24 VDC	DR Deutsch DT04-2P
	3B	115 115 VAC	<b>Termination (VAC) Std. Coil</b>
		230 230 VAC	AG DIN 43650
			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)

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