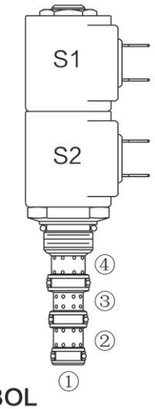
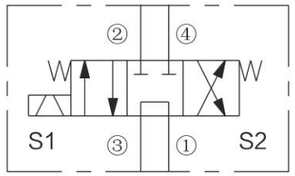
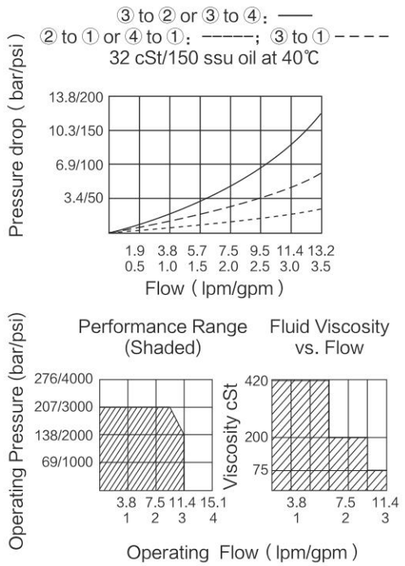


ISO SYMBOL



PERFORMANCE (Cartridge Only)



DESCRIPTION

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

OPERATION

When de-energized，INSV08-47A blocks cylinder ports, while allowing flow from ③ to ① . When coil S1 is energized, flow is allowed from ③ to ② , and from 4 to ① .

When coil S2 is energized, flow is allowed from ③ to 4, and from ② 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 knob to activate the coil (S2) function; pull the knob to activate the coil (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.
- Manual OverrideOptions.
- Optional waterproof E-Coils rated up to IP69K.

RATINGS

Operating Pressure:210 bar (3000 psi)

Flow:MAX 11.4 lpm (3.0 gpm)

Internal Leakage:

278 cc/minute (17 cu. in./minute) max. at 207 bar (3000 psi)

Temperature:-40℃ to 120℃，with Buna N seals

Coil Duty Rating:

Continuous from 85% to 115% of nominal voltage

Initial Coil Current Draw at 20℃ :

Standard Coil: 1.2 A at 12 VDC; 0.13 A at 115 VAC (full wave rectified).

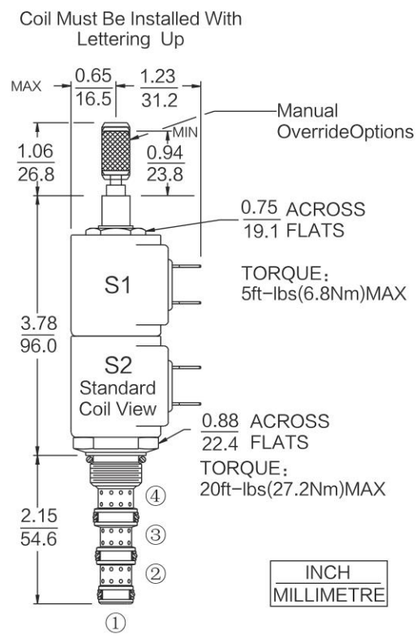
E-Coil: 1.4 A at 12 VDC; 0.7 A at 24 VDC

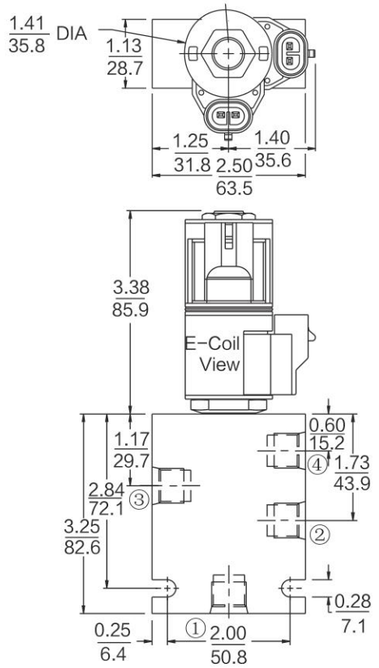
Minimum Pull-in Voltage:85% of nominal at 207 bar (3000 psi)

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)
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 highstrength 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 thermoplasti 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

INSV08-47A - - - - -

Options

None	(Blank)
Manual Override	M

Porting

Cartridge Only	0
SAE 6	6T
1/4 in. BSP*	2B
3/8 in. BSP*	3B

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.

E-Coil

10	10 VDC
12	12 VDC
20	20 VDC
24	24 VDC

Termination (VDC) Std. Coil

DS	Dual Spades
DG	DIN 43650
DL	Leadwires (2)
DL/W	Leads w/ Weatherpak® Connectors
DR	Deutsch DT04-2P

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)