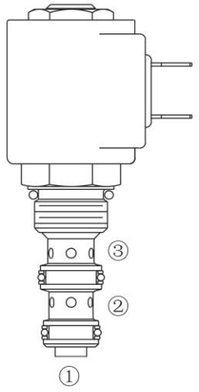
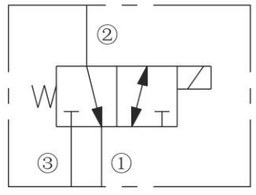
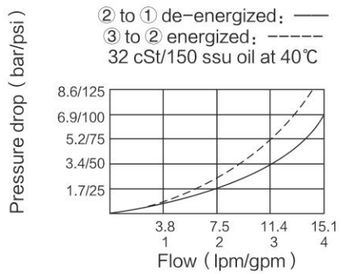
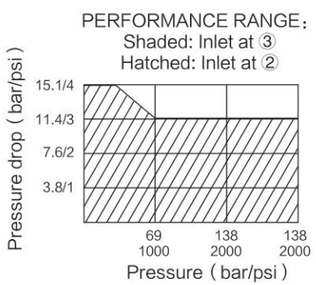


ISO SYMBOL



PERFORMANCE (Cartridge Only)





DESCRIPTION

A solenoid-operated, 3-way, direct-acting, spool-type, screw-in hydraulic directional valve.

OPERATION

When de-energized, INSV08-30 allows flow from ② to ① while blocking flow at ③.

When energized, the cartridge's spool shifts to open from ③ to ②, while blocking flow out ①. 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 counterclockwise180° . 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.

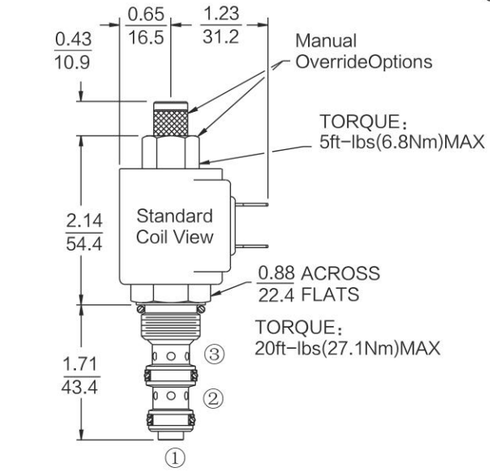
FEATURES

- 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 OverrideOptions.
- Optional waterproof E-Coils rated up to IP69K.
- Unitized, molded coil design.
- Fully guided spool.
- Compact size.

RATINGS

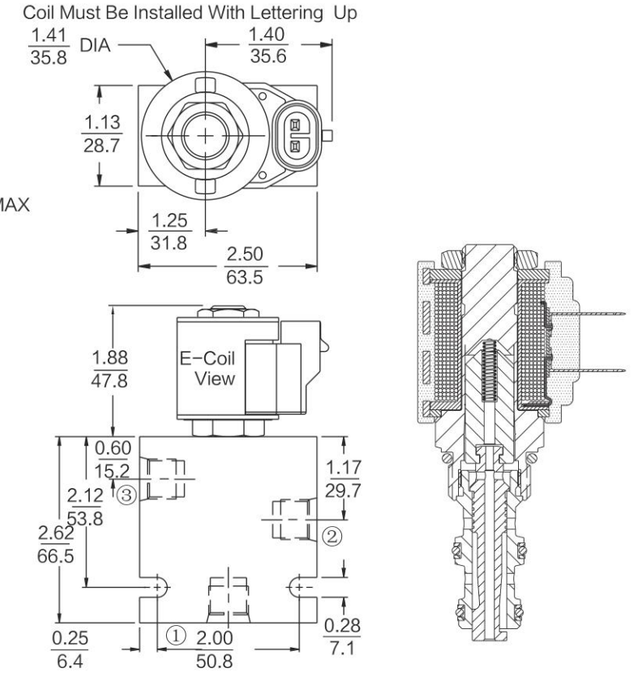
Operating Pressure:207 bar (3000 psi)
Flow: See Performance Chart
Internal Leakage: Port ③ (De-energized): 82 cc/minute (5 cu. in./minute) max.at 207 bar (3000 psi);Port ① (Energized): 164 cc/minute (10 cu. in./minute) max. at 207 bar (3000 psi)
Temperature:-40℃ to 120℃, with Buna N seals
Coil Duty Rating: Continuous from 85% to 115% of nominal voltage
Response Time: First indication of change of state with 100% voltage supplied at 80% of nominal flow rating: Energized: 22 ms; De-energized: 12 ms
Initial Coil Current Draw at 20℃ :
Standard Coil: 1.2 amps at 12 VDC;
0.13 amps 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



ORIFICE DISCS WAY NOT BE USED WITH THIS PRODUCT

INCH
MILLIMETRE



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); Ductileiron 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

INSV08- _ _ _

Options
None (Blank)
Manual Override M

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

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)

Coils with internal diode are