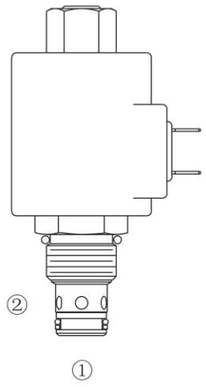
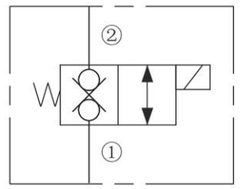
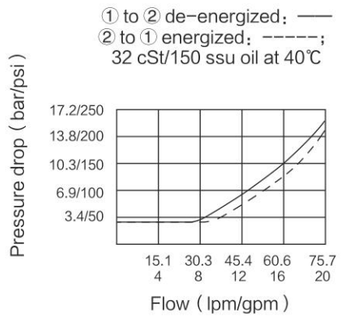


ISO SYMBOL



PERFORMANCE (Cartridge Only)



DESCRIPTION

A solenoid-operated, 2-way, normally closed, internally piloted, poppet-type,bi-directional blocking, screw-in hydraulic cartridge valve, designed for low leakage in load-holding applications.

OPERATION

When de-energized, INSV10-28 blocks flow in both directions. When energized, the valve's poppet opens on its seat, allowing flow from ② to ① or ① to ② .

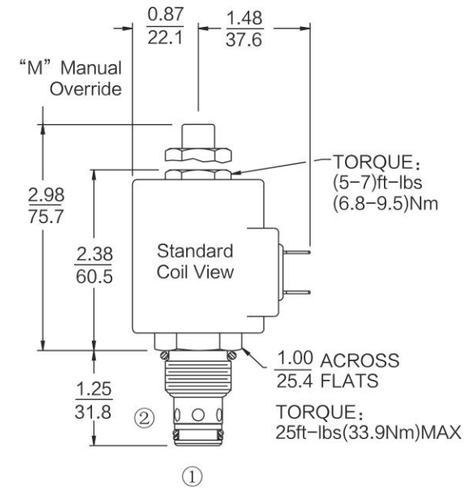
FEATURES

- Continuous-duty rated coil.
- Optional coil voltages and terminations.
- Cartridges are voltage interchangeable.
- Optional waterproof E-Coils rated up to IP69K.
- Hardened seat for long life and low leakage.
- Manual OverrideOptions.
- Industry common cavity.

RATINGS

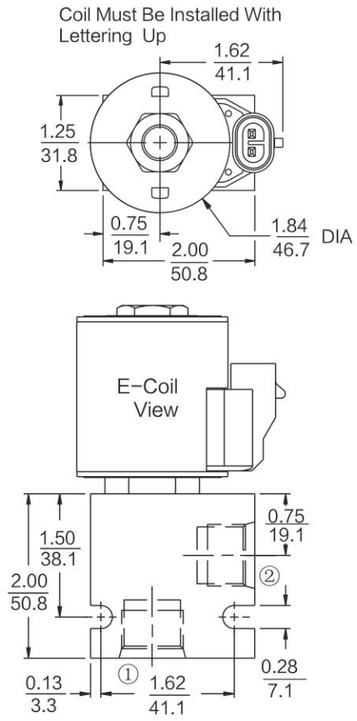
Operating Pressure:240 bar (3500 psi)
Flow:75.7 lpm (20 gpm)
Internal Leakage:
0.25 cc/minute (5 drops/minute) max. at 240 bar (3500 psi)
Temperature:-40℃ to 120℃, with Buna N seals
Coil Duty Rating:
Continuous from 85% to 115% of nominal voltage
Response Time: First indication of change of state with 100% voltage supplied at 80% of nominal flow rating: Energized: 40 ms.; De-energized: 32 ms.
Initial Coil Current Draw at 20℃ :
Standard Coil: 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 240 bar (3500 psi)
Fluids: Mineral-based or synthetics with lubricating properties at viscosities of 7.4 to 420 cSt (50 to 2000 ssu)
Cavity: T10-2B,See bottom of this catalog.

DIMENSIONS



INCH
MILLIMETRE

BSP BODY 55 mm



MATERIALS

Cartridge: Weight:0.16kg (0.35lbs) ;
Steel with hardened work surfaces. Zinc-plated exposed surfaces; Buna N O-rings and back-ups standard.
Standard Ported Body:Weight:
0.16kg (0.35lbs) ; Anodized highstrength 6061 T6 aluminum alloy,rated to 240 bar (3500 psi); Ductile iron bodies available; dimensions may differ.
Standard Coil: Weight:
0.27kg (0.60lbs) ; Unitized thermoplastic encapsulated, Class H high temperature magnet wire.
E-Coil: Weight:0.41kg (0.9lbs) ;
Fully encapsulated with rugged external metal shell. Rated up to IP69K with integral connectors.

TO ORDER

INSV10-28 - - - - -

Options
None (Blank)
Manual Override M

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

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