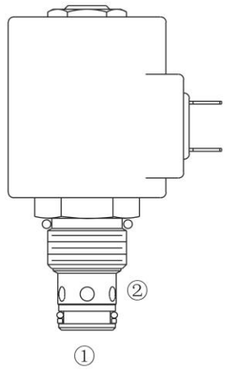
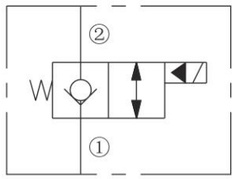
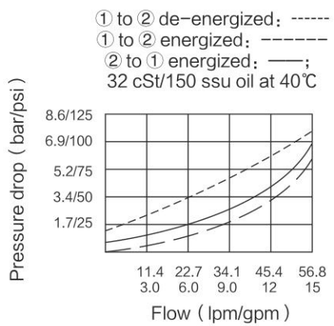


ISO SYMBOL



PERFORMANCE (Cartridge Only)



DESCRIPTION

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

OPERATION

When de-energized, INSV10-22 acts as a check valve, allowing flow to pass from ① to ② , while blocking flow from ② to ① . With the sensor option, the neutral sensor will signal ON or HIGH.
When energized, the ② to ① flow path opens. In this mode, flow is also allowed from ① to ② . With the sensor option, the neutral sensor will signal LOW or OFF.
Operation of Manual Override Option: To override, push button in, twist counterclockwise 180° and release. In this position, the valve will remain open.To return to normal operation, push button in, twist clockwise 180° and release.Override will be detented in this position.

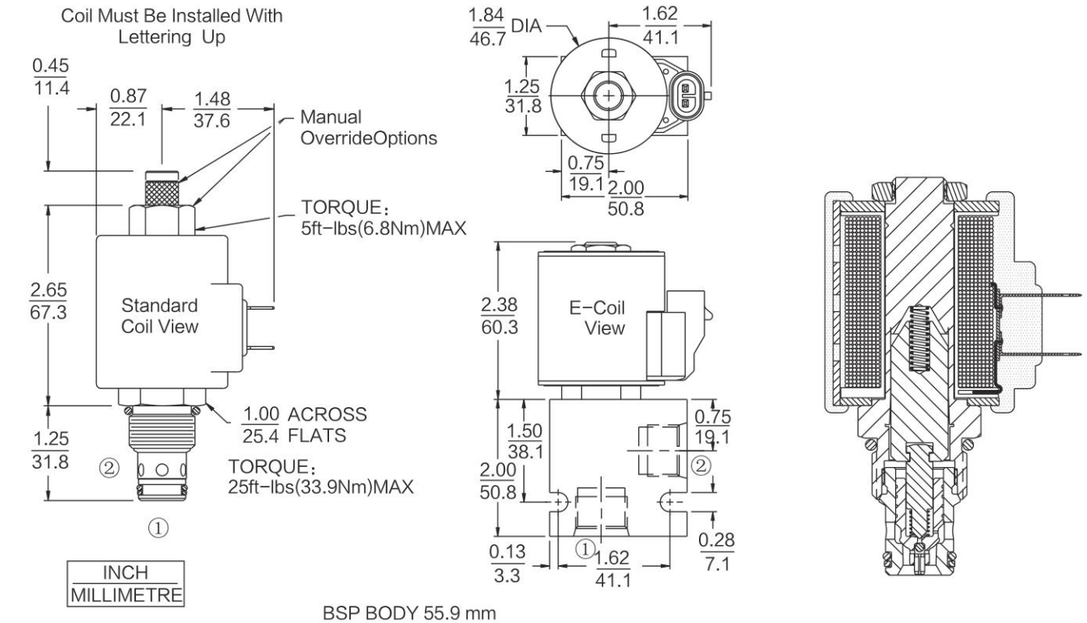
FEATURES

- Continuous-duty rated solenoid.
- Hardened seat for long life and low leakage.
- Optional coil voltages and terminations.
- Efficient wet-armature construction.
- Cartridges are voltage interchangeable.
- Manual OverrideOptions.
- 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: See Performance Chart
Internal Leakage:
0.15 cc/minute (3 drops/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: 40 msec; De-energized: 32 msec.Response Time with Sensor: 68 ms pull-in, 50 ms drop-out
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 VDCMinimum 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: T10-2B; See bottom of this catalog.

DIMENSIONS



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

INSV10-22 - - - - -

Options

None	(Blank)
Manual Override	M
Manual Override	Y
Manual Override	J

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 available. Consult factory.