

DESCRIPTION

A solenoid-operated, 2-way, normally closed, piloted poppet-type, screw-in hydraulic cartridge valve, intended to act as a blocking or load-holding device for low flow circuits.

OPERATION

When de-energized, the INSV08-20 acts as a check valve, allowing flow from ① to ②, while blocking flow from ② to ①. When energized, the cartridge's poppet lifts to open the ② to ① flow path. In this mode, flow from ① to ② is severely restricted. If this path is required, see model.

INSV08-22, 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.

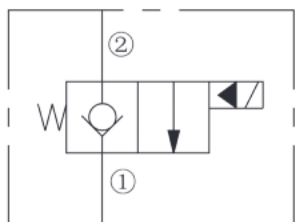
FEATURES

- Continuous-duty rated coil.
- Hardened seat for long life and low leakage.
- Optional coil voltages and terminations.
- Cartridges are voltage interchangeable.
- Unitized, molded coil design.
- Manual Override Options.
- Optional waterproof E-Coils rated up to IP69K.
- Industry common cavity.
- Compact size.

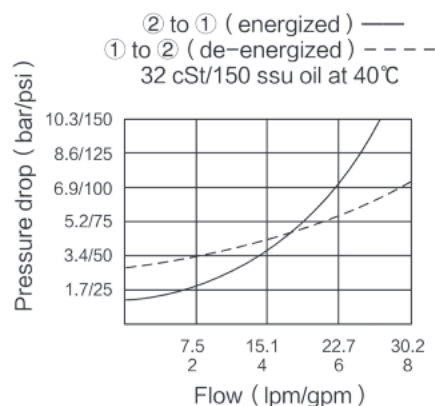
RATINGS

Operating Pressure: 207 bar (3000 psi)
Proof Pressure: 255 bar (3700 psi)
Flow: See Performance Chart
Internal Leakage: 0.15 cc/minute (3 drops/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
Response Time: First indication of change of state with 100% voltage supplied at 80% of nominal flow rating:
 Energized: 40 ms De-energized: 46ms
Initial Coil Current Draw at 20°C:
Standard Coil: 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: T08-2E; See page 297.

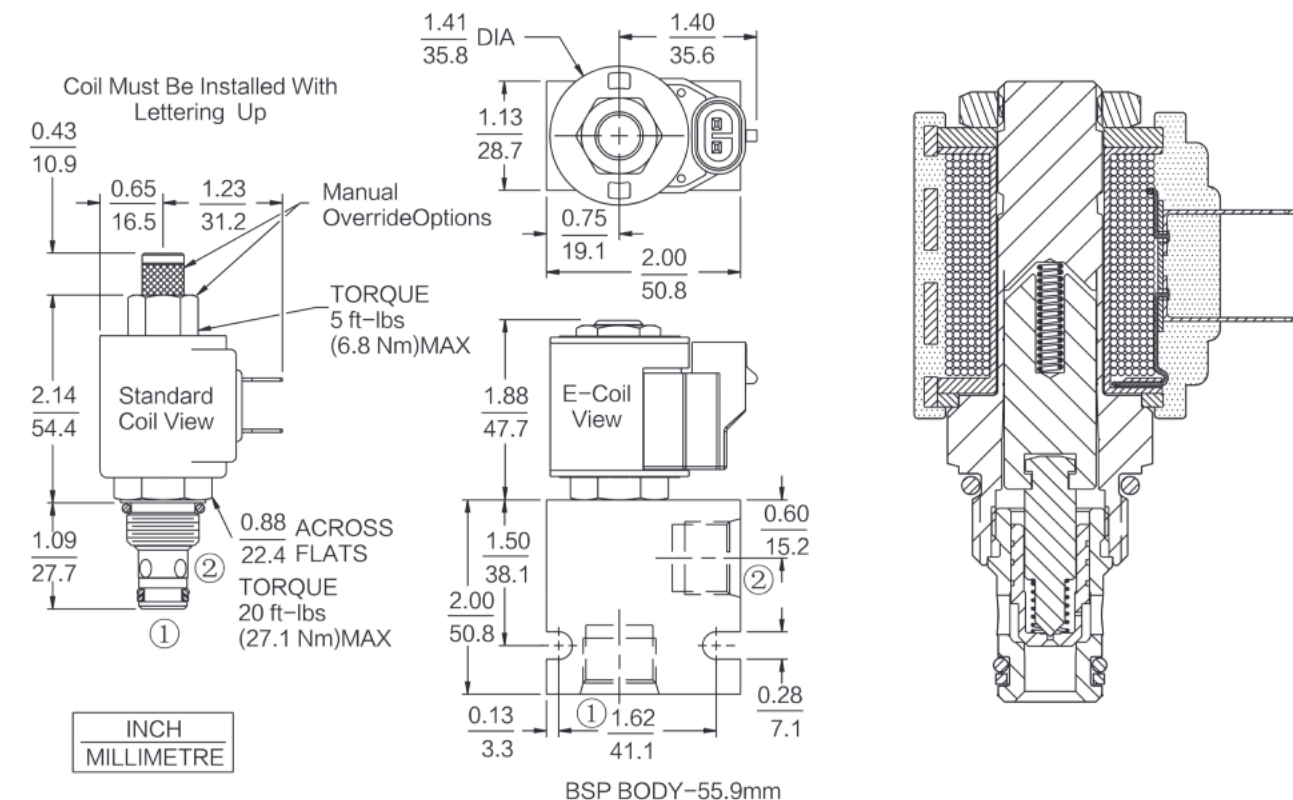
ISO SYMBOL



PERFORMANCE (Cartridge Only)



DIMENSIONS



MATERIALS

Cartridge: Weight: 0.09kg (0.20lbs) INSV08-20

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 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); Perfect wound, fully encapsulated with rugged external metal shell; Rated up to IP69K with integral connectors.

TO ORDER

Options

None (Blank)	S
150 μ Screen	M
Manual Override	

Porting

Cartridge Only	0
SAE 4	12T
SAE 6	6T
SAE 8	8T
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)

Coils with internal diode are available. Consult factory.