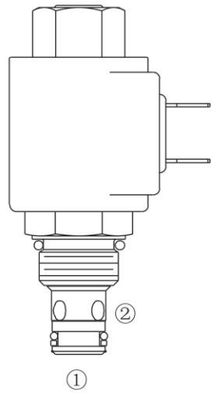
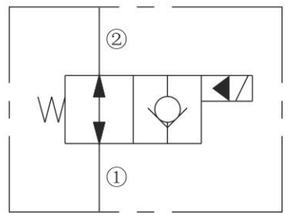
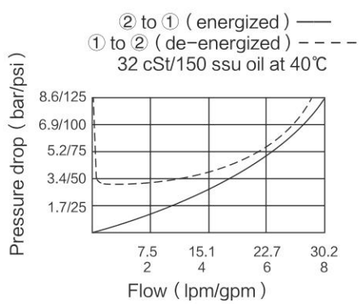


ISO SYMBOL



PERFORMANCE (Cartridge Only)



DESCRIPTION

A solenoid-operated, two-way, poppet-type, normally open, screw-in, hydraulic cartridge valve designed for low leakage in load-holding applications.

OPERATION

When de-energized, INSV08-23 poppet lifts to open flow from ② to ① . Flow is also open from ① to ② .
When energized, the cartridge acts as a check valve, allowing flow from ① to ② ,while blocking flow from ② to ① after overcoming the solenoid force (requires 3.4 to 10.3 bar / 50 to 150 psi).
Operation of Manual Override Option:
To override, push and hold override button.

FEATURES

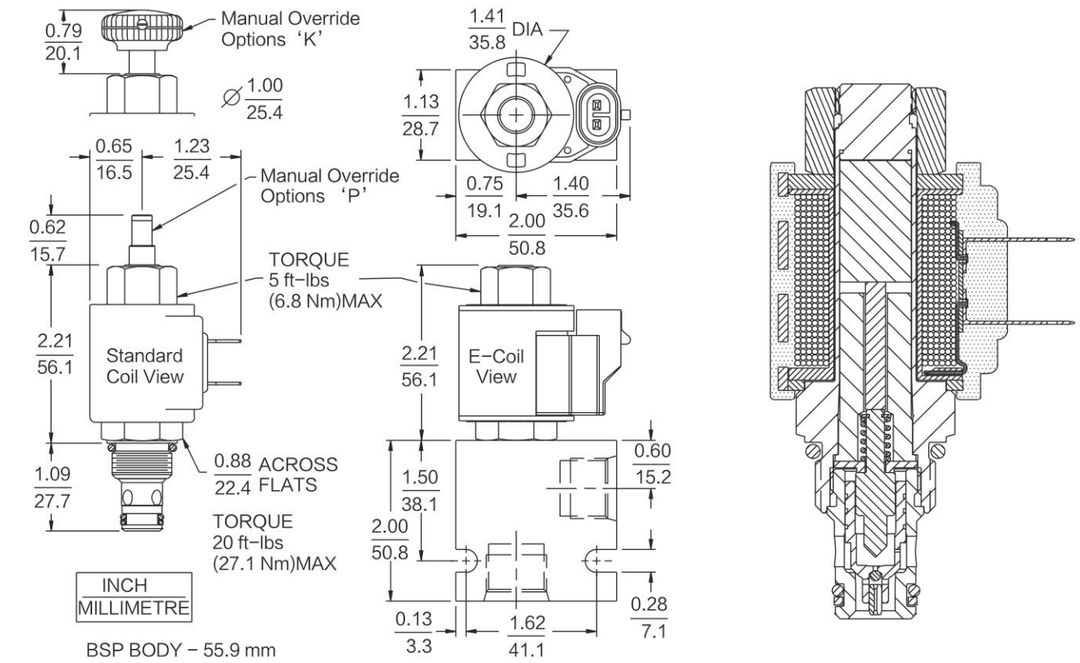
- Continuous-duty rated solenoid.
- Hardened seat for long life and low leakage.
- Optional coil voltages and terminations.
- Efficient wet-armature construction.
- Cartridges are voltage interchangeable.
- Unitized, molded coil design.
- Manual OverrideOptions.
- Optional waterproof E-Coils rated up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

RATINGS

Operating Pressure:207 bar (3000 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
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: T08-2E; See bottom of this catalog.

DIMENSIONS

Coil Must Be Installed With Lettering Up



MATERIALS

Cartridge: Weight:0.09kg (0.20lbs) ; 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,ratedto 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

INSV08-23 - - - - -

Options

None	(Blank)
Screen	S
Manual Override Without Knob	P
Manual Override with Knob	K

Porting

Cartridge Only	0
SAE 4	4T
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)