**SV38-28 Poppet, 2-Way, N.C., Bi-Directional Blocking**

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

**OPERATION**
When de-energized, the SV38-28 blocks flow in both directions. When energized, the valve’s poppet opens on its seat, allowing flow from □ to ○ and ○ to □.

Consult factory if used serially with orifice disc.

**Operation of Manual Override Option:** To override, push and hold override button.

**FEATURES**
- Continuous-duty rated coil.
- Hardened seat for long life and low leakage.
- Optional coil voltages and terminations.
- Efficient wet-armature construction.
- Cartridges are voltage interchangeable.
- Utilized, molded coil design.
- Manual override option.
- Optional waterproof E-Coils rated up to IP69K.
- Industry common cavity.

**RATINGS**
- **Operating Pressure:** 207 bar (3000 psi)
- **Flow:** See Performance Chart
- **Internal Leakage:** 0.25 cc/minute (5 drops/minute) max. at 207 bar (3000 psi)
- **Cycle Life:** 500,000 cycles minimum at rated pressure (due to internal dynamic seal life)
- **Temperature:** -40 to 100°C with standard Buna N seals
- **Coil Duty Rating:** Continuous from 85% to 115% of nominal voltage
- **Initial Coil Current Draw at 20°C:**
  - 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 207 bar (3000 psi)
- **Filtration:** See page 9.010.1
- **Fluids:** Mineral-based or synthetics with lubricating properties at viscosities of 7.4 to 420 cSt (50 to 2000 sus); See Temperature and Oil Viscosity, page 9.060.1
- **Installation:** No restrictions; See page 9.020.1
- **Cavity:** VC08-2; See page 9.108.1
- **Cavity Tool:** CT08-2XX; See page 8.600.1
- **Seal Kit:** SK08-2x-M; See page 8.650.1
- **Coil Nut:** Part No. 7004420; For E-coils manufactured prior to 1-1-04, see page 3.400.1 for coil nut info.
DIMENSIONS

COIL MUST BE INSTALLED WITH LETTERING UP

MATERIALS

Cartridge: Weight: 0.15 kg. (0.33 lbs.); Steel with hardened work surfaces. Zinc-plated exposed surfaces. Buna N O-rings and polyester elastomer back-up standard.

Standard Ported Body: Weight: 0.16 kg. (0.35 lbs.); Anodized high-strength 6061 T6 aluminum alloy, rated to 207 bar (3000 psi). Ductile iron bodies available; dimensions may differ. See page 8.008.1

Standard Coil: Weight: 0.27 kg. (0.60 lbs.); Unitized thermoplastic encapsulated, Class H high temperature magnetwire. See page 3.200.1

E-Coil: Weight: 0.41 kg. (0.9 lbs.); Fully encapsulated with rugged external metal shell. Rated up to IP69K with integral connectors. Note: See page 3.400.1 for all E-Coil retrofit applications.

TO ORDER

SV38-28

Option
None
Screen
Manual Override without Knob
Manual Override with Knob

Porting
Cartridge Only
SAE 4
SAE 6
1/4 in. BSP*
3/8 in. BSP*

Seals
Buna N (Std.)
Fluorocarbon

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.

Termination (VAC)
Std. Coil
AG DIN 43650
AP 1/2 in. Conduit

Termination (VDC)
Std. Coil
DS Dual Spades
DG DIN 43650
DL Leadwires (2)
DL/W Leads w/Weatherpak® Connectors
DR Deutsch DT04-2P

E-Coil
ER Deutsch DT04-2P (IP69K Rated)
EY Metri-Pack® 150 (IP69K Rated)

Coils with internal diode are available. Consult factory.