**SVG10-40A  Spool, 4-Way, 2-Position**

**DESCRIPTION**
A solenoid-operated, four-way, two-position, direct-acting, spool-type, screw-in hydraulic cartridge valve.

**OPERATION**
When de-energized, the **SV10-40A** allows flow from 3 to 2, as well as from 4 to 1. When energized, the cartridge’s spool shifts to open 3 to 4, and 2 to 1. All ports are closed at crossover.

**NOTE:** When used in a full loop mode, the SV10-40A delivers up to 37.9 lpm (10 gpm) maximum flow. When used as a selector valve, the SV10-40A can handle up to 22.7 lpm (6 gpm) maximum flow rate.

**FEATURES**
- Optional coil voltages and terminations.
- Efficient wet-armature construction.
- All ports may be fully pressurized.
- Industry common cavity.
- Cartridges are voltage interchangeable.
- Hardened precision spool and cage for long life.
- Optional waterproof E-Coils rated up to IP69K.
- Continuous-duty rated solenoid with unitized, molded coil design.

**RATINGS**
- **Operating Pressure:** 207 bar (3000 psi)
- **Proof Pressure:** 276 bar (4000 psi)
- **Burst Pressure:** 621 bar (9000 psi)
- **Flow:** 37.9 lpm (10 gpm) max when used in full loop mode; 22.7 lpm (6 gpm) when used as a selector valve.
- **Internal Leakage:** 164 cc/minute (10 cu. in./minute) max. at 207 bar (3000 psi); Port 3 to port 1, de-energized, with ports 2 and 4 blocked.
- **Temperature:** -40 to 100 °C (-40 to 212° F) with standard Buna N seals
  -26 to 204 °C (-15 to 400 °F) with Fluorocarbon seals;
  -54 to 104 °C (-65 to 225 °F) with Polyurethane seals.
- **Coil Duty Rating:** Continuous from 85% to 115% of nominal voltage
- **Initial Coil Current Draw at 20 °C:**
  - Standard Coil: 1.67 A at 12 Vdc; 0.18 A at 115 Vac (full wave rectified).
  - E-Coil: 1.7 A at 12 Vdc; 0.85 A 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:** VC10-4; See page 9.110.1
- **Cavity Tool:** CT10-4XX; See page 8.600.1
- **Seal Kit:** SK10-4X-MMM; See page 8.650.1
- **Coil Nut:** without manual override: Part No. 7004400

**OPERATING LIMITS**
- **Pull-In Current 85% of Nominal**
- **Drop-Out Current 5% of Nominal**
- Valve used as a selector with inlet at port 3. Independent load pressures at ports 2 and 4, ports not looped.
  - SV10-40AY: ///
  - SV10-40A and SV10-40AM: \\

**FLOW lpm/gpm**
- 32 cSt/150 sus oil at 40°C

**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

**SEAL KIT**
- SK10-4X-MMM; See page 8.650.1

**COIL NUT**
- without manual override: Part No. 7004400

**FLOW lpm/gpm**
- 32 cSt/150 sus oil at 40°C
SV10-40A

**DIMENSIONS**

**MATERIALS**

Cartridge: Weight: 0.18 kg (0.40 lb); Steel with hardened work surfaces. Zinc-plated exposed surfaces. Buna N O-rings and polyester elastomer back-up standard.

Standard Ported Body: Weight: 0.36 kg (0.80 lb); Anodized high-strength 6061 T6 aluminum alloy, rated to 207 bar (3000 psi). Ductile iron bodies available; dimensions may differ. See page 8.010.1.

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

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

**TO ORDER**

**SV10-40A**

**Option**

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

For Manual Override operating limits of pressure and flow, see charts above. For more information on manual override options, see page 1.001.1

**Voltage**

- 0 Less Coil**
- 12 12 Vdc
- 24 24 Vdc

**Coil Termination**

- E-Coil ER (IP69K)
- D-Coil DR (IP65)
- EY (IP69K)
- DY (IP65)
- EL (IP69K)
- DL (IP65)
- EJ (IP67)
- DG (IP65)
- EG (IP65)
- DS (IP65)

For Coils with Zener Diode, add "Z" to option code. For example: "ERU/Z" Not available on all models. See coil option info. on pages 3.200.1 & 3.400.1