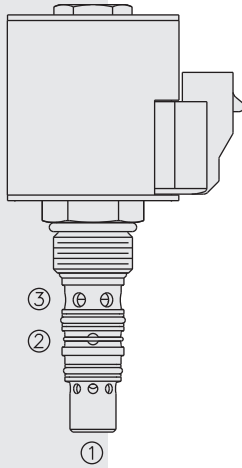


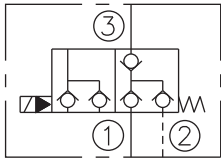
SVCL10-30 Poppet, 3-Port, Normally Closed

U.S. Patent
7,921,880

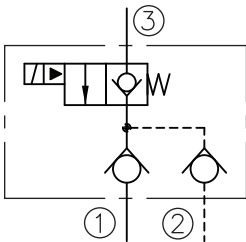


ISO SYMBOL

ISO:



Expanded:



DESCRIPTION

A solenoid-operated, normally-closed, on/off, poppet-type, screw-in hydraulic cartridge valve incorporating an integral load-sense pressure port with isolation check.

OPERATION

When de-energized, the **SVCL10-30** blocks flow at all ports. When energized, flow is allowed from 3 to 1 with a check-isolated load sense signal supplied at 2. Reverse flow is not allowed from 1 or 2 to 3.

NOTE: When using this valve in bridge circuits, seals should not be used on the pilot pistons of the pilot-operated check valves. This is to avoid trapping oil which would keep the pilot-operated check valve open.

FEATURES

- Integral load sense pressure port with isolation check
- Hardened precision spool and cage for long life.
- Optional coil voltages and terminations.
- Efficient wet-armature construction.
- All ports may be fully pressurized.
- Cartridges are voltage interchangeable.
- Optional waterproof E-Coils rated up to IP69K.
- Unitized, molded coil design.
- Reduce manifold space claim.

RATINGS

Operating Pressure: 250 bar (3625 psi); Holding Pressure at 1: 350 bar (5000 psi)

Flow: Up to 57 lpm (15 gpm)

Internal Leakage: Ports 1 and 3: 5 drops/minute max. at rated pressure. Port 2: 10 drops/minute max. at rated pressure.

Operating Temperature: -40 to 121 °C (-40 to 250 °F) with Buna N

-35 to 204 °C (-31 to 400 °F) with Fluorocarbon seals

-54 to 107 °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 D-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

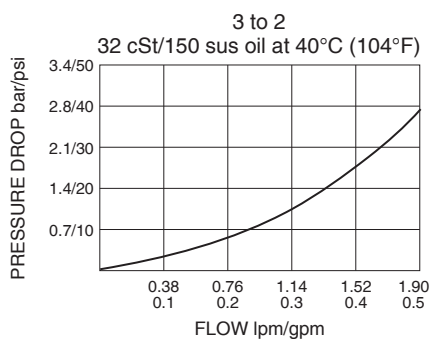
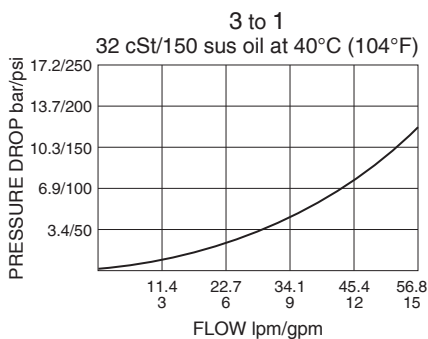
Cavity: VC10-3B Variation "B"; See page 9.110.1

Cavity Tool: CT10-3XX; See page 8.600.1

Seal Kit: SK10-3X-MM; See page 8.650.1

Coil Nut: Part No. 7004400

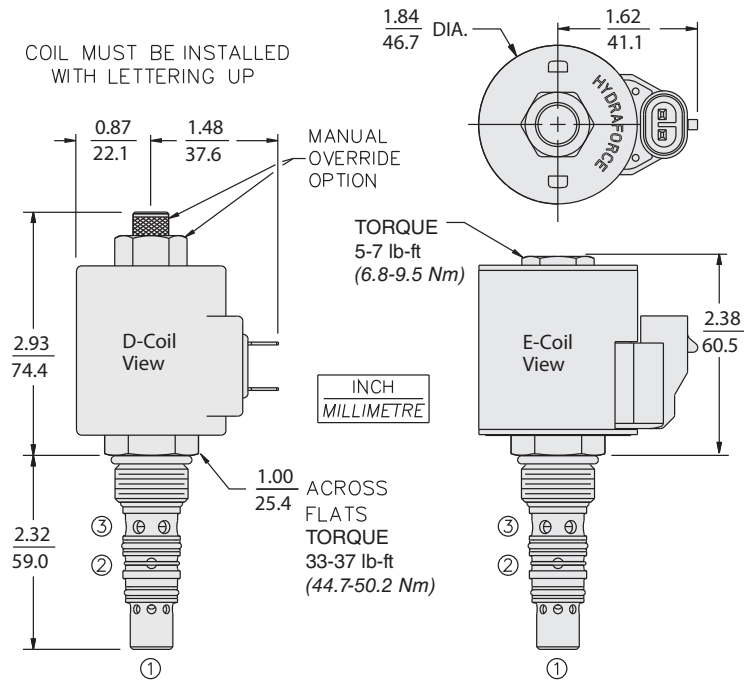
PERFORMANCE (Cartridge Only)



SVCL10-30

DIMENSIONS

U.S. Patent 7,921,880



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 D-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. **Note: See page 3.400.1 for all E-Coil retrofit applications.**

TO ORDER

