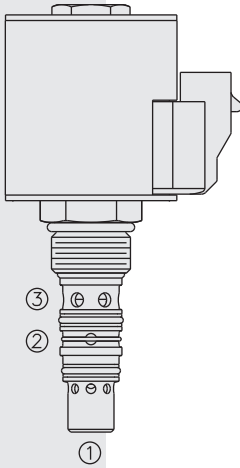


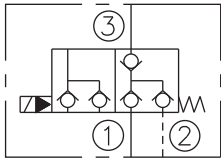
SVCL10-30 Poppet, 3-Port, Normally Closed

U.S. Patent
7,921,880

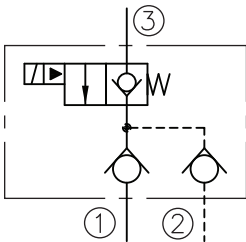


SYMBOL

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 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

- Continuous-duty rated solenoid.
- 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: 240 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 240 bar (3500 psi)
Port 2: 10 drops/minute max. at 240 bar (3500 psi)

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

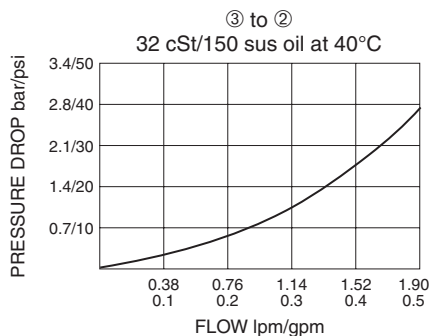
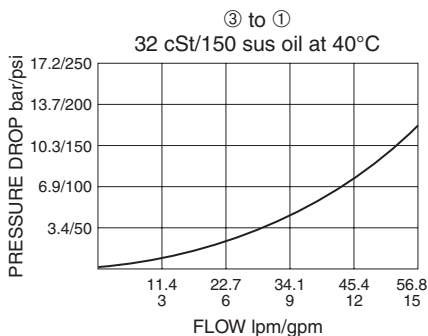
Cavity: VC10-3, Variation "B"; See page 9.110.1

Cavity Tool: CT10-3XX; See page 8.600.1

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

Coil Nut: Part No. 7004400

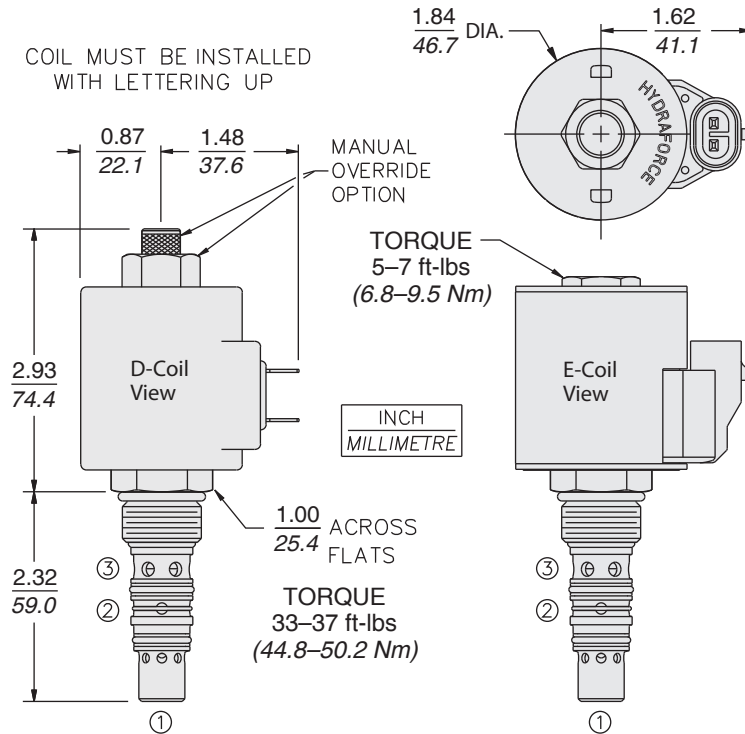
PERFORMANCE (Cartridge Only)



SVCL10-30

DIMENSIONS

U.S. Patent 7,921,880



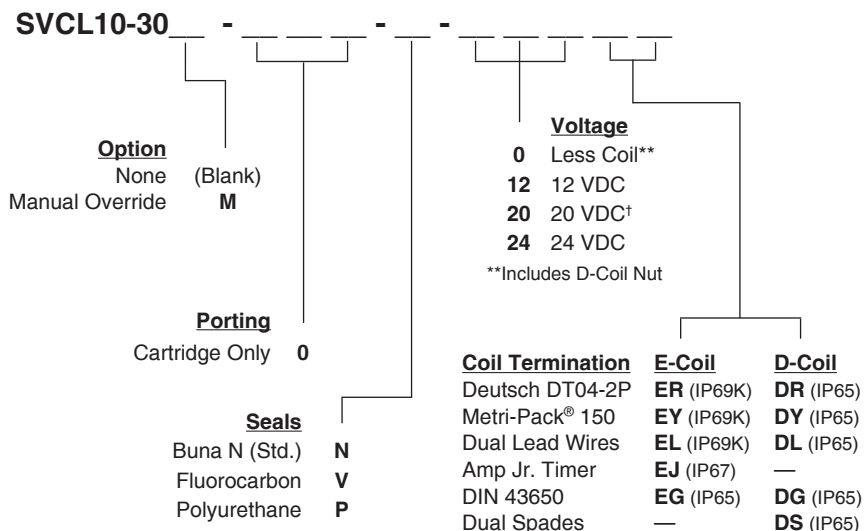
MATERIALS

Cartridge: Weight: 0.18 kg. (0.40 lbs.); 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 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



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