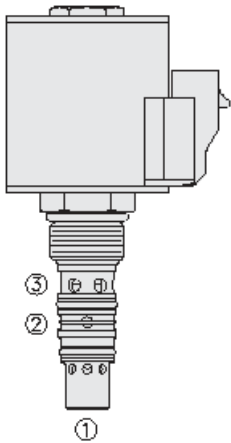




Overview



Description

A solenoid operated, 3 port, normally closed, on/off, poppet-type, screw-in hydraulic cartridge valve designed to function as a load holding or blocking valve in applications requiring low leakage.

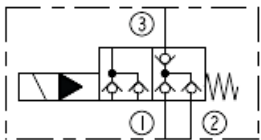
Operation

When de-energized, flow is blocked at all ports. When energized, flow is allowed to pass from port 3 to ports 1 and 2, but will not allow flow from ports 2 and 1 to port 3.

Features

- Continuous-duty rated coil.
- Hardened precision seat for long life and low leakage.
- Optional coil voltages and terminations.
- Efficient wet-armature construction.
- Cartridges are voltage interchangeable.
- All ports may be fully pressurized.
- Unitized, molded coil design.
- Optional waterproof E-Coils rated up to IP69K.
- Industry common cavity.
- Reduce manifold space claim.

Symbol



Ratings

Pressure Ratings

Pressure rating	250 bar (3625 psi)	- Note: Ports 2 and 3. Per NFPA t2.6.1 r2-20000 using 99.9 assurance and 99% verification levels
	250 bar (5000 psi)	- Note: Port 1. Per NFPA t2.6.1 r2-20000 using 99.9 assurance and 90% verification levels

Flow Ratings

Flow rating	57 lpm (15 gpm)	- Note: Based on 12 bar (175 psi) pressure drop, see performance graphs
Maximum internal leakage	5 drops/min	- Note: Port 1 port 3 at rated pressure
	10 drops/min	- Note: Port 2 at rated pressure

Temperature Ratings

Operating fluid temperature	-40 to 100 °C (-40 to 212 °F)	- Note: With buna N seals
	-26 to 204 °C (-15 to 400 °F)	- Note: With fluorocarbon seals
	-54 to 107 °C (-65 to 225 °F)	- Note: With polyurethane seals
Storage temperature	-40 to 70 °C (-40 to 158 °F)	
Ambient temperature	-40 to 70 °C (-40 to 158 °F)	

Operating Parameters

Fluids	Mineral based or synthetic hydraulic fluid with lubricating properties	
Fluid viscosity range	5 to 420 cSt	- Note: At 100 °F
Maximum operating contamination level	20/18/14 per ISO 4406	

Properties

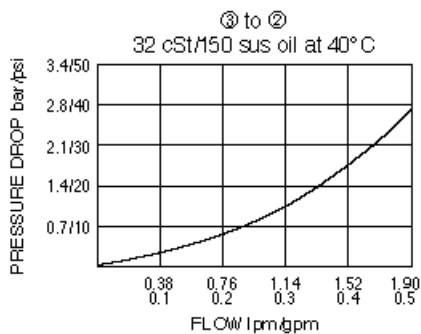
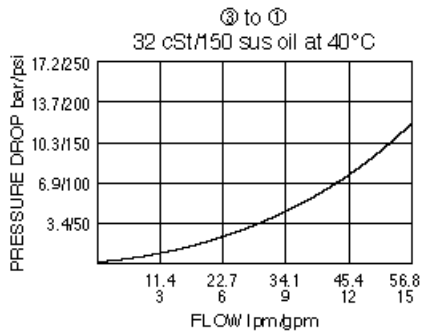
Unit weight	0.195 kg (0.43 lb)	- Note: SVCL10-30
	0.204 kg (0.45 lb)	- Note: SVCL10-30M
Internal wetted surface area	154 cm ² (23.9 in ²)	- Note: SVCL10-30
	164 cm ² (25.4 in ²)	- Note: SVCL10-30M



Electrical Parameters

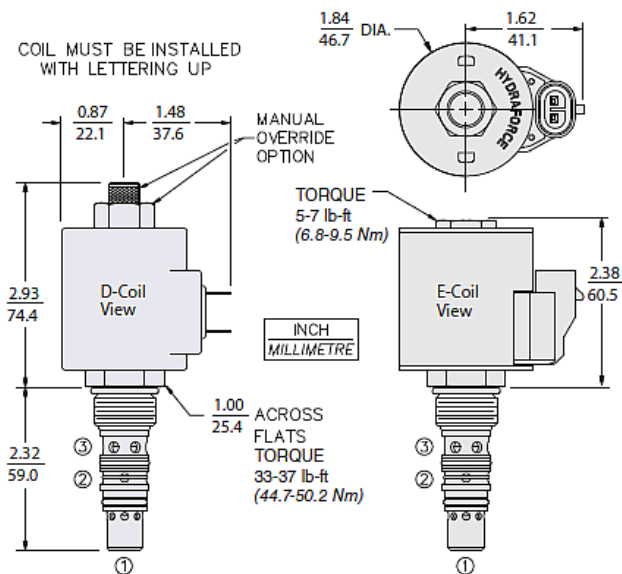
Initial current draw 1.7 A - **Note:** At 12 V, 20 °C (68 °F)

Performance



Dimensions

U.S. Patent 7,921,880



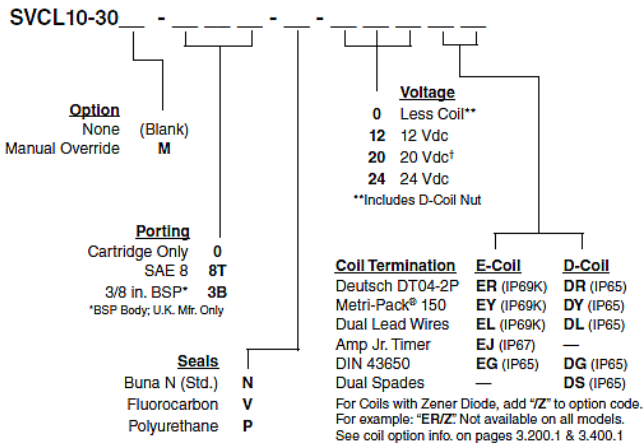
Installation Specifications

Cavity	VC10-3B
Cartridge installation torque	44.8 to 50.2 N-m (33 to 37 ft-lb)
Coil nut torque	5.8 to 9.5 N-m (5 to 7 ft-lb)
Orientation restriction	

Accessories

Seal kit SK10-3X-MM - **Note:** X = seal option

Order Code



Model Options

SVCL10-30E-H-J-L

E Manual Override

CODE	DESCRIPTION
BLANK	NONE
J	Momentary Pull Override, #10-32 threads
M	Two Position Override, Red Knurled Knob
Y	Momentary Pull Override, Red Knurled Knob

H Line Body

CODE	DESCRIPTION
0	No Body

J Seal

CODE	DESCRIPTION
N	Buna-N
V	Fluorocarbon
P	Polyurethane
U	PPDI Urethane

L Coil

CODE	DESCRIPTION
0	No Coil
10DG	10 VDC, D-Coil, DIN 43650
10DL	10 VDC, D-Coil, Dual Lead Wires
10DR/D	10 VDC, D-Coil, Deutsch with Diode
10DS	10 VDC, D-Coil, Dual Spade
10EL	10 VDC, E-Coil, Dual Lead Wires
10ER	10 VDC, E-Coil, Deutsch
10ER/Z	10 VDC, E-Coil, Deutsch with Zener Diode
12DG	12 VDC, D-Coil, DIN 43650
12DL	12 VDC, D-Coil, Dual Lead Wires, 18 inches long
12DL/36	12 VDC, D-Coil, Dual Lead Wires, 36 inches long
12DL/W	12 VDC, D-Coil, Dual Lead Wires with Weatherpak
12DL/W/D	12 VDC, D-Coil, Dual Lead Wires with Weatherpak with Diode
12DR	12 VDC, D-Coil, Deutsch



CODE	DESCRIPTION
12DR/D	12 VDC, D-Coil, Deutsch with Diode
12DR/Z	12 VDC, D-Coil, Deutsch with Zener Diode
12DS	12 VDC, D-Coil, Dual Spade
12EG	12 VDC, E-Coil, DIN 43650
12EJ	12 VDC, E-Coil, AMP Jr.
12EL	12 VDC, E-Coil, Dual Lead Wires, 18 inches long
12EL/36	12 VDC, E-Coil, Dual Lead Wires, 36 inches long
12EL/W/Z	12 VDC, E-Coil, Dual Lead Wires with WeatherPak and Zener Diode
12EL/Z	12 VDC, E-Coil, Dual Lead Wires with Zener Diode
12ER	12 VDC, E-Coil, Deutsch
12ER/Z	12 VDC, E-Coil, Deutsch with Zener Diode
12EY	12 VDC, E-Coil, Metri-Pack 150
12EY/Z	12 VDC, E-Coil, Metri-Pack 150 with Zener Diode
20DR/D	20 VDC, D-Coil, Deutsch with Diode
20DS	20 VDC, D-Coil, Dual Spade
20ER	20 VDC, E-Coil, Deutsch
24AG	24 VDC, D-Coil, DIN 43650
24AP	24 VDC, D-Coil, 1/2" Conduit and Dual Lead Wires
24DG	24 VDC, D-Coil, DIN 43650
24DL	24 VDC, D-Coil, Dual Lead Wires
24DL/W	24 VDC, D-Coil, Dual Lead Wires with Weatherpak
24DL/W/D	24 VDC, D-Coil, Dual Lead Wires with Weatherpak with Diode
24DP	24 VDC, D-Coil, 1/2" Conduit and Dual Lead Wires
24DR	24 VDC, D-Coil, Deutsch
24DR/D	24 VDC, D-Coil, Deutsch with Diode
24DS	24 VDC, D-Coil, Dual Spade
24EG	24 VDC, E-Coil, DIN 43650
24EJ	24 VDC, E-Coil, AMP Jr.
24EL	24 VDC, E-Coil, Dual Lead Wires, 18 inches long
24EL/36	24 VDC, E-Coil, Dual Lead Wires, 36 inches long
24EL/W/Z	24 VDC, E-Coil, Dual Lead Wires with WeatherPak and Zener Diode
24ER	24 VDC, E-Coil, Deutsch
24ER/Z	24 VDC, E-Coil, Deutsch with Zener Diode
24EY	24 VDC, E-Coil, Metri-Pack 150
24EY/Z	24 VDC, E-Coil, Metri-Pack 150 with Zener Diode
36DS	36 VDC, D-Coil, Dual Spade
115AG	115 VAC, D-Coil, DIN 43650
115AP	115 VAC, D-Coil, 1/2" Conduit and Dual Lead Wires
230AG	230 VAC, D-Coil, DIN 43650
230AP	230 VAC, D-Coil, 1/2" Conduit and Dual Lead Wires