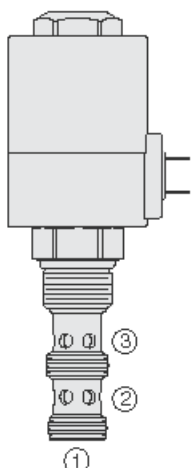




## Overview



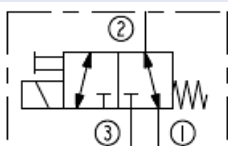
### Description

A solenoid operated, two position, three way, direct acting spool valve. When de-energized, the SV12-34X allows flow from port 2 to port 1, while blocking flow at port 3. When energized, the spool shifts to open from port 3 to port 2 while blocking port 1. While port 1 may be fully pressurized, it is not intended to be used as an inlet

### Features

- Manual override options.
- Continuous-duty rated coil.
- Hardened precision spool and cage for long life.
- Optional coil voltages and terminations.
- All ports may be fully pressurized.
- Heavy-duty waterproof E&C Coils rated up to IP69K.

### Symbol



## Ratings

### Pressure Ratings

Pressure rating	See performance chart
Proof pressure	483 bar (7000 psi)
Burst pressure	690 bar (10000 psi)

### Flow Ratings

Flow rating	<b>- Note:</b> See performance chart	
Maximum internal leakage	410 ml/min (25 in <sup>3</sup> /min)	<b>- Note:</b> Max at 241 bar (3500 psi); per NFPA/t 3.5.15m-1986

### Other Ratings

Cycle life	1 million cycles at rated pressure and flow	
Response	60 ms	<b>- Note:</b> Pull-in, indication of shift with nominal voltage
	35 ms	<b>- Note:</b> Drop-out, indication of shift with nominal voltage
	100 ms	<b>- Note:</b> Pull-in, per NFPA/T3.5.30-19XX
	80 ms	<b>- Note:</b> Drop-out, per NFPA/T3.5.30-19XX
Environmental rating	Ip67 (with integral connectors)	

### Temperature Ratings

Operating fluid temperature	-40 to 100 °C (-40 to 212 °F)	<b>- Note:</b> With buna N seals
	-26 to 204 °C (-15 to 400 °F)	<b>- Note:</b> With viton seals
	-54 to 107 °C (-65 to 225 °F)	<b>- Note:</b> With polyurethane seals
Storage temperature	-40 to 70 °C (-40 to 160 °F)	
Ambient temperature	-40 to 70 °C (-40 to 160 °F)	

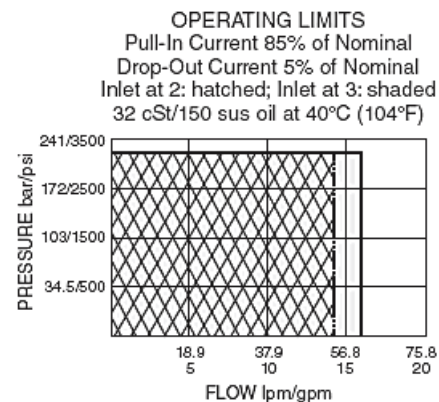
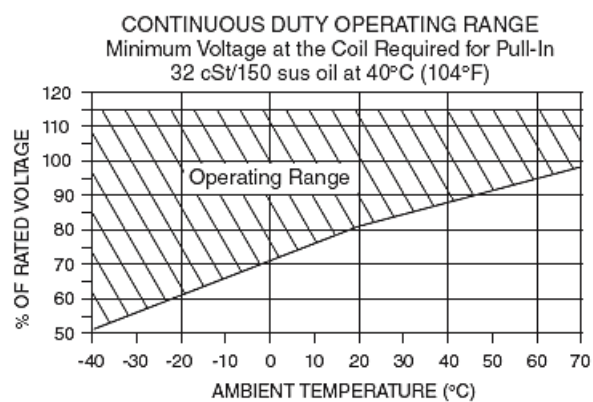
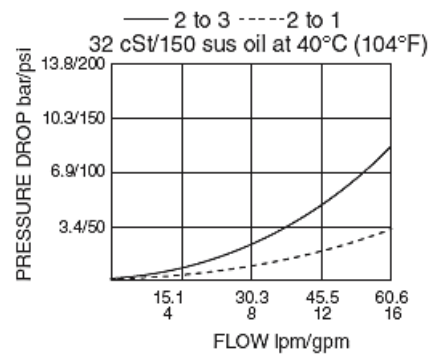
## Operating Parameters

Fluids	Mineral based or synthetic hydraulic fluid with lubricating properties
Fluid viscosity range	7.4 to 420 cSt
Maximum operating contamination level	20/18/14 per ISO 4406

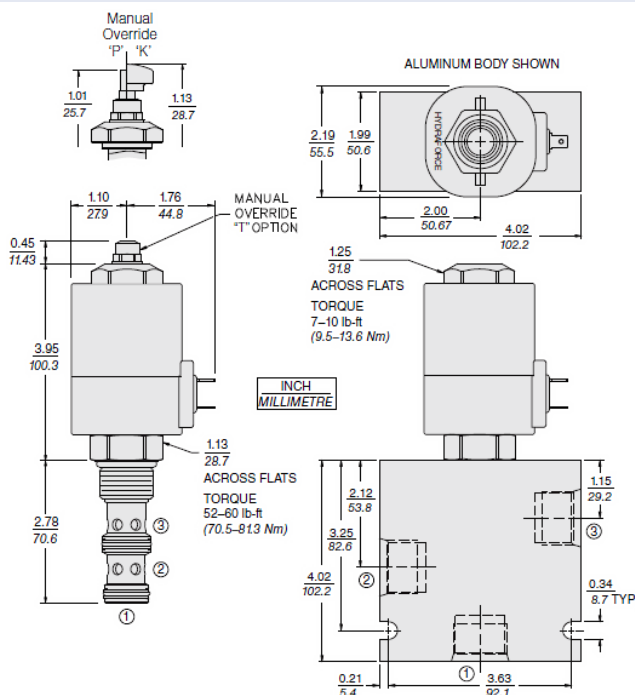
## Properties

Unit weight	0.39 kg (0.87 lb)
Internal wetted surface area	330 cm <sup>2</sup> (51.2 in <sup>2</sup> )

## Performance



## Dimensions





## Materials

### Materials

**Cartridge:** Weight: 0.39 kg (0.87 lb) Steel with hardened work surfaces. Zinc-plated exposed surfaces. Buna N O-rings and TFE back-ups standard.

**Standard Ported Body:** Weight: 0.98 kg (2.15 lb); Anodized high-strength aluminum alloy, rate to 207 bar (3000 psi); Ductile iron bodies available; dimensions may differ.

**Coil:** Weight: 1.36 kg (3.0 lb); Perfect wound, fully encapsulated with rugged external metal shell; Rated up to IP69K with integral connectors.

## Installation Specifications

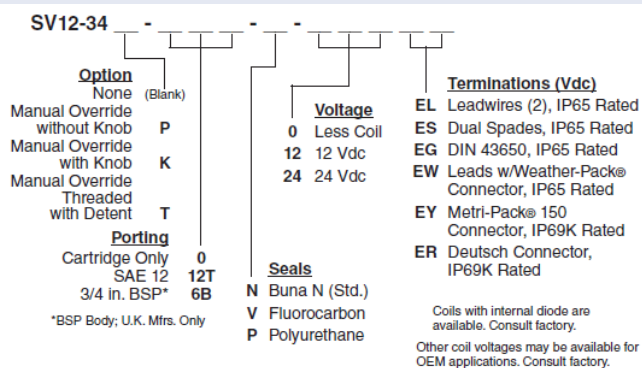
Cavity	VC12-3
Cartridge installation torque	70.5 to 81.4 N-m (52 to 60 ft-lb)
Coil nut torque	9.5 to 13.6 N-m (7 to 10 ft-lb)
Orientation restriction	None

## Accessories

Seal kit	SK12-3X-MM	- <b>Note:</b> X = seal option
Housings		
Coils		



## Order Code



POSITION	CODE	DESCRIPTION
		SV12-34E-H-J-L
E		Manual Override
E	BLANK	NONE
E	K	Momentary Push Override, Knob
E	P	Momentary Push Override, Button
E	T	Variable Position Override, Slotted Screw
H		Line Body
H	0	No Body
H	8T	Aluminum SAE 8
H	10T	Aluminum SAE 10
H	12T	Aluminum SAE 12
H	12TD	Ductile Iron SAE 12
H	6B	Aluminum BSPP 3/4" (6)
J		Seal
J	N	Buna-N
J	V	Fluorocarbon
J	P	Polyurethane
J	U	PPDI Urethane
L		Coil
L	0	No Coil
L	12EG	12 VDC, E-Coil, DIN 43650
L	12EL	12 VDC, E-Coil, Dual Lead Wires
L	12EL/W	12 VDC, E-Coil, Dual Lead Wires with WeatherPak
L	12ER	12 VDC, E-Coil, Deutsch
L	12ER/Z	12 VDC, E-Coil, Deutsch with Zener Diode
L	12ES	12 VDC, E-Coil, Dual Spade
L	12EY	12 VDC, E-Coil, Metri-Pack 150
L	24EG	24 VDC, E-Coil, DIN 43650
L	24ER	24 VDC, E-Coil, Deutsch
L	24ER/Z	24 VDC, E-Coil, Deutsch with Zener Diode
L	24ES	24 VDC, E-Coil, Dual Spade