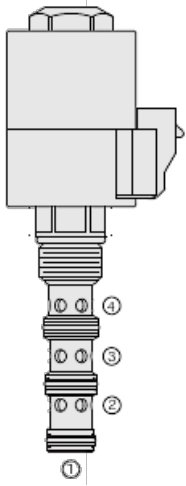




Overview



Description

A solenoid operated, 2 position, 4 way, direct-acting spool type, screw-in hydraulic cartridge valve.

Operation

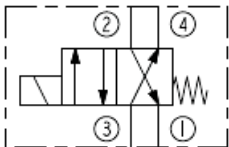
When de-energized, the SV12-40R allows flow from port 2 to port 1 and from port 3 to port 4. When energized, the spool shifts to allow flow from port 3 to port 2, and from port 4 to port 1.

note: consult factory for applications where port 1 will be used as an inlet.

Features

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

Symbol



Ratings

Pressure Ratings

Pressure rating	241 bar (3500 psi)
Proof pressure	345 bar (5000 psi)
Burst pressure	758 bar (11000 psi)

Flow Ratings

Maximum internal leakage	410 ml/min (25 in ³ /min)	- Note: Max at 240 bar (3500 psi)
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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 viton seals
	-54 to 107 °C (-65 to 225 °F)	- Note: With polyurethane seals
Storage temperature	-40 to 70 °C (-40 to 160 °F)	
Ambient temperature	-40 to 70 °C (-40 to 160 °F)	

Other Ratings

Environmental rating	Ip67 (with integral connectors)
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Operating Parameters

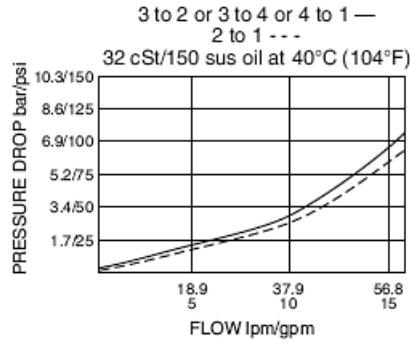
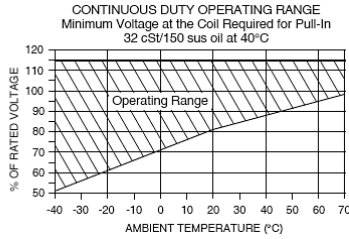
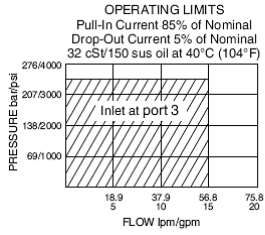
Fluids	Mineral based or synthetic hydraulic fluid with lubricating properties
Fluid viscosity range	7.4 to 420 cSt
Maximum operating contamination level	20/18/14 per ISO 4406

Properties

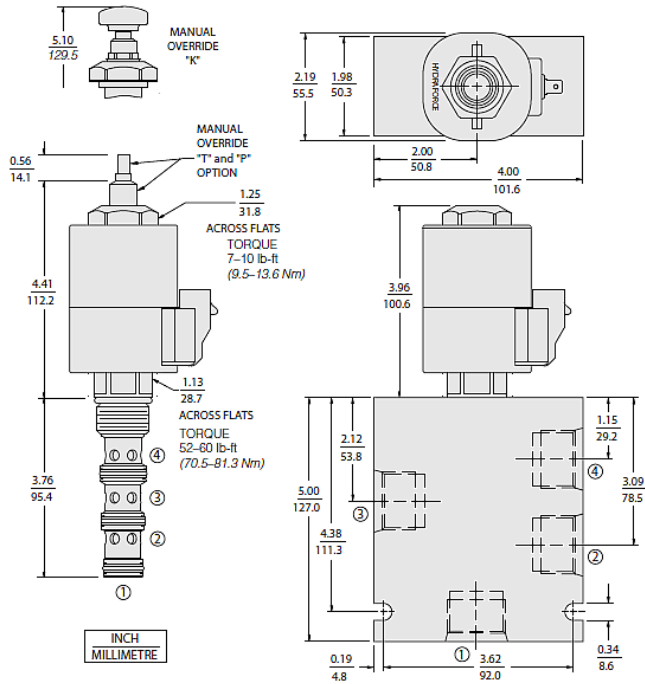
Unit weight	0.43 kg (0.95 lb)
Internal wetted surface area	333 cm ² (51.6 in ²)



Performance



Dimensions



Installation Specifications

Cavity	VC12-4
Cartridge installation torque	70.5 to 81.3 N-m (52 to 60 ft-lb)
Coil nut torque	6.8 to 9.5 N-m (5 to 7 ft-lb)
Orientation restriction	None

Accessories

Seal kit	SK12-4X-MMM	- Note: X=seal option
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Order Code

SV12-40R - - -		Terminations (Vdc)
Manual Override		EL Leadwires (2), IP65 Rated
None (Blank)		ES Dual Spades, IP65 Rated
Push Option P		EG DIN 43650, IP65 Rated
Threaded Option T		ER Deutsch Connector, IP69 Rated
Push with Knob K		EW Leads w/Weather-Pack® Connector, IP65 Rated
		EY Metri-Pack® 150 Connector, IP69K Rated
Porting		Voltage
Cartridge Only 0		0 Less Coil
SAE 12 12T		12 12 Vdc
		20 20 Vdc
		24 24 Vdc
Seals		Coils with internal diode are available. Consult factory.
Buna N (Std.) N		Other coil voltages may be available for OEM applications. Consult factory.
Fluorocarbon V		

Model Options



SV12-40RE-H-J-L

E Manual Override

CODE	DESCRIPTION
BLANK	NONE
K	Momentary Push Override, Knob
P	Momentary Push Override, Button
T	Variable Position Override, Slotted Screw

H Line Body

CODE	DESCRIPTION
0	No Body
10T	Aluminum SAE 10
12T	Aluminum SAE 12
12TD	Ductile Iron SAE 12
6B	Aluminum BSPP 3/4" (6)

J Seal

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

L Coil

CODE	DESCRIPTION
0	No Coil
12EG	12 VDC, E-Coil, DIN 43650
12EL	12 VDC, E-Coil, Dual Lead Wires
12EL/W	12 VDC, E-Coil, Dual Lead Wires with WeatherPak
12ER	12 VDC, E-Coil, Deutsch
12ER/Z	12 VDC, E-Coil, Deutsch with Zener Diode
12ES	12 VDC, E-Coil, Dual Spade
12EY	12 VDC, E-Coil, Metri-Pack 150
24EG	24 VDC, E-Coil, DIN 43650
24ER	24 VDC, E-Coil, Deutsch
24ER/Z	24 VDC, E-Coil, Deutsch with Zener Diode
24ES	24 VDC, E-Coil, Dual Spade