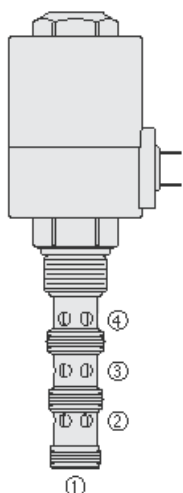




Overview



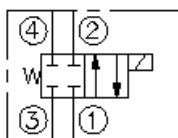
Description

This is a solenoid operated, two position, four way, direct acting spool valve. It is intended for use in mineral based or synthetic (with lubrication properties) hydraulic fluids as a bidirectional selector valve.

Features

- Bidirectional operation.
- 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-Coils rated up to IP69K.

Symbol



Ratings

Pressure Ratings

Pressure rating	241 bar (3500 psi)
Proof pressure	483 bar (7000 psi)
Burst pressure	690 bar (10000 psi)

Flow Ratings

Flow rating	- Note: See performance chart	
Maximum internal leakage	410 ml/min (25 in ³ /min) 3.5.15m-1986	- Note: Max at 240 bar (3500 psi); per NFPA/t 3.5.15m-1986

Other Ratings

Cycle life	One million cycles	
Response	160 ms	- Note: Pull-in, indication of shift with nominal voltage
	20 ms	- Note: Drop-out, indication of shift with nominal voltage
	225 ms	- Note: Pull-in, per NFPA/T3.5.30-19XX
	120 ms	- Note: 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)	- Note: With buna N seals
	-26 to 204 °C (-15 to 400 °F)	- Note: With fluorocarbon seals
Storage temperature	-40 to 70 °C (-40 to 160 °F)	
Ambient temperature	-40 to 70 °C (-40 to 160 °F)	

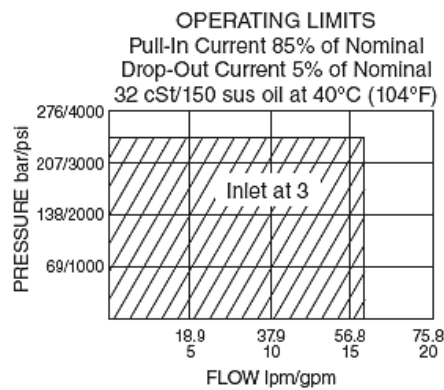
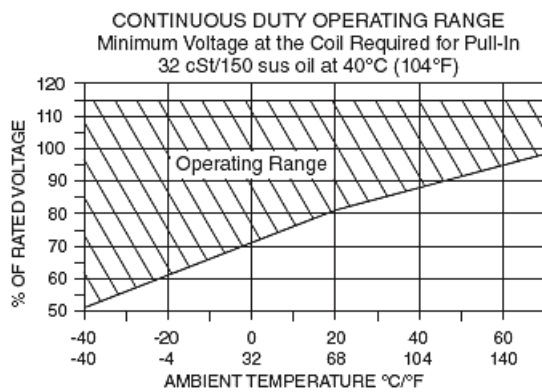
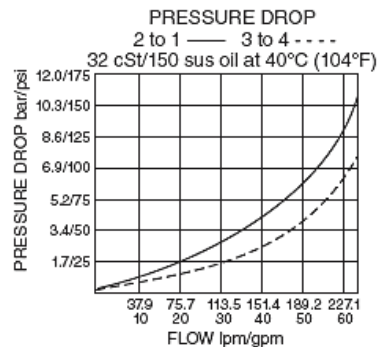
Operating Parameters

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	

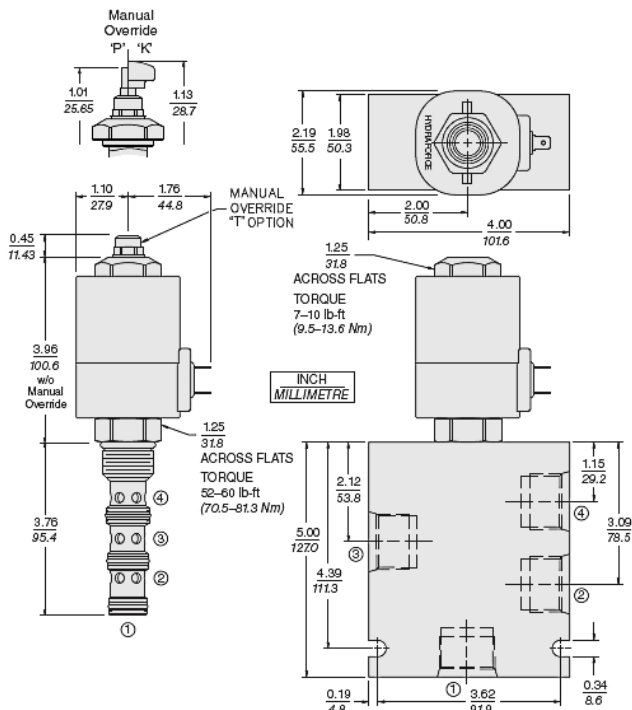
Properties

Unit weight	0.5 kg (1.1 lb)	- Note: Std. valve
Internal wetted surface area	383 cm ² (59.4 in ²)	

Performance



Dimensions





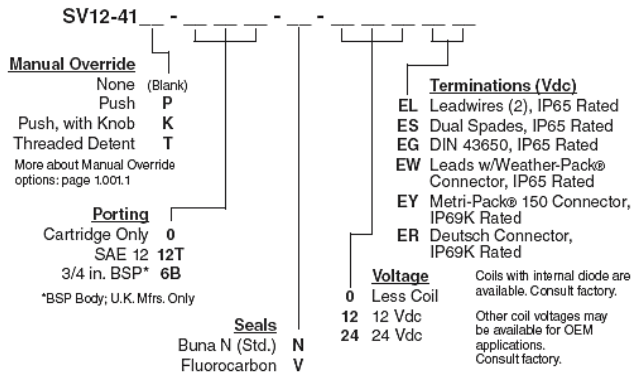
Installation Specifications

Cavity	VC12-4
Cartridge installation torque	70.5 to 81.4 N-m (52 to 60 ft-lb)
Maximum allowable torque	122 N-m (90 ft-lb)
Coil nut torque	9.5 to 13.6 N-m (7 to 10 ft-lb)
Orientation restriction	None

Accessories

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



Model Options

SV12-41E-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



CODE	DESCRIPTION
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