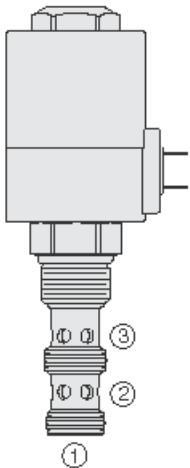




## Overview



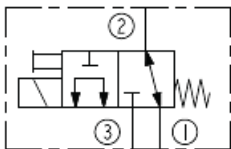
### Description

This is a solenoid operated, two position, three 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.
- 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	- <b>Note:</b> See performance chart	
Maximum internal leakage	410 ml/min (25 in <sup>3</sup> /min)	- <b>Note:</b> Max at 240 bar (3500 psi); per NFPA/t 3.5.15m-1986

### Other Ratings

Cycle life	One million cycles	
Response	45 ms	- <b>Note:</b> Pull-in, indication of shift with nominal voltage
	20 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
	100 ms	- <b>Note:</b> Drop-out, per NFPA/T3.5.30-19XX

### 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 fluorocarbon seals
Storage temperature	-40 to 70 °C (-40 to 160 °F)	
Ambient temperature	-40 to 70 °C (-40 to 160 °F)	

## Operating Parameters

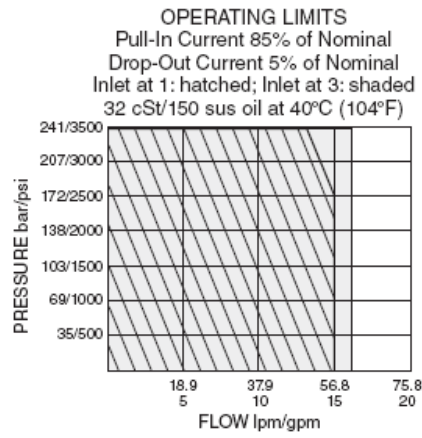
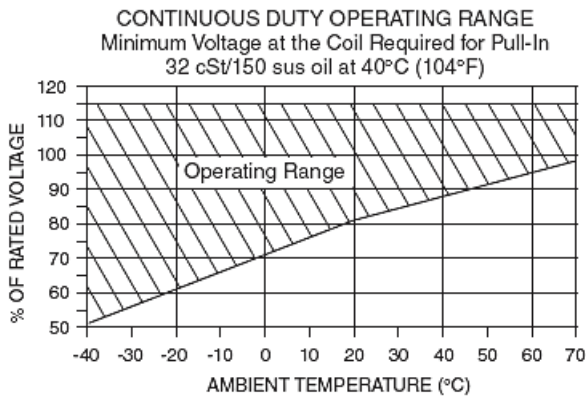
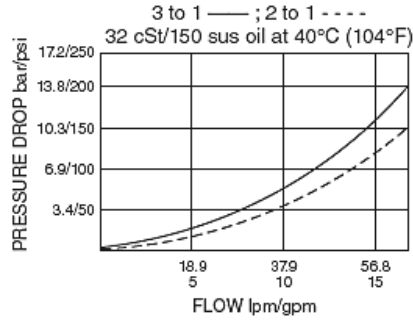
Fluids	Mineral based or synthetic hydraulic fluid with lubricating properties
Fluid viscosity range	7.4 to 420 cSt
Maximum operating contamination level	20/18/14 per ISO 4406



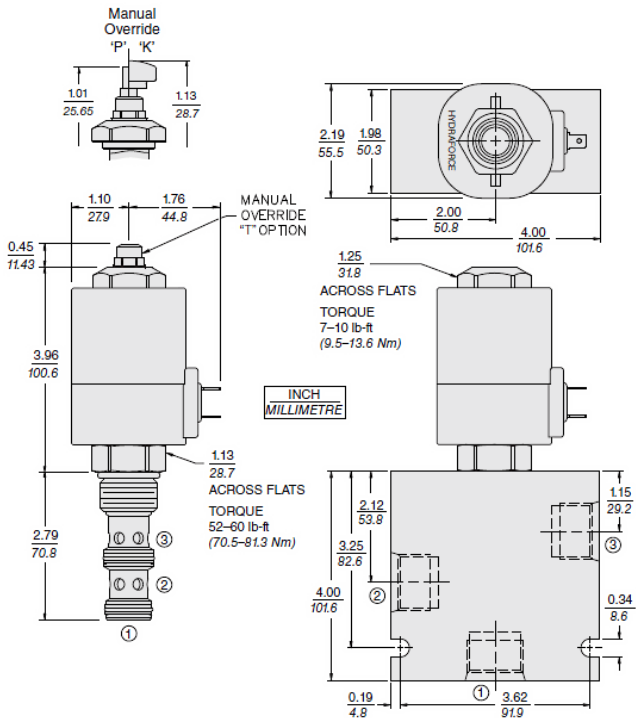
Properties

Unit weight 0.39 kg (0.87 lb) - **Note:** Std. valve  
 Internal wetted surface area 339 cm<sup>2</sup> (52.5 in<sup>2</sup>)

Performance



Dimensions







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