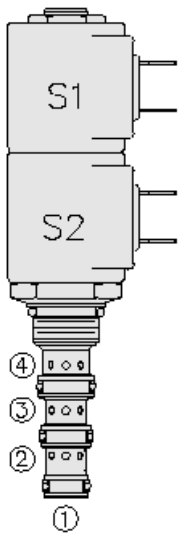




Overview



Description

A solenoid operated, direct acting, 3 position, 4-way, closed center spool, proportional directional control. It is a screw in hydraulic cartridge valve for use with general purpose hydraulic fluids. Manual override feature is available as an option

Operation

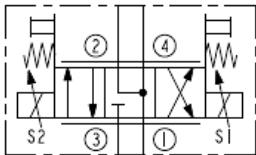
When de-energized, the SP08-47DL blocks flow to port 3, while allowing flow from port 2 to port 1 and port 4 to port 1. When coil #1 is energized, flow is allowed from port 3 to port 4, and from port 2 to port 1. When coil #2 is energized, flow is allowed from port 3 to port 2, and from port 4 to port 1

note: that while port 1 may be fully pressurized, it is not intended for use as the valve's inlet

Features

- Continuous-duty rated solenoid.
- Hardened precision spool and cage for long life.
- Optional coil voltages and terminations.
- Manual override option.
- Optional waterproof E-Coils rated up to IP69K.
- Efficient wet-armature construction.
- Cartridges are voltage interchangeable.
- Good linearity and hysteresis.
- Industry-common cavity.

Symbol



Ratings

Pressure Ratings

Pressure rating 241 bar (3500 psi)

Flow Ratings

Flow rating 7.6 lpm (2.0 gpm)

Maximum internal leakage 164 ml/min (10 in³/min)
At 207 bar (3000 psi)

- Note: Port 3 to 2 or 3 to 4 each port, in neutral inlet pressure.

Temperature Ratings

Operating fluid temperature

-40 to 120 °C (-40 to 250 °F)
-30 to 205 °C (-20 to 400 °F)
-50 to 80 °C (-60 to 175 °F)

- Note: With buna N seals
- Note: With fluorocarbon seals
- Note: With polyurethane seals

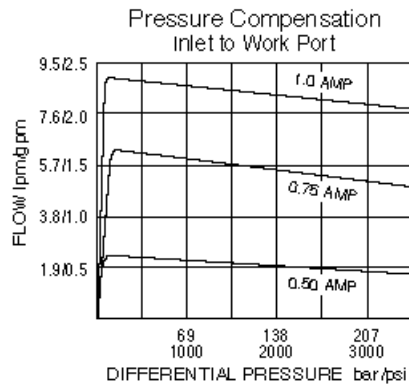
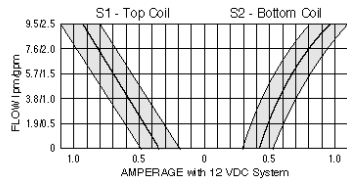
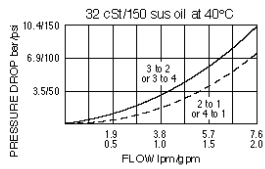
Electrical Parameters

Maximum operating current

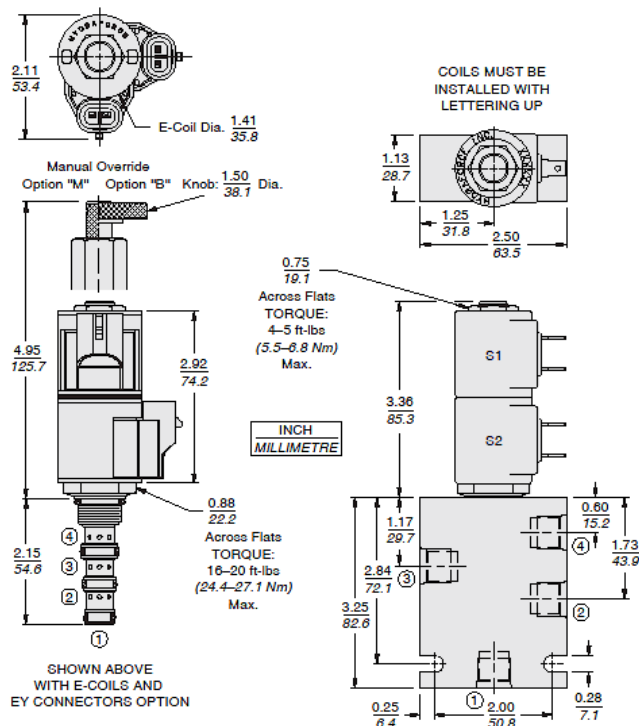
- Note: See chart



Performance



Dimensions



Materials

Materials

Cartridge: Weight: 0.13 kg (0.28 lb); Steel with hardened work surfaces. Zinc-plated exposed surfaces; Buna N O-rings and back-ups standard.

Standard Ported Body: Weight: 0.27 kg (0.60 lb); Anodized high-strength 6061 T6 aluminum alloy, rated to 207 bar (3000 psi); Ductile iron bodies available; dimensions may differ.

Standard D-Coil: 2 required; Weight each: 0.11 kg (0.25 lb); Unitized thermoplastic encapsulated, Class H high temperature magnet wire.

E-Coil: 2 required; Weight: 0.14 kg (0.3 lb); Perfect wound, fully encapsulated with rugged external metal shell; Rated up to IP69K with integral connectors.

Installation Specifications

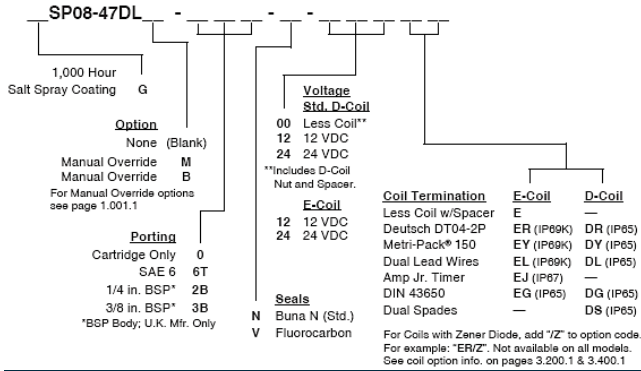
Cavity	VC08-4
Cartridge installation torque	25.8 to 28.5 N-m (19 to 21 ft-lb)
Coil nut torque	5.4 to 6.8 N-m (4 to 5 ft-lb)



Accessories

- Seal kit SK08-4X-MMM
- Housings
- Coils

Order Code



POSITION	CODE	DESCRIPTION
		SP08-47DL-H-J-L
H		Line Body
H	0	No Body
H	6T	Aluminum SAE 6
H	6TD	Ductile Iron SAE 6
H	3B	Aluminum BSPP 3/8" (3)
H	3BD	Ductile Iron BSPP 3/8" (3)
J		Seal
J	N	Buna-N
J	V	Fluorocarbon
J	P	Polyurethane
J	U	PPDI Urethane
L		Coil
L	0	No Coil, D-Coil Spacer
L	0E	No Coil, E-Coil Spacer
L	10DL	10 VDC, D-Coil, Dual Lead Wires
L	10DS	10 VDC, D-Coil, Dual Spade
L	10EL	10 VDC, E-Coil, Dual Lead Wires, 18 inches long
L	10EL/36	10 VDC, E-Coil, Dual Lead Wires, 36 inches long
L	10ER	10 VDC, E-Coil, Deutsch
L	12DG	12 VDC, D-Coil, DIN 43650
L	12DL	12 VDC, D-Coil, Dual Lead Wires, 18 inches long
L	12DL/36	12 VDC, D-Coil, Dual Lead Wires, 36 inches long
L	12DL/W	12 VDC, D-Coil, Dual Lead Wires with Weatherpak
L	12DR	12 VDC, D-Coil, Deutsch
L	12DS	12 VDC, D-Coil, Dual Spade
L	12EG	12 VDC, E-Coil, DIN 43650
L	12EJ	12 VDC, E-Coil, AMP Jr.
L	12EL	12 VDC, E-Coil, Dual Lead Wires, 18 inches long
L	12EL/36	12 VDC, E-Coil, Dual Lead Wires, 36 inches long



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