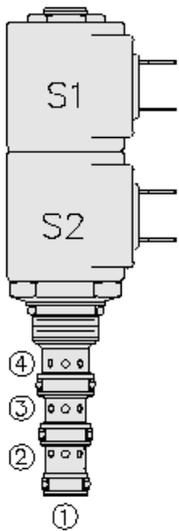




Overview



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 sp08-47cx blocks flow to all ports, 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.t.

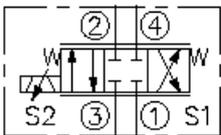
Notes

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)	
Proof pressure	345 bar (5000 psi)	- Note: SP08-47C ONLY
Burst pressure	655 bar (9500 psi)	- Note: SP08-47C ONLY

Flow Ratings

Flow rating	11.4 lpm (3.0 gpm)	
	9.5 lpm (2.5 gpm)	- Note: MANUAL OVERRIDE OPTIONS "B" AND "M"
Maximum internal leakage	10 in ³ /min	- Note: At 207 bar (3000 psi) to port 2 or 4, leakage from port 1 or 3.

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
	-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)	

Operating Parameters

Fluids

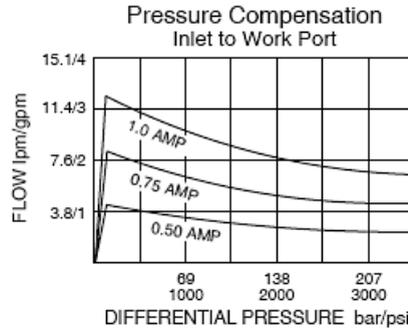
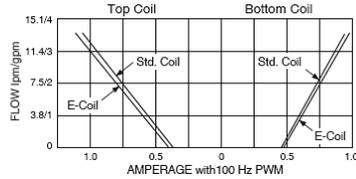
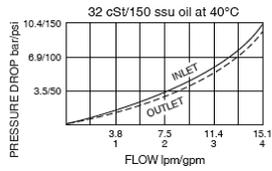
Compatible fluids	Mineral based or synthetic hydraulic fluid with lubricating properties
Fluid viscosity range	7.4 to 420 cSt
Maximum operating contamination level	20/18/14 PER ISO 4406



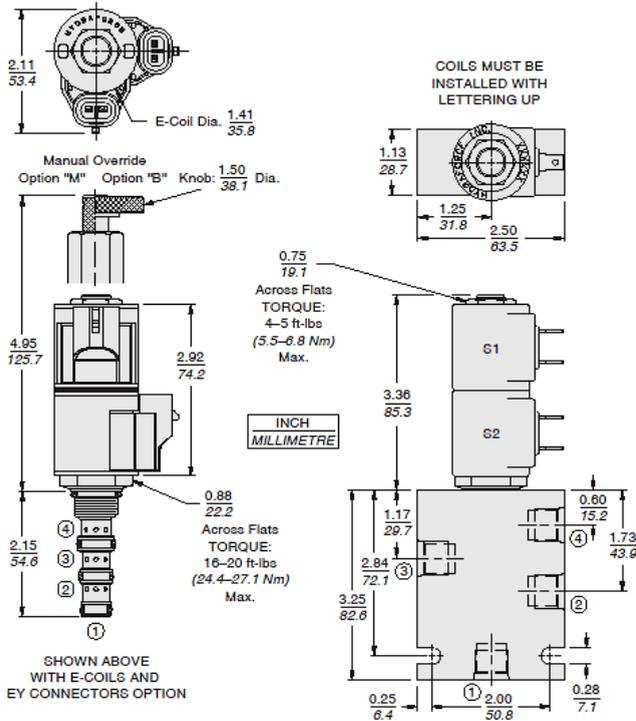
Properties

Unit weight	0.16 kg (0.36 lb) 0.22 kg (0.48 lb) 0.24 kg (0.53 lb)	- Note: SP08-47C - Note: SP08-47CM - Note: SP08-47CB
Internal wetted surface area	161 cm ² (25 in ²) 187 cm ² (29 in ²)	- Note: SP08-47C - Note: SP08-47CM/B
Corrosion protection	960 hr salt spray per ASTM B117	

Performance



Dimensions



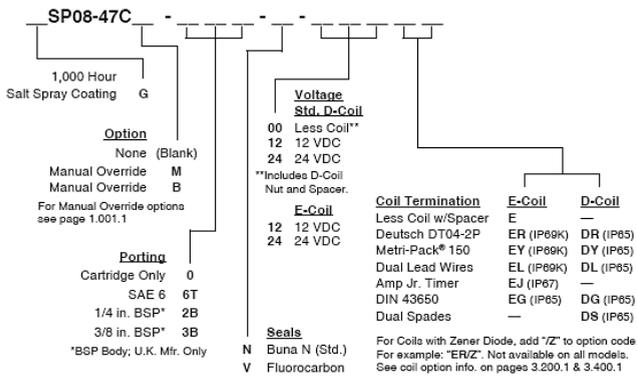
Installation Specifications

Cavity	VC08-4	
Cartridge installation torque	25.8 to 28.6 N-m (19 to 21 ft-lb) 54.2 N-m (40 ft-lb)	- Note: Maximum allowable torque

Accessories

Seal kit	SK08-4X-MMM	- Note: X = seal option
----------	-------------	--------------------------------

Order Code



Model Options

SP08-47CE-H-J-L

E Manual Override

CODE	DESCRIPTION
B	Momentary PushPull Override, 1.5" Diameter Aluminum Knob
BLANK	NONE
K	Three Position Override, 1.5" Diameter Aluminum Knob
M	Momentary Push/Pull Override, Red Knurled Knob

H Line Body

CODE	DESCRIPTION
0	No Body
6T	Aluminum SAE 6
6TD	Ductile Iron SAE 6
3B	Aluminum BSPP 3/8" (3)
3BD	Ductile Iron BSPP 3/8" (3)

J Seal

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

L Coil

CODE	DESCRIPTION
0	No Coil, D-Coil Spacer
0E	No Coil, E-Coil Spacer
10DL	10 VDC, D-Coil, Dual Lead Wires
10DS	10 VDC, D-Coil, Dual Spade
10EL	10 VDC, E-Coil, Dual Lead Wires, 18 inches long
10EL/36	10 VDC, E-Coil, Dual Lead Wires, 36 inches long
10ER	10 VDC, E-Coil, Deutsch
12DG	12 VDC, D-Coil, DIN 43650
12DL	12 VDC, D-Coil, Dual Lead Wires, 18 inches long
12DL/36	12 VDC, D-Coil, Dual Lead Wires, 36 inches long
12DL/W	12 VDC, D-Coil, Dual Lead Wires with Weatherpak



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