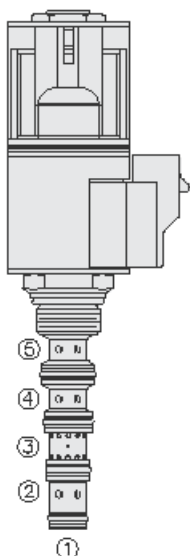




Overview



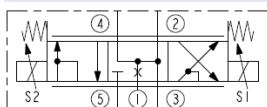
Description

This SP08-58DL valve is a direct-acting 3 position, 5 port proportional directional control. With port 1 as a load sense port, it is a screw in cartridge type for use with general purpose hydraulic fluids.

Features

- Low flow spool option for increased resolution
- Continuous-duty rated solenoid.
- Hardened spool and cage for long life.
- Optional coil voltages and terminations.
- Efficient wet-armature construction.
- Optional waterproof E-Coils rated up to IP69K.

Symbol



Ratings

Pressure Ratings

Pressure rating	207 bar (3000 psi)	- Note: Per NFPA T2.6.1 R2-2000 using 99.9 assurance and 90% verification levels
Proof pressure	345 bar (5000 psi)	- Note: SP08-58D
Burst pressure	655 bar (9500 psi)	- Note: SP08-58D

Flow Ratings

Minimum flow rating	3.3 lpm (0.83 gpm)	- Note: S1 and S2 based on 10.3 bar [150 psid] with pressure compensator at maximum control current (see performance graphs)
Maximum internal leakage	164 ml/min (10 in ³ /min)	- Note: At 207 bar (3000 psi), valve de-energized, from port 5 to ports 2 or 4 (ports 3 and 1 are blocked)
Hysteresis	0.8 lpm (0.2 gpm)	- Note: Maximum, from 1.5 to 4.2 lpm (0.4 to 1.1 gpm)

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	Mineral based or synthetic hydraulic fluid with lubricating properties
Fluid viscosity range	7.4 to 420 cSt
Maximum operating contamination level	18/16/13 per ISO 4406



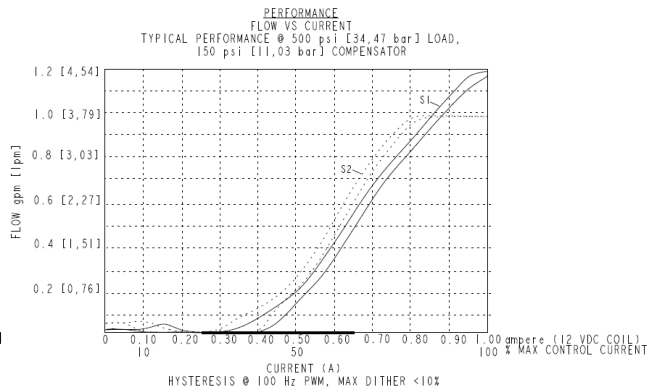
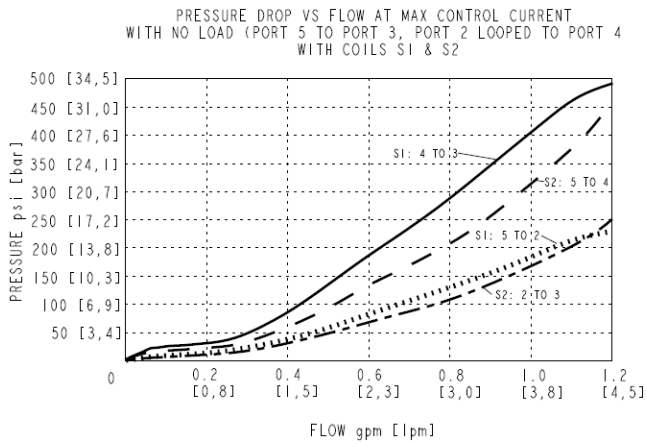
Properties

Unit weight	0.17 kg (0.38 lb)
Internal wetted surface area	178 cm ² (27.6 in ²)
Corrosion protection	960 hr salt spray per ASTM B117

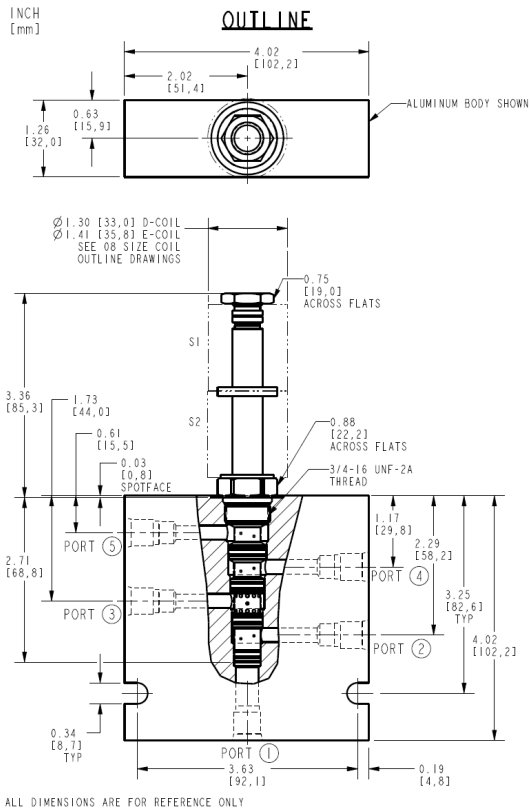
Electrical Parameters

Valve inductance	124 mH - Note: S1 97 mH - Note: S2
Threshold current	See performance graphs - Note: D-coil 12 Vdc
Maximum control current	1.0 A - Note: D-coil 12 Vdc
Dither PWM frequency	90 to 110 Hz

Performance



Dimensions





Installation Specifications

Cavity	VC08-5
Cartridge installation torque	33.9 to 40.7 N-m (25 to 30 ft-lb)
Maximum allowable torque	54.2 N-m (40 ft-lb) - Note: Aluminum
Coil nut torque	5.4 to 6.8 N-m (4 to 5 ft-lb)
Orientation restriction	None

Accessories

Seal kit	SK08-5X-MMMM	- Note: X = seal option
----------	--------------	--------------------------------

Order Code

ORDERING INFORMATION

SP08-58DL-X-X-XXXX

BASE MODEL
NUMBER

LOW FLOW

PORTING

CARTRIDGE ONLY - 0

SEAL OPTIONS

BUNA N - N
FLUOROCARBON - V
POLYURETHANE - P

COIL VOLTAGE

(FOR D-COIL SPACER) LESS COIL - 00
(FOR E-COIL SPACER) LESS COIL - 00E
12 VDC COIL - 12
24 VDC COIL - 24

COIL TERMINATIONS

E-COIL OPTIONS:
METRI-PACK CONNECTOR - EY
DEUTSCH CONNECTOR - ER

D-COIL OPTIONS:
(2) LEADWIRES 18"
STANDARD LENGTH - DL
DUAL SPADES SAE J858a - DS
DIN 43650 - DG

Model Options

SP08-58DL-H-J-L

H Line Body

CODE	DESCRIPTION
0	No Body
6T	Aluminum SAE 6

J Seal

CODE	DESCRIPTION
N	Buna-N
V	Fluorocarbon
P	Polyurethane

L Coil

CODE	DESCRIPTION
0	No Coil, D-Coil Spacer
0E	No Coil, E-Coil Spacer
10DL	10 VDC, D-Coil, Dual Lead Wires



CODE	DESCRIPTION
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
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