



2.4

50SD08-22 TYPE

Solenoid Directional Valve

Rated pressure (bar / psi)	345 / 5000
Peak flow (L/min / gpm)	See performance chart

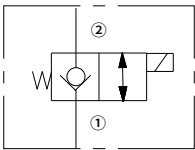
Features

- Continuous-duty rated coil
- Efficient wet-armature construction
- Cartridges are voltage interchangeable
- Optional waterproof E-Coils rated up to IP69K
- Industry common cavity
- Hardened parts for long life and low leakage

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Symbol



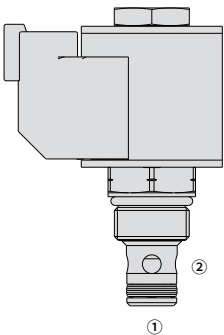
Description

A solenoid-operated, 2-way, normally closed, piloted poppet-type, screw-in hydraulic cartridge valve, intended to act as a blocking or load-holding device for low flow circuits.

Operation

When de-energized, the valve acts as a check valve, allowing flow from ① to ②, while blocking flow from ② to ①.

When energized, the cartridge's poppet lifts to open the ② to ① flow path. In this mode, bidirectional flow is allowed.



Ordering Code

50SD08-22		-	-	-	-	-	-	-
Option:		Blank		Voltage		Termination (VDC)		
None		S		Std. Coil:		E-Coil:		
150μ Screen				Less Coil		Deutsch DT04-2P		
		0		10VDC		(IP69K Rated)		
Cartridge Only				12VDC		Lead wires (2)		
				20VDC		(IP69K Rated)		
Seals:		P		24VDC		Termination (VDC)		
Polyurethane (Std.)		N				D-Coil:		
Buna N		V				Dual Spades		
Fluorocarbon						(SAE J858a, IP65K Rated)		
						DIN 43650		
						(IP65K Rated)		
						Lead wires (2)		
						(IP65K Rated)		

Materials

Cartridge:

Weight: 0.1 kg; Steel with hardened work surfaces. Zinc-plated exposed surfaces; Polyurethane (Std.) seal.

Standard Ported Body:

Anodized high-strength aluminum alloy, rated to 240 bar; Ductile iron and steel bodies available; Dimensions may differ, consult factory.

Standard Coil: Consult factory.

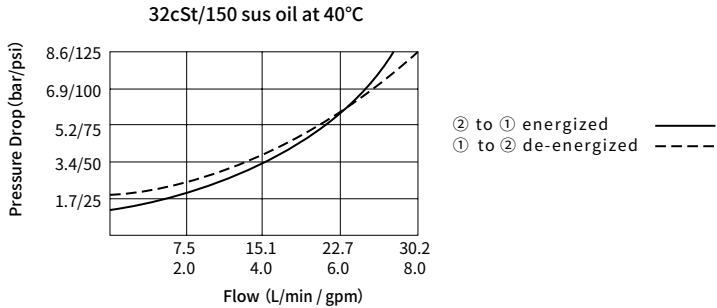
E-Coil:

Weight: 0.14 kg; Perfect wound, fully encapsulated with rugged external metal shell; Rated up to IP69K with Deutsch sockets.

Technical Data

Rated pressure		345 bar (5000 psi)
Peak flow		See performance chart
Internal leakage		≤ 0.15 mL/min (3 drops/min) @ 345 bar
Coil duty rating		Continuous from 85% to 115% of nominal voltage
Initial coil current draw at 20°C	E-Coil	1.4 A at 12VDC; 0.7 A at 24VDC
	D-Coil	1.2 A at 12VDC; 0.6 A at 24VDC
Minimum pull-in voltage		85% of nominal at 345 bar
Cavity		VC08-2 (See technical reference)
Fluid		Mineral-based or synthetics with lubricating properties
Viscosity range		7.4 to 420 mm ² /s
Temperature range	-54 to 107 °C (Polyurethane seals)	
	-40 to 100 °C (Buna N seals)	
	-26 to 204 °C (Fluorocarbon seals)	
Degree of fluid contamination		The minimum pollution level is ISO4406 level 20/18/14, and level 17/15/13 is recommended to prolong the service life

Performance (Cartridge Only)



Dimensions

01

