

2.19

50SD10-22 TYPE Solenoid Directional Valve

Rated pressure (bar / psi) 350 / 5075

Peak flow (L/min / gpm) 75.7 / 20

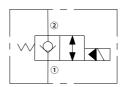
Features

- ·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



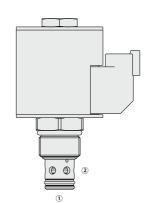
Description

A solenoid-operated, 2-way, normally closed, poppet-type, screw-in hydraulic cartridge valve, designed for low leakage blocking and load holding applications.

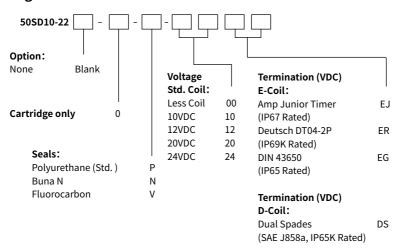
Operation

When de-energized, the 50SD10-22 acts as a check valve, allowing flow to pass from 1 to 2, while blocking flow from 2 to 1.

When energized, the ② to ③ flow path opens. In this mode, flow is also allowed from ① to ② .



Ordering Code



Materials

Cartridge:

Weight: 0.17 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.

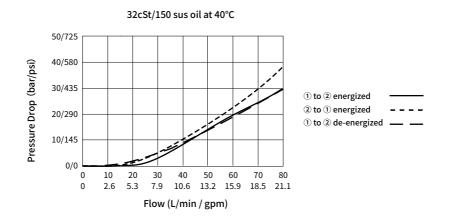
E-Coil:

Weight: 0.41 kg; Perfect wound, fully encapsulated with rugged external metal shell; Rated up to IP69K with Deutsch sockets.

Technical Data

Rated pressure		350 bar (5075 psi)	
Proof pressure		525 bar (7612 psi)	
Peak flow		75.7 L/min (20 gpm)	
Internal leakage		≤ 0.15 mL/min (3 drops /min) @350 bar	
Coil duty rating		Continuous from 85% to 115% of nominal voltage	
Initial coil current draw at 20°C	E-Coil	1.7 A at 12VDC; 0.85 A at 24VDC	
	D-Coil	1.67 A at 12VDC; 0.83 A at 24VDC	
Minimum pull-in voltage		85% of nominal at 350 bar	
Cavity		VC10-2 (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 18/16/13, and level 15/13/11 is recommended to prolong the service life	

Performance (Cartridge Only)



Dimensions

(Dimensions in mm)

