

2.3

50SD08-20 TYPE Solenoid Directional Valve

Maximum pressure (bar / psi)
Peak flow (L/min / gpm)

345 / 5000

See performance chart

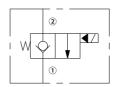
Features

- · Continuous-duty rated coil
- · 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



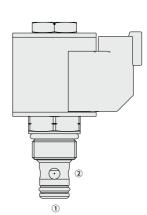
Description

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.

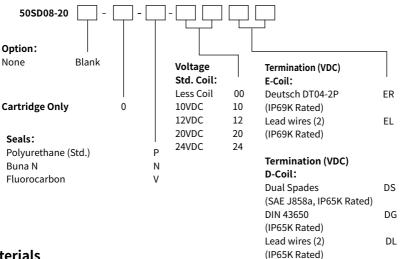
Operation

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, flow from ① to ② is severely restricted.



Ordering Code



Materials

Cartridge:

Weight: 0.09 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.

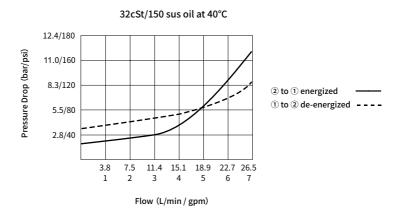
E-Coil:

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 18/16/13, and level 15/13/11 is recommended to prolong the service life	

Performance (Cartridge Only)



Dimensions

(Dimensions in mm)

