

30SD10-31 TYPE Solenoid Directional Valve

Features

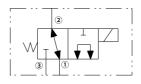
- · Continuous-duty rated coil
- · Efficient wet-armature construction
- · Cartridges are voltage interchangeable
- Optional waterproof E-Coils rated up to IP69K
- ·All ports may be fully pressurized
- · Industry common cavity
- Hardened parts for long life and low leakage

Contents

Peak flow (L/min / gpm)

Description	02
Operation	02
Ordering code	02
Materials	02
Technical data	03
Performance	03
Dimensions	04

Symbol



2.24

Description

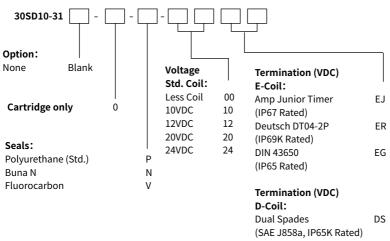
A solenoid-operated, 3-way, direct-acting, spool-type, screw-in hydraulic cartridge valve.

Operation

When de-energized, the valve allows flow from (2) to (1), while blocking flow at (3). When energized, the valve shifts to open from (1) to (3), while

blocking at ②.

Ordering Code



Materials

Cartridge:

Weight: 0.14 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.

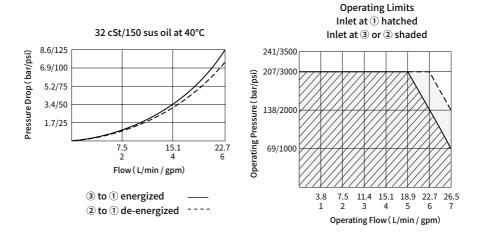
E-Coil:

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

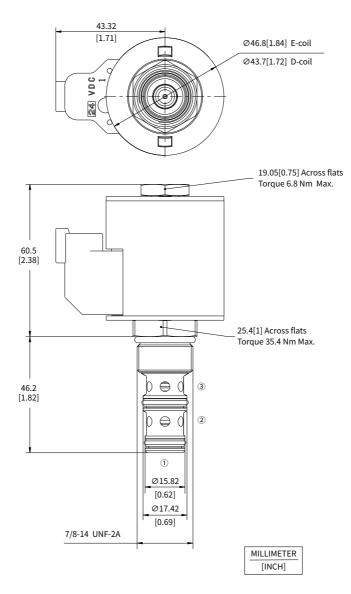
Technical Data

Rated pressure		207 bar (3000 psi)	
Peak flow		22.7 L/min (6 gpm)	
Internal leakage		≤ 164 mL/min @ 207 bar	
Coil duty rating		Continuous from 85% to 115% of nominal voltage	
Response time		First indication of change of state with 100% voltage supplied at 80% of nominal flow rating: Energized: 60 msec. ; De-energized: 10 msec.	
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 207 bar	
Cavity		VC10-3 (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



114