



2.18

# 30SD10-21 TYPE

## Solenoid Directional Valve

Rated pressure (bar / psi) 207 / 3000  
 Peak flow (L/min / gpm) 68.1 / 18 (See performance chart)

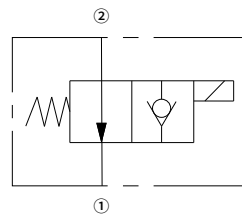
### Features

- 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

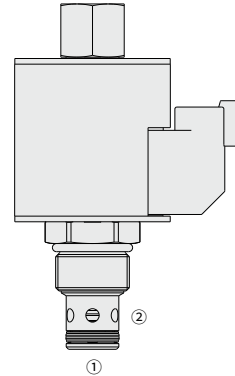
A solenoid-operated, 2-way, piloted, poppet-type, normally open, screw-in, hydraulic cartridge valve designed for low leakage in load-holding applications.

## Operation

When de-energized, the 30SD10-21 allows flow from ② to ①.

Flow from ① to ② is severely restricted in this mode.

When energized, the valve's poppet closes on its seat, blocking flow in the ② to ① direction. In this mode the cartridge will allow ① to ② flow after overcoming the solenoid force (requires 3.4 to 10.3 bar / 50 to 150 psi).



## Ordering Code

	30SD10-21	-	-	-	-	-	-	-	-
<b>Option:</b>	Blank								
	None								
<b>Cartridge only</b>	0								
<b>Seals:</b>									
Buna N (Std.)				N					
Polyurethane				P					
Fluorocarbon				V					
					<b>Voltage Std. Coil:</b>				
					Less Coil	00			
					10VDC	10			
					12VDC	12			
					20VDC	20			
					24VDC	24			
								<b>Termination (VDC)</b>	
								<b>E-Coil:</b>	
								Amp Junior Timer	EJ
								(IP67 Rated)	
								Deutsch DT04-2P	ER
								(IP69K Rated)	
								DIN 43650	EG
								(IP65 Rated)	
								<b>Termination (VDC)</b>	
								<b>D-Coil:</b>	
								Dual Spades	DS
								(SAE J858a, IP65K Rated)	

## Materials

### Cartridge:

Weight: 0.2 kg ; Steel with hardened work surfaces. Zinc-plated exposed surfaces; Buna N (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.

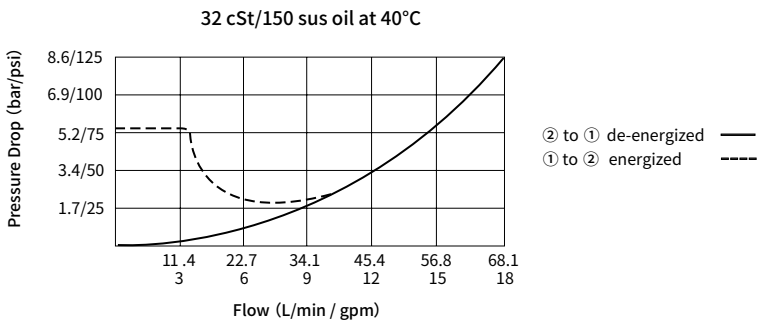
### E-Coil:

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

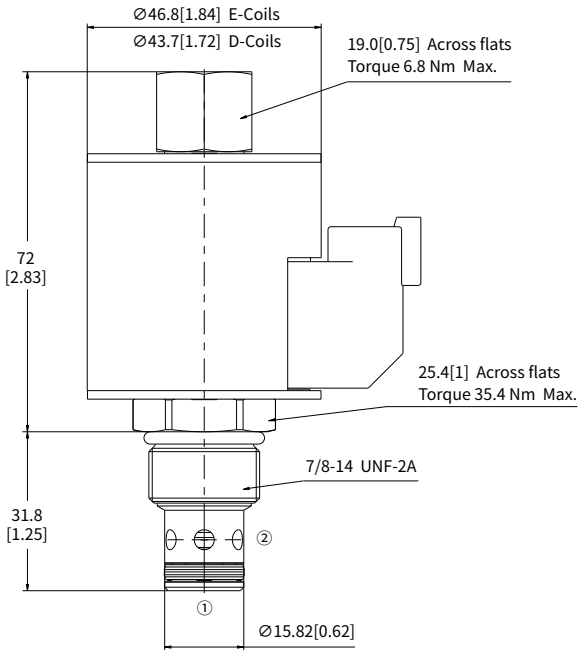
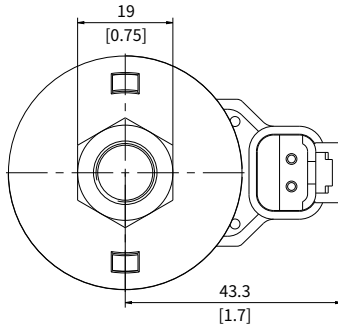
## Technical Data

Rated pressure	207 bar (3000 psi)	
Peak flow	68.1 L/min (18 gpm) ; See performance chart	
Internal leakage	≤ 0.15 mL/min (3 drops /min) @207 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 207 bar	
Cavity	VC10-2 (See technical reference)	
Fluid	Mineral-based or synthetics with lubricating properties	
Viscosity range	7.4 to 420 mm <sup>2</sup> /s	
Temperature range	-40 to 100 °C (Buna N seals)	
	-54 to 107 °C (Polyurethane 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



MILLIMETER
INCH