

1.17

# **30SD10-21** TYPE Solenoid Directional Valve

Rated pressure (bar / psi) 207 / 3000

Peak flow (L/min / gpm) 68.1 / 18 (See performance chart)

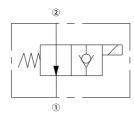
#### **Features**

- · 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

### **Contents**

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

## Symbol

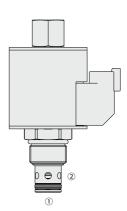


## Description

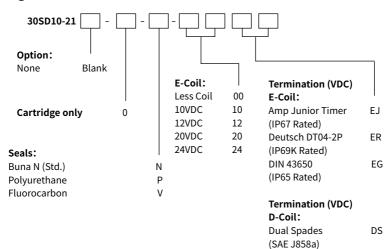
A solenoid-operated, 2-way, piloted, poppet-type, normally open, screw-in, hydraulic cartridge valve designed for low leakage in load-holding applications.

## 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**



#### **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.

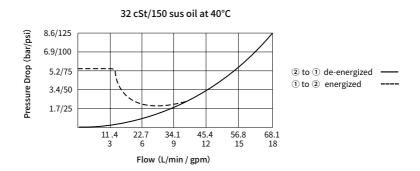
#### E-Coil:

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**

