

2.43

# **35SD12-41** TYPE Solenoid Directional Valve

Rated pressure (bar / psi) 240 / 3500

Peak flow (L/min / gpm) 56.8 / 15 (See performance chart)

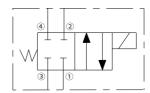
#### **Features**

- · Continuous-duty rated coil
- · Cartridges are voltage interchangeable
- · Optional waterproof E-Coils rated up to IP69K
- · Efficient wet-armature construction
- · Industry common cavity
- · Hardened parts for long life

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# Symbol



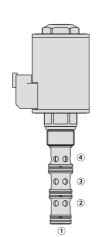
## Description

A solenoid-operated, 2-position, four-way, direct-acting spool-type, screw-in hydraulic cartridge valve, intended as a bidirectional blocking valve.

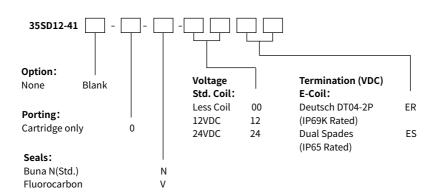
## Operation

When de-energized, the 35SD12-41 blocks flow at all ports. When energized, the spool shifts to allow flow from ③ to ④, and from ② to ①.

Note: Consult factory for applications where port 1 will be used as an inlet.



# **Ordering Code**



#### **Materials**

#### Cartridge:

Weight: 0.39 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:

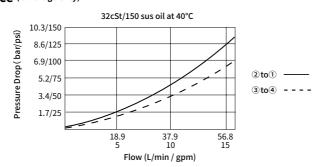
Weight: 1.36 kg; Perfect wound, fully encapsulated with rugged external metal shell; Rated up to IP69K with Deutsch sockets.

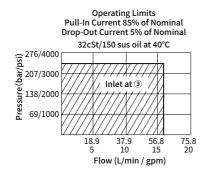
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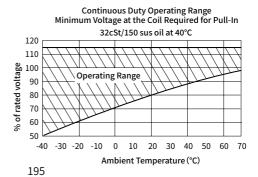
## **Technical Data**

Rated pressure		240 bar (3500 psi)	
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Peak flow		See performance chart	
Internal leakage		≤ 410 ml/min@240 bar	
Coil duty rating		See performance chart	
Response time (When the voltage is 100% and the flow is 80% of the rated value)		Pull-In:	
		100 msec; Drop-Out: 100 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		VC12-4 (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)	
		-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**

