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# **50SD58-35** TYPE Solenoid Directional Valve

Rated pressure (bar / psi) 345 / 5000

Peak flow (L/min / gpm) 11.4 / 3 (See performance chart

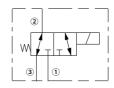
#### **Features**

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

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## **Symbol**



## Description

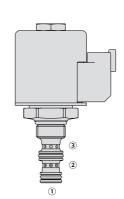
A solenoid-operated, 3-way,2-position,direct-acting,spool-type,screw-in hydraulic directional valve designed for high pressure operation up to 345 bar(5000psi).

## Operation

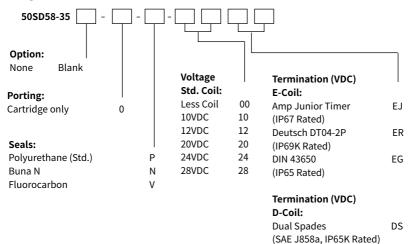
When de-energized, the valve allows flow from  $\ensuremath{\mathfrak{D}}$  to

When energized, the cartridge's spool shifts to open from ② to ① ,while blocking flow out ③ .

Note:Port  $\odot$  must be connected to tank.Valve cannot withstand more than 276 bar(4000psi)at the inlet of port  $\odot$ .



## **Ordering Code**



#### **Materials**

#### Cartridge:

Weight: 0.2 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.

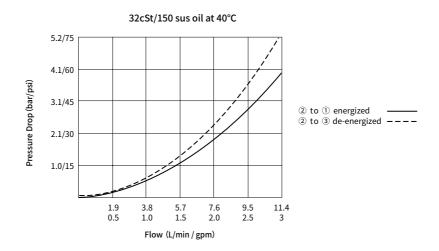
#### E Cail

Weight: 0.4 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                     |        | ≤ 140 mL/min @345 bar  |  |
| Coil duty rating                     |        | Continuous from 85% to 115% of nominal voltage   |  |
| Initial coil current<br>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 83VDC   |  |
| Minimum pull-in voltage              |        | 85% of nominal at 207 bar  |  |
| Cavity                               |        | VC08-3 (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 18/16/13, and level 15/13/11 is recommended to prolong the service life |  |

## Performance (Cartridge Only)



## **Dimensions**

