



2.13

# 30SD08-47A TYPE

## Solenoid Directional Valve

|                            |            |
|----------------------------|------------|
| Rated pressure (bar / psi) | 207 / 3000 |
| Peak flow (L/min / gpm)    | 11.4 / 3   |

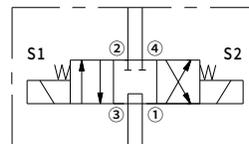
### Features

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

### Contents

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### Symbol



## Description

A solenoid-operated, 4-way, 3-position, direct-acting, spool-type, tandem center, screw-in hydraulic cartridge valve.

## Operation

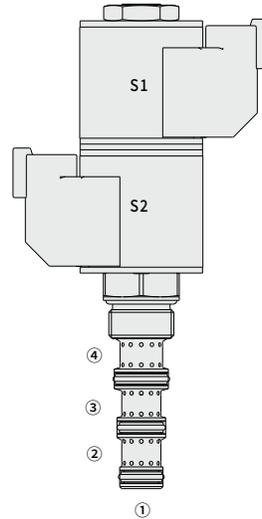
When de-energized, the valve blocks cylinder ports, while allowing flow from ③ to ①.

When coil #1 (S1) is energized, flow is allowed from ③ to ②, and from ④ to ①.

When coil #2 (S2) is energized, flow is allowed from ③ to ④, and from ② to ①.

In circuits where work port flows are unequal due to cylinder ratios, the higher return flow should be directed to port ②.

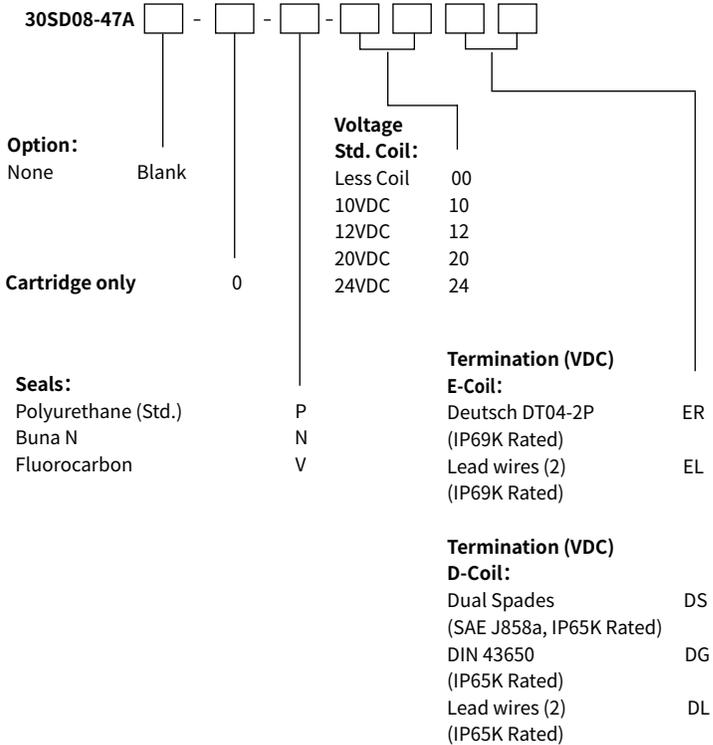
**While ① may be fully pressurized, it is not intended for use as the valve's inlet.**



## Technical Data

|                                   |  |                                |
|-----------------------------------|--|--------------------------------|
| Rated pressure                    | 207 bar (3000 psi)   |                                |
| Peak flow                         | 11.4 L/min (3 gpm)   |                                |
| Internal leakage                  | ≤ 278 mL/min@207 bar   |                                |
| Coil duty rating                  | Continuous from 85% to 115% of nominal voltage   |                                |
| Initial coil current draw at 20°C | E-Coil   | 1.4 A at 12VDC; 0.7 A at 24VDC |
|                                   | D-Coil   | 1.2 A at 12VDC; 0.6 A at 24VDC |
| Minimum pull-in voltage           | 85% of nominal at 207 bar  |                                |
| Cavity                            | VC08-4 (See technical reference)   |                                |
| Fluid                             | Mineral-based or synthetics with lubricating properties  |                                |
| Viscosity range                   | 7.4 to 420 mm <sup>2</sup> /s  |                                |
| Temperature range                 | -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 |                                |

## Ordering Code



01

## 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.

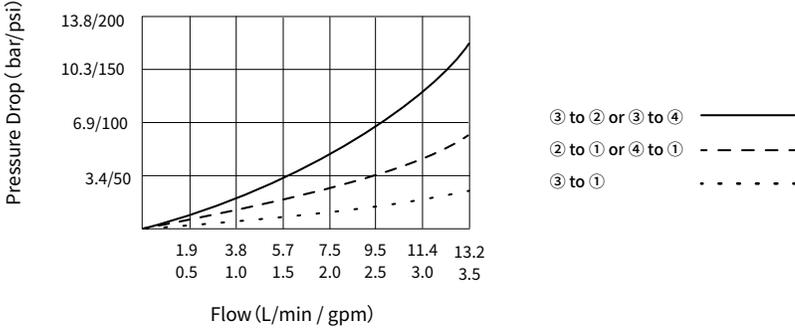
### E-Coil:

Weight: 0.14 kg; Perfect wound, fully encapsulated with rugged external metal shell; Rated up to IP69K with Deutsch sockets.

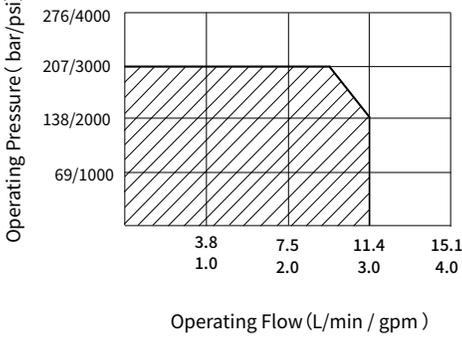
**Performance (Cartridge Only)**

01

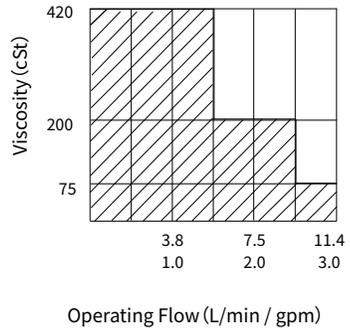
32cSt/150 sus oil at 40°C



Performance Range (Shaded)

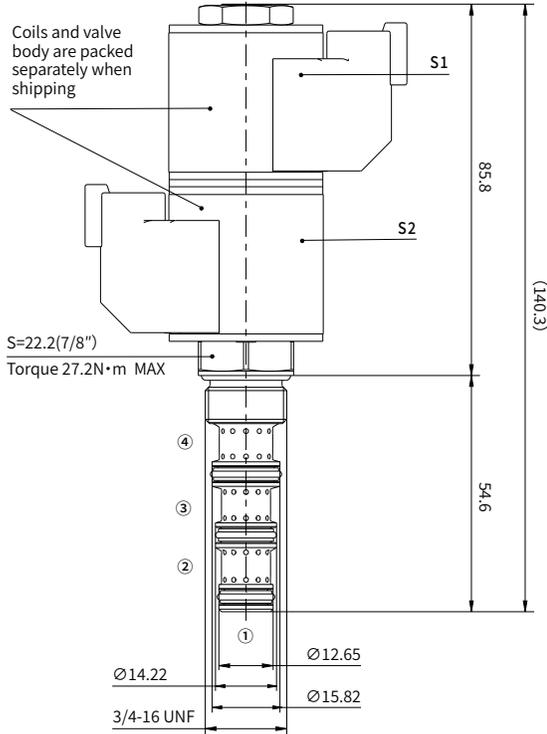
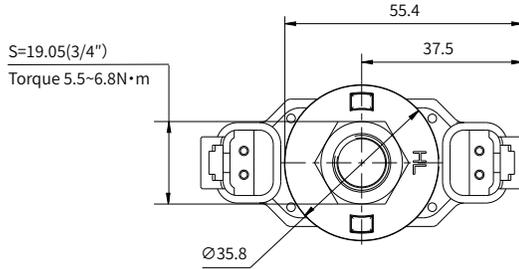


Fluid Viscosity vs. Flow



# Dimensions

(Dimensions in mm)



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