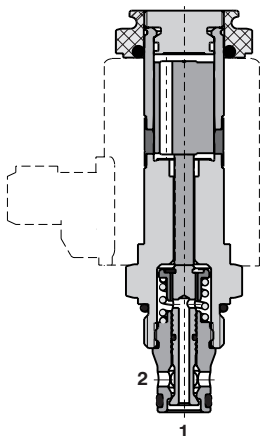


SD1E-A2

3/4-16 UNF • Q_{max} 30 l/min (8 GPM) • p_{max} 350 bar (5100 PSI)

2S5



Technical Features

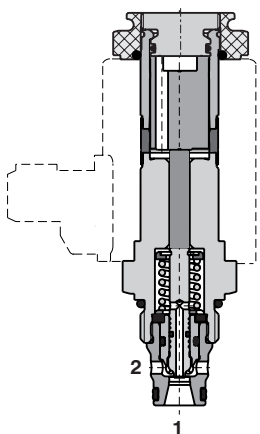
- › Hardened precision parts
- › High flow capacity and leak-free closing (up to 3 drops per minute)
- › High transmitted hydraulic power up to 350 bar
- › Normally open and normally closed version
- › Wide range of manual overrides available
- › All ports may be fully pressurized
- › Coil interchangeability among SD*-A*/H product line
- › In the standard version, the valve is zinc-coated for 240 h protection acc. to ISO 9227

Functional Description

2-way, 2 position high pressure direct acting poppet valve in form of a screw-in cartridge. The valve is used mainly for ON-OFF bi-directional control of flow to actuators with leak-free closing in both directions.

| Model Code | 2S5 | 2S6 |
|------------|-----|-----|
| Symbol | | |

2S6



Technical Data

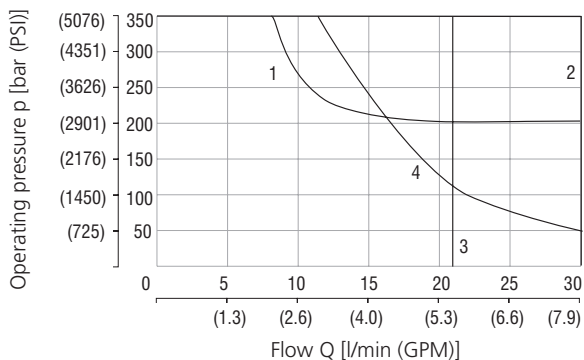
| Valve size / Cartridge cavity | | 3/4-16 UNF-2A / A2 (C-8-2) |
|-------------------------------|-------------|----------------------------|
| Max. flow | l/min (GPM) | 30 (7.9) |
| Max. operating pressure | bar (PSI) | 350 (5080) |
| Fluid temperature range (NBR) | °C (°F) | -30...80 (-22...176) |
| Fluid temperature range (FPM) | °C (°F) | -20...80 (-4...176) |
| Ambient temperature range | °C (°F) | -30...80 (-22...176) |
| Supply voltage tolerance | % | AC, DC: ± 15 |
| Max. switching frequency | 1/h | 15 000 |
| Weight without coil | kg (lbs) | 0.19 (0.42) |

| | Datasheet | Type |
|-----------------------------|------------------|-----------------------------------|
| General information | GI_0060 | Products and operating conditions |
| Coil types | C_8007 | C19B* |
| Valve bodies | In-line mounted | SB-A2* |
| | Sandwich mounted | SB-*A2* |
| Cavity details / Form tools | SMT_0019 | SMT-A2* |
| Spare parts | SP_8010 | |

Characteristics measured at $v = 32 \text{ mm}^2/\text{s}$ (156 SUS)

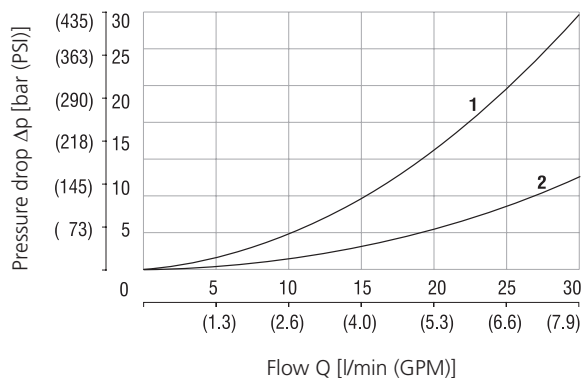
Operating limits

Oil 80 °C (176 °F) / Ambient temperature 50 °C (122 °F) / Voltage U_n -10% (21.6 V DC)



| | Model | Connection |
|---|-------|------------|
| 1 | 2S5 | 1→2 |
| 2 | 2S5 | 2→1 |
| 3 | 2S6 | 2→1 |
| 4 | 2S6 | 1→2 |

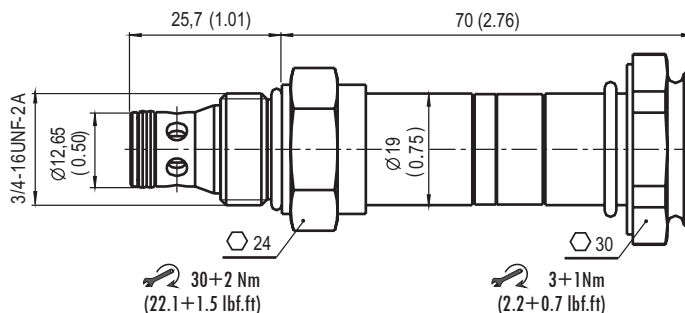
Pressure drop related to flow rate



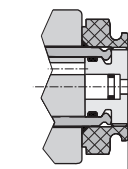
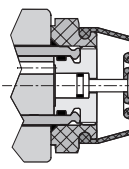
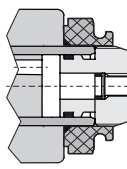
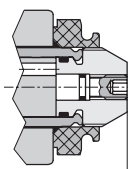
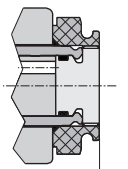
| | Model | Connection |
|---|-------|------------|
| 1 | 2S5 | 1→2 |
| 1 | 2S5 | 2→1 |
| 2 | 2S6 | 1→2 |
| 2 | 2S6 | 2→1 |

Dimensions in millimeters (inches)

255, 256

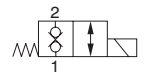
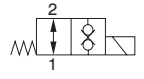


Manual Override in millimeters (inches)

| No designation - standard | Designation M2 - rubber boot protected | Designation M4 - hand screw | Designation M5 - socket head screw, size 2.5 | Designation M9 - without manual override |
|--|--|--|---|--|
|  ~ 70,0 (2.76) |  ~ 81,5 (3.21) |  ~ 90 (3.54) |  ~ 77,5 (3.05) |  ~ 70,0 (2.76) |

In case of solenoid malfunction or power failure, the spool of the valve can be shifted by manual override as long as the pressure in port T does not exceed 25 bar (363 PSI). For alternative manual overrides contact our technical support.

Ordering Code

| | |
|--|---|
| SD1E-A2 / H <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> - <input type="checkbox"/> | |
| 2/2 directional valve, solenoid operated, poppet type, blocking, direct acting | |
| Valve cavity 3/4-16 UNF (C-8-2) | |
| High performance | |
| Functional symbol | |
|  | 255 |
|  | 256 |
| Surface treatment | |
| A zinc-coated (ZnCr-3), ISO 9227 (240 h) | |
| B zinc-coated (ZnNi), ISO 9227 (520 h) | |
| Seals | |
| No designation V | NBR FPM (Viton) |
| Manual override | |
| No designation | standard M2 rubber boot protected M4 hand screw M5 socket head screw M9 without manual override |