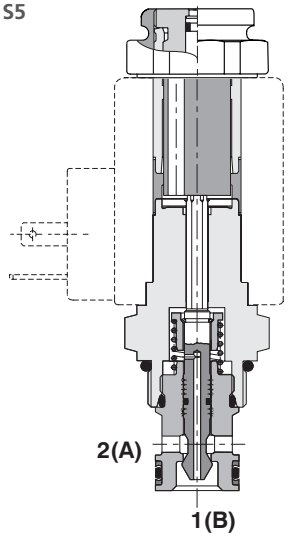
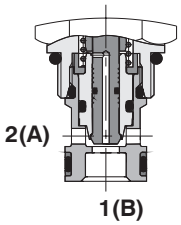
# ROE3-042S5(S6)

M22x1.5 • $Q_{max}$ 25 l/min (7 GPM) • $p_{max}$ 250 bar (3600 PSI)

S5




S6

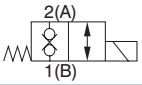
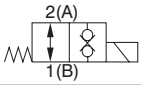



## Technical Features

- Hardened precision parts
- High flow capacity and leak-free closing
- High transmitted hydraulic power
- Wide range of manual overrides available
- All ports may be fully pressurized
- Normally open and normally closed version
- Coil interchangeability among ROE / RPE3-04 product line
- Standard version zinc-coated with surface protection acc. to ISO 9227 (240 h salt spray)

## Functional Description

2-way, 2-position high pressure, direct-acting poppet valve in the 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 | S5 | S6 |
|---|---|---|
| Symbol |  |  |



## Technical Data

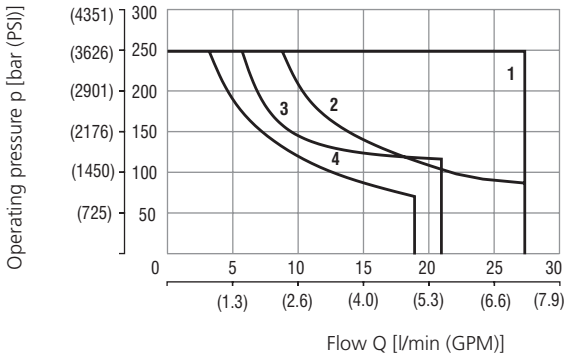
| Valve size / Cartridge cavity | | M22x1.5 / QG2 |
|---|---|---|
| Max. flow | l/min (GPM) | 25 (6.6) |
| Max. operating pressure | bar (PSI) | 250 (3630) |
| Fluid temperature range (NBR) | °C (°F) | -30 ... +80 (-22 ... +176) |
| Fluid temperature range (FPM) | °C (°F) | -20 ... +80 (-4 ... +176) |
| Ambient temperature | °C (°F) | -20 ... 50 (-4 ... 122) |
| Supply voltage tolerance | % | AC, DC: ± 10 |
| Max. switching frequency | 1/h | 15 000 |
| Mass without coil | kg (lbs) | 0.2 (0.44) |

| | | Datasheet | Type |
|---|---|---|---|
| General information | | GI_0060 | Products and operating conditions |
| Coil types | | C_8007 | C19B* |
| Valve bodies | In-line mounted | SB_0018 | SB-QG2* |
| | Sandwich mounted | SB-04 (06)_0028 | SB-04-QG2* |
| Cavity details | | SMT_0019 | SMT-QG2* |
| Spare parts | | SP_8010 | |

## Characteristics measured at ν = 32 mm²/s (156 SUS)

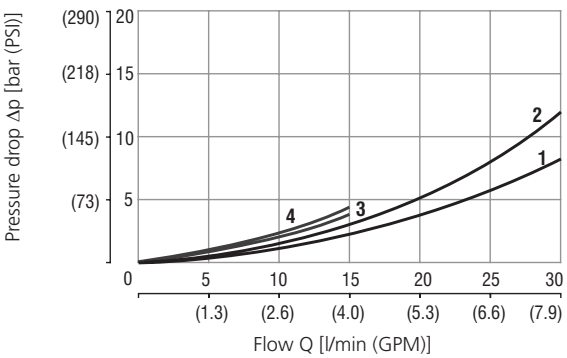
### Operating limits

Operating limits for maximum hydraulic power at rated temperature and supply voltage equal to 90% nominal.




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

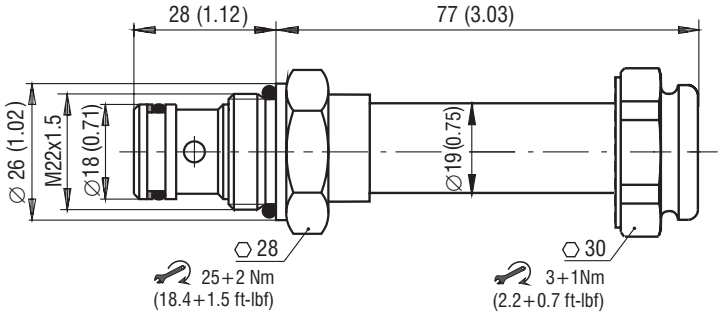
### Pressure drop related to flow rate



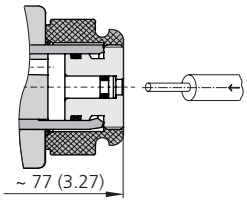
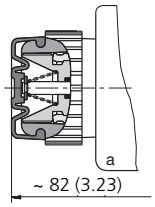
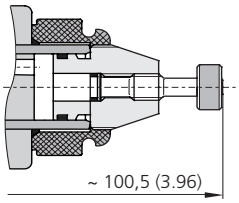

| | Model | Connection |
|---|---|---|
| 1 | S5 | 2→1 |
| 2 | S5 | 1→2 |
| 3 | S6 | 2→1* |
| 4 | S6 | 1→2* |

* flow up to 15 l/min (4 GPM)

## Dimensions in millimeters (inches)




## Manual Override in millimeters (inches)

| No designation<br>- standard | Designation N2<br>- rubber boot protected | Designation N4<br>- hand screw |
|---|---|---|
|  |  |  |



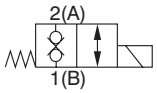
In case of solenoid malfunction or power failure, the spool of the valve can be shifted by manual override as long as the pressure in port T does not exceed 25 bar (363 PSI). For alternative manual overrides contact our technical support.

## Ordering Code

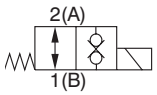
**ROE3-042** □ □ □ - □

**2/2 Directional Valve, solenoid operated, poppet-type, blocking, direct-acting M22x1.5**

**Model**




**S5**




**S6**

**Surface treatment**

| | |
|---|---|
| **A** | zinc-coated (ZnCr-3), ISO 9227 (240h) |
| **B** | zinc-coated (ZnNi), ISO 9227 (520h) |

**Seals**

| | |
|---|---|
| **No designation** | NBR |
| **V** | FPM (Viton) |

**Manual override**

| | |
|---|---|
| **No designation** | standard |
| **N2** | rubber boot protected |
| **N4** | hand screw |