

Float switches for monitoring the level of liquid media

Characteristics

- ▶ simple to install
- ▶ practical and inexpensive solution
- ▶ maintenance-free
- ▶ control elements: reed contacts
- ▶ Electrical connection:
Connecting box , coupler plug or cable
- ▶ IP66 protection
- ▶ Temperature range: -30°C to 150°C
- ▶ standardised and customer-specific designs

Areas of application

▶ IMB float switches are based on the float principle with small reed contacts for every level to be monitored. They are suitable for virtually all liquids and are mainly used for level controlling and monitoring.

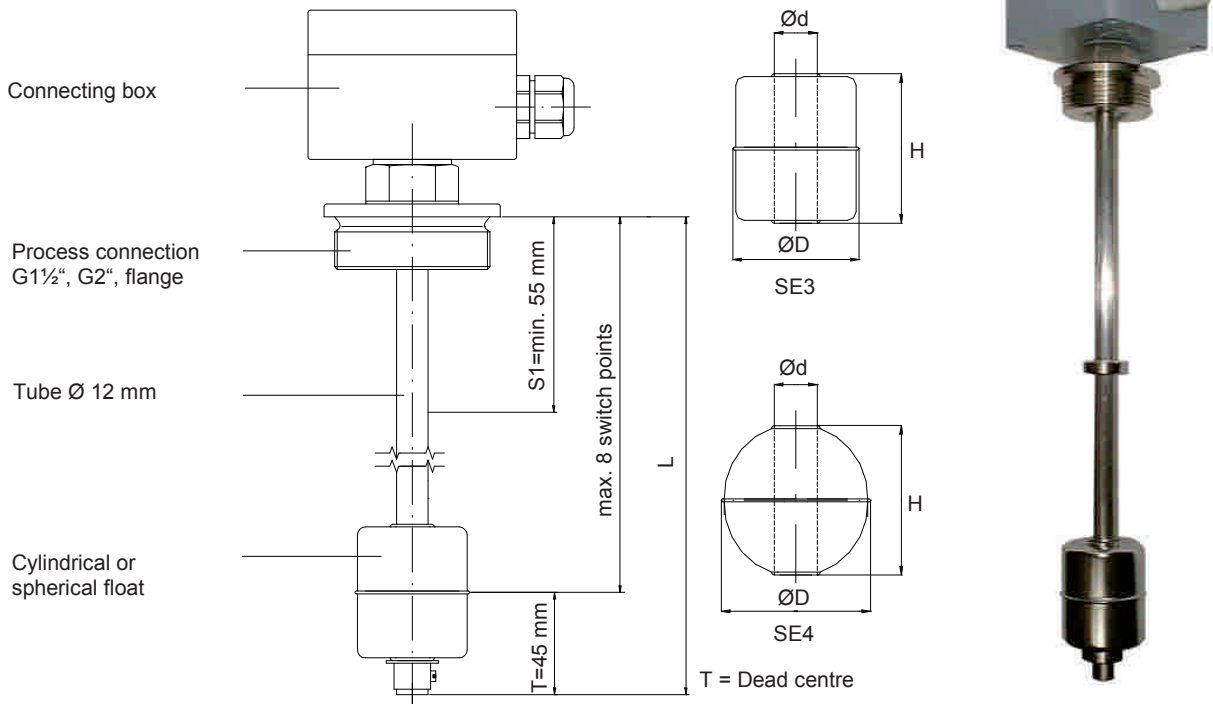
Float switches are suitable even for rough environments and are applicable in the following industries:

- plant engineering
- machine construction
- chemical industrie
- biochemical industrie
- petrochemical industrie
- liquid natural gas
- off-shore
- power plants
- ship-building
- food industrie
- pharmaceuticals etc.

Functional description

▶ The magnetic field of a permanent magnet built into the float operates the reed contacts installed in the tube. The functions of the reed contacts are: closer, opener or change-over switch.

Dimensions



| Float type | Dimensions | | | Max. operating pressure (MPa) | Max. operating temperature (°C) | Medium density kg/m ³ | Material |
|-----------------------|------------|----------|--------|-------------------------------|---------------------------------|----------------------------------|----------|
| | Ø D (mm) | Ø d (mm) | H (mm) | | | | |
| SE3 Cylindrical float | 44 | 15 | 52 | 1,6 | 180 | ≥ 750 | 1.4571 |
| SE4 Spherical float | 52 | 15 | 52 | 4,0 | 180 | ≥ 750 | 1.4571 |

Technical data

| | | | |
|------------------------------|---|---------------------------|---|
| Max. Power | Opener / Closer: 230 V AC; 100 VA; 1 A AC 230 V DC; 50 W; 0,5 A DC | Temperature | -30°C to +150°C |
| | Change-over switch: 230 V AC; 40 VA; 1 A AC 230 V DC; 20 W; 0,5 A DC | Connecting box | Aluminium 75x80x57 mm Aluminium 58x64x36 mm Polycarbonate 80x82x55 mm |
| Switch function | opener / closer / change-over switch with a rising liquid level | Protection | IP 66 |
| Installation position | vertical, ± 30° | Max. pressure | 4.0 MPa |
| Medium density | ≥ 750 kg/m ³ | Tube length L | Standard: up to 6000 mm, > 6000 mm on request |
| | | Process connection | Standard: G 1 1/2", G 2", Flange DN50 PN16, other types on request |

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Product overview / Order table

SR 10

Connecting box
 A Aluminium case 75 x 80 x 57 mm, IP66
 B Aluminium case 58 x 64 x 36 mm, IP66
 C Polycarbonate case 80 x 82 x 55 mm, IP66

Process connections (installation: vertical, ± 30°)
 A Fixing screw thread G 1 1/2", 1.4571
 B Fixing screw thread G 2", 1.4571
 C Flange DIN 2527, Form B, DN 50 PN 16, 1.4571
 X Other types on request

Tube length L (see dimensioned diagram)
 Tube in 1.4571
 Tube length from sealing face of process connection
 Tube length L ≤ 6000 mm; L > 6000 mm on request
 Dimensions in mm

Float types
 Z SE3 (cylindrical float Ø44 in 1.4571)
 K SE4 (spherical float Ø52 in 1.4571)
 X Other types on request

Temperature range
 N -30° to +80 °C
 H -30° to +150°C

Switch point number
 (see dimensioned diagram)

Switch function (with a rising liquid level)
 O Opener
 S Closer
 U Change-over switch

Switch position
 Switch position from sealing face of process connection in mm

| | | | | | | |
|-------|--|--|--|--|--|--|
| SR 10 | | | | | | |
|-------|--|--|--|--|--|--|

| | | |
|----|--|--|
| S1 | | |
| S2 | | |
| ⋮ | | |

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