

Characteristics

- ▶ Level sensor output 4 – 20mA or
- ▶ Resistance output in three-wire potentiometer circuit
- ▶ Temperature range: -30°C to 150°C
- ▶ Simple operating principle
Reed switch resistance measuring chain
- ▶ 12 mm accuracy grid
- ▶ Vertical installation
- ▶ Electrical connection:
Connecting box, coupler plug or cable
- ▶ IP66 protection

Areas of application

▶ The level sensors are ideal for industrial use because of their extreme reliability and robust mechanical construction. They operate safely and reliably even under harsh service conditions and can be used in the following industries, among others:

- Plant construction
- Biochemicals
- Chemicals
- Energy systems
- Natural gas
- Power stations
- Food industry
- Engineering
- Offshore
- Petrochemicals
- Shipbuilding
- Pharmaceuticals etc.

Functional description

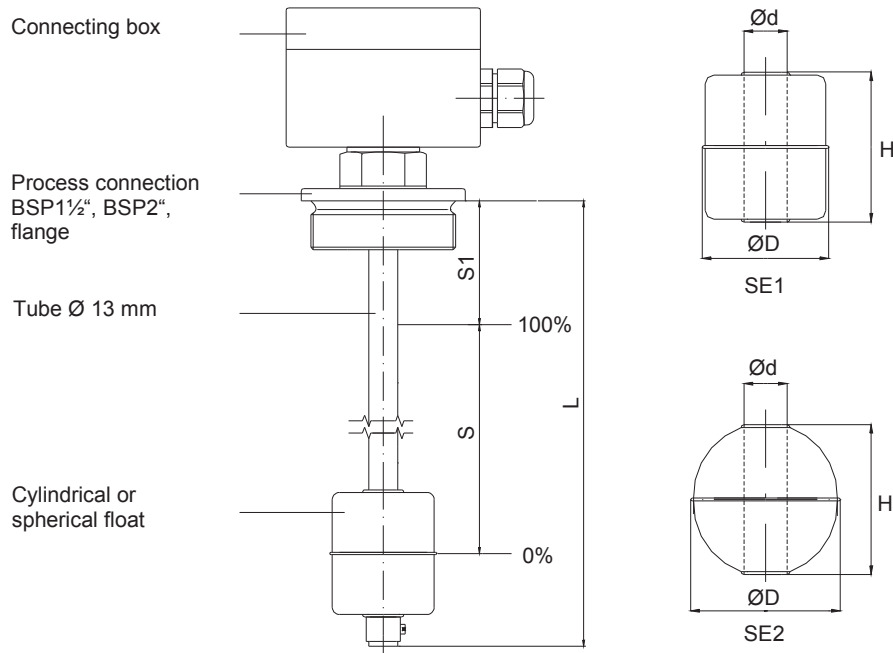
▶ The magnetic field of a permanent magnet built into the float operates the resistance measuring chain installed in the tube which is equivalent to a three-wire potentiometer circuit. The resistance signal generated is proportional to the level.

The signal can be transmitted through external transducers and limit transmitters or through a 4-20mA two-wire transducer (see brochure ZM1) which can be integrated in the level sensor connecting box.

Level sensor in stainless steel 1.4571 with connecting box

MG 01

Dimensions

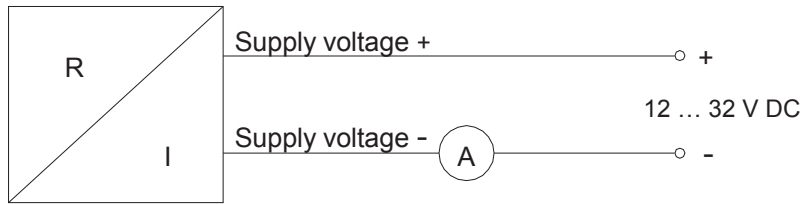


Float type	Dimensions			Max. operating pressure (MPa)	Max. operating temperature (°C)	Medium density kg/m ³	Material
	Ø D (mm)	Ø d (mm)	H (mm)				
SE1 Cylindrical float	44	15	52	1.6	180	≥ 750	1.4571
SE2 Spherical float	52	15	52	4.0	180	≥ 750	1.4571

Technical data

Supply voltage	12 – 32 V DC	Medium density	≥ 750 kg/m ³
Output	4 – 20mA or resistance signal proportional to level	Protection	IP66
Max. pressure	4.0 MPa	Accuracy	12 mm
Temperature	-30°C to +150°C	Tube length L	Standard: up to 6000 mm, > 6000 mm on request
Connecting box	Aluminium 75 x 80 x 57 mm Aluminium 58 x 64 x 36 mm Polycarbonate 82 x 80 x 55 mm	Process connection	Standard: BSP1 1/2", BSP2", Flange DN50 PN16, other types on request

Electrical connection



Product overview / Order table

MG 01

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 BSP 1 1/2", 1.4571
- B Fixing screw thread BSP 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

- A SE1 (cylindrical float Ø44 in 1.4571)
- B SE2 (spherical float Ø52 in 1.4571)
- X Other types on request

Temperature range

- C -30° to +80 °C
- D -30° to +150°C

Optional two-wire transducer ZM1 (integrated in the

- O Without two-wire transducer connecting box)
- Z With two-wire transducer, 4 - 20mA (see brochure ZM1)

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S1=	
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100 % marker S1 = distance from sealing face to centre of float

Order instruction: 100% marker S1 in mm

Edition: 10/2015. Technical specifications are for information only and may change without notice.