



Level Sensor M03

Level sensor for monitoring of liquids
made of stainless steel, with angular connector



D-EN-M03-20190606

- High reliability
- Robust design
- Output 4 - 20 mA
- Designs up to 6m in length



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Features

- Media compatibility: Oil, water, diesel, refrigerants and other liquids
- Permissible medium temperature range: -30 ... +120 °C [-22 ... +248 °F]
- Output signal: Resistance in a 3-wire potentiometer circuit, current output 4...20 mA
- Measuring principle: Reed-chain technology
- Accuracy, resolution: 24 mm [0.9 in], 12 mm [0.5 in], 10 mm [0.4 in], 6 mm [0.2 in] or 3 mm [0.1 in]

Description

The model M01 level sensor has been developed for measuring the levels of liquids. The stainless steel used is suitable for a multitude of media, such as, for example, oil, water, diesel and refrigerants.

Applications

Due to their high reliability and robust mechanical design, the encoders are ideally suited for industrial use. They work safely and reliably even under harsh operating conditions and can i.a. used in the following industries:

- plant construction
- biochemistry
- chemistry
- turbines
- natural gas
- power plants
- food industry
- mechanical engineering
- offshore
- petro chemistry
- shipbuilding
- pharmacy etc.

Measuring principle

A permanent magnet built into the float triggers, with its magnetic field, the resistance measuring chain built into the guide tube. The entire assembly corresponds to a 3-wire potentiometer circuit. The measured resistance signal is proportional to the level. The model M01 is optionally available with a 4 ... 20 mA analogue output.

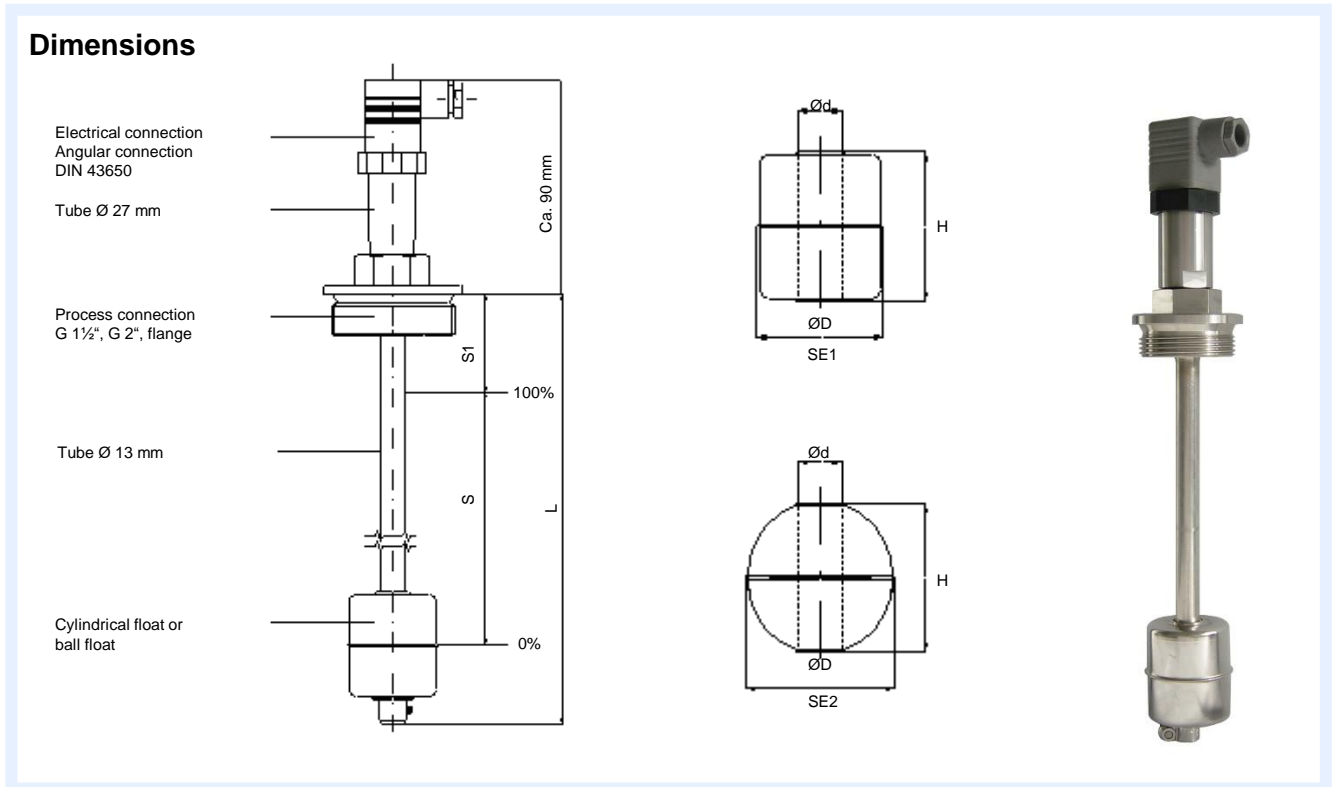
Technical data

Supply voltage	12 – 32 V DC
Output	4-20 mA or level-proportional resistance signal
Operating pressure max.	4.0 MPa
Temperature	-30°C to +80°C higher temperatures on request
Plug output	Angular connection DIN 43650, other versions on request
Medium density	≥ 750 kg/m ³
Accuracy	12 mm
Tube length L	Standard: up to 6000 mm, >6000 mm on request
Process connection	Standard: 1½", G2", Flange DN50 PN16, other versions on request



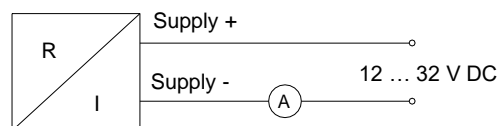
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Float type	Dimensions (mm)			Operating pressure max. (MPa)	Operating temperature max. (°C)	Medium density (kg/m ³)	Material
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SE1 Cylindrical float	44	15	52	1,6	80	≥ 750	1.4571
SE2 Ball float	52	15	52	4,0	80	≥ 750	1.4571

Electrical connection



	plug assignment
Supply +	1
Supply -	2

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Ordering information

M 03

Electrical connection

- A Angular plug, DIN 43650
- X Other versions on request

Process connection (Mounting position: vertical, $\pm 30^\circ$)

- A Mounting screw thread G 1 1/2", 1.4571
- B Mounting screw thread G 2", 1.4571
- C Flange DIN 2527, Form B, DN 50 PN 16, 1.4571
- X Other versions on request

Tube length L (see „Dimensions“)

- Tube material 1.4571
- Tube length from sealing surface process connection
- Tube length $L \leq 6000$ mm; $L > 6000$ mm on request
- Indication in mm

Float type

- A SE1 (Cylindrical float $\varnothing 44$, material 1.4571)
- B SE2 (Ball float $\varnothing 52$, material 1.4571)
- X other versions on request

Output

- Z with two-wire transmitter, 4 – 20 mA
- W resistance signal



Distance sealing face to 100 % mark
($X \geq$ dead band T in mm [in] (from sealing edge))

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Important instructions!

Technical changes and errors reserved.

Pictures can be similar.

The operating instructions belonging to this device must be observed! Download at www.schmidt-messtechnik.com.