



## Level Sensor M01

Level sensor for monitoring of liquids  
made of stainless steel, with terminal housing



D-EN-M01-20190605

- 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.

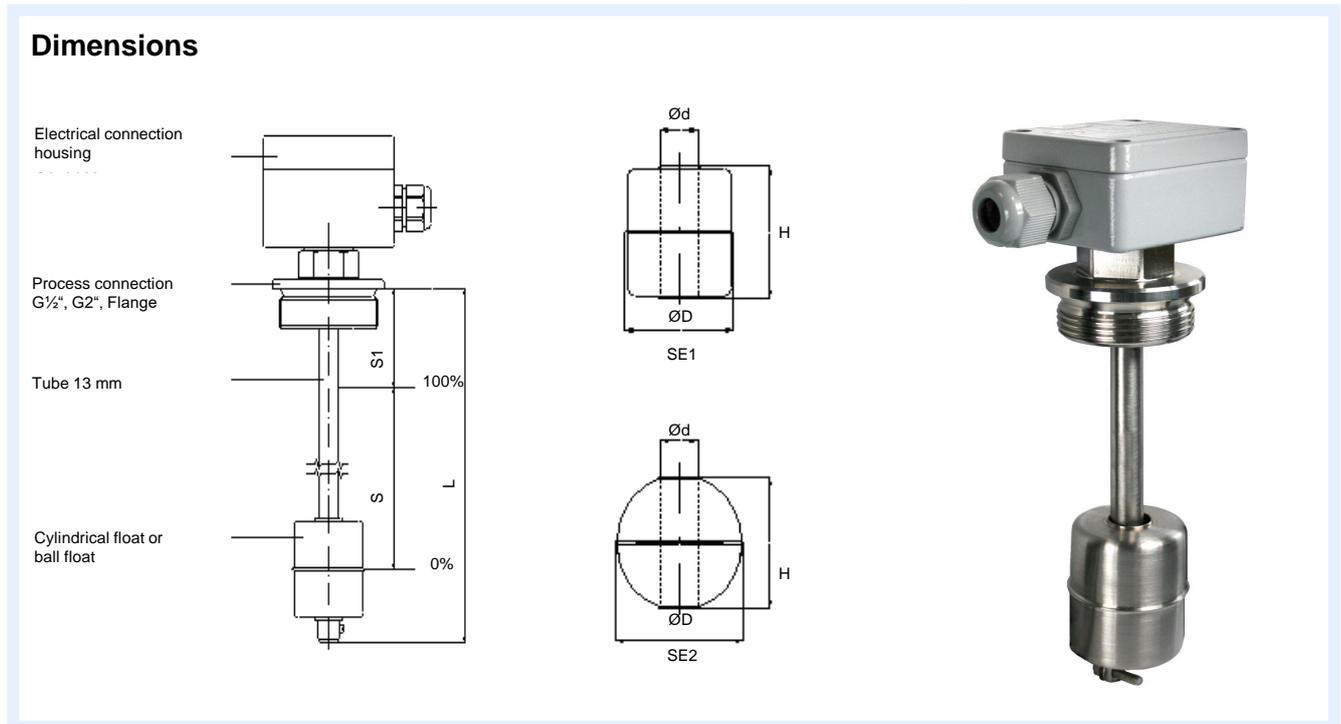
### Technical data

<b>Power supply</b>	12 – 32 V DC
<b>Output</b>	4 – 20 mA or level-proportional resistance signal
<b>Operating pressure max.</b>	4.0 MPa
<b>Temperature</b>	-30°C to +120°C
<b>Housing</b>	Aluminum 75x80x57 mm Aluminum 58x64x36 mm Polycarbonate 80 x 82 x 55 mm
<b>Medium density</b>	≥ 750 kg/m <sup>3</sup>
<b>Protection</b>	IP 66
<b>Accuracy</b>	12 mm
<b>Tube length L</b>	Standard: up to 6000 mm, >6000 mm on request
<b>Process connection</b>	Standard: G1½“, G2“, Other versions on request



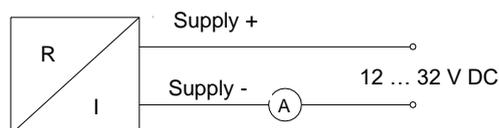
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Float type	Dimensions (mm)			Operating pressure max. (MPa)	Operating temperature max. (°C)	Medium density (kg/m <sup>3</sup> )	Material
	Ø D	Ø d	H				
SE1 Cylindrical float	44	15	52	1,6	120	≥ 750	1.4571
SE2 Ball float	52	15	52	4,0	120	≥ 750	1.4571

### Electrical connection



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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](http://www.schmidt-messtechnik.com).



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### Ordering information

#### M 01

#### Electrical connection

- A Aluminum housing 75 x 80 x 57 mm, IP66
- B Aluminum housing 58 x 64 x 36 mm, IP66
- C Polycarbonate housing 80 x 82 x 55 mm, IP66

#### 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

#### Temperature range

- C  $-30^\circ\text{C}$  to  $+80^\circ\text{C}$
- D  $-30^\circ\text{C}$  to  $+120^\circ\text{C}$

#### Option two-wire transmitter ZM1

- (integrated in the housing)
- O without two-wire transmitter
- Z with two-wire transmitter, 4 – 20 mA



S1 =

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

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