

# Magnetostrictive level transmitter

## High-resolution measurement principle, for industrial applications

### Model FLM-CM

WIKA data sheet LM 20.05

#### Applications

- High-accuracy level detection for liquid media
- For machine building, power generating equipment and mobile working machines

#### Special features

- Compact and space-saving design for industrial applications
- Output signal 4 ... 20 mA (NAMUR NE43)
- Operating limits:
  - Operating temperature:  $T = -40 \dots +125 \text{ }^{\circ}\text{C}$
  - Operating pressure:  $P = \text{Vacuum to } 40 \text{ bar}$
  - Limit density:  $\rho \geq 680 \text{ kg/m}^3$

#### Description

The model FLM-CM magnetostrictive level transmitter is used for the high-accuracy, continuous level detection of liquids in industrial applications and is based on determining the position of a magnetic float according to the magnetostrictive measurement principle.

The FLM-CM emits a 4 ... 20 mA output signal, which is configured via a USB adapter and the electrical coupler connector. Probe lengths of 100 mm to 1 m and also various temperature and pressure ranges are possible.



Mounting thread, cylinder float from stainless steel

## Approvals

Logo	Description	Country
	<b>EU declaration of conformity</b> <ul style="list-style-type: none"> <li>■ EMC directive EN 61326 emission (group 1, class B) and immunity (industrial application)</li> <li>■ RoHS directive</li> </ul>	European Union

Approvals and certificates, see website

## Specifications

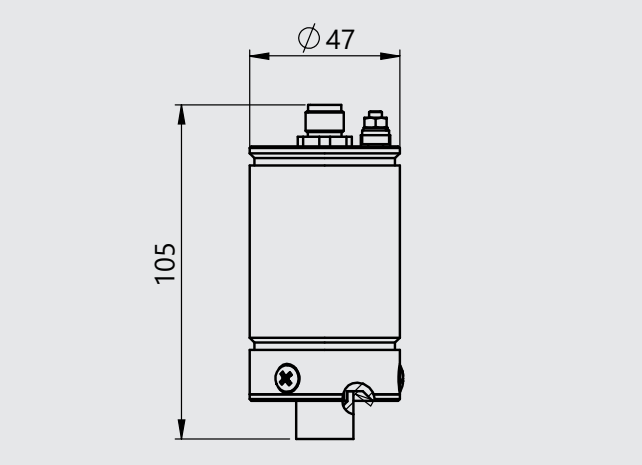
Magnetostrictive level transmitter, model FLM-CM	
<b>Guide tube</b>	Ø 6 mm (max. 1,000 mm)
<b>Process connection</b>	Mounting thread downwards <ul style="list-style-type: none"> <li>■ G 1/2" ... G 2"</li> <li>■ NPT 1/2" ... NPT 2"</li> </ul> Other process connections on request
<b>Materials</b>	
Wetted parts	Stainless steel 1.4571 (316Ti)
Connection head	Stainless steel 1.4305 (303)
<b>Insertion length</b>	100 ... 1,000 mm
<b>Measurement accuracy</b>	±2.5 mm
<b>Resolution</b>	0.1 mm
<b>Electrical connection</b>	Circular connector M12
<b>Supply voltage</b>	DC 8 ... 30 V
<b>Output signal</b>	4 ... 20 mA (NAMUR NE43)
<b>Operating pressure</b>	Depending on the float, max. 40 bar
<b>Operating temperature</b>	-40 ... +125 °C
<b>Ambient temperature</b>	-40 ... +85 °C
<b>Ingress protection per EN 60529</b>	IP68
<b>Configuration</b>	Via USB adapter with corresponding software and standard computer Order number: 14361280

## Float

Material	Version	Description	Suits guide tube Ø in mm	Minimum dimension U in mm	Max. operating pressure in bar	Limit density 85 % in kg/m <sup>3</sup>
<b>Stainless steel 1.4571 (316Ti)</b>	V18/42A	Cylinder Ø 18 mm	6	48	6	800
	V27A	Cylinder Ø 27 mm	6	22	16	700
	V29A	Sphere Ø 29 mm	6	20	25	920
<b>Titanium 3.7035 (grade 2)</b>	T29A	Sphere Ø 29 mm	6	21	30	700
<b>Buna (NBR)</b>	B20A	Cylinder Ø 20 mm	6	26	3	940
	B25A	Cylinder Ø 25 mm	6	20	3	790
	B30A	Cylinder Ø 30 mm	6	51	3	680

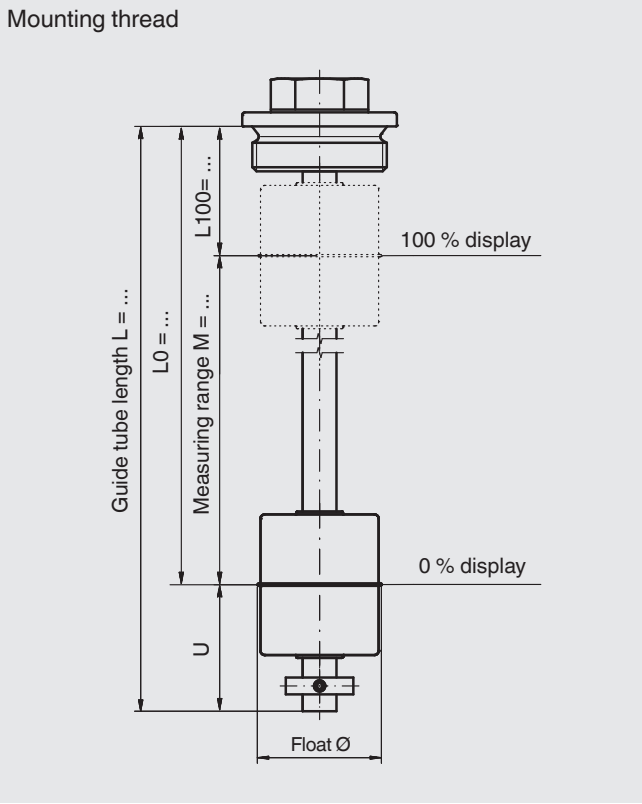
# Dimensions in mm

## ■ Read-out unit



## ■ Sensor unit

### Mounting thread



## Ordering information

Model / Version / Electrical connection / Process connection / Guide tube diameter / Guide tube length (insertion length) L / 100 % mark L1 / Measuring range M (span 0 ... 100 %) / Process specifications (operating temperature and pressure, limit density) / Options

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We reserve the right to make modifications to the specifications and materials.



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