

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

Approvals and certificates, see website

Specifications

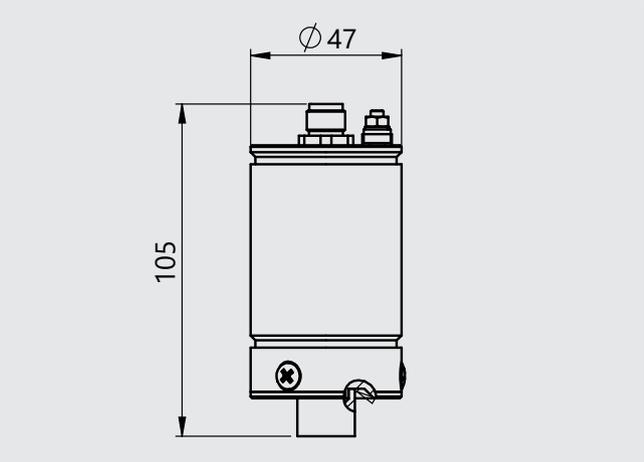
Magnetostrictive level transmitter, model FLM-CM	
Guide tube	Ø 6 mm (max. 1,000 mm)
Process connection	Mounting thread downwards <ul style="list-style-type: none"> ■ G 1/2" ... G 2" ■ NPT 1/2" ... NPT 2" Other process connections on request
Materials	
Wetted parts	Stainless steel 1.4571 (316Ti)
Connection head	Stainless steel 1.4305 (303)
Insertion length	100 ... 1,000 mm
Measurement accuracy	±2.5 mm
Resolution	0.1 mm
Electrical connection	Circular connector M12
Supply voltage	DC 8 ... 30 V
Output signal	4 ... 20 mA (NAMUR NE43)
Operating pressure	Depending on the float, max. 40 bar
Operating temperature	-40 ... +125 °C
Ambient temperature	-40 ... +85 °C
Ingress protection per EN 60529	IP68
Configuration	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 ³
Stainless steel 1.4571 (316Ti)	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
Titanium 3.7035 (grade 2)	T29A	Sphere Ø 29 mm	6	21	30	700
Buna (NBR)	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

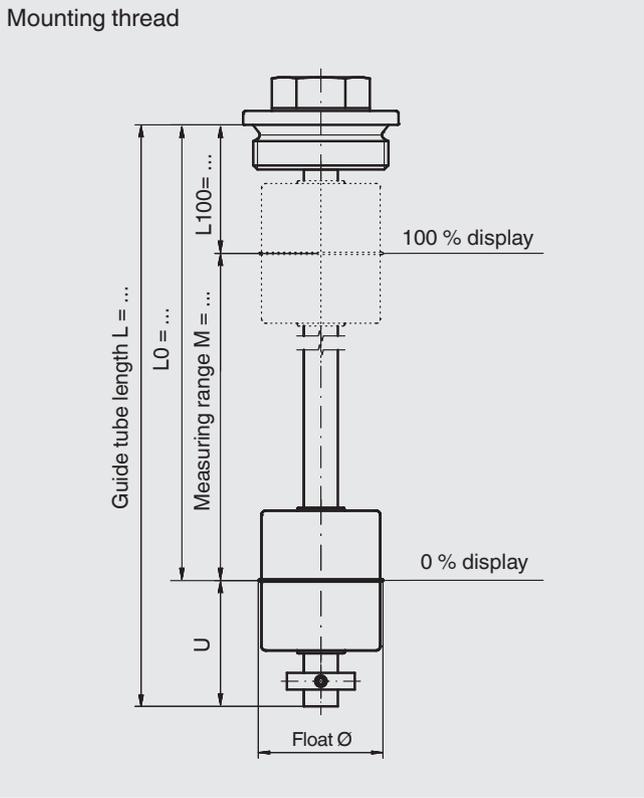
Dimensions in mm

■ 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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The specifications given in this document represent the state of engineering at the time of publishing.
We reserve the right to make modifications to the specifications and materials.

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