

Bypass Level Indicator Model LM



- ◆ Measuring Length:
max. 3 metres
- ◆ Pressure: max. 16 bar
- ◆ Temperature: max. 120°C
- ◆ Roller-type Indication,
Transmitter
- ◆ Medium Density:
1 g/cm³ (0.9...1.13 g/cm³)
- ◆ Material:
Stainless steel 1.4301
- ◆ Connection:
DIN Flange DN 10...DN 25

**Cost Effective
Measurement Technology**

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Bypass Level Indicator

Model LM

No responsibility taken for errors; subject to change without prior notice. 08 / 2007

Description

INTERIN bypass level indicators are used for continuous measurement, display and monitoring of liquid levels. The bypass tube is attached onto the side wall of the vessel.

According to the law of communicating tubes the level in the bypass tube equals the level in the vessel. A float with embedded magnets in the bypass tube follows the liquid level and transfers it in a non-contacting manner to a display fitted outside the tube or to a monitoring device.

The following indication and monitoring devices are available:

Magnetic roller indicator

As the float passes by, the red/white rollers are rotated in succession by 180° around their own axes. The rollers change from white to red as the level rises and from red to white as the level falls. The level is continuously displayed as a red column, even when the power fails.

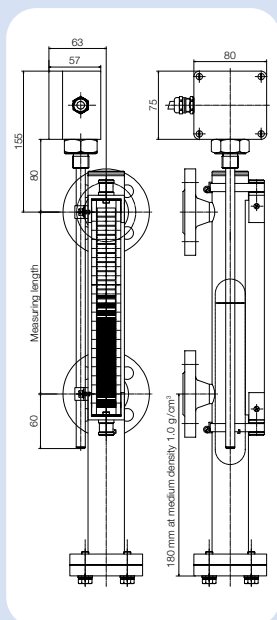
Transmitter

A magnetostrictive transmitter can be mounted outside the bypass tube to teletransmit the level. A continuous standard signal of 4 to 20 mA is output by means of a fitted transmitter.

Limit contacts

Reed contacts for limit-value acquisition or also for level control can be secured to the bypass tube.

Dimensions



Technical Details

Bypass tube:	40 mm, st. steel, 1.4571
Connections:	Flange DIN-EN-1092-1 Type 11, form B, DN 10...DN 25
Max. temperature:	s. table
Max. pressure:	PN 16
Max. viscosity:	200 mm ² /s
Density:	0.9...1.13 g/L (set density 1.0 g/L)
O-ring (flange):	FPM
Max. meas. length:	3000 mm
Total length:	see drawing
Indication error:	± 20 mm deviation from the set density
Installation position:	vertical
Roller indication:	Aluminium profile with Polypropylene rollers

Limit Contacts

Contact operation:	bistable Change-over contact
Switching hysteresis:	approx. 15 mm
Housing:	Polycarbonate
Protection type:	IP 67
Max. switch capacity:	60 W/VA, 230 V / 1 A
Electr. connection:	3 m PVC cable
Ambient temperature:	max. 75 °C

Transmitter

Measuring principle:	magnetostrictive
Supply voltage:	24 V _{DC} , max. 150 mA
Output:	4 - 20 mA
Load:	max. 500 Ω
Accuracy:	± 1 mm
Protection type:	IP 65

Applications

- ◆ Storage tanks
- ◆ Tanks on ships
- ◆ Mixing vessels
- ◆ Water tanks

Order Details (Example: LM-12D3)

Model	Indication	Medium max °C	Flange	Allowed Medium Density
LM-12D3	Roller indication	120	DN 10	0.9 - 1.13 kg/L
LM-12D4	Roller indication	120	DN 15	0.9 - 1.13 kg/L
LM-12D5	Roller indication	120	DN 20	0.9 - 1.13 kg/L
LM-12D6	Roller indication	120	DN 25	0.9 - 1.13 kg/L
LM-22D3	Transmitter	80	DN 10	0.9 - 1.13 kg/L
LM-22D4	Transmitter	80	DN 15	0.9 - 1.13 kg/L
LM-22D5	Transmitter	80	DN 20	0.9 - 1.13 kg/L
LM-22D6	Transmitter	80	DN 25	0.9 - 1.13 kg/L
LM-32D3	Roller indication and transmitter	80	DN 10	0.9 - 1.13 kg/L
LM-32D4	Roller indication and transmitter	80	DN 15	0.9 - 1.13 kg/L
LM-32D5	Roller indication and transmitter	80	DN 20	0.9 - 1.13 kg/L
LM-32D6	Roller indication and transmitter	80	DN 25	0.9 - 1.13 kg/L
LM-R	Limit contact	100		

Please specify the measuring length »L« in writing.