

# Guided radar measurement Time-of-Flight Levelflex FMP52

## Coated probe for use in aggressive liquids



### Benefits:

- Reliable measurement even for changing product and process conditions
- HistoROM data management concept for fast and easy commissioning, maintenance and diagnostics
- Highest reliability due to new Multi-Echo Tracking evaluation
- Hardware and software developed according to IEC 61508 up to SIL3
- Heartbeat Technology for a cost-effective and safe plant operation during the entire life cycle
- Seamless integration into control or asset management systems and intuitive, menu-guided operation concept (on-site or via the control system)
- World's easiest proof test for SIL and WHG saves time and costs

More information and current pricing:

[www.si.endress.com/FMP52](http://www.si.endress.com/FMP52)

### Specs at a glance

- **Accuracy** Rod probe : +/- 2 mm (0.08 in) Rope probe <= 15 m (49 ft): +/- 2 mm (0.08 in) Rope probe > 15 m (49 ft): +/- 10 mm (0.39 in)
- **Process temperature** -50...+200 °C (-58...+392 °F)
- **Process pressure absolute / max. overpressure limit**  
Vacuum...40 bar (Vacuum...580 psi)
- **Max. measurement distance** Rod: 4 m (13 ft) Min DK>1.6 Rope: 25 m...30 m (82 ft...98 ft) Min DK>1.6; 30 m...45 m (98 ft...148 ft) Min DK>1,9
- **Main wetted parts** Rod probe: 304, 304L, 316L, PTFE, PFA Rope probe: 304, 304L, 316, 316L, PTFE, PFA

**Field of application:** Levelflex FMP52 for level measurement in aggressive liquids with chemically resistant gap-free PFA-coated probe.

All wetted parts are FDA listed materials. FMP52 guided radar offers maximum reliability even in case of moved surface. Levelflex FMP52 is used for continuous level measurement of liquids, pastes and slurries but also for interface measurement. The measurement is not affected by changing media, temperature changes, gas blankets or vapors.

## Features and specifications

### Continuous / Liquids

#### Measuring principle

Guided radar

#### Characteristic / Application

Premium device coated for corrosive media

Rod probe, Rope probe

Wetted parts FDA listed materials, Integrated data memory, Factory precalibrated, Reliable measuring: in case of moved surface + foam, for changing medias.

#### Interface measurement

Clean interfaces liquid/ liquid;

Simultaneous measurement of interface and overall level

#### Specialities

Heartbeat Technology,

Bluetooth® commissioning,

Operation and maintenance SmartBlue App,

HistoROM,

RFID TAG for easy identification

#### Supply / Communication

2-wire (HART / PROFIBUS PA/ FOUNDATION Fieldbus)

4-wire (HART)

Bluetooth® wireless technology and App (optional)

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**Continuous / Liquids****Accuracy**

Rod probe :+/- 2 mm (0.08 in)

Rope probe &lt;= 15 m (49 ft):

+/- 2 mm (0.08 in)

Rope probe &gt; 15 m (49 ft):

+/- 10 mm (0.39 in)

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**Ambient temperature**

-40...+80 °C

(-40...+176 °F)

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**Process temperature**

-50...+200 °C

(-58...+392 °F)

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**Process pressure absolute / max. overpressure limit**

Vacuum...40 bar

(Vacuum...580 psi)

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**Main wetted parts**

Rod probe:

304, 304L, 316L, PTFE, PFA

Rope probe:

304, 304L, 316, 316L, PTFE, PFA

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**Process connection**

Flange:

ASME 1 1/2"...6",

DN50...DN100,

JIS 10K

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**Process connection hygienic**

Tri-Clamp

DIN11851

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**Sensor length**

Rod probe: 4 m (13 ft)

Rope probe: 45 m (148 ft)

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## Continuous / Liquids

### Max. measurement distance

Rod:

4 m (13 ft) Min DK>1.6

Rope:

25 m...30 m (82 ft...98 ft) Min DK>1.6;

30 m...45 m (98 ft...148 ft) Min DK>1,9

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### Communication

4...20 mA HART

PROFIBUS PA

FOUNDATION Fieldbus

Bluetooth® wireless technology

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### Certificates / Approvals

ATEX, FM, CSA, CSA C/US, IEC Ex, JPN Ex, INMETRO, NEPSI, KC, EAC

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### Safety approvals

Overfill protection WHG

SIL

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### Design approvals

EN 10204-3.1

ASME B31.1, B31.3

AD2000

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### Hygienic approvals

3A, EHEDG

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### Marine approval

GL/ ABS/ LR/ BV/ DNV

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### Options

Sensor remote with 3 m/ 9 ft cable,

Gas-tight feed through,

Remote operation via SmartBlue App using Bluetooth®

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### Application limits

Application limits

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More information [www.si.endress.com/FMP52](http://www.si.endress.com/FMP52)