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

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 / 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)
### Continuous / Liquids

**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)

**Ambient temperature**
- -40...+80 °C
  (-40...+176 °F)

**Process temperature**
- -50...+200 °C
  (-58...+392 °F)

**Process pressure / max. overpressure limit**
- Vacuum...40 bar
  (Vacuum...580 psi)

**Main wetted parts**
- Rod probe:
  - 304, 304L, 316L, PTFE, PFA
- Rope probe:
  - 304, 304L, 316, 316L, PTFE, PFA

**Process connection**
- Flange:
  - ASME 1 1/2"...6",
  - DN50...DN100,
  - JIS 10K

**Process connection hygienic**
- Tri-Clamp
  - DIN11851

**Sensor length**
- Rod probe: 4 m (13 ft)
- Rope probe: 45 m (148 ft)
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

**Communication**

4...20 mA HART
PROFIBUS PA
FOUNDATION Fieldbus
Bluetooth® wireless technology

**Certificates / Approvals**

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

**Safety approvals**

Overfill protection WHG
SIL

**Design approvals**

EN 10204-3.1
ASME B31.1, B31.3
AD2000

**Hygienic approvals**

3A, EHEDG

**Marine approval**

GL/ ABS/ LR/ BV/ DNV

**Options**

Sensor remote with 3 m/ 9 ft cable,
Gas-tight feed through,
Remote operation via SmartBlue App using Bluetooth®

**Application limits**

Application limits
More information [www.us.endress.com/FMP52](http://www.us.endress.com/FMP52)