

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.us.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)

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 absolute / 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