# Guided radar measurement Time-of-Flight Levelflex FMP53

# For the highest hygiene requirements in the food and life sciences industry



More information and current pricing: www.endress.com/FMP53

#### 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-quided 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)
- Process temperature -20...+150 °C (-4...+302 °F)
- Process pressure absolute / max. overpressure limit Vacuum...16 bar (Vacuum...232 psi)
- Max. measurement distance Rod: 6 m (20 ft) Min DK>1.6
- Main wetted parts Rod probe: 304, 304L, 316L, PEEK

Field of application: Levelflex FMP53 for continuous level measurement for hygienically sensitive applications in the food and life sciences industry. FMP53 meets the hygiene requirements according to ASME BPE and USP Class VI. The unique in situ validation without dismantling from the process is a cost saving advantage. FMP53 guided radar offers

maximum reliability even in case of moved surface and foam, for changing medias and in case of filling via spray head.

# Features and specifications

# Continuous / Liquids

## Measuring principle

Guided radar

#### **Characteristic / Application**

Premium device. Hygiene

Rod probe,

ASME BPE + USP Class VI compliant, Integrated data memory, Factory precalibrated, Reliable measuring: in case of moved surface + foam, for changing medias, for filling via spray head.

#### **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)

#### **Accuracy**

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

### Ambient temperature

-20...+80 °C

(-4...+176°F)

#### **Process temperature**

-20...+150°C

(-4...+302 °F)

# Continuous / Liquids

## Process pressure absolute / max. overpressure limit

Vacuum...16 bar (Vacuum...232 psi)

### Main wetted parts

Rod probe:

304, 304L, 316L, PEEK

#### **Process connection**

Thread:

M24

### **Process connection hygienic**

Tri-Clamp

DIN11851

DIN11864-1

NEUMO

Varivent N

**SMS** 

### Sensor length

Rod probe: 6 m (20 ft)

#### Max. measurement distance

Rod: 6 m (20 ft) Min DK>1.6

#### 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, UK Ex

## Safety approvals

Overfill protection WHG

SIL

# Continuous / Liquids

## Design approvals

EN 10204-3.1

### Hygienic approvals

3A, EHEDG

CoC ASME-BPE

### **Options**

Sensor remote with 3 m/9 ft or 6 m/18 ft cable,

Weld-in adpater,

Remote operation via SmartBlue App using Bluetooth®

## **Application limits**

Application limits

More information www.endress.com/FMP53

