

# Guided radar measurement Time-of-Flight Levelflex FMP53

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



## 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/FMP53](http://www.us.endress.com/FMP53)

## 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 adapter,

Remote operation via SmartBlue App using Bluetooth®

---

### **Application limits**

Application limits

---

More information [www.us.endress.com/FMP53](http://www.us.endress.com/FMP53)