

# Guided radar measurement Time-of-Flight Levelflex FMP57

The standard sensor for highest demands for level measurement in bulk solids



## 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/FMP57](http://www.us.endress.com/FMP57)

## Specs at a glance

- **Accuracy** Rod probe: +/- 2 mm (0.08 in) Rope probe <= 15 m (49ft): +/- 2 mm (0.08 in) Rope probe > 15 m (49ft): +/- 10 mm (0,39 in)
- **Process temperature** -40...+150 °C (-40...+302 °F)
- **Process pressure / max. overpressure limit** Vacuum...16 bar (Vacuum...232 psi)
- **Max. measurement distance** Rod: 4 m (13 ft) Min DK>1.4 Rope: 20 m...25 m (66 ft...82 ft) Min DK >1.4; 25 m...30 m (82ft...98 ft) Min DK >1.6; 30 m...45 m (98ft...148 ft) Min DK>1,9
- **Main wetted parts** Rod probe: 316Ti, 316L, PEEK, PPS Rope probe: 304, 316, 316Ti, 316L, PEEK, PPS, PA

**Field of application:** Levelflex FMP57 is the sensor for the highest demands in bulk solids and best suited for measurements in high silos, bunkers or stockpiles. Providing rope probes up to a length of 45m the FMP57 is also suited to measurements in high silos. Levelflex FMP57 guided radar is used for continuous level measurement in powdery to granular bulk solids. Dust, filling noises, temperature layers and gas layers do not affect the measurement.

## Features and specifications

### Continuous / Solids

#### Measuring principle

Guided radar

#### Characteristic / Application

Premium device for pulling forces up to 30kN

Rod probe, Rope probe

Integrated data memory. Factory precalibrated, Reliable measuring: in dusty atmosphere, in high + narrow silos, in vessels + obstacles.

#### 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)

Rope probe <= 15 m (49ft):

+/- 2 mm (0.08 in)

Rope probe > 15 m (49ft):

+/- 10 mm (0,39 in)

## Continuous / Solids

**Ambient temperature**

-40...+80 °C  
(-40...+176 °F)

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**Process temperature**

-40...+150 °C  
(-40...+302 °F)

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**Process pressure / max. overpressure limit**

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

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**Main wetted parts**

Rod probe:

316Ti, 316L, PEEK, PPS

Rope probe:

304, 316, 316Ti, 316L, PEEK, PPS, PA

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**Process connection**

Thread:

G1 1/2, MNPT1 1/2

Flange:

ASME 1 1/2"...8",

DN50...DN200,

JIS 10K

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**Sensor length**

Rod probe: 4 m (13 ft)

Rope probe: 45 m (148 ft)

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**Max. measurement distance**

Rod:

4 m (13 ft) Min DK>1.4

Rope:

20 m...25 m (66 ft...82 ft) Min DK >1.4;

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

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

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**Continuous / Solids****Communication**

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

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**Certificates / Approvals**

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

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**Safety approvals**

SIL

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**Design approvals**

EN 10204-3.1

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**Marine approval**

GL/ ABS/ LR/ BV/ DNV/ KR

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**Options**

Sensor remote with 3 m/ 9 ft cable,  
Remote operation via SmartBlue App using Bluetooth®

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More information [www.us.endress.com/FMP57](http://www.us.endress.com/FMP57)