Radar measurement Time-of-Flight Micropilot FMR56

Economically efficient basis model for level measurement in solids

More information and current pricing:
www.uk.endress.com/FMR56

Benefits:

- Reliable measurement even for changing product and process conditions
- HistoROM data management concept for fast and easy commissioning, maintenance and diagnostics
- Highest reliability even in the presence of obstructions in the vessel due to new Multi-Echo Tracking evaluation
- Hardware and software developed according to IEC 61508 up to SIL3 (in homogeneous redundancy)
- 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 concept for SIL and WHG saves time and cost

Specs at a glance

- **Accuracy** +/- 3 mm (0.12 in)
- **Process temperature** -40 °C...+80 °C (-40 °F...+176 °F)
- **Process pressure absolute / max. overpressure limit** Vacuum...3 bar (Vacuum...43.5 psi)
- **Max. measurement distance** 30 m (98 ft)
- **Main wetted parts** PP, UP

Field of application: Micropilot FMR56 is particularly designed for light-duty process conditions as they occur in silos or bins for solids. Micropilot free space radar is used for continuous, non-contact 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
Level radar solid

Characteristic / Application
For simple applications:
Reliable non-contact level measurements in silos or storage tanks for bulk solids

Specialities
Heartbeat Technology,
Bluetooth® commissioning,
Operation and maintenance SmartBlue App,
Safety and reliability with Multi- Echo Tracking,
HistoROM,
RFID TAG for easy identification,

Supply / Communication
2-wire (HART/ PROFIBUS PA/ FOUNDATION Fieldbus)
4-wire (HART)
Bluetooth® wireless technology and App (optional)

Frequency
K-band (~26 GHz)

Antenna
Horn DN80/3", PP plated
Horn DN100/4", PP plated

Accuracy
+/- 3 mm (0.12 in)

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

Continuous / Solids

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

Process pressure absolute / max. overpressure limit
Vacuum...3 bar
(Vacuum...43.5 psi)

Main wetted parts
PP, UP

Process connection
Flange:
UNI DN80...DN150
(3"...6")
Mounting bracket

Max. measurement distance
30 m (98 ft)

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

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

Safety approvals
SIL

Options
Display,
Customized parameterization
Remote operation via SmartBlue App using Bluetooth®

Continuous / Solids

Application limits

DK < 1.6
Reduction of the max. possible measuring range through:
Media with poor reflection properties
Angle of repose
Extremely loose surfaces of bulk solids, e.g. bulk solids with low bulk weight for pneumatic filling
Build-up, above all of moist products

More information **www.uk.endress.com/FMR56**

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