Micropilot M FMR250



More information and current pricing: www.endress.com/FMR250

Benefits:

- Non-contact measurement: Measurement is almost independent from product properties
- 2-wire technology, low price: A real alternative to differential pressure, floats and displacers.
 - 2-wire technology reduces wiring costs and allows easy implementation into existing systems
- Easy commissioning, documentation and diagnostics via Endress+Hauser operating software
- Easy on-site operation via menu-driven alphanumeric display
- Used for level monitoring (MIN, MAX) up to SIL2 as per IEC 61508/ IEC 61511-1
- HART or PROFIBUS PA respectively FOUNDATION Fieldbus protocol
- Max. measuring range 70m (230ft)

Specs at a glance

- Accuracy +/- 15mm (or 0.04% of range, whatever is larger)
- Process temperature -40 °C...+200 °C (-40 °F...+392 °F)
- Process pressure / max. overpressure limit Vacuum...16bar (Vaccum...232psi)
- Max. measurement distance 70 m (230 ft)
- Main wetted parts PEEK, 1.4435, 1.4404, 316L

Field of application: The Micropilot FMR250 is ideally suited for tall silos and high temperature requirements also as for abrasive solids. The FMR250 has a integrated air purge connection for extremely dusty conditions or media tending to create build-up. Micropilot FMR250 performs continuous, non-contact level measurement especially in powdery to granular bulk solids. Dust, filling noises, temperature layers and gas stratification do not affect measurement.

Features and specifications

Continuous / Solids

Measuring principle

Characteristic / Application

Non-contact level measurement especially in powdery to granular bulk solids. Level measurement in tall silos with extremely dusty bulk solids e.g. cement, raw meal or animal feed. Applications with highly abrasive bulk solids e.g. ferrite / clinker

Specialities

Air purge connection

Supply / Communication

2-wire (HART / PROFIBUS PA / FOUNDATION Fieldbus)

Frequency

K-Band (~ 26 GHz)

Antenna

Parabolic DN200/8", DN250/10" Horn DN80/3", DN100/4"

Accuracy

+/- 15mm (or 0.04% of range, whatever is larger)

Ambient temperature

-40 °C...+80 °C (-40 °F...+176 °F)

Process temperature

-40 °C...+200 °C (-40 °F...+392 °F)

Process pressure / max. overpressure limit

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

Main wetted parts

PEEK, 1.4435, 1.4404, 316L

Continuous / Solids

Process connection

Thread:

R1 1/2", NPT1 1/2

Flange:

DN80, DN 100

ASME 3", 4"

JIS 80A, 100A

UNI DN100/4"...DN250/10"

Blocking distance

Antenna length + 400mm (15.75")

Max. measurement distance

70 m (230 ft)

Communication

4...20 mA HART

PROFIBUS PA

FOUNDATION Fieldbus

Certificates / Approvals

ATEX, FM, CSA, NEPSI

SIL

Options

Separate display

Antenna extension 250 mm/10" or 450 mm/18"

Top Target Positioner (+/-15°)

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.endress.com/FMR250