

Micropilot M FMR244



More information and current pricing:

www.at.endress.com/FMR244

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 SIL 2 as per IEC 61508/IEC 61511-1
- HART or PROFIBUS PA respectively FOUNDATION Fieldbus protocol
- Option: Gastight feedthrough to improve the process safety

Specs at a glance

- **Accuracy** +/- 3 mm
- **Process temperature** -40 °C...+130 °C (-40 °F...+266 °F)
- **Process pressure / max. overpressure limit** Vacuum...3 bar (Vacuum...43.5 psi)
- **Max. measurement distance** Max. measurement distance
- **Main wetted parts** PVDF, PTFE, PP, PBT

Field of application: The Micropilot FMR244 offers cost-effective 4 to 20mA 2-wire technology and is suitable for hazardous locations. The 80mm horn antenna is used additionally in solids. The FMR244 is used for continuous, non-contact level measurement of liquids, pastes, slurries and solids. The measurement is not affected by changing media, temperature changes, gas blankets or vapors.

Features and specifications

Continuous / Liquids

Measuring principle

Characteristic / ApplicationCharacteristic / Application

Supply / Communication2-wire (HART / PROFIBUS PA / FOUNDATION
Fieldbus)

FrequencyK-band (~26 GHz)

Accuracy+/- 3 mm

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

Process temperature-40 °C...+130 °C
(-40 °F...+266 °F)

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

Main wetted partsPVDF, PTFE, PP, PBT

Process connectionThread:
NPT 1 1/2, G 1 1/2
Slip on flange:
DN80...DN150 (3"...6"),

ApplicationApplication

Continuous / Liquids

Max. measurement distance

Max. measurement distance

Communication

4...20 mA HART
PROFIBUS PA
FOUNDATION Fieldbus

Certificates / Approvals

ATEX, FM, CSA, IECEX, TIIS, NEPSI
Overfill prevention WHG
SIL
Marine GL/ABS/NK

Application limits

Application limits

Continuous / Solids

Measuring principle

Characteristic / Application

Non-contact level measurement in powdery to granular bulk solids up to 15m measuring range. Applications with highly abrasive bulk solids e.g. ferrite / glas ...

Supply / Communication

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

Frequency

K-band (~26 GHz)

Antenna

Horn DN80/3"

Accuracy

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

Continuous / Solids

Ambient temperature

-40 °C...+80 °C
(-40 °F...+266 °F)

Process temperature

-40 °C...+80 °C
(-40 °F...+266 °F)

Process pressure / max. overpressure limit

Vacuum... 3bar
(Vaccum... 43.5 psi)

Main wetted parts

PP, PBT, Silicone

Process connection

Flange:
UNI DN80...DN150

Max. measurement distance

15m (49 ft)(Option F)

Communication

4...20 mA HART
PROFIBUS PA
FOUNDATION Fieldbus

Certificates / Approvals

ATEX, FM, CSA, IECEX, TIIS, NEPSI

Options

Separate display
Mounting bracket
variable flange seal for adjustment

Successor

Micropilot FMR56

Continuous / Solids

Application limits

Dk < 1.6

More information www.at.endress.com/FMR244