

Micropilot FMR63B – 80 GHz radar sensor

More simplicity with the specialist for hygienic applications



More information and current pricing:

www.endress.com/FMR63B

Benefits:

- Fulfills highest compliance requirements of the industry
- Easy handling through intuitive operation and wizards, for commissioning and verification
- Increased productivity thanks to process monitoring, verification also of the radar's accuracy and diagnostics in the running process with Heartbeat Technology
- Simple Display of device status – A change in the backlighting from green to red highlights errors immediately
- Simple device integration into asset management systems through digital communication

Specs at a glance

- **Accuracy** +/-1 mm (0.04 in)
- **Process temperature** -40 °C ... +200 °C (-40 °F ... +392 °F)
- **Process pressure / max. overpressure limit** Vacuum...25 bar (363 psi)
- **Max. measurement distance** 80 m (262 ft)
- **Main wetted parts** PEEK or PTFE

Field of application: Micropilot FMR63B is part of the new generation of 80 GHz radar sensors. Thanks to its complete hygienic design it is suitable for continuous non-contact level measurement in hygienic applications. Wizards guide users through commissioning, proof tests and verification of the devices and thus guarantee a simple operation. Heartbeat Technology offers verification and monitoring functions to identify anomalies or checking the measurement accuracy.

Features and specifications

Continuous / Liquids

Measuring principle

Level radar

Characteristic / Application

Premium device for continuous non-contact level measurement with hygienic requirements (ASME BPE, USP Class VI);

Specialities

Heartbeat Technology,
SIL 2/3 according to IEC 61508,
Bluetooth® commissioning;
Operation and maintenance with SmartBlue app;
HistoROM;
RFID TAG for easy identification;
Very narrow beam angle

Supply / Communication

2-wire (HART/ PROFIBUS PA)
PROFINET with Ethernet-APL
Bluetooth® wireless technology

Frequency

W-Band (~80 GHz)

Accuracy

+/-1 mm (0.04 in)

Ambient temperature

-40 °C ... +85 °C (-40 °F ... +185 °F)

Process temperature

-40 °C ... +200 °C (-40 °F ... +392 °F)

Process pressure / max. overpressure limit

Vacuum...25 bar (363 psi)

Main wetted parts

PEEK or PTFE

Continuous / Liquids

Process connection

Thread:
M24

Process connection hygienic

NEUMO BioControl;
Slotted-nut DIN11851;
Varivent;
Tri-Clamp ISO2852

Max. measurement distance

80 m (262 ft)

Communication

4...20 mA HART
Additional analog or switch output
PROFIBUS PA
PROFINET with Ethernet-APL
Bluetooth® wireless
technology and app (optional)

Certificates / Approvals

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

Safety approvals

Overfill protection WHG;
SIL 2/ SIL 3

Design approvals

Acceptance test certificate 3.1, EN10204;
EU Food Contact Material (EC) 1935/2004;
US Food Contact Material FDA CFR 21;
Declaration of Conformity ASME B31.3;
Conformity to cGMP;
CoC ASME BPE;
CRN approval

Continuous / Liquids

Hygienic approvals

3-A;
EHEDG;
CoC-ASME BPE

Drinking water approvals

KTW-BWGL;
NSF/ANSI 61

Options

Display,
Customized settings,
App 'SmartBlue' for commissioning and operation via Bluetooth
Gas-tight implementation;
Overvoltage protection;
PWIS free

Application limits

Process temp. > 200°C (392°F) -> FMR62
Strong foam, stilling well and bypass (>10 m) ->
FMR5x, FMP5x

More information www.endress.com/FMR63B