Micropilot FMR60B – 80 GHz radar sensor

More simplicity for your application

Benefits:
- Easy handling through intuitive operation and wizards, for commissioning and verification
- Easier troubleshooting through recommended actions shown on the display
- Reduction of systematic errors through guided SIL-locking, verification and proof testing
- Safety by design: Device development according to IEC 61508
- Increased productivity thanks to process monitoring, verification and diagnostics in the running process with Heartbeat Technology

Specs at a glance
- **Accuracy** +/-1 mm (0.04 in)
- **Process temperature** -40 ... +200 °C (-40 ... +392 °F)
- **Process pressure / max. overpressure limit** Vacuum...20 bar (290 psi)
- **Max. measurement distance** 50 m (164 ft)
- **Main wetted parts** PVDF, PTFE or PEEK

Field of application: Micropilot FMR60B is part of the new generation of 80 GHz radar sensors. It is used for continuous non-contact level measurement in simple liquid applications with small process connections. 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 for more safety and increased productivity.

Features and specifications
Continuous / Liquids

**Measuring principle**
Level radar

**Characteristic / Application**
For simple continuous non-contact level measurements in liquids, pastes, and slurries; Not influenced by changing media, temperature differences, gas phases or steam;
For vessels with many internals

**Specialities**
Heartbeat Technology;
SIL 2 according to IEC 61508;
Bluetooth® commissioning;
Operation and maintenance with SmartBlue App;
HistoROM;
RFID TAG for easy identification

**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 ... +85 °C (-40 ... +185 °F)

**Process temperature**
-40 ... +200 °C (-40 ... +392 °F)

**Process pressure / max. overpressure limit**
Vacuum...20 bar (290 psi)
Continuous / Liquids

<table>
<thead>
<tr>
<th><strong>Main wetted parts</strong></th>
<th>PVDF, PTFE or PEEK</th>
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<tbody>
<tr>
<td><strong>Process connection</strong></td>
<td>Thread: G3/4&quot; and 1-1/2&quot;, MNPT 3/4&quot; and 1-1/2&quot;; Flange: UNI DN80...DN150; Mounting bracket</td>
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<tr>
<td><strong>Max. measurement distance</strong></td>
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<tr>
<td><strong>Communication</strong></td>
<td>HART/ PROFIBUS PA</td>
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<td>PROFINET with Ethernet-APL</td>
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<td>Bluetooth® wireless technology and app (optional)</td>
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<td><strong>Certificates / Approvals</strong></td>
<td>IEC Ex, ATEX, CSA C/US, EAC Ex, JPN Ex, KC Ex, INMETRO Ex, NEPSI Ex, UK Ex</td>
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<tr>
<td><strong>Safety approvals</strong></td>
<td>Overfill protection WHG; SIL 2</td>
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<td><strong>Design approvals</strong></td>
<td>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; AD2000; PMI test; CRN approval</td>
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<td><strong>Marine approval</strong></td>
<td>ABS, LR, BV, RINA, DNV</td>
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Continuous / Liquids

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

Application limits
- Process temp. < -40°C (-40°F) or > 200°C (392°F) -> FMR62B
- Very aggressive media -> FMR62B
- Turbulences, stilling well and bypass -> FMR62B
- Strong foam and interfaces --> FMP5x

More information www.endress.com/FMR60B