Ultrasonic measurement
Time-of-Flight
Prosonic FMU30

Cost effective all-round instrument for level applications in liquids and bulk solids

Benefits:
- Quick and simple commissioning via menu-guided onsite operation with four-line plain text display, 7 languages selectable
- Envelope curves on the on-site display for simple diagnosis
- Linearization function (up to 32 points) for conversion of the measured value into any unit of length, volume or flow rate
- Non-contact measurement method minimizes service requirements
- Installation possible from thread G 1½ or 1½ NPT upwards
- Integrated temperature sensor for automatic correction of the temperature dependent sound velocity

Specs at a glance
- **Accuracy** +/- 3 mm or +/- 0.2 % of set measuring range
- **Process temperature** -20 °C...+60 °C (-4 °F...+140 °F)
- **Process pressure / max. overpressure limit** 0.7 bar...3 bar abs (10 psi ...44 psi)
- **Max. measurement distance** Sensor 1-1/2": 2 m (6.6 ft) Sensor 2": 3.5 m (11 ft)
- **Main wetted parts** PP/EPDM

Field of application: The range of applications extends from monitoring levels in sewage treatment plants and process water tanks to applications for loading, storage and buffer tanks. FMU30 ultrasonic sensor offers proven software algorithms and all warning and alarm messages are shown on the four-line plain text display and guarantee fast remedy of problems. The envelope curve can also be shown on the display. As the
analysis results are displayed directly on-site, this ensures quick and accurate error diagnostics.

**Features and specifications**

<table>
<thead>
<tr>
<th>Continuous / Liquids</th>
<th>Measuring principle</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ultrasonic</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Characteristic / Application</th>
</tr>
</thead>
<tbody>
<tr>
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</tr>
</tbody>
</table>

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<thead>
<tr>
<th>Supply / Communication</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-wire</td>
</tr>
</tbody>
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### Continuous / Liquids

| Blocking distance | 1 1/2": 0.25 m (0.8 ft)  
| 2": 0.35 m (1.15 ft) |
| Application | Application |
| Max. measurement distance | Max. measurement distance |
| Communication | 4...20 mA |
| Certificates / Approvals | ATEX, CSA C/US, IEC Ex, NEPSI |
| Options | Accessory Enclosed:  
| UNI flange 2" ... 4" |
| Application limits | Application limits |

### Continuous / Solids

| Measuring principle | Ultrasonic |
| Characteristic / Application | Compact ultrasonic transmitter |
| Supply / Communication | 2-wire |
| Accuracy | +/- 3 mm or +/- 0.2 % of set measuring range |
Continuous / Solids

**Ambient temperature**
-20 °C ... 60 °C  
(-4 °F ... 140 °F)

**Process temperature**
-20 °C ... 60 °C  
(-4 °F ... 140 °F)

**Process pressure / max. overpressure limit**
0.7 bar ... 3 bar abs  
(10 psi ... 44 psi)

**Main wetted parts**
PP/EPDM

**Process connection**
G / NPT 1 1/2"
G / NPT 2"

**Blocking distance**
Sensor 1 1/2": 0.25 m  
Sensor 2": 0.35 m

**Max. measurement distance**
Sensor 1-1/2": 2 m (6.6 ft)  
Sensor 2": 3.5 m (11 ft)

**Communication**
4...20 mA

**Certificates / Approvals**
ATEX, CSA C/US, IEC Ex, NEPSI

**Options**
Accessory Enclosed:  
UNI flange 2" ... 4"

**Application limits**
Take notice of range diagram
## Point Level / Liquids

### Measuring principle
Ultrasonic Limit

### Characteristic / Application
Compact ultrasonic transmitter

### Supply / Communication
2-wire

### Ambient temperature
-20 °C...+60 °C  
(-4 °F...+140 °F)

### Process temperature
-20 °C...+60 °C  
(-4 °F...+140 °F)

### Process pressure / max. overpressure limit
0.7 bar...3 bar abs  
(10 psi ...44 psi)

### Main wetted parts
PP/EPDM

### Process connection
G / NPT 1 1/2"  
G / NPT 2"

### Blocking distance
Sensor 1 1/2": 0.25 m,  
Sensor 2": 0.35 m

### Communication
4...20 mA

### Certificates / Approvals
ATEX, CSA C/US, IEC Ex, NEPSI
Point Level / Liquids

**Options**
Accessory Enclosed:
UNI flange 2"... 4"

**Application limits**
Take notice of range diagram

Point Level / Solids

**Measuring principle**
Ultrasonic Limit

**Characteristic / Application**
Compact ultrasonic transmitter

**Supply / Communication**
2-wire

**Ambient temperature**
-20 °C...+60 °C,
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**Main wetted parts**
PP/ EPDM

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G / NPT 1 1/2",
G / NPT 2"
Point Level / Solids

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4...20 mA

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More information [www.us.endress.com/FMU30](http://www.us.endress.com/FMU30)