# Ultrasonic measurement Time-of-Flight Prosonic FMU44

Cost effective device for sophisticated level measurement in liquids and bulk solids for up to 20m



More information and current pricing: www.uk.endress.com/FMU44

#### Benefits:

- Reliable non-contact measurement
- Quick and simple commissioning via menu-guided on-site operation with four-line plain text display, 7 languages selectable
- Envelope curves on the on-site display for simple diagnosis
- Hermetically sealed and potted sensor
- Chemically resistant sensor out of PVDF
- Calibration without filling or discharging
- Integrated temperature sensor for automatic correction of the temperature dependent sound velocity

# Specs at a glance

- Accuracy +/- 4mm or +/- 0,2 % of set measuring range
- Process temperature -40 °C ... 80 °C (-40 °F ... 176 °F)
- Process pressure absolute / max. overpressure limit 0,7 bar ... 2,5 bar abs (10 psi ... 36 psi)
- Max. measurement distance Max. measurement distance
- Main wetted parts PVDF

Field of application: The Prosonic FMU44 sensor is suited for noncontact level measurement in fluids, pastes, coarse bulk material and flow measurement in open channels or at weirs. The two-wire or fourwire compact transmitter can be used in applications with storage tanks, agitators, on stockpiles and conveyor belts. The envelope curve can be shown 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.

# Features and specifications

# Continuous / Liquids

# Measuring principle

Ultrasonic

# Characteristic / Application

Compact ultrasonic transmitter

## **Supply / Communication**

2/4-wire (HART), PROFIBUS PA, FOUNDATION Fieldbus

#### **Accuracy**

+/- 4mm or +/- 0,2 % of set measuring range

#### Ambient temperature

-40 °C ... 80 °C (-40 °F ... 176 °F)

#### **Process temperature**

-40 °C ... 80 °C (-40 °F ... 176 °F)

# Process pressure absolute / max. overpressure limit

0,7 bar ... 2,5 bar abs (10 psi ... 36 psi)

#### Main wetted parts

**PVDF** 

#### **Process connection**

Flange

DN100, ASME 4", JIS 10K 100 DN150, ASME 6", JIS 10K 150 DN200, ASME 8", JIS 10K 200 Mounting bracket

# Continuous / Liquids

## **Blocking distance**

0.5 m (1.9 ft)

## **Application**

Application

#### Max. measurement distance

Max. measurement distance

#### Communication

4 ... 20 mA HART PROFIBUS PA FOUNDATION Fieldbus

## Certificates / Approvals

ATEX, FM, CSA, INMETRO, NEPSI

## **Application limits**

Application limits

# Continuous / Solids

## Measuring principle

Ultrasonic

# Characteristic / Application

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**PVDF** 

#### **Process connection**

Flange DN100, ASME 4", JIS 10K 100 DN150, ASME 6", JIS 10K 150 DN200, ASME 8", JIS 10K 200 Mounting bracket

# **Blocking distance**

0.5 m (1.9 ft)

#### Max. measurement distance

10 m

#### Communication

4 ... 20 mA HART PROFIBUS PA FOUNDATION Fieldbus

#### **Certificates / Approvals**

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## **Application limits**

Take notice of range diagram

More information www.uk.endress.com/FMU44