

Ultrasonic measurement

Time-of-Flight

Prosonic FMU43

Cost effective device for sophisticated level measurement in liquids and bulk solids for up to 15m



More information and current pricing:

www.be.endress.com/FMU43

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** +/- 4 mm 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** Unsaturated Polyester, 316 Ti

Field of application: The Prosonic FMU43 sensor is suited for non-contact level measurement in fluids, pastes, coarse bulk material and flow measurement in open channels or at weirs. The two-wire or four-wire 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

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

Accuracy

+/- 4 mm 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

Unsaturated Polyester, 316 Ti

Process connection

DN 100, ASME 4"

Blocking distance

0.6 m (2 ft)

Continuous / Liquids**Application**

Application

Max. measurement distance

Max. measurement distance

Communication4 ... 20 mA HART
PROFIBUS PA
FOUNDATION Fieldbus

Certificates / Approvals

ATEX, FM, CSA, NEPSI

Application limits

Application limits

Continuous / Solids**Measuring principle**

Ultrasonic

Characteristic / Application

Compact ultrasonic transmitter

Supply / Communication4-wire (HART), PROFIBUS PA, FOUNDATION
Fieldbus

Accuracy

+/- 4 mm or +/- 0.2 %of set measuring range 1)

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

Process temperature-40 °C ... 80 °C
(-40 °F ... 176 °F)

Continuous / Solids**Process pressure absolute / max. overpressure limit**

0.7 bar ... 2.5 bar abs
(10 psi ... 36 psi)

Main wetted parts

unsaturated polyester, 316 Ti

Process connection

DN 100, ASME 4"

Blocking distance

0.6 m (2 ft)

Max. measurement distance

7 m (23 ft)

Communication

4 ... 20 mA HART
PROFIBUS PA
FOUNDATION Fieldbus

Certificates / Approvals

ATEX, FM, CSA, NEPSI

Application limits

Take notice of range diagram

More information www.be.endress.com/FMU43