

# Ultrasonic measurement

## Time-of-Flight

### Prosonic FMU43

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



Thông tin thêm và mức tính giá hiện tại:

[www.apsc.endress.com/FMU43](http://www.apsc.endress.com/FMU43)

#### Lợi ích:

- 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

#### Tổng quan về thông số kỹ thuật

- **Accuracy** +/- 4 mm or +/- 0.2 %of set measuring range 1)
- **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** 7 m (23 ft)
- **Main wetted parts** unsaturated polyester, 316 Ti

**Phạm vi ứng dụng:** 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.

## Tín năng và thông số kỹ thuật

### Continuous / Solids

#### 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 1)

#### Ambient temperature

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

#### Process temperature

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(-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)

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**Continuous / Solids****Max. measurement distance**7 m (23 ft)

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**Communication**4 ... 20 mA HART  
PROFIBUS PA  
FOUNDATION Fieldbus

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**Certificates / Approvals**ATEX, FM, CSA, NEPSI

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**Application limits**Take notice of range diagram

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**Application**Application

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**Application limits**Application limits

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