Turbidity sensor
Turbimax CUS52D

Hygienic Memosens sensor for turbidity measurement in drinking water, process water and utilities

Benefits:
- Measuring results like in the lab: Highly accurate and reliable monitoring of your water quality – even at the lowest turbidity.
- Turbidity measurement without product loss: Hygienic inline measurement preserves each drop of water in the process.
- Unattended operation: Intelligent design and practical accessories enable sophisticated self-cleaning capabilities and minimize maintenance.
- Smart verification and calibration: Absolutely safe, liquid-free, without Formazin.
- Great flexibility, simple handling: One sensor for all measuring points and all installation environments (inline or immersion).
- Improved process control: Individually adaptable sensor response time.
- Fast commissioning: Factory calibration and Memosens technology allow plug & play integration into your process.

Specs at a glance
- Measurement range 0.000 to 4000 FNU
- Process temperature Stainless steel version: -20 to 85 °C (0 to 185 °F) Plastic version: -20 to 60 °C (-4 to 140 °F)
- Process pressure Stainless steel version: 0.5 to 10 bar abs (7.3 to 145 psi abs) Plastic version: 0.5 to 6 bar abs (7.3 to 87 psi abs)

Field of application: Turbimax CUS52D is a smart sensor with lab accuracy that allows unattended operation of all turbidity measuring points in drinking water production and many other applications with fresh, process or salt water. You can mount it directly into your pipeline, thus saving costly bypass installations and avoiding product losses.
Thanks to Memosens digital technology, the Turbimax CUS52D offers maximum process and data integrity, simple operation and allows predictive maintenance.

Features and specifications

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## Total Solids / Total Suspended Solids

**Output / communication**
Memosens

## Turbidity

**Measuring principle**
Single beam scattered light

**Application**
Turbidity measurement in:
- Drinking and process water
- Saline water
- Utilities of all industries

**Installation**
Inline Insitu, sensor with clamp, flow cell, sensor with clamp, retractables, sensor straight, immersion in open channels

**Measurement range**
0.000 to 4000 FNU

**Measuring principle**
Nephelometric turbidity sensor (90° scattering) according to ISO7027

**Design**
40 mm sensor

**Material**
- Stainless steel version: 1.4404
- Plastic version: sensor head: PEEK, shaft: PPS
- Optical windows: sapphire
- O-rings: EPDM

**Dimension**
40 mm design, hygienic Clamp-version
320 x 40 mm
Turbidity

**Process temperature**
Stainless steel version: -20 to 85 °C (0 to 185 °F)
Plastic version: -20 to 60°C (-4 to 140 °F)

**Process pressure**
Stainless steel version: 0.5 to 10 bar abs (7.3 to 145 psi abs)
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**Temperature sensor**
Stainless steel version: -20 to 85 °C (0 to 185 °F)
Plastic version: -20 to 60°C (-4 to 140 °F)

**Ingress protection**
IP68

**Output / communication**
Memosens

**Additional certifications**
ISO 7027

More information [www.endress.com/CUS52D](http://www.endress.com/CUS52D)