Turbidity sensor
Turbimax CUS52D

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



More information and current pricing:
www.endress.com/CUS52D

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

- **Measuring 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** Stainles 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

Total Solids / Total Suspended Solids

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

Design
40 mm sensor

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

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

Measuring range
0.000 to 4000 FNU

Process pressure
Stainles 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)

Total Solids / Total Suspended Solids

Ingress protection
IP68

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

Measuring 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

Stainles 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)

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

Certificates, declarations and approvals

ISO 7027

More information **www.endress.com/CUS52D**