

Turbidity Sensor Model MoniTurb-C (MTC-F)



Image similar

- Principle of measurement: 12° forward scattered light
- Low maintenance / long service life
- Optimized flow cell for simplified maintenance & cleaning
- Calibration- / maintenance interval 24 months (depending by application)
- Measuring lamp, gas filled (λ 380 1100nm), life time approx. 2 years
- Protection class: All parts are at least IP65 / Nema 4x rated
- Flow cell material: stainless steel 1.4404 (optional titanium, PTFE, ...)
- Sight glass material: Sapphire (optional Borosilicate, Plexiglas, ...)
- Gasket material: FKM (optional FFKM, EPDM, silicone, ...)
- Process connections: DIN flanges, ANSI flanges, NPT,
- Span of measuring ranges: 0-0.5mg/l to 0-8000mg/l (DE)
- For use in hazardous area Ex- Zone I & Ex- Zone II (ATEX- Ex d IIC / T6)
- Optional air purge
- Cleaning: Cleaning in place / optional cleaning jets

Description:

The turbidity sensor Model MoniTurb-C-F uses the principle of 12° forward scattered light to detect suspended particles in liquids. The transmitter model Messenger is required to use this sensor. The system has been designed for continuous operation with long life time. A ratio measurement of direct- / scatter light assure highly reliable and repeatable measurement results. Inaccuracies caused by product color, lamp ageing or window coating will be compensated. The forward scatter measuring results are nearly independent of particle size and will correlate to product concentration. Calibration can be done in multiple ranges and measurement units like EBC, ppm, mg/l, etc.. The sensors can be installed into almost any type of pipe. Process connection, pressure, temperature, gasket material, etc will be application specific. Optional cleaning jets will allow a cleaning of the sapphire windows in determined intervals.

Applications:

- Filtration control
- Product quality
- Water in fuel
- Oil in water / Water in oil

Operational areas:

- Chemical industry
- Petrochemical industry
- Power plants
- Brew & Beverage

Technical Data:

Line size: DN 25 – DN 125 / ½" - 5"

Process pressure: PN16 / ANSI class 150

Process temperature: -5°C up to 140°C (ice free)

Sensor material: 1.4404 / 316L (other on request)

Sight glass material: Sapphire (other on request)

Gasket material: application specific

Protection class: IP65 / NEMA 4X

Measurement range: typical 0–1ppm, 0–500ppm Accuracy: ± 1 % of current range

Detector system: Silica diodes

Cleaning: optional cleaning jet probe
Sterilization: CIP (cleaning in place)
optional hazardous area: ATEX Zone I or Zone II