

## Turbidity Sensor Model MoniTurb-C-FS (MTC-FS)



Image similar

- Principle of measurement: 12° & 90° 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 ( $\lambda$  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-FS uses the principles of 12° forward- and 90° side scattered light to detect 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. The measuring results of the 12° system are not affected by particle size. The 90° system shows a high sensitivity for small particles ( $< 0.3 \mu\text{m}$ ). Comparing both measurement values will allow conclusion of particle size distribution inside the liquid. The sensors can be installed into almost any type of pipe. Process connection, gasket material, etc. will be application specific. A ratio measurement of direct- / scatter light assure highly reliable and repeatable measurement results. Inaccuracies caused by product colour, lamp ageing or window coating will be compensated. Calibration can be done in multiple ranges and measurement units like EBC, ppm, mg/l, etc. Optional cleaning jets will allow a cleaning of the sapphire windows in determined intervals.

### Applications:

- Filtration control
- Product quality
- Water / Waste water

### Operational areas:

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

### Technical Data:

Line size:	DN 25 – DN 125 / ½" - 5"	Measurement range:	typical 0–1ppm, 0–500ppm
Process pressure:	PN16 / ANSI class 150	Reproducibility:	$\pm 1 \%$ of current range
Process temperature:	-5°C up to 140°C (ice free)	Detector system:	Silica diodes
Sensor material:	1.4404 / 316L (other on request)	Cleaning:	optional cleaning jet probe
Sight glass material:	Sapphire (other on request)	Sterilization:	CIP (cleaning in place)
Gasket material:	application specific	optional hazardous area:	ATEX Zone I or Zone II
Protection class:	IP65 / NEMA 4X		