Inline Turbidity Measurements Tailored for Easy System Integration



Wireless configuration – fast and cost-effective

Configuration and verification of the sensor is performed remotely with a handheld device. A transmitter for input and display is not necessary, leading to substantial cost savings.

Direct PLC integration

The turbidity sensor and measurement electronics are one. A straightforward integration in any PLC is realized via the standard 0/4...20 mA current output.



InPro 8600 with wireless configuration

The new InPro 8600 turbidity sensor with wireless configuration device has been specifically designed to simplify installation and reduce loop costs.

One configuration tool can serve more than one sensor by the use of a wireless connection between sensor and configuration tool. No hardwiring for transmitter installation is necessary, keeping the investment and installation costs low.

ISM® (Intelligent Sensor Management) plays an important role: With both the calibration data as well as further sensor-specific data stored in the sensor, the sensors are truly "Plug and Measure".

Leading-edge technology based on digital processing of the turbidity signals guarantees reliable measurements.





Light scattering with ratio principle

Highly precise turbidity measurement and trend monitoring of particle size distribution is guaranteed with digital measurement technology. Changes in color are compensated with the ratio principle.

Easy pipe installation and low maintenance

The Varivent process connection with a compact design enables installation in minimum space. Sapphire optics and the absence of O-rings guarantee reliability and process safety.



Technical data

| Measuring principle | Light scattering |
|-----------------------------|--|
| | Ratio measurement |
| | Light detection at 25° (single-angle) and |
| | 25°/90° angles (dual-angle) |
| Light source | 650 nm, LED (Light Emitting Diode) |
| Measurement range | 0400 FTU (Formazin Turbidity Units) |
| Measurement accuracy | 0.01 FTU (value < 1 FTU) |
| | 1% of the measured value (> 1 FTU) |
| Repeatability | 0.01 FTU |
| Resolution | 0.01 FTU |
| Response time (T90) | < 2 sec. |
| Units | FTU, EBC, ASBC, ppm SiO ₂ , mg/l SiO ₂ |
| Factory calibration | 10-point calibration, |
| | based on formazin standards |
| Process conditions | |
| Max. pressure | Max. 16 bar (232 psi) |
| Temperature (ambient) | 060 °C (32140 °F) |
| InPro 8600/*/1 | |
| Temperature (process media) | 0100 °C (32212 °F) |
| | Max. 120 °C (248 °F), short time, 1 h |
| InPro 8600/*/2 | |
| Temperature (process media) | 080 °C (32176 °F), |
| | at 25 °C (77 °F) ambient temperature with air cooling |
| | 070 °C (32158 °F), |
| | at 25 °C (77 °F) ambient temperature without air cooling |
| | Max. 120 °C (248 °F), short time, 1 h |
| Materials and dimensions | |
| Materials and almensions | Obviolana start (1,4404 (2101) |
| Sensor neud (weiled) | Sidiniess sieel (1.4404 / 316L) |
| | Capabira |
| | Suppline |
| Soneor bousing | Steiplose stool (1.4404 / 316L) |
| Surface roughness | Da < 0.8 um |
| Distriction rating | |
| Protection ruling | 1P05 |
| Installation | |
| Process connection | Tuchenhagen-Varivent® N 50/40 |
| Process pipe dimension | ≥ DN 40 |
| InPro 8600/W | |
| Communication | Wireless (Bluetooth®) |
| | $3 \times 0/4$ 20 mA current output |
| | individually configurable |
| Distance Bluetooth® | 5 m (16.4 ft) |
| Power supply | 24 VDC (+ 2 V) |
| | |
| Certificates | |
| Quality / end control | • |
| PED | • |
| Hygienic design (EHEDG) | • |
| CE | • |







www.mt.com/pro

Visit for more information



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