AWE

Model TU8355 - TU8555
High Turbidity & TSS Probes

* **4-20mA or RS485 Output**
* **Optical Device**
* **Low Maintenance**
* **Output in FTU.**
* **Not affected by sample colour**
* **Infrared light source.**
* **Submersible Assembly.**
* **Inline Assembly.**
* **Nozel for AutoClean (TU8355)**

TThese unique probes have been designed to measure to measure high turbidity and suspended solids based on back scattering technology.
The probes are available for submersible and in-pipe installations.
The measuring system consists of:
• Infrared light source,
• Detector of scattered light by suspended particles,
• Detector of the clean lens status,
• 2-wire 4/20 mA analogue output,
• RS 485 digital output
• Nozzle for the autoclean by external pressured air (TU 8355).

Technical Specifications

Scale: 0 - 100 / 0 - 1000 / 0 - 10000 FTU
Sensitivity: 70 / 130 %
Zero NTU: ± 10 FTU all scales.
Power supply: 9/36 Vdc
Analog output: 4/20 mA isolated current Loop
Load: 600 Ω max. at 24 Vdc
Digital output: RS 485
Room Temperature: -5 - 50°C
Max Pressure: 1 bar at 25°C (TU8355);
6 bar at 25°C (TU8555)
Autoclean: by pressure air 3 bar max (TU 8355)
Dimensions TU 8355: L=165 mm total, D= 60 mm
Dimensions TU 8555: L=143 mm total, D= 40 mm
Body: PVC
Cable: 10 m (100 m max.)
Protection: IP 68

Through commands from the Personal Computer hyperterminal, the serial interface allows the measuring and check signals transmission, the scale selection, the analogue or digital operating mode selection, the zero and sensitivity calibration.

Thanks to its 4/20 mA isolated output, the probe can be directly connected to a PLC or data logger, and configured in FTU, g/l, % or other.

The probe can be connected to one of the following controllers:- BC7335, BC 7635, BC 7635.010, BC 7687 or BC 6587, which provide the power, the measuring readout, 2 set-points, the alarm relay and the holding function for an external cleaning cycle.

The most common applications of this probe include: water quality monitoring, municipal and industrial water treatment and aquaculture.

The turbidity and suspended solid measurement follows the back scattering method.
A light beam is sent in the sample through an optical lens.

The back scattered light by suspended particle is collected by the probe through a second lens, detected and converted in an electric signal proportional to the turbidity of the sample.

The probe uses an infrared light and the measuring is not affected by the color of the sample.