TU 8355

High turbidity and suspended solids probe. 4/20 mA and RS 485 output

This unique submersible probe has been designed to measure the high turbidity and suspended solids based on back scattering technology.

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 analog output,
- RS 485 digital output, nozzle for the autoclean by external pressured air.

Through commands from the Personal Computer hyperterminal, the serial interface allows the measuring and check signals transmission, the scale selection, the analog 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 B&C Electronics controller BC7635 or BC7335, 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.

Principle of operation

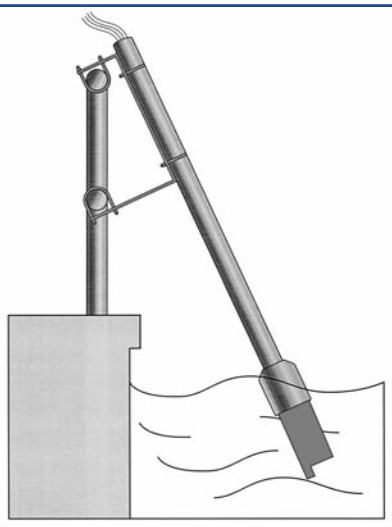
The turbidity and suspended solid measurement follows the back scattering method.
A light beam is sent in the sample through an optical lens.
The back scattered light by suspended particle is collected by the probe through a second lens, detected and converted in an electric signal proportional to the turbidity of the sample.

The TU 8355 probes uses an infrared light and the measuring is not effected by the color of the sample.

Specifications

Scale:	*0/100 – 0/1000 – 0/10000 FTU*
Sensitivity FTU:	*70/130 %*
Zero FTU:	*± 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*
Autoclean:	*by pressure air 3 bar max*
Dimensions:	*L=165 mm total, D= 60 mm*
Body:	*PVC*
Cable:	*10 m (100 m max.)*
Protection:	*IP 68*

The technical specifications may be changed without notice



Typical submersible installation

GUEMISA (Electrónica Guerra y Miró Guemisa S.L.)
Sta. Virgilia, 29 - local - 28033 Madrid (Spain)
Tlfno.: (034) 91 764 21 00 Fax.: (034) 91 764 21 32
Email.: ventas@guemisa.com Web.: www.guemisa.com