

products III

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- Dissolved Oxygen
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- Nitrate/Nitrite
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- SRT Control
- Suspended Solids
- TOC/COD
- Turbidity

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III Monitor For Turbidity & Suspended Solids - TU 7685

Specifications

- Input from preamplifier sensor
- Manual and automatic operation
- Selectable scales:
0/4.000 0/40.00 0/400.0 0/4000 NTU
0/10.00 0/100.0 0/1000 0/10,000 mg/l of SiO₂,
- Autoranging
- Software filter
- Alphanumeric backlit display
- 0/20 or 4/20 mA selectable output, programmable on the input scale
- 2 Set point with min/max function, Hysteresis and adjustable delay
- Alarm: min/max Turbidity Set point timing, dirty lens, empty cell, external light too high
- Check signal from dirty lens
- Autoclean relay with programmable cycle repetition, cleaning and holding time
- 3 access levels: display, calibration and configuration of process parameters
- 110/220 Vac with overload power protection
- Dimensions: 96 x 96 x 155 mm DIN 43700
- Panel mounting

This instrument is designed to operate together with TU 810 amplified Turbidity probe which can be installed over 100 m from the controller.

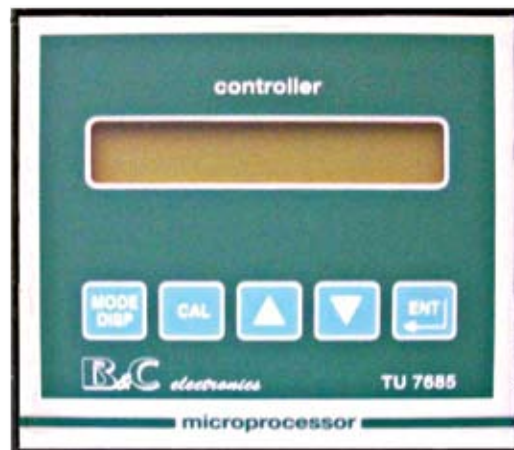
Accessories allow the system to operate in flow, in line and in immersion applications.

Measuring Probes

- TU 810** - Turbidity probe in PVC body
- TU 8105** - Turbidity probe in PVFC body
- TU 8182** - Turbidity probe autoclean submersible in PVFC body

Accessories

- **SZ 9481** Connector
- **TU 910** Flow cell for TU 810 or TU 8105
- **Formazine Standard solutions**



Turbidity Sensor:	TU 810
Operating mode:	Automatic/Manual
Measuring unit:	NTU/mg/l/PPM
Range:	4/400 NTU - 40/4000 NTU 9/999 - 99/9999 PPM of SiO ₂ 9/999 - 99/9999 mg/l of SiO ₂
Resolution:	0.05% of scale
Zero of the probe:	0.0/10.0 % f.s.
Sensitivity:	80.0/120.0 %
Set point A/B:	ON-OFF
Hysteresis:	0/10 % of the scale
Relay delay:	0.0/99.9 s
Relay contacts:	5 A 220 V
Low/high alarm:	0 to full scale
Autoclean:	Manual/Auto+Manual
Analog output Nr.1:	0-20/4-20 mA isolated
Response time:	10 sec. for 98% of input
R max:	600 ohm
Analog output Nr.2:	option 091.3713
Serial output:	RS232 option 091.701
Humidity:	95% without condensate
Power:	110/220 Vac +/-10% 50/60 Hz 5 VA max
Isolation:	4000 V (IEC 348)
Dimensions:	96 x 96 x 155 mm (1/4 DIN)

The technical specifications may be changed without notice

/// Turbidity Probe TU 810 - TU 8105



- For in flow, in line applications
- Nephelometric method
- I. R. light
- Cable length up to 100 m
- Sample Temperature 0 to 50 °C
- Built-in pre-amplifier
- IP67 connector

Specifications

Range:	0/4000 NTU
Resolution:	0.001 on scale 0/4.000 NTU 0.01 on scale 0/40.00 NTU 0.1 on scale 0/400.0 NTU 1 on scale 0/4000 NTU
Accuracy:	± 5% of reading on 0/400 NTU ± 10% of reading on 400/4000 NTU
Response Time:	10 sec.
Measuring Method:	Nephelometric (ISO 7027 - EN 27027)
Light Source:	LED I.R. 890 nm
Preamplifier:	built-in
Power:	±12 Vdc from TU 7685
Ambient Temperature:	0 to 50 °C
Sample Temperature:	0 to 50 °C
Sample Pressure:	6 bar max. at 20 °C
Connector:	IP 67
TU 810 Body Material:	PVC
TU 8105 Body Material:	PVDF
O Ring:	NBR (Acrylat Nitrile)
Optical Window Material:	Acrylic
Diameter:	40 mm
Cable Length:	100 M Max

The Technical Specifications may be changed without notice

/// Turbidity Flow Cell TU 910



This measuring cell has been designed for using with TU 810 or TU 8105 turbidity probes.

It allows very accurate measurements even at very low turbidity values, as requested by drinking water applications.

It is provided with a flow control to avoid air bubbles from grab samples under pressure.

Cleaning and calibrating operations are very easy.

The package includes the 1892702 adaptor and O Ring 2713118 for the TU 810 - TU 8105 installation.

Specifications

Applications:	in flow measurement
Flow Of Sample:	0.2 to 25 l/min.
Temperature:	0 to 50 °C
Temperature Of Sample:	0 to 50 °C
Pressure Of Sample:	6 bar max. at 20 °C
Material:	PVC
Fixing Of Probe:	2 1/2" nut (DN 50)
Fittings:	1/4"
Tubing:	PVC 4 x 6 mm 1=5m

The Technical Specifications may be changed without notice

/// Submersible Autoclean Turbidity & Suspended Solids Probe TU 8182



The Turbidity probe TU 8182 has been designed for submersible applications. It is provided with a built-in device for cleaning the optical lens by means of pressure air blasts.

The probe is operated by the TU 7685 controller.

The controller provides the power to the amplifier of the probe and it activates the auto clean relay as programmed by the user.

The cleaning action can be effected by means of a water tight electric module completed with the air compressor.

The controller TU 7685 can be installed on the front panel of the auto clean module.

The Turbidity probe contains

- an infrared light source - a light detector
- a signal detector of the lens fouling
- a built-in amplifier as interface to the Turbidity monitor.

The measuring method is Nephelometric with the detection of the scattered light at 90° by suspended particles, proportional to the Turbidity value.

Accessories

The installation of the probe needs few accessories to be selected among the following:

- 0012.450043 Extension pipe adapter
- 0012.000624 Swivel mounting
- 0012.440040 33 m PVC tubing for pressure air

Range:	0/4000 NTU - 0/9.999 g/l
Resolution:	0.001 on scale 0/4.000 NTU 0.01 on scale 0/40.00 NTU 0.1 on scale 0/400.0 NTU 1 on scale 0/4000 NTU
Accuracy:	± 5% of reading on 0/400 NTU ± 10% of reading on 400/4000 NTU
Response Time:	10 sec.
Measuring Principle:	Nephelometric
Light:	LED I.R. 890 nm
Preamplifier:	built-in
Power:	±12 V DC
Operating Temperature:	0 to 50 °C
Sample Temperature:	0 to 50 °C
Sample Pressure:	6 bar max. at 20 °C
Body:	PVC
Optical Lens:	Acrylic
Cable Length:	10 M
Diameter:	40 mm
Protection:	IP68
Auto clean:	Built-in device
Air line connector:	1/4" I/E 3/8"
Air Pressure:	3 bar

