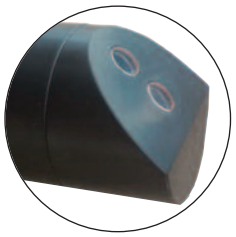
LOW RANGE TURBIDITY SENSOR

General features

Turbidity refers to the scattered component of a light beam which is diverted away from its natural course e by optically denser particles in the medium (e.g. solid matter particles).

The measurement is performed by using a 90° scattered light method compliant with ISO 7027 / EN 27027. The measuring method is based on the Tyndall effect. The turbidity of the medium is determined by the amount of scattered light.



Applications

Drinking water, process industrial water, low turbidity waters, immersion or by-pass installation

Standard version

PVC Body and Modbus RTU RS485 interface

On request

SS316 body;

Technical specifications

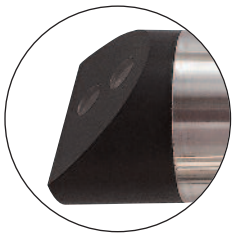
Measuring range	0…10 NTU / 0…100 NTU
Measuring method	90° Scattered light
Resolution	0,01 NTU for 0…10 NTU range 0,1 NTU for 0…100 NTU range
Accuracy	±1% for 0…10 NTU range ±5% for 0…100 NTU range
Ripeatability	±0.05 NTU for 0…100 NTU range ±0.5 NTU for 0…100 NTU range
Response time	T_{90} < 60s
Operating temperature	0…50 °C (0…75 °C with SS316 optional body)
Maximum pressure	4 bar
Body material	Black PVC (on request only SS316)
O-ring	Viton® and Silicon
Optics	Special Glass with oleophobic treatment
Mechanical protection	IP68 Sensor + cable
Power supply	12…24Vdc
Power consumption	max. 3W
Cable	10 mt integral with the sensor
Calibration	1-point and/or 2-point for scale
Signal interface	Modbus RTU Standard Protocol RS485

TURBIDITY SENSOR

General features

Turbidity refers to the scattered component of a light beam which is diverted away from its natural course e by optically denser particles in the medium (e.g. solid matter particles).

The measurement is performed by using a 90° scattered light method compliant with ISO 7027 / EN 27027. The measuring method is based on the Tyndall effect. The turbidity of the medium is determined by the amount of scattered light.



Applications

Untreated water, surface water, process water, industrial or municipal water treatment plant discharge

Standard version

PVC and SS316 body with Modbus RTU RS485 interface

On request

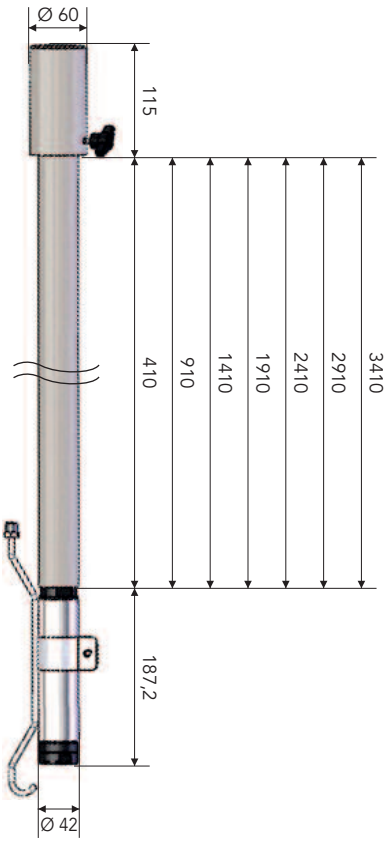
Only SS316 body ;

Technical specifications

Measuring range	0…1000 NTU / 0…4000 NTU
Measuring method	90° Scattered light
Resolution	0,01 NTU for 0…1000 NTU range 0,01 NTU for 0…4000 NTU range
Accuracy	±2% for 0…1000 NTU range ±5% for 0…4000 NTU range
Ripeatability	±5 NTU for 0…1000 NTU range ±20 NTU for 0…4000 NTU range
Response time	T_{90} < 60s
Operating temperature	0…50 °C (0…75 °C with body in SS316)
Maximum pressure	4 bar
Body material	Black PVC and SS316 (on request only SS316)
O-ring	Viton® and Silicon
Optics	Special Glass with oleophobic treatment
Mechanical protection	IP68 Sensor + cable
Power supply	12…24Vdc
Power consumption	max. 3W
Cable	10 mt integral with the sensor
Calibration	1-point and/or 2-point for scale
Signal interface	Modbus RTU Standard Protocol RS485

probeholder for insertion into the pipe

IMMERSION PROBEHOLDERS



Immersion probeholder for turbidity/suspended solids probes

Materials

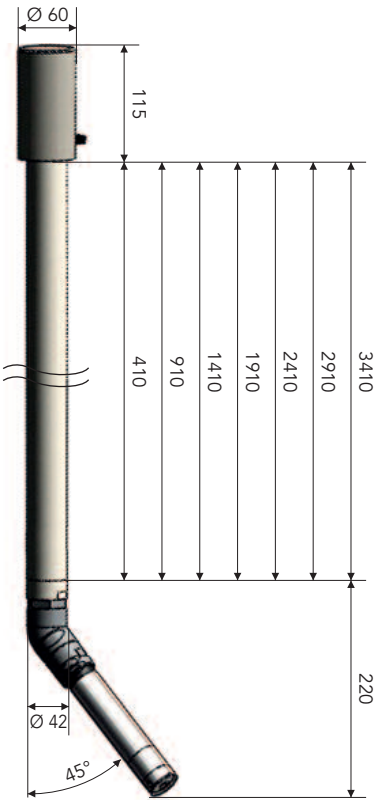
- Polipropilene (PP) Tube and cap
- Nylon fixing screw
- NBR o-Rings

Working Temperature

- max 80 °C

Available lengths

- See drawing



Immersion probeholder for Oxygen probe and redox digital/differential electrodes

Materials

- Polipropilene (PP) Tube and cap
- Nylon fixing screw
- PVc 45° Fitting
- NBR o-Rings

Working Temperature

- max 80 °C

Available lengths

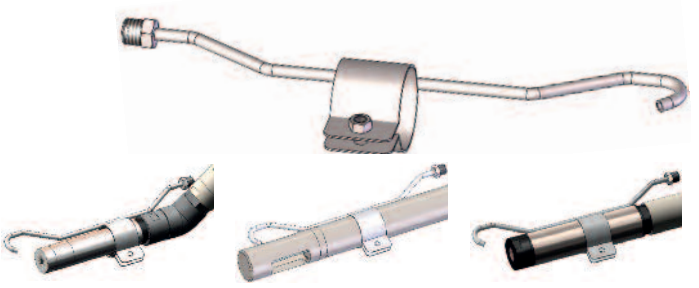
- See drawing

nozzle for immersion probes' cleaning

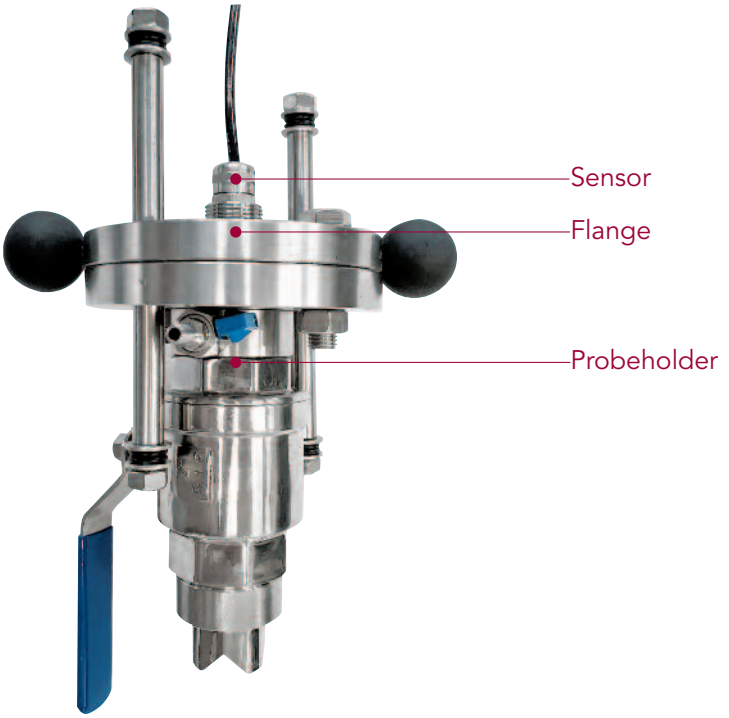
Materials

- SS316 tube
- SS316 nozzle
- SS316 fittings and nuts

The washing conduit is connected to the nozzle via the ¼"BSP male threaded fitting The system can be adapted to all immersion probes and probeholders.



INSERTION PROBEHOLDER FOR TURBIDITY/SS



Technical specifications

Body material	SS316
Ball valve	DN 40 for extraction of the probe without interruption of the process
Connection	welded for mounting on pipe
Complete with	fixing brackets of the safety sensor

BYPASS PROBEHOLDERS

By-pass probeholder

The electrode/sensor installed in remains always immerged in the liquid to guarantee stable and accurate measures.

Applications

- Wastewater
- Drinking water
- Cooling towers
- Reverse osmosis
- Irrigation

Technical data

Input/Output	8x12 mm (tube)
Probe connections	PG 13,5mm, 42mm, 35mm, 24mm
Head Material	Black PP
Wessel Material	Transparent PMMA / Black PP
Pressure range	1 bar at 50 °C 2 bar at 40 °C
Control sensor	Reed flux at 0,5 bar of min. pressure
pH range chemically compatible	4,0…10 pH transparent body
	2,7…12 pH black body

A

- Bypass probeholder for three (3) probes diameter 12 mm
- Pressure up to 2 bar
- Temperature up to 50 °C
- Transparent wessel
- pH range 4,0…10 pH

Probe types

- pH and redox 12 mm
- pH and redox 13.5 mm
- Temperature 12 or 13,5 mm
- Conductivity 12 or 13.5 mm
- Oxygen 13,5 mm

A1

- Bypass probeholder for three (3) probes diameter 12 mm
- Pressure up to 2 bar
- Temperature up to 50 °C
- Black wessel
- pH range 2,7…12 pH

Probe types

- pH e Redox 12 mm
- pH e Redox 13.5 mm
- Temperature 12 or 13,5 mm
- Conductivity 12 or 13.5 mm
- Oxygen 13,5 mm

B1

- Bypass probeholder for one (1) probe diameter 35 or 42 mm
- Pressure up to 2 bar
- Temperature up to 50 °C
- Black wessel
- pH range 2,7…12 pH

Probe types

- Torbidity 42mm
- Oxygen 35mm