Turbidity sensor low range

S461 LT

Applications

- Drinking water
- Industrial waters
- Fish farming

General features

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.

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

Applications

Drinking water, process industrial water, low turbidity waters, immersion or bypass installation.

Standard version

PVC Body and Modbus RTU RS485 interface.

On request

SS316 body; 4...20 mA outputs

S461 LT
with Flow cell

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
Repeatability	±0.05 NTU for 0...10 NTU range ±0.5 NTU for 0...100 NTU range
Response time	T_{90} < 60s
Operating temperature	0...50°C (0...75°C with AISI316 optional body)
Maximum pressure	4 bar
Body material	Black PVC (on request only AISI316)
O-ring	Viton® and silicone
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