Suspended solids and turbidity sensors

S461 ST

Applications

- Industrial water
- Mining industry
- Wastewater

General features

The S461ST sensor is used for the optical measurement of suspended solids in industrial and process waters up to 300 g/l (depending on the type of sludge). The probe uses the dual sensor scattering measurement method.

- Reliable concentration measurement thanks to the use of the infrared optical measurement process
- Absorption method of pulsed infrared light
- Sensor body in AISI316
- Absence of mechanical moving parts
- Pre-processed measurement in the sensor that provides high sensitivity in low signal transmission
- Immediate installation and easy maintenance

Applications

- Measurement of suspended solids and turbidity in biological purification processes
- Measurement of suspended solids and turbidity in industrial waters

Technical specifications

Measurement range	Measuring ranges SS: 0-300 g/l depending on the type of sludge Turbidity measuring ranges: 0...4000 NTU
Measurement method	Absorption of light
Sensitivity	0.1 g/l
Repeatability	± 5%
Accuracy	± 0.5 g/l
Response time	T_{90} < 60s
Working temperature	0...50°C
Max pressure	4 bar
Body material	SS316
O-ring	Viton®
Optics	Special epoxy
Mechanical protection	IP68 sensor & cable
Power supply	12... 24Vdc
Absorption	Max. 3W
Cable	10 m integral with the sensor
Calibration	By points
Signal interface	RS485 with standard Modbus RTU protocol