



Turbi-Tech 2000LA

Suspended Solids Sensor

PRODUCT DATASHEET

APPLICATIONS

Mixed Liquor
Aeration Basin
Oxidation Ditch
Returned Activated Sludge
Surplus Activated Sludge

MEASUREMENT PRINCIPAL

Light Attenuation
Wavelength 860 nm

FEATURES

Fully automatic Self Cleaning
Flexible Mounting System
Large Optical Surface

BENEFITS

Automated Aeration Control
Low Cost of Ownership

COMPATIBLE MONITOR

7200 Monitor

ALTERNATIVE SENSORS

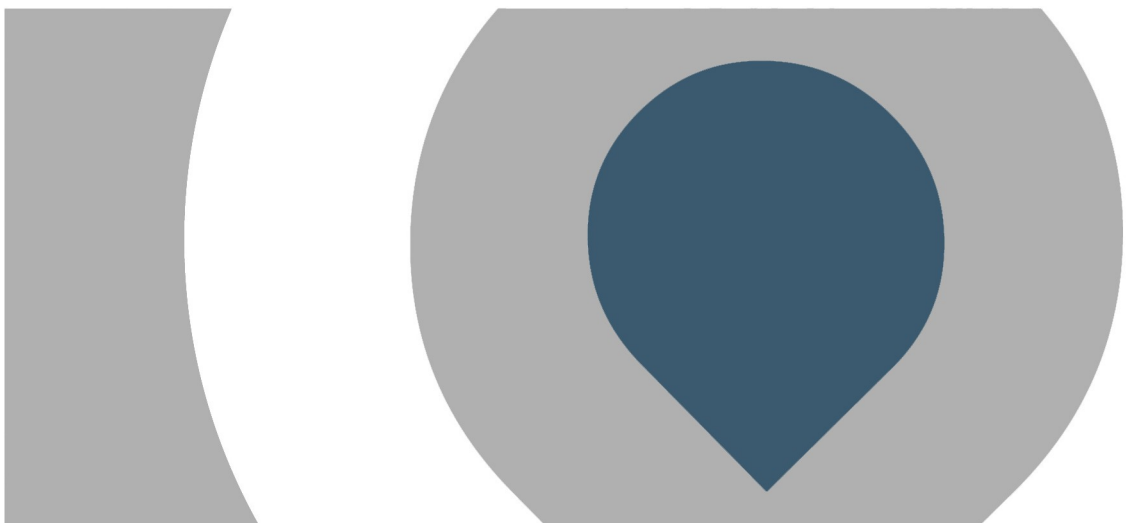
Turbi-Tech 2000HR
Soli-Tech 20v2
Infrared Sensors



The Turbi-Tech 2000LA Sensor has been designed for use in aeration systems typically monitoring Mixed Liquor Suspended Solids also known as Activated Sludge where solids are typically in the range of 1,500 to 3,500 mg/l. The sensor can also measure Returned Activated Sludge (R.A.S.), Surplus Activated Sludge (S.A.S.) and Suspended Solids or Turbidity in any higher range application.

The large optical surface and sample volume combine to ensure that the sensor is providing information that is reliable and representative of the solids present in the process. Deposits of fats and grease on the sensing area do not prevent the sensor from measuring unlike sensors with small optical surfaces. In addition the sensor incorporates a self cleaning mechanism that ensures that the optical surfaces are kept clean at all times, the cleaning system is designed to avoid problems with ragging and does not smear the optical system. The cleaning system ensures that manual intervention on a routine basis is not required, the sensor should simply be checked as part of general site housekeeping.

The Turbi-Tech 2000LA Sensor uses Infrared Light at 860 nm and operates using the Light Attenuation Principle. The cleaning mechanism is then sealed by 2 Nitrile 'H' Rings that finish the cleaning process. The Nitrile seals can be exchanged for Viton if the process media dictates. The cleaning process is automatically initiated by the 7200 Monitor at a user determined frequency. The cleaning process takes only 90 seconds, which means that the sensor is available for 99.5% of the time with a 5 hourly cleaning cycle.



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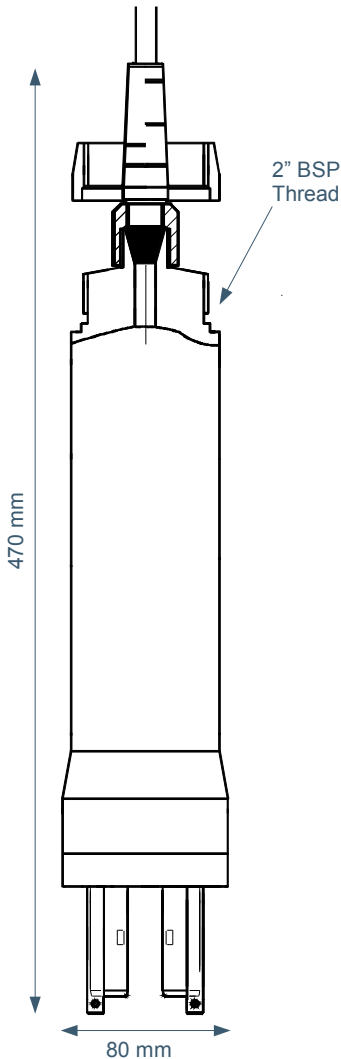




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PRODUCT DATASHEET



Physical

Dimensions
Weight
Protection Class
Enclosure Material
Cable Entries
Wetted Parts
Seal Material
Cable Type
Cable Length
Service Requirement

Environmental Data

Operating Temperature
Storage Temperature
Location

Electrical

Power Supply

Interface to Monitor

Type

Measurement

Accuracy
Resolution
Repeatability
Measurement Principle
Wavelength/Frequency
Response Time
Pressure Rating (Depth)
Flow Rate
Maximum Range
Minimum Range

Mounting

Installation Type
Mounting Shaft
Handrail Attachment
Stilling Tube

80 mm diameter x 540 mm long
2.2 kg (inc 10 metres of cable)
IP68
Black Acetal Co-Polymer
Integral Cable Gland
Black Acetal, 316 Stainless Steel, Glass
Polyurethane and Nitrile (Viton option)
6 core, 9mm O/D Polyurethane Coated
10 metres standard, 100 metres maximum
Automatic Self Cleaning
Seal Service every 3500 cleans (application dependent)

0 to 50°C
-20 to 60°C
Indoor/Outdoor

12VDC from 7200 Monitor

PWM Digital Signal

Better than +/-5% FSD on real sample
Dependent on range setting, typically +/-2%
Better than +/-1% FSD on real sample
Light Absorption
860 nm Infrared
0.5 seconds - damping provided by monitor
10 mWC
Not affected by flowrate, avoid dead spots and extreme turbulence
0 - 20,000 mg/l
0 - 4,000 mg/l
Measuring range will depend on the nature of the sample being monitored

Dip, Flowcell or Stilling Tube
0.5 to 3 metres in 0.5 metre increments
Part Numbers 160000 + 160080
Available

Publication No: I62700DS-Iss05
The company reserves the right to alter the specification without prior notice. E&OE

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