



OxyTechw² OPT

Optical Dissolved Oxygen Sensor

PRODUCT DATASHEET

APPLICATIONS

Activated Sludge Control
Drinking Water Processing
Reservoir Water Quality
River Monitoring

MEASUREMENT PRINCIPAL

Luminescent Optical Technology

FEATURES

No drift
Reduced Maintenance
Fast Response

BENEFITS

Automated Aeration Control
Low Cost of Ownership

COMPATIBLE MONITOR

7300w² Monitor

MOUNTING OPTIONS

Flexible Joint for Self Cleaning

ALTERNATIVE SENSORS

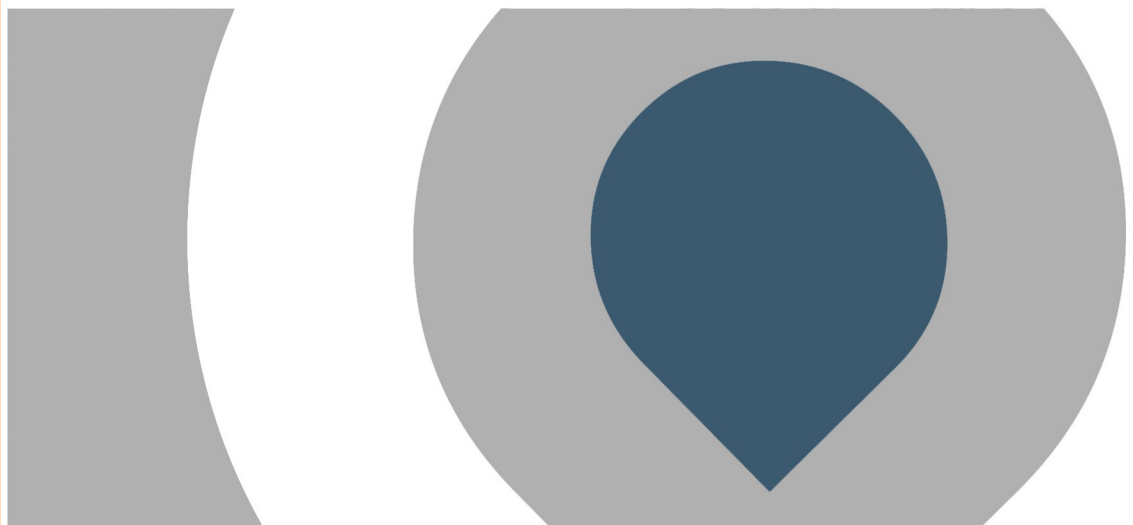
OxyTechw² GAL



The OxyTechw² OPT Sensor has been designed to provide highly reliable Dissolved Oxygen measurements using the industry accepted optical luminescent technology. Optical measurement of dissolved oxygen offers some improvement over older galvanic type sensors, this includes extended times between maintenance, no drift, a faster response and allows installation in applications where there is low or no flow.

For installation in activated sludge plants (ASP's) we recommend that the sensor is installed using our specially designed mounting system, with a flexible joint in the mounting shaft. The flexible joint moves the sensor in the process, keeping the membrane clean by reducing bio-fouling without the use of a compressor and with the added benefit of allowing rags to fall away from the assembly. This motion is similar to that achieved by using a floating ball assembly, with the added advantage of placing the sensor below the surface of the liquor. This means that the sensor is below the level of the floating fats and greases that accumulate at the surface and results in the Dissolved Oxygen reading being more representative of the whole tank.

The OxyTechw² OPT provides the reliable, accurate measurement that is required to operate activated sludge plants at the optimum Dissolved Oxygen concentration, maintaining the balance between the running costs of blowers and aerators and the need to produce high quality effluent.



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Physical

Dimensions	25 mm diameter x 148.50 mm long
Weight	0.45 kg (inc 10 metres of cable)
Protection Class	IP68
Enclosure Material	316L Stainless Steel
Cable Entries	Integral Cable Gland
Cable Type	6 core, Polyurethane Coated
Cable Length	10 metres standard, 100 metres maximum
Service Requirement	Membrane Cap Replacement yearly (application dependent) Periodic cleaning and calibration are required at a frequency determined by the application

Environmental Data

Operating Temperature	0 to 50°C
Storage Temperature	-10 to 60°C
Location	Indoor/Outdoor

Electrical

Power Supply	12 Volts from Monitor
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Interface to Monitor

Type	RS485
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Measurement

Accuracy	+/- 0.1 mg/l on range 0-20mg/l +/- 1%Sat on range 0-20% sat
Resolution	0.01
Repeatability	Better than +/-1% FSD on real sample
Measurement Principle	Optical measurement of luminescence
Light Source	Blue LED
Temperature Measurement	NTC
Response Time	90% of value in less than 60 seconds
Pressure Rating	5 Bar
Flow Rate	No flow necessary
Range	0 – 20.00 mg/l or ppm 0 – 200 %Sat

Mounting

Installation Type	Dip
Mounting Shaft	0.5 to 4 metres in 0.5 metre increments
Handrail Attachment	See Document I32258DS for options

Order Codes

Part No	Description
223882	OxyTechw ² OPT Sensor (Cable Length: 10 metres)
223884	OxyTechw ² OPT Sensor (Cable Length: 20 metres)

Publication No: I32244DS-Iss05
The company reserves the right to alter the specification without prior notice. E&OE

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