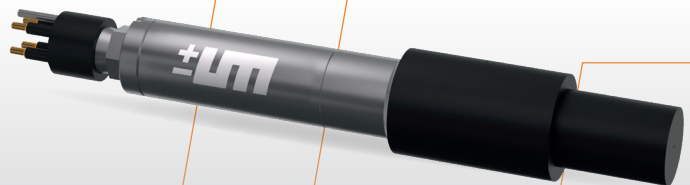


Sensor

O2 Sensor



Sensor

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General Description

The dissolved oxygen sensor is suitable for use in monitoring systems for long-term measurements.

The sensor can be used in seawater, lakes, and rivers (freshwater) to measure dissolved oxygen.

A multi-core, 4-wire subsea cable is used for power supply and data transmission. The sensor operates on a 9–24 V DC power supply. Other voltage options are available upon request. The signal output can also be customized upon request.

Mechanical Design

The sensor housing is primarily made of corrosion-resistant materials such as plastic (POM) or titanium, regardless of the application. A pressure resistance of at least 6000 dbar is ensured.

The connector is made of titanium and neoprene. It is screwed into the lid of the pressure tube and sealed with an O-ring. The retaining sleeves typically used for this type of connection are not required, as the water pressure is sufficient to securely connect the sensor and inline connector. The lid, together with the connector, is fastened to the pressure tube using two hex socket screws. The part of the sensor head installed inside the housing is sealed with two O-rings at the bottom and one O-ring at the top.

The upper part of the pressure tube is additionally bonded to the sensor head for extra security.

Applications

- **Process & manufacturing technology**
Monitoring oxygen concentrations in closed systems, reactors, or process gas lines.
- **Environmental & emission analysis**
Determination of oxygen levels in emissions, exhaust air, and combustion systems.
- **Energy technology & power plants**
Control of combustion processes and optimization of efficiency.
- **Food & packaging industry**
Control of oxygen levels in modified atmosphere packaging.
- **Biotechnology & laboratory applications**
Monitoring of incubation processes, fermentations, and biological systems.
- **Safety & indoor air monitoring**
Warning systems in laboratories, industrial facilities, and enclosed spaces.

Further technical details

Measuring range	0–150 % saturation
Initial Accuracy	1,5 % sat.
Sensor type	Clark-measuring cell
Housing	Plastics (POM), titanium
Resolution	0,1 % sat.
Response time	900 ms



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