



OXYTRANS INNOVATION

If required OXYTRANS can be supplied with a manual or pneumatic retractable unit made of electro-polished stainless steel. Equipped with an automatic safety lock while the sensor is removed, this is the perfect solution for all manufacturers who cannot stop production for maintaining the sensor. Also, this feature safely protects the optical window during cleaning of the plant – even with the most aggressive cleaning detergents. The retractable unit has two connections for optimum sterilization and a stroke of just 36 mm.



Innovation. Dedication. Centec.

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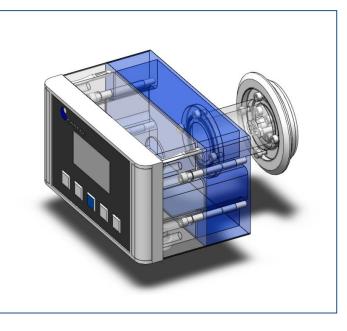
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TRANS

Measurement of

Oxygen Content

Centec Process Sensors





Automated process skids and high precision sensors from a single source. Centec.

OXYTRANS

The Principle

OXYTRANS continuously measures the content of oxygen in liquids and gases. Designed for applications that require maximum sensitivity and high accuracy, this device is used in various industries all around the world. Breweries and soft drink manufacturers determine the O_2 content in deaerated water and beverages with OXYTRANS. Oxygen measurement during fermentation is an ideal application. Numerous power plants use the sensor to monitor oxygen levels in their boiler water. The state of the art optical measurement technology is based on the effect of luminescence quenching, i.e. the radiationless redistribution of excitation energy via a molecular interaction. An indicator layer on a small glass component ("optical window") installed in the measuring head is illuminated with blue-green-light. When the indicator molecules absorb the incident light they are promoted to a higher energy state. After a certain time they convert back to their ground state during which a detectable red light is emitted. If O_2 is present the energy is transferred from the indicator molecules to the oxygen. The detected signal decreases according to the oxygen content. OXYTRANS displays various units, e.g. ppb, ppm and % oxygen. The lightweight portable device is very robust and can easily be connected with hoses.



OXYTRANS TR Transmitter Version



OXYTRANS M Portable Version

- Available as Transmitter and Portable Version with Local Display
- Highly Precise and Fast Measurement of O₂ in Liquids and Gases
- Optical Technology without Membrane and Electrolyte
- Short Response Time and Excellent Long-Term Stability
- Hygienic Execution and Full CIP Capability
- Easy Maintainable within a Few Minutes
- Outstanding Price-Performance-Ratio

Technical Data	OXYTRANS TR
Liquid Phase	I) 1 ppb - 2 ppm or
Measuring Range	II) 30 ppb - 50 ppm
Liquid Phase	I) ±1 ppb or
Accuracy	II) ± 30 ppb
Gas Phase	I) 0 - 4,2 % O ₂ or
Measuring Range	II) 0 - 50 % O ₂
Gas Phase	I) $\pm 0,002 \% O_2$
Accuracy	II) ± 0,03 % O ₂
Response Time	T90 ≤ 10 s
Inlet Pressure	max. 12 bar
Temperature of Operation	- 5 - + 55 °C (option: + 98 °C)
	resistance: max. + 130 °C
Temperature Compensation	Pt100
Material	1.4404/AISI 304,
	silicon (FDA), PTFE (FDA)
Connections	Varivent [©] DN65 compatible
	to inline housings DN40 - 150;
	DIN; ANSI; others on request
	input:
Interface (OXYTRANS TR)	2 x digital (24 VDC)
Data Logger (OXYTRANS M)	output:
	3 x digital (24 VDC) &
	2 x analog (4 - 20 mA)
Profibus DP	option
Enclosure Rating	IP65
Power Supply	24 VDC



e Version with Local Display at of O₂ in Liquids and Gases ane and Electrolyte ong-Term Stability bility utes





OXYTRANS M

 I ppb - 2 ppm or II) 30 ppb - 50 ppm
I) ± 1 ppb or
II) $\pm 30 \text{ ppb}$
<i>i</i>
I) $0 - 4,2 \% O_2 \text{ or}$
II) 0 - 50 % O ₂
I) $\pm 0,002 \% O_2$
II) ± 0,03 % O ₂
T90 ≤ 10 s
max. 12 bar
- 5 - + 55 °C (option: + 98 °C)
resistance: max. + 130 °C
Pt100
1.4404/AISI 304,
silicon (FDA), PTFE (FDA)
hoses of 6 mm diameter
manual and automatic with
selectable intervals (5 - 600 s);
approx. 5.000 measured vales;
PC software and USB-interface
for data management
-

IP65

battery, rechargeable

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