OPTICAL OXYGEN MEASUREMENT

OXYTRANS ATEX

Measure O_2 in Liquids and Gases

OXYTRANS ATEX measures O_2 in deaerated water, wort, beer, beverages, liquid food products, CO_2 and inert gases. This version is documented for applications requiring maximum sensitivity and high accuracy.



Liquids
Measurement down to the ppb range.

Gases
Two documented measuring ranges up to 50 % O_2.

ATEX Option
Enclosure rating IP65; optional ATEX marking.

Measuring Principle

Indicator molecules in the optical window are excited by blue-green LED light. Oxygen transfers energy from the excited molecules and reduces the detected signal. Other gases do not affect the measurement result.

Applications

- Deaerated Water
- Wort
- Beer
- Beverages
- Liquid Food Products
- CO_2
- Inert Gases
- ATEX Option

Optical technology requiring no replacement of electrolyte or membrane; hygienic design with various flange connections.

Technical Data

Technical data for selection and integration of the OXYTRANS ATEX version.

PARAMETER	OXYTRANS ATEX
Measuring Ranges, Liquid Phase	I) 1 ppb - 2 ppm II) 30 ppb - 35 ppm
Accuracies, Liquid Phase	I) ± 1 ppb II) ± 30 ppb
Measuring Ranges, Gas Phase	I) 0 - 4,2 % O_2 II) 0 - 50 % O_2
Accuracies, Gas Phase	I) ± 0,002 % O_2 II) ± 0,03 % O_2
Response Time / Operating Pressure	t90 ≤ 10 s / max. 12 bar
Operating Temperature	-5 to +55 °C (Pt100); optional +98 °C
Material	1.4404 / AISI 316L, silicone (FDA), PTFE (FDA)
Input	1 x analog (4 - 20 mA) & 3 x digital (24 VDC)
Output / Fieldbus	2 x analog (4 - 20 mA) & 3 x digital (24 VDC) optional: PROFIBUS DP & PROFINET
Enclosure Rating	IP65; optional: ATEX (II 3G Ex ic IIC T6 Gc)
Power Supply	24 VDC

Optical Technology

No replacement of electrolyte or membrane.

Short Response Time

t90 ≤ 10 s and high long-term stability.

Hygienic Design

Various flange connections available.

Design & Integration

We support you with the project-specific selection and integration of the **OXYTRANS ATEX** - from measuring range and installation position to process connection and interfaces.

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