OPTICAL OXYGEN MEASUREMENT

OXYTRANS TR Varivent N / Type 1

In-line O_2 Measurement in Liquids and Gases

OXYTRANS TR is an optical oxygen sensor for continuous O_2 measurement in deaerated water, wort, beer, beverages, liquid food products, CO_2 and inert gases.



In-line Measurement
Continuous measurement values directly from the process.

Liquid and Gas Phase
Measuring range 1 for liquid and gas phase.

Optical Technology
No replacement of electrolyte or membrane.

Measuring Principle

Indicator molecules in the optical window are excited by blue-green light. Oxygen transfers the excitation energy and changes the detected signal. As the O_2 concentration increases, the signal decreases.

Applications

- Deaerated Water
- Wort
- Beer
- Beverages
- Liquid Food Products
- CO_2
- Inert Gases
- Product Line

OXYTRANS TR is designed for applications requiring maximum sensitivity and highest accuracy.

Technical Data

Technical data for the in-line version.

PARAMETER	OXYTRANS TR VARIVENT N / TYPE 1
Centec ID	329
Measuring Range, Liquid Phase	1 ppb - 2 ppm
Accuracy, Liquid Phase	± 1 ppb
Measuring Range, Gas Phase	0 - 4,2 % O_2
Accuracy, Gas Phase	± 0,002 % 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 / Supply	IP65 / 24 VDC

Optical Measurement
No replacement of electrolyte or membrane.

Short Response Time
t90 ≤ 10 s.

In-line Integration
Continuous measurement in the process.

Design & Integration

We support you with the project-specific selection and integration of the **OXYTRANS TR Varivent N / Type 1** - from measuring range and installation position to process connection and interfaces.

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