

ProTrode DO sensor

Inline dissolved oxygen (DO) sensor

HIGHLIGHTS

- Maintenance-free optical sensor, no electrolyte replacement required
- Supports CIP, SIP, and autoclaving, suitable for hygienic and sterile environment
- Improves batch consistency by reducing process variability



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Optimize your process by monitoring dissolved oxygen in «real-time»

Dissolved oxygen (DO) plays a vital role in aerobic biotechnological applications, particularly in fermentation and cell culture. Maintaining optimal oxygen levels is essential for supporting cell metabolism, ensuring consistent growth, and maximizing product yield.

The ProTrode DO sensor uses advanced optical technology to deliver accurate, real-time measurements of dissolved oxygen directly within the process stream. Unlike electrochemical sensors, ProTrode DO sensor is low-maintenance, eliminating the need for electrolyte replacement. Its robust design supports sterilization processes such as CIP (Clean-In-Place), SIP (Sterilize-In-Place), and autoclaving, making it ideal for demanding bioprocess environments.



By continuously monitoring dissolved oxygen, the ProTrode sensor provides operators with the insights needed to tightly control oxygen levels throughout the production cycle. This reduces variability, improves batch consistency, and supports regulatory compliance, all while minimizing downtime and maintenance.

TECHNICAL SPECIFICATIONS

Industry Pharmaceuticals and biotechnology Measuring Range 0 - 250 % air saturation 0 - 50 % O₂ Membrane Silicone Shaft material Stainless steel (316S), Ra ≤ 0.4 Shaft diameter 12 mm Temperature sensor Pt100 Temperature range 0 - 50 °C High temperature (autoclavable) <20 min 121°C Pressure 4 bar Sensor connector VarioPin, PG 13.5 Min. immersion depth 10 mm ATEX No Output signal Digital		
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ATEX No	Sensor connector	VarioPin, PG 13.5
	Min. immersion depth	10 mm
Output signal Digital	ATEX	No
- Digital	Output signal	Digital
Min. immersion depth 10 mm	Min. immersion depth	10 mm
120 mm 609332010		120 mm 609332010
Length 220 mm 609332020	Length	220 mm 609332020
Other lengths on request		_