



**DE<sup>TM</sup> DYNAMIC**  
Process Equipment

Dissolved Oxygen Sensor  
FermSense DO

## Dissolved Oxygen Sensor – Amperometric, Sterilizable

### FermSense DO



The membrane design has an expandable inner Silicone bladder that holds the electrolyte within a 316L stainless steel cage. During SIP processes or during autoclaving the internal bladder expands first, taking the pressure off the sensitive measurement area. This allows to have a maximum of electrolyte present, with minimum risk of damage to the sensor. The membrane cartridge design is easy to use and durable enough to be used many times over if necessary.

#### Applications

- Fermenters
- Bioreactor

#### Features

- Measuring Principle: Electrochemical - Polarographic
- Sensor Body: 316L Stainless Steel
- Membrane Material: Silicone/Teflon (Reinforced with Steel Mesh)
- Surface Roughness of Wetted Parts: Max. Ra0.4µm (N5)
- O-Ring Wetted Material: Silicone, EPDM (FDA and USP Class VI positive listed)

#### Specification:

FermSense DO : Amperometric Dissolved Oxygen Sensor		
Application		Bio-pharmaceutical, Life Science & Fermentation
Type		Electrochemical-Polarographic DO Sensor
Output		40 to 80 nA
O <sub>2</sub> Range	Saturation	0 to 300%
	Accuracy	≤ ±1%
Steam Sterilizable		Recommended: + 121 °C, 30 min
Temperature Sensor		NTC 22K
Process Range	Temperature	0 to 80 °C
	Pressure	6 Bar
Response Time		98% of final value in < 60 s
Cable Connector		VP6
Dimensions	Surface	Ra < 0.4 µm (N5)
	Diameter	12 mm
	Length	120, 220, 320, 420 mm
	Connector	PG13.5

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SmartDip 240M is a compact retractable electrode housing. This version can fit 120mm long sensor. It comes with 1" NPT, Triclover connection.

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SmartDip 450M is a pneumatically operated retractable electrode housing with long immersion length and isolation ball valve. This unique model can fit 120mm long sensor.

