

DISSOLVED OXYGEN**Process Automation Solutions D200 & D400 Series
19 and 25 mm OxyProbes®****Features And Applications:**

- 🏗️ Modular Design, Rebuildable
- 🏗️ Easy to Replace Membrane Cartridge
- 🏗️ Superior Membrane Cartridge Design
- 🏗️ Unique T-Pull™ Handle
- 🏗️ 100% Quality Assurance & Quality Control
- 🏗️ Reduced Down-Time and Maintenance

These sensors provide the user with a modular design that permits easy repair and component interchangeability. The D200 (19 mm) and D400 (25 mm) series of OxyProbe® dissolved oxygen sensors are available in several configurations. This allows them to fit the wide array of installation requirements found in steam sterilizable and autoclavable applications in the food, beverage, and biopharmaceutical industries.

The Models D200 and D205 represent the standard configuration for 19 mm head plate fittings used by many fermentation vessel and bioreactor manufacturers.

The Models D400 and D405 are the conventional configurations that fit all standard (Ingold) 25 mm side wall ports, found in most large scale fermentation vessels and bioreactors. For B. Braun vessels fitted with their unique 25 mm ports we offer the Models D430 and D435.

All configurations are available with the T-Pull™ handle design. This feature provides a low profile that protects the cable and connector. Also, when placed on a flat surface, the T-Pull™ handle prevents the sensor from rolling off and impacting with the floor, saving costly repairs and loss of service.

Each configuration is available with a large selection of insertion lengths. Custom insertion lengths are also available.

The D200 and the D400 series of dissolved oxygen sensors are designed to work with the Bela Instruments Transmitters and most existing polarographic dissolved oxygen instruments and cables. Give us a call and we would be pleased to suggest the most suitable design for your particular vessel.

D400**D200**

D200 & D400 Series:

Measurement Principle	Amperometric - Polarographic
Cathode	Platinum (Pt)
Anode	Silver (Ag)
Membrane	Composite of Teflon & Silicone rubber reinforced with stainless steel screen
Polarization voltage	675 mV
Output signal in air at 25 °C	Approximately 60×10^{-9} amps
• Residual signal in oxygen free medium	< 1% of current in ambient air
Temperature range	Operation: 0 to 80 °C Sterilization: Max. 135 °C
Temperature Compensation	Automatic with integral 22 kΩ @ 25 °C NTC thermistor
• Stability	Better than 2% of readout per week at constant pressure and temperature (30 °C)
• Linearity	Better than +0.3% of readout
• Response time at 25 °C	98% of readout in less than 60 seconds
37 °C	less than 20 seconds
Max. pressure	4 bar (atm.), 58 psig
• Max. flow error	Between resting and stirred solution being measured: approximately 3-5% of readout
Connector	Standard 4 pin disconnect, moistureproof with glass to metal hermetic seal
Wetted materials	316L, Silicone rubber
Seals	Silicon rubber
• Under laboratory conditions in deionized water	

STANDARD SIZES:

19 mm Diameter		25 mm Diameter	
Part Number	Length	Part Number	Length
D200-B150-PT-D9	B = 150 mm	D400-B070-PT-D9	B = 70 mm
D200-B220-PT-D9	B = 220 mm	D400-B150-PT-D9	B = 150 mm
D200-B320-PT-D9	B = 320 mm	D400-B220-PT-D9	B = 220 mm
D200-B420-PT-D9	B = 420 mm	D400-B320-PT-D9	B = 320 mm
		D400-B420-PT-D9	B = 420 mm

Miscellaneous Parts

KA2501	Membrane Cartridge
KA2504	Kit, 4 Membrane Cartridges
AS-3140-C30-0025	Electrolyte, 25 mm bottle
AM-9200	316L Cap nut for D400
AM-9201	316L Cap nut for D200

Cables, polarizers, accessories, and instruments are also available. Please contact us for additional information at the address below.

Principle Sensor Components

