

D100 Series 12 mm OxyProbe®

Features And Applications:

- ▶ Improved Anode-Cathode Assembly
- ▶ Easy to Replace Membrane Cartridge
- ▶ Superior Membrane Cartridge Design
- ▶ Unique T-Pull™ Handle
- ▶ 100% Quality Assurance & Quality Control
- ▶ Reduced Down-Time and Maintenance

This series of OxyProbe® 12 mm diameter dissolved oxygen sensors is available in three individual configurations. They fit the wide array of installation requirements found in steam sterilizable and autoclavable applications for the food, beverage, and biopharmaceutical industries.

The Models D100 is a clean and economical sensor configuration designed to fit into all 12 mm compression fittings used by many fermentation vessel and bioreactor manufacturers. This design allows for a very low profile installation; no more damaged sensors due to impacts while installing or removing vessels from the autoclave.

The Model D120 incorporates the Broadley - James captive hex nut, a reliable method of securing the dissolved oxygen sensor to a mating BJC housing or fitting.

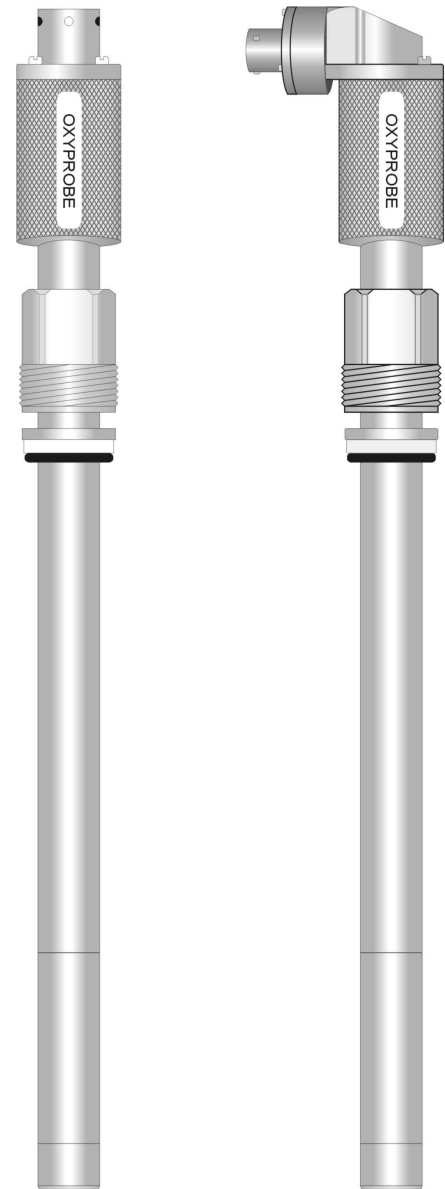
The model D140 is supplied with a Euro-standard PG 13.5 threaded fitting for compatible housings, and fittings. These include all Mettler-Toledo/Ingold fittings which utilize a PG 13.5 thread design, including Valve-Retract assemblies.

All three 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.

The wide variety of physical configuration insures that there is a type and size that will fit into your vessel or housing, regardless of manufacturer or age.

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

Just like the D200 (19mm) and the D400 (25 mm), the D100 series of dissolved oxygen sensors are designed to work with the Bela Instruments D.O. 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.



OxyProbe® Dissolved Oxygen Sensors

D100 Series:

Measurement PrincipalAmperometric - Polarographic
 CathodePlatinum (Pt)
 AnodeSilver (Ag)
 MembraneComposite of Teflon & Silicone

rubber reinforced with steel screen
 stainless
 ElectrolyteKOH/KCl solution, pH 13
 Polarization volage675 mV

Output signal in air at 25 °CApproximately 60×10^{-9} amps

- Residual signal in oxygen< 1% of current in ambient air free medium

Temperature rangeOperation: 0 to 80 °C
 Sterilization: Max. 135 °C

Temperature CompensationAutomatic with integral 22 kΩ @ 25 °C NTC

thermistor

- StabilityBetter than 2 % of readout per week at constant pressure and temperature (30 °C)

- LinearityBetter than +0.3% of readout

- Response time at98% of readout in
 25 °C less than 60 seconds

37 °C less than 20 seconds

Max. pressure4 bar (atm.), 58 psig

- Max. flow errorBetween resting and stirred solution being measured: approximately 3-5% of readout

ConnectorStandard 4 pin disconnect, moistureproof with glass to metal hermetic seal

Wetted materials316L Stainless Steel, Silicone rubber, Teflon

- Under laboratory conditions in deionized water

STANDARD SIZES:

D100 Series Oxyprobe Sensors

Part Number	Length
D100-B158-PT-D9	B = 158 mm
D100-B188-PT-D9	B = 188 mm
D100-B258-PT-D9	B = 258 mm
D100-B358-PT-D9	B = 358 mm
D100-B458-PT-D9	B = 458 mm

D140 Series Oxyprobe Sensors

Part Number	Length
D140-B120-PT-D9	B = 120 mm
D140-B150-PT-D9	B = 150 mm
D140-B220-PT-D9	B = 220 mm
D140-B320-PT-D9	B = 320 mm
D140-B420-PT-D9	B = 420 mm

316L SST cartridge with composite Teflon/silicone rubber membrane reinforced with steel mesh

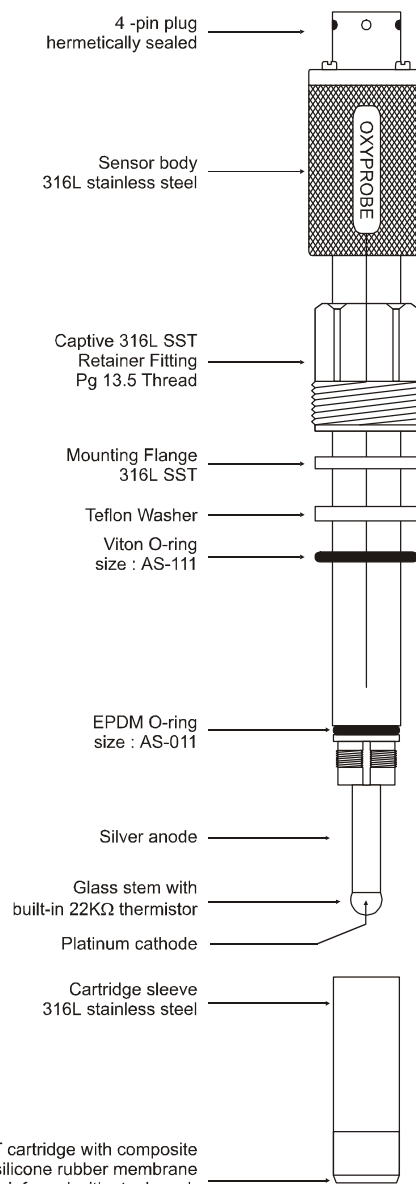
D120 Series Oxyprobe Sensors

Part Number	Length
D120-B130-PT-D9	B = 130 mm
D120-B160-PT-D9	B = 160 mm
D120-B210-PT-D9	B = 210 mm
D120-B310-PT-D9	B = 310 mm
D120-B420-PT-D9	B = 420 mm

Miscellaneous Parts

KA1201	Membrane Cartridge
KA1204	Kit, 4 Membrane Cartridges
AS-3140-C30-0025	Electrolyte, 25 ml bottle

Principle Sensor Components



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