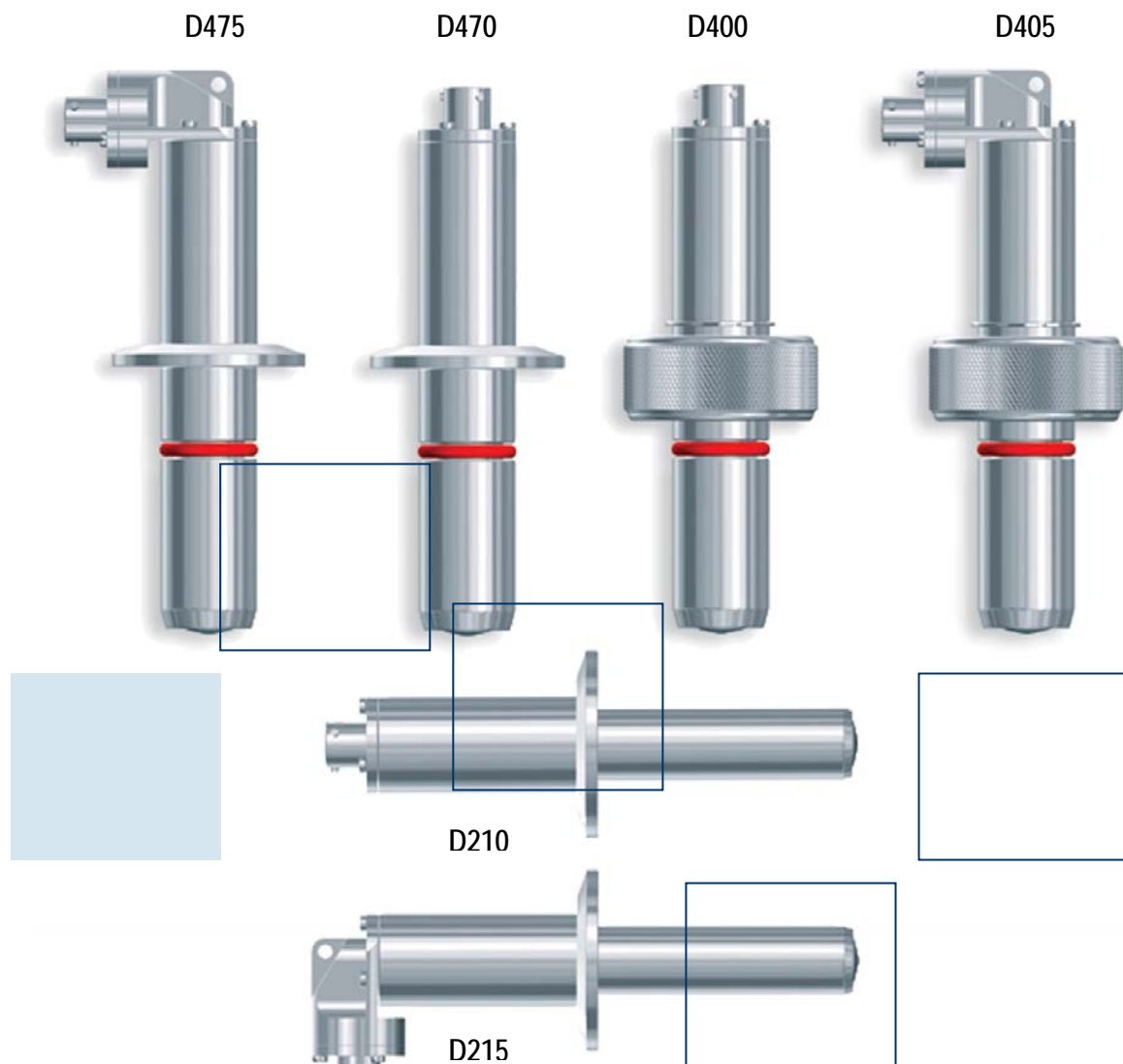


OxyProbe®

OxyProbe® Dissolved Oxygen Sensors

LTH Electronics can offer a series of Polarographic Dissolved Oxygen sensors that are ideally suited for use in microbial fermentation and cell culture bioprocess applications inside fermentation vessels and bioreactors.



The Oxyprobe® Dissolved Oxygen sensors are available with a choice of process connections to suit 25mm threaded ports, side ports with 1.5" sanitary flange connection and a 1.5" sanitary flange tee.

What makes OxyProbe® sensors unique?

The internal seals of an Oxyprobe® are all mechanical seals using o-rings. There are no adhesives to leak or fail in process, making this a more rugged and reliable sensor. Replacing the cathode is also much easier and faster since there is no sealant to clean from the threads. No sealant also makes the job of replacing the cathode much faster and cleaner.

D400 & D405 OxyProbe® Dissolved Oxygen Sensors

The OxyProbe® dissolved oxygen sensor offers the most rugged design for 25 mm side ports. It fits directly into the vessel, eliminating the need for a housing, reducing contamination risks. The modular design allows quick replacement of any part, making it easy to maintain and repair the sensor.

D470 & D475 OxyProbe® Dissolved Oxygen Sensors

The sensor fits directly into a 25 mm side port with a 1.5" sanitary flange, eliminating the need for a housing, reducing contamination risks. Designed with an integral 1.5" sanitary flange, this sensor has 2 seals to secure it into the vessel. A gasket seal at the flange holds the sensor securely in place, while the 25 mm o-ring seal minimizes crevices when the sensor is installed.

It is important to note, the port should be at least 15° above horizontal in order to be used for any pH or D.O. sensor. Vessels with these ports are sometimes found in food and pharmaceutical processes that utilize CIP.

D210 & D215 OxyProbe® Dissolved Oxygen Sensors

These sensors are unique in their construction. The front end of the sensor is the same as the 19 mm sensor, with the smaller diameter and no crevices or o-rings. It fits directly into a 1.5" sanitary pipe tee, eliminating the need for a housing, reducing contamination risks. Designed with an integral 1.5" sanitary flange, a gasket seal at the flange holds the sensor securely in place.

It is important to note, these sensors are not intended for use with the standard 25 mm sanitary flange ports. However, they can be used with the NovAseptic ports.

The interior design and replacement parts of this sensor are the same as other 25 mm OxyProbes®. The modular design allows quick replacement of any part, making it easy to maintain and repair the sensor.

Standard Mounting for Model D210 Series OxyProbe® Dissolved Oxygen Sensors

The Models D210 Series D.O. OxyProbe® sensors are intended for use in a 1.5" sanitary pipe tee. The sensor is secured into the tee with a standard flange clamp sealed with a flange gasket. The tip of the sensor is positioned in the middle of the process flow when it is placed in a standard size tee. These sensors can also be used in NovAseptic ports.

Model 215
D.O sensor
installed in
1.5"
sanitary
pipe



Specifications

316L Stainless steel

Serialised for traceability

RA32 finish with electro polish on wetted parts

Measurement principle: Amperometric – Polarographic

Output signal in air: Approx. 67nA at 25°C

Temperature range: 0-80°C

Sterilisation: Maximum 135°C

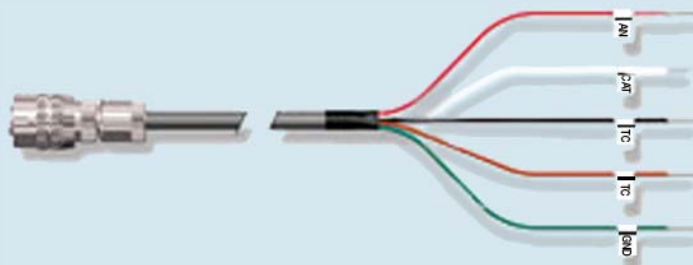
Stability: Better than 2 % of readout per week at constant pressure and temperature. (30°C.)

Maximum pressure: 4 bar, 58 PSI.

How to choose a sensor:

- (1) Confirm the type of process connection - standard 25 mm port, 1.5" sanitary flange port or pipe tee.
- (2) Determine how far the sensor should extend into the vessel. For most process media, the minimum length is optimal. However, if the media is viscous and tends to coat the inner wall of the vessel, a longer length may provide better performance.
- (3) Decide whether a right angle connector is preferred over a straight connector.
- (4) Choose cable length and connector. All D.O. sensors require cable and connector assemblies

Dissolved Oxygen Cable Assemblies with Crimped Ferrules



A variety of cable assemblies to connect OxyProbe® D.O. sensors with today's D.O. transmitters and controllers are available.

- Cables are shielded to decrease signal noise and other interferences.
- Cables are tagged with part numbers for easy replacement.
- Cables have a D4 twist-lock coaxial cable plug to connect to the sensor.
- Cable assemblies are 100% tested for continuity and the absence of short circuits.
- D-type cables are 6 mm diameter, low noise, multiconductor cables.

Spares and Accessories

Single Cartridge Kit

This kit includes everything required to replace the membrane cartridge and internal o-rings on one 25 mm or 19 mm OxyProbe®.

This kit includes:

- One 25 ml bottle of electrolyte
- One membrane cartridge
- One set of internal o-rings

Four Cartridge Kit

This kit contains everything required to replace four membrane cartridges on any combination of 25 mm or 19 mm OxyProbes®. Everything is conveniently packed in one box for easy storage.

This kit includes:

- One 25 ml bottle of electrolyte
- Four membrane cartridges
- Four sets of internal o-rings



Order Codes

Sensor Model	Sensor Length	Typical Insertion Length	Sensor Part Number	
Standard 25mm OxyProbe® with Straight Connector				
D400	70mm	35mm	D400-B070-PT-D9	
Standard 25mm OxyProbe® with Right Angle Connector				
D405	70mm	35mm	D405-B070-PT-D9	
25mm OxyProbe® with 1.5" Sanitary Flange				
D470	70mm	35mm	D470-B070-PT-D9	
25mm OxyProbe® with 1.5" Sanitary Flange and Right Angle Connector				
D475	70mm	35mm	D475-B070-PT-D9	
25mm OxyProbe® with 1.5" Sanitary Flange				
D210	70mm	70mm	D210-B070-PT-D9	
D215	150mm	70mm	D215-B070-PT-D9	
Cables				
Cable Part Number	Connector A	Cable Type	Cable Length	Connector B
D4 Sensor Plug to Crimped Ferrules				
AX-5000-D4-D03FF	D4	D	1m	Crimped Ferrules
AX-5000-D4-D06FF	D4	D	2m	Crimped Ferrules
AX-5000-D4-D10FF	D4	D	3m	Crimped Ferrules
Other cable lengths available, please contact LTH Electronics for further information.				
Spares				
Description			Part Number	
Single Cartridge Kit			KA2501	
Four Cartridge Kit			KA2504	



These products comply with current European Directives

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