OxyGuard Micro Probe

Instructions For Use

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D15 Micro Probe Manual GB 2014 01
Data subject to change without notice

OxyGuard®

GENERAL The OxyGuard Micro probe measures dissolved oxygen in % saturation. It generates its own millivolt output and can be used with transmitters that have input impedance of at least 1 megohm and galvanic isolation. The brown lead is plus.

USE For correct measurements the probe must have the same temperature as the water, and a flow past the probe of 1 cm/sec or more is necessary. Note the reading when the signal is steady.

CALIBRATION To calibrate, wipe the membrane, place the probe in fresh air, wait until the measurement is steady and adjust the connected equipment to show 100%.

SPECIFICATIONS

Dimensions:	12 mm dia., length 20 or 27mm.
Principle:	Galvanic cell, self polarising, self temperature compensating.
Output:	Typically 10 to 40 mV in air.
Range:	Standard 0 to 200% sat
Accuracy:	+/- 1% of value or better.
Flow requirements:	Typically 1 cm/sec in water.
Repeatability:	Typically +/- 0.5% of value.
Operating conditions:	-5 to +50°C.
Response Time:	90% after less than 10 sec.

For use with equipment with input impedance of at least 1 megohm and with galvanic isolation.

MAINTENANCE

Wipe the membrane as needed. Renovation should only be performed if the membrane is damaged, or if there is difficulty in calibrating the probe. The process is also used to mount the protector. Proceed as follows:

1) Clean the outer of the probe. Unscrew the cap. Rinse the probe.

2)Inspect the cathode and clean it using the brown plastic scouring pad provided with the unit. The cathode MUST NOT BE POLISHED.

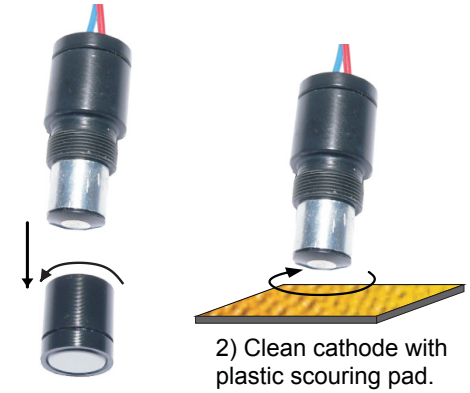
3) Press a knife into the gap between the ring and cap to remove the ring. Discard the old membrane. 4) Clean and dry the parts.

Fit a new membrane with the aid of the tool as shown, figures 5) to 10). To fit the protector use this in stage 5 instead of 2 rings.

11) Fill the cap with electrolyte. 12) Screw the filled cap slowly onto the probe. Excess electrolyte will dribble from the thread.

Calibrate the probe. Re-calibrate after a few hours, since the probe will take a little time to settle down after renovation.

Keep the probe in the transport chamber when not in use. Keep the sponge in the chamber moist.

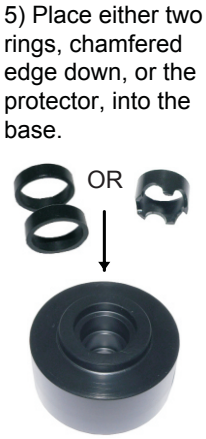


1) Clean probe. Unscrew cap.

2) Clean cathode with plastic scouring pad.

3) remove ring from cap and discard old membrane

4) CLEAN and DRY parts



5) Place either two rings, chamfered edge down, or the protector, into the base.

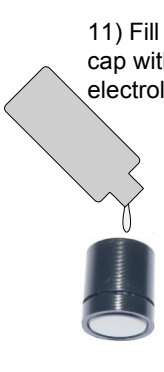
6) Place a new membrane on the base above the rings or protector.

Do NOT use the backing paper!

7) Place the guide over the base and 8) insert the cap

9) Press the cap firmly down by hand.

10) You can now open the tool and remove the cap



11) Fill the cap with electrolyte

12) Screw the cap slowly up onto the probe.

Excess electrolyte should dribble from the thread.

D15XMEM
membranes with O-rings

D15ACC
Electrolyte, membranes with O-rings, protector, cleaning pad.

D15TOOL

D10E150
electrolyte (50 ml)

D15CAP
cap