

User Guide

Polarographic Dissolved Oxygen

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PREPARATIONS FOR USE

1. Inspect the completeness of the sensor in the packaging box.
2. Unpack the sensor from the box and inspect for any physical damage. Report any defect(s) promptly to your supplier or any Leadtec representatives.
3. Rehydrate the sensor for 12 hours for optimum performance due to dry storage.
4. Wait for the temperature to stabilize before taking measurements.

CALIBRATION

The sensor has to be calibrated together with the controller before usage. This sensor requires 1-point calibration or 2-points calibration. For 1-point calibration, it is normally performed for general or waste water application. For 2-point calibration, it is normally used in the low DO measurement for the process line.

1-Point Calibration: Using 100% DO Saturation in Air

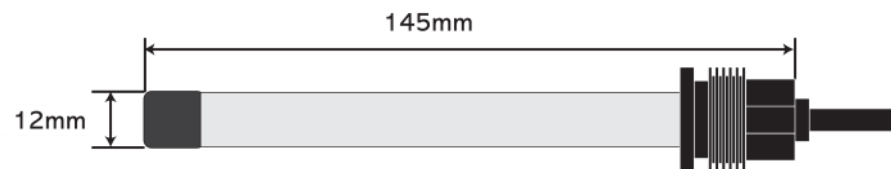
1. Rinse the sensor thoroughly.
2. Dab a dry cloth gently on the probe head to remove excess water.
3. Expose the probe to ambient air.
4. Calibrate the sensor at 100% DO saturation point with the controller.

2-Point Calibration:

1. Rinse the sensor thoroughly.
2. Immerse the sensor into the zero solution.
3. Calibrate the sensor in DO zero saturation point with the controller.
4. Calibrate the sensor in 100% DO Saturation.

DIMENSIONS

C-D103



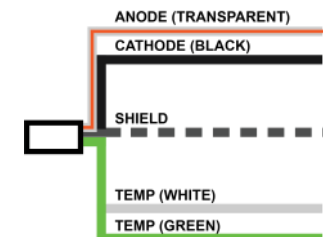
SPECIFICATIONS

Measuring Principle	Polarographic Technology
Measuring Range	40 ppb – 40.00 ppm
Polarization Voltage	-670 ± 50mV
Current In Air At 25°C	40 – 80 nA
Temperature Compensation	NTC22K
Operating Temperature	0 – 60°C
Response Time (T _{95%})	90 seconds at 25°C
Maximum Pressure	5 bar
Minimum Flowrate	0.02 m/s
Material	Stainless Steel
Thread	PG 13.5
Dimension	Diameter : 12 mm Length : 145 mm

STORAGE

Membrane DO sensor can be stored dry or with moist condition. When the probe is not in operation, clean the probe thoroughly to remove impurities. Store with care.

WIRING DIAGRAM



CLEANING & MAINTENANCE

Polarographic DO probe will exhibit indications when cleaning is required. The probe will require longer stabilization time, measures erratic reading and, having difficulties to perform calibration. Clean the sensor when these key indications occur. It should be done periodically throughout the operation for optimum performance. Avoid using abrasive scouring sponge.

1. Rinse the sensor thoroughly with water.
2. Rub a soft sponge with soap solution gently over the sensor body and membrane cap.
3. Rinse off the remaining soap with water on the sensor.
4. Calibrate the sensor accordingly.

Replacement of Membrane Cap

In case of deterioration of sensor cap, or difficulty on the process of calibration, please contact your Leadtec Sales & Service representative for membrane cap replacement.