

DO100 Dissolved Oxygen Probe Instruction Manual

This polarographic dissolved oxygen probe is designed for laboratory and field use.

Required equipment and reagents

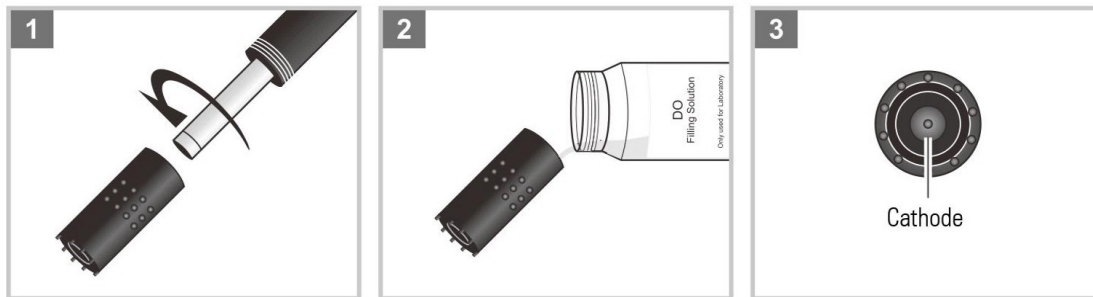
- A dissolved oxygen meter
- Sodium sulfite reagent (Na_2SO_3)
- Cobalt(II) chloride hexahydrate ($\text{CoCl}_2 \cdot 6\text{H}_2\text{O}$)
- Electrolyte solution (Order Code: DOES-100)

Required solutions for calibration

- Air-saturated water
- Zero Oxygen Solution:
To prepare this solution, dissolve 500mg of sodium sulfite reagent and a small amount of cobalt(II) chloride hexahydrate ($\text{CoCl}_2 \cdot 6\text{H}_2\text{O}$) in the 250ml distilled water, mix the solution until reagent is completely dissolved.

Prior to use

1. Unscrew the membrane cap from the bottom of the dissolved oxygen probe.
2. Fill the membrane cap halfway with electrolyte solution.
3. Screw the membrane cap onto the probe, excess electrolyte will drain out. Be sure the cathode of probe makes contact with membrane cap, the electrolyte solution in membrane cap should be without an air bubble.
4. Connecting the probe to meter, turn on the meter 10 to 15 minutes and wait for the probe to polarize.

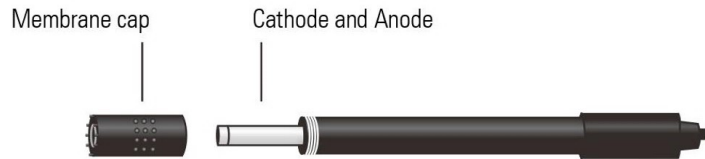


Measurement

1. Calibrate the meter according to the manufacturer's instructions.
2. Rinse the probe in deionised water and blot dry.
3. Place the probe in the sample and record the stable reading.

Storage and maintenance

- Always keep the membrane of the dissolved oxygen probe is wet or moist.
- If you do not use the probe for long periods, please screw off membrane cap and rinse the cathode, anode and membrane with deionized water, then soak up residual water on them with filter paper. Install the probe again.



Specification

PARAMETER	SPECIFICATION
Sensor Type	Polarographic
Output at Saturation	400nA ($\pm 25\%$)
Output at Zero Oxygen	<1%
Temperature Range	0~80°C, 32~176°F
Body Type	Epoxy
Dimensions	150 (L) × 12 (Dia.)mm
Connector	6-pin