Membrane Replacement
OxyProbe® II DO Sensors

There are two distinct types of 12 mm DO sensor cartridges: one for the traditional style sensor (for example, OxyProbe D140) and one for the newer style OxyProbe II sensors. Please make sure you received the right membrane cartridge for your particular sensor design. The old and new membranes are not interchangeable and cannot be installed on the wrong sensor type. However, once opened, they cannot be returned or re-sold so be sure to check the box label before opening it. If you have any questions, feel free to call us toll-free at 800-288-2833 (US and Canada).

Important Notice:
The O₂ electrolyte has an alkaline pH value of 13. Contact of electrolyte with the skin, especially the mucous membrane of the eyes, should be avoided. If such contact occurs, rinse the affected area thoroughly with water. Get medical attention if adverse signs appear. An MSDS is available for download from our website if desired.

Great care should be exercised when handling the sensor and changing the membrane. The internal glass cathode is very fragile and any impact can cause a crack or fracture which can permanently damage the sensor.

Because contact with the electrolyte is very likely during exchange of electrolyte or membrane body, the use of protective gloves and eyewear is recommended.

Membranes are typically replaced after a single use in high-value processes, or after multiple uses in R&D, university, PD labs, etc. How many uses you might expect depends upon the process conditions. Visit our website FAQ section for more detailed information.
To replace the used membrane with a new one, or to remove, clean, and re-install the existing membrane, please follow these procedures:

1. Unscrew the cap sleeve from the shaft and carefully remove it from the sensor. Place the sensor down nearby in a safe place where it will not roll off or bump into anything that might damage the fragile glass tip of the cathode.

2. Usually the membrane cartridge remains in the cap sleeve when the sleeve is removed from the sensor body. Tip it over and pour out the old electrolyte solution (remember it is pH 13). Carefully push on the flat face of the membrane with your finger or thumb to dislodge it from o-ring holding it in place within the cap sleeve. The cartridge should slide free of the cap sleeve.

3. If re-using the old membrane, rinse it out with DI water using a squeeze bottle or other device to ensure all of the old electrolyte and byproducts are removed. Refill the cartridge slightly with OxyProbe electrolyte solution. Rinse it around and pour it out to flush out any remaining DI water.

4. Check the o-ring on the sensor body, just above the threads where the cap sleeve attaches. If installing a new membrane, replace the o-ring with the one supplied with the membrane. If it is a re-use, inspect the o-ring and replace if necessary.

5. Fill the membrane halfway with electrolyte solution, and give it a “tap” or “flick” of your fingemail to make any large bubbles rise to the top.*

6. While holding the sensor in a vertical position, slide the membrane cartridge over the cathode assembly. The excess electrolyte will be displaced and this should be patted dry with a paper towel, kimwipe, etc.

7. Take the steel cap sleeve and carefully slide it over the membrane cartridge, threading it onto the body until it is completely flush with the body.

8. Rinse off any excess electrolyte that may have spilled, and dry the sensor with a paper towel, kimwipe, etc.

9. Each time the membrane is changed the sensor should be polarized and calibrated before use. See the instruction manuals for your particular sensor and instrument, or visit our website “Documents” link.

*NEVER fill the membrane with electrolyte while it is lodged inside the cap sleeve. This causes excess electrolyte to be captured inside and can result in the rupture of the membrane during the autoclave cycle.