

Replacing the Membrane in FX-300-DO-Universal Industrial Galvanic Dissolved Oxygen (DO) Sensors

IMPORTANT NOTE BEFORE CHANGING MEMBRANE!

The FX-300-DO-Universal sensor should not be taken apart for service unless the membrane is damaged, the response (slope) is significantly reduced by fouling or if there are deposits on the membrane that cannot be removed.

PREPARATION FOR CHANGING MEMBRANE

Unscrew the cap, rinse with water and clean the anode <u>ONLY</u> with a <u>PLASTIC</u> scouring pad. \rightarrow <u>NEVER</u> USE A <u>METAL</u> SCOURING PAD ON THE ANODE! If the cathode is tarnished it can be cleaned with a 600 grade wet-or-dry paper. \rightarrow DO NOT POLISH THE CATHODE!

QUICK TEST

After the anode and (if necessary the cathode) was cleaned it is possible to perform a simple test to ensure the integrity of the sensor. Dry the top part of the sensor quite thoroughly, especially the cathode and the area surrounding it. Measure the output of the sensor when connected to the mating FX-300-DO dissolved oxygen transmitter. It should show zero ppm on the display. If your display does not read zero (or very near zero) contact factory for assistance.

MEMBRANE REPLACEMENT PROCEDURE:

See drawing to right for all referenced components in instructions:

- 1. Use the tool provided to unscrew the ring the ring.
- 2. Remove the used membrane and O-ring.
- 3. Rinse the cap and ring. Dry both parts thoroughly.
- 4. Put a new O-ring in the bottom of the cap.
- 5. Put a membrane on top of the O-ring.
- 6. Replace ring and tighten it firmly with the supplied tool.

Precautions and Caveats:

- All parts must be clean & dry before performing the procedure.
- Membrane must not be wrinkled before or after it is installed. If it is wrinkled it must be replaced with a new membrane.
- Fill the cap to the brim with electrolyte. Hold probe upright and slowly screw on cap until it's completely flush. Some electrolyte solution may leak out of the cap.



Replacing the Membrane in FX-300-DO

• Wait one hour before performing a calibration after changing the membrane. For best results calibrate again approximately 24 hours after membrane is changed as the galvanic DO cell will have reached full equilibrium by this point in time.

Spare Parts & Optional Fittings

UNIVERSAL-DO-HS-MB: UNIVERSAL-DO-EL-125mL: UNIVERSAL-DO-GUARD: Set of 10 each thick high stability membrane with small O-rings 125ml Electrolyte (Internal Filling Solution to recharge sensor). Protective guard threads onto ¾"MNPT threads of convertible sensor