

## **Summary of Final Conductivity Sensor Cleaning Procedures**

- If an ultrasonic cleaning bath is available us it with an all-purpose surface cleaning solution or detergent and some hot water. Allow the sensor to soak in the detergent bath and use a soft tuft pipe cleaner or wooden shaft q-tip (because their tips are smaller) to wipe down the center electrode. The pipe cleaner is best. In a pinch tear off a piece of paper towel and roll it into a tight rod small enough to fit in the hole. It will of course deform on being wetted, just shove it in the cross-hole and rotate to scrub. You could also use a cut piece of cloth for this.
- If no ultrasonic is available clean it with your choice of hot detergent in water, or with alcohol or acetone. Allow the sensor to soak then wipe down the center and outer electrodes as described above.
- In the event of a hard scale, try soaking the sensor in white vinegar, or some mild acid solution. Whatever will dissolve what's coating the surfaces.
- For biological fouling a solution of 50% bleach and water will do a good stripping job but often warm or hot is better. Soak the tip in that for a half hour or so.
- The same remedies apply to the body of the sensor which is the outer electrode except you don't have to worry about access or q-tips.
- On the chance that bubbles are the whole problem there is a good way to check for them. Sensor entry from the top of a line or vessel often results in an air-trapping cavity around the short sensor stem. If this sort of installation is used, examine it and make sure that the sensor tip is completely submerged at all times.
- To check for the presence of bubbles rap the sensor back cap sharply from the side several times with the plastic or wooden handle of a screwdriver. This will sometimes dislodge outgassing bubbles that form on all the surfaces of a sensor and you can observe a sudden increase in conductivity when the sensor is struck a few times. Use common sense about how hard to hit it. Hold the screwdriver loosely by the blade between your thumb and forefinger to control the amount of muscle that goes into the raps. No warranty for hammer blows naturally.
- A good detergent cleaning without rinsing will minimize bubbles on reinsertion if the detergent residue can be tolerated.

Inquire to factory should you have any questions about cleaning of your contacting conductivity sensors that is not covered in the summary above or the following pages with photos and notes for visualization of the best practice final cleaning procedures detailed.

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1. CLEAN ELECTRODE AREA FOR 10 MINUTES IN THE ULTRASONIC TANK WITH A WARM SOLUTION OF ALCONOX DETERGENT.



2. RINSE THE SENSOR WITH HOT WATER



3. WIPE ELECTRODE AREAS WITH ACETONE USING PIPE CLEANERS AND COTTON TIPPED SWABS.





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4. SOAK THE SENSORS IN THE ULTRASONIC TANK FOR 10 MINUTES WITH A HOT ALCONOX SOLUTION.





## 5. RINSE THE SENSOR WITH HOT WATER

