CALIBRATION

Use fresh buffer for calibration. Prepare two calibration buffers of 50mL. The ideal buffer values should cover the common operating range for measurement. The second buffer solution value must match the first buffer solution with 10 times multiplication difference. Add 1 mL of ISAB solution into each buffer solution.

1. Rinse the electrode with water and dab it dry with lint free cloth.
2. Immerse the probe in the First Point buffer (lowest ppm value).
3. Initiate first point calibration from the controller
4. Rinse the electrode and dab it dry with lint free cloth
5. Immerse the probe in the Second Point buffer and begin Second Point calibration from controller to complete .

Example 1

The fluoride range of the process:
0.56 ppm

First Point : 0.1 ppm
Second Point : 1.0 ppm

Leadtec
Water Treatment Solution

User Guide

Fluoride Sensor

Leadtec
Water Treatment Solution

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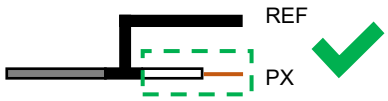
PREPARATIONS FOR USE

1. Unpack the sensor from the box and inspect for any physical damage. If any defects or damage are present, report promptly to your supplier to resolve this issue.
2. Pre-soak the sensor with 100 ppm fluoride solution for about 30 minutes.
3. Calibration is required before use.
4. The conductive layer covering the sensor cable must be removed in order to isolate the circuit connection from the Reference. Otherwise, the sensor will display incorrect readings.

Conductive layer not removed

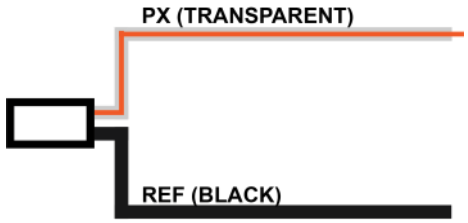


Conductive layer removed

STORAGE

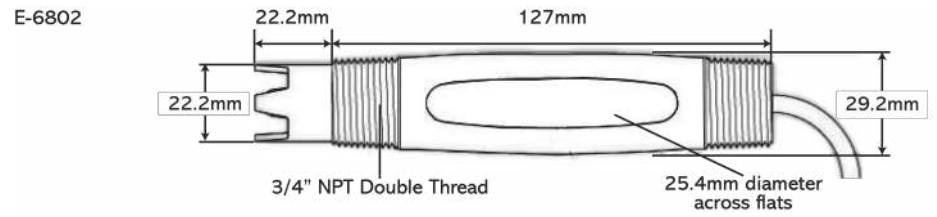
When the probe is not in operation, clean the sensor thoroughly to remove impurities. Dab off remaining liquid and keep the sensor dry. Secure the protective cap back on.

WIRING DIAGRAM

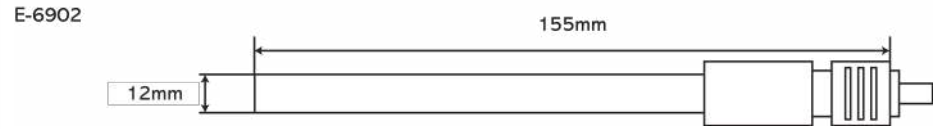


DIMENSIONS

E-6802



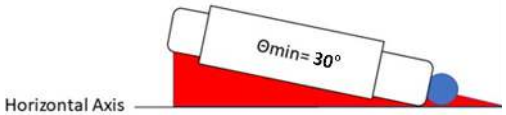
E-6902

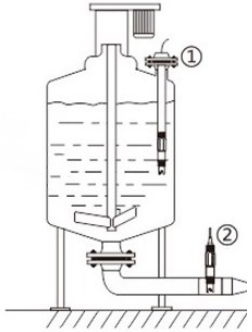


INSTALLATION

The fluoride sensor can be installed in-line or immersion .

1. Remove the sensor cap and rinse thoroughly.
2. After rinsing, the electrode is ready to be fasten on piping and holders.





Types of Installation:

1. Immersion
2. In-line

MAINTENANCE

Fluoride 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.

Cleaning

Rinse the sensor thoroughly with water and dab the sensor dry. Should the stain remains intact to the sensor, rinse the sensor with cleaning solution and immerse it into a 100ppm fluoride solution for 1 hour.

SPECIFICATIONS

Measuring Principle	Ion Selective (Potentiometric)
Measuring Range	0.02 – 2000 ppm Other ranges are upon request
Resolution	0.01 ppm
Slope	56 ± 6 mV @ 25°C
Endpoint Time	Typically, 10 to 30 seconds
Interferences	Hydroxide Ions Aluminum (III) Ions Iron (III) Ions
Temperature Range	5 – 50°C
pH Range	2 – 8 pH
Potential Drift	2 mV per day
Body Material	ABS