



FOXCROFT EQUIPMENT AND SERVICE COMPANY, INC.
FX-300 High Fluoride & Acid Resistant pH Sensor Specifications

Part number: SPH-HHF-68-UL-G-10
Configuration: 3/4" x 1" MNPT, Combination pH Sensor, Acid & High Level Fluoride Resistant

Recommended Applications: wastewater treatment of acid fluoride solutions for etching of metal, glass or silicon wafer processes, wastewater containing high Fluoride levels, low pH range applications or mid-high range pH processes that require strong acid cleaning to remove buildups. Where no / low maintenance is required, for remote locations, or pollution control equipment.

Special Features:

Crosslinked polymer in the reference system is resistant to heat, solvents and most chemicals. Sensor holds an excess of KCl, assuring saturation at all temperatures and extending sensor life. Both types of pH glass resist the buildup of fluoride precipitates on the glass surface to minimize cleaning and reduce calibration frequency. The special glass composition has ten times the fluoride resistance of standard general pH glass. It resist high acid concentrations, the reference system design permits pH measurements into the negative range.

General Specifications:

pH Range: 0 to 12 pH (0 to 11 pH, with the high HF Resistant Option).
Temperature Range: -5 to 50° C in fluoride solutions
Pressure Range: 1 to 100 psig (6.9 to 690 kPag)

Body Material: Ultem (Poly-Ether-Imide)
Junction Material: Kynar (Poly-Vinylidene-Fluoride)

Cable: RG 174/U Coaxial (without preamplifier)
Connector: BNC (unless otherwise specified)
Standard Connection Options: Sensor without Preamp: BNC Connector + TC lead wires
Sensor With Preamp: Multiconductor Lead Wires

pH Sensor Specifications:

Measuring Glass: Low-mid level acid & HF resistant green glass, hemispherical
High level HF resistant, Low pH service: clear high HF resistant glass
Dimensions: 0.310, (7.8 mm) DIA
Initial Impedance: Green glass less than 800 M Ohms @ 25° C
Clear glass less than 2000 M Ohms @ 25° C (high HF option)
Alkaline Ion Error: Less than 0.15 pH in 1.0 M K+ at pH 14.0
Acidic Error: Less than 0.01 pH in 1.0 M HCl @ 0.0 pH

Reference System Specifications:

Type: Double Junction
Reference Half Cell: Ag/AgCl, Saturated NaCl
Primary Junction: Porous Ceramic, Saturated KCl in crosslinked polymer
Secondary Junction: Kynar, Saturated with KCl in crosslinked polymer

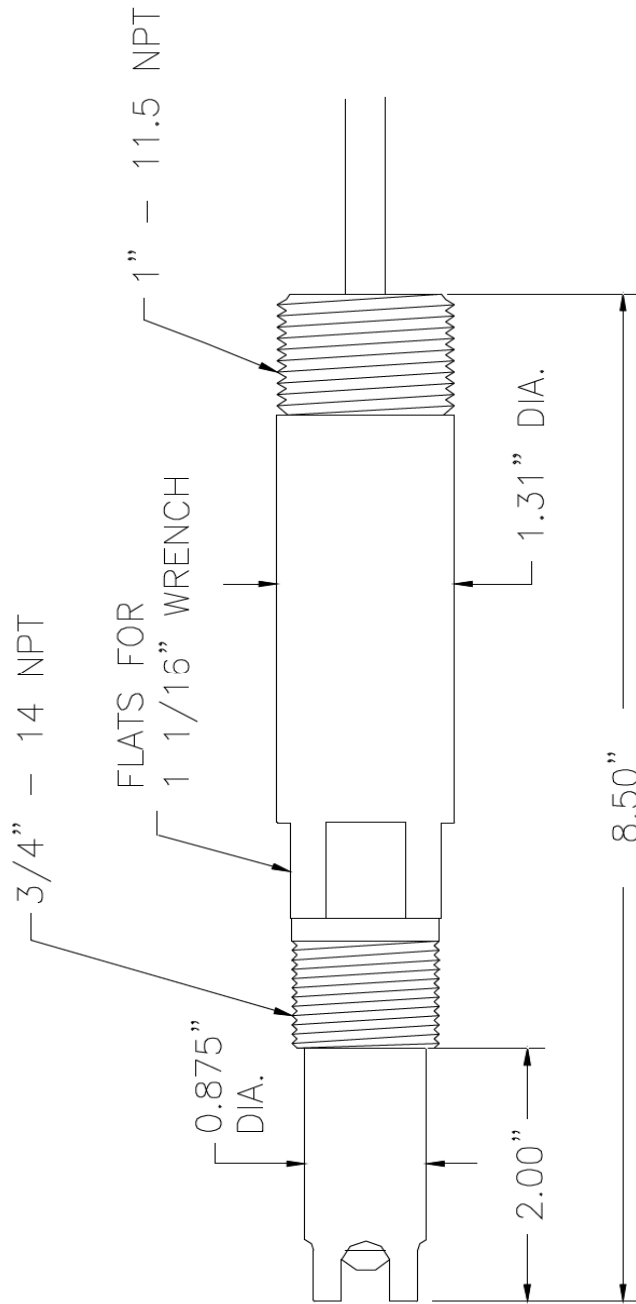
Surface Area: 366,000 mil², (236 mm²)

Storage Shelf Life: 1 year from date of manufacture if stored at room temperature with protective cap on

SENSOR CONDITIONING FOR STARTUP: within one hour



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Fluoride Resistant pH Sensor Part No. SPH-HHF-68-UL-G-1(