

## Specifications – Fluoride Ion Selective Sensor

General Specifications	
Description	Fluoride Ion Selective Sensor
Part Number	TT-GP-F-6008
Concentration Range	1 to 10 <sup>-6</sup> Molar, 0.019 to 19,000ppm
Lowest Limit of Detection	5X10 <sup>-8</sup> Molar, 0.001 ppm
pH Range	5.5 to 9.5 pH
Temperature Range	5 to 40°C
Pressure	6.9 to 69 kPa absolute (1 to 10 psig)
Body Type	¾" – 1" MNPT Integrated Calcium Ion Selective Sensor, RADEL (Poly-Phenyl-Sulfone)
Junction Material	KYNAR (Poly-Vinylidene-Fluoride)
Dimensions	216mm Length, Maximum Diameter 33.3mm
Cable	RG 174/U Coaxial – 1.5m
Preamplifier	Not Fitted
Connection	Tinned +TC lead wires
Ion Sensor Specifications	
Measuring Glass Type	Selective Fluoride Sensitive Membrane (solid state)
Dimension	7.8mm (0.310") Diameter
Initial Impedance	< 20 M Ohms @ 25°C
Interfering Ions	<i>Given in Ratios of Permissible Excess: Interfering Ion / Measured Ion (in Molarity)</i> OH <sup>-</sup> above 12.0 pH
Reference System Specifications	
Type	Double Junction
Reference Half Cell	Ag/AgCl, Saturated KCl
Primary Junction	Porous Ceramic, Saturated KCl in crosslinked polymer
Secondary Junction	Porous Kynar, Saturated with KCl in crosslinked polymer
Surface Area	258 mm <sup>2</sup> (400,000 mil <sup>2</sup> )
Special Features	Crosslinked polymer in the reference system is resistant to heat, solvents and to most chemicals. Sensor holds an excess of KCl, assuring saturation at all temperatures and extending the life of the sensor. The sensor is designed to resist the interactions of sodium and potassium ions and most solvents used in chemical processes. The construction of the sensor permits easy access to the sensing and reference surfaces for cleaning or inspection.
Application Specifications	
Recommended Applications	Fluoride ion concentration in aqueous solution from drinking water through wastewater to industrial process solutions.
Analyser / Interface	Turtle Tough TT-MA Analysers
Storage	Item should be kept at room temperature with closed protector cap. Shelf life warranted for 12 months from the date of purchase.
Warranty	12 Month Conditional Warranty. Please see <a href="http://www.turtletough.com.au/support/warranty-returns/">www.turtletough.com.au/support/warranty-returns/</a>

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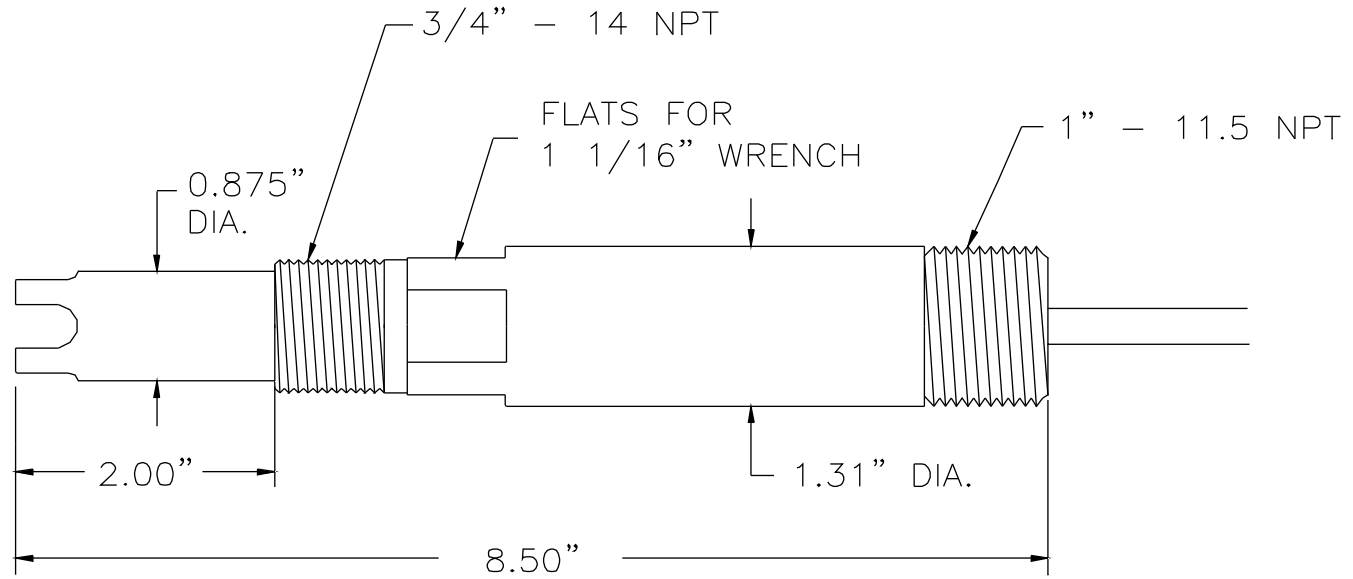
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 <b>TURTLE TOUGH</b>	Turtle Tough Sensors www.turtletough.com.au			
	ION SELECTIVE SENSOR REF. DRAWING <6-2>			
DIMENSION	SIZE	WEB NO.	DWG NO.	REV
DRAWN BY:	2			1
	SCALE NONE	DATE:	SHEET 1 OF 1	

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