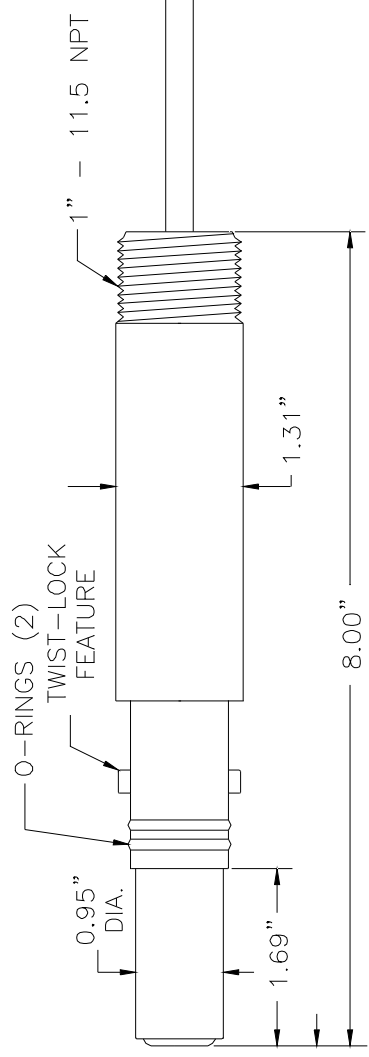




<u>Part number:</u>	AB 8100
<u>Configuration:</u>	1" Twist Lock, Immersion Fluoride Ion Selective Sensor for use in High pH Application
<u>General Specifications:</u>	
<u>Concentration Range:</u>	1 to 10 <sup>-6</sup> Molar, 19,000 to 0.019 ppm
<u>Lowest Limit of Detection</u>	5X10 <sup>-8</sup> Molar, .001 ppm
<u>pH Range:</u>	3 to 11 pH
<u>Temperature Range:</u>	5 to 50 °C
<u>Pressure Range:</u>	1 to 20 psig (6.9 to 138 kPag)
<u>Body Material:</u>	Ultem (Poly-Ether-Imide)
<u>Junction Material:</u>	Kynar (Poly-Vinylidene-Fluoride)
<u>Dimensions:</u>	Drawing <8-2>
<u>Cable:</u>	RG 174/U Coaxial (without preamplifier)
<u>Connector:</u>	BNC (unless otherwise specified)
<u>Ion Sensor Specifications:</u>	
<u>Measuring Membrane:</u>	Selective Fluoride Sensitive Membrane (solid state)
<u>Dimensions:</u>	0.310, (7.8 mm) DIA
<u>Initial Impedance:</u>	Less than 100 M Ohms @ 25 o C
<u>Interfering Ions:</u>	
<u>Given in Ratios of Permissible Excess:</u>	OH <sup>-</sup> above 12.0 pH
<u>Interfering Ion / Measured Ion (in Molarity)</u>	
<u>Reference System Specifications:</u>	
<u>Type:</u>	Double Junction
<u>Reference Half Cell:</u>	Ag/AgCl, Saturated KCl
<u>Primary Junction:</u>	Porous Ceramic, Saturated KCl in crosslinked polymer
<u>Secondary Junction:</u>	Porous Kynar, Saturated with KCl in crosslinked polymer
<u>Surface Area:</u>	366,000 mil <sup>2</sup> , (236 mm <sup>2</sup> )
<u>Special Features:</u>	<p>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.</p> <p>The ion sensitive part of the sensor is designed to resist the attack of acids, typically used in fluoride etching processes.</p> <p>The construction of the sensor permits easy access to the sensing and reference surfaces for cleaning or inspection.</p>
<u>Recommended Applications:</u>	Fluoride ion concentration in aqueous solution from drinking water through waste water. Not suitable for use in etching solutions. See Acceptable pH Range given above.
<u>Storage and Shelf Life:</u>	At room temperature with closed protector cap, 1 year from date of manufacture.
<u>Standard Hook-Up Options:</u>	No Preamp - BNC Connector + TC lead wires With Preamp – Multiconductor Lead Wires – See Hook Up Schematics

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REVISIONS		
ZONE	REV	DESCRIPTION
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ASTI  
Advanced Sensor Technologies, Inc.  
ION SELECTIVE SENSOR  
REF. DRAWING <8-2>

SIZE	WEB NO.	DWG NO.	DATE	REV
2	#<8-2>	ASTIAB8-2.DWG	MARCH, 2003	1
DRAWN BY: PETE CSISZAR				SCALE: NONE
				SHEET 1 OF 1

4 3 2 1