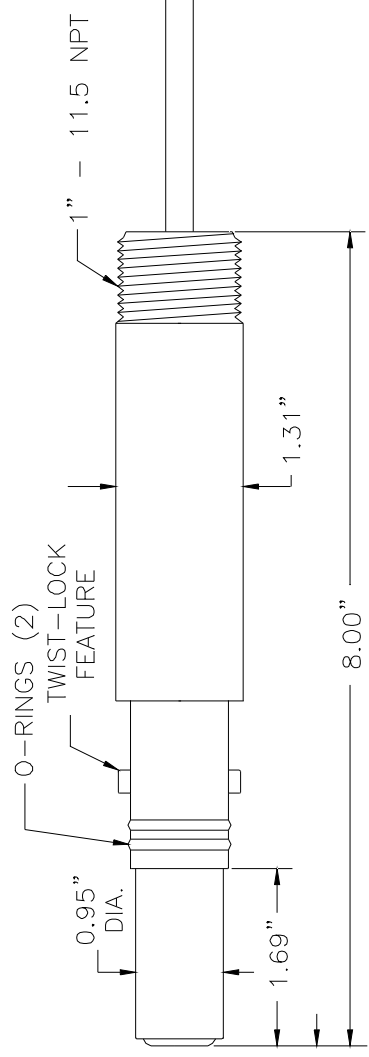




<u>Part number:</u>	AB 8500
<u>Configuration:</u>	1" Twist Lock, Integrated Barium Ion Selective Sensor
<u>General Specifications:</u>	
<u>Concentration Range:</u>	0.1 - 3×10^{-4} Molar, 13,700 - 41. ppm
<u>Lowest Limit of Detection:</u>	3×10^{-5} Molar, 4.11 ppm
<u>pH Range:</u>	
<u>Temperature Range:</u>	5 to 40 °C
<u>Pressure Range:</u>	1 to 10 psig (6.9 to 69 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 Barium Sensitive Membrane (organic)
<u>Dimensions:</u>	0.310, (7.8 mm) DIA
<u>Initial Impedance:</u>	Less than 200 M Ohms @ 25 °C
<u>Interfering Ions:</u>	
<u>Given in Ratios of Permissible Excess:</u>	H ⁺ (30), Li ⁺ (1.5×10^3), Na ⁺ (300), Cs ⁺ (550), K ⁺ (300), NH ₄ ⁺ (1250)
<u>Interfering Ion / Measured Ion (in Molarity)</u>	Mg ⁺² (5×10^7), Ca ⁺² (50)
<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 KNO ₃ in crosslinked polymer
<u>Surface Area:</u>	366,000 mil ² , (236 mm ²)
<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 KNO₃ assuring saturation at all temperatures and extending the life of the sensor.</p> <p>The sensor is designed to resist the interactions of a wide range of chemicals and some solvents used in chemical 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>	Lead ion concentration in aqueous solution from ultrapure water through waste water to industrial process solutions.
<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
2	1	
		DATE
		APPROVED



D C B A



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