IOTRON™ SENSORS
ION SELECTIVE SENSOR SPECIFICATIONS

Part number:	AB 8120
Configuration:	1" Twist Lock, MNPT Integrated Sulfide Ion Selective Sensor
General Specifications:	
Concentration Range:	1 to 10^{-7} Molar, 32,000 to 0.003 ppm
Lowest Limit of Detection	10^{-17} Molar, $3.2X10^{-13}$ ppm
pH Range:	11 to 13
Temperature Range:	5 to 50 ^{o}C
Pressure Range:	1 to 20 psig (6.9 to 138 kPag)
Body Material:	Ultem (Poly-Ether-Imide)
Junction Material:	Kynar (Poly-Vinylidene-Fluoride)
Dimensions:	Drawing <8-2>
Cable:	RG 174/U Coaxial (without preamplifier)
Connector:	BNC (unless otherwise specified)
Ion Sensor Specifications:	
Measuring Membrane:	Selective Sulfide Sensitive Membrane (solid state)
Dimensions:	0.310, (7.8 mm) DIA
Initial Impedance:	Less than 1 M Ohms @ 25 ^{o}C
Interferring Ions: Given in Ratios of Permissible Excess: Interferring Ion / Measured Ion (in Molarity)	Hg^{2+} (Trace)
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:	366,000 mil^2, (236 mm^2)
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 ion sensitive part of the sensor is designed to resist the attack of sulfides, alkali and solvents used in checmical processes. The construction of the sensor permits easy access to the sensing and reference surfaces for cleaning or inspection.
Recommended Applications:	Sulfide ion concentration in aqueous solution from wastewater industrial process solutions
Storage and Shelf Life:	At room temperature with closed protector cap, 1 year from date of manufacture.
Standard Hook-Up Options:	No Preamp - BNC Connector + TC lead wires With Preamp – Multiconductor Lead Wires – See Hook Up Schematics

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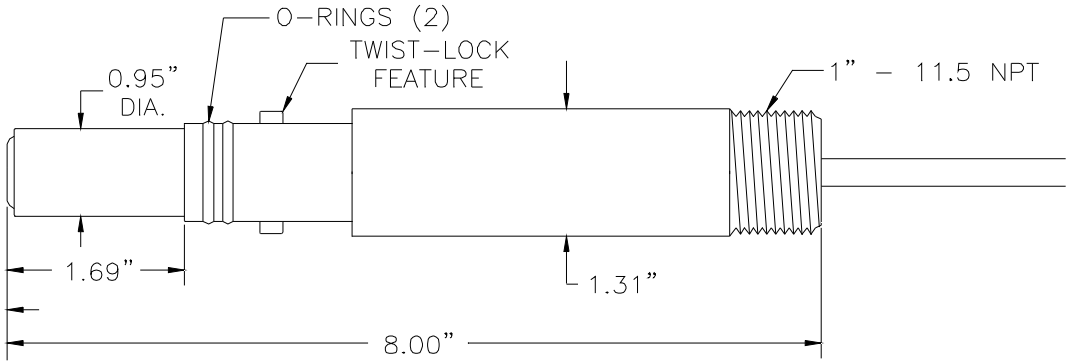
REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED
2	1			



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