IOTRON™ SENSORS
ION SELECTIVE SENSOR SPECIFICATIONS

Part number:	AB 8820
Configuration:	1" MNPT Twist Lock, Integrated Nitrite (NO_2^-) Ion Selective Sensor
General Specifications:	
Concentration Range:	1.0 to 10^{-5} Molar (46,000 to 0.460 ppm)
Lowest Limit of Detection:	0.276 ppm (276 ppb)
pH Range:	4 to 9 pH
Temperature Range:	5 to 40 °C
Pressure Range:	1 to 10 psig (6.9 to 69 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 Nitrite Sensitive Membrane (Organic)
Dimensions:	0.310, (7.8 mm) DIA
Initial Impedance:	Less than 100 M Ohms @ 25 °C
Interferring Ions (Permissible ratios of Molar excess) :	SCN^- (5), ClO_4^- (25), Br^- (230), NO_3^- (760), Cl^- (6,400)
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 sensor is designed to resist the interactions of a wide range of chemicals and some solvents used in chemical processes. The construction of the sensor permits easy access to the sensing and reference surfaces for cleaning or inspection.
Recommended Applications:	Nitrite ion concentration in aqueous solution from ultrapure water through waste water to 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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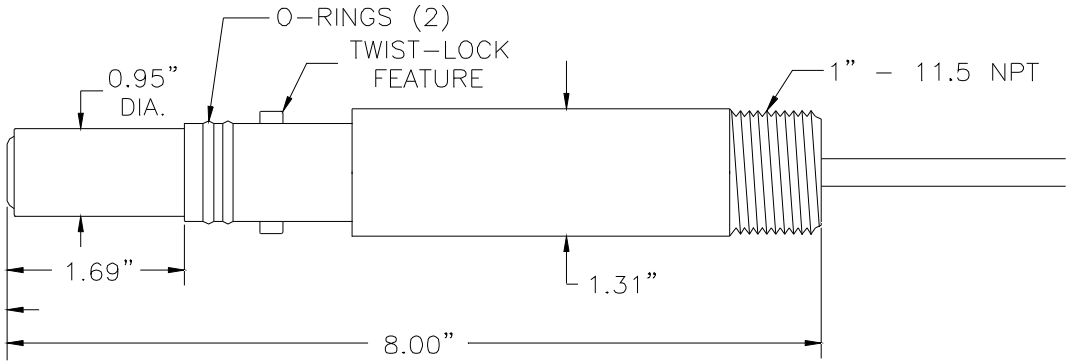
REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED
2	1			



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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	