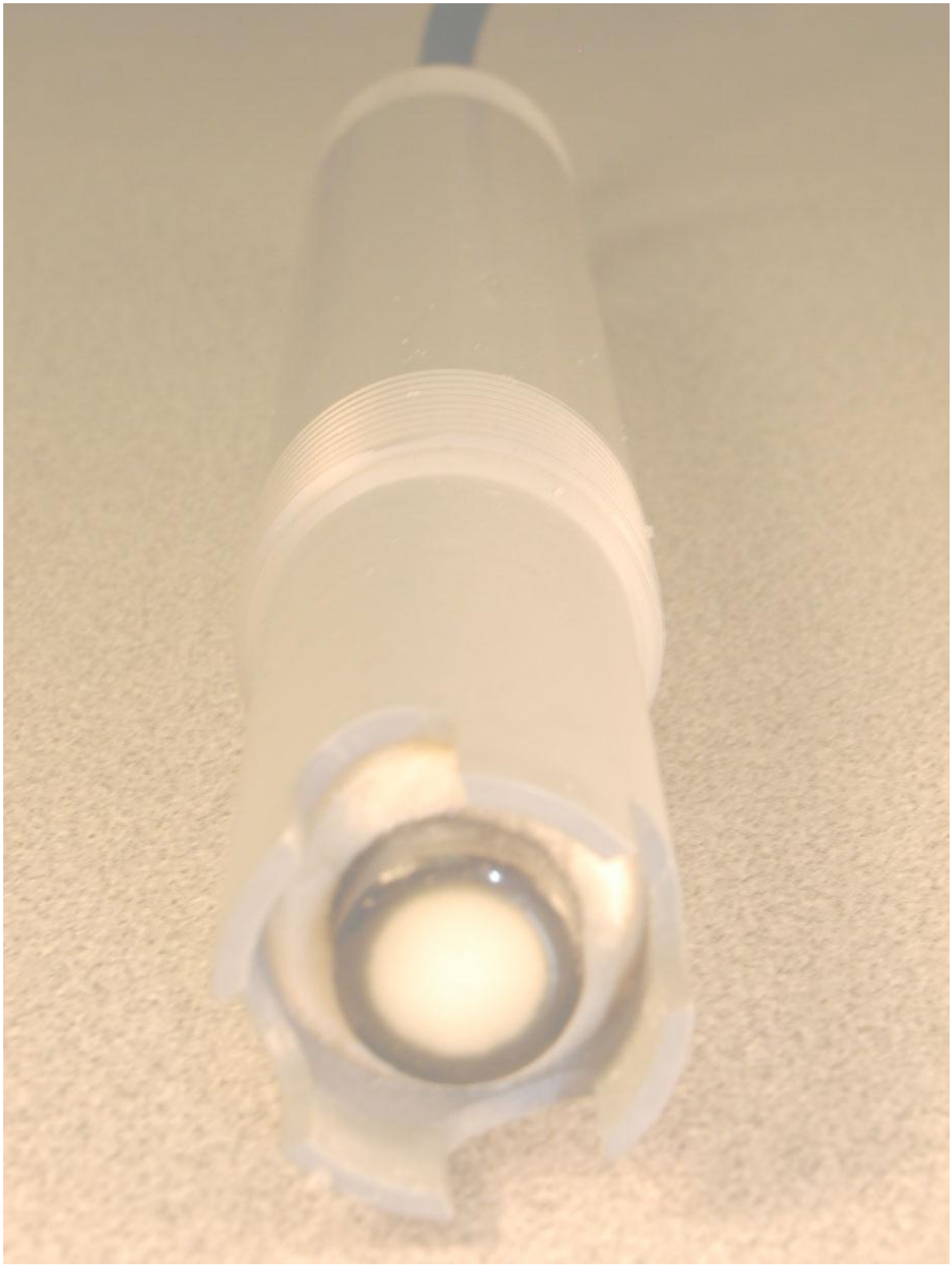
IOTRON™ SENSORS
INTEGRATED pH SENSOR SPECIFICATIONS

Part number:	6100A
Configuration:	3/4"- 3/4" MNPTIntegrated, Fluoride Ion Selective Sensor for use in High pH Application
General Specifications:	
Concentration Range:	1 to 10^{-6} Molar, 19,000 to 0.019 ppm
Lowest Limit of Detection	$5X10^{-8}$ Molar, .001 ppm
pH Range:	3 to 11 pH (continuous)
Temperature Range:	5 to 50 ^{o} C
Pressure Range:	1 to 20 psig (6.9 to 138 kPag)
Body Material:	CPVC (Chlorinated-Polyvinyl-Chloride)
Junction Material:	Kynar (Poly-Vinylidene-Fluoride)
Dimensions:	Drawing <6-5>
Cable:	RG 174/U Coaxial (without preamplifier)
Connector:	BNC (unless otherwise specified)
Ion Sensor Specifications:	
Measuring Membrane:	Selective Fluoride Sensitive Membrane (solid state)
Dimensions:	0.310, (7.8 mm) DIA
Initial Impedance:	Less than 100 M Ohms @ 25 o C
Interferring Ions: Given in Ratios of Permissible Excess: Interferring Ion / Measured Ion (in Molarity)	OH^- 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:	366,000 mil2, (236 mm2)
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 acids, typically used in fluoride etching processes. The construction of the sensor permits easy access to the sensing and reference surfaces for cleaning orinspection.
Recommended Applications:	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.
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

Advanced Sensor Technologies, Inc. 603 North Poplar Street, Orange, CA 92868-1011
Tel.: (714) 978-2837, Fax: (714) 978-6339 Website: www.astisensor.com



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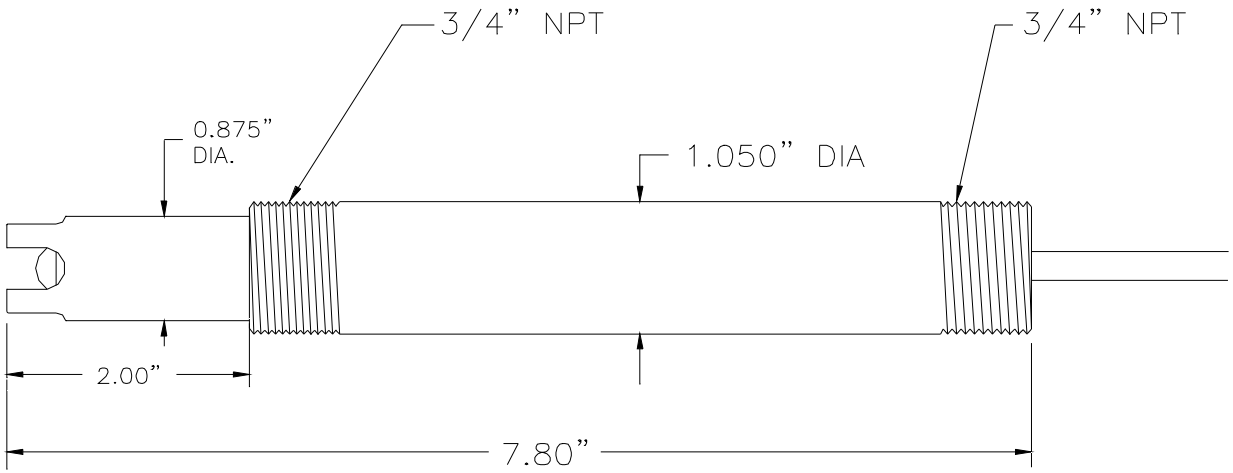
REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED
2	1			



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INTEGRATED pH SENSOR
REF. DRAWING <6-5>

DIMENSION	SIZE 2	WEB NO. #<6-5>	DWG NO. ASTI6-5.DWG	REV 1
DRAWN BY: PETE CSISZAR	SCALE NONE	DATE: MARCH, 2003	SHEET 1 OF 1	