



IOTRON™ SENSORS

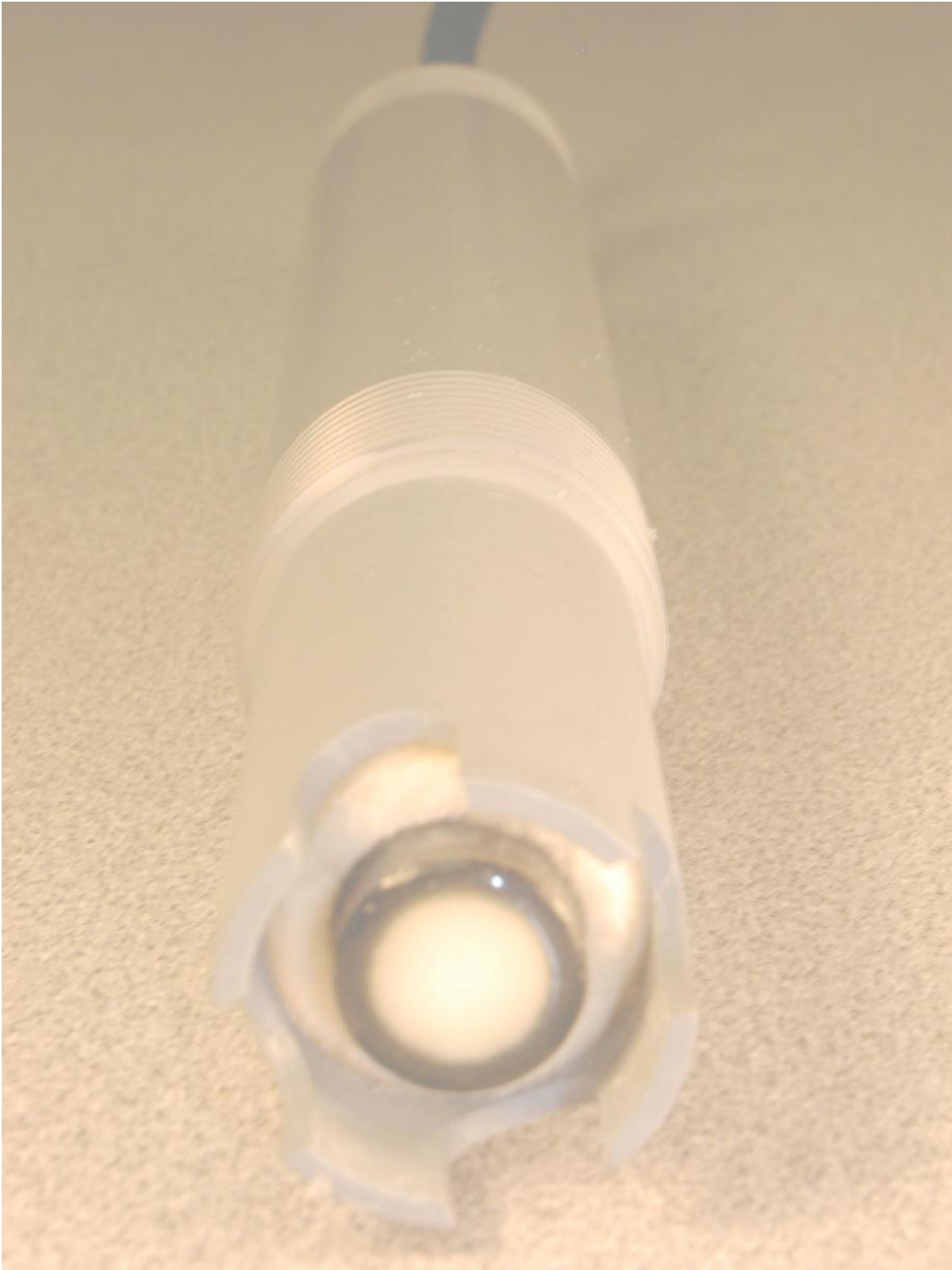
INTEGRATED pH SENSOR SPECIFICATIONS

<u>Part number:</u>	6660A
<u>Configuration:</u>	3/4" – 3/4" MNPT Integrated Tetrafluoro Borate Ion Selective Sensor
<u>General Specifications:</u>	
<u>Concentration Range:</u>	10^{-1} - 10^{-5} Molar, 8,680 - .868 ppm
<u>Lowest Limit of Detection:</u>	2.2×10^{-6} Molar, .191 ppm
<u>pH Range:</u>	3 - 11.5 pH
<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>	CPVC (Chlorinated-Polyvinyl-Chloride)
<u>Junction Material:</u>	Kynar (Poly-Vinylidene-Fluoride)
<u>Dimensions:</u>	Drawing <6-5>
<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 Tetrafluoro Borate Sensitive Membrane (organic)
<u>Dimensions:</u>	0.310, (7.8 mm) DIA
<u>Initial Impedance:</u>	Less than 100 M Ohms @ 25 °C
<u>Interfering Ions:</u>	
<u>Given in Ratios of Permissible Excess:</u>	ClO_4^- (0.5), SCN^- (2.2), I^- (2.3), ClO_3^- (7.6), NO_3^- (40), Br^- (120), CN^- (125), NO_2^- (130), Cl^- (650), CO_3^- (11,500), HPO_4^- (21,000), SO_4^- (22,000)
<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 Na_2SO_4 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 Na_2SO_4 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>	Nitrite 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



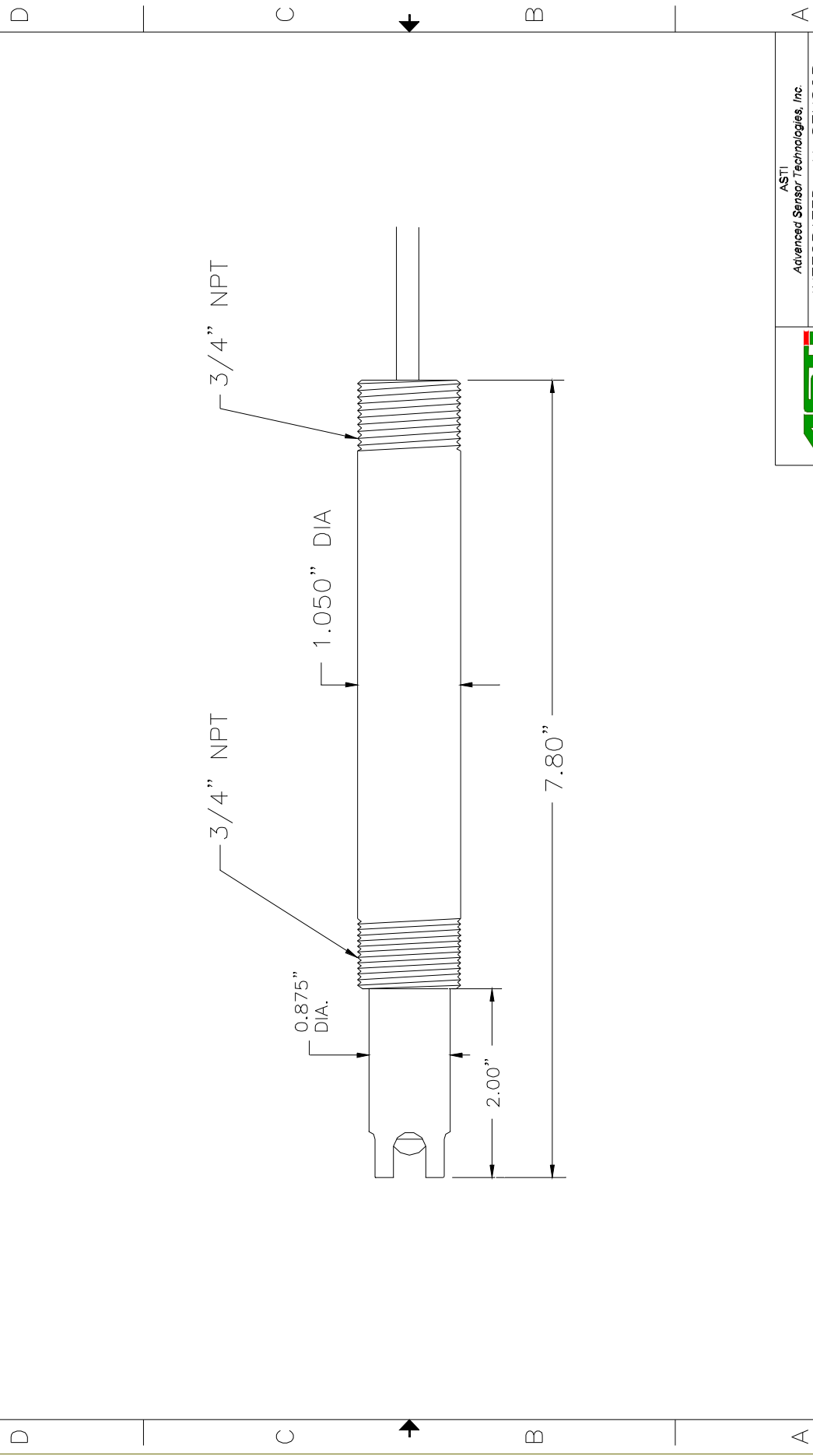
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4 3 2 1

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED
2	1			



1 2 3 4

ASTI Advanced Sensor Technologies, Inc.	
INTEGRATED pH SENSOR	
REF. DRAWING <6-5>	
SIZE	DWG NO.
2	AST16-5.DWG
DIMENSION	REV
# <6-5>	1
DRAWN BY: PETE CSISZAR	
SCALE: NONE	SHEET 1 OF 1