



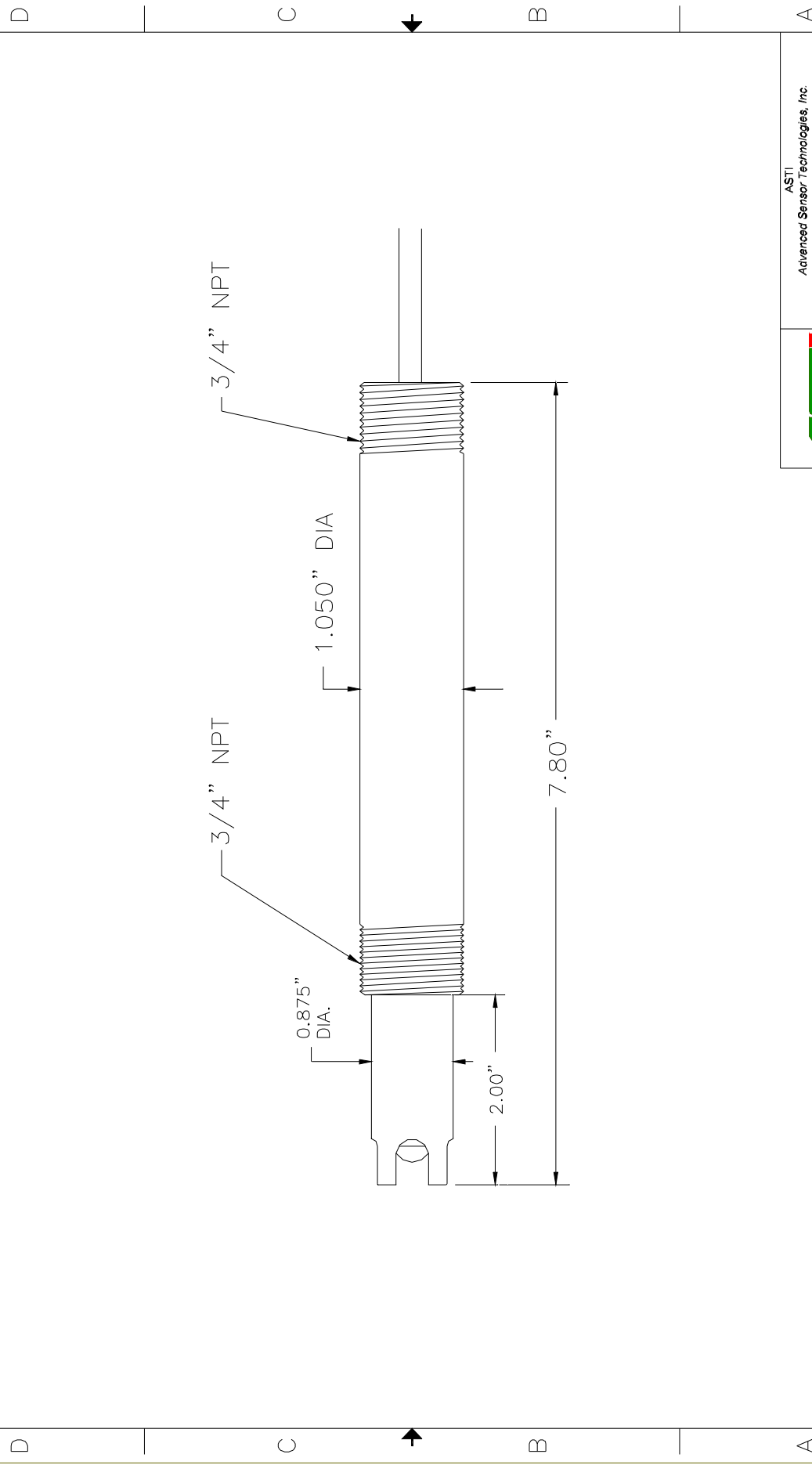
IOTRON™ SENSORS

INTEGRATED pH SENSOR SPECIFICATIONS

<u>Part number:</u>	6160A
<u>Configuration:</u>	3/4" – 3/4" MNPT Integrated Cyanide Ion Selective Sensor
<u>General Specifications:</u>	
<u>Concentration Range:</u>	10^{-3} to 10^{-7} Molar, 26 to 0.002 ppm
<u>Lowest Limit of Detection</u>	10^{-7} Molar, 0.002 ppm
<u>pH Range:</u>	11 to 13
<u>Temperature Range:</u>	5 to 50 °C
<u>Pressure Range:</u>	1 to 20 psig (6.9 to 138 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 Cyanide Sensitive Membrane (solid state)
<u>Dimensions:</u>	0.310, (7.8 mm) DIA
<u>Initial Impedance:</u>	Less than 20 M Ohms @ 25 °C
<u>Interferring Ions:</u>	
<u>Given in Ratios of Permissible Excess:</u>	$\text{OH}^- (10^8)$, $\text{Cl}^- (10^6)$, $\text{Br}^- (5 \times 10^3)$, S^{2-} (Trace)
<u>Interferring 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 KCl 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 KCl, assuring saturation at all temperatures and extending the life of the sensor.</p> <p>The ion sensitive part of the sensor is designed to resist the attack of gold and silver, typically used in leaching 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>	Cyanide ion concentration in aqueous solution from wastewater 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	DATE	APPROVED
2	1			



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	
DATE: MARCH, 2003	
SHEET 1 OF 1	

1 2 3 4