



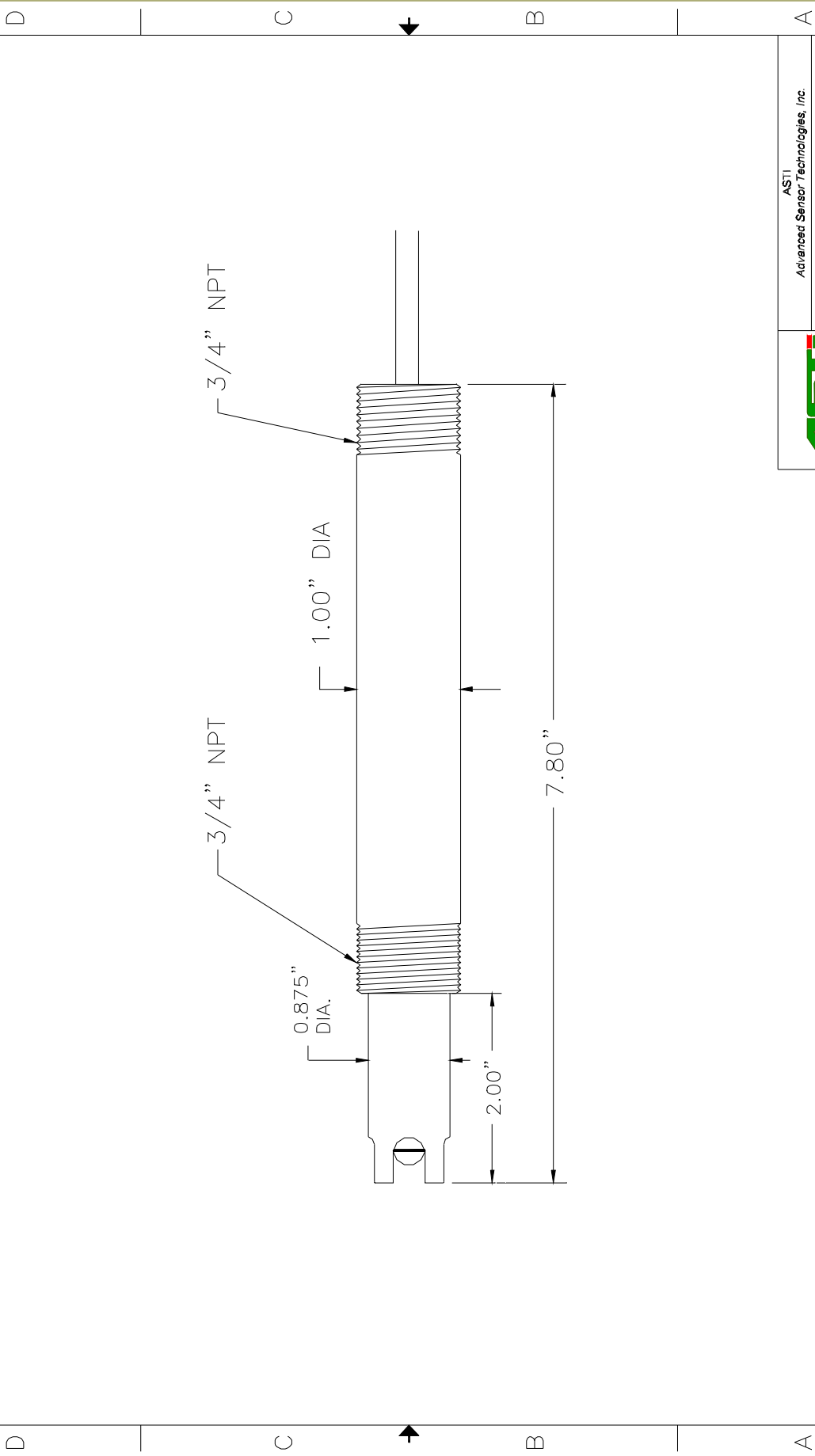
IOTRON™ SENSORS

INTEGRATED pH SENSOR SPECIFICATIONS

<u>Part Number:</u>	6242
<u>Configuration:</u>	3/4" – 3/4" MNPT Integrated, Ultra High and Low Temperature pH Sensor
<u>General Specifications:</u>	
<u>pH Range:</u>	0 to 14 pH
<u>Temperature Range:</u>	-30 to 150 °C
<u>Pressure Range:</u>	1 to 150 psia (6.9 to 690 kPa absolute)
<u>Body Material:</u>	PEEK (Poly-Ether-Ether-Ketone)
<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>pH Sensor Specifications:</u>	
<u>Measuring Glass Type:</u>	Hemispherical, Green Glass (MUGG)
<u>Dimensions:</u>	0.310, (7.8 mm) DIA
<u>Initial Impedance:</u>	Less than 1000 M Ohms @ 25 °C
<u>Sodium Ion Error:</u>	Less than 0.15 pH in 1.0 M Na ⁺ Concentration at pH 14.00
<u>Acidic Error:</u>	Less than 0.05 pH in 1.0 M HCl @ 0.00 pH
<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 high temperature crosslinked polymer
<u>Secondary Junction:</u>	Porous Kynar, Saturated with KCl in high temperature crosslinked polymer
<u>Surface Area:</u>	366,000 mil ² (236 mm ²)
<u>Special Features:</u>	Body (PEEK) and reference junction materials (Kynar) and crosslinked high temperature polymer are extremely resistant to high heat, low temperature, solvents and to most chemicals. Sensor holds an excess of KCl, assuring saturation at all temperatures and extending in situ sensor life. The reference system holds a generous supply of saturated KCl in a high temperature filling solution, eliminating effects of intruding contaminants and permits the sensor to be left in a dry condition for extended periods of time.
<u>Recommended Applications:</u>	Wastewater treatment, chemical processes, pollution control, measurements at high and low temperatures where long service life or operation at remote locations where (no) low maintenance is required.
<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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ZONE		REV		DESCRIPTION		DATE		APPROVED	
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ASTI
Advanced Sensor Technologies, Inc.

INTEGRATED ORP SENSOR
REF. DRAWING <6-5-Pt>

DIMENSION	SIZE	WEB NO.	DWG NO.	REV
2	#<6-5>-Pt	AST16-SPLDWG		1

DRAWN BY: PETE CSISZAR DATE: MARCH, 2003 SHEET 1 OF 1

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