



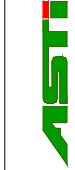
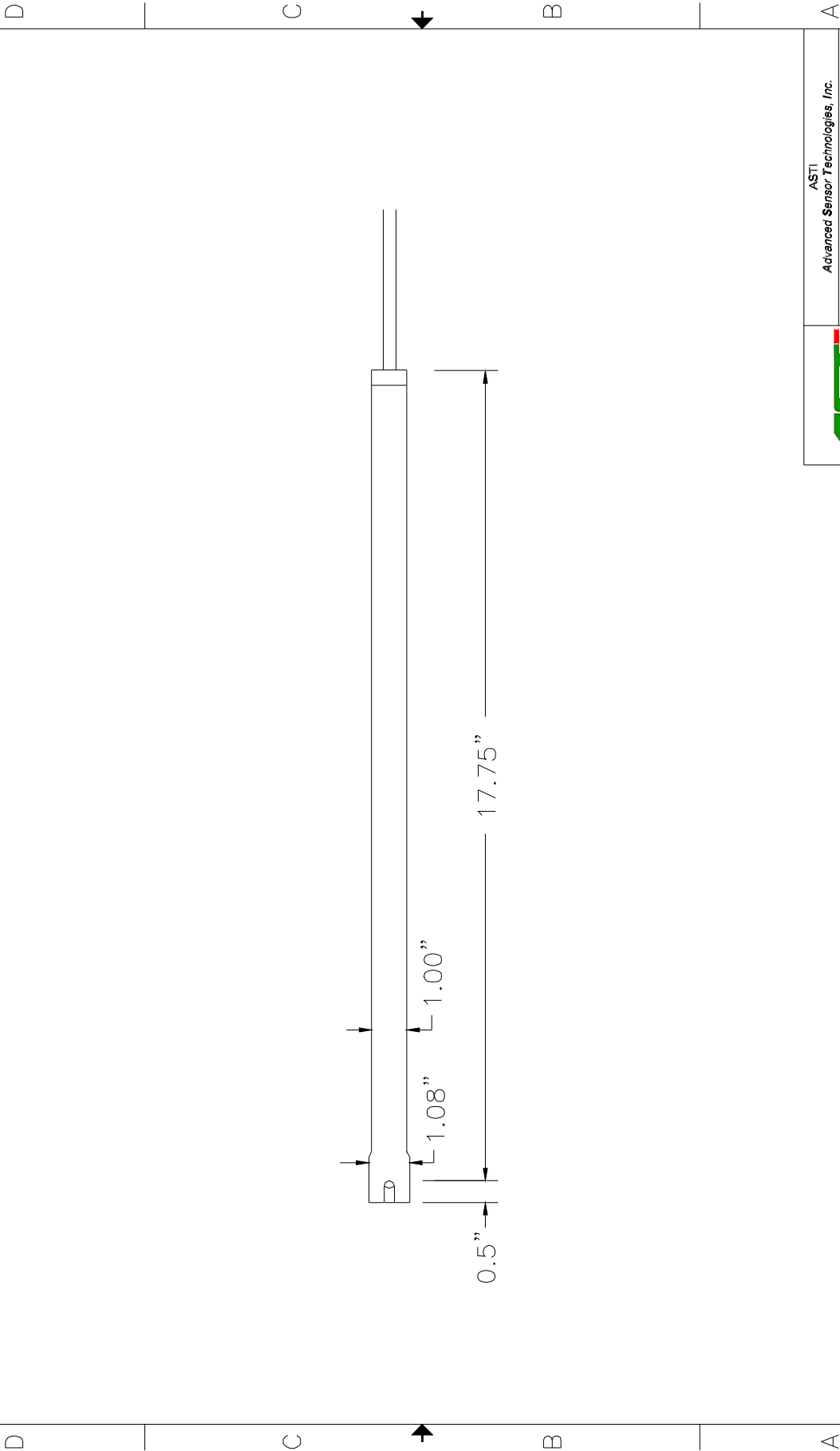
# IOTRON™ SENSORS

## INTEGRATED pH SENSOR SPECIFICATIONS

<u>Part Number:</u>	9612
<u>Configuration:</u>	1.0" O.D. Valve Retractable, Sulfide Resistant pH Sensor
<u>General Specifications:</u>	
<u>pH Range:</u>	0 to 14 pH
<u>Temperature Range:</u>	-5 to 105 ° C
<u>Pressure Range:</u>	1 to 100 psia (6.9 to 690 kPa absolute)
<u>Body Material:</u>	CPVC (Chlorinated-Polyvinyl-Chloride)
<u>Junction Material:</u>	Kynar (Poly-Vinylidene-Fluoride)
<u>Dimensions:</u>	Drawing <9-1>
<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 800 MOhms @ 25 ° C
<u>Sodium Ion Error:</u>	Less than 0.15 pH in 1.0 M Na <sup>+</sup> 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, Sulfide resistant crosslinked polymer
<u>Secondary Junction:</u>	Porous Kynar, Sulfide resistant crosslinked polymer
<u>Surface Area:</u>	366,000 mil <sup>2</sup> (236 mm <sup>2</sup> )
<u>Special Features:</u>	Sulfide resistant crosslinked polymer is resistant to heat, solvents and to most chemicals. It also slows the diffusion of sulfide ions and traps them before reaching the reference half cell. Sensor holds an excess of a salt mixture, assuring saturation at all temperatures and extending in situ sensor life. The reference system holds a generous supply of aqueous saturated salt mixture, eliminating effects of intruding contaminants and permits the sensor to be left in dry condition for extended periods of time.
<u>Recommended Applications:</u>	Wastewater treatment, chemical processes, pollution control, refinery water management and treatment, oil drilling, measurements 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

4 3 2 1

REVISIONS			
ZONE	REV	DESCRIPTION	DATE
2	1		



ASTI  
Advanced Sensor Technologies, Inc.

VALVE RETRACTABLE  
pH SENSOR DWG <9-1>

SIZE	FSON NO.	DWG NO.	REV
2	#<9-1>	AST19-1.DWG	1
DRAWN BY: PETE CSISZAR		DATE: MARCH, 2003	SHEET 1 OF 1

4 3 2 1