



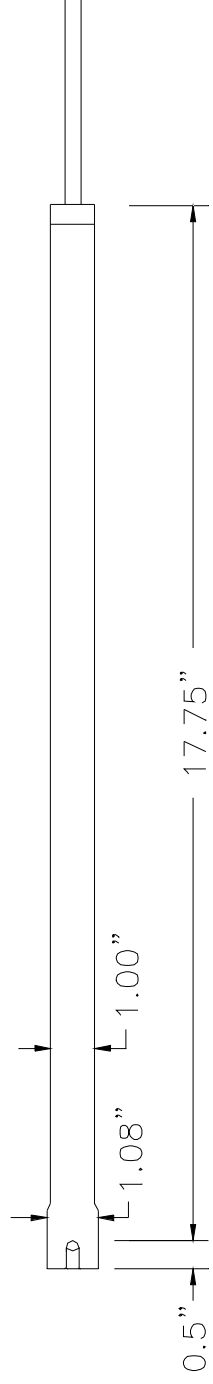
IOTRON™ SENSORS

INTEGRATED pH SENSOR SPECIFICATIONS

<u>Part number:</u>	9312
<u>Configuration:</u>	1.0" O.D. Valve Retractable, Slurry pH Sensor
<u>General Specifications:</u>	
<u>pH Range:</u>	0 to 14 pH
<u>Temperature Range:</u>	5 to 70° C
<u>Pressure Range:</u>	1 to 60 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 <9-2>
<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>	Flat Green Glass (MUGG)
<u>Dimensions:</u>	0.310, (7.8 mm) DIA
<u>Initial Impedance:</u>	Less than 1,500 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 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>	Crosslinked polymer is resistant to heat, solvents and to most chemicals. Sensor holds an excess of KCl, assuring saturation at all temperatures and extending in situ sensor life. The referencesystem holds a generous supply of aqueous saturated KCl, eliminating effects of intruding contaminants and permits the sensor to be left in dry condition for extended periods of time. Reference junction material and crosslinked polymer is abrasion resistant. The special configuration and low profile of the active sensor surface does not interfere with the process flow and insures long product life.
<u>Recommended Applications:</u>	Abrasive slurries, high viscosity stock in food, paper, paper pulp and mining industries.
<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			



D C B A



Advanced Sensor Technologies, Inc.
**VALVE RETRACTABLE
 pH SENSOR DWG <9-2>**

SIZE	FSCM NO.	DWG NO.	AST19-2.DWG	REV	1
SCALE	NONE		DATE: MARCH, 2003	SHEET 1 OF 1	

4 3 2 1

DIVISION
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