

## IOTRON<sup>TM</sup> SENSORS INTEGRATED pH SENSOR SPECIFICATIONS

Part Number: 6612

Configuration: 3/4" – 3/4" MNPT Integrated, Sulfide Resistant pH Sensor

**General Specifications:** 

pH Range: 0 to 14 pH
Temperature Range: 5 to 70 ° C

Pressure Range: 1 to 40 psia (6.9 to 276 kPa absolute)

Body Material: CPVC (Chlorinated-Polyvinyl-Chloride)

<u>Junction Material:</u> Kynar (Poly-Vinylidene-Fluoride)

Dimensions: Drawing <6-5>

Cable: RG 174/U Coaxial (without preamplifier)

Connector: BNC (unless otherwise specified)

pH Sensor Specifications:

Measuring Glass Type: Hemispherical, Green Glass (MUGG)

Dimensions: 0.310, (7.8 mm) DIA

Initial Impedance: Less than 800 MOhms @ 25 °C

Sodium Ion Error: Less than 0.15 pH in 1.0 M Na<sup>+</sup> Concentration at pH 14.00

Acidic Error: Less than 0.05 pH in 1.0 M HCl @ 0.00 pH

Reference System Specifications:

Type: Double Junction

Reference Half Cell: Ag/AgCl, Saturated KCl

Primary Junction: Porous Ceramic, Sulfide resistant crosslinked polymer

Secondary Junction: Porous Kynar, Sulfide resistant crosslinked polymer

Surface Area: 366,000 mil<sup>2</sup> (236 mm<sup>2</sup>)

Special Features: 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.

Recommended Applications: 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.

Storage and Shelf Life: At room temperature with closed protector cap, 1 year from date of manufacture.

Standard Hook-Up Options: No Preamp - BNC Connector + TC lead wires

With Preamp - Multiconductor Lead Wires - See Hook Up Schematics

