

IOTRONTM SENSORS ION SELECTIVE SENSOR SPECIFICATIONS

Part number: AB 8130

Configuration: 1" Twist Lock, Integrated Bromide Ion Selective Sensor

General Specifications:

Concentration Range: 1 to 10⁻⁶ Molar, 80,000 to 0.080 ppm

<u>Lowest Limit of Detection</u> 5X10⁻⁷ Molar, .040 ppm

pH Range: 1 to 12

Temperature Range: 5 to 50 °C

Pressure Range: 1 to 20 psig (6.9 to 138 kPag)

Body Material: Ultem (Poly-Ether-Imide)

Junction Material: Kynar (Poly-Vinylidene-Fluoride)

Dimensions: Drawing <8-2>

Cable: RG 174/U Coaxial (without preamplifier)

Connector: BNC (unless otherwise specified)

Ion Sensor Specifications:

Measuring Membrane: Selective Bromide Sensitive Membrane (solid state)

Dimensions: 0.310, (7.8 mm) DIA

Initial Impedance: Less than 50 M Ohms @ 25 °C

Interferring lons:

Given in Ratios of Permissible Excess: OH (3X10⁴), Cl (400), l (2X10⁻⁴), S²⁻ (Trace)

Interferring Ion / Measured Ion (in Molarity)

Reference System Specifications:

Type: Double Junction

Reference Half Cell: Ag/AgCl, Saturated KCl

Primary Junction:

Porous Ceramic, Saturated KCl in crosslinked polymer

Secondary Junction:

Porous Kynar, Saturated with KNO₃in crosslinked polymer

Surface Area: 366,000 mil², (236 mm²)

<u>Special Features:</u> <u>Crosslinked polymer in the reference system is resistant to heat, solvents and to a contract to the contr</u>

most chemicals. Sensor holds an excess of KNO₃, assuring saturation at all

temperatures and extending the life of the sensor.

The ion sensitive part of the sensor is designed to resist the attack of most acids,

alkali and solvents used in cchemical processes..

The construction of the sensor permits easy access to the sensing and reference

surfaces for cleaning or inspection.

Recommended Applications:

Bromide ion concentration in aqueous solution from wastewater industrial process

solutions

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

