

## IOTRON<sup>TM</sup> SENSORS

Part number:	AB 6160
Configuration:	3/4" - 1" MNPT Integrated Cyanide Ion Selective Sensor
General Specifications:	
Concentration Range:	10 <sup>-3</sup> to 10 <sup>-7</sup> Molar, 26 to 0.002 ppm
Lowest Limit of Detection	10 <sup>-7</sup> Molar, 0.002 ppm
pH Range:	11 to 13
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 <6-2>
Cable:	RG 174/U Coaxial (without preamplifier)
Connector:	BNC (unless otherwise specified)
Ion Sensor Specifications:	
Measuring Membrane:	Selective Cyanide Sensitive Membrane (solid state)
Dimensions:	0.310, (7.8 mm) DIA
Initial Impedance:	Less than 20 M Ohms @ 25 °C
Interferring lons: Given in Ratios of Permissible Excess:	
Interferring Ion / Measured Ion (in Molarity)	OH <sup>-</sup> (10 <sup>8</sup> ), Cl <sup>-</sup> (10 <sup>6</sup> ),Br <sup>-</sup> (5X10 <sup>3</sup> ), S <sup>2-</sup> (Trace)
Reference System Specifications:	
Type:	Double Junction
Reference Half Cell:	Ag/AgCl, Saturated KCl
Primary Junction:	Porous Ceramic, Saturated KCI in crosslinked polymer
Secondary Junction:	Porous Kynar, Saturated with KCI in crosslinked polymer
Surface Area:	$366,000 \text{ mil}^2$ , (236 mm <sup>2</sup> )
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Special Features:	Crosslinked polymer in the reference system is resistant to heat, solvents and to most chemicals. Sensor holds an excess of KCl, assuring saturation at all temperatures and extending the life of the sensor.
Charling and	The ion sensitive part of the sensor is designed to resist the attack of gold and silver, typically used in leeching processes.
1	The construction of the sensor permits easy access to the sensing and reference surfaces for cleaning or inspection.
Recommended Applications:	Cyanide ion concentration in aqueous solution from wastewater industrial proces 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

