



pH / ORP Electrodes

High Pressure & High Temperature pH & ORP Electrodes

The 102029 pH electrode and 102963 ORP electrode are designed to function where other electrodes cannot. In room temperature water, they can handle up to 500 psi. In low pressure installations, they can handle up to 275°F (135°C) without melting.

In all cases, pH/ORP electrode life will be maximized by operating at room temperature, and the expected life span at temperatures above 140°F (60°C) will be short. But if low temperature operation is impossible, these electrodes will fit the bill.



KEY BENEFITS

- Higher temperature rating
- Steam sterilizable
- Transmits signal up to 1000 feet (305 meters)"
- Booted BNC, waterproof cable

SPECIFICATIONS

Reference cell	Double junction, Na ₂ SO ₄ + KCl, Ag/AgCl
Cable lead	10 ft. (3.05 m) length with BNC connector
Membrane impedance (pH)	150 megaohms at 77°F (25°C)
Zero potential (pH)	0 mV ±12 @ pH 7
Operating Temperature	23° to 275°F (-5° to 135°C) @ 200 PSI (1.38 MPa)
Operating Pressure	500 PSI (3.45 MPa) @ 77°F (25°C)
Maximum Flow Velocity	10 ft./sec (3 m/sec)
Range	0 to 14 pH, -1000 to 1000 mV
Output voltage (pH)	58.7 ±0.3 mV per pH unit
Drift	Less than 2 mV per week
Sodium error (pH)	Less than 0.5 pH unit typical in 0.1 Na ⁺ @ 12.8 pH

DIMENSIONS

5" (127 mm) length x 0.47" (12 mm) diameter
Gland thread size 3/4" NPTM

MATERIALS OF CONSTRUCTION

PFA junction
Glass membrane (pH and ORP)
Platinum (ORP)
Polymer body
SS mounting gland

ORDERING INFORMATION

102027	Mounting Gland, SS, 3/4" NPT, High
102028	Temperature/Submersion (pH/ORP)
102029	Mounting Gland, SS, 3/4" NPT, High
102963	Temperature/In-line (pH/ORP)
	Electrode, pH, High Temperature, 10 ft. cable
	Electrode, ORP, High Temperature, 10 ft. cable