



## High Temperature Insertion Type Electrode

### PHE-5431-10 Series



- ✓ High Temperature
- ✓ High Pressure
- ✓ Steam Sterilization
- ✓ Easy Installation

#### Applications

- ✓ High-Temperature Environment
- ✓ Continuous Processing Applications
- ✓ Harsh Conditions
- ✓ Steam Sterilization

The high temperature insertion type electrode is designed for periodic exposure to steam sterilization or continuous high temperature. This pH electrode is housed in a durable thermoplastic (PAS) body and is rated for temperatures up to 135°C (275°F). The use of the double Porous PTFE liquid junctions with matched viscosity electrolytes provides a reference cell which permits extended periods of pH measurements in the presence of sulfides or other silver complexing agents. This electrode also incorporates pressure compensating devices to protect the electrode from extreme temperature induced pressure deviations. Ten foot cable length and BNC connector are standard.

#### Specifications

- pH Range:** 0 to 14 pH  
**Temperature Range:** -5 to 135°C (25 to 275°F) @ 25 psig  
**Pressure Range:** 500 psig @ 25°C  
**Accuracy:** ±0.1% over full range  
**Impedance:** 125 Ω (standard version)  
**Reference Cell:** Double junction, KCl/AgCl, KNO<sub>3</sub>  
**Reference Junction:** Porous PTFE  
**Wetted Materials:** PTFE, glass membrane, polymer outer body, EPR "O" Rings  
**Response Time:** 10 seconds to 95% of reading  
**Drift:** Less than 2 mV per week  
**Dimensions:** 12 D x 127 mm L (0.47 x 5")

PHE-5431-10 shown larger than actual size.



#### To Order

Model No.	Description
PHE-5431-10	High temperature insertion type pH electrode
PHE-5431-10-(*)	High temperature insertion type pH electrode with ATC
ORE-5431-10	High temperature insertion type ORP electrode

\* Specify ATC sensor: "-PT100" for 100 Ω Pt RTD or "-PT1K" for 1000 Ω Pt RTD, for additional cost.

Note: PHEH-51 (1/2 MNPT) installation fitting is required for first time installation.

Comes complete with operator's manual.

Ordering Example: PHE-5431-10, high temperature pH electrode, and PHEH-51.