Universal Industrial Electrodes
12 mm (0.47”) pH Sensor for Tough Measurement Applications

The PHE-5432 is a steam-sterilizable combination pH electrode designed to withstand high temperatures and pressures. A porous PTFE liquid double junction and specifically formulated low-impedance glass membrane allow it to function in a wide variety of pH applications. This combination of features permits extended periods of pH measurement in the presence of poisoning ions or where membrane leaching would shorten the life of a conventional electrode. Melting of the cable due to contact with steam lines and motion-generated noise are common problems with interconnecting cables on steam-sterilizable electrodes. Our proprietary TPE high-temperature/ultra-low noise cable is designed for optimal service, even in demanding environments.

Specifications

- **pH Range:** 0 to 14
- **Temperature Range:** -5 to 135°C (23 to 275°F) @ 25 psig
- **Maximum Pressure:** 500 psig @ 25°C (77°F)
- **Accuracy:** ±0.1% over full range
- **Sodium Error:** Less than 0.05 pH in 0.1 Molar Na+ ion @ 12.8 pH
- **Reference Cell:** Double-junction KNO₃ and KCl/AgCl
- **Reference Junction:** Porous PTFE
- **Zero Potential:** 7.0 ±0.2 pH
- **Wetted Materials:** PTFE, glass membrane, glass outer body
- **Drift:** Less than 2 mV per week

To Order

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Description</th>
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<tbody>
<tr>
<td>PHE-5432-10</td>
<td>Glass body, porous PTFE liquid junction pH electrode</td>
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<tr>
<td>PHE-5432-10(*)</td>
<td>Glass body, porous PTFE liquid junction pH electrode with ATC</td>
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<tr>
<td>ORE-5432-10</td>
<td>Oxidation-reduction potential electrode</td>
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</table>

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

Ordering Examples: PHE-5432-10-PT100, high-temperature electrode with 3 m (10’) cable and 100 Ω Pt RTD ATC.
ORE-5432-10, ORP electrode, with 3 m (10’) cable.