



INDUSTRIAL pH INSTRUMENTATION & ELECTRODES

Industrial Ground Loop Protection and Solution Ground pH Sensors

PHE-5580-20



TRODEKS®

- ✓ Stainless Steel Body
- ✓ Self Powered Amplifier (PHE-5580)
- ✓ Steam Sterilizable
- ✓ Solution Ground Contact (PHE-5590)
- ✓ Any Angle Orientation

Applications

- ✓ General Industrial Service
- ✓ Chemical Production
- ✓ Electro-Plating Baths
- ✓ Waste Treatment Processing

The PHE-5580-20 and PHE-5590-20 are wet or dry steam sterilizable pH electrodes constructed of a durable high temperature thermoplastic with a 316 stainless steel jacket. The outer body is fitted with a ¼ MNPT mounting thread. The use of a double Porous PTFE liquid junction reference cell and specifically formulated low impedance glass membrane allows use in the broadest spectrum of pH applications. This combination permits extended periods of pH measurement in the presence of poisoning ions, or where membrane leaching would shorten the life of conventional electrodes.

Specifications

pH Range: 0 to 14 pH
Temperature Range: -5 to 130°C (23 to 266°F)
Pressure Range: 0 to 150 psig
Accuracy: ±0.1% over full range
Impedance:
 PHE-5590: 300 MΩ @ 25°C
 PHE-5580: 1 MΩ @ 25°C
Reference Cell: Double junction, KCl/AgCl, KNO₃
Reference Junction: Porous PTFE
Wetted Materials: 316 SS, PTFE, glass membrane
Response Time: 95% of reading in 10 seconds
Drift: Less than 2 mV per week
Length: 171 mm (6.73")
Diameter: 22 mm (0.87")
Cable: 6 m (20')

Both models shown smaller than actual size.



To Order	
Model No.	Description
PHE-5580-20-(*)	General purpose ground loop pH electrode
PHE-5590-20-(*)	General purpose solution ground pH electrode

Comes complete with electrode care instructions and 6 m (20') cable.

For non-standard cable lengths, change the "-20" in model number to the required length in feet, for additional cost.

* For 100 Ω platinum RTD automatic Temperature Compensation (ATC), add suffix "-PT100" to the model number, for additional cost.

* For 1000 Ω platinum RTD automatic Temperature Compensation (ATC) add suffix "-PT1K" to model number, for additional cost.

* For 3000 Ω Balco, add suffix "-R3K" to model number, for additional cost.

Ordering Examples: PHE-5590-20-PT100, general purpose solution ground pH sensor with 6 m (20') of cable; Pt 100 Ω ATC.

PHE-5580-20, ground loop pH sensor.