

# INDUSTRIAL PH INSTRUMENTATION & ELECTRODES

# Industrial Ground Loop Protection and Solution Ground pH Sensors



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Order Suffix	Description	Additional Cost		
-AMP	Battery powered amplifier \$100			
-HT	High temperature reference cell 35			
-HPH	High pH glass	30		
-HF	HF/Fluoride resistant	50		
-PT100	100 Ω Pt RTD†	25 to 50*		
-PT1K	1000 Ω Pt RTD†	25 to 50*		
-SG	Solution ground	45		
-sco	Self-cleaning option mounting (cleaning cage sold separately model no. PHEH-SCO, \$75)**	30		
-TJ	Triple junction reference cell	45		
-ULT	Combination of ATC, triple junction, high temp, and solution ground	125		

<sup>†</sup> Available with pH electrodes only. Not available with option "-ORP"

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  $\frac{3}{4}$  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.

- 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

## **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, KCI/AgCI, KNO<sub>3</sub>

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')

#### AVAILABLE FOR FAST DELIVERY!

To Order (Specify Model Number)				
Model No.	Price	Price w/ATC	Description	
PHE-5580-20-(*)	\$345	\$385	General purpose ground loop pH electrode	
PHE-5590-20-(*)	250	290	General purpose solution ground pH electrode	
ORE-5580-20	385	_	General purpose ground loop ORP electrode	
ORE-5590-20	290	_	General purpose solution ground ORP electrode	

<sup>\*</sup> Insert option code from chart at left.

Ordering Examples: PHE-5590-20-PT100, general purpose solution ground pH sensor with 6 m (20') of cable; Pt 100  $\Omega$  ATC, \$250 + 40 = **\$290**.

PHE-5580-20, ground loop pH sensor, \$345.

<sup>\*</sup> Refer to individual electrodes for ATC pricing.

<sup>\*\*</sup> Only available with PHE-7451, PHE-7354, PHE-9151, or PHE-9153.

<sup>&</sup>quot;-HF", "-ORP", "-PT1K", "-PT100" is available for PHE-5580-20 only.
"-AMP", "-HF", "-ORP", "-PT1K", "-PT100" is available for PHE-5590-20 only. Comes with standard 6 m (20') cable.

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