



INDUSTRIAL pH INSTRUMENTATION & ELECTRONICS

General Purpose Sensor for Viscous Applications

PHE-7451



- ✓ High Temperature
- ✓ High Pressure
- ✓ Any Angle Orientation

Applications

- ✓ Continuous and Batch Process Control
- ✓ Pulp and Paper
- ✓ Petro-Chemical

The PHE-7451-15 is a combination pH sensor designed specifically for insertable use in process and waste water applications. The outer body material is PPS and has 3/4 MNPT (or optional 1 MNPT) front and rear facing threads. The double junction reference cell is highly resistant to electrode poisoning solutions, while the use of the non-fouling patented Porous PTFE liquid junction ensures a steady presence of reference electrolyte. The PHE-7451 assures a low maintenance service life in most applications. The concave sensor configuration (see drawing on the right) protects the pH bulb from particulate matter and provides a cleansing flow without affecting critical line pressure characteristics. Use of the high temperature version is recommended where service temperatures continuously exceed 80°C (176°F).

Specifications

Body Material: PPS

pH Range: 0 to 14 pH

Temperature Range:

Standard Version: 0 to 80°C (32 to 176°F)

High Temperature Version: 0 to 110°C (32 to 230°F)

Pressure Range:

Standard Version: 0 to 100 psig

High Temperature Version: 0 to 150 psig

Accuracy: ±0.1% over full range

Sodium Error: Less than 0.05 pH in 0.1 molar Na. ion @ 12.8 pH

Impedance: 150 MΩ @ 25°C (76°F)

Reference Cell:

Double KNO³ KCl/AgCl

Zero Potential: 7.0 pH ±0.2 pH

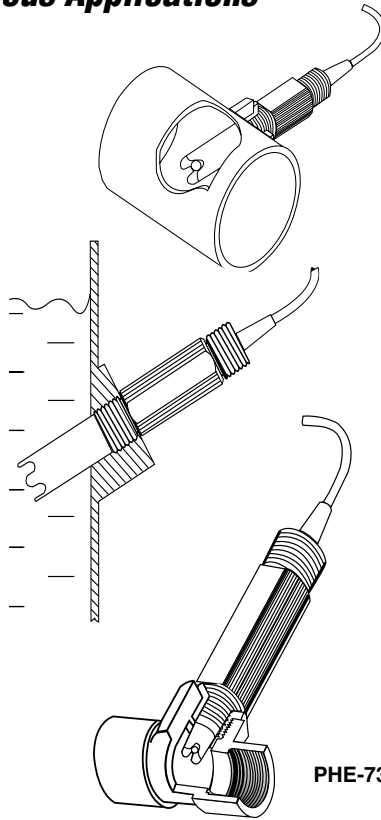
Wetted Materials:

PPS, PTFE, FKM, glass

Response Time:

95% of reading in 10 sec

Drift: < 2 mV per week

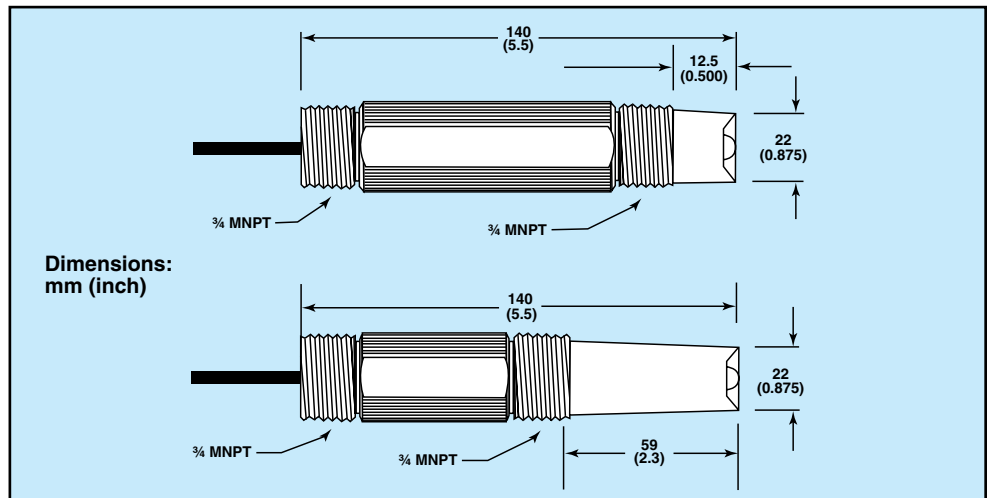


PHE-7354-15



PHE-7451-15

Both shown smaller than actual size.



To Order

Model No.	Description
PHE-7451-15-(*)	3/4 MNPT sensor for viscous liquids
PHE-7354-15-(*)	3/4 MNPT long insertable sensor for viscous liquids

Comes complete with 4.6 m (15') cable and operator's manual.

Non standard cable lengths available for additional cost.

* Specify ATC Sensor: "-PT100" for 100 Ω Platinum RTD or "-PT1K" for 1000 Ω Platinum RTD, for additional cost.

Ordering Examples: PHE-7451-15-PT1K pH sensor with "PT1K" (high pH).

PHE-7354-15, pH electrode for viscous liquids.