

# Differential pH Sensor



## Advantages Differential pH sensors

Convertible mounting style1 LCP (Liquid Crystal Polymer) Differential pH Sensor, with built-in preamplifier and glass electrode: 0-14 pH, 5-wire, 10 ft. cable.

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## Advantages Differential pH sensors:

- Double-junction salt bridge and pH 7 reference solution can easily be dismantled / replaced in the field, making the sensor very economical to maintain.
- Chemically-resistant LCP Body material allows sensors to be used in aggressive process solutions, such as acids, bases, alcohols, hydrocarbons, aromatics, chlorinated hydrocarbons, esters, ketones, and most other chemicals.
- LCP sensors are physically stable and will not expand or contract when subjected to the heating and cooling cycles of a process.
- Integrated ground electrode eliminates measurement error due to ground loops that may exist in the process.
- Built-in preamp produces a strong signal, enabling you to locate the analyzer up to 914 m (3000 ft.) from the sensor.

## Specifications

### Wetted Materials

#### LCP Sensor:

LCP (liquid crystal polymer) body and salt bridge with PVDF (or ceramic) junction, glass process electrode, titanium ground electrode, and Viton O-ring process seals. Union-mount style sensor also has LCP adapter. pH sensor with optional antimony process electrode has stainless steel ground electrode.

#### Ryton® Sensor:

Ryton body and salt bridge with PVDF (or ceramic) junction, glass process electrode, titanium round electrode, and Viton O-ring process seals. Union-mount style sensor also has Ryton adapter. pH sensor with optional antimony process electrode has stainless steel ground electrode.

### Measuring Range

LCP and Ryton Sensors 0-14 pH

### Sensitivity

Less than 0.005 pH

### Stability

0.03 pH per 24 hours, non-cumulative

### Output Span (only with 2-wire transmitter)

0.95 mA per pH unit

### Output Offset (only with 2-wire transmitter)

12 mA occurs at 7.0 pH,  $\pm 0.88$  pH

