

## Differential pH / ORP Sensors



Connects with  
most pH  
Analyzers

### Features and Benefits

Potence Controls Differential pH /ORP sensors are designed for special applications. They can be mounted in a Flow through Tee / Chamber or Immersed in Tanks or Vessels.

Differential technique uses three electrodes instead of the two electrodes normally used in conventional pH sensors. Process and reference electrodes measure the pH differentially with respect to a third ground electrode.

Differential technology helps in improving measurement accuracy and extending sensor lifetime.

#### ADVANTAGES:

- Connects with most pH Analyzers.
- Greater reliability ,Longer Life Span.
- Low maintenance, Replaceable Salt Bridge.
- Encapsulated design.
- Built In PreAmplifier.
- Sensor to Transmitter distance upto 990 Feet.

### General Specifications

#### pH Sensor

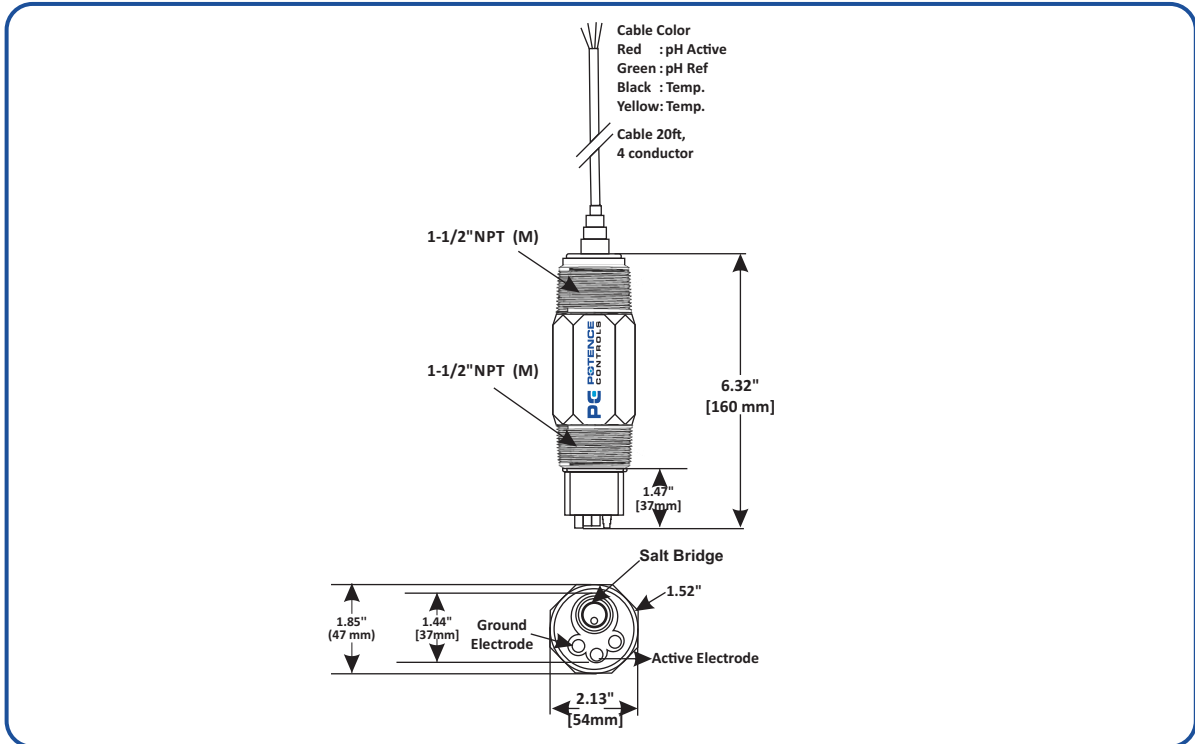
<b>Wetted Material</b>	: Ryton Body & Salt Bridge with PVDF junction, glass process electrode, titanium ground electrode
<b>Measuring Range</b>	: 0-14 pH
<b>Temp. Element</b>	: Pt 100/Pt 1000
<b>Temp. Limit</b>	: 0-95°C
<b>Pressure Limit</b>	: 0-100 psig @95°C (0-6.9 bar @ 95°C)
<b>Max. Flow range</b>	: 0-10 ft/sec (0-3 m/sec)
<b>Speed of Response</b>	: 95% in 5 sec
<b>Sensor Cable</b>	: Integral 4 core cable, std. 20 ft / 6m terminated with stripped and tinned wires

#### ORP Sensor

<b>Wetted Material</b>	: Ryton Body & Salt Bridge with PVDF junction, glass & platinum process electrode
<b>Measuring Range</b>	: - 2000 mV to + 2000 mV
<b>Temp. Element</b>	: N.A.
<b>Temp. Limit</b>	: 0-95°C
<b>Pressure Limit</b>	: 0-100 psig @95°C (0-6.9 bar @ 95°C)
<b>Max. Flow range</b>	: 0-10 ft/sec (0-3 m/sec)
<b>Speed of Response</b>	: 95% in 5 sec
<b>Sensor Cable</b>	: Integral 2 core cable, std. 20 ft / 6m terminated with stripped and tinned wires

**Note :** The accuracy of the sensor is not the accuracy of the System and depends on the transmitter / controller being used. The accuracy is calculated under standard reference conditions

## Dimensions



## Ordering Information

### Model Number

PC

### Sensor Type

PD: pH Differential  
 RD: ORP Differential

### Temperature Element

R100: Pt 100 (Only for pH sensor )  
 R1K : Pt 1000 (Only for pH sensor )  
 NA : No Temp. Element (Only for ORP sensor )

**Cable** (Std. 20 feet, Max 990 feet)  
 XXX: Cable in feet

**PC PD R1K 050**

Example- **PCPDR1K050** stands for Differential pH sensor with Pt 1000 temperature element & 50 feet cable.

## Accessories

- PCSB01 : Salt bridge, pack of 1
- PCSB03 : Salt bridge, pack of 3
- PCPDVOR : Viton O Ring
- PCRS250 : Standard cell refill solution, 250mL
- PCRS500 : Standard cell refill solution, 500mL

In the interest of improving and updating , PCPL reserves the right to alter specifications at any time.