

Now with larger electrode and ground rod for better signal-to-noise and faster response.

Description

The 60 series pH and ORP probes are dependable industrial grade sensors designed to provide accurate measurement and longer service life under the most demanding conditions. The P60C-6 pH probes and R60C-6 ORP probes incorporate all the benefits of differential measurement found in other models of the 60 series, field proven in thousands of installations. This technique uses two glass electrodes to make the measurement differentially with respect to a third metal electrode.

This second electrode is protected from the process by a double junction replaceable salt bridge. The resulting true differential measurement has several advantages over conventional probes: ground loop problems are virtually eliminated, and the salt bridge is easily replaced. If the internal solution becomes contaminated, the probe can be rejuvenated at modest cost by replacing the salt bridge and reference solution. Automatic temperature compensation is accomplished through the use of an embedded thermistor inside the tip of the ground rod. This thermistor placement provides rapid response for process temperature

variations. This unique probe mounts in a standard 1 1/4" NPT tee, or in a tank, through a specially designed CPVC compression fitting. This technology provides several important advantages: the probe enters straight into the fitting eliminating twisting of the cable; the pipe size is only 1 1/4" NPT; the insertion length is variable between 7/8" and 5"; one model is used for both flow-through and submersion tank-mount.

Installation does not require a pipe wrench, strap wrench or thread sealant on the probe. This helps to reduce down time for calibration. The P/R60C-6 may be ordered with a flat face electrode which fouls less frequently and is easily cleaned.

The encapsulated preamplifier provides an output signal which can be transmitted 3000 feet over inexpensive cable. For greater distances, see the P65C data sheet for the probe that encapsulates a blind 4-20 mA two-wire transmitter which can transmit a virtually unlimited distance over a twisted pair cable.

Features

- Differential Measurement
- Replaceable Salt Bridge
- Low Maintenance Cost
- Easy in: no twisted cable
- Easy out: no special tools
- 1 1/4" Compression Fitting
- Adjustable insertion depth
- Easy Cleaning
- Semi-flush face for reduced buildup
- Encapsulated Preamp
- Transmits up to 3000 ft
- 4-20 mA two-wire blind transmitter version available
- Hot-Tap version available
- Flat-faced version available for pH
- ORP available with gold electrode

Applications

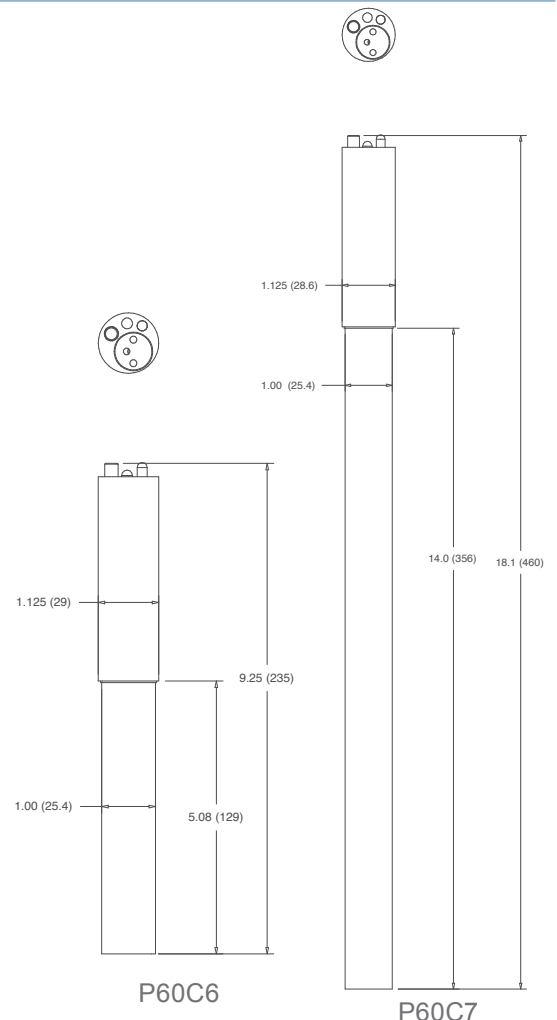
- Process Control
- Industrial and Municipal Water Treatment
- Industrial and Municipal Waste Treatment and Neutralization
- Fume Scrubbers, Circuit Board Manufacturing, Plating, Food and Beverage, Chemical Processing, Pulp and Paper, Mining, Power Generation, Pharmaceuticals

Model P60C-6 pH or R60C-6 ORP Differential Probes

Technical Data

Measuring Range	
pH	0 to 14 pH (Consult factory for applications below 2 or above 12).
ORP	-1000 to +1000 mV
Flow Rate	10 ft./sec maximum (3 metres/sec) Flow should be as low as possible in low conductivity water and in solutions with high suspended solids
Wetted Materials	CPVC, kynar, glass, titanium palladium alloy and EPDM (platinum for ORP probe)
Transmission Distance	3000 ft. (900 m)
Sensitivity	
pH	0.01 pH
ORP	0.1 mV
Stability	
pH	0.03 pH per day, non-cumulative
ORP	2 mV per day, non-cumulative
Temperature Copensation	
Automatic	-5 to 95°C (23 to 203°F)
Pressure Limit	100 psig at 65°C maximum
Temperature Limits	
CPVC	-5 to 95°C (23 to 203°F) The temperature limit of probes in flow-through applications is limited by pressure and by the pipe fitting material.
Probe Cable	5 Conductor plus shield, 15 ft. (4.6m) long

Dimensions



Related Products

CABLES & ACCESORIES

JB-1	NEMA 4X junction box
STC60-6	Mounting kit for submersion applications includes 1-1/4" NPT x 1" reducer, 4 feet of 1" CPVC pipe with water-tight strain relief fitting and securing assembly
P60HTC	Hot Tap Ball Valve assembly (Probe not included)
C42-5PXXX	Interconnect cable, dressed both ends. Specify length.
C35-17	Salt bridge Kit for all -6 series probes, package of 3.
C35-79	Compression fitting for all -6 series probes.
C34-51	Adapter for GLI Installations.
Protector-6	Protection shroud for submersion applications.

CALIBRATION SOLUTIONS

A35-13	pH 4 Buffer, 500 mL.
A35-14	pH 7 Buffer, 500 mL
A35-24	pH 10 Buffer, 500 mL
A35-40	ORP Buffer, 200 mV, 500 mL
A35-41	ORP Buffer, 600 mV, 500 mL

Ordering Information

P60C-6	pH probe complete with universal installation fitting for flow-through or submersion applications
P60C-7	pH Probe for use with Hot-Tap hardware
P60C-6F	Flat-face pH probe
R60C-6	ORP probe complete with installation fitting for low-through or submersion applications
R60C-6-G	ORP probe with gold electrode
R60C-7	ORP Probe for use with Hot-Tap hardware