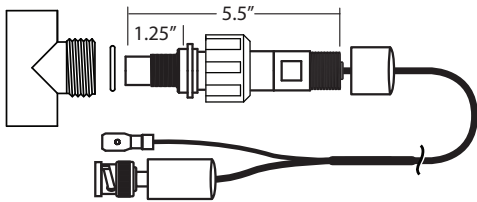


# pH/ORP Probes

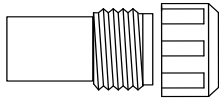
## PE-21 / OE-21

Flat surface, double junction, 10 ft. lead, 140°F and 100 PSI max, CPVC general purpose electrode designed to be used with our 3/4" quick-release PVC slip tee (sold separately).



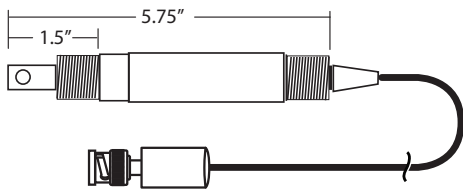
## T-ADAPT

Quick disconnect with 1" male slip fitting for PE-21 and OE-21 probes (shown above).



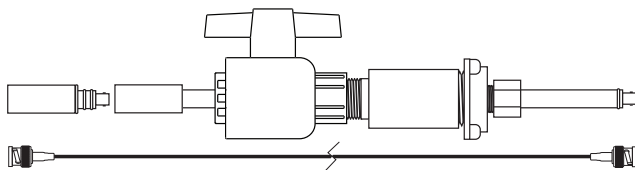
## PE-21SS / OE-21SS

Glass bulb, double junction, 10 ft. lead, 212°F and 250 PSI max, SS construction electrode with 1/2" MNPT.



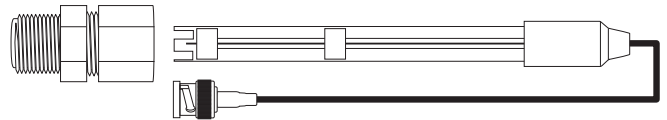
## PE-21CS / OE-21CS

Flat surface, double junction, 10 ft. lead, 165°F at 100 PSI max, CPVC corporation stop style electrode with 1" CPVC ball valve. Insertion depth 2-12". Replacement sensor parts: S656CD for pH and S656CD-ORP for ORP.



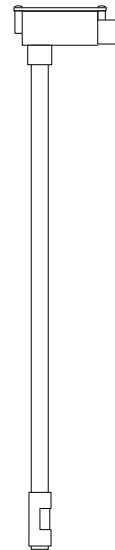
## PE-11

Low ionic pH electrode for use with condensate systems, 10 ft. lead, 180°F and 100 PSI max, inserts into 1/2" MNPT Polypropylene compression fitting.

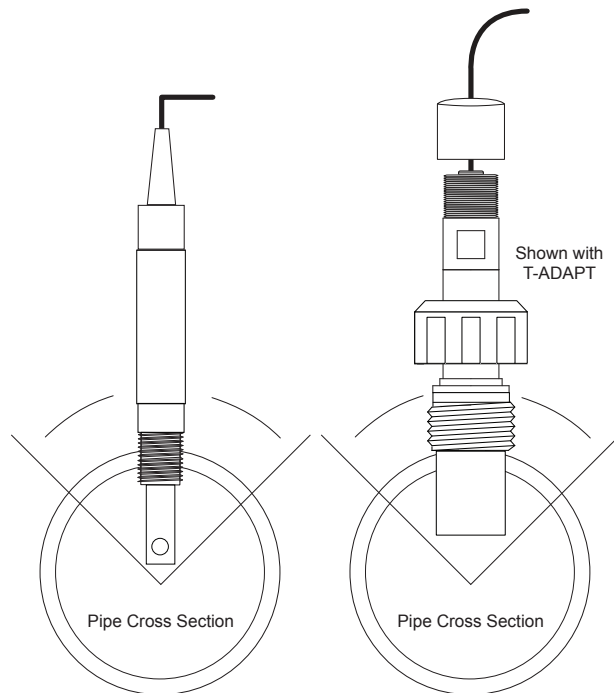


## DPE

Tank-mounted pH/ORP electrode assembly converts a PE/OE-21 into a tank mount configuration.



Probes must be installed within 45° of vertical with tip pointed down



## Electrode cleaning of pH and ORP probes

Coating of an electrode's measuring surface can lead to erroneous readings including shortened span and slow response times. The type of coating determines the type of cleaning technique.

**Soft Coatings** can be removed by vigorous stirring, by use of a squirt bottle, or very carefully, by gently wiping with a soft cloth, clean non-abrasive paper or cloth. **DO NOT USE ANY BRUSH OR ABRASIVE CLEANER ON pH GLASS!**

**Hard Coatings** should be chemically removed. The chemical used to remove the coating should be the least harsh chemical that dissolves the coating in 1 or 2 minutes and does not attack the electrode's materials of construction. For example, a calcium carbonate coating might be removed with 5% HCl (muriatic acid). Oily or Organic Coatings are best removed with detergents or an appropriate solvent that does not attack the electrode's materials of construction. For example, isopropyl alcohol might be used but acetone should be avoided if the electrode's body is made of CPVC.

**NOTE: WHEN USING CHEMICALS OR SOLVENTS CARE SHOULD BE TAKEN AND APPROPRIATE EYE,**

**FACE, HAND, BODY AND/OR RESPIRATORY PROTECTION SHOULD BE USED.**

Abranding or sanding a pH electrode's surface should never be done. However, the measuring surface of an ORP electrode may be gently abraded by use of 600 grade wet silicon carbide paper, jeweler's rouge or very fine steel wool, but try to clean chemically before abrading with 600 paper.

## Important considerations for pH/ORP probes

1. The pH Electrode is shipped in a cap containing a solution of pH 4 buffer and potassium chloride. ORP Electrodes are shipped in caps containing a piece of cotton dampened with tap water. The electrode should remain in the cap until it is used. If the electrode is used infrequently the cap and its solution should be saved and the electrode stored in it. Store pH electrodes in pH 4 buffer if soaking solution is discarded. Remove cap and label to use.
2. After exposure to a sample, buffer or rinse solution, carryover can be minimized by blotting-never by wiping-the electrode with a clean, non-abrasive paper or a clean cloth towel. **DO NOT USE A BRUSH ON pH GLASS.**
3. Coatings on an electrode's surface prevent new liquids from contacting an electrode's measuring surface and can mimic the effects of electrode aging. Before concluding that an electrode needs replacing check its surface for coatings.

## When to use a remote transmitter

pH and ORP probes require a remote transmitter if the wire run from the probe to the controller is beyond 20 feet (6 meters).

**Get the Advantage**



4700 Harold-Abitz Dr  
Muskogee, OK 74403  
800-743-7431 Phone  
888-686-6212 Fax  
[www.advantagecontrols.com](http://www.advantagecontrols.com)