

# By-pass/Side Stream pH and ORP Fittings With Temperature Compensation

## Product Instructions

### Description of Parts

FC60TC includes special flow cell (tee), metal washer, white nut and cable assembly with cap and 1/4" NPT nipple that houses temperature sensor.

### Mechanical Installation

Installation of the CPVC by-pass pH system with ATC requires the special flow cell, Cable Assembly with ATC and CPVC pH electrode (S645CD). Taking care to not overtighten plastic threads (particularly when screwing male metal pipe into female plastic fittings) proceed as follows:

- A. install tee into pipeline via 3/4" NPT connection. Make sure the tee is oriented  $> 10\text{deg}$  above horizontal (FIG 1). Use pipe threads sealing tape for all threaded fittings.
- B. Remove white nut and washer by turning nut counter clockwise.
- C. Install electrode until it seats completely into flow cell (apply grease to large body o-ring first).
- D. Install metal washer on top electrode.
- E. Install white nut onto tee by turning clockwise as shown in FIG.2

### Cable Considerations

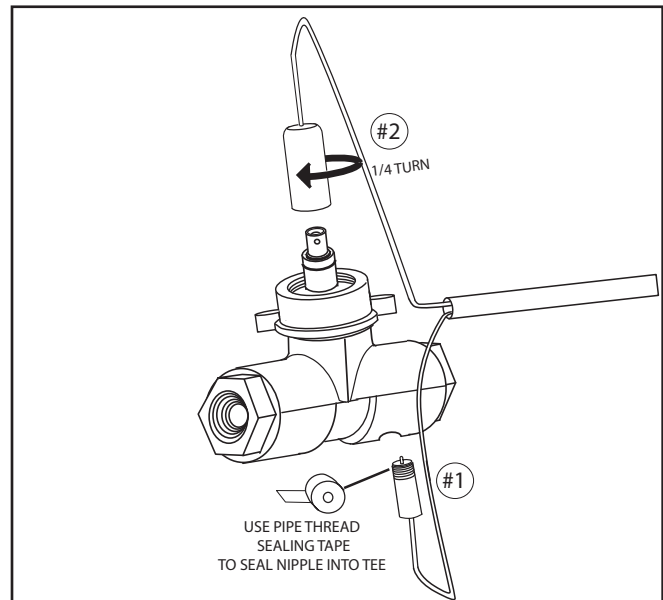
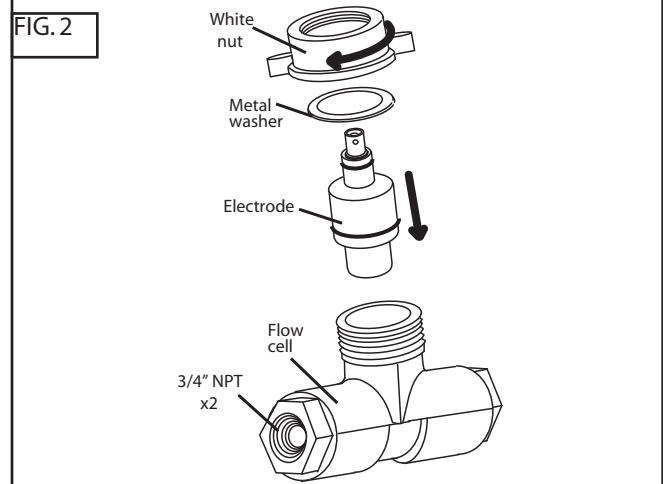
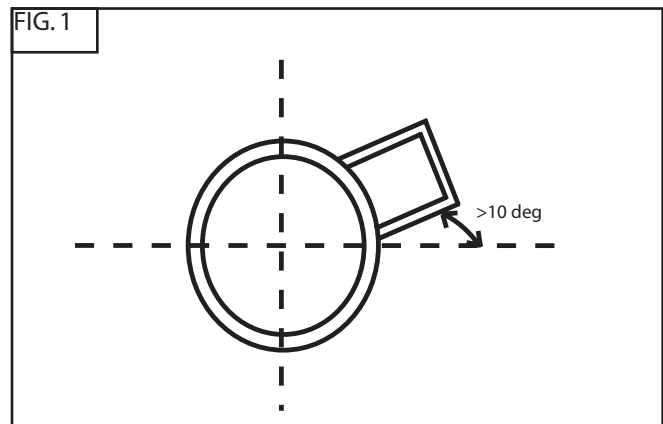
The grey plastic cap with the recessed BNC connector is fitted onto the electrode's connector as is described in FIG. 3. The exposed cable should be secured to supports to prevent cable sway.

Thread TC assembly into hole on underside of tee. Seal with pipe thread sealing tape. Install cable by aligning tabs in connectors, pressing down and turning 1/4- turn. FIG. 3.

### Electrical Installation

The cable assembly connects the electrode to the pH pre-amplifier, transmitter or meter. It is usually supplied with connector(s) to match those of the pH meter.

Parts covered by this product data sheet include:  
FC60TC



## Electrical Connections

The pH preamplifier/transmitter/meter electrical connections are as follows (FIG. 4):

pH - \_\_\_\_\_ (COAXIAL CABLE)

Reference - \_\_\_\_\_ (COAXIAL CABLE)

Temperature Compensator\* - \_\_\_\_\_  
(BLACK AND RED WIRES)

Solution Ground\*\* - \_\_\_\_\_  
(GREEN WIRE)

**NOTES:**

\* Unless noted above, either temperature compensator lead (red or black wires) may be connected to either temperature compensator terminal strip connection.

\*\* The green wire is for solution ground. Not all units have or require a solution ground. The pH meter/transmitter instructions should provide information about the use of this connection. If no reference is made to a solution (not earth) ground connection then it probably is not needed.

