

PVDF By-Pass/Side-Stream pH Electrode Fitting with ATC (Model FC60TK) Product Instructions

Description of Parts

FC60TK modified 1" PVDF tee, with 1/4" NPT hole for ATC connection, cable assembly with cap and 1/4" NPT nipple that houses temperature sensor.

Mechanical Installation

Installation of the PVDF by-pass pH system with ATC requires the special flow cell, Cable Assembly with ATC and PVDF pH electrode (S645KD). 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 1" NPT connections. Make sure the tee is oriented $> 10\text{deg}$ above horizontal (FIG 1)
- B. Install electrode until it seats completely into flow cell (apply grease to large body o-ring first). O-ring under electrode's threads will seat into recess in top of flow cell providing a water-tight seal.

Electrode Installation

Install electrode into FC60TK tee assembly. Make sure the o-ring on the electrode has a liberal coating of o-ring grease (FIG. 2)

Cable Considerations

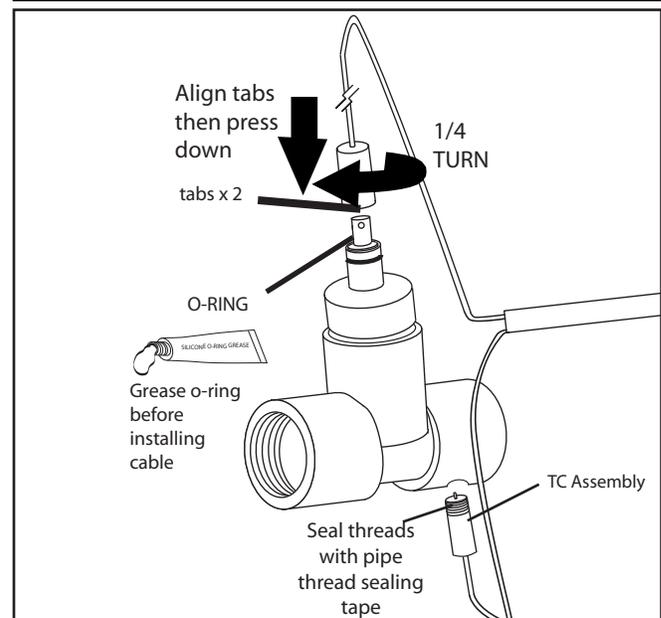
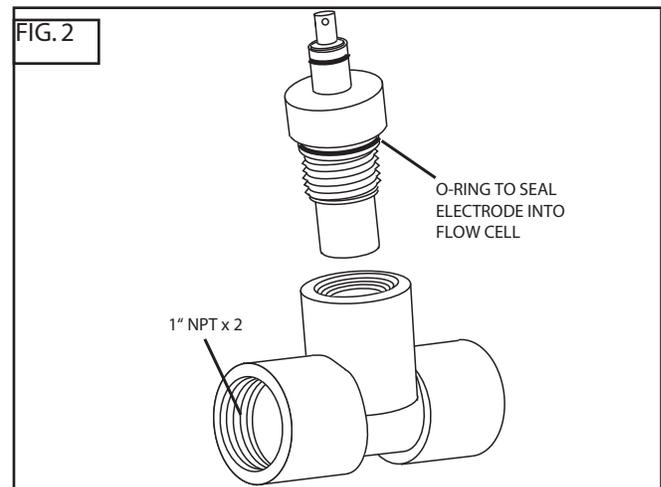
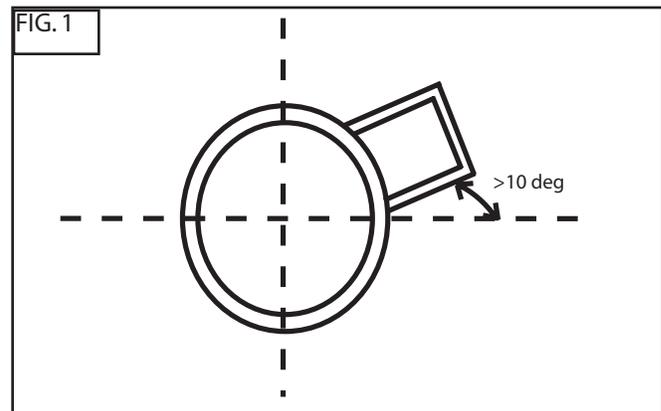
Thread TC assembly (1/4" NPT nipple) into the threaded hole on the underside of the FC60TK tee, Make sure to seal threads with pipe thread sealing tape. Install cap and cable assembly by aligning tabs of electrode connector with notches in internal BNC of cap. Press down firmly then turn clockwise 1/4 turn to engage.

The exposed cable should be secured to supports to prevent cable sway. For installing the cable in conduit, a threaded cable cap assembly should be used. Before the main rigid conduit, a short length of flexible, waterproof conduit should be used so that the electrode can be installed and removed from the mounting gland.

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:
FC60TK, S645KD



Electrical Installation

The pH preamplifier/transmitter/meter electrical connections are as follows:

pH - _____

Reference - _____

Temperature Compensator* - _____

Solution Ground** - _____

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.

