# FC45C, FC47C, FC49K, FC51K -pH Detector

## Product Instructions

### What Is Included With Your Flow Cell?

Your flow cell is suppplied with the following parts:
1) Acrylic flow cell FC45C(200uL) or FC47C (50uL) or PVDF flow cell FC49K (50uL) or FC51K (200uL)
2) Gray nut
3) Clear nylon Spacer x2
4) Black o-ring (2-113)
5) Blue ferrule x 2
6) Black 1/4-28 flangless knurled fitting x 2

pH electrode is sold separately. Choose model 450CD. You will also need to provide your own 1/16" OD tubing.

### Inlet and Outlet Connections

Since the flow cell is symmetrical, either port can be used as an inlet or an outlet. Each port has 1/4-28 threads and can be used with flanged or flangless tubing. Since the fittings provided are flangless install fittings as follows:

1. Cut tubing leaving a square face (see FIG. 1)
2. Slide blue ferrule over tube with flat end toward the flow cell. (see FIG. 2)
3. Slide the black knurled fitting over the tubing next so that cone end of ferrule seats in threaded side of fitting. (see FIG. 2)
4. Screw fitting into flow cell. Hand tighten only. (see FIG. 2)
5. Repeat on opposite side of flow cell.

### Electrode Installation

The pH or ORP electrode is installed in the flow cell's gland as follows (FIG. 3):

1. Slide the gland's parts onto the electrode in this order: first the gland's nut, then the 2 nylon spacers, and then the O-ring. The O-ring should be at least 1 ¾" from the end of the electrode.
2. Insert the electrode into the flow cell until it rests against the shoulders at the top of the flow channel.
3. Screw the nut onto the gland firmly, hand-tight only. The complete installation will look like FIG 4.

FIG. 1

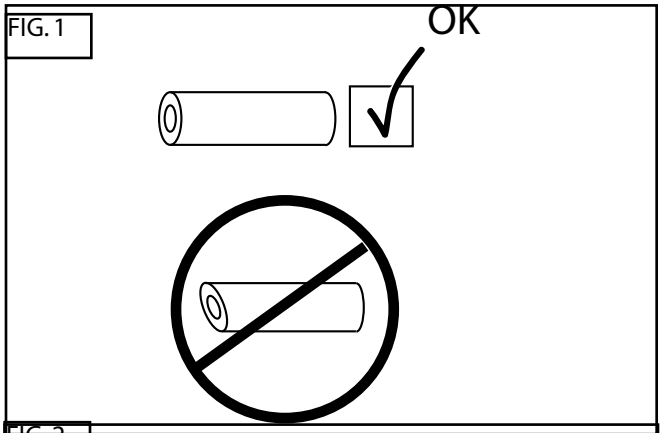



FIG. 2

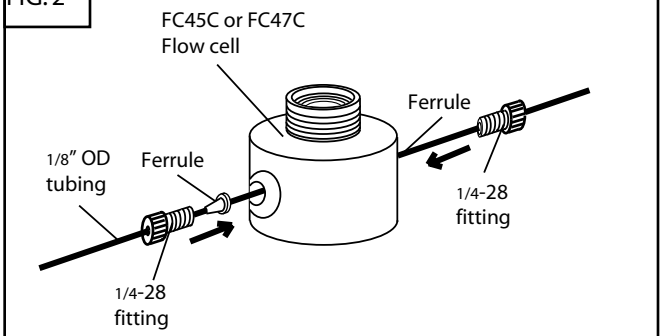
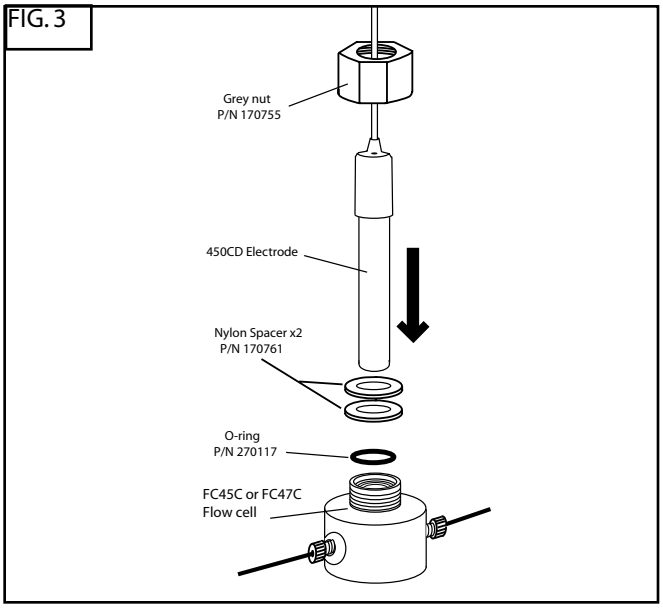



FIG. 3





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## Assembled Flow Cell and Electrode Mounting

The assembly may be mounted in any position such that the flow path is between horizontal to within 5 degrees of vertical (i.e., the flow path must not be in the perfectly vertical orientation). To minimize the possibility of bubbles accumulating in the flow path, it is recommended that the cell be mounted so that the outlet is higher than the inlet as shown in FIG. 5.

FIG. 4

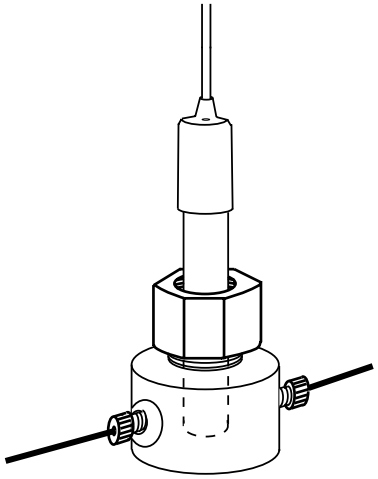
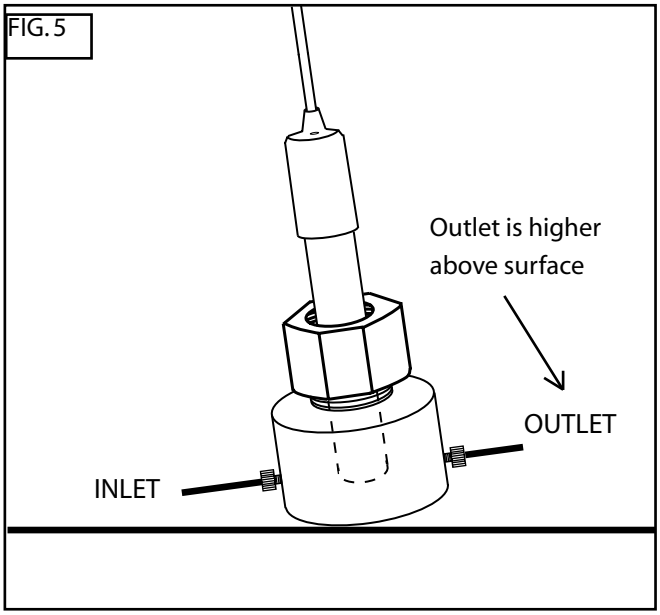


FIG. 5



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