3.4 Remote Sampling Probe or Tygon Tubing

An optional 6-foot Teflon remote sampling probe with a telescoping handle or 15-foot Tygon tubing are handy accessories for users to probe areas that are difficult to reach, such as ceilings, storage tanks, underground manholes, etc. Connect the male Luer connector at the end of the remote sampling probe or the Tygon tubing to the female Luer connector on the water trap filter. The remote sampling probe or the Tygon tubing is ready for operation.

Warning:

Tygon tubing is recommended only for volatile compounds like methane, propane, CO, H₂S, and O₂. For LEL measurements of higher hydrocarbons, it is recommended to use Teflon tubing. For example, one meter of Tygon tubing can completely absorb Jet fuel vapors resulting in a false negative response. For heavy fuels and other organic compounds, Teflon, metal or other non-absorbing extension tubing are necessary.

3.5 Dilution Fitting

An optional dilution fitting can be installed together with the remote sampling probe or Tygon tubing on the gas inlet port to dilute the gas samples. This fitting is needed if the gas sample does not contain more than 15% of oxygen. This is due to the fact that the combustible sensor will not function correctly when the oxygen concentration falls below 15%. The dilution fitting will increase the oxygen concentration so that the combustible sensor can still be used under oxygen deficient conditions. The other use of the dilution fitting is to measure H_2S or CO when the concentration exceeds the upper limit of the sensor range.

To use the dilution fitting, simply insert the fitting between the water trap filter and the remote sampling probe or extension tubing. Make sure to set the dilution ratio in the programming mode (see Section 4.8) so that the correct gas reading will be displayed when the dilution fitting is used.

WARNING: For this application, the user must have the monitor located in a clean atmosphere outside the confined space and use a remote access probe or Tygon tubing to measure the gas concentration.



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