

**PhoCheck 100:1 Diluter
User Instructions V1-2**



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General Description

This simple device allows PhoCheck instruments to detect gases 100 times greater than normal.

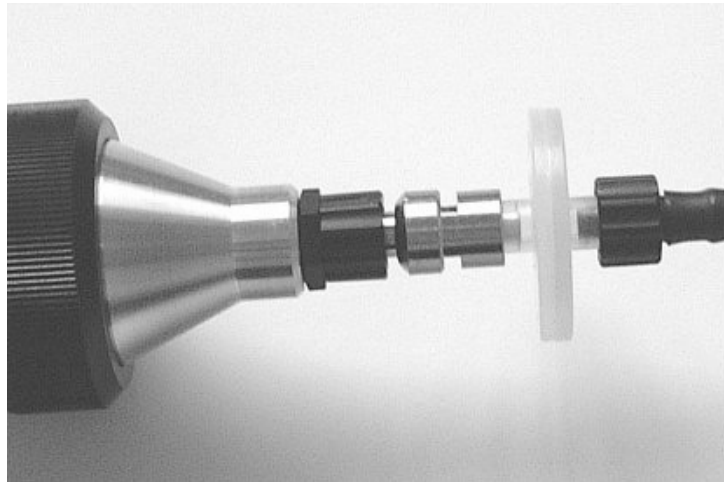
The user must calculate and interpret the displayed readings. In very general terms a 10,000 ppm sample will be displayed as approximately 100 ppm.

Connection

Always connect the diluter nearest to the instrument!

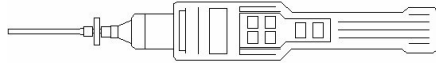
The PTFE filter is used as a restriction and will effect the dilution properties if fitted incorrectly.

Never cover the vent holes in the diluter body!



General Points

- * Wait 30 seconds before taking a reading. Longer probes will take longer to respond.
- * It is strongly suggested that a 'Sample bag' be used to contain the sample at ambient pressure. A pressurised sample will affect accuracy.
- * Any variation in probe length or restriction after a calibration will effect the accuracy.
- * Always remove the diluter after use as there is no indication that a diluter is fitted on the instrument display.
- * After removal of the diluter, switch to 'Factory Calibration' or carry out a standard 'Customer Calibration'.



Accuracy

Accuracy of any type of diluter relies on the flow of gas passing through the device, therefore any variation in filter type or probe length will affect the displayed reading!

Uncalibrated Accuracy **+/- 30% of gas sampled.**

The above figure is based on a PhoCheck with PTFE filter, and 100 mm probe on an instrument that has not been customer calibrated. It is suggested that this basic form of dilution is NOT used for critical applications.

Matched Diluter & Filter **+/- 15% of gas sampled.**

If a filter and diluter are supplied together the above accuracy can be achieved using the standard 100 mm probe.

Calibrated Accuracy **+/- 5% of gas sampled.**

If the above higher accuracy is required or a long probe is fitted, a 'Customer Calibration' must be carried out to match the instrument, diluter, PTFE filter and probe length. This can be carried out using a 1% by volume (10,000 ppm) Isobutylene in Air mix. With the diluter fitted, 'Customer Calibrate' the instrument in the normal way.