



Bubble Trap



In-line trap eliminates solvent line gas bubbles upstream of sensitive

- Effective removal of gas bubbles
- Prevents system running dry
- Inert materials (PTFE and PEEK™)
- Zero dead volume
- Pressure rated to 30psi (2 bar)
- Easy-change membranes
- 1/4"-28 UNF threaded ports

Problem solving

Gas bubbles moving through a system can damage equipment and cause signal errors. The Omnifit Bubble Trap connects in-line to provide an effective, time-saving and cost-efficient method of bubble removal upstream of sensitive detectors. If gas bubbles are formed in-line, or your pump delivers air instead of liquid, the resulting bubbles will be removed completely by the Trap, the outlet flow will stop and your device remain protected.

Simple to use

The Omnifit Bubble Trap requires no intervention to operate after it has been installed. The unit is quickly and easily connected in-line using the 1/4"-28 UNF female threaded ports and fittings such as Omni-Lok™. Spare membranes are available and can be replaced quickly and easily.

Many applications

The Trap is ideal for use in any fluid handling application where the presence of bubbles would negatively impact results or damage sensitive detectors, specifically flow analysis systems, flow-through biosensors or enzyme reactors. The Trap can be used as a guard



Assembled 006BT with
Omni-Lok™ fittings

Operation

The Trap uses a micro-porous, hydrophobic membrane held between two PEEK™ plates. When a fluid containing bubbles flows through the unit, the bubbles are forced through the membrane as the pressure within the system is higher than atmospheric pressure outside. The hydrophobic properties of the membrane retain the aqueous fluid within the Trap. Because the membrane function depends on its hydrophobicity, the Trap is only suitable for use with aqueous systems and NOT with organic solvents.

Maintenance

If salts are present in the fluid, it is advisable to flush the Trap with de-ionized/distilled water after use to prevent any salt crystals forming on or in the membrane. The lifetime of the membranes strongly depends on the kind of fluid being used. If pure water is to be de-bubbled, the lifetime may be several months or years. If buffer solutions are used, the life will be reduced.

Technical Specifications

Pressure

- Omnifit Bubble Traps are pressure rated to 30psi.
- It is possible to de-bubble a fluid even if only a small system pressure is available, but positive pressure only must be applied to the Trap. It is not possible to apply a vacuum and pull liquid through the Trap as this would introduce bubbles into the fluid.
- If the system back-pressure is insufficient to enable the Trap to function, a 1m length of 0.5mm bore tube can be fitted on the outlet side of the Trap to create more back-pressure.

Flow

- The maximum flow rate is dependent upon the amount of bubbles in the liquid. Typically the Bubble Trap is used in the range of 0.5 - 2.0 ml/min, but 6ml/min can be achieved if few bubbles are present in the liquid.

Media

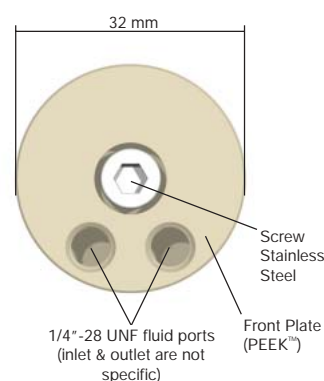
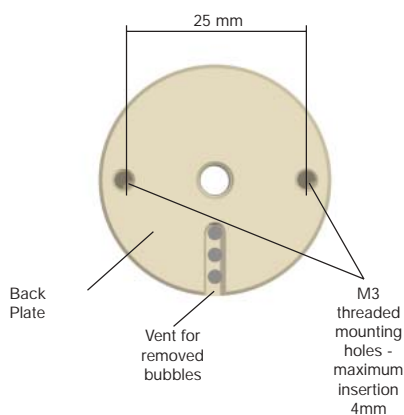
- The Trap must be used with aqueous fluids, if any other liquids are used, they will break through the membrane.

Materials
Body front - PEEK™
Body back - PEEK™
Membrane - PTFE
Retaining screw - 316 Stainless steel (not wetted)

Installation Information

For best results this face should be vertical, with the fluid ports at the lowest position.

The 006BT Bubble Trap is supplied with two spare membranes, mounting screws not supplied.



Ordering Information

Part Number	Description	Pack Size
006BT	Bubble Trap	1
006BTM	Spare membrane	5

Trademarks:

Omnifit™ is a trademark of Omnifit Ltd.
PEEK™ is a trademark of Victrex plc

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