

# Bubble Trap.

Please read all instructions before use

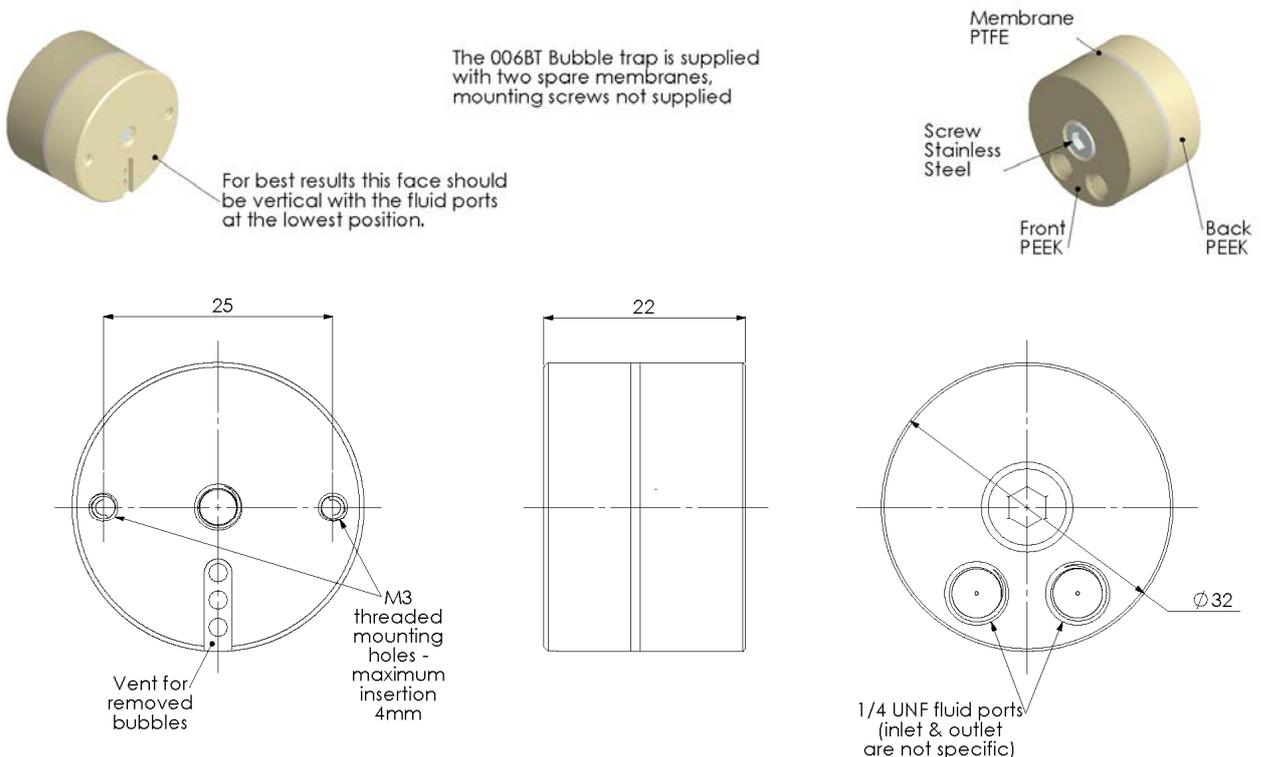
The bubble trap is a novel product designed for the removal of gas bubbles from aqueous solutions.

- Effective removal of air or gas bubbles
- Inert materials of construction (PTFE and PEEK™)
- No dead volume
- Pressure rated to 30psi
- Easy change of membranes
- 1/4"-28 UNF threaded female ports



## Instructions for use.

1. For optimum bubble removal the Trap should be mounted as shown.



2. Make tubing connections to the 1/4"-28 UNF female threaded ports. Inlet and outlet ports are not specific. Any Omnifit 1/4"-28 UNF fitting nuts and ferrules are suitable.
3. The liquid containing gas bubbles may now be passed under pressure upto 30psi through the trap.



# Bubble Trap.

- 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.
- The Trap must be used with aqueous fluids, if any other liquids are used, they will break through the membrane.
- 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 not sufficient to enable the Trap to function, fit a 1 metre length of 0.5mm bore tube on the outlet side of the Trap to create more back-pressure.

## 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. Failure to do so will prevent correct functioning of the Bubble Trap.

If the Trap will not be used for an extended period, completely dry the membrane after washing.

The lifetime of the membranes strongly depends on the kind of fluid being used. If pure water is to be de-bubbled, the life time may be several months or years. If buffer solutions are used, the life will be reduced.

## Replacing the membrane (00BTM)

Do not disassemble the product until replacement of the membrane is required.

Disassembly and reassembly without replacing the membrane is likely to result in leakage.

1. Unscrew the retaining screw to separate the components of the Trap.
2. Remove membrane.
3. Fit a replacement membrane onto the half of the Trap that contains the threaded ports.  
If text is present on the membrane, this must face away from the connection ports
4. Carefully assemble the two halves of the Trap together with the retaining screw. Tighten the screw hand tight until a stop is felt (1.5Nm).
5. The Bubble Trap is now ready for use.

## Specification

|                         |   |                |
|-------------------------|---|----------------|
| Bubble Trap front       | - | PEEK™          |
| Bubble Trap back        | - | PEEK™          |
| Membrane                | - | PTFE           |
| Threaded ports          | - | ¼"-28 UNF      |
| Internal volume         | - | ≈ 115µL        |
| Inlet and Outlet port Ø | - | 0.4mm          |
| Pressure rating         | - | 30 Psi (2 bar) |

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