

Bubble Trap & High Flow Bubble Trap

Effective, in-line removal of bubbles, with or without vacuum assistance

- Effective removal of bubbles from aqueous solutions
- Up to 6 ml/min flow rate or 60 ml/min under vacuum
- Quick, in-line connection with minimal maintenance

The Omnifit® Labware Bubble Trap and High-Flow Bubble Trap effectively remove bubbles* from aqueous solutions. The units are connected in-line, downstream of a pump, using ¼"-28 UNF threaded fittings, such as Omni-Lok™.

Operation

When a fluid containing bubbles flows through the unit, aqueous fluid is retained while bubbles are forced through a micro-porous, hydrophobic membrane (PTFE). The membrane function depends on its hydrophobicity, therefore the units are only suitable for use in aqueous systems and NOT with organic solvents.

The High Flow trap has a vacuum port on the atmosphere (dry) side of the membrane. When a vacuum is applied, the pressure differential between the system and atmosphere sides increases, causing bubbles to be sucked out of the liquid, and permitting increased liquid flow. Note: the vacuum line does not draw liquid through the trap under pressure. Its function is to accelerate the removal of bubbles across the membrane from the system (wet) side to the atmosphere (dry) side.

The High-Flow bubble trap will also operate as a stand-alone unit without a vacuum pump.

Flow rate

Maximum flow rate depends on the amount of bubbles in the liquid. Typical operating range is 0.5 - 2.0ml/min, but up to 6ml/min can be achieved if few bubbles are present in the liquid. Up to 60ml/min can be achieved for the high-flow trap when a vacuum line is used.

For both units, the maximum differential pressure that the membrane can be exposed to is 30psi. In the high flow trap the maximum inlet (positive) pressure will be determined by the level of vacuum applied to the dry side of the membrane. If for example a full vacuum (14.5psi) was applied to the dry side, the maximum inlet pressure would be 15.5psi.

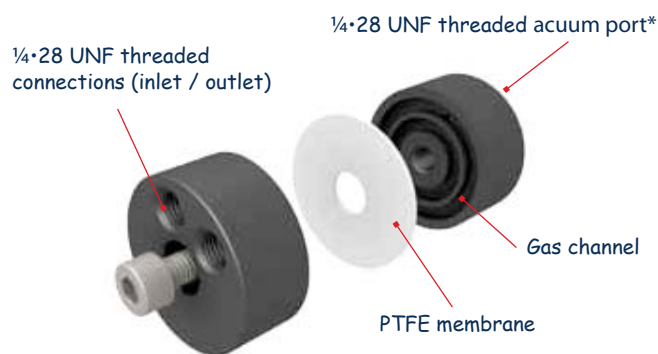
De-bubbling is effected under positive pressure. It is not possible to pull liquid through the unit under vacuum as this would introduce bubbles into the fluid. If the system back-pressure is insufficient for the unit to function, a length of tube can be fitted on the outlet side to create more back-pressure.

* Note: these bubble traps do not remove dissolved gases

Technical Specifications

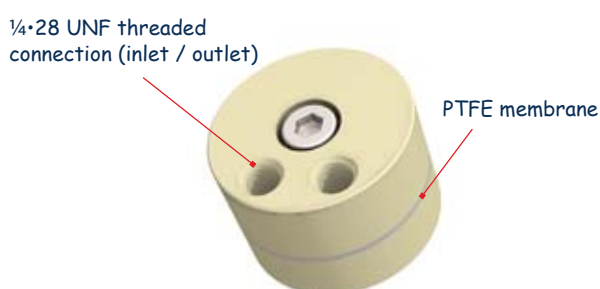
Materials:	Body	Filter
006BT	PEEK™	10µm PTFE
00BT-HF	PVC	10µm PTFE
Flow and pressure ratings:	Max. flow rate	Pressure rating (system side)
006BT	6 ml/min	30psi
00BT-HF	60 ml/min	30psi

HIGH FLOW BUBBLE TRAP



* not visible as it is positioned at rear of unit

STANDARD BUBBLE TRAP



Ordering information

BUBBLE TRAPS & ACCESSORIES

PART NUMBER	DESCRIPTION	QTY
006BT	Bubble trap	ea
006BTM	Replacement filter elements, standard trap	5pk
006BT-HF	High flow bubble trap	ea
006BT-HFM	Replacement filter elements, high flow trap	5pk

Maintenance

Membrane lifetime strongly depends on the kind of fluid used. For pure water, the lifetime may be several months or years. Buffer solutions reduce lifetime and it is advisable to flush the unit with de-ionized/distilled water after use to prevent salt crystals forming.

Dimensions

