

**Masterfilter MasterSip Capsule Filter** designed for use in sterile air and gas filtration in biopharmaceutical and other applications. Composed of a hydrophobic PTFE membrane and a polyetherimide housing, these capsule filters provide an alternative to a stainless-steel housing/filter combination and thus reduces operating costs and maintenance time. Engineered polyetherimide material allows multiple SIP (steam-in-place) cycles at high pressures and temperatures.



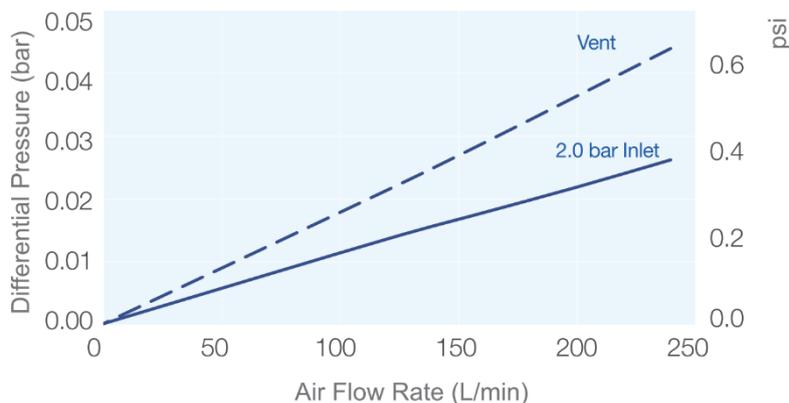
### Application

- Fermenter venting
- Venting
- Sterile air supply
- Wort aeration
- Fermentation

### Features and Benefits

- In situ Integrity testable by WIT
- Low investment cost compared to a standard filter and stainless-steel housing system
- Steam sterilizable with long service life
- Able to operate at high gas pressures up to 6,9 bar

### Air Flow Rate Characteristics



### Materials of Construction

- **Filter media:** Hydrophobic PTFE Membrane
- **Removal Rating:** 0,2 µm
- **Support:** Polypropylene
- **Cage:** Polypropylene
- **Core:** Polypropylene
- **End Caps:** Polypropylene
- **Capsule housing** Polyetherimide
- **Outlet Internal Support Ring:** Stainless Steel
- **O-Rings:** Silicone
- **Overall Length:** 159 mm
- **Body Diameter:** 81 mm

### Operating Parameters

- **Max differential pressure forward:** 6,9 bar (25°C), 4,0 bar (60°C), 2,4 bar (80°C)
- **Max differential pressure reverse:** 3,0 bar (40°C), 1,0 bar (80°C)
- **Max operating pressure:** 6,9 bar (40°C), 4,0 bar (60°C), 2,4 bar (80°C)
- **Effective Filtration Area:** 0,2 m<sup>2</sup>
- **Steam in Place:** 142°C/30min up to 10 cycles
- **Autoclave:** 131°C/30min up to 50 cycles

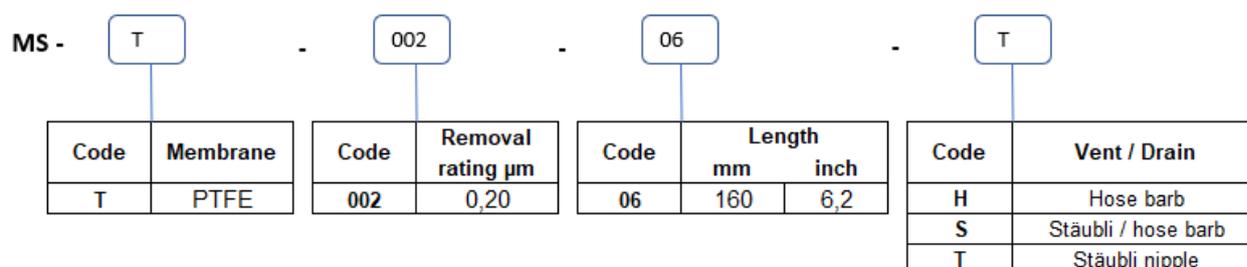
### Integrity Test Data (25°C)

Bubble Point IPA/water 60/40		Water intrusion test pressure		Water flow
[bar]	[psi]	[bar]	[psi]	[µl/10min]
≥1,1	≥11,6	2,5	36,2	≤1.150

### Food and Biological Safety

Comply with the relevant requirements of EU 1935/2004 and EU directive 10/2011  
 Comply with USP Plastics Class VI - 121 °C and ISO10993 equivalents

### Part Numbers



e.g. part number: MS-T-002-T  
 MasterSip Capsule filter, 0,2 µm, 6,2" length, Vent / Drain: Stäubli nipple