HIGH FLOW TETPOR II gas sterilization filters have been developed to benefit from technological advances within the manufacture of PTFE membranes. This new generation of filter sets the standard with an unrivalled combination of efficiency, flow rate and strength.

The HIGH FLOW TETPOR II is validated as a 0.2 micron sterilizing grade filter in liquids through ASTM F838-05 in gas through full retention to an aerosol challenge of MS2 phage. This ensures the filter will guarantee the sterility of your process in the worst-case scenario where the filter may be subjected to bulk liquid due to a process problem. Subtle changes to the structure of the hydrophobic PTFE have also resulted in the production of an extremely robust product now validated for 225 steam sterilization cycles @ 142 °C (287.6 °F). The combination of non-woven supports upstream of the membrane and an expanded net layer downstream has significant benefits. It provides increased protection and service life while guaranteeing zero fibre shedding into the process.

HIGH FLOW TETPOR II is suitable for all sterile gas applications including fermentation inlet and off gas streams, venting, lyophilisers, autoclave vacuum breaks and blow-fill-seal equipment as well as the provision of particle free air within the electronics industry.

Features and Benefits

- Optimum pleat configuration
- Steam sterilizable up to 225 cycles at 142 °C (287.6 °F)
- Unrivalled flow rates combined with low pressure drops
- Fully validated to ASTM 838-05 for liquid bacterial challenge
- Fully validated to aerosol and viral challenge
- Integrity testable by all methods including water intrusion test

Performance Characteristics

Graphs showing differential pressure vs. flow rate for different sizes of cartridges.
Specifications

**Materials of Construction**

- **Filtration Membrane:** Expanded PTFE
- **Upstream Support:** Polypropylene
- **Downstream Support:** Polypropylene
- **Inner Support Core:** 316L Stainless Steel
- **Outer Protection Cage:** Polypropylene
- **End Caps:** Polypropylene
- **End Cap Insert:** Polysulphone
- **Standard o-rings:** Silicone

**Food and Biological Safety**

Materials conform to the relevant requirements of 21 CFR Part 177, EC1935 / 2004 and current USP Plastics Class VI - 121 °C and ISO10993 equivalents.

**Recommended Operating Conditions**

The maximum differential pressure in direction of flow (outside to in) is 3.5 barg (50.76 psig) at 60 °C (140 °F).

The maximum recommended continuous inlet air temperature is 60 °C (140 °F).

*Note: HIGH FLOW TETPOR II cartridges can be used as WFI vents in heated housings if changed on a 4-6 monthly basis.*

**Sterilization**

HIGH FLOW TETPOR II cartridges can be in situ steam sterilized for up to 225 cycles at 142 °C [287.6 °F].

**Retention Characteristics**

HIGH FLOW TETPOR II cartridges have been fully validated as 0.2 micron sterilizing grade filter cartridges, for compressed air and gas applications. They exceed liquid bacterial challenge levels as recommended by ASTM.* In addition, HIGH FLOW TETPOR II is also validated by aerosol bacterial and MS-2 Coliphage challenge testing.

*ASTM American Society for Testing and Materials

**Integrity Test Data**

All cartridges are integrity tested prior to dispatch by the pressure decay and aerosol challenge test methods. Values are for cartridges wetted with 60 / 40 IPA / Water.

**Ordering Information**

<table>
<thead>
<tr>
<th>Code</th>
<th>Length (Nominal)</th>
<th>Code</th>
<th>Endcap (10¨)</th>
<th>Code</th>
<th>O-rings</th>
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<tbody>
<tr>
<td>C*</td>
<td>2.5¨ (65 mm)</td>
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<td>BIO-X Retrofit</td>
<td>E</td>
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<td>2.5¨ (65 mm)</td>
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<td>UF Retrofit</td>
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<td>K</td>
<td>5¨ (125 mm)</td>
<td>S</td>
<td>Silicone</td>
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<td>TRUESEAL</td>
<td>V</td>
<td>Viton</td>
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<td>HE Demi C &amp; D</td>
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<td>Demi MCY</td>
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<td>Demi A &amp; B Std</td>
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* Supplied in packs of 3.

+ Not available on C and D length variants.

* Silicone o-ring supplied as standard without having to specify the “S” code.

**Cartridge Test Diffusional Water Water Water**

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**Parker domnick hunter has a continuous policy of product development and although the Company reserves the right to change specifications, it always keeps customers informed of any such action. This publication is for general information only and customers are requested to contact our Process Filtration Sales Department for detailed information and advice on a product’s suitability for specific applications. All products are sold subject to the company’s Standard conditions of Sale.**

**Contact Information**

+44 (0)191 4105121
dhprocess@parker.com

www.parker.com/processfiltration