Bio-Reduction Grade PTFE Cartridges are high-flow, high-capacity membrane filters with exceptional hydrophobicity. This series provides retention of the finest particulate and reliable high-LRV reduction of micro-organisms in fermentation feed air, compressed gas, and process vent applications. With superior flow rates, the BRPTFE series ensures economical costs of design, installation, operation, and compressor energy consumption. Validated for >7.4 LRV retention of aerosolized bacteriophage to provide reliable bioburden reduction and prevention of process contamination. Tolerates multiple sterilization cycles by autoclave or in situ steaming while retaining superior hydrophobicity and reliable integrity. 100% integrity tested in production with full lot traceability of materials.

Typical Applications
- Fermentation feed air
- Compressed air & gases
- Process venting

Flow Rate vs Pressure Drop

Construction Materials
Membrane: PTFE
Support Media: Polypropylene
End Caps: Polypropylene
Center Core: Polypropylene
Outer Support Cage: Polypropylene
O-Rings/Gaskets: Buna, EPDM, Silicone, Viton®, Teflon® Encapsulated Viton®

Sanitization/Sterilization
Filtered Hot Water: 80°C for 30 min.
Steam Sterilization: 121°C for 30 min., multiple cycles

Chemicals: Cartridges are chemically compatible with most chemicals and sanitizing agents.
Cartridge O-ring adapters feature integral reinforcement to assure no deformation under repeated steam sterilization cycles.

Dimensions
Length: 10 to 40 inches (25.4 to 101.6 cm) nominal
Outside Diameter: 2.70 inches (7.0 cm) nominal
Maximum Recommended Operating Conditions
Temperature: 176°F (80°C)

Maximum Differential Pressures
Forward: 50 PSI (3.4 bar) at 20°C
Reverse: 40 PSI (2.7 bar) at 20°C

Food Safety Compliance
Materials of construction comply with FDA regulations for food and beverage contact use as detailed in the US Code of Federal Regulations, 21CFR. Materials used to produce filter media and hardware are deemed safe for use in contact with foodstuffs in accordance with EU Directives 2002/72/EC, 1935/2004, and/or 10/2011.

Toxicity
All polypropylene components meet the specifications for biological safety per USP Class VI – 121°C for plastics.

Ordering Information

<table>
<thead>
<tr>
<th>BRPTFE</th>
<th>Rating (µ)</th>
<th>A</th>
<th>Length (cm)</th>
<th>C</th>
<th>End Cap Style</th>
<th>O-Rings/Gaskets</th>
<th>Adders</th>
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<tbody>
<tr>
<td></td>
<td>0.2</td>
<td>10”</td>
<td>25.4</td>
<td>2</td>
<td>DOE Flat Gasket</td>
<td>B = Buna</td>
<td>CS = 316ss Compression Spring</td>
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<td></td>
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<td>20”</td>
<td>50.8</td>
<td>3</td>
<td>222 w/ Fin</td>
<td>E = EPDM</td>
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<tr>
<td></td>
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<td>30”</td>
<td>76.2</td>
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<td>101.6</td>
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<td>226 w/ Flat Cap</td>
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<td>7</td>
<td>226 w/ Fin</td>
<td>T = Teflon® Encapsulated Viton®</td>
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<td></td>
<td>16</td>
<td>213 Internal O-Ring</td>
<td>Z = Teflon® Encapsulated Silicone</td>
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</tbody>
</table>

DISCLAIMER: Filtration data presented is representative of performance observed in controlled laboratory testing. It is not given as a warranty, specification or statement of fitness for use. Specific performance can vary widely depending on contaminant type, fluid properties, flow rates and environmental conditions. It is recommended that users conduct thorough qualification testing to assure the product functions as required.