High Purity - WaterClear PES
Hydrophilic Polyethersulfone (PES) Membrane Cartridges for Water Purification Applications

WaterClear PES Cartridges are constructed of continuous length* polyethersulfone membrane with polypropylene supports. This combination offers extremely cost effective membrane filtration for aqueous solution applications. WaterClear cartridges deliver excellent flow rates at a low pressure drops.

Flow Rate vs Pressure Drop

![Graph showing flow rate vs pressure drop](image)

Typical Applications
- Deionized Water Systems
- General-Use Water Filtration
- Liquid Clarification
- Chemical Filtration

* Continuous length up to 30" (40) cartridges have (2) 20" segments.

FDA Listed Materials
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, 1995/2004, and/or 10/2011.

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

Note: Stainless steel insert option needed for all cartridges being hot water sanitized or steam sterilized.

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

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

Ordering Information

<table>
<thead>
<tr>
<th>WCPES</th>
<th>Rating (μ)</th>
<th>A</th>
<th>Length</th>
<th>C</th>
<th>End Cap Style</th>
<th>O-Rings/Gaskets</th>
<th>-</th>
<th>Adders</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.1</td>
<td></td>
<td>10&quot; (5.4 cm)</td>
<td>2 = DOE Flat Gasket</td>
<td>S = Silicone</td>
<td>R = 18 Megohm Rinse</td>
<td></td>
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<tr>
<td>0.2</td>
<td></td>
<td>20&quot; (50.8 cm)</td>
<td>3 = 222 w/ Flat</td>
<td>V = Viton®</td>
<td>CS = 316ss Compression Spring</td>
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</tr>
<tr>
<td>0.45</td>
<td></td>
<td>30&quot; (76.2 cm)</td>
<td>4 = 222 w/ Flat Cap</td>
<td>T = Teflon® Encapsulated Viton®</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>0.65</td>
<td></td>
<td>40&quot; (101.6 cm)</td>
<td>6 = 226 w/ Flat Cap</td>
<td>Z = Teflon® Encapsulated Silicone</td>
<td></td>
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</tr>
</tbody>
</table>

16 = 213 Internal O-Ring

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 contamination type, fluid properties, flow rates and environmental conditions. It is recommended that users conduct thorough qualification testing to assure the product functions as required.