MicroVantage™ WGPS Series
Water Grade Polysulfone Membrane Filter Cartridges

- Absolute retention ratings from 0.03 to 1.0 microns
- 6.0 square feet (0.56 m²) of media surface area per ten inch length for optimal performance
- Highly tapered asymmetric pore structure provides excellent flow rate and dirt holding capacity
- Cost effective absolute filtration for less critical applications - not integrity tested
- Rigid, molded cage protects pleated media and strengthens structural stability
- Manufactured in state-of-the-art white room for high purity
- Complies with Food & Drug Administration’s CFR criteria for food & beverage contact.
- Meets USP Class VI Biological Test for plastics
- Available in common and end cap configurations to fit most filter housings
- Produced in standard lengths up to 40 inches

Applications
- RO Pre/Post Filtration
- DI Water
- Plating Solutions
- Specialty Chemicals
- Process Water
- Water & Wastewater
- Food & Beverage
- Bottled Water
- Microelectronics
- Cosmetics

Specifications & Operating Parameters

Pore Sizes: 0.03, 0.05, 0.1, 0.2, 0.45, 0.65, 1.0 microns absolute retention

Nominal Lengths: 9.75” (24.7 cm), 10” (25.4 cm), 20” (50.8 cm), 30” (76.2 cm), 40” (101.6 cm)

Outside Diameter: 2.67” (6.78 cm)

Inside Diameter: 1.0” (2.54 cm)

Media Surface Area: 6.0 sq.ft. (0.56 m²) per 10 inches filter length

Gaskets/O-rings: Silicone, Buna N, EPR, Viton, Teflon Encapsulated Viton (O-rings only)

Materials of Construction:
- Filter Media: Polysulfone
- Outer Cage: Polypropylene
- Inner Core: Polypropylene
- End caps: Polypropylene

Maximum Operating Temperature: 176°F (80°C)

Recommended Change-out Differential Pressure: 35 psid (2.4 bar)

Maximum Differential (Collapse) Pressure:
- Forward: 75 psid @ 70°F (5.2 bar @ 21°C)
- Reverse: 40 psid @ 176°F (2.8 bar @ 80°C)

Sanitization and Sterilization:
- Hot water at 175°F (80°C) at 5 psid for 30 minutes
- In-line steam at 257°F (125°C) @ 1 psid (0.7 bar) for 30 minutes
- Autoclavable at 257°F (125°C) for 30 minutes

FDA and USP Compliance:
- All materials comply with the requirements of Food and Drug Administration Title 21 of The Code of Federal Regulations 174.5, 177.1520 and 177.1630. All components meet current USP Class VI biological tests for plastics

www.shelco.com
Filter Housings

Shelco manufactures a full line of filter housings. From our rugged single cartridge housings to our heavy duty multi-cartridge housings. Shelco is the perfect choice for your filtration solutions.

Ordering Guide (Example: WGPS0.2-10S4S)

<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
<th>MICRON</th>
<th>LENGTH</th>
<th>END CAP CONFIGURATION</th>
<th>GASKET / O-RING</th>
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</thead>
<tbody>
<tr>
<td>WGPS</td>
<td>0.03</td>
<td>9.75&quot;</td>
<td>S1 = DOE</td>
<td>B = Buna N</td>
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<tr>
<td></td>
<td>0.05</td>
<td>10&quot;</td>
<td>S3 = 222 w/ Fin End</td>
<td>E = EPR</td>
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<tr>
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<td>0.1</td>
<td>19.75&quot;</td>
<td>S4 = 222 w/ Flat End</td>
<td>S = Silicone</td>
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<tr>
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<td>0.2</td>
<td>20&quot;</td>
<td>S5 = 226 w/ Fin End</td>
<td>V = Viton</td>
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<tr>
<td></td>
<td>0.45</td>
<td>29.25&quot;</td>
<td>S6 = 226 w/ Flat End</td>
<td>T = Teflon Encapsulated</td>
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<tr>
<td></td>
<td>0.65</td>
<td>30&quot;</td>
<td>S7 = Internal O-ring with Recessed Plug</td>
<td>Viton (O-ring only)</td>
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<tr>
<td></td>
<td>1.0</td>
<td>40&quot;</td>
<td>S9 = Internal O-ring on both ends</td>
<td></td>
</tr>
</tbody>
</table>

Flow vs. Pressure Drop

This chart represents typical water flow per 10” cartridge length. The test fluid is water at ambient temperature. Extrapolation for multiple elements tends to be linear, but as flows increase the △P of the housing becomes more apparent.