MicroVantage™ MPN Series
Nominally-Rated (90%) Pleated Polypropylene Filter Cartridges

- Nominally-Rated Beta 10 (90%) retention efficiency
- 5.6 square feet (0.52 m²) of media surface area per 10” length
  - High throughput and particle retention
  - Optimal performance and value
- 100% polypropylene construction offers wide range of chemical compatibility
- Rigid, molded cage provides greater structural integrity
- Gradient, fixed pore structure increases dirt-holding capacity and resists unloading under high differential pressure
- 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
- Various end cap configurations available to fit existing housings
- Produced in continuous lengths up to 40 inches

Applications
RO Prefilters  Food & Beverage
Process Water  Bottled Water
Plating Solutions  Microelectronics
Chemicals  Paint/Inks
Water & Wastewater  Cosmetics

Specifications & Operating Parameters

Pore Sizes  0.2, 0.5, 1, 3, 5, 10, 25, 50 microns

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  5.6 sq. ft. (0.52 m²) per ten inches in length

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

Materials of Construction
Filter Media:  Polypropylene
Outer Cage / Core / End Caps:  Polypropylene

Maximum Operating Temperature  176°F (80°C)

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

Maximum Differential (Collapse) Pressure  75 psid @ 70°F (5.2 bar @21°C), 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 (0.07 bar) for 30 minutes
Autoclavable at 257°F (125°C) for 30 minutes

FDA and USP Compliance
All filters are manufactured of virgin polypropylene materials. All materials comply with FDA requirements for food contact per CFR Title 21 174.5, 177.1520 and 177.1630. All Components meet USP Class VI Plastics biological reactivity tests.
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: MPN5-10S1E)**

<table>
<thead>
<tr>
<th>MPN</th>
<th>5</th>
<th>–</th>
<th>10</th>
<th>S1</th>
<th>E</th>
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<tbody>
<tr>
<td>PRODUCT CODE</td>
<td>MICRON</td>
<td>LENGTH</td>
<td>END CAP CONFIGURATION</td>
<td>GASKET/O-RING</td>
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<tr>
<td>MPN</td>
<td>0.2</td>
<td>9.75'</td>
<td>S1 = DOE</td>
<td>B = Buna N</td>
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<tr>
<td>0.5</td>
<td>10'</td>
<td>S3 = 222 w/ Fin End</td>
<td>E = EPDM</td>
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<td>1</td>
<td>20'</td>
<td>S4 = 222 w/ Flat End</td>
<td>S = Silicone</td>
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<tr>
<td>3</td>
<td>30'</td>
<td>S5 = 226 w/ Fin End</td>
<td>V = Viton</td>
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<tr>
<td>5</td>
<td>40'</td>
<td>S6 = 226 w/ Flat End</td>
<td>T = Teflon Encapsulated</td>
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<tr>
<td>10</td>
<td></td>
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<td>S7 = Internal O-ring with Recessed Plug</td>
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<tr>
<td>25</td>
<td></td>
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<td>S9 = Internal O-ring on both ends</td>
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<tr>
<td>50</td>
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**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.

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 ΔP of the housing becomes more apparent.