Tekfil™ WF
Melt Blown Pre-Filter or Final Polishing Filter

Porvair Filtration Group wide format (WF) filter cartridges are designed for applications requiring a very high flow rate. They are equally suitable for use as pre-filters or final polishing filters in applications that do not require membrane filtration. The use of a spacer mesh as an upstream pleat support means that fluid flow is uniform across the entire surface of the filter medium. The mesh holds the flow channels open thereby maximising dirt holding capacity and minimising pressure drop across the filter.

Our filter cartridges are absolute rated, tested to Beta 5000 using the industry standard single pass OSU-F2 test procedure with ISO 12103 part 1 A2 Fine and A4 Coarse test dust as appropriate. Manufactured in the UK using all polypropylene hardware with glass fibre filter media, these filter cartridges have excellent chemical compatibility.

Thermal bonded construction eliminates the requirement for adhesives, maintaining product integrity in demanding applications and minimising the level of extractables in the filtrate. All the materials conform to the relevant requirements of FDA CFR21 part 17.

Features and Benefits

- Absolute micron ratings to ensure consistent, repeatable performance.
- Multi layer graded density structure gives high contaminant holding capacity resulting in a longer filter service life.
- Available with or without a core.
- Manufactured in the UK.
- Formed by thermal bonding with no resins, binders or adhesives.
- 100% polypropylene or nylon construction, provides wide process fluids compatibility and a minimum level of extractables.
- Suitable for high flow applications as the large surface area and high void volume media result in low pressure drops and high contaminant capacity.
- Available in 20” and 40” lengths to retrofit into most existing installations.
- Compliant with NSF42 and FDA CFR title 21.
Specifications

Materials of Manufacture
Filter medium: Polypropylene or Nylon

Cartridge Dimensions
Outside diameter: 152mm (6”)
Inside diameter: 114mm (4.5”)
Length: 508mm (20”)]

Micron Rating
5µm, 10µm, 25µm, 40µm, 75µm and 100µm

Effective Filtration Area

<table>
<thead>
<tr>
<th>Absolute Microbial Rating</th>
<th>Effective Filtration Area (each 1016mm (40&quot;) module)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5µm, 10µm, 25µm, 40µm, 75µm and 100µm</td>
<td>5m² (53.8ft²)</td>
</tr>
</tbody>
</table>

Recommended Operating Conditions

<table>
<thead>
<tr>
<th></th>
<th>Polypropylene</th>
<th>Nylon</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recommended ∆P @ 20°C (68°F)</td>
<td>2 bar (29psi)</td>
<td>2 bar (29psi)</td>
</tr>
<tr>
<td>Maximum ∆P @ 20°C (68°F)</td>
<td>4 bar (58psi)</td>
<td>4 bar (58psi)</td>
</tr>
<tr>
<td>Maximum ∆P @ 80°C (68°F)</td>
<td>1 bar (15psi)</td>
<td>2 bar (29psi)</td>
</tr>
<tr>
<td>Maximum ∆P @ 135°C (68°F)</td>
<td>n/a</td>
<td>0.5 bar (7psi)</td>
</tr>
</tbody>
</table>

Maximum Differential Pressure
Normal Flow direction at:
20°C (68°F): 3.5bar (51psi)
65°C (149°F): 1.8bar (26psi)
80°C (176°F): 1.0bar (15psi)

Reverse flow is not recommended.

Recommended Changeout Differential Pressure
20°C (68°F): 1.5bar (22psi)

Flow Rate/Pressure Drop
Water, 40” Element

![Graph of Flow Rate vs. Pressure Drop]

PP = Polypropylene

© Copyright 2019. Porvair Filtration Group Ltd. All rights reserved.

Whilst every effort has been made to ensure the accuracy of this document, due to continuous product development, the data contained is subject to constant revision and Porvair Filtration Group Ltd. reserves the right to change, alter or modify its contents.