Polyfil™ WF
Pleated Depth Media 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 from polypropylene or microfibre glass filter media and hardware, 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 177 and cartridges using polypropylene filter media meet the requirements for food contact as detailed in European Regulation 1935/2004.

Features and Benefits
- Absolute micron ratings to ensure consistent, repeatable performance.
- Inside to out flow ensures that contamination is collected inside the filter cartridge, for easy disposal.
- Our Polyfil™ WF filters meet the requirements for food contact as detailed in EC 1935/2004.
- Manufactured in the UK.
- Large surface area, typically 5 metres per 40”, and pleat spacing mesh on the inner layer ensures low initial pressure drops and high dirt holding capacity, for extended service life.
- 100% Polypropylene construction (PP only) and thermal bonding mean wide chemical compatibility and a minimum level of extractables.
- Suitable for steam sterilisation, autoclaving and hot water sanitisation.
- Available in 20”, 40” and 60” lengths to retrofit into most existing installations.
Specifications

Materials of Manufacture
Filter medium: Polypropylene or glass fibre
Drainage layers: Polypropylene
Support mesh: Polypropylene
Outer core: Polypropylene
End caps: Polypropylene

Cartridge Dimensions
Outside diameter: 154mm (6”)
Inside diameter: 75mm (3”)
Length: 508mm (20’)
1016mm (40’)
1524mm (60’)

Effective Filtration Area

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<th>Absolute Microbial Rating</th>
<th>Effective Filtration Area (each 1016mm (40”) module)</th>
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<td>0.45, 1, 5, 10, 25, 50, 0.65 and 100μm</td>
<td>5m² (53.8ft²)</td>
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Gasket and O-Rings
EPDM, FEP encapsulated, Silicone, Viton® and Nitrile

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)

Sanitisation
Steam or autoclave: 121°C (250°F) for 15 minutes
Hot water sanitisation: 90°C (194°F) for 30 minutes repeatedly

Clean Water Flow Rates
Polypropylene Media:

Glass Fibre Media: