

Polyfil™ WF

Pleated Depth Filter or
Final Polishing Filter



Polyfil™ 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 all polypropylene 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.

Typical Applications

- Foods and beverages
- Inks and coatings
- Fine chemicals
- Cosmetics
- Process water systems

Ordering Information

Product Code:		1	2	3	PP	4
1: Pre-Filter	WF	Polyfil™ WF	P45	0.45µm		
2: Pore rating	01	1µm	20	20" (508mm)	E	EPDM
	05	5µm	40	40" (1016mm)	N	Nitrile
	10	10µm	60	60" (1524mm)	S	Silicone
	25	25µm			V	Viton
	50	50µm				
	100	100µm				

*Other micron ratings available
upon request

Features and Benefits

- Available with 304 stainless steel outer cage for high temperature and differential pressure applications.
- 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
Drainage layers:	Polypropylene
Support mesh:	Polypropylene
Outer core:	Polypropylene
End caps:	Polypropylene

Cartridge Dimensions (Nominal)

Effective Filtration Area:	5m ² (53.8ft ²) per 40" module.
Outside Diameter:	154mm (6")
Inside Diameter:	75mm (3")
Length:	508mm (20") 1016mm (40") 1524mm (60")

Gaskets and O-Rings

EPDM, FEP encapsulated, Silicone, Viton® and Nitrile

Maximum Differential Pressure

Normal flow direction at:

20°C (68°F):	3.5 bar (51psi)
65°C (149°F):	1.8 bar (26psi)
80°C (176°F):	1.0 bar (15psi)

Reverse flow is not recommended.

Recommended Changeout Differential Pressure

20°C (68°F):	1.5bar (22psi)
--------------	----------------

Sanitation

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

- Typical clean water flow rate:

A 1016mm (40") Polyfil™ WF cartridge exhibits the flow- ΔP characteristics indicated below, for solutions with a viscosity of 1 centipoise.

- Other solutions:

For solutions with a different viscosity, multiply the indicated differential pressure by the viscosity in centipoise.

Polypropylene Media:

