



PF-PP-K

Absolute Rated Pleated Depth Filters



PF-PP-K

PF-PP-K:

A range of absolute rated cartridge filters from Ultrafilter GmbH, featuring the latest developments in meltblown polypropylene filter media technology, PP-K Serie cartridges are based on a robust all polypropylene construction, offering removal ratings from 0.5 to 75 micron absolute.

The combination of up to eight separate filtration layers provides true depth filtration, within a pleated cartridge construction. This design will reduce fouling of the filter surface area caused by a broad spectrum of contaminants.

PP-K Serie cartridges are ideally suited for the filtration of process fluids, that contain contaminants with a wide range of particle sizes.

The graded multi-layer polypropylene media provides prefiltration of the process fluid prior to the absolute rated final layer. The unique design of the PP-K Serie cartridges helps to achieve lower running costs and a smaller process footprint.

The PP-K Serie are also highly resistant to integrity failure caused by steam sterilisation and have excellent chemical compatibility characteristics. They are suitable for applications ranging from bioburden reduction and the clarification of a wide range of process liquids and end products.

APPLICATIONS:

PP-K Serie cartridges provide absolute filtration where reproducibility and consistency of performance are critical. Suitable for the filtration of aqueous and organic liquids, PP-K Serie cartridges can be used as prefilters or final filters in the following applications:

• PHARMACEUTICALS AND BIOPROCESSING

The structure of the filter media makes it ideally suited for the filtration of complex biological fluids (e.g. serum).

• FOODS AND BEVERAGES

The clarification of beers, wines and spirits to a clear and bright finish without affecting taste or colour. Provides an alternative to plate and frame and other sheet formatted depth filters.

• PROCESS WATER SYSTEMS

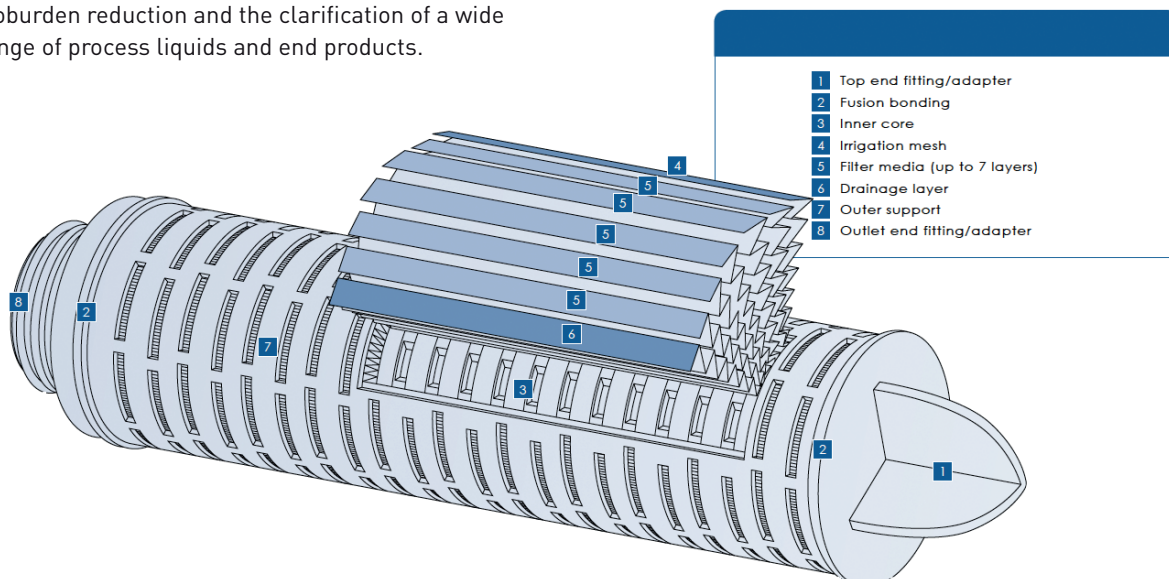
The filtration of process water installations for removal of general contamination and resin fines.

• FINE CHEMICALS

The filtration of high grade chemicals including solvents, reagents, photographic emulsions, inks, paints and plating solutions.

• COSMETICS

The clarification of process water and intermediates for the finished product.



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FEATURES AND BENEFITS:

● PP-K SERIE CARTRIDGES

The combination of up to eight separate filtration layers provides true depth filtration, within a pleated cartridge construction, and resistance to fouling.

● GRADED MULTI-LAYER MEDIA

The multi-layer media structure provides prefiltration of the process fluid prior to the absolute rated final layer. This combination provides economy of use and a smaller process footprint.

● GUARANTEED REMOVAL RATINGS

PP-K Serie cartridges are validated using the recognised industry standard modified OSU-F2 single pass test to Beta 5000 (99.98% efficiency).

● SUITABLE FOR STEAM AND HOT WATER SANITISATION

PP-K Serie cartridges are resistant to repeat steam sterilisation up to 135°C (275°F) and hot water cycles at up to 90°C (194°F).

● ENVIRONMENTALLY FRIENDLY

PP-K Serie filters are environmentally friendly, all spent cartridges can be readily incinerated to trace ash.

● FULL TRACEABILITY

All PP-K Serie cartridges are identified with a batch serial number. Each PP-K Serie cartridge is supplied with a Certificate of Quality and an operating instruction leaflet.

● CONTROLLED MANUFACTURING ENVIRONMENT

PP-K Serie cartridges are manufactured in an ISO Cleanroom environment by fully gownned staff, minimising the risk of contamination.

CARTRIDGE CONSTRUCTION:

The high quality robust all polypropylene construction of PP-K Serie cartridges, allows for excellent chemical compatibility with a wide range of fluids.

The meltblown polypropylene media provides a bonded matrix thus eliminating fibre migration.

The inherent structural stability of the PP-K Serie, prevents 'channelling' and avoids the risk of particle unloading even under impulse conditions.

The multi-layer combination of filter media, irrigation mesh and drainage material carefully pleated and thermally bonded maximises the filtration depth and ensures an efficient flow throughout the cartridge.

The PP-K Serie fusion bonded construction ensures cartridge integrity. No surfactants or bonding agents are used, minimising extractables.

OPERATING CONDITIONS

Maximum Operating Pressure	6.9 bar (100 psi) at 25 °C 4.0 bar (58 psi) at 60 °C 2.4 bar (35 psi) at 80 °C
Max. Differential Pressure	Forward 6.9 bar (100 psi) at 25 °C 2.4 bar (35 psi) at 80 °C Reverse 3.0 bar (44 psi) at 25 °C 1.0 bar (15 psi) at 80 °C
Sterilization	Inline Steam Sterilization: 20 cycles for 30 min at 125 °C (Differential Pressure < 30 kPa) Hot Water Sterilization: 50 cycles for 30 min at 85 °C
Cleaning Solution	2% NaOH Solution @ ≤65°C
Effective Filtration Area	0.23m ² / 71-10 inch



Kronsbein ultrafilter®

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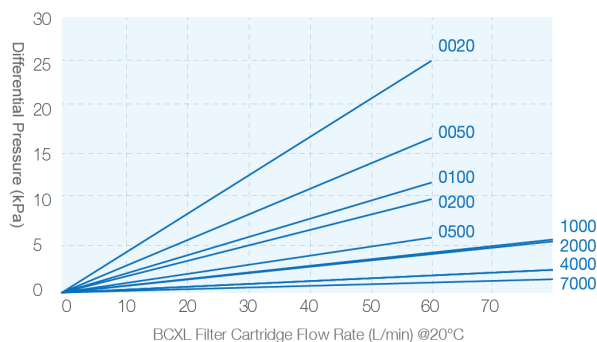
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Flow Rate Characteristics



Technical Data:

MATERIALS OF CONSTRUCTION

Filter Medium	Multi-Layer Polypropylene
Cage Support	Polypropylene
Core Endcaps	Polypropylene

RETENTION RATES

Retention Rates [%]							
PF-PP-K	1.0 µm	2.0 µm	5.0 µm	10 µm	20 µm	40 µm	70 µm
0020	≥99.90	≥99.90	≥99.90	≥99.99	≥99.99	≥99.99	≥99.99
0050	≥99.00	≥99.50	≥99.90	≥99.90	≥99.99	≥99.99	≥99.99
0100	≥98.00	≥99.00	≥99.50	≥99.90	≥99.98	≥99.99	≥99.99
0200		≥98.00	≥99.00	≥99.50	≥99.90	≥99.98	≥99.99
0500			≥98.00	≥99.00	≥99.50	≥99.90	≥99.98
1000				≥98.00	≥99.00	≥99.50	≥99.90
2000					≥98.00	≥99.00	≥99.50
4000						≥98.00	≥99.00
7000							≥98.00

ORDERING INFORMATION

PF-PP-K-F

	REMOVAL	NOMINAL LENGTH	END CAP	SEAL MATERIAL
[71]	01 = 0.01 µm	05 = 5"	2 = Code 2	A = EPDM
	1 = 0.1 µm	10 = 10"	3 = Code 3	B = Silicone
	2 = 0.2 µm	20 = 20"	7 = Code 7	C = Viton
	4 = 0.45 µm	30 = 30"	8 = Code 8	D = Nitrile
		40 = 40"	MF = DOE	E = FEP Viton
			UF = UF	F = FEP Silicone

Technical Alternations reserved



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