



KPP

Absolute Rated Pleated Depth Filters



A range of absolute rated cartridge filters are manufactured, featuring the latest developments in melt blown polypropylene filter media technology; KPP 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 reduces fouling of the filter surface area caused by a broad spectrum of contaminants.

KPP 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 pre-filtration of the process fluid prior to the absolute rated final layer.

The unique design of the KPP cartridge helps to achieve lower running costs and a smaller process footprint. KPP is highly resistant to integrity failure caused by steam sterilisation and has excellent chemical compatibility characteristics.

Typical Applications

- Pharmaceuticals and bio-processing
- Foods and beverages
- Process water systems
- Fine chemicals
- Cosmetics
- Inkjet

Features and Benefits

- Graded multi-layer media
- Guaranteed removal ratings
- Suitable for steam and hot water sanitisation
- Full traceability
- Controlled manufacturing environment

Ordering Information

1: Membrane		2: Pore rating		3: Version		4: Length		5: End fitting		6: Seals		7 Additional	
CF-K	KPP	P5	0.5 µm	R	Rinsed	1	10" (254mm)	A	Code 3	A	Ethylene Propylene	A	N+U
		01	1 µm	S	Standard	2	20" (508mm)	B	Code 7	B	Silicone	N	Non-steamable(no insert)
		02	2 µm			3	30" (762mm)	C	Code 8	C	Viton	P	Pharma Grade
		03	3 µm			4	40" (1016mm)	F	N SOE	D	Nitrile		
		05	5 µm			5	5" 125mm)	G	G DOE (short)	E	FEP Encap. Viton		
		10	10 µm					H	G SOE	G	FEP Encap. Silicone		
		15	15 µm					J	216 (218), fin	J	DOE PTFE		
		20	20 µm					K	Code 2				
		30	30 µm					L	223, fin (no lugs)				
		40	40 µm					M	DOE				
		75	75 µm					S	Code 28, fin (3 lugs)				
								T	223, flat (no lugs)				
								U	224, fin				
								Y	BS832, flat				

Product Code:

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Specifications

Materials of Manufacture

Filter media:	Polypropylene
Support layers:	Polypropylene
Inner core:	Polypropylene
Outer support:	Polypropylene
End fittings:	Polypropylene
Support ring:	Stainless steel

Cartridge Dimensions (Nominal)

Diameter:	70mm (2.8")
Length:	1 module (short): 125mm (5")
	1 module: 254mm (10"), 508mm (20")
	2 modules: 762mm (30"), 1016mm (40")

Cartridge Treatment

Standard:	Cleaned without further treatment
Flushed:	Flushed with pyrogen-free water
Rinsed:	Ultra-clean, pulse flushed to give a system resistivity of 18MΩ.cm

Gaskets and O-Rings

Ethylene Propylene, FEP encapsulated, Silicone, Viton®, Nitrile or Polypropylene felt

Maximum Differential Pressure

Normal flow direction at:

20°C (68°F):	6.0 bar (87psi)
80°C (176°F):	4.0 bar (58psi)
100°C (212°F):	3.0 bar (44psi)
120°C (248°F):	2.0 bar (29psi)
125°C (257°F):	1.5 bar (22psi)

Reverse flow direction at:

20°C (68°F):	2.1 bar (30psi)
80°C (176°F):	1.0 bar (15psi)
100°C (212°F):	0.5 bar (7psi)

Sterilisation

In situ steam 80 x 30 minute cycles at 135°C (275°F)
Hot water 200 x 20 minute cycles at 85-90°C (185-194°F)

Extractables

Minimum total extractables. Please refer to the KPP Validation Guide.

Integrity Testing

KPP filter cartridges are batch tested for integrity using the Bubble Point Test. Please contact us for procedural details.

Clean Water Flow Rates

- Typical clean water flow rate:
A 254mm (10") KPP single cartridge exhibits the flow-ΔP characteristics indicated below, for solutions with a viscosity of 1 centipoise.

- Other solutions:
For solutions with a viscosity of greater than 1 centipoise, multiply the indicated differential pressure by the viscosity in centipoise.

