

Masterfilter APKM series

The Masterfilter *PreFil* APKM series absolute multi-layered polypropylene cartridges combines depth filtration with pleated filter technology, ensuring the removal of large quantity of contaminants.

The APKM construction adopts depth filter technology of graded pore-size increasing the efficiency and avoiding filter surface jam.

Graded pore-size distribution from coarse (upstream) to fine (downstream) can remove particles, colloids and gels gradually and extend filter's service life.

Applications

- APIs
- Fine Chemicals
- Fermentation Processes
- Pharmaceutical Water Treatment
- Syrups

Features and Benefits

- High contaminant holding capacity
- Graded pore-size (5 to 7 PP layers) provides excellent flow rate and long service life
- Absolute rating from 0.2 to 70 microns
- Low pressure drop
- 100% PP offers compatibility with most chemicals, solvents caustic and acids

Materials of Construction

- Membrane: Polypropylene
- Support layers: Polypropylene
- Inner core: Polypropylene
- Outer cage: Polypropylene
- End caps: Polypropylene
- Adapter internal support: PBT
- O-ring: EPDM, Silicone, Viton, PTFE encapsulated Viton, PTFE encapsulated Silicone

Operating Parameters

- Max. operating pressure: 6.9 bar at 25 °C, 4.0 bar at 60 °C, 2.4 bar at 80 °C
- Max differential pressure forward: 6.9 bar at 25 °C, 4.0 bar at 60 °C, 2.4 bar at 80 °C
- Max differential pressure reverse: 3.0 bar at 25 °C, 1.0 bar at 80 °C
- Steam sterilisation: up to 20 cycles at 125 °C for 30 minutes (< 0.3 bar, 5 psi)



Quality Assurance

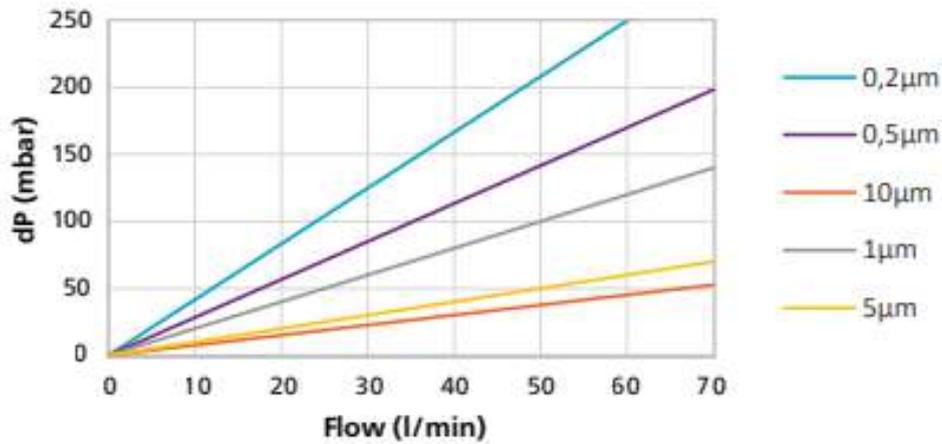
- Cartridge can be marked with unique serial number for identification and traceability
- All components meet the criteria for non-fibre releasing as defined in 21 CFR 210.3 (b) (6)
- APKM is manufactured under ISO 9001:2015
- Particle Shedding: Autoclaved filter effluent meets the USP <788> for LVP
- All component materials meet the FDA indirect Food Additive requirements cited in 21 CFR 177-182

Biological Standards

- Bacterial Endotoxin: Aqueous extraction less than 0.25 EU/ml as determined by Limulus Amebocyte Lysate (LAL), meeting requirements of USP<85>
- Meets the USP <88> Biological Toxicity Reactivity Test, in Vivo for Class VI-121°C plastics

Flow Rate Characteristics

Flow rate



Note: 10" cartridge tested with water @20°C, 1,005 cP (typical flow rate)

Part Numbers

APKM 0100 - 10 - HSF - S

Code	Removal rating [μm]	Length		Code	End caps	Code	O-rings
		[mm]	[inch]				
0020	0.2	05	127	5	DOE	S	Silicone
0050	0.5	10	254	10	HTC	E	EPDM
0100	1	20	508	20	HTF	V	Viton
0200	2	30	762	30	HSC	P	PTFE encaps. Viton
0300	3	40	1016	40	HSF	T	PTFE encaps. Silicone
0500	5				HSH		
1000	10				STC		
2000	20						
4000	40						
7000	70						

e.g. part number: APKM0100-10-HSF-S

APKM filter with 1 μm, 10" length, Code 7 end caps, Silicone O-rings

Contact Masterfilter:

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