

APKV Series

Beer Prefiltration & Bioburden reduction



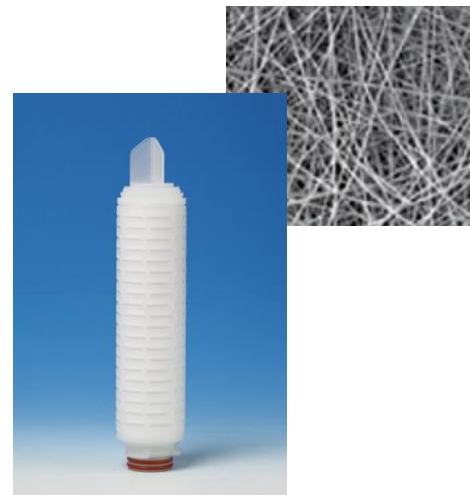
Masterfilter APKV absolute rated filter has been developed for the clarification and microbial pre-stabilization of beer. The control of particulate and bioburden loading is critical to provide stability and prevent spoilage of the beer. Constructed from a unique multilayer of Polypropylene & PVDF nanofibre, the APKV filters maintain high flow rates and excellent dirt holding capacity. The robust nanofiber media construction gives the filter high porosity, strength and facilitates backwash regeneration of the filter making the filter stage a reliable and cost-effective solution to intermediate stabilization.



Beer application

Pre-stabilization & final filter service life

One of the most critical production steps in processing of beer is the final filtration, prior to filling. The beer can typically contain concentration of haze, proteins, colloids, and bio-burden, which can impact the service-life of the final membrane filter. The final filter is heavily influenced by the effectiveness of the upstream prefilter. Selecting the APKV prefilter is key to optimising the overall beer quality and stability and maintaining economical production costs.



Features	Benefits
Nanofibre PVDF/PP matrix	High porosity offering excellent flux rates
Absolute rated for yeast retention and bio-burden reduction	Optimised clarity and stability of beer
Construction designed to handle broad CIP chemical compatibility and back wash regeneration of the filter	Increased service life and performance
Graded density layer media	High retention capacity of bioburden as well as wine spoilage contaminants

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Quality Assurance

- All materials used in APKV meet the requirements of FDA 21 CFR and EU No. 1935/2004 and EU10/2011

Materials of Construction

- Membrane:** Multilayer Polypropylene & Nanofiber PVDF
- Support Layers:** Polypropylene
- Inner Core:** Polypropylene
- Outer Cage:** Polypropylene
- End Caps:** Polypropylene

Operating Parameters

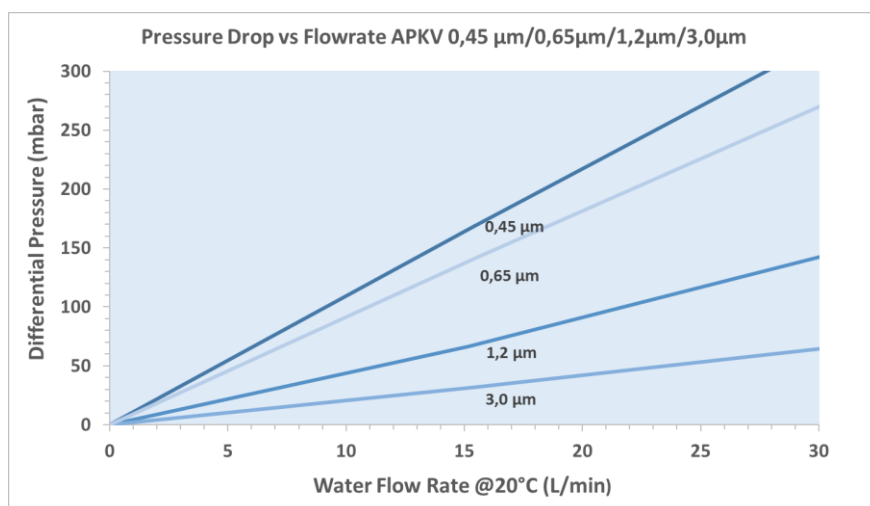
- Max differential pressure forward** 4,2 bar (21°C)
- Max differential pressure reverse** 2,1 bar (21°C)
- Max operating temperature:** < 85°C / 176°F
- pH range:** 1.0 – 14.0

Effective Filtration Area (EFA)

0.68m² (7.32ft²) /10" (250mm)

Microbiological retention

APKV beer pre-filter (1.2 µm, 0.65 µm and 0.45 µm) is an absolute rated filter that is suited for microbial reduction of *Saccharomyces Cerevisiae*, *Brettanomyces Brucellosis*, yeast and fungi.



Part Numbers

APKV

065

10

HSF

S

Code	Removal rating micron
045	0,45
065	0,65
120	1,2
300	3,0

Code	length	
	mm	inch
10	254	10
20	508	20
30	762	30
40	1016	40

Code	end caps
STC	Sartorius code 28
HTF	222 O-ring/fin (Code 8)
HSF	226 O-ring/fin (Code 7)
HSC	226 O-ring/flat (Code 2)

Code	O-Rings
S	Silicone
E	EPDM
V	Viton

e.g. part number: APKV065-10-HSF-S – Multi layers PP/PVDF filter, 0.65 µm, 10" length, Code 7 end caps, silicone O-rings