

Masterfilter APKV series

The Masterfilter *PreFil* APKV series 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 and PVDF nanofiber, 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 stabilisation.

Beer application

Pre-stabilisation and 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 and Benefits

- Nanofiber 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

Materials of Construction

- Membrane: Multilayer Polypropylene and Nanofiber PVDF
- Support layers: Polypropylene
- Inner core: Polypropylene
- Outer cage: Polypropylene
- End caps: Polypropylene
- O-ring: EPDM, Silicone, Viton



Operating Parameters

- Max. differential pressure forward: 4.2 bar at 21 °C
- Max. differential pressure reverse: 2.1 bar at 21 °C
- Max. operating temperature: < 85°C / 176 °F
- pH range: 1.0 to 14.0
- Effective filtration Area (EFA): 0.68 m² (7.32 ft²) for 10" (250mm) length

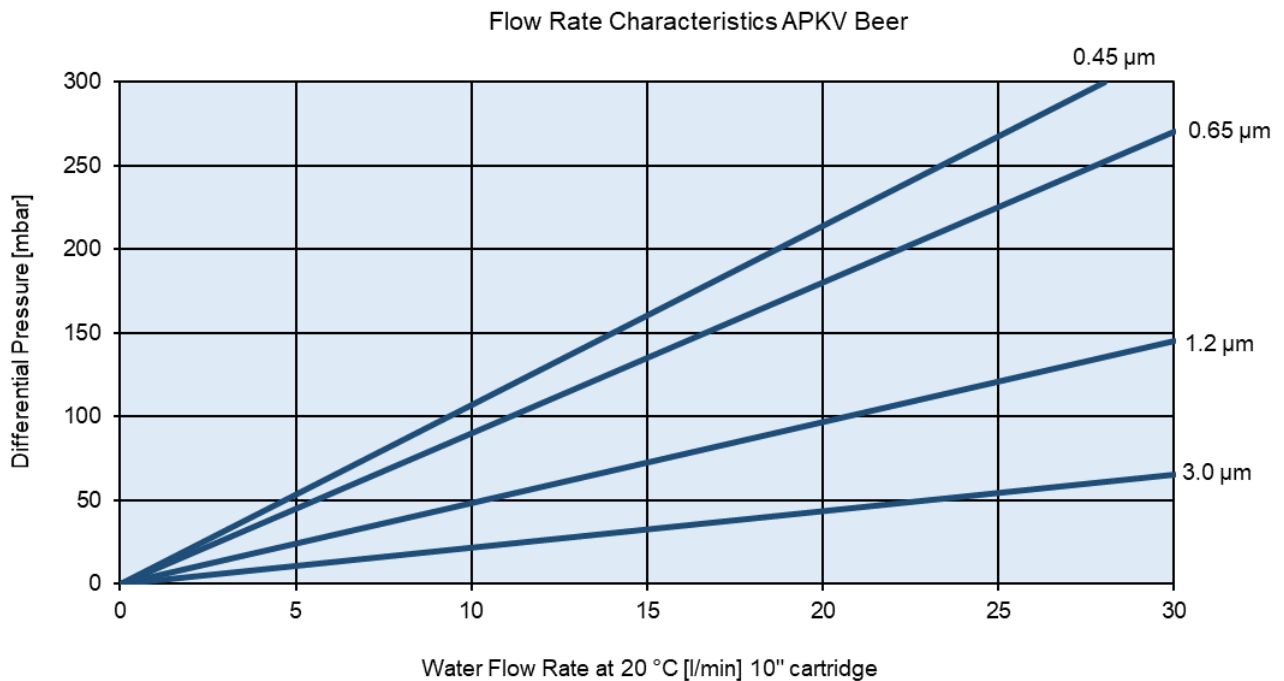
Quality Assurance

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

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.

Flow Rate Characteristics



Part Numbers

APKV 0065 - 10 - HSF - S

Code	Removal rating [µm]
045	0.45
065	0.65
120	1.2
300	3

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

APKM with multi layers PP/PVDF filter, 0.65 µm, 10" length, Code 7 end caps, silicone O-rings