

APKV Series

Wine Prefiltration & Bioburden reduction



Masterfilter APKV absolute rated filter has been developed for the clarification and microbial pre-stabilization of wines. The control of particulate and bioburden loading is critical to provide stability and prevent spoilage of the wine. 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.



Wine application

Pre-stabilization & final filter service life

One of the most critical production steps in processing of wine is the final filtration, prior to filling. The wine 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 wine 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 wine
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

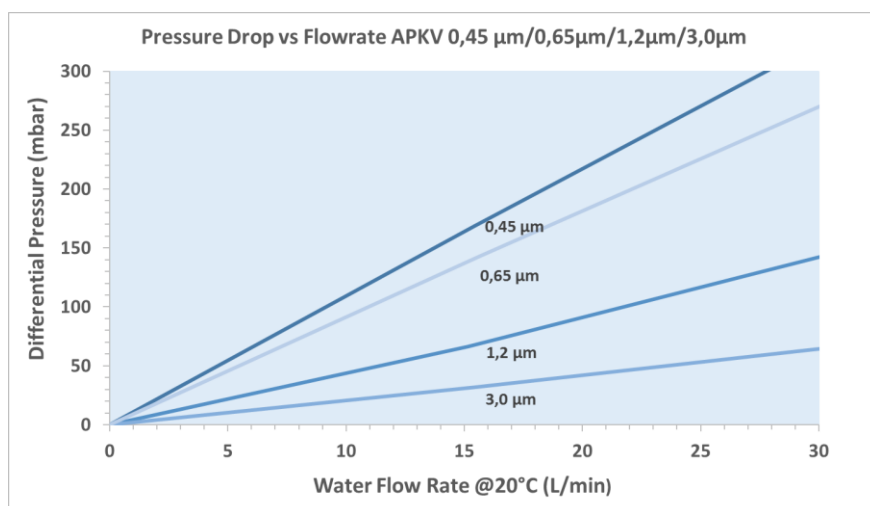
- Max differential pressure forward** 4,2 bar (21°C)
- Max differential pressure reverse** 2,1 bar (21°C)
- Max operating temperature:** < 85°C / 176°F
- pH range:** 1.0 – 14.0

Effective Filtration Area (EFA)

0.68m² (7.32ft²) /10" (250mm)

Microbiological retention

APKV Wine 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		10			HSF		S	
065								
Code	Removal rating micron	Code	length		Code	end caps	Code	O-Rings
			mm	inch				
045	0,45	10	254	10	STC	Sartorius code 28	S	Silicone
065	0,65	20	508	20	HTF	222 O-ring/fin (Code 8)	E	EPDM
120	1,2	30	762	30	HSF	226 O-ring/fin (Code 7)	V	Viton
300	3,0	40	1016	40	HSC	226 O-ring/flat (Code 2)		

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