

PESF Series

Wine stabilisation – Polyethersulphone Asymmetric membrane filter

MF
Masterfilter

Masterfilter PESF series filters are designed to retain 'wine spoilage' such as yeast, lactic and acetic bacteria, so preventing post-fermentation, turbidity and affecting the organoleptic properties of the wine, following bottling. The validated single layer asymmetric PES membrane filter compliments our **Masterfilter APKV** pre-filter by acting as final security barrier. The combination of our **APKV** pre-filter and **PESF** final stabilization filter, enable an optimized wine filtration system with extended shelf life and economic operating costs.



Features	Benefits
Inherently Hydrophilic membrane	Easily wettable and Integrity testable
Asymmetric pore structure	Excellent flux rates and pore distribution offering high retention efficiencies
Thermal Bonded sealing and Polypropylene hardware/ PES media, materials of construction	Free from Adhesives and surfactants and extractables at high temperature
Log retention value (LTV) Absolute rated	Retention efficiencies proven against Wine spoilage contaminants

Food Regulatory Compliance

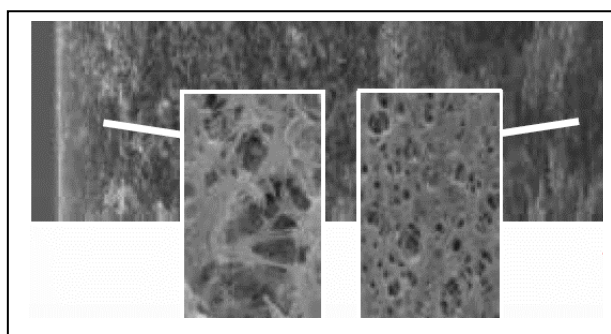
Comply with the relevant requirements of EU 1935/2004 and EU directive 10/2011

Food and Biological Safety Materials conform to the relevant requirements of FDA 21CFR Parts 170 to 199.

Materials of construction

Filter membrane	Polyethersulphone
Support layer	Polypropylene
Inner Core	Polypropylene
Outer Core	Polypropylene
End cap	Polypropylene
O-Ring seals	EPDM/Silicone

S.E.M Asymmetric PES



Effective Filtration Area: 0,62 m² per 10"/

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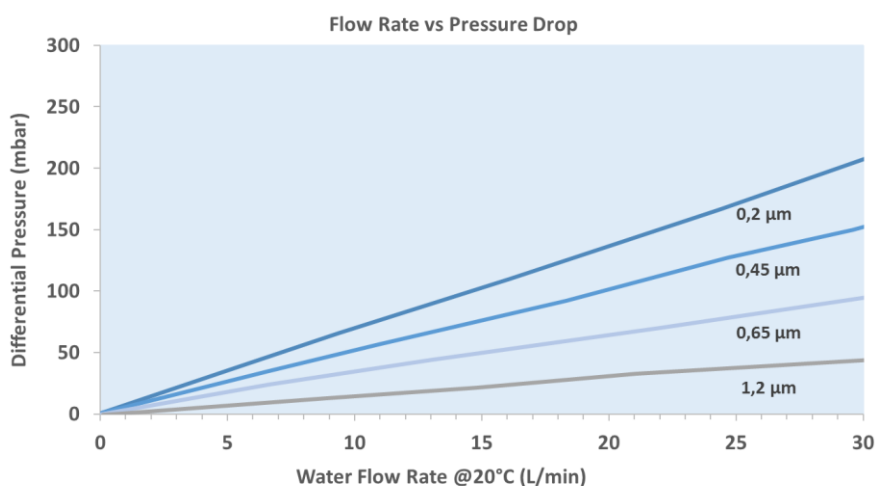
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Operating parameters

Maximum operating temperature	82°C@ 1.9Bar
Maximum differential pressure (Forward)	5.2bar@25°C
Maximum differential pressure (Reverse)	2.1bar@25°
Hot water sterilisation: 85°C/30 min @max. differential pressure of 2 bar	
In situ steam Sterilization: 124°C/20min @max. differential pressure of 0,5 bar (150 cycles)	
Autoclaving: 134°C/30min (100 cycles)	

Flow Rate Characteristics



Typical Log Reduction Value (LRV)				
	Acholeplasma L.	B. Diminuta	Lactobacillus Brevis	Saccharomyces Cerevisiae
0,2 µm	N/A	> 7/cm ²	N/A	N/A
0,45 µm	N/A	N/A	> 7/cm ²	> 7/cm ²
0,65 µm	N/A	N/A	> 7/cm ²	> 7/cm ²
1,2 µm	N/A	N/A	N/A	> 7/cm ²

Part Numbers

PESF

045

Code	Removal rating micron
020	0,2
045	0,45
065	0,65
120	1,2

10

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

HSF

Code	end caps
STC	Sartorius code 28
HTC	222 O-ring/flat (Code 3)
HTF	222 O-ring/fin (Code 8)
HSF	226 O-ring/fin (Code 7)
HSC	226 O-ring/flat (Code 2)

S

Code	O-Rings
S	Silicone
E	EPDM
V	Viton

e.g. part number: PESF045-10-HSF-S single layers PESF filter, 0.45 µm, 10" length, Code 7 end aps, silicone O-rings