OptiPes PESF Series Filter

Wine Stabilisation - Polyether Sulphone Asymmetric Membrane Cartridge

Masterfilter PESF series

The Masterfilter *OptiPes* 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 stabilisation filter, enable an optimised wine filtration system with extended shelf life and economic operating costs.

Applications

- Food and beverage - wine

Features and 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

Materials of Construction

- Membrane: Polyether sulphone
- Support layers: Polypropylene
- Inner core: Polypropylene
- Outer cage: Polypropylene
- End caps: Polypropylene
- O-rings: Silicone, EPDM, Viton

Operating Parameters

- Max. operating temperature: 82 °C at 1.9 bar
- Max. differential pressure forward: 5.2 bar at 25 °C
- Max. differential pressure reverse: 2.1 bar at 25 °C
- Autoclave: 100 cycles for 30 minutes at 134 °C
- Hot water sanitisation: 30 minutes at 85 °C at max. differential pressure of 2 bar
- In situ steam sterilisation: 150 cycles for 20 minutes at 124 °C, max. differential pressure of 0.5 bar
- Filtration area 10” module: 0.62 m²

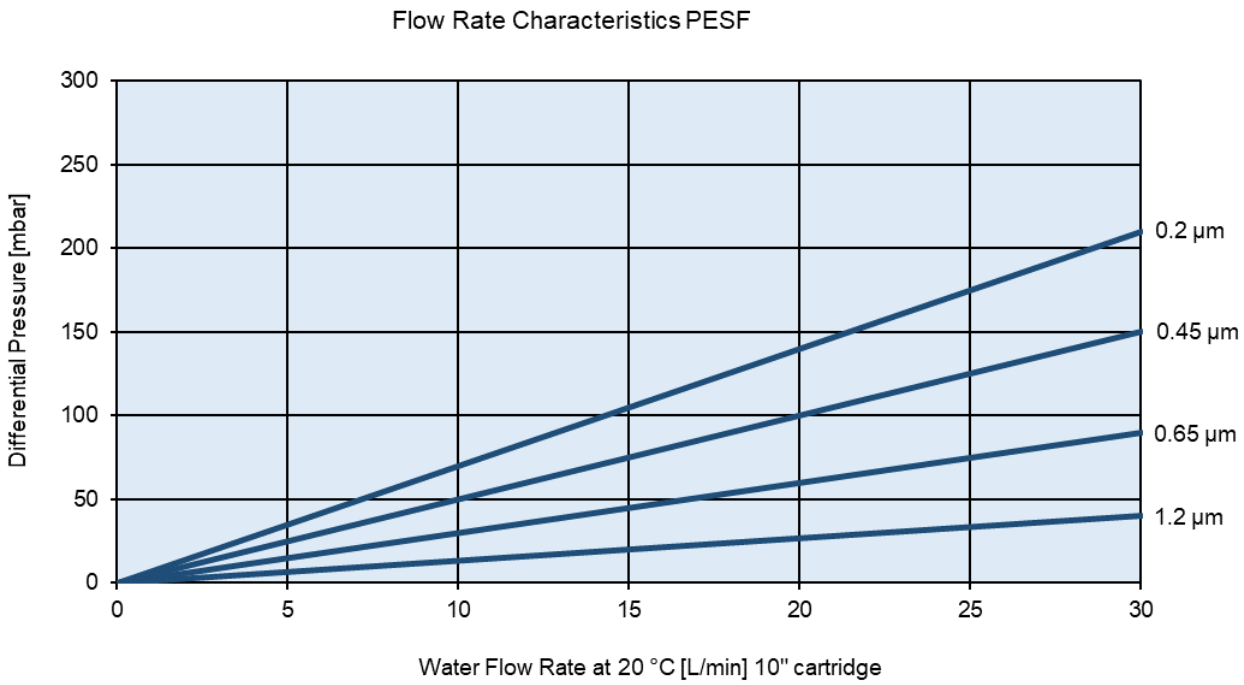
Food Regulatory Compliance

- 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.

Typical Log Reduction Value (LRV)

0.2 µm	- > 7/cm² for B. Diminuta
0.45 µm	- > 7/cm² for Lactobacillus Brevis - > 7/cm² for Saccharomyces Cerevisiae
0.65 µm	- > 7/cm² for Lactobacillus Brevis - > 7/cm² for Saccharomyces Cerevisiae
1.2 µm	- > 7/cm² for Saccharomyces Cerevisiae

Flow Rate Characteristics



Part Numbers

PESF	045	-	10		HSF	-	S

Code	Removal rating [µm]
020	0.2
045	0.45
065	0.65
120	1.2

Code	Length	
	[mm]	[inch]
10	254	10
20	508	20
30	762	30
40	1016	40

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)

Code	O-Ring
S	Silicone
E	EPDM
V	Viton

e.g. part number: PESF-045-10-HSF-S

PESF filter, 0.45 µm, 10” Length, End caps Code 7, Silicone O-rings