

Vinofil™

Double Layer Membrane Filters for Wine and Beer Filtration



Vinofil™ membrane cartridges are specifically designed for wine and beer filtration, as a final filter for cold biological stabilisation. Vinofil™ cartridges utilise a double layer of naturally hydrophilic polyethersulfone (PES) membrane with a mirrored asymmetric pore structure, providing graded filtration throughout its depth, resulting in higher throughputs and long service life.

Vinofil™ cartridges exploit the narrow pore size distribution and high void volume of the media to provide a choice of cartridges capable of meeting the requirements of most applications. These cartridges offer high flux rates and low differential pressures, a feature common to polyethersulfone membranes.

Ordering Information

Product Code:						
1: Membrane	2: Pore rating	3: Version	4: Length (Nominal)	5: End Fitting	6: Seals	7: Additional
VT	Vinofil™	20 0.2µm	A 10" (254mm)	A Code 3	A Ethylene Propylene	A N+U
		45 0.45µm	B 20" (508mm)	B Silicone	N Non-steamable (no insert)	
		65 0.65µm	C 30" (762mm)	C Viton®	U Unbranded	
			D 40" (1016mm)	D Nitrile		
			E 5" (125mm)	E FEP Encap. Viton®		
			F G DOE (short)	G FEP Encap. Silicone		
			H G SOE	J DOE PTFE		
			I 216 (218), fin			
			K 223, fin (no lugs)			
			L 224, fin			
			M 226, fin			
			N F20 +Code 7 (SS Core)			
			O F20 +Code 2 (SS Core)			
			P BS832, flat			
			Q F20 +Code Y (SS Core)			

Features and Benefits

- Guaranteed microbial ratings
- Low binding and fouling
- Will not hydrolyse
- Excellent chemical compatibility
- Cartridge integrity and low TOC levels
- Suitable for steam sterilising
- Full traceability
- Controlled manufacturing environment

Specifications

Materials of Manufacture

Filter membranes:	Dual Polyethersulfone
Membrane support:	Polypropylene
Irrigation mesh (support):	Polypropylene
Drainage layer:	Polypropylene
Inner core:	Polypropylene
Outer support:	Polypropylene
End fittings:	Polypropylene
Support ring:	Stainless steel

Cartridge Dimensions (Nominal)

Effective Filtration Area:	0.48m ² (5.2ft ²) per 10" module
Diameter:	70mm (2.8")
Length:	1 module (short): 125mm (5") 1 module: 254mm (10") 2 modules: 508mm (20") 3 modules: 762mm (30") 4 modules: 1016mm (40")

Cartridge Treatment

Standard:	Cleaned and flushed with pyrogen-free water
Rinsed:	Ultra-clean, pulse flushed to give a system resistivity of 18MΩ.cm

Gaskets and O-Rings

FDA approved Ethylene Propylene, FEP encapsulated, Silicone, Viton® or Nitrile

Maximum Differential Pressure

Normal flow direction at:

20°C (68°F):	6.0bar (87psi)
80°C (176°F):	4.0bar (58psi)
100°C (212°F):	3.0bar (44psi)
120°C (248°F):	2.0bar (29psi)

Reverse flow direction at:

20°C (68°F):	2.1bar (30psi)
80°C (176°F):	1.0bar (15psi)
100°C (212°F):	0.5bar (7psi)

Operating Temperature

Maximum continuous: 85-90°C (185-194°F)

Sterilisation

In situ steam 80 x 20 minute cycles at 125°C (257°F)
Hot water 200 x 20 minute cycles at 85-90°C (185-194°F)

Extractables

Minimum total extractables. Please refer to the Vinofil™ Validation Guide.

Integrity Testing

Each Vinofil™ module of every cartridge is individually integrity tested using the Diffusive Flow Test, which correlates to the HIMA and ASTM F838-05 bacterial challenge tests. Non-destructive integrity tests, such as Pressure Hold, Diffusive Flow and Bubble Point, can be performed by customers. Please contact us for procedural details.

Clean Water Flow Rates

- Typical clean water flow rate:
A 254mm (10") Vinofil™ single cartridge exhibits the flow- Δ P characteristics indicated below, for solutions with a viscosity of 1 centipoise.
- Other solutions:
For solutions with a viscosity other than 1 centipoise, multiply the indicated differential pressure by the viscosity in centipoise.

