

Ventafil™

ePTFE Membrane
Cartridge Filters for
Autoclave Venting



Ventafil™ cartridges are manufactured using a highly hydrophobic ePTFE membrane and are designed for autoclave venting. The enhanced ePTFE membrane offers exceptionally high gas flow rates at low pressure differentials.

Ventafil™ cartridges are designed with either a ¼" or ½" BSP male thread for autoclave and small tank venting applications. The hydrophobic characteristics of the ePTFE membrane makes the Ventafil™ filter cartridge particularly suitable for rapid vacuum break in autoclaves.

Typical Applications

- Autoclave vents
- Sterile product storage vessels

Features and Benefits

- Validated with *B. diminuta* >10⁷ cfu/cm²
- Bacterial spores and virus retention
- Steam sterilisation
- 100% integrity tested prior dispatch
- Full traceability
- USP class VI approved
- Uses FDA compliant materials
- Non-fibre releasing

Ordering Information

Product Code: 1 2 3 4			
1: J-Style		2: Length	
F20VENT	Ventafil™	2.5	77.5mm (2.5")
		5	136mm (5.0")
		10	254mm (10")
		3: Options Threaded	
		B	1/2" BSP
		X	1/4" BSP
		4: Additional	
		P	Pharma Grade

Specifications

Materials of Manufacture

Filter membrane:	ePTFE
Membrane support:	Polypropylene
Irrigation mesh (support):	Polypropylene
Drainage layer:	Polypropylene
Inner core:	Polypropylene
Outer support:	Polypropylene
End fittings:	Polypropylene
O Rings:	Fusion bonding

Cartridge Dimensions (Nominal)

Effective Filtration Area:	0.32m ² (3.4ft ²) per 5" module.
Diameter:	70mm (2.8")
Length:	64mm (2.5") 136mm (5.0") 254mm (10")

Cartridge Treatment

Standard:	Cleaned and flushed, without further treatment
Rinsed:	Ultra-clean, pulse flushed to give a system resistivity of 18MΩ.cm

Adaptor and O-Ring

Silicone (other materials are available on request)
1/4" and 1/2" BSP male thread.

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)
125°C (257°F):	1.5bar (22psi)

Sterilisation

In situ steam 100 x 20 minute cycles at 135°C (275°F)

Extractables

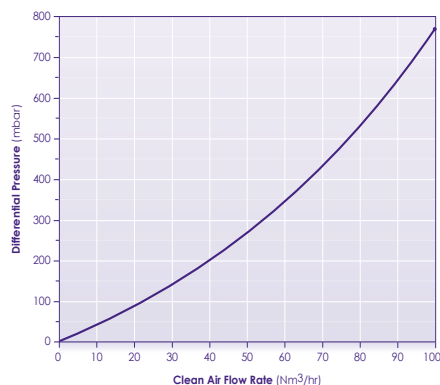
Minimum total extractables. Please refer to the Fluorofil™ Validation Guide.

Integrity Testing

Each Ventafil™ cartridge is individually integrity tested using the Diffusive Flow Test, which correlates to the HIMA and ASTM F838-20 bacterial challenge tests. Non-destructive integrity tests, such as Diffusive Flow, Water Intrusion, Pressure Hold and Bubble Point, can be performed by customers. Procedural details are available from **Porvair**.

Clean Air Flow Rates

- Typical clean air flow rate:
A 136mm (5") Ventafil™ cartridge exhibits the flow- Δ P characteristics indicated below.



Filter Selection

- Vacuum break application:
If the initial vacuum is at -980 mbarg, the time required before the vacuum break conditions required to safely open the autoclave door (at -20mbarg) are achieved, is indicated below.

