



HIGH FLOW TETPOR II Filter Cartridges

- Sterilizing Grade Air and Gas Filters
- Expanded PTFE Membrane

HIGH FLOW TETPOR II gas sterilization filters have been developed to benefit from technological advances within the manufacturer of PTFE membranes. This new generation of filter sets the standard with an unrivalled combination of efficiency, flow rate and strength.

The **HIGH FLOW TETPOR II** is validated as a 0.2 micron sterilizing grade filter in liquids through ASTM F838-05 in gas through full retention to an aerosol challenge of MS2 phage. This ensures the filter will guarantee the sterility of your process in the worst-case scenario where the filter may be subjected to bulk liquid due to a process problem. Subtle changes to the structure of the hydrophobic PTFE have also resulted in the production of an extremely robust product now validated for 225 steam sterilization cycles @142°C (287.6°F). The combination of non-woven supports upstream of the membrane and an expanded net layer downstream has significant benefits. It provides increased protection and service life while guaranteeing zero fibre shedding into the process.

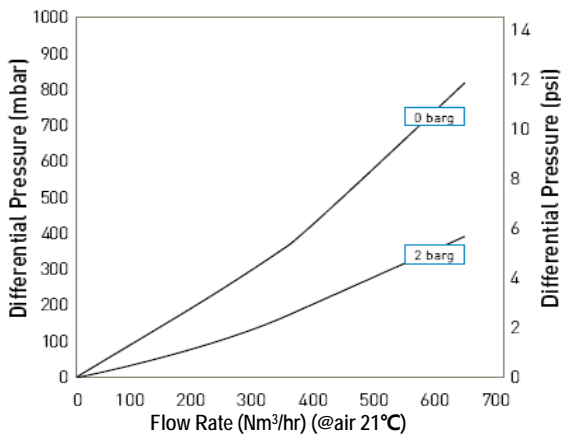
HIGH FLOW TETPOR II is suitable for all sterile gas applications including fermentation inlet and off gas streams, venting, lyophilisers, autoclave vacuum breaks and blow-fill-seal equipment as well as the provision of particle free air within the electronics industry.

Features and Benefits

- Optimum pleat configuration
- Steam sterilizable up to 225 cycles at 142 °C (287.6 °F)
- Unrivalled flow rates combined with low pressure drops
- Fully validated to ASTM 838-05 for liquid bacterial challenge
- Fully validated to aerosol and viral challenge
- Integrity testable by all methods including water intrusion test



Performance Characteristics



10" (250mm) Length Cartridge

HIGH FLOW TETPOR II / Filter Cartridges

Specifications

Materials of Construction

■ Membrane:	Expanded PTFE
■ Upstream Support:	Polypropylene
■ Downstream Support:	Polypropylene
■ Inner Core:	316L Stainless Steel
■ Outer Cage:	Polypropylene
■ End Caps:	Polypropylene
■ End Cap Insert:	Polysulphone
■ Standard o-rings:	Silicone

Food and Biological Safety

Materials conform to the relevant requirements of 21CFR Part 177 and current USP Plastics Class VI - 121°C and ISO10993 equivalents.

Recommended Operating Conditions

The maximum differential pressure in direction of flow (outside to in) is 3.5barg (50.76psig) at 60°C (140°F).

The maximum recommended continuous inlet air temperature is 60°C (140°F).

Sterilization

HIGH FLOW TETPOR II cartridges can be in situ steam sterilized for up to 225 cycles at 142°C (287.6°F).

Retention Characteristics

HIGH FLOW TETPOR II cartridges have been fully validated as 0.2 micron sterilizing grade filter cartridges, for compressed air and gas applications. They exceed liquid bacterial challenge levels as recommended by ASTM F 838-05.

In addition, HIGH FLOW TETPOR II cartridge is also validated by aerosol bacterial and MS-2 Coliphage challenge testing.

Integrity Test Data

All cartridges are integrity tested prior to despatch by the pressure decay and aerosol challenge test methods. Values are for cartridges wetted with 60 / 40 IPA / Water.

Cartridge	Test Pressure		Diffusional Flow	Water Intrusion Test Pressure		Water Intrusion	Water Flow
	[bar]	[psig]		[bar]	[psig]		
10"	0.8	11.6	16.50	2.5	36.2	13.5	3857
20"	0.8	11.6	33.00	2.5	36.2	27	7714
30"	0.8	11.6	49.50	2.5	36.2	40.5	11571

Ordering Information

HIGH FLOW TETPOR II

ZHFT /

Nominal Length

1 : 10" (250mm)
2 : 20" (500mm)
3 : 30" (750mm)

End Cap Style

C : 226/FIN(P-7)
P* : BIO-X Retrofit
H* : UF Retrofit

*P,H availables only silicone o-ring

Seal Material

S : Silicone
E : EPDM
P* : FTFE
V : Viton

P* : PTFE Encapsulated Silicone

Ex) ZHFT/1C-SK : 0.2mic PTFE membrane/10" Length/226 FIN Type End Cap/Silicone seal
ZHFT/3C-EK : 0.2mic PTFE membrane/30" Length/226 FIN Type End Cap/EPDM seal

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