HIGH FLOW TETPOR II Filter Cartridges

- air / gas filters
- polytetrafluoroethylene PTFE

domnick hunter

HIGH FLOW TETPOR II gas sterilisation filters have been developed to benefit from technological advances within the manufacture 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 sterilising grade filter in liquids through ASTM 838-05 and 0.01 micron 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 PTFE have also resulted in the production of an extremely robust product now validated for 225 steam sterilisation 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.

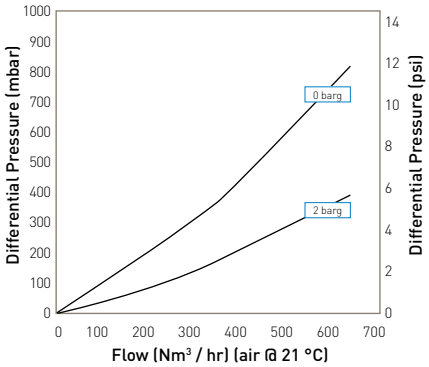
HIGH FLOW TETPOR II is suitable for all sterile gas applications including fermentation inlet and off gas streams, venting, lyophilisers, autoclave vacuum breaks and blow-fill-seal equipment as well as the provision of particle free air within the electronics industry.

Features and Benefits

- Optimum pleat configuration
- Steam sterilisable 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

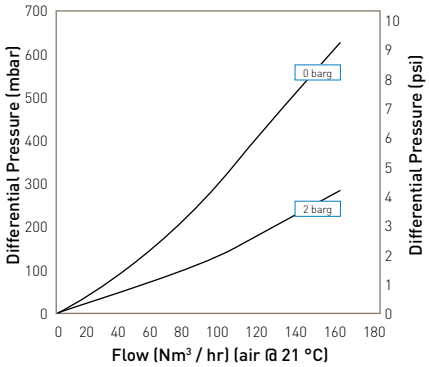
Note: TETPOR is a registered trademark of Parker domnick hunter

Performance Characteristics



Flow rates for other sizes available upon request

10" Size (250 mm) Cartridge



Flow rates for other sizes available upon request

A Size (125 mm) Cartridge

Specifications

Materials of Construction

- Filtration Membrane: Polytetrafluoroethylene PTFE
- Upstream Support: Polypropylene
- Downstream Support: Polypropylene
- Inner Support Core: 316L Stainless Steel
- Outer Protection 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, EC1935 / 2004 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 3.5 barg (50.76 psig) at 60 °C (140 °F).

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

Note: HIGH FLOW TETPOR II cartridges can be used as WFI vents in heated housings if changed on a 4-6 monthly basis.

Sterilisation

HIGH FLOW TETPOR II cartridges can be in situ steam sterilised 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 sterilising grade filter cartridges, for compressed air and gas applications. They exceed liquid bacterial challenge levels as recommended by ASTM+. In addition, HIGH FLOW TETPOR II is also validated by aerosol bacterial and *MS-2 Coliphage* challenge testing.

+ASTM American Society for Testing and Materials

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 (bar)	Test Pressure (psi)	Diffusional Flow (ml / min)	Water Intrusion Test Pressure (barg)	Water Intrusion Test Pressure (psig)	Water Intrusion (ml / 10 min)	Water Flow (µl / 10 min)
D	0.8	11.6	0.6	2.5	36.2	N / A	N / A
C	0.8	11.6	1.1	2.5	36.2	N / A	N / A
B	0.8	11.6	2.8	2.5	36.2	2.3	657
A	0.8	11.6	5.6	2.5	36.2	4.6	1314
K	0.8	11.6	7.70	2.5	36.2	6.4	1828
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	27.0	7714
30"	0.8	11.6	49.50	2.5	36.2	40.5	11571

Ordering Information

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Code	Length (Nominal)	
D	1.5"	(35 mm)
C	2.5"	(65 mm)
B	2.5"	(65 mm)
A	5"	(125 mm)
K	5"	(125 mm)
1	10"	(250 mm)
2	20"	(500 mm)
3	30"	(750 mm)

Code	Endcap (10")
C	P-7
P	BIO-X Retrofit
H	UF Retrofit

Code	Endcap (Demi)
H	UF Retrofit
T	TRUESEAL
W	HF Demi C & D
Y	Demi MCY
Z	Demi A & B Std

Code	O-rings
E	EPDM
P	FEP Encapsulated Silicone
S	Silicone
V	Viton

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www.domnick hunter.com
dhprocess@parker.com
+44 (0)191 4105121