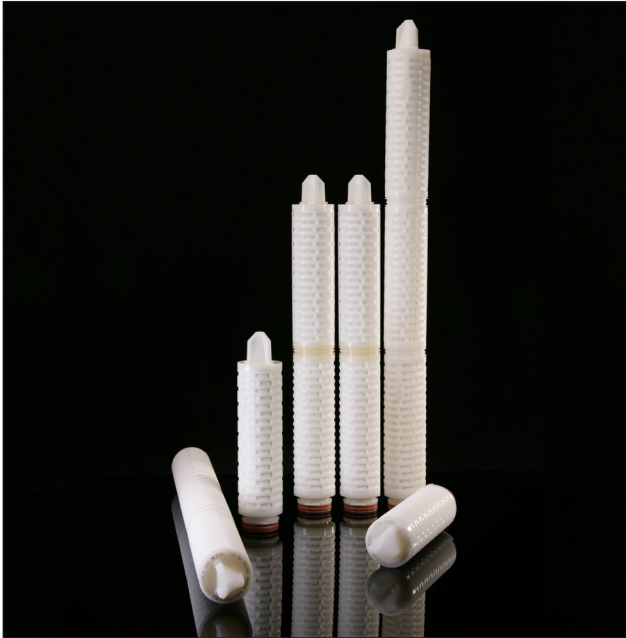


# HIGH FLOW TETPOR II Air & Gas

Filter Cartridges



HIGH FLOW TETPOR II gas sterilization 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 sterilizing grade filter in liquids through ASTM F838-05 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 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.

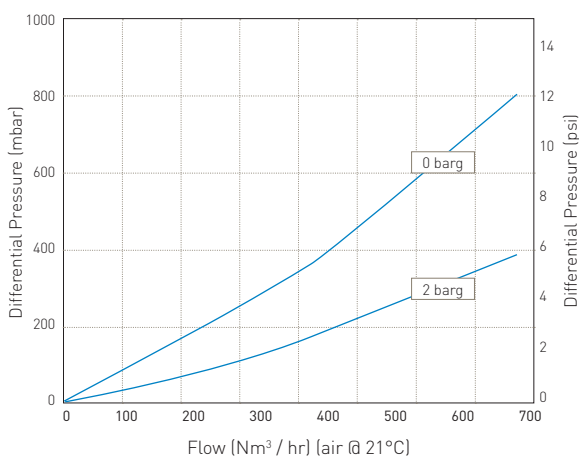
## Features

- Highly hydrophobic PTFE membrane
- Fully validated to ASTM F838-05 liquid bacterial challenge
- Fully validated to aerosol and viral challenge
- Unique high flowing PTFE membrane
- Can be in-situ steam sterilized for up to 225 cycles at 142°C

## Benefits

- Prevents membrane blinding during high humidity conditions
- Provides sterile effluent in high humidity environments and increased product protection
- Increased energy savings due to reduced pressure loss
- Long service life under aggressive processing conditions

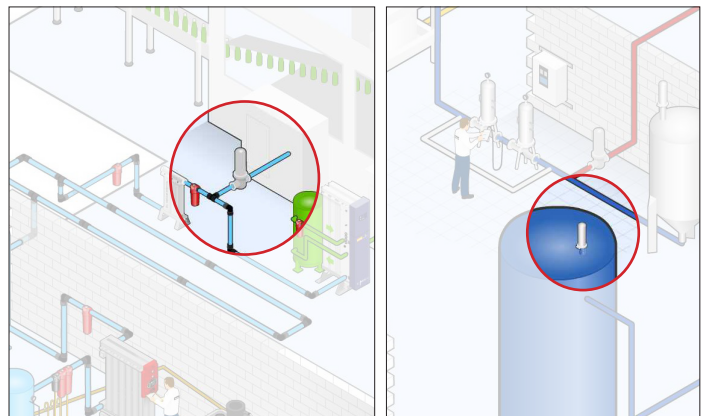
## Performance Characteristics



For A size filter, multiply dP by factor of 3 at same flow

## Filtration Stage

### Sterile Gas and Vent Filtration



## Specifications

### Materials of Construction

■ Filtration Media:	Expanded 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/gaskets:	Silicone

### Food Contact Compliance

Parker domnick hunter's range of HIGH FLOW TETPOR II filters are intended for indirect food contact and as such are manufactured from materials suitable for the sterilization of compressed gasses within Food and Beverage applications. Materials conform to the relevant requirements of the United States FDA 21 CFR part 177 and USP Plastics Class VI – 121°C .



### Sterilization

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

For detailed operational procedures and advice on cleaning and sterilization, please contact the Technical Support Group through your usual Parker domnick hunter contact.

### 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+. 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 diffusional flow and aerosol challenge test methods. Values are for cartridges wetted with 60 / 40 IPA / Water.

Cartridge	Test Pressure		Diffusional Flow (ml / min)
	(barg)	(psig)	
D	0.8	11.6	0.6
C	0.8	11.6	1.1
B	0.8	11.6	2.8
A	0.8	11.6	5.6
K	0.8	11.6	7.70
10"	0.8	11.6	16.50
20"	0.8	11.6	33.00
30"	0.8	11.6	49.50

### 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.*

## Ordering information

ZHFT	/		-		
Code	Length (Nominal)	Code	End Cap (10 inch)	Code	O-rings
D*	1.5" (35 mm)	C	P-7	E	EPDM
C*	2.5" (65 mm)	P	BIO-X Retrofit	P <sup>(1)</sup>	PTFE Encapsulated Silicone
B*	2.5" (65 mm)	H	UF Retrofit	S <sup>(2)</sup>	Silicone
A*	5" (125 mm)			V	Viton
K	5" (125 mm)				
1	10" (250 mm)	Code	End Cap (Demi)		
2	20" (500 mm)	H	UF Retrofit		
3	30" (750 mm)	W	HF Demi C & D		
		T	TRUESEAL		
		Y	Demi MCY		
		Z	Demi A & B Std		

*\*Supplied in packs of 3*

<sup>(1)</sup>Not available on C and D length variants  
<sup>(2)</sup>Silicone o-ring supplied as standard without having to specify the 'S' code

HBA, HPG  
& HSV  
HOUSING RANGE  
AVAILABLE