

HIGH FLOW BIO-X Air & Gas

Filter Cartridges



HIGH FLOW BIO-X sterile gas filters combine proven depth filter technology and a pleated construction to provide retention down to 0.01 micron in gas.

Flow rates typically 2-3 times that of membrane filters make HIGH FLOW BIO-X the filter that can dramatically reduce cartridge usage and installation size within the fermentation, food and beverage industries.

The specially developed PTFE impregnation process imparts greater strength and permanent hydrophobicity to the borosilicate microfibre media. This leads to excellent performance in applications such as the provision of sterile gas in filling machines.

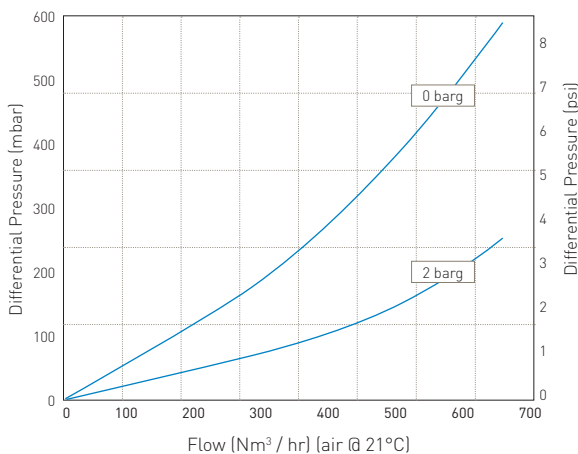
Features

- High flowing hydrophobic PTFE impregnated media
- Fully validated by aerosolized bacterial and viral challenge
- Stainless steel inner core
- 100% integrity testable by Valairdata 3 aerosol challenge

Benefits

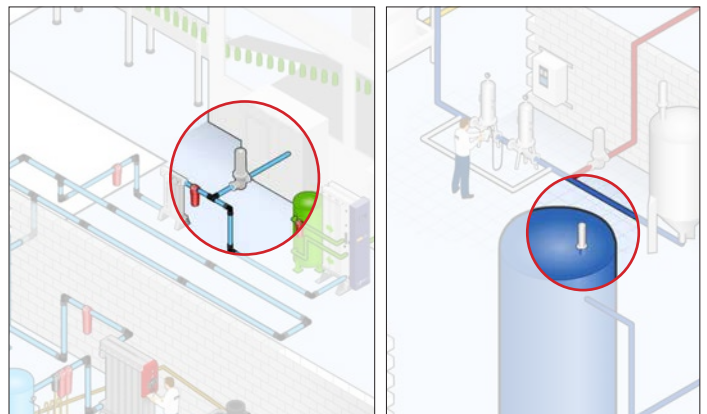
- Reduce system size and reduced total cost of ownership.
- Provides complete process security
- Strong and robust for extended service life
- Guaranteed performance in-situ

Performance Characteristics



Filtration Stage

Sterile Gas and Vent Filtration



Specifications

Materials of Construction

■ Filtration Media:	PTFE Impregnated Borosilicate Microfibre
■ Upstream Support:	Polypropylene
■ Downstream Support:	Polypropylene
■ Inner Support Core:	316L Stainless Steel
■ Outer Protection Cage:	Polypropylene
■ End Caps:	Polypropylene
■ End Cap Insert:	Polyethersulphone
■ Standard o-rings/gaskets:	Silicone

Food Contact Compliance

Parker domnick hunter's range of HIGH FLOW BIO-X 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.



Recommended Operating Conditions

The maximum differential pressure in direction of flow (outside to in) is 3.0 barg (43.5 psig) at 70 °C (158 °F).

The maximum recommended continuous operating temperature is 70 °C (158 °F).

Effective Filtration Area (EFA)

10" (250 mm) Up to 0.38 m² (4.09 ft²)

Sterilization

HIGH FLOW BIO-X cartridges can be in-situ steam sterilized or autoclaved up to 142 °C (287.6 °F) for a maximum of 150 steam cycles.

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

The HIGH FLOW BIO-X range of cartridges has been fully validated by aerosol bacterial challenge with challenge levels of 10¹² *Brevundimonas diminuta* per 10" (250 mm) filter cartridge. Independent test work also shows full retention to *MS-2 Coliphage*.

Integrity Test Data

All cartridges are integrity tested prior to despatch by the aerosol challenge test method using the Parker domnick hunter VALAIRDATA 3.

Manufacturing Traceability

Each filter cartridge displays the product name, product code and lot number. Additionally, each module displays a unique serial number providing full manufacturing traceability.

Ordering information

ZCHB	-		-		
Code	Length (Nominal)	Code	End Cap (10 inch)	Code	O-rings
B*	2.5" (65 mm)	C	P-7	E	EPDM
A*	5" (125 mm)	P	BIO-X Retrofit	S	Silicone
K	5" (125 mm)	H	UF Retrofit	V	Viton
1	10" (250 mm)				
2	20" (500 mm)				
3	30" (750 mm)				
4	40" (1000 mm)				
*Supplied in packs of 3		Code	End Cap (Demi)	*Silicone o-ring supplied as standard without having to specify 'S' code	
		H	UF Retrofit		
		T	TRUESEAL		
		Y	Demi MCY		
		Z	Demi A & B Std		

