

# HIGH FLOW BIO-X Filter Cartridges

- air / gas filters
- PTFE impregnated borosilicate microfibre

HIGH FLOW BIO-X combines 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.

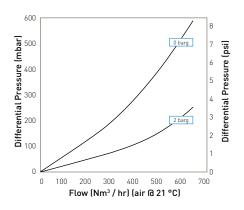
#### **Features and Benefits**

- 94% voids volume PTFE impregnated microfibre
- Wide bore cartridge construction to maximize flow rate
- Stainless steel inner core
- Exceptionally high flow rates with low pressure drops
- Fully validated by aerosolized bacterial and viral challenge



Note: BIO-X is a registered trademark of Parker domnick hunter

#### **Performance Characteristics**



Flow rates for other sizes available upon request

Oberg 1.50 Oberg 1.50 Oberg 1.5 (ied) 2 barg 1.5 (ied) 2 barg 1.5 (ied) 2 barg 1.5 (ied) 2 barg 1.0 Oberg 1.0 Same (which is the same of t

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10" Size (250 mm) Cartridge

A Size (125 mm) Cartridge

## **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: 316L Stainless Steel

■ Standard o-rings/gaskets: 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 70 °C (158 °F).

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

#### Effective Filtration Area (EFA)

10" (250 mm) 0.38 m<sup>2</sup> (4.09 ft<sup>2</sup>)

#### 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.

#### **Retention Characteristics**

The HIGH FLOW BIO-X range of cartridges has been fully validated by aerosol bacterial challenge levels of  $10^{12}$  Brevundimonas diminuta per  $10^{\circ}$  (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 II.

### **Ordering Information**

