



# 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.

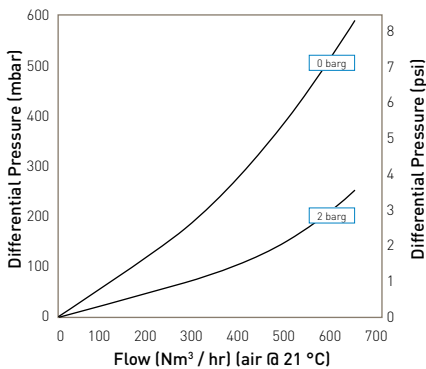
## Features and Benefits

- 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



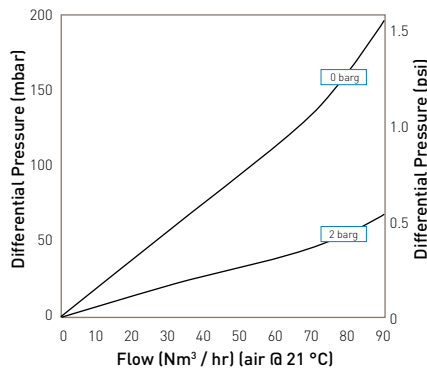
Note: BIO-X is a registered trademark of Parker domnick hunter

## Performance Characteristics



Flow rates for other sizes available upon request

10" Size (250 mm) Cartridge



Flow rates for other sizes available upon request

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<sup>12</sup> *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 II.

## Ordering Information

ZCHB - [ ] - [ ] - [ ]

| Code   Length (Nominal)   | Code   Endcap (10")  | 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)            |  |                |
| * Supplied in packs of 3. |  |                |
| Code   Endcap (Demi)      | * Silicone o-ring supplied as standard without having to specify the 'S' code. |                |
| H UF Retrofit             |  |                |
| T TRUESEAL                |  |                |
| Y Demi MCV                |  |                |
| Z Demi A & B Std          |  |                |