

# BIO-X II Air & Gas

Filter Cartridges



BIO-X II air sterilization filter cartridges utilize a borosilicate microfibre media. This media has proven to be particularly effective in the removal of sub-micron particles as small as 0.01 micron, therefore ensuring the removal of all microorganisms, including bacteria and viruses.

The media is sandwiched between polyaramid support materials to provide additional strength and prevent media migration. This is rigidly held between stainless steel support cylinders and finally encapsulated into stainless steel end caps. The result is a filter cartridge with the exceptional strength and efficiency necessary for absolute security in the most testing of applications.

BIO-X II filter cartridges are particularly suitable for the increasing number of high temperature applications. They also fulfil the sterile compressed air and gas requirements of the dairy, brewery and food processing industries.

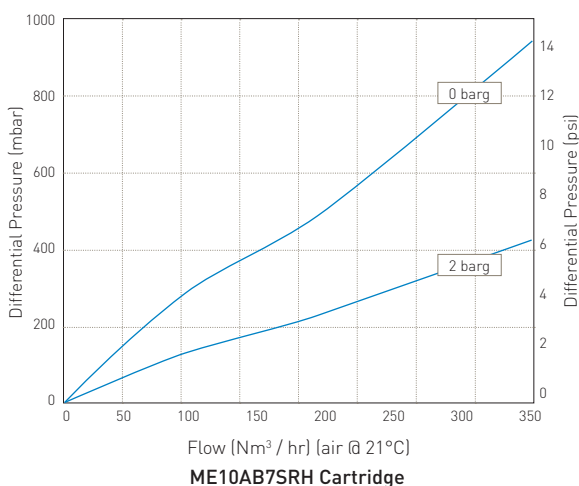
## Features

- Robust stainless steel componentry
- Fully validated by aerosolized bacterial and viral challenge
- 100% integrity testable by Valairdata 3 aerosol challenge

## Benefits

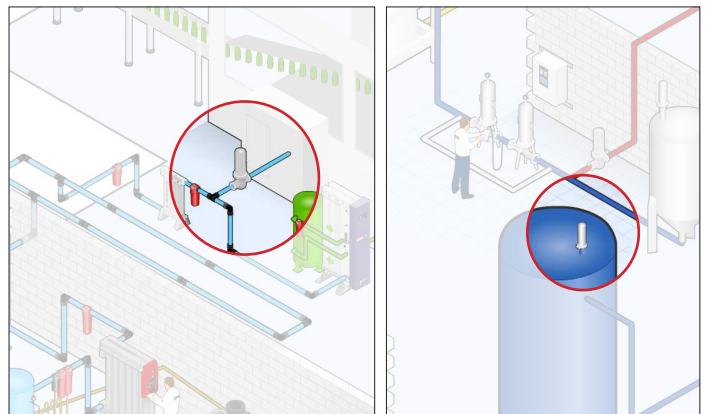
- High temperature operation up to 200°C (392°F)
- Process security under demanding conditions
- Guaranteed performance in-situ

## Performance Characteristics



## Filtration Stage

### Sterile Gas and Vent Filtration



## Specifications

### Materials of Construction

Filtration Media:	Borosilicate Microfibre
Upstream Support:	Polyaramid
Downstream Support:	Polyaramid
Inner Support Core:	Stainless Steel
Outer Protection Cage:	Stainless Steel
End Caps:	Stainless Steel
Encapsulant:	Epoxy Resin
Standard o-rings/gaskets:	Silicone

### Food and Biological Safety

Parker domnick hunter's range of BIO-X 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 for non-fibre release as laid down in the United States FDA 21 CFR 211.72 and 210,3(b).(6).



### Maximum Continuous Inlet Air Temperature

200 °C (392 °F) Intermittent  
170 °C (338 °F) Continuous

### Sterilization

BIO-X II filter elements can withstand a maximum of 100 in-line sterilization cycles with purified saturated steam. In-line sterilization 142 °C (287.6 °F), 2.8 barg (40.7 psig) for 30 minutes.

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

### Integrity Test Data

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

### Retention Characteristics

The BIO-X II range of cartridges have been fully validated by bacterial challenge of aerosolized *Brevundimonas diminuta*.

### Recommended Operating Conditions

The maximum differential pressure is 700 mbar for economical element change.

## Ordering information

Element Code	Cartridge Length	End Cap Location
MER-BZ	2.5" (65 mm)	Demi A & B Std (Z)
MER-AZ	5" (125 mm)	Demi A & B Std (Z)
ME10-AB7SRH	10" (250 mm)	BS226 (C)
ME20-AB7-SRH	20" (500 mm)	BS226 (C)
ME30-AB7-SRH	30" (750 mm)	BS226 (C)

All BIO-X cartridges are supplied as single units

HBA, HPG  
& HSV  
HOUSING RANGE  
AVAILABLE

## BIO-X II Retrofit Cartridge Part Numbers

Parker domnick hunter Cartridge	ME3/1	ME3/1.5	ME4/1.5	ME4/2.5	ME5/2.5	ME5/3	ME10/3	ME15/3	ME20/3	ME30/3	ME30/5	
Retrofit Cartridge	SRF3/1	SRF3/1.5	SRF4/1.5	SRF4/2.5	SRF5/2.5	SRF5/3	SRF10/3	SRF15/3	SRF20/3	SRF30/3	SRF30/5	
Parker domnick hunter Cartridge	MER2/10	MER3/10	MER4/20	MER5/20	MER5/25	MER7/25	MER7/30	MER10/30	MER15/30	MER20/30	MER30/30	MER30/50
Retrofit Cartridge	SRF02/10	SRF03/10	SRF04/20	SR05/20	SRF05/25	SRF07/25	SRF07/30	SRF10/30	SRF15/30	SRF20/30	SRF30/30	SRF30/50
Parker domnick hunter Cartridge	ME2/10	ME3/10	ME4/20	ME5/20	ME5/25	ME7/25	ME7/30	ME10/30	ME15/30	ME20/30	ME30/30	ME30/50
Retrofit Cartridge	P-SRF02/10	P-SRF03/10	P-SRF04/20	P-SRF05/20	P-SRF05/25	P-SRF07/25	P-SRF07/30	P-SRF10/30	P-SRF15/30	P-SRF20/30	P-SRF30/30	P-SRF30/50