

Process filter P-BE

Sterile depth filter for storage tanks

VAN BORSELEN FILTERS



Van Borselen P-BE

The P-BE is a wound depth filter with inner and outer guard end caps made of stainless steel. Consisting of a three-dimensional borosilicate depth media, the P-BE achieves a void volume of 95 %, ensuring a high containment capacity at high flow rates and low differential pressure. A retention rate of > 99.999 % related to 0.01 µm is achieved during operation.

All components meet the FDA requirements for the contact with food in accordance with the CFR requirements (code of federal regulations) tilte 21.

Features and advantages

- Non-fibre releasing filter element.
- Manufactured without use of binders or other chemical additives.
- Corresponds to cGMP requirements (current Good Manufacture Practice) and is manufactured according to DIN EN ISO 9001.
- P-BE has passed the toxicological test according to USP XX Class VU for plastics.

Applications

- Chemical Industry
- Aseptic packing
- Pharmaceutical Industry
- Biotechnology
- Cosmetics Industry
- Breweries
- Dairies
- Food and beverages
- Water treatment systems
- Fermentation processes

P-BE vent filter

Features

Outer guard and endcaps made of stainless steel

Absolute retention rate of 99.999% related to 0.01 µm

Three-dimensional borosilicate depth filter media

Biologically and chemically inert

100 sterilization cycles guaranteed

100% integrity tested

Available in 6 sizes

Stainless steel core and end-caps

Benefits:

High mechanical and thermal stability, good durability against chemicals and numerous aggressive gases.

Validated retention rate, integrity testable with DOP test according to HIMA

High waste containment capacity, low differential pressure, high flow rate

No breeding ground for separated microorganism

High economical efficiency and low filtration costs

Guaranteed quality

Optimum filter size for individual application

Temperature range from -20 °C up to 200 °C

Materials

Filter media	Borosilicate
Outer core	SS 1.4301
Inner core	SS 1.4301
Supporting fabric	Polyester
Endcaps	SS 1.4301
Bonding material	Silicone
O-Rings	Silicone (stand.), Buna N, EPDM or Viton

Sterilization

In-line sterilization with slow speed saturated steam:
 max. 121°C for 30 minutes
 max. 131°C for 20 minutes
 max. 141°C for 10 minutes

Autoclave:
 125°C for 30 minutes

P-BE filter elements are guaranteed for 100 sterilization cycles without loss of integrity.

Bacterial retention

LRV > 7/cm² for T1 Coliphagen

Filtration surface

494 cm² per 10" element (10/30) (250 mm)

Bacterial retention

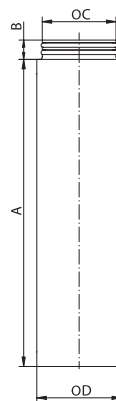
-20 °C to 200 °C

Absolute retention rate

99.999% related to 0.01 µm

Dimensions

Element Size	A mm	B mm	Ø C	Ø D mm	Correction Factor
03/10	76	12	3/4"	42	0,12
05/25	128	14	1"	62	0,32
05/30	128	16	2"	86	0,46
10/30	254	16	2"	86	1,00
20/30	508	16	2"	86	2,10
30/30	762	16	2"	86	3,28



Flow rate of a 10" P-BE element at 1 bar

