

Process filter P-BE

Sterile depth filter for storage tanks



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	Benefits:
Outer guard and endcaps made of stainless steel	High mechanical and thermal stability, good durability against chemicals and numerous aggressive gases.
Absolute retention rate of 99.999% related to 0.01 µm	Validated retention rate, integrity testable with DOP test according to HIMA.
Three-dimensional borosilicate depth filter media	High waste containment capacity, low differential pressure, high flow rate.
Biologically and chemically inert	No breeding ground for separated microorganism.
100 sterilization cycles guaranteed	High economical efficiency and low filtration costs.
100% integrity tested	Guaranteed quality.
Available in 6 sizes	Optimum filter size for individual application.
Stainless steel core and end-caps	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	76	16	2"	86	3,28

