

Ultradept II P-BE

The sterile depth filter for the sterile ventilation of storage tanks.

Product description:

The Ultradept II filter is a wounded depth filter with inner and outer guard end caps made from stainless steel. The retention rate is $\geq 99.999\%$ related to $0.01 \mu\text{m}$. The Ultradept II threedimensional borosilicate depth media has a large void volume of 95%. This ensures a high dirt containment capacity at a low differential pressure and a high flow rate. The filter media is inherently hydrophobic.

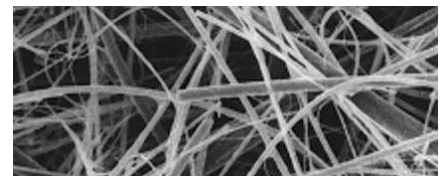
Features:

All components meet the FDA requirements for the contact with food in accordance with the CFR requirements (code of Federal Regulations), title 21.

Ultradept II filter elements have passed the toxicological tests according to USP XX Class VI for plastics. The filter element corresponds to the cGMP requirements (current Good Manufacturer practice) and is manufactured according to DIN EN ISO 9001. The filter medium is nonfiber releasing and it is manufactured without the use of binders or other chemical additives.

The Ultradept II P-BE – ensures a safe operation and is proven thousands of times in application

SEM of the Ultradept II media



Applications:

The Ultradept II sterile filters are, among others, designed and developed for the following applications:

- Chemical industry
- Aseptic packaging
- Pharmaceutical industry
- Biotechnology
- Cosmetic industry
- Breweries
- Dairies
- Food and beverage
- Water treatment systems
- Fermentation processes

Ultradepth II P-BE

Features:	Benefits:
High-quality stainless steel construction	High mechanical and thermal stability, good durability range 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
Manufactured in accordance with cGMP and DIN EN ISO 9001	Constant product quality, high operational- and process safety
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 microorganisms
100 sterilization cycles guaranteed	Highly economical and low filtration costs
100% integrity tested by factory	Guaranteed quality
Available in 6 element sizes	Optimum filter size for the individual application
Stainless steel core and endcaps	Temperature range from -20°C to 200°C, sterilizable at a steam temperature of up to 141°C

Bacterial retention:

LRV > 7/cm² for T1 Coliphagen

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
 Ultradepth II filter elements are guaranteed for 100 sterilization cycles – without loss of integrity

Temperature range:

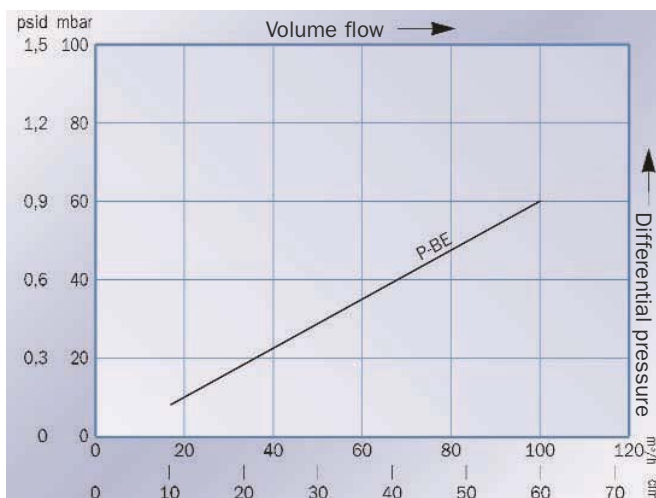
-20°C to 200°C*

* > 150°C only for dry compressed air

Materials:	
Filter medium:	Borosilicate
Outer core:	SS 1.4301 (304)
Inner core:	SS 1.4301 (304)
Supporting fabric:	Polyamide
Endcaps:	SS 1.4301 (304)
Bonding material:	Silicone
O-Rings:	Silicone (standard), Buna N, EPDM or Viton

Filtration surface:
494 cm ² for 10" element (10/30) For other sizes see correction factor (CF)
Absolute retention rate:
99.999% related to 0.01 µm

Flow rate of a 10" P-BE element – air (1 bar, 20°C)



Dimensions:					
Element size	A mm	B mm	Ø C*	Ø D* mm	CF**
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

* Plug- type connection with double-o-ring
 ** Correction factor filtration surface

