

ultradept II® P-BE

The sterile depth filter for the sterile ventilation of storage tanks

Product description:

The ultradept II® filter is a wrapped depth filter with an inner and an outer guard as well as end caps made from stainless steel. The retention rate is 0.01 µm up to 99.999%. The ultradept II® binder-free, three-dimensional borosilicate depth media has a hollow volume of more than 95%. This ensures a high dirt hold capacity and a low differential pressure at high flow rates. The filter media is inherently hydrophobic.

Features:

All components meet the FDA requirements for the contact with food according to the CFR (Code of Federal Regulations) Titel 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 in accordance with DIN EN ISO 9001. The filter media is non-fibre releasing, is asbestos free and manufactured without the use of binders or other chemical additives.

Applications:

The ultradept II® sterile filters are, among others, designed and developed for sterile tank storage applications such as:

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

Sterilisation:

- In-line sterilisation with slow speed saturated steam
 - max. 121°C (250°F) for 30 minutes
 - max. 131°C (270°F) for 20 minutes
 - max. 141°C (290°F) for 10 minutes
- Autoclave
 - 125°C (260°F) for 30 minutes

ultradept II® filter elements are guaranteed for 100 sterilisation cycles – without loss of integrity

Materials:

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

The ultradept II® P-PB – sterile ventilation of storage tanks under atmospheric conditions



Absolute retention rates:

99.999% related to 0,01 µm

Bacterial retention:

LRV > 7/cm² for T1 Coliphagen

Temperature range:

–20°C (–4°F) to 200°C (400°F)*

* > 150°C (300°F) only for dry compressed air

FEATURES	BENEFITS
High quality stainless steel construction	High mechanical and thermal stability, good durability range against chemicals and against 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 medium	High dirt hold capacity, low differential pressure, high flow rate
Biologically and chemically inert	No breeding ground for separated micro-organisms
100 sterilisation 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 cores and end caps	Temperature range from –20°C (–4°F) to 200°C (400°F), sterilisable at a steam temperature of up to 141°C (290°F)

DIMENSIONS							
ELEMENT SIZE	A	B	ø C o.d.	ø C nominal width	ø D	CF	
03/10	76	12	31.0	(3/4")	42	0.12	
04/10	104	12	31.0	(3/4")	42	0.17	
04/20	104	14	38.5	(1")	52	0.19	
05/20	128	14	38.5	(1")	52	0.25	
05/25	128	14	38.5	(1")	62	0.32	
07/25	180	14	38.5	(1")	62	0.47	
05/30	128	16	63.0	(2")	86	0.46	
07/30	180	16	63.0	(2")	86	0.68	
10/30	254	16	63.0	(2")	86	1.00	
15/30	381	16	63.0	(2")	86	1.55	
20/30	508	16	63.0	(2")	86	2.10	
20/30	762	16	63.0	(2")	86	3.28	
30/50	762	16	91.0	(3")	140	5.89	