

Process Filter P-SRF

Sterile Depth Filter For Process Air & Gases

P-SRF Sterile Filter

Van Borselen P-SRF

The P-SRF 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-SRF achieves a void volume of 95 %, ensuring a high containment capacity at high flow rates and low differential pressure. A retention rate of > 99.99998 % related to 0.2 μ m 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) title 21 and EC/1935/2004.

Features and advantages

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

Applications

- Aseptic packing
- Biotechnology
- Breweries
- Chemical Industry
- Dairies

- Fermentation processes
- Food and beverages
- Pharmaceutical Industry
- Water treatment systems

| 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 99.9998% related to 0.2 μm | Validated retention rate, intergrity 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 | | |
| 200 sterilization cycles guaranteed | High economical effency and low filtration costs | | |
| 100% integrity tested | Guaranteed quality | | |
| Available in 13 sizes | Optimum filter size for indivdual application | | |
| Stainles steel core and end-caps | Temperature range from -20 °C up to 200 °C | | |

| Materials | |
|-----------------------------|---|
| Filter media : Borosilicate | End caps : SS 1.4301 |
| Outer core : SS 1.4301 | Bonding material : Silicone |
| Inner core : SS 1.4301 | Seals : EPM (Std.), FEPM (Fluoraz) on request |
| Inner layer : Polyester | |

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Bacterial Retention:

LRV > 7/cm2 for viruses and phages

Temperature Range:

-20 °C to 200 °C

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-SRF-N filter elements are guaranted for 200 sterilization cycles withou loss of integrity

| Dimensions | | | | | | | |
|-----------------|---------|---------|-----------|-----------|----------------------|--|--|
| Element Size | A mm | B mm | Ø C mm | Ø D mm | Correction Factor | | |
| 03/10 | 76 | 12 | 3/4" | 42 | 0,12 | | |
| 04/10 | 104 | 12 | 3/4" | 42 | 0,17 | | |
| 04/20 | 104 | 14 | 1" | 52 | 0,19 | | |
| 05/20 | 104 | 14 | 1" | 52 | 0,19 | | |
| 05/25 | 128 | 14 | 1" | 62 | 0,32 | | |
| 05/30 | 128 | 16 | 2" | 86 | 0,46 | | |
| 07/25 | 180 | 14 | 1" | 62 | 0,47 | | |
| 07/30 | 180 | 16 | 2" | 86 | 0,68 | | |
| 10/30 | 254 | 16 | 2" | 86 | 1,00 | | |
| 15/30 | 381 | 16 | 2" | 86 | 1,55 | | |
| 20/30 | 508 | 16 | 2" | 86 | 2,10 | | |
| 30/30 | 762 | 16 | 2" | 86 | 3,28 | | |
| 30/50 | 762 | 16 | 2" | 140 | 5,89 | | |

Filtration Surface:

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

Absolute Retention Rate:

99.99998 % related to 0.2 μm

Max. Differential Pressure:

5 bar, independent of operating pressure of flow direction.



