

Sartobran P 0.45 µm

Bioburden and Particle Reductive Filter Cartridges and Mini Cartridges



Description

Sartobran P 0.45 µm rated filter cartridges are ideally suited for bioburden and particle removal from bio-pharmaceutical solutions for protection of subsequent downstream processing equipment or sterilizing grade filters. The unique low unspecific binding capacity of the cellulose acetate membranes assures highest protein yield and rapid preservative recovery.

Applications

Sartobran P filters are ideally suited for prefiltration of high value biological solutions and pharmaceuticals sensitive to adsorption as well as for final filtration of LVP's and Buffers. Typical applications are filtration of:

- Coagulation Factors, Albumine, IgG
- Bacterial and Viral Vaccines
- MAB's
- Bio-processed Pharmaceuticals
- Diagnostics
- Purified Protein Solutions
- LV P
- Buffers

Highest Product Yield

The cellulose acetate membrane of the Sartobran P filters provides the lowest unspecific adsorption of all membrane materials available for highest product recovery rates.

Performance

Due to the "built-in prefiltration" by a 0.65 µm membrane, Sartobran P 0.45 µm filters provide excellent total throughputs and higher flow rates at low differential pressure for gentle product treatment.

Flexibility

Sartobran P 0.45 µm filters are available in traditional cartridge formats and mini cartridges for simple linear scale up and process flexibility.

Microbiological Retention

Sartobran P 0.45 µm rated filter cartridges are validated for removal of *Serratia marcescens* with Log Reduction Value (LRV) of 7 according to HIMA and ASTM F-838-83 guidelines.

Quality Control

Each individual element is tested for integrity by diffusion and bubble point test prior to release, assuring absolute reliability.

Documentation

Sartobran P cartridges are designed, developed and manufactured in accordance with an ISO 9001 certified Quality Management System. A Validation Guide and Extractables Guide are available for compliance with regulatory requirements.

Specifications

Materials

Prefilter Membrane:	Cellulose Acetate
Endfilter Membrane:	Cellulose Acetate
Support Fleece:	Polypropylene
Core:	Polypropylene
End Caps:	Polypropylene
O-Rings:	Silicone (optional EPDM or Viton)

Pore Size

0.65 µm + 0.45 µm

Available Sizes | Filtration Area

Standard Cartridges

Size 1	10"	0.6 m ² 6 ft ²
Size 2	20"	1.2 m ² 12 ft ²
Size 3	30"	1.8 m ² 18 ft ²

Mini Cartridges

Size 7	0.05 m ² 0.5 ft ²
Size 8	0.1 m ² 1 ft ²
Size 9	0.2 m ² 2 ft ²

Available Adapters Cartridges

21, 25, 27, 28

Available Adapter Mini Cartridges

15

Operating Parameters

Max. Allowable Differential Pressure:	5 bar 75 psi at 20 °C
	2 bar 29 psi at 80 °C

Max. Allowable Back Pressure:	2 bar 29 psi at 20 °C
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Integrity Test Limits

Maximum Allowable Diffusion at 1.5 bar / 22 psi & 20 °C

Cartridge Size	Maximum Diffusion	Minimum Bubble Point
Size 1	15 ml/min	2.0 bar/29 psi
Size 2	30 ml/min	2.0 bar/29 psi
Size 3	45 ml/min	2.0 bar/29 psi
Size 7	3 ml/min	2.0 bar/29 psi
Size 8	4 ml/min	2.0 bar/29 psi
Size 9	5 ml/min	2.0 bar/29 psi

Membrane Filter Cartridges

Specifications

Extractables

Sartobran P 0.45 µm rated filter cartridges meet, or exceed the requirements for WFI quality standards set by the current USP.

Regulatory Compliance

100% Individually integrity tested

Integrity test correlated to HIMA/ASTM F 838-83 Bacteria Challenge Test

Non-pyrogenic according to USP Bacterial Endotoxins

Passes USP Plastics Class VI Test

Non-fiber releasing according to 21 CFR

Sterilization

In-Line Steam Sterilization

134 °C, 20 min. at max differential pressure of 0.5 bar | 7 psi

Autoclaving

134 °C, 2 bar | 29 psi, 30 min

Sterilization Cycles

In-Line Sterilization: Min. 25
Autoclaving: Min. 25

Technical References

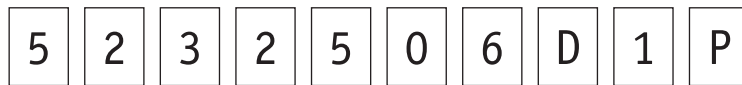
Validation Guide:

SPK 5726-e

Extractables Guide:

SPK5720-e

Ordering Guide:



Filter Family
523 = Sartobran P

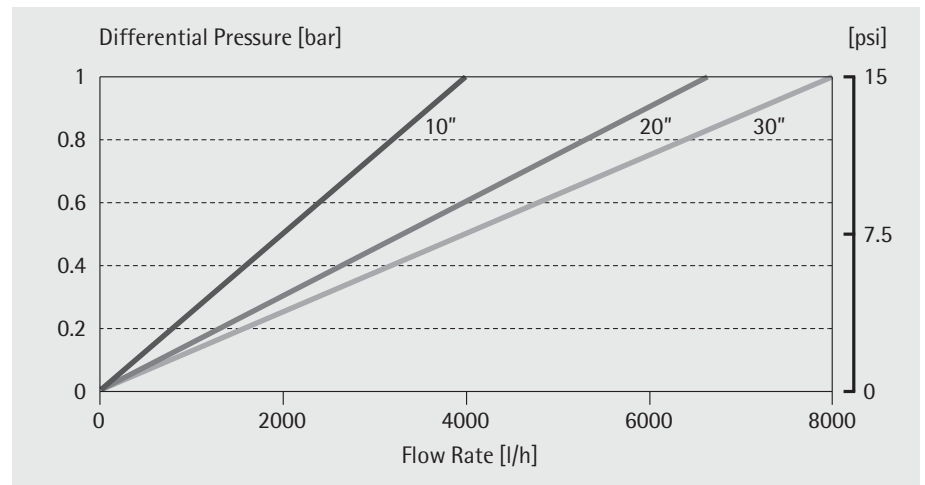
Filter Format
21 = Double Open End
25 = Standard Cartridge (Code 7)
27 = Standard Cartridge (Code 3)
15 = Mini Cartridge

Final Membrane Pore Size
06 = 0.45 µm

Prefilter Membrane Pore Size
D = 0.65 µm

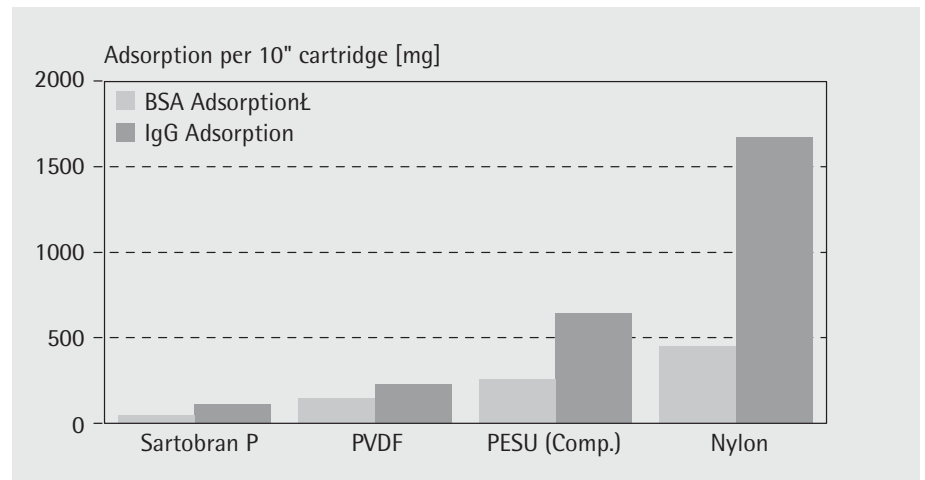
Cartridge Size | Package Quantity
1P = 10" Std Cartridge, 0.6m²/6ft², Single Unit
2P = 20" Std Cartridge, 1.2m²/12ft², Single Unit
3P = 30" Std Cartridge, 1.8m²/18ft², Single Unit
7B = 500 cm² / .5ft² Mini Cartridge, Pack of 5
8B = 0.1 m² / 1ft² Mini Cartridge, Pack of 5
9B = 0.2 m² / 2ft² Mini Cartridge, Pack of 5

Water Flow Rates for Standard Cartridges



Standardized at 20 °C

Total Throughput Comparison



10" Cartridge format

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