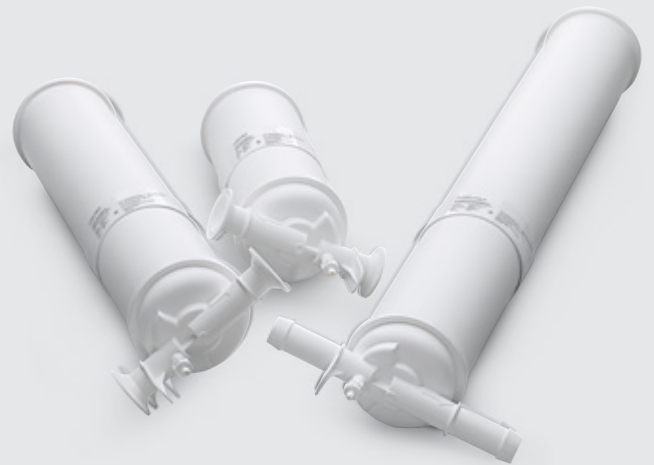


Sartoguard GF

Membrane Prefiltration Filter Elements



Product Information

Sartoguard GF filter elements are polyethersulfone membrane based prefilters. The membrane double layer is protected by a layer of glass fiber fleece material. They combine the defined retention performance of membrane filters with the high total throughput capacity of depth filter material. Therefore, Sartoguard GF prefilters offering optimal protection of sterile filters and validated bioburden reduction.

Applications

Sartoguard GF filter elements are typically used for prefiltration of:

- Cell Culture Media
- Buffers
- Serum
- Ophthalmics
- Large Volume Parenterals
- Colloid and lipid containing liquids

Efficiency

The glassfiber material provides high particle loading capacity and effective retention of large and small particles as well as excellent turbidity reduction. The heterogeneous double layer PES membranes provide secure and reliable retention needed for critical applications.

Reliable Retention

Sartoguard GF filters are available with 0.1 µm and 0.2 µm nominal retention rating. The 0.1 µm rated filters typically provides a LRV of 6 per cm² filtration area for *Brevundimonas Diminuta*, while the 0.2 µm rated filter typically provides a LVR of 6 per cm² filtration area for *Serratia Marcescens*.

Flexibility

Sartoguard GF filters are available as cartridges, capsules, Midicaps® and T-Style Maxicaps® providing utmost flexibility for integration into any filtration process independent from the batch size.

Quality and Security

Sartoguard GF filter elements are individually tested for integrity during production. The integrity of the filters can be verified onside before and after use by a diffusion or bubble-point (0.2 µm) test.

Scalability

Sartoguard GF filter elements are available in a broad range of sizes and formats to provide linear scale-up from R&D to process scale.

Documentation

Sartoguard GF filter elements are designed, developed and manufactured in accordance with an ISO 9001 certified Quality Management System. A Validation Guide is available for compliance with regulatory requirements.

Technical Data

Specifications

Materials

Prefilter Membrane	PES, asymmetric
Final Membrane	PES, asymmetric
Filter active Fleece	Glass Fiber
Support fleeces	Polypropylene
Core	Polypropylene
End caps	Polypropylene
Housing	Polypropylene
O-Rings	Silicone (optional: EPDM or Fluoroelastomer)

Retention Rates

0.2 µm + 0.1 µm nominally
0.8 µm + 0.2 µm nominally

Available Sizes | Filtration Area

Materials

10"	0.45 m ² 4.8 ft ²
20"	0.9 m ² 9.6 ft ²
30"	1.35 m ² 14.5 ft ²

Midicaps®

Size 8	0.08 m ² 0.9 ft ²
Size 9	0.15 m ² 1.6 ft ²
Size 0	0.3 m ² 3.2 ft ²

Capsules

Size 4	0.012 m ² 0.13 ft ²
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Available Adapters Cartridges

25: 2 Flange Bayonet adapter with 226 double o-ring

Available Connectors

T- Style Maxicaps®

- S: Tri-Clamp 50 mm (1½")
- O: ½" single stepped hose barb
- Y: 1" single stepped hose barb

Available Connectors Midicaps®

- S: Tri-Clamp 50 mm (1½")
- O: ½" single stepped hose barb
- F: Tri-Clamp 25 mm (¾")

Available Connectors Capsules

- S: Tri-Clamp 25 mm (¾")
- O: ¼" multiple stepped hose barb

Operating Parameters

Max. Allowable Differential Pressure	5 bar 72.5 psi at 20°C (Cartridges, Midicaps®, T-Style Maxicaps®)
	4 bar 58 psi at 20°C (Capsules)
	2 bar 29 psi at 80°C (Cartridges)
	3 bar 43.5 psi at 50°C (T-Style Maxicaps®, Midicaps®)
	2 bar 29 psi at 50°C (Capsules)
Max. Allowable Back Pressure	2 bar 29 psi at 20°C (all elements)

Extractables

Sartoguard GF filter elements meet, or exceed the requirements for WFI quality standards set by the current USP after preflushing.

Regulatory Compliance

Individually integrity tested during production

Onside integrity testable by diffusion or bubble-point test

Non pyrogenic according to USP Bacterial Endotoxins

Pass USP Plastic Class VI Test

Non fiber releasing according to 21 CFR

Sterilization

Cartridges

In-Line Steam Sterilization:

134°C, 20 min. at max differential pressure of 0.5 bar | 7.25 psi or

Autoclaving:

134°C, 2 bar, 30 min

T-Style Maxicaps® | Midicaps® | Capsules

Autoclaving:

134°C, 2 bar, 30 min

Only cartridges can be in-line steam sterilized

Technical References

Validation Guide

SPK5792-e

Order Information

Type	Pore Size [μm]	Test Pressure [bar psi]	Max. Diffusion [ml min]	Min. Bubble-Point [bar psi]	Pack Size [Pieces]
Cartridges					
5482507G1	0.2	2.0 29	19	2.3 33	1
5482507G2	0.2	2.0 29	38	2.3 33	1
5482507G3	0.2	2.0 29	57	2.3 33	1
5482558M1	0.1	2.5 36	17	n. a.	1
5482558M2	0.1	2.5 36	34	n. a.	1
5482558M3	0.1	2.5 36	51	n. a.	1

T-Style Maxicaps®

5488307G1--**	0.2	2.0 29	19	2.3 33	1
5488307G2--**	0.2	2.0 29	38	2.3 33	1
5488307G3--**	0.2	2.0 29	57	2.3 33	1
5488358M1--**	0.1	2.5 36	17	n. a.	1
5488358M2--**	0.1	2.5 36	34	n. a.	1
5488358M3--**	0.1	2.5 36	51	n. a.	1

Midicaps® | Capsules

5481307G4--**--B	0.2	2.0 29	2	2.3 33	5
5485307G8--**--A	0.2	2.0 29	7	2.3 33	4
5485307G9--**--A	0.2	2.0 29	10	2.3 33	4
5485307G0--**--V	0.2	2.0 29	12	2.3 33	2
5481358M4--**--B	0.1	2.5 36	2	n. a.	5
5485358M8--**--A	0.1	2.5 36	6	n. a.	4
5485358M9--**--A	0.1	2.5 36	9	n. a.	4
5485358M0--**--V	0.1	2.5 36	11	n. a.	2

n. a.: not applicable


** Connector Styles (first code letter represents the inlet, the second the outlet)

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