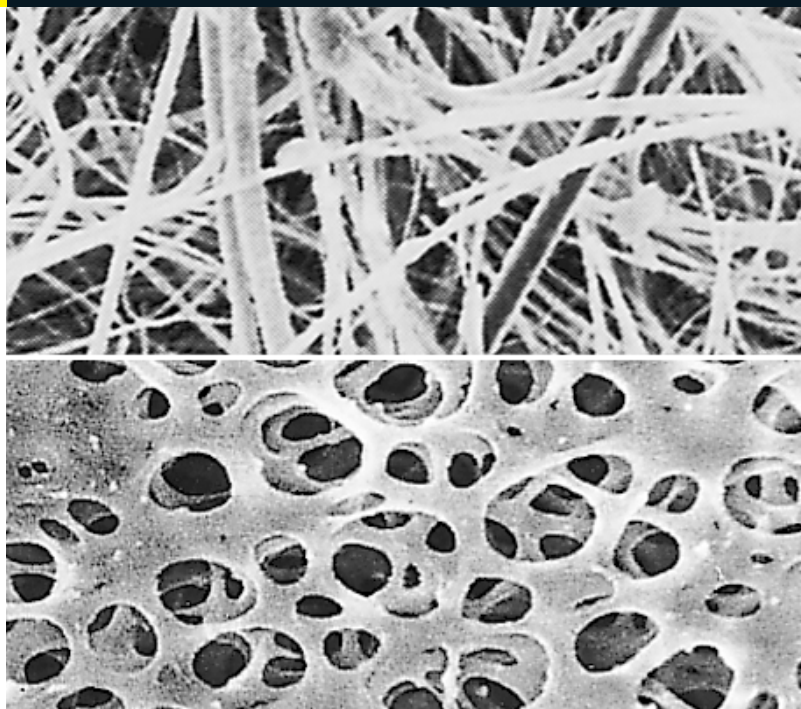


Sartoclean® GF

Adsorptive Membrane
Filter for Colloid and
Bioburden Reduction



Sartoclean® GF filter cartridges combine absolute retention performance by membrane filtration with high adsorptive power by glass fiber fleeces. Therefore Sartoclean® GF are ideally suited for removal of colloids and lipids as well as defined particle retention and bioburden reduction for a broad range of bio-pharmaceutical applications.

Process Safety

The removal of colloidal containments and lipids by adsorption allows an effective downstream processing step. The bioburden reduction by membrane filtration avoids formation of pyrogenes during the process. This results in an increased process safety especially for biotech-derived fluids.

Product Information

- Lowest filter consumption for filtration of chemically defined process fluids
- Outstanding capacity and flow performance
- Ideal solution for conventional and single-use processes
- Highly economic sizing for intermediate steps in downstream processing

Performance

The combination of adsorptive glass fiber fleeces with membrane filters assures optimal total throughput performance and allow for economic filtration system design.

Technical Data

Available Sizes	Filtration Area
Cartridges, Maxicaps®	
Size 1 (10")	0.47 m ² 5.1 ft ²
Size 2 (20")	0.94 m ² 10.2 ft ²
Size 3 (30")	1.41 m ² 15.3 ft ²

Mini Cartridges Midicaps® (Mini Cartridges only available in size 7 and 9)	
Size 7	0.05 m ² 0.54 ft ²
Size 8	0.08 m ² 0.85 ft ²
Size 9	0.16 m ² 1.7 ft ²
Size 0	0.32 m ² 3.4 ft ²

Max. Allowable Differential Pressure

Cartridges | Midicaps®

5 bar | 72.5 psi at 20°C

2 bar | 29 psi at 80°C

Maxicaps®

5 bar | 72.5 psi at 20°C

3 bar | 43.5 psi at 50°C

Materials

Prefilter Membrane

Reinforced Cellulose Acetate

Core

Polypropylene

Endfilter Membrane

Reinforced Cellulose Acetate

End Caps

Polypropylene

Filter Active Fleece

Glass Fiber

Capsule Housing

Polypropylene

Support Fleece

Polypropylene

O-Rings

Silicone (optional EPDM or Fluoroelastomer)

Applications

- Fermentation broths
- Serum
- Plasma
- Cell Culture Media
- Colloid and Lipid containing solutions

Max. Allowable Back Pressure

Cartridges | Maxicaps® | Mini Cartridges | Midicaps®

2 bar | 29 psi at 20°C

Max. Operating Pressure

Cartridges | Maxicaps® | Mini Cartridges | Midicaps®

5 bar | 72.5 psi at 20°C

Pore Size Combination

3.0 µm + 0.8 µm (nom.)

0.8 µm + 0.65 µm (nom.)



Regulatory Compliance

- Each individual element is tested for integrity by Bubble Point and Diffusion test
- Fully validated as sterilizing grade filters according to current ASTM F-838 guidelines
- Designed, developed and manufactured in accordance with an ISO 9001 certified Quality Management System
- USP Plastic Class VI Test
- Non-fiber releasing: This product was manufactured with a membrane which meets the criteria for a "non-fiber releasing" filter as defined in 21 CFR 210.3 (b) (6) and 211.72.
- Oxidizable Substances: The filtrate of these filter elements shows a negative reaction when tested according to the current USP

Sterilization

Cartridges

In-Line Steam Sterilization

134°C, 0.5 bar | 7.25 psi, 20 min.

Min. 25 Sterilization Cycles

or

Autoclaving

134°C, 2 bar | 29 psi, 30 min

Min. 25 Sterilization Cycles

Maxicaps®, Midicaps®

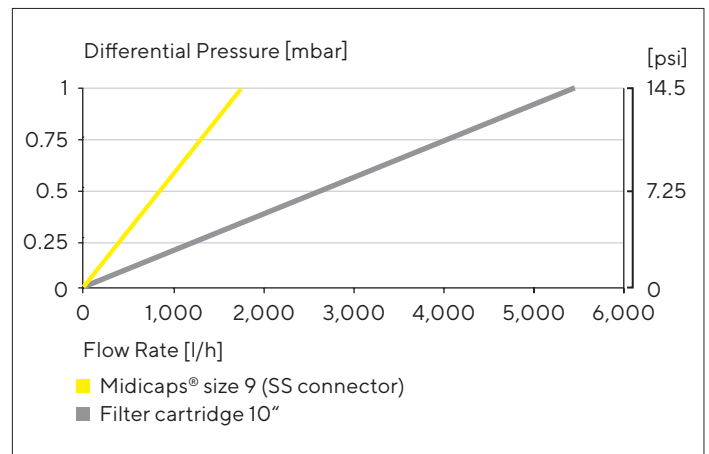
Autoclaving

134°C, 2 bar | 29 psi, 30 min

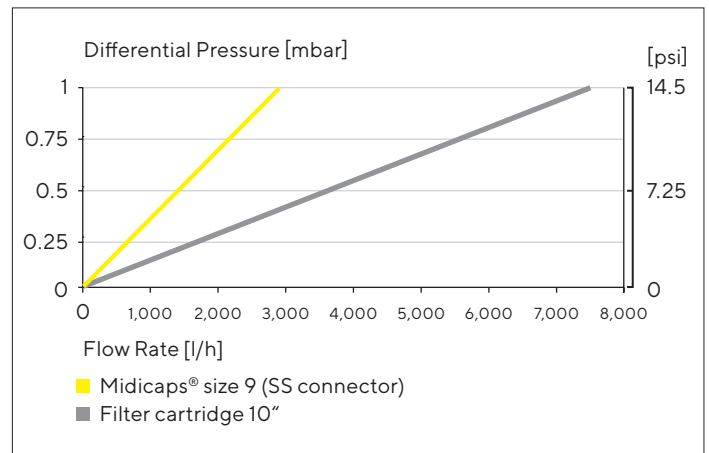
Min. 25 Sterilization Cycles

Performance

Water Flow Rates 0.8 µm + 0.65 µm



Water Flow Rates 3.0 µm + 0.8 µm



Technical References

Validation Guide

SPK5788-e

Ordering Information



Cartridge

560		
Adapter 25: 2 Flange Bayonet adapter with 226 double o-ring 27: Bayonet adapter with 222 double o-ring 28: 3 Flange Bayonet adapter with 222 double o-ring	Pore Size 04 E: Final filter 0.8 µm, prefilter 3.0 µm 05 G: Final filter 0.65 µm, prefilter 0.8 µm	Filter Size 1: 0.47 m² 5.1 ft² (10") 2: 0.94 m² 10.2 ft² (20") 3: 1.41 m² 15.3 ft² (30")



Mini Cartridge

560	15				--	--	--	B
Pore Size		Filter Size						
04 E: Final filter 0.8 µm, prefilter 3.0 µm		7: 0.05 m ² 0.54 ft ² (only 3.0 µm + 0.8 µm)						
05 G: Final filter 0.65 µm, prefilter 0.8 µm		9: 0.16 m ² 1.7 ft ²						



Maxicaps®

560	73				--		
Pore Size		Filter Size		Connector Inlet		Connector Outlet	
04 E: Final filter 0.8 µm, prefilter 3.0 µm		1: 0.47 m ² 5.1 ft ²		S: 1½" Tri-Clamp 50 mm		S: 1½" Tri-Clamp 50 mm	
05 G: Final filter 0.65 µm, prefilter 0.8 µm		2: 0.94 m ² 10.2 ft ²		O: ½" single stepped hose barb		O: ½" single stepped hose barb	
		3: 1.41 m ² 15.3 ft ²		F: ¾" Tri-Clamp 25 mm		F: ¾" Tri-Clamp 25 mm	



Midicaps®

560	53				--			--	V
Pore Size		Filter Size		Connector Inlet		Connector Outlet		Packing Size	
04 E: Final filter 0.8 µm, prefilter 3.0 µm		7: 0.05 m ² 0.54 ft ²		S: 1½" Tri-Clamp 50 mm		S: 1½" Tri-Clamp 50 mm		A: box of 4	
05 G: Final filter 0.65 µm, prefilter 0.8 µm		8: 0.08 m ² 0.85 ft ²		O: ½" single stepped hose barb		O: ½" single stepped hose barb		V: box of 2	
		9: 0.16 m ² 1.7 ft ²		F: ¾" Tri-Clamp 25 mm		F: ¾" Tri-Clamp 25 mm			
		0: 0.32 m ² 3.4 ft ²							

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