

Sartofluor® GA

Air Filter Cartridges and Mini Cartridges for Bio-Pharmaceutical Applications



Description

Sartofluor® GA filter cartridges, manufactured with permanently hydrophobic PTFE membranes, are specially designed for sterile venting and gas applications where adherence to cGMP's is a must. Due to their permanent hydrophobicity, Sartofluor® GA cartridges offer the highest process security, even with high volume gas streams, extreme humidity and stringent in-line steam sterilizations.

Applications

Sartofluor® GA cartridges are ideally suited for application requiring a sterile, hydrophobic gas filter such as:

- Fermenter and bioreactor inlet gases
- Fermenter and bioreactor vents
- Autoclave vents
- Lyophilizer vents
- Purified water system storage tank vents
- In process storage tank vents
- Filling equipment process air

Performance

PTFE is the most hydrophobic of all membranes used in sterile filtration of gases. The inherent hydrophobicity of the PTFE membrane remains unaffected by repeated autoclaving or steaming. The sterile filtration of dry or moist gases is guaranteed. The unique single layer design is optimized for high flow rates at low differential pressures with short blow down times.

Stability

Sartofluor® GA can withstand high differential pressures in either the forward or reverse direction of flow. The mechanical stability and membrane structure are not affected by pulsation or high flow rates.

Water Intrusion Test (WIT) | Water Flow Test (WFT)

A Sartorius Stedim Biotech development, the WFT offers the first and only correlated insitu integrity testing system for hydrophobic vent filters. WFT not only eliminates downstream intervention and preflushing, more importantly, it does not require a single drop of alcohol.

Quality Control

Each individual element is tested for integrity prior to released assuring absolute reliability.

Documentation

Sartofluor® GA 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

Membrane	PTFE		
Support Fleece	Polypropylene		
Core	Polypropylene		
End Caps	Polypropylene		
O-Rings	Silicone (EPDM or Fluoroelastomer optional)		

Pore Size

0.45 μm (only Mini Cartridges) 0.2 μm 0.1 μm

Available Sizes | Filtration Area

Cartridges:

Size 0	5"	$0.375 \text{ m}^2 4.05 \text{ ft}^2$
Size 1	10"	0.75 m ² 8.1 ft ²
Size 2	20"	1.5 m ² 16.1 ft ²
Size 3	30"	2.25 m ² 24.2 ft ²

Mini Cartridges:

Size 7	$0.05 \text{ m}^2 \mid 0.54 \text{ ft}$
Size 8	0.1 m ² 1.1 ft ²
Size 9	0.2 m ² 2.2 ft ²

Junior:

Size 7 $0.05 \text{ m}^2 \mid 0.54 \text{ ft}^2$

Available Adapters Cartridges

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

Available Adapter Mini Cartridges

12, 15, 18: Bayonet adapter with o-ring (other adapters on request)

Available Adaper Junior

14: Plug adapter with double o-ring

Operating Parameters

Max. Allowable Differential Pressure	5 bar 72.5 psi at 20°C 2 bar 29 psi at 80°C
Max. Allowable Back	3 bar 43.5 psi
Pressure	at 20°C

Specifications

Extractables

Sartofluor® GA 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 Bacteria Challenge Test.

Non-pyrogenic according to USP Bacterial Endotoxins

Meets USP Plastics Class VI biological reactivity test, in vivo

Non-fiber releasing according to 21 CFR

Sterilization

In-Line Steam Sterilization

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

Autoclaving

134°C, 2 bar | 29 psi, 30 min

Sterilization Cycles

In-Line Sterilization: min 150 (in direction and in reverse direction of filtration)

Technical References

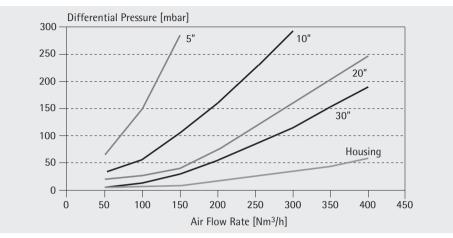
Validation Guide:

SPK5711-e

Extractables Guide:

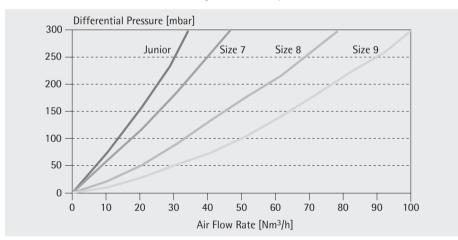
SPK5749-e

Air Flow Chart Sartofluor $^{\circ}$ GA Cartridge 0.2 μm



Under atmospheric pressure conditions

Air Flow Chart Sartofluor® GA Mini Cartridges | Junior 0.2 μm



Under atmospheric pressure conditions

Ordering Information

Order Code	Pore Size [µm]	Pack Size [pieces]	Test Pressure [bar psi]	Max. Diffusion [ml/min]	Min. Bubble Point [bar psi]
Cartridges					
5182558T1GA	0.1	1	0.9 13	11	1.5 22
5182558T2GA	0.1	1	0.9 13	22	1.5 22
5182558T3GA	0.1	1	0.9 13	33	1.5 22
5182507T0GA	0.2	1	0.7 10	6	1.0 14.5
5182507T1GA	0.2	1	0.7 10	11	1.0 14.5
5182507T2GA	0.2	1	0.7 10	22	1.0 14.5
5182507T3GA	0.2	1	0.7 10	33	1.0 14.5
Mini Cartridges					
5181558T7B	0.1	5	_	_	1.5 22
5181558T8B	0.1	5	_	_	1.5 22
5181558T9B	0.1	5	0.9 13.1	5	1.5 22
5181507T7B	0.2	5	0.7 10.2	2	1.0 14.5
5181507T8B	0.2	5	0.7 10.2	3	1.0 14.5
5181507T9B	0.2	5	0.7 10.2	4	1.0 14.5
5181506T7B	0.45	5	0.4 5.8	1	0.6 8.7
5181506T8B	0.45	5	0.4 5.8	2	0.6 8.7
5181506T9B	0.45	5	0.4 5.8	3	0.6 8.7
Junior					
5181407T7B	0.2	5	0.7 10	2	1.0 14.5

Sartorius Stedim Biotech GmbH August-Spindler-Strasse 11 37079 Goettingen, Germany Phone +49.551.308.0 Fax +49.551.308.3289

www.sartorius-stedim.com USA Toll-Free +1.800.368.7178 Argentina +54.11.4721.0505 Brazil +55.11.4451.6226

Mexico +52.5555.62.1102 UK +44.1372.737159 France +33.442.845600 Italy +39.055.63.40.41 Spain +34.913.586.098 Russian Federation +7.812.327.5.327 Japan +81.3.4331.4300 China +86.21.68782300

Specifications subject to change without notice.
Copyright Sartorius Stedim Biotech GmbH.
Printed in the EU on paper bleached without chlorine.
Plication No.: SPK2025-e160611
Order No.: 85030-507-97
Ver. 06 | 2016