

Sartobran®-P

Double-layer membrane filters for superior performance



Sartorius AG, Separation Technology

sartorius

Sartobran®-P Filter cartridges and capsules

Sartobran-P was developed specifically for the following applications:

- Plasma fractionation
- Serum/plasma filtration
- Vaccine production
- Ophthalmics
- Filtration of solutions containing proteins

The technically superior filtration principle

Sartobran-P offers increased security during filtration due to the mechanism of retention of its membrane: cellulose acetate membranes retain particles and microorganisms through sieve retention rather than through adsorption.

In addition, Sartobran-P filter elements have a heterogeneous double layer membrane construction which results in fractionated retention. Overall, Sartobran-P filter elements provide excellent total throughput and exceptional flow rate.

Ready-to-use

Sartobran-P filter units can be used immediately without any rinsing. Filtrates meet USP 23 Water for Injection requirements in the first liter of processing. In addition Sartobran-P capsules are delivered as sterile products, sterilized by steam-sterilization and labeled with a CE-sign for sterile medical devices

Sartobran-P is economical

Sartobran-P filter cartridges reduce your filtration costs as a result of their excellent throughputs. Higher filtrate volumes are attainable with the same filtration area. This allows you to cut your costs per liter of filtrate.

Sartobran-P cartridges offer improved mechanical strength and higher thermal stability due to the reinforced final filter membrane. This means that the cartridges can withstand a greater number of steaming cycles without loss of filter integrity.

Scale-up with Sartorius

Our entire range of Sartobran-P filter cartridges is made with the same membranes and materials of construction from the smallest element, our Sartobran 300, to capsules with a 0.3 ft² to 5 ft² filter area all the way up to our standard filter cartridge systems with up to 19.5 ft² filter area.

This gives you the opportunity to easily scale up from the first laboratory stages of R&D testing and development to future processes.

The results of laboratory trials can be easily converted into production scale with higher volumes. Sartorius' philosophy of scaling up allows you to adapt the filter element size to meet your changing production needs to achieve the maximum flow rate and throughput. Scaling up with Sartorius enables you to optimize your process.



Sartorius – quality according to ISO 9001

Sartorius is certified to meet the strictest of the ISO standards – ISO 9001. This covers our entire organization and ensures the highest of standards to provide for a total quality management system ranging from R & D to production, warehousing, materials management and customer service.



Sartorius' philosophy on quality ensures that our customers receive products which meet the strictest quality controls and regulatory requirements.

Every Sartobran-P filter element is individually numbered to provide 100% traceability concerning test and production data. Each filter is 100% integrity tested prior to release from production.

Validation with Sartorius

Comprehensive, product specific validation packages are available for all Sartobran-P filter elements since this information is the basis for your own process validation.



Sartobran-P filter elements meet and exceed all the requirements of the new USP 23 concerning the filtrate quality in "Water for Injection" and "Large Volume Parenterals for Single Dose Infusion". All materials used in the construction of the Sartobran-P filter elements are checked for biocompatibility by fulfilling the requirements of the USP 23 "Plastic Class VI Test".

Detailed data can be found in our validation guide which is available upon request.

Support from Sartorius

In addition to our documentation, Sartorius also offers support for your specific process validation. For example, we will evaluate specific integrity data for your media, if required. Moreover, to ensure that we competently meet your needs, we continually invest our time participating in tests and evaluations done at independent institutes regarding issues such as asbestos fiber retention as well as any new aspects to be described in the forthcoming USP.

Besides our own in-house validation efforts, we also offer our support for your process validation. With over 60 years of filtration experience behind us, we have developed the know-how necessary to support you through every stage of optimizing your filtration procedures and special process developments. At Sartorius, we continually strive to develop customer relationships to provide the right filtration solutions with the highest quality.



Ordering Information

Sartobran-P Pleated Filter Capsules

	0.45 μm	0.2 μm	0.1 μm
0.03 m ² / 0.3 ft ² / box of 10	5231306D5..D	5231307H5..D	
0.05 m ² / 0.5 ft ² / box of 5	5231306D7..B	5231307H7..B	
0.1 m ² / 1.0 ft ² / box of 5	5231306D8..B	5231307H8..B	
0.2 m ² / 2.0 ft ² / box of 4	5231306D9..A	5231307H9..A	5231358H9..A
0.5 m ² / 5.0 ft ² / box of 2	5231306D0..V	5231307H0..V	5231358H0..V

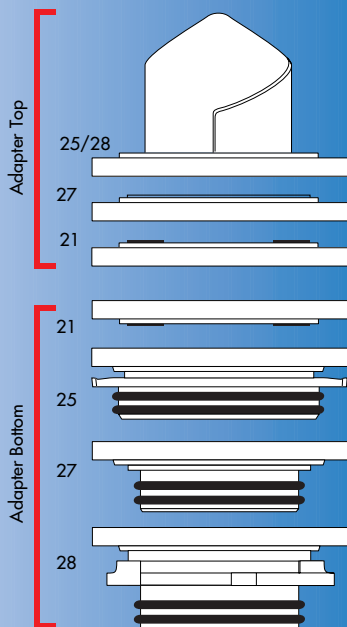
Sartorius Sartobran capsule filters are listed in the above chart. Different pore sizes for each capsule and corresponding partial order numbers are listed by capsule size. To complete the order number simply replace the two dots with the appropriate two letter combination (S,O,N) to indicate the type of end connectors you require.

S=Sanitary Flange, O=1/2" Hose Barb, N=1/4" NPT.
Example: 5231306D8..B would become 5231306D8SOB, signifying the selection of a Sartobran-P, 0.45 μm , 1 ft² / 0.1 m² box of 5 capsules with a sanitary flange connector at the inlet and a 1/2" hose barb at the outlet.

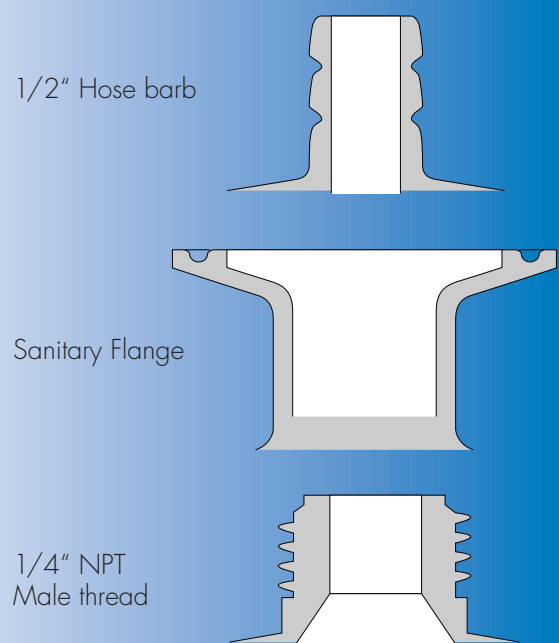
Sartobran-P Filter Cartridges

	0.45 μm	0.2 μm	0.1 μm
1-high (10")	523..06D1-P	523..07H1-P	523..58H1-P
2-high (20")	523..06D2-P	523..07H2-P	523..58H2-P
3-high (30")	523..06D3-P	523..07H3-P	523..58H3-P

Filter Cartridges



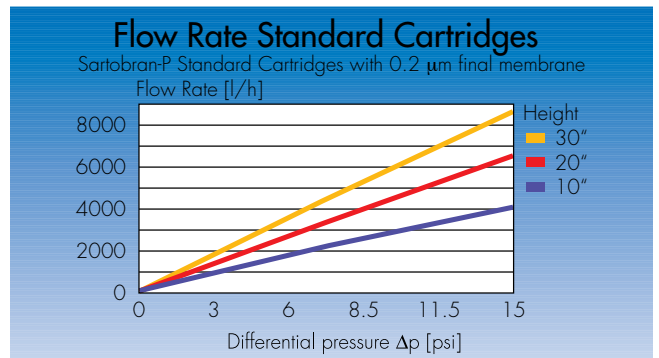
Connectors for Capsules



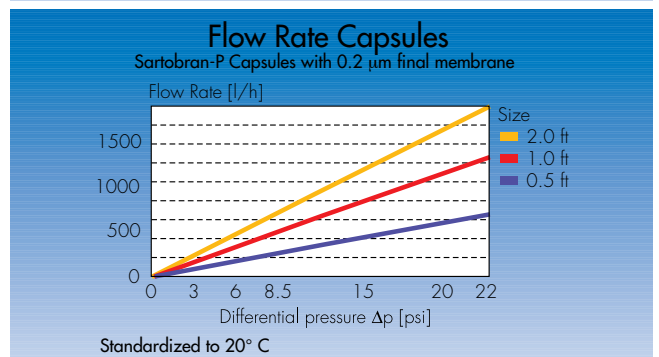
Sartobran®-P Filter Cartridges and Capsules

Features of the Sartobran-P

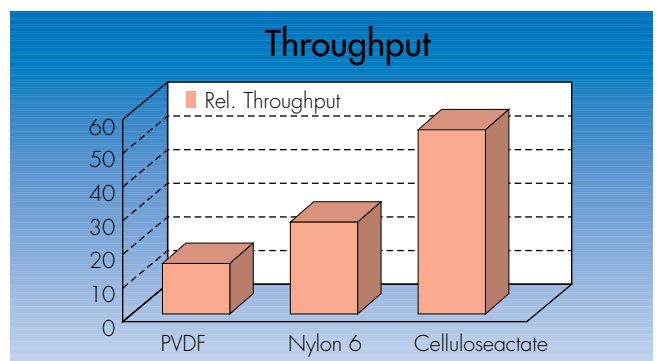
○ Sartobran-P filter cartridges provide outstanding flow rates in the standard cartridge range...



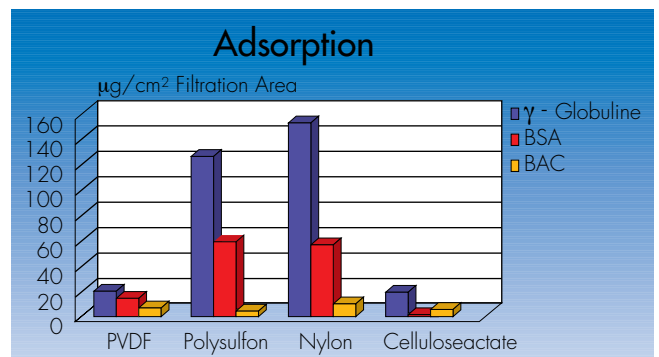
○ ... and for mini cartridges and capsules as well.



○ In addition, Sartobran-P elements guarantee exceptionally good total throughputs.



○ Cellulose acetate membranes provide very low nonspecific protein adsorption rates.



From lab to pilot to process, Sartorius filters meet the challenge

Whether you're developing a bench-top or laboratory scale application, or moving up to full-process scale pharmaceutical manufacturing, there's a Sartorius filter right for your requirements. From easy-to-use syringe filters to high-flow process-scale cartridges capable of handling volumes as high as 10,000 liters, Sartorius filters deliver exceptional performance. Consistent. Reproducible. Cost-effective.

Start with Sartorius, scale-up with Sartorius, stay with Sartorius

As volume needs increase, the range of Sartorius prefilters, depth filters and final membrane filters provides a vast resource for meeting your growing requirements. The broad selection of Sartorius filters makes it easy to choose the membrane type, pore size and mode of filtration you need for a given process volume.

Consistent materials for consistent results and consistent savings

You reduce costs when you stay with Sartorius as you scale-up. We use the same membrane materials and materials of construction throughout our pleated capsule filter range. So validation requirements – and their high cost – are greatly reduced or entirely eliminated as you scale-up to filter cartridges for full production. And you are assured reliable, consistent performance and process yields.

Proven superior throughput helps your process grow with the flow

In head-to-head tests against competitive filters, Sartorius capsules demonstrated higher flow rates – as much as twice those of the competition. Superior throughput is achieved via the low protein adsorption and extremely uniform pore structure of our cellulose acetate membranes. So you can count on Sartorius filter elements to keep pace with your process as you scale-up.

Quality that extends beyond superior technology

At Sartorius, we won't recommend a filter or system that's right for you until we thoroughly understand your needs.

Behind our recommendation and the quality of our products stands the full capabilities of Sartorius. A worldwide company with more than 65 years of experience in filtration, we offer:

- Fully-stocked facilities in Germany as well as in New York, California, Canada and Puerto Rico, ready to respond to your requirements at a moment's notice
- Testing and validation capabilities including laboratory applications, bacterial challenge and integrity testing
- Products that meet or exceed standards such as HIMA bacterial challenge and USP 23
- A responsive service team that's available to help you get the most from Sartorius products and services.

Call us for sales, service and validation support, worldwide

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Focus On

Scale-up

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