

Sartofine-PP

The high dirt loading prefilter cartridges filters

Sartofine-PP Applications in the Pharmaceutical Industry

Sartofine PP filter cartridges are designed for the removal of particle and microorganisms from liquids and gases.

- Particle and cell removal from biological broth
- Cell removal from fermentation solutions
- Tissue culture media and diagnostic sera filtration
- Serum product filtration
- Prefiltration of fermentation liquid feeds
- Clarification of solvents particle retention from acids, solvents, and other cleaning chemicals
- Particle removal in the filtration of gases
- Utility filter - cleaning machines, steam filtration
- Replace scintetered PTFE in water and steam systems
- Capture of DI resins particle retention from deionized water and from the feed water to these systems
- Filtration of bottle, vial and stopper washing fluids

Product Profile

Sartofine PP cartridges combine the advantages of both depth filtration and gradient filtration with absolute retention capabilities. Thermally bonded polypropylene materials offer a cartridge without media migration. This coupled with the precise manufacturing conditions offers the filters in a wide range of nominal and absolute retentions.

Sartofine PP cartridges utilize a non-pleated form. The use of successively finer layers of polypropylene fibers form depth filter matrices with a density gradient over four depth zones and leads to an extremely high dirt loading capacity.

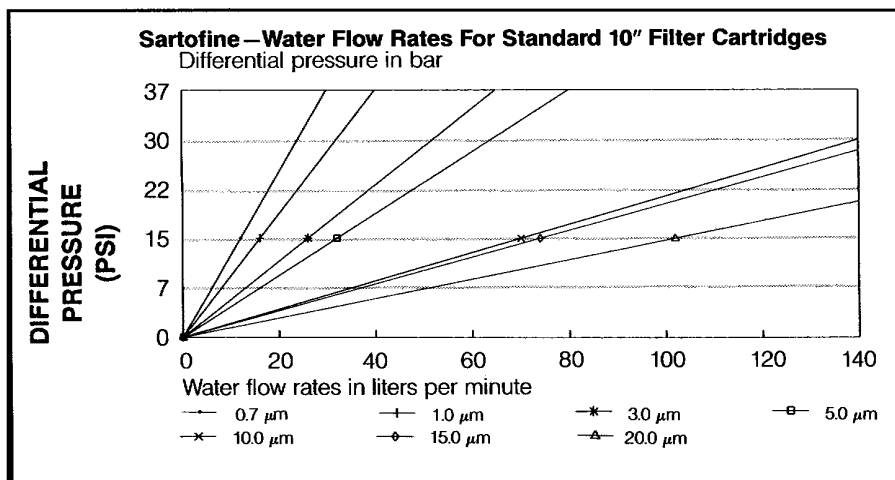
Chemical Compatibility

With the broad chemical compatibility of polypropylene and the high physical strength of the cartridge, Sartofine PP filters are resistant to both back pressure and pulsation pressure while being compatible with most solvents.

Highly Efficient Prefilters

These filters can greatly reduce the cost of filtration by extending the service life of membrane based filter capsules when filtering liquids with a wide spectrum of particle sizes. These filters are also suitable as particle removing filters for the filtration of gases.

Feature	Benefits
Combination of 4 zones of successively finer depth filter materials	High dirt loading capacity.
Precise manufacturing conditions	Thermally bonded polypropylene materials offers a capsule without media migration.
All propylene construction	With the broad chemical compatibility of polypropylene to most solvents and high physical strength of the cartridge, Sartofine-PP capsules are resistant to both back pressures and pulsation pressures.
Sartofine-PP cartridges provide long service life in the filtration of liquids which contain a wide spectrum of particle sizes.	Reduces the cost of filtration by extending the service life of membrane filter cartridges.



Materials of Construction

Depth Filter Material	Polypropylene	End Caps	Polypropylene
Inner Core	Polypropylene	O-Rings	Silicone*

*EPDM and Viton O-rings are also available. Add an E or V to the part number

Technical Data

Filtration Outer Surface Area, standard capsules	0.05 m ² (0.5 ft ²) per 10" element Surface area of each layer
Filtration media thickness	12 mm (40 layers)
Maximum differential pressure	75 psi at 20°C
Toxicity	Meets and exceeds all requirements of USP 23 Class VI Plastics Tests.
Sterilization:	Autoclaving (121°C, 15 psi, 30 min.) In-line steaming (up to 30 psi inlet with max. differential pressure of 7 psi, 30 min.) Hot water sanitized at 80°C for 30 min.
Chemical compatibility:	See table in the Sartorius Validation Guide or contact Sartorius

Sartofine-PP: retention rating	Retention capability*	
	99.9% retention of particle size:	99.99% retention of particle size:
20 µm	20 µm	25 µm
15 µm	15 µm	20 µm
10 µm	10 µm	12 µm
5 µm	5 µm	7 µm
3 µm	3 µm	5 µm
1 µm	1 µm	3 µm
0.7 µm	0.7 µm	1 µm

Available types and Order Number: Sartofine-PP Cartridges

Nominal Pore Size	1-high (10")	2-high (20")	3-high (30")
20 µm	558..20W1	558..20W5	558..20W3
15 µm	558..15W1	558..15W5	558..15W3
10 µm	558..10W1	558..10W5	558..10W3
5 µm	558..42W1	558..42W5	558..42W3
3 µm	558..02W1	558..02W5	558..02W3
1 µm	558..03W1	558..03W5	558..03W3
0.7 µm	558..05W1	558..05W5	558..05W3

* The effectiveness depends in part on the development of a filter cake at the start of the filtration and is dependent on the medium being filtered.

- .. Substitute the desired endcap/adapter configuration
- 00 for the "knife end seal" - double open end type adapter
- 03 for double open end with flat gasket seal
- 05 for S-adapter top with 2-pin bayonet-type 226 double O-ring adapter bottom
- 06 for S-adapter top with 222 double O-ring adapter bottom
- 07 for Flat top with 222 double O-ring adapter bottom

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