

P-SRF N

The sterile depth filter for compressed or process air and vent applications.

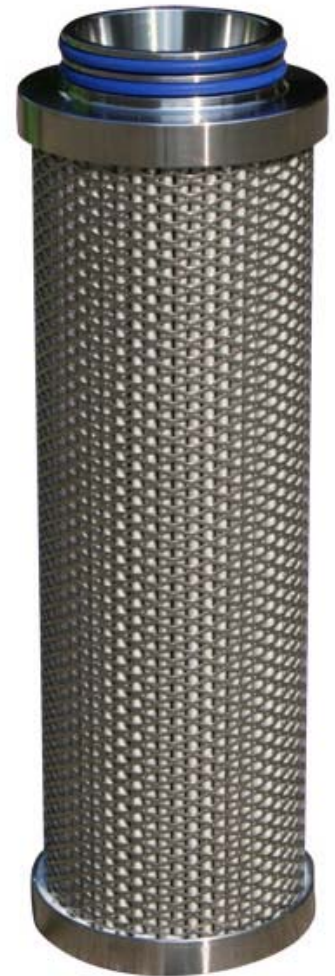
Product Description:

The P-SRF N is a pleated depth filter for sterile filtration of compressed air, process air, technical gases and vent applications. The retention rate is 99,99998% related to 0,2 µm. The P-SRF N combines great strength, long service life, high safety and high flow rates and can dramatically reduce costs by cartridge usage.

All components meet the FDA requirements for the contact with food in accordance with the CFR requirements (Code of Federal Regulations), title 21. The filter is manufactured according to DIN EN ISO 9001.

Features:

The use of a high quality stainless steel construction ensures excellent mechanical stability, thermal resistance up to 200°C and is suited even for VPHP sterilization. The three layer borosilicate media is chemically resistant and developed specifically for the removal of contaminating bacteria, phages and viruses. This inherently hydrophobic media ensures high flow rates, an extremely low pressure drop and excellent dewetting characteristics. The validated retention of bacteria and viruses provides high safety for aseptic applications in all industries.



The P-SRF N ensures a safe operation and is proven thousands of times in application



P-SRF N filter media

Application:

The P-SRF N sterile filters are designed for the following applications:

- Food & Beverage Industry
- Pharmaceutical Industry
- Biotech Industry
- Health Care
- Aseptic Packaging
- Chemical Industry
- Breweries
- Dairies



P-SRF N

Features:	Benefits:
High-quality stainless steel construction	High mechanical and thermal stability ranging from -20°C (-4°F) to 200°C (400°F)
Retention rate > 99,99998% related to 0,2 µm	Integrity testable with DOP test according to HIMA
Validated by aerosol bacterial challenge test levels of 10 ¹⁰ Brevundimonas diminuta per 5" element	Full retention of bacteria
Validated by aerosol phagae challenge test levels of 10 ¹⁰ MS-2 Coliphagae per 5" element	Full retention of viruses
Available in 11 sizes	Optimum filter size for individual applications
Stainless Steel core, layer and end caps	Good durability against chemicals, also applicable for VPHP Sterilization
100% integrity tested by factory	Guaranteed quality
Three dimensional borosilicate depth filter media	High dirt holding capacity
Optimized pleating structure	Excellent flow rate, low pressure drop, highly economical and low filtration costs

Temperature Range (continuous working filtration):
- 20°C to 200°C *

* > 150°C only for dry air

Effective Filtration Area (nominal):
0.84 m ² per 10 in. (254 mm) element For other element sizes see correction factor CF

Bacterial / Viral Retention:
P-SRF N filter elements have been scientifically validated from an independent institute by:
<ul style="list-style-type: none"> Brevundimonas (Pseudomonas) diminuta aerosol challenge LRV > 7/ cm² (0.2 µm) MS-2 Coliphagen aerosol challenge LRV > 9/ cm² (0.02 µm)

Materials:		
Filter media:	Borosilicate glass fibers	CFR Title 21, 177.2260
Coating:	PDMS	CFR Title 21, 177.2260
Support /Drainage Layers:	Stainless Steel 1.4301	CFR Title 21, 211.65
Cage / Core:	Stainless Steel 1.4301	CFR Title 21, 211.65
End caps:	Stainless Steel 1.4301	CFR Title 21, 211.65
O-Rings:	Silicone	CFR Title 21, 177.2600
Sealing Compound:	Silicone	CFR Title 21, 177.2600

Integrity Test Values:
DOP-Test according to HIMA: ≥ 99.99998%

Operating Conditions:
Maximum Differential Pressure: 5 bar (75 psid) (-20°C up to 150°C), independent of the system pressure or the flow direction
Typical Continuous Air Service Life: 12 months
Typical Vent Service Life: 6 months

Autoclaving/Steaming/Sterilization:
Cumulative Steaming Time*:
<ul style="list-style-type: none"> 121°C (250°F), Saturated Steam: 180 cycles (30 Minutes) 131°C (270°F), Saturated Steam: 150 cycles (20 Minutes) 141°C (290°F), Saturated Steam: 150 cycles (10 Minutes)
* Lab Tests to evaluate steaming resistance. Filter elements need to be checked in actual use. Contact Donaldson for recommended Autoclaving/Steaming procedures
Also suitable for VPHP Sterilization

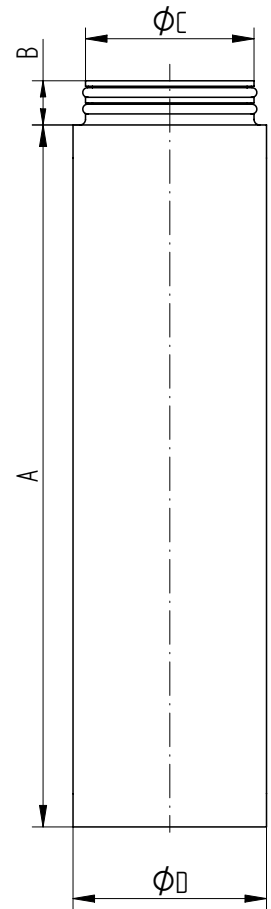
Configurations:
<ul style="list-style-type: none"> Single Open End, Flat End Cap, 3/4"/ 1"/ 2" plug/screw connection ("uf") 2 x 226 O-Rings, bayonet 2 locking tabs, locating fin ("P7")

P-SRF N

Dimensions:					
Element size	A mm	B mm	Ø C*	Ø D mm	KF**
03/10	76	11	3/4"	52	0,12
04/10	104	11	3/4"	52	0,17
04/20	104	14	1"	52	0,17
05/20	128	14	1"	52	0,21
05/25	128	14	1"	62	0,29
07/25	180	14	1"	62	0,42
07/30	180	16	2"	86	0,70
10/30	254	16	2"	86	1,00
15/30	381	16	2"	86	1,28
20/30	510	16	2"	86	2,00
30/30	764	16	2"	86	2,56

* Plug-type connection with double-o-ring

** Correction factor filtration surface



Pressure drop (2 bar abs):	
Nm ³ /h	mbar
0	0
20	7
40	12
60	18
80	22
100	29
120	37
140	44
160	50
180	57
200	65
220	72
240	82

Pressure drop (8 bar abs):	
Nm ³ /h	mbar
0	0
80	13
160	20
240	28
320	40
400	50
480	65
560	81
640	94
720	113
800	134
880	170

