



Donaldson.
FILTRATION SOLUTIONS

Process Filtration From Pure to Sterile

(P)-SRF

MAIN FEATURES & BENEFITS:

- Highly robust and mechanically stable
- Very durable design
- Integrity testable according to HIMA
- Thermal stability up to 200°C



INDUSTRIES:



- Dairy
- Brewery
- Food Processing
- Pharmaceutical
- Chemical
- Packaging

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Donaldson.
Ultrafilter

PRODUCT DESCRIPTION

The (P)-SRF filter is a wrapped depth filter with inner and outer guard and end caps made from stainless steel. The retention rate is 99,99998 % related to 0,2 µm. The binder-free, three dimensional borosilicate depth media has a large void volume of 95 %. This ensures a high dirt containment capacity at a low differential pressure and a high flow rate. The filter media is inherently hydrophobic.

The (P)-SRF was developed for the safe sterile filtration of compressed air and other process gases. The filter element fulfils the high requirements in food (breweries, dairies, soft drinks) and pharmaceutical industries and works reliable even under extreme operating conditions. Based on the patented binder free micro fibre medium made of borosilicate, this depth type filter realises high particle holding capacity and long service life.

The depth filter medium is non-fibre releasing and complies to the FDA requirements (Food and Drug Administration 21CFR 211.72 latest edition). Several layers of the glass fibre medium are embedded in stainless steel supports and bound to stainless steel end caps. The sturdy stainless steel construction permits one hundred (100) possible sterilisation cycles at specified conditions and withstands high differential pressures in both flow directions. (P)-SRF sterile filter elements guarantee a safe and reproducible production.

The wrapped sterile depth filter (P)-SRF is designed and developed for the following applications:

Filtration of air and gases

- Compressed Air
- Carbon Dioxide
- Fermentation Air
- Tank Ventilation
- Technical Gases

Application areas

- Chemical industry
- Pharmaceutical industry
- Biotechnology
- Breweries
- Dairies
- Aseptic packaging
- Food industry
- Hospitals

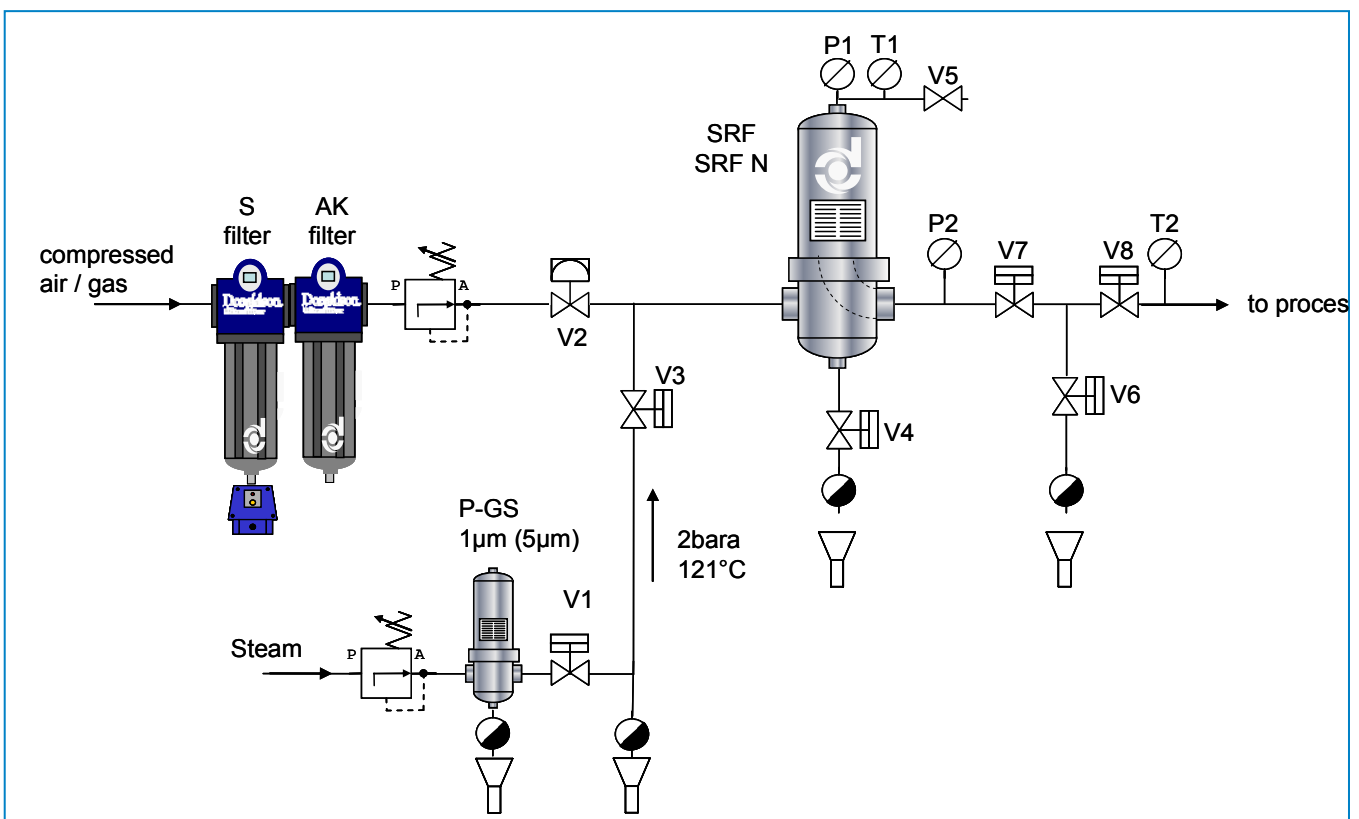
PRODUCT SPECIFICATIONS

Product Specifications

Retention Rate	<ul style="list-style-type: none"> > 99,99998 % at $\leq 0,2 \mu\text{m}$
Filtration Surface	<ul style="list-style-type: none"> 0,05 m² per 250 mm element (10")
Temperature Range	<ul style="list-style-type: none"> -20°C (-4°F) to 200°C (400°F) > 150°C (300°F) only for dry air
Maximum Differential Pressure	<ul style="list-style-type: none"> 5 bar (75 psid), independent of the system pressure or the flow direction
Typical Continuous Air Service Life time	<ul style="list-style-type: none"> 12 months
Typical Vent Service Life Time	<ul style="list-style-type: none"> 6 months
Cumulative Steaming Time*	<ul style="list-style-type: none"> 121°C (250° F), Saturated Steam: > 100 cycles (30 minutes)

* Figures are based on lab tests to evaluate steaming resistance. Filter elements need to be checked in actual use. Contact Donaldson for recommended Autoclaving/Steaming procedures.

SAMPLE INSTALLATION (REVERSE FLOW STERILISATION)



MATERIAL COMPLIANCE

All components of the (P)-SRF filter element are FDA listed for food contact use in the **Code of Federal Regulations (CFR), Title 21**

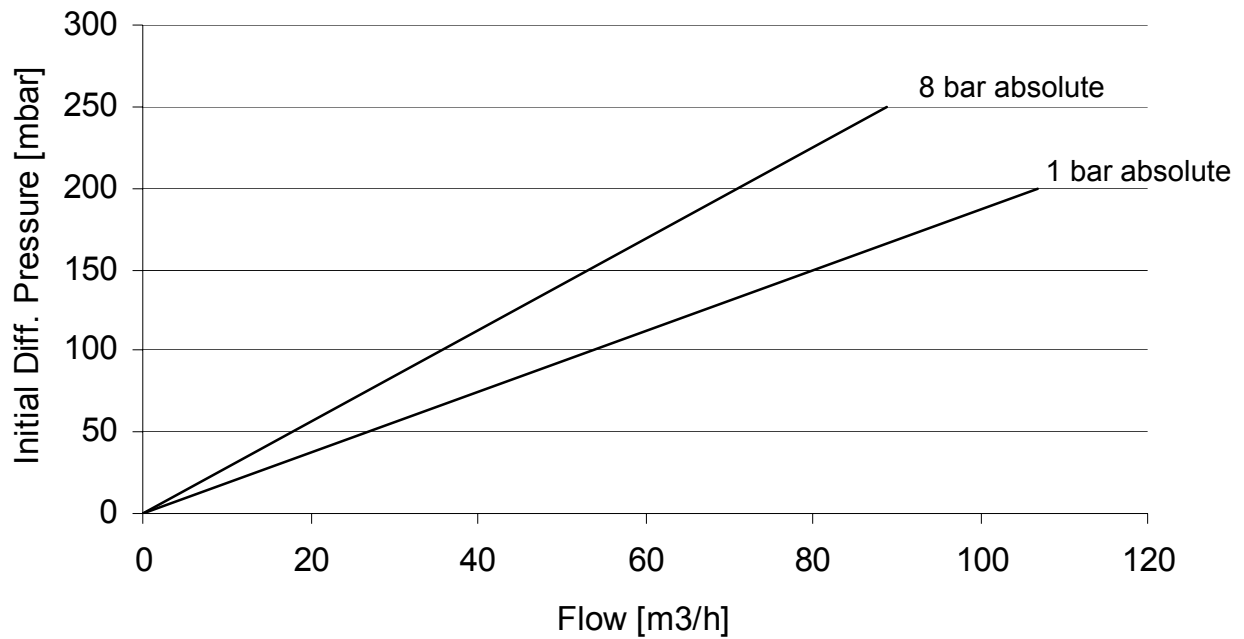
Filter Materials		CFR Title
Filter Matrix:	Borosilicate	177.2260
Upstream Support:	Aramide	177.2600
Downstream Support:	Aramide	177.2600
Outer Guard:	Stainless Steel 1.4301	211.65
Inner Guard:	Stainless Steel 1.4301	211.65
End Caps:	Stainless Steel 1.4301	211.65
Bonding Materials:	Silicone	177.2600
O-Rings:	Silicone	177.2600
Alternatively:	Buna	177.2600
	EPDM	177.2600
	PTFE over silicone	177.1550
	PTFE over viton	177.1550

All products have been inspected and released by Quality Assurance as having met the following requirements:

- All filters are fabricated without the use of binders, adhesives, additives or surface-active agents.
- All filter components based on plastics are non-toxic and are certified bio-safe in accordance with current USP Class VI Tests for Plastic.
- All sterile filters are integrity tested according to ASTM D 2986-91 and DIN EN 1822. to verify compliance with established quality and design specifications and to assure consistent and reliable performance.
- On request a Factory Test Certificate according to DIN EN 10204 is available.

FLOW CHARACTERISTICS

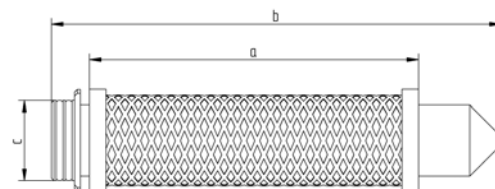
(P)-SRF, 10/30, air, 25°C, 1 bar absolute & 8 bar absolute



AVAILABLE END CAP CONFIGURATIONS

Dimensions (CODE 7 connection) :

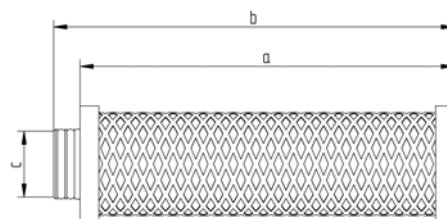
CODE 7						
Size	a		b		c	
	mm	inch	mm	inch	mm	inch
5"	125	4,92	190	7,48	56,5	2,22
10"	250	9,84	315	12,40	56,5	2,22
20"	500	19,68	585	22,24	56,5	2,22
30"	750	29,53	815	32,08	56,5	2,22



CODE 7: 2 x 226 o-rings, bayonet 2 locking tabs, locating fin.

Dimensions (uf plug connection):

uf – plug Connection							
Size	a		b		C*		CF**
	mm	inch	mm	inch	mm	inch	
03/10	76	2,99	87	3,42	30	1,18	0,12
04/10	104	4,09	118	4,64	30	1,18	0,17
04/20	104	4,09	118	4,64	37	1,46	0,19
05/20	128	5,04	142	5,59	37	1,46	0,25
05/25	128	5,04	142	5,59	37	1,46	0,32
07/25	180	7,08	194	7,64	37	1,46	0,47
05/30	128	5,04	144	5,67	61	2,40	0,46
07/30	180	7,08	196	7,71	61	2,40	0,68
10/30	254	10	270	10,63	61	2,40	1,00
15/30	381	15	397	15,63	61	2,40	1,55
20/30	510	20	526	20,63	61	2,40	2,10
30/30	764	30	780	30,63	61	2,40	3,28
30/50	764	30	780	30,63	89	3,50	5,89



* Plug- type connection with double-o-ring

** Correction Factor Filtration Surface & Flow Rate

Other end cap configurations on request.

Technical alterations reserved 04/2009

- Integrity test of this element to be done by DOP Test.
- For information on test equipment or test services, please contact your Donaldson Sales Engineer and visit our website at www.donaldson.com!

