FILTER ELEMENT P/SRF

(Particulate + Bacteria removal + Sterile)

DESCRIPTION

P-SRF filter elements have been developed for high-efficient sterile filtration of compressed air, process air and technical gasses. Depth filter media made of borosilicate glass microfibers assures high-efficient removal of sub-micron particles down to 0,01μm including microorganisms (bacteria). Filter media supported with NOMEX* is rigidly held between two stainless steel cylinders and encapsulated between stainless steel end-caps. The result is filter element with exceptional strength assuring high-efficient filtration and allowing large number of sterilization cycles.

APPLICATIONS

- Packing industry
- Biotechnology
- Breweries
- Chemical industry
- Diaries
- Fermentation processes
- Food & beverage industry
- Pharmaceutical industry
- Hospitals

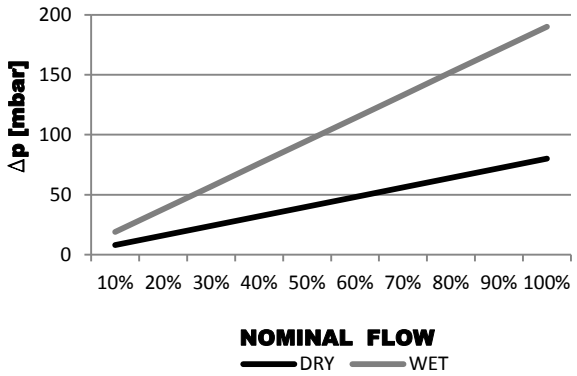
FILTER ELEMENT RATING ACCORDING TO ISO8573-1

Solid particles	Water	Oil
Class 1	-	-

Validated according to ISO12500-3

TECHNICAL SPECIFICATION

Operating temperature	-20 / +150°C	-4 / +302 °F
Operating pressure	0 - 16 barg	0 - 232 psi
Differential pressure (dry)	80 mbar	1,160 psi
Differential pressure (wet)	190 mbar	2,756 PSI
Particle retention (nominal)	99,9999% (0,01 µm)	
Manufactured without use of binders or other chemical additives		✓
100% integrity tested (DOP test)		✓
All components meet the FDA requirements for contact with food in accordance with the Code of Federal Regulations (CFR), title 21		✓



MATERIALS

Filter media	Borosilicate micro fibers
Support media	NOMEX*
Support (inner-outer)	Stainless Steel 1.4301
Bonding	Silicone
Endcaps	Stainless Steel 1.4301
Sealing	Silicone

**Nomex is a registered trademark of E.I. du Pont de Nemours and Co. Inc.*

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SIZES

FILTER ELEMENT SIZE	DIMENSIONS [mm]	FLOW CAPACITY [Nm^3/h]		FLOW CAPACITY [scfm]		FITS INTO FILTER HOUSING
		Nominal	Max.	Nominal	Max.	
02/10 P-SRF	Ø=42;h=62	46	69	27,1	40	
03/10 P-SRF	Ø=42;h=76	60	90	35	53	0006
04/10 P-SRF	Ø=42;h=104	90	120	53	71	0009
04/20 P-SRF	Ø=52;h=104	120	180	71	106	0012
05/20 P-SRF	Ø=52;h=128	180	270	106	159	0018
05/25 P-SRF	Ø=62;h=128	270	360	159	212	0027
07/25 P-SRF	Ø=62;h=180	360	480	212	282	0036
05/30 P-SRF	Ø=86;h=128	214	321	126	189	0032
07/30 P-SRF	Ø=86;h=180	480	720	282	423	0048
10/30 P-SRF	Ø=86;h=254	720	1080	423	635	0072
15/30 P-SRF	Ø=86;h=381	1080	1440	635	847	0108
20/30 P-SRF	Ø=86;h=508	1440	1920	847	1129	0144
30/30 P-SRF	Ø=86;h=760	1920	2880	1129	1693	0192
30/50 P-SRF	Ø=140;h=760	2880	4320	1693	2540	0288

ø=Diameter;L=length

CORRECTION FACTORS

To calculate the correct capacity of a given filter based on actual operating conditions, multiply the nominal flow capacity by the appropriate correction factor(s).
CORRECTED CAPACITY = NOMINAL FLOW CAPACITY x C_{OP}

OPERATING PRESSURE

[bar]	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
[psi]	29	44	58	72	87	100	115	130	145	160	174	189	203	218	232
C_{OP}	0,38	0,5	0,63	0,75	0,88	1	1,13	1,25	1,38	1,50	1,63	1,75	1,88	2,00	2,13

STERILIZATION (saturated steam)

Comulative steaming time:

- 121°C/250°F, Sterilization 30min, Heating and cooling 30min (100 cycles)
- 132°C/270°F, Sterilization 20min, Heating and cooling 40min (100 cycles)
- 143°C/290°F, Sterilization 10min, Heating and cooling 50min (100 cycles)

MAINTENANCE

Replace filter element when first of following criteria is reached:

- twelve months in operation
- pressure drop reaches 600 [mbar]
- prescribed number of sterilisation cycles

Please note that all P-SRF (sterile) filter elements are delivered unsterile in unsterile packaging! Please sterilize the filter elements before first use if needed for the application.

INFORMATION IN THIS DOCUMENT IS SUBJECT TO CHANGE WITHOUT NOTICE

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