

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 0,01mm 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

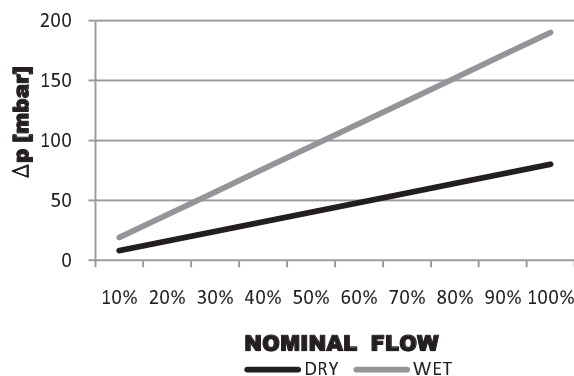
FILTER ELEMENT RATING ACCORDING TO ISO8573-1

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.

SIZES

FILTER ELEMENT SIZE	DIMENSIONS [mm]	FLOW CAPACITY [Nm ³ /h]	FLOW CAPACITY [scfm]	FITS INTO FILTER HOUSING
1x0310 P-SRF	Ø=42;L=76	75	44	0006
1x0410 P-SRF	Ø=42;L=104	105	62	0009
1x0420 P-SRF	Ø=52;L=104	150	88	0012
1x0520 P-SRF	Ø=52;L=128	225	132	0018
1x0530 P-SRF	Ø=62;L=128	315	185	0032
1x0730 P-SRF	Ø=86;L=180	600	353	0048
1x1030 P-SRF	Ø=86;L=254	900	530	0072
1x1530 P-SRF	Ø=86;L=381	1260	742	0108
1x2030 P-SRF	Ø=86;L=508	1680	989	0144
1x3030 P-SRF	Ø=86;L=760	2400	1413	0192
3x2030 P-SRF	Ø=86;L=760	5040	2966	0432
3x3030 P-SRF	Ø=86;L=760	6720	3955	0576
4x3030 P-SRF	Ø=86;L=760	9600	5650	0768
6x3030 P-SRF	Ø=86;L=760	13440	7910	1152
8x3030 P-SRF	Ø=86;L=760	17280	10171	1536
10x3030 P-SRF	Ø=86;L=760	21120	12431	1920

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

	Our quality management system is certified by BUREAU VERITAS in conformity with ISO 9001:2000 Reg. number: 200285	
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