



P-FF, P-MF, P-SMF

COALESCING FILTER ELEMENTS

fits Donaldson P-EG & PG-EG housings

Process Filtration

Donaldson® P-FF, P-MF, and P-SMF coalescing depth filters are used for the removal of water, oil aerosols and solid particles from compressed air and gases with absolute retention efficiency.

The coalescing filter uses a three dimensional micro fiber fleece made out of binderfree glass fiber. A 1 µm pre-filter medium is integrated and allows for effective two-stage filtration.

By using various filtration mechanisms such as impaction, sieving, and diffusion, liquid aerosols and solid particles down to the size of 0.01 µm are being retained in the filter.

APPLICATIONS

The P-FF, P-MF and P-SMF coalescing filters are used in the following industries:

- Chemical
- Petrochemical
- Pharmaceutical
- Plastics
- Paint
- General machine fabrication
- Food & Beverage
- Instrumentation and control air



P-FF, P-MF, and P-SMF

FEATURES	BENEFITS
Expanded inner and outer stainless steel support sleeves for the secure hold of the filter medium	No danger of corrosion – large openings ensure low differential pressure drop and high throughput
Binderfree depth filter medium made of borosilicate glass	Low differential pressure drop
Removal of liquid aerosols and solid particles down to 0.01 µm	Validated retention efficiency, high level of contaminant removal
Large media surface area	High dirt holding capacity, long service life

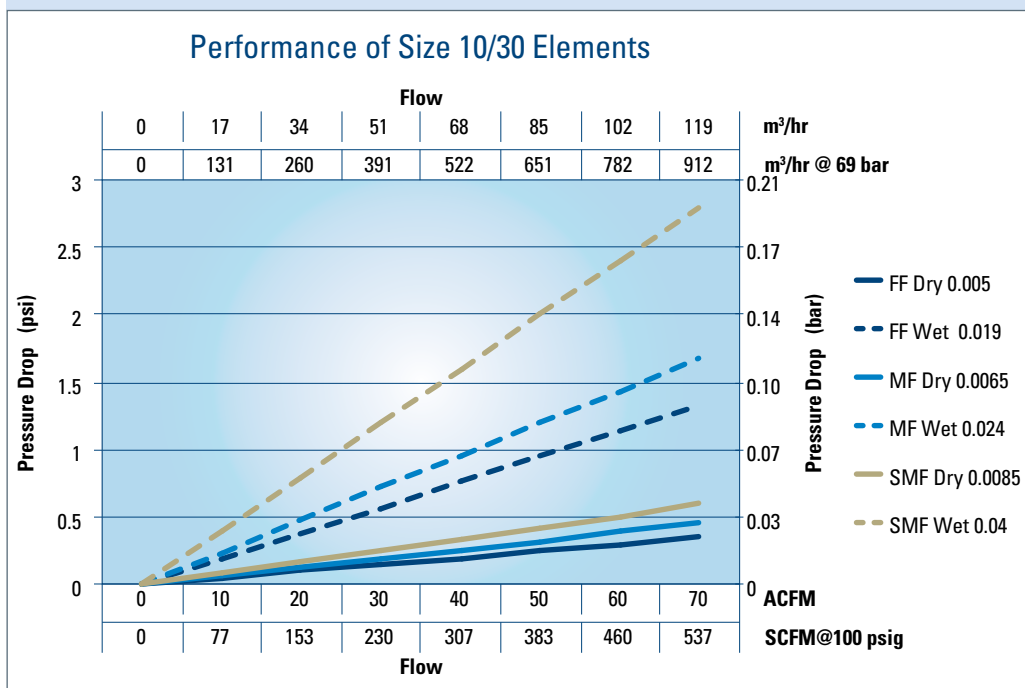
SPECIFICATIONS

MATERIALS	
Filter Media	Borosilicate microfiber with polyurethane foam drainage layer
Pre- & After-Filter Media	Cerex®*
Outer Foam Socks	Blue polyurethane foam sock up to 80° C (176° F) HT/CR sock up to 120° C (248° F) HT/NX sock up to 180° C (356° F)
Bonding	Polyurethane
End Caps	304 SS
O-Rings	Buna
Inner & Outer Support Sleeves	304 SS

Validation	Validation of high-efficiency filters by Technical University Dresden
Residual oil content at an inlet concentration of 3 mg/m ³	FF = 0.1 mg/m ³ MF = 0.03 mg/m ³ SMF = <0.01 mg/m ³
Retention rate related to particles of 0.01 µm	FF = 99.999% MF = 99.99998% SMF = 99.99999%
Maximum Differential Pressure	5 bar (72.5 psi) at 20° C (68° F) regardless of system pressure
Initial Differential Pressure at Nominal Flow	FF = 0.083 bar (0.73 psi) MF = 0.117 bar (1.20 psi) SMF = 0.138 bar (1.70 psi)

* Cerex® is a registered trademark of Cerex Advanced Fabrics, Inc.

FLOW CHARACTERISTICS



PRESSURE DROP CALCULATIONS

Element Size	Correction Factor Filter Surface (CF)
03/10	0.12
04/10	0.17
04/20	0.19
05/20	0.25
05/25	0.32
07/25	0.47
07/30	0.68
10/30	1.00
15/30	1.55
20/30	2.10
30/30	3.20
30/50	5.65

Important Notice

Many factors beyond the control of Donaldson can affect the use and performance of Donaldson products in a particular application, including the conditions under which the product is used. Since these factors are uniquely within the user's knowledge and control, it is essential the user evaluate the products to determine whether the product is fit for the particular purpose and suitable for the user's application. All products, specifications, availability and data are subject to change without notice, and may vary by region or country.

Registered:



Donaldson Company, Inc.
Minneapolis, MN

donaldson.com
shop.donaldson.com

Australasia 61-02-4350-2066
marketing.australia@donaldson.com

Brazil 55-11-4894-6035
vendas.brasil@donaldson.com

China 86-400-921-7032
info.cn@donaldson.com

EMEA 49-2129-569-0
cap-europe@donaldson.com

India 91-124-4807-400
indiaquiries@donaldson.com

Japan 81-42-540-4123
ndl-ultrafilter-web@donaldson.com

Korea 82-2-517-3333
cap-kr@donaldson.com

Latin America 52-449-300-2442
industrialair@donaldson.com

North America 800-543-3634
processfilters@donaldson.com

South Africa 27-11-997-6000
samarketing@donaldson.com

Southeast Asia 65-6311-7373
sea.salesenquiry@donaldson.com