

# FILTER ELEMENT – Ultrafilter

Alternative filter elements for Donaldson - Ultrafilter

Series: 90'

## DESCRIPTION

These filter elements have been developed for highly efficient removal of solid particles, oil aerosols, water, hydrocarbons, vapours and odours from compressed air.



## FILTER ELEMENT RATING ACCORDING TO ISO 8573-1

Filtration grade	Solid particles class	Water class	Oil class
PE	6	/	/
FF	2	/	2
MF	2	/	2
SMF	1	/	1
AK	1*	/	0/1

Validated according to ISO12500-1, ISO12500-2 and ISO12500-3

## TECHNICAL SPECIFICATION

	PE	FF	MF	SMF	AK
Operating temperature	1,5 - 65 °C/ 35 - 149 °F	1,5 - 45 °C/ 35 - 113 °F			
Operating pressure	0 - 16 barg/ 0 - 232 psi				
Differential pressure (dry)	10 mbar/ 0,145 psi	20 mbar/ 0,290 psi	50 mbar/ 0,725 psi	80 mbar/ 1,160 psi	60 mbar/ 0,870 psi
Differential pressure (wet)	20 mbar/ 0,290 psi	40 mbar/ 0,580 psi	120 mbar/ 1,740 psi	190 mbar/ 2,756 psi	/
Particle retention (nominal)	99,99% (3 µm)	99,9999% (0,1 µm)	99,9999% (0,1 µm)	99,9999% (0,01 µm)	/
Particle retention rate ISO <sup>(3)</sup>	95 %	99,8 %	99,98 %	99,9994 %	/
Residual oil content <sup>(4)</sup>	/	< 0,5mg/m <sup>3</sup>	< 0,1mg/m <sup>3</sup>	< 0,01mg/m <sup>3</sup>	< 0,005mg/m <sup>3</sup>
Flow Direction	INSIDE to OUTSIDE				
Capacity (ISO12500-2) <sup>(5)</sup>	/	/	/	/	20 min

<sup>(3)</sup>Tested according to ISO12500-3, 1bar(a), nominal flow, 06050 P, MPPS-(5µm) ; 06050 M, S, MPPS-(0,3µm)

<sup>(4)</sup>Tested according to ISO12500-1, 06050 M, S Oil aerosol viscosity 32mm<sup>2</sup>/s, inlet concentration 10mg/m<sup>3</sup>

<sup>(5)</sup>Tested according to ISO12500-2, 06050 A, tested with n-Hexane, test concentration 100mg/kg, 80% Saturation

## 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<sub>OP</sub>

### 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 <sub>OP</sub>	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

## MATERIALS

	PE	FF	MF	SMF	AK
Filter media	Acrylic fibers, cellulose	Borosilicate micro fibers	Borosilicate micro fibers	Borosilicate micro fibers	Borosilicate micro fibers
Protection media	Polyester fleece				
Drainage media	/	Polyester needle felt	Polyester needle felt	Polyester needle felt	/
Adsorption media	/	/	/	/	Activated carbon granulate
Support (inner-outer)	Stainless steel 1.4301				
Bonding	Polyurethane	Polyurethane	Polyurethane	Polyurethane	Polyurethane
Endcaps	PA6 with 30% glass fibers or aluminium				
Sealing	NBR	NBR	NBR	NBR	NBR

## SIZES

Model*	Diameter [mm]	Height [mm]	Flow Capacity [Nm <sup>3</sup> /h]	Flow Capacity [scfm]	Fits into filter housing
DO 0205	35	62	20-40	12-24	0002
DO 0305	35	76	40-60	24-35	0004
DO 0310	42	76	60-90	35-53	0006
DO 0410	42	104	90-120	53-71	0009
DO 0420	52	104	120-180	71-106	0012
DO 0520	52	128	180-270	106-159	0018
DO 0525	62	128	270-360	159-212	0027
DO 0725	62	180	360-480	212-282	0036
DO 0730	86	180	480-720	282-423	0048
DO 1030	86	254	720-1080	423-635	0072
DO 1530	86	381	1080-1440	635-847	0108
DO 2030	86	508	1440-1920	847-1129	0144
DO 3030	86	760	1920-2880	1129-1693	0192
DO 3050	140	760	2880-4320	1693-2540	0288

\*Filter cartridge names consist of cartridge size and filtration grade. Place filtration grade designation after filter size (e.g. DO 0205 PE). There is an option for **aluminum endcaps** (e.g. DO 0205 PE Al).

## MAINTENANCE

PE, FF, MF, SMF - Replace filter element at least once per year or when pressure drop reaches 350mbar

AK - Replace filter element at least every 6 months



## Strength

- We export to almost 100 countries.
- We have more than 2000 global customers.
- We can provide a total filtration solution.

- Filter-Online & Nordic Filtration offers a wide selection of filtration products for Domestic and Industrial Application.

- You can buy our products on our websites or by contacting us by phone or e-mail. Information about our products as well as brochures and manuals can be found on our websites:

[www.filter-online.com](http://www.filter-online.com) for Domestic Products

[nordicfiltration.com](http://nordicfiltration.com) for Industrial Products

We distribute many of our products from our stock in Denmark. Some products are shipped from remote stock.



Filter-Online & Nordic Filtration ApS  
Glasvænget 6  
5492 Vissenbjerg  
Denmark

**Filter-Online**  
+45 70 40 42 22  
[info@filter-online.com](mailto:info@filter-online.com)  
[www.filter-online.com](http://www.filter-online.com)

**Nordic Filtration**  
+45 72 25 10 00  
[info@nordicfiltration.com](mailto:info@nordicfiltration.com)  
[nordicfiltration.com](http://nordicfiltration.com)