

Replacement Element FF / MF / SMF / AK

Domnick Hunter OIL-X EVOLUTION AR / AO / AA / ACS / AC

(Particulate, Coalescing, Oil vapour removal)

Description

ultrafilter replacement filter elements have been specifically developed for high efficient removal of solid particles, oil aerosols, water, hydrocarbons, vapours and odours from compressed air⁽¹⁾.

Filter elements are designed to fit into Parker - Domnick Hunter OIL-X EVOLUTION filter housings.

Applications⁽²⁾

- Automotive
- Electronics
- Food & Beverage
- Chemical
- Petrochemical
- Plastics
- Paint
- General industrial application

⁽¹⁾For any other technical gas please contact us or your local dealer

⁽²⁾**ultrafilter** replacement filter element can be used in variety of applications.

For applications not listed please contact us or your local dealer.



Filter Element rating according ISO8573-1

	Solid particles	Water	Oil
AR/FF	Class 3	-	Class 3
AO/MF	Class 2	-	Class 2
AA/SMF	Class 1	-	Class 1
ACS/AK	-	-	Class 0/1

Validated according to ISO12500-1 and ISO12500-3

Technical Specification

Filtration grade	AR/FF ⁽⁶⁾	AO/MF ⁽⁶⁾	AA/SMF ⁽⁶⁾	ACS/AK ⁽⁶⁾	AC/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)	20 mbar/ 0,290 psi	50 mbar/ 0,725 psi	80 mbar/ 1,160 psi	60 mbar/ 0,870 psi	
Differential pressure (wet)	40 mbar/ 0,580 psi	120 mbar/ 1,740 psi	190 mbar/ 2,756 psi	N/A	
Particle retention (nominal)	99,9999% (1 µm)	99,9999% (0,1 µm)	99,9999% (0,01 µm)	N/A	
Particle retention rate ISO ⁽³⁾	99,8 %	99,98 %	99,9994 %	N/A	
Residual oil content ⁽⁴⁾	< 0,5mg/m ³	< 0,1mg/m ³	< 0,01mg/m ³	< 0,005mg/m ³	
Capacity (ISO12500-2) ⁽⁵⁾	N/A	N/A	N/A	20 min	

⁽³⁾Tested according to ISO12500-3, 1bar(a), at nominal flow, 03/10 AR/FF, AO/MF, AA/SMF, MPPS-(0,3 Mic)

⁽⁴⁾Tested according to ISO12500-1, 03/10 AR/FF, AO/MF, AA/SMF Oil aerosol viscosity 32mm²/s, inlet concentration 10mg/m³

⁽⁵⁾Tested according to ISO12500-2, 03/10 ACS/AK, tested with n-Hexane, test concentration 100mg/kg, 80% Saturation

⁽⁶⁾Cross reference **ultrafilter** vs. Domnick Hunter filtration grades:

FF = AR/FF = AR
MF = AO/MF = AO
SMF = AA/SMF = AA
AK = ACS/AK = ACS
AK = AC/AK = AC



Sizes

Filter Element Size	Dimensions [mm]	Flow Capacity [Nm³/h]	Flow Capacity [scfm]	Fits into DH Filter Housing
XX 1/0,5 005__	Ø=37; h=43	22	13	005
XX 2/0,5 010__	Ø=37; h=70	36	21	010
XX 3/1,5 015__	Ø=48; h=91	72	42	015
XX 4/1,5 020__	Ø=48; h=111	108	64	020
XX 6/2,5 025__	Ø=68; h=131	216	127	025
XX 10/2,5 030__	Ø=68; h=220	396	233	030
XX 10/3,5 035__	Ø=90; h=268	576	339	035
XX 12/3 040__	Ø=90; h=305	792	466	040
XX 24/3 045__	Ø=90; h=358	1188	699	045
XX 15/4 050__	Ø=108; h=458	1548	911	050
XX 24/4 055__	Ø=108; h=648	2232	1314	055
XX 25/3 060__	Ø=86; h=635	3600	2119	060
XX 16/4,5 150__	Ø=114; h=415	1548	911	150
XX 25/4,5 200__	Ø=114; h=635	2232	1314	200
AK 010AC (Al)	Ø=36,5; h=105	36	21	010
AK 015AC (Al)	Ø=46; h=130	72	42	015
AK 020AC (Al)	Ø=46; h=130	108	64	020
AK 025AC (Al)	Ø=70; h=136,5	216	127	025
AK 025E AC (Al)	Ø=70; h=136,5	216	127	025
AK 030AC (Al)	Ø=70; h=210	396	233	030

XX = Filtration grade **ultrafilter** FF, MF, SMF or AK

(Al) = aluminium end caps

__ = Filtration grade Domnik Hunter AR, AO, AA, ACS or AC

Materials

	AR/FF	AO/MF	AA/SMF	ACS/AK	AC/AK
Filter media	Borosilicate micro fibers	Borosilicate micro fibers	Borosilicate micro fibers	Glass fibre, borosilicate microfibers	Glass fibre, borosilicate microfibers
Drainage media	Polyurethane	Polyurethane	Polyurethane	/	/
Adsorption media	/	/	/	Activated carbon granulate PES (Polyester)	Activated carbon granulate PES (Polyester)
Support (inner-outer)	Stainless steel 1.4301				
Bonding	Polyurethane				
Endcaps	PA6 with 30% glass fibers				Aluminium
Sealing	NBR				

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

Maintenance

Replacement filter element grade AR/FF, AO/MF, AA/SMF at least once per year or when pressure drop reaches 350mbar. Replacement filter element grade ACS/AK, AC/AK at least every 6 months.

