

Replacement Element FF / SMF / AK

CompAir B+E / C+F / D

(Particulate, Coalescing, Oil vapour removal)

Description

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

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
B+E/FF	Class 3	-	-
C+F/SMF	Class 1	-	Class 1
D/AK	Class 1	-	Class 0/1

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

Technical Specification

Filtration grade CompAir / ultrafilter	B+E / FF	C+F / SMF	D / AK
Operating temperature	1,5 - 65 °C 35 - 149 °F	1,5 - 65 °C 35 - 149 °F	1,5 - 45 °C 35 - 113 °F
Differential pressure (dry)	20 mbar 0,290 psi	80 mbar 1,160 psi	60 mbar 0,870 psi
Differential pressure (wet)	40 mbar 0,580 PSI	190 mbar 2,756 PSI	/
Particle retention (nominal)	99,9999%(1 µm)	99,9999%(0,01 µm)	/
Particle retention rate ISO ⁽³⁾	99,8%	99,998%	/
Residual oil content ⁽⁴⁾	/	/	< 0,005mg/m ³
Capacity (ISO12500-2) ⁽⁵⁾	/	/	20 min

⁽³⁾ Tested according to ISO12500-3, 1bar(a), nominal flow, 03/10 B+E/FF, C+F/SMF, MPPS-(0,3µm)

⁽⁴⁾ Tested according to ISO12500-1, 03/10 B+E/FF, C+F/SMF, Oil aerosol viscosity 32mm²/s, inlet concentration 10mg/m³

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

⁽⁶⁾ Cross reference **ultrafilter** – Compare filtration grades:

FF = B+E/FF = B and/or E

SMF = C+F/SMF = C and/or F

AK = D/AK = D



Sizes

Element Size Plastic End Caps	Dimensions [mm]	Flow Capacity [Nm ³ /h]	Flow Capacity [scfm]
XX 2/0,5 CE 0006N _	Ø=36,5; h=70,0	36	21
XX 3/1,5 CE 0012N _	Ø=48,0; h=91,1	72	42
XX 4/1,5 CE 0018N _	Ø=48,0; h=111,0	108	64
XX 6/2,5 CE 0036N _	Ø=68,0; h=131,0	216	127
XX 10/2,5 CE 0066N _	Ø=68,0; h=220,0	396	233
XX 10/3,5 CE 0096N _	Ø=90,0; h=268,0	576	339
XX 12/3 CE 0132N _	Ø=90,0; h=305,0	792	466
XX 24/3 CE 0198N _	Ø=90,0; h=358,0	1188	699
XX 15/4 CE 0258N _	Ø=108,0; h=458,0	1548	911
XX 24/4 CE 0372N _	Ø=108; h=648	2232	1314
XX 25/3 CE 0600F _	Ø=86; h=635	3600	2119
XX 16/4,5 CE 0258F _	Ø=114; h=415	1548	911
XX 25/4,5 CE 0372F _	Ø=114; h=365	2232	1314

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

Ø=Diameter; h=Height

_ = Filtration grade CompAir B+E, C+F or D

Materials

	B+E/FF	C+F/SMF	D/AK
Filter media	Borosilicate micro fibers		Glass fiber, borosilicate microfibres
Adsorption media	Activated carbon granulate PES (Polyester)		
Drainage media	Polyester based polyurethane		
Support (inner-outer)	Stainless Steel 1.4301		
Bonding	Polyurethane		
Endcaps	PA6 with 30% glass fibers		
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

Replace filter element grade B+E/FF and C+F/SMF at least once per year or when pressure drop reaches 350mbar.

Replace filter element grade D/AK at least every 6 months.

