

Replacement Element VF / MF / SMF / AK

Beko G / F / S / A

(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⁾.

Filter elements are designed to fit into Beko-Clearpoint 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⁾ 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 ISO 8573-1

Type Beko/ ultrafilter	Solid particles	Water	Oil
G/VF	6	-	-
F/MF	2	-	2
S/SMF	1/2	-	1
A/AK	1/2	-	0/1 ⁽³⁾

⁽³⁾ Suitable filtration must be provided downstream.

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

Technical Specification

Filtration grade name	G/VF ⁽⁷⁾	F/MF ⁽⁷⁾	S/SMF ⁽⁷⁾	A/AK ⁽⁷⁾
Operating temperature	1,5 – 65°C 35 - 149 °F	1,5 – 65°C 35 - 149 °F	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	50 mbar 0,725 psi	80 mbar 1,160 psi	60 mbar 0,870 psi
Differential pressure (wet)	20 mbar 0,290 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% (0,01 µm)	
Particle retention rate ISO ⁽⁴⁾	95 %	99,98 %	99,998 %	
Residual oil content ⁽⁵⁾		< 0,1mg/m ³	< 0,01mg/m ³	< 0,005mg/m ³
Capacity (ISO12500-2) ⁽⁶⁾				20 min

⁽⁴⁾ Tested according to ISO12500-3, 1bar(a), nominal flow, 03/10 G/VF - MPPS-(5 Mic) ; 03/10 F/MF, S/SMF - MPPS-(0,3 Mic)

⁽⁵⁾ Tested according to ISO12500-1, 03/10 F/MF, S/SMF - Oil aerosol viscosity 32mm²/s, inlet concentration 10mg/m³

⁽⁶⁾ Tested according to ISO12500-2, 03/10 A/AK, tested with n-Hexane, test concentration 100mg/kg, 80% Saturation

⁽⁷⁾ Cross reference **ultrafilter** vs. Beko Clearpoint filtration grades:

VF = G/VR = G

MF = F/MF = F

SMF = S/SMF = S

AK = A/AK = A

Sizes

Filter Element Size	Dimensions [mm]		Flow Capacity [Nm³/h]	Flow Capacity [scfm]	Fits into Beko Filter Housing
	ø	h			
XX04_	35	87,5	35	20	S040
XX05_	35	117,5	65	38	S050
XX06_	35	172,5	100	58,8	S055
XX07_	48	175	150	88	S075
XX10_	48	242,5	200	117,7	M010
XX12_	48	277	250	147	M012
XX15_	83	213,5	320	188	M015
XX18_	83	266,5	420	247	M018
XX20_	83	316,5	600	353	M020
XX22_	83	413	780	459	M022
XX23_	83	531	1020	600	M023
XX25_	129	411,5	1300	765	M025
XX27_	129	515,5	1620	953	M027
XX30_	129	636	1940	1142	M030
XX32_	129	783	2400	1412	M032
XX88_	82	789	1580	930	L080-L304

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

_ = Filtration grade Beko G, F, S or A

Materials

	G/VF	F/MF	S/SMF	A/AK
Filter media	Pleated acrylic fibers & cellulose	Pleated borosilicate micro fibers	Pleated borosilicate micro fibers	Wrapped borosilicate micro fibers
Protection	Polyester fleece			
media Drainage	/	Polyurethane	Polyurethane	/
media	/	/	/	Activated carbon
Adsorption	granulate PES (Polyester)			
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.

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 elements grade G/VF, F/MF, S/SMF at least once per year or when pressure drop reaches 350 mbar.

Replace activated carbon filter element grade A/AK at least every 6 months.