

FILTER ELEMENT – OBK

(Particulate, Coalescing, Oil vapour removal)

DESCRIPTION

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

OBK 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⁾OBK filter element can be used in variety of applications. For applications not listed please contact us or your local dealer.

FILTER ELEMENT RATING ACCORDING TO ISO8573-1

	Solid particles	Water	Oil
G/P	6	-	-
F/M	2	-	2
S/S	1	-	1
A/A	1	-	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/P ⁽⁷⁾	F/M ⁽⁷⁾	S/S ⁽⁷⁾	A/A ⁽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, 06050 G/P, MPPS-(5,µm) ; 06050 F/M,S/S, MPPS-(0,3µm)

⁽⁵⁾Tested according to ISO12500-1, 06050 F/M,S/S Oil aerosol viscosity 32mm²/s, inlet concentration 10mg/m³

⁽⁶⁾Tested according to ISO12500-2, 06050 A/A, tested with n-Hexane, test concentration 100mg/kg, 80% Saturation

⁽⁷⁾Cross reference Omega Air – Beko Clearpoint filtration grades: P=G/P=G, M=F/M=F, S=S/S=S, A=A/A=A

MAINTENANCE

Replace filter elements grade G/P, F/M, S/S at least once per year or when pressure drop reaches 350mbar.

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

FILTER CARTRIDGE NAMES

Filter cartridge names consist of cartridge size and filtration grade, E.g. OBK 18 F/M.

SIZES

	DIMENSIONS [mm]		FLOW CAPACITY [Nm ³ /h]	FLOW CAPACITY [scfm]	FITS INTO FILTER HOUSING
	ø	h			
OBK 04	35	87,5	35	20	S040
OBK 05	35	117,5	65	38	S050
OBK 06	35	172,5	100	58,8	S055
OBK 07	48	175	150	88	S075
OBK 10	48	242,5	200	117,7	M010
OBK 12	48	277	250	147	M012
OBK 15	83	213,5	320	188	M015
OBK 18	83	266,5	420	247	M018
OBK 20	83	316,5	600	353	M020
OBK 22	83	413	780	459	M022
OBK 23	83	531	1020	600	M023
OBK 25	129	411,5	1300	765	M025
OBK 27	129	515,5	1620	953	M027
OBK 30	129	636	1940	1142	M030
OBK 32	129	783	2400	1412	M032
OBK 88	82	789	1580	930	L080-L304

MATERIALS

	G/P	F/M	S/S	A/A
Filter media	Acrylic fibers, cellulose	Borosilicate micro fibers	Borosilicate micro fibers	Glass fibre, borosilicate microfibers
Protection media			Polyester fleece	
Drainage media	/	Polyurethane	Polyurethane	/
Adsorption media	/	/	/	Activated carbon 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

INFORMATION IN THIS DOCUMENT IS SUBJECT TO CHANGE WITHOUT NOTICE

	Our quality management system is certified by BUREAU VERITAS in conformity with ISO 9001:2008 Reg. number: 200285
---	--

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
-----------------	------	-----	------	------	------	---	------	------	------	------	------	------	------	------	------

INFORMATION IN THIS DOCUMENT IS SUBJECT TO CHANGE WITHOUT NOTICE

	<p>Our quality management system is certified by BUREAU VERITAS in conformity with ISO 9001:2008 Reg. number: 200285</p>	
---	--	--

