FILTER ELEMENT – OKA

(Particulate, Coalescing, Oil vapour removal)

DESCRIPTION

OKA filter elements have been developed for high efficient removal of solid particles, oil aerosols, water, hydrocarbons, vapours and odours from compressed air[(1)].
OKA filter elements are designed to fit into Kaeser 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)] OKA 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

Filtration grade	**Solid particles**	Water	Oil
E-B/P	Class 6	-	-
E-C/R	Class 3	-	-
E-E/M	Class 2	-	Class 2
E-F/S	Class 1	-	Class 1
E-G/A	-	-	Class 0/1

Validated according to ISO12500-1 and ISO12500-3

TECHNICAL SPECIFICATION

	E-B/P[(6)]	E-C/R[(6)]	E-E/M[(6)]	E-F/S[(6)]	E-G/A[(6)]
Operating pressure			0 - 16 barg/ 0 - 232 psi		
Operating temperature			1,5 - 65 °C/ 35 - 149 °F		1,5 - 45 °C/ 35 - 113 °F
Differential pressure (dry)	10mbar	20mbar	50 mbar/ 0,725 psi	80 mbar/ 1,160 psi	60 mbar/ 0,870 psi
Differential pressure (wet)	20mbar	40mbar	120 mbar/ 1,740 psi	190 mbar/ 2,756 psi	N/A
Particle retention (nominal)	99,99% (3µm)	99,9999%(1 µm)	99,9999% (0,1 µm)	99,9999% (0,01 µm)	N/A
Particle retention rate ISO[(3)]	95%	99,8%	99,98 %	99,9994 %	N/A
Residual oil content[(4)]	/	/	< 0,1mg/m^3	< 0,01mg/m^3	< 0,005mg/m^3
Capacity (ISO12500-2)[(5)]	N/A	N/A	N/A	N/A	20 min

[(3)] Tested according to ISO12500-3, 1bar(a), nominal flow, 06050 E-B/P, MPPS-(5μm) ; 06050 E-C/R, E-E/M, E-F/S, MPPS-(0,3μm)
[(4)] Tested according to ISO12500-1, 06050 E-E/M, E-F/S Oil aerosol viscosity 32mm^2/s, inlet concentration 10mg/m^3
[(5)] Tested according to ISO12500-2, 06050 E-G/A, tested with n-Hexane, test concentration 100mg/kg, 80% Saturation
[(6)] Cross reference Kaeser – Omega Air filtration grades: E-B=E-B/P= P, E-C=E-C/R=R, E-E=E-E/M=M, E-F=E-F/S=S, E-G=E-G/A=A

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SIZES

ALUMINIUM END CAPS	DIMENSIONS [mm] ø1	ø2	h	FLOW CAPACITY [Nm³/h]	FLOW CAPACITY [scfm]
OKA 6 E-_/_ Al	42,5	60,0	50,0	35	20
OKA 10 E-_/_ Al	42,5	60,0	91,0	60	35
OKA 18 E-_/_ Al	42,5	60,0	152,0	105	61
OKA 28 E-_/_ Al	60,5	60,5	168,0	170	100
OKA 48 E-_/_ Al	60,5	60,5	276,0	290	170
OKA 71 E-_/_ Al	68,0	68,0	337,0	425	250
OKA 107 E-_/_ Al	68,0	68,0	450,0	640	376
OKA 138 E-_/_ Al	82,5	82,5	518,0	825	485
OKA 177 E-_/_ Al	82,5	82,5	665,0	1060	623
OKA 221 E-_/_ Al	82,5	82,5	820,0	1325	779
OKA 185 E-_/_ Al	85,0	82,5	674,0	1110	653
OKA 283 E-_/_ Al	85,0	82,5	527,0	1700	1000

ø=Diameter; h=Height

MATERIALS

	E-B/P	E-C/R	E-E/M	E-F/S	E-G/A
Filter media	Acrylic fibers, cellulose	Borosilicate micro fibers			Glass fibre, borosilicate microfibers
Support media	Polyester	/			/
Drainage media	/	Polyurethane			/
Adsorption media		/			Activated carbon granulate PES (Polyester)
Support (inner-outer)	Stainless steel 1.4301				
Bonding	Polyurethane				
Endcaps	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

Replace filter element grade E-B/P, E-C/R, E-E/M, E-F/S at least once per year or when pressure drop reaches 350mbar.

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

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
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