FILTER ELEMENT - OAFE

(Particulate, Coalescing, Oil vapour removal)

DESCRIPTION

OAFE filter elements have been developed for high efficient removal of solid particles, oil aerosols, water, hydrocarbons, vapours and odours from compressed air[(1)].
OAFE filter elements are designed to fit into Airfilter Engineering 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)]OAFE 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
P/P	Class 6	-	-
U/R	Class 3	-	-
H/M	Class 2	-	Class 2
S/S	Class 1	-	Class 1
C/A	-	-	Class 0/1

Validated according to ISO12500-1 and ISO12500-3

TECHNICAL SPECIFICATION

	P/P[(6)]	U/R[(6)]	H/M[(6)]	S/S[(6)]	C/A[(6)]
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)	10 mbar/ 0,145 psi	20 mbar/ 0,290 psi	50 mbar/ 0,725 psi	80 mbar/ 1,160 psi	60 mbar/ 0,870 psi
Differential pressure (wet)	20 mbar/ 0,290 psi	40 mbar/ 0,580 psi	120 mbar/ 1,740 psi	190 mbar/ 2,756 psi	N/A
Particle retention (nominal)	99,99% (3 µm)	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)]	N/A	< 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	N/A	20 min

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

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SIZES

PLASTIC END CAPS	ALUMINIUM END CAPS	DIMENSIONS [mm]	FLOW CAPACITY [Nm^3/h]	FLOW CAPACITY [scfm]	FITS INTO FILTER HOUSING
OAFE EA10_/_	**OAFE EA10_/_ Al**	Ø=42;h=53	30	18	**G0010**
OAFE EA15_ /_	**OAFE EA15_/_ Al**	Ø=51;h=59	50	29	**G0015**
OAFE EA20_/_	**OAFE EA20_/_ Al**	Ø=51;h=75	70	41	**G0020**
OAFE EA30_/_	**OAFE EA30_/_ Al**	Ø=51;h=144	100	59	**G0030**
OAFE EA55_/_	**OAFE EA55_/_ Al**	Ø=75;h=118	180	106	**G0055**
OAFE EA95_/_	**OAFE EA95_/_ Al**	Ø=75;h=218	300	177	**G0095**
OAFE EA150_/_	**OAFE EA150_/_ Al**	Ø=75;h=318	470	277	**G0150**
OAFE EA220_/_	**OAFE EA220_/_ Al**	Ø=75;h=508	700	412	**G0220**
OAFE EA290_/_	**OAFE EA290_/_ Al**	Ø=92;h=506	940	553	**G0290**
OAFE EA430_/_	**OAFE EA430_/_ Al**	Ø=92;h=760	1450	853	**G0430**
OAFE EA625_/_	**OAFE EA625_/_ Al**	Ø=140;h=605	1940	1142	**G0625**
OAFE EA775_/_	**OAFE EA775_/_ Al**	Ø=140;h=755	2400	1413	**G0775**

ø=Diameter; h=Height

MATERIALS

	P/P	U/R	H/M	S/S	C/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	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 P/P, U/R, H/M, S/S at least once per year or when pressure drop reaches 350mbar.

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

INFORMATION IN THIS DOCUMENT IS SUBJECT TO CHANGE WITHOUT NOTICE

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

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