

# FILTER ELEMENT – OAC

(Particulate, Coalescing, Oil vapour removal)

## DESCRIPTION

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

OAC filter elements are designed to fit into Atlas Copco filter housings.



## APPLICATIONS <sup>(2)</sup>

- Automotive
- Electronics
- Food & Beverage
- Chemical
- Petrochemical
- Plastics
- Paint
- General industrial application

<sup>(1)</sup>For any other technical gas please contact us or your local dealer

<sup>(2)</sup>OAC 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
DD/M	Class 2	-	Class 2
PD/S	Class 1	-	Class 1
QD/A	-	-	Class 0/1

Validated according to ISO12500-1 and ISO12500-3

## TECHNICAL SPECIFICATION

	DD/M <sup>(6)</sup>	PD/S <sup>(6)</sup>	QD/A <sup>(6)</sup>
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)	50 mbar/ 0,725 psi	80 mbar/ 1,160 psi	60 mbar/ 0,870 psi
Differential pressure (wet)	120 mbar/ 1,740 psi	190 mbar/ 2,756 psi	N/A
Particle retention (nominal)	99,9999% (0,1 µm)	99,9999% (0,01 µm)	N/A
Particle retention rate ISO <sup>(3)</sup>	99,98 %	99,9994 %	N/A
Residual oil content <sup>(4)</sup>	< 0,1mg/m <sup>3</sup>	< 0,01mg/m <sup>3</sup>	< 0,005mg/m <sup>3</sup>
Capacity (ISO12500-2) <sup>(5)</sup>	N/A	N/A	20 min

<sup>(3)</sup>Tested according to ISO12500-3, 1bar(a), nominal flow, 06050 DD/M,PD/S, MPPS-(0,3µm)

<sup>(4)</sup>Tested according to ISO12500-1, 06050 DD/M, PD/S Oil aerosol viscosity 32mm<sup>2</sup>/s, inlet concentration 10mg/m<sup>3</sup>

<sup>(5)</sup>Tested according to ISO12500-2, 06050 QD/A, tested with n-Hexane, test concentration 100mg/kg, 80% Saturation

<sup>(6)</sup>Cross reference Atlas Copco – Omega Air filtration grades: DD=DD/M=M, PD=PD/S=S, QD=QD/A=A

**SIZES**

PLASTIC END CAPS	ALUMINIUM END CAPS	DIMENSIONS [mm]
OAC 9 _/_/_	OAC 9 _/_/_ AI	Ø=46;h=56
OAC 17 _/_/_	OAC 17 _/_/_ AI	Ø=46;h=91
OAC 32 _/_/_	OAC 32 _/_/_ AI	Ø=46;h=146
OAC 44 _/_/_	OAC 44 _/_/_ AI	Ø=61;h=155
OAC 60 _/_/_	OAC 60 _/_/_ AI	Ø=61;h=195
OAC 120 _/_/_	OAC 120 _/_/_ AI	Ø=86;h=288
OAC 150 _/_/_	OAC 150 _/_/_ AI	Ø=86;h=323
OAC 175 _/_/_	OAC 175 _/_/_ AI	Ø=86;h=368
/	OAC 260/280 _/_/_ AI	Ø=102;h=420
OAC 390 _/_/_	OAC 390 _/_/_ AI	Ø=120;h=509
OAC 520 _/_/_	OAC 520 _/_/_ AI	Ø=120;h=679
/	OAC 520F _/_/_ AI	Ø=120;h=683
/	OAC 780F _/_/_ AI	Ø=88;h=584
/	OAC 850F _/_/_ AI	Ø=87,5; h=622

Ø=Diameter; h=Height;

**MATERIALS**

	DD/M	PD/S	QD/A
Filter media	Borosilicate micro fibers	Borosilicate micro fibers	Glass fibre, borosilicate microfibers
Support media	/	/	/
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(s). CORRECTED CAPACITY = NOMINAL FLOW CAPACITY x C<sub>OP</sub>


**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 <sub>OP</sub>	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 DD/M, PD/S at least once per year or when pressure drop reaches 350mbar.  
Replace filter element grade QD/A at least every 6 months.

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