

# FILTER ELEMENT – OMA old

(Particulate, Coalescing, Oil vapour removal)

## DESCRIPTION

OMA old 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>.

## 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> OMA 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
MBP/P	Class 6	-	-
MBM/M	Class 2	-	Class 2
MBS/S	Class 1	-	Class 1
MBA/A	-	-	Class 0/1

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

## TECHNICAL SPECIFICATION

Filtration grade name	MBP/P <sup>(6)</sup>	MBM/M <sup>(6)</sup>	MBS/S <sup>(6)</sup>	MBA/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)	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	N/A
Particle retention (nominal)	99,99 % (3 µm)	99,9999 % (0,1 µm)	99,9999 % (0,01 µm)	N/A
Particle retention rate ISO <sup>(3)</sup>	95 %	99,98 %	99,998 %	N/A
Residual oil content <sup>(4)</sup>	N/A	< 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	N/A	20 min

<sup>(3)</sup> Tested according to ISO12500-3, 1bar(a), nominal flow 06050 MBP/P MPPS-(5 µm); 06050 MBM/M, MBS/S, MPPS-(0,3 µm)

<sup>(4)</sup> Tested according to ISO12500-1, 06050 MBM/M, MBS/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 MBA/A, tested with n-Hexane, test concentration 100mg/kg, 80% Saturation

<sup>(6)</sup> Cross reference Omega Air – Mark filtration grades: P=MBP/P = MBP, M=MBM/M=MBM, S= MBS/S = MBS, A=MBA/A = MBA

## FILTER CARTRIDGE NAMES

Filter cartridge names consist of cartridge size and filtration grade. Place filtration grade designation after filter size instead of dashes.

E.g. OMA 10 MBS/S

**SIZES**

END CAPS	DIMENSIONS [mm]
OMA 10	Ø=51; h=60
OMA 13	Ø=51; h=70
OMA 20	Ø=51; h=140
OMA 33	Ø=75; h=125
OMA 60	Ø=75; h=225
OMA 85	Ø=75; h=325
OMA 130	Ø=75; h=505
OMA 170	Ø=90; h=510
OMA 250	Ø=90; h=760
OMA 400	Ø=140; h=750

Ø=Diameter; h=Height

**MATERIALS**

	MBP/P	MBM/M	MBS/S	MBA/A
Filter media	Acrylic fibres, cellulose	Borosilicate micro fibres		Glass fibre, borosilicate microfibres
Adsorption media		/		Activated carbon granulate PES (Polyester)
Drainage media	/	Polyester based polyurethane		/
Protection media			Polyester fleece	
Support (inner-outer)			Stainless steel 1.4301	
Bonding			Polyurethane	
Endcaps			PA6 with 30% glass fibres	
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).

$CORRECTED\ CAPACITY = NOMINAL\ FLOW\ CAPACITY \times C_{OP}$

**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 <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 MBP/P, MBM/M and MBS/S at least once per year or when pressure drop reaches 350mbar.

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

**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>	
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