

# FILTER ELEMENT – OMP

(Particulate, Coalescing, Oil vapour removal)

## DESCRIPTION

OMP 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>OMP 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	-	-
X/R	Class 3	-	-
Y/S	Class 1	-	Class 1
A/A	Class 1	-	Class 0/1

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

## TECHNICAL SPECIFICATION

Filtration grade name	P/P	X/R	Y/S	A/A
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
Differential pressure (dry)	10 mbar 0,145 psi	20 mbar 0,290 psi	80 mbar 1,160 psi	60 mbar 0,870 psi
Differential pressure (wet)	20 mbar 0,290 PSI	40 mbar 0,580 PSI	190 mbar 2,756 PSI	/
Particle retention (nominal)	99,99% (3 µm)	99,9999% (1 µm)	99,9999% (0,01 µm)	/
Particle retention rate ISO <sup>(3)</sup>	95 %	99,8 %	99,998 %	/
Residual oil content <sup>(4)</sup>			< 0,01mg/m <sup>3</sup>	< 0,005mg/m <sup>3</sup>
Capacity (ISO12500-2) <sup>(5)</sup>				20 min

<sup>(3)</sup> Tested according to ISO12500-3, 1bar(a), nominal flow, 06050 P/P, MPPS-(5µm); 06050 X/R, Y/S, MPPS-(0,3µm)

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

<sup>(6)</sup> Cross reference Omega Air – Mikropor filtration grades: P=P/P = P, R=X/R = X, S=Y/S = Y, A=A/A = A

## 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. OMP M250 X/R

**SIZES**

PLASTIC END CAPS	DIMENSIONS [mm]
OMP M24 /_/_	Ø=35; h=72,5
OMP M48 /_/_	
OMP M25 /_/_	Ø=47,7; h=80
OMP M50 /_/_	
OMP M100 /_/_	Ø=47,7; h=119
OMP M150 /_/_	Ø=71,5; h=153
OMP M200 /_/_	Ø=71,5; h=215
OMP M250 /_/_	Ø=71,5; h=258
OMP M300 /_/_	Ø=71,5; h=298
OMP M500 /_/_	Ø=71,5; h=325
OMP M600 /_/_	Ø=71,5; h=373
OMP M851 /_/_	Ø=105,5; h=430
OMP M1210 /_/_	Ø=105,5; h=500
OMP M1510 /_/_	Ø=160; h=380
OMP M1810 /_/_	Ø=160; h=490
OMP M2210 /_/_	Ø=160; h=530

Ø=Diameter; h=Height

**MATERIALS**

	P/P	X/R	Y/S	A/A
<b>Filter media</b>	Acrylic fibers, cellulose	Borosilicate micro fibers		Glass fiber, borosilicate microfibrs
<b>Adsorption media</b>		/		Activated carbon granulate PES (Polyester)
<b>Drainage media</b>	Polyester	Polyester based polyurethane		/
<b>Support (inner-outer)</b>			Stainless steel 1.4301	
<b>Bonding</b>			Polyurethane	
<b>Endcaps</b>			PA6 with 30% glass fibers	
<b>Sealing</b>			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 P/P, X/R and Y/S at least once per year or when pressure drop reaches 350mbar.

Replace filter element grade A/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 Reg. number: 200285	
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