

FILTER ELEMENT – OWC

(Particulate, Coalescing, Oil vapour removal)

DESCRIPTION

OWC filter elements have been developed for high efficient removal of solid particles, oil aerosols, water, hydrocarbons, vapours and odours from compressed air⁽¹⁾. OWC filter elements have been designed to fit into Worthington Creyssensac 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⁾ OWC 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/R	Class 3	-	Class 3
G/M	Class 2	-	Class 2
C/S	Class 1	-	Class 1
V/A	-	-	Class 0/1

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

TECHNICAL SPECIFICATION

Filtration grade name	P/R ⁽⁶⁾	G/M ⁽⁶⁾	C/S ⁽⁶⁾	V/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)	20 mbar 0,290 psi	50 mbar / 0,725 psi	80 mbar 1,160 psi	60 mbar 0,870 psi
Differential pressure (wet)	40 mbar 0,580 psi	120 mbar / 1,740 psi	190 mbar 2,756 psi	N/A
Particle retention (nominal)	99,9999 % (1 µm)	99,9999 % (0,1 µm)	99,9999 % (0,01 µm)	N/A
Particle retention rate ISO ⁽³⁾	99,8 %	99,98 %	99,998 %	N/A
Residual oil content ⁽⁴⁾	< 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	20 min

⁽³⁾ Tested according to ISO12500-3, 1bar(a), nominal flow 06050 P/R, G/M, C/S, MPPS-(0,3µm)

⁽⁴⁾ Tested according to ISO12500-1, 06050 P/R, G/M, C/S Oil aerosol viscosity 32mm²/s, inlet concentration 10mg/m³

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

⁽⁶⁾ Cross reference Omega Air – Worthington Creyssensac filtration grades: R=P/R = P, M=G/M=G, S= C/S = C, A=V/A = V

FILTER CARTRIDGE NAMES

Filter cartridge names consist of cartridge size and filtration grade.

E.g. OWC 125 P/R

SIZES

FILTER ELEMENT	DIMENSIONS [mm]
OWC 45 _/_	Ø=46; h=56
OWC 90 _/_	Ø=46; h=91
OWC 125 _/_	Ø=46; h=146
OWC 180 _/_	Ø=61; h=155
OWC 290 _/_	Ø=61; h=195
OWC 505 _/_	Ø=86; h=288
OWC 685 _/_	Ø=86; h=323
OWC 935 _/_	Ø=;86 h=368
OWC 1295 _/_	Ø=102; h=420
OWC 1890 _/_	Ø=120; h=509
OWC 2430 _/_	Ø=120; h=679

Ø=Diameter; h=Height

MATERIALS

	P/R	G/M	C/S	V/A
Filter media	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 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/R, G/M and C/S at least once per year or when pressure drop reaches 350mbar.

Replace filter element grade V/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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