

# FILTER ELEMENT – OBO

(Particulate, Coalescing, Oil vapour removal)

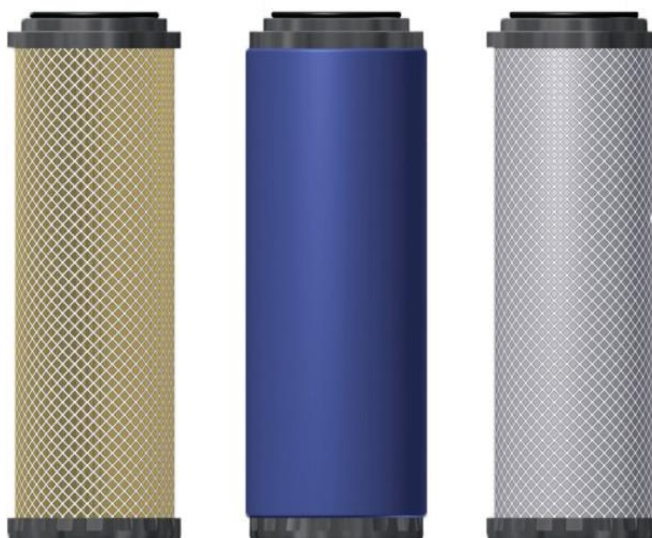
## DESCRIPTION

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

OBO filter elements will fit into BOGE 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>OBO 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
V/P	Class 6	-	-
FP/S	Class 1	-	Class 1
A/A	-	-	Class 0/1

Validated according to ISO12500-1 and ISO12500-3

## TECHNICAL SPECIFICATION

Filtration grade name	V/P <sup>(6)</sup>	FP/S <sup>(6)</sup>	A/A <sup>(6)</sup>
<b>Operating temperature</b>		1,5 - 65 °C 35 - 149 °F	1,5 - 45 °C 35 - 113 °F
<b>Differential pressure (dry)</b>	10 mbar 0,145 psi	80 mbar 1,160 psi	60 mbar 0,870 psi
<b>Differential pressure (wet)</b>	20 mbar 0,290 psi	190 mbar 2,756 PSI	/
<b>Particle Retention (nominal)</b>	99,99% (3 µm)	99,9999% (0,01µm)	/
<b>Particle retention Rate ISO(3)</b>	95%	99,9994 %	/
<b>Residual oil content(4)</b>	/	< 0,01mg/m <sup>3</sup>	<0,005mg/m <sup>3</sup>
<b>Capacity (ISO12500-2)(5)</b>	/		20 min

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

<sup>(4)</sup>Tested according to ISO12500-1, 06050 FP/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 – Boge filtration grades P=V/P=V, S=FP/S=S, A=A/A=A

## FILTER CARTRIDGE NAMES

Filter cartridge names consist of cartridge size and filtration grade.

Example: "OBO 120 FP/S.

**SIZES**

SIZES	DIMENSIONS [mm]	FLOW CAPACITY		FITS INTO FILTER HOUSING
		[Nm <sup>3</sup> /h]	[scfm]	
OBO 5 _/_	Ø=42; h=43	30	18	V 5
OBO 10 _/_	Ø=51; h=49	50	30	V 10
OBO 12 _/_	Ø=51; h=65	70	41	V 12
OBO 20 _/_	Ø=51; h=134	100	59	V 20
OBO 30 _/_	Ø=75; h=108	180	106	V 30
OBO 50 _/_	Ø=75; h=206	300	177	V 50
OBO 80 _/_	Ø=75; h=306	470	277	V 80
OBO 120 _/_	Ø=75; h=496	700	412	V 120
OBO 160 _/_	Ø=92; h=494	940	553	V 160
OBO 250 _/_	Ø=92; h=744	1450	853	V 250

Ø=Diameter; h=Height

**MATERIALS**

	V/P	FP/S	A/A
Filter media	Acrylic fibers, cellulose	Borosilicate micro fibers	Glass fiber, borosilicate microfibres
Drainage media	Polyester	Polyester based 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 V/P and FP/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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