

# FILTER ELEMENT – OBE BST

(Particulate, Coalescing, Oil vapour removal)

## DESCRIPTION

We have designed OBE BST filter elements for high efficient removal of solid particles, oil aerosols, water, hydrocarbons, vapours and odours from compressed air <sup>(1)</sup>. OBE BST filter elements will fit into BEA 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> OBE BST 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
<b>RM/P</b>	Class 6	-	-
<b>RB/M</b>	Class 2	-	Class 2
<b>RA/S</b>	Class 1	-	Class 1
<b>CA/A</b>	-	-	Class 0/1

Validated according to ISO12500-1 and ISO12500-3

## TECHNICAL SPECIFICATION

Filteration grade name	RM/P <sup>(6)</sup>	RB/M <sup>(6)</sup>	RA/S <sup>(6)</sup>	CA/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 0,290 PSI	50 mbar 0,725 psi	80 mbar 1,160 PSI	60 mbar 0,870 PSI
<b>Differential pressure (wet)</b>	20 mbar 0,290 PSI	120 mbar 1,740 PSI	190 mbar 2,756 PSI	N/A
<b>Particle Retention (nominal)</b>	99,99% (3 µm)	99,9999% (0,1 µm)	99,9999% (0,01 µm)	N/A
<b>Particle retention rate ISO <sup>(3)</sup></b>	95 %	99,98 %	99,998 %	N/A
<b>Residual oil content <sup>(4)</sup></b>	N/A	< 0,1mg/m	< 0,01mg/m <sup>3</sup>	<0,005mg/m <sup>3</sup>
<b>Capacity (ISO12500-2) <sup>(5)</sup></b>		N/A		20 min

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

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

<sup>(6)</sup> Cross reference BEA - Omega Air filtration grades: RM =RM/P=P, RB=RB/M=M, RA=RA/S=S, CA=CA/A=A

## FILTER CARTRIDGE NAMES

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

E.g. OBE BST 0190 RM/P

**SIZES**

SIZES	DIMENSIONS
	[mm]
OBE BST 0064	Ø=54 ; h=131
OBE BST 0105	Ø= 54; h=131
OBE BST 0190	Ø=76 ; h=146
OBE BST 0300	Ø=76 ; h=203
OBE BST 0480	Ø=76 ; h=283
OBE BST 0700	Ø=94 ; h=346
OBE BST 1000	Ø=94 ; h=445
OBE BST 1200	Ø=94 ; h=445
OBE BST 1500	Ø=115 ; h=340
OBE BST 2300	Ø=115 ; h=687

Ø=Diameter; h=Height

**MATERIALS**

	RM/P	RB/M	RA/S	CA/A
<b>Filter media</b>	Acrylic fibres, cellulose	Borosilicate micro fibres		Glass fibre, borosilicate microfibres
<b>Drainage media</b>	Polyester	Polyester based polyurethane		/
<b>Adsorption media</b>	/	/	/	Activated carbon granulate PES (Polyester)
<b>Protection media</b>			Polyester fleece	
<b>Support (inner-outer)</b>			Stainless steel 1.4301	
<b>Bonding</b>			Polyurethane	
<b>Endcaps</b>			Aluminium	
<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 RM/P, RB/M and RA/S at least once per year or when pressure drop reaches 350mbar, replace filter element grade CA/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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