FILTER ELEMENT – OKN

(Particulate, Coalescing, Oil vapour removal)

DESCRIPTION

OKN filter elements have been developed for high efficient removal of solid particles, oil aerosols, water, hydrocarbons, vapours and odours from compressed air [(1)].
OKN filter elements are designed to fit into Knocks 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)] OKN 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/M	Class 2	-	Class 2
X/S	Class 1	-	Class 1
A/A	-	-	Class 0/1

Validated according to ISO12500-1 and ISO12500-3

TECHNICAL SPECIFICATION

	V/M [(6)]	X/S [(6)]	A/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)	50 mbar/ 0,725 psi	80 mbar/ 1,160 psi	60 mbar/ 0,870 psi
Differential pressure (wet)	120 mbar/ 1,740 psi	190 mbar/ 2,756 psi	N/A
Particle retention (nominal)	99,9999% (0,1 µm)	99,9999% (0,01 µm)	N/A
Particle retention rate ISO [(3)]	99,98 %	99,9994 %	N/A
Residual oil content [(4)]	< 0,1mg/m^3	< 0,01mg/m^3	< 0,005mg/m^3
Capacity (ISO12500-2) [(5)]	N/A	N/A	20 min

[(3)] Tested according to ISO12500-3, 1bar(a), nominal flow, 06050 V/M, X/S, MPPS-(0,3µm)
[(4)] Tested according to ISO12500-1, 06050 V/M, X/S Oil aerosol viscosity 32mm^2/s, inlet concentration 10mg/m^3
[(5)] Tested according to ISO12500-2, 06050 A/A, tested with n-Hexane, test concentration 100mg/kg, 80% Saturation
[(6)] Cross reference Knocks – Omega Air filtration grades: V=V/M=M, X=X/S=S, A=A/A=A

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SIZES

END CAPS	DIMENSIONS [mm]
OKN 2335	Ø=22; h=35
OKN 2340	Ø=22; h=40
OKN 2360	Ø=22; h=60
OKN 2370	Ø=22; h=70
OKN 2380	Ø=22; h=80
OKN 3860	Ø=37,5; h=60
OKN 3890	Ø=37,5; h=90
OKN 38100	Ø=37,5; h=100
OKN 38185	Ø=37,5; h=185
OKN 61130	Ø=61; h=130
OKN 61230	Ø=61; h=230

ø=Diameter; h=Height;

MATERIALS

	V/M	X/S	A/A
Filter media	Borosilicate micro fibers	Borosilicate micro fibers	Glass fibre, borosilicate microfibers
Support media	Polyester fleece	Polyester fleece	Polyester fleece
Drainage media	Polyurethane	Polyurethane	/
Adsorption media	/	/	Activated carbon granulate PES (Polyester)
Support (inner-outer)		Stainless steel 1.4301	
Bonding		Polyurethane	
Endcaps		Aluminium	
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 V/M, X/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

BUREAU VERITAS	Our quality management system is certified by BUREAU VERITAS in conformity with ISO 9001:2008 Reg. number: 200285	

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