

FILTER ELEMENT – ORION

Alternative filter elements for Orion

Series: DSF, LSF, MSF, KSF Series



DESCRIPTION

These filter elements have been developed for high efficient removal of solid particles, oil aerosols, water, hydrocarbons, vapours and odours from compressed air.

FILTER ELEMENT RATING ACCORDING TO ISO 8573-1

Filtration grade	Solid particles class	Water class	Oil class
DSF	6	/	/
LSF	3	/	/
MSF	1	/	1
KSF	1*	/	0/1

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

TECHNICAL SPECIFICATION

	DSF	LSF	MSF	KSF
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
Operating pressure	0 - 16 barg/ 0 - 232 psi			
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 ⁽³⁾	95 %	99,8 %	99,9994 %	/
Residual oil content ⁽⁴⁾	/	/	< 0,01mg/m ³	< 0,005mg/m ³
Flow Direction	INSIDE to OUTSIDE	INSIDE to OUTSIDE	INSIDE to OUTSIDE	INSIDE to OUTSIDE
Capacity (ISO12500-2) ⁽⁵⁾	/	/	/	20 min

⁽³⁾Tested according to ISO12500-3, 1bar(a), nominal flow, 06050 P, MPPS-(5µm) ; 06050 R, S, MPPS-(0,3µm)

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

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

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

MATERIALS

	DSF	LSF	MSF	KSF
Filter media	Acrylic fibers, cellulose	Borosilicate micro fibers	Borosilicate micro fibers	Borosilicate micro fibers
Protection media	Polyester fleece	Polyester fleece	Polyester fleece	Polyester fleece
Drainage media	/	Polyester needle felt	Polyester needle felt	/
Adsorption media	/	/	/	Activated carbon granulate
Support (inner-outer)	Stainless steel 1.4301	Stainless steel 1.4301	Stainless steel 1.4301	Stainless steel 1.4301
Bonding	Polyurethane	Polyurethane	Polyurethane	Polyurethane
Endcaps	PA6 with 30% glass fibers or aluminium			
Sealing	NBR	NBR	NBR	NBR

SIZES

Model*	Diameter [mm]	Height [mm]	Flow Capacity [Nm ³ /h]	Flow Capacity [scfm]	Fits into filter housing
OR 75	58	42	21	12	75B
OR 150	58	97	72	42	150B
OR 200	68	95	108	64	200B
OR 250	68	137	162	95	250B
OR 400	86	123	234	138	400-1
OR 500	86	159	336	198	500
OR 700	86	190	396	233	700-1
OR 850	86	244	516	304	850
OR 1000	86	297	636	374	1000-1
OR 1300	86	377	828	487	1300-1
OR 1700**	87	471	1038	611	1700
OR 2000	86	534	1200	706	2000-1
2x OR 1300			1656	975	2700C
2x OR 2000			1920, 2400	1130, 1412	3200C, 4000C
3x OR 2000			3000, 3600	1765, 2118	5000B, 6000B
4x OR 2000			4668	2747	7700B
6x OR 2000			6222	3662	10300B
7x OR 2000			7782	4580	12900B
9x OR 2000			9336	5495	15500B
12x OR 2000			12450	7328	20700B
18x OR 2000			19134	11262	31800B

*Filter cartridge names consist of cartridge size and filtration grade. Place filtration grade designation after filter size (e.g. OR 75 DSF). There is an option for **aluminum endcaps** (e.g. OR 75 DSF AI).

**Filtration grade DSF is not available for size OR 1700

MAINTENANCE

DSF, LSF MSF - Replace filter element at least once per year or when pressure drop reaches 350mbar

KSF - Replace filter element at least every 6 months



Strength

- We export to almost 100 countries.
- We have more than 2000 global customers.
- We can provide a total filtration solution.

- Filter-Online & Nordic Filtration offers a wide selection of filtration products for Domestic and Industrial Application.

- You can buy our products on our websites or by contacting us by phone or e-mail. Information about our products as well as brochures and manuals can be found on our websites:

www.filter-online.com for Domestic Products

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We distribute many of our products from our stock in Denmark. Some products are shipped from remote stock.



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