

FILTER ELEMENT – MARK F

Alternative filter elements for Mark

Series: Multibrand F

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
P	3	/	3
G-S	2	/	2
C-D	1	/	1
V	1*	/	0/1

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

TECHNICAL SPECIFICATION

	P	G-S	C-D	V
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 - 20 barg/ 0 - 290 psi	0 - 20 barg/ 0 - 290 psi	0 - 20 barg/ 0 - 290 psi	0 - 20 barg/ 0 - 290 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	/
Particle retention (nominal)	99,9999% (1 µm)	99,9999% (0,1 µm)	99,9999% (0,01 µm)	/
Particle retention rate ISO ⁽³⁾	99,8 %	99,98 %	99,998 %	/
Residual oil content ⁽⁴⁾	/	< 0,1mg/m ³	< 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 R, M, S, MPPS-(0,3µm)

⁽⁴⁾Tested according to ISO12500-1, 06050 M, 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	17	18	19	20
[psi]	29	44	58	72	87	100	115	130	145	160	174	189	203	218	232	247	261	276	290
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	2,25	2,38	2,50	2,63

MATERIALS

	P	G-S	C-D	V
Filter media	Borosilicate micro fibers	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	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	PA6 with 30% glass fibers	PA6 with 30% glass fibers	PA6 with 30% glass fibers
Sealing	NBR	NBR	NBR	NBR

SIZES

Model*	Diameter [mm]	Height [mm]	Flow Capacity [Nm ³ /h]	Flow Capacity [scfm]	Fits into filter housing
MA F1	28	59,5	10	6	F_ - 1 FILTRO 2 F_
MA F2	28	59,5	25	15	F_ - 2 FILTRO 4 F_
MA F3	38,5	80,5	42	25	F_ - 3 FILTRO 7 F_
MA F4	38,5	80,5	54	32	F_ - 4 FILTRO 9 F_
MA F5	38,5	123	85	50	F_ - 5 FILTRO 14 F_
MA F6	65	120,5	119	70	F_ - 6 FILTRO 20 F_
MA F7	65	120,5	144	85	F_ - 7 FILTRO 24 F_
MA F8	65	120,5	178	105	F_ - 8 FILTRO 29 F_
MA F9	65	205,5	212	125	F_ - 9 FILTRO 35 F_
MA F10	65	205,5	297	175	F_ - 10 FILTRO 50 F_
MA F11	72	305	476	280	F_ - 11 FILTRO 79 F_
MA F12	72	305	545	321	F_ - 12 FILTRO 91 F_
MA F13	83	307	765	450	F_ - 13 FILTRO 128 F_
MA F14	83	509	1189	700	F_ - 14 FILTRO 198 F_
MA F15	130	497	1444	850	F_ - 15 FILTRO 241 F_
MA F16	130	497	1529	900	F_ - 16 FILTRO 255 F_
MA F17	130	619	2125	1250	F_ - 17 FILTRO 354 F_
MA F18	130	769	2550	1500	F_ - 18 FILTRO 425 F_

*Filter cartridge names consist of cartridge size and filtration grade. Place filtration grade designation after filter size (e.g. MA F1 P).

MAINTENANCE

P, G-S, C-D - Replace filter element at least once per year or when pressure drop reaches 350mbar

V - Replace filter element at least every 6 months