

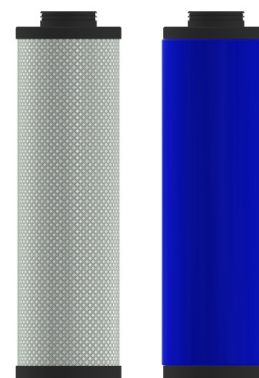
Replacement Element FF / MF / SMF / AK

Pneumatech Series Multibrand New P / G / C / V

(Particles, Coalescing, Oil vapour removal)

Description

ultrafilter replacement 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 8573-1:2010

Filtration grade	Solid particles class	Water class	Oil class
P/FF	3	/	3
G/MF	2	/	2
C/SMF	2	/	1
V/AK	1*	/	0/1

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

* Valid if SMF filter cartridge is installed upstream

Technical Specification

	P/FF ⁽⁶⁾	G/MF ⁽⁶⁾	C/SMF ⁽⁶⁾	V/AK ⁽⁶⁾
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	0 - 16 barg/ 0 - 232 psi	0 - 16 barg/ 0 - 232 psi	0 - 16 barg/ 0 - 232 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, 03/10 R/FF, G/MF, C/SMF, MPPS-(0,3µm)

⁽⁴⁾Tested according to ISO12500-1, 03/10 R/MF, C/SMF Oil aerosol viscosity 32mm²/s, inlet concentration 10mg/m³

⁽⁵⁾Tested according to ISO12500-2, 03/10 V/AK, tested with n-Hexane, test concentration 100mg/kg, 80% Saturation

⁽⁶⁾Cross reference **ultrafilter** – Pneumatech filtration grades: FF = P / MF = G / SMF = C / AK = V

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

	P/FF	G/MF	C/SMF	V/AK
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 based polyurethane	Polyester based polyurethane	Polyester based polyurethane	/
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

Filter Element Typ / Size	Diameter [mm]	Height [mm]	Flow Capacity [Nm ³ /h]	Flow Capacity [scfm]	Fits into filter housing
XXX 1 _	46	55,5	43	25	1 S
XXX 2 _	46	90,5	90	53	2 S
XXX 3 _	46	146	126	74	3 S
XXX 4 _	61	155	180	106	4 S
XXX 5 _	61	195	288	170	5 S
XXX 6 _	86	288	504	297	6 S
XXX 7 _	86	323	684	403	7 S
XXX 8 _	86	367,5	936	551	8 S
XXX 9 _	101,5	420	1296	763	9 S
XXX 10 _	120	509	1890	1112	10 S
XXX 11 _	120	679	2430	1430	11 S

XXX = **ultrafilter** filtration grade FF, MF, SMF or AK

_ = Filtration grade Pneumatech P, G, C or V

Example for **ultrafilter** designation: **SMF 10 C**

Maintenance

Element Type P/FF, G/MF, C/SMF - Replace filter element at least once per year or when pressure drop reaches 350mbar.

Element Type V/AK - Replace filter element at least every 6 months.