

Replacement Element VF / FF / SMF / AK

DELTECH 300 S3 / P3 / H3 / C3

(Particulate, 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⁽¹⁾. Filter elements have been designed to fit into DELTECH 300 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⁾ **ultrafilter** replacement 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 ISO 8573-1 (2010)

DELTECH 300 type / ultrafilter type	Solid particles	Water	Oil
S3 / VF	Class 6	-	-
P3 / FF	Class 3	-	-
H3 / SMF	Class 2	-	Class 1
C3 / AK	-	-	Class 0/1

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

Technical Specification

Filtration grade name	S3 / VF	P3 / FF	H3 / SMF	C3 / AK
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
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 %	99,998 %	/
Residual oil content ⁽⁴⁾			< 0,01mg/m ³	< 0,005mg/m ³
Capacity (ISO12500-2) ⁽⁵⁾				20 min

⁽³⁾ Tested according to ISO12500-3, 1bar(a), nominal flow, 03/10 - S3/**VF**, MPPS-(5µm); 03/10 - P3/**FF**, H3/**SMF**, MPPS-(0,3µm)

⁽⁴⁾ Tested according to ISO12500-1, 03/10 - P3/**FF**, H3/**SMF** oil aerosol viscosity 32mm²/s, inlet concentration 10mg/m³

⁽⁵⁾ Tested according to ISO12500-2, 03/10 - C3/**AK** tested with n-Hexane, test concentration 100mg/kg, 80% saturation

⁽⁶⁾ Cross reference **ultrafilter** – DELTECH 300 filtration grades:

ultrafilter pre filter **VF** = S3/**VF** = S3

ultrafilter Fine Filter **FF** = P3/**FF** = P3

ultrafilter Submicrofilter **SMF** = H3/**SMF** = H3

ultrafilter activated carbon filter **AK** = C3/**AK** = C3

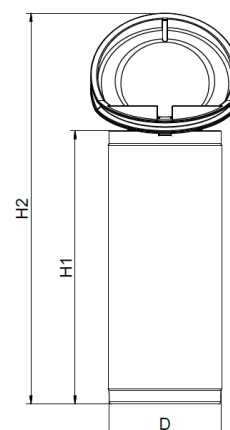
Sizes

Filter Element Type / Size	Dimensions [mm]		
	D	H1	H2
XXX 300 02 _ _	48	62	104
XXX 300 03 _ _	48	62	104
XXX 300 04 _ _	48	107	149
XXX 300 06 _ _	62	85	135
XXX 300 07 _ _	62	112	162
XXX 300 08 _ _	62	176	226
XXX 300 10 _ _	95	135	234
XXX 300 11 _ _	95	231	330
XXX 300 12 _ _	95	366	465
XXX 300 13 _ _	120	303	422
XXX 300 14 _ _	120	403	522
XXX 300 15 _ _	108	493	612
XXX 300 16 _ _	108	582	701
XXX 300 17 _ _	95	852	971

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

_ _ = Filtration grade DELTECH 300 S3, P3, H3 or C3

Example for **ultrafilter** designation: **SMF 300 12 H3**



D = Diameter; H = Height

Materials

Materials	S3 / VF	P3 / FF	H3 / SMF	C3 / AK
Filter media	Acrylic fibers, cellulose	Borosilicate microfibers		Borosilicate microfibres (glass fibres)
Adsorption media	/			Activated carbon granulate PES (Polyester)
Drainage media	Polyester	Polyester based polyurethane		/
Support (inner-outer)	Stainless steel 1.4301			
Bonding	Polyurethane			
Endcaps	PA6 with 30% glass fibers			
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 S3/VF, P3/FF and H3/SMF at least once per year or when pressure drop reaches 350mbar.

Replace filter element grade C3/AK at least every 6 months.