Replacement Element FF / SMF / AK

INGERSOLL RAND AC GP / HE / AC

(Particulate, Coalescing, Oil vapour removal)

Description

We have designed INGERSOLL RAND AC filter elements for high efficient removal of solid particles, oil aerosols, water, hydrocarbons, vapours and odours from compressed air [1].

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] INGERSOLL RAND AC 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)

INGERSOLL RAND AC / ***ultrafilter*** type	Solid particles	Water	Oil
GP / FF	Class 3	-	-
HE / SMF	Class 2	-	Class 1
AC / AK	Class 2	-	Class 0/1

Validated according to ISO12500-1 and ISO12500-3

Technical Specification

Filtration grade name	**GP / FF** [6]	**HE / SMF** [6]	**AC / AK** [6]
Operating temperature	1,5 - 65°C 35 - 149°F		1,5 - 45°C 35 - 113°F
Differential pressure (dry)	20 mbar 0,290 psi	80 mbar 1,160 psi	60 mbar 0,870 psi
Differential pressure (wet)	40 mbar 0,580 psi	190 mbar 2,756 psi	/
Particle retention (nominal)	99,9999% (1 µm)	99,9999% (0,01µm)	/
Particle retention rate ISO [3]	99,8%	99,9994%	/
Residual oil content [4]	/	< 0,01mg/m³	<0,003mg/m³
Capacity (ISO12500-2) [5]	/		20 min

[3] Tested according to ISO12500-3, 1bar(a), nominal flow, 03/10 GP/FF, HE/SMF, MPPS-(0,3µm)

[4] Tested according to ISO12500-1, 03/10 HE/SMF, oil aerosol viscosity 32mm²/s, inlet concentration 10mg/m³

[5] Tested according to ISO12500-2, 03/10 AC/AK, tested with n-Hexane, test concentration 100mg/kg, 80% saturation

[6] Cross reference ***ultrafilter*** vs. Ingersoll Rand AC filtration grades:

ultrafilter Finefilter element type	**FF** = GP/FF = GP
ultrafilter Submicrofilter element type	**SMF** = HE/SMF = HE
ultrafilter Activated Carbon filter element type	**AK** = AC/AK = AC

GB - 2017-01-01

ultra.air **ag** ● Leutschenbachstrasse 45 ● CH-8050 Zürich
Fon: +41 (0)44 – 224 60 60 ● Fax: +41 (0)44 – 224 60 61
E-Mail: info@ultraair.ch ● Internet: www.ultraair.ch

Sizes

Filter Element Size	Dimensions [mm]	Fits into Filter Housing
XX 19 _ _	Ø=51; h=75	IR (grade) 19
XX 40 _ _	Ø=51; h=90	IR (grade) 40
XX 64 _ _	Ø=51; h=114	IR (grade) 64
XX 123 _ _	Ø=73; h=144	IR (grade) 123
XX 216 _ _	Ø=73; h=237	IR (grade) 216
XX 275 _ _	Ø=73; h=295	IR (grade) 275
XX 350 _ _	Ø=87; h=305	IR (grade) 350
XX 481 _ _	Ø=87; h=411	IR (grade) 481
XX 563 _ _	Ø=87; h=477	IR (grade) 563
XX 706 _ _	Ø=87; h=592	IR (grade) 706
XX 850 _ _	Ø=104; h=596	IR (grade) 850
XX 1100 _ _	Ø=104; h=714	IR (grade) 1100
XX 1380 _ _	Ø=104; h=793	IR (grade) 1380

ø=Diameter; h=Height

XX = Filtration grade ***ultrafilter*** type FF, SMF or AK
_ _ = Filtration grade INGERSOLL RAND AC type GP, HE or AC
Example for ***ultrafilter*** designation: SMF 850 HE

Materials

	GP / FF	HE / SMF	AC / AK
Filter media	Borosilicate microfibers		Borosilicate microfibres
Drainage media	Polyester based polyurethane		/
Adsorption media			Activated carbon granulate PES (Polyester)
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}

Operatin 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 GP/**FF** and HE/**SMF** at least once per year or when pressure drop reaches 350mbar.
Replace filter element grade AC/**AK** at least every 6 months.

ULTRAFILTER
THE FILTRATION MANUFACTURER

ultra.air **ag** ● Leutschenbachstrasse 45 ● CH-8050 Zürich
Fon: +41 (0)44 – 224 60 60 ● Fax: +41 (0)44 – 224 60 61
E-Mail: info@ultraair.ch ● Internet: www.ultraair.ch