



COMPRESSED AIR FILTERS

High efficiency filtration for clean & technically oil-free compressed air

G-SERIES / F-SERIES



Certificate No: KLR 0403771

Engineering Solutions to Cleaner Air

Why We Need To Purify Our Compressed Air

In just one cubic metre of air, there are millions of particles potentially harmful to your machines and equipments. These are primarily made up dust, bacteria, viruses, smoke, fumes, hydrocarbons, water, oil and other contaminants derived from human and industrial activities. When this air is sucked into your compressor and compressed to 8 bar pressure, for instance, the concentration of particles will increase by eight times. This will make the air more troublesome by eightfold.

Troublesome in the sense that roughly 80% of these particles are so small that they will pass easily through your compressor's intake filters and find their way to your process line to cause either frequent expensive downtime of your pneumatic machine or adversely affect the quality of your end products.

This is why it makes economical sense to incorporate compressed air treatment into your compressed air system as the benefits would outweigh the cost, which would probably be only a small fraction of your total business investment.

With this in mind, Airfilter Engineering has ventured forth to produce a range of high quality filters, with essential parts being imported from renowned suppliers in Europe.

However, in the end, it is the highly efficient pleated filtration media produced by Airfilter Engineering that makes all the difference.

AFE Filter Grades

Airfilter Engineering (AFE) has developed a comprehensive range of filter grades to cater to the requirements of different applications. All our filter media are of pleated design to ensure higher filtration area. Here at AFE, filters and elements can also be custom-made to suit your needs.

AFE Filter Grade P

- For coarse pre-filtration
- Particle removal down to 3 micron

AFE Filter Grade U

- For general filtration
- Particle removal down to 1 micron
- Oil content down to 0.1 mg/m³ at 20°C

AFE Filter Grade H

- For high performance filtration
- Particle removal down to 0.01 micron
- Oil content down to 0.01 mg/m³ at 20°C

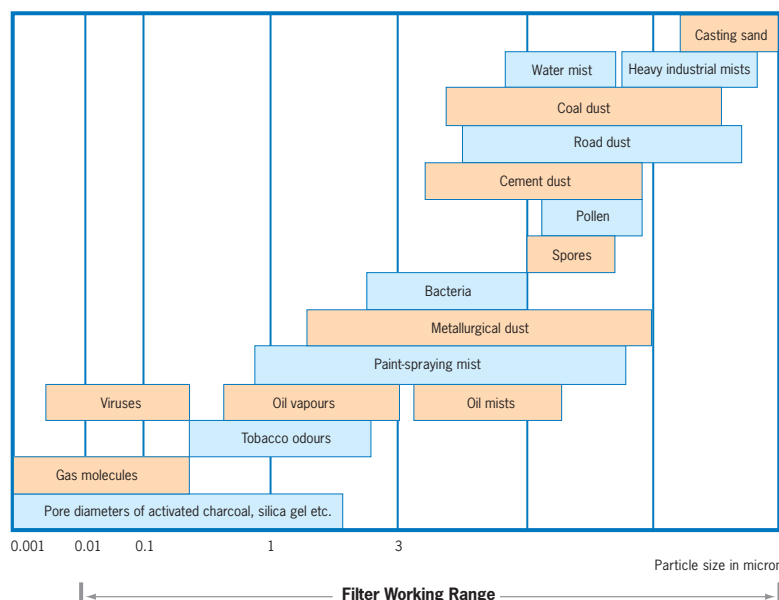
AFE Filter Grade S

- For high performance filtration
- Particle removal down to 0.01 micron. Oil content down to 0.001 mg/m³ at 20°C in conjunction with filter grade H

AFE Filter Grade C

- For removal of oil content down to 0.003 mg/m³ at 20°C
- Activated carbon filter. For odour removal. Applicable in oil lubricated compressors in conjunction with filter grade H

Nature And Extent Of Air Impurities



Accessories



Internal Auto Drain
IAD 416
CODE = I4



Semi Auto Drain
SAD 116
CODE = S1



Internal Auto Drain
IAD 316
CODE = I3



Mounting Kits
MB



External Auto Drain
EAD 316
CODE = E3



Connecting Kits
CK1 & CK2



Differential Pressure Indicator
DP 11
CODE = A



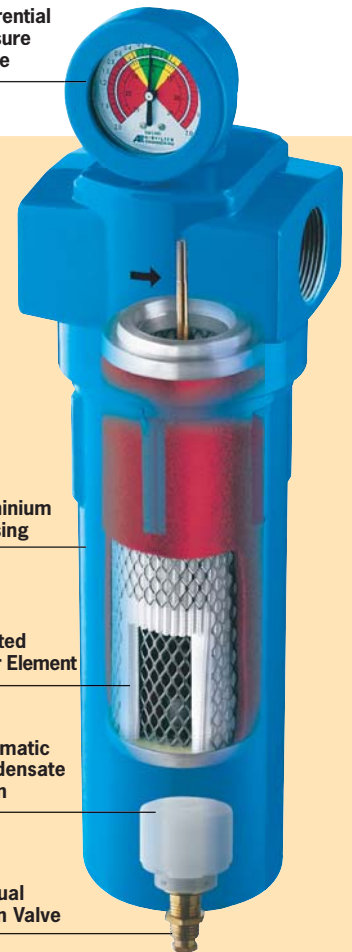
Differential Pressure Gauge
DP 12
CODE = B

The basic benefits that we can offer with our pleated filter media are:

- Higher effective filtration area
- Higher dirt holding capacity
- Lower pressure drop
- Possibility of higher air flow



Differential Pressure Gauge



Aluminium Housing

Pleated Filter Element

Automatic Condensate Drain

Manual Drain Valve

AIRFILTER ENGINEERING CE
COMPRESSED AIR FILTER

Filter Model	G55 C
Element Model	RA55 C
Maximum Pressure	16 BAR
Maximum Temperature	60°C

WARNING! Always depressurize filter before servicing. Please read and adhere to instructions given in the Installation, Operation and Maintenance Manual provided with this product.

ISO - 8573 Part 1 Compressed Air Quality Class : 2001

Class	Solid Particulate Per m ³			Water Pressure dewpoint C°	Oil mg/m ³
	0.1-0.5 µm	0.5-1 µm	1-5 µm		
1	100	1	0	-70	0.01
2	100000	1000	10	-40	0.1
3	-	10000	500	-20	1
4	-	-	1000	3	5
5	-	-	20000	7	-
6	-	-	-	10	-

ISO 8573 is the group of international standards relating to compressed air quality

Using the ISO Quality Class Table, a maximum level of contaminants can be specified for each air quality class (Solid Particulate, Water Vapor & Oil at point of application)

Example:

"ISO 8573 : Class 1.2.1"

Not more than 100 Solid Particles 0.1-0.5 µm. Not more than 1 Solid Particles 0.5-1 µm.

No Solid Particles >1 µm.

Water Pressure Dew Point ≤40°C. Oil (including oil vapour) ≤0.01 mg-m3

Filter Technical Information

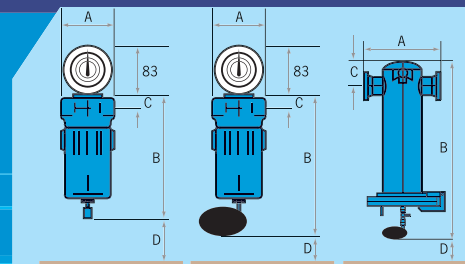
	Filter Model AFE	Pipe Conn.	Capacity At 7 Bar Gauge Pressure		Max Oper. Pressure (bar g)	Approx. weight (kg)	Dimensions				Replacement Element Model
			(m3/min)	(cfm)			A	B	C	D	
THREADED	G0010	G 1/2	0.66	23	16	1.0	87	182	21	60	EA10
	G0015	G 1/2	0.96	34	16	1.1	87	215	21	75	EA15
	G0020	G 1/2	1.32	47	16	1.1	87	215	21	90	EA20
	G0030	G 3/4	1.98	70	16	1.2	87	311	21	90	EA30
	G0055	G1	3.30	116	16	3.8	130	311	43	135	EA55
	G0095	G1 1/2	5.70	201	16	4.3	130	420	43	235	EA95
	G0150	G1 1/2	9.00	318	16	4.9	130	512	43	335	EA150
	G0220	G1 1/2	13.32	470	16	7.0	130	719	43	525	EA220
	G0290	G2	17.46	616	16	10.2	164	913	48	520	EA290
	G0430	G2 1/2	26.16	923	16	12.5	164	1167	48	770	EA430
	G0625	G3	37.50	1324	16	28.0	250	1161	74	610	EA625
G0775	G3	46.62	1645	16	29.2	250	1421	74	760	EA775	
FLANGED	F0430	DN80	26.16	923	16	96.0	380	1393	170	580	EA430 (1)
	F0625	DN80	37.50	1324	16	130.0	440	1470	200	580	EA625 (1)
	F0775	DN80	46.62	1645	16	131.0	440	1470	200	580	EA775 (1)
	F0870	DN100	52.32	1847	16	213.0	500	1526	230	580	EA430 (2)
	F1300	DN100	78.48	2770	16	215.0	500	1526	230	580	EA430 (3)
	F1745	DN150	104.70	3695	16	276.0	640	1634	280	580	EA430 (4)
	F2615	DN150	156.96	5540	16	331.0	790	1655	300	580	EA430 (6)
	F3485	DN200	209.28	7386	16	424.0	790	1784	340	580	EA430 (8)
	F4025	DN200	261.66	9235	16	506.0	840	1821	360	580	EA430 (10)
	F5230	DN250	313.98	11082	16	728.0	940	1985	420	610	EA430 (12)
	F6975	DN250	418.62	14775	16	737.0	940	1985	420	610	EA430 (16)
	F8720	DN300	523.32	18470	16	800.0	940	2065	450	610	EA430 (20)

Capacity Correction Factor For Various Operating Pressure

Pressure	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Factor	0.25	0.38	0.50	0.65	0.75	0.88	1.00	1.13	1.25	1.38	1.50	1.63	1.75	1.88	2.00	2.13

Filter Grade	Particle Removal Down To	Oil Removal Down To*	Nominal initial Pressure Drop
P	3 micron	-	0.03 bar g
U	1 micron	0.1mg/m ³	0.05 bar g
H	0.01 micron	0.01mg/m ³	0.09 bar g
S	0.01 micron	0.001mg/m ³	0.10 bar g
C	-	0.003mg/m	0.10 bar g

*at 20°C



V5/F/1/2006

GENERAL INFORMATION

Maximum recommended operating temperature of 60°C (high temperature range is also available)
 Minimum recommended operating temperature 1°C.
 Maximum recommended operating pressure of 16 bar g.
 Maximum recommended pressure differential for element change is 0.6 bar g. (Except Grade C)
 Material for G-Type filters is aluminium. Material for F-Type filters is steel.
 Filters come complete with auto drain. Gauges are optional.

Note: Will also make filters to customer's requirement, subject to negotiation. Airfilter Engineering reserves the right to change specifications and details without prior notice.



Certificate No: KLR 0403771