



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.

Nature And Extent Of Air Impurities Casting sand Water mist Coal dust Road dust Pollen Spores Bacteria Metallurgical dust Paintspraying mist Viruses Oil vapours Oil mists Tobacco odours Pore diameters of activated charcoal, silica gel etc. Pore diameters of activated charcoal, silica gel etc. Particle size in micron

Filter Working Range

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 0.0 1 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

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



Accessories



Internal Auto Drain IAD 416 CODE = I4



Internal Auto Drain IAD 316 CODE = I3



External Auto Drain EAD 416 CODE = E4



Differential Pressure Indicator DP 11 CODE = A



Semi Auto Drain SAD 116 CODE = S1



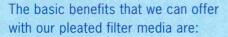
Mounting Kits MB 1030 MB 55220



Connecting Kits CK1 & CK2



Differential Pressure Gauge DP 12 CODE = B



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





ISO - 8573 Part 1 Compressed Air Quality Class: 2001

Class	Solid	l Particulate P	Water	Oil mg/m ³	
	0.1 - 0.5 μm	0.5-1 μm	Pressure dewpoint C°		
1	100	1	0	-70	0.01
~ 2	100000	1000	10	-40	0.1
3	-	10000	500	-20	1
4	1115-590		1000	3	5
5	-	=	20000	7	-
6	71_1.1	+	_	10	- 1

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)

"ISO 8573 : Class 1.2.1"

Not more than 100 Solid Particles 0.1-0.5 μ M. Not more than 1 Solid Particles 0.5-1 μ M.

No Solid Particles $>1 \mu M$.

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



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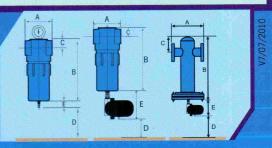
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Filter			16 Bar Filters (232 Psi)		50 Bar Filte	rs (725 Psi)	Approx.	A STATE OF THE STA					Replacement	
	Model	Pipe Conn.	Capacity (@ 50 bar g	weight		Din	nensior	15		Element	
	AFE	Conn.	m³/min	cfm	m³/min	cfm	(kg)	Α	В	С	D	Ε	Model	
	G0010	G ¹ /2	0.66	23	1.49	52	0.90	87	151	24	60	41	EA10	
	G0015	G 1/2	0.96	34	2.16	76	0.95	87	192	24	75	41	EA15	
	G0020	G ¹ /2	1.32	47	2.97	105	0.95	87	192	24	90	41	EA20	
	G0030	G ³ /4	1.98	70	4.46	157	1.30	87	263	24	90	41	EA30	
THREADE	G0055	G1	3.30	116	7.43	262	3.60	130	285	43	135	41	EA55	
A	G0095	G1 ¹ /2	5.70	201	12.83	453	4.10	130	380	43	235	41	EA95	
H.	G0150	G1 ¹ /2	9.00	318	20.25	715	4.60	130	482	43	335	41	EA150	
王	G0220	G1 ¹ / ₂	13.32	470	29.97	1058	6.70	130	692	43	525	41	EA220	
	G0290	G2	17.46	616	43.65	1541	8.90	162	686	55	520	140	EA290	
	G0430	G2 1/2	26.16	923	-	-	11.00	162	937	55	770	140	EA430	
	G0625	G3	37.50	1324	-	-	26.20	252	910	79	610	140	EA625	
	G0775	G3	46.62	1645	-	-	27.70	252	1060	79	760	140	EA775	
	F0515*-E4-B	DN80	30.80	1087		-	100.50	449	1093	176	580	165	EA515*	
	F0625*-E4-B	DN80	37.50	1324		-	135.20	503	1230	211	580	165	EA625*	
	F0775*-E4-B	DN80	46.62	1645	-	-	136.00	503	1230	211	580	165	EA775*	
	F1028*-E4-B	DN100	61.60	2174	-	-	220.60	652	1286	259	580	165	EA515*x 2	
	F1542*-E4-B	DN100	92.40	3261	-	-	222.10	652	1286	259	580	165	EA515*x 3	
ANGED	F2056*-E4-B	DN150	123.20	4348	=	-	285.00	686	1394	299	580	165	EA515*x 4	
A	F3084*-E4-B	DN150	184.80	6522	-	-	352.30	757	1416	312	580	165	EA515*x 6	
	F4112*-E4-B	DN200	246.40	8696	-	-	438.30	805	1536	341	580	165	EA515*x 8	
	F5140*-E4-B	DN200	308.00	10870	-	-	523.40	856	1581	360	580	165	EA515*x 10	
	F6168*-E4-B	DN250	369.60	13044	-		749.00	960	1718	420	610	165	EA515*x 12	
	F8224*-E4-B	DN250	492.80	17392	-	-	763.40	960	1718	420	610	165	EA515*x 16	
	F10280*-E4-B	DN300	616.00	21740	-	-	833.00	944	1732	445	610	165	EA515*x 20	

Capacity Correction	Factor For Various	Operating Pressure
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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				
Р	3 micron	:-	0.03 bar g				
U	1 micron	0.1mg/m ³	0.05 bar g				
Н	0.01 micron	0.01mg/m ³	0.09 bar g				
S	0.01 micron	0.001mg/m ³	0.10 bar g				
С		0.003mg/m	0.10 bar g				





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 and 50 bar g.

Maximum recommended operating 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-train (16 bar) or manual drain (50 bar).

The weights provided are approximate and do not include packaging and gauge.

Note: Will also make filters to customer's requirement, subject to negotiation. Airfilter Engineering reserves the right to ch



