

Filter Technical Information

	Filter Model AFE	Pipe Conn.	16 Bar (232psi) Max		Approx. weight (kg)	Dimensions					Replacement Element Model
			Capacity @ 7 bar g			A	B	C	D	E	
			m ³ /min	cfm							
THREADED	G10	G 1/2	0.66	23	1.34	85	154	24	60	44	EA10
	G15	G 1/2	0.96	34	1.45	85	185	24	75	44	EA15
	G20	G 1/2	1.32	47	1.46	85	185	24	90	44	EA20
	G30	G 3/4	1.98	70	1.72	85	255	24	90	44	EA30
	G55	G1	3.30	116	4.10	130	285	43	135	44	EA55
	G95	G1 1/2	5.70	201	4.52	130	385	43	235	44	EA95
	G150	G1 1/2	9.00	318	5.01	130	485	43	335	44	EA150
	GE220	G1 1/2	13.32	470	7.45	130	685	43	525	44	EA220
	GE290	G2	17.46	616	12.00	162	687	55	520	140	EA290
	GE430	G2 1/2	26.16	923	14.97	162	921	55	770	140	EA430
			12 bar (174psi) Max								
	GE625	G3	37.50	1324	30.95	252	908	79	610	140	EA625
	GE775	G3	46.62	1645	32.99	252	1058	79	760	140	EA775
FLANGED	F0515	DN80	30.80	1087	65.77	440	1098	173	580	165	EA515
	F0625	DN80	37.50	1324	100.63	449	1176	186	580	165	EA625
	F0775	DN80	46.62	1645	101.07	449	1176	186	580	165	EA775
	F1028	DN100	61.60	2174	128.09	500	1254	229	580	165	EA515 X 2
	F1542	DN100	92.40	3261	129.41	500	1254	229	580	165	EA515 X 3
	F2056	DN150	123.20	4348	182.74	640	1387	286	580	165	EA515 X 4
	F3084	DN150	184.80	6522	252.39	790	1460	312	580	165	EA515 X 6
	F4112	DN200	246.40	8696	282.03	790	1545	348	580	165	EA515 X 8
	F5140	DN200	308.00	10870	388.68	840	1651	406	580	165	EA515 X 10
	F6168	DN250	369.60	13044	562.33	940	1862	497	610	165	EA515 X 12
	F8224	DN250	492.80	17392	567.63	940	1862	497	610	165	EA515 X 16
	F10280	DN300	616.00	21740	577.92	940	1862	497	610	165	EA515 X 20

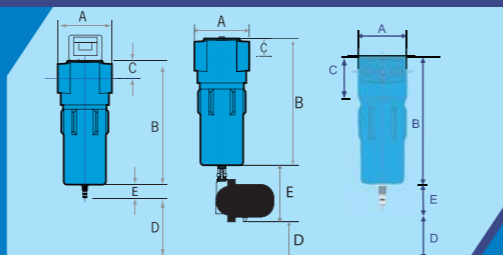
** 50 bar filter not applicable for G/GE625 & G/GE775

Capacity Correction Factor For Various Operating Pressure

Pressure	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	20	25	30	35	40	45	50
Factor	0.3	0.4	0.5	0.6	0.8	0.9	1	1.1	1.3	1.4	1.5	1.6	1.8	1.9	2	2.1	2.6	3.3	3.9	4.5	5.1	5.8	6.4

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



GENERAL INFORMATION
 Filter housings comply to the PED 2014/68/EU (Max 16 bar for G10- GE430; Max 12 bar for GE625-GE775)
 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 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 (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 change specifications without prior notice. (V15/07/2022/M)



Approval Number: 0047637



COMPRESSED AIR FILTERS

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

G-SERIES / F-SERIES

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

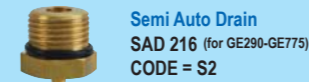
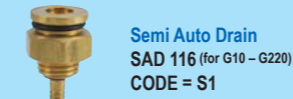
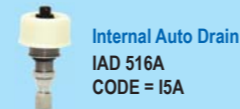
AFE Filter Grade S

- 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

- 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 conjunction with filter grade H

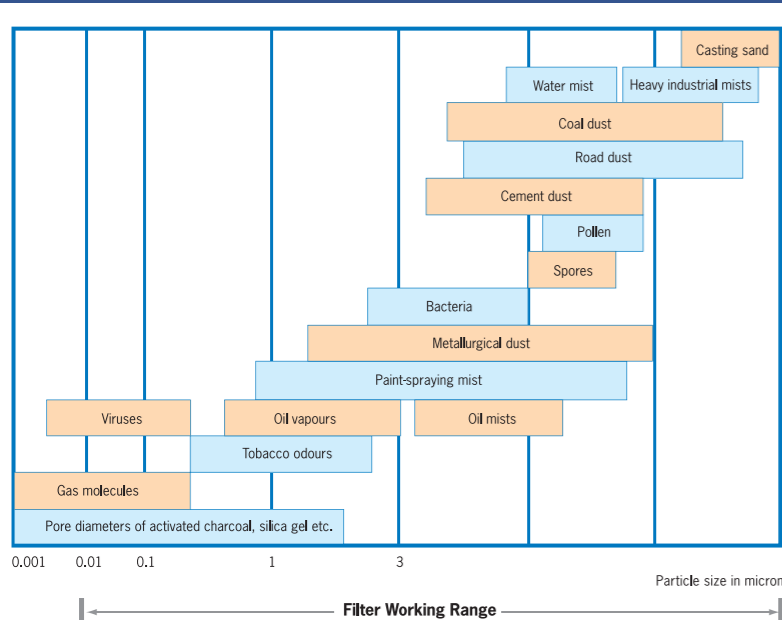
Accessories



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

Nature And Extent Of Air Impurities



Purity Class	PARTICLES			HUMIDITY AND LIQUID WATER		OIL
	Maximum number of particles per cubic metre as a function of particle size, d	Mass Concentration C _p	Pressure Dewpoint	Concentration Of Liquid Water, C _w	Concentration Of Total Oil (Liquid, Aerosol & Vapour)	
	0.1 µm < d ≤ 0.5 µm	0.5 µm < d ≤ 1.0 µm	1.0 µm < d ≤ 5.0 µm	mg/m ³	°C	g/m ³
0	As specified by the equipment user or supplier and more stringent than Class 1					
1	≤ 20 000	≤ 400	≤ 10	-	≤ -70	≤ 0.01
2	≤ 400 000	≤ 6 000	≤ 100	-	≤ -40	≤ 0.1
3	Not specified	≤ 90 000	≤ 1 000	-	≤ -20	≤ 1
4	Not specified	Not specified	≤ 10 000	-	≤ +3	≤ 5
5	Not specified	Not specified	≤ 100 000	-	≤ +7	-
6	-	-	-	0 < C _p ≤ 5	≤ +10	-
7	-	-	-	5 < C _p ≤ 10	-	C _w ≤ 0.5
8	-	-	-	-	-	0.5 < C _w ≤ 5

The ISO 8573-1 is a key element of the ISO 8573 series of documents and it specifies the various purity classes of compressed air with respect to particles, water and oil.
 EXAMPLE OF DESIGNATION:
 ISO 8573-1:2010 [1:2-1] indicate,
 - purity Class 1 for particles
 - purity Class 2 for humidity and liquid water
 - purity Class 1 for oil