

Filter Elements

(Nano fiber media)

DESCRIPTION

The quality of filter elements is increasingly important, first because the requirements for clean compressed air and technical gases are constantly being raised, and second because awareness of the environment and energy efficiency is always on the increase.

Alfafilter has once again demonstrated that it is one of the most innovative suppliers in the market with the introduction of its new high-performance filter elements with efficiency of 99.99998%. And, thanks to the unique combination of binder-free, non woven nano-fiber filter media and pleating technology, a reduction in energy costs of 70% is achieved as well as improved filtration performance!



The nano-fiber of the Alfafilter filter media are not bounded with an adhesives as is commonly the case, but thermally welded. The differential pressure is thus reduced and dirt-holding capacity is significantly greater.



450% Greater filter area !

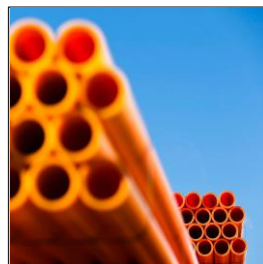
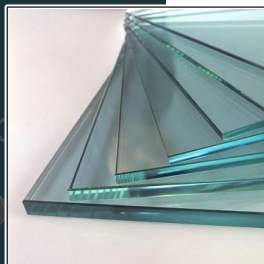
The secret of this vast increase in performance lies in the pleating of the ultra nano filter media. The pleating process mechanically folds the non-woven filter media many times. This makes the filter area 450% larger than that of a conventional filter element.

Many added-value benefits

You obtain obvious benefits when you use the new pleated high-performance filter element:

- low differential pressure
- improved filtration efficiency
- greater dirt-capturing capacity
- 70 % lower energy costs

In addition, the new nano-filter media from Alfafilter is 'oleo-phobic', which means oil and water are actively rejected, so the differential pressure drop (and therefore operating costs) are reduced to a minimum compared to conventional filter elements.



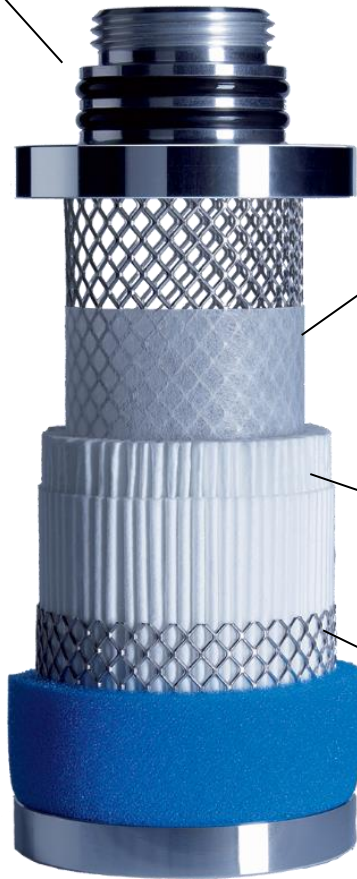
Massively reduced costs !

Depending on size, the use of the new high-performance filter elements from ultrafilter, saves users between € 280 and € 1,600 per filter element in energy costs per year.

TECHNICAL SPECIFICATIONS

End caps from anodized aluminum

- Made from the highest quality, anodized aluminum



Nano fiber filter media

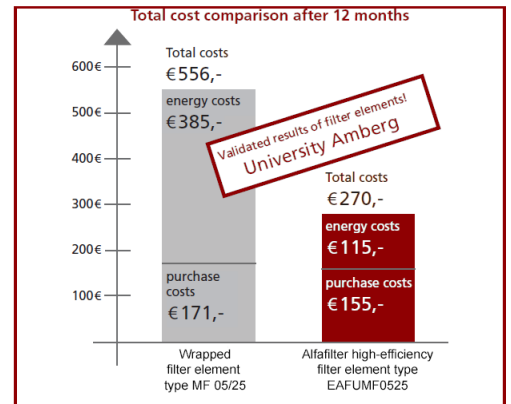
- Multilayer, binder-free nanofiber media, made of borosilicate nanofibers with a void volume of over 98 %.
- The three-dimensional construction extends the service life and filtration performance by effectively separating larger solid particles in the pre-filterlayer.
- Oleophobic - actively rejects oil and water, thus reducing differential pressure.
- Nanofibers are 10 times finer than micro-fibers

The pleated filter media

- 450% larger filter area than conventionally wrapped filter elements.
- Increased depth filtration capacity and aerosols archived by combining several different filtration mechanisms.
- Low airflow speeds ensure better retention of particles.
- Mechanical pleating for consistently high standards.

Robust inner and outer support

- Made of high-quality 316L stainless steel, extremely large free flow.



SIZES

Housing Size	Capacity (m ³ /h)		Connection	Filter element	
	Nominal	Maximal		R/Dn	Size
0002	20	40	R 1/4	02/05	
0004	40	60	R 3/8	03/05	
0006	60	90	R 3/8	03/10	
0009	90	120	R 1/2	04/10	
0012	120	180	R 1/2	04/20	
0018	180	270	R 3/4	05/20	
0027	270	360	R 1	05/25	
0036	360	480	R 1 1/4	07/25	
0048	480	720	R 1 1/2	07/30	
0072	720	1080	R 2	10/30	
0108	1080	1440	R 2	15/30	
0144	1440	1920	R 2 1/2	20/30	
0192	1920	2880	R 3	30/30	
0288	2880	4320	R 3	30/50	
0108	1080	1440	DN 50	15/30	
0144	1440	1920	DN 65	20/30	
0192	1920	2880	DN 80	30/30	
0288	2880	4320	DN 80	30/50	
0432	4320	5760	DN 100	20/30	
0576	5760	7680	DN 100	30/30	
0768	7680	11520	DN 150	30/30	
1152	11520	15360	DN 150	30/30	
1536	15360	19200	DN 200	30/30	
1920	19200	23040	DN 200	30/30	
2304	23040	30720	DN 250	30/30	
3072	30720	38400	DN 250	30/30	
3840	38400	51072	DN 300	30/30	

MAINTENANCE

During its life cycle, in order to protect the compressed air system, the filter element is exposed to substances containing oil, acid and in most cases lacquer-like substances such as condensates and high volatile solid particles. Over time, the differential pressure increases and energy costs increase. In order to guarantee the highest quality of compressed air and lowest life-cycle costs, the filter elements must be replaced every twelve months with high-efficiency filters. Regular replacements avoid costly breakdowns or complicated and expensive repairs.