viledon®

PRODUCT CATALOGUE 2015 / 2016

AIR AND LIQUID FILTRATION

FREUDENBERG
FILTRATION TECHNOLOGIES

FREUDENBERG
INNOVATING TOGETHER

Product range overview

Always up-to-date

Simply scan the QR code to see all product information at a glance on a daily basis.

www.freudenberg-filter.com

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Groups G to F according to EN 779:2012
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Energy efficiency classes | Energy consumption
According to EUROVENT 4/21 measured at 3,400 m^3/h

A comprehensive performance package
for industrial filtration

Protecting people, optimizing processes

Protecting the environment and resources

Making industrial processes more efficient

Improving the quality of life

60 years of experience in filtration

As a technology leader with over 60 years experience, we understand the complexity in industrial filtration, we know the high demands of our customers and have the right solution package for each application.

Freudenberg Filtration Technologies offers a comprehensive range of top-quality and reliable filtration products, technical design and installation expertise, consulting skills and an extensive service program. Thanks to this complete package, we are able to develop system solutions with high energy efficiency, specifically tailored to the needs of our customers. In this way, we ensure savings on energy costs and help our customers to reduce CO_2 emissions.

With Freudenberg Filtration Technologies, you can always rely on the highest quality: from the initial design stage through manufacturing and delivery to technical application advice and services. We always think one step ahead. As a driver of innovation, our constant new developments deliver both progress in the market and competitive advantage for our customers.

Discover the fascinating world of Freudenberg Filtration Technologies in just three minutes – simply scan the QR code to view our image film.

www.freudenberg-filter.com/en/imagefilm

Superior filtration solutions
for a better quality of life

One of the big challenges facing society today is safeguarding the cleanliness of air and liquids. Innovative solutions are called for and Freudenberg Filtration Technologies has the answers. We develop solutions that make processes more efficient, save resources and protect our environment, thereby raising the quality of life.

Environmental responsibility begins in the development and production stages

We are committed to responsible management as a cornerstone of our sustainable business success. We are convinced that economic efficiency, social responsibility and the protection of the environment are intimately linked. We pledge to promote sustainable technologies and product solutions that also provide the best possible product quality. Our activities in this area are wide-ranging. We avoid waste, reduce our use of materials and energy, increase the share of recycled raw materials and develop disposal-friendly and space-saving product alternatives.

Sustainable production processes and products are not always obvious at first glance for customers. This is why we actively support the "Blue Competence" initiative of the VDMA (German Engineering Federation). This initiative has defined reliable sustainability criteria and standards, which are in turn confirmed by the actions of the membership. In this way, Blue Competence provides increased transparency, facilitates orientation and provides security for anyone looking for sustainable products or companies that work in a sustainable way.

BLUEcoMPETENCE
Alliance Member
Partner of the Engineering Industry Sustainability Initiative

FREUDENBERG IS A UNITED NATIONS
GLOBAL COMPACT
PARTICIPANT

Our contribution to your improved energy efficiency and climate protection balance

Ventilation systems require a relatively large amount of energy. In office buildings, the proportion is about 40 % of total consumption. In cleanrooms, it can be as high as 80 %. A large part of the energy expenditure of variable-speed fans in ventilation (HVAC) systems is attributable to pressure drops, half of which are caused by the filters themselves. For this reason, acting responsibly in this area means reducing the pressure drop in air filtration systems to save valuable energy, avoid unnecessary costs and reduce CO_2 emissions. The new EUROVENT guideline on energy efficiency classification, EUROVENT 4/21, in which Freudenberg Filtration Technologies was closely involved, provides a first port of call when choosing energy-efficient Viledon® products. The construction of the entire filtration system is crucial and you can count on our competent advice in this.

Numerous case studies have shown that our customers make a valuable contribution to energy saving and climate protection by using our filtration solutions.

Viledon®
energy efficiency
performance
by Freudenberg

Our customers gladly use the energy efficiency logo in their documentation, which effectively says: "We save energy and reduce CO_2 emissions with Viledon® air filters." As a partner of Freudenberg Filtration Technologies, you too can benefit from the added value of our solutions. For example, by using the Viledon® energy efficiency logo. Contact your Viledon® representative for more details.

Protecting people and the environment
Optimizing industrial processes

With our innovative and powerful concepts for air and liquid filtration, Freudenberg Filtration Technologies combines effective protection against contamination with maximum cost-efficiency.

Industry and production

Throughout the world, the Viledon® brand stands for the very highest standards in industrial air and liquid filtration. A successful combination of know-how, innovation and technical and scientific resources results in future-proof system solutions. These are used, among others, in the fields of turbomachinery / compressors, surface treatment, food and beverage production, general air-conditioning and cleanroom technology, pharma industry, gas phase filtration and dust extraction technology.

Comfort and healthcare

Our Viledon® filter media help to effectively protect people against dust, gases and pathogens. In this segment we develop innovative preventive healthcare concepts for interiors and sensitive areas (e. g. for the living area, households, the office, respiratory protection and medical technology) together with our partners from many branches of industry.

Automobiles and transport

micronAir® is the number 1 in automotive cabin air filters. Our filters ensure clean air in the vehicle and increase driving comfort and safety – especially for allergy sufferers. Made from fully synthetic filtration materials, micronAir® engine intake air filters protect against contaminants in the outside air and therefore ensure optimal combustion processes in the engine while also preventing damage to highly sensitive sensors.

Some of the many industries we support

- Automotive
- Cement
- Chemicals
- Cleanrooms
- Dust removal technology
- Energy
- Food and beverage production
- Health services
- Manufacturing
- Microelectronics
- Mining
- Office buildings
- Paper and pulp
- Pharma
- Residential buildings
- Steel
- Surface technology
- Transport (rail, sea and air)
- Wood industry

Innovative technologies
Viledon® ChemWatch Online Monitoring System

Capture, monitor and control corrosiveness in sensitive areas – and protect your electrical and electronic equipment against corrosion. The new Viledon® ChemWatch Online Monitoring System offers an excellent solution for achieving these aims. This device measures the corrosion class for gaseous media in accordance with ANSI/ISA-71.04-2013. To support targeted analysis, temperature, relative humidity and room pressure can also all be determined.

Thanks to the use of innovative sensor technology for resistance measurement, the Viledon® ChemWatch Online Monitoring System enables continuous monitoring and rapid results. During this process, the device remains insensitive to vibrations and temperature fluctuations.

It can be simply installed and handled. All data are automatically recorded from the start. Individual settings can also be easily carried out – either directly on the device or via PC. With its sealed housing, the device features a large color display for direct reading of information. Thanks to the generous storage capacity, the measurement data of a whole year can be saved.

MADE IN
GERMANY

Advantages for our customers

- Large color display – all measurement results at a glance.
- Data transmission via LAN, WiFi or Bluetooth.
- Large memory – min. 1 year backup.
- Alarm signal can be adjusted individually – alerts via LED on the device or notification via email.
- Users can create notes and link them to the measured data.
- 7 standard languages: English, Chinese, Japanese, German, French, Spanish and Portuguese (other languages can be supplied as an option).
- Power supply including adapter for all international outlets.

Maximum purity
for liquid filtration

Freudenberg Filtration Technologies provides a comprehensive product range of high-quality filter media for maximum purity and reliability.

nutritexx

For food and beverage filtration

Under the hydrotexx brand, Freudenberg Filtration Technologies develops filter mats consisting of 100 % food-grade fibers. This makes them ideal for the filtration of food, hot and cold beverages as well as drinking water. Physiologically harmless materials in combination with the most modern production technologies guarantee a filter medium that meets the stringent requirements of the food industry in terms of hygiene, efficiency and extractable ingredients, every time.

cooltexx

For coolant and lubricant filtration

cooltexx provides durable, application-specific nonwoven fabrics for all vacuum, pressure and gravity belt filter systems, in all the popular roll widths and lengths. This filtration media is custom-matched to the intended machining process, materials and process fluids in terms of filter mesh size, fiber type and media structure. These include, for example, emulsions and oils, washing, phosphating and coagulation baths.

puratexx

For oil, urea and fuel filtration

Modern hydraulic filter systems require excellent filter media which, with their high mechanical and chemical resistance, are able to withstand extremely high differential pressure, pressure peaks and volume flows. Modern diesel injection systems operate at extremely high pressures and require excellent particle and water separation. With puratexx, we have developed filter media that can perfectly fulfil all these demanding requirements.

novatexx

Membrane support media

Polymer-based membranes in many cases require additional mechanical reinforcement. This is the only way to ensure that they can withstand the physical stresses of production, further processing and operational use. In these terms, novatexx is well-proven as an effective support and drainage medium. The brand is synonymous with customized filtration media for liquids from the industrial and food sectors, as well as for products required in the production of membranes and filter cartridges.

Viledon® filterCair

Filters plus service plus consultancy – the complete air quality management system

viledon®
filterCair

Viledon® filterCair service

To ensure that you get maximum value out of our top-quality filters in your complex and sensitive systems, we have developed a unique and comprehensive filter management system: Viledon® filterCair – an individually bundled package consisting of a comprehensive filter range plus services and warranties.

Advantages for our customers

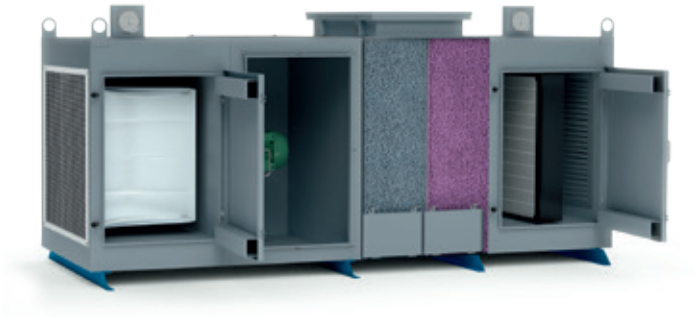
- Reduction of inventories and warehousing costs
- Lower ordering costs
- Improved and stable air quality
- Long-term quality assurance
- Fewer suppliers
- Continuous improvements
- Complete cost control

Some examples of our Viledon® filterCair services

- Particle measurements by laser particle counter (stationary or as ProSim measurement).
- Determination of rates of descent, cabin balance, balance ventilation, temperature and humidity.
- Paint inclusion and dirt-in-paint analysis on site or at the Viledon® laboratories (SEM, EDX, IR microscopy).
- Computational fluid dynamics (CFD) analysis in advance of reconstruction, redesign or realignment.
- Use of a mist generator for the visualization of air streams.
- Measurement of electrostatic charging and discharging processes.
- Hygiene inspections and hygiene controls in accordance with VDI 6022, using trained personnel.
- Changing filters, cleaning and disposal including acceptance testing according to DIN 1946-4.
- Technical service and maintenance of mechanical and electrical system components (such as differential pressure monitoring, anti-icing system, etc.).
- Testing and calibration of differential pressure gauges and transmitters.
- Technical analysis of filter and ventilation systems (e.g. by measuring separation levels, air power, fit testing, etc.).
- Checking the technical condition of the equipment, vulnerability analysis.
- Filter procurement, stockholding, disposition.
- Filter comparison measurements.
- Energy efficiency measurements.

Viledon® system solutions
for air, water and gas

Freudenberg Filtration Technologies offers a comprehensive range of reliable and energy-efficient filtration solutions in addition to technical development and installation know-how for complete industrial filtration systems. Our system solutions are combined with an extensive program of services. This ensures the optimum efficiency of our filter systems for our customers.



Air filtration systems

Viledon® Engineering is our complete service and installation program, which includes all construction elements for building or converting air filtration systems, particularly in the fields of clean room technology, process air and turbomachinery.

Components include single or multi-stage energy-efficient filter system solutions, innovative anti-icing systems (Viledon® IceProtect) as well as combined intake air filtration and cooling systems (Viledon® eee.Sy), which are each tailored to the specific requirements of the customer and the location.

Water filtration systems

Sustainable use of the precious resource water is becoming increasingly important. With the Aquabio system technology, Viledon® Water Solutions has positioned itself as a competent development partner and supplier of membrane bioreactor (MBR) systems that enable economic recycling of process water and waste water.

Reliable separation of solid particles and bacteria is especially important for the food and beverage industry, the pharmaceutical industry, waste disposal sites and tanneries. Thanks to the space-saving design of our water filtration systems, existing plants can be upgraded or extended without problems.

Gas phase filtration systems

Toxic gases, which occur in many industrial processes, can cause corrosion. Even small disturbances of electronic components lead to power loss, high maintenance and repair costs or unplanned downtime. Freudenberg's Viledon® ChemControl system solutions provide protection against corrosion.

Producers of pulp and paper, operators of refineries or customers in the chemical and pharmaceutical industries enjoy the benefits of a complete solution tailored to their specific application: We provide the design and construction of the filter systems including all filter stages for particle and noxious gas filtration – including all technical services.

Performance and certified quality
that you can rely on

Freudenberg Filtration Technologies is committed to delivering the highest quality. For you, this means increased safety during everyday use. Our consistent commitment to the highest standards is also reflected in the diversity of the certification and quality improvement initiatives we deploy.

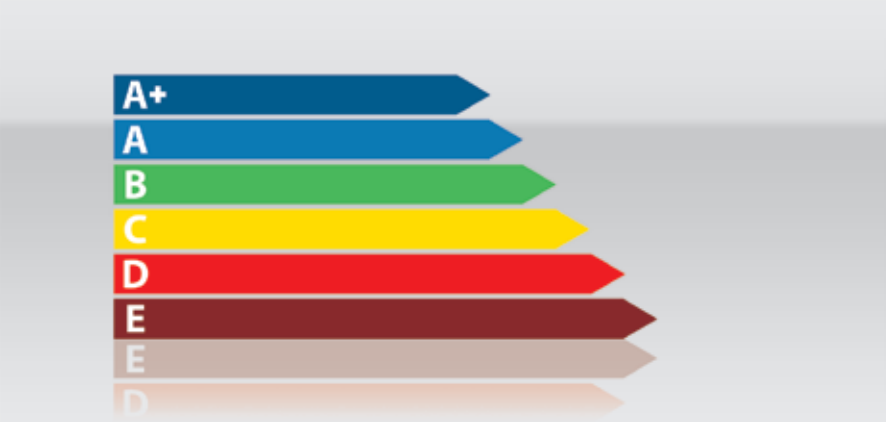
Others achieve the minimum requirements. We offer our customers more. This is why we do not restrict ourselves to completing externally required inspections – we are committed to even more stringent internal quality criteria. We are certified according to DIN EN ISO 9001. Our overall integral management system is based on the current ISO/TS 16949 regulations (requirements of the automotive industry), ISO 14001 (environmental management) and OHSAS 18001 (occupational health and safety). Six Sigma is an integral part of our corporate culture. Extremely rigorous testing in the Freudenberg filter laboratory ensures the consistent quality of all our filters.

Increased transparency: EUROVENT certification for fine filters

Not all filters deliver what their manufacturers promise. It is not uncommon to find features in the product information that are never achieved in reality. But now, you can protect yourself. As an independent institution, the EUROVENT Certification Company has developed an international certification program for fine filters of groups M and F (according to EN 779:2012), which gives the user security. All Viledon® fine filters are certified by EUROVENT.

ISO 9001

Energy efficiency classification for air filters
Increased transparency in choosing filters



Significant cost reduction

Rising energy costs and the need to reduce CO_2 emissions are increasingly focusing attention on the energy consumption of air-conditioning systems. In fact, there is a substantial potential for savings because ventilation systems require a disproportionate amount of energy. In office buildings, the proportion is around 40 % of the total consumption; in cleanrooms, it is even 80 %.

Energy-efficient air filters at a glance

Energy-saving measures include the use of highly efficient frequency-controlled fans. In addition, a relatively simple and effective method of achieving significant cost reduction is the use of top-quality, energy-efficient air filters. To make it easier for endusers to select the most energy-efficient air filters, the European Committee of Air Handling and Refrigeration Equipment Manufacturers (EUROVENT) developed a European energy efficiency classification system for air filters as part of the EUROVENT Certification, which is decisively co-developed by Freudenberg Filtration Technologies.

Calculation of energy consumption

In the laboratory method for testing air filters described in the European standard EN 779:2012, both filtration efficiency and pressure difference as a function of dust loading are measured at 3,400 m^3/h. This testing procedure uses the synthetic ASHRAE test dust. From the mean pressure difference averaged over the course of dust loading, a representative energy consumption level can be calculated. On the basis of these figures, it is then possible to simulate in a laboratory the energy performance of a filter over an operating period of one year (6,000 operating hours). The method of calculation is described in the document EUROVENT 4/21. The representative energy value is used for a classification of air filters into energy efficiency classes.

Classification following laboratory testing for annual energy consumption at 3,400 m^3/h

Filter class*	M5	M6	F7	F8	F9
ME**	-	-	≥ 35 %	≥ 55 %	≥ 70 %
	M_G = 250 g ***		M_F = 100 g ***		
A+	0 – 450 kWh	0 – 550 kWh	0 – 800 kWh	0 – 1,000 kWh	0 – 1,250 kWh
A	> 450 – 600 kWh	> 550 – 650 kWh	> 800 – 950 kWh	> 1,000 – 1,200 kWh	> 1,250 – 1,450 kWh
B	> 600 – 700 kWh	> 650 – 800 kWh	> 950 – 1,200 kWh	> 1,200 – 1,500 kWh	> 1,450 – 1,900 kWh
C	> 700 – 950 kWh	> 800 – 1,100 kWh	> 1,200 – 1,700 kWh	> 1,500 – 2,000 kWh	> 1,900 – 2,600 kWh
D	> 950 – 1,200 kWh	> 1,100 – 1,400 kWh	> 1,700 – 2,200 kWh	> 2,000 – 3,000 kWh	> 2,600 – 4,000 kWh
E	> 1,200 kWh	> 1,400 kWh	> 2,200 kWh	> 3,000 kWh	> 4,000 kWh

* *According to EN 779:2012* ** *Minimum efficiency* *** *Threshold of dust loading with ASHRAE test dust*

Sustainability through energy efficiency
Reduce energy costs with Viledon®

Businesses across many industries and applications profit from the use of energy efficient Viledon® filter solutions. You too can achieve significant energy cost savings while contributing to the reduction of CO_2 emissions.

energy efficiency
performance

We will be pleased to send you documented case studies. Simply contact us.

Example: 4.4 t less CO_2 emissions per year with Viledon®.

	1st filter stage: 9 × conventional M 6 pocket filters 2nd filter stage: 9 × conventional F 9 cassette filters Volume flow: 30,000 m³/h	*1st filter stage: 9 × M 6 Viledon® Compact pocket filters T 60 2nd filter stage: 9 × F 9 Viledon® MaxiPleat cassette filters MX 98 Volume flow: 30,000 m³/h*
	Conventional filters	**Viledon® system**
Power consumption	**27,820 kWh / year**	**19,930 kWh / year**
Electricity costs* (27,820 kWh × 0.10 €/kWh)	**2,782 €**	**1,993 €**
	789 € / year Cost savings with Viledon®	
CO_2 emission** (27,820 kWh × 0.559 kg/kWh)	**≈15,551 kg / year**	**≈11,140 kg / year**
	≈4.4 t / year CO_2 reduction with Viledon®	

* *Electricity costs for industry (0.10 €/kWh), Source: BDEW Bundesverband der Energie- und Wasserwirtschaft e.V., correct as of 2011*

** *Specific carbon dioxide emissions of the German electricity mix in 2011 (0.559 kg/kWh of CO_2 emission factor), Source: German National Environment Office, FG/2.5., correct as of April 2012*

44 € Cost savings per filter / year

Viledon® air filters for the energy efficient use in HVAC systems

Viledon® product	Type	Filter class*	Energy efficiency class**	Annual energy consumption***
F 50	Pocket filter	M 5	A	600 kWh
T 60	Pocket filter	M 6	A	620 kWh
T 90	Pocket filter	F 7	B	1,060 kWh
MF 90	Pocket filter	F 7	C	1,500 kWh
MF 95	Pocket filter	F 8	C	1,650 kWh
MX 85	Cassette filter	F 7	C	1,240 kWh
MX 95	Cassette filter	F 8	B	1,300 kWh
MX 98	Cassette filter	F 9	B	1,830 kWh
MV 85 HSN	Cassette filter (synth.)	F 7	C	1,500 kWh
MV 95 HSN	Cassette filter (synth.)	F 8	C	1,700 kWh
MVP 85	Cassette filter	F 7	B	1,100 kWh
MVP 95	Cassette filter	F 8	A	1,200 kWh
MVP 98	Cassette filter	F 9	B	1,470 kWh

Significant cost reduction

The fan in an HVAC system consumes electrical energy during operation, for example, to overcome the filter's resistance. In the case of variable-speed fans, energy consumption will continually increase as a result of the air filters' pressure drop. Many conventional filters display unfavorable resistance behavior. Not Viledon®: our filters have a large dust storage capacity and the pressure drop increases only slowly.

* *according to EN 779:2012*

** *As part of the EUROVENT Certification, rated at 3,400 m³/h*

*** *The indicated annual energy consumption results from a laboratory test procedure with synthetic test dust at 3,400 m³/h and only refers to the portion of total energy consumption which is caused by the flow resistance of the filter. The annual energy consumption of an HVAC system may therefore differ significantly in actual operation.*

A partnership for your long-lasting success
With Viledon® at your side

Your direct route to us

To find your customer service contact details for your region, please visit our website www.freudenberg-filter.com and go to "Contact".

Apart from top-quality filter solutions, our portfolio also includes a comprehensive range of services to help our customers make optimum use of their filter systems in every respect. Our services at a glance:

- Personal, expert on-site advice
  Our network of filtration consultants has numerous branches and distribution partners in Europe and worldwide.
- Reliable delivery service
  Delivery reliability is a key factor in our performance spectrum.
- Filter program comprising more than 10,000 articles
  You will find the right product for every need in our product range.
- Tailored filtration solutions on demand
  Individual solutions lead to better results. We develop them together with you.
- Accessories
  A large number of extras support the effective use of our top-quality filters.
- Viledon® academy
  In seminars, we pass on practical know-how and theoretical background knowledge related to all areas of filtration.
- Filter measurement technology
  Using the latest test rig technologies, we subject our filters to standardized performance tests in accordance with national and international standards, as well as more stringent tests in our own test laboratory.

Our product portfolio also includes high-quality accessories, for example:

- Mounting frames of stainless steel or galvanized sheet steel with force-locking press-in spring system and rubber seal.
- Differential pressure gauges: display and switching device for basic to very challenging applications.
- Rotational nozzle systems for effective cleaning of filter cartridges.
- Pressure surge reflectors to optimize pulse-jet cleaning.
- Supporting baskets to prevent deformation of filter cartridges.
- Particulate filter accessories: terminal housings, hood modules, fan-filter units, safe-change housings.

Air filter classification index

viledon®

Filter application			Particulate air filters for general ventilation							EPA, HEPA and ULPA						
Test			EN 779:2012 evaluation of filter performance at 0.944 m^3/s (or nominal air flow)							EN 1822:2009 (Parts 1 to 5) Evaluation of filter performance at nominal air flow						ISO 29463
	Suitable for	Group designation	Filter classes	Test dust	Test aerosol	Final pressure drop in Pa	Average arrestance (A_m) compared with test dust in %	Average efficiency (E_m) for particles of 0.4 microns in %	Minimum efficiency for particles 0.4 microns in %	Filter classes	Test aerosol	Integral value of efficiency in the MPPS in %	Integral value of penetration in the MPPS in %	Local value of efficiency in the MPPS in %	Local value of penetration in the MPPS in %	Filter classes
1st filter stage (prefiltration)	Coarse dust	G	G 1	ASHRAE dust		250	$50 \le A_m < 65$		–							
			G 2			250	$65 \le A_m < 80$		–							
			G 3			250	$80 \le A_m < 90$		–							
			G 4			250	$90 \le A_m$		–							
	Fine dust	M	M 5		DEHS (Di-Eth-yl-Hexyl-Sebacate) 0.2–3.0 µm	450	–	$40 \le E_m < 60$	–							
			M 6			450	–	$60 \le E_m < 80$	–							
		F	F 7			450	–	$80 \le E_m < 90$	35							
			F 8			450	–	$90 \le E_m < 95$	55							
			F 9			450	–	$95 \le E_m$	70							
2nd filter stage (fine filtration) / 3rd filter stage (final filtration)	Suspended dust	E	EPA: Efficient Particulate Air filter							E 10	DEHS (Di-Ethyl-Hexyl-Sebacate) MPPS 0.1–0.3 µm	≥ 85	≤ 15	–	–	–
										E 11		≥ 95	≤ 5	–	–	ISO 15 E
										E 12		≥ 99.5	≤ 0.5	–	–	ISO 25 E
		H	HEPA: High Efficiency Particulate Air filter							H 13		≥ 99.95	≤ 0.05	≥ 99.75	≤ 0.25	ISO 35 H
										H 14		≥ 99.995	≤ 0.005	≥ 99.975	≤ 0.025	ISO 45 H
		U	ULPA: Ultra Low Penetration Air filter							U 15		≥ 99.9995	≤ 0.0005	≥ 99.9975	≤ 0.0025	ISO 55 U
										U 16		≥ 99.99995	≤ 0.00005	≥ 99.99975	≤ 0.00025	ISO 65 U
										U 17		≥ 99.999995	≤ 0.000005	≥ 99.9999	≤ 0.0001	ISO 75 U

Product overview
by filter classes

						Filter mats		Filter cells	Pocket filters		Cassette filters				
Suitable for	Group designation	Filter standard	Filter classes acc. to EN 779:2012	Filter classes acc. to ISO 29463		Filter mats (p. 20+21)	Roll filters (p. 23)	MP45 (p. 26)	Compact (p. 28 – 31)	WinAir (p. 32 – 35)	MaxiPleat (p. 38 – 42)	NanoPleat (p. 43)	eMaxx (p. 44+45)	MVP (p. 46+47)	MVPGT (p. 48+49)
1st filter stage (prefiltration)															
Coarse dust	G	EN 779 Average arrestance efficiency	G1												
			G2			●									
			G3			●	●	●	●	●					
			G4			●		●	●	●					
Fine dust	M	EN 779 Average efficiency with 0.4 µm	M5			●			●	●					
			M6			●			●	●	●	●		●	
	F	EN 779 Average efficiency with 0.4 µm / Minimum efficiency	F7						●	●	●	●		●	●
			F8						●		●	●		●	●
			F9								●	●	●	●	●
2nd filter stage (fine filtration)															
Suspended dust	E (EPA)	EN 1822 Total arrestance efficiency (integral value)	E10								●		●		●
			E11	ISO 15E							●		●		
			E12	ISO 25E							●				
	H (HEPA)		H13	ISO 35H											
			H14	ISO 45H											
	U (ULPA)		U15	ISO 55U											
			U16	ISO 65U											
			U17	ISO 75U											
3rd filter stage (final filtration)		ISO 29463													

	EPA | HEPA | ULPA filters									Gas phase filters	Filter cartridges		High-temperature filters		
	Aluminum frames (p. 52 – 60)	Aluminum frame with silgel seal (p. 61 + 62)	Plastic frame (p. 63 + 64)	MDF frame (p. 65 – 70)	Steel sheet frame (p. 71)	High volume flow (p. 72)	Cartridge (p. 73 + 74)	Plastic plenum hood (p. 75)	Fan-filter unit (p. 77)	DuoPleat (p. 82)	Pulse-jet (p. 94)	Depth-loading filters (p. 95)	HT filter mats (p. 98)	HiProtec cassette filters (p. 100)	HT cassette filters (p. 101)
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Air filtration

Filter mats

Filter mats, filter panels, paint mist arrestors, roll filters

Viledon® filter mats are progressively structured, with the density of the fiber layers increasing towards the clean air side. This ensures an optimum in terms of defined filter performance and dust holding capacity, coupled with a low pressure drop. All filter mats are produced using an eco-friendly formula. They are moisture-resistant up to 100% relative humidity and thermally stable up to at least 100°C.

Filter mats
Filter mats | Coarse dust

Specifications	
Filter medium	P 15 and T 3 / 290 S: Polyolefin fibers; PSB: Polyester fibers
Recommended final pressure drop	250 Pa
Thermal stability	up to 100 °C
Moisture resistance	100 % rel. hum.
Fire class	F 1 acc. to DIN 53438
Packing	1 roll

PSB series

Application

The PSB filter mats are used for intake air filtration in air-conditioning systems of all kinds, particularly for coarse dust arrestance or as a prefilter stage.

The PSB range comprises of

- PSB / 145 S
- PSB / 275 S
- PSB / 290 S

Special features of the PSB series

- By virtue of their high dust holding capacity and their long lifetime, PSB filter mats are exceptionally cost-efficient.
- All types in this series prove their worth in application categories where stable arrestance performance is required when coping with a large dust loading and a high air flow rate.
- When used in exhaust air filtration, one of the advantages of the PSB series is that arrestance efficiency and dust holding capacity are ideally matched to each other.

P 15 series

Application

All types in this series can cope with heavy-duty operation and are suitable for filtration in air-conditioning systems of all kinds.

The P 15 series features the familiar Viledon® filter mats

- P 15 / 150 S
- P 15 / 350 S
- P 15 / 500 S

Special features of the P 15 series

- High arrestance efficiency right from the start over the entire operational lifetime, for maximized operational dependability.
- The material's high mechanical strength ensures good dimensional stability, even when subjected to large air volumes, over the entire operational lifetime.
- Thanks to the polyolefin fibers used, P 15 filter mats are largely resistant to chemicals such as solvents, acids and lyes. They must be protected against continuous UV irradiation.
- The filter mats can be cleaned by careful washing, beating or spraying; even after being washed, they remain dimensionally stable and retain their technical filtering characteristics. Our eco-friendly series of filters is much in demand among users prioritizing waste avoidance and filtration cost savings.

T 3 / 290 S

This ultra-efficient G 4 filter mat is suitable for filtration in confined spaces, e. g. in control cabinets or electrical equipment. Thanks to the use of polyolefin fibers, it is highly resistant to chemicals, and hydrophobic.

Delivery notes

All the filter mats we supply are airtight packed as roll goods in standard dimensions in plastic sheets.
Other dimensions are available as roll goods or blanks.
Special shapes like die-cuts and bags, welded or sewn, are available on request.

Article	Article number	Dimensions (W × L) [mm / m]	Thickness approx. [mm]	Weight per unit area approx. [g / m²]	Filter class	Nominal media velocity [m / s]	Initial pressure drop [Pa]	Average arrestance [%]	Dust holding capacity [g / m²]
PSB / 145 S 40 / 2000	7833647	2,000 / 40	10	120	G 2	2	22	70	600
P 15 / 150 S 40 / 2000	8039227	2,000 / 40	8	100	G 2	2	30	75	600
PSB / 275 S 30 / 2000	53375688	2,000 / 30	15	180	G 3	1.5	22	83	700
P 15 / 350 S 30 / 2000	8039427	2,000 / 30	14	200	G 3	1.5	30	84	600
PSB / 290 S 20 / 2000	8019407	2,000 / 20	20	300	G 4	1	22	91	750
P 15 / 500 S 20 / 2000	8040248	2,000 / 20	20	350	G 4	1	30	94	600
T 3 / 290 S 40 / 2000	8105365	2,000 / 40	8	200	G 4	0.25	14	96	250

Specifications	
Filter medium	Polyester fibers
Recommended final pressure drop	450 Pa
Thermal stability	up to 100 °C; PA/ProfAir: Briefly up to 120 °C
Moisture resistance	up to 100 % rel. hum.
Migration test class	S0
Fire class	F1 acc. to DIN 53438

A3/300 S

Application

The A3/300 S filter mat is designed primarily for high-quality final filtration in air-conditioning devices and systems, and as prefilters in multi stage intake air systems.

Special features

- The special smoothing of the clean air side increases the rigidity of the filter mat, rendering it sturdy and installation-friendly.
- By virtue of its very good arrestance performance, the A3/300 S filter mat can be used universally in all applications in which high-quality filtration in the fine dust range is demanded in order to protect both people and machinery.

ProfAir

Application

ProfAir is a fine filter for final filtration of intake air in repair paint-spray booths. The filter mat ensures high arrestance performance for particles > 10 µm and thus provides a high degree of protection against paintwork damage.

PA/500-10, PA/560 G-10 and PA-5 micron

Application

The PA/500-10 and PA/5560 G-10 filter mats, acknowledged as the standard in surface treatment technology, are used for final filtration of the intake air in paint shops und paint-spray booths. The principal application category for the PA-5 micron filter mat is final filtration of the intake air in paint-spray processes with particularly stringent requirements for air purity.

Special features of the PA series

- PA/500-10 and PA/560 G-10 assure practically 100 % arrestance of particles > 10 µm, which are able to cause visually perceptible surface blemishes. This offers their users maximized security against paintwork defects.
- With practically 100 % arrestance of particles > 5 µm, the PA-5 micron filter mat meets even the most stringent of requirements in surface treatment technology and offers its users maximized dependability in the production process.
- The adherent surface of each individual fiber in the filter media can be relied upon to retain already-arrested particles over the entire operational lifetime.
- Thanks to the adherent surface of the fibers, the PA-5 micron is able to lastingly bond more than 3 kg/m² of pourable aloxite dust.
- PA/560 G-10 and PA-5 micron additionally possess a reinforcing mesh fabric on the clean air side, which increases the filter mat's stability and reduces the risk of the clean air side being damaged during installation.
- All PA filter mats are resistant to solvent vapours and contain no silicone.

Delivery notes

All the filter mats we supply are airtight packed as roll goods in standard dimensions in plastic sheets.
Other dimensions available on rolls or as blanks.
Special shapes like die-cuts and bags, welded or sewn, are available on request.

Article	Article number	Dimensions (W × L) [mm/m]	Thickness approx. [mm]	Weight per unit area approx. [g/m²]	Filter class	Nominal media velocity [m/s]	Initial pressure drop [Pa]	Average efficiency [%]	Average arrestance [%]	Dust holding capacity [g/m²]
A3/300 S 20/2000	8422288	2,000/20	20	300	M5	0.25	20	46	97	330
ProfAir N 20/2000	53350549	2,000/20	23	545	M5	0.25	30	45	96	250
PA/500-10 18/1600	7700072	1,600/18	25	500	M5	0.25	25	50	98	300
PA/500-10 20/2000	7802106	2,000/20	25	500	M5	0.25	25	50	98	300
PA/560 G-10 20/1600	53253198	1,600/20	25	580	M5	0.25	30	55	99	300
PA/560 G-10 20/2000	7802206	2,000/20	25	580	M5	0.25	30	55	99	300
PA/560 G-10 22/1600	8887232	1,600/22	25	580	M5	0.25	30	55	99	300
PA/560 G-10 22/2000	8238130	2,000/22	25	580	M5	0.25	30	55	99	300
PA-5 micron BK 20/2000	53296957	2,000/20	25	650	M6	0.25	55	70	99	300

Filter mats
Filter panels

Specifications	
Filter medium	Various Viledon® filter media available
Thermal stability	70 °C
Moisture resistance	100 % rel. hum.
Frame	Polyurethane

Application

The filter panels are used for intake air filtration in air-conditioning systems of all kinds, particularly for coarse dust arrestance or at the prefilter stage. Application areas include e. g.

- Heavy industry: cement plants, steel mills,
- Automotive: paint booths,
- Food industry,
- Petrochemical industry.

Filter panels are used to protect the climate and ventilation systems, control panels and heating systems.

Special features

- Large range of high quality and efficient Viledon® filter media.
- Extremely rigid.
- Non-corroding and moisture-resistant up to 100 % relative humidity.
- Easy installation, no extra clamping necessary.
- Self-sealing through overlapping.

Delivery notes

Filter panels in a washable version are available upon request.

Article	Article number	Filter medium	Dimensions (W × L) [mm]	Filter class	Nominal volume flow [m³/h]	Pressure drop [Pa]
LH 111 MIT P15/150 S 610/610	53263665	P15/150 S	610×610	G2	2,600	25
LH 101 MIT PSB/290 S 610/610	53263659	PSB 290 S	610×610	G4	1,300	35
LH 101 MIT PSB/290 S 700/500	53263662	PSB 290 S	700×500	G4	1,250	35
LH 101 MIT PSB/290 S 625/500	53263658	PSB 290 S	625×500	G4	1,100	35
LH 101 MIT PSB/290 S 500/500	53263660	PSB 290 S	500×500	G4	720	35
LH 101 MIT PSB/290 S 500/400	53263661	PSB 290 S	500×400	G4	900	35
LH 103 MIT P15/500 S 610/610	53253599	P15/500 S	610×610	G4	1,300	35
LH 103 MIT P15/500 S 500/500	53000301	P15/500 S	500×500	G4	900	35
LH 103 MIT PA/560 G-10 500/500	53430605	PA/560 G-10	500×500	M5	450	55

Specifications	
Filter medium	Polyester fibers
Recommended final pressure drop	160 Pa
Initial pressure drop	50 Pa at 2.5 m/s
Dust holding capacity	400 g/m²
Gravimetric efficiency	80% (EN 779)
Weight	250 g/m²

Application

The R/260 filter mat is used for filtration in roll filter equipment.

The medium and its features

The medium used is a high-performance nonwoven made of polyester fibers with thermal fiber bonding, i.e. without any bonding agents. The filter medium is progressively structured, featuring fiber layers with different fiber diameters, arranged one after the other in such a way that the density of the fiber layers increases towards the clean air side. This ensures an optimum in terms of defined filter performance and dust holding capacity. Result: longer operational lifetime of the filter. A scrim increases the mechanical strength.

Fire behavior

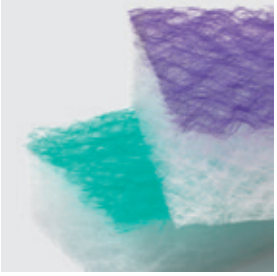
Viledon® filter media meet the stringent requirements of fire class F 1 in conformity with DIN 53438, and are thus self-extinguishing.

Delivery notes

Available on a cardboard core or a metal spool.
The roll goods R/260 (40 running meters) are manufactured in three different widths: 2,200 mm, 1,900 mm and 1,600 mm.

Article	Article number	Filter class	Thickness approx. [mm]
LH_R 260/810	53329934	G3	8
LH_R 260/838	53329914	G3	8
LH_R 260/1110	53329936	G3	8
LH_R 260/1143	53329915	G3	8
LH_R 260/1250	53361322	G3	8
LH_R 260/1410	53329938	G3	8
LH_R 260/1448	53329916	G3	8
LH_R 260/1710	53329940	G3	8
LH_R 260/1753	53329917	G3	8
LH_R 260/2010	53355829	G3	8
LH_R 260/2058	53329918	G3	8

Filter mats
Paint mist arrestors, glass-fiber



Specifications	
Filter medium	Glass-fibers
Thermal stability	up to at least 80 °C
Fire behavior	non-flammable acc. to DIN 4102
Nominal media velocity	0.7 – 1.75 m/s

Application

High-quality filtration for paint-spray booth exhaust air. The PS 100 type, thanks to its higher arrestance efficiency is particularly well-suited for use in installations with heat recovery systems. The Paint Stop Hydro PSH 75 filter mat is ideally suited for arresting water-based paint.

During the intended use as a paint mist arrestor, the safety regulations for avoiding self-ignition must be complied with.

Special features PS 50 / PS 100

- Dimensionally elastic glass-fiber medium with a progressive structure, i. e. openly structured face side (green) and increasing fiber density towards the clean air side (white).
- High dimensional stability even when loaded thanks to low compressibility, which means the entire material depth is used for storing paint mist.
- Non-flammable in conformity with DIN 4102 and thermally stable up to 80 °C.

Special features of the PSH 75 Paint Stop Hydro

- A shape-elastic high performance glass-fiber medium is used.
- Thanks to its fine, elastic material structure, the surface is prevented from being prematurely clogged.
- Enhanced material rigidity thanks to special finish.
- The paint mist arrestor PSH 75 scores excellently in terms of increased paint storage capacity for hydro-paints, with concomitantly long useful lifetime.

Delivery notes

PS 50 | PS 100 and PSH 75 are available on request in all commonly encountered roll lengths and widths, and as rectangular blanks.

Article	Dimensions (W × L) [mm / m]	Thickness approx. [mm]	Weight per unit area approx. [g / m²]	Initial pressure drop [Pa]	Paint mist arrestance efficiency [%]	Paint holding capacity (at 80 Pa and 0.7 m / s) [g / m²]
PS 50 20 / 1000	1,000 / 20	50 – 65	220 – 240	7 – 40	93 – 97	3,500 – 4,700
PS 50 20 / 1524	1,524 / 20	50 – 65	220 – 240	7 – 40	93 – 97	3,500 – 4,700
PS 50 20 / 2000	2,000 / 20	50 – 65	220 – 240	7 – 40	93 – 97	3,500 – 4,700
PS 50 25 / 500	500 / 25	50 – 65	220 – 240	7 – 40	93 – 97	3,500 – 4,700
PS 50 25 / 1000	1,000 / 25	50 – 65	220 – 240	7 – 40	93 – 97	3,500 – 4,700
PS 50 25 / 1250	1,250 / 25	50 – 65	220 – 240	7 – 40	93 – 97	3,500 – 4,700
PS 50 25 / 1524	1,524 / 25	50 – 65	220 – 240	7 – 40	93 – 97	3,500 – 4,700
PS 50 25 / 2000	2,000 / 25	50 – 65	220 – 240	7 – 40	93 – 97	3,500 – 4,700
PS 50 50 / 500	500 / 50	50 – 65	220 – 240	7 – 40	93 – 97	3,500 – 4,700
PS 50 50 / 1000	1,000 / 50	50 – 65	220 – 240	7 – 40	93 – 97	3,500 – 4,700
PS 50 50 / 1250	1,250 / 50	50 – 65	220 – 240	7 – 40	93 – 97	3,500 – 4,700
PS 50 50 / 1524	1,524 / 50	50 – 65	220 – 240	7 – 40	93 – 97	3,500 – 4,700
PS 50 91 / 500	500 / 91	50 – 65	220 – 240	7 – 40	93 – 97	3,500 – 4,700
PS 50 91 / 610	610 / 91	50 – 65	220 – 240	7 – 40	93 – 97	3,500 – 4,700
PS 50 91 / 660	660 / 91	50 – 65	220 – 240	7 – 40	93 – 97	3,500 – 4,700
PS 50 91 / 760	760 / 91	50 – 65	220 – 240	7 – 40	93 – 97	3,500 – 4,700
PS 50 91 / 860	860 / 91	50 – 65	220 – 240	7 – 40	93 – 97	3,500 – 4,700
PS 50 91 / 910	910 / 91	50 – 65	220 – 240	7 – 40	93 – 97	3,500 – 4,700
PS 50 91 / 1000	1,000 / 91	50 – 65	220 – 240	7 – 40	93 – 97	3,500 – 4,700
PS 50 91 / 1250	1,250 / 91	50 – 65	220 – 240	7 – 40	93 – 97	3,500 – 4,700
PS 50 91 / 1524	1,524 / 91	50 – 65	220 – 240	7 – 40	93 – 97	3,500 – 4,700
PS 50 91 / 2000	2,000 / 91	50 – 65	220 – 240	7 – 40	93 – 97	3,500 – 4,700
PS 100 20 / 1000	1,000 / 20	100	350	14 – 60	98 – 99	3,900 – 5,050
PS 100 20 / 1524	1,524 / 20	100	350	14 – 60	98 – 99	3,900 – 5,050
PS 100 20 / 2000	2,000 / 20	100	350	14 – 60	98 – 99	3,900 – 5,050
PSH 75 20 / 1000	1,000 / 20	75	300	10 – 50	>98	>4,000

Filter cells

MP 45

Viledon® filter cells give reliable service in prefiltration jobs for intake, exhaust and recirculating air systems. They extend the operational lifetimes of the downstream fine filters.

Filter cells
MP 45 | Coarse dust

Specifications	
Thermal stability	up to 70 °C
Moisture resistance	100 % rel. hum.

Principal application category

Filter cells are used for prefiltration in ventilation and air-conditioning units, and in intake air systems and lines, so as to extend the operational lifetimes of the downstream fine filters.

Almost all commercially available filter cells and filter mats can be replaced in the removable frame by the filter cells MP 45 (frame material cardboard) and MP 45 K (frame material plastic).

The MP 45 KTC filter cells can be used as prefilters for the Viledon® MaxiPleat filters, simply by clipping them on thus enabling another filter stage to be inserted without any structural modifications.

Characteristics and pluses of the MP 45 KTC

- Four coupling holes (L) are provided in the frame corners of the clean air side. This means the prefilter can be simply clipped onto an already-installed MaxiPleat basic filter fitted with black connecting pins. The connecting pins anchored in the basic filter can no longer be detached. The MP 45 KTC prefilter, however, can easily be removed again and replaced. Even while the intake air system is still operating, the prefilter can be quickly and safely replaced.
- Velcro fastenings (KB) to the main filter increase the retention forces during operation. Additional metal brackets are available on request, which secure the filter in place when it is installed overhead.
- The entire filter element contains no metal, and is therefore non-corroding and fully incinerable.

Delivery notes

Customized dimensions and regionally divergent versions are available on request.

Article	Article number	Dimensions (W × H × D) [mm]	Filter class	Nominal volume flow [m³/h]	Initial pressure drop [Pa]	Average arrestance [%]	Face velocity [m/s]	Recommended final pressure drop [Pa]	Filter area [m²]	Frame
MP 45 0595x0595x96	53307806	595 × 595 × 96	G 3	4,250	60	88	3.3	200	2.0	Cardboard
MP 45 K 0595x0595x96	53408851	595 × 595 × 96	G 3	4,250	60	88	3.3	200	2.0	Plastic
MP 45 0595x0595x48	53349216	595 × 595 × 48	G 3	4,250	95	88	3.3	200	1.1	Cardboard
MP 45 K 0595x0595x48	53401206	595 × 595 × 48	G 3	4,250	95	88	3.3	200	1.1	Plastic
MP 45 0595x0595x96	53307806	595 × 595 × 96	G 4	3,400	50	90	2.7	200	2.0	Cardboard
MP 45 K 0595x0595x96	53408851	595 × 595 × 96	G 4	3,400	50	90	2.7	200	2.0	Plastic
MP 45 0595x0595x48	53349216	595 × 595 × 48	G 4	3,400	75	90	2.7	200	1.1	Cardboard
MP 45 K 0595x0595x48	53401206	595 × 595 × 48	G 4	3,400	75	90	2.7	200	1.1	Plastic
MP 45 KTC 0555x0555x092 LKB	53374950	555 × 555 × 92	G 4	3,400	50	91	3.1	250	2.0	Nonwoven
MP 45 KTC 0555x0555x092 LD	53386678	555 × 555 × 92	G 4	3,400	50	91	3.1	250	2.0	Nonwoven

Pocket filters

Compact, WinAir

energy efficiency
performance

Viledon® pocket filters are made from non-breaking synthetic-organic fibers and microfibers. The pockets are welded and foamed into the front frame in a leakproof configuration so as to provide maximized security against dust breakthrough. Their high cost-efficiency is rooted in low average pressure drops and optimized aerodynamics coupled with full utilization of the filtering area available.

Pocket filters
Compact | Coarse dust

Specifications	
Filter medium	Polyester fibers
Recommended final pressure drop	250 Pa
Thermal stability	70 °C
Moisture resistance	100 % rel. hum.
Frame	Polyurethane
Fire class	F 1 acc. to DIN 53438

Special features of all Compact pocket filters with filter class G

- Progressively structured high-performance nonwovens made from non-breaking synthetic-organic fibers.
- High arrestance, low pressure drop, long operational lifetime, high cost-efficiency.
- Free of glass-fibers, non-corroding, moisture-resistant up to 100 % rel. hum., self-extinguishing according to DIN 53438 (fire class F 1) and microbiologically inactive. They meet all the criteria laid down in VDI Guideline 6022 “Hygiene requirements for ventilation and air-conditioning systems and units”.
- High functional dependability thanks to the leakproof welded configuration of the filter pockets, foam-sealed into a PUR front frame with aerodynamically optimized welded-in spacers and a dimensionally stable construction of the filter element as a whole.

Application

- Compact pocket filters of filter classes G 3 – G 4 are used in intake, exhaust and recirculating air filtration for air-conditioning systems of all kinds.
- As prefilters for fine and ultra-fine filters in industrial processes (metalworking, chemicals, pharmaceuticals, food and beverages, optics, electronics, etc.), in ventilation and air-conditioning systems, in paint shops / booths and in turbomachinery.
- For the filtration of process air with high dust loading or coarse particles.

Special features of G 35 series

- The robust filter series for heavy coarse dust loadings, even at high air flow rates. The filters achieve medium clean air quality coupled with particularly cost-efficient operating behavior and low energy costs.
- High functional dependability even when subjected to extreme humidity and moisture.
- By reason of their shorter pockets, the G 35 S provide a space-saving solution for systems in which the G 35 SL long-pocket filters cannot be used due to space constraints.

Special features of F 40 / 45 series

- Stable arrestance performance even with high coarse dust loadings and high air flow rate.
- F 40 and F 45 SEL achieve energy efficiency class A, thus ensuring reduced energy costs and downsized CO_2 emissions.
- High functional reliability, even under extremely moist and wet operating conditions.
- Thanks to their shorter pockets, F 45 S filters offer a space-saving solution for plants where the use of long-pocket filters would not be possible.

Delivery notes

Customized dimensions are available on request.

Article	Article number	Dimensions (W × H × D) [mm]	Number of pockets	Filter class	Nominal volume flow [m³/h]	Initial pressure drop [Pa]	Energy consumption [kWh/a]	Average arrestance [%]	Dust holding capacity (ASHRAE / 250 Pa) [g]	Filter area [m²]	Weight [kg]	Packaging unit [units / carton]
G 35 S 1 / 1*	7515413	592 × 592 × 330	5	G 3	3,400	20		86	1,180	2.0	1.2	4
G 35 S 5 / 6	7521289	492 × 592 × 330	4	G 3	2,700	20		86	950	1.6	1.0	2
G 35 S 1 / 2	7521389	289 × 592 × 330	3	G 3	2,000	20		86	700	1.2	0.8	2
G 35 SL 1 / 1	7579317	592 × 592 × 650	5	G 3	4,250	30		86	2,300	4.0	1.7	2
G 35 SL 5 / 6	7599437	492 × 592 × 650	4	G 3	3,400	30		86	1,850	3.2	1.5	2
G 35 SL 1 / 2	7580138	289 × 592 × 650	3	G 3	2,500	30		86	1,350	2.4	1.2	2
G 35 SL 1 / 4	7580238	289 × 289 × 650	4	G 3	1,500	30		86	800	1.5	0.7	2
G 35 SE 1/1	8929206	592 × 592 × 510	8	G 3	4,250	40		86	2,600	4.7	2.3	2
G 35 SEL 1/1	53307071	592 × 592 × 650	8	G 3	4,250	45		86	3,200	6.2	2.7	2
F 45 S 1 / 1*	7526134	592 × 592 × 330	5	G 4	3,400	35	890	93	590	2.0	1.2	4
F 45 S 5 / 6	7528456	492 × 592 × 330	4	G 4	2,700	35		93	470	1.6	1.0	2
F 45 S 1 / 2	7529267	289 × 592 × 330	3	G 4	2,000	35		93	350	1.2	0.8	2
F 40 1 / 1	8256138	592 × 592 × 650	5	G 4	4,250	30	400	93	1,425	4.0	1.7	2
F 40 5 / 6	8500259	492 × 592 × 650	4	G 4	3,400	30		93	1,150	3.2	1.5	2
F 40 1 / 2	8498114	289 × 592 × 650	3	G 4	2,500	30		93	850	2.4	1.2	2
F 40 1 / 4	8500359	289 × 289 × 650	4	G 4	1,500	30		93	500	1.5	0.7	2
F 45 SEL 1/1	53457509	592 × 592 × 650	8	G 4	4,250	50	410	93	1,980	6.2	2.7	2

* also available as reverse-flow version

Specifications	
Filter medium	PES (F50, T60), Polyolefin (others)
Recommended final pressure drop	450 Pa
Bursting pressure	>3,000 Pa
Thermal stability	70 °C
Moisture resistance	100% rel. hum.
Frame	Polyurethane
Fire class	F1 acc. to DIN 53438

Special features of all Compact pocket filters with filter classes M and F

High-performing, extremely cost-effective and energy efficient: Viledon® Compact pocket filters offer dependable operating characteristics plus freedom from maintenance over the entire operational lifetime. They constitute an optimum combination of stable arrestance performance for fine dusts, high dust holding capacity, low pressure drop and long operational lifetime.

- Single- or multi-layered progressively structured high-performance nonwovens made from non-breaking synthetic-organic fibers.
- High arrestance, low pressure drop, long operational lifetime, high cost-efficiency.
- Free of glass-fibers, non-corroding, moisture-resistant up to 100% relative humidity, self-extinguishing according to DIN 53438 (fire class F1) and microbiologically inactive. They meet all criteria laid down in VDI Guideline 6022 "Hygiene requirements for ventilation and air-conditioning systems and units".
- High functional dependability thanks to filter pockets welded in a leakproof configuration foamed onto a PUR front frame, with welded-in aerodynamic spacers and a dimensionally stable construction of the entire filter element.

F50 und T60

Application

F50 and T60 are used for filtering intake, exhaust and recirculating air in air-conditioning systems with stringent requirements for sturdiness and cost-efficiency, e. g.

- in industrial processes (chemicals, pharmaceuticals, food and beverages, optics, electronics, etc.),
- in intake and exhaust air filtration for paint shops,
- in intake air filtration for gas turbines and turbocompressors onshore and offshore (especially T60),
- for intake and exhaust air filtration in sophisticated air-conditioning technology (hospitals, laboratories, libraries, museums, airports), plus production facilities and factory halls (especially F50).

Special features

- T60 and F50 pocket filters are robust in continuous operation and achieve superlative performance even during temporary overload operation in terms of high clean air quality.
- Both pocket filter series achieve energy efficiency class A and thus ensure reduced energy costs and downsized CO_2 emissions.
- In the intake air systems of gas turbines, T60 filters can be relied upon to retain aggressive, abrasive particles, to minimize blade fouling and erosion, thus enhancing the efficiency and availability of turbomachinery. They give excellent service even under extreme weather conditions, and in intake air systems on offshore installations, not least when subjected to increased volume flows.

T90 PRE

Application

T90 PRE with proven jetSpin technology are used in intake air filtration for gas turbines and turbocompressors onshore and offshore.

Special features

- In intake air filtration for gas turbines, T90 filters can be relied upon to arrest aggressive, abrasive particles, to minimize blade fouling and erosion, and thus to upgrade the efficiency and availability of turbomachinery.

T90, MF90 and MF95

Application

T90, MF90 and MF95 filters are used for intake, exhaust and recirculating air filtration in air-conditioning systems with special requirements for arrestance performance, e. g.

- in sophisticated air-conditioning technology (hospitals, laboratories, libraries, museums, airports, etc.),
- in industrial processes (chemicals, pharmaceuticals, food and beverages, optics, electronics, etc.),
- as prefilters for EPA | HEPA | ULPA filters (MF90 and MF95),
- as downstream "police filters" in dust removal systems.

Special features

- T90, MF90 and MF95 pocket filters featuring Nano jetSpin technology provide a sustainedly high level of mechanical filtering performance under all duty conditions. The advantage for the user: maximized operational reliability.
- The filters meet the toughest of requirements in terms of fine filtration and create very high clean air quality, thus making a crucial contribution to cost-efficient operation of sensitive lines and processes.
- T90 pocket filters achieve energy efficiency class A, thus ensuring reduced energy costs and downsized CO_2 emissions.

Pocket filters
Compact | Fine dust

Specifications	
Filter medium	PES (F 50, T 60), Polyolefin (others)
Recommended final pressure drop	450 Pa
Bursting pressure	> 3,000 Pa
Thermal stability	70 °C
Moisture resistance	100 % rel. hum.
Frame	Polyurethane
Fire class	F 1 acc. to DIN 53438

Article	Article number	Dimensions (W × H × D) [mm]	Number of pockets	Filter class	Nominal volume flow [m³/h]	Initial pressure drop [Pa]	Initial efficiency [%]	Minimum efficiency [%]	Average efficiency [%]	Average arrestance [%]	
F 50 S 1/1*	53456360	592×592×330	5	M 5	3,400	65			49	95	
F 50 1/1	7581349	592×592×650	5	M 5	4,250	50			51	97	
F 50 5/6	7581449	492×592×650	4	M 5	3,400	50			51	97	
F 50 1/2	7582150	289×592×650	3	M 5	2,500	50			51	97	
F 50 1/4	7582250	289×289×650	4	M 5	1,525	50			51	97	
F 50 SE 1/1	53457510	592×592×510	8	M 5	4,250	60			50	97	
F 50 SEL 1/2 horiz	53473137	592×289×650	8	M 5	2,100	50			51	97	
T 60 1/1	8473449	592×592×650	8	M 6	4,250	65			63	99	
T 60 5/6	8474150	492×592×650	4	M 6	2,175	65			63	99	
T 60 1/2	8474250	289×592×650	3	M 6	1,600	65			63	99	
T 60 1/2 horiz	53471177	592×289×650	8	M 6	2,100	65			63	99	
T 60 1/4	8474350	289×289×650	4	M 6	975	65			63	99	
T 90 PRE 1/1	53449490	592×592×650	12	M 6	4,250	80			85	>99	
T 90 PRE 1/2	53449491	289×592×650	4	M 6	1,450	80			85	>99	
T 90 1/1	53444184	592×592×650	12	F 7	4,250	115	67	36	89	>99	
T 90 5/6	53444180	492×592×650	6	F 7	2,200	115	67	36	89	>99	
T 90 1/2	53444179	289×592×650	4	F 7	1,450	115	67	36	89	>99	
MF 90 1/1	53444178	592×592×650	8	F 7	4,250	140	67	35	88	>99	
MF 90 5/6	53444175	492×592×650	6	F 7	3,175	140	67	35	88	>99	
MF 90 1/2	53444172	289×592×650	4	F 7	2,125	140	67	35	88	>99	
MF 90 1/4	53444170	289×289×650	4	F 7	975	140	67	35	88	>99	
MF 95 1/1	53444168	592×592×650	12	F 8	4,250	190	84	55	95	>99	
MF 95 5/6	53444167	492×592×650	6	F 8	2,200	190	84	55	95	>99	
MF 95 1/2	53444166	289×592×650	4	F 8	1,450	190	84	55	95	>99	
MF 95 1/4	53444165	289×289×650	4	F 8	675	190	84	55	95	>99	

energy efficiency performance

EUROVENT CERTIFIED PERFORMANCE AIR FILTERS CLASS M5 – F9 www.eurovent-certification.com

Pocket filters
Compact | Fine dust

Specifications	
Filter medium	PES (F 50, T 60), Polyolefin (others)
Recommended final pressure drop	450 Pa
Bursting pressure	> 3,000 Pa
Thermal stability	70 °C
Moisture resistance	100 % rel. hum.
Frame	Polyurethane
Fire class	F 1 acc. to DIN 53438

Delivery notes

Customized dimensions are available on request.

	Dust holding capacity (AC Fine / 450 Pa) [g]	Dust holding capacity (AC Fine / 800 Pa) [g]	Filter area [m²]	Weight [kg]	Packaging unit [units / carton]	Article	Energy efficiency classification according to EUROVENT 4/21**		
							Nominal volume flow [m³ / h]	Energy class	Annual Energy consumption***
			2.0	1.6	4	F 50 S 1 / 1*	3,400	E	1,609
	3,650		4.0	2.1	2	F 50 1 / 1	3,400	A	600
	2,900		3.2	1.6	2	F 50 5 / 6	2,700	A	
	2,150		2.4	1.2	2	F 50 1 / 2	2,000	A	
	1,300		1.4	0.7	2	F 50 1 / 4	1,200	A	
			4.7	2.5	2	F 50 SE 1 / 1	3,400	A	560
			3.0	1.5	2	F 50 SEL 1 /2 horiz	3,150	A	
		5,000	6.2	3.1	2	T 60 1 / 1	3,400	A	620
		2,550	3.2	1.6	2	T 60 5 / 6	1,750	A	
		1,900	2.4	1.2	2	T 60 1 / 2	1,300	A	
			3.0	1.5	2	T 60 1 / 2 horiz	1,600	A	
		1,150	1.5	0.7	2	T 60 1 / 4	800	A	
			9.0	3.1	2	T 90 PRE 1 / 1	3,400	D	1,170
			3.1	1.6	6	T 90 PRE 1 / 2	1,200	D	
		3,000	9.0	3.1	2	T 90 1 / 1	3,400	B	1,060
		1,600	4.7	1.6	4	T 90 5 / 6	1,750	B	
		1,100	3.1	1.1	6	T 90 1 / 2	1,200	B	
		2,000	6.2	2.2	6	MF 90 1 / 1	3,400	C	1,500
		1,500	4.7	1.6	4	MF 90 5 / 6	2,550	C	
		1,000	3.1	1.1	6	MF 90 1 / 2	1,700	C	
		460	1.5	0.5	6 / 12	MF 90 1 / 4	800	C	
		2,200	9.0	3.1	2 / 5	MF 95 1 / 1	3,400	C	1,650
		1,150	4.7	1.7	4	MF 95 5 / 6	1,750	C	
		800	3.1	1.2	6	MF 95 1 / 2	1,200	C	
		350	1.5	0.5	6 / 12	MF 95 1 / 4	570	C	

* also available as reverse-flow version

** rated at 3,400 m³/h (further information at www.eurovent-certification.com)

*** The specified annual energy consumption is the result of laboratory tests using synthetic test dust and refers only to the proportion of total energy consumption attributable to flow resistance through the filter. The annual energy consumption of an HVAC system in operation can therefore differ significantly under actual operational conditions.

Pocket filters
WinAir | Coarse dust

Specifications	
Filter medium	Polyester fibers
Recommended final pressure drop	250 Pa
Thermal stability	70 °C
Moisture resistance	100 % rel. hum.
Frame	Polyurethane
Fire class	F 1 acc. to DIN 53438

Application

The WinAir 35 and WinAir 45 coarse filters provide stable arrestance of coarse dusts, and are particularly suitable as prefilters.

Special features

- Good filtration characteristics thanks to progressively structured filter media made of synthetic-organic fibers.
- Filter pockets foamed into the PU front frame, and welded in a leakproof configuration.
- Pocket forming through integrated welded seams.
- The pocket filters are microbiologically inactive and meet all hygiene requirements of the German VDI Guideline 6022 “Hygiene requirements for ventilation and air-conditioning systems and units”.
- Free of glass-fibers, non-corroding, moisture-resistant up to 100 % relative humidity, self-extinguishing under DIN 53438 (fire class F 1).
- Simple, secure installation, suitable for all commonly used mounting frames.

Delivery notes

Customized dimensions are available on request.

Article	Article number	Dimensions (W × H × D) [mm]	Number of pockets	Filter class	Nominal volume flow [m³/h]	Initial pressure drop [Pa]	Energy consumption [kWh/a]	Average arrestance [%]	Filter area [m²]	Weight [kg]	Packaging unit [units/carton]
WinAir 35 1/1 330 mm	53393071	592 × 592 × 330	5	G 3	3,400	28		86	2.0	1.2	2
WinAir 35 5/6 330 mm	53393073	492 × 592 × 330	4	G 3	2,700	28		86	1.6	0.9	2
WinAir 35 1/2 330 mm	53393072	289 × 592 × 330	3	G 3	2,050	28		86	1.2	0.7	2
WinAir 35 1/4 330 mm	53393159	289 × 289 × 330	4	G 3	1,200	28		86	0.7	0.5	2
WinAir 45 1/1 330 mm	53390774	592 × 592 × 330	5	G 4	3,400	30	810	90	2.0	1.2	2
WinAir 45 5/6 330 mm	53390780	492 × 592 × 330	4	G 4	2,700	30		90	1.6	0.9	2
WinAir 45 1/2 330 mm	53390777	289 × 592 × 330	3	G 4	2,050	30		90	1.2	0.7	2
WinAir 45 1/4 330 mm	53393160	289 × 289 × 330	4	G 4	1,200	30		90	0.7	0.5	2
WinAir 45 1/1 510 mm	53390775	592 × 592 × 510	5	G 4	3,400	30	530	91	3.1	1.3	8
WinAir 45 5/6 510 mm	53390781	492 × 592 × 510	4	G 4	2,700	30		91	2.5	1.1	10
WinAir 45 1/2 510 mm	53390778	289 × 592 × 510	3	G 4	2,050	30		91	1.9	0.8	10
WinAir 45 1/4 510 mm	53393161	289 × 289 × 510	4	G 4	1,200	30		91	1.1	0.6	2
WinAir 45 1/1 625 mm	53390776	592 × 592 × 625	5	G 4	3,400	25	490	92	3.8	1.4	8
WinAir 45 5/6 625 mm	53390782	492 × 592 × 625	4	G 4	2,700	25		92	3.0	1.2	4
WinAir 45 1/2 625 mm	53390779	289 × 592 × 625	3	G 4	2,050	25		92	2.3	1.0	6
WinAir 45 1/4 650 mm	53393162	289 × 289 × 650	4	G 4	1,250	25		92	1.4	0.6	2

Pocket filters
WinAir | Fine dust

Specifications	
Filter medium	Polyester (WinAir 50), Polyolefin (others)
Recommended final pressure drop	450 Pa
Thermal stability	70 °C
Moisture resistance	100% rel. hum.
Frame	Polyurethane
Fire class	F 1 acc. to DIN 53438

Application

The WinAir fine filters create good clean air quality based on good arrestance coupled with a low pressure drop. Used as prefilters, they protect the downstream filter stages.

Special features

- Good filtration characteristics thanks to progressively structured filter media made of synthetic-organic fibers.
- Filter pockets foamed into the PU front frame, and welded in a leakproof configuration.
- Pocket forming through integrated welded seams.
- The pocket filters are microbiologically inactive and meet all hygiene requirements of the German VDI Guideline 6022 “Hygiene requirements for ventilation and air-conditioning systems and units”.
- Free of glass-fibers, non-corroding, moisture-resistant up to 100% relative humidity, self-extinguishing under DIN 53438 (fire class F 1).
- Simple, secure installation, suitable for all commonly used mounting frames.

Pocket filters
WinAir | Fine dust

Specifications	
Filter medium	Polyester (WinAir 50), Polyolefin (others)
Recommended final pressure drop	450 Pa
Thermal stability	70 °C
Moisture resistance	100 % rel. hum.
Frame	Polyurethane
Fire class	F 1 acc. to DIN 53438

Article	Article number	Dimensions (W × H × D) [mm]	Number of pockets	Filter class	Nominal volume flow [m³/h]	Initial pressure drop [Pa]	Initial efficiency [%]	Minimum efficiency [%]	
WinAir 50 1/1 330 mm	53390783	592 × 592 × 330	5	M 5	2,500	40			
WinAir 50 5/6 330 mm	53390795	492 × 592 × 330	4	M 5	2,000	40			
WinAir 50 1/2 330 mm	53390787	289 × 592 × 330	3	M 5	1,500	40			
WinAir 50 1/4 330 mm	53393163	289 × 289 × 330	4	M 5	900	40			
WinAir 50 1/1 510 mm	53390784	592 × 592 × 510	5	M 5	3,400	50			
WinAir 50 5/6 510 mm	53390796	492 × 592 × 510	4	M 5	2,700	50			
WinAir 50 1/2 510 mm	53390788	289 × 592 × 510	3	M 5	2,000	50			
WinAir 50 1/4 510 mm	53393169	289 × 289 × 510	4	M 5	1,200	50			
WinAir 50 1/1 625 mm	53390785	592 × 592 × 625	5	M 5	3,400	45			
WinAir 50 5/6 625 mm	53390797	492 × 592 × 625	4	M 5	2,700	45			
WinAir 50 1/2 625 mm	53390794	289 × 592 × 625	3	M 5	2,000	45			
WinAir 50 1/4 650 mm	53393170	289 × 289 × 650	4	M 5	1,250	45			
WinAir 75 1/1 510 mm	53390798	592 × 592 × 510	8	M 6	3,400	100			
WinAir 75 5/6 510 mm	53390803	492 × 592 × 510	6	M 6	2,550	100			
WinAir 75 1/2 510 mm	53390801	289 × 592 × 510	4	M 6	1,700	100			
WinAir 75 1/4 510 mm	53393171	289 × 289 × 510	4	M 6	800	100			
WinAir 75 1/1 625 mm	53390799	592 × 592 × 625	8	M 6	3,400	75			
WinAir 75 5/6 625 mm	53390804	492 × 592 × 625	6	M 6	2,550	75			
WinAir 75 1/2 625 mm	53390802	289 × 592 × 625	4	M 6	1,700	75			
WinAir 75 1/4 650 mm	53393172	289 × 289 × 650	4	M 6	800	75			
WinAir 90 1/1 N 510 mm	53464906	592 × 592 × 510	8	F 7	3,400	170	60	35	
WinAir 90 5/6 510 mm	53390810	492 × 592 × 510	6	F 7	2,550	170	60	35	
WinAir 90 1/2 510 mm	53390808	289 × 592 × 510	4	F 7	1,700	170	60	35	
WinAir 90 1/4 510 mm	53393173	289 × 289 × 510	4	F 7	800	170	60	35	
WinAir 90 1/1 N 625 mm	53464907	592 × 592 × 625	8	F 7	3,400	140	62	35	
WinAir 90 5/6 625 mm	53390811	492 × 592 × 625	6	F 7	2,550	140	62	35	
WinAir 90 1/2 625 mm	53390809	289 × 592 × 625	4	F 7	1,700	140	62	35	
WinAir 90 1/4 650 mm	53393174	289 × 289 × 650	4	F 7	800	140	62	35	

Pocket filters
WinAir | Fine dust

Specifications	
Filter medium	Polyester (WinAir 50), Polyolefin (others)
Recommended final pressure drop	450 Pa
Thermal stability	70 °C
Moisture resistance	100 % rel. hum.
Frame	Polyurethane
Fire class	F 1 acc. to DIN 53438

Delivery notes

Customized dimensions are available on request. WinAir 50, WinAir 75 and WinAir 90 are also available in the sizes 1 / 2 and 5 / 6 for transverse installation.

Average efficiency [%]	Average arrestance [%]	Filter area [m²]	Weight [kg]	Packaging unit [units / carton]	Article	Energy efficiency classification according to EUROVENT 4/21*		
						Nominal volume flow [m³ / h]	Energy class	Annual Energy consumption**
50	95	2.0	1.0	2	WinAir 50 1 / 1 330 mm	3,400	E	> 1,200
50	95	1.6	1.0	2	WinAir 50 5 / 6 330 mm	2,700	E	
50	95	1.2	0.8	2	WinAir 50 1 / 2 330 mm	2,000	E	
50	95	0.7	0.6	2	WinAir 50 1 / 4 330 mm	1,200	E	
50	96	3.1	1.3	6	WinAir 50 1 / 1 510 mm	3,400	D	960
50	96	2.5	1.2	10	WinAir 50 5 / 6 510 mm	2,700	D	
50	96	1.9	0.9	10	WinAir 50 1 / 2 510 mm	2,000	D	
50	96	1.1	0.6	2	WinAir 50 1 / 4 510 mm	1,200	D	
50	97	3.8	1.5	6	WinAir 50 1 / 1 625 mm	3,400	C	700
50	97	3.1	1.3	6	WinAir 50 5 / 6 625 mm	2,700	C	
50	97	2.3	1.0	10	WinAir 50 1 / 2 625 mm	2,000	C	
50	97	1.4	0.7	2	WinAir 50 1 / 4 650 mm	1,250	C	
72	> 99	4.9	1.8	6	WinAir 75 1 / 1 510 mm	3,400	E	> 1,400
72	> 99	3.7	1.3	4	WinAir 75 5 / 6 510 mm	2,550	E	
72	> 99	2.5	0.9	6	WinAir 75 1 / 2 510 mm	1,700	E	
72	> 99	1.2	0.5	12	WinAir 75 1 / 4 510 mm	800	E	
77	> 99	6.0	2.0	8	WinAir 75 1 / 1 625 mm	3,400	E	> 1,400
77	> 99	4.5	1.5	4	WinAir 75 5 / 6 625 mm	2,550	E	
77	> 99	3.0	1.0	6	WinAir 75 1 / 2 625 mm	1,700	E	
77	> 99	1.4	0.5	12	WinAir 75 1 / 4 650 mm	800	E	
81	> 99	4.9	1.8	6	WinAir 90 1 / 1 N 510 mm	3,400	E	> 2,200
81	> 99	3.7	1.3	4	WinAir 90 5 / 6 510 mm	2,550	E	
81	> 99	2.5	0.9	6	WinAir 90 1 / 2 510 mm	1,700	E	
81	> 99	1.2	0.5	12	WinAir 90 1 / 4 510 mm	800	E	
83	> 99	6.0	2.0	8	WinAir 90 1 / 1 N 625 mm	3,400	E	> 2,200
83	> 99	4.5	1.5	4	WinAir 90 5 / 6 625 mm	2,550	E	
83	> 99	3.0	1.0	6	WinAir 90 1 / 2 625 mm	1,700	E	
83	> 99	1.4	0.5	12	WinAir 90 1 / 4 650 mm	800	E	

* rated at 3,400 m³/h (further information at www.eurovent-certification.com)

** The specified annual energy consumption is the result of laboratory tests using synthetic test dust and refers only to the proportion of total energy consumption attributable to flow resistance through the filter. The annual energy consumption of an HVAC system in operation can therefore differ significantly under actual operational conditions.

Cassette filters

MaxiPleat, NanoPleat, eMaxx, MVP, MVPGT

energy efficiency
performance

In the category of cassette filters, Freudenberg Filtration Technologies offers a broad choice of products. All models are characterized by high performance capabilities: Viledon® cassette filters excel in terms of optimum media velocity with low pressure drop even at high volume flows. Plus a large dust holding capacity and exceptionally high stability of the entire filter construction for operational dependability in actual use.

Cassette filters
MaxiPleat | Fine dust

Specifications	
Filter medium	Micro-glass-fiber paper
Recommended final pressure drop	650 Pa
Bursting pressure	>6,000 Pa
Thermal stability	up to 70 °C
Moisture resistance	100 % rel. hum.
Frame	Without (D), 25 mm front frame, halogen-free plastic (N)
Seal	Without (Z0), on request foamed-on PU seal (N1)
Protection grids	On both sides, halogen-free plastic

Application

Viledon® MaxiPleat cassette filters offer maximized operational dependability and cost-efficiency for intake, exhaust and recirculating air filtration in air-conditioning systems with stringent requirements for clean air quality, particularly in the case of critical local conditions, high volume flows, restricted space available, and when process dependability does not tolerate compromises, e. g.

- in intake air filtration of turbomachinery,
- in industrial processes (chemicals, pharmaceuticals, food and beverages, optics, electronics, surface treatment technology, etc.),
- in sophisticated air-conditioning technology (laboratories, museums, airports, office buildings, etc.),
- as “police filters” in dust removal systems.

Special features

- The optimum V-shaped pleat geometry of the filter medium, as created by the thermal embossing process, enables the entire filtering area to be utilized, with uniform dust loading, and a homogeneous media velocity with a low average pressure drop.
- The high dust holding capacity of the MaxiPleat filters, in conjunction with a low pressure drop and superlative constructional stability, ensures cost-efficient and dependable operation over a very long operational lifetime.
- MaxiPleat cassette filters achieve energy efficiency class A (MX95 and MX98) and B (MX85), thus ensuring reduced energy costs and downsized CO_2 emissions.
- Casting the dimensionally stable pleat package in the torsion-resistant plastic frame assures exceptional sturdiness plus high security against dust break-through. Gripping lugs facilitate installation and removal, and the protection grid on both sides minimizes the risk of damage to the filter medium.
- With the MaxiPleat modular filter system, MaxiPleat filters of different filter classes and construction depths can be positively combined simply by clipping them on, thus enabling another filter stage to be inserted without any structural modifications.
- MaxiPleat filters meet in full the requirements laid down in VDI 6022.

Article	Article number	Dimensions (W × L × D) [mm]	Filter class	Nominal volume flow [m³/h]	Initial pressure drop [Pa]	Initial efficiency [%]	Minimum efficiency [%]	
MX75-R-0592x0287x292x25-Z08N-A84	53360086	592 × 287 × 292	M6	2,000	135			
MX75-R-0592x0490x292x25-Z08N-A84	53360087	592 × 490 × 292	M6	3,500	135			
MX75-R-0592x0579x292x25-N18N-A84	53360088	592 × 579 × 292	M6	4,150	135			
MX75-R-0592x0592x292x25-Z08D-A84	53392076	592 × 592 × 292	M6	4,250	105			
MX75-M-0592x0592x292x25-Z08N-A84	53415630	592 × 592 × 292	M6	4,250	135			
MX85-R-0287X0287X292X25-Z08N-B84	53400130	287 × 287 × 292	F7	1,000	140	45	41	
MX85-R-0592x0287x292x25-Z08N-B84	53360039	592 × 287 × 292	F7	2,000	140	45	41	
MX85-R-0592x0490x292x25-Z08N-B84	53360040	592 × 490 × 292	F7	3,500	140	45	41	
MX85-R-0592X0579X292X25-N18N-B84	53360043	592 × 579 × 292	F7	4,150	140	45	41	
MX85-R-0592X0592X292X25-Z08D-B84	53375079	592 × 592 × 292	F7	4,250	110	46	42	
MX85-M-0592x0592x292x25-Z08N-B84	53415632	592 × 592 × 292	F7	4,250	140	45	41	
MX95-R-0592x0287x292x25-Z08N-C84	53360024	592 × 287 × 292	F8	2,000	150	65	61	
MX95-R-0592x0490x292x25-Z08N-C84	53360025	592 × 490 × 292	F8	3,500	150	65	61	
MX95-R-0592x0579x292x25-N18N-C84	53358070	592 × 579 × 292	F8	4,150	150	65	61	
MX95-R-0592x0592x292x25-Z08D-C84	53370948	592 × 592 × 292	F8	4,250	120	66	62	
MX95-M-0592x0592x292x25-Z08N-C84	53415637	592 × 592 × 292	F8	4,250	150	65	61	
MX98-R-0592x0287x292x25-Z08N-D84	53360019	592 × 287 × 292	F9	2,000	175	80	76	
MX98-R-0592x0490x292x25-Z08N-D84	53360020	592 × 490 × 292	F9	3,500	175	80	76	
MX98-R-0592x0579x292x25-N18N-D84	53360021	592 × 579 × 292	F9	4,150	175	80	76	
MX98-R-0592x0592x292x25-Z08D-D84	53372259	592 × 592 × 292	F9	4,250	135	82	78	
MX98-M-0592x0592x292x25-Z08N-D84	53415639	592 × 592 × 292	F9	4,250	175	80	76	

Cassette filters
MaxiPleat | Fine dust

Specifications	
Filter medium	Micro-glass-fiber paper
Recommended final pressure drop	650 Pa
Bursting pressure	>6,000 Pa
Thermal stability	up to 70 °C
Moisture resistance	100% rel. hum.
Frame	Without (D), 25 mm front frame, halogen-free plastic (N)
Seal	Without (Z0), on request foamed-on PU seal (N1)
Protection grids	On both sides, halogen-free plastic

Delivery notes

MaxiPleat cassette filters are also available in 140 mm construction depth as well as with and without PU seal.
N = with 25 mm front frame; U = with 20.5 mm front frame; D = without front frame.
An optional water barrier reduces the passage of intake water to the clean air side.
Customized dimensions are available on request.

Average efficiency [%]	Dust holding capacity (AC Fine / 800 Pa) [g]	Filter area [m²]	Weight [kg]	Packaging unit [units / carton]	Article	Energy efficiency classification according to EUROVENT 4/21*		
						Nominal volume flow [m³/h]	Energy class	Annual Energy consumption**
75	960	7.5	4.0	2	MX75-R-0592x0287x292x25-Z08N-A84	1,500	E	
75	1,850	14.5	6.0	1	MX75-R-0592x0490x292x25-Z08N-A84	2,700	E	
75	2,240	17.5	7.0	1	MX75-R-0592x0579x292x25-N18N-A84	3,300	E	
75	2,600	21.0	7.0	1	MX75-R-0592x0592x292x25-Z08D-A84	3,400	E	
75	2,300	18.0	7.0	1	MX75-M-0592x0592x292x25-Z08N-A84	3,400	E	1,780
86	550	4.3	2.0	4	MX85-R-0287X0287X292X25-Z08N-B84	800	C	
86	790	7.5	4.0	2	MX85-R-0592x0287x292x25-Z08N-B84	1,500	C	
86	1,530	14.5	6.0	1	MX85-R-0592x0490x292x25-Z08N-B84	2,700	C	
86	1,850	17.5	7.0	1	MX85-R-0592X0579X292X25-N18N-B84	3,300	C	
86	2,200	21.0	7.0	1	MX85-R-0592X0592X292X25-Z08D-B84	3,400	C	
86	1,900	18.0	7.0	1	MX85-M-0592x0592x292x25-Z08N-B84	3,400	C	1,240
92	710	7.5	4.0	2	MX95-R-0592x0287x292x25-Z08N-C84	1,500	B	
92	1,370	14.5	6.0	1	MX95-R-0592x0490x292x25-Z08N-C84	2,700	B	
92	1,650	17.5	7.0	1	MX95-R-0592x0579x292x25-N18N-C84	3,300	B	
92	1,900	21.0	7.0	1	MX95-R-0592x0592x292x25-Z08D-C84	3,400	B	
92	1,700	18.0	7.0	1	MX95-M-0592x0592x292x25-Z08N-C84	3,400	B	1,300
96	630	7.5	4.0	2	MX98-R-0592x0287x292x25-Z08N-D84	1,500	B	
96	1,210	14.5	6.0	1	MX98-R-0592x0490x292x25-Z08N-D84	2,700	B	
96	1,460	17.5	7.0	1	MX98-R-0592x0579x292x25-N18N-D84	3,300	B	
96	1,700	21.0	7.0	1	MX98-R-0592x0592x292x25-Z08D-D84	3,400	B	
96	1,500	18.0	7.0	1	MX98-M-0592x0592x292x25-Z08N-D84	3,400	B	1,830

* rated at 3,400 m³/h (further information at www.eurovent-certification.com)

** The specified annual energy consumption is the result of laboratory tests using synthetic test dust and refers only to the proportion of total energy consumption attributable to flow resistance through the filter. The annual energy consumption of an HVAC system in operation can therefore differ significantly under actual operational conditions.

Cassette filters
MaxiPleat | EPA

Specifications	
Filter medium	Micro-glass-fiber paper
Recommended final pressure drop	600 Pa
Bursting pressure	>6,000 Pa
Thermal stability	up to 70 °C
Moisture resistance	100 % rel. hum.
Frame	Without (D), 25 mm front frame, halogen-free plastic (N)
Seal	Without (Z0), on request foamed-on PU seal (N1)
Protection grids	On both sides, halogen-free plastic

Application

Viledon® MaxiPleat cassette filters offer maximized operational dependability and cost-efficiency for intake, exhaust and recirculating air filtration in air-conditioning systems with stringent requirements for clean air quality, particularly in the case of critical local conditions, high volume flows, restricted space available, and when process dependability does not tolerate compromises, e. g.

- in intake air filtration of turbomachinery,
- in industrial processes (chemicals, pharmaceuticals, food and beverages, optics, electronics, surface treatment technology, etc.),
- in sophisticated air-conditioning technology (laboratories, museums, airports, office buildings, etc.),
- as “police filters” in dust removal systems.

Special features

- The optimum V-shaped pleat geometry of the filter medium, as created by the thermal embossing process, enables the entire filtering area to be utilized, with uniform dust loading over the filtering area and a homogeneous media velocity with a low average pressure drop.
- The high dust holding capacity of the MaxiPleat filters, in conjunction with a low pressure drop and superlative constructional stability, ensures cost-efficient and dependable operation over a very long operational lifetime.
- Casting the dimensionally stable pleat package in the torsion-resistant plastic frame assures exceptional sturdiness plus high security against dust break-through. Gripping lugs facilitate installation and removal, and the protection grids on both sides minimize the risk of damage to the filter medium.
- With the MaxiPleat modular filter system, MaxiPleat filters of different filter classes and construction depths can be positively combined simply by clipping them on, thus enabling another filter stage to be inserted without any structural modifications.
- MaxiPleat filters meet in full the requirements laid down in VDI 6022.

Delivery notes

MaxiPleat cassette filters are also available in 140 mm construction depth as well as with and without seal.
N = with 25 mm front frame; U = with 20.5 mm front frame; D = without front frame.
An optional water barrier reduces the passage of intake water to the clean air side.
Customized dimensions are available on request.

Article	Article number	Dimensions (W × L × D) [mm]	Filter class acc. to EN 1822: 2009	Filter class acc. to ISO 29463	Nominal volume flow [m³/h]	Initial pressure drop [Pa]	Arrestance efficiency MPPS [%]	Dust holding capacity (AC Fine / 800 Pa) [g]	Face velocity [m/s]	Filter area [m²]	Packaging unit [units/carton]
MXH10-M-0592x0592x292x25-Z08N-E84	53438221	592 × 592 × 292	E 10		4,250	235	≥85	630	3.2	18.0	1
MX100-R-0592x0287x292x25-Z08N-F84	53360015	592 × 287 × 292	E 11	ISO 15 E	1,500	195	≥95	300	2.3	7.5	2
MX100-R-0592X0490X292X25-Z08N-F84	53360016	592 × 490 × 292	E 11	ISO 15 E	2,700	195	≥95	505	2.4	14.5	1
MX100-R-0592X0579X292X25-N18N-F84	53360017	592 × 579 × 292	E 11	ISO 15 E	3,350	195	≥95	600	2.5	17.5	1
MX100-R-0592X0592X292X25-Z08D-F84	53372031	592 × 592 × 292	E 11	ISO 15 E	3,400	190	≥95	690	2.5	21.0	1
MX100-M-0592X0592X292X25-Z08N-F84	53415622	592 × 592 × 292	E 11	ISO 15 E	3,400	195	≥95	610	2.5	18.0	1
MX120-R-0592X0287X292X25-Z08N-G60	53359975	592 × 287 × 292	E 11	ISO 15 E	1,500	320	≥99.9	235	2.3	11.0	2
MX120-R-0592X0490X292X25-Z08N-G60	53359976	592 × 490 × 292	E 12	ISO 25 E	2,700	320	≥99.9	400	2.4	19.0	1
MX120-R-0592X0579X292X25-N18N-G60	53359977	592 × 579 × 292	E 12	ISO 25 E	3,300	320	≥99.9	475	2.5	22.0	1
MX120-M-0592X0592X292X25-Z08N-G60	53415627	592 × 592 × 292	E 12	ISO 25 E	3,400	320	≥99.9	485	2.5	23.0	1

Specifications	
Filter medium	Micro-glass-fiber paper
Recommended final pressure drop	650 Pa
Bursting pressure	>6,000 Pa
Thermal stability	up to 70 °C
Moisture resistance	100 % rel. hum.
Frame	Without (D), 25 mm front frame, halogen-free plastic (N)
Seal	Without (Z0), on request glued-on / foamed-on PU seal (N5)
Protection grids	On both sides, halogen-free plastic

Application

The Viledon® MaxiPleat modular filter system is used for intake, exhaust and recirculating air filtration in air-conditioning systems with stringent requirements for the clean air quality, particularly when the space available is restricted, e. g.

- in intake air filtration for turbomachinery,
- in industrial processes,
- in sophisticated air-conditioning technology.

With the MaxiPleat modular filter system, MaxiPleat filters of different filter classes and construction depths can be positively combined simply by clipping them on, thus enabling another filter stage to be inserted without any structural modifications.

Special features

- The optimum V-shaped pleat geometry of the filter medium, as created by the thermal embossing process, enables the entire filtering area to be utilized, with uniform dust loading over the filtering area and a homogeneous media velocity with a low pressure drop.
- The high dust holding capacity of the MaxiPleat filters, in conjunction with a low pressure drop and superlative constructional stability, ensures cost-efficient and dependable operation over a very long operational lifetime.
- To install the MaxiPleat modular filter system, the MaxiPleat basic filter fitted with the black connecting pins is inserted in the existing support system. The prefilter with the white connecting caps can now be simply clipped onto the installed basic filter. The connecting pins anchored in the basic filter can no longer be detached. The clipped-on prefilter can be removed again and replaced.
- Casting the dimensionally stable pleat package in the torsion-resistant plastic frame assures exceptional sturdiness plus high security against dust break-through. Gripping lugs facilitate installation and removal, and the protection grids on both sides minimize the risk of damage to the filter medium.
- MaxiPleat filters meet in full the requirements laid down in VDI 6022.

Delivery notes

The MaxiPleat basic filters are supplied with connecting pins inserted (RB types).
N = with 25 mm front frame; U = with 20.5 mm front frame; D = without front frame.
The MaxiPleat modular prefilters (RC types) are available in 292 and 140 mm construction depths.
The standard version does not include a front frame, but is delivered with a clean air side seal and connecting caps inserted.
A retaining bracket, which precludes the possibility of the prefilter becoming detached under any operating conditions, is included in the delivery package of the 292 mm types (for vertical installation).
In the case of overhead installation, an additional bracket is required, which can be ordered separately.
An optional water barrier reduces the passage of intake water to the clean air side.
Customized dimensions are available on request.

Article	Article number	Dimensions (W × L × D) [mm]	Filter class	Nominal volume flow [m³/h]	Initial pressure drop [Pa]	Average efficiency [%]	Dust holding capacity (AC Fine / 800 Pa) [g]	Filter area [m²]	Weight [kg]	Packaging unit [units / carton]
MX75-RC-0554x0554x140x10-N58D-A45	53372039	554 × 554 × 140	M6	3,400	135	79	>1,500	12	4	1
MX75-RC-0554x0554x292x25-N58D-A84	53378239	554 × 554 × 292	M6	3,400	95	79	>2,300	18	7	1
MX85-RB-0592x0592x292x25-Z08N-B84	53403631	592 × 592 × 292	F7	3,400	100	87	>1,900	18	7	1
MX85-RC-0554x0554x140x10-N58D-B45	53371192	554 × 554 × 140	F7	3,400	140	82	>1,250	12	4	1
MX85-RC-0554x0554x292x25-N58D-B84	53375083	554 × 554 × 292	F7	3,400	100	87	>1,900	18	7	1
MX95-RB-0592x0592x292x25-Z08N-C84	53371193	592 × 592 × 292	F8	3,400	105	92	>1,700	18	7	1
MX95-RC-0554x0554x140x10-N58D-C45	53372040	554 × 554 × 140	F8	3,400	150	91	>1,150	12	4	1
MX95-RC-0554x0554x292x25-N58D-C84	3379914	554 × 554 × 292	F8	3,400	105	92	>1,700	18	7	1
MX98-RB-0592x0592x292x25-Z08N-D84	53372041	592 × 592 × 292	F9	3,400	125	96	>1,500	18	7	1
MX98-MB-0592x0592x292x25-Z08N-D84	53473592	592 × 592 × 292	F9	3,400	125	96	>1,500	18	7	1
MX98-MB-0592x0592x292x25-N18N-D84	53473593	592 × 592 × 292	F9	3,400	125	96	>1,500	18	7	1
MX98-RC-0554x0554x140x10-N58D-D45	53431249	554 × 554 × 140	F9	3,400	175	96	>1,000	12	4	1
MX98-RC-0554X0554X292X25-N58D-D84	53372421	554 × 554 × 292	F9	3,400	125	96	>1,500	18	7	1

Cassette filters
MaxiPleat | Modular filter system | EPA

Specifications	
Filter medium	Micro-glass-fiber paper
Recommended final pressure drop	650 Pa
Bursting pressure	>6,000 Pa
Thermal stability	up to 70 °C
Moisture resistance	100 % rel. hum.
Frame	Without (D), 25 mm front frame, halogen-free plastic (N)
Seal	Without (Z0), on request glued-on / foamed-on PU seal (N5)
Protection grids	On both sides, halogen-free plastic

Application

The Viledon® MaxiPleat modular filter system is used for intake, exhaust and recirculated air filtration in air-conditioning systems with stringent requirements for the clean air quality, particularly when the space available is restricted, e. g.

- in intake air filtration for turbomachinery,
- in industrial processes,
- in sophisticated air-conditioning technology.

With the MaxiPleat modular filter system, MaxiPleat filters of different filter classes and construction depths can be positively combined simply by clipping them on, thus enabling another filter stage to be inserted without any structural modifications.

Special features

- The optimum V-shaped pleat geometry of the filter medium, as created by the thermal embossing process, enables the entire filtering area to be utilized, with uniform dust loading over the filtering area and a homogeneous media velocity with a low pressure drop.
- The high dust holding capacity of the MaxiPleat filters, in conjunction with a low pressure drop and superlative constructional stability, ensures costefficient and dependable operation over a very long operational lifetime.
- To install the MaxiPleat modular filter system, the MaxiPleat basic filter fitted with the black connecting pins is inserted in the existing support system. The prefilter with the white connecting caps can now be simply clipped onto the installed basic filter. The connecting pins anchored in the basic filter can no longer be detached. The clipped-on prefilter can be removed again and replaced.
- Casting the dimensionally stable pleat package in the torsion-resistant plastic frame assures exceptional sturdiness plus high security against dust break-through. Gripping lugs facilitate installation and removal, and the protection grids on both sides minimize the risk of damage to the filter medium.
- MaxiPleat filters meet in full the requirements laid down in VDI 6022.

Delivery notes

The MaxiPleat basic filters are supplied with connecting pins inserted (RB types).
N = with 25 mm front frame; U = with 20.5 mm front frame; D = without front frame.
The MaxiPleat modular prefilters (RC types) are available in 292 and 140 mm construction depths. The standard version does not include a front frame, but is delivered with a clean air side seal and connecting caps inserted.
An additional retaining bracket, which precludes the possibility of the prefilter becoming detached under any operating conditions, is included in the delivery package of the 292 mm types (for vertical installation). In the case of overhead installation, an additional bracket is required, which can be ordered separately. An optional water barrier reduces the passage of intake water to the clean air side. Customized dimensions are available on request.

Article	Article number	Dimensions (W × L × D) [mm]	Filter class acc. to EN 1822:2009	Filter class acc. to ISO 29463	Nominal volume flow [m³/h]	Initial pressure drop [Pa]	Dust holding capacity (AC Fine / 800 Pa) [g]	Filter area [m²]	Weight [kg]	Packaging unit [units / carton]
MXH10-RB-0592x0592x292x25-Z08N-E84	53440228	592 × 592 × 292	E10		3,400	175	700	18	7.0	1
MXH10-MB-0592x0592x292x25-Z08N-E84	53470031	592 × 592 × 292	E10		3,400	175	700	18	7.0	1
MXH10-MB-0592x0592x292x25-N18N-E84	53473604	592 × 592 × 292	E10		3,400	175	700	18	7.0	1
MX100-RB-0592x0592x292x25-Z08N-F84	53381884	592 × 592 × 292	E11	ISO 15 E	3,400	195	610	18	7.0	1
MX100-MB-0592x0592x292x25-Z08N-F84	53473606	592 × 592 × 292	E11	ISO 15 E	3,400	195	610	18	7.0	1
MX100-MB-0592x0592x292x25-N18N-F84	53473607	592 × 592 × 292	E11	ISO 15 E	3,400	195	610	18	7.0	1
MX100-MB-0592x0592x292x25-N18N-F60	53473605	592 × 592 × 292	E11	ISO 15 E	3,400	210	750	23	8.3	1
MX120-RB-0592x0592x292x25-Z08N-G60	53372043	592 × 592 × 292	E12	ISO 25 E	3,400	320	485	23	8.3	1
MX120-MB-0592x0592x292x25-Z08N-G60	53473608	592 × 592 × 292	E12	ISO 25 E	3,400	320	485	23	8.3	1
MX120-MB-0592x0592x292x25-N18N-G60	53473609	592 × 592 × 292	E12	ISO 25 E	3,400	320	485	23	8.3	1

Cassette filters
NanoPleat | Fine dust

Specifications	
Filter medium	HSN media technology
Recommended final pressure drop	450 Pa
Thermal stability	up to 70 °C
Moisture resistance	100 % rel. hum.
Frame	Plastic

Application

Viledon® NanoPleat filters have been developed specifically for intake, exhaust and recirculated air filtration in HVAC systems posing stringent requirements for clean air quality and cost-efficiency. They ensure clean, efficiently conditioned air

- in office buildings, production halls, airports, libraries, museums, laboratories, hospitals, old people's homes and care facilities, etc.,
- in sensitive applications for the food and beverage industries, pharmaceuticals, chemicals, optics, electronics, and medical technology, etc.

Special features and benefits

- Consistently high filtration efficiency under all operating conditions thanks to the unique HSN media.
- The low pressure drop and the high dust holding capacity provide ultra-efficient, energy-saving operating characteristics, with a slow increase in the pressure drop and resultant additional lifetime reserves. This produces a significant reduction in operating costs.
- Simplified handling at installation, since the HSN medium will not be irreversibly damaged even if it comes into contact with slight pressure.
- The pleated HSN filter media, cast in a tough plastic frame in a leakproof configuration, are exceptionally sturdy and water-repellent. Even when exposed to high levels of dampness and moisture, the filter medium will not be saturated; in fact the water droplets will simply roll off the material's surface. The pressure drop remains almost unchanged even under these circumstances, thus providing maximized operational reliability.
- Viledon® NanoPleat filters are highly resistant to chemicals, microbiologically inert and meet all hygiene requirements for HVAC systems to EN 13779 and the German VDI Guideline 6022. Their microbial safety has been confirmed by the Institute for Air Hygiene in Berlin.
- The sturdy construction ensures optimum performance even under turbulent flow conditions or during load changes. This means that the risk of particle or fiber shedding is practically eliminated.
- The filter elements are free of metals and halogens, corrosion-proof and also fully incinerable and thus disposal-friendly. The frame and filter media are self-extinguishing to DIN 53438 (Fire class F 1).

Article	Article number	Dimensions (W × L × D) [mm]	Filter class	Nominal volume flow [m³/h]	Initial pressure drop [Pa]	Initial efficiency [%]	Minimum efficiency [%]	Average efficiency [%]	Weight [kg]	Energy efficiency classification according to EUROVENT 4/21*		
										Nominal volume flow [m³/h]	Energy class	Annual Energy consumption**
MV 75 HSN 1/1 V08x24-Z00N-A33	53424217	592 × 592 × 292	M6	3,400	85	43		≥70	5.8	3.400	E	1,640
MV 75 HSN 5/6 V08x24-Z00N-A33	53429115	490 × 592 × 292	M6	2,700	85	40		≥70	4.8	2.700	E	
MV 75 HSN 4/6 V08x24-Z00N-B33	53475720	405 × 592 × 292	M6	2,100	85	40		≥70	4.6	2.100	E	
MV 75 HSN 1/2 V08x24-Z00N-A33	53429114	287 × 592 × 292	M6	1,500	85	40		≥70	3.3	1.500	E	
MV 85 HSN 1/1 V08x24-Z00N-B33	53424218	592 × 592 × 292	F7	3,400	100	60	57	≥85	5.8	3.400	C	1,500
MV 85 HSN 5/6 V08x24-Z00N-B33	53429117	490 × 592 × 292	F7	2,700	100	60	57	≥85	4.8	2.700	C	
MV 85 HSN 4/6 V08x24-Z00N-B33	53441273	405 × 592 × 292	F7	2,100	100	60	57	≥85	4.6	2.100	C	
MV 85 HSN 1/2 V08x24-Z00N-B33	53429116	287 × 592 × 292	F7	1,500	100	60	57	≥85	3.3	1.500	C	
MV 95 HSN 1/1 V08x24-Z00N-C33	53424229	592 × 592 × 292	F8	3,400	110	70	67	≥90	5.8	3.400	C	1,700
MV 95 HSN 5/6 V08x24-Z00N-C33	53429124	490 × 592 × 292	F8	2,700	110	70	67	≥90	4.8	2.700	C	
MV 95 HSN 4/6 V08x24-Z00N-C33	53441279	405 × 592 × 292	F8	2,100	110	70	67	≥90	4.6	2.100	C	
MV 95 HSN 1/2 V08x24-Z00N-C33	53429118	287 × 592 × 292	F8	1,500	110	70	67	≥90	3.3	1.500	C	
MV 98 HSN 1/1 V08x24-Z00N-D33	53424230	592 × 592 × 292	F9	3,400	120	75	72	>95	5.8	3.400	B	1,690
MV 98 HSN 1/2 V08x24-Z00N-D33	53429135	287 × 952 × 292	F9	2,700	120	75	72	>95	3.3	2.700	B	
MV 98 HSN 4/6 V08x24-Z00N-D33	53490992	405 × 592 × 292	F9	2,100	120	75	72	>95	4.6	2.100	B	
MV 98 HSN 5/6 V08x24-Z00N-D33	53429134	490 × 592 × 292	F9	1,500	120	75	72	>95	4.8	1.500	B	

* rated at 3,400 m³/h (further information at www.eurovent-certification.com)

** The specified annual energy consumption is the result of laboratory tests using synthetic test dust and refers only to the proportion of total energy consumption attributable to flow resistance through the filter. The annual energy consumption of an HVAC system in operation can therefore differ significantly under actual operational conditions.

Cassette filters
eMaxx | Fine dust

Specifications	
Filter medium	Micro-glass-fiber paper
Thermal stability	up to 70 °C
Moisture resistance	100 % rel. hum.
Frame	Halogen-free plastic

Application

Viledon® eMaxx filters are a new generation of powerful, efficient, economic and durable cassette filters offering operational reliability and cost efficiency for supply of air filtration systems which have stringent requirements for clean air quality. They are used in, e. g.

- intake air filtration for gas turbines and compressors,
- ventilation systems.

Their characteristics and benefits

- High-strength micro-glass-fiber papers with hydrophobic coating are used as filter media.
- The entire filter element is non-corroding, and fully incinerable, since it contains no metal parts. Frame and protection grids consist of halogen-free plastic.
- eMaxx cassette filters have been optimized in terms of pleat geometry using the 3D pleating technology which ensures full utilization of the filtering area and uniform dust deposition. Combined with the filter elements depth of 420 mm particularly high dust holding capacity can be achieved resulting in long useful lifetimes.
- The leakproof casting of the dimensionally stable media pleat pack provides high burst strength, as well as excellent security against dust penetration during operation.
- Prefilters can be simply plugged-on by connecting pins and an additional retaining bracket.

Special features

- The eMaxx cassette filter range offers a combination of excellent dust holding capacity, low pressure drop at an optimum price-performance ratio.
- eMaxx cassette filters are supplied as standard with an adhesively affixed gasket and a protection grid fitted to minimize risk of damage during handling and operation.

Article	Article number	Dimensions (W × L × D) [mm]	Filter class	Nominal volume flow [m^3/h]	Initial pressure drop [Pa]	Dust holding capacity (AC Fine / 650 Pa) [g]	Filter area [m^2]
EMAXX 98-P-1/1-W19N	53464841	593 × 593 × 420	F9	4,250	135	1,200	30
EMAXX 98-P-1/1-W19V	53466957	593 × 593 × 420	F9	4,250	135	1,200	30
EMAXX 98-P-1/1-Z09N	53479544	593 × 593 × 420	F9	4,250	135	1,200	30
EMAXX 98-P-1/2-W19N	53464840	288 × 593 × 420	F9	1,900	135	540	14

Specifications	
Filter medium	Micro-glass-fiber paper
Thermal stability	up to 70 °C
Moisture resistance	100 % rel. hum.
Frame	Halogen-free plastic

Application

Viledon® eMaxx filters are a new generation of powerful, efficient, economic and durable cassette filters offering operational reliability and cost efficiency for supply of air filtration systems which have stringent requirements for clean air quality. They are used in, e. g.

- intake air filtration for gas turbines and compressors,
- ventilation systems.

Their characteristics and benefits

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Special features

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- eMaxx cassette filters are supplied as standard with an adhesively affixed gasket and a protection grid fitted to minimize risk of damage during handling and operation.

Article	Article number	Dimensions (W × L × D) [mm]	Filter class acc. to EN 1822:2009	Filter class acc. to ISO 29463	Nominal volume flow [m³/h]	Initial pressure drop [Pa]	Arrestance efficiency MPPS [%]	Dust holding capacity (AC Fine/650 Pa) [g]	Filter area [m²]
EMAXX E10-P-1/1-W19N	53457960	593 × 593 × 420	E 10		4,250	170	≥ 85	1,000	30
EMAXX E10-P-1/1-Z09N	53457959	593 × 593 × 420	E 10		4,250	170	≥ 85	1,000	30
EMAXX E10-P-1/1-W19V	53466958	593 × 593 × 420	E 10		4,250	170	≥ 85	1,000	30
EMAXX E10-P-1/2-W19N	53482824	288 × 593 × 420	E 10		1,900	170	≥ 85	420	14
EMAXX E11-P-1/1-W19N	53464853	593 × 593 × 420	E 11	ISO 15 E	4,250	235	≥ 95	900	30
EMAXX E11-P-1/1-W19V	53466959	593 × 593 × 420	E 11	ISO 15 E	4,250	235	≥ 95	900	30

Cassette filters
MVP | Fine dust

Specifications	
Recommended final pressure drop	450 Pa
Thermal stability	70 °C
Moisture resistance	100 % rel. hum.
Frame	Top frame 25 mm, halogen-free plastic

Application

Viledon® MVP cassette filters are used for intake, exhaust and recirculating air filtration in air-conditioning systems, e. g.

- office buildings,
- factory / production halls,
- airports, libraries,
- museums,
- laboratories,
- hospitals,
- old people's and nursing homes, etc.

Special features

- MVP cassette filters excel in terms of a high dust holding capacity and low pressure drop values.
- Casting the dimensionally stable pleat package in the plastic frame assures a high degree of security against dust breakthrough over the entire operational lifetime.

Article	Article number	Dimensions (W × L × D) [mm]	Filter class	Nominal volume flow [m³ / h]	Initial pressure drop [Pa]	Initial efficiency [%]	
MVP75-P-0593x0593x292 / V08x25-Z00N	53412032	592 × 592 × 292	M 6	4,250	100		
MVP75-P-0491x0593x292 / V08x25-Z00N	53412030	490 × 592 × 292	M 6	3,500	100		
MVP75-P-0402x0593x292 / V08x25-Z00N	53412623	402 × 592 × 292	M 6	2,800	100		
MVP75-P-0288x0593x292 / V08x25-Z00N	53412029	287 × 592 × 292	M 6	2,000	100		
MVP85-P-0593x0593x292 / V08x25-Z00N	53412035	592 × 592 × 292	F 7	4,250	115	56	
MVP85-P-0491x0593x292 / V08x25-Z00N	53412034	490 × 592 × 292	F 7	3,500	115	56	
MVP85-P-0402x0593x292 / V08x25-Z00N	53412634	402 × 592 × 292	F 7	2,800	115	56	
MVP85-P-0288x0593x292 / V08x25-Z00N	53412033	287 × 592 × 292	F 7	2,000	115	56	
MVP95-P-0593x0593x292 / V08x25-Z00N	53412038	592 × 592 × 292	F 8	4,250	130	63	
MVP95-P-0491x0593x292 / V08x25-Z00N	53412037	490 × 592 × 292	F 8	3,500	130	63	
MVP95-P-0402x0593x292 / V08x25-Z00N	53412635	402 × 592 × 292	F 8	2,800	130	63	
MVP95-P-0288x0593x292 / V08x25-Z00N	53412036	287 × 592 × 292	F 8	2,000	130	63	
MVP98-P-0593x0593x292 / V08x25-Z00N	53412046	592 × 592 × 292	F 9	4,250	140	82	
MVP98-P-0491x0593x292 / V08x25-Z00N	53412045	490 × 592 × 292	F 9	3,500	140	82	
MVP98-P-0402x0593x292 / V08x25-Z00N	53412637	402 × 592 × 292	F 9	2,800	140	82	
MVP98-P-0288x0593x292 / V08x25-Z00N	53412044	287 × 592 × 292	F 9	2,000	140	82	

Cassette filters
MVP | Fine dust

Specifications	
Recommended final pressure drop	450 Pa
Thermal stability	70 °C
Moisture resistance	100 % rel. hum.
Frame	Top frame 25 mm, halogen-free plastic

Delivery notes

MVP cassette filters are available on request in filter classes E 10 to E 12, and with a glued-on seal on the clean air side.
Also available with 6 instead of 8 panels.

	Minimum efficiency [%]	Average efficiency [%]	Filter area [m²]	Article	Energy efficiency classification according to EUROVENT 4/21*		
					Nominal volume flow [m³/h]	Energy class	Annual Energy consumption**
		≥70	18.0	MVP75-P-0593x0593x292/V08x25-Z00N	3.400	E	1,500
		≥70	14.5	MVP75-P-0491x0593x292/V08x25-Z00N	2.700	E	
		≥70	11.8	MVP75-P-0402x0593x292/V08x25-Z00N	2.100	E	
		≥70	8.5	MVP75-P-0288x0593x292/V08x25-Z00N	1.500	E	
	52	≥85	18.0	MVP85-P-0593x0593x292/V08x25-Z00N	3.400	B	1,100
	52	≥85	14.5	MVP85-P-0491x0593x292/V08x25-Z00N	2.700	B	
	52	≥85	11.8	MVP85-P-0402x0593x292/V08x25-Z00N	2.100	B	
	52	≥85	8.5	MVP85-P-0288x0593x292/V08x25-Z00N	1.500	B	
	59	≥90	18.0	MVP95-P-0593x0593x292/V08x25-Z00N	3.400	A	1,200
	59	≥90	14.5	MVP95-P-0491x0593x292/V08x25-Z00N	2.700	A	
	59	≥90	11.8	MVP95-P-0402x0593x292/V08x25-Z00N	2.100	A	
	59	≥90	8.5	MVP95-P-0288x0593x292/V08x25-Z00N	1.500	A	
	78	≥95	18.0	MVP98-P-0593x0593x292/V08x25-Z00N	3.400	B	1,470
	78	≥95	14.5	MVP98-P-0491x0593x292/V08x25-Z00N	2.700	B	
	78	≥95	11.8	MVP98-P-0402x0593x292/V08x25-Z00N	2.100	B	
	78	≥95	8.5	MVP98-P-0288x0593x292/V08x25-Z00N	1.500	B	

* rated at 3,400 m³/h (further information at www.eurovent-certification.com)

** The specified annual energy consumption is the result of laboratory tests using synthetic test dust and refers only to the proportion of total energy consumption attributable to flow resistance through the filter. The annual energy consumption of an HVAC system in operation can therefore differ significantly under actual operational conditions.

Cassette filters
MVPGT | Fine dust

Specifications	
Recommended final pressure drop	600 Pa
Bursting pressure	3,700 Pa
Thermal stability	70 °C
Moisture resistance	100 % rel. hum.
Frame	Halogen-free plastic
Seal	Flat seal, glued
Protection grids	Halogen-free plastic, on the clean air side

Application

Viledon® MVPGT cassette filters are used in intake air filtration for gas turbines and turbocompressors on the mainland. They are particularly well suited for locations with low dust concentrations, with volume flows of ≤ 5,000 m^3/h per filter unit and for systems with ≤ 6,000 operating hours / year.

Advantages

- Low pressure drop values.
- Filtering area in accordance with industrial standard.
- High dust holding capacity.
- Casting the dimensionally stable pleat package into the plastic frame assures a high degree of security against dust breakthrough and a high pressure surge withstand capability over the entire operational lifetime.

Article	Article number	Dimensions (W × L × D) [mm]	Filter class	Nominal volume flow [m^3/h]	Initial pressure drop [Pa]	Initial efficiency [%]	Minimum efficiency [%]	Average efficiency [%]	Filter area [m^2]
MVPGT85-P-0593x0593x292/V08x25-W19N	53413477	592 × 592 × 292	F7	4,250	125	56	53	≥80	18
MVPGT85-P-0491x0593x292/V08x25-W19N		491 × 592 × 292	F7		125	56	53	≥80	14.5
MVPGT85-P-0288x0593x292/V08x25-W19N		288 × 592 × 292	F7		125	56	53	≥80	8.5
MVPGT95-P-0593x0593x292/V08x25-W19N	53413478	592 × 592 × 292	F8	4,250	135	70	67	≥90	18
MVPGT95-P-0491x0593x292/V08x25-W19N		491 × 592 × 292	F8		135	70	67	≥90	14.5
MVPGT95-P-0288x0593x292/V08x25-W19N		288 × 592 × 292	F8		135	70	67	≥90	8.5
MVPGT98-P-0593x0593x292/V08x25-W19N	53413480	592 × 592 × 292	F9	4,250	165	82	79	≥95	18
MVPGT98-P-0491x0593x292/V08x25-W19N		491 × 592 × 292	F9		165	82	79	≥95	14.5
MVPGT98-P-0288x0593x292/V08x25-W19N		288 × 592 × 292	F9		165	82	79	≥95	8.5

Specifications	
Recommended final pressure drop	600 Pa
Bursting pressure	3,700 Pa
Thermal stability	70 °C
Moisture resistance	100 % rel. hum.
Frame	Halogen-free plastic
Seal	Flat seal, glued
Protection grids	Halogen-free plastic, on the clean air side

Application

Viledon® MVPGT cassette filters are used in intake air filtration for gas turbines and turbocompressors on the mainland. They are particularly well suited for locations with low dust concentrations, with volume flows of ≤ 5,000 m^3/h per filter unit and for systems with ≤ 6,000 operating hours / year.

Advantages

- Low pressure drop values.
- Filtering area in accordance with industrial standard.
- High dust holding capacity.
- Casting the dimensionally stable pleat package into the plastic frame assures a high degree of security against dust breakthrough and a high pressure surge withstand capability over the entire operational lifetime.

Article	Article number	Dimensions (W × L × D) [mm]	Filter class	Nominal volume flow [m^3/h]	Initial pressure drop [Pa]	Arrestance efficiency MPPS [%]	Filter area [m^2]
MVPGTE10-P-0593x0593x292/V08x25-W19N	53464952	592 × 592 × 292	E 10	4,250	240	≥ 85	18

EPA | HEPA | ULPA filters

Aluminum frame, plastic frame, MDF frame, steel sheet frame,
high volume flow, cartridge, plastic plenum hood, accessories

Whether EPA, HEPA or ULPA filters: all Viledon® models guarantee effective protection for sensitive products and processes, by dependably arresting critical particles from intake and recirculating air flows in accordance with EN 1822. Even when subjected to high volume flows, they ensure optimum media velocity coupled with low pressure drop.

EPA | HEPA | ULPA filters

Aluminum frame | Construction depths 68 + 88 mm | HEPA

Specifications	
Filter medium	Micro-glass-fiber paper
Recommended final pressure drop	600 Pa
Thermal stability	70 °C
Moisture resistance	100 % rel. hum.
Frame	Extruded aluminum profile, anodized
Seal	Semicircular PU profile, endlessly foamed
Protection grids	On both sides, aluminum, powder-coated

Application

Viledon® HEPA filters of filter classes H 13 + H 14 are used in intake and recirculating air filtration for cleanrooms and in laminar flow boxes with ultra-stringent requirements for clean air and sterility, e. g.

- in sophisticated air-conditioning applications (operating theaters / intensive care units in hospitals and medical institutes, pharmacies, sterile rooms, labs, research centers, etc.),
- in sensitive and highly sensitive industrial processes (pharmaceuticals, biotechnology, chemicals, optics, food / beverage, micro-electronics, etc.),
- in ceiling outlets and modules for flexible cleanroom systems.

Special features

- High-efficiency micro-glass-fiber papers are used as filter media.
- The MiniPleat technology employed ensures flow-friendly geometry and equidistance of the pleats, with homogeneous media velocity coupled with a very low pressure drop. This means particularly cost-efficient and dependable operation plus a quasi-laminar outflow.
- Each filter element is tested using state-of-the-art scanning equipment for arrestance efficiency and leakproofing in accordance with EN 1822, and delivered together with the corresponding test certificate.
- The frame consists of extruded, anodized aluminum and is extremely solid and moisture-resistant.
- Viledon® HEPA filters are microbiologically inactive and meet all hygiene requirements of the German VDI Guideline 6022 “Hygiene requirements for HVAC systems and units”.
- Easy handling and mounting thanks to high twist strength.
- Protection grids on both sides made of powdercoated expanded metal.

Delivery notes

Customized dimensions and other filter classes are available on request.

Article	Article number	Dimensions (W × L × D) [mm]	Pleat depth [mm]	Filter class acc. to EN 1822:2009	Filter class acc. to ISO 29463	Nominal volume flow [m³ / h]	Initial pressure drop [Pa]	Arrestance efficiency MPPS [%]
SF13-A-0305x0610x068x05-N13N	53417676	305 × 610 × 68	50	H 13	ISO 35 H	580	250	≥ 99.95
SF13-A-0305x0762x068x05-N13N	53417677	305 × 762 × 68	50	H 13	ISO 35 H	730	250	≥ 99.95
SF13-A-0457x0457x068x05-N13N	53417679	457 × 457 × 68	50	H 13	ISO 35 H	660	250	≥ 99.95
SF13-A-0545x0545x068x05-N13N	53444903	545 × 545 × 68	50	H 13	ISO 35 H	950	250	≥ 99.95
SF13-A-0610x0610x068x05-N13N	53417681	610 × 610 × 68	50	H 13	ISO 35 H	1,200	250	≥ 99.95
SF13-A-0610x0762x068x05-N13N	53417683	610 × 762 × 68	50	H 13	ISO 35 H	1,500	250	≥ 99.95
SF13-A-0610x1220x068x05-N13N	53417686	610 × 1,220 × 68	50	H 13	ISO 35 H	2,400	250	≥ 99.95
SF13-A-1220x1220x068x05-N13N	53417688	1,220 × 1,220 × 68	50	H 13	ISO 35 H	5,000	250	≥ 99.95
SF14-A-0305x0305x068x05-N13N	53411760	305 × 305 × 68	50	H 14	ISO 45 H	135	120	≥ 99.995
SF14-A-0305x0305x088x07-N13N	53411849	305 × 305 × 88	70	H 14	ISO 45 H	135	90	≥ 99.995
SF14-A-0305x0610x068x05-N13N	53411816	305 × 610 × 68	50	H 14	ISO 45 H	280	120	≥ 99.995
SF14-A-0305x0610x088x07-N13N	53423973	305 × 610 × 88	70	H 14	ISO 45 H	300	90	≥ 99.995
SF14-A-0610x0610x068x05-N13N	53411822	610 × 610 × 68	50	H 14	ISO 45 H	600	120	≥ 99.995
SF14-A-0610x0610x088x07-N13N	53411851	610 × 610 × 88	70	H 14	ISO 45 H	600	90	≥ 99.995
SF14-A-0610x0915x068x05-N13N	53411834	610 × 915 × 68	50	H 14	ISO 45 H	900	120	≥ 99.995
SF14-A-0610x1220x068x05-N13N	53411835	610 × 1,220 × 68	50	H 14	ISO 45 H	1,200	120	≥ 99.995
SF14-A-0610x1220x088x07-N13N	53411853	610 × 1,220 × 88	70	H 14	ISO 45 H	1,200	90	≥ 99.995
SF14-A-0610x1525x068x05-N13N	53411836	610 × 1,525 × 68	50	H 14	ISO 45 H	1,500	120	≥ 99.995
SF14-A-0610x1525x088x07-N13N	53411854	610 × 1,525 × 88	70	H 14	ISO 45 H	1,500	90	≥ 99.995
SF14-A-0610x1830x068x05-N13N	53411837	610 × 1,830 × 68	50	H 14	ISO 45 H	1,800	120	≥ 99.995
SF14-A-0610x1830x088x07-N13N	53411855	610 × 1,830 × 88	70	H 14	ISO 45 H	1,800	90	≥ 99.995
SF14-A-0762x1220x068x05-N13N	53411842	762 × 1,220 × 68	50	H 14	ISO 45 H	1,500	120	≥ 99.995
SF14-A-0762x1220x088x07-N13N	53411858	762 × 1,220 × 88	70	H 14	ISO 45 H	1,500	90	≥ 99.995
SF14-A-0762x1830x068x05-N13N	53411844	762 × 1,830 × 68	50	H 14	ISO 45 H	2,250	120	≥ 99.995
SF14-A-0915x1220x068x05-N13N	53411846	915 × 1,220 × 68	50	H 14	ISO 45 H	1,800	120	≥ 99.995
SF14-A-0915x1220x088x07-N13N	53427337	915 × 1,220 × 88	70	H 14	ISO 45 H	1,800	90	≥ 99.995
SF14-A-0915x1830x068x05-N13N	53411848	915 × 1,830 × 68	50	H 14	ISO 45 H	2,700	120	≥ 99.995
SF14-A-0545x0545x068x05-N13N	53417689	545 × 545 × 68	50	H 14	ISO 45 H	480	120	≥ 99.995

Aluminum frame | Construction depth 78 mm | HEPA

Specifications	
Filter medium	Micro-glass-fiber paper
Recommended final pressure drop	600 Pa
Thermal stability	70 °C
Moisture resistance	100 % rel. hum.
Frame	Extruded aluminum profile, anodized
Seal	Semicircular PU profile, endlessly foamed
Protection grids	On both sides, aluminum, powder-coated

Application

Viledon® HEPA filters of filter classes H 13 + H 14 are used in intake and recirculating air filtration for cleanrooms and in laminar flow boxes with ultra-stringent requirements for clean air and sterility, e. g.

- in sophisticated air-conditioning applications (operating theaters / intensive care units in hospitals and medical institutes, pharmacies, sterile rooms, labs, research centers, etc.),
- in sensitive industrial processes (pharmaceuticals, biotechnology, chemicals, optics, food / beverage, micro-electronics, etc.),
- in ceiling outlets and modules for flexible cleanroom systems.

Special features

- The filter media used are high-arrestance micro-glass-fiber papers.
- The MiniPleat technology employed ensures flow-friendly geometry and equidistance of the pleats, with homogeneous media velocity coupled with a very low pressure drop. This means particularly cost-efficient and dependable operation, plus a quasi-laminar outflow.
- Each filter element is tested using state-of-the-art scanning equipment for arrestance efficiency and leakproofing in accordance with EN 1822, and delivered together with the corresponding test certificate.
- The frame consists of extruded, anodized aluminum and is extremely solid and moisture-resistant.
- Easy handling and mounting thanks to high twist strength.
- The filter elements feature protection grids on both sides made of powder-coated expanded metal.

Article	Dimensions (W × L × D) [mm]	Pleat depth [mm]	Filter class acc. to EN 1822:2009	Filter class acc. to ISO 29463	Nominal volume flow [m³ / h]	Initial pressure drop [Pa]	Arrestance efficiency MPPS [%]
SF13-A-0305x0305x078x06-N13N	305 × 305 × 78	60	H 13	ISO 35 H	290	210	≥99.95
SF13-A-0305x0457x078x06-N13N	305 × 457 × 78	60	H 13	ISO 35 H	420	210	≥99.95
SF13-A-0305x0610x078x06-N13N	305 × 610 × 78	60	H 13	ISO 35 H	600	210	≥99.95
SF13-A-0305x0762x078x06-N13N	305 × 762 × 78	60	H 13	ISO 35 H	750	210	≥99.95
SF13-A-0305x0915x078x06-N13N	305 × 915 × 78	60	H 13	ISO 35 H	900	210	≥99.95
SF13-A-0305x1120x078x06-N13N	305 × 1,120 × 78	60	H 13	ISO 35 H	1,200	210	≥99.95
SF13-A-0457x0457x078x06-N13N	457 × 457 × 78	60	H 13	ISO 35 H	680	210	≥99.95
SF13-A-0457x0610x078x06-N13N	457 × 610 × 78	60	H 13	ISO 35 H	900	210	≥99.95
SF13-A-0545x0545x078x06-N13N	545 × 545 × 78	60	H 13	ISO 35 H	1,000	210	≥99.95
SF13-A-0545x1155x078x06-N13N	545 × 1,155 × 78	60	H 13	ISO 35 H	2,000	210	≥99.95
SF-13A-0575x0575x078x06xN13N	575 × 575 × 78	60	H 13	ISO 35 H	1,070	210	≥99.95
SF13-A-0610x0610x078x06-N13N	610 × 610 × 78	60	H 13	ISO 35 H	1,200	210	≥99.95
SF13-A-0610x0762x078x06-N13N	610 × 762 × 78	60	H 13	ISO 35 H	1,500	210	≥99.95
SF13-A-0610x0915x078x06-N13N	610 × 915 × 78	60	H 13	ISO 35 H	1,800	210	≥99.95
SF13-A-0610x1220x078x06-N13N	610 × 1,220 × 78	60	H 13	ISO 35 H	2,400	210	≥99.95
SF13-A-0610x1525x078x06-N13N	610 × 1,525 × 78	60	H 13	ISO 35 H	3,000	210	≥99.95
SF13-A-0610x1830x078x06-N13N	610 × 1,830 × 78	60	H 13	ISO 35 H	3,600	210	≥99.95
SF13-A-0762x0762x078x06-N13N	762 × 762 × 78	60	H 13	ISO 35 H	1,900	210	≥99.95
SF13-A-0762x0915x078x06-N13N	762 × 915 × 78	60	H 13	ISO 35 H	2,250	210	≥99.95
SF13-A-0762x1220x078x06-N13N	762 × 1,220 × 78	60	H 13	ISO 35 H	3,000	210	≥99.95
SF13-A-0762x1525x078x06-N13N	762 × 1,525 × 78	60	H 13	ISO 35 H	3,750	210	≥99.95
SF13-A-0762x1830x078x06-N13N	762 × 1,830 × 78	60	H 13	ISO 35 H	4,500	210	≥99.95
SF13-A-0915x0915x078x06-N13N	915 × 915 × 78	60	H 13	ISO 35 H	2,700	210	≥99.95
SF13-A-0915x1220x078x06-N13N	915 × 1,220 × 78	60	H 13	ISO 35 H	3,600	210	≥99.95
SF13-A-0915x1525x078x06-N13N	915 × 1,525 × 78	60	H 13	ISO 35 H	4,500	210	≥99.95
SF13-A-0915x1830x078x06-N13N	915 × 1,830 × 78	60	H 13	ISO 35 H	5,400	210	≥99.95

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EPA | HEPA | ULPA filters

Aluminum frame | Construction depth 78 mm | HEPA

Specifications	
Filter medium	Micro-glass-fiber paper
Recommended final pressure drop	600 Pa
Thermal stability	70 °C
Moisture resistance	100 % rel. hum.
Frame	Extruded aluminum profile, anodized
Seal	Semicircular PU profile, endlessly foamed
Protection grids	On both sides, aluminum, powder-coated

Delivery notes

Customized dimensions and other filter classes are available on request.

Article	Dimensions (W × L × D) [mm]	Pleat depth [mm]	Filter class acc. to EN 1822:2009	Filter class acc. to ISO 29463	Nominal volume flow [m³/h]	Initial pressure drop [Pa]	Arrestance efficiency MPPS [%]
SF14-A-0305x0305x078x06-N13N	305 × 305 × 78	60	H 14	ISO 45 H	135	100	≥99.995
SF14-A-0305x0457x078x06-N13N	305 × 457 × 78	60	H 14	ISO 45 H	200	100	≥99.995
SF14-A-0305x0610x078x06-N13N	305 × 610 × 78	60	H 14	ISO 45 H	280	100	≥99.995
SF14-A-0305x0762x078x06-N13N	305 × 762 × 78	60	H 14	ISO 45 H	360	100	≥99.995
SF14-A-0305x0915x078x06-N13N	305 × 915 × 78	60	H 14	ISO 45 H	430	100	≥99.995
SF14-A-0305x1120x078x06-N13N	305 × 1,120 × 78	60	H 14	ISO 45 H	600	100	≥99.995
SF14-A-0457x0457x078x06-N13N	457 × 457 × 78	60	H 14	ISO 45 H	335	100	≥99.995
SF14-A-0457x0610x078x06-N13N	457 × 610 × 78	60	H 14	ISO 45 H	450	100	≥99.995
SF14-A-0545x0545x078x06-N13N	545 × 545 × 78	60	H 14	ISO 45 H	500	100	≥99.995
SF14-A-0545x1155x078x06-N13N	545 × 1,155 × 78	60	H 14	ISO 45 H	1,000	100	≥99.995
SF14-A-0610x0610x078x06-N13N	610 × 610 × 78	60	H 14	ISO 45 H	600	100	≥99.995
SF14-A-0610x0762x078x06-N13N	610 × 762 × 78	60	H 14	ISO 45 H	750	100	≥99.995
SF14-A-0610x0915x078x06-N13N	610 × 915 × 78	60	H 14	ISO 45 H	900	100	≥99.995
SF14-A-0610x1220x078x06-N13N	610 × 1,220 × 78	60	H 14	ISO 45 H	1,200	100	≥99.995
SF14-A-0610x1525x078x06-N13N	610 × 1,525 × 78	60	H 14	ISO 45 H	1,500	100	≥99.995
SF14-A-0610x1830x078x06-N13N	610 × 1,830 × 78	60	H 14	ISO 45 H	1,800	100	≥99.995
SF14-A-0762x0762x078x06-N13N	762 × 762 × 78	60	H 14	ISO 45 H	950	100	≥99.995
SF14-A-0762x0915x078x06-N13N	762 × 915 × 78	60	H 14	ISO 45 H	1,125	100	≥99.995
SF14-A-0762x1220x078x06-N13N	762 × 1,220 × 78	60	H 14	ISO 45 H	1,500	100	≥99.995
SF14-A-0762x1525x078x06-N13N	762 × 1,525 × 78	60	H 14	ISO 45 H	1,875	100	≥99.995
SF14-A-0762x1830x078x06-N13N	762 × 1,830 × 78	60	H 14	ISO 45 H	2,250	100	≥99.995
SF14-A-0915x0915x078x06-N13N	915 × 915 × 78	60	H 14	ISO 45 H	1,350	100	≥99.995
SF14-A-0915x1220x078x06-N13N	915 × 1,220 × 78	60	H 14	ISO 45 H	1,800	100	≥99.995
SF14-A-0915x1525x078x06-N13N	915 × 1,525 × 78	60	H 14	ISO 45 H	2,250	100	≥99.995
SF14-A-0915x1830x078x06-N13N	915 × 1,830 × 78	60	H 14	ISO 45 H	2,700	100	≥99.995

Aluminum frame | Construction depth 150 mm | Pleat depth 50 mm | HEPA

Specifications	
Filter medium	Micro-glass-fiber paper
Recommended final pressure drop	600 Pa
Thermal stability	70 °C
Moisture resistance	100% rel. hum.
Frame	Extruded aluminum profile, anodized
Seal	Semicircular PU profile, endlessly foamed
Protection grids	On both sides, aluminum, powder-coated

Application

Viledon® HEPA filters of filter classes H 13 + H 14 are used in intake and recirculating air filtration for cleanrooms and in laminar flow boxes with ultra-stringent requirements for clean air and sterility, e. g.

- in sophisticated air-conditioning applications (operating theaters / intensive care units in hospitals and medical institutes, pharmacies, sterile rooms, labs, research centers, etc.),
- in highly sensitive industrial processes (pharmaceuticals, biotechnology, chemicals, optics, food and beverage processing, micro-electronics, etc.),
- in ceiling outlets and modules for flexible cleanroom systems.

Special features

- The filter media used are high-arrestance micro-glass-fiber papers.
- The MiniPleat technology employed ensures flow-friendly geometry and equidistance of the pleats, with homogeneous media velocity coupled with a very low pressure drop. This means particularly cost-efficient and dependable operation plus a quasi-laminar outflow.
- Each filter element is tested using state-of-the-art scanning equipment for arrestance efficiency and leakproofing in accordance with EN 1822, and delivered together with the corresponding test certificate.
- The frame consists of extruded, anodized aluminum and is extremely solid and moisture-resistant.
- Viledon® HEPA filters are microbiologically inactive and meet all hygiene requirements of the German VDI Guideline 6022 "Hygiene requirements for HVAC systems and units".
- Easy handling and mounting thanks to high twist strength.
- The filter elements feature protection grids on both sides made of powder-coated expanded metal.

Article	Dimensions (W × L × D) [mm]	Pleat depth [mm]	Filter class acc. to EN 1822:2009	Filter class acc. to ISO 29463	Nominal volume flow [m³/h]	Initial pressure drop [Pa]	Arrestance efficiency MPPS [%]
SF13-A-0305x0305x150x05-N13N	305 × 305 × 150	50	H 13	ISO 35 H	270	250	≥99.95
SF13-A-0305x0457x150x05-N13N	305 × 457 × 150	50	H 13	ISO 35 H	420	250	≥99.95
SF13-A-0305x0610x150x05-N13N	305 × 610 × 150	50	H 13	ISO 35 H	580	250	≥99.95
SF13-A-0305x0762x150x05-N13N	305 × 762 × 150	50	H 13	ISO 35 H	730	250	≥99.95
SF13-A-0305x0915x150x05-N13N	305 × 915 × 150	50	H 13	ISO 35 H	900	250	≥99.95
SF13-A-0457x0457x150x05-N13N	457 × 457 × 150	50	H 13	ISO 35 H	660	250	≥99.95
SF13-A-0457x0610x150x05-N13N	457 × 610 × 150	50	H 13	ISO 35 H	900	250	≥99.95
SF13-A-0610x0610x150x05-N13N	610 × 610 × 150	50	H 13	ISO 35 H	1,200	250	≥99.95
SF13-A-0610x0762x150x05-N13N	610 × 762 × 150	50	H 13	ISO 35 H	1,500	250	≥99.95
SF13-A-0610x0915x150x05-N13N	610 × 915 × 150	50	H 13	ISO 35 H	1,800	250	≥99.95
SF13-A-0610x1220x150x05-N13N	610 × 1,220 × 150	50	H 13	ISO 35 H	2,400	250	≥99.95
SF13-A-0610x1525x150x05-N13N	610 × 1,525 × 150	50	H 13	ISO 35 H	3,000	250	≥99.95
SF13-A-0610x1830x150x05-N13N	610 × 1,830 × 150	50	H 13	ISO 35 H	3,600	250	≥99.95
SF13-A-0762x0762x150x05-N13N	762 × 762 × 150	50	H 13	ISO 35 H	1,900	250	≥99.95
SF13-A-0762x0915x150x05-N13N	762 × 915 × 150	50	H 13	ISO 35 H	2,250	250	≥99.95
SF13-A-0762x1220x150x05-N13N	762 × 1,220 × 150	50	H 13	ISO 35 H	3,000	250	≥99.95
SF13-A-0762x1525x150x05-N13N	762 × 1,525 × 150	50	H 13	ISO 35 H	3,750	250	≥99.95
SF13-A-0762x1830x150x05-N13N	762 × 1,830 × 150	50	H 13	ISO 35 H	4,500	250	≥99.95
SF13-A-0915x0915x150x05-N13N	915 × 915 × 150	50	H 13	ISO 35 H	2,700	250	≥99.95
SF13-A-0915x1220x150x05-N13N	915 × 1,220 × 150	50	H 13	ISO 35 H	3,600	250	≥99.95
SF13-A-0915x1525x150x05-N13N	915 × 1,525 × 150	50	H 13	ISO 35 H	4,500	250	≥99.95
SF13-A-0915x1830x150x05-N13N	915 × 1,830 × 150	50	H 13	ISO 35 H	5,400	250	≥99.95

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EPA | HEPA | ULPA filters

Aluminum frame | Construction depth 150 mm | Pleat depth 50 mm | HEPA

Specifications	
Filter medium	Micro-glass-fiber paper
Recommended final pressure drop	600 Pa
Thermal stability	70 °C
Moisture resistance	100 % rel. hum.
Frame	Extruded aluminum profile, anodized
Seal	Semicircular PU profile, endlessly foamed
Protection grids	On both sides, aluminum, powder-coated

Delivery notes

Customized dimensions and other filter classes are available on request.

Article	Dimensions (W × L × D) [mm]	Pleat depth [mm]	Filter class acc. to EN 1822:2009	Filter class acc. to ISO 29463	Nominal volume flow [m³/h]	Initial pressure drop [Pa]	Arrestance efficiency MPPS [%]
SF14-A-0305x0305x150x05-N13N	305 × 305 × 150	50	H 14	ISO 45 H	135	120	≥99.995
SF14-A-0305x0457x150x05-N13N	305 × 457 × 150	50	H 14	ISO 45 H	200	120	≥99.995
SF14-A-0305x0610x150x05-N13N	305 × 610 × 150	50	H 14	ISO 45 H	280	120	≥99.995
SF14-A-0305x0762x150x05-N13N	305 × 762 × 150	50	H 14	ISO 45 H	360	120	≥99.995
SF14-A-0305x0915x150x05-N13N	305 × 915 × 150	50	H 14	ISO 45 H	430	120	≥99.995
SF14-A-0457x0457x150x05-N13N	457 × 457 × 150	50	H 14	ISO 45 H	335	120	≥99.995
SF14-A-0457x0610x150x05-N13N	457 × 610 × 150	50	H 14	ISO 45 H	450	120	≥99.995
SF14-A-0610x0610x150x05-N13N	610 × 610 × 150	50	H 14	ISO 45 H	600	120	≥99.995
SF14-A-0610x0762x150x05-N13N	610 × 762 × 150	50	H 14	ISO 45 H	750	120	≥99.995
SF14-A-0610x0915x150x05-N13N	610 × 915 × 150	50	H 14	ISO 45 H	900	120	≥99.995
SF14-A-0610x1220x150x05-N13N	610 × 1,220 × 150	50	H 14	ISO 45 H	1,200	120	≥99.995
SF14-A-0610x1525x150x05-N13N	610 × 1,525 × 150	50	H 14	ISO 45 H	1,500	120	≥99.995
SF14-A-0610x1830x150x05-N13N	610 × 1,830 × 150	50	H 14	ISO 45 H	1,800	120	≥99.995
SF14-A-0762x0762x150x05-N13N	762 × 762 × 150	50	H 14	ISO 45 H	950	120	≥99.995
SF14-A-0762x0915x150x05-N13N	762 × 915 × 150	50	H 14	ISO 45 H	1,125	120	≥99.995
SF14-A-0762x1220x150x05-N13N	762 × 1,220 × 150	50	H 14	ISO 45 H	1,500	120	≥99.995
SF14-A-0762x1525x150x05-N13N	762 × 1,525 × 150	50	H 14	ISO 45 H	1,875	120	≥99.995
SF14-A-0762x1830x150x05-N13N	762 × 1,830 × 150	50	H 14	ISO 45 H	2,250	120	≥99.995
SF14-A-0915x0915x150x05-N13N	915 × 915 × 150	50	H 14	ISO 45 H	350	120	≥99.995
SF14-A-0915x1220x150x05-N13N	915 × 1,220 × 150	50	H 14	ISO 45 H	1,800	120	≥99.995
SF14-A-0915x1525x150x05-N13N	915 × 1,525 × 150	50	H 14	ISO 45 H	2,250	120	≥99.995
SF14-A-0915x1830x150x05-N13N	915 × 1,830 × 150	50	H 14	ISO 45 H	2,700	120	≥99.995

Aluminum frame | Constrution depth 150 mm | Pleat depth 125 mm | EPA

Specifications	
Filter medium	Micro-glass-fiber paper
Recommended final pressure drop	600 Pa
Thermal stability	70 °C
Moisture resistance	100 % rel. hum.
Frame	Extruded aluminum profile, anodized
Seal	Semicircular PU profile, endlessly foamed
Protection grids	On both sides, aluminum, powder-coated

Application

Viledon® high volume flow EPA filters are used in intake, exhaust and recirculating air filtration in cleanrooms in air-conditioning systems with stringent requirements for clean air quality and sterility, e. g.

- in sophisticated air-conditioning technology (operating theaters / intensive care units in hospitals and medical institutes, pharmacies, sterile rooms, labs, research centers, etc.),
- in highly sensitive industrial processes.

Special features

- The filter media used are high-arrestance micro-glass-fiber papers.
- The MiniPleat technology employed ensures flow-friendly geometry and equidistance of the pleats, with homogeneous media velocity coupled with a very low pressure drop. This means particularly cost-efficient and dependable operation plus a quasi-laminar outflow.
- The frame consists of extruded, anodized aluminum and is extremely solid and moisture-resistant.
- Viledon® HEPA filters are microbiologically inactive and meet all hygiene requirements of the German VDI Guideline 6022 "Hygiene requirements for HVAC systems and units".
- Easy handling and mounting thanks to high twist strength.
- The filter elements feature protection grids on both sides made of powder-coated expanded metal.

Delivery notes

Customized dimensions and other filter classes are available on request.

Article	Dimensions (W × L × D) [mm]	Pleat depth [mm]	Filter class acc. to EN 1822:2009	Filter class acc. to ISO 29463	Nominal volume flow [m³/h]	Initial pressure drop [Pa]	Arrestance efficiency MPPS [%]
SF11-A-0305x0610x150x12-N13N-F58	305 × 610 × 150	125	E 11	ISO 15 E	750	140	95
SF11-A-0457x0457x150x12-N13N-F58	457 × 457 × 150	125	E 11	ISO 15 E	850	140	95
SF11-A-0610x0610x150x12-N13N-F58	610 × 610 × 150	125	E 11	ISO 15 E	1,500	140	95

EPA | HEPA | ULPA filters

Aluminum frame | Construction depth 150 mm | Pleat depth 125 mm | HEPA

Specifications	
Filter medium	Micro-glass-fiber paper
Recommended final pressure drop	600 Pa
Thermal stability	70 °C
Moisture resistance	100 % rel. hum.
Frame	Extruded aluminum profile, anodized
Seal	Semicircular PU profile, endlessly foamed
Protection grids	On both sides, aluminum, powder-coated

Application

Viledon® high volume flow HEPA filters are used in intake, exhaust and recirculating air filtration in cleanrooms in air-conditioning systems with ultra-stringent requirements for clean air quality and sterility, e. g.

- in sophisticated air-conditioning technology (operating theaters / intensive care units in hospitals and medical institutes, pharmacies, sterile rooms, labs, research centers, etc.),
- in highly sensitive industrial processes.

Special features

- The filter media used are high-arrestance micro-glass-fiber papers.
- The MiniPleat technology employed ensures flow-friendly geometry and equidistance of the pleats, with homogeneous media velocity coupled with a very low pressure drop. This means particularly cost-efficient and dependable operation plus a quasi-laminar outflow.
- The frame consists of extruded, anodized aluminum and is extremely solid and moisture-resistant.
- Viledon® HEPA filters are microbiologically inactive and meet all hygiene requirements of the German VDI Guideline 6022 "Hygiene requirements for HVAC systems and units".
- Easy handling and mounting thanks to high twist strength.
- The filter elements feature protection grids on both sides made of powder-coated expanded metal.
- Each filter element is tested for leakproofing in accordance with EN 1822, and delivered together with the corresponding test certificate.

Delivery notes

Customized dimensions and other filter classes are available on request.

Article	Dimensions (W × L × D) [mm]	Pleat depth [mm]	Filter class acc. to EN 1822:2009	Filter class acc. to ISO 29463	Nominal volume flow [m³ / h]	Initial pressure drop [Pa]	Arrestance efficiency MPPS [%]
SF13-A-0305x0610x150x12-N13N-J58	305 × 610 × 150	125	H 13	ISO 35 H	860	250	≥ 99.95
SF13-A-0457x0457x150x12-N13N-J58	457 × 457 × 150	125	H 13	ISO 35 H	950	250	≥ 99.95
SF13-A-0610x0610x150x12-N13N-J58	610 × 610 × 150	125	H 13	ISO 35 H	1,750	250	≥ 99.95
SF14-A-0305x0305x150x12-N13N-U36	305 × 305 × 150	125	H 14	ISO 45 H	450	250	≥ 99.995
SF14-A-0305x0610x150x12-N13N-U36	305 × 610 × 150	125	H 14	ISO 45 H	950	250	≥ 99.995
SF14-A-0457x0457x150x12-N13N-U36	457 × 457 × 150	125	H 14	ISO 45 H	1,100	250	≥ 99.995
SF14-A-0610x0610x150x12-N13N-U36	610 × 610 × 150	125	H 14	ISO 45 H	2,000	250	≥ 99.995

EPA | HEPA | ULPA filters

Aluminum frame | Construction depth 292 mm | EPA

Specifications	
Filter medium	Micro-glass-fiber paper
Recommended final pressure drop	600 Pa
Thermal stability	70 °C
Moisture resistance	100 % rel. hum.
Frame	Extruded aluminum profile, anodized
Seal	Semicircular PU profile, endlessly foamed
Protection grids	On both sides, aluminum, powder-coated

Application

Viledon® high volume flow EPA filters are used in intake, exhaust and recirculating air filtration in cleanrooms in air-conditioning systems with ultra-stringent requirements for clean air quality and sterility, e. g.

- in sophisticated air-conditioning technology (operating theaters / intensive care units in hospitals and medical institutes, pharmacies, sterile rooms, labs, research centers, etc.),
- in highly sensitive industrial processes.

Special features

- The filter media used are high-arrestance micro-glass-fiber papers.
- The MiniPleat technology employed ensures flow-friendly geometry and equidistance of the pleats, with homogeneous media velocity coupled with a very low pressure drop. This means particularly cost-efficient and dependable operation plus a quasi-laminar outflow.
- The frame consists of extruded, anodized aluminum and is extremely solid and moisture-resistant.
- Viledon® HEPA filters are microbiologically inactive and meet all hygiene requirements of the German VDI Guideline 6022 "Hygiene requirements for HVAC systems and units".
- Easy handling and mounting thanks to high twist strength.
- The filter elements feature protection grids on both sides made of powder-coated expanded metal.

Delivery notes

Customized dimensions and other filter classes are available on request.

Article	Dimensions (W × L × D) [mm]	Pleat depth [mm]	Filter class acc. to EN 1822:2009	Filter class acc. to ISO 29463	Nominal volume flow [m³/h]	Initial pressure drop [Pa]	Arrestance efficiency MPPS [%]
SF11-A-0305x0610x292x20-N13N-F69	305 × 610 × 292	200	E 11	ISO 15 E	1,100	140	≥ 95
SF11-A-0457x0457x292x20-N13N-F69	457 × 457 × 292	200	E 11	ISO 15 E	1,300	140	≥ 95
SF11-A-0457x0610x292x20-N13N-F69	457 × 610 × 292	200	E 11	ISO 15 E	1,750	140	≥ 95
SF11-A-0593x0593x292x20-N13N-F69	593 × 593 × 292	200	E 11	ISO 15 E	2,250	140	≥ 95
SF11-A-0610x0610x292x20-N13N-F69	610 × 610 × 292	200	E 11	ISO 15 E	2,400	140	≥ 95
SF11-A-0610x0762x292x20-N13N-F69	610 × 762 × 292	200	E 11	ISO 15 E	3,000	140	≥ 95

EPA | HEPA | ULPA filters
Aluminum frame | Construction depth 292 mm | HEPA

Specifications	
Filter medium	Micro-glass-fiber paper
Recommended final pressure drop	600 Pa
Thermal stability	70 °C
Moisture resistance	100 % rel. hum.
Frame	Extruded aluminum profile, anodized
Seal	Semicircular PU profile, endlessly foamed
Protection grids	On both sides, aluminum, powder-coated

Application

Viledon® high volume flow HEPA filters are used in intake, exhaust and recirculating air filtration in cleanrooms in air-conditioning systems with ultra-stringent requirements for clean air quality and sterility, e. g.

- in sophisticated air-conditioning technology (operating theaters / intensive care units in hospitals and medical institutes, pharmacies, sterile rooms, labs, research centers, etc.),
- in highly sensitive industrial processes.

Special features

- The filter media used are high-arrestance micro-glass-fiber papers.
- The MiniPleat technology employed ensures flow-friendly geometry and equidistance of the pleats, with homogeneous media velocity coupled with a very low pressure drop. This means particularly cost-efficient and dependable operation plus a quasi-laminar outflow.
- The frame consists of extruded, anodized aluminum and is extremely solid and moisture-resistant.
- Viledon® HEPA filters are microbiologically inactive and meet all hygiene requirements of the German VDI Guideline 6022 "Hygiene requirements for HVAC systems and units".
- Easy handling and mounting thanks to high twist strength.
- The filter elements feature protection grids on both sides made of powder-coated expanded metal.
- Each filter element is tested for leakproofing in accordance with EN 1822, and delivered together with the corresponding test certificate.

Delivery notes

Customized dimensions and other filter classes are available on request.

Article	Dimensions (W × L × D) [mm]	Pleat depth [mm]	Filter class acc. to EN 1822:2009	Filter class acc. to ISO 29463	Nominal volume flow [m³/h]	Initial pressure drop [Pa]	Arrestance efficiency MPPS [%]
SF13-A-0305x0610x292x17-N13N-U42	305 × 610 × 292	175	H 13	ISO 35 H	1,250	250	≥ 99.95
SF13-A-0457x0457x292x17-N13N-U42	457 × 457 × 292	175	H 13	ISO 35 H	1,400	250	≥ 99.95
SF13-A-0457x0610x292x17-N13N-U42	457 × 610 × 292	175	H 13	ISO 35 H	1,950	250	≥ 99.95
SF13-A-0593x0593x292x17-N13N-U42	593 × 593 × 292	175	H 13	ISO 35 H	2,450	250	≥ 99.95
SF13-A-0610x0610x292x17-N13N-U42	610 × 610 × 292	175	H 13	ISO 35 H	2,600	250	≥ 99.95
SF13-A-0610x0762x292x17-N13N-U42	610 × 762 × 292	175	H 13	ISO 35 H	3,250	250	≥ 99.95
SF14-A-0305x0610x292x17-N13N-U42	305 × 610 × 292	175	H 14	ISO 45 H	1,100	230	≥ 99.95
SF14-A-0457x0457x292x17-N13N-U42	457 × 457 × 292	175	H 14	ISO 45 H	1,300	230	≥ 99.95
SF14-A-0457x0610x292x17-N13N-U42	457 × 610 × 292	175	H 14	ISO 45 H	1,750	230	≥ 99.95
SF14-A-0593x0593x292x17-N13N-U42	593 × 593 × 292	175	H 14	ISO 45 H	2,250	230	≥ 99.95
SF14-A-0610x0610x292x17-N13N-U42	610 × 610 × 292	175	H 14	ISO 45 H	2,400	230	≥ 99.95
SF14-A-0610x0762x292x17-N13N-U42	610 × 762 × 292	175	H 14	ISO 45 H	3,000	230	≥ 99.95

Aluminum frame | Construction depth 80 mm | Silgel seal | HEPA

Specifications	
Filter medium	Micro-glass-fiber paper
Recommended final pressure drop	600 Pa
Thermal stability	70 °C
Moisture resistance	100 % rel. hum.
Frame	Extruded aluminum profile, anodized
Seal	SilgelProtection grids: On both sides, aluminum, powder-coated; also available in a stainless steel version

Application

Viledon® HEPA filters of filter class H 14 are used in intake and recirculating air filtration for cleanrooms and in laminar flow boxes with ultra-stringent requirements for clean air and sterility, e. g.

- in sophisticated air-conditioning applications (operating theaters / intensive care units in hospitals and medical institutes, pharmacies, sterile rooms, labs, research centers, etc.),
- in highly sensitive industrial processes (pharmaceuticals, biotechnology, chemicals, optics, food / beverage, micro-electronics, etc.),
- in ceiling outlets and modules for flexible cleanroom systems.

Delivery notes

Customized dimensions and other filter classes are available on request.

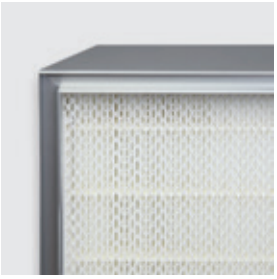
Special features

- The filter media used are high-arrestance micro-glass-fiber papers.
- The MiniPleat technology employed ensures flow-friendly geometry and equidistance of the pleats, with homogeneous media velocity coupled with a very low pressure drop. This means particularly cost-efficient and dependable operation plus a quasi-laminar outflow.
- The frame consists of extruded, anodized aluminum and is extremely solid and moisture-resistant.
- Viledon® HEPA filters are microbiologically inactive and meet all hygiene requirements of the German VDI Guideline 6022 "Hygiene requirements for HVAC systems and units".
- Easy handling and mounting thanks to high twist strength.
- The filter elements feature protection grids on both sides made of powder-coated expanded metal.
- Silgel seal for mounting systems with a sword profile.
- Each filter element is tested using state-of-the-art scanning equipment for arrestance efficiency and leakproofing in accordance with EN 1822, and delivered together with the corresponding test certificate.

Article	Dimensions (W × L × D) [mm]	Pleat depth [mm]	Filter class acc. to EN 1822:2009	Filter class acc. to ISO 29463	Nominal volume flow [m³/h]	Initial pressure drop [Pa]	Arrestance efficiency MPPS [%]
SF14-A-0305x0305x080x05-F13N	305 × 305 × 80	50	H 14	ISO 45 H	135	120	≥99.995
SF14-A-0305x0457x080x05-F13N	305 × 457 × 80	50	H 14	ISO 45 H	200	120	≥99.995
SF14-A-0305x0610x080x05-F13N	305 × 610 × 80	50	H 14	ISO 45 H	280	120	≥99.995
SF14-A-0305x0762x080x05-F13N	305 × 762 × 80	50	H 14	ISO 45 H	360	120	≥99.995
SF14-A-0305x0915x080x05-F13N	305 × 915 × 80	50	H 14	ISO 45 H	430	120	≥99.995
SF14-A-0457x0457x080x05-F13N	457 × 457 × 80	50	H 14	ISO 45 H	335	120	≥99.995
SF14-A-0457x0610x080x05-F13N	457 × 610 × 80	50	H 14	ISO 45 H	450	120	≥99.995
SF14-A-0610x0610x080x05-F13N	610 × 610 × 80	50	H 14	ISO 45 H	600	120	≥99.995
SF14-A-0610x0762x080x05-F13N	610 × 762 × 80	50	H 14	ISO 45 H	750	120	≥99.995
SF14-A-0610x0915x080x05-F13N	610 × 915 × 80	50	H 14	ISO 45 H	900	120	≥99.995
SF14-A-0610x1220x080x05-F13N	610 × 1,220 × 80	50	H 14	ISO 45 H	1,200	120	≥99.995
SF14-A-0610x1525x080x05-F13N	610 × 1,525 × 80	50	H 14	ISO 45 H	1,500	120	≥99.995
SF14-A-0610x1830x080x05-F13N	610 × 1,830 × 80	50	H 14	ISO 45 H	1,800	120	≥99.995
SF14-A-0762x0762x080x05-F13N	762 × 762 × 80	50	H 14	ISO 45 H	950	120	≥99.995
SF14-A-0762x0915x080x05-F13N	762 × 915 × 80	50	H 14	ISO 45 H	1,125	120	≥99.995
SF14-A-0762x1220x080x05-F13N	762 × 1,220 × 80	50	H 14	ISO 45 H	1,500	120	≥99.995
SF14-A-0762x1525x080x05-F13N	762 × 1,525 × 80	50	H 14	ISO 45 H	1,875	120	≥99.995
SF14-A-0762x1830x080x05-F13N	762 × 1,830 × 80	50	H 14	ISO 45 H	2,250	120	≥99.995
SF14-A-0915x0915x080x05-F13N	915 × 915 × 80	50	H 14	ISO 45 H	1,350	120	≥99.995
SF14-A-0915x1220x080x05-F13N	915 × 1,220 × 80	50	H 14	ISO 45 H	1,800	120	≥99.995
SF14-A-0915x1525x080x05-F13N	915 × 1,525 × 80	50	H 14	ISO 45 H	2,250	120	≥99.995
SF14-A-0915x1830x080x05-F13N	915 × 1,830 × 80	50	H 14	ISO 45 H	2,700	120	≥99.995

EPA | HEPA | ULPA filters

Aluminum frame | Construction depth 80 mm | Silgel seal | ULPA



Specifications	
Filter medium	Micro-glass-fiber paper
Recommended final pressure drop	600 Pa
Thermal stability	70 °C
Moisture resistance	100 % rel. hum.
Frame	Extruded aluminum profile, anodized
Seal	Silgel
Protection grids	On both sides, aluminum, powder-coated; also available in a stainless steel version

Application

Viledon® ULPA filters of filter class U 15 are used in intake and recirculating air filtration for cleanrooms and in laminar flow boxes with ultra-stringent requirements for clean air quality and sterility, e. g.

- in sophisticated air-conditioning applications (operating theaters / intensive care units in hospitals and medical institutes, pharmacies, sterile rooms, labs, research centers, etc.),
- in highly sensitive industrial processes (pharmaceuticals, biotechnology, chemicals, optics, food / beverage, micro-electronics, etc.),
- in ceiling outlets and modules for flexible cleanroom systems.

Special features

- The filter media used are high-arrestance micro-glass-fiber papers.
- The MiniPleat technology employed ensures flow-friendly geometry and equidistance of the pleats, with homogeneous media velocity coupled with a very low pressure drop. This means particularly cost-efficient and dependable operation plus a quasi-laminar outflow.
- Each filter element is tested using state-of-the-art scanning equipment for arrestance efficiency and leakproofing in accordance with EN 1822, and delivered together with the corresponding test certificate.
- The frame consists of extruded, anodized aluminum and is extremely solid and moisture-resistant.
- Viledon® HEPA filters are microbiologically inactive and meet all hygiene requirements of the German VDI Guideline 6022 "Hygiene requirements for HVAC systems and units".
- Easy handling and mounting thanks to high twist strength.
- The filter elements feature protection grids on both sides made of powder-coated expanded metal.
- Silgel seal for mounting systems with a sword profile.

Delivery notes

Customized dimensions and other filter classes are available on request.

Article	Dimensions (W × L × D) [mm]	Pleat depth [mm]	Filter class acc. to EN 1822:2009	Filter class acc. to ISO 29463	Nominal volume flow [m³ / h]	Initial pressure drop [Pa]	Arrestance efficiency MPPS [%]
SF15-A-0305x0305x080x05-F13N	305 × 305 × 80	50	U 15	ISO 55 U	135	140	≥99.9995
SF15-A-0305x0457x080x05-F13N	305 × 457 × 80	50	U 15	ISO 55 U	200	140	≥99.9995
SF15-A-0305x0610x080x05-F13N	305 × 610 × 80	50	U 15	ISO 55 U	280	140	≥99.9995
SF15-A-0305x0762x080x05-F13N	305 × 762 × 80	50	U 15	ISO 55 U	360	140	≥99.9995
SF15-A-0305x0915x080x05-F13N	305 × 915 × 80	50	U 15	ISO 55 U	430	140	≥99.9995
SF15-A-0457x0457x080x05-F13N	457 × 457 × 80	50	U 15	ISO 55 U	335	140	≥99.9995
SF15-A-0457x0610x080x05-F13N	457 × 610 × 80	50	U 15	ISO 55 U	450	140	≥99.9995
SF15-A-0610x0610x080x05-F13N	610 × 610 × 80	50	U 15	ISO 55 U	600	140	≥99.9995
SF15-A-0610x0762x080x05-F13N	610 × 762 × 80	50	U 15	ISO 55 U	750	140	≥99.9995
SF15-A-0610x0915x080x05-F13N	610 × 915 × 80	50	U 15	ISO 55 U	900	140	≥99.9995
SF15-A-0610x1220x080x05-F13N	610 × 1,220 × 80	50	U 15	ISO 55 U	1,200	140	≥99.9995
SF15-A-0610x1525x080x05-F13N	610 × 1,525 × 80	50	U 15	ISO 55 U	1,500	140	≥99.9995
SF15-A-0610x1830x080x05-F13N	610 × 1,830 × 80	50	U 15	ISO 55 U	1,800	140	≥99.9995
SF15-A-0762x0762x080x05-F13N	762 × 762 × 80	50	U 15	ISO 55 U	950	140	≥99.9995
SF15-A-0762x0915x080x05-F13N	762 × 915 × 80	50	U 15	ISO 55 U	1,125	140	≥99.9995
SF15-A-0762x1220x080x05-F13N	762 × 1,220 × 80	50	U 15	ISO 55 U	1,500	140	≥99.9995
SF15-A-0762x1525x080x05-F13N	762 × 1525x 80	50	U 15	ISO 55 U	1,875	140	≥99.9995
SF15-A-0762x1830x080x05-F13N	762 × 1,830 × 80	50	U 15	ISO 55 U	2,250	140	≥99.9995
SF15-A-0915x0915x080x05-F13N	915 × 915 × 80	50	U 15	ISO 55 U	1,350	140	≥99.9995
SF15-A-0915x1220x080x05-F13N	915 × 1,220 × 80	50	U 15	ISO 55 U	1,800	140	≥99.9995
SF15-A-0915x1525x080x05-F13N	915 × 1,525 × 80	50	U 15	ISO 55 U	2,250	140	≥99.9995
SF15-A-0915x1830x080x05-F13N	915 × 1,830 × 80	50	U 15	ISO 55 U	2,700	140	≥99.9995

Plastic frame | Construction depths 150 + 292 mm | EPA

Specifications	
Filter medium	Micro-glass-fiber paper, highly resistant to moisture and oils
Bursting pressure	>3,000 Pa
Thermal stability	70 °C
Moisture resistance	100% rel. hum.
Frame	Halogen-free plastic; on request also with frame made from galvanized steel or stainless steel sheeting
Seal	Semicircular PU profile, endlessly foamed, on one side; on request with flat seal
Protection grids	Plastic, on both sides (N18N), with 200 mm pleat depth standard version without protection grid (N 10N)

Application

Viledon® EPA filters of filter class E 11 are used for intake, exhaust and recirculating air filtration of ventilation systems with special requirements for clean air quality, e. g.

- sophisticated air-conditioning applications (hospitals, labs, cleanrooms, museums, etc.),
- sensitive industrial processes (pharmaceuticals, biotechnology, chemicals, optics, food and beverages, micro-electronics, etc.),
- downstream policing filters in dust removal applications.

Special features

- The patented thermal embossing technique ensures the optimum V-shaped geometry and equidistance of the pleats and therefore maximum, homogeneous air passage at a very low pressure drop. This results in a remarkably economical and reliable operation.
- The frame consists of halogen-free plastic and is exceptionally distortion-resistant, moisture-resistant and fully incinerable.
- Viledon® EPA filters are microbiologically inactive and meet all hygiene requirements of the German VDI Guideline 6022 “Hygiene requirements for HVAC systems and units”.
- Easy handling and mounting, thanks to exceptionally low weight.
- The entire filter element is non-corroding and easy to dispose of, as it is metal-free.

Delivery notes

Customized dimensions are available on request.
Also available in 292 mm construction depth as MaxiPleat filters with and without a top frame.

Article	Article number	Dimensions (W × L × D) [mm]	Pleat depth [mm]	Filter class acc. to EN 1822:2009	Filter class acc. to ISO 29463	Nominal volume flow [m³/h]	Initial pressure drop [Pa]	Arrestance efficiency MPPS [%]
SF11-K-0305x0305x150x10-N18N-F45	53392321	305 × 305 × 150	100	E 11	ISO 15 E	440	160	≥95
SF11-K-0457x0457x150x10-N10N-F45	53359319	457 × 457 × 150	100	E 11	ISO 15 E	1,100	160	≥95
SF11-K-0610x0610x150x10-N10N-F45	53360528	610 × 610 × 150	100	E 11	ISO 15 E	2,000	160	≥95
SF11-K-0610x0610x150x10-N18N-F45	53386630	610 × 610 × 150	100	E 11	ISO 15 E	2,000	160	≥95
SF11-K-0610x0305x292x20-N10N-F60	53352684	610 × 305 × 292	200	E 11	ISO 15 E	1,400	160	≥95
SF11-K-0610x0610x292x20-N10N-F60	53352648	610 × 610 × 292	200	E 11	ISO 15 E	3,000	160	≥95
SF11-K-0610x0762x292x20-N10N-F60	53357238	610 × 762 × 292	200	E 11	ISO 15 E	4,000	160	≥95
SF11-K-0610x0305x292x28-N18N-F60	53351145	610 × 305 × 292	280	E 11	ISO 15 E	1,600	160	≥95
SF11-K-0610x0610x292x28-N18N-F60	53351144	610 × 610 × 292	280	E 11	ISO 15 E	3,400	160	≥95
SF11-K-0610x0762x292x28-N18N-F60	53357518	610 × 762 × 292	280	E 11	ISO 15 E	4,300	160	≥95

EPA | HEPA | ULPA filters

Plastic frame | Construction depths 150 + 292 mm | HEPA

Specifications	
Filter medium	Micro-glass-fiber paper, highly resistant to moisture and oils
Bursting pressure	>3,000 Pa
Thermal stability	70 °C
Moisture resistance	100 % rel. hum.
Frame	Halogen-free plastic; on request also with frame made of galvanized steel sheeting or stainless steel sheeting
Seal	Semicircular PU profile, endlessly foamed, on one-side; on request with flat seal
Protection grids	Plastic on both sides (N18N), with 200 mm pleat depth standard version without protection grid (N10N)

Application

Viledon® HEPA filters of filter classes H 13 + H 14 are used in intake, exhaust and recirculating air filtration in air-conditioning systems with ultra-stringent requirements for clean air quality and sterility, e. g.

- in sophisticated air-conditioning applications (operating theaters / intensive care units in hospitals, labs, cleanrooms etc.),
- in highly sensitive industrial processes (pharmaceuticals, biotechnology, chemicals, optics, food and beverages, micro-electronics, etc.),
- in the treatment of dangerous substances (asbestos disposal, heavy metals, carcinogenic dusts, etc.),
- in the preliminary filtration of turbomachinery.

Special features

- The patented thermal embossing process ensures the optimum V-shaped geometry and equidistance of the pleats, and therefore maximum, homogeneous air passage at a very low pressure drop. This results in a remarkably economical and reliable operation.
- Each filter element is leakproofed in accordance with EN 1822, and delivered together with the corresponding test certificate.
- The frame consists of halogen-free plastic and is extremely distortion-resistant, moisture-resistant and fully incinerable. The patented design provides a high degree of security against the growth of bacteria and fungi (permissible according to VDI 6022 in accordance with independent test certificates).
- Easy handling and mounting thanks to exceptionally low weight and a continuous, homogeneously foamed-on polyurethane gasket.
- The entire filter element is non-corroding and easy to dispose of, as it is metal-free.
- Meets the requirements laid down in EN 60335-2-69 for filters being used in dust-eliminating machines and equipment of dust class "H" (see table).

Delivery notes

Customized dimensions and other filter classes are available on request.

Article	Article number	Dimensions (W × L × D) [mm]	Pleat depth [mm]	Filter class acc. to EN 1822:2009	Filter class acc. to ISO 29463	Nominal volume flow [m³/h]	Initial pressure drop [Pa]	Arrestance efficiency MPPS [%]	Dust class*
SF13-K-0305x0305x150x10-N18N-H45	53357911	305 × 305 × 150	100	H 13	ISO 35 H	325	220	≥99.95	
SF13-K-0305x0305x292x20-N10N-H60	53380609	305 × 305 × 292	200	H 13	ISO 35 H	500	250	≥99.95	H
SF13-K-0305x0305x292x28-N18N-G60	53358438	305 × 305 × 292	280	H 13	ISO 35 H	700	250	≥99.95	H
SF13-K-0457x0457x150x10-N18N-H45	53361285	457 × 457 × 150	100	H 13	ISO 35 H	800	220	≥99.95	
SF13-K-0457x0457x292x20-N10N-H60	53352681	457 × 457 × 292	200	H 13	ISO 35 H	1,300	250	≥99.95	H
SF13-K-0457x0457x292x28-N18N-G60	53353934	457 × 457 × 292	280	H 13	ISO 35 H	1,800	250	≥99.95	H
SF13-K-0575x0575x150x10-N18N-H45	53440647	575 × 575 × 150	100	H 13	ISO 35 H	1,400	220	≥99.95	
SF13-K-0592x0592x292x28-N18N-G60	53378568	592 × 592 × 292	280	H 13	ISO 35 H	3,000	250	≥99.95	H
SF13-K-0610x0305x150x10-N18N-H45	53364637	610 × 305 × 150	100	H 13	ISO 35 H	700	220	≥99.95	
SF13-K-0610x0305x292x20-N10N-H60	53352680	610 × 305 × 292	200	H 13	ISO 35 H	1,100	250	≥99.95	H
SF13-K-0610x0305x292x28-N18N-G60	53351143	610 × 305 × 292	280	H 13	ISO 35 H	1,550	250	≥99.95	H
SF13-K-0610x0305x292x28-N18N-J60	53383118	610 × 305 × 292	280	H 13	ISO 35 H	1,800	330	≥99.95	H
SF13-K-0610x0457x292x20-N10N-H60	53367419	610 × 457 × 292	200	H 13	ISO 35 H	1,800	250	≥99.95	H
SF13-K-0610x0457x292x28-N18N-G60	53363063	610 × 457 × 292	280	H 13	ISO 35 H	2,500	250	≥99.95	H
SF13-K-0610x0610x150x10-N18N-H45	53392755	610 × 610 × 150	100	H 13	ISO 35 H	1,500	220	≥99.95	
SF13-K-0610x0610x292x20-N10N-H60	53352647	610 × 610 × 292	200	H 13	ISO 35 H	2,500	250	≥99.95	H
SF13-K-0610x0610x292x28-N18N-G60	53351139	610 × 610 × 292	280	H 13	ISO 35 H	3,400	250	≥99.95	H
SF13-K-0610x0610x292x28-N18N-J60	53383117	610 × 610 × 292	280	H 13	ISO 35 H	4,000	350	≥99.95	H
SF13-K-0610x0762x292x20-N10N-H60	53373991	610 × 762 × 292	200	H 13	ISO 35 H	3,150	250	≥99.95	H
SF13-K-0610x0762x292x28-N18N-G60	53373837	610 × 762 × 292	280	H 13	ISO 35 H	4,300	250	≥99.95	H
SF14-K-0305x0305x292x28-N18N-J60	53390438	305 × 305 × 292	280	H 14	ISO 45 H	375	150	≥99.995	
SF14-K-0457x0457x292x28-N18N-J60	53381017	457 × 457 × 292	280	H 14	ISO 45 H	900	150	≥99.995	
SF14-K-0610x0305x292x28-N18N-J60	53367662	610 × 305 × 292	280	H 14	ISO 45 H	850	150	≥99.995	
SF14-K-0610x0457x292x28-N18N-J60	53358594	610 × 457 × 292	280	H 14	ISO 45 H	1,250	150	≥99.995	
SF14-K-0610x0610x292x28-N18N-J60	53353557	610 × 610 × 292	280	H 14	ISO 45 H	1,700	150	≥99.995	
SF14-K-0610x0762x292x28-N18N-J60	53361167	610 × 762 × 292	280	H 14	ISO 45 H	2,150	150	≥99.995	

* according to DIN EN 60 335-2-69 appendix AA

MDF frame | Construction depth 78 mm | EPA

Specifications	
Filter medium	Micro-glass-fiber paper
Recommended final pressure drop	600 Pa
Thermal stability	70 °C
Moisture resistance	100 % rel. hum.
Frame	MDF
Seal	Semicircular PU profile, endlessly foamed

Application

Viledon® EPA filters of filter class E 11 are used in intake, exhaust and recirculating air filtration in air-conditioning systems with stringent requirements for clean air quality and sterility, e. g.

- in sophisticated air-conditioning technology (operating theaters, intensive care units in hospitals, laboratories, cleanrooms, etc.),
- in sensitive industrial processes,
- as final filters in ceiling air outlets.

Characteristics and pluses

- The filter media used are high-arrestance micro-glass-fiber papers.
- The MiniPleat technology employed ensures flow-friendly geometry and equidistance of the pleats, with homogeneous media velocity coupled with a very low pressure drop. This means particularly cost-efficient and dependable operation plus a quasi-laminar outflow.
- The frame consists of MDF (medium-density fiber board) and is fully incinerable.
- The entire filter element is non-corroding and easy to dispose of, as it is metal-free.
- Endlessly and homogeneously foamed-on polyurethane seal; on request also available with a flat gasket.
- Protection grids on request.

Delivery notes

Customized dimensions are available on request.

Article	Dimensions (W × L × D) [mm]	Pleat depth [mm]	Filter class acc. to EN 1822:2009	Filter class acc. to ISO 29463	Nominal volume flow [m³/h]	Initial pressure drop [Pa]	Arrestance efficiency MPPS [%]
SF11-M-0305x0305x078x05-N10N	305 × 305 × 78	50	E 11	ISO 15 E	220	160	≥95
SF11-M-0305x0457x078x05-N10N	305 × 457 × 78	50	E 11	ISO 15 E	350	160	≥95
SF11-M-0305x0610x078x05-N10N	305 × 610 × 78	50	E 11	ISO 15 E	480	160	≥95
SF11-M-0305x0762x078x05-N10N	305 × 762 × 78	50	E 11	ISO 15 E	600	160	≥95
SF11-M-0457x0457x078x05-N10N	457 × 457 × 78	50	E 11	ISO 15 E	550	160	≥95
SF11-M-0457x0610x078x05-N10N	457 × 610 × 78	50	E 11	ISO 15 E	750	160	≥95
SF11-M-0610x0610x078x05-N10N	610 × 610 × 78	50	E 11	ISO 15 E	1,000	160	≥95
SF11-M-0610x0762x078x05-N10N	610 × 762 × 78	50	E 11	ISO 15 E	1,300	160	≥95
SF11-M-0762x0762x078x05-N10N	762 × 762 × 78	50	E 11	ISO 15 E	1,640	160	≥95

EPA | HEPA | ULPA filters
MDF frame | Construction depth 78 mm | HEPA

Specifications	
Filter medium	Micro-glass-fiber paper
Recommended final pressure drop	600 Pa
Thermal stability	70 °C
Moisture resistance	100 % rel. hum.
Frame	MDF
Seal	Semicircular PU profile, endlessly foamed

Application

Viledon® HEPA filters of filter classes H 13 + H 14 are used in intake, exhaust and recirculating air filtration in air-conditioning systems with stringent requirements for clean air quality and sterility, e. g.

- in sophisticated air-conditioning technology (operating theaters, intensive care units in hospitals, laboratories, cleanrooms, etc.),
- in sensitive industrial processes,
- as final filters in ceiling air outlets.

Characteristics and pluses

- The filter media used are high-arrestance micro-glass-fiber papers.
- The MiniPleat technology employed ensures flow-friendly geometry and equidistance of the pleats, with homogeneous media velocity coupled with a very low pressure drop. This means particularly cost-efficient and dependable operation plus a quasi-laminar outflow.
- Each filter element is tested for leakproofing in accordance with EN 1822, and delivered together with the corresponding test certificate.
- The frame consists of MDF (medium-density fiber board) and is fully incinerable.
- The entire filter element is non-corroding and easy to dispose of, as it is metal-free.
- Endlessly and homogeneously foamed-on polyurethane seal; on request also available with a flat gasket.
- Protection grid on request.

Delivery notes

Customized dimensions are available on request.

Article	Dimensions (W × L × D) [mm]	Pleat depth [mm]	Filter class acc. to EN 1822:2009	Filter class acc. to ISO 29463	Nominal volume flow [m³/h]	Initial pressure drop [Pa]	Arrestance efficiency MPPS [%]
SF13-M-0305x0305x078x05-N10N	305 × 305 × 78	50	H 13	ISO 35 H	250	250	≥99.95
SF13-M-0305x0457x078x05-N10N	305 × 457 × 78	50	H 13	ISO 35 H	400	250	≥99.95
SF13-M-0305x0610x078x05-N10N	305 × 610 × 78	50	H 13	ISO 35 H	550	250	≥99.95
SF13-M-0305x0762x078x05-N10N	305 × 762 × 78	50	H 13	ISO 35 H	700	250	≥99.95
SF13-M-0457x0457x078x05-N10N	457 × 457 × 78	50	H 13	ISO 35 H	630	250	≥99.95
SF13-M-0457x0610x078x05-N10N	457 × 610 × 78	50	H 13	ISO 35 H	850	250	≥99.95
SF13-M-0610x0610x078x05-N10N	610 × 610 × 78	50	H 13	ISO 35 H	1,200	250	≥99.95
SF13-M-0610x0762x078x05-N10N	610 × 762 × 78	50	H 13	ISO 35 H	1,500	250	≥99.95
SF13-M-0762x0762x078x05-N10N	762 × 762 × 78	50	H 13	ISO 35 H	1,900	250	≥99.95
SF14-M-0305x0305x078x05-N10N	305 × 305 × 78	50	H 14	ISO 45 H	120	125	≥99.995
SF14-M-0305x0457x078x05-N10N	305 × 457 × 78	50	H 14	ISO 45 H	200	125	≥99.995
SF14-M-0305x0610x078x05-N10N	305 × 610 × 78	50	H 14	ISO 45 H	280	125	≥99.995
SF14-M-0305x0762x078x05-N10N	305 × 762 × 78	50	H 14	ISO 45 H	350	125	≥99.995
SF14-M-0457x0457x078x05-N10N	457 × 457 × 78	50	H 14	ISO 45 H	335	125	≥99.995
SF14-M-0457x0610x078x05-N10N	457 × 610 × 78	50	H 14	ISO 45 H	420	125	≥99.995
SF14-M-0610x0610x078x05-N10N	610 × 610 × 78	50	H 14	ISO 45 H	600	125	≥99.995
SF14-M-0610x0762x078x05-N10N	610 × 762 × 78	50	H 14	ISO 45 H	750	125	≥99.995
SF14-M-0762x0762x078x05-N10N	762 × 762 × 78	50	H 14	ISO 45 H	900	125	≥99.995

MDF frame | Construction depth 150 mm | EPA

Specifications	
Filter medium	Micro-glass-fiber paper
Recommended final pressure drop	600 Pa
Thermal stability	70 °C
Moisture resistance	100 % rel. hum.
Frame	MDF
Seal	Semicircular PU profile, endlessly foamed

Application

Viledon® EPA filters of filter class E 11 are used in intake, exhaust and recirculating air filtration in air-conditioning systems with stringent requirements for clean air quality and sterility, e. g.

- in sophisticated air-conditioning technology (operating theaters, intensive care units in hospitals, laboratories, cleanrooms, etc.),
- in sensitive industrial processes,
- as final filters in ceiling air outlets.

Characteristics and pluses

- The filter media used are high-arrestance micro-glass-fiber papers.
- The MiniPleat technology employed ensures flow-friendly geometry and equidistance of the pleats, with homogeneous media velocity coupled with a very low pressure drop. This means particularly cost-efficient and dependable operation plus a quasi-laminar outflow.
- The frame consists of MDF (medium-density fiber board) and is fully incinerable.
- The entire filter element is non-corroding and easy to dispose of, as it is metal-free.
- Endlessly and homogeneously foamed-on polyurethane seal; on request also available with a flat gasket.
- Protection grids on request.

Delivery notes

Customized dimensions are available on request.

Article	Dimensions (W × L × D) [mm]	Pleat depth [mm]	Filter class acc. to EN 1822:2009	Filter class acc. to ISO 29463	Nominal volume flow [m³/h]	Initial pressure drop [Pa]	Arrestance efficiency MPPS [%]
SF11-M-0305x0305x150x12-N10N	305 × 305 × 150	125	E 11	ISO 15 E	370	140	≥95
SF11-M-0305x0457x150x12-N10N	305 × 457 × 150	125	E 11	ISO 15 E	560	140	≥95
SF11-M-0305x0610x150x12-N10N	305 × 610 × 150	125	E 11	ISO 15 E	750	140	≥95
SF11-M-0305x0762x150x12-N10N	305 × 762 × 150	125	E 11	ISO 15 E	950	140	≥95
SF11-M-0457x0457x150x12-N10N	457 × 457 × 150	125	E 11	ISO 15 E	850	140	≥95
SF11-M-0457x0610x150x12-N10N	457 × 610 × 150	125	E 11	ISO 15 E	1,200	140	≥95
SF11-M-0610x0610x150x12-N10N	610 × 610 × 150	125	E 11	ISO 15 E	1,500	140	≥95
SF11-M-0610x0762x150x12-N10N	610 × 762 × 150	125	E 11	ISO 15 E	2,100	140	≥95
SF11-M-0762x0762x150x12-N10N	762 × 762 × 150	125	E 11	ISO 15 E	2,600	140	≥95

EPA | HEPA | ULPA filters
MDF frame | Construction depth 150 mm | HEPA

Specifications	
Filter medium	Micro-glass-fiber paper
Recommended final pressure drop	600 Pa
Thermal stability	70 °C
Moisture resistance	100 % rel. hum.
Frame	MDF
Seal	Semicircular PU profile, endlessly foamed

Application

Viledon® HEPA filters of filter classes H 13 + H 14 are used in intake, exhaust and recirculating air filtration in air-conditioning systems with stringent requirements for clean air quality and sterility, e. g.

- in sophisticated air-conditioning technology (operating theaters, intensive care units in hospitals, laboratories, cleanrooms, etc.),
- in sensitive and highly sensitive industrial processes,
- as final filters in ceiling air outlets.

Characteristics and pluses

- The filter media used are high-arrestance micro-glass-fiber papers.
- The MiniPleat technology employed ensures flow-friendly geometry and equidistance of the pleats, with homogeneous media velocity coupled with a very low pressure drop. This means particularly cost-efficient and dependable operation plus a quasi-laminar outflow.
- Each filter element is tested for leakproofing in accordance with EN 1822, and delivered together with the corresponding test certificate.
- The frame consists of MDF (medium-density fiber panel) and is fully incinerable.
- The entire filter element is non-corroding and easy to dispose of, as it is metal-free.
- Endlessly and homogeneously foamed-on polyurethane seal; on request also available with a flat gasket.
- Protection grids on request.

Delivery notes

Customized dimensions are available on request.

Article	Dimensions (W × L × D) [mm]	Pleat depth [mm]	Filter class acc. to EN 1822:2009	Filter class acc. to ISO 29463	Nominal volume flow [m³/h]	Initial pressure drop [Pa]	Arrestance efficiency MPPS [%]
SF13-M-0305x0305x150x12-N10N	305 × 305 × 150	125	H 13	ISO 35 H	400	250	≥99.95
SF13-M-0305x0457x150x12-N10N	305 × 457 × 150	125	H 13	ISO 35 H	600	250	≥99.95
SF13-M-0305x0610x150x12-N10N	305 × 610 × 150	125	H 13	ISO 35 H	820	250	≥99.95
SF13-M-0305x0762x150x12-N10N	305 × 762 × 150	125	H 13	ISO 35 H	1,000	250	≥99.95
SF13-M-0457x0457x150x12-N10N	457 × 457 × 150	125	H 13	ISO 35 H	950	250	≥99.95
SF13-M-0457x0610x150x12-N10N	457 × 610 × 150	125	H 13	ISO 35 H	1,300	250	≥99.95
SF13-M-0610x0610x150x12-N10N	610 × 610 × 150	125	H 13	ISO 35 H	1,700	250	≥99.95
SF13-M-0610x0762x150x12-N10N	610 × 762 × 150	125	H 13	ISO 35 H	2,200	250	≥99.95
SF13-M-0762x0762x150x12-N10N	762 × 762 × 150	125	H 13	ISO 35 H	2,850	250	≥99.95
SF14-M-0305x0305x150x12-N10N	305 × 305 × 150	125	H 14	ISO 45 H	210	125	≥99.995
SF14-M-0305x0457x150x12-N10N	305 × 457 × 150	125	H 14	ISO 45 H	320	125	≥99.995
SF14-M-0305x0610x150x12-N10N	305 × 610 × 150	125	H 14	ISO 45 H	430	125	≥99.995
SF14-M-0305x0762x150x12-N10N	305 × 762 × 150	125	H 14	ISO 45 H	560	125	≥99.995
SF14-M-0457x0457x150x12-N10N	457 × 457 × 150	125	H 14	ISO 45 H	500	125	≥99.995
SF14-M-0457x0610x150x12-N10N	457 × 610 × 150	125	H 14	ISO 45 H	700	125	≥99.995
SF14-M-0610x0610x150x12-N10N	610 × 610 × 150	125	H 14	ISO 45 H	900	125	≥99.995
SF14-M-0610x0762x150x12-N10N	610 × 762 × 150	125	H 14	ISO 45 H	1,200	125	≥99.995
SF14-M-0762x0762x150x12-N10N	762 × 762 × 150	125	H 14	ISO 45 H	1,500	125	≥99.995

MDF frame | Construction depth 292 mm | EPA

Specifications	
Filter medium	Micro-glass-fiber paper
Recommended final pressure drop	600 Pa
Thermal stability	70 °C
Moisture resistance	100 % rel. hum.
Frame	MDF
Seal	Semicircular PU profile, endlessly foamed

Application

Viledon® EPA filters of filter class E 11 are used in intake, exhaust and recirculating air filtration in air-conditioning systems with stringent requirements for clean air quality and sterility, e. g.

- in sophisticated air-conditioning technology (operating theaters, intensive care units in hospitals, laboratories, cleanrooms, etc.),
- in sensitive and highly sensitive industrial processes.

Characteristics and pluses

- The filter media used are high-arrestance micro-glass-fiber papers.
- The MiniPleat technology employed ensures flow-friendly geometry and equidistance of the pleats, with homogeneous media velocity coupled with a very low pressure drop. This means particularly cost-efficient and dependable operation plus a quasi-laminar outflow.
- The frame consists of MDF (medium-density fiber board) and is fully incinerable.
- The entire filter element is non-corroding and easy to dispose of, as it is metal-free.
- Endlessly and homogeneously foamed-on polyurethane seal; on request also available with a flat gasket.
- Protection grids on request.

Delivery notes

Customized dimensions are available on request.

Article	Dimensions (W × L × D) [mm]	Pleat depth [mm]	Filter class acc. to EN 1822:2009	Filter class acc. to ISO 29463	Nominal volume flow [m³/h]	Initial pressure drop [Pa]	Arrestance efficiency MPPS [%]
SF11-M-0288x0593x292x20-N10N	288 × 593 × 292	200	E11	ISO 15 E	950	140	≥95
SF11-M-0305x0305x292x20-N10N	305 × 305 × 292	200	E11	ISO 15 E	500	140	≥95
SF11-M-0305x0610x292x20-N10N	305 × 610 × 292	200	E11	ISO 15 E	1,050	140	≥95
SF11-M-0457x0457x292x20-N10N	457 × 457 × 292	200	E11	ISO 15 E	1,200	140	≥95
SF11-M-0457x0610x292x20-N10N	457 × 610 × 292	200	E11	ISO 15 E	1,650	140	≥95
SF11-M-0593x0593x292x20-N10N	593 × 593 × 292	200	E11	ISO 15 E	2,150	140	≥95
SF11-M-0610x0610x292x20-N10N	610 × 610 × 292	200	E11	ISO 15 E	2,250	140	≥95
SF11-M-0610x0762x292x20-N10N	610 × 762 × 292	200	E11	ISO 15 E	2,870	140	≥95

EPA | HEPA | ULPA filters
MDF frame | Construction depth 292 mm | HEPA

Specifications	
Filter medium	Micro-glass-fiber paper
Recommended final pressure drop	600 Pa
Thermal stability	70 °C
Moisture resistance	100 % rel. hum.
Frame	MDF
Seal	Semicircular PU profile, endlessly foamed

Application

Viledon® HEPA filters of filter classes H 13 + H 14 are used in intake, exhaust and recirculating air filtration in air-conditioning systems with stringent requirements for clean air quality and sterility, e. g.

- in sophisticated air-conditioning technology (operating theaters, intensive care units in hospitals, laboratories, cleanrooms, etc.),
- in sensitive and highly sensitive industrial processes,
- as final filters in ceiling air outlets.

Characteristics and pluses

- The filter media used are high-arrestance micro-glass-fiber papers.
- The MiniPleat technology employed ensures flow-friendly geometry and equidistance of the pleats, with homogeneous media velocity coupled with a very low pressure drop. This means particularly cost-efficient and dependable operation plus a quasi-laminar outflow.
- Each filter element is tested for leakproofing in accordance with EN 1822, and delivered together with the corresponding test certificate.
- The frame consists of MDF (medium-density fiber panel) and is fully incinerable.
- The entire filter element is non-corroding and easy to dispose of, as it is metal free.
- Endlessly and homogeneously foamed-on polyurethane seal; on request also available with a flat gasket.
- Protection grid on request.

Delivery notes

Customized dimensions are available on request.

Article	Dimensions (W × L × D) [mm]	Pleat depth [mm]	Filter class acc. to EN 1822:2009	Filter class acc. to ISO 29463	Nominal volume flow [m³/h]	Initial pressure drop [Pa]	Arrestance efficiency MPPS [%]
SF13-M-0288x0593x292x20-N10N	288 × 593 × 292	200	H 13	ISO 35 H	900	250	≥99.95
SF13-M-0305x0305x292x20-N10N	305 × 305 × 292	200	H 13	ISO 35 H	470	250	≥99.95
SF13-M-0305x0610x292x20-N10N	305 × 610 × 292	200	H 13	ISO 35 H	1,000	250	≥99.95
SF13-M-0457x0457x292x20-N10N	457 × 457 × 292	200	H 13	ISO 35 H	1,100	250	≥99.95
SF13-M-0457x0610x292x20-N10N	457 × 610 × 292	200	H 13	ISO 35 H	1,500	250	≥99.95
SF13-M-0593x0593x292x20-N10N	593 × 593 × 292	200	H 13	ISO 35 H	1,900	250	≥99.95
SF13-M-0610x0610x292x20-N10N	610 × 610 × 292	200	H 13	ISO 35 H	2,000	250	≥99.95
SF13-M-0610x0762x292x20-N10N	610 × 762 × 292	200	H 13	ISO 35 H	2,750	250	≥99.95
SF14-M-0288x0593x292x20-N10N	288 × 593 × 292	200	H 14	ISO 45 H	900	160	≥99.995
SF14-M-0305x0305x292x20-N10N	305 × 305 × 292	200	H 14	ISO 45 H	270	160	≥99.995
SF14-M-0305x0610x292x20-N10N	305 × 610 × 292	200	H 14	ISO 45 H	600	160	≥99.995
SF14-M-0457x0457x292x20-N10N	457 × 457 × 292	200	H 14	ISO 45 H	680	160	≥99.995
SF14-M-0457x0610x292x20-N10N	457 × 610 × 292	200	H 14	ISO 45 H	940	160	≥99.995
SF14-M-0593x0593x292x20-N10N	593 × 593 × 292	200	H 14	ISO 45 H	1,200	160	≥99.995
SF14-M-0610x0610x292x20-N10N	610 × 610 × 292	200	H 14	ISO 45 H	1,280	160	≥99.995
SF14-M-0610x0762x292x20-N10N	610 × 762 × 292	200	H 14	ISO 45 H	1,620	160	≥99.995

Steel sheet frame | Construction depth 292 mm | EPA

Specifications	
Filter medium	Micro-glass-fiber paper
Recommended final pressure drop	600 Pa
Thermal stability	70 °C
Moisture resistance	100 % rel. hum.
Frame	Steel sheeting, galvanized
Seal	Semicircular PU profile, endlessly foamed

Application

Viledon® EPA filters of filter class E 11 are used in intake, exhaust and recirculating air filtration in air-conditioning systems with stringent and ultra-stringent requirements for clean air quality and sterility, e. g.

- in sophisticated air-conditioning technology (operating theaters, intensive care units in hospitals, laboratories, cleanrooms, etc.),
- in sensitive and highly sensitive industrial processes.

Characteristics and pluses

- The filter media used are high-arrestance micro-glass-fiber papers.
- The MiniPleat technology employed ensures flow-friendly geometry and equidistance of the pleats, with homogeneous media velocity coupled with a very low pressure drop. This means particularly cost-efficient and dependable operation.
- Endlessly and homogeneously foamed-on polyurethane seal; on request available with flat seal.
- On request with protection grid.
- The frame consists of galvanized steel sheeting. The sturdy construction is moisture-resistant and provides a high degree of security against the growth of bacteria and fungi (thus permissible according to VDI 6022).

Delivery notes

Customized dimensions are available on request.

Article	Dimensions (W × L × D) [mm]	Pleat depth [mm]	Filter class acc. to EN 1822:2009	Filter class acc. to ISO 29463	Nominal volume flow [m³/h]	Initial pressure drop [Pa]	Arrestance efficiency MPPS [%]
SF11-B-0288x0593x292x20-N10N	288 × 593 × 292	200	E11	ISO 15 E	1,000	140	≥95
SF11-B-0305x0305x292x20-N10N	305 × 305 × 292	200	E11	ISO 15 E	550	140	≥95
SF11-B-0305x0610x292x20-N10N	305 × 610 × 292	200	E11	ISO 15 E	1,150	140	≥95
SF11-B-0457x0457x292x20-N10N	457 × 457 × 292	200	E11	ISO 15 E	1,300	140	≥95
SF11-B-0457x0610x292x20-N10N	457 × 610 × 292	200	E11	ISO 15 E	1,750	140	≥95
SF11-B-0593x0593x292x20-N10N	593 × 593 × 292	200	E11	ISO 15 E	2,270	140	≥95
SF11-B-0610x0610x292x20-N10N	610 × 610 × 292	200	E11	ISO 15 E	2,400	140	≥95
SF11-B-0610x0762x292x20-N10N	610 × 762 × 292	200	E11	ISO 15 E	3,000	140	≥95

EPA | HEPA | ULPA filters
High volume flow | Construction depth 292 mm | HEPA

Specifications	
Filter medium	Micro-glass-fiber paper
Recommended final pressure drop	600 Pa
Thermal stability	70 °C
Moisture resistance	100 % rel. hum.
Frame	Steel sheeting, galvanized | also available with a stainless steel frame
Seal	Semicircular PU profile, endlessly foamed, on one side

Application

Viledon® high volume flow HEPA filters are used in intake, exhaust and recirculating air filtration in cleanrooms in air-conditioning systems with ultra-stringent requirements for clean air quality and sterility, e. g.

- in sophisticated air-conditioning technology (operating theaters / intensive care units in hospitals and medical institutes, pharmacies, sterile rooms, labs, research centers, etc.),
- in highly sensitive industrial processes (pharmaceuticals, biotechnology, chemicals, optics, food and beverage processing, micro-electronics, etc.).

Special features

- The filter media used are high-arrestance micro-glass-fiber papers.
- The MiniPleat technology employed, plus the V-shaped configuration of the pleat package, ensure a particularly large filtering area for maximum air flow rate per filter element together with homogeneous media velocity, coupled with a very low pressure drop. This means particularly cost-efficient and dependable operation with a very long lifetime.
- Each filter element is tested for leakproofing in accordance with EN 1822, and delivered together with the corresponding test certificate.
- The frame consists of galvanized steel or stainless steel sheeting and is extremely solid and moisture-resistant.
- Viledon® high volume flow HEPA filters are microbiologically inactive and meet all hygiene requirements of the German VDI Guideline 6022 "Hygiene requirements for HVAC systems and units."
- A continuous and homogeneously foamed-on profile gasket made of polyurethane. Also available with a flat gasket on request.
- The elements feature recessed grips at the side and a gripping lug for easier handling and installation.

Delivery notes

Also available as ULPA filter.
Customized dimensions and variants available on request.

Article	Article number	Dimensions (W × L × D) [mm]	Filter class acc. to EN 1822:2009	Filter class acc. to ISO 29463	Nominal volume flow [m³/h]	Initial pressure drop [Pa]	Arrestance efficiency MPPS [%]
SF13-B-0288x0288x292/V06x25-N10N	53438538	288 × 288 × 292	H 13	ISO 35 H	850	250	≥99.95
SF13-B-0288x0593x292/V06x25-N10N	53412638	288 × 593 × 292	H 13	ISO 35 H	1,800	250	≥99.95
SF13-B-0305x0305x292/V06x25-N10N	53411980	305 × 305 × 292	H 13	ISO 35 H	1,000	250	≥99.95
SF13-B-0305x0610x292/V06x25-N10N	53412052	305 × 610 × 292	H 13	ISO 35 H	2,000	250	≥99.95
SF13-B-0593x0593x292/V12x25-N10N	53412644	593 × 593 × 292	H 13	ISO 35 H	3,600	250	≥99.95
SF13-B-0610x0610x292/V10x25-N10N	53412060	610 × 610 × 292	H 13	ISO 35 H	3,400	250	≥99.95
SF13-B-0610x0610x292/V12x25-N10N	53412054	610 × 610 × 292	H 13	ISO 35 H	4,000	250	≥99.95
SF13-B-0610x0762x292/V14x25-N10N	53412056	610 × 762 × 292	H 13	ISO 35 H	4,700	250	≥99.95
SF14-B-0288x0288x292/V06x25-N10N		288 × 288 × 292	H 14	ISO 45 H	850	320	≥99.995
SF14-B-0288x0593x292/V06x25-N10N	53417294	288 × 593 × 292	H 14	ISO 45 H	1,800	320	≥99.995
SF14-B-0305x0305x292/V06x25-N10N	53415772	305 × 305 × 292	H 14	ISO 45 H	1,000	320	≥99.995
SF14-B-0305x0610x292/V06x25-N10N	53418697	305 × 610 × 292	H 14	ISO 45 H	2,000	320	≥99.995
SF14-B-0593x0593x292/V12x25-N10N	53429101	593 × 593 × 292	H 14	ISO 45 H	3,600	320	≥99.995
SF14-B-0610x0610x292/V12x25-N10N	53412194	610 × 610 × 292	H 14	ISO 45 H	4,000	320	≥99.995
SF14-B-0610x0610x292/V12x25-N13S-V27	53448417	610 × 610 × 292	H 14	ISO 45 H	5,000	450	≥99.995

Specifications	
Filter medium	Micro-glass-fiber paper
Recommended final pressure drop	600 Pa
Thermal stability	70 °C
Moisture resistance	100 % rel. hum.
Sheathing	Expanded metal
Seal	Semicircular PU profile, foamed

Application

Viledon® EPA cartridge filters offer in a minimized space highly efficient arrestance in a compactly dimensioned unit. They are used for various applications in medical technology and the pharmaceutical industry.

Features and benefits

- High-arrestance micro-fiber papers are used as filter media.
- Compactly dimensioned unit for highly efficient arrestance in a minimized space.
- The sheathing of powder-coated expanded metal protects the filter media from damage.
- Endlessly and homogeneously foamed-on polyurethane seal.
- Viledon® EPA cartridge filters are microbiologically inactive and meet all hygiene requirements of the German VDI Guideline 6022 “Hygiene requirements for HVAC systems and units”.

Delivery notes

Customized dimensions and variants available on request.

Article	Nominal diameter / Nominal lengths [mm]	Filter class acc. to EN 1822:2009	Filter class acc. to ISO 29463	Nominal volume flow [m³/h]	Initial pressure drop [Pa]	Arrestance efficiency MPPS [%]
SP11-A-0175x0175	175/175	E11	ISO 15 E	130	120	≥95
SP11-A-0175x0226	175/226	E11	ISO 15 E	170	120	≥95

EPA | HEPA | ULPA filters
Cartridge | HEPA

Specifications	
Filter medium	Micro-glass-fiber paper
Recommended final pressure drop	600 Pa
Thermal stability	70 °C
Moisture resistance	100 % rel. hum.
Sheathing	Expanded metal
Seal	Semicircular PU profile, foamed

Application

Viledon® HEPA cartridge filters offer in a minimized space highly efficient arrestance in a compactly dimensioned unit. They are used for various applications in medical technology and the pharmaceutical industry.

Features and benefits

- Each filter element is tested for leakproofing in accordance with EN 1822, and delivered together with the corresponding test certificate.
- High-arrestance micro-fiber papers are used as filter media.
- Compactly dimensioned unit for highly efficient arrestance in a minimized space.
- The sheathing of powder-coated expanded metal protects the filter media from damage.
- Endlessly and homogeneously foamed-on polyurethane seal.
- Viledon® HEPA cartridge filters are microbiologically inactive and meet all hygiene requirements of the German VDI Guideline 6022 "Hygiene requirements for HVAC systems and units".

Delivery notes

Customized dimensions and variants available on request.

Article	Nominal diameter / Nominal lengths [mm]	Filter class acc. to EN 1822:2009	Filter class acc. to ISO 29463	Nominal volume flow [m³/h]	Initial pressure drop [Pa]	Arrestance efficiency MPPS [%]
SP13-A-0175x0175x033x02-N11N-J25	175/175	H13	ISO 35 H	130	200	≥99.95
SP13-A-0175x0226x033x02-N11N-J25	175/226	H13	ISO 35 H	170	200	≥99.95

Specifications	
Filter medium	Micro-glass-fiber paper
Initial pressure drop	at 0.45 m/s 140 Pa
Recommended final pressure drop	600 Pa
Thermal stability	70 °C
Moisture resistance	100 % rel. hum.

Application

Viledon® HEPA filters / hood modules of filter class H 14 are used for intake and recirculating air filtration of cleanrooms and flexible cleanroom systems requiring the highest clean air quality and sterility, e. g.

- in hospitals / medical institutes, pharmacies, sterile rooms, laboratories, research centers, etc.,
- in highly sensitive industrial processes (pharmaceuticals, biotechnology, chemicals, optics, food and beverage processing, micro-electronics, etc.).

Special features

- The filter media used are high-arrestance micro-glass-fiber papers.
- The MiniPleat technology employed ensures flow-friendly geometry and equidistance of the pleats, with homogeneous media velocity coupled with a very low pressure drop. This means particularly cost-efficient and dependable operation, and a quasi-laminar outflow.
- Each filter element is tested using state-of-the-art scanning equipment for arrestance efficiency and leakproofing in accordance with EN 1822, and delivered together with the corresponding test certificate.
- The frame is made of extruded anodized aluminum, with an airtight, cast-in polystyrene plenum hood on the upstream side. An integrated perforated deflector plate equalizes the incoming air flow (minimum filter size 610 × 610 mm). The sturdy construction is moisture-resistant and offers high security against the growth of bacteria and moulds.
- Easy handling and mounting, as the units are distortion-resistant and exceptionally lightweight.
- The filter / hood modules feature a protection grid on the clean air side made from powder-coated expanded metal and a connection for measuring aerosol/pressure drop.

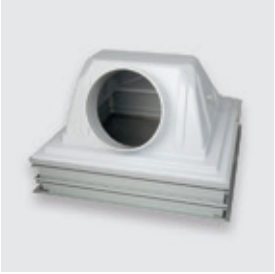
Delivery notes

On request also with integrated control and stop valve plus clean air side flat gasket.
Also available as ULPA filter of class U 15.
Customized dimensions (then with metal hood) available on request.

Article	Article number	Dimensions (W × L × D) [mm]	Filter class acc. to EN 1822:2009	Filter class acc. to ISO 29463	Nominal volume flow [m³/h]	Arrestance efficiency MPPS [%]
SF14-A-0305x0610x150x05-Z02H-250x50	53417702	305 × 610 × 150	H 14	ISO 45 H	280	≥ 99.995
SF14-A-0610x0610x150x05-Z02H-250x50	53412922	610 × 610 × 150	H 14	ISO 45 H	600	≥ 99.995
SF14-A-0610x1220x150x05-Z02H-250x50	53413831	610 × 1,220 × 150	H 14	ISO 45 H	1,200	≥ 99.995
SF14-A-0595x1205x150x05-Z02H-250x50	53480454	595 × 1,205 × 150	H 14	ISO 45 H	1,130	≥ 99.995
SF14-A-0600x0600x150x05-Z02H-250x50		600 × 600 × 150	H 14	ISO 45 H	600	≥ 99.995
SF14-A-0600x1210x150x05-Z02H-250x50		600 × 1,210 × 150	H 14	ISO 45 H	1,200	≥ 99.995
SF14-A-0300x0600x150x05-Z02H-250x50		300 × 600 × 150	H 14	ISO 45 H	280	≥ 99.995

EPA | HEPA | ULPA filters

Accessories | Ceiling air outlets | With ceiling connection profile



Specifications	
Outlet housing	Extruded, anodized aluminum frame and deep-drawn plastic plenum made of polystyrene and cast in an airtight configuration, with round connection piece on the side; on request also available with a metal plenum and a connection at the top / side
Diffusor	As vortex flow outlet with adjustable air guide elements in powder-coated steel sheeting (RAL 9010), as a rectangular outlet with fixed-position guide fins in anodized aluminum or painted, as perforated-plate diffusor for low-turbulence displacement flow in anodized aluminum, painted, or stainless steel
Filter elements	Associated filter elements must be ordered separately. The ceiling air outlets are suitable for Viledon® HEPA filters with a 68, 78 or 88 mm deep aluminum frame and a foamed-on seal

Application

Viledon® filter ceiling air outlets are used for intake and recirculating air filtration of cleanrooms and air-conditioning systems with ultra-stringent requirements for clean air quality and sterility, e. g.

- in sophisticated air-conditioning technology (operating theaters / intensive care units in hospitals and medical institutes, labs, pharmacies, sterile rooms, research centers, etc.),
- In highly sensitive industrial processes (pharmaceuticals, biotechnology, chemicals, optics, food and beverage processing, micro-electronics, etc.).

Special features

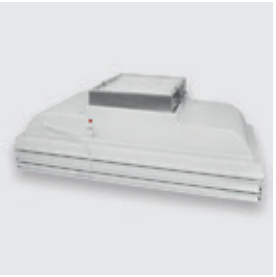
- The housings feature clamping devices for the filter elements and a port for measuring the raw gas concentration and the operational pressure drop.
- The construction is extremely solid and moisture-resistant.
- Viledon® ceiling air outlets meet all hygiene requirements of the German VDI Guideline 6022 "Hygiene requirements for HVAC systems and units".
- Easy handling and mounting, thanks to low weight and high twist strength.
- Filter replacement, cleaning and maintenance can be simply performed from the clean air side.

Delivery notes

On request also available with integrated control and stop valve.
Customized dimensions (then with metal plenum) and variants available on request.
Please order suitable filters as a separate item.

Article	Article number	Dimensions (W × L × D) [mm]	Dimensions of matching filters (W × L × D) [mm]	Diffusor	Diffusor material
SFDLA-CA-0380x0380x355-EV-0-200-0-T	53425088	380 × 380 × 355	305 × 305 × 68 | 78 | 88	Vortex flow outlet	Powder-coated steel (RAL 9010)
SFDLA-CA-0380x0685x380-LA-0-200-0-0	53424466	380 × 685 × 380	305 × 610 × 68 | 78 | 88	Rectangular outlet	Anodized aluminum
SFDLA-CA-0532x0532x390-LV-0-250-0-0	53427694	532 × 532 × 390	457 × 457 × 68 | 78 | 88	Rectangular outlet	Powder-coated steel (RAL 9010)
SFDLA-CA-0620x0620x410-EV-0-250-0-0	53427199	620 × 620 × 410	545 × 545 × 68 | 78 | 88	Vortex flow outlet	Powder-coated steel (RAL 9010)
SFDLA-CA-0685x0685x420FX-0-250-0-0	53424467	685 × 685 × 420	610 × 610 × 68 | 78 | 88	Perforated-plate diffusor	Stainless steel
SFDLA-CA-0685x0990x430-LV-Z-250-0-0	53427696	685 × 990 × 430	610 × 915 × 68 | 78 | 88	Rectangular outlet	Powder-coated steel (RAL 9010)
SFDLA-CA-0685x1295x450-FX-0-250-0-0	53424468	685 × 1,295 × 450	610 × 1,220 × 68 | 78 | 88	Perforated-plate diffusor	Stainless steel
SFDLA-CA-0837x0837x450-LV-Z-250-0-0	53427698	837 × 837 × 450	762 × 762 × 68 | 78 | 88	Rectangular outlet	Powder-coated steel (RAL 9010)

Specifications	
Description	Fan with AC motor (230 V, 50–60 Hz single-phase, 1.2 A / 0.28 kW); Integrated electronic control system with main switch and heat protection; Noise level <75 dB (A) 1.5 m below the filter element; Outflow velocity max. 0.6 m / s, depending on the filter efficiency involved; Tool-free installation of a prefilter due to a clamping system



Housing

The housing consists of an extruded, anodized aluminum frame and a deep-drawn plastic plenum cast in an airtight configuration, with an integrated fan, a connection for measuring the raw-gas concentration and operating pressure drop, plus an operating light. The removable diffusor is made of perforated aluminum sheeting.

Filter element

Associated filter elements such as Viledon® HEPA | ULPA filters of filter classes H 14 to U 15 with aluminum frames can be ordered separately (see table for technical data). A prefilter panel is optionally available.

Delivery notes

A pre-filter panel is optionally available.
Please order suitable filters as a separate item.

Housing

Article	Article number	Dimensions (W × L × D) [mm]	Outflow area (W × L) [mm²]	Filter class acc. to EN 1822:2009	Filter class acc. to ISO 29463	Nominal volume flow [m³ / h]	Initial pressure drop [Pa]	Weight [kg]
FFU-AK-0660x1270x380-AC	53479440	660 × 1,270 × 380	580 × 1,190			1,200		26

Pre-filter

Article	Article number	Dimensions (W × L × D) [mm]	Outflow area (W × L) [mm²]	Filter class acc. to EN 779:2012	Filter class acc. to ISO 29463	Nominal volume flow [m³ / h]	Initial pressure drop [Pa]	Weight [kg]
FFU pre-filter panel	53479442	415 × 515 × 98		G 4		1,200		22

Applicable filters

Article	Article number	Dimensions (W × L × D) [mm]	Outflow area (W × L) [mm²]	Filter class acc. to EN 1822:2009	Filter class acc. to ISO 29463	Nominal volume flow [m³ / h]	Initial pressure drop [Pa]	Weight [kg]
SF14-A-0610x1220x068x05-N13N	53411835	610 × 1,220 × 68		H 14	ISO 45 H	1,200	120	
SF14-A-0610x1220x078x06-N13N	53415898	610 × 1,220 × 78		H 14	ISO 45 H	1,200	100	
SF14-A-0610x1220x088x07-N13N	53411853	610 × 1,220 × 88		H 14	ISO 45 H	1,200	90	
SF15-A-0610x1220x088x07-N13N	53431655	610 × 1,220 × 88		U 15	ISO 55 U	1,200	115	

EPA | HEPA | ULPA filters
Accessories | Safe-change system

Specifications	
Accessories	Safety bag and elastic O-ring (featured one set per housing as standard)
Bench	Aerosol connection for checking leakproofing and filter's seal fit, and for measuring the operating pressure drop (T); Manometer for checking the pressure drop (M); Pressure equalization valve (R)

Housing

The entire housing consists of powder-coated steel in the color RAL 7035 (Type V) or stainless steel (Type X). The system provides for contamination-free filter replacement using a safety bag (bag in / bag out). The filter element is fixed in place using two eccentric rods made of stainless steel. The hinged and removable maintenance cover is fixed in position with manually operated clamping wheels, and sealed with a circumferential leakproof rubber seal.

Bench

For putting together a larger or multi stage filter system, up to six housings can be combined with each other in parallel. These are fitted as standard with a rectangular intake and exhaust air duct. The entire unit stands on stable feet.

Filter element

Fine or EPA | HEPA | ULPA filters can be used with plastic, steel-sheeting or MDF frames in various dimensions.

Delivery notes

Accessories (see above) can be integrated in the SF-benches on request.
Please order the suitable filter as a separate item.

Housing

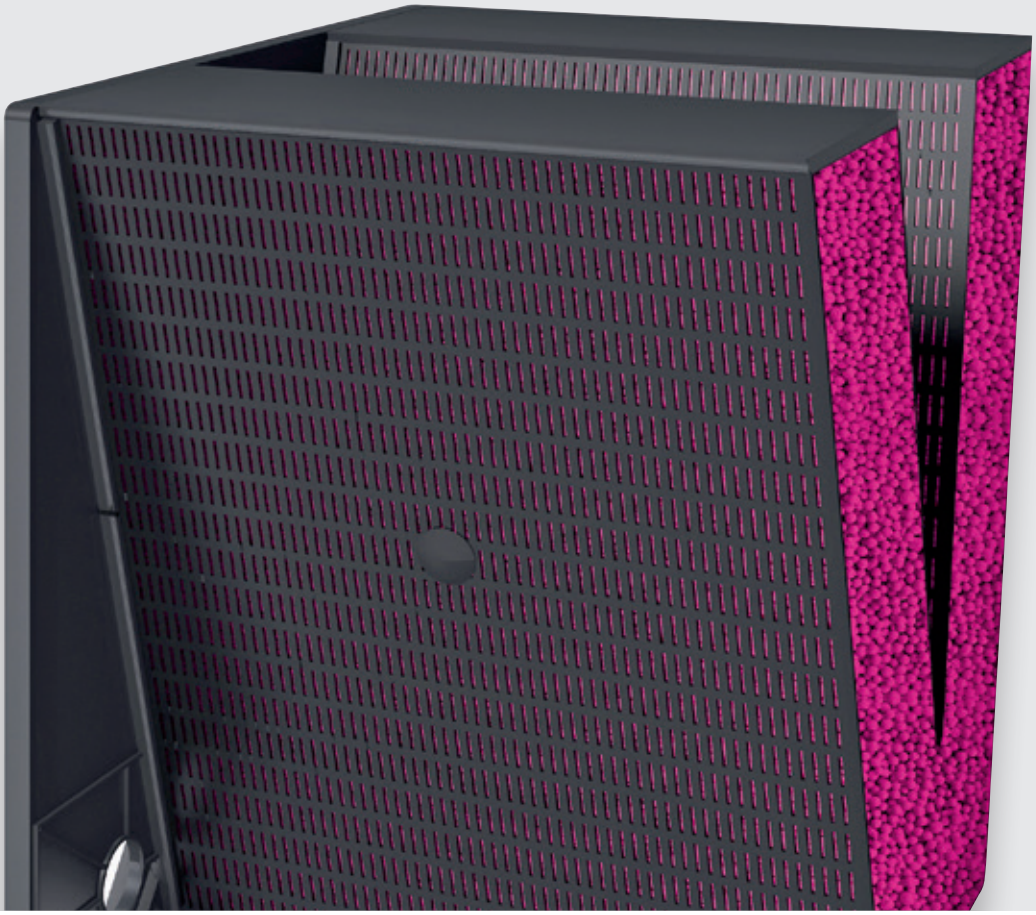
Article	Article number	Dimensions (W × L × D) [mm]	Dimensions of matching filters (W × L × D) [mm]	Housing material	Number of filter stages	Integrated option
SFSafe-V-363	53424126	755 × 495 × 570	610 × 305 × 292	Steel, powder coated RAL 7035		
SFSafe-V-663	53412788	755 × 800 × 570	610 × 610 × 292	Steel, powder coated RAL 7035		
SFSafe-V-673		755 × 950 × 570	610 × 762 × 292	Steel, powder coated RAL 7035		
SFSafe-X-663	53419671	755 × 800 × 570	610 × 610 × 292	Stainless steel (AISI 304)		

Bench

Article	Article number	Dimensions (W × L × D) [mm]	Dimensions of matching filters (W × L × D) [mm]	Housing material	Number of filter stages	Integrated option
SFBench-1-V-663-C-N-S-M-R			610 × 610 × 292	Steel, powder coated RAL 7035	1	Pressure drop monometer, pressure equalization valve
SFBench-2-V-663-C-N-S-M-R			610 × 610 × 292	Steel, powder coated RAL 7035	1	Pressure drop monometer, pressure equalization valve, 2 parallel filters
SFBench-1-X-363-C-N-S-M-R-T	53430511		610 × 305 × 292	Stainless steel (AISI 304)	1	Pressure drop monometer, pressure equalization valve, aerosol connection
SFBench-1-X-6613-C-N-S-2M-R-T			610 × 610 × 150 | 292	Stainless steel (AISI 304)	2	Pressure drop monometer (2 x), pressure equalization valve, aerosol connection
SFBench-2-X-6613-C-N-S-2M-R-T			610 × 610 × 150 | 292	Stainless steel (AISI 304)	2	Pressure drop monometer (2 x), pressure equalization valve, aerosol connection, 2 parallel filters

Gas phase filtration

CarboPleat / DuoPleat, ChemControl filters, activated-carbon cartridges, ChemControl modules, HM® modules, ChemControl pellets, ChemControl systems, ChemWatch



CarboPleat activated-carbon and DuoPleat combination filters improve indoor air quality und protect people as well as sensitive products, processes and equipment, by eliminating or reducing pollutant gases and unwanted odors.

Viledon® ChemControl pellets are used for the prevention of corrosion. They remove contaminant gases by means of adsorption, absorption and chemisorption.

Gas phase filters
CarboPleat / DuoPleat | Fine dust

Specifications	
Recommended duty temperature	<30 °C
Thermal stability	70 °C
Recommended duty humidity	<60 % rel. hum.

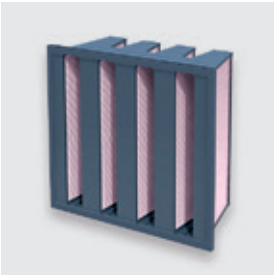
Application

CarboPleat activated-carbon and DuoPleat combi filters improve the air quality in indoor environments and protect both people and sensitive products, processes and lines, by eliminating or reducing environmental pollutants and unwanted odors.

The activated-carbon media of both filters are fixed in place using a special bonding process, and provide a maximum of active surface area for efficient gas adsorption. DuoPleat combi filters simultaneously provide particle filtration of class M 6, thanks to their additional 3-layered high-performance nonwoven on the face side. The large filtering area and the special structure of the filter media involved create not only a particularly high holding capacity and a long operational lifetime, but also very low pressure drop.

The filter capacities are measured according to DIN 71460-2 and refer to a gas breakthrough of 95 % for toluene and n-butane, and 80 % for SO_2. The concentration of the test gas is 80 ppm (toluene and n-butane) or 30 ppm (SO_2).

Article	Article number	Dimensions (W × H × D) [mm]	Filter class	Nominal volume flow [m³/h]	Initial pressure drop [Pa]	Average efficiency [%]	Recommended final pressure drop [Pa]	Filter capacity toluene [g]	Filter capacity SO_2 [g]	Filter capacity n-butane [g]
CP 1/1	53439756	592 × 592 × 292		3,400	60			1,550	120	250
CP 5/6	53439758	592 × 491 × 292		2,700	60			1,250	100	200
CP 1/2	53439770	592 × 288 × 292		1,500	60			700	55	110
DP85 1/1	53438699	592 × 592 × 292	M 6	3,400	130	85	450	715	165	85
DP85 5/6	53438701	592 × 491 × 292	M 6	2,700	130	85	450	570	132	68
DP85 1/2	53438700	592 × 288 × 292	M 6	1,500	130	85	450	310	72	37



Application

Viledon® ChemControl Filters of the CCF range provide an optimum solution for integrating chemisorptive filter media into conventional air handling systems. The chemisorptive components are mainly based on permanganate impregnated structures with basis weights of either 500 or 1,000 g per square meter. The permanganate is highly reactive against acidic gases such as hydrogen sulfide and sulfur oxides, formaldehyde, mercaptanes and other inorganic contaminant gases. The chemisorptive principle of operation avoids any desorption as it is known with activated carbons which are working on physical adsorption principals. These filters can easily be integrated in air handling units to supply relatively large amounts of make-up air into protected areas such as data centers and microelectronic production facilities. Depending on the concentrations of contaminant gases, the ChemControl Filters can be used in styles with different amounts of chemisorptively active permanganates.

Article	Dimensions (W × L × D) [mm]	Nominal volume flow [m³/h]	Filter area [m²]	Content of permanganate substrate [kg]	Initial pressure drop [Pa]	Weight [kg]	Thermal stability [°C]	Suitable for gases
CCF 1000-B-P	592 × 592 × 292	3,400	11	11	160	26	50	H_2S, SO_2, mercaptanes, formaldehyde
CCF 500-B-P	592 × 592 × 292	3,400	11	5.8	160	21	50	H_2S, SO_2, mercaptanes, formaldehyde
CCF 1000-P-P	592 × 592 × 292	3,400	8	8	130	20	50	H_2S, SO_2, mercaptanes, formaldehyde
CCF 500-P-P	592 × 592 × 292	3,400	8	4.1	130	15	50	H_2S, SO_2, mercaptanes, formaldehyde

Gas phase filters
Activated-carbon cartridges | Modules + individual elements

Specifications	
Adsorption medium	Activated-carbon, granulated
Operating temperature	<30 °C
Thermal stability	70 °C
Moisture resistance	<60 % rel. hum.
Top plate	Steel, painted
Cartridge sheathing	Expanded metal
Seal	Flat seal

Application

The filters are used in air-conditioning systems in public buildings, at airports, in offices and industrial facilities, in order to eliminate unwanted odors.

Special features

- Stable construction.
- Compact single elements for easy handling and installation.
- Two different cartridge diameters (140 mm and 160 mm).
- Thickness of each activated carbon layer is 35 mm.

Module

Article	Optimized for	Dimensions (W x H x D) [mm]	Number of cartridges	Nominal volume flow [m³/h]	Initial pressure drop [Pa]	Activated-carbon volume [dm³]
C bank B-0305x0610x430/08x140 odor	Odors/organic solvents	305×610×430	8	1,700	200	32
C bank B-0507x0610x430/12x140 odor	Odors/organic solvents	507×610×430	12	2,500	200	48
C bank B-0610x0610x430/16x140 odor	Odors/organic solvents	610×610×430	16	3,400	200	64
C bank B-0305x0610x430/08x140 acid	Acidic gases	305×610×430	8	1,700	200	32
C bank B-0507x0610x430/12x140 acid	Acidic gases	507×610×430	12	2,500	200	48
C bank B-0610x0610x430/16x140 acid	Acidic gases	610×610×430	16	3,400	200	64
C bank B-0305x0610x430/08x140 iodine	Radioactive iodine	305×610×430	8	1,700	200	32
C bank B-0507x0610x430/12x140 iodine	Radioactive iodine	507×610×430	12	2,500	200	48
C bank B-0610x0610x430/16x140 iodine	Radioactive iodine	610×610×430	16	3,400	200	64
C bank B-0305x0610x430/05x160 odor	Odors/organic solvents	305×610×430	5	1,500	150	30
C bank B-0507x0610x430/07x160 odor	Odors/organic solvents	507×610×430	7	2,550	150	42
C bank B-0610x0610x430/09x160 odor	Odors/organic solvents	610×610×430	9	3,000	150	54
C bank B-0305x0610x430/05x160 acid	Acidic gases	305×610×430	5	1,500	150	30
C bank B-0507x0610x430/07x160 acid	Acidic gases	507×610×430	7	2,550	150	42
C bank B-0610x0610x430/09x160 acid	Acidic gases	610×610×430	9	3,000	150	54
C bank B-0305x0610x430/05x160 iodine	Radioactive iodine	305×610×430	5	1,500	150	30
C bank B-0507x0610x430/07x160 iodine	Radioactive iodine	507×610×430	7	2,550	150	42
C bank B-0610x0610x430/09x160 iodine	Radioactive iodine	610×610×430	9	3,000	150	54

Individual elements (cartridges)

Article	Optimized for	Nominal diameter/ Nominal height [mm]
C cart B-0140x0400x035 odor	Odors/organic solvents	140×400
C cart B-0140x0400x035 acid	Acidic gases	140×400
C cart B-0140x0400x035 iodine	Radioactive iodine	140×400
C cart B-0160x0400x035 odor	Odors/organic solvents	160×400
C cart B-0160x0400x035 acid	Acidic gases	160×400
C cart B-0160x0400x035 iodine	Radioactive iodine	160×400

Individual elements (plates)

Article	Dimensions (W×H×D) [mm]	Number of cartridges
C plate B-0305x0610x40/08x140	305×610×40	8
C plate B-0507x0610x40/12x140	507×610×40	12
C plate B-0610x0610x40/16x140	610×610×40	16
C plate B-0305x0610x40/05x160	305×610×40	5
C plate B-0507x0610x40/07x160	507×610×40	7
C plate B-0610x0610x40/09x160	610×610×40	9

Application

Viledon® ChemControl Modules are the rugged plastic housings that contain our chemical filtration pellets. They come in a range of four sizes to suit all applications and are designed for easy handling and replacement. They can be supplied pre-filled, direct from our production facilities, or refilled via their easy-access removable caps.

The design of your system will determine which size of module you require. Factors that need to be taken into consideration include available space, airflow volumes, type and concentration of contaminants and desired media life.

Proven performance and low whole-life costs. As with all Viledon® products, our ChemControl Modules offer excellent airflow performance with low pressure drops. We have designed our modules to minimize maintenance time and reduce whole-life costs.

Delivery notes

Please consult your local Viledon® partner for further information.

Article	Dimensions (L × W × D) [mm]	Weight [kg]	Depth [mm]	Nominal volume flow [m³/h]	Initial pressure drop [Pa]	Packaging unit [units/carton]
CCM 1810	598 × 438 × 144	3.4	25.4	600	35	1
CCM 1210	598 × 295 × 299	2.9	76	600	180	1
CCM 1805	299 × 438 × 144	2	25.4	300	35	2
CCM 1205	299 × 295 × 299	1.8	76	300	180	2

Gas phase filters
Modules | HM® Modules

The Viledon® HM® modules are an assembly of Versacomb™ media housed in either a plastic or metallic frame for removing gas-phase contaminants from outdoor or recirculated air. The module is available in nominal depths of one, two, four and six inches as standard. Viledon® HM® modules are designed to fit in a side-access filter track or a Type 8 filter frame, and are available with or without a header.

Applications

Refineries, petrochemical plants, electric centers, paper mills, wastewater treatment plants, museums, archives, hospitals, data centers, break rooms, laboratories, commercial and industrial offices.

Features and benefits

- Provides protection from gas-phase contaminants.
- Can be installed in a standard filter track.
- Can be mounted horizontally or vertically.
- Frame options: Stainless steel, aluminum and plastic are available for most sizes.
- Can be used at face velocities up to 500 fpm.
- Can be used in ambient conditions up to 170 °F and 99% RH non-condensing.
- By weight removal capacity of up to 40% for H_2S, 4% for Cl_2*, 9% for Toluene and 13% for Xylene.
- Easy to install (no need for vacuum trucks).
- Economical and energy-efficient.

Delivery notes

Customized dimensions available on request.

Dimensions** (W × L × D) [mm]	Weight [kg]
305 × 305 × 51	1.4
305 × 610 × 51	2.7
406 × 508 × 51	3.2
508 × 508 × 51	3.6
610 × 610 × 51	4.5
356 × 356 × 152	7.3

* Third party testing at 37 ft/min and 75 ppm Cl_2 inlet concentration to 5 ppm breakthrough with 1.5" media length resulted in 4% chlorine capacity by weight. Further testing is being performed.

** Example module sizes.

Application

Viledon® ChemControl Pellets are used in different areas for the prevention of corrosion caused by acidic gases. Special pellets are used for ammonia and chlorine.

- Paper and chemical pulp industry
- Petrochemistry
- Mining
- Chemical industry
- Pharmaceutical industry
- Computer center
- Labs
- Microelectronics
- Fertilizer

CCP 104

Used for the prevention of corrosion caused by acidic gases. Remove contaminant gases by adsorption, absorption and chemisorption. Contain a minimum of 4 % potassium permanganate to eliminate contaminants via oxidation reaction to inactive solids.

CCP 108

Used for the prevention of corrosion caused by acidic gases. Remove contaminant gases by adsorption, absorption and chemisorption. Contain a minimum of 8 % potassium permanganate to eliminate contaminants via oxidation reaction to inactive solids.

CCP 210

Designed to remove or destroy airborne acidic gases by oxidation. Especially high reactivities and removal capabilities, even at high contaminant concentrations. Contain a mix of sodium and potassium permanganate at minimum 10 % by weight.

CCP 310

Ideal for filtration of acidic gases in highly corrosive environments. Very effective in removing hydrogen sulfide, sulfur dioxide and chlorine. Porous structure based on activated alumina impregnated with activated carbon.

CCP 510

Used especially for removal of gaseous halogens from airstreams. Capture chlorine, bromine and iodine by adsorption and absorption. Highly porous structure of activated alumina impregnated with active ingredients.

CCP 610

Used for the filtration of airborne contaminant gases e. g. hydrocarbons, VOCs, chlorine and nitrogen dioxide. Consist of virgin activated carbon with very high inner surface area to achieve excellent adsorption capacities. Very low resistance to airflow and long service life.

CCP 810

Blended pellets used for filtration of gaseous contaminants. 50:50 mix of CCP 108 and CCP 610 provides excellent adsorption, absorption and chemisorption.

CCP 830

Blended pellets used for filtration of gaseous contaminants. 50:50 mix of CCP 210 and CCP 610 provides excellent adsorption, absorption and chemisorption.

CCP 840

Blended pellets used for filtration of gaseous contaminants. 50:50 mix of CCP 310 and CCP 610 provides excellent adsorption, absorption and chemisorption.

CCP 903

Specifically used for removal of gaseous ammonia from airstreams. They capture ammonia by means of adsorption and absorption inside their zeolite structure.

Please note:

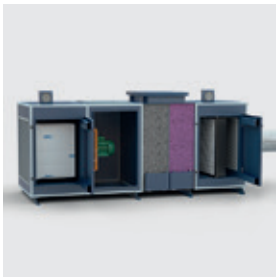
All application information provided are subject to on-site conditions, specific application requirements and potential alternating effects by combining several ChemControl Pellets in multi-stage units. Please consult your local Viledon® partner for further information.

Delivery notes

Other ChemControl Pellets are available on request – especially custom formulations with impregnations for specific gaseous contaminants.

Article	Diameter [mm]	Face velocity [m/s]	Ambient temperature [C°]	Removal capacity for Cl_2 of own weight [%]	Removal capacity for H_2S of own weight [%]	Removal capacity for NH_3 of own weight [%]	Removal capacity for SO_2 of own weight [%]	Moisture content (approx.) [%]	Crush strength (minimum) [kg]
CCP 104	3.80	0.3 - 2.5	−20 ... +50		7		4	20	2
CCP 108	3.80	0.3 - 2.5	−20 ... +50		14		7	20	2
CCP 210	3.80	0.3 - 2.5	−20 ... +50		25		12	20	2
CCP 310	3.80	0.3 - 2.5	−20 ... +50	10	15		10	20	2
CCP 510	3.80	0.3 - 2.8	−20 ... +50	15				15	2
CCP 610	4 × 8	0.3 - 2.5	−20 ... +50	10				3	2
CCP 810	3.80 | 4 × 8	0.3 - 2.9	−20 ... +50	4	7		3		2
CCP 830	3.80	0.3 - 2.1	−20 ... +50	3.75	15.53		7.5		2
CCP 840	3.80 | 4 × 8	0.3 - 2.1	−20 ... +50	10	12		6		2
CCP 903	3.80	0.3 - 2.7	−20 ... +50			10			3

Gas phase filters
Systems | ChemControl Deep-Bed Pressurization Units



Application

Many industrial processes generate contaminant gases that can cause corrosion. Even minor damage to electronic components can have serious consequences, e. g. fault signals, unplanned downtime, high repair costs. The Viledon® ChemControl Deep-Bed Pressurization Units (DBPU) are multi-stage filtration systems that reliably provide complete protection against corrosion. The Viledon® DBPUs are used for medium to high concentrations of gaseous contaminants. The system is placed outside the protected area and supplies purified air into it. Hence, the Viledon® DBPUs provide a positive pressure inside the protected area. They are particularly designed for paper mills, refineries, smelters, steel and chemical plants. In the Viledon® DBPU, Viledon® Compact pocket filters are used in the pre-filtration stage. Viledon® MaxiPleat cassette filters ensure secure fine filtration. The progressive media design, moisture resistance up to 100% relative humidity (no risk of filter collapse) and high dust holding capacities result in improved energy consumption over generic industry filters due to homogeneous air flow coupled with a low average pressure drop.

Viledon® ChemControl Deep-Bed Pressurization Units (DBPU)

- Boxed anodized aluminum pentapost frame and high strength 30 mm double skin plastisol panels as standard offer reduced leakage rates of L3 in accordance with EN1886, compared to single skin products.
- High quality assembly ensures a smooth interior surface, thereby minimizing frictional losses and providing a positive air seal where panels are fitted to the frames.
- Units equipped with two deep bed stages; optionally available with third or fourth stage for higher gas concentrations.
- Panel construction offers increased acoustic properties over single skin versions with a case reduction index as follows:
  Frequency Hz: 63 | 125 | 250 | 500 | 1 k | 2 k | 4 k | 8 k
  Casing reduction index: −11 | −14 | −14 | −24 | −25 | −25 | −25 | −23
- Integrated pressure gauges allow clear monitoring onsite.
- Internal and external weatherproof designs available.

Delivery notes

Please consult your local Viledon® partner for further information.

Article	Construction	Air intake	Air outlet	Air volume [m³/h]	Number of pre-filters	Number of fine filters	Overall unit height (excludes refill ports) [mm]	Overall unit width (excluding control panel)** [mm]	Overall unit length (excluding duct connections) [mm]	Overall weight (excluding filters and pellets)*** [kg]	Power consumption average [kW]	Control panel
DBPU 1000 Indoor	Plastisol inner / outer double skin panels, with aluminum extrusion frame*	Duct	Duct	1,000	1	1	1,076	700	3,700	400	1.35	IP 54
DBPU 3000 Indoor	Plastisol inner / outer double skin panels, with aluminum extrusion frame*	Duct	Duct	3,000	4	4	1,576	1,280	3,700	700	2.30	IP 54
DBPU 6000 Indoor	Plastisol inner / outer double skin panels, with aluminum extrusion frame*	Duct	Duct	6,000	9	9	2,176	1,900	3,700	900	4.70	IP 54
DBPU 1000 Outdoor	Plastisol inner / outer double skin panels, with aluminum extrusion frame*	Louvre	Duct	1,000	1	1	1,076	700	3,700	420	1.35	IP 66
DBPU 3000 Outdoor	Plastisol inner / outer double skin panels, with aluminum extrusion frame*	Louvre	Duct	3,000	4	4	1,576	1,280	3,700	740	2.30	IP 66
DBPU 6000 Outdoor	Plastisol inner / outer double skin panels, with aluminum extrusion frame*	Louvre	Duct	6,000	9	9	2,176	1,900	3,700	960	4.70	IP 66

* Stainless steel construction available. All units are supplied as standard in one section. Section breaks can be added as an option.
** Customized unit dimensions are available on request.
*** All units are optionally available with Viledon® CCM 1205 modules.

Application

Many industrial processes generate contaminant gases that can cause corrosion. Even minor damage to electronic components can have serious consequences, e. g. fault signals, unplanned downtime, high repair costs. The Viledon® ChemControl Recirculation Unit (CRU) and the Viledon® ChemControl Recirculation Pressurization Unit (CRPU) are multi-stage filtration systems that reliably provide complete protection against corrosion.

In both systems, Viledon® Compact pocket filters are used in the pre-filtration stage. Positioned before and after the fan, the Viledon® ChemControl Modules with pellets eliminate harmful gases. Viledon® MaxiPleat cassette filters ensure secure fine filtration. Integrated pressure gauges allow for reliable monitoring onsite.

Viledon® CRU: The 'recirculating air filtration' system

The Viledon® ChemControl Recirculation Unit (CRU) is a system fully based on recirculated air filtration. This makes it an ideal addition for rooms that are supplied with filtered air and maintained at positive pressure using a Viledon® ChemControl Deep-Bed Pressurization Unit (CDBPU).

Viledon® CRPU: The 'outside air + recirculating air filtration' system for overpressure generation

Using an admixture of outside air, the Viledon® ChemControl Recirculation Pressurization Unit (CRPU) can maintain a slight positive pressure within the room to be protected. At moderate concentrations of corrosive gases, the Viledon® CRPU can be operated without the use of a Viledon® ChemControl Deep-Bed Pressurization Unit.

Delivery notes

Please consult your local Viledon® partner for further information.

Viledon® CRU*

Article	Nominal volume flow [m³/h]	Dimensions (H × W × D) [mm]	Weight [kg]	Number of modules per stage	Number of pre-filters	Number of fine filters	Power consumption average [kW]
1800 DW	1,800	2,600 × 750 × 750	550	4	1	1	0.8
1800 DW stainless steel**	1,800	2,600 × 750 × 750	580	4	1	1	0.8
3600 DW	3,600	2,600 × 1,500 × 750	650	8	2	2	1.3
3600 DW stainless steel**	3,600	2,600 × 1,500 × 750	680	8	2	2	1.3

Viledon® CRPU*

Article	Nominal volume flow [m³/h]	Dimensions (H × W × D) [mm]	Weight [kg]	Number of modules per stage	Number of pre-filters	Number of fine filters	Power consumption average [kW]
1800 DW	1,800	2,600 × 750 × 750	560	4	1	1	0.8
1800 DW stainless steel**	1,800	2,600 × 750 × 750	590	4	1	1	0.8
3600 DW	3,600	2,600 × 1,500 × 750	660	8	2	2	1.3
3600 DW stainless steel**	3,600	2,600 × 1,500 × 750	690	8	2	2	1.3

* Standard casing: double wall casing ensuring low noise, manufactured using alumina corners and panels with plastisol coating.

** Stainless steel casing also available as single wall (SW) model.

Gas phase filters
ChemWatch | Online Monitoring System

Application

The ChemWatch Online Monitoring System measures and monitors the corrosivity of air in rooms via copper and silver sensors. Corrosivity is usually caused by acid gases such as H_2S, SO_2, SO_3, Cl_2, Cl_2O, NOx, or NH_3.

The online monitoring system is suitable for measuring corrosive gases in the range from low ppb to a maximum of 1 to 3 ppm. The sensors are consumed as they measure the corrosivity and thus need to be replaced from time to time. The corrosion rate is determined according to ANSI/ISA-71.04-2013.

Measurements

- Corrosion rate (Copper and Silver).
- Temperature.
- Relative humidity.
- Differential pressure (positive pressure).

Characteristics and pluses

- Big color display.
- Data transfer via LAN, WiFi or Bluetooth to PC, control station, or Smartphone.
- Large data storage capacity.
- Unsusceptible to vibrations.
- Precise corrosion rates independent from temperature fluctuations.
- All measured values logged directly from the beginning.
- Easy adjusting of individual measuring tasks – on the instrument itself or via PC.
- CE mark.
- 7 standard languages: English, German, French, Spanish, Portuguese, Chinese, and Japanese (additional languages are available on request).
- The user can create notes – which can be linked to the measured data.
- Metric and imperial units available.

Equipment

- Measuring instrument.
- 1 set of corrosion sensors copper and silver.
- Software for data visualization and analysis (e. g diagrams).
- SD-card for maximum data logging capacity and easy software updates.
- Detailed operating instruction in several languages.
- Power supply unit including adapter set for all common outlets.

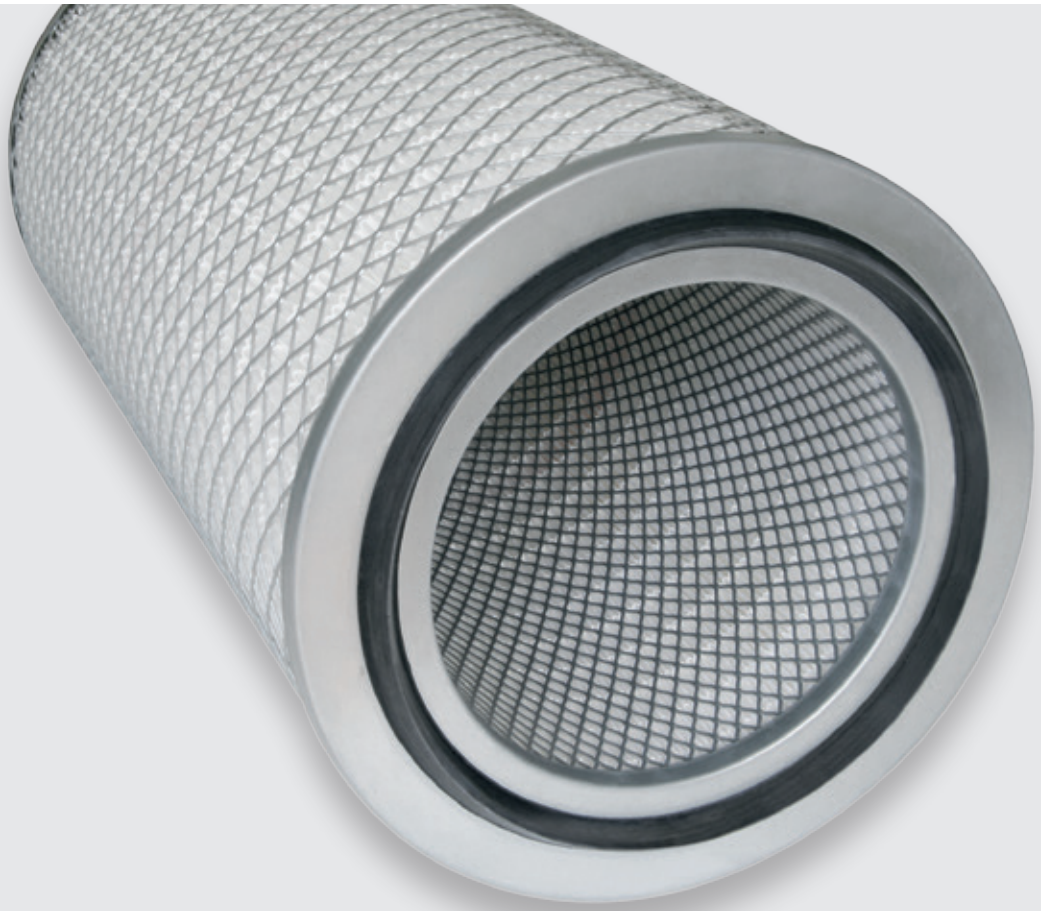
Delivery notes

WiFi and Bluetooth modules can be inserted into the instrument as option.

Article	Article number
ChemWatch Instrument	53496605
ChemWatch Cu Sensor	53496606
ChemWatch Ag Sensor	53496607
ChemWatch WiFi Module	53496608
ChemWatch Bluetooth Module	53496609

Filter cartridges (turbomachinery)

Pulse-jet, depth-loading filters



Viledon® pulse-jet filter cartridges and depth-loading filter cartridges achieve optimum results in intake air filtration for turbomachinery. Pulse-jet filter cartridges are, for instance, the ideal solution for pulse-jet systems, where very high dust concentrations and/or fine, pourable dusts predominate.

Filter cartridges for turbomachinery
Pulse-jet | Fine dust

Specifications	
Filter medium	GTS: high-performance nonwoven with water-repellent coating made of synthetic microfibers; GTB: blended synthetic micro-fiber nonwoven with water repellent coating
Recommended final pressure drop	800 Pa
Thermal stability	80 °C
Moisture resistance	100% rel. hum.
Material for cover, base and support cages	Steel, galvanized
Seal	GTS: polyurethane, GTB: neoprene

Application

Viledon® pulse-jet filter cartridges are used for intake air filtration at gas turbines and turbocompressors. The GTB series is suitable for dry locations. The GTS series is used at both onshore and offshore installations.

With their optimum cleaning characteristics, pulse-jet filter cartridges maximize the lifetimes of intake air systems for turbomachinery and reduce the operating costs significantly.

Characteristics and pluses of the GTS filter cartridges

- Innovative high-performance nonwovens with a water-repellent finish and made of synthetic micro-fibers enable GTS filter cartridges to retain their excellent performance features under all climatic duty conditions.
- The filter medium achieves high arrestance performance, large dust holding capacity, a low average pressure drop and high cost-efficiency. The GTS series is particularly well suited for locations with high dust concentrations in the outside air.
- GTS filter cartridges have been optimized in terms of filtering area and pleat geometry. The active filtering area remains effective over the entire operational lifetime.
- In order to avoid corrosion, the inner and outer support cages, plus the cover and base, are made from galvanized steel or stainless steel. These components are cast in a leakproof configuration, so as to ensure maximized security against dust breakthrough during pulse-jet cleaning.
- Optimum seal with the mounting plate using a foamed-on polyurethane seal.

Characteristics and pluses of the GTB filter cartridges

- High-strength blended synthetic micro-fiber nonwoven with water repellent coating that allows the cartridge to maintain excellent operational characteristics in most climatic conditions.
- The filter media, ensure high arrestance, high dust holding capacity (prior to self cleaning), low average pressure drop and high cost efficiency. This makes the GTB particularly suitable for predominantly dry locations with high dust concentrations in the ambient air.
- GTB cartridges have been optimized in terms of filtering area, pleat depth and number of pleats which means the active filtering area remains completely effective over its entire operating lifetime.
- To minimize corrosion and handling damage, the inner and outer support cages and end base end caps are made of galvanized steel or stainless steel. All components are cast together to ensure leakproof operation as well as high security against dust penetration during pulse operation.
- The foamed-on neoprene gasket ensures optimum sealing against the mounting plate.

Delivery notes

Customized variants of GTS cartridges and adapters (bayonet, etc.) plus cover, base and support cage in stainless steel version are available on request.
GTB cartridges can be obtained in a variety of other dimensions, stainless steel end caps and support cages and can be supplied with installation accessories (washers and nuts).

Article	Outer diameter [mm]	Construction height [mm]	Filter class	Nominal volume flow [m³/h]	Initial pressure drop [Pa]	Initial efficiency [%]	Average efficiency [%]	Average arrestance [%]	Filter area [m²]
GTB 324 W66SO	324	660	M6	1,100	120	18	96.0	>99	18.1
GTB 324 W70S0	324	700	M6	1,100	120	18	96.0	>99	19.2
GTB 324-445 W66S0 Set	445/324	1,330	M6	2,500	135	18	96.0	>99	40.1
GTB 445 W66SO	445/324	660	M6	1,400	-	18	96.0	>99	22.0
GTS 324 W66S0	324	660	F9	1,100	115	65	97.0	99.9	18.1
GTS 324 W70S0	324	700	F9	1,100	115	65	97.0	99.9	19.2
GTS 324-445 W66S0 Set	445/324	1,330	F9	2,500	130	65	97.0	99.9	40.1
GTS 445 K66S0	445	660	F9	1,400	-	65	97.0	99.9	22.0

Specifications	
Filter medium	GTG: synthetic microglass-fiber nonwoven with water repellent coating
Recommended final pressure drop	800 Pa
Maximum permitted operating pressure	3,000 Pa
Seal	Foamed-on polyurethane

Application

Viledon® depth-loading filter cartridges are used in intake air filtration for gas turbines and turbocompressors at both onshore and offshore installations.

Characteristics and pluses of the GTG filter cartridges

- Innovative high strength synthetic micro-glass-fiber nonwoven with water repellent coating.
- Uniform pleat spacing for maximum dust holding capacity.
- The filter medium offers excellent initial efficiency, high dust holding capacity, low pressure drop and high cost efficiency. This makes the GTG cartridges of filter class F.
- GTG cartridges have been optimized in terms of filtering area, pleat depth and number of pleats which means the active filtering area remains completely effective over its entire operating lifetime.
- The pleat pack, plus the inner and outer support cages are cast into the steel-galvanized or stainless steel end caps in a leakproof configuration.
- The foamed-on EPDM gasket ensures optimum sealing against the mounting plate.

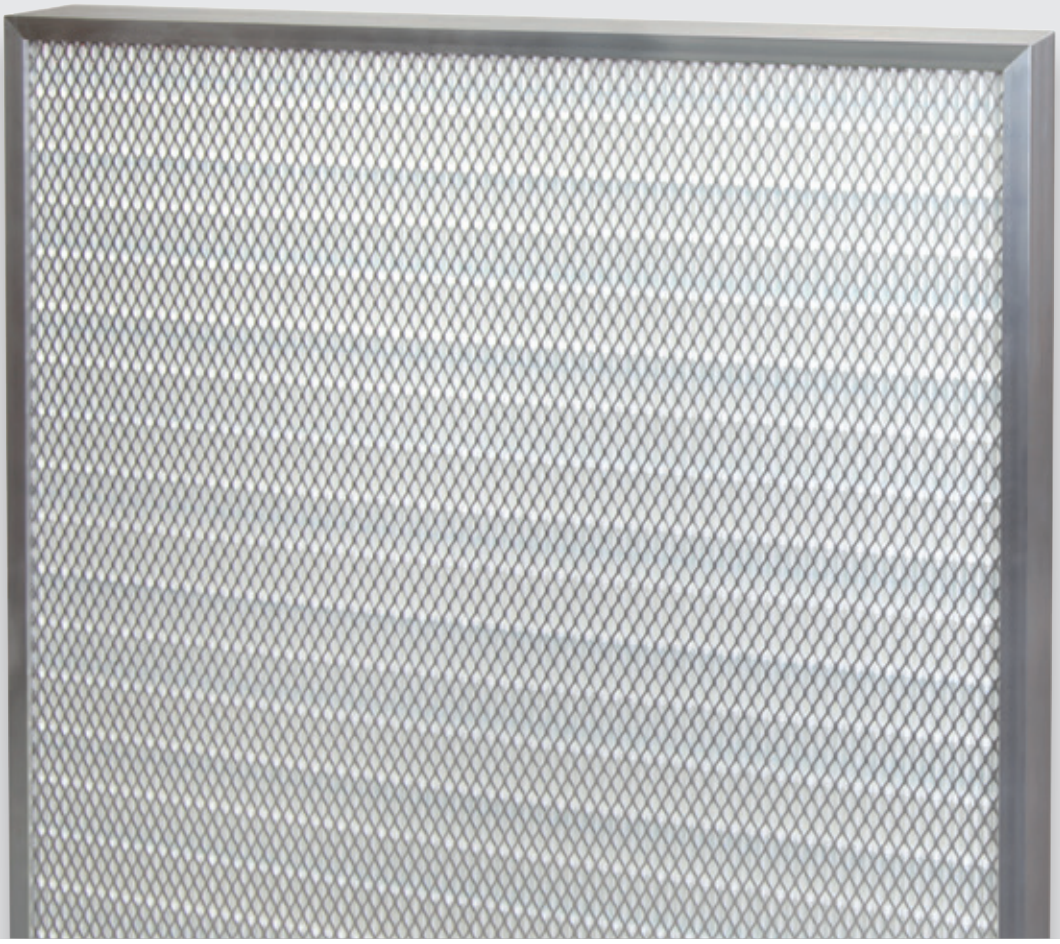
Delivery notes

GTG filter cartridges can be obtained in a variety of other dimensions, stainless steel end caps and support cages.

Article	Article number	Construc-tion height [mm]	Outer diameter [mm]	Filter class	Nominal volume flow [m³/h]	Initial pressure drop [Pa]	Average efficiency [%]	Average arrestance [%]	Dust holding capacity (ASHRAE/450 Pa) [g]	Filter area [m²]
GTG 324-445 W 66S0-Set		1,330	445/324	F9	2,500	135	98	>99.0	>1,750	40.1
GTG 445 K66S0	53458789	660	445/324	F9	1,400	70	98	>99.9	>800	22.0
GTG 324 W66S0	53454436	660	324	F9	1,100	120	98	>99.9	>800	18.1

High-temperature filters

HT filter mats, HT filter packs, HiProtec cassette filters, HT cassette filters



For air filtration at temperatures above 100 °C up to a maximum of 385 °C, the Viledon® high-temperature filters are the right choice. The silicone-free filter elements meet particularly stringent requirements for air purity, process dependability and cost-efficiency. The pleated filter media are made from special, thermally stable micro-glass-fiber papers.

High temperature filters
HT filter mats | Fine dust

Specifications	
Filter medium	LH 243: Filter medium made from ultra-fine, homogeneously spun glass-fibers. Clean air side with special final layer made of glass-fiber nonwoven; LH 244: Filter medium made from ultra-fine homogeneously spun glass-fibers. Clean air side with special final layer made of synthetic nonwoven. LH 620: Filter medium made from ultra-fine, homogeneously spun glass-fibers. Clean air side with special final layer made of glass-fiber nonwoven.
Recommended final pressure drop	250 Pa
Thermal stability LH 244	150 °C; LH 243 und LH 620: 200 °C
Moisture resistance	100 % rel. hum.
Fire class	F 1 acc. to DIN 53438

Application

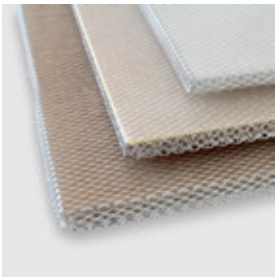
- Filtration of recirculating air in drying booths or drying ovens in surface treatment systems.
- Filtration of air and gases at high temperatures.

Delivery notes

LH 243 and LH 244: Rolls are available up to a maximum of 10 × 1.5 m. LH 620 rolls are available up to a maximum of 2 × 1.5 m. Customized dimensions are available as roll goods or blanks on request.

Article	Thickness approx. [mm]	Filter class	Nominal media velocity [$m^3/h \times m^2$]	Initial pressure drop [Pa]	Average efficiency [%]	Average arrestance [%]
LH 243	20	M 5	2,200	125	46	97
LH 244	20	M 5	2,200	125	46	97
LH 620	20	M 5	2,200	125	46	97

Specifications	
Filter medium	LH 350 / LH 1000: Glass-fiber nonwoven framed in expanded aluminum metal, type sticker on the clean air side, clean air side with additional glass-fiber nonwoven; LH 1000 OV: Glass-fiber nonwoven framed in expanded aluminum metal, type sticker on the clean air side; LH 370: Progressively structured PES staple-fiber nonwoven with a scrim on the clean air side in expanded aluminum metal.
Recommended final pressure drop	250 Pa
Thermal stability	LH 350: 200 °C; LH 1000 und LH 1000 OV: 300 °C; LH 370: 120 °C
Moisture resistance	100 % rel. hum.
Fire class	F 1 acc. to DIN 53438



Application

HT filter packs are used for recirculated air filtration in drying booths and drying ovens for surface treatment systems, and for the filtration of air and gases at high temperatures.

Delivery notes

Standard dimensions: Approx. 480 × 480 × 14 mm, customized dimensions available on request.
Delivery unit: 30 pcs. / carton

Article	Dimensions (W × L) [mm]	Nominal volume flow [m³ / h]	Initial pressure drop [Pa]	Average arrestance [%]	Dust holding capacity (AC Fine / 450 Pa) [g]	Weight [kg]
LH 350	480 × 480	350	75	99	40	0.25
LH 370	480 × 480	900	30	99	75	0.30
LH 1000	480 × 480	1,000	85	94	75	0.30
LH 1000 / OV	480 × 480	1,000	60	92	100	0.30

High temperature filters

HiProtec cassette filters | Construction depth up to 78 mm | Fine dust

Specifications	
Recommended final pressure drop	300 Pa
Thermal stability	385 °C (aluminum frame) | 260 °C (steel sheeting frame)
Frame	S: Extruded aluminum profile | A: Steel sheeting, galvanized
Seal	Textile glass round-cord seal; G 1: Raw air side; G 2: Clean air side
Fire class	F 1 acc. to DIN 53438

Application

The principal application category for Viledon® HiProtec cassette filters HT 10.0 and HT 2.5 with construction depths of up to 78 mm is air filtration in paint driers for the automotive industry. The filters are mounted in the booth ceilings or the side channels of the dryer pipes, and meet particularly stringent requirements for air purity, process dependability and cost-efficiency.

Besides the applications in surface treatment technology, the filters also meet the toughest of quality stipulations for general drying technology. Type HT 2.5 A 480 × 480 mm (class M 6) frequently serves as an upgrade for expanded-metal filter packs and cells.

Special features

- The Viledon® HiProtec cassette filters HT 10.0 and HT 2.5 excel in terms of a high dust holding capacity and very good mechanical sturdiness even when subjected to inhomogeneous air flows.
- Thanks to low filter resistances, very long operational lifetimes can be achieved, coupled with exceptionally cost-efficient operating characteristics.

Delivery notes

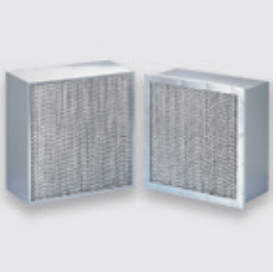
Available in all dimensions commonly encountered on the market.
Customized dimensions, filtering areas or frame materials available on request.

Article	Article number	Dimensions (H × W × D) [mm]	Filter class	Nominal volume flow [m³/h]	Initial pressure drop [Pa]	Average efficiency [%]	Average arrestance [%]	Filter area [m²]	Weight [kg]	Seal position
HT10-S-0915x0457x055-1	53457313	915 × 457 × 55	M 6	1,800	30	85	99	6.5	4.5	Raw air side
HT10-S-0915x0457x055-2	53463986	915 × 457 × 55	M 6	1,800	30	85	99	6.5	4.5	Clean air side
HT10-S-0915x0457x078-1	53463978	915 × 457 × 78	M 6	1,900	30	85	99	7.4	5.5	Raw air side
HT10-S-0805x0575x055-2	53458958	805 × 575 × 55	M 6	2,000	30	85	99	7.2	6.5	Clean air side
HT10-S-0610x0610x078-2	53299750	610 × 610 × 78	M 6	1,700	30	85	99	6.6	5.0	Clean air side
HT10-S-0610x0610x078-1	53463984	610 × 610 × 78	M 6	1,700	30	85	99	6.6	5.0	Raw air side
HT10-S-0610x0610x055-1	53457319	610 × 610 × 55	M 6	1,600	30	85	99	5.8	3.5	Raw air side
HT10-S-0610x0610x055-2	53457404	610 × 610 × 55	M 6	1,600	30	85	99	5.8	3.5	Clean air side
HT10-S-0490x0490x040-2	53457321	490 × 490 × 40	M 6	860	35	85	99	2.1	1.5	Raw air side
HT10-S-0480x0480x078-1	53456716	480 × 480 × 78	M 6	1,050	30	85	99	4.1	3.0	Raw air side
HT10-A-0480x0480x022-2	53456197	480 × 480 × 22	M 6	1,000	40	80	99	1.5	2.0	Clean air side
HT10-A-0480x0480x022-1	53469855	480 × 480 × 22	M 6	1,000	40	80	99	1.5	2.0	Raw air side
HT2.5-S-0915x0457x078-1	53463978	915 × 457 × 78	F 8	1,900	85	95	>99	7.4	5.0	Raw air side
HT2.5-S-0915x0457x078-2	53463977	915 × 457 × 78	F 8	1,900	85	95	>99	7.4	5.0	Clean air side
HT2.5-S-0915x0457x055-1	53457320	915 × 457 × 55	F 8	1,800	95	95	>99	6.5	5.5	Raw air side
HT2.5-S-0915x0457x055-2	53456199	915 × 457 × 55	F 8	1,800	95	95	>99	6.5	5.5	Clean air side
HT2.5-S-0610x0610x078-1	53463984	610 × 610 × 78	F 8	1,700	85	95	>99	6.6	5.0	Raw air side
HT2.5-S-0610x0610x078-2	53456196	610 × 610 × 78	F 8	1,700	85	95	>99	6.6	5.0	Clean air side
HT2.5-S-0610x0610x055-1	53457312	610 × 610 × 55	F 8	1,600	95	95	>99	5.8	3.5	Raw air side
HT2.5-S-0610x0610x055-2	53457621	610 × 610 × 55	F 8	1,600	95	95	>99	5.8	3.5	Clean air side
HT2.5-S-0490x0490x040-2	53463309	490 × 490 × 40	F 8	860	135	95	>99	2.1	1.5	Clean air side
HT2.5-S-0305x0610x055-1	53456195	305 × 610 × 78	F 8	850	85	95	>99	3.3	2	Raw air side
HT2.5-S-0305x0305x055-1	53458016	305 × 305 × 55	F 8	400	95	95	>99	1.45	2.5	Raw air side
HT2.5-S-0915x0610x078-1	53482697	915 × 610 × 78	F 9	2,000	75	>95	>99	10	7.5	Raw air side

High temperature filters

HT cassette filters | Construction depth 292 mm | Fine dust

Specifications	
Recommended final pressure drop	300 Pa
Thermal stability	at least 260 °C
Frame	25 mm top frame (type B) or box shape (type A)
Frame material	Steel sheeting, galvanized | Aluminum extruded section
Seal	Textile glass round-cord seal
Fire class	F1 acc. to DIN 53438



Application

The principal application category for the Viledon® HT60 and HT90 high-temperature cassette filters with an construction depth of 292 mm is air filtration in recirculating air equipment of paint drying processes in the automotive industry. The filters meet particularly stringent requirements for air purity, process dependability and cost-efficiency.

Besides the applications in surface treatment technology, the filters also meet the toughest of quality stipulations for general drying technology.

Special features

- The Viledon® HT60 and HT90 high-temperature cassette filters excel in terms of a particularly high dust holding capacity and very good mechanical strength, even when subjected to inhomogeneous air flows.
- Thanks to low filter resistances, very long operational lifetimes can be achieved, coupled with exceptionally cost-efficient operating characteristics.

Special variants

For confined space situations, the filters are available with a top frame (type B) featuring a reduced through-hole width of 547 mm (designation: -547).

For unfavorable flow conditions in the system, the filters can be supplied in a stronger version (designation: -reinforced).

For temperatures up to 350 °C, the filters are also available with a frame made of aluminized steel sheeting (designation: -D).

For systems with only a confined space at their disposal, the filter elements are also available in a construction depth of 150 mm.

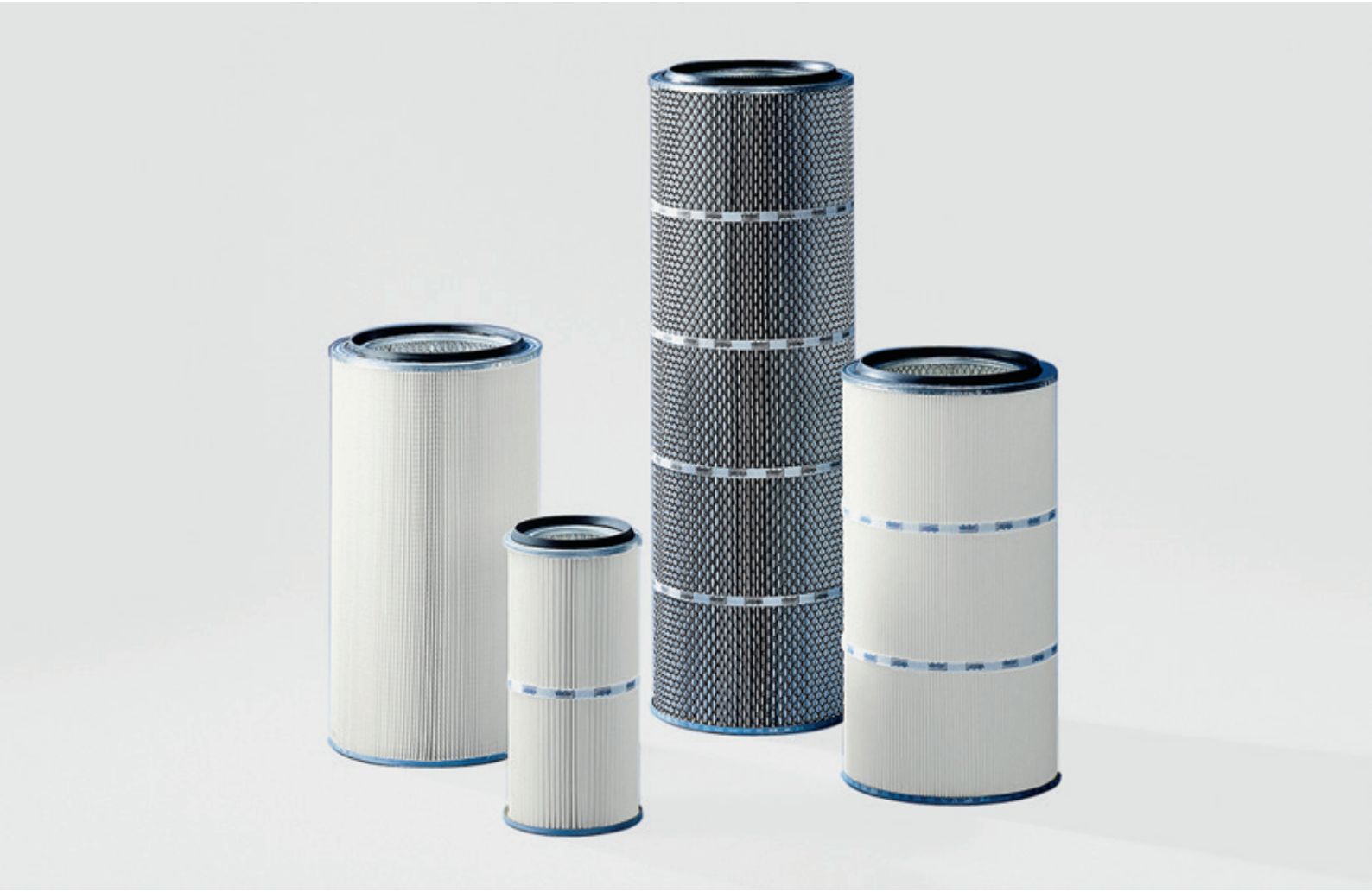
Delivery notes

Customized dimensions, different frame materials, higher thermal stability or a specially reinforced version available on request.

Article	Article number	Dimensions (L × W × D) [mm]	Filter class	Nominal volume flow [m³/h]	Initial pressure drop [Pa]	Average efficiency [%]	Average arrestance [%]	Filter area [m²]	Weight [kg]	Seal position
HT60-A-0610x0610x292-G-2-M-3-Q-2-F	53366788	610 × 610 × 292	M6	3,400	90	71	99	12.0	10.0	Clean air side
HT60-A-0610x0610x292-G-1-M-3-Q-2-F	53414743	610 × 610 × 292	M6	3,400	90	71	99	12.0	10.0	Raw air side
HT60-A-0305x0610x292-G-2-M-3-Q-2-F	53367242	305 × 610 × 292	M6	1,700	100	71	99	6.0	6.0	Clean air side
HT60-A-0305x0610x292-G-2-M-3-Q-2F-reinfo	53426898	305 × 610 × 292	M6	1,700	100	71	99	6.0	6.0	Clean air side
HT60-B-0592x0592x292-G-2-M-3-Q-2-F	53366698	592 × 592 × 292	M6	3,400	130	71	99	9.0	7.0	Clean air side
HT60-B-0592x0592x292-G-1-M-3-Q-2-F	53366787	592 × 592 × 292	M6	3,400	130	71	99	9.0	7.0	Raw air side
HT60-B-0592x0592x292-G-2-M-3-Q-2F-547 mm	53394225	592 × 592 × 292	M6	3,400	130	71	99	9.0	7.0	Clean air side
HT60-B-0592x0592x292-G-2-M-3-Q-2F-547-Re	53414564	592 × 592 × 292	M6	3,400	130	71	99	9.0	7.0	Clean air side
HT60-B-0490x0592x292-G-2-M-3-Q-2-F	53429703	490 × 592 × 292	M6	2,800	130	71	99	9.0	7.0	Clean air side
HT60-B-0287x0592x292-G-2-M-3-Q-2-F	53366705	287 × 592 × 292	M6	1,700	140	71	99	4.5	4.5	Clean air side
HT60-B-0287x0592x292-G-1-M-3-Q-2-F	53366706	287 × 592 × 292	M6	1,700	140	71	99	4.5	4.5	Raw air side
HT60-B-0287x0592x292-G-2-M-3-Q-2F-547 mm	53394224	287 × 592 × 292	M6	1,700	140	71	99	4.5	4.5	Clean air side
HT90-A-0610x0610x292-G-2-M-3-Q-2-F	53340443	610 × 610 × 292	F8	3,400	120	93	>99	12.0	10.0	Clean air side
HT90-A-0610x0610x292-G-1-M-3-Q-2-F	53433314	610 × 610 × 292	F8	3,400	120	93	>99	12.0	10.0	Raw air side
HT90-A-0305x0610x292-G-2-M-3-Q-2-F	53371208	305 × 610 × 292	F8	1,700	130	93	>99	6.0	6.0	Clean air side
HT90-B-0592x0592x292-G-2-M-3-Q-2-F	53366717	592 × 592 × 292	F8	3,400	150	93	>99	9.0	7.0	Clean air side
HT90-B-0592x0592x292-G-1-M-3-Q-2-F	53409792	592 × 592 × 292	F8	3,400	150	93	>99	9.0	7.0	Raw air side
HT90-B-0287x0592x292-G-2-M-3-Q-2-F	53366727	287 × 592 × 292	F8	1,700	160	93	>99	4.5	4.5	Raw air side
HT90-B-0287x0592x292-G-1-M-3-Q-2-F	53382668	287 × 592 × 292	F8	1,700	160	93	>99	4.5	4.5	Raw air side

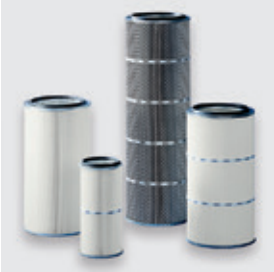
Filters for dust removal

Filter cartridges, filter bags, filter plates, filter media



We develop customized dust removal concepts for enhancing occupational safety and protecting both the environment and technical systems, as well as for product recovery. We customize Viledon® filter media for dust removal, filter cartridges and filter plates in terms of model, construction height, nominal diameters and pleat geometry to suit the particular requirements involved.

Filters for dust removal
Filter cartridges



DIN standard cartridges

Cylindrical filter cartridges for horizontal and vertical installation with integrated interior support cage in various heights. Simple installation using a tie-rod or a closure cover. Available in nominal diameters of 200, 327 mm and 351 mm, and in the standard lengths of 300, 400, 600, 660, 1,000 and 1,200 mm.

Twist & Fix filter cartridges

- Cylindrical filter cartridges with four nominal diameters 145, 156, 218 and 324 mm, with standard lengths of 300, 600, 1,000, 1,200 and 1,500 mm and with 3- or 4-hook flanges. Perfect fit of the filter cartridge and protection of the filter medium thanks to centering collar.
- Spacer ribs (patented) on both sides at the flange ensure correct installation and an optimum seal to the system's raw-gas compartment.
- A foamed-on seal on both sides – for installation on the raw or clean-gas side as desired.

Snap & Fix filter cartridges

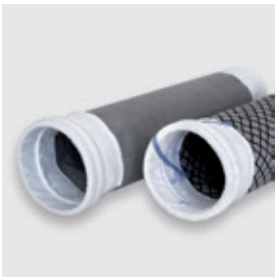
- The cartridge series snaps into place "properly", for a perfect axial seal achieved without any further aids like metal sleeves or spring washers.
- Suitable for upgrading old bag filter systems or for new installations.
- Installation: on the clean-gas side without any elaborate screwing work: simply press into place and the patented snap-on hooks will engage.
- Dismantling: just takes a matter of seconds with the aid of a snap-ring lifter.

Pluses

- Low pressure drop values.
- Minimized compressed-air-consumption for the cleaning routine.
- Pleat geometry optimally matched to the application concerned.
- All cartridges are fitted with surface media, and can be cleaned using a pulse-jet procedure or rotary nozzles.
- Long operational lifetimes.
- Low replacement costs.
- Low disposal outlay thanks to long operational lifetimes.
- Antistatic variants have DEKRA certification.

Article	Article number	Version	Filter medium	Nominal diameter / Nominal lengths [mm]	Filter area [m²]	Pleat depth [mm]	Dust class*
LP 351 D-71-A 17-76	53457670	DIN open/open	sinTexx Plus as	351/710	17	44	M
LP 327 S-12-A 15-06	53343700	DIN standard cartridge	FE 2506-sinus, PES (antistatic)	327/1,205	15.6	48	M
LP 200 S-40-A 20-07	53322727	DIN standard cartridge	FE 2507-sinus, PES	200/405	2.0	32	M
LP 327 S-66-A 14-07-L	53421628	DIN standard cartridge	FE 2507-sinus, PES	327/660	13.9	46	M
LP 327 S-12-A 25-07	53324309	DIN standard cartridge	FE 2507-sinus, PES	327/1,205	25.3	46	M
LP 327 S-30-B 50-09	53492086	DIN standard cartridge	FE 2509, PP	327/305	5.0	46	M
LP 327 D-66-A 11-09	53492081	DIN standard cartridge	FE 2509, PP	327/660	11.0	46	M
LP 327 S-66-A 11-09	53492094	DIN standard cartridge	FE 2509, PP	327/660	11.0	46	M
LP 327 S-76-A 12-09	53492095	DIN standard cartridge	FE 2509, PP	327/765	12.6	46	M
LP 327 S-10-A 13-09	53492070	DIN standard cartridge	FE 2509, PP	327/1,005	13.0	46	M
LP 327 S-60-A 10-76	53458532	DIN standard cartridge	sinTexx Plus as	327/605	10	46	M
LP 152 B-15-A 54-07	53321826	Snap & Fix cartridge	FE 2507-sinus, PES	152/1,512	5.4	25	M
LP 155 B-15-A 54-07	53327406	Snap & Fix cartridge	FE 2507-sinus, PES	155/1,512	5.4	25	M
LP 145 G-10-A 27-06	53375277	Twist & Fix cartridge	FE 2506-sinus, PES (antistatic)	145/1,012	2.7	25	M
LP 156 G-10-A 36-06	53372251	Twist & Fix cartridge	FE 2506-sinus, PES (antistatic)	156/1,012	3.6	25	M
LP 218 G-15-A 75-09	53295115	Twist & Fix cartridge	FE 2509, PP drainage nonwoven	218/1,512	7.5	32	M
LP 324 G-60-B 77-21	53306324	Twist & Fix cartridge	FE 2521, PES + PTFE membrane	324/612	7.7	48	M
LP 324 G-12-A 25-77	53457204	Twist & Fix cartridge	sinTexx Plus	324/1,212	25.3	48	M
LP 145 G-15-A 54-77	53458531	Twist & Fix cartridge	sinTexx Plus	145/1,512	5.4	25	M

* according to DIN EN 60 335-2-69 appendix AA



Viledon® filter bags are available in a large number of different sizes, lengths and models, and in different top and bottom section variants. On request, Viledon® filter bags are available made from almost all the filter media commonly encountered on the market.

Viledon® filter bags can be precoated to suit your own particular needs, e.g. with FHM 1500 for sticky dusts or with lime for oily dusts.

Viledon® NEXX Bags

- Viledon® NEXX filter bags are the next generation of surface filters, with outstanding advantages compared to conventional filters featuring needlefelt.
- Whether in the pigment, cement or metal industries, in fact wherever large quantities of dust are encountered, Viledon® NEXX filter bags are what you need.
- Original Viledon® NEXX: This high-quality patented filter medium possesses unique properties for surface filtration.
- Worry-free cleaning: Dusts can be quickly and easily cleaned off the microfiber layer of the Viledon® NEXX filter bags.
- Reduced energy costs: Thanks to optimized filter performance, less compressed air is used during the cleaning process, and the fan's power consumption downsized.
- Low emissions: With Viledon® NEXX, clean-gas values of < 1 mg / m³ can be lastingly achieved.
- In comparison to needlefelts, Viledon® NEXX requires around 50 % less resources to produce. Coupled with the same (or an even higher) filtration performance! This means you're making a proactive contribution to protecting the natural environment and ensuring sustainable resource-economy.
- Application: e.g. fine dusts, pigment, cement and metal industries.

Viledon® Fiber Bags

- Viledon® Fiber Bags with unique characteristics are particularly suitable for use in the wood and paper industry.
- In particular for extraction of fibrous dust, high arrestance with a low pressure drop can be achieved.
- Significantly longer useful lifetimes than conventional needlefelts.
- Very high resistance to abrasion.
- Viledon® FE 2919 + FE 2920 are made from recycled polyester. So the plastic can be brought back into industrial circulation and is not dumped on a landfill. This is a proactive contribution towards resource-economy.
- Applications: fibrous dusts, wood and paper industries.

Viledon® MAXX Bags

- For maximized filtration performance.
- MAXX Bags are finished with a PTFE membrane on the face side.
- Ultra-fine dusts in the nm range are efficiently arrested, and clean-gas concentrations of < 1 mg / m³ achieved.
- Very good regenerability using a pulse-jet routine.
- Application: ultra-fine dusts.

Delivery notes

The innovative Viledon® filter media are also available as roll material: Antistatic (gray-black raster print) or in the standard version (gray).

Article	Filter medium	Weight per unit area approx. [g/m²]	Maximum tensile force along / across [N / 5 cm]	Thermal stability [°C]
NEXX Bags	NEXX	240	700 / 800	150
NEXX Bags as	NEXX as	240	700 / 800	150
Fiber Bags	FE 2920	250	750 / 750	150
Fiber Bags as	FE 2919	260	750 / 750	150
MAXX Bags	FE 2921	280	750 / 750	150
MAXX Bags as	FE 2923	280	750 / 750	150

Filters for dust removal
Filter plates

Specifications	
Note	Electrostatically conductive filter plates must be properly earthed

Product characteristics

- High-performance filter plates for every application, to ensure compliance with the statutory residual-dust emission values.
- Long lifetime coupled with low maintenance and operating costs.
- Space-saving thanks to compact construction with pleated, synthetic filter media.
- Can be regenerated using all customary cleaning processes and by washing.

Delivery notes

Customized product variants and dimensions available on request.
Please ask our customer service for technical data.

Article	Dimensions (W × H × D) [mm]	Pleat depth [mm]	Filter medium	Filter area [m²]	Number of pleats
FP 0110 C6014N	490 × 600 × 33	15	FE 2831 polyester	1.4	40
FP 0110 C6014L	490 × 600 × 33	15	FE 2832 polyester antistatic	1.4	40
FP 0110 C6014C	490 × 600 × 33	15	FE 2833 polyester + PTFE membrane	1.4	40
FP 0110 C6014D	490 × 600 × 33	15	FE 2834 polyester + PTFE membrane antistatic	1.4	40
FP 0110 C1024N	490 × 1,000 × 33	15	FE 2831 polyester	2.4	40
FP 0110 C1024L	490 × 1,000 × 33	15	FE 2832 polyester antistatic	2.4	40
FP 0110 C1024C	490 × 1,000 × 33	15	FE 2833 polyester + PTFE membrane	2.4	40
FP 0110 C1024D	490 × 1,000 × 33	15	FE 2834 polyester + PTFE membrane antistatic	2.4	40
FP 0110 C1230N	490 × 1,200 × 33	15	FE 2831 polyester	3.0	40
FP 0110 C1230L	490 × 1,200 × 33	15	FE 2832 polyester antistatic	3.0	40
FP 0110 C1230C	490 × 1,200 × 33	15	FE 2833 polyester + PTFE membrane	3.0	40
FP 0110 C1230D	490 × 1,200 × 33	15	FE 2834 polyester + PTFE membrane antistatic	3.0	40
FP 0800 C6021N	490 × 600 × 33	15	FE 2831 polyester	2.1	60
FP 0800 C6021L	490 × 600 × 33	15	FE 2832 polyester antistatic	2.1	60
FP 0800 C6021C	490 × 600 × 33	15	FE 2833 polyester + PTFE membrane	2.1	60
FP 0800 C6021D	490 × 600 × 33	15	FE 2834 polyester + PTFE membrane antistatic	2.1	60
FP 0800 C1034N	490 × 1,000 × 33	15	FE 2831 polyester	3.4	60
FP 0800 C1034L	490 × 1,000 × 33	15	FE 2832 polyester antistatic	3.4	60
FP 0800 C1034C	490 × 1,000 × 33	15	FE 2833 polyester + PTFE membrane	3.4	60
FP 0800 C1034D	490 × 1,000 × 33	15	FE 2834 polyester + PTFE membrane antistatic	3.4	60
FP 0800 C1241N	490 × 1,200 × 33	15	FE 2831 polyester	4.1	60
FP 0800 C1241L	490 × 1,200 × 33	15	FE 2832 polyester antistatic	4.1	60
FP 0800 C1241C	490 × 1,200 × 33	15	FE 2833 polyester + PTFE membrane	4.1	60
FP 0800 C1241D	490 × 1,200 × 33	15	FE 2834 polyester + PTFE membrane antistatic	4.1	60
FP 1800 C1050C	554 × 1,045 × 52	24	FE 2833 polyester + PTFE membrane	5.0	52

FE 2506-sinus and FE 2507-sinus

- The pleatable polyester filter media with sinusoidal cross-section and microfibers achieve up to 35 % energy cost savings when operating a cartridge system.
- You benefit from an extended operational lifetime and reduced maintenance costs.
- The patented pleat stabilization is thermally stable up to 90 °C and remains mechanically stable even under alternating loads in the filtration and cleaning phases.
- Increase your filters' air flow rate, since the cartridges finished with FE 2507-sinus offer a higher effective filtering area.

Antistatic filter media

- Finished with a patented raster imprint on both sides, applied by carbon suspension.
- High operational dependability without restricting the filters' performance.
- Retain their antistatic effect even with abrasive dusts or after being washed in conformity with the washing instructions.
- DEKRA test reports with electric surface and resistances to ground < 10^8 Ω are on file.

Full-area thermal bonding of the media involved creates very smooth nonwoven surfaces. This means removal of the dust cake during cleaning is significantly better than with spunbonded nonwovens featuring punctiform or linear bonding.

Delivery notes

Customized dimensions are available on request, not available as roll goods.

sinTexx Plus

- sinTexx Plus is a corrugated polyester medium with a nanofiber lining, developed specifically for removing dust from smoke produced in welding, cutting and coating processes.
- Collection efficiency for fine dust and smoke improved across the board and assured right from the start. Thanks to the higher collection efficiency threshold limit values for the workplace can be reliably complied with.
- Highly efficient thanks to lower flow resistance. This significantly reduces the consumption levels for power and compressed-air and extends useful lifetime of the filter elements concerned. Finally this improves the energy balance for the system's operator.
- Dispensation of the initial precoating of cartridges otherwise customary. This implies easier handling, less maintenance and the costs can be reduced.
- Combination of excellent properties of the corrugated Viledon filter medium with improved filtration behavior.

Efficacious filtration of ultra-fine and difficult-to-handle dust and smoke outperforming customary media.

NEXX

This patented microfiber material has been developed specifically for the stringent requirements in dust removal systems, and possesses unique properties for surface filtration.

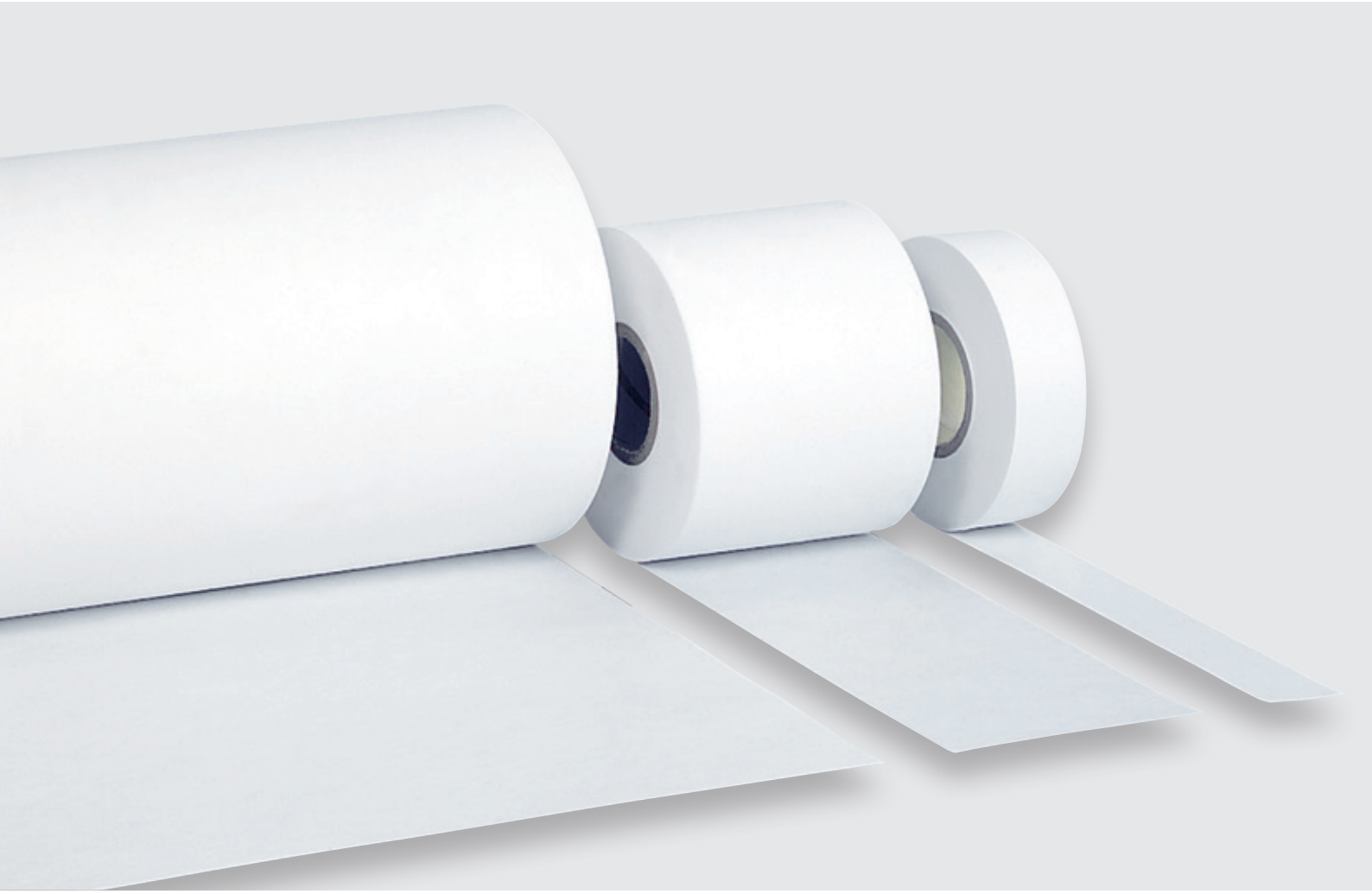
- Dusts can be quickly and easily washed off the microfiber layer of the Viledon® NEXX filter medium.
- With Viledon® NEXX clean-gas values of < 1 mg / m^3 can be lastingly achieved.
- Resource-saving manufacturing allows active contribution to environmental protection.

Article	Product series	Filter medium	Thickness approx. [mm]	Weight per unit area approx. [g / m^2]	Dust class*	Air-permeability at 200 Pa [m^3 / (m^2 × h)]	Elongation at maximum tensile force along / across [%]	Maximum tensile force along / across [N / 5 cm]
FE 2506	FE Medien	PES, thermally bonded, antistatic halftone print	0.45	250	M	300	25 / 40	300 / 600
FE 2507	FE Medien	PES, thermally bonded	0.45	240	M	300	25 / 40	300 / 600
FE 2508	FE Medien	100 % polyolefin, thermally bonded, antistatic halftone print	0.3	130	M	500	25 / 25	350 / 600
FE 2509	FE Medien	100 % polyolefin, thermally bonded	0.3	120	M	500	25 / 25	350 / 200
FE 2519	FE Medien	PES, thermally bonded, antistatic halftone print	1.0	260		3,400	35 / 35	750 / 750
FE 2520	FE Medien	PES, thermally bonded	1.0	250		3,400	35 / 35	750 / 750
FE 2521	FE Medien	PES, thermally bonded, + PTFE membrane	1.0	270	M	320	35 / 35	750 / 750
FE 2523	FE Medien	PES, thermally bonded, antistatic halftone print, + PTFE membrane	1.0	280	M	320	35 / 35	750 / 750
FE 2576 sinTexx Plus as	sinTexx Plus	PES, thermally bonded with nanofiber lining; antistatic finish	0.55	240	M	600	25 / 40	500 / 700
FE 2577 sinTexx Plus	sinTexx Plus	PES, thermally bonded with nanofiber lining	0.55	240	M	600	25 / 40	500 / 700
FE 2931 NEXX as	NEXX	PES / PA, microfilaments; antistatic finish	1.0	245	M	480	35 / 35	700 / 800
FE 2932 NEXX	NEXX	PES / PA, microfilaments	1.0	240	M	600	35 / 35	700 / 800
FE 2933 NEXX as wr	NEXX	PES / PA, microfilaments; antistatic finish; water- and oil-repellent finish	1.0	250	M	420	35 / 35	700 / 800
FE 2934 NEXX wr	NEXX	PES / PA, microfilaments; water- and oil-repellent finish	1.0	245	M	420	35 / 35	700 / 800

* according to DIN EN 60 335-2-69 appendix AA

Liquid filtration

nutritexx, cooltexx, pluratexx, novatexx



Viledon® sets the standard for industrial liquid filtration in terms of quality, reliability and versatility: with nutritexx for food and beverage filtration, with cooltexx for coolant and lubricant filtration, with pluratexx for oil, urea and fuel filtration and with novatexx as support media for membranes.

Liquid filtration
nutritexx | Food-grade nonwovens

Specifications	
Material	Polyester (some with cellulose content), Polypropylene
Bonding	Chemical or thermal
Food-grade testing	dependent on the filter fleece, (EC) No 1935/2004, (EU) NO 10/2011, FDA 21 CFR

Application

Whether for food and beverage or drinking water filtration: In stringently hygienic areas such as food and beverage or drinking water filtration producers require special filter media which fulfill the various requirements and highest standards – Viledon® nutritexx filter media ensure the perfect combination of hygiene, efficiency and diversity.

Product advantages

- Good processability for making bags (sewing, welding, die-cutting).
- Long operational lifetime.
- Low pressure drop.
- High wet strength.

Delivery notes

Customized roll dimensions available on request.

Article	Weight per unit area approx. [g/m²]	Air permeability at 100 Pa [l/(s × m²)]	Maximum tensile force along/across [N/5 cm]	Thickness approx. [mm]
nutritexx 2640	100	150	130/220	0.24
nutritexx 2641	100	900	120/75	0.64
nutritexx 2690N	75	1,600	90/60	0.6
nutritexx 2693N	65	1,800	80/60	0.5
nutritexx 2681	30	3,500	20/14	0.25
nutritexx 2614	65	980	85/45	0.22
nutritexx 1007 KN	70	38	55/25	0.25
nutritexx 2007	100	90	95/65	0.74
nutritexx 5021	50	90	40/25	0.35
nutritexx 6550	50	1,200	135/60	0.24
nutritexx 6470	70	1,600	100/65	0.25

Specifications	
Fiber	Polyester
Principal application	Drinking water filtration

Application

nutritexx 2020 and 2040 are the newly developed filter mats that are made from 100% food-grade fibers. They are therefore particularly well suited for filtering ion exchangers and drinking water. Physiologically safe raw materials in conjunction with state-of-the-art production technology guarantee a filter medium that consistently meets the food and beverage industries' stringent requirements in terms of hygiene, efficiency and extractable constituents.

Food-grade testing to:

- 2002/72/EC und 2011/10/EC
- FDA 21 CFR 177.1630
- KTW (Plastic, Drinking Water) Guideline of the UBA (German Federal Environmental Agency)
- DVGW (German Association of the Gas and Water Industry) Worksheet W 270

Article	Dimensions (W × L) [mm / m]	Weight per unit area approx. [g / m²]	Air permeability at 100 Pa [l / (s × m²)]	Thickness approx. [mm]
nutritexx 2020	1,600 × 20	300	2,700	17
nutritexx 2040	2,000 × 12	400	2,300	38

Liquid filtration
cooltexx | Polyester spunbonded nonwovens

Specifications	
Material	Polyester endless filaments
Bonding	Thermal
Band filter principle	Pressure | vacuum
Machining process	Rotating | milling | drilling | grinding

Application

Viledon® cooltexx polyester spunbond media have a high mechanical and chemical resistance, are budget products, and on demand we also deliver food grade versions. Due to their excellent tensile strength, they can also be used on vacuum and pressure belt lines, where the filter material is under high mechanical stress.

Product advantages

- Long lifetime.
- Maximized process dependability.
- Good filter cake detachment.
- Optimum process matching.

Product characteristics

- Maximized mechanical strength.
- Filtration based on sieving effect.
- Smooth surface.
- High separation efficacy.

Delivery notes

Customized lengths available on request.

Article	Fiber structure	Weight per unit area approx. [g/m²]	Belt filter principle	Machining process	Air permeability at 100 Pa [l/(s × m²)]	Maximum tensile force along/across [N/5 cm]	Thickness approx. [mm]
cooltexx 6430	Fine fibers	30	Gravity | pressure	Turning | drilling | milling	3,300	40/20	0.14
cooltexx 6450	Fine fibers	50	Pressure | vacuum	Turning | drilling | milling (smoothing)	2,500	70/50	0.22
cooltexx 6470	Fine fibers	70	Pressure | vacuum	Grinding (ultra-precision machining)	1,600	110/60	0.32
cooltexx 6534	Fine fibers – punctiform-bonded	34	Gravity | pressure	Turning | drilling | milling	2,000	80/30	0.16
cooltexx 6550	Fine fibers – punctiform-bonded	50	Pressure | vacuum	Turning | drilling | milling (smoothing)	1,200	130/60	0.24
cooltexx 6570	Fine fibers – punctiform-bonded	70	Pressure | vacuum	Grinding (ultra-precision machining)	600	170/80	0.30
cooltexx 7230	Coarse fibers	30	Gravity | pressure	Turning | drilling | milling (roughing)	5,000	60/60	0.14
cooltexx 7250	Coarse fibers	50	Pressure | vacuum	Turning | drilling | milling (smoothing)	4,000	110/100	0.23
cooltexx 7270	Coarse fibers	70	Pressure | vacuum	Turning | drilling | milling (smoothing)	2,700	175/170	0.29
cooltexx H7210	Coarse fibers	100	Pressure | vacuum	Grinding | honing | lapping (fine-smoothing)	1,800	230/220	0.38

Specifications	
Material	Polypropylene endless filaments
Bonding	Thermal
Band filter principle	Pressure | vacuum
Machining process	Rotating | milling | drilling | grinding

Application

Viledon® cooltexx polypropylene spunbond media have a high mechanical and chemical resistance, are budget products, and on demand we also deliver food grade versions. Thanks to their excellent tensile strength, they can also be used on vacuum and pressure belt lines, where the filter material is under high mechanical stress. Due to the hydrophobic nature of polypropylene, the pressure drop in water filtration is increased. Additionally, polypropylene needs to be protected from UV light.

Product advantages

- Adsorption of foreign oil from the emulsion.
- High chemical stability.
- Good filter cake detachment.

Product characteristics

- Oleophilic and hydrophobic fibers.
- Pure polypropylene.
- Smooth surface.

Delivery notes

Customized lengths available on request.

Article	Weight per unit area approx. [g/m²]	Machining process	Air permeability at 100 Pa [l/(s × m²)]	Maximum tensile force along/across [N/5 cm]	Thickness approx. [mm]
cooltexx 3440	40	Turning | drilling | milling (smoothing)	1,400	100/60	0.38
cooltexx 3440	40	Turning | drilling | milling (smoothing)	1,400	100/60	0.38
cooltexx 3450	50	Turning | drilling | milling (smoothing)	1,200	90/60	0.40
cooltexx 3450	50	Turning | drilling | milling (smoothing)	1,200	90/60	0.40
cooltexx 3470	70	Grinding (ultra-precision machining)	700	180/100	0.50
cooltexx 3470	70	Grinding (ultra-precision machining)	700	180/100	0.50

Liquid filtration
cooltexx | Cellulose-polyester media

Specifications	
Material	Cellulose + Polyester
Bonding	Chemical
Band filter principle	Gravitation | pressure | vacuum
Machining process	Grinding | honing | lapping (fine-smoothing)

Application

Viledon® cooltexx filter media with a cellulose content are used predominantly in aqueous solutions, where a low pressure drop is a primary consideration, e. g. with pure gravity systems. The hydrophilic properties of the cellulose ensure good wettability for water, so that despite the fine fibers used and the good particle arrestance only a low pressure drop ensues. Since cellulose can be bonded only chemically, not thermally, the mechanical strengths will usually be lower than with polyester spunbonded nonwovens, so that their use is restricted to systems with low tensile stresses.

Product advantages

- Hydrophilic fine-fiber medium with good water wettability.
- Long operational lifetime thanks to depth-loading filtration.
- Low pressure drop thanks to good wettability.
- High separation efficacy, even with fine particles.

Delivery notes

Customized lengths available on request.

Article	Weight per unit area approx. [g/m²]	Air permeability at 100 Pa [l/(s × m²)]	Thickness approx. [mm]
cooltexx 2652	17	3,000	0.19
cooltexx 2653	23	1,900	0.19
cooltexx 2654	32	1,500	0.28
cooltexx 2662	25	4,000	0.28
cooltexx 2663	50	1,800	0.37
cooltexx 2666	60	1,600	0.45
cooltexx 2689	130	1,000	1.0
cooltexx 2693	70	2,000	0.53

Specifications	
Production process	Wet laid process
Material	Polyester (partly with cellulose content)
Bonding	needled + chemical
Band filter principle	Gravitation	pressure	vacuum
Machining process	Grinding	honing	lapping (fine-smoothing)

Product advantages

- Particularly long operational lifetime thanks to deep bed filtration.
- Low pressure drop.
- High separation efficiency, even for fine particles.

Product characteristics

- High dust holding volume.
- Depth-loading filter – high nonwovens thickness.
- High amount of fine fibers.

Delivery notes

Customized lengths available on request.

Article	Weight per unit area approx. [g/m²]	Air permeability at 100 Pa [l/(s × m²)]	Maximum tensile force along/across [N/5 cm]	Elongation at maximum tensile force along/across [%]	Thickness approx. [mm]
cooltexx 9210N	100	900	120/100	12/15	0.7
cooltexx 2689	130	1,000	160/90	13/16	1.0

Liquid filtration
pluratexx | Oil, urea and fuel filtration

Specifications	
Material	Polyester, Polypropylene, Polyamide
Bonding	Thermal

Application

Whether for oil, urea or fuel filtration, Freudenberg Filtration Technologies high-quality filter media allow reliable removal of dirt particles, ensuring motor function and oil quality, and guarantee economic vehicle operation. Viledon® pluratexx filter media fulfill the various requirements of the hydraulic and automotive industry and assure the perfect combination of hygiene, efficiency and diversity.

Product advantages

- High arrestance efficiency thanks to fine fibers.
- Long operational lifetime (high dust holding capacity).
- High mechanical strength and resistance to chemicals.
- No fiber release, no glass-fibers.

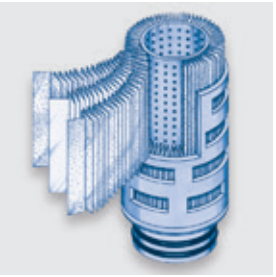
Delivery notes

Customized roll dimensions available on request.

Article	Weight per unit area approx. [g/m²]	Air-permeability at 200 Pa [l/(s × m²)]	Pore size: Largest pore/MFP [µm]	Particle size at 90% arrestance efficiency [µm]	Particle size at 99% arrestance efficiency [µm]	Dust holding capacity [g/m²]	Thickness approx. [mm]
pluratexx 2033	165	650	72/32	24	30	180	0.95
pluratexx 2037	155	400	55/22	15	22	150	0.9
pluratexx 5100	190	200	40/20	10	15	100	1.1
pluratexx 5120	120	500	50/20	20	30	80	0.54
pluratexx 5121	120	800	80/30	23	35	85	0.7
pluratexx 2313	130	80	45/15	4	10	70	0.5
pluratexx 2317 S	170	40	32/14	4	6	150	0.7
pluratexx 5021	50	200	25/11	7	12	75	0.35
pluratexx 2001 KN	62	100	18/11	5	9	65	0.24
pluratexx 1007 KN	65	65	16/7	5	11	65	0.3

novatexx | Drainage nonwoven for filter cartridges

Specifications	
Maximum width	2,000 mm
Standard lengths	500 m, 1,000 m



In the production of filter cartridges, Viledon® novatexx spunbonded nonwovens serve as "spacers" between the pleats on the face side and as a drainage layer on the clean side. The performance profiles of the media concerned can be very specifically designed to requirements. The nonwovens involved can be easily pleated together with the membrane without damaging the latter.

In the products of the 20xx series, the use of special bi-component fibers creates particularly high rigidity, which is indispensable for the pleating operation and significantly enhances the stability of the filter cartridge.

The raw materials used meet the requirements laid down for safety in food, beverage, medical and pharmaceutical applications.

Delivery notes

Customized dimensions are available on request.
Please protect products from exposure to direct sunlight.

Article	Filter medium	Weight per unit area approx. [g/m²]	Air permeability at 100 Pa [l/(s × m²)]	Maximum tensile force along/across [N/5 cm]	Elongation at maximum tensile force along/across [%]	Thickness approx. [mm]
novatexx 2010	PP biko	50	1,300	155/90	60/70	0.24
novatexx 2019	PP biko	70	1,200	170/90	60/70	0.44
novatexx 2035	PP biko	30	1,800	85/50	50/50	0.15
novatexx 2036	PP biko	30	3,900	60/35	60/60	0.23
novatexx 2043	PP biko	50	1,800	140/70	60/70	0.32
novatexx 6317	PP	17	2,100 [50 Pa]	25/25	50/50	0.21
novatexx 6320	PP	20	1,900 [50 Pa]	35/30	40/40	0.24
novatexx 6340	PP	40	1,300	85/85	70/70	0.40

Liquid filtration

novatexx | Carrier materials for flat membranes

Specifications	
Minimum width	15 mm
Standard lengths	500 m, 1,000 m

Viledon® novatexx products for flat membranes stand for superior results in membrane production. The carrier materials are made of synthetic polymers, and are crucial to the mechanical and filtering properties of the filtration membranes. The specially created surface porosity enables the membrane solution to penetrate into the nonwoven, so as to achieve good adhesion results.

There is an option for additionally customizing the products by modifying the surface to suit the particular membrane production process involved.

All polymers used are suitable for contact with food and beverages.

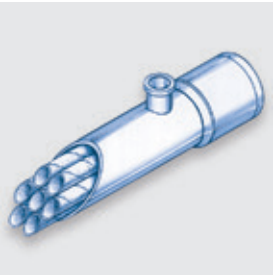
Delivery notes

Customized lengths, widths and surface modification available on request.
Please protect products from exposure to direct sunlight.

Article	Filter medium	Weight per unit area approx. [g/m²]	Air-permeability at 200 Pa [l/(s × m²)]	Maximum tensile force along/across [N/5 cm]	Elongation at maximum tensile force along/across [%]	Thickness approx. [mm]
novatexx 2413	PET	100	300	125/240	10/25	0.19
novatexx 2429	PET/PBT	90	190	240/200	25/30	0.15
novatexx 2430	PP/PE	100	150	200/300	65/65	0.22
novatexx 2431	PP/PE	60	500	110/170	60/85	0.14
novatexx 2432	PP/PE	32	700	60/80	50/70	0.11
novatexx 2442	PET	25	1,800	30/17	10/10	0.06
novatexx 2463	PP/PE	50	2,500	100/85	30/30	0.35
novatexx 2465	PP/PE	30	4,000	65/60	25/30	0.31
novatexx 2470	PP/PE	60	200	200/150	28/28	0.12
novatexx 2471	PP/PE	85	150	270/170	25/30	0.18
novatexx 2473	PP/PE	27	2,100	80/55	20/25	0.11
novatexx 2481	PET/PBT	100	120	270/180	25/30	0.15
novatexx 2483	PET/PBT	70	100	170/110	25/30	0.10
novatexx 2484	PET/PBT	85	60	300/200	25/30	0.12

novatexx | Carrier materials for tubular membranes

Specifications	
Minimum width	15 mm
Roll length	500 m



Viledon® novatexx products for tubular membranes are very well established in the membrane industry. The products are predominantly made of polyester fibers, and offer a high degree of stability. Combined with specially created surface porosity, novatexx products stand for superlative results in terms of membrane production.

There is an option for additionally customizing the products to suit the particular membrane production process involved, by surface modification or by providing an adhesive-compound finish.

All polymers used are suitable for contact with food and beverages.

Delivery notes

Customized lengths, adhesive-compound coating and surface modification available on request.
Please protect products from exposure to direct sunlight.

Article	Filter medium	Weight per unit area approx. [g/m²]	Air-permeability at 200 Pa [l/(s × m²)]	Maximum tensile force along/across [N/5 cm]	Elongation at maximum tensile force along/across [%]	Thickness approx. [mm]
novatexx 2413	PET	100	300	125/240	10/25	0.19
novatexx 2416	PET	205	6	500/550	25/30	0.25
novatexx 2429	PET/PBT	90	190	240/200	23/28	0.15
novatexx 2436	PET	235	4	550/600	20/35	0.27
novatexx 2472	PP/PE	200	90	650/380	25/28	0.42
novatexx 2481	PET/PBT	100	120	270/180	25/30	0.15
novatexx 2482	PET/PBT	220	6	800/380	28/28	0.25

Accessories

Mounting frames, seals, dust removal accessories

Freudenberg Filtration Technologies offer high-quality accessories matched to the entire range of filters. These include mounting frames for air filters, clip-on seals for mounting frames, pressure drop measuring instruments, and an extensive range of accessories for dust removal filters.

Accessories
Mounting frames

Specifications	
Note	ARV = Mounting frame galvanized; ARE = Mounting frame stainless steel

Design features

- High inherent rigidity thanks to special jointing process and large construction depth.
- Centering guides assure optimum positioning of the filter elements.
- Consistent leakproofing thanks to four friction-locked clamping springs, which are fixed in position in “locking noses”.
- The shape of the springs enables the filters to be easily installed and removed, since the free cross-sectional area of the mounting frame is available in full.
- The boreholes for the screws have been selected so as to ensure that mounting frames of different sizes can be combined without any problems.
- An ultra-flexible, silicone-free rubber clip-on seal with a hollow compartment is supplied with the frame. The clip-on seal is weatherproof and thermally stable within a range of approx. −40 °C to +100 °C, with good resistance to alcohols, lyes and weak acids, and very long-lived.
- Depending on the size of the filter wall, and the stresses acting on it, we recommend providing additional reinforcements as a substructure. M 6 × 8 screws should be used for affixing the frames; if reinforcements are provided, then correspondingly longer screws must be selected.

Application category

Designing new air-conditioning systems and modifying existing ones with variable dimensions.

Use

Supporting Viledon® filters with a top frame, e. g. Compact pocket filters or MaxiPleat cassette filters. Panel filters featuring the standard depth of 48 mm can also be installed.

Execution

Non-corroding stainless steel (material 1.4301) or galvanized steel sheeting (U-St 1203), burr-free, inherently rigid, in four sizes. Operationally dependable clamping spring system with four clamping springs and mechanical locking, including rubber clip-on seal enclosed loose. The mitered corners are rendered airtight with a permanently elastic sealing compound.

Article	Article number	Dimensions (W × H × D) [mm]	Suitable for filters in the dimensions [mm, approx.]
ARV-LD NF 1/1 A-Mounting frame galvanized with seal	53373316	610×610×75	1/1 592×592
ARE-LD NF 1/1 A-Mounting frame stainless steel with seal	53373325	610×610×75	1/1 592×592
ARV-LD NF 5/6 A-Mounting frame galvanized with seal	53435027	508×610×75	5/6 490×592
ARE-LD NF 5/6 A-Mounting frame stainless steel with seal	53435039	508×610×75	5/6 490×592
ARV-LD NF 1/2 A-Mounting frame galvanized with seal	53377509	305×610×75	1/2 287×592
ARE-LD NF 1/2 A-Mounting frame stainless steel with seal	53377510	305×610×75	1/2 287×592
ARV-LD NF 1/4 A-Mounting frame galvanized with seal	53435028	305×305×75	1/4 287×287
ARE-LD NF 1/4 A-Mounting frame stainless steel with seal	53435040	305×305×75	1/4 287×287

Clip-on seal

- U-shaped seal profile made of closed-pore EPDM soft rubber with embedded wire clamping band and formed sealing lips plus a hollow compartment made of EPDM cellular rubber; color: black.
- The seal can be installed without needing any tools simply by pressing it in place by hand.
- The clip-on seal is held in position by the clamping effect of the rubber lips; no adhesives or other attachment aids are required.
- The Viledon® clip-on seal is weatherproof and thermally stable in the range from −40 °C to +100 °C, possesses good resistance to alcohols, lyes and weak acids, and is durable. It is not resistant to concentrated acids, chlorinated hydrocarbons, aromatic hydrocarbons, oil and fuel.
- Good paint-compatibility, silicone-free.

Delivery notes

Other seals available on request.

Article	Article number	Length [m]
Clip-on seal AR 2.5 running meters	53453283	2.5
Clip-on seal AR 50 meters roll	53466122	50

Accessories

Accessories for dust removal filters | Support cages + pulse-jet reflectors + displacer units

Support cages

In order to avoid deformations of Viledon® filter cartridges in the case of high pressure drop, they are fitted with reusable support cages.

Pulse-jet reflectors

To optimize the pulse-jet cleaning function, when support cages of the type series 145, 156, 218 and 324 are being used, pulse-jet reflectors can additionally be affixed.

Displacer unit

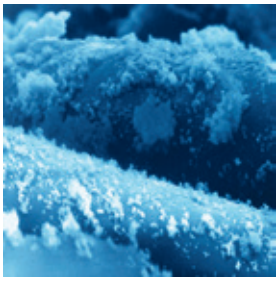
Use of the displacer unit leads to a significant increase in cleaning intensity, which means real savings in terms of operating and capital investment costs. The tank pressure must be restricted to a maximum of 3 bar, or if the maximum tank pressure is retained, the valves must be reduced by one size.

Delivery notes

Customized dimensions are available on request.

Article	Article number	Construction height [mm]	Diameter [mm]	Outer diameter [mm]	Inner diameter [mm]	Material thickness [mm]
Pulse-jet-reflector 145/P946010	53280727	50		79	62	1.0
Pulse-jet-reflector 156/P946013	53296351	50		90	71	1.0
Pulse-jet-reflector 218/P946011	53280134	60		139	92	1.0
Pulse-jet-reflector 324/P946012	53280728	70		210	156	1.0
Support cage 145/0600	53366927	585	84			2.9
Support cage 145/1000	53366928	985	84			2.9
Support cage 145/1200	53366935	1,185	84			2.9
Support cage 145/1500	53366936	1,485	84			2.9
Support cage 156/0600	53366945	585	95			2.9
Support cage 156/1000	53366947	985	95			2.9
Support cage 156/1200	53366946	1,185	95			2.9
Support cage 156/1500	53366949	1,485	95			2.9
Support cage 218/0500	53366951	485	143			2.9
Support cage 218/0600	53366952	585	143			2.9
Support cage 218/1000	53366953	985	143			2.9
Support cage 218/1200	53366954	1,185	143			2.9
Support cage 218/1500	53366955	1,485	143			2.9
Support cage 324/0600	53366956	585	215			2.9
Support cage 324/0660	53366957	645	215			2.9
Support cage 324/1000	53366958	985	215			2.9
Support cage 324/1200	53366959	1,185	215			2.9
Support cage 324/1500	53366960	1,485	215			2.9
Displacer unit 327/0600	53283768	585				
Displacer unit 327/1000	53283767	985				
Displacer unit 327/1200	53281463	1,185				
Displacer unit 327/1500	53283766	1,485				

Accessories for dust removal filters | Filtering Aid FHM 1500



Application

In what application categories does precoating with FHM 1500 offer advantages?

- Plasma / flame and laser-cutting of metals.
- Welding.
- Cleanable "police filter" stages.
- Sticky dusts.
- Coating processes like spray-galvanizing, spray-aluminizing.
- Applications with low raw-gas concentrations.

Why precoating?

- To improve the cleaning characteristics.
- For lower stable pressure drops.

How is precoating performed with FHM 1500?

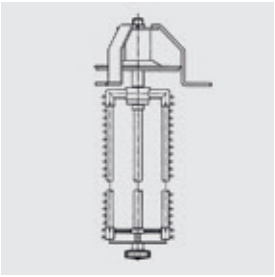
- With Filtering Aid 1500 as a one-off routine on new filter cartridges (approx. 10 g / m^2).
- Precoating duration: Minimum 15 min. compression with process dust to 2,000 – 2,500 Pa.

Important: Precoating and compression without cleaning. In accordance with the relevant DIN safety data sheet, wearing a respirator mask of protection level FFP1 is recommended when handling the FHM 1500.

Article	Article number	Weight [kg]
Filtering Aid 1500	53474679	0.1
Filtering Aid 1500	53474681	0.5
Filtering Aid 1500	53301586	1

Accessories

Accessories for dust removal filters | Rotary nozzle systems



Specifications	
Suitable filter cartridges	Ø = 327 mm, H = 602 mm und 1,202 mm, particularly with small pleat spacings

Application

The ROG 600 F-PL and ROG 1200 F-PL rotary nozzle systems ensure effective cleaning of filter cartridges with Ø = 327 mm, H = 602 mm und 1,202 mm, particularly with small pleat spacings.

Special features

- Lasting operational dependability.
- The nozzle vane is mounted on life-time-lubricated ball-bearings encapsulated on both sides.
- Air distributor pipes and lower supporting rib plus stop plate made from high-quality, glass-fiber-reinforced plastic.
- High accuracy of fit of all joints to assure optimum concentricity.
- Quasi-offline cleaning featuring clean-gas-side stop plate operated by compressed air.
- Additional devices for securing the cartridge not required.

Article	Article number	Operating pressure [bar]	Solenoid valve + air feeding line [,,]	Pulse time [s]	Air-consumption per pulse [standard liters]
Rotary nozzle 1200/F-PL/P946713	8928695	2.5 – 3.5	3/4	0.8 – 1.0	160
Rotary nozzle 600/F-PL/P946712	8925662	3.0 – 4.0	1	1.0 – 1.5	250

Pneumatic components

Correct dimensioning of the cleaning unit is essential for effective, cost-efficient operation of dust removal systems. It is vital to select the right individual components and in the right dimensions too, in order to ensure trouble-free, cost-efficient filtration.

Corrosion-proofed solenoid valves, optimized for maximum air flow rate with the shortest possible pulses, in conjunction with optimally dimensioned compressed-air tanks, ensure gentle and nonetheless effective cleaning of the filter's surface.

Integral valves or corner valves with screw or quick-release locks are matched to the geometry used in the filter cartridges involved.

Ready-for use customized cleaning units, consisting of compressed-air tank, valves and blowing pipes, can be supplied.

Ready-to-connect BUS systems, e. g. for large filter systems, reduce the amount of work involved in installation and connection.

Filter wall connections in various versions and sizes are available for simple installation of the cleaning unit.

Delivery notes

Compressed-air tanks, valves and blowing pipes are individually matched to each filter system, and have to be inquired for separately in each individual case.

Accessories

Accessories for dust removal filters | Cleaning control

Cleaning control systems

- Cleaning control systems governed by pressure drop and time for highest requirements.
- Ultra-simple operator control of adjustments, and optimum visualization of the ongoing values.
- A huge range of different sizes for matching your own filter system.
- Ideal for utilizing the full potential of your filter inserts.
- Display and switching device with electrical and pressure connections for one or two switching points used to monitor the pressure differential. Alarm function, plus switch-on / switch-off functions.

Delivery notes

Customized product variants available on request.

Accessories for dust removal filters | Cartridge protection sleeve

The CPSs are made from a fully synthetic PES filter medium, that excels particularly in terms of very high air-permeability measuring approx. 3,880 l/m²·s and a mean pore size of approx. 50 µm. Fine particles can penetrate the filter medium, while coarse ones are arrested.

Use

For protecting a filter cartridge against irreversible dust deposits of coarse particles or fibrous dusts in the pleat package.

Application category

Arresting fibrous dusts, for example.

Assembly

The CPSs are secured in accordance with the illustration above with a cable tie underneath the flange of the filter cartridge, and cut off approx. 5 – 10 cm above the base of the filter cartridge.

Delivery notes

Cartridge protection sleeves are individually matched to each filter system, and have to be inquired for separately in each particular case.
Cartridge protection sleeves are available for the following cartridge diameters: 145 mm, 218 mm and 327 mm.

Order | order inquiry form
Information | legal notes

Order | order inquiry form

(Please enter all particulars legibly and in block letters.)

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Customer number: _____

Company name: _____

If you do not know your customer number, please state complete contact data

Your contact data:

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Article number	Article designation	Quantity (pcs. / m² / rolls)	Application	Remark

Place, date

Signature

Information | legal notes

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Your "Viledon® product catalogue" editors

Notes on technical specifications

Filter classes
Groups G to F according to EN 779:2012
Groups E to U according to EN 1822:2009

Energy efficiency classes | Energy consumption
According to EUROVENT 4/21
measured at 3,400 m^3/h

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Important notes

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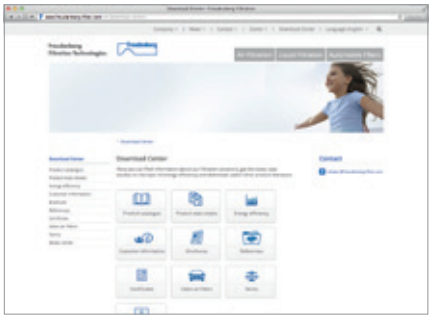

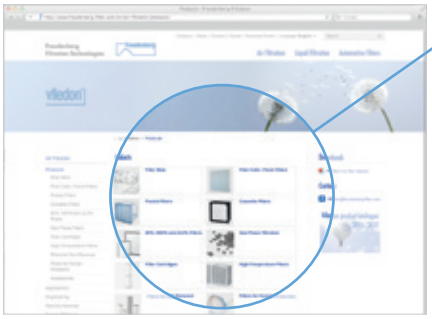

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