

viledon®

PRODUCT CATALOGUE 2017/2018

AIR AND LIQUID FILTRATION



1957 - 2017

WHAT'S NEW AT A GLANCE



AT A GLANCE

We have made choosing the right products even easier for you. Discover the new structure of the catalogue pages at a glance.

P. 4-5



NEW ISO16890 STANDARD

All important information about the new ISO 16890 standard for air filter testing and evaluation has been summarized for you.

P. 14-15



VILEDON FILTER APP

Explore, compare, or directly request your personal product selection while you are on the move – our new app makes it possible. Available to download from February 2017.



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



Always up-to-date



www.freudenberg-filter.de



www.linkedin.com/company/freudenberg -filtration-technologies



www.youtube.com/user/FreudenbergFilter

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viledon®

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SIMPLE AND DIRECT

ACCESS TO ALL IMPORTANT INFORMATION

With our new Viledon® Product catalogue 2017/2018, selecting the right products is simpler than ever. To make it easier for you to get an overview of the different test standards, we have used colors to divide the table fields. We have also placed a QR code next to each product. This takes you straight to the corresponding product page of our website, where you will find plenty of additional detailed information.

Notes on technical specifications

Filter groups according to ISO 16890 Measurements according to ISO 16890 were performed exclusively for our Viledon® filters. The results cannot be transferred to other filters.

Filter classes

Groups G to F according to EN 779:2012 Groups E to U according to EN 1822:2009 / ISO 29463

Energy efficiency classes | Energy consumption according to EUROVENT 4/21, measured at 3,400 m³/h

1

QR codeDirect link to the corresponding product page of the Freudenberg Filteration Technologies website.

How it works.

- Download a QR scanner app (e.g. Scanbot or Barcoo) and open it.
- Ensure adequate lighting. Use the camera to focus on the QR code and wait a few seconds. Within seconds the code with the information behind it will be recognized.
- You will now be automatically forwarded to the respective product page, where you will find comprehensive information.

2 Characteristics

The most important information on the respective product, at a glance.

3 Applications and features

Overview of the most important applications and features. More information via the QR code or on our website

www www.freudenberg-filter.com

4 Gray table columns

The gray columns show generally valid technical characteristics. This data applies to all test standards in the catalogue.

......

5 Dark blue table columns

Technical characteristics according to test standard EN 779:2012 for filter classes G1-F9. Test standard EN 1822:2009 and ISO 29463 for filter classes E10-U17 and E11-E17.

6 Light blue table columns

Technical characteristics according to the new ISO 16890 test standard, from ISO coarse to ISO ePM1.

Green table columns
 Energy efficiency classes according to EUROVENT 4/21.

SAMPLE PAGE

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



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,

- 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.

Features and benefits

- · Consistently high filtration efficiency under all operating conditions thanks to the unique HSN media.
- $\bullet\,$ 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.

	8 1	
	5 6	7
4	EN 779:2012 ISO 16890	EUROVENT 4/2°

	NS	VOLUME	SSURE	SS 12		M	FICIENCY		
ARTICLE	DIMENSIONS (W×L×D) [mm]	NOMINAL VOLUME FLOW [m³/h]	INITIAL PRESSURE DROP [Pa]	FILTER CLASS ACC. TO EN 779:2012	CLASS TO ISO 16890	ISO ePM1	ISO ePM2,5	ISO ePM10	ENERGY EFFICIENCY CLASS*
MV 75 HSN 1/2 V08X25-Z00N-A33	287×592×292	1,500	85	M6	ISO ePM10 75%	33	46	79	
MV 75 HSN 4/6 V08X25-Z00N-A33	402×592×292	2,100	85	M6	ISO ePM10 75%	33	46	79	
MV 75 HSN 5/6 V08X25-Z00N-A33	490×592×292	2,700	85	M6	ISO ePM10 75%	33	46	79	
MV 75 HSN 1/1 V08X25-Z00N-A33	592×592×292	3,400	85	M6	ISO ePM10 75%	33	46	79	
MV 85 HSN 1/2 V08X25-Z00N-B33	287×592×292	1,500	100	F7	ISO ePM2,5 70%	63	72	90	
MV 85 HSN 4/6 V08X25-Z00N-B33	402×592×292	2,100	100	F7	ISO ePM2,5 70%	63	72	90	
MV 85 HSN 5/6 V08X25-Z00N-B33	490×592×292	2,700	100	F7	ISO ePM2,5 70%	63	72	90	
MV 85 HSN 1/1 V08X25-Z00N-B33	592×592×292	3,400	100	F7	ISO ePM2,5 70%	63	72	90	
MV 95 HSN 1/2 V08X25-Z00N-C33	287×592×292	1,500	110	F8	ISO ePM1 75%	79	84	94	
MV 95 HSN 4/6 V08X25-Z00N-C33	402×592×292	2,100	110	F8	ISO ePM1 75%	79	84	94	
MV 95 HSN 5/6 V08X25-Z00N-C33	490×592×292	2,700	110	F8	ISO ePM1 75%	79	84	94	
MV 95 HSN 1/1 V08X25-Z00N-C33	592×592×292	3,400	110	F8	ISO ePM1 75%	79	84	94	
MV 98 HSN 1/2 V08X25-Z00N-D33	287×592×292	1,500	120	F9	ISO ePM1 80%	83	87	95	В
MV 98 HSN 4/6 V08X25-Z00N-D33	402×592×292	2,100	120	F9	ISO ePM1 80%	83	87	95	В
MV 98 HSN 5/6 V08X25-Z00N-D33	490×592×292	2,700	120	F9	ISO ePM1 80%	83	87	95	В
MV 98 HSN 1/1 V08X25-Z00N-D33	592×592×292	3,400	120	F9	ISO ePM1 80%	83	87	95	В

50



60 YEARS OF EXPERIENCE IN FILTRATION

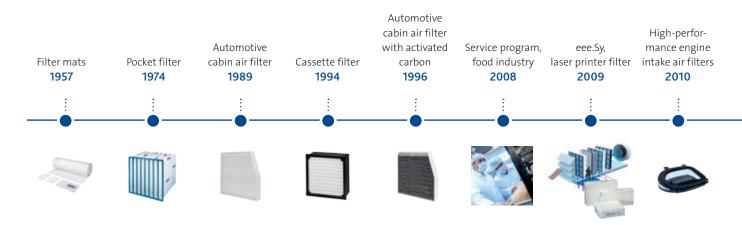
INNOVATIVE FILTER TECHNOLOGY - YESTERDAY, TODAY AND IN THE FUTURE

Freudenberg filters are the product of 60 years of experience, expertise and research in air and liquid filtration. With our Viledon® and micronAir® brands, we offer innovative filtration solutions that set standards and help to improve the quality of life. Yesterday, today and in the future.

On the occasion of our 60th anniversary, we would like to thank you, our customers, business partners and employees for the trust you have placed in us and for the excellent cooperation that has enabled so many joint projects and successes.

FREUDENBERG HAS DECADES OF EXPERTISE IN FILTRATION

viledon micronAir





With many of you, we have a long history: a reliable foundation on which to build our common future. That experience gives us the necessary confidence to do the right thing at the right time and equips each of us to meet the challenges of tomorrow.

We will continue to focus on partnership and proximity to our customers, far into the future. With a global production and project management network that extends to more than 30 locations worldwide. For innovative solutions that help to make industrial processes more efficient and sustainably improve the quality of life.

In this spirit and in keeping with our company slogan "INNOVATING TOGETHER", we look forward to our continued successful collaboration and shared growth.

hydroMash metal filter, hydroPack filter cells, hydroMaxx pocket filter, edrizzi® paint mist arrestors, MVP E² plus cassette filter, Gas phase filtration, Filters for Honeycomb/ ChemWatch NEXX sinTexx plus filter cartridges, air purifiers, versacomb online monitoring DryPleat filter plates, filter bags eMaxx cassette filter water treatment technology system micronAir® blue 2011 2012 2013 2014 2015 2016

Honeycomb module,

SUPERIOR FILTRATION SOLUTIONS

FOR A BETTER QUALITY OF LIFE

The provision of clean air and pure liquids is one of the major challenges that our society faces today and will increasingly face in the future. Freudenberg Filtration Technologies makes an important contribution to this and develops convincing filtration solutions that make industrial processes more economical, save resources, protect people and the environment, and thus contribute to an improvement in 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. As filter experts, 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.

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 around 40 percent of total consumption. In clean-rooms, it can be as high as 80 percent. 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 CO₂ emissions. The new EUROVENT guideline on energy efficiency classification, EUROVENT 4/21, in which Freudenberg Filtration Technologies was closely involved, provides a first point of reference when choosing energy-efficient Viledon® products. The construction of the entire filtration system is crucial and you can count on our expert advice to provide guidance in this area.

Numerous case studies have shown that our customers make a valuable contribution to energy saving and climate protection by using our filtration solutions. For more information, visit our website:



www.freudenberg-filter.com







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 represents 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 sector we develop innovative preventive healthcare concepts for interiors and sensi-

tive 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.

Example main areas of expertise

- · Air pollution control
- Cabin air filters
- Corrosion control
- Diesel exhaust filters for mining vehicles
- Engine intake air filters

- Filter for off-road and agricultural vehicles
- Food and beverage industry
- Gas turbines and compressors
- Hospitals and educational facilities
- Liquid and membrane filtration
- Offices and living rooms
- Pharma industry and cleanrooms
- Surface treatment
- Water solutions



A BOX FOR PAINT MIST SEPERATION

FREUDENBERG ACQUIRES DISTRIBUTION RIGHTS FOR EDRIZZI

edrizzi® is a patented system for paint mist separation in the area of surface technology. In 2016, Freudenberg Filtration Technologies secured the exclusive, worldwide distribution rights from Brainflash Patententwicklungs GmbH for the automotive and supplier industry, thus completing our portfolio of multi-stage filter systems.





Saves time and reduces costs. Inside the inconspicuous cardboard box is an interlaced system of edges and openings through which the paint mist is sucked. The size and construction of the absorption surface allow a capacity of up

to 25 kg with a separation efficiency of 97 percent. This makes edrizzi® the perfect pre-separator in multi-stage filter systems for modern dry separation.

The boxes offer many other advantages for coating companies in particular. Once saturated, the paint mist arrestors can be individually replaced. Depending on the type of system, this can even be done without having to stop the process. The filter boxes with the dried paint can be cheaply disposed via incineration plants.

Dry separation is economically superior to wet separation for a number of reasons. For a start, no water is needed for overspray separation and there is no requirement for time-intensive cleaning and paint sludge removal. Once the changeover has been made, expensive coagulation and defoaming chemicals also become a thing of the past. In addition to time saving and reduced costs, a conversion carried out

by Freudenberg Filtration Technologies will rapidly repay the investment. Plenty of good reasons to launch a successful, cooperative future together with Freudenberg Filtration Technologies and edrizzi®.

The ideal paint mist arrestor for every kind of application

- edrizzi® Vario medium: for the majority of all surface materials
- edrizzi® Vario fine: for high-speed rotational bells, very finely atomized solvent-based coatings and nano paints
- edrizzi® Vario coarse: for applications where a paint cake forms on the front of the edrizzi® medium and the maximum possible service life cannot be achieved



CLEAN AIR AT LOWER COST

THE NEW MVP E2 PLUS CASSETTE FILTER

Significant savings for ventilation systems. With their very low pressure differences, the new generation of Viledon® MVP E² Plus cassette filters combine low operating costs with the highest air quality. Thanks to the increase in energy efficiency, up to 30 percent of electricity costs can now be saved when operating filter systems with frequency-controlled fans.



These gains are achieved by the new filtration medium made from filter-optimized microglass-fiber paper. The filters are characterized by extremely low pressure difference values with a simultaneously high dust-holding capacity. The resulting long filter life extends change intervals and contributes to the economic efficiency of the MVP E² Plus.

Viledon® MVP E² Plus cassette filters of classes F8 and F9, ISO ePM1 85% and ISO ePM1 60% are used in the supply, exhaust and recirculation filtration of air-conditioning systems in the food and beverage industry, office buildings, production halls, airports, libraries, museums, laboratories, hospitals and more. They offer impressive performance over their entire operational life in terms of dust penetration prevention as well as resistance to pressure surges.

The construction of the filter enables simple and safe handling, making installation quick and easy. Viledon® MVP E² Plus filters are also microbiologically inactive and fulfill all the criteria of the VDI guideline 6022 "Hygiene requirements for HVAC systems and devices". The entire filter element is free from metals and halogens, corrosion-free, fully washable and consequently easily disposable.



Thanks to the integrated plug system, filters of different classes and depths can be combined in a positive fit by simple plug-on. In this way, a further filter stage can be inserted without modifications.



COUNTERING CORROSIVE GASES

USING ACTIVE CARBON AGAINST CORROSIVE GASES IN THE PETROCHEMICAL INDUSTRY

Freudenberg Filtration Technologies sets standards in corrosion protection with a new technology. Viledon® Honeycomb is the name of the new modules and system solutions that ensure operational reliability wherever corrosive harmful gases occur, which can damage sensitive electronic devices and systems.

Viledon®
Honeycomb module

Numerous corrosive gases, such as hydrogen sulfide, sulfur oxides and ozone, cause corrosion in electronic components. The negative consequences extend to efficiency losses in processes, additional maintenance and expensive repairs, as well as unscheduled downtime.

Alongside their performance and reliability, Viledon® Honeycomb modules offer additional advantages. Pressure loss as air passes through the modules is extremely low, which means that they work particularly economically and energy-efficiently. Reminiscent of a honeycomb, their compact design also saves space.

This innovative filtration technology is used in various applications and areas in refineries, petrochemical plants, power distribution centers, paper factories, wastewater treatment plants, museums, archives, hospitals, data centers, break rooms and laboratories, as well as in office and industrial rooms.

HIGH-QUALITY DRY SEPARATION WITH HIGH SAVINGS POTENTIAL

NEW DRYPLEAT AND DRYPLEAT NANO FILTER PLATES

With the new Viledon® DryPleat and DryPleat nano filter plates, Freudenberg Filtration Technologies offers the ideal solution for dry separation of paint overspray using stone powder. Thanks to their outstanding filter technology, the filter plates improve process stability and offer enormous potential savings compared to sintered lamella filters. Viledon® DryPleat and DryPleat nano reduce energy costs by more than 50 percent and compressed air consumption by around 30 percent.

The maximum process reliability of both silicon-free filter plates is ensured by their robust construction and excellent cleanability. Due to low flow resistance over a long period of time, users can access larger power reserves of their system with a longer runtime.

Viledon® DryPleat and DryPleat nano filter plates

Compared to the DryPleat filter plate, the DryPleat nano is characterized by its high-quality nanofiber technology with a three-layer structure. This further reduces pressurized air resistance and thus allows even longer running times. Common to both filter plates is their lowweight, stable design. This greatly simplifies handling during filter plate replacement.



Advantages of dry separation compared to conventional wet leaching systems

- Water is not required for overspray separation
- Expensive paint sludge disposal as special waste is not required
- Cost- and time-intensive paint sludge dispensing is no longer required
- The use of chemicals (coagulants, defoamers and bactericides, etc.) is dispensed with
- Electrical cabinet corrosion is reduced
- Maintenance costs for pumps are eliminated
- Plant cleaning costs are reduced

4

MAXIMUM PERFORMANCE IN HUMID AND MOIST CLIMATES

VILEDON HYDROMAXX – THE PRE-FILTRATION MULTI-TALENT

A moist climate, as is the case in coastal areas or in countries with periodic heavy rains such as India or China, poses a challenge for all power plant operators. The high humidity and the salt content accelerate system and plant corrosion. With Viledon® hydroMaxx, Freudenberg Filtration Technologies has launched a new, water-repellent pocket filter that enables supply air filtration systems for gas turbines and compressors to be designed to precisely meet the local ambient conditions.



Viledon® hydroMaxx pocket filter

Outstanding pre-filtration with excellent water-repellent properties. The impressive performance of the Viledon® hydroMaxx is based on a front-side drainage effect, in which water droplets on the inflow side form into larger drops before dripping off the outside of the filter pockets. As a result, downstream filter stages remain dry, ensuring excellent dust separation and long filter life.

In addition, the new pocket filter enables a wide variety of multi-stage supply air system solutions to be constructed in a confined space and without the need for expensive rebuilding. Thanks to the self-supporting, integrated plastic support cage and the unique Viledon® module system, Viledon® hydroMaxx can be easily combined with other filter stages into a compact 2-in-1 filtration solution. For maximum filtration performance, perfectly adapted to individual requirements.

Coalescer pre-filters for optimum protection

Viledon® hydroPack: for pre-filtration of gas turbines and compressors in locations with high humidity. Equipped with a water barrier, it provides increased protection and longevity for the subsequent filter stages.

Viledon® hydroMesh: metal filter with wire mesh. Used as a pre-filter in very dusty, humid environments. Particularly suitable for Pulse-Jet filter cartridges as well as coarse dust pre-filters for static filter systems.





Viledon® hydroPack and hydroMesh

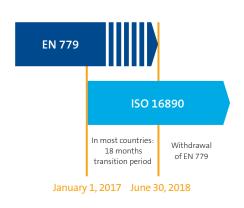


TARGETED SELECTION OF AIR FILTERS

THE NEW ISO 16890 STANDARD MAKES IT POSSIBLE

The new test standard ISO 16890 for filter testing and assessment replaces EN 779 as of January 2017, with a transition period of 18 months. This new method for the evaluation of air filter elements represents a paradigm shift. In future, filter efficiencies will be determined with regard to the particulate classes PM1, PM2,5 and PM10, which are also used as evaluation parameters by the WHO (World Health Organization) and environmental authorities. Based on these benchmarks, users will in future be able to more precisely select filters according to their individual requirements.

As of January 2017, the new test standard ISO 16890 for filter testing and assessment replaces the previous standard EN 779 and will have sole validity from the middle of 2018 onwards. This happens with a transitional period of 18 months. During this period both standards can exist in parallel. It is possible that countries withdraw the EN 779 standard with immediate effect. In this case, ISO 16890 replaces EN 779 transition-free. The United Kingdom and The Netherlands, for instance, have already withdrawn EN 779 at the beginning of 2017.



ISO 16890 enables targeted selection

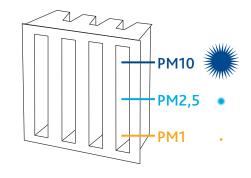
Under the previous test standard EN 779, the efficiency of a filter was evaluated using ASHRAE dust – but only and exclusively for the particle size 0.4 μm . This is one of the main criticisms of classification according to EN 779, because in reality there is a much broader range of particle sizes.

The new ISO 16890 standard reproduces real conditions much more closely and enables the user to make a targeted selection based on individual requirements. In contrast to EN 779, ISO 16890 takes into account a wide range of particle sizes between 0.3 μ m and 10 μ m. Using this particle spectrum, separation rates for the fine dust fractions PM1, PM2,5 and PM10 are determined.

CONSIDERATION OF PARTICLE SIZES ACCORDING TO EN 779 AND ISO 16890

According to EN 779

0.4 μm



According to ISO 16890

Filter groups rather than filter classes

According to the new ISO standard, filters are divided into four groups. If a filter retains at least 50 percent of the particles of a fine dust category, it is assigned to that group. In other words, if a filter separates more than 50 percent of PM1 particles, it is grouped as an ISO ePM1 filter.

In addition, the respective degree of separation is indicated in rounded 5% steps. Classes in the true sense meant by EN 779 or ASHRAE 52.2 will no longer exist. Alongside fine dust filters, the new ISO standard also evaluates coarse dust filters as "ISO coarse". These are filters that separate less than 50% PM10.

GROUP CLASSIFICATION TO ISO 16890									
$ePM_{1,min} \ge 50\%$									
$ePM_{2,5,min} \ge 50\%$									
ePM10 ≥ 50 %									
ePM10 < 50%									

Comparing the EN 779 and ISO 16890 standards. What has changed for users?

what has changed for users:	
EN 779 – UP TO NOW	ISO 16890 – IN THE FUTURE
CLOSENESS TO REALITY	
Determining average efficiency/arrestance after loading with synthetic test dust in at least 5 individual steps	 Measuring fractional efficiencies when new
→ Average of several measurements at 0.4 microns	 2. Measuring fractional efficiencies after 24 hours of IPA treatment ↓ 3. Calculating average fractional efficiencies → Calculating efficiency ePMx
→ Distant from reality	→ Equivalent to real performance
FILTER EVALUATION	
→ Exclusively particle size 0.4 µm	→ Particle size spectrum from 0.3–10 µm
FILTER PERFORMANCE	
Distinction according to filter classes rather than particle filtration performance	Filter performance is determined according to particulate matter fractions PM10, PM2,5 and PM1
→ No detailed info about particle size	→ Detailed info about various particle sizes
IN TERMS OF THE APPLICATION	
No classification of particulate matter fractions for specific conditions of use	Specific application conditions are taken into account (e.g. general air conditioning versus medium-risk hygiene areas)
→ Filters chosen without regard to application	→ Application is taken into account when choosing a filter
FILTER CHARACTERISTICS	
 Taken into account: Average gravimetric arrestance Average efficiency (based on 0.4 micron particles) Minimum efficiency (F 7 to F9) Dust-holding capacity for synthetic test dust (ASHRAE) Δp 	 Taken into account: 1. Efficiency based on PM10, PM2,5 and PM1 2. Dust-holding capacity for synthetic test dust (ISO A2 / AC Fine) 3. Initial gravimetric arrestance 4. Δp
CLASS DIVISION	
Filter classes G 2 to F 9	Four ISO groups ISO ePM1 ISO ePM2,5 ISO coarse

Simply scan the QR code to find out more about the ISO 16890 video or visit our website at



www.freudenberg-filter.com/en/iso16890



MAXIMUM PURITY

FOR LIQUID FILTRATION

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







For food and beverage filtration

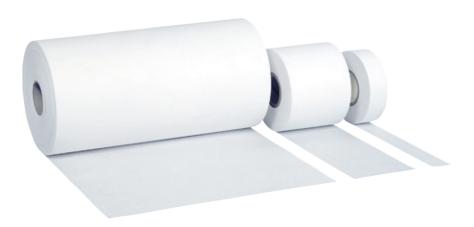
Under the hydrotexx brand, Freudenberg Filtration Technologies develops filter mats consisting of 100 percent food-grade fibers. This makes them ideal for the filtration of food, hot and cold beverages as well as drinking water. Physiologically harmless materials in combination with the most modern production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

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 medium 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.

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 pluratexx, we have developed filter media that can perfectly fulfill all these demanding requirements.



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 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.

Your benefits at a glance

- 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 generators 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 cleanroom 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 precious water resources is becoming increasingly important. With Aquabio system technology, Viledon® Water Solutions has positioned itself as an expert development partner and supplier of membrane bioreactor (MBR) systems that enable economic recycling of process water and wastewater.

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 difficulty.

Gas phase filtration systems

Toxic gases, which occur in many industrial processes, can cause corrosion. Even small disturbances of electronic components can 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 and data centres 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 corrosive 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.

Maximum safety in daily use

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.



















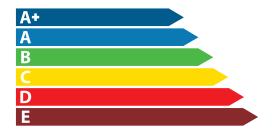






ENERGY USE MADE VISIBLE

ENERGY EFFICIENCY CLASSIFICATION TO EUROVENT 4/21



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 percent of the total consumption; in cleanrooms, it can be as high as 80 percent.

Energy-efficient air filters at a glance

Measures for energy saving in HVAC systems involve the conversion to or use of high-efficiency, frequency-controlled fans. A comparatively simple and effective method for significant energy cost reduction is the use of energy-efficient air filters. To make it easier for users to choose the most energy-efficient air filters, the experts at Freudenberg Filtration Technologies developed their own energy efficiency classification system several years ago.

Based on this work, the European Association of Manufacturers of Air-Conditioning and Drying Systems EUROVENT developed a European energy efficiency classification system for air filters, which is described in the EUROVENT Directive 4/21. Class A represents very good energy efficiency values, class E very poor.

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 m³/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 the classification of air filters into energy efficiency classes.



Energy efficiency classification will be adapted to the new ISO 16890 as part of EUROVENT certification at the beginning of 2018.

	FILTER CLASSES ACCORDING TO EUROVENT 4/21 CLASSIFICATION FOLLOWING LABORATORY TESTING FOR ANNUAL ENERGY CONSUMPTION AT 3,400 m³/h												
FILTER CLASS*	M 5	M 6	F7	F8	F9								
MW**	-	_	≥35%	≥55%	≥70%								
	$M_G = 2$	50 g ***		$M_F = 100 g^{***}$									
A+	0 – 450 kWh	0 – 550 kWh	0 – 800 kWh	0 – 1,000 kWh	0 – 1,250 kWh								
А	> 450 - 600 kWh	> 550 – 650 kWh	> 800 - 950 kWh	> 1,000 - 1,200 kWh	> 1,250 - 1,450 kWh								
В	> 600 - 700 kWh	> 650 - 800 kWh	> 950 - 1,200 kWh	> 1,200 - 1,500 kWh	> 1,450 - 1,900 kWh								
С	> 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

A PARTNERSHIP FOR YOUR LONG-LASTING SUCCESS

WITH VILEDON AT YOUR SIDE



Your direct route to us

To find the customer service contact details for your region, please visit our website

www 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 aspect. 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 highquality accessories, for example:

- Mounting frames of stainless steel or galvanized sheet steel with force-locking press-in spring system and rubber
- 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
- Particulate filter accessories: ceiling air outlets, hood modules

OVERVIEW OF FILTER CLASSES

If you are looking for the ISO 16890, please note that it is not possible to directly transfer ISO 16890 onto the current EN 779 filter classes. This is due to their different methods of evaluation. We would be pleased to provide you with further information in a personal consultation.



@ iso16890@freudenberg-filter.com

	TER CATION			PARTICULATE	AIR FILTERS FOR GE	ENERAL VENTILATIO	N							
T	EST	EN 779:2012 EVALUATION OF FILTER PERFORMANCE AT 0.944 m³/s (OR NOMINAL AIR FLOW)												
SUITABLE FOR	GROUP DESIGNATION	FILTER CLASSES	TEST DUST	TEST AEROS OL	FINAL PRESSURE DROP [Pa]	AVERAGE ARRESTANCE (A,,) COMPARED WITH TEST DUST [%]	AVERAGE EFFICIENCY (E_,) FOR PARTICLES OF 0.4 MICRONS [%]	MINIMUM EFFICIENCY FOR PARTICLES 0.4 MICRONS [%]						
st		G1			250	50≤A _m <65		-						
Coarse dust	G	G2			250	65 ≤ A _m < 80		_						
Coars		G3			250	80≤A _m <90		-						
		G 4								250	90 ≤ A _m		_	
	Μ	M 5	ASHRAE dust		450	-	$40 \le E_m < 60$	_						
ust		M 6		DEHS	450	_	60 ≤ E _m < 80	_						
Fine dust		F7		(Di-Ethyl-Hexyl- Sebacate)	450	-	80 ≤ E _m < 90	35						
证	F	F8		0.2-3.0 μm	450	_	90 ≤ E _m < 95	55						
		F9			450	-	95 ≤ E _m	70						
ust	E				EPA: Efficie	nt Particulate Air filt	eer							
Suspended dust	Н				HEPA: High Effi	ciency Particulate Ai	r filter							
Sus	U				ULPA: Ultra L	ow Penetration Air f	ilter							

EPA, HEPA AND ULPA										
EN 1822:2009 (PARTS 1 TO 5) EVALUATION OF FILTER PERFORMANCE AT NOMINAL AIR FLOW										
FILTER CLASSES	TEST AEROSOL	INTEGRAL VALUE OF EFFICIENCY IN THE MPPS [%]	INTEGRAL VALUE OF PENETRATION IN THE MPPS [%]	LOCAL VALUE OF EFFICIENCY IN THE MPPS [%]	LOCAL VALUE OF PENETRATION IN THE MPPS [%]	FILTER CLASSES				
E10		≥85	≤15	_	_	_				
E11		≥95	≤ 5	-	-	ISO 15 E				
E12	DEHS	≥99.5	≤ 0.5	_	_	ISO 25 E				
H13	(Di-Ethyl- Hexyl-	≥99.95	≤0.05	≥99.75	≤0.25	ISO 35 H				
H14	Sebacate) MPPS 0.1–0.3 μm	≥99.995	≤0.005	≥99.975	≤ 0.025	ISO 45 H				
U15		≥99.9995	≤0.0005	≥99.9975	≤0.0025	ISO 55 U				
U16		≥99.99995	≤0.00005	≥99.99975	≤0.00025	ISO 65 U				
U 17		≥99.999995	≤0.000005	≥99.9999	≤0.0001	ISO 75 U				

AIR FILTRATION



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. We offer a range of variants for use in general ventilation and air-conditioning technology as well as for the painting industry.



FILTER MATS | COARSE DUST





SPECIFICATIONS	
Filter medium	P15 and T3 / 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	F1 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

Features and benefits 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.

P15 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 P15 series features the familiar Viledon® filter mats

- P15/150 S
- P15/350 S
- P15/500 S

Features and benefits of the P15 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, P15 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.

T3/290 S

This ultra-efficient G4 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.

EN 779:2012 ISO 16890

ARTICLE	ARTICLE NUMBER	DIMENSIONS (W×L) [mm/m]	THICKNESS APPROX. [mm]	WEIGHT PER UNIT AREA APPROX. [g/m²]	NOMINAL MEDIA VELOCITY [m/s]	DUST HOLDING CAPACITY (ASHRAE/250 Pa)	INITIAL PRESSURE DROP [Pa]	FILTER CLASS ACC. TO EN 779:2012	CLASS TO ISO 16890	INITIAL GRAV. ARRESTANCE [%]
PSB/145 S 40/2000	7833647	2,000/40	10	120	2	600	22	G2	ISO coarse 30%	30
P15/150 S 40/2000	8039227	2,000/40	8	100	2	600	30	G2	ISO coarse 30%	33
PSB/275 S 30/2000	53375688	2,000/30	15	180	1.5	700	22	G3	ISO coarse 45%	45
P15/350 S 30/2000	8039427	2,000/30	14	200	1.5	600	30	G3	ISO coarse 55%	57
PSB/290 S 20/2000	8019407	2,000/20	20	300	1	750	22	G4	ISO coarse 60%	62
P15/500 S 20/2000	8040248	2,000/20	20	350	1	600	30	G4	ISO coarse 75%	75
T3/290 S 40/2000	8105365	2,000/40	8	200	0,25	250	14	G4	ISO coarse 90%	90

Subject to technical changes.





FILTER MATS | FINE DUST

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	SO
Fire class	F1 acc. to DIN 53438



A3/300S

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.

Features and benefits

- 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 μ m and thus provides a high degree of protection against paintwork damage.

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.

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.

Features and benefits of the PA series

- PA/500-10 and PA/560 G-10 assure practically 100% arrestance of particles > 10 μ m, 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 μ m, 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.

EN 779:2012 ISO 16890

	NUMBER	SP	APPROX.	R UNIT OX.	MEDIA	00 Pa)	PRESSURE	SSURE	SS 12*		PARTICULA	ATE MATTER E [%]	EFFICIENCY
ARTICLE	ARTICLE NU	DIMENSIONS (W×L) [mm/m]	THICKNESS [mm]	WEIGHT PEI AREA APPRO [g/m²]	NOMINAL / VELOCITY [m/s]	DUST HOLDING CAPACITY (AC FINE/300 P: [g/m²]	INITIAL PRE DROP* [Pa]	FILTER CLASS ACC. TO EN 779:2012*	CLASS TO ISO 16890	ISO ePM1	ISO ePM2,5	ISO ePM10	
A3/300 S 20/2000	8422288	2,000/20	20	300	0.5	550	20	M5	ISO ePM10 50%	5	12	52	
ProfAir N 20/2000	53350549	2,000/20	23	545	0.5	550	30	M5	ISO ePM10 55%	11	17	55	
PA/500-10 20/2000	7802106	2,000/20	25	500	0.5	680	25	M5	ISO ePM10 50%	10	15	50	
PA/560 G-10 20/1600	53253198	1,600/20	25	580	0.5	590	30	M5	ISO ePM10 55%	11	17	55	
PA/560 G-10 20/2000	7802206	2,000/20	25	580	0.5	590	30	M5	ISO ePM10 55%	11	17	55	
PA/560 G-10 22/1600	8887232	1,600/22	25	580	0.5	590	30	M5	ISO ePM10 55%	11	17	55	
PA/560 G-10 22/2000	8238130	2,000/22	25	580	0.5	590	30	M5	ISO ePM10 55%	11	17	55	
PA-5 micron BK 20/2000	53296957	2,000/20	25	650	0.5	470	55	M6	ISO ePM10 65%	7	19	65	

subject to technical changes

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 as 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.

Features and benefits

- 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.

EN 779:2012 ISO 16890

ARTICLE	ARTICLE NUMBER	FILTER MEDIUM	DIMENSIONS (W×L) [mm]	NOMINAL VOLUME FLOW [m²/h]	PRESSURE DROP [Pa]	FILTER CLASS ACC. TO EN 779:2012	CLASS TO ISO 16890	INITIAL GRAV. ARRESTANCE [%]
LH 111 MIT P15/150 S 610/610	53263665	P15/150 S	610×610	2,600	25	G2	ISO coarse 30%	33
LH 101 MIT PSB/290 S 610/610	53263659	PSB 290 S	610×610	1,300	35	G4	ISO coarse 60%	62
LH 101 MIT PSB/290 S 700/500	53263662	PSB 290 S	700×500	1,250	35	G4	ISO coarse 60%	62
LH 101 MIT PSB/290 S 625/500	53263658	PSB 290 S	625×500	1,100	35	G4	ISO coarse 60%	62
LH 101 MIT PSB/290 S 500/500	53263660	PSB 290 S	500×500	720	35	G4	ISO coarse 60%	62
LH 101 MIT PSB/290 S 500/400	53263661	PSB 290 S	500×400	900	35	G4	ISO coarse 60%	62
LH 103 MIT P15/500 S 610/610	53253599	P15/500S	610×610	1,300	35	G4	ISO coarse 75%	75
LH 103 MIT P15/500 S 500/500	53000301	P15/500S	500×500	900	35	G4	ISO coarse 75%	75
LH 103 MIT PA/560 G-10 500/500	53430605	PA/560 G-10	500×500	450	55	M5	ISO ePM 10 55%	90

Subject to technical changes.



ROLL FILTERS | COARSE DUST

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/m ²
Gravimetric efficiency	80% (EN 779)
Weight	250 g/m ²



Application

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

Features and benefits

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 behaviour

Viledon® filter media meet the stringent requirements of fire class F1 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.

EN 779:2012 ISO 16890

ARTICLE	ARTICLE NUMBER	THICKNESS APPROX. [mm]	FILTER CLASS ACC. TO EN 779:2012	CLASS TO ISO 16890	INITIAL GRAV. ARRESTANCE [%]
LH R 260/810	53329934	8	G3	ISO coarse 40%	43
LH R 260/838	53329914	8	G3	ISO coarse 40%	43
LH R 260/1110	53329936	8	G3	ISO coarse 40%	43
LH R 260/1143	53329915	8	G3	ISO coarse 40%	43
LH R 260/1250	53361322	8	G3	ISO coarse 40%	43
LH R 260/1410	53329938	8	G3	ISO coarse 40%	43
LH R 260/1448	53329916	8	G3	ISO coarse 40%	43
LH R 260/1710	53329940	8	G3	ISO coarse 40%	43
LH R 260/1753	53329917	8	G3	ISO coarse 40%	43
LH R 260/2010	53355829	8	G3	ISO coarse 40%	43
LH R 260/2058	53329918	8	G3	ISO coarse 40%	43

Subject to technical changes.

www.freudenberg-filter.com

PAINT MIST ARRESTORS, GLASS-FIBER





SPECIFICATIONS	
Fillter medium	Glass-fibers
Thermal stability	up to at least 80 °C
Fire behaviour	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.

Features and benefits 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).

Delivery notes

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

- 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 $^{\circ}\text{C}.$

Features and benefits 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.

ARTICLE	DIMENSIONS (W×1) [mm/m]	THICKNESS APPROX. [mm]	WEIGHT PER UNIT AREA APPROX. [g/ m²]	INITIAL PRESSURE DROP [Pa]	PAINT MIST ARRESTANCE EFFICIENCY [%]	PAINT HOLD- ING 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

Subject to technical changes.

EDRIZZI SYSTEMS

PAINT MIST ARRESTORS



Made from fire retardant corrugated board, the patented edrizzi® paint mist separators have a capacity of up to 25 kg with a separation efficiency of up to 97%. The system saves both time and costs. The paint mist separators can be quickly replaced and disposed of at low cost in incineration plants. They complete our portfolio of multi-stage filter systems.



EDRIZZI SYSTEMS

PAINT MIST ARRESTORS





SPECIFICATIONS	
Paint storage capacity	25 kg
Arrestance for paint mist	up to 97%
Nominal air flow	500-750 m ³ /h
Thermal stability	80 °C
Fire class	B1 according to DIN 4102 – very flame retardant
Fire class	F1 according to DIN 53438
Moisture resistance	up to 70% rel. hum.

Application

edrizzi® paint mist arrestors allow high-quality dry separation in spray booths. They are perfect as a prefilter in multistage filtration systems by Freudenberg Filtration Technologies.

Features and benefits

- The simple but innovative design of these patented paint mist arrestors provides paint shops with cost-effective, efficient dry separation with a high paint storage capacity.
- The handy boxes are made from fire-retardant corrugated cardboard. This guarantees a safe and stable application.
- The majority of the overspray is collected in the front third of the paint mist arrestor. The guidance systems deep inside ensure optimum arrestance efficiency and are designed not to become saturated too fast.
- edrizzi® paint mist arrestors reduce noise levels in the spraying area by 15 to 20 dB.
- · The dried paint can be disposed of cost-effectively.

Special features

There is a suitable edrizzi® paint mist arrestor for every type of paint and application:

- The edrizzi® Vario medium is the solution for the majority of surface materials.
- The edrizzi® Vario fine is used for applications in which the edrizzi®
 Vario medium reaches its limits in terms of arrestance efficiency.
 Application examples include high-rotation bells, very finely atomized solvent coatings and nano coatings.
- The edrizzi® Vario coarse is the solution for applications in which paint
 cakes build up on the inlet side of the edrizzi® medium, preventing
 attainment of the maximum service life.

Note

When using the product for its intended purpose as a paint mist arrestor, it is necessary to comply with the safety regulations for avoiding self-ignition. See reverse side of this data sheet.

You can find assembly instructions on our YouTube channel

www

www.youtube.com/user/FreudenbergFilter

Delivery notes

edrizzi[®] paint mist arrestors are delivered unassembled in lots of 20 pieces, allowing cost-effective transport and storage. Inner and outer box are delivered separately.

ARTICLE	ARTICLE NUMBER	DIMENSIONS (W×H×D) [mm]	INITIAL PRESSURE DROP [Pa]	WEIGHT, EMPTY [kg]
edrizzi Vario coarse	53534365 + 53534347	485×485×495	95	1.6
edrizzi Vario medium	53534365 + 53534348	485×485×495	185	1.9
edrizzi Vario fine	53534365 + 53534364	485×485×495	250	2.2
edrizzi Vario S coarse	53534344 + 53534331	485×485×295	33	0.8
edrizzi Vario S medium	53534344 + 53534332	485×485×295	120	1.1
edrizzi Vario S fine	53534344 + 53534333	485×485×295	175	1.4
edrizzi Vario Aufnahmerahmen	53534366	500×500×466	-	
edrizzi Vario S Aufnahmerahmen	53534345	500×500×265	-	

Subject to technical changes



EDRIZZI SYSTEMS

PAINT MIST ARRESTORS

SPECIFICATIONS	
Paint storage capacity	25 kg
Arrestance for paint mist	up to 97 %
Nominal air flow	500-750 m³/h
Thermal stability	80 °C



Application

edrizzi® paint mist arrestors allow high-quality dry separation in spray booths. They are perfect as a prefilter in multistage filtration systems by Freudenberg Filtration Technologies.

Features and benefits

- The simple but innovative design of these patented paint mist arrestors provides paint shops with cost-effective, efficient dry separation with a high paint storage capacity.
- The handy boxes are made from wet strength paper. This guarantees a safe and stable application in areas with strong deviations in relative humidity and in case of intensive loading with water based paints.
- The majority of the overspray is collected in the front third of the paint mist arrestor. The guidance systems deep inside ensure optimum arrestance efficiency and are designed not to become saturated too fast
- edrizzi[®] paint mist arrestors reduce noise levels in the spraying area by 15 to 20 dB.
- The dried paint can be disposed of cost-effectively.

Special features

There is a suitable edrizzi® paint mist arrestor for every type of paint and application:

- The edrizzi® Vario medium is the solution for the majority of surface materials.
- The edrizzi® Vario fine is used for applications in which the edrizzi®
 Vario medium reaches its limits in terms of arrestance efficiency.
 Application examples include high-rotation bells, very finely atomized solvent coatings and nano coatings.
- The edrizzi® Vario coarse is the solution for applications in which paint
 cakes build up on the inlet side of the edrizzi® medium, preventing
 attainment of the maximum service life.

Note

When using the product for its intended purpose as a paint mist arrestor, it is necessary to comply with the safety regulations for avoiding self-ignition. See reverse side of this data sheet.

You can find assembly instructions on our YouTube channel

www

www.youtube.com/user/FreudenbergFilter

Delivery notes

edrizzi® paint mist arrestors are delivered unassembled in lots of 20 pieces, allowing cost-effective transport and storage. Inner and outer box are delivered separately.

ARTICLE	ARTICLE NUMBER	DIMENSIONS (W×H×D) [mm]	INITIAL PRESSURE DROP [Pa]	WEIGHT, EMPTY [kg]
edrizzi Vario hydro coarse	53537032 + 53537030	485×485×495	55	1.6
edrizzi Vario hydro medium	53537032 + 53537031	485×485×495	90	1.9
edrizzi Vario hydro fine	53537032 + 53537206	485×485×495	110	2.2
edrizzi Vario S hydro coarse	53537029 + 53537024	485×485×295	20	0.8
edrizzi Vario S hydro medium	53537029 + 53537026	485×485×295	70	1.1
edrizzi Vario S hydro fine	53537029 + 53537028	485×485×295	105	1.4

Subject to technical changes.

www.freudenberg-filter.com





FILTER CELLS

MP 45 | COARSE DUST





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

Application

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.

Features and benefits 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 noncorroding and fully incinerable.

Delivery notes

Customized dimensions and regionally divergent versions are available on request.

EN 779:2012

ARTICLE	ARTICLENUMBER	FRAME	DIMENSIONS (W×H×D) [mm]	FILTER AREA [m²]	NOMINAL VOLUME FLOW [m³/h]	INITIAL PRESSURE DROP [Pa]	FILTER CLASS ACC. TO EN 779:2012
MP 45 0595x0595x96	53307806	Cardboard	595×595×96	2.0	4,250	60	G3
MP 45 K 0595x0595x96	53408851	Plastic	595×595×96	2.0	4,250	60	G3
MP 45 0595x0595x48	53349216	Cardboard	595×595×48	1.1	4,250	95	G3
MP 45 K 0595x0595x48	53401206	Plastic	595×595×48	1.1	4,250	95	G3
MP 45 0595x0595x96	53307806	Cardboard	595×595×96	2.0	3,400	50	G4
MP 45 K 0595x0595x96	53408851	Plastic	595×595×96	2.0	3,400	50	G4
MP 45 0595x0595x48	53349216	Cardboard	595×595×48	1.1	3,400	75	G4
MP 45 K 0595x0595x48	53401206	Plastic	595×595×48	1.1	3,400	75	G4
MP 45 KTC 0555x0555x092 LKB	53374950	Nonwoven	555×555×92	2.0	3,400	50	G4
MP 45 KTC 0555x0555x092 LD	53386678	Nonwoven	555×555×92	2.0	3,400	50	G4

Subject to technical changes.



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.

energy efficiency

COMPACT | COARSE DUST





SPECIFICATIONS	
Filter medium	Polyester
Recommended final pressure drop	250 Pa
Thermal stability	70 °C
Moisture resistance	100% rel. hum.
Frame	Polyurethane
Fire class	F1 acc. to DIN 53438

Special features of all Compact coarse dust pocket filters

- Progressively structured high-performance nonwovens made from non-breaking synthetic-organic fibers.
- Low pressure difference and a high dust storage capacity guarantee a very long service life and high efficiency of the filter system.
- · Free of glass-fibers.
- · Non-corroding materials.
- · Moisture-resistant up to 100 % rel. humidity.
- Self-extinguishing according to DIN 53438 (fire class F1)
- Microbiologically inactive materials and the design 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 robust PUR front frame.
- Leak-free aerodynamic spacers ensure an optimal flow through the pockets.

Application

- Compact coarse dust pocket filters 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.

Features and benefits 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.
- For applications with extremely high dust quantities, the G 35 SEL with 8 long-pockets is recommended.

Delivery notes

Customized dimensions are available on request.

EN 779:2012 ISO 16890

ARTICLE	ARTICLE NUMBER	DIMENSIONS (W×H×D) [mm]	NUMBER OF POCKETS	FILTER AREA [m²]	NOMINAL VOLUME FLOW [m³/h]	DUST HOLDING CAPACITY (AC FINE/300 PA) [g]	INITIAL PRESSURE DROP [Pa]	FILTER CLASS ACC. TO EN 779:2012	CLASS TO ISO 16890	INITIAL GRAV. ARRESTANCE [%]	PARTICULATE MATTER EFFICIENCY ISO ePM10 [%]
G 35 S 1/1	7515413	592×592×330	5	2.0	3,400	3,000	20	G3	ISO coarse 65%	67	44
G 35 S 5/6	7521289	492×592×330	4	1.6	2,700	2,400	20	G3	ISO coarse 65%	67	44
G 35 S 1/2	7521389	289×592×330	3	1.2	2,000	1,800	20	G3	ISO coarse 65%	67	44
G 35 SL 1/1	7579317	592×592×650	5	4.0	4,250	6,500	30	G3	ISO coarse 60%	64	42
G 35 SL 5/6	7599437	492×592×650	4	3.2	3,400	5,200	30	G3	ISO coarse 60%	64	42
G 35 SL 1/2	7580138	289×592×650	3	2.4	2,500	3,900	30	G3	ISO coarse 60%	64	42
G 35 SL 1/4	7580238	289×289×650	4	1.5	1,500	2,400	30	G3	ISO coarse 60%	63	42
G 35 SE 1/1	8929206	592×592×510	8	4.7	4,250	7,500	40	G3	ISO coarse 65%	66	43
G 35 SEL 1/1	53307071	592×592×650	8	6.2	4,250	9,000	45	G3	ISO coarse 60%	63	41



COMPACT | COARSE DUST

SPECIFICATIONS	
Filter medium	Polyester
Recommended final pressure drop	250 Pa
Thermal stability	70 °C
Moisture resistance	100% rel. hum.
Frame	Polyurethane
Fire class	F1 acc. to DIN 53438
rire class	F1 acc. to DIN 53438



Features and benefits 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 are particularly energy-efficient, thus ensuring reduced energy costs and downsized CO, 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.
- F 45 R in reverse flow design offers the possibility of a prefilter stage on the raw-gas side and therefore the expansion of the filter system.

Delivery notes

Customized dimensions are available on request.

EN 779:2012 ISO 16890

ARTICLE	ARTICLE NUMBER	DIMENSIONS (W×H×D) [mm]	NUMBER OF POCKETS	FILTER AREA [m²]	NOMINAL VOLUME FLOW [m³/h]	DUST HOLDING CAPACITY (AC FINE/300 PA) [g]	INITIAL PRESSURE DROP [Pa]	FILTER CLASS ACC. TO EN 779:2012	CLASS TO ISO 16890	INITIAL GRAV. ARRESTANCE [%]	PARTICULATE MATTER EFFICIENCY ISO ePM10 [%]
F 45 S 1/1	7526134	592×592×330	5	2.0	3,400	1,700	35	G4	ISO ePM10 50%	71	52
F 45 S 5/6	7528456	492×592×330	4	1.6	2,700	1,350	35	G4	ISO ePM10 50%	71	52
F 45 S 1/2	7529267	289×592×330	3	1.2	2,000	1,000	35	G4	ISO ePM10 50%	71	52
F 45 R 1/1*	7526134	592×592×330	5	2.0	3,400	-	35	G4	ISO coarse 70%	70	49
F 45 R 5/6*	7528456	492×592×330	4	1.6	2,700	-	35	G4	ISO coarse 70%	70	49
F 45 R 1/2*	7529267	289×592×330	3	1.2	2,000	-	35	G4	ISO coarse 70%	70	49
F 40 1/1	8256138	592×592×650	5	4.0	4,250	4,400	30	G4	ISO ePM10 50%	71	51
F 40 5/6	8500259	492×592×650	4	3.2	3,400	3,500	30	G4	ISO ePM10 50%	71	51
F 40 1/2	8498114	289×592×650	3	2.4	2,500	2,600	30	G4	ISO ePM10 50%	71	51
F 40 1/4	8500359	289×289×650	4	1.5	1,500	1,650	30	G4	ISO ePM10 50%	71	51
F 45 SEL 1/1	53457509	592×592×650	8	6.2	4,250	5,600	50	G4	ISO coarse 70%	70	48

COMPACT | FINE DUST









SPECIFICATIONS	
Filter medium	Polyester (F 50, T 60)
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 fine dust Compact pocket filters

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.

F 50 und T 60

Application

F 50 and T 60 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 T 60),
- for intake and exhaust air filtration in sophisticated air-conditioning technology (hospitals, laboratories, libraries, museums, airports), plus production facilities and factory halls (especially F 50).

Features and benefits

- T 60 and F 50 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 ${\rm CO_2}$ emissions.

Delivery notes

Customized dimensions are available on request.

EN 779:2012 ISO 16890

EUROVENT 4/21

		SP	OF	4	MO.	.DING 300 Pa)	.DING 800 Pa)	PRESSURE	SS .2			:ULATE M FFICIENC [%]		EFFICIENCY
ARTICLE	ARTICLE NUMBER	DIMENSIONS (W×H×D) [mm]	NUMBER O POCKETS	FILTER AREA [m²]	NOMINAL VOLUME FLOW [m³/h]	DUST HOLDING CAPACITY (AC FINE/300 P: [g]	DUST HOLDING CAPACITY (AC FINE/800 Pa	INITIAL PRE DROP [Pa]	FILTER CLASS ACC. TO EN 779:2012	CLASS TO ISO 16890	ISO ePM1	ISO ePM2,5	ISO ePM10	ENERGY EF CLASS**
F 50 1/1	7581349	592×592×650	5	4.0	4,250	3,200	-	50	M5	ISO ePM10 55%	7	15	58	Α
F 50 5 / 6	7581449	492×592×650	4	3.2	3,400	2,550	-	50	M5	ISO ePM10 55%	7	15	58	Α
F 50 1/2	7582150	289×592×650	3	2.4	2,500	1,900	-	50	M5	ISO ePM10 55%	7	15	58	Α
F 50 1/4	7582250	289×289×650	4	1.4	1,525	1,100	-	50	M5	ISO ePM10 55%	7	15	58	Α
F 50 SE 1/1	53457510	592×592×510	8	4.7	4,250	3,600	-	60	M5	ISO ePM10 55%	7	15	56	Α
F 50 SEL 1 /2 horiz	53473137	592×289×650	8	3.0	2,100	1,600	-	60	M5	ISO ePM10 55%	5	14	56	Α
F 50 S 1/1*	53456360	592×592×330	5	2.0	3,400	1,900	-	65	M5	ISO ePM10 60%	7	18	64	
T601/1	8473449	592×592×650	8	6.2	4,250	3,000	5,000	65	M6	ISO ePM10 60%	8	18	61	Α
T 60 5/6	8474150	492×592×650	4	3.2	2,175	1,600	2,550	65	M6	ISO ePM10 60%	8	18	61	Α
T 60 1/2	8474250	289×592×650	3	2.4	1,600	1,200	1,900	65	M6	ISO ePM10 60%	8	18	61	Α
T 60 1/2 horiz	53471177	592×289×650	8	3.0	2,100	1,450	2,200	65	M6	ISO ePM10 60%	8	18	61	Α
T601/4	8474350	289×289×650	4	1.5	975	750	1,150	65	M6	ISO ePM10 60%	8	18	61	Α
T 60 OG	53430681	618×578×605	8	5.5	3,925	2,700	4,600	65	M6	ISO ePM10 60%	8	18	61	Α

also available as reverse-flow version

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







COMPACT | FINE DUST

SPECIFICATIONS	
Filter medium	Polyolefin
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



• In the intake air systems of gas turbines, T 60 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

T 90 PRE with proven jetSpin technology are used in intake air filtration for gas turbines and turbocompressors onshore and offshore.

Features and benefits

 In intake air filtration for gas turbines, T 90 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.

T 90, MF 90 and MF 95

Application

T 90, MF 90 and MF 95 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 (MF 90 and MF 95),
- as downstream "police filters" in dust removal systems.

Features and benefits

- T 90, MF 90 and MF 95 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.

Delivery notes

Customized dimensions are available on request.

EN 779:2012 ISO 16890

EUROVENT 4/21

		S	ш	4	ow	00 Pa)	.DING 800 Pa)	SSURE	55			CULATE N FFICIENC [%]		EFFICIENCY
ARTICLE	ARTICLE NUMBER	DIMENSIONS (W×H×D) [mm]	NUMBER OF POCKETS	FILTER AREA [m²]	NOMINAL VOLUME FLOW [m³/h]	DUST HOLDING CAPACITY (AC FINE/300 P: [g]	DUST HOLDING CAPACITY (AC FINE / 800 Pa	INITIAL PRESSURE DROP [Pa]	FILTER CLASS ACC. TO EN 779:2012	CLASS TO ISO 16890	ISO ePM1	ISO ePM2,5	ISO ePM10	ENERGY EFI
T 90 PRE 1/1	53449490	592×592×650	12	9.0	4,250	1,900	3,300	80	M6	ISO ePM10 75%	38	47	77	
T 90 PRE 1/2	53449491	289×592×650	4	3.1	1,450	650	1,100	80	M6	ISO ePM10 75%	38	47	77	
T 90 1/1	53444184	592×592×650	12	9.0	4,250	1,800	3,000	115	F7	ISO ePM2,5 70%	65	74	91	В
T 90 5/6	53444180	492×592×650	6	4.7	2,200	950	1,600	115	F7	ISO ePM2,5 70%	65	74	91	В
T 90 1/2	53444179	289×592×650	4	3.1	1,450	600	1,100	115	F7	ISO ePM2,5 70%	65	74	91	В
MF 90 1/1	53444178	592×592×650	8	6.2	4,250	1,200	2,000	140	F7	ISO ePM2,5 70%	64	74	91	С
MF 90 5/6	53444175	492×592×650	6	4.7	3,175	950	1,500	140	F7	ISO ePM2,5 70%	64	74	91	С
MF 90 1/2	53444172	289×592×650	4	3.1	2,125	600	1,000	140	F7	ISO ePM2,5 70%	64	74	91	С
MF 90 1/4	53444170	289×289×650	4	1.5	975	300	450	140	F7	ISO ePM2,5 70%	64	74	91	С
MF 95 1/1	53444168	592×592×650	12	9.0	4,250	1,250	2,200	190	F8	ISO ePM1 80%	81	86	95	С
MF 95 5/6	53444167	492×592×650	6	4.7	2,200	650	1,150	190	F8	ISO ePM1 80%	81	86	95	С
MF 95 1/2	53444166	289×592×650	4	3.1	1,450	400	800	190	F8	ISO ePM1 80%	81	86	95	С
MF 95 1/4	53444165	289×289×650	4	1.5	675	200	350	190	F8	ISO ePM1 80%	81	86	95	С

WINAIR | COARSE DUST





SPECIFICATIONS	
Filter medium	Polyester
Recommended final pressure drop	250 Pa
Thermal stability	70 °C
Moisture resistance	100% rel. hum.
Frame	Polyurethane
Fire class	F1 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.

Features and benefits

- 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 F1).
- Simple, secure installation, suitable for all commonly used mounting frames.

Delivery notes

Customized dimensions are available on request.

EN / /9:2012 ISO 16890	ΕN	779:2012	ISO 16890
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ARTICLE	ARTICLE NUMBER	DIMENSIONS (W×H×D) [mm]	NUMBER OF POCKETS	FILTER AREA [m²]	NOMINAL VOLUME FLOW [m³/h]	INITIAL PRESSURE DROP [Pa]	FILTER CLASS ACC. TO EN 779:2012	CLASS TO ISO 16890	INITIAL GRAVIMETRIC ARRESTANCE [%]	PARTICULATE MATTER EFFICIENCY ISO EPM10 [%]
WinAir 35 1/1 330 mm	53393071	592×592×330	5	2.0	3,400	28	G3	ISO coarse 60%	64	42
WinAir 35 5 / 6 330 mm	53393073	492×592×330	4	1.6	2,700	28	G3	ISO coarse 60%	64	42
WinAir 35 1/2 330 mm	53393072	289×592×330	3	1.2	2,050	28	G3	ISO coarse 60%	64	42
WinAir 35 1/4 330 mm	53393159	289×289×330	4	0.7	1,200	28	G3	ISO coarse 60%	64	42
WinAir 45 1/1 330 mm	53390774	592×592×330	5	2.0	3,400	30	G4	ISO coarse 65%	66	45
WinAir 45 5/6 330 mm	53390780	492×592×330	4	1.6	2,700	30	G4	ISO coarse 65%	66	45
WinAir 45 1/2 330 mm	53390777	289×592×330	3	1.2	2,050	30	G4	ISO coarse 65%	66	45
WinAir 45 1/4 330 mm	53393160	289×289×330	4	0.7	1,200	30	G4	ISO coarse 65%	66	45
WinAir 45 1/1 510 mm	53390775	592×592×510	5	3.1	3,400	30	G4	ISO coarse 65%	68	44
WinAir 45 5/6 510 mm	53390781	492×592×510	4	2.5	2,700	30	G4	ISO coarse 65%	68	44
WinAir 45 1/2 510 mm	53390778	289×592×510	3	1.9	2,050	30	G4	ISO coarse 65%	68	44
WinAir 45 1/4 510 mm	53393161	289×289×510	4	1.1	1,200	30	G4	ISO coarse 65%	68	44
WinAir 45 1/1 625 mm	53390776	592×592×625	5	3.8	3,400	25	G4	ISO coarse 70%	70	43
WinAir 45 5 / 6 625 mm	53390782	492×592×625	4	3.0	2,700	25	G4	ISO coarse 70%	70	43
WinAir 45 1/2 625 mm	53390779	289×592×625	3	2.3	2,050	25	G4	ISO coarse 70%	70	43
WinAir 45 1/4 650 mm	53393162	289×289×650	4	1.4	1,250	25	G4	ISO coarse 70%	70	43





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	F1 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.

Features and benefits

- Very 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 F1).
- Simple, secure installation, suitable for all commonly used mounting frames.

EN 779:2012 ISO 16890

		ONS (OF	ΈA	L FLOW	ш	ASS 012	- 0	PARTICL	JLATE MATT [%]	ER EFFICIENCY
ARTICLE	ARTICLE NUMBER	DIMENSIONS (W×H×D) [mm]	NUMBER OF POCKETS	FILTER AREA [m²]	NOMINAL VOLUME FLOW [m³/h]	INITIAL PRESSURE DROP [Pa]	FILTER CLASS ACC. TO EN 779:2012	CLASS TO ISO 16890	ISO ePM1	ISO ePM2,5	ISO ePM10
WinAir 50 1/1 330 mm	53390783	592×592×330	5	2.0	2,500	40	M5	ISO ePM10 55%	5	12	59
WinAir 50 5 / 6 330 mm	53390795	492×592×330	4	1.6	2,000	40	M5	ISO ePM10 55%	5	12	59
WinAir 50 1/2 330 mm	53390787	289×592×330	3	1.2	1,500	40	M5	ISO ePM10 55%	5	12	59
WinAir 50 1/4 330 mm	53393163	289×289×330	4	0.7	900	40	M5	ISO ePM10 55%	5	12	59
WinAir 50 1/1 510 mm	53390784	592×592×510	5	3.1	3,400	50	M5	ISO ePM10 55%	6	14	58
WinAir 50 5 / 6 510 mm	53390796	492×592×510	4	2.5	2,700	50	M5	ISO ePM10 55%	6	14	58
WinAir 50 1/2 510 mm	53390788	289×592×510	3	1.9	2,000	50	M5	ISO ePM10 55%	6	14	58
WinAir 50 1/4 510 mm	53393169	289×289×510	4	1.1	1,200	50	M5	ISO ePM10 55%	6	14	58
WinAir 50 1/1 625 mm	53390785	592×592×625	5	3.8	3,400	45	M5	ISO ePM10 55%	7	15	56
WinAir 50 5 / 6 625 mm	53390797	492×592×625	4	3.1	2,700	45	M5	ISO ePM10 55%	7	15	56
WinAir 50 1/2 625 mm	53390794	289×592×625	3	2.3	2,000	45	M5	ISO ePM10 55%	7	15	56
WinAir 50 1/4 650 mm	53393170	289×289×650	4	1.4	1,250	45	M5	ISO ePM10 55%	7	15	56
WinAir 75 1/1 510 mm	53390798	592×592×510	8	4.9	3,400	100	M6	ISO ePM10 70%	26	38	73
WinAir 75 5 / 6 510 mm	53390803	492×592×510	6	3.7	2,550	100	M6	ISO ePM10 70%	26	38	73
WinAir 75 1/2 510 mm	53390801	289×592×510	4	2.5	1,700	100	M6	ISO ePM10 70%	26	38	73
WinAir 75 1/4 510 mm	53393171	289×289×510	4	1.2	800	100	M6	ISO ePM10 70%	26	38	73
WinAir 75 1/1 625 mm	53390799	592×592×625	8	6.0	3,400	75	M6	ISO ePM10 75%	31	42	76
WinAir 75 5 / 6 625 mm	53390804	492×592×625	6	4.5	2,550	75	M6	ISO ePM10 75%	31	42	76
WinAir 75 1/2 625 mm	53390802	289×592×625	4	3.0	1,700	75	M6	ISO ePM10 75%	31	42	76
WinAir 75 1/4 650 mm	53393172	289×289×650	4	1.4	800	75	M6	ISO ePM10 75%	31	42	76
WinAir 90 1/1 N 510 mm	53464906	592×592×510	8	4.9	3,400	170	F7	ISO ePM2,5 70%	62	71	92
WinAir 90 5 / 6 510 mm	53390810	492×592×510	6	3.7	2,550	170	F7	ISO ePM2,5 70%	62	71	92
WinAir 90 1/2 510 mm	53390808	289×592×510	4	2.5	1,700	170	F7	ISO ePM2,5 70%	62	71	92
WinAir 90 1/4 510 mm	53393173	289×289×510	4	1.2	800	170	F7	ISO ePM2,5 70%	62	71	92
WinAir 90 1/1 N 625 mm	53464907	592×592×625	8	6.0	3,400	140	F7	ISO ePM2,5 70%	63	72	91
WinAir 90 5 / 6 625 mm	53390811	492×592×625	6	4.5	2,550	140	F7	ISO ePM2,5 70%	63	72	91
WinAir 90 1/2 625 mm	53390809	289×592×625	4	3.0	1,700	140	F7	ISO ePM2,5 70%	63	72	91
WinAir 90 1/4 650 mm	53393174	289×289×650	4	1.4	800	140	F7	ISO ePM2,5 70%	63	72	91





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.





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.),

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• as "police filters" in dust removal systems.

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.

Features and benefits

- 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.
- Casting the dimensionally stable pleat package in the torsion-resistant
 plastic frame assures exceptional sturdiness plus high security against
 dust breakthrough. Gripping lugs facilitate installation and removal,
 and the protection grid on both sides minimizes the risk of damage to
 the filter medium.
- Optionally installed pins can be used for combination with other pre- or final filters for a 2-in-1 system solution by using the patented-Viledon® modular clip-on system.
- MaxiPleat filters meet in full the requirements laid down in VDI 6022.

EN 779:2012 ISO 16890

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		SNC (AREA	L FLOW	HOLDING CITY (AC 800 Pa)		ASS 012	- 0		CULATE M FICIENCY		۲,
ARTICLE	ARTICLE NUMBER	DIMENSIONS (H×W×D) [mm]	FILTER AR [m²]	NOMINA VOLUME [m³/h]	DUST HOL CAPACITY FINE/800 [g]	INITIAL PRESSURE DROP [Pa]	FILTER CLASS ACC. TO EN 779:2012	CLASS TO ISO 16890	ISO ePM1	ISO ePM2,5	ISO ePM10	ENERGY EFFICIENCY CLASS*
MX75-R-0592x0287x292x25-Z08N-A84	53360086	592×287×292	7.5	2,000	960	135	M6	ISO ePM10 85%	55	60	85	
MX75-R-0592x0490x292x25-Z08N-A84	53360087	592×490×292	14.5	3,500	1,850	135	M6	ISO ePM10 85%	55	60	85	
MX75-R-0592x0579x292x25-N18N-A84	53360088	592×579×292	17.5	4,150	2,240	135	M6	ISO ePM10 85%	55	60	85	
MX75-R-0592x0592x292x25-Z08D-A84	53392076	592×592×292	21.0	4,250	2,600	105	M6	ISO ePM10 85%	56	61	85	
MX75-M-0592x0592x292x25-Z08N-A84	53415630	592×592×292	18.0	4,250	2,300	135	M6	ISO ePM10 85%	55	60	85	
MX85-R-0287X0287X292X25-Z08N-B84	53400130	287×287×292	4.3	1,000	550	140	F7	ISO ePM2,5 65%	60	69	88	
MX85-R-0592x0287x292x25-Z08N-B84	53360039	592×287×292	7.5	2,000	790	140	F7	ISO ePM2,5 65%	60	69	88	
MX85-R-0592x0490x292x25-Z08N-B84	53360040	592×490×292	14.5	3,500	1,530	140	F7	ISO ePM2,5 65%	60	69	88	
MX85-R-0592X0579X292X25-N18N-B84	53360043	592×579×292	17.5	4,150	1,850	140	F7	ISO ePM2,5 65%	60	69	88	
MX85-R-0592X0592X292X25-Z08D-B84	53375079	592×592×292	21.0	4,250	2,200	110	F7	ISO ePM2,5 65%	60	70	89	
MX85-M-0592x0592x292x25-Z08N-B84	53415632	592×592×292	18.0	4,250	1,900	140	F7	ISO ePM2,5 65%	60	69	88	
MX95-R-0592x0287x292x25-Z08N-C84	53360024	592×287×292	7.5	2,000	710	150	F8	ISO ePM1 75%	76	82	94	В
MX95-R-0592x0490x292x25-Z08N-C84	53360025	592×490×292	14.5	3,500	1,370	150	F8	ISO ePM1 75%	76	82	94	В
MX95-R-0592x0579x292x25-N18N-C84	53358070	592×579×292	17.5	4,150	1,650	150	F8	ISO ePM1 75%	76	82	94	В
MX95-R-0592x0592x292x25-Z08D-C84	53370948	592×592×292	21.0	4,250	1,900	120	F8	ISO ePM1 75%	77	83	94	В
MX95-M-0592x0592x292x25-Z08N-C84	53415637	592×592×292	18.0	4,250	1,700	150	F8	ISO ePM1 75%	76	82	94	В
MX98-R-0592x0287x292x25-Z08N-D84	53360019	592×287×292	7.5	2,000	630	175	F9	ISO ePM1 85%	88	92	97	В
MX98-R-0592x0490x292x25-Z08N-D84	53360020	592×490×292	14.5	3,500	1,210	175	F9	ISO ePM1 85%	88	92	97	В
MX98-R-0592x0579x292x25-N18N-D84	53360021	592×579×292	17.5	4,150	1,460	175	F9	ISO ePM1 85%	88	92	97	В
MX98-R-0592x0592x292x25-Z08D-D84	53372259	592×592×292	21.0	4,250	1,700	135	F9	ISO ePM1 85%	89	92	97	В
MX98-M-0592x0592x292x25-Z08N-D84	53415639	592×592×292	18.0	4,250	1,500	175	F9	ISO ePM1 85%	88	92	97	В



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 admit of any 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.

Features and benefits

- 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 breakthrough. 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.

								EN182	22:2012		ISO 16890			
	~			MEFLOW	CAPACITY)	E DROP		:2009	63	S			RTICUL <i>A</i> ER EFFIC [%]	
ARTICLE	ARTICLE NUMBER	DIMENSIONS (H×W×D) [mm]	FILTER AREA [m²]	NOMINAL VOLUME [m³/h]	DUST HOLDING C (AC FINE/800 Pa) [g]	INITIAL PRESSURE [Pa]	FACE VELOCITY [m/s]	FILTER CLASS ACC. TO EN 1822:2009	FILTER CLASS ACC. TO ISO 29463	ARRESTANCE EFFICIENCY MPPS [%]	CLASS TO ISO 16890	ISO ePM1	ISO ePM2,5	ISO ePM10
MXH10-M-0592x0592x292x25-Z08N-E84	53438221	592×592×292	18.0	4250	630	235	3.2	E10		≥85	ISO ePM1 95%	95	97	99
MX100-R-0592x0287x292x25-Z08N-F84	53360015	592×287×292	7.5	1500	300	195	2.3	E11	ISO 15 E	≥95	ISO ePM1 >95%	97	99	>99
MX100-R-0592X0490X292X25-Z08N-F84	53360016	592×490×292	14.5	2700	505	195	2.4	E11	ISO 15 E	≥95	ISO ePM1 >95%	97	99	>99
MX100-R-0592X0579X292X25-N18N-F84	53360017	592×579×292	17.5	3350	600	195	2.5	E11	ISO 15 E	≥95	ISO ePM1 >95%	97	99	>99
MX100-R-0592X0592X292X25-Z08D-F84	53372031	592×592×292	21.0	3400	690	190	2.5	E11	ISO 15 E	≥95	ISO ePM1 >95%	97	99	>99
MX100-M-0592X0592X292X25-Z08N-F84	53415622	592×592×292	18.0	3400	610	195	2.5	E11	ISO 15 E	≥95	ISO ePM1 >95%	97	99	>99
MX120-R-0592X0287X292X25-Z08N-G60	53359975	592×287×292	11.0	1500	235	320	2.3	E12	ISO 25 E	≥99.5				
MX120-R-0592X0490X292X25-Z08N-G60	53359976	592×490×292	19.0	2700	400	320	2.4	E12	ISO 25 E	≥99.5				
MX120-R-0592X0579X292X25-N18N-G60	53359977	592×579×292	22.0	3300	475	320	2.5	E12	ISO 25 E	≥99.5				
MX120-M-0592X0592X292X25-Z08N-G60	53415627	592×592×292	23.0	3400	485	320	2.5	E12	ISO 25 E	≥99.5				

MAXIPLEAT | MODULAR FILTER SYSTEM | 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 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.

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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 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

Customized dimensions are available on request.

Features and benefits

- 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 breakthrough. 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.

EN 779:2012 ISO 16890

	3ER			VOLUME FLOW	G CAPACITY Pa)	JRE DROP	ACC. TO			PARTICULAT TTER EFFICIE [%]	
ARTICLE	ARTICLE NUMBER	DIMENSIONS (H×W×D) [mm]	FILTER AREA [m²]	NOMINAL VOL [m³/h]	DUST HOLDING (AC FINE/800F [g]	INITIAL PRESSURE [Pa]	FILTER CLASS A EN 779:2012	CLASS TO ISO 16890	ISO ePM1	ISO ePM2,5	ISO ePM10
MX75-RC-0554x0554x140x10-N58D-A45	53372039	554×554×140	12	3,400	>1,500	135	M6	ISO ePM10 85%	56	61	85
MX75-RC-0554x0554x292x25-N58D-A84	53378239	554×554×292	18	3,400	>2,300	95	M6	ISO ePM10 85%	56	61	85
MX85-RB-0592x0592x292x25-Z08N-B84	53403631	592×592×292	18	3,400	>1,900	100	F7	ISO ePM2,5 65%	60	69	88
MX85-RC-0554x0554x140x10-N58D-B45	53371192	554×554×140	12	3,400	>1,250	140	F7	ISO ePM2,5 65%	60	70	89
MX85-RC-0554x0554x292x25-N58D-B84	53375083	554×554×292	18	3,400	>1,900	100	F7	ISO ePM2,5 65%	60	70	89
MX95-RB-0592x0592x292x25-Z08N-C84	53371193	592×592×292	18	3,400	>1,700	105	F8	ISO ePM1 75%	76	82	94
MX95-RC-0554x0554x140x10-N58D-C45	53372040	554×554×140	12	3,400	>1,150	150	F8	ISO ePM1 75%	77	83	94
MX95-RC-0554x0554x292x25-N58D-C84	3379914	554×554×292	18	3,400	>1,700	105	F8	ISO ePM1 75%	77	83	94
MX98-RB-0592x0592x292x25-Z08N-D84	53372041	592×592×292	18	3,400	>1,500	125	F9	ISO ePM1 85%	88	92	97
MX98-MB-0592x0592x292x25-Z08N-D84	53473592	592×592×292	18	3,400	>1,500	125	F9	ISO ePM1 85%	88	92	97
MX98-MB-0592x0592x292x25-N18N-D84	53473593	592×592×292	18	3,400	>1,500	125	F9	ISO ePM1 85%	88	92	97
MX98-RC-0554x0554x140x10-N58D-D45	53431249	554×554×140	12	3,400	>1,000	175	F9	ISO ePM1 85%	89	92	97
MX98-RC-0554X0554X292X25-N58D-D84	53372421	554×554×292	18	3,400	>1,500	125	F9	ISO ePM1 85%	89	92	97



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 ℃
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.

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.

Features and benefits

- 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 breakthrough. 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.

EN 1822:2009 ISO 16890

	BER			.UME FLOW	G CAPACITY Pa)	JRE DROP	ACC. TO	ACC. TO			ARTICULA FER EFFICI [%]	
ARTICLE	ARTICLE NUMBER	DIMENSIONS (H×W×D) [mm]	FILTER AREA [m²]	NOMINAL VOLUME [m³/h]	DUST HOLDIN (AC FINE/800 [g]	INITIAL PRESSU [Pa]	FILTER CLASS A EN 1822:2009	FILTER CLASS /	CLASS TO ISO 16890	ISO ePM1	ISO ePM2,5	ISO ePM10
MXH10-RB-0592x0592x292x25-Z08N-E84	53440228	592×592×292	18	3,400	700	175	E10		ISO ePM1 95%	95	97	99
MXH10-MB-0592x0592x292x25-Z08N-E84	53470031	592×592×292	18	3,400	700	175	E10		ISO ePM1 95%	95	97	>99
MXH10-MB-0592x0592x292x25-N18N-E84	53473604	592×592×292	18	3,400	700	175	E10		ISO ePM1 95%	95	97	>99
MX100-RB-0592x0592x292x25-Z08N-F84	53381884	592×592×292	18	3,400	610	195	E11	ISO 15 E	ISO ePM1 >95%	97	99	>99
MX100-MB-0592x0592x292x25-Z08N-F84	53473606	592×592×292	18	3,400	610	195	E11	ISO 15 E	ISO ePM1 >95%	97	99	>99
MX100-MB-0592x0592x292x25-N18N-F84	53473607	592×592×292	18	3,400	610	195	E11	ISO 15 E	ISO ePM1 >95%	97	99	>99
MX100-MB-0592x0592x292x25-N18N-F60	53473605	592×592×292	23	3,400	750	210	E11	ISO 15 E	ISO ePM1 >95%	97	99	>99
MX120-RB-0592x0592x292x25-Z08N-G60	53372043	592×592×292	23	3,400	485	320	E12	ISO 25 E				
MX120-MB-0592x0592x292x25-Z08N-G60	53473608	592×592×292	23	3,400	485	320	E12	ISO 25 E				
MX120-MB-0592x0592x292x25-N18N-G60	53473609	592×592×292	23	3,400	485	320	E12	ISO 25 E				

Subject to technical chang

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.

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.

EN 779:2012 ISO 16890

EUROVENT 4/21

	NS	VOLUME	PRESSURE	SS 12		PARTICULATE MATTER EFFICIENCY [%]			
АКТІСІЕ	DIMENSIONS (W×L×D) [mm]	NOMINAL VOLUME FLOW [m³/h]	INITIAL PRI DROP [Pa]	FILTER CLASS ACC. TO EN 779:2012	CLASS TO ISO 16890	ISO ePM1	ISO ePM2,5	ISO ePM10	ENERGY EFFICIENCY CLASS*
MV 75 HSN 1/2 V08X25-Z00N-A33	287×592×292	1,500	85	M6	ISO ePM10 75%	33	46	79	
MV 75 HSN 4/6 V08X25-Z00N-A33	402×592×292	2,100	85	M6	ISO ePM10 75%	33	46	79	
MV 75 HSN 5/6 V08X25-Z00N-A33	490×592×292	2,700	85	M6	ISO ePM10 75%	33	46	79	
MV 75 HSN 1/1 V08X25-Z00N-A33	592×592×292	3,400	85	M6	ISO ePM10 75%	33	46	79	
MV 85 HSN 1/2 V08X25-Z00N-B33	287×592×292	1,500	100	F7	ISO ePM2,5 70%	63	72	90	
MV 85 HSN 4/6 V08X25-Z00N-B33	402×592×292	2,100	100	F7	ISO ePM2,5 70%	63	72	90	
MV 85 HSN 5/6 V08X25-Z00N-B33	490×592×292	2,700	100	F7	ISO ePM2,5 70%	63	72	90	
MV 85 HSN 1/1 V08X25-Z00N-B33	592×592×292	3,400	100	F7	ISO ePM2,5 70%	63	72	90	
MV 95 HSN 1/2 V08X25-Z00N-C33	287×592×292	1,500	110	F8	ISO ePM1 75%	79	84	94	
MV 95 HSN 4/6 V08X25-Z00N-C33	402×592×292	2,100	110	F8	ISO ePM1 75%	79	84	94	
MV 95 HSN 5/6 V08X25-Z00N-C33	490×592×292	2,700	110	F8	ISO ePM1 75%	79	84	94	
MV 95 HSN 1/1 V08X25-Z00N-C33	592×592×292	3,400	110	F8	ISO ePM1 75%	79	84	94	
MV 98 HSN 1/2 V08X25-Z00N-D33	287×592×292	1,500	120	F9	ISO ePM1 80%	83	87	95	В
MV 98 HSN 4/6 V08X25-Z00N-D33	402×592×292	2,100	120	F9	ISO ePM1 80%	83	87	95	В
MV 98 HSN 5/6 V08X25-Z00N-D33	490×592×292	2,700	120	F9	ISO ePM1 80%	83	87	95	В
MV 98 HSN 1/1 V08X25-Z00N-D33	592×592×292	3,400	120	F9	ISO ePM1 80%	83	87	95	В





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

Subject to technical changes

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.

Features and benefits

- High-strength synthetic media and micro-glass-fiber papers with hydrophobic coating are used.
- 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.
- The 4-sided, leakproof casting of the dimensionally stable media pleat pack provides high burst strength as well as excellent security against dust penetration during operation.
- During usage the vertical arrangement of pleats allows drainage of water to the bottom. This results in less water saturation of the filter and reduced pressure drop increase.
- Combination of excellent dust holding capacity at low pressure drop.
- eMaxx cassette filters are supplied as standard with a foamed in place gasket and a protection grid fitted to minimize risk of damage during handling and operation.
- The filters can be used as part of the unique Viledon® modular clip-on system. They can be combined with hydroMaxx coalescer filters or with MVPGT respectively MaxiPleat cassette filters in one filter stage by simple clip-on.

EN 779:2012 ISO 16890

	ABER	Z			OLUME FLOW	ING CAPACITY O Pa)	URE DROP	ACC. TO			ARTICULAT TER EFFICIE [%]	
ARTICLE	ARTICLE NUMBER	SEAL POSITION	DIMENSIONS (W×L×D) [mm]	FILTER AREA [m²]	NOMINALVO [m³/h]	DUST HOLDING CA (AC FINE/650 Pa) [g]	INITIAL PRESSURE [[Pa]	FILTER CLASS. EN 779:2012	CLASS TO ISO 16890	ISO ePM1	ISO ePM2,5	ISO ePM10
EMAXX 98 1/1 N19N	53541784	Clean air side	592×592×422	30	4,250	1,200	135	F9	ISO ePM1 80%	83	87	95
EMAXX 98 1/1 Z09N	53541785	Without seal	592×592×422	30	4,250	1,200	135	F9	ISO ePM1 80%	83	87	95

EMAXX | EPA





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

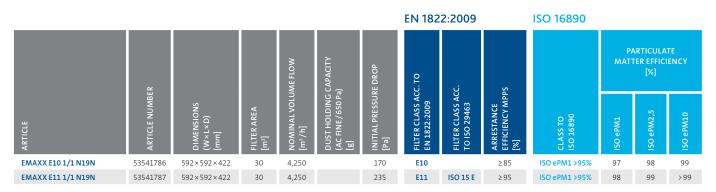
Application

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.

Features and benefits

- High-strength synthetic media and micro-glass-fiber papers with hydrophobic coating are used.
- 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.
- The 4-sided, leakproof casting of the dimensionally stable media pleat pack provides high burst strength as well as excellent security against dust penetration during operation.
- During usage the vertical arrangement of pleats allows drainage of water to the bottom. This results in less water saturation of the filter and reduced pressure drop increase.
- Combination of excellent dust holding capacity at low pressure drop.
- eMaxx cassette filters are supplied as standard with a foamed in place gasket and a protection grid fitted to minimize risk of damage during handling and operation.
- The filters can be used as part of the unique Viledon® modular clip-on system. They can be combined with hydroMaxx coalescer filters or with MVPGT respectively MaxiPleat cassette filters in one filter stage by simple clip-on.









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.

Features and benefits

- 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.
- Recessed vertical rails allow full usage of a directly attached prefilter panel resulting in longer lifetimes and lower pressure drops.
- A lug between the two inner V's allows easy handling.
- The frame offers various possibilities for the installation of clips to hold prefilters.
- Optionally installed pins can be used for combination with other pre- or final filters for a 2-in-1 system solution by using the patented Viledon® modular clip-on system.

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 E10 to E12, and with a foamed on gasket on the clean air side. Also available with 6 instead of 8 panels.

ARTICLE	ARTICLE NUMBER	DIMENSIONS (W×L×D) [mm]	HLTER AREA [m³]	NOMINAL VOLUME FLOW [m³/h]	INITIAL PRESSURE DROP [Pa]	
MVP 75 1/2 V08x25-Z00N-A33	53538455	287×592×292	8.5	2,000	100	
MVP 75 4/6 V08x25-Z00N-A33	53538456	402×592×292	11.8	2,800	100	
MVP 75 5/6 V08x25-Z00N-A33	53538457	490×592×292	14.5	3,500	100	
MVP 75 1/1 V08x25-Z00N-A33	53538458	592×592×292	18.0	4,250	100	
MVP 85 1/2 V08x25-Z00N-B33	53538464	287×592×292	8.5	2,000	115	
MVP 85 4/6 V08x25-Z00N-B33	53538465	402×592×292	11.8	2,800	115	
MVP 85 5/6 V08x25-Z00N-B33	53538466	490×592×292	14.5	3,500	115	
MVP 85 1/1 V08x25-Z00N-B33	53538467	592×592×292	18.0	4,250	115	
MVP 95 1/2 V08x25-Z00N-C33	53538468	287×592×292	8.5	2,000	130	
MVP 95 4/6 V08x25-Z00N-C33	53538469	402×592×292	11.8	2,800	130	
MVP 95 5/6 V08x25-Z00N-C33	53538470	490×592×292	14.5	3,500	130	
MVP 95 1/1 V08x25-Z00N-C33	53538471	592×592×292	18.0	4,250	130	
MVP 98 1/2 V08x25-Z00N-D33	53538472	287×592×292	8.5	2,000	140	
MVP 98 4/6 V08x25-Z00N-D33	53538473	402×592×292	11.8	2,800	140	
MVP 98 5/6 V08x25-Z00N-D33	53538479	490×592×292	14.5	3,500	140	
MVP 98 1/1 V08x25-Z00N-D33	53538480	592×592×292	18.0	4,250	140	
MVP E ² + 95 1/2 V08x25-Z00N-C27		287×592×292	8.5	1,500	80	
MVP E ² + 95 4/6 V08x25-Z00N-C27		402×592×292	11.8	2,100	80	
MVP E ² + 95 5/6 V08x25-Z00N-C27		490×592×292	14.5	2,700	80	
MVP E ² + 95 1/1 V08x25-Z00N-C27		592×592×292	18.0	3,400	80	
MVP E ² + 98 1/2 V08x25-Z00N-D27	53535685	287×592×292	9.9	1,500	95	
MVP E ² + 98 4/6 V08x25-Z00N-D27	53535686	402×592×292	13.5	2,100	95	
MVP E ² + 98 5/6 V08x25-Z00N-D27	53535687	490×592×292	17.0	2,700	95	
MVP E ² + 98 1/1 V08x25-Z00N-D27	53535688	592×592×292	21.0	3,400	95	
MVP 75 1/2 V06x25-Z00N-A33		287×592×292	6.5	2,000	85	
MVP 75 5/6 V06x25-Z00N-A33		490×592×292	11.5	3,500	85	
MVP 75 1/1 V06x25-Z00N-A33		592×592×292	14	4,250	85	
MVP 85 1/2 V06x25-Z00N-B33		287×592×292	6.5	2,000	115	
MVP 85 5/6 V06x25-Z00N-B33		490×592×292	11.5	3,500	115	
MVP 85 1/1 V06x25-Z00N-B33		592×592×292	14	4,250	115	
MVP 95 1/2 V06x25-Z00N-C33		287×592×292	6.5	2,000	140	
MVP 95 5/6 V06x25-Z00N-C33		490×592×292	11.5	3,500	140	
MVP 95 1/1 V06x25-Z00N-C33		592×592×292	14	4,250	140	
MVP 98 1/2 V06x25-Z00N-D33		287×592×292	6.5	2,000	160	
MVP 98 5/6 V06x25-Z00N-D33		490×592×292	11.5	3,500	160	
MVP 98 1/1 V06x25-Z00N-D33		592×592×292	14	4,250	160	







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



EN 779:2012 ISO 16890 EUROVENT 4/21

12			PARTICULATE MATTER EFFICIENCY [%]		FICIENCY	
FILTER CLASS ACC. TO EN 779:2012	CLASS TO ISO 16890	lSO ePM1	ISO ePM2,5	ISO ePM10	ENERGY EFFICIENCY CLASS*	ARTICLE
M6	ISO ePM10 75%	33	46	79		MVP 75 1/2 V08x25-Z00N-A33
M6	ISO ePM10 75%	33	46	79		MVP 75 4/6 V08x25-Z00N-A33
M6	ISO ePM10 75%	33	46	79		MVP 75 5/6 V08x25-Z00N-A33
M6	ISO ePM10 75%	33	46	79		MVP 75 1/1 V08x25-Z00N-A33
F7	ISO ePM2,5 70%	62	72	90	В	MVP 85 1/2 V08x25-Z00N-B33
F7	ISO ePM2,5 70%	62	72	90	В	MVP 85 4/6 V08x25-Z00N-B33
F7	ISO ePM2,5 70%	62	72	90	В	MVP 85 5/6 V08x25-Z00N-B33
F7	ISO ePM2,5 70%	62	72	90	В	MVP 85 1/1 V08x25-Z00N-B33
F8	ISO ePM1 70%	73	80	93	Α	MVP 95 1/2 V08x25-Z00N-C33
F8	ISO ePM1 70%	73	80	93	Α	MVP 95 4/6 V08x25-Z00N-C33
F8	ISO ePM1 70%	73	80	93	Α	MVP 95 5/6 V08x25-Z00N-C33
F8	ISO ePM1 70%	73	80	93	Α	MVP 95 1/1 V08x25-Z00N-C33
F9	ISO ePM1 85%	86	91	97	В	MVP 98 1/2 V08x25-Z00N-D33
F9	ISO ePM1 85%	86	91	97	В	MVP 98 4/6 V08x25-Z00N-D33
F9	ISO ePM1 85%	86	91	97	В	MVP 98 5/6 V08x25-Z00N-D33
F9	ISO ePM1 85%	86	91	97	В	MVP 98 1/1 V08x25-Z00N-D33
F8	ISO ePM1 60%	64	73	90	A+	MVP E ² + 95 1/2 V08x25-Z00N-C27
F8	ISO ePM1 60%	64	73	90	A+	MVP E ² + 95 4/6 V08x25-Z00N-C27
F8	ISO ePM1 60%	64	73	90	A+	MVP E ² + 95 5/6 V08x25-Z00N-C27
F8	ISO ePM1 60%	64	73	90	A+	MVP E ² + 95 1/1 V08x25-Z00N-C27
F9	ISO ePM1 85%	86	90	97	A+	MVP E ² + 98 1/2 V08x25-Z00N-D27
F9	ISO ePM1 85%	86	90	97	A+	MVP E ² + 98 4/6 V08x25-Z00N-D27
F9	ISO ePM1 85%	86	90	97	A+	MVP E ² + 98 5/6 V08x25-Z00N-D27
F9	ISO ePM1 85%	86	90	97	A+	MVP E ² + 98 1/1 V08x25-Z00N-D27
M6	ISO ePM10 75%	32	45	77		MVP 75 1/2 V06x25-Z00N-A33
M6	ISO ePM10 75%	32	45	77		MVP 75 5/6 V06x25-Z00N-A33
M6	ISO ePM10 75%	32	45	77		MVP 75 1/1 V06x25-Z00N-A33
F7	ISO ePM2,5 70%	61	71	89		MVP 85 1/2 V06x25-Z00N-B33
F7	ISO ePM2,5 70%	61	71	89		MVP 85 5/6 V06x25-Z00N-B33
F7	ISO ePM2,5 70%	61	71	89		MVP 85 1/1 V06x25-Z00N-B33
F8	ISO ePM1 70%	72	79	92		MVP 95 1/2 V06x25-Z00N-C33
F8	ISO ePM1 70%	72	79	92		MVP 95 5/6 V06x25-Z00N-C33
F8	ISO ePM1 70%	72	79	92		MVP 95 1/1 V06x25-Z00N-C33
F9	ISO ePM1 80%	82	85	93		MVP 98 1/2 V06x25-Z00N-D33
F9	ISO ePM1 80%	82	85	93		MVP 98 5/6 V06x25-Z00N-D33
F9	ISO ePM1 80%	82	85	93		MVP 98 1/1 V06x25-Z00N-D33

MVPGT | FINE DUST





SPECIFICATIONS	
Recommended final pressure drop	600 Pa
Bursting pressure	>4,000 Pa
Thermal stability	70 °C
Moisture resistance	100% rel. hum.
Frame	Halogen-free plastic
Seal	PU gasket, continuously foamed
Protection grids	Halogen-free plastic, on the clean air side

Application

Viledon® MVPGT cassette filters are used for intake air filtration of

- gas turbines in power generation and in the oil and gas industry,
- compressors and diesel and gas engines.

They are particularly well suited for peaking units located onshore with average dust concentrations in the ambient air.

Features and benefits

- High dust holding capacity and low pressure drop at an optimum price-performance ratio.
- Supplied with protection grids fitted to minimize risk of damage to the filter during operation and optionally with a foamed-in place gasket.
- Recessed vertical rails allow full usage of a directly attached prefilter panel resulting in longer lifetimes and lower pressure drops.
- · A lug between the two inner V's allows easy handling.
- The frame offers various possibilities for the installation of clips to hold prefilters.
- Optionally installed pins can be used for combination with other pre- or final filters for a 2-in-1 system solution by using the patented Viledon® modular clip-on system.
- For high performance requirements MVPGT-21 cassette filters are optimized in terms of an extended filter surface of 21 m².

EN 779:2012 ISO 16890

							150 10050			
	BER			N	DROP				E NCY	
ARTICLE	ARTICLE NUMBER	DIMENSIONS (W×L×D) [mm]	FILTER AREA [m²]	NOMINAL VOLUME FLOW [m³/h]	INITIAL PRESSURE DR [Pa]	FILTER CLASS ACC.TO EN 779:2012	CLASS TO ISO 16890	ISO ePM1	ISO ePM2,5	150 ePM10
MVPGT 85 1/1 V08x25-Z09N-B33-18m ²	53536299	592×592×292	18	4,250	125	F7	ISO ePM2,5 70%	62	72	90
MVPGT 95 1/1 V08x25-Z09N-C33-18m ²	53536300	592×592×292	18	4,250	135	F8	ISO ePM1 70%	73	80	93
MVPGT 98 1/1 V08x25-Z09N-D33-18m ²	53536301	592×592×292	18	4,250	155	F9	ISO ePM1 85%	86	91	97
MVPGT 85 1/1 V08x25-Z09N-B27-21m ²	53536333	592×592×292	21	4,250	120	F7	ISO ePM2,5 70%	62	72	90
MVPGT 95 1/1 V08x25-Z09N-C27-21m ²	53536334	592×592×292	21	4,250	130	F8	ISO ePM1 70%	73	80	93
MVPGT 98 1/1 V08x25-Z09N-D27-21m ²	53536335	592×592×292	21	4,250	150	F9	ISO ePM1 85%	86	91	97
MVPGT 85 1/1 V08x25-N19N-B33-18m ²	53536310	592×592×292	18	4,250	125	F7	ISO ePM2,5 70%	62	72	90
MVPGT 85 1/1 V08x25-N49N-B33-18m ²	53536312	592×592×292	18	4,250	125	F7	ISO ePM2,5 70%	73	80	93
MVPGT 95 1/1 V08x25-N19N-C33-18m ²	53536311	592×592×292	18	4,250	135	F8	ISO ePM1 70%	73	80	93
MVPGT 98 1/2 V08x25-N19N-D33-8.5m ²	53536313	287×592×292	9.5	2,000	155	F9	ISO ePM1 85%	86	91	97
MVPGT 98 1/1 V08x25-N19N-D33-18m ²	53536329	592×592×292	18	4,250	155	F9	ISO ePM1 85%	86	91	97
MVPGT 95 1/1 V08x25-N19N-C27-21m ²	53536338	592×592×292	21	4,250	130	F8	ISO ePM1 70%	74	81	93
MVPGT 98 1/1 V08x25-N19N-D27-21m ²	53536359	592×592×292	21	4,250	150	F9	ISO ePM1 85%	88	91	97
MVPGT 98 1/1 V08x25-T19N-D33-18m ²	53536364	592×592×292	18	4,250	155	F9	ISO ePM1 85%	86	91	97



MVPGT | EPA

SPECIFICATIONS	
Recommended final pressure drop	600 Pa
Bursting pressure	>4,000 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 for intake air filtration of

- gas turbines in power generation and in the oil and gas industry,
- compressors and diesel and gas engines.

They are particularly well suited for peaking units located onshore with average dust concentrations in the ambient air.

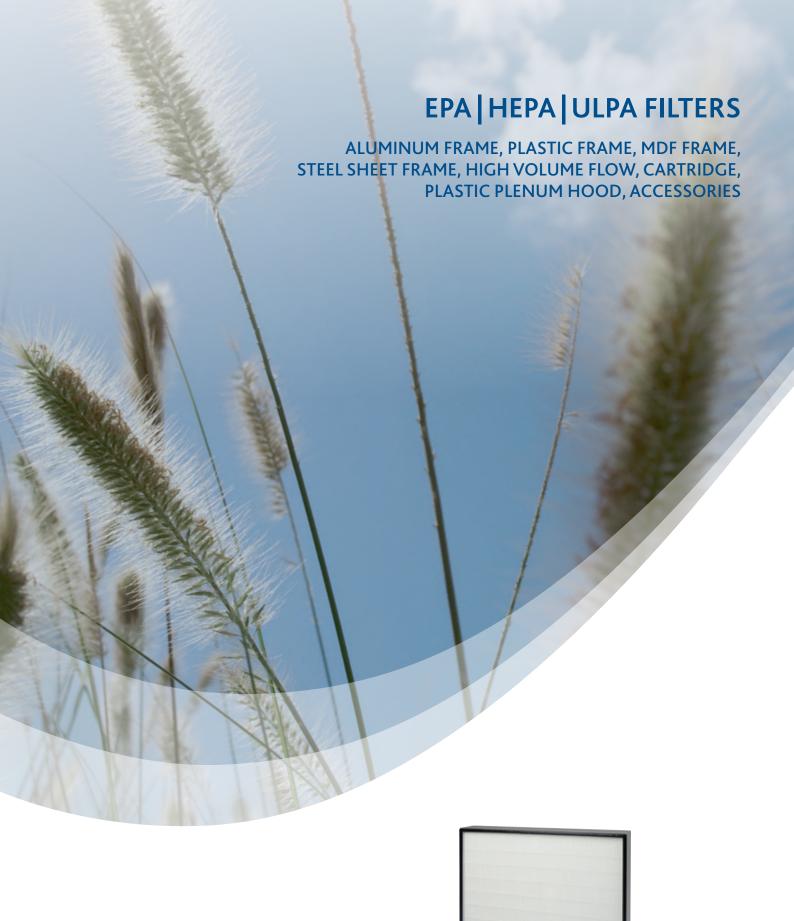
Features and benefits

- High dust holding capacity and low pressure drop at an optimum price-performance ratio.
- Supplied with protection grids fitted to minimize risk of damage to the filter during operation and optionally with a foamed-in place gasket.
- Recessed vertical rails allow full usage of a directly attached prefilter panel resulting in longer lifetimes and lower pressure drops.
- · A lug between the two inner V's allows easy handling.
- The frame offers various possibilities for the installation of clips to hold prefilters.
- Optionally installed pins can be used for combination with other pre- or final filters for a 2-in-1 system solution by using the patented Viledon® modular clip-on system.
- For high performance requirements MVPGT-21 cassette filters are optimized in terms of an extended filter surface of 21 m².

EN 1822:2009 ISO 16890

	NUMBER			мо	DROP	? CLASS TO EN 1822:2009	APPS			ARTICULA TER EFFICI [%]	
ARTICLE	ARTICLE NUA	DIMENSIONS (W×L×D) [mm]	FILTER AREA [m²]	NOMINAL VOLUME FLO [m³/h]	INITIAL PRESSURE DR [Pa]	FILTER CLASS ACC. TO EN 1	ARRESTANCE EFFICIENCY MF [%]	CLASS TO ISO 16890	ISO ePM1	ISO ePM2,5	ISO ePM10
MVPGT E10 1/1 V08x25-Z09N-K27-21m ²	53536337	592×592×292	21.0	3,400	145	E10	≥85	ISO ePM1 95%	95	97	99
MVPGT E11 1/2 V08x25-Z09N-F27-9.5m ²	53536302	287×592×292	9.5	1,500	165	E11	≥95	ISO ePM1 >95%	98	99	>99
MVPGT E11 1/1 V08x25-Z09N-F27-21m ²	53536303	592×592×292	18.0	3,400	165	E11	≥95	ISO ePM1 >95%	98	99	>99
MVPGT E10 1/1 V08x25-N19N-K27-21m ²	53536360	592×592×292	21.0	3,400	145	E10	≥85	ISO ePM1 95%	95	97	99
MVPGT E11 1/1 V08x25-N19N-F27-21m ²	53536331	592×592×292	21.0	3,400	165	E11	≥95	ISO ePM1 >95%	98	99	>99





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.

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, steel grid, powder-coated				

Application

Viledon® HEPA filters of filter classes H13 + H14 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 theatres/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.

Features and benefits

- · 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

All standard sizes are packed in watertight foil and a particularly robust, impact-resistant cardboard box for risk-free transport and storage. A second label for documentation is enclosed.

EN 1822:2009

ARTICLE	ARTICLE NUMBER	DIMENSIONS (W×L×D) [mm]	PLEAT DEPTH [mm]	NOMINAL VOLUME FLOW [m²/h]	INITIAL PRESSURE DROP [Pa]	FILTER CLASS ACC. TO EN 1822:2009	FILTER CLASS ACC. TO ISO 29463	ARRESTANCE EFFICIENCY MPPS [%]
SF13-A-0305x0610x068x05-N13N	53417676	305×610×68	50	580	250	H13	ISO 35 H	≥ 99.95
SF13-A-0305x0762x068x05-N13N	53417677	305×762×68	50	730	250	H13	ISO 35 H	≥ 99.95
SF13-A-0457x0457x068x05-N13N	53417679	457×457×68	50	660	250	H13	ISO 35 H	≥ 99.95
SF13-A-0545x0545x068x05-N13N	53444903	545×545×68	50	950	250	H13	ISO 35 H	≥ 99.95
SF13-A-0610x0610x068x05-N13N	53417681	610×610×68	50	1,200	250	H13	ISO 35 H	≥ 99.95
SF13-A-0610x0762x068x05-N13N	53417683	610×762×68	50	1,500	250	H13	ISO 35 H	≥ 99.95
SF13-A-0610x1220x068x05-N13N	53417686	610×1,220×68	50	2,400	250	H13	ISO 35 H	≥ 99.95
SF13-A-1220x1220x068x05-N13N	53417688	1,220×1,220×68	50	5,000	250	H13	ISO 35 H	≥ 99.95



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, steel grid, powder-coated



Delivery notes

All standard sizes are packed in watertight foil and a particularly robust, impact-resistant cardboard box for risk-free transport and storage. A second label for documentation is enclosed.

EN 1822:2009

ARTICLE	ARTICLE NUMBER	DIMENSIONS (W×L×D) [mm]	РІЕАТ DEРТН [mm]	NOMINAL VOLUME FLOW [m³/h]	INITIAL PRESSURE DROP [Pa]	FILTER CLASS ACC. TO EN 1822:2009	FILTER CLASS ACC. TO ISO 29463	ARRESTANCE EFFICIENCY MPPS [%]
SF14-A-0305x0305x068x05-N13N	53411760	305×305×68	50	135	120	H14	ISO 45 H	≥ 99.995
SF14-A-0305x0305x088x07-N13N	53411849	305×305×88	70	135	90	H14	ISO 45 H	≥ 99.995
SF14-A-0305x0610x068x05-N13N	53411816	305×610×68	50	280	120	H14	ISO 45 H	≥ 99.995
SF14-A-0305x0610x088x07-N13N	53423973	305×610×88	70	300	90	H14	ISO 45 H	≥ 99.995
SF14-A-0610x0610x068x05-N13N	53411822	610×610×68	50	600	120	H14	ISO 45 H	≥ 99.995
SF14-A-0610x0610x088x07-N13N	53411851	610×610×88	70	600	90	H14	ISO 45 H	≥ 99.995
SF14-A-0610x0915x068x05-N13N	53411834	610×915×68	50	900	120	H14	ISO 45 H	≥ 99.995
SF14-A-0610x1220x068x05-N13N	53411835	610×1,220×68	50	1,200	120	H14	ISO 45 H	≥ 99.995
SF14-A-0610x1220x088x07-N13N	53411853	610×1,220×88	70	1,200	90	H14	ISO 45 H	≥ 99.995
SF14-A-0610x1525x068x05-N13N	53411836	610×1,525×68	50	1,500	120	H14	ISO 45 H	≥ 99.995
SF14-A-0610x1525x088x07-N13N	53411854	610×1,525×88	70	1,500	90	H14	ISO 45 H	≥ 99.995
SF14-A-0610x1830x068x05-N13N	53411837	610×1,830×68	50	1,800	120	H14	ISO 45 H	≥ 99.995
SF14-A-0610x1830x088x07-N13N	53411855	610×1,830×88	70	1,800	90	H14	ISO 45 H	≥ 99.995
SF14-A-0762x1220x068x05-N13N	53411842	762×1,220×68	50	1,500	120	H14	ISO 45 H	≥ 99.995
SF14-A-0762x1220x088x07-N13N	53411858	762×1,220×88	70	1,500	90	H14	ISO 45 H	≥ 99.995
SF14-A-0762x1830x068x05-N13N	53411844	762×1,830×68	50	2,250	120	H14	ISO 45 H	≥ 99.995
SF14-A-0915x1220x068x05-N13N	53411846	915×1,220×68	50	1,800	120	H14	ISO 45 H	≥ 99.995
SF14-A-0915x1220x088x07-N13N	53427337	915×1,220×88	70	1,800	90	H14	ISO 45 H	≥ 99.995
SF14-A-0915x1830x068x05-N13N	53411848	915×1,830×68	50	2,700	120	H14	ISO 45 H	≥ 99.995
SF14-A-0545x0545x068x05-N13N	53417689	545×545×68	50	480	120	H14	ISO 45 H	≥ 99.995

Subject to technical changes.

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, steel grid, powder-coated

Application

Viledon® HEPA filters of filter classes H13 + H14 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 theatres / 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.),
- ${\boldsymbol \cdot}$ in ceiling outlets and modules for flexible clean room systems.

Delivery notes

All standard sizes are packed in watertight foil and a particularly robust, impact-resistant cardboard box for risk-free transport and storage. A second label for documentation is enclosed.

EN 1822:2009

ARTICLE	DIMENSIONS (W×L×D) [mm]	РLEAT DEРТН [mm]	NOMINAL VOLUME FLOW [m³/h]	INITIAL PRESSURE DROP [Pa]	FILTER CLASS ACC. TO EN 1822:2009	FILTER CLASS ACC. TO ISO 29463	ARRESTANCE EFFICIENCY MPPS [%]
SF13-A-0305x0305x078x06-N13N	305×305×78	60	290	210	H13	ISO 35 H	≥ 99.95
SF13-A-0305x0457x078x06-N13N	305×457×78	60	420	210	H13	ISO 35 H	≥ 99.95
SF13-A-0305x0610x078x06-N13N	305×610×78	60	600	210	H13	ISO 35 H	≥ 99.95
SF13-A-0305x0762x078x06-N13N	305×762×78	60	750	210	H13	ISO 35 H	≥ 99.95
SF13-A-0305x0915x078x06-N13N	305×915×78	60	900	210	H13	ISO 35 H	≥ 99.95
SF13-A-0305x1120x078x06-N13N	305×1,120×78	60	1,200	210	H13	ISO 35 H	≥ 99.95
SF13-A-0457x0457x078x06-N13N	457×457×78	60	680	210	H13	ISO 35 H	≥ 99.95
SF13-A-0457x0610x078x06-N13N	457×610×78	60	900	210	H13	ISO 35 H	≥ 99.95
SF13-A-0545x0545x078x06-N13N	545×545×78	60	1,000	210	H13	ISO 35 H	≥ 99.95
SF13-A-0545x1155x078x06-N13N	545×1,155×78	60	2,000	210	H13	ISO 35 H	≥ 99.95
SF-13A-0575x0575x078x06xN13N	575×575×78	60	1,070	210	H13	ISO 35 H	≥ 99.95
SF13-A-0610x0610x078x06-N13N	610×610×78	60	1,200	210	H13	ISO 35 H	≥ 99.95
SF13-A-0610x0762x078x06-N13N	610×762×78	60	1,500	210	H13	ISO 35 H	≥ 99.95
SF13-A-0610x0915x078x06-N13N	610×915×78	60	1,800	210	H13	ISO 35 H	≥ 99.95
SF13-A-0610x1220x078x06-N13N	610×1,220×78	60	2,400	210	H13	ISO 35 H	≥ 99.95
SF13-A-0610x1525x078x06-N13N	610×1,525×78	60	3,000	210	H13	ISO 35 H	≥ 99.95
SF13-A-0610x1830x078x06-N13N	610×1,830×78	60	3,600	210	H13	ISO 35 H	≥ 99.95
SF13-A-0762x0762x078x06-N13N	762×762×78	60	1,900	210	H13	ISO 35 H	≥ 99.95
SF13-A-0762x0915x078x06-N13N	762×915×78	60	2,250	210	H13	ISO 35 H	≥ 99.95
SF13-A-0762x1220x078x06-N13N	762×1,220×78	60	3,000	210	H13	ISO 35 H	≥ 99.95
SF13-A-0762x1525x078x06-N13N	762×1,525×78	60	3,750	210	H13	ISO 35 H	≥ 99.95
SF13-A-0762x1830x078x06-N13N	762×1,830×78	60	4,500	210	H13	ISO 35 H	≥ 99.95
SF13-A-0915x0915x078x06-N13N	915×915×78	60	2,700	210	H13	ISO 35 H	≥ 99.95
SF13-A-0915x1220x078x06-N13N	915×1,220×78	60	3,600	210	H13	ISO 35 H	≥ 99.95
SF13-A-0915x1525x078x06-N13N	915×1,525×78	60	4,500	210	H13	ISO 35 H	≥ 99.95
SF13-A-0915x1830x078x06-N13N	915×1,830×78	60	5,400	210	H13	ISO 35 H	≥ 99.95



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, steel grid, powder-coated



Features and benefits

- 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.
- $\bullet\,$ Easy handling and mounting thanks to high twist strength.
- The filter elements feature protection grids on both sides made of powdercoated expanded metal.

Delivery notes

All standard sizes are packed in watertight foil and a particularly robust, impact-resistant cardboard box for risk-free transport and storage. A second label for documentation is enclosed.

EN 1822:2009

ARTICLE	DIMENSIONS (W×L×D) [mm]	PLEAT DEPTH [mm]	NOMINAL VOLUME FLOW [m³/h]	INITIAL PRESSURE DROP [Pa]	FILTER CLASS ACC. TO EN 1822:2009	FILTER CLASS ACC. TO ISO 29463	ARRESTANCE EFFICIENCY MPPS [%]
SF14-A-0305x0305x078x06-N13N	305×305×78	60	135	100	H14	ISO 45 H	≥ 99.995
SF14-A-0305x0457x078x06-N13N	305×457×78	60	200	100	H14	ISO 45 H	≥ 99.995
SF14-A-0305x0610x078x06-N13N	305×610×78	60	280	100	H14	ISO 45 H	≥ 99.995
SF14-A-0305x0762x078x06-N13N	305×762×78	60	360	100	H14	ISO 45 H	≥ 99.995
SF14-A-0305x0915x078x06-N13N	305×915×78	60	430	100	H14	ISO 45 H	≥ 99.995
SF14-A-0305x1120x078x06-N13N	305×1,120×78	60	600	100	H14	ISO 45 H	≥ 99.995
SF14-A-0457x0457x078x06-N13N	457×457×78	60	335	100	H14	ISO 45 H	≥ 99.995
SF14-A-0457x0610x078x06-N13N	457×610×78	60	450	100	H14	ISO 45 H	≥ 99.995
SF14-A-0545x0545x078x06-N13N	545×545×78	60	500	100	H14	ISO 45 H	≥ 99.995
SF14-A-0545x1155x078x06-N13N	545×1,155×78	60	1,000	100	H14	ISO 45 H	≥ 99.995
SF14-A-0610x0610x078x06-N13N	610×610×78	60	600	100	H14	ISO 45 H	≥ 99.995
SF14-A-0610x0762x078x06-N13N	610×762×78	60	750	100	H14	ISO 45 H	≥ 99.995
SF14-A-0610x0915x078x06-N13N	610×915×78	60	900	100	H14	ISO 45 H	≥ 99.995
SF14-A-0610x1220x078x06-N13N	610×1,220×78	60	1,200	100	H14	ISO 45 H	≥ 99.995
SF14-A-0610x1525x078x06-N13N	610×1,525×78	60	1,500	100	H14	ISO 45 H	≥ 99.995
SF14-A-0610x1830x078x06-N13N	610×1,830×78	60	1,800	100	H14	ISO 45 H	≥ 99.995
SF14-A-0762x0762x078x06-N13N	762×762×78	60	950	100	H14	ISO 45 H	≥ 99.995
SF14-A-0762x0915x078x06-N13N	762×915×78	60	1,125	100	H14	ISO 45 H	≥ 99.995
SF14-A-0762x1220x078x06-N13N	762×1,220×78	60	1,500	100	H14	ISO 45 H	≥ 99.995
SF14-A-0762x1525x078x06-N13N	762×1,525×78	60	1,875	100	H14	ISO 45 H	≥ 99.995
SF14-A-0762x1830x078x06-N13N	762×1,830×78	60	2,250	100	H14	ISO 45 H	≥ 99.995
SF14-A-0915x0915x078x06-N13N	915×915×78	60	1,350	100	H14	ISO 45 H	≥ 99.995
SF14-A-0915x1220x078x06-N13N	915×1,220×78	60	1,800	100	H14	ISO 45 H	≥ 99.995
SF14-A-0915x1525x078x06-N13N	915×1,525×78	60	2,250	100	H14	ISO 45 H	≥ 99.995
SF14-A-0915x1830x078x06-N13N	915×1,830×78	60	2,700	100	H14	ISO 45 H	≥ 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, steel grid, powder-coated

Application

Viledon® HEPA filters of filter classes H13 + H14 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 theatres/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, microelectronics, etc.),
- in ceiling outlets and modules for flexible cleanroom systems.

Features and benefits

- 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.

Delivery notes

All standard sizes are packed in watertight foil and a particularly robust, impact-resistant cardboard box for risk-free transport and storage. A second label for documentation is enclosed.

EN 1822:2009

ARTICLE	DIMENSIONS (W×L×D) [mm]	РLEAT DEPTH [mm]	NOMINAL VOLUME FLOW [m³/h]	INITIAL PRESSURE DROP [Pa]	FILTER CLASS ACC. TO EN 1822:2009	FILTER CLASS ACC. TO ISO 29463	ARRESTANCE EFFICIENCY MPPS [%]
SF13-A-0305x0305x150x05-N13N	305×305×150	50	270	250	H13	ISO 35 H	≥ 99.95
SF13-A-0305x0457x150x05-N13N	305×457×150	50	420	250	H13	ISO 35 H	≥ 99.95
SF13-A-0305x0610x150x05-N13N	305×610×150	50	580	250	H13	ISO 35 H	≥ 99.95
SF13-A-0305x0762x150x05-N13N	305×762×150	50	730	250	H13	ISO 35 H	≥ 99.95
SF13-A-0305x0915x150x05-N13N	305×915×150	50	900	250	H13	ISO 35 H	≥ 99.95
SF13-A-0457x0457x150x05-N13N	457×457×150	50	660	250	H13	ISO 35 H	≥ 99.95
SF13-A-0457x0610x150x05-N13N	457×610×150	50	900	250	H13	ISO 35 H	≥ 99.95
SF13-A-0610x0610x150x05-N13N	610×610×150	50	1,200	250	H13	ISO 35 H	≥ 99.95
SF13-A-0610x0762x150x05-N13N	610×762×150	50	1,500	250	H13	ISO 35 H	≥ 99.95
SF13-A-0610x0915x150x05-N13N	610×915×150	50	1,800	250	H13	ISO 35 H	≥ 99.95
SF13-A-0610x1220x150x05-N13N	610×1,220×150	50	2,400	250	H13	ISO 35 H	≥ 99.95
SF13-A-0610x1525x150x05-N13N	610×1,525×150	50	3,000	250	H13	ISO 35 H	≥ 99.95
SF13-A-0610x1830x150x05-N13N	610×1,830×150	50	3,600	250	H13	ISO 35 H	≥ 99.95
SF13-A-0762x0762x150x05-N13N	762×762×150	50	1,900	250	H13	ISO 35 H	≥ 99.95
SF13-A-0762x0915x150x05-N13N	762×915×150	50	2,250	250	H13	ISO 35 H	≥ 99.95
SF13-A-0762x1220x150x05-N13N	762×1,220×150	50	3,000	250	H13	ISO 35 H	≥ 99.95
SF13-A-0762x1525x150x05-N13N	762×1,525×150	50	3,750	250	H13	ISO 35 H	≥ 99.95
SF13-A-0762x1830x150x05-N13N	762×1,830×150	50	4,500	250	H13	ISO 35 H	≥ 99.95
SF13-A-0915x0915x150x05-N13N	915×915×150	50	2,700	250	H13	ISO 35 H	≥ 99.95
SF13-A-0915x1220x150x05-N13N	915×1,220×150	50	3,600	250	H13	ISO 35 H	≥ 99.95
SF13-A-0915x1525x150x05-N13N	915×1,525×150	50	4,500	250	H13	ISO 35 H	≥ 99.95
SF13-A-0915x1830x150x05-N13N	915×1,830×150	50	5,400	250	H13	ISO 35 H	≥ 99.95



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, steel grid, powder-coated



- 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 powdercoated expanded metal.

Delivery notes

All standard sizes are packed in watertight foil and a particularly robust, impact-resistant cardboard box for risk-free transport and storage. A second label for documentation is enclosed.

EN 1822:2009

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ARTICLE	DIMENSIONS (W×L×D) [mm]	PLEAT DEPTH [mm]	NOMINAL VOLUME FLOW [m³/h]	INITIAL PRESSURE DROP [Pa]	FILTER CLASS ACC. TO EN 1822:2009	FILTER CLASS ACC. TO ISO 29463	ARRESTANCE EFFICIENCY MPPS [%]
SF14-A-0305x0305x150x05-N13N	305×305×150	50	135	120	H14	ISO 45 H	≥ 99.995
SF14-A-0305x0457x150x05-N13N	305×457×150	50	200	120	H14	ISO 45 H	≥ 99.995
SF14-A-0305x0610x150x05-N13N	305×610×150	50	280	120	H14	ISO 45 H	≥ 99.995
SF14-A-0305x0762x150x05-N13N	305×762×150	50	360	120	H14	ISO 45 H	≥ 99.995
SF14-A-0305x0915x150x05-N13N	305×915×150	50	430	120	H14	ISO 45 H	≥ 99.995
SF14-A-0457x0457x150x05-N13N	457×457×150	50	335	120	H14	ISO 45 H	≥ 99.995
SF14-A-0457x0610x150x05-N13N	457×610×150	50	450	120	H14	ISO 45 H	≥ 99.995
SF14-A-0610x0610x150x05-N13N	610×610×150	50	600	120	H14	ISO 45 H	≥ 99.995
SF14-A-0610x0762x150x05-N13N	610×762×150	50	750	120	H14	ISO 45 H	≥ 99.995
SF14-A-0610x0915x150x05-N13N	610×915×150	50	900	120	H14	ISO 45 H	≥ 99.995
SF14-A-0610x1220x150x05-N13N	610×1,220×150	50	1,200	120	H14	ISO 45 H	≥ 99.995
SF14-A-0610x1525x150x05-N13N	610×1,525×150	50	1,500	120	H14	ISO 45 H	≥ 99.995
SF14-A-0610x1830x150x05-N13N	610×1,830×150	50	1,800	120	H14	ISO 45 H	≥ 99.995
SF14-A-0762x0762x150x05-N13N	762×762×150	50	950	120	H14	ISO 45 H	≥ 99.995
SF14-A-0762x0915x150x05-N13N	762×915×150	50	1,125	120	H14	ISO 45 H	≥ 99.995
SF14-A-0762x1220x150x05-N13N	762×1,220×150	50	1,500	120	H14	ISO 45 H	≥ 99.995
SF14-A-0762x1525x150x05-N13N	762×1,525×150	50	1,875	120	H14	ISO 45 H	≥ 99.995
SF14-A-0762x1830x150x05-N13N	762×1,830×150	50	2,250	120	H14	ISO 45 H	≥ 99.995
SF14-A-0915x0915x150x05-N13N	915×915×150	50	350	120	H14	ISO 45 H	≥ 99.995
SF14-A-0915x1220x150x05-N13N	915×1,220×150	50	1,800	120	H14	ISO 45 H	≥ 99.995
SF14-A-0915x1525x150x05-N13N	915×1,525×150	50	2,250	120	H14	ISO 45 H	≥ 99.995
SF14-A-0915x1830x150x05-N13N	915×1,830×150	50	2,700	120	H14	ISO 45 H	≥ 99.995

ubject to technical changes.

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, steel grid, 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.

Features and benefits

- 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 powdercoated expanded metal.

Delivery notes

All standard sizes are packed in watertight foil and a particularly robust, impact-resistant cardboard box for risk-free transport and storage. A second label for documentation is enclosed.

EN 1822:2009

ARTICLE	DIMENSIONS (W×L×D) [mm]	PLEAT DEPTH [mm]	NOMINAL VOLUME FLOW [m³/h]	INITIAL PRESSURE DROP [Pa]	FILTER CLASS ACC. TO EN 1822:2009	FILTER CLASS ACC. TO ISO 29463	ARRESTANCE EFFICIENCY MPPS [%]
SF11-A-0305x0610x150x12-N13N-F58	305×610×150	125	750	140	E11	ISO 15 E	95
SF11-A-0457x0457x150x12-N13N-F58	457×457×150	125	850	140	E11	ISO 15 E	95
SF11-A-0610x0610x150x12-N13N-F58	610×610×150	125	1,500	140	E11	ISO 15 E	95

Subject to technical char



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, steel grid, 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.

Features and benefits

- 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 powdercoated expanded metal.
- Each filter element is tested for leakproofing in accordance with EN 1822, and delivered together with the corresponding test certificate.

Delivery notes

All standard sizes are packed in watertight foil and a particularly robust, impact-resistant cardboard box for risk-free transport and storage. A second label for documentation is enclosed.

EN 1822:2009

ARTICLE	DIMENSIONS (W×L×D) [mm]	PLEAT DEPTH [mm]	NOMINAL VOLUME FLOW [m³/h]	INITIAL PRESS URE DROP [Pa]	HLTER CLASS ACC. TO EN 1822:2009	FILTER CLASS ACC. TO ISO 29463	ARRESTANCE EFFICIENCY MPPS [%]
SF13-A-0305x0610x150x12-N13N-J58	305×610×150	125	860	250	H13	ISO 35 H	≥ 99.95
SF13-A-0457x0457x150x12-N13N-J58	457×457×150	125	950	250	H13	ISO 35 H	≥ 99.95
SF13-A-0610x0610x150x12-N13N-J58	610×610×150	125	1,750	250	H13	ISO 35 H	≥ 99.95
SF14-A-0305x0305x150x12-N13N-U36	305×305×150	125	450	250	H14	ISO 45 H	≥ 99.995
SF14-A-0305x0610x150x12-N13N-U36	305×610×150	125	950	250	H14	ISO 45 H	≥ 99.995
SF14-A-0457x0457x150x12-N13N-U36	457×457×150	125	1,100	250	H14	ISO 45 H	≥ 99.995
SF14-A-0610x0610x150x12-N13N-U36	610×610×150	125	2,000	250	H14	ISO 45 H	≥ 99.995

Subject to technical changes.

ALUMINUM FRAME | CONSTRUCTION DEPTH 292 | 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, steel grid, 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 (pharmaceuticals, biotechnology, chemicals, optics, food and beverage processing, micro-electronics, etc.).

Features and benefits

- 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 powdercoated expanded metal.

Delivery notes

All standard sizes are packed in watertight foil and a particularly robust, impact-resistant cardboard box for risk-free transport and storage. A second label for documentation is enclosed.

EN 1822:2009

ARTICLE	DIMENSIONS (W×L×D) [mm]	PLEAT DEPTH [mm]	NOMINAL VOLUME FLOW [m³/h]	INITIAL PRESSURE DROP [Pa]	FILTER CLASS ACC. TO EN 1822:2009	FILTER CLASS ACC. TO ISO 29463	ARRESTANCE EFFICIENCY MPPS [%]
SF11-A-0305x0610x292x20-N13N-F69	305×610×292	200	1,100	140	E11	ISO 15 E	≥ 95
SF11-A-0457x0457x292x20-N13N-F69	457×457×292	200	1,300	140	E11	ISO 15 E	≥ 95
SF11-A-0457x0610x292x20-N13N-F69	457×610×292	200	1,750	140	E11	ISO 15 E	≥ 95
SF11-A-0593x0593x292x20-N13N-F69	593×593×292	200	2,250	140	E11	ISO 15 E	≥ 95
SF11-A-0610x0610x292x20-N13N-F69	610×610×292	200	2,400	140	E11	ISO 15 E	≥ 95
SF11-A-0610x0762x292x20-N13N-F69	610×762×292	200	3,000	140	E11	ISO 15 E	≥ 95



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, steel grid, 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 (pharmaceuticals, biotechnology, chemicals, optics, food and beverage processing, micro-electronics, etc.).

Features and benefits

- 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 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 powdercoated expanded metal.

Delivery notes

All standard sizes are packed in watertight foil and a particularly robust, impact-resistant cardboard box for risk-free transport and storage. A second label for documentation is enclosed.

EN 1822:2009

ARTICLE	DIMENSIONS (W×L×D) [mm]	PLEAT DEPTH [mm]	NOMINAL VOLUME FLOW [m²/h]	INITIAL PRESSURE DROP [Pa]	FILTER CLASS ACC. TO EN 1822:2009	FILTER CLASS ACC. TO ISO 29463	ARRESTANCE EFFICIENCY MPPS [%]
SF13-A-0305x0610x292x17-N13N-U42	305×610×292	175	1,250	250	H13	ISO 35 H	≥ 99.95
SF13-A-0457x0457x292x17-N13N-U42	457×457×292	175	1,400	250	H13	ISO 35 H	≥ 99.95
SF13-A-0457x0610x292x17-N13N-U42	457×610×292	175	1,950	250	H13	ISO 35 H	≥ 99.95
SF13-A-0593x0593x292x17-N13N-U42	593×593×292	175	2,450	250	H13	ISO 35 H	≥ 99.95
SF13-A-0610x0610x292x17-N13N-U42	610×610×292	175	2,600	250	H13	ISO 35 H	≥ 99.95
SF13-A-0610x0762x292x17-N13N-U42	610×762×292	175	3,250	250	H13	ISO 35 H	≥ 99.95
SF14-A-0305x0610x292x17-N13N-U42	305×610×292	175	1,100	230	H14	ISO 45 H	≥ 99.995
SF14-A-0457x0457x292x17-N13N-U42	457×457×292	175	1,300	230	H14	ISO 45 H	≥ 99.995
SF14-A-0457x0610x292x17-N13N-U42	457×610×292	175	1,750	230	H14	ISO 45 H	≥ 99.995
SF14-A-0593x0593x292x17-N13N-U42	593×593×292	175	2,250	230	H14	ISO 45 H	≥ 99.995
SF14-A-0610x0610x292x17-N13N-U42	610×610×292	175	2,400	230	H14	ISO 45 H	≥ 99.995
SF14-A-0610x0762x292x17-N13N-U42	610×762×292	175	3,000	230	H14	ISO 45 H	≥ 99.995

Subject to technical changes



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, steel grids, powder-coated; also available in a stainless steel version

Application

Viledon® HEPA filters of filter class H14 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 theatres / 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

All standard sizes are packed in watertight foil and a particularly robust, impact-resistant cardboard box for risk-free transport and storage. A second label for documentation is enclosed.

Features and benefits

- 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 powdercoated 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.

EN 1822:2009

ARTICLE	DIMENSIONS (W×L×D) [mm]	РLEAT DEPTH [mm]	NOMINAL VOLUME FLOW [m³/h]	INITIAL PRESSURE DROP [Pa]	FILTER CLASS ACC. TO EN 1822:2009	FILTER CLASS ACC. TO ISO 29463	ARRESTANCE EFFICIENCY MPPS [%]
SF14-A-0305x0305x080x05-F13N	305×305×80	50	135	120	H14	ISO 45 H	≥ 99.995
SF14-A-0305x0457x080x05-F13N	305×457×80	50	200	120	H14	ISO 45 H	≥ 99.995
SF14-A-0305x0610x080x05-F13N	305×610×80	50	280	120	H14	ISO 45 H	≥ 99.995
SF14-A-0305x0762x080x05-F13N	305×762×80	50	360	120	H14	ISO 45 H	≥ 99.995
SF14-A-0305x0915x080x05-F13N	305×915×80	50	430	120	H14	ISO 45 H	≥ 99.995
SF14-A-0457x0457x080x05-F13N	457×457×80	50	335	120	H14	ISO 45 H	≥ 99.995
SF14-A-0457x0610x080x05-F13N	457×610×80	50	450	120	H14	ISO 45 H	≥ 99.995
SF14-A-0610x0610x080x05-F13N	610×610×80	50	600	120	H14	ISO 45 H	≥ 99.995
SF14-A-0610x0762x080x05-F13N	610×762×80	50	750	120	H14	ISO 45 H	≥ 99.995
SF14-A-0610x0915x080x05-F13N	610×915×80	50	900	120	H14	ISO 45 H	≥ 99.995
SF14-A-0610x1220x080x05-F13N	610×1,220×80	50	1,200	120	H14	ISO 45 H	≥ 99.995
SF14-A-0610x1525x080x05-F13N	610×1,525×80	50	1,500	120	H14	ISO 45 H	≥ 99.995
SF14-A-0610x1830x080x05-F13N	610×1,830×80	50	1,800	120	H14	ISO 45 H	≥ 99.995
SF14-A-0762x0762x080x05-F13N	762×762×80	50	950	120	H14	ISO 45 H	≥ 99.995
SF14-A-0762x0915x080x05-F13N	762×915×80	50	1,125	120	H14	ISO 45 H	≥ 99.995
SF14-A-0762x1220x080x05-F13N	762×1,220×80	50	1,500	120	H14	ISO 45 H	≥ 99.995
SF14-A-0762x1525x080x05-F13N	762×1,525×80	50	1,875	120	H14	ISO 45 H	≥ 99.995
SF14-A-0762x1830x080x05-F13N	762×1,830×80	50	2,250	120	H14	ISO 45 H	≥ 99.995
SF14-A-0915x0915x080x05-F13N	915×915×80	50	1,350	120	H14	ISO 45 H	≥ 99.995
SF14-A-0915x1220x080x05-F13N	915×1,220×80	50	1,800	120	H14	ISO 45 H	≥ 99.995
SF14-A-0915x1525x080x05-F13N	915×1,525×80	50	2,250	120	H14	ISO 45 H	≥ 99.995
SF14-A-0915x1830x080x05-F13N	915×1,830×80	50	2,700	120	H14	ISO 45 H	≥ 99.995



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, steel grids, powder-coated; also available in a stainless steel version



Application

Viledon® ULPA filters of filter class U15 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 theatres / 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.

Features and benefits

• The filter media used are high-arrestance micro-glass-fiber papers.

Delivery notes

All standard sizes are packed in watertight foil and a particularly robust, impact-resistant cardboard box for risk-free transport and storage. A second label for documentation is enclosed.

- 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 powdercoated expanded metal.
- · Silgel seal for mounting systems with a sword profile.

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ARTICLE	DIMENSIONS (W×L×D) [mm]	рцеат Dертн [mm]	NOMINAL VOLUME FLOW [π²/h]	INITIAL PRESSURE DROP [Pa]	FILTER CLASS ACC. TO EN 1822:2009	FILTER CLASS ACC. TO ISO 29463	ARRESTANCE EFFICIENCY MPPS [%]
SF15-A-0305x0305x080x05-F13N	305×305×80	50	135	140	U15	ISO 55 U	≥ 99.9995
SF15-A-0305x0457x080x05-F13N	305×457×80	50	200	140	U15	ISO 55 U	≥ 99.9995
SF15-A-0305x0610x080x05-F13N	305×610×80	50	280	140	U15	ISO 55 U	≥ 99.9995
SF15-A-0305x0762x080x05-F13N	305×762×80	50	360	140	U15	ISO 55 U	≥ 99.9995
SF15-A-0305x0915x080x05-F13N	305×915×80	50	430	140	U15	ISO 55 U	≥ 99.9995
SF15-A-0457x0457x080x05-F13N	457×457×80	50	335	140	U15	ISO 55 U	≥ 99.9995
SF15-A-0457x0610x080x05-F13N	457×610×80	50	450	140	U15	ISO 55 U	≥ 99.9995
SF15-A-0610x0610x080x05-F13N	610×610×80	50	600	140	U15	ISO 55 U	≥ 99.9995
SF15-A-0610x0762x080x05-F13N	610×762×80	50	750	140	U15	ISO 55 U	≥ 99.9995
SF15-A-0610x0915x080x05-F13N	610×915×80	50	900	140	U15	ISO 55 U	≥ 99.9995
SF15-A-0610x1220x080x05-F13N	610×1,220×80	50	1,200	140	U15	ISO 55 U	≥ 99.9995
SF15-A-0610x1525x080x05-F13N	610×1,525×80	50	1,500	140	U15	ISO 55 U	≥ 99.9995
SF15-A-0610x1830x080x05-F13N	610×1,830×80	50	1,800	140	U15	ISO 55 U	≥ 99.9995
SF15-A-0762x0762x080x05-F13N	762×762×80	50	950	140	U15	ISO 55 U	≥ 99.9995
SF15-A-0762x0915x080x05-F13N	762×915×80	50	1,125	140	U15	ISO 55 U	≥ 99.9995
SF15-A-0762x1220x080x05-F13N	762×1,220×80	50	1,500	140	U15	ISO 55 U	≥ 99.9995
SF15-A-0762x1525x080x05-F13N	762×1,525x 80	50	1,875	140	U15	ISO 55 U	≥ 99.9995
SF15-A-0762x1830x080x05-F13N	762×1,830×80	50	2,250	140	U15	ISO 55 U	≥ 99.9995
SF15-A-0915x0915x080x05-F13N	915×915×80	50	1,350	140	U15	ISO 55 U	≥ 99.9995
SF15-A-0915x1220x080x05-F13N	915×1,220×80	50	1,800	140	U15	ISO 55 U	≥ 99.9995
SF15-A-0915x1525x080x05-F13N	915×1,525×80	50	2,250	140	U15	ISO 55 U	≥ 99.9995
SF15-A-0915x1830x080x05-F13N	915×1,830×80	50	2,700	140	U15	ISO 55 U	≥ 99.9995

Subject to technical changes

STEEL SHEET FRAME | CONSTRUCTION DEPTH 292 MM | EPA



Micro-glass-fiber paper
600 Pa
70 °C
100% rel. hum.
Steel sheeting, galvanized
Semicircular PU profile, endlessly foamed

Application

Viledon® EPA filters of filter class E11 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.

Features and benefits

- 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

All standard sizes are packed in watertight foil and a particularly robust, impact-resistant cardboard box for risk-free transport and storage. A second label for documentation is enclosed.

EN 1822:2009

ARTICLE	DIMENSIONS (W×L×D) [mm]	РLEAT DEPTH [mm]	NOMINAL VOLUME FLOW [m³/h]	INITIAL PRESSURE DROP [Pa]	FILTER CLASS ACC. TO EN 1822:2009	FILTER CLASS ACC. TO ISO 29463	ARRESTANCE EFFICIENCY MPPS [%]
SF11-B-0288x0593x292x20-N10N	288×593×292	200	1,000	140	E11	ISO 15 E	≥ 95
SF11-B-0305x0305x292x20-N10N	305×305×292	200	550	140	E11	ISO 15 E	≥ 95
SF11-B-0305x0610x292x20-N10N	305×610×292	200	1,150	140	E11	ISO 15 E	≥ 95
SF11-B-0457x0457x292x20-N10N	457×457×292	200	1,300	140	E11	ISO 15 E	≥ 95
SF11-B-0457x0610x292x20-N10N	457×610×292	200	1,750	140	E11	ISO 15 E	≥ 95
SF11-B-0593x0593x292x20-N10N	593×593×292	200	2,270	140	E11	ISO 15 E	≥ 95
SF11-B-0610x0610x292x20-N10N	610×610×292	200	2,400	140	E11	ISO 15 E	≥ 95
SF11-B-0610x0762x292x20-N10N	610×762×292	200	3,000	140	E11	ISO 15 E	≥ 95



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 E11 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, clean-rooms, museums, etc.),
- sensitive industrial processes (pharmaceuticals, biotechnology, chemicals, optics, food and beverages, micro-electronics, etc.),
- · downstream policing filters in dust removal applications.

Features and benefits

- 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

All standard sizes are packed in watertight foil and a particularly robust, impact-resistant cardboard box for risk-free transport and storage. A second label for documentation is enclosed.

EN 1822:2009

ARTICLE	ARTICLE NUMBER	DIMENSIONS (W×L×D) [mm]	PLEAT DEPTH [mm]	NOMINAL VOLUME FLOW [m³/h]	INITIAL PRESSURE DROP [Pa]	FILTER CLASS ACC. TO EN 1822:2009	FILTER CLASS ACC. TO ISO 29463	ARRESTANCE EFFICIENCY MPPS [%]
SF11-K-0305x0305x150x10-N18N-F45	53392321	305×305×150	100	440	160	E11	ISO 15 E	≥ 95
SF11-K-0457x0457x150x10-N10N-F45	53359319	457×457×150	100	1,100	160	E11	ISO 15 E	≥ 95
SF11-K-0610x0610x150x10-N10N-F45	53360528	610×610×150	100	2,000	160	E11	ISO 15 E	≥ 95
SF11-K-0610x0610x150x10-N18N-F45	53386630	610×610×150	100	2,000	160	E11	ISO 15 E	≥ 95
SF11-K-0610x0305x292x20-N10N-F60	53352684	610×305×292	200	1,400	160	E11	ISO 15 E	≥ 95
SF11-K-0610x0610x292x20-N10N-F60	53352648	610×610×292	200	3,000	160	E11	ISO 15 E	≥ 95
SF11-K-0610x0762x292x20-N10N-F60	53357238	610×762×292	200	4,000	160	E11	ISO 15 E	≥ 95
SF11-K-0610x0305x292x28-N18N-F60	53351145	610×305×292	280	1,600	160	E11	ISO 15 E	≥ 95
SF11-K-0610x0610x292x28-N18N-F60	53351144	610×610×292	280	3,400	160	E11	ISO 15 E	≥ 95
SF11-K-0610x0762x292x28-N18N-F60	53357518	610×762×292	280	4,300	160	E11	ISO 15 E	≥ 95

Subject to technical changes.

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 (N 18N), with 200 mm pleat depth standard version without protection grid (N 10N)

Application

Viledon® HEPA filters of filter classes H13 + H14 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 theatres / 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.

Features and benefits

- 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 exceptionally 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).

Delivery notes

All standard sizes are packed in watertight foil and a particularly robust, impact-resistant cardboard box for risk-free transport and storage. A second label for documentation is enclosed.

EN 1822:2009

ARTICLE	ARTICLE NUMBER	DIMENSIONS (W×L×D) [mm]	РLEAT DEPTH [mm]	NOMINAL VOLUME FLOW [m²/h]	INITIAL PRESSURE DROP [Pa]	IFA – DUST CLASS	FILTER CLASS ACC.TO EN 1822:2009	FILTER CLASS ACC. TO ISO 29463	ARRESTANCE EFFICIENCY MPPS [%]
SF13-K-0305x0305x150x10-N18N-H45	53357911	305×305×150	100	325	220		H13	ISO 35 H	≥ 99.95
SF13-K-0305x0305x292x20-N10N-H60	53380609	305×305×292	200	500	250	Н	H13	ISO 35 H	≥ 99.95
SF13-K-0305x0305x292x28-N18N-G60	53358438	305×305×292	280	700	250	Н	H13	ISO 35 H	≥ 99.95
SF13-K-0457x0457x150x10-N18N-H45	53361285	457×457×150	100	800	220		H13	ISO 35 H	≥ 99.95
SF13-K-0457x0457x292x20-N10N-H60	53352681	457×457×292	200	1,300	250	Н	H13	ISO 35 H	≥ 99.95
SF13-K-0457x0457x292x28-N18N-G60	53353934	457×457×292	280	1,800	250	Н	H13	ISO 35 H	≥ 99.95
SF13-K-0575x0575x150x10-N18N-H45	53440647	575×575×150	100	1,400	220		H13	ISO 35 H	≥ 99.95
SF13-K-0592x0592x292x28-N18N-G60	53378568	592×592×292	280	3,000	250	Н	H13	ISO 35 H	≥ 99.95
SF13-K-0610x0305x150x10-N18N-H45	53364637	610×305×150	100	700	220		H13	ISO 35 H	≥ 99.95
SF13-K-0610x0305x292x20-N10N-H60	53352680	610×305×292	200	1,100	250	Н	H13	ISO 35 H	≥ 99.95
SF13-K-0610x0305x292x28-N18N-G60	53351143	610×305×292	280	1,550	250	Н	H13	ISO 35 H	≥ 99.95
SF13-K-0610x0305x292x28-N18N-J60	53383118	610×305×292	280	1,800	330	Н	H13	ISO 35 H	≥ 99.95
SF13-K-0610x0457x292x20-N10N-H60	53367419	610×457×292	200	1,800	250	Н	H13	ISO 35 H	≥ 99.95



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 (N 18N), with 200 mm pleat depth standard version without protection grid (N 10N)



- 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

All standard sizes are packed in watertight foil and a particularly robust, impact-resistant cardboard box for risk-free transport and storage. A second label for documentation is enclosed.

EN 1822:2009

ARTICLE	ARTICLE NUMBER	DIMENSIONS (W×L×D) [mm]	РLEAT DEPTH [mm]	NOMINAL VOLUME FLOW [m³/h]	INITIAL PRESSURE DROP [Pa]	IFA – DUST CLASS	FILTER CLASS ACC. TO EN 1822:2009	FILTER CLASS ACC. TO ISO 29463	ARRESTANCE EFFICIENCY MPPS [%]
SF13-K-0610x0457x292x28-N18N-G60	53363063	610×457×292	280	2,500	250	Н	H13	ISO 35 H	≥ 99.95
SF13-K-0610x0610x150x10-N18N-H45	53392755	610×610×150	100	1,500	220		H13	ISO 35 H	≥ 99.95
SF13-K-0610x0610x292x20-N10N-H60	53352647	610×610×292	200	2,500	250	Н	H13	ISO 35 H	≥ 99.95
SF13-K-0610x0610x292x28-N18N-G60	53351139	610×610×292	280	3,400	250	Н	H13	ISO 35 H	≥ 99.95
SF13-K-0610x0610x292x28-N18N-J60	53383117	610×610×292	280	4,000	350	Н	H13	ISO 35 H	≥ 99.95
SF13-K-0610x0762x292x20-N10N-H60	53373991	610×762×292	200	3,150	250	Н	H13	ISO 35 H	≥ 99.95
SF13-K-0610x0762x292x28-N18N-G60	53373837	610×762×292	280	4,300	250	Н	H13	ISO 35 H	≥ 99.95
SF14-K-0305x0305x292x28-N18N-J60	53390438	305×305×292	280	375	150		H14	ISO 45 H	≥ 99. 995
SF14-K-0457x0457x292x28-N18N-J60	53381017	457×457×292	280	900	150		H14	ISO 45 H	≥ 99.995
SF14-K-0610x0305x292x28-N18N-J60	53367662	610×305×292	280	850	150		H14	ISO 45 H	≥ 99.995
SF14-K-0610x0457x292x28-N18N-J60	53358594	610×457×292	280	1,250	150		H14	ISO 45 H	≥ 99.995
SF14-K-0610x0610x292x28-N18N-J60	53353557	610×610×292	280	1,700	150		H14	ISO 45 H	≥ 99.995
SF14-K-0610x0762x292x28-N18N-J60	53361167	610×762×292	280	2,150	150		H14	ISO 45 H	≥ 99.995

subject to technical changes.

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 E11 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.

Features and benefits

- 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.

EN 1822:2009

ARTICLE	DIMENSIONS (W×L×D) [mm]	РLEAT DEРТН [mm]	NOMINAL VOLUME FLOW [m³/h]	INITIAL PRESSURE DROP [Pa]	FILTER CLASS ACC. TO EN 1822:2009	FILTER CLASS ACC. TO ISO 29463	ARRESTANCE EFFICIENCY MPPS [%]
SF11-M-0305x0305x078x05-N10N	305×305×78	50	220	160	E11	ISO 15 E	≥ 95
SF11-M-0305x0457x078x05-N10N	305×457×78	50	350	160	E11	ISO 15 E	≥ 95
SF11-M-0305x0610x078x05-N10N	305×610×78	50	480	160	E11	ISO 15 E	≥ 95
SF11-M-0305x0762x078x05-N10N	305×762×78	50	600	160	E11	ISO 15 E	≥ 95
SF11-M-0457x0457x078x05-N10N	457×457×78	50	550	160	E11	ISO 15 E	≥ 95
SF11-M-0457x0610x078x05-N10N	457×610×78	50	750	160	E11	ISO 15 E	≥ 95
SF11-M-0610x0610x078x05-N10N	610×610×78	50	1,000	160	E11	ISO 15 E	≥ 95
SF11-M-0610x0762x078x05-N10N	610×762×78	50	1,300	160	E11	ISO 15 E	≥ 95
SF11-M-0762x0762x078x05-N10N	762×762×78	50	1,640	160	E11	ISO 15 E	≥ 95



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 H13 + H14 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.

Features and benefits

- 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.

EN 1822:2009

ARTICLE	DIMENSIONS (W×L×D) [mm]	PLEAT DEPTH [mm]	NOMINAL VOLUME FLOW [m²/h]	INITIAL PRESSURE DROP [Pa]	HITER CLASS ACC. TO EN 1822:2009	FILTER CLASS ACC. TO ISO 29463	ARRESTANCE EFFICIENCY MPPS [%]
SF13-M-0305x0305x078x05-N10N	305×305×78	50	250	250	H13	ISO 35 H	≥ 99.95
SF13-M-0305x0457x078x05-N10N	305×457×78	50	400	250	H13	ISO 35 H	≥ 99.95
SF13-M-0305x0610x078x05-N10N	305×610×78	50	550	250	H13	ISO 35 H	≥ 99.95
SF13-M-0305x0762x078x05-N10N	305×762×78	50	700	250	H13	ISO 35 H	≥ 99.95
SF13-M-0457x0457x078x05-N10N	457×457×78	50	630	250	H13	ISO 35 H	≥ 99.95
SF13-M-0457x0610x078x05-N10N	457×610×78	50	850	250	H13	ISO 35 H	≥ 99.95
SF13-M-0610x0610x078x05-N10N	610×610×78	50	1,200	250	H13	ISO 35 H	≥ 99.95
SF13-M-0610x0762x078x05-N10N	610×762×78	50	1,500	250	H13	ISO 35 H	≥ 99.95
SF13-M-0762x0762x078x05-N10N	762×762×78	50	1,900	250	H13	ISO 35 H	≥ 99.95
SF14-M-0305x0305x078x05-N10N	305×305×78	50	120	125	H14	ISO 45 H	≥ 99.995
SF14-M-0305x0457x078x05-N10N	305×457×78	50	200	125	H14	ISO 45 H	≥ 99.995
SF14-M-0305x0610x078x05-N10N	305×610×78	50	280	125	H14	ISO 45 H	≥ 99.995
SF14-M-0305x0762x078x05-N10N	305×762×78	50	350	125	H14	ISO 45 H	≥ 99.995
SF14-M-0457x0457x078x05-N10N	457×457×78	50	335	125	H14	ISO 45 H	≥ 99.995
SF14-M-0457x0610x078x05-N10N	457×610×78	50	420	125	H14	ISO 45 H	≥ 99.995
SF14-M-0610x0610x078x05-N10N	610×610×78	50	600	125	H14	ISO 45 H	≥ 99.995
SF14-M-0610x0762x078x05-N10N	610×762×78	50	750	125	H14	ISO 45 H	≥ 99.995
SF14-M-0762x0762x078x05-N10N	762×762×78	50	900	125	H14	ISO 45 H	≥ 99.995

Subject to technical change

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 E11 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.

Features and benefits

- 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 grid on request.

Delivery notes

Customized dimensions are available on request.

EN 1822:2009

ARTICLE	DIMENSIONS (W×L×D) [mm]	PLEAT DEPTH [mm]	NOMINAL VOLUME FLOW [m²/h]	INITIAL PRESSURE DROP [Pa]	FILTER CLASS ACC. TO EN 1822:2009	FILTER CLASS ACC. TO ISO 29463	ARRESTANCE EFFICIENCY MPPS [%]
SF11-M-0305x0305x150x12-N10N	305×305×150	125	370	140	E11	ISO 15 E	≥ 95
SF11-M-0305x0305x292x20-N10N	305×305×292	200	500	140	E11	ISO 15 E	≥ 95
SF11-M-0305x0457x150x12-N10N	305×457×150	125	560	140	E11	ISO 15 E	≥ 95
SF11-M-0305x0610x150x12-N10N	305×610×150	125	750	140	E11	ISO 15 E	≥ 95
SF11-M-0305x0610x292x20-N10N	305×610×292	200	1,050	140	E11	ISO 15 E	≥ 95
SF11-M-0305x0762x150x12-N10N	305×762×150	125	950	140	E11	ISO 15 E	≥ 95
SF11-M-0457x0457x150x12-N10N	457×457×150	125	850	140	E11	ISO 15 E	≥ 95
SF11-M-0457x0457x292x20-N10N	457×457×292	200	1,200	140	E11	ISO 15 E	≥ 95
SF11-M-0457x0610x150x12-N10N	457×610×150	125	1,200	140	E11	ISO 15 E	≥ 95
SF11-M-0457x0610x292x20-N10N	457×610×292	200	1,650	140	E11	ISO 15 E	≥ 95
SF11-M-0593x0593x292x20-N10N	593×593×292	200	2,150	140	E11	ISO 15 E	≥ 95
SF11-M-0610x0610x150x12-N10N	610×610×150	125	1,500	140	E11	ISO 15 E	≥ 95
SF11-M-0610x0610x292x20-N10N	610×610×292	200	2,250	140	E11	ISO 15 E	≥ 95
SF11-M-0610x0762x150x12-N10N	610×762×150	125	2,100	140	E11	ISO 15 E	≥ 95
SF11-M-0610x0762x292x20-N10N	610×762×292	200	2,870	140	E11	ISO 15 E	≥ 95
SF11-M-0762x0762x150x12-N10N	762×762×150	125	2,600	140	E11	ISO 15 E	≥ 95



MDF FRAME | CONSTRUCTION DEPTH 150 MM | HEPA

Micro-glass-fiber paper
600 Pa
70 °C
100 % rel. hum.
MDF
Semicircular PU profile, endlessly foamed



Application

Viledon® HEPA filters of filter classes H13 + H14 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.

Features and benefits

- 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 leak-proofing 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.

EN 1822:2009

ARTICLE	DIMENSIONS (W×L×D) [mm]	PLEAT DEPTH [mm]	NOMINAL VOLUME FLOW [m³/h]	INITIAL PRESSURE DROP [Pa]	HITER CLASS ACC. TO EN 1822:2009	HLTER CLASS ACC. TO ISO 29463	ARRESTANCE EFFICIENCY MPPS [%]
SF13-M-0305x0305x150x12-N10N	305×305×150	125	400	250	H13	ISO 35 H	≥ 99.95
SF13-M-0305x0305x292x20-N10N	305×305×292	200	470	250	H13	ISO 35 H	≥ 99.95
SF13-M-0305x0610x150x12-N10N	305×610×150	125	820	250	H13	ISO 35 H	≥ 99.95
SF13-M-0305x0610x292x20-N10N	305×610×292	200	1,000	250	H13	ISO 35 H	≥ 99.95
SF13-M-0457x0457x150x12-N10N	457×457×150	125	950	250	H13	ISO 35 H	≥ 99.95
SF13-M-0457x0457x292x20-N10N	457×457×292	200	1,100	250	H13	ISO 35 H	≥ 99.95
SF13-M-0610x0610x150x12-N10N	610×610×150	125	1,700	250	H13	ISO 35 H	≥ 99.95
SF13-M-0610x0610x292x20-N10N	610×610×292	200	2,000	250	H13	ISO 35 H	≥ 99.95
SF13-M-0610x0762x150x12-N10N	610×762×150	125	2,200	250	H13	ISO 35 H	≥ 99.95
SF13-M-0610x0762x292x20-N10N	610×762×292	200	2,750	250	H13	ISO 35 H	≥ 99.95
SF14-M-0305x0305x150x12-N10N	305×305×150	125	210	125	H14	ISO 45 H	≥ 99.995
SF14-M-0305x0305x292x20-N10N	305×305×292	200	270	160	H14	ISO 45 H	≥ 99.995
SF14-M-0305x0610x150x12-N10N	305×610×150	125	430	125	H14	ISO 45 H	≥ 99.995
SF14-M-0305x0610x292x20-N10N	305×610×292	200	600	160	H14	ISO 45 H	≥ 99.995
SF14-M-0457x0457x150x12-N10N	457×457×150	125	500	125	H14	ISO 45 H	≥ 99.995
SF14-M-0457x0457x292x20-N10N	457×457×292	200	680	160	H14	ISO 45 H	≥ 99.995
SF14-M-0610x0610x150x12-N10N	610×610×150	125	900	125	H14	ISO 45 H	≥ 99.995
SF14-M-0610x0610x292x20-N10N	610×610×292	200	1,280	160	H14	ISO 45 H	≥ 99.995
SF14-M-0610x0762x150x12-N10N	610×762×150	125	1,200	125	H14	ISO 45 H	≥ 99.995
SF14-M-0610x0762x292x20-N10N	610×762×292	200	1,620	160	H14	ISO 45 H	≥ 99.995

Subject to technical changes

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, microelectronics, etc.).

Features and benefits

- 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 Guidelin 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.

EN 1822:2009

ARTICLE	ARTICLE NUMBER	DIMENSIONS (W×L×D) [mm]	NOMINAL VOLUME FLOW [m³/h]	INITIAL PRESSURE DROP [Pa]	HLTER CLASS ACC. TO EN 1822:2009	FILTER CLASS ACC. TO ISO 29463	ARRESTANCE EFFICIENCY MPPS [%]
SF13-B-0288x0288x292/V06x25-N10N	53438538	288×288×292	850	250	H13	ISO 35 H	≥ 99.95
SF13-B-0288x0593x292/V06x25-N10N	53412638	288×593×292	1,800	250	H13	ISO 35 H	≥ 99.95
SF13-B-0305x0305x292/V06x25-N10N	53411980	305×305×292	1,000	250	H13	ISO 35 H	≥ 99.95
SF13-B-0305x0610x292/V06x25-N10N	53412052	305×610×292	2,000	250	H13	ISO 35 H	≥ 99.95
SF13-B-0593x0593x292/V12x25-N10N	53412644	593×593×292	3,600	250	H13	ISO 35 H	≥ 99.95
SF13-B-0610x0610x292/V10x25-N10N	53412060	610×610×292	3,400	250	H13	ISO 35 H	≥ 99.95
SF13-B-0610x0610x292/V12x25-N10N	53412054	610×610×292	4,000	250	H13	ISO 35 H	≥ 99.95
SF13-B-0610x0762x292/V14x25-N10N	53412056	610×762×292	4,700	250	H13	ISO 35 H	≥ 99.95
SF14-B-0288x0288x292/V06x25-N10N		288×288×292	850	320	H14	ISO 45 H	≥ 99.995
SF14-B-0288x0593x292/V06x25-N10N	53417294	288×593×292	1,800	320	H14	ISO 45 H	≥ 99.995
SF14-B-0305x0305x292/V06x25-N10N	53415772	305×305×292	1,000	320	H14	ISO 45 H	≥ 99.995
SF14-B-0305x0610x292/V06x25-N10N	53418697	305×610×292	2,000	320	H14	ISO 45 H	≥ 99.995
SF14-B-0593x0593x292/V12x25-N10N	53429101	593×593×292	3,600	320	H14	ISO 45 H	≥ 99.995
SF14-B-0610x0610x292/V12x25-N10N	53412194	610×610×292	4,000	320	H14	ISO 45 H	≥ 99.995
SF14-B-0610x0610x292/V12x25-N13S-V27	53448417	610×610×292	5,000	450	H14	ISO 45 H	≥ 99.995



CARTRIDGE | EPA

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 protect 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

 $\label{lem:customized} \textbf{Customized dimensions and variants available on request.}$

EN 1822:2009

ARTICLE	NOMINAL DIAMETER/ NOMINAL LENGTHS [mm]	NOMINAL VOLUME FLOW [m³/h]	INITIAL PRESSURE DROP [Pa]	FILTER CLASS ACC. TO EN 1822:2009	FILTER CLASS ACC. TO ISO 29463	ARRESTANCE EFFICIENCY MPPS [%]
SP11-A-0175x0175	175/175	130	120	E11	ISO 15 E	≥ 95
SP11-A-0175x0226	175/226	170	120	E11	ISO 15 E	≥ 95

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.
- The sheathing of powder-coated expanded metal protect 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

 $\label{lem:customized} \textbf{Customized dimensions and variants available on request.}$

EN 1822:2009

ARTICLE	NOMINAL DIAMETER/ NOMINAL LENGTHS [mm]	NOMINAL VOLUME FLOW [m³/h]	INITIAL PRESSURE DROP [Pa]	FILTER CLASS ACC. TO EN 1822:2009	FILTER CLASS ACC. TO ISO 29463	ARRESTANCE EFFICIENCY MPPS [%]
SP13-A-0175x0175x033x02-N11N-J25	175/175	130	200	H13	ISO 35 H	≥ 99.95
SP13-A-0175x0226x033x02-N11N-J25	175/226	170	200	H13	ISO 35 H	≥ 99.95



PLASTIC PLENUM HOOD | HEPA

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 H14 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.).

Features and benefits

- 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 aluminium, 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 U15.

Customized dimensions (then with metal hood) available on request.

EN 1822:2009

ARTICLE	ARTICLE NUMBER	DIMENSIONS (W×L×D) [mm]	NOMINAL VOLUME FLOW [m³/h]	HLTER CLASS ACC. TO EN 1822:2009	FILTER CLASS ACC. TO ISO 29463	ARRESTANCE EFFICIENCY MPPS [%]
SF14-A-0305x0610x150x05-Z02H-250x50	53417702	305×610×150	280	H14	ISO 45 H	≥ 99.995
SF14-A-0610x0610x150x05-Z02H-250x50	53412922	610×610×150	600	H14	ISO 45 H	≥ 99.995
SF14-A-0610x1220x150x05-Z02H-250x50	53413831	610×1,220×150	1,200	H14	ISO 45 H	≥ 99.995
SF14-A-0595x1205x150x05-Z02H-250x50	53480454	595×1,205×150	1,130	H14	ISO 45 H	≥ 99.995
SF14-A-0600x0600x150x05-Z02H-250x50		600×600×150	600	H14	ISO 45 H	≥ 99.995
SF14-A-0600x1210x150x05-Z02H-250x50		600×1,210×150	1,200	H14	ISO 45 H	≥ 99.995
SF14-A-0300x0600x150x05-Z02H-250x50		300×600×150	280	H14	ISO 45 H	≥ 99.995

Subject to technical changes.



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.
	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.

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.

Diffusor

Filter elements

- 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.).

Features and benefits

- 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 (Wx.Lx.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-CA0685x0685x420FX-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	837×0,837×450	762×762×68 78 88	Rectangular outlet	Powder-coated steel (RAL 9010)

GAS PHASE FILTRATION

CHEMCONTROL MODULES, HM MODULES, CHEMCONTROL PELLETS, CHEMCONTROL SYSTEMS, CHEMWATCH, CARBOPLEAT / DUOPLEAT, CHEMCONTROL FILTERS, ACTIVATED-CARBON CARTRIDGES



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.



MODULES | CHEMCONTROL MODULES





SPECIFICATIONS	
Adsorption medium	e.g. ChemControl Pellets
Operating temperature	<50 °C
Thermal stability (plastic)	120 °C
Moisture resistance	< 60% rel. hum.
Frame	plastic, black
Removable caps	plastic, black

Applications

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.

Features and benefits

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]	DE РТН [mm]	NOMINAL VOLUME FLOW [m²/h]	INITIAL PRESSURE DROP [Pa]
CCM 1810	598×438×144	3.4	25.4	600	35
CCM 1210	598×295×299	2.9	76	600	180
CCM 1805	299×438×144	2	25.4	300	35
CCM 1205	299×295×299	1.8	76	300	180



MODULES | HM MODULES

SPECIFICATIONS	
Adsorption medium	Versacomb Honeycomb media
Operating temperature	<50 °C
Thermal stability	76 °C
Recommended Humidity	< 60 % rel. hum.
Moisture resistance	99% rel. hum., non-condensing



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 rack 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 rack.
- · 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 2.5 m/s.
- 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.

ARTICLE	DIMENSIONS (L×W×D) [mm]	WEIGHT [kg]	GASKETING THICKNESS [mm]
HM01-P-289x594x44-Z08B20	289×594×44*	2.2	
HM01-P-594x594x44-Z08B20	594×594×44*	4.3	
HM01-P-594x594x99-Z08B20	594×594×99*	9.3	
HM01-P-495x495x99-N68B22	495×495×99*	7.7	6.35
HM01-P-348x348x152-N68B22	348×348×152*	5.8	6.35

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PELLETS | CHEMCONTROL PELLETS





SPECIFICATIONS	
Operating temperature	−20 °C up to +50 °C
Moisture resistance	10-95% rel. hum., non-condensing
Face velocity	0.3 – 2.5 m/s

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 industrie
- 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.

Delivery notes

Other Chem Control pellets are available on request-especially custom formulations with impregnations for specific gaseous contaminants.

ARTICLE	DIAMETER [mm]	REMOVAL CAPACITY FOR H ₂ S OF OWN WEIGHT [%]	REMOVAL CAPACITY FOR SO, OF OWN WEIGHT [%]	REMOVAL CAPACITY FOR CL ₂ OF OWN WEIGHT [%]	REMOVAL CAPACITY FOR NH, OF OWN WEIGHT [%]	MOISTURE CONTENT (APPROX.) [%]	CRUSH STRENGTH (MINIMUM) [kg]
CCP 104	3.80	7	4			20	2
CCP 108	3.80	14	7			20	2
CCP 210	3.80	25	12			20	2
CCP 310	3.80	15	10	10		20	2
CCP 510	3.80			15		15	2



PELLETS | CHEMCONTROL PELLETS

SPECIFICATIONS	
Operating temperature	−20 °C up to +50 °C
Moisture resistance	10–95% rel. hum., non-condensing
Face velocity	0.3 – 2.5 m/s



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

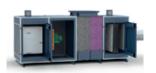
 $Other Chem Control \ pellets \ are \ available \ on \ request - especially \ custom \ formulations \ with impregnations for specific gaseous \ contaminants.$

ARTICLE	DIAMETER [mm]	REMOVALCAPACITY FOR H, S OF OWN WEIGHT [%]	REMOVAL CAPACITY FOR SO, OF OWN WEIGHT [%]	REMOVAL CAPACITY FOR CL ₂ OF OWN WEIGHT [%]	REMOVALCAPACITY FOR NH, OF OWN WEIGHT [%]	MOISTURE CONTENT (APPROX.) [%]	CRUSH STRENGTH (MINIMUM) [kg]
CCP 610	4×8			10		3	2
CCP 810	3.80; 4×8	7	3	4			2
CCP 830	3.80; 4×8	18	8	4			2
CCP 840	3.80; 4×8	12	6	10			2
CCP 903	3.80				10		3

Subject to technical changes.

SYSTEMS | CHEMCONTROL DEEP-BED PRESSURIZATION UNITS





SPECIFICATIONS	
Housing	Plastisol inner/outer skin panels, with aluminium extrusion frame, alternatively stainless steel constructions available
Prefiltration	e.g. Viledon® Compact pocket filters
Adsorption medium	ChemControl Pellets, as deep bed stage or with ChemControl Modules
Fine filtration	e.g. Viledon® MaxiPleat cassette filters
Fan	energy-saving EC motor, meeting the ErP 2015 directive for increased minimum efficiency ratings

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 proteced 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.

Features and benefits

- Boxed anodized aluminum pentapost frame and high strength 30 mm double skin plastisol panels as standard offer reduced leakage rates of L 3 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 availabe 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	AIRINTAKE	AIROUTLET	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]	OVERALLUNIT LENGTH (EXCLUDING DUCT CONNECTIONS) [mm]	OVERALL WEIGHT (EXCLUDING FILTERS AND PELLETS)***	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
- *** All units are optionally available with Viledon® CCM 1205 modules



SYSTEMS | CHEMCONTROL RECIRCULATION UNITS

SPECIFICATIONS	
Housing	Plastisol inner/outer skin panels, with aluminium extrusion frame, alternatively stainless steel constructions available
Prefiltration	e. g. Viledon® pocket filters
Adsorption medium	ChemControl Modules filled with ChemControl Pellets
Fine filtration	e.g. Viledon® MaxiPleat cassette filters
Fan	energy-saving EC motor, meeting the ErP 2015 directive



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 (DBPU).

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.

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]
VILEDON CRU*							
CRU 1800 DW	1,800	2,600×750×750	550	4	1	1	0.8
CRU 1800 DW stainless steel**	1,800	2,600×750×750	580	4	1	1	0.8
CRU 3600 DW	3,600	2,600×1,500×750	650	8	2	2	1.3
CRU 3600 DW stainless steel**	3,600	2,600×1,500×750	680	8	2	2	1.3
VILEDON CRPU*							
CRPU 1800 DW	1,800	2,600×750×750	560	4	1	1	0.8
CRPU 1800 DW stainless steel**	1,800	2,600×750×750	590	4	1	1	0.8
CRPU 3600 DW	3,600	2,600×1,500×750	660	8	2	2	1.3
CRPU 3600 DW stainless steel**	3,600	2,600×1,500×750	690	8	2	2	1.3

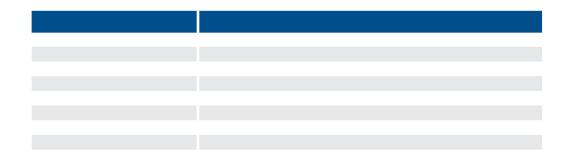
^{*} Standard casing: double wall casing ensuring low noise, manufactured using alumina corners and panels with plastisol coating.

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

SYSTEMS | HM VAPOR ADSORBER







The Viledon® HM Vapor Adsorber Series 500HM, 1000HM and 2000HM are complete, skid-mounted systems used to control organic and inorganic gaseous contaminants by activated carbon adsorption and chemical reaction.

They provide highly purified makeup air for pressurizing control rooms to prevent the intrusion of contaminated air.

Each system is pre-engineered and includes a fan, a particulate pre-filter, four passes of honeycomb matrix (HM) activated carbon modules with Versacomb media and a particulate final filter.

Application

- 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

- Versacomb media provide protection from corrosive gases e.g. H₂S, SO₂ and CL.
- · Suitable for the adsorption of hydrocarbons and VOCs.
- Open honeycomb structure leads to fast reaction kinetics combined with a low pressure drop.
- The media can be engineered to meet specific performance requirements such as pressure drop, maximum face velocity and residence

ARTICLE	AIR VOLUME [m³/h]	DIMENSIONS (H×W×D) [mm]	NUMBER OF HM MODULES	(kg)	WEIGHT, WITH MODULES [kg]
500HM	860	2,007×660×851	4	147	176
1000HM	1,700	1,496×1,321×1,016	8	193	251
2000HM	3,400	1,591×1,778×1,143	16	236	352



CHEMWATCH | ONLINE MONITORING SYSTEM

SPECIFICATIONS	
Dimensions (W×H×D)	180×180×85 mm
Weight	1,100 g
Operating temperature	0 – 50 °C
Relative humidity	10-95%



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,S, SO₃, SO₃, Cl₃, Cl₃O, NO₄, or NH₃.

The online monitoring system is suitable to 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).

Features and benefits

- Large color display for clear visibility of all measurements at a glance.
- Optimal data information thanks to graphically visualized G-classification
- Data transfer via LAN, WiFi or Bluetooth to PC, control station, or Smartphone.
- · Large data storage capacity with data history.
- · Unsusceptible to vibrations.
- Precise corrosion rates independent from temperature fluctuations.
- · All measured values logged directly from the beginning.
- Easy adjusting of individual measuring tasks direct at the instrument or via PC.
- · CE mark.
- 8 standard languages: English, Chinese, French, German, Italian, Japanese, Portuguese and Spanish (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 manual 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 WLAN Modul	53496608
ChemWatch Bluetooth Modul	53496609

ibject to technical change

CARBOPLEAT | 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 M6, 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).

EN 779:2012

ARTICLE	ARTICLE NUMBER	DIMENSIONS (W×H×D) [mm]	NOMINAL VOLUME FLOW [m³/h]	INITIAL PRESSURE DROP [Pa]	FILTER CLASS ACC. TO EN 779:2012	FILTER CAPACITY TOLUENE	FILTER CAPACITY SO, [B]	FILTER CAPACITY N-BUTANE [g]
CP 1/1	53538274	592×592×292	3,400	70		910	210	105
CP 5/6	53538276	592×490×292	2,700	70		740	170	85
CP 1/2	53538275	592×287×292	1,500	70		410	95	48
DP85 1/1	53541780	592×592×292	3,400	130	M6	715	165	85
DP85 5/6	53541782	592×490×292	2,700	130	M6	570	132	68
DP85 1/2	53541781	592×287×292	1,500	130	M6	310	72	37



CHEMCONTROL FILTERS | CHEMCONTROL FILTERS

SPECIFICATIONS	
Recommended duty temperature	<30 °C
Thermal stability	50 °C
Recommended duty humidity	< 60 % rel. hum.



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, mercaptans 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 principales. 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]	FILTER AREA [m³]	CONTENT OF PERMANGANATE SUBSTRATE [kg]	NOMINAL VOLUME FLOW [m³/h]	INITIAL PRESSURE DROP [Pa]	SUITABLE FOR GASES
CCF 1000-B-P	592×592×292	11	11	3,400	160	H ₂ S, SO ₂ , mercaptanes, formaldehyde
CCF 500-B-P	592×592×292	11	5.8	3,400	160	H ₂ S, SO ₂ , mercaptanes, formaldehyde
CCF 1000-P-P	592×592×292	8	8	3,400	130	H ₂ S, SO ₂ , mercaptanes, formaldehyde
CCF 500-P-P	592×592×292	8	4.1	3,400	130	H ₂ S, SO ₂ , mercaptanes, formaldehyde



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.

Features and benefits

- 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.

ARTICLE	OPTIMIZED FOR	DIMENSIONS (W×H×D) [mm]	NUMBER OF CARTRIDGES	NOMINAL VOLUME FLOW [m³/h]	INITIAL PRESSURE DROP [Pa]	ACTIVATED- CARBON VOLUME [dm³]
MODULE						
C bank B-0305x0610x430 / 08x140 odour	Odours / organic solvents	305×610×430	8	1,700	200	32
C bank B-0507x0610x430 / 12x140 odour	Odours / organic solvents	507×610×430	12	2,500	200	48
C bank B-0610x0610x430/16x140 odour	Odours / 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 odour	Odours / organic solvents	305×610×430	5	1,500	150	30
C bank B-0507x0610x430/07x160 odour	Odours / organic solvents	507×610×430	7	2,550	150	42
C bank B-0610x0610x430/09x160 odour	Odours / 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



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



ARTICLE	OPTIMIZ ED FOR	NOMINAL DIAM- ETER /NOMINAL LENGTHS [mm]
INDIVIDUAL ELEMENTS (CARTRIDGES)		
C cart B-0140x0400x035 odour	Odours / 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 odour	Odours/organic solvents	160×400
C cart B-0160x0400x035 acid	Acidic gases	160×400
C cart B-0160x0400x035 iodine	Radioactive iodine	160×400
ARTICLE	DIMENSIONS (W×H×D) [mm]	NUMBER OF CARTRIDGES
INDIVIDUAL ELEMENTS (PLATES)		
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

Subject to technical changes.

C plate B-0507x0610x40/07x160

C plate B-0610x0610x40/09x160

www.freudenberg-filter.com 97

507×610×40

610×610×40





Coalescing filters offer optimal protection against penetrating water and salt, especially in offshore or coastal environments and in many other locations with high humidity. As pre-filters with special drainage properties, they prevent water droplets from passing through the subsequent filter stages.



COALESCER

HYDROMAXX POCKET FILTERS





SPECIFICATIONS	
Filter medium	Hydrophobic polyester fibers
Recommended final pressure drop	375 Pa
Thermal stability	70 °C
Moisture resistance	100% rel. hum.
Frame	Polyurethane

Application

Viledon® hydroMaxx reverse pocket filters are the next generation of coalescer filters following the field-proven F 45 R pocket filter range. Offering high operational reliability and cost-efficiency they are ideally suited for intake air prefiltration at coastal, offshore and other high humidity locations of

- gas turbines in power generation and in the oil and gas industry,
- · compressors and diesel and gas engines.

Features and benefits

hydroMaxx pocket filters offer **four main benefits** in one filtration concept.

1. The reverse media's hydrophobic, progressive nonwoven composition functions as a reliable coalescer for water particles.

This feature enables the water droplets to combine and drain down from the vertical pockets. Thus salt and hydrocarbon ingress will be substantially reduced.

- 2. Superior dust handling. Thanks to the reverse media concept, dust is not readily stored as in a traditional pocket filter. The hydroMaxx utilizes a self-supporting, integrated cage system to optimize performance.
- 3. Maximized functional reliability thanks to the leak-proof welded edge configuration of the filter pockets, foam-sealed into a PUR front frame, and dimensionally stable construction of the filter element as a whole.
- 4. Various 2-in-1 filtration system solutions based on the unique modular clip-on system. This design allows close coupling to either the intermediate or the final filter without any structural modifications.
- The integrated plastic support cage ensures optimum stability as well as easy, timesaving mounting or change of the filter element.
- Pre-installed couplings at the four corners can be used for combination with other pre- or final filters by using the patented Viledon® modular clip-on system.

Delivery notes

Viledon $^{\otimes}$ hydroMaxx can be installed on another Viledon $^{\otimes}$ pocket filter with the aid of an adapter (art. No. 53541191).

| ISO 16890 | ISO



COALESCER

HYDROPACK FILTER CELLS

SPECIFICATIONS	
Thermal stability	up to 70 °C
Moisture resistance	up to 100% rel. hum.
Frame	plastic



Application

Subject to technical changes.

hydroPack MP 45 KTC-W filter cells are used for intake air filtration of

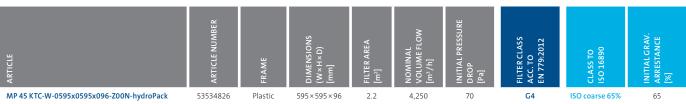
- · gas turbines in power generation and in the oil and gas industry,
- compressors and diesel and gas engines.

Here they extend the useful lifetimes of the downstream high-performance filters.

Features and benefits of hydroPack MP 45 KTC-W

- A water barrier at the bottom of the filters back side reduces intaken water from reaching the clean-air side. This ensures enhanced prefilter lifetime and protection of the downstream filter stage.
- Thanks to coalescing properties ideally suited for applications where filters are exposed to constant waterspray or fogging.
- hydroPack MP 45 KTC-W Filters are fully-potted resulting in a leak-free construction.
- The entire filter element is metal-free and thus non-corroding and fully incinerable.
- The filter cells are moisture-resistant up to 100% rel. humidity and thermally stable up to 70 °C. The filtermedium is self-extinguishing to DIN 53438 (Fire class F 1).
- Besides the standard version without gasket hydroPack filter elements
 are optionally available with a glued on gasket, either gasket on the
 downstream side (same side as water barrier) or gasket on the
 upstream side (opposite side of the water barrier).

EN 779:2012 ISO 16890



COALESCER

HYDROMESH METAL FILTERS





SPECIFICATIONS	
Filter material	Knitted wire mesh (AlMg3)
Moisture resistance	up to 100% rel. hum.
Frame	Aluminium (AlMg3) or stainless steel
Protection grid	Expanded metal aluminium

Application

 $\label{prop:prop:prop:prop:prop:state} hydro Mesh \ coalescer \ filters \ apply \ for \ moisture \ separation \ used \ in \ intake \ air \ filtration \ systems \ of$

- gas turbines for power generation and in the oil and gas industry
- · compressors,
- offshore and coastal installations,
- installations with recurrent high humidity.

Features and benefits

- hydroMesh coalescer are suitable for prefiltration of pulse-jet cartridge systems in very dusty environments that are also characterized by high humidity (e.g. coastal sites in desert areas) or by water ingress.
- They protect the downstream filter stages reliably and remove moisture.
- Can be used as a coarse dust (e.g. sand) prefilter in static filter systems.

ARTICLE	ARTICLE NUMBER	DIMENSIONS (W×H×D) [mm]	NOMINAL VOLUME FLOW [m²/h]	INITIAL PRESSURE DROP [Pa]
hydroMesh Coalescer AlMg3 610x305x25 mm	53541448	610×305×25	1,700	65
hydroMesh Coalescer AlMg3 610x610x25 mm	53541447	610×610×25	3,400	65

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.

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.

Features and benefits 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.

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).

- 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.

Features and benefits 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.

EN 779:2012 ISO 16890

	ER	ныснт		ME FLOW	URE DROP	c. To		М	PARTICULATE ATTER EFFICIENO [%]	EY
ARTICLE	OUTER DIAMETER [mm]	CONSTRUCTION HEIGHT [mm]	FILTER AREA [m²]	NOMINAL VOLUME [m³/h]	INITIAL PRESSURE DROP [Pa]	FILTER CLASS AC EN 779:2012	CLASS TO ISO 16890	ISO ePM1	ISO ePM2,5	ISO ePM10
GTB 324 W66S0	324	660	21.0	1,100	160		ISO ePM10 70%	28	39	74
GTB 324 W70S0	324	700	23.0	1,100	160		ISO ePM10 70%	28	39	74
GTB 324-445 W66S0 Set	445/324	1,330	46.0	2,500	165		ISO ePM10 70%	28	39	74
GTB 445 K66S0	445/324	660	25.0	1,400	-		ISO ePM10 70%	28	39	74
GTS 324 W66S0	324	660	18.1	1,100	115	F9	ISO ePM1 80%	80	85	95
GTS 324 W70S0	324	700	19.2	1,100	115	F9	ISO ePM1 80%	80	85	95
GTS 324-445 W66S0 Set	445/324	1,330	40.1	2,500	130	F9	ISO ePM1 80%	80	85	95
GTS 445 K66S0	445	660	22.0	1,400	-	F9	ISO ePM1 80%	80	85	95



PULSE-JET

SPECIFICATIONS	
Filter medium	GTS 10: high-performance nonwoven with water-repellent coating made of synthetic microfibers
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



Application

Viledon® pulse-jet filter cartridges are used for intake air filtration at gas turbines and turbocompressors. The GTS10 series is used at both onshore and offshore installations.

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

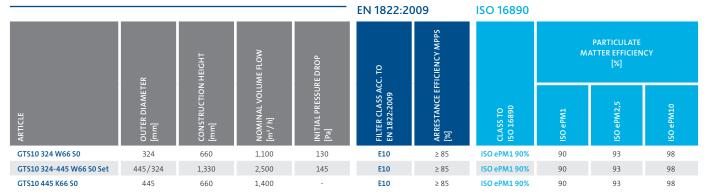
Features and benefits

- Innovative high-performance nonwovens with a water-repellent finish and made of synthetic micro-fibers enable GTS 10 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 10 series is particularly well suited for locations with high dust concentrations in the outside air.
- GTS 10 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.

Delivery notes

Subject to technical changes

Customized variants of GTS cartridges and adapters (bayonet, etc.) plus cover, base and support cage in stainless steel version are available on request.









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.

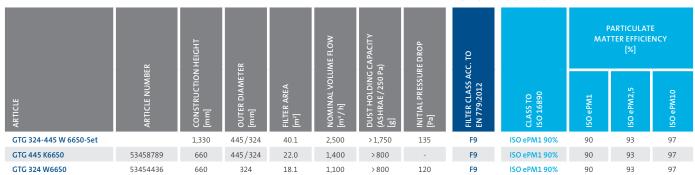
Characteristics and pluses of the GTG filter cartridges

- 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

Delivery notes

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

EN 779:2012 ISO 16890



HIGH-TEMPERATURE FILTERS

HT FILTER MATS, HT FILTER PACKS, HITEMP CASSETTE FILTERS, HIPROTEC 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 ultrafine homogeneously spun glass-fibers, clean air side with special final layer made of synthetic nonwoven. LH620: 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	E1 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.

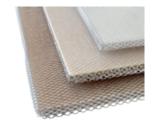
	ox.	OX. VELOCITY E DROP		.: 01		PARTICULATE MATTER EFFICIENCY [%]		
ARTICLE	THICKNESS APPR([mm]	NOMINAL MEDI/ [m³/h×m²]	INITIAL PRESSURE DROP [Pa]	FILTER CLASS ACC. EN 779:2012	CLASS TO ISO 16890	ISO ePM1	ISO ePM2,5	ISO ePM10
LH 243	20	2,200	125	M5	ISO ePM10 65%	20	31	68
LH 244	20	2,200	125	M5	ISO ePM10 65%	20	31	68
LH 620	20	2,200	125	M5	ISO ePM10 65%	20	31	68



HIGH TEMPERATURE FILTERS

HT FILTER PACKS

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	F1 acc to DIN 53/38



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. $480 \times 480 \times 14$ mm. Delivery unit: 30 pcs./carton.

ARTICLE	DIMENSIONS (W×L) [mm]	WEIGHT [kg]	NOMINAL VOLUME FLOW [π² /h]	DUST HOLDING CAPACITY (AC FINE / 450 Pa) [g]	INITIAL PRESSURE DROP [Pa]	AVERAGE ARRESTANCE [%]
LH 350	480×480	0.25	350	40	75	99
LH 370	480×480	0.30	900	75	30	99
LH 1000	480×480	0.30	1,000	75	85	94
LH 1000/OV	480×480	0.30	1,000	100	60	92

Subject to technical changes.

HIGH TEMPERATURE FILTERS

HITEMP 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® HT 60 and HT 90 HiTemp 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.

Features and benefits

The Viledon® HT 60 and HT 90 HiTemp cassette filters excel in terms
of a particularly high dust holding capacity and very good mechanical
strength, even when subjected to inhomogeneous air flows.

Delivery notes

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

 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 an construction depth of 150 mm.

EN 779:2012 ISO 16890

	IBER	z			ILUME FLOW	URE DROP	ACC. TO			ARTICULAT FER EFFICII [%]	
ARTICLE	ARTICLE NUMBER	SEAL POSITION	DIMENSIONS (L×W×D) [mm]	FILTER AREA [m²]	NOMINAL VOLUME FLOW [m³/h]	INITIAL PRESSURE DROP [Pa]	FILTER CLASS / EN 779:2012	CLASS TO ISO 16890	ISO ePM1	ISO ePM2,5	ISO ePM10
HT60-A-0610x0610x292-G-2-M-3-Q-2-F	53366788	Clean air side	610×610×292	12,0	3,400	90	M6	ISO ePM10 75%	30	42	75
HT60-A-0610x0610x292-G-1-M-3-Q-2-F	53414743	Raw air side	610×610×292	12,0	3,400	90	M6	ISO ePM10 75%	30	42	75
HT60-A-0305x0610x292-G-2-M-3-Q-2-F	53367242	Clean air side	305×610×292	6.0	1,700	100	M6	ISO ePM10 75%	30	42	75
HT60-A-0305x0610x292-G-2-M-3-Q-2F-reinfo	53426898	Clean air side	305×610×292	6.0	1,700	100	M6	ISO ePM10 75%	30	42	75
HT60-B-0592x0592x292-G-2-M-3-Q-2-F	53366698	Clean air side	592×592×292	9.0	3,400	130	M6	ISO ePM10 75%	30	42	75
HT60-B-0592x0592x292-G-1-M-3-Q-2-F	53366787	Raw air side	592×592×292	9.0	3,400	130	M6	ISO ePM10 75%	30	42	75
HT60-B-0592x0592x292-G-2-M-3-Q-2F-547 mm	53394225	Clean air side	592×592×292	9.0	3,400	130	M6	ISO ePM10 75%	30	42	75
HT60-B-0592x0592x292-G-2-M-3-Q-2F-547-Re	53414564	Clean air side	592×592×292	9.0	3,400	130	M6	ISO ePM10 75%	30	42	75
HT60-B-0490x0592x292-G-2-M-3-Q-2-F	53429703	Clean air side	490×592×292	9.0	2,800	130	M6	ISO ePM10 75%	30	42	75
HT60-B-0287x0592x292-G-2-M-3-Q-2-F	53366705	Clean air side	287×592×292	4.5	1,700	140	M6	ISO ePM10 75%	30	42	75
HT60-B-0287x0592x292-G-1-M-3-Q-2-F	53366706	Raw air side	287×592×292	4.5	1,700	140	M6	ISO ePM10 75%	30	42	75
HT60-B-0287x0592x292-G-2-M-3-Q-2F-547 mm	53394224	Clean air side	287×592×292	4.5	1,700	140	M6	ISO ePM10 75%	30	42	75
HT90-A-0610x0610x292-G-2-M-3-Q-2-F	53340443	Clean air side	610×610×292	12.0	3,400	120	F8	ISO ePM2,5 75%	69	77	92
HT90-A-0610x0610x292-G-1-M-3-Q-2-F	53433314	Raw air side	610×610×292	12.0	3,400	120	F8	ISO ePM2,5 75%	69	77	92
HT90-A-0305x0610x292-G-2-M-3-Q-2-F	53371208	Clean air side	305×610×292	6.0	1,700	130	F8	ISO ePM2,5 75%	69	77	92
HT90-B-0592x0592x292-G-2-M-3-Q-2-F	53366717	Clean air side	592×592×292	9.0	3,400	150	F8	ISO ePM2,5 75%	69	77	92
HT90-B-0592x0592x292-G-1-M-3-Q-2-F	53409792	Raw air side	592×592×292	9.0	3,400	150	F8	ISO ePM2,5 75%	69	77	92
HT90-B-0287x0592x292-G-2-M-3-Q-2-F	53366727	Raw air side	287×592×292	4.5	1,700	160	F8	ISO ePM2,5 75%	69	77	92
HT90-B-0287x0592x292-G-1-M-3-Q-2-F	53382668	Raw air side	287×592×292	4.5	1,700	160	F8	ISO ePM2,5 75%	69	77	92



HIGH TEMPERATURE FILTERS

HIPROTEC CASSETTE FILTERS | CONSTRUCTION DEPTH UP TO 78 MM | FINE DUST

SPECIFICATIONS	
Recommended final pressure drop	300 Pa
Thermal stability	260 °C 385 °C upon request (aluminum frame)
Frame	S: Extruded aluminum profile A: Steel sheeting, galvanized
Seal	Textile glass round-cord seal
Mounting	Installation on both raw and clean gas side possible
Fire class	F1 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 \times 480 mm (class M6) frequently serves as an upgrade for expanded-metal filter packs and cells.

Features and benefits

- The Viledon® HiProtec cassette filters HPT 10.0 and HPT 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, frame materials or termal stability up to 385 $^\circ\text{C}$ available on request.

EN 779:2012 ISO 16890

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	3ER			UME FLOW	LUME FLOW					CY
ARTICLE	ARTICLE NUMBER	DIMENSIONS (H×W×D) [mm]	FILTER AREA [m²]	NOMINAL VOLUME FLOW [m³/h]	INITIAL PRESSURE DROP [Pa]	FILTER CLASS A EN 779:2012	CLASS TO ISO 16890	ISO ePM1	ISO ePM2,5	ISO ePM10
HT10-A-0480x0480x022-U	53527861	480×480×22	1.5	1,000	50	M6	ISO ePM10 70%	23	34	70
HT10-S-0480x0480x078-U	53527859	480×480×78	3.9	1,050	45	M6	ISO ePM10 75%	32	42	75
HT10-S-0490x0490x040-U	53527860	490×490×40	2.1	860	35	M6	ISO ePM10 75%	32	42	75
HT10-S-0610x0610x055-U	53527908	610×610×55	5.9	1,600	35	M6	ISO ePM10 75%	32	42	75
HT10-S-0610x0610x078-U	53527907	610×610×78	6.6	1,700	35	M6	ISO ePM10 75%	32	42	75
HT10-S-0805x0575x055-U	53527904	805×575×55	7.0	2,000	35	M6	ISO ePM10 75%	32	42	75
HT10-S-0915x0457x055-U	53527888	915×457×55	6.2	1,800	35	M6	ISO ePM10 75%	32	42	75
HT10-S-0915x0457x078-U	53527856	915×457×78	7.0	1,900	35	M6	ISO ePM10 75%	32	42	75
HT2.5-S-0305x0305x055-U	53527855	305×305×55	1.3	400	80	F8	ISO ePM2,5 80%	77	84	95
HT2.5-S-0305x0610x055-U	53527853	305×610×55	3.0	850	80	F8	ISO ePM2,5 80%	77	84	95
HT2.5-S-0305x0610x078-U	53528272	305×610×78	2.7	850	85	F8	ISO ePM2,5 80%	77	84	95
HT2.5-S-0490x0490x040-U	53527852	490×490×40	2.1	860	85	F8	ISO ePM2,5 80%	77	84	95
HT2.5-S-0610x0610x055-U	53527850	610×610×55	5.9	1,600	80	F8	ISO ePM2,5 80%	77	84	95
HT2.5-S-0610x0610x078-U	53527849	610×610×78	6.6	1,700	85	F8	ISO ePM2,5 80%	77	84	95
HT2.5-S-0915x0457x055-U	53527838	915×457×55	6.2	1,800	80	F8	ISO ePM2,5 80%	77	84	95
HT2.5-S-0915x0457x078-U	53527837	915×457×78	7.0	1,900	85	F8	ISO ePM2,5 80%	77	84	95

Subject to technical changes.



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. Based on a careful analysis, we individually select the appropriate filter medium for the respective dust requirement as well as the appropriate dust removal element, which is variable in terms of shape, overall height, nominal diameter and pleat geometry.

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, 1000 and 1200 mm.

Twist&Fix filter cartridges

- Cylindrical filter cartridges with four nominal diameters 145, 156, 218 and 324 mm, with standard lengths of 300, 600, 1000, 1200 and 1500 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 compart-
- · 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.

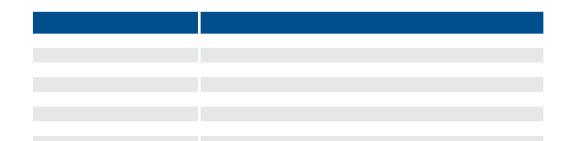
Features and benefits

- 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 DIAM- ETER/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 (antistatisch)	327/1,205	15.6	46	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	Μ
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	Μ
LP 327 S-66-A 11-09	53492094	DIN standard cartridge	FE 2509, PP	327/660	11.0	46	Μ
LP 327 S-76-A 12-09	53492095	DIN standard cartridge	FE 2509, PP	327/765	12.6	46	Μ
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	22	Μ
LP 155 B-15-A 54-07	53327406	Snap&Fix cartridge	FE 2507-sinus, PES	155/1,512	5.4	22	Μ
LP 145 G-10-A 27-06	53375277	Twist&Fix cartridge	FE 2506-sinus, PES (antistatisch)	145/1,012	2.7	22	M
LP 156 G-10-A 36-06	53372251	Twist&Fix cartridge	FE 2506-sinus, PES (antistatisch)	156/1,012	3.6	22	M
LP 218 G-15-A 75-09	53295115	Twist&Fix cartridge	FE 2509, PP	218/1,512	7.5	29	M
LP 324 G-60-B 77-21	53306324	Twist&Fix cartridge	FE 2521, PES + PTFE-Membran	324/612	7.7	46	Μ
LP 324 G-12-A 25-77	53457204	Twist&Fix cartridge	sinTexx Plus	324/1,212	25.3	46	Μ
LP 145 G-15-A 54-77	53458531	Twist&Fix cartridge	sinTexx Plus	145/1,512	5.4	22	M



FILTER BAGS





115

Viledon® filter bags are available in a large number of different sizes, lengths and models, and in different top and bottom section variants. They 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 industrie, 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.
- Trouble-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 $< 1 \text{ mg/m}^3$ 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.

Delivery notes

The innovative Viledon $^{\circ}$ 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	120
NEXX Bags as	NEXX as	250	700/800	120
Fiber Bags	FE 2920	250	750/750	150
Fiber Bags as	FE 2919	260	750/750	150

FILTER PLATES





SPECIFICATIONS	
Note	Electrostatically conductive filter plates must be properly earthed

Features and benefits

- 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
- DryPleat and DryPleat nano filter plates are ideal for high-quality dry separation of paint overspray using stone powder. They are silicone-free and are available for both clean and raw air side applications.

Delivery notes

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

ARTIKEL	DIMENSIONS (W×H×D) [mm]	РІЕАТ DEPTH [mm]	FILTER MEDIUM	FILTER AREA [m²]	NUMBER OF PLEATS
FP 0110 C6014N	515×600×52	15	FE 2831 Polyester	1.4	40
FP 0110 C6014L	515×600×52	15	FE 2832 Polyester antistatic	1.4	40
FP 0110 C6014C	515×600×52	15	FE 2833 Polyester + PTFE Membrane	1.4	40
FP 0110 C6014D	515×600×52	15	FE 2834 Polyester + PTFE Membrane antistatic	1.4	40
FP 0110 C1024N	515×1,000×52	15	FE 2831 Polyester	2.4	40
FP 0110 C1024L	515×1,000×52	15	FE 2832 Polyester antistatic	2.4	40
FP 0110 C1024C	515×1,000×52	15	FE 2833 Polyester + PTFE Membrane	2.4	40
FP 0110 C1024D	515×1,000×52	15	FE 2834 Polyester + PTFE Membrane antistatic	2.4	40
FP 0110 C1230N	515×1,200×52	15	FE 2831 Polyester	3.0	40
FP 0110 C1230L	515×1,200×52	15	FE 2832 Polyester antistatic	3.0	40
FP 0110 C1230C	515×1,200×52	15	FE 2833 Polyester + PTFE Membrane	3.0	40
FP 0110 C1230D	515×1,200×52	15	FE 2834 Polyester + PTFE Membrane antistatic	3.0	40
FP 0800 C6021N	515×600×52	15	FE 2831 Polyester	2.1	60
FP 0800 C6021L	515×600×52	15	FE 2832 Polyester antistatic	2.1	60
FP 0800 C6021C	515×600×52	15	FE 2833 Polyester + PTFE Membrane	2.1	60
FP 0800 C6021D	515×600×52	15	FE 2834 Polyester + PTFE Membrane antistatic	2.1	60



FILTER PLATES

SPECIFICATIONS	
Note	Electrostatically conductive filter plates must be properly earthed



Delivery notes

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

ARTIKEL	DIMENSIONS (W×H×D) [mm]	РІЕАТ DЕРТН [mm]	FILTER MEDIUM	FILTER AREA [m²]	NUMBER OF PLEATS
FP 0800 C1034N	515×1,000×52	15	FE 2831 Polyester	3.4	60
FP 0800 C1034L	515×1,000×52	15	FE 2832 Polyester antistatic	3.4	60
FP 0800 C1034C	515×1,000×52	15	FE 2833 Polyester + PTFE Membrane	3.4	60
FP 0800 C1034D	515×1,000×52	15	FE 2834 Polyester + PTFE Membrane antistatic	3.4	60
FP 0800 C1241N	515×1,200×52	15	FE 2831 Polyester	4.1	60
FP 0800 C1241L	515×1,200×52	15	FE 2832 Polyester antistatic	4.1	60
FP 0800 C1241C	515×1,200×52	15	FE 2833 Polyester + PTFE Membrane	4.1	60
FP 0800 C1241D	515×1,200×52	15	FE 2834 Polyester + PTFE Membrane antistatic	4.1	60
FP 1800 C1050C	578×1,045×74	24	FE 2833 Polyester + PTFE Membrane	5.0	52
DryPleat 2909	566×1,500×80	23	FE 2834 Polyester + PTFE Membrane antistatic	4.7	36
DryPleat nano 2909	566×1,500×80	23	sinTexx Plus advanced antistatic	4.7	36
DryPleat 2909M	566×1,500×80	24	FE 2834 Polyester + PTFE Membrane antistatic	5.0	36
DryPleat nano 2909M	566×1,500×80	24	sinTexx Plus advanced antistatic	5.0	36
DryPleat 0900M	1,050×1,500×62	23	FE 2834 Polyester + PTFE Membrane antistatic	10.2	72
DryPleat nano 0900M	1,050×1,500×62	23	sinTexx Plus advanced antistatic	10.2	72
DryPlat 0900	1,054×1,500×80	26	sinTexx Plus advanced antistatic	10.9	72

FILTER MEDIA FOR DUST REMOVAL ELEMENTS





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 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.

ARTICLE	FILTER MEDIUM	THICKNESS APPROX. [mm]	WEIGHT PER UNIT AREA APPROX. [g/m³]	DUST CLASS	AIR-PERMEABILITY AT 200 Pa [m² / (m² ×h)]	ELONGATION AT MAXIMUM TENSILE FORCE ALONG/ACROSS [%]	MAXIMUM TENSILE FORCE ALONG/ACROSS [N/5 cm]
FE 2506	PES, thermisch gebunden, antistatischer Rasterdruck	0.8	245	Μ	360	25/40	300/600
FE 2507	PES, thermisch gebunden		235	Μ	360	25/40	300/600
FE 2508	100% Polyolefin, thermisch gebunden, antistatischer Rasterdruck	0.3	130	Μ	360	25/25	350/200
FE 2509	100% Polyolefin, thermisch gebunden	0.3	120	Μ	360	25/25	350/200
FE 2519	PES, thermisch gebunden, antistatischer Rasterdruck	1.1	260	L	3,400	35 /35	750/750
FE 2520	PES, thermisch gebunden	1.1	250	L	3,400	35/35	750/750
FE 2521	PES, thermisch gebunden, + PTFE-Membran	1.0	270	Μ	320	35/35	750/750
FE 2523	PES, thermisch gebunden, antistatischer Rasterdruck, + PTFE-Membran	1.0	280	Μ	320	35/35	750/750



FILTER MEDIA FOR DUST REMOVAL ELEMENTS

SPECIFICATIONS	



- 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/m³ can be lastingly achieved.
- Resource-saving manufacturing allows active contribution to environmental protection.

Delivery notes

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

ARTICLE	HLTER MEDIUM	THICKNESS APPROX. [mm]	WEIGHT PER UNIT AREA APPROX. [g/m²]	DUST CLASS	AIR-PERMEABILITY AT 200 Pa [m³/(m²×h)]	ELONGATION AT MAXIMUM TENSILE FORCE ALONG/ACROSS [%]	MAXIMUM TENSILE FORCE ALONG/ACROSS [N/5 cm]
FE 2576 sinTexx Plus as	PES, thermisch gebunden mit Feinstfaserauflage; antistatische Ausrüstung	0.75	240	Μ	600	25/40	500/700
FE 2577 sinTexx Plus	PES, thermisch gebunden mit Feinstfaserauflage	0.75	230	M	600	25/40	500/700
FE 2931 NEXX as	PES / PA, Mikrofilamente; antistatische Ausrüstung	1.0	250	Μ	480	35/35	700/800
FE 2932 NEXX	PES / PA, Mikrofilamente	1.0	240	M	600	35/35	700/800
FE 2933 NEXX as wr	PES/PA, Mikrofilamente; antistatische Ausrüstung; wasser- und ölabweisende Ausrüstung		255	Μ	420	35/35	700/800
FE 2934 NEXX wr	PES / PA, Mikrofilamente; wasser- und ölabweisende Ausrüstung	1.0	245	Μ	420	35/35	700/800

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.



NUTRITEXX | FOOD-GRADE NONWOVENS





SPECIFICATIONS	
Material	Polyester (some with cellulose content), Polypropylene
Bonding	Chemical or thermal
Food-grade testing	dependent on the filter fleece, (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.

Features and benefits

- 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 AREAAPPROX. [g/m³]	AIR PERMEABILITY AT 100 Pa [J/ (s×m²)]	MAXIMUM TENSILE FORCE ALONG/ACROSS [N/5 cm]	THICKNESS APPROX. [mm]
nutritexx 2640	100	150	130/220	0.19
nutritexx 2641	100	900	120/75	0.63
nutritexx 2690N	75	1,600	90/60	0.60
nutritexx 2693N	65	1,800	80/60	0.53
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 | DRINKING WATER FILTER MATS

SPECIFICATIONS	
Fiber	Polyester
Principal application	Drinking water filtration

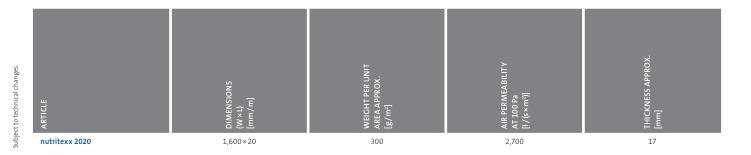


Application

nutritexx 2020 is made from 100% food-grade fibers. It is therefore particularly well suited for the application of 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:

- 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.



COOLTEXX | POLYESTER SPUNBONDED NONWOVENS





Polyester endless filaments
Thermal
Pressure vacuum
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.

Features and benefits

- · Long lifetime.
- · Maximized process dependability.
- Good filter cake detachment.
- · Optimum process matching.
- Maximized mechanical strength.
- Filtration based on sieving effect.
- · Smooth surface.
- · High separation efficiency.

Delivery notes

Customized lengths available on request.

ARTICLE	FIBER STRUCTURE	WEIGHT PER UNIT AREA APPROX. [g/ m²]	BELT FILTER PRINCIPLE	AIR PERMEABILITY AT 100 Pa [I/(s×m²)]	AIR-PERMEABILITY AT 125 Pa [I / (s×m²)]	THICKNESS APPROX. [mm]
cooltexx 6430	Fine fibers	30	Gravity pressure		3,700	0.15
cooltexx 6450	Fine fibers	50	Pressure vacuum		2,533	0.22
cooltexx 6470	Fine fibers	70	Pressure vacuum		1,806	0.31
cooltexx 6534	Fine fibers – point-bonded	34	Gravity pressure		2,500	0.16
cooltexx 6550	Fine fibers – point-bonded	50	Pressure vacuum		1,426	0.23
cooltexx 6570	Fine fibers – point-bonded	70	Pressure vacuum		885	0.30
cooltexx 7230	Coarse fibers	30	Gravity pressure	4,420		0.12
cooltexx 7250	Coarse fibers	50	Pressure vacuum	3,630		0.20
cooltexx 7270	Coarse fibers	70	Pressure vacuum	2,600		0.28
cooltexx H7210	Coarse fibers	100	Pressure vacuum	1,800		0.39



COOLTEXX | POLYPROPYLENE SPUNBONDED NONWOVENS

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. 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.

Features and benefits

- Adsorption of foreign oil from the emulsion.
- · High chemical stability.
- Good filter cake detachment.
- Oleophilic and hydrophobic fibers.
- Pure polypropylene.
- Smooth surface.

Delivery notes

Customized lengths available on request.

ARTICLE	WEIGHT PER UNIT AREA APPROX. [g/m³]	MACHINING PROCESS	AIR-PERMEABILITY AT 125 Pa [J/(s×m²)]	MAXIMUM TENSILE FORCE ALONG/ACROSS [N/5 cm]	THICKNESS APPROX. [mm]
cooltexx 3423	23	Turning drilling milling (smoothing)	3,350	45/35	0.23
cooltexx 3440	40	Turning drilling milling (smoothing)	1,550	100/60	0.38
cooltexx 3450	50	Turning drilling milling (smoothing)	900	90/60	0.38
cooltexx 3470	70	Grinding (ultra-precision machining)	750	180/100	0.48

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.

Features and benefits

- 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 efficiency, even with fine particles.

Delivery notes

Customized lengths available on request.

ARTICLE	WEIGHT PER UNIT AREA APPROX. [g/m²]	AIR PERMEABILITY AT 100 Pa [1/(s×m²)]	THICKNESS APPROX. [mm]
cooltexx 2652	17	3,220	0.18
cooltexx 2653	23	2,010	0.22
cooltexx 2654	32	1,350	0.26
cooltexx 2662	25	3,930	0.26
cooltexx 2663	37	2,770	0.32
cooltexx 2664	50	1,800	0.38
cooltexx 2666	60	2,150	0.50
cooltexx 2693	70	2,000	0.53
cooltexx 2689	130	1,000	1.0



COOLTEXX | DEPTH FILTER

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)



Features and benefits

- Particularly long operational lifetime thanks to deep bed filtration.
- · Low pressure drop.
- High separation efficiency, even for fine particles.
- High dust holding capacity.
- Depth-loading filter high nonwovens thickness.

Delivery notes

Customized lengths available on request.

ARTICLE	WEIGHT PER UNIT AREA APROX. [g/m³]	AIR PERMEABILITY AT 100 Pa [1/(s×m²)]	MAXIMUM TENSILE FORCE ALONG/ACROSS [N/5 cm]	ELONGATION AT MAXIMUM TENSILE FORCE ALONG/ACROSS [%]	THICKNESS APPROX. [mm]
cooltexx 9210N	100	1,000	120/100	12/15	0.7
cooltexx 2689	130	1,000	160/90	13/16	1.0

Subject to technical changes.

PLURATEXX | OIL, UREA AND FUEL FILTRATION





SPECIFICATIONS	
Material	Polyester, Polypropylene, Polyamide
Bonding	Thermal

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.

Features and benefits

- High 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 [1/(s×m³)]	PORE SIZE: LARGEST PORE/MFP [μm]	PARTICLE SIZE AT 90% ARRESTANCE EFHCIENCY [µm]	PARTICLE SIZE AT 99% ARRESTANCE EFHCIENCY [µm]	DUST HOLDING CAPACITY [g/ m²]	THICKNESS APPROX. [mm]
pluratexx 2037	155	400	55/22	15	22	150	0.9
pluratexx 5120	120	500	50/20	20	30	80	0.54
pluratexx 5121	120	800	80/30	23	35	85	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

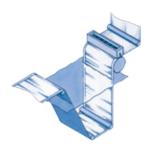
Customized dimensions are available on request. Please protect products from exposure to direct sunlight.

ARTICLE	FILTER MEDIUM	WEIGHT PER UNIT AREA APPROX. [Β/m²]	AIR PERMEABILITV AT 100 Pa [1/(s×m²)]	MAXIMUM TENSILE FORCE ALONG/ACROSS [N/5 cm]	ELONGATION AT MAXIMUM TENSILE FORCE RALONG/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

Subject to technical changes.







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 AP- PROX. [g/m³]	AIR-PERMEABILITY AT 200 Pa [1/(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 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 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.

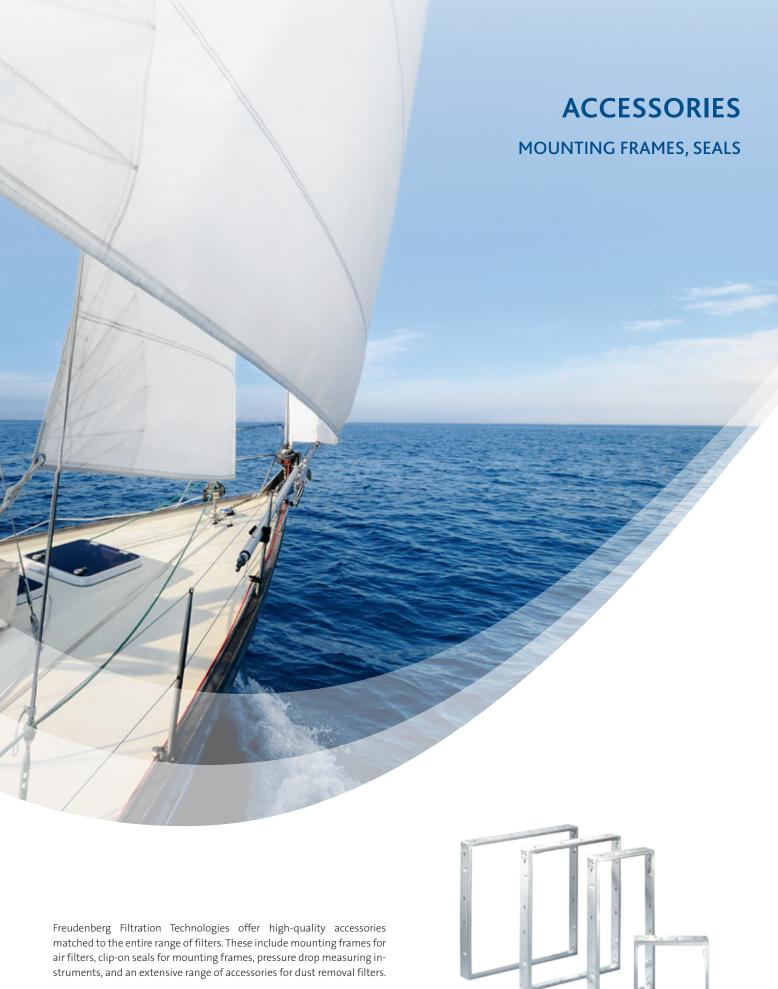
There is an option for additionally customizing the products to suit the particular membrane production process involved, by surface modification or by providing an adhesive-compound finish.

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 AP- PROX. [g/ m²]	AIR-PERMEABILITY AT 200 Pa [1/(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 2436	PET	235	4	550/600	20/35	0.27
novatexx 2472	PP/PE	200	90	650/380	25/28	0.42
novatexx 2482	PET/PBT	210	8	800/380	28/28	0.25



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.

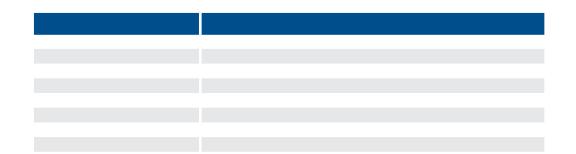
Execution

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-Rahmen verzinkt mit Dichtung	53373316	610×610×75	1/1592×592
ARE-LD NF 1/1 A-Rahmen Edelstahl mit Dichtung	53373325	610×610×75	1/1592×592
ARV-LD NF 5 / 6 A-Rahmen verzinkt mit Dichtung	53435027	508×610×75	5/6490×592
ARE-LD NF 5 / 6 A-Rahmen Edelstahl mit Dichtung	53435039	508×610×75	5/6490×592
ARV-LD NF 1/2 A-Rahmen verzinkt mit Dichtung	53377509	305×610×75	1/2 287×592
ARE-LD NF 1/2 A-Rahmen Edelstahl mit Dichtung	53377510	305×610×75	1/2 287×592
ARV-LD NF 1/4 A-Rahmen verzinkt mit Dichtung	53435028	305×305×75	1/4287×287
ARE-LD NF 1/4 A-Rahmen Edelstahl mit Dichtung	53435040	305×305×75	1/4 287×287



SEALS





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; colour: 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

Subject to technical changes.

Other seals available on request.

ARTICLE	ARTICLE NUMBER	[m]
Clip-on seal AR 2.5 running meters	53453283	2.5
Clip-on seal AR 50 meters roll	53466122	50

ACCESSORIES FOR DUST REMOVAL FILTERS | PULSE-JET REFLECTORS + DISPLACER UNITS



PJR Pulse-jet reflectors

PJR pulse-jet reflectors are available as an accessory and are the perfect match for filter cartridges. They improve air pressure behavior during the filtration operation by optimizing the intake of secondary air. When using Viledon® filter cartridges and other commercially available filter cartridges with nominal diameters of 145, 155, 218, 324 and 327 mm, these pulse-jet reflectors can be easily at-tached with snap hook technology.

Features and benefits

- Unique solution with new snap hook technology. PJR snaps onto the cartridge flange.
- New: PJR327 now available for DIN cartridges.
- Easy installation simply insert them into the cartridge Click & Fix.
- · Can be ordered as an optional accessory.
- Simple retrofitting for Viledon® filter cartridges as well as many other com- mercially available cartridge models.

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]
PJR 145-152-155	53535691	80
PJR 218	53535692	80
PJR 324-327	53535693	80
Verdränger-Einheit 327/0600	53283768	585
Verdränger-Einheit 327 / 1000	53283767	985
Verdränger-Einheit 327/1200	53281463	1,185
Verdränger-Einheit 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.

What is precoating?

Precoating involves adding a suitable filter aid to the actual process dust.

When is precoating used?

In the case of low raw gas loading and/or very fine dust particles or ticky dusts.

Why is precoating used?

- · To improve cleaning properties.
- · For lower stable differential pressures.

First precoating process with FHM 1500?

- Dosage: approx. 10 g/ m^2 , once on new filter cartridge.
- Precoating duration and process: apply FHM 1500, then compact with process dust at a differential pressure from 2,000 to 2,500 Pa for at least 15 minutes. The cleaning process has to be turned off until maximum differential pressure has been reached.

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 NUM- BER	WEIGHT [kg]
Filter aids 1500	53474679	0.1
Filter aids 1500	53474681	0.5
Filter aids 1500	53301586	1

ACCESSORIES FOR DUST REMOVAL FILTERS | ROTARY NOZZLE SYSTEMS



SPECIFICATIONS	
Suitable filter cartridges	ϕ = 327 mm, H = 602 mm and 1,202 mm, particularly with small pleat spacings

Application

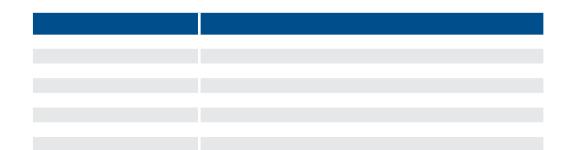
The ROG 600 F-PL and ROG 1200 F-PL rotary nozzle systems ensure effective cleaning of filter cartridges with \emptyset = 327 mm, H = 602 mm and 1,202 mm, particularly with small pleat spacings.

Features and benefits

- · 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 [,,]	PULSETIME [5]	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

ACCESSORIES FOR DUST REMOVAL FILTERS | TANKS + VALVES





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.

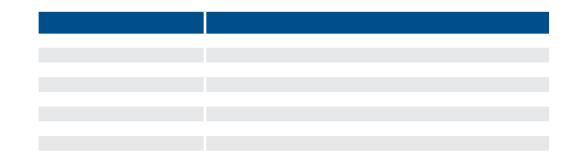
Filter wall connections in various versions and sizes are available for simple installation of the cleaning unit.

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 FOR DUST REMOVAL FILTERS | CLEANING CONTROL





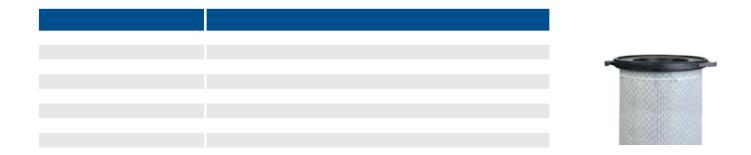
Cleaning control systems

- 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. 3880 l/m²-s and a mean pore size of approx. 50 μ m. 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

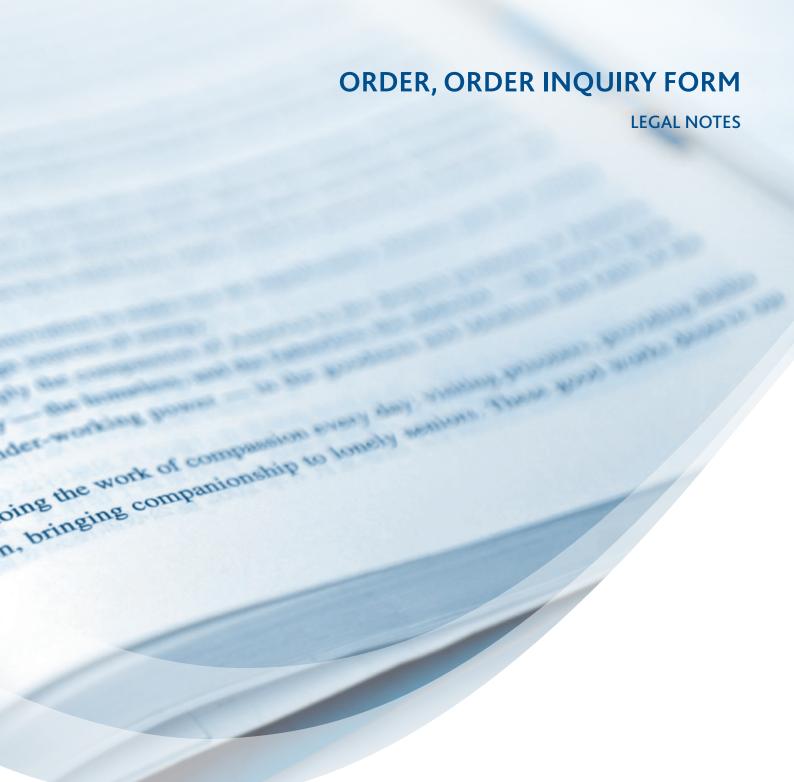
The CPSs are secured in accordance with the illustration above with a cable tie underneath the flange of the filter cartridge, and cut off approx. 5–10 cm above the base of the filter cartridge.

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.

MORE INFORMATION



ORDER ORDER INQUIRY FORM

Place, date

To find your customer service contact details for your region, please visit our website www.freudenberg-filter.com and go to "Contact". PLEASE ENTER ALL PARTICULARS LEGIBLY AND IN BLOCK LETTERS Request
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Signature

INFORMATION LEGAL NOTES

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Your "Viledon® product catalogue" editors

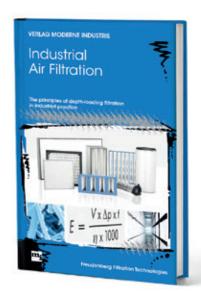
INDUSTRIAL AIR FILTRATION KNOWLEDGE

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Our book trailer



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Notes on technical specifications

Filter groups according to ISO 16890
Measurements according to ISO 16890
were performed exclusively for our
Viledon® filters. The results cannot
be transferred to other filters.

Filter classes

Groups G to F according to EN 779:2012 Groups E to U according to EN 1822:2009 / ISO 29463

Energy efficiency classes | Energy consumption according to EUROVENT 4/21

Freudenberg Filtration Technologies SE & Co. KG

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Date of publication: January 2017

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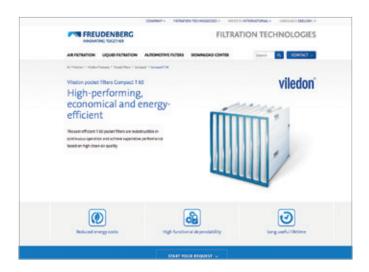
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Freudenberg Filtration Technologies develops and produces high-performance, energy efficient filtration solutions, designed to make industrial processes more efficient, save resources and protect people and our environment, and thus to improve the quality of life. Our Viledon® and micronAir® brands enjoy an enviable reputation worldwide. Viledon® ensures optimum results in industrial air and liquid filtration systems, while micronAir® finedust filters are used as intake air filters for the engine and the passenger compartment in the automotive industry, as well as for improving indoor air quality in buildings. For nearly 2,300 associates at 34 facilities all over the world, customer satisfaction is the overriding goal.

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