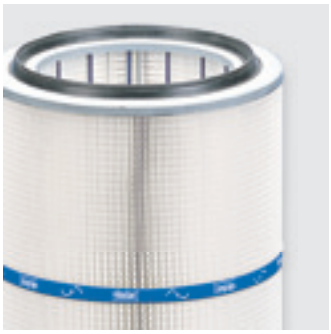
viledon®

# Product catalogue 2013/2014

## Air and liquid filtration

energy efficiency
performance



Industrial Filtration

Freudenberg
Filtration Technologies

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# Product range overview





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Groups E to U according to EN 1822:2009

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According to EUROVENT 4/11 measured at 3,400 $m^3/h$



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# Superior filtration solutions
## for a better quality of life

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

### Environmental responsibility begins in the development and production stages

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

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

BLUEcoMPETENCE
Alliance Member
Partner of the Engineering Industry Sustainability Initiative

### Our contribution to your improved energy efficiency and climate protection balance

Ventilation systems require a relatively large amount of energy. In office buildings, the proportion is about 40% of total consumption. In cleanrooms, it can be as high as 80%. A large part of the energy expenditure of variable-speed fans in ventilation (HVAC) systems is attributable to pressure drop, half of which are caused by the filters themselves. For this reason, acting responsibly in this area means reducing the pressure drop in air filtration systems to save valuable energy, avoid unnecessary costs and reduce $CO_2$ emissions. Significantly driven by Freudenberg Filtration Technologies, the new EUROVENT directive on energy efficiency classification, EUROVENT 4/11, helps you to identify particularly energy efficient Viledon® products.

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

energy efficiency
performance

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.



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# 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.

### Industrial air filtration

The Viledon® brand represents the highest standards in industrial air filtration. Our system solutions are used in areas such as general HVAC and cleanroom technology, turbomachinery, surface technology, gas phase filtration and dust removal.

### Liquid filtration

Viledon® products set the standards for quality, reliability and diversity in industrial liquid filtration. Our well-known brands include hydrotexx for drinking water, nutritexx for food, cooltexx for coolant and lubricant filtration, pluratexx for hydraulic and lube filtration, as well as novatexx support media for membranes.

### Human protection air filtration

Our Viledon® filtration media provide people with effective protection against dusts and gases. In this segment, we develop solutions for respirators, secondary filters for vacuum cleaners, filter media and elements for room air cleaners, filters for protection against diesel emissions in mining, and customized filtration media.

Product information can be found at www.freudenberg-filter.com.

### Automotive air filters

micronAir® is the number 1 in automotive cabin air filters and ensures effective protection against fine dust and odours. Made from fully synthetic filtration materials, micronAir® engine intake air filters combine exceptional performance levels with new possibilities in terms of space utilization.

Product information can be found at www.freudenberg-filter.com.

### Office air filtration

micronAir® office fine dust filters provide effective protection against emissions from laser printers, copiers and document shredders. They are certified by the German TÜV Nord and have been awarded ECARF approval for allergy-friendly products and services.

Product information can be found at www.freudenberg-filter.com.

### Some of the many industries we support

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



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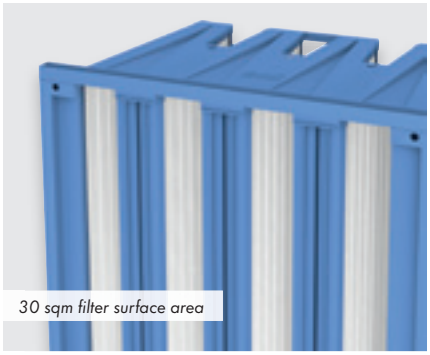
# Innovative filter solutions
## developed and produced by Freudenberg

As part of the Freudenberg Group, we have access to all trend-setting technologies for filter media manufacturing. This provides the basis for our innovation leadership in industrial filtration. Because we develop and manufacture our own filtration media, we can ensure both process reliability and the highest quality filtration solutions. We can quickly and efficiently respond to changing market requirements to set new standards from which our customers benefit.

### Innovations that set standards

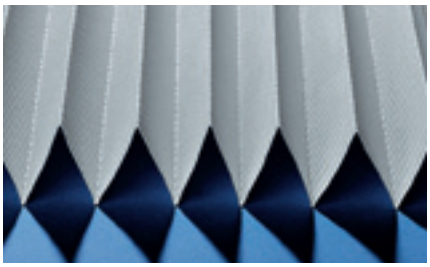
Freudenberg innovations change the market and increase the effectiveness of industrial filtration. Here are just of few of the latest examples:

- Viledon® sinTexx Plus filter cartridges with their corrugated polyester media with a nanofiber lining provide reliable protection and reduce energy costs. They achieve excellent performance for fine and hard-to-handle dust and smoke, and surpass the performance of previously used media, providing unprecedented levels of efficiency.



*30 sqm filter surface area*

- Viledon® eMaxx cassette filters represent a new generation of powerful, efficient, economical and durable filter cassettes. Designed for use in intake air filtration for gas turbines and compressors, they offer high reliability and efficiency and a long service life, increasing the efficiency of the turbine.



**Viledon® sinTexx Plus**

This symbol helps you recognize the new Viledon® sinTexx Plus filter cartridges with corrugated polyester media and nanofiber lining.

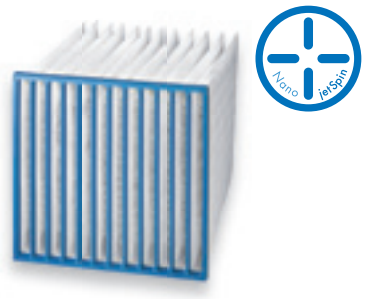
**Viledon® eMaxx cassette filters provide many advantages**

- Reliable, durable and long-lasting
- High dust-holding capacity with low pressure drop values
- Excellent filtration efficiency, even in moist working conditions
- Halogen- and corrosion-free plastic frame can be fully incinerated
- Can be mounted directly into existing designs

# Well-proven products
## for industrial air filtration

### The Viledon® advantage is your advantage

Thanks to their special design features, Viledon® filters for intake air, exhaust air and recirculating air systems are characterized by high filtration performance, excellent economy and outstanding reliability.




### Proven storage specialist: Viledon® Compact pocket filters

- The rigid construction of the entire filter element results in uniform dust storage with full utilization of the filter surface area. This is achieved thanks to the leak-free, inherently rigid filter pockets with aerodynamic spacers, foamed into the PUR front frame.
- With four layers of filtration, the new nano jetSpin media achieves the highest possible levels of filtration. It is used in pocket filters belonging to classes F 7 and F 8.

### Robust and durable: Viledon® MaxiPleat cassette filters

- Thermal embossing process with optimal V-shaped pleat geometry.
- Full utilization and uniform loading of the filter area for homogeneous air flow rates.
- High stability and torsional rigidity thanks to patented plastic frame construction.
- Uncompromising fine-particle filtration performance.

### Highly reliable and efficient: Viledon® high-temperature filters (with aluminum frame)

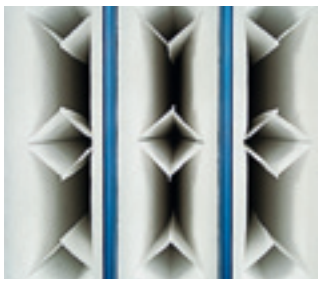
- Specifically developed for air filtration in paint dryers used in the automotive industry (also suitable for general drying technology).
- High dust-holding capacity and very good mechanical resistance, even for non-homogeneous air contamination.
- Meet particularly high requirements for air purity, process reliability and cost-effectiveness.

### Technology and performance advantages

- Long service life and high dust-holding capacity thanks to special depth-loading filter media.
- Aerodynamically optimized construction leads to low pressure differences and reduced energy costs.
- According to the allocation to energy efficiency classes, particularly energy efficient. Large savings for the operator across the entire filter-related cost spectrum.

energy efficiency
performance

- Excellent operational safety is achieved from the interaction of high-strength filter media, high dimensional stability and mechanical strength, as well as careful processing and quality control of the filter elements.
- Viledon® filters are corrosion-free, 100% moisture-resistant and microbiologically inactive. Some products can also be fully incinerated.
- Viledon® filters meet all requirements of the VDI 6022 hygiene regulations.
- Viledon® fine filters are EUROVENT certified.



*MaxiPleat cassette filters with plug-in connection for space-saving combination of two filter stages. (left)*
*The welded spacers in Compact pocket filters optimally shape the pockets during operation. (right)*



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# Maximum purity
for liquid filtration

Whether for food and beverage filtration, drinking water filtration, coolant and lubricant filtration or membrane support media: Freudenberg Filtration Technologies provides a comprehensive product range of high-quality nonwoven fabrics for maximum purity and reliability in all applications.

## hydrotexx

### For drinking water filtration

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

## cooltexx

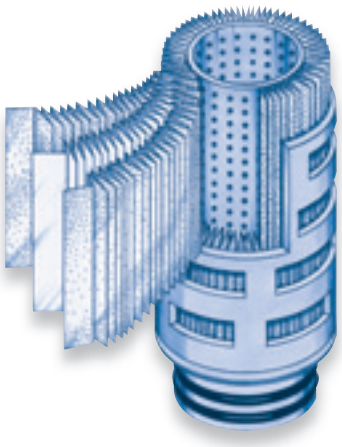
### For coolant and lubricant filtration

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

## puratexx

### For hydraulic fluid and fuel filtration

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



## nutritexx

### For food and beverage filtration

For the filtration of beverages such as milk, wine and beer, Freudenberg nonwovens are fabricated into pockets and bags. In addition to being approved for food use, our media display high wet strength and a long service life thanks to the use of polyester cellulose fibers in their production. This makes these products ideal for processing into durable bags (sewing, welding, stamping) with a low pressure difference and excellent wet strength.

## novatexx

### Membrane support media

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



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**Filtration Technologies**

# Viledon® filterCair

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

viledon®
filterCair

### Viledon® filterCair service

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

### Technical and economic benefits of Viledon® filterCair

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

### Some examples of our Viledon® filterCair services

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



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# Viledon® Engineering
## Design and construction of filter units

Viledon® Engineering offers a complete development and installation program for the upgrading and construction of air-cleaning equipment. Service packages focusing on the customer's individual needs include performing an on-site status analysis, consultation, design of filter systems, precise proposals using 3D CAD drawings, profitability analysis, order processing, documentation, training and after-sales support.

Our many years of engineering experience in the fields of air-conditioning systems, (mechanical) process air and turbomachinery is documented in numerous successful projects worldwide. These include, for example, intake air systems for power plants, refineries, compressor stations, water plants, bottling plants, laboratories and office buildings. We will be happy to present individual case studies in a personal meeting.

Our engineering teams are in action around the globe and work closely with our customers to find the right filtration solution, no matter how big the project may be. Each plant project is individually planned and implemented according to customer requirements.

A special Viledon® Engineering solution is Viledon® eee.Sy. This stands for "energy efficiency-enhancement system" and is a turnkey solution that provides improved energy efficiency for turbomachinery while simultaneously utilizing waste heat to reduce energy consumption and increase plant profitability.

### Construction

- Retrofitting / new constructions
- Concrete filter housings
- Steel filter housings
- Filter modules
- Front end protection

### Components

- Single or multi-stage Viledon® filter wall solutions
- Air-cooling systems (Viledon® eee.Sy)
- Weather hood constructions
- Anti-icing systems (Viledon® IceProtect)
- Droplet separators
- Ventilation ducts
- Fans
- Transition elements
- Bends
- Silencers
- Support structures
- Electrical equipment
- Measurement technology

**Viledon® Engineering**

| Construction | Operational service and support |
|---|---|
| **Retrofitting / new constructions** | **Viledon® filters & spare parts** |
| ▪ Comprehensive status analysis<br>▪ Detailed cost analysis<br>▪ 3D CAD models to illustrate the concept<br>▪ Customized end-to-end solutions<br>▪ Standardized modular filter system components<br>▪ Turnkey solutions for all plant sizes<br>▪ Final on-site inspections<br>▪ Close collaboration with our customers | ▪ Top-quality Viledon® filters<br>▪ Complete range of spare parts |
| | **Comprehensive service support** |
| | ▪ Repair and replacement<br>▪ Inspections<br>▪ Measurements<br>▪ Maintenance programs |
| | **Training** |
| | ▪ Large selection of training courses |

# Performance and certified quality
## that you can rely on

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

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

**ISO 9001**

### 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.

# Sustainability through energy efficiency
## Reduce energy costs with Viledon®

### Significant cost reduction

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

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

Here is a typical example of the efficiency of Viledon® filtration solutions:

energy efficiency
performance

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

| *1st filter stage: 9 x conventional F6 pocket filters<br>2nd filter stage: 9 x conventional F9 cassette filters<br>Volume flow: 30,000 m³/h* | *1st filter stage: 9 x F6 Viledon® Compact pocket filters T60 2nd filter stage: 9 x F9 Viledon® MaxiPleat cassette filters MX98<br>Volume flow: 30,000 m³/h* |
|---|---|
| **Conventional filters** | **Viledon® system** |
| Power consumption<br>**27,820 kWh / year** | Power consumption<br>**19,930 kWh / year** |
| Electricity costs*<br>(27,820 kWh x 0.10 € / kWh)<br>**2,782 €** | Electricity costs*<br>(19,930 kWh x 0.10 € / kWh)<br>**1,993 €** |
| $CO_2$-Emission**<br>(27,820 kWh x 0.559 kg / kWh)<br>**≈15,551 kg / year** | $CO_2$-Emission**<br>(19,930 kWh x 0.559 kg / kWh)<br>**≈11,140 kg / year** |

**789 € / year** Cost savings with Viledon®

**≈4.4 t / year** $CO_2$ reduction with Viledon®

**44 €** Cost savings per filter / year

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

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

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



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# Energy efficiency classification according to EUROVENT 4/11

## Increased transparency in choosing filters

Rising energy costs and the need to reduce $CO_2$ emissions are steadily increasing the focus on the energy consumption of HVAC systems. Energy-saving measures include the use of highly efficient frequency-controlled fans. Alongside that, a relatively simple and effective method of achieving significant cost reduction is the use of top-quality, energy efficient Viledon® air filters.


To make it easier for users to choose the most energy efficient air filters, experts at Freudenberg Filtration Technologies introduced their own energy efficiency classification system some years ago. Based on this work, a European energy efficiency classification system for air filters was developed by the European Committee of manufacturers of air handling and drying equipment (EUROVENT). This is described in the EUROVENT Guideline 4/11. Class A stands for excellent energy efficiency values, class G for very poor. For the energy-optimized operation of HVAC systems – while still ensuring that filter efficiency is adequate to deliver the necessary indoor air quality – we recommend air filters in energy efficiency classes A to C.

In the study described in the EN 779 laboratory procedure for air filter testing, both filter efficiency and pressure difference are measured as a function of the dust load. This application uses the synthetic ASHRAE test dust. From the pressure difference resulting from dust storage, a representative power consumption can be calculated with which the energy behaviour of the filter over an operating period of one year can be simulated in the laboratory. This representative energy value is used for the classification of air filters into energy efficiency classes.

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

| Viledon® product | Type | Filter class* | Energy efficiency class | | Annual energy consumption** |
|---|---|---|---|---|---|
| | | | Viledon® | EUROVENT | |
| F 40 | Pocket filter | G4 | 1 | A | 430 kWh |
| F 50 | Pocket filter | M5 | 1 | A | 600 kWh |
| T 60 | Pocket filter | M6 | 1 | A | 620 kWh |
| T 90 | Pocket filter | F7 | 1 | A | 1,060 kWh |
| MF 90 | Pocket filter | F7 | 2 | C | 1,500 kWh |
| MF 95 | Pocket filter | F8 | 2 | B | 1,650 kWh |
| MX 85 | Cassette filter | F7 | 2 | B | 1,240 kWh |
| MX 95 | Cassette filter | F8 | 1 | A | 1,300 kWh |
| MX 98 | Cassette filter | F9 | 1 | A | 1,830 kWh |
| MV 85 HSN | Cassette filter (synth.) | F7 | 1 | C | 1,500 kWh |
| MV 95 HSN | Cassette filter (synth.) | F8 | 1 | B | 1,700 kWh |
| MVP 85 | Cassette filter | F7 | 1 | A | 1,100 kWh |
| MVP 95 | Cassette filter | F8 | 1 | A | 1,200 kWh |
| MVP 98 | Cassette filter | F9 | 1 | A | 1,470 kWh |

**Note**

The energy efficiency class (EE class) helps you to recognize our highly energy efficient Viledon® filters.


* *according to EN 779:2012*

** *according to Eurovent 4/11: The indicated annual energy consumption results from a laboratory test procedure with synthetic test dust at 3,400 m³/h and only refers to the portion of total energy consumption which is caused by the flow resistance of the filter. The annual energy consumption of an HVAC system may therefore differ significantly in actual operation.*



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

**Your direct route to us**

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

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

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

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

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

# Air filter classification index

viledon®

| Filter application | | | Particulate air filters for general ventilation | | | | | | | | EPA, HEPA and ULPA | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Test | | | EN 779:2012 evaluation of filter performance at 0.944 m³/s (or nominal air flow) | | | | | | | | EN 1822:2009 (Part 1 to 5) Evaluation of filter performance at nominal air flow | | | | | | |
| | Suitable for | Group designation | Filter classes | Test dust | Test aerosol | Final pressure drop in Pa | Average arrestance ($A_m$) compared with test dust in % | Average efficiency ($E_m$) for particles of 0.4 microns in % | Minimum efficiency for particles 0.4 microns in % | Previous: DIN EN 779:2003 (Predecessor: DIN 24185) | Filter classes | Test aerosol | Integral value of efficiency in the MPPS in % | Integral value of penetration in the MPPS in % | Local value of efficiency in the MPPS in % | Local value of penetration in the MPPS in % | Previous: DIN EN 1822:1998 (Predecessor DIN 24184) |
| 1st filter stage (prefiltration) | Coarse dust | G | G 1 | ASHRAE dust | | 250 | $50 \le A_m < 65$ | | – | G 1 | | | | | | | |
| | | | G 2 | | | 250 | $65 \le A_m < 80$ | | – | G 2 | | | | | | | |
| | | | G 3 | | | 250 | $80 \le A_m < 90$ | | – | G 3 | | | | | | | |
| | | | G 4 | | | 250 | $90 \le A_m$ | | – | G 4 | | | | | | | |
| | Fine dust | M | M 5 | | DEHS (Di-Ethyl-Hexyl-Sebacate) 0.2–3.0 µm | 450 | – | $40 \le E_m < 60$ | – | F 5 | | | | | | | |
| | | | M 6 | | | 450 | – | $60 \le E_m < 80$ | – | F 6 | | | | | | | |
| | | F | F 7 | | | 450 | – | $80 \le E_m < 90$ | 35 | F 7 | | | | | | | |
| | | | F 8 | | | 450 | – | $90 \le E_m < 95$ | 55 | F 8 | | | | | | | |
| | | | F 9 | | | 450 | – | $95 \le E_m$ | 70 | F 9 | | | | | | | |
| 2nd filter stage (fine filtration) / 3rd filter stage (final filtration) | Suspended dust | E | EPA: Efficient Particulate Air filter | | | | | | | | E 10 | DEHS (Di-Ethyl-Hexyl-Sebacate) MPPS 0.1–0.3 µm | ≥ 85 | ≤ 15 | – | – | H 10 |
| | | | | | | | | | | | E 11 | | ≥ 95 | ≤ 5 | – | – | H 11 |
| | | | | | | | | | | | E 12 | | ≥ 99.5 | ≤ 0.5 | – | – | H 12 |
| | | H | HEPA: High Efficiency Particulate Air filter | | | | | | | | H 13 | | ≥ 99.95 | ≤ 0.05 | ≥ 99.75 | ≤ 0.25 | H 13 |
| | | | | | | | | | | | H 14 | | ≥ 99.995 | ≤ 0.005 | ≥ 99.975 | ≤ 0.025 | H 14 |
| | | U | ULPA: Ultra Low Penetration Air filter | | | | | | | | U 15 | | ≥ 99.9995 | ≤ 0.0005 | ≥ 99.9975 | ≤ 0.0025 | U 15 |
| | | | | | | | | | | | U 16 | | ≥ 99.99995 | ≤ 0.00005 | ≥ 99.99975 | ≤ 0.00025 | U 16 |
| | | | | | | | | | | | U 17 | | ≥ 99.999995 | ≤ 0.000005 | ≥ 99.9999 | ≤ 0.0001 | U 17 |

# Product overview
by filter classes

| | | | | | Filter mats | | Filter cells | Pocket filters | | Cassette filters | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Suitable for | Group designation | Filter standard | Filter classes | Filter mats (p. 20–23) | Roll filters (p. 24) | MP 45 (p. 26) | Compact (p. 28–31) | WinAir (p. 32–35) | MaxiPleat (p. 38–42) | NanoPleat (p. 43) | eMaxx (p. 44) | MVP (p. 45) | MVPGT (p. 46+47) |
| 1st filter stage (prefiltration) | 2nd filter stage (fine filtration) | Coarse dust | G | EN 779 Average arrestance efficiency | G1 <65% | | | | | | | | | | |
| | | | | | G2 ≥65% | ● | | | | | | | | | |
| | | | | | G3 ≥80% | ● | ● | ● | ● | ● | | | | | |
| | | | | | G4 ≥90% | ● | | ● | ● | ● | | | | | |
| | | Fine dust | M | EN 779 Average efficiency with 0.4 µm | M5 ≥40% | ● | | | ● | ● | | | | | |
| | | | | | M6 ≥60% | ● | | | ● | ● | ● | ● | | ● | |
| | | | F | EN 779 Average efficiency with 0.4 µm / Minimum efficiency | F7 ≥80% \| ≥35% | | | | ● | ● | ● | ● | | ● | ● |
| | | | | | F8 ≥90% \| ≥55% | | | | ● | | ● | ● | | ● | ● |
| | | | | | F9 ≥95% \| ≥70% | | | | | | ● | | | ● | ● |
| | 3rd filter stage (final filtration) | Suspended dust | E (EPA) | EN 1822 Total arrestance efficiency (integral value) | E10 ≥85% | | | | | | ● | | ● | | |
| | | | | | E11 ≥95% | | | | | | ● | | | | |
| | | | | | E12 ≥99.5% | | | | | | ● | | | | |
| | | | H (HEPA) | | H13 ≥99.95% | | | | | | | | | | |
| | | | | | H14 ≥99.995% | | | | | | | | | | |
| | | | U (ULPA) | | U15 ≥99.9995% | | | | | | | | | | |
| | | | | | U16 ≥99.99995% | | | | | | | | | | |
| | | | | | U17 ≥99.999995% | | | | | | | | | | |

| | EPA \| HEPA \| ULPA filters | | | | | | | | | | Adsorption filters | Filter cartridges | | High-temperature filters | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Aluminum frames (p. 50–54) | Aluminum frame with silgel seal (p. 55–58) | Aluminum frame with sword profile (p. 59+60) | Plastic frame (p. 61+62) | MDF frame (p. 63–68) | Steel sheet frame (p. 69–72) | High volume flow (p. 73) | Cartridge (p. 74+75) | Plastic plenum hood (p. 76) | Fan-filter unit (p. 78) | DuoPleat (p. 82) | Pulse-jet (p. 88) | Depth-loading filters (p. 89) | HT filter mats (p. 92) | HiProtec cassette filters (p. 94) | HT cassette filters (p. 95) |
| | | | | | | | | | | | | | | | | |
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# Air filtration

# Filter mats

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


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

# Filter mats
## Filter mats | Coarse dust

| Specifications | |
|---|---|
| Filter medium | P15 and T3 / 290 S: Polyolefin fibers; Other: 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

**Special features of the PSB series**

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

### 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

**Special features 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.

| Article number | Article | Dimensions (W x L) [mm / m] | Thickness approx. [mm] | Filter class | Nominal media velocity [m / s] | Initial pressure drop [Pa] | Average arrestance efficiency [%] | Dust holding capacity [g / m²] | Weight per unit area approx. [g / m²] |
|---|---|---|---|---|---|---|---|---|---|
| 7833647 | PSB / 145 S 40 / 2000 | 2,000 / 40 | 10 | G2 | 2 | 22 | 70 | 600 | 120 |
| 8039227 | P15 / 150 S 40 / 2000 | 2,000 / 40 | 8 | G2 | 2 | 30 | 75 | 600 | 100 |
| 53375688 | PSB / 275 S 30 / 2000 | 2,000 / 30 | 15 | G3 | 1.5 | 22 | 83 | 700 | 180 |
| 8039427 | P15 / 350 S 30 / 2000 | 2,000 / 30 | 14 | G3 | 1.5 | 30 | 84 | 600 | 200 |
| 8019407 | PSB / 290 S 20 / 2000 | 2,000 / 20 | 20 | G4 | 1 | 22 | 91 | 750 | 300 |
| 8040248 | P15 / 500 S 20 / 2000 | 2,000 / 20 | 20 | G4 | 1 | 30 | 94 | 600 | 350 |
| 8105365 | T3 / 290 S 40 / 2000 | 2,000 / 40 | 8 | G4 | 0.25 | 14 | 96 | 250 | 200 |

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

## A3 / 300S

### Application

The A 3 / 300 S filter mat is designed primarily for high-quality final filtration in air-conditioning devices and systems, and as prefilters in multi stage intake air systems.

### Special features

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

## ProfAir

### Application

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

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

### Application

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

### Special features of the PA series

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

### Delivery notes

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

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

# Filter mats
## Filter panels

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

### Application

The filter panels are used for intake air filtration in air-conditioning systems of all kinds, particularly for coarse dust arrestance or 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.

### Special features

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

### Delivery notes

Filter panels in a washable version are available upon request.

| Article number | Article | Filter medium | Dimensions (W x L) [mm] | Filter class | Nominal volume flow [m³/h] | Pressure drop [Pa] |
|---|---|---|---|---|---|---|
| 53263665 | LH 111 MIT P15/150 S 610/610 | P15/150 S | 610x610 | G2 | 2,600 | 25 |
| 53263659 | LH 101 MIT PSB/290 S 610/610 | PSB 290 | 610x610 | G4 | 1,300 | 35 |
| 53263662 | LH 101 MIT PSB/290 S 700/500 | PSB 290 | 700x500 | G4 | 1,250 | 35 |
| 53263658 | LH 101 MIT PSB/290 S 625/500 | PSB 290 | 625x500 | G4 | 1,100 | 35 |
| 53263660 | LH 101 MIT PSB/290 S 500/500 | PSB 290 | 500x500 | G4 | 720 | 35 |
| 53263661 | LH 101 MIT PSB/290 S 500/400 | PSB 290 | 500x400 | G4 | 900 | 35 |
| 53253599 | LH 103 MIT P15/500 S 610/610 | P15/500 | 610x610 | G4 | 1,300 | 35 |
| 53000301 | LH 103 MIT P15/500 S 500/500 | P15/500 | 500x500 | G4 | 900 | 35 |
| 53430605 | LH 103 MIT PA/560 G-10 500/500 | PA/560 G-10 | 500x500 | M5 | 450 | 55 |

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

### Application

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

### The medium and its features

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

### Fire behaviour

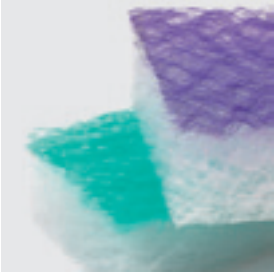
Viledon® filter media meet the stringent requirements of fire class F1 in conformity with DIN 53438, and are thus self-extinguishing.

### 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.

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

# Filter mats
## 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.

### Special features PS 50/PS 100

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

### Special features of the PSH 75 Paint Stop Hydro

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

### Delivery notes

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

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

# Filter cells

## MP 45

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

# Filter cells
## MP 45 | Coarse dust

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

### Principal application category

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

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

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

### Characteristics and pluses of the MP 45 KTC

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

### Delivery notes

Customized dimensions and regionally divergent versions are available on request.

Coupling holes in the frame corners of the clean air side = L
Velcro fastenings to the main filter = KB

| Article number | Article | Dimensions (W x H x D) [mm] | Filter class | Nominal volume flow [m³/h] | Initial pressure drop [Pa] | Average arrestance efficiency [%] | Face velocity [m/s] | Recommended final pressure drop [Pa] | Filter area [m²] | Frame |
|---|---|---|---|---|---|---|---|---|---|---|
| 53307806 | MP 45 0595x0595x96 | 595 x 595 x 96 | G3 | 4,250 | 60 | 88 | 3.3 | 200 | 2.0 | Cardboard |
| 53408851 | MP 45 K 0595x0595x96 | 595 x 595 x 96 | G3 | 4,250 | 60 | 88 | 3.3 | 200 | 2.0 | Plastic |
| 53349216 | MP 45 0595x0595x48 | 595 x 595 x 48 | G3 | 4,250 | 95 | 88 | 3.3 | 200 | 1.1 | Cardboard |
| 53401206 | MP 45 K 0595x0595x48 | 595 x 595 x 48 | G3 | 4,250 | 95 | 88 | 3.3 | 200 | 1.1 | Plastic |
| 53307806 | MP 45 0595x0595x96 | 595 x 595 x 96 | G4 | 3,400 | 50 | 90 | 2.7 | 200 | 2.0 | Cardboard |
| 53408851 | MP 45 K 0595x0595x96 | 595 x 595 x 96 | G4 | 3,400 | 50 | 90 | 2.7 | 200 | 2.0 | Plastic |
| 53349216 | MP 45 0595x0595x48 | 595 x 595 x 48 | G4 | 3,400 | 75 | 90 | 2.7 | 200 | 1.1 | Cardboard |
| 53401206 | MP 45 K 0595x0595x48 | 595 x 595 x 48 | G4 | 3,400 | 75 | 90 | 2.7 | 200 | 1.1 | Plastic |
| 53374950 | MP 45 KTC 0555x0555x092 LKB | 555 x 555 x 92 | G4 | 3,400 | 50 | 91 | 3.1 | 250 | 2.0 | Nonwoven |
| 53386678 | MP 45 KTC 0555x0555x092 LD | 555 x 555 x 92 | G4 | 3,400 | 50 | 91 | 3.1 | 250 | 2.0 | Nonwoven |

# Pocket filters

## Compact, WinAir

energy efficiency
performance

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

# Pocket filters
## Compact | Coarse dust

energy efficiency
performance

| Specifications | |
|---|---|
| Filter medium | Polyester fibers |
| 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 pocket filters with filter class G

- Progressively structured high-performance nonwovens made from non-breaking synthetic-organic fibers.
- High arrestance, low pressure drop, long operational lifetime, high cost-efficiency.
- Free of glass-fibers, non-corroding, moisture-resistant up to 100% rel. hum., self-extinguishing according to DIN 53438 (fire class F1) and microbiologically inactive. They meet all the criteria laid down in VDI Guideline 6022 “Hygiene requirements for ventilation and air-conditioning systems and units”.
- High functional dependability thanks to the leak proof welded configuration of the filter pockets, foam-sealed into a PUR front frame with aerodynamically optimized welded-in spacers and a dimensionally stable construction of the filter element as a whole.

### Application

- Compact pocket filters of filter classes G3 – G4 are used in intake, exhaust and recirculating air filtration for air-conditioning systems of all kinds.
- As prefilters for fine and ultra-fine filters in industrial processes (metalworking, chemicals, pharmaceuticals, food and beverages, optics, electronics, etc.), in ventilation and air-conditioning systems, in paint shops / booths and in turbomachinery.
- For the filtration of process air with high dust loading or coarse particles.

### Special features of G 35 series

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

### Special features of F 40/45 series

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

### Delivery notes

Customized dimensions are available on request.

| Article number | Article | Dimensions (W x H x D) [mm] | Number of pockets | Filter class | Nominal volume flow [m³/h] | Initial pressure drop [Pa] | EE class | Energy consumption [kWh/a] | Average arrestance efficiency [%] | Dust holding capacity (ASHRAE/450 Pa) [g] | Filter area [m²] | Weight [kg] | Packaging unit [units/carton] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7515413 | G 35 S 1/1 * | 592x592x330 | 5 | G3 | 3,400 | 20 | | | 86 | 1,180 | 2.0 | 1.2 | 4 |
| 7521289 | G 35 S 5/6 | 492x592x330 | 4 | G3 | 2,700 | 20 | | | 86 | 950 | 1.6 | 1.0 | 2 |
| 7521389 | G 35 S 1/2 | 289x592x330 | 3 | G3 | 2,000 | 20 | | | 86 | 700 | 1.2 | 0.8 | 2 |
| 7579317 | G 35 SL 1/1 | 592x592x650 | 5 | G3 | 4,250 | 20 | | | 86 | 2,300 | 4.0 | 1.7 | 2 |
| 7599437 | G 35 SL 5/6 | 492x592x650 | 4 | G3 | 3,400 | 20 | | | 86 | 1,850 | 3.2 | 1.5 | 2 |
| 7580138 | G 35 SL 1/2 | 289x592x650 | 3 | G3 | 2,500 | 20 | | | 86 | 1,350 | 2.4 | 1.2 | 2 |
| 7580238 | G 35 SL 1/4 | 289x289x650 | 4 | G3 | 1,500 | 20 | | | 86 | 800 | 1.5 | 0.7 | 2 |
| 8929206 | G 35 SE 1/1 | 592x592x510 | 8 | G3 | 4,250 | 40 | | | 86 | 2,600 | 4.7 | 2.3 | 2 |
| 53307071 | G 35 SEL 1/1 | 592x592x650 | 8 | G3 | 4,250 | 45 | | | 86 | 3,200 | 6.2 | 2.7 | 2 |
| 7526134 | F 45 S 1/1 * | 592x592x330 | 5 | G4 | 3,400 | 35 | D | 890 | 93 | 590 | 2.0 | 1.2 | 4 |
| 7528456 | F 45 S 5/6 | 492x592x330 | 4 | G4 | 2,700 | 35 | D | | 93 | 470 | 1.6 | 1.0 | 2 |
| 7529267 | F 45 S 1/2 | 289x592x330 | 3 | G4 | 2,000 | 35 | D | | 93 | 350 | 1.2 | 0.8 | 2 |
| 8256138 | F 40 1/1 | 592x592x650 | 5 | G4 | 4,250 | 30 | A | 400 | 93 | 1,425 | 4.0 | 1.7 | 2 |
| 8500259 | F 40 5/6 | 492x592x650 | 4 | G4 | 3,400 | 30 | A | | 93 | 1,150 | 3.2 | 1.5 | 2 |
| 8498114 | F 40 1/2 | 289x592x650 | 3 | G4 | 2,500 | 30 | A | | 93 | 850 | 2.4 | 1.2 | 2 |
| 8500359 | F 40 1/4 | 289x289x650 | 4 | G4 | 1,500 | 30 | A | | 93 | 500 | 1.5 | 0.7 | 2 |
| 53457509 | F 45 SEL 1/1 | 592x592x650 | 8 | G4 | 4,250 | 50 | A | 410 | 93 | 1,980 | 6.2 | 2.7 | 2 |

* also available as reverse-flow version

| Specifications | |
|---|---|
| Filter medium | PES (F 50, T 60), polyolefin (others) |
| Recommended final pressure drop | 450 Pa |
| Bursting pressure | >3,000 Pa |
| Thermal stability | 70°C |
| Moisture resistance | 100% rel. hum. |
| Frame | Polyurethane |
| Fire class | F1 acc. to DIN 53438 |
| | |

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

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

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

## 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)

### Special features

- 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 $CO_2$ emissions.
- 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.

## T 90 PRE

### Application

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

### Special features

- In intake air filtration for gas turbines, 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

### Special features

- 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.
- T 90 pocket filters achieve energy efficiency class A, thus ensuring reduced energy costs and downsized $CO_2$ emissions.

# Pocket filters
## Compact | Fine dust

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

energy efficiency performance

| Specifications | |
|---|---|
| Filter medium | PES (F 50, T 60), polyolefin (others) |
| Recommended final pressure drop | 450 Pa |
| Bursting pressure | >3,000 Pa |
| Thermal stability | 70°C |
| Moisture resistance | 100% rel. hum. |
| Frame | Polyurethane |
| Fire class | F1 acc. to DIN 53438 |
| | |

| Article number | Article | Dimensions (W x H x D) [mm] | Number of pockets | Filter class | Nominal volume flow [m³/h] | Initial pressure drop [Pa] | EE class | Energy consumption [kWh/a] | Initial efficiency [%] | |
|---|---|---|---|---|---|---|---|---|---|---|
| 53456360 | F 50 S 1/1 * | 592x592x330 | 5 | M5 | 3,400 | 65 | G | >1,300 | | |
| 7581349 | F 50 1/1 | 592x592x650 | 5 | M5 | 4,250 | 50 | A | 600 | | |
| 7581449 | F 50 5/6 | 492x592x650 | 4 | M5 | 3,400 | 50 | A | | | |
| 7582150 | F 50 1/2 | 289x592x650 | 3 | M5 | 2,500 | 50 | A | | | |
| 7582250 | F 50 1/4 | 289x289x650 | 4 | M5 | 1,525 | 50 | A | | | |
| 53457510 | F 50 SE 1/1 | 592x592x510 | 8 | M5 | 4,250 | 45 | A | 610 | | |
| 8473449 | T 60 1/1 | 592x592x650 | 8 | M6 | 4,250 | 65 | A | 620 | | |
| 8474150 | T 60 5/6 | 492x592x650 | 4 | M6 | 2,175 | 65 | A | | | |
| 8474250 | T 60 1/2 | 289x592x650 | 3 | M6 | 1,600 | 65 | A | | | |
| 8474350 | T 60 1/4 | 289x289x650 | 4 | M6 | 975 | 65 | A | | | |
| 53449490 | T 90 PRE 1/1 | 592x592x650 | 12 | M6 | 4,250 | 80 | D | 1,170 | | |
| 53449491 | T 90 PRE 1/2 | 289x592x650 | 4 | M6 | 1,450 | 80 | D | | | |
| 53444184 | T 90 1/1 | 592x592x650 | 12 | F7 | 4,250 | 115 | A | 1,060 | 67 | |
| 53444180 | T 90 5/6 | 492x592x650 | 6 | F7 | 2,200 | 115 | A | | 67 | |
| 53444179 | T 90 1/2 | 289x592x650 | 4 | F7 | 1,450 | 115 | A | | 67 | |
| 53444178 | MF 90 1/1 | 592x592x650 | 8 | F7 | 4,250 | 140 | C | 1,500 | 67 | |
| 53444175 | MF 90 5/6 | 492x592x650 | 6 | F7 | 3,175 | 140 | C | | 67 | |
| 53444172 | MF 90 1/2 | 289x592x650 | 4 | F7 | 2,125 | 140 | C | | 67 | |
| 53444170 | MF 90 1/4 | 289x289x650 | 4 | F7 | 975 | 140 | C | | 67 | |
| 53444168 | MF 95 1/1 | 592x592x650 | 12 | F8 | 4,250 | 190 | B | 1,650 | 84 | |
| 53444167 | MF 95 5/6 | 492x592x650 | 6 | F8 | 2,200 | 190 | B | | 84 | |
| 53444166 | MF 95 1/2 | 289x592x650 | 4 | F8 | 1,450 | 190 | B | | 84 | |
| 53444165 | MF 95 1/4 | 289x289x650 | 4 | F8 | 675 | 190 | B | | 84 | |

* also available as reverse-flow version

# Pocket filters
## Compact | Fine dust

| Specifications | |
|---|---|
| Filter medium | PES (F 50, T 60), polyolefin (others) |
| Recommended final pressure drop | 450 Pa |
| Bursting pressure | >3,000 Pa |
| Thermal stability | 70°C |
| Moisture resistance | 100% rel. hum. |
| Frame | Polyurethane |
| Fire class | F1 acc. to DIN 53438 |
| | |

### Delivery notes

Customized dimensions are available on request.

| | Minimum efficiency [%] | Average efficiency [%] | Average arrestance efficiency [%] | Dust holding capacity (AC Fine / 450 Pa) [g] | Dust holding capacity (AC Fine / 800 Pa) [g] | Filter area [m²] | Weight [kg] | Packaging unit [units / carton] |
|---|---|---|---|---|---|---|---|---|
| | | 49 | 95 | | | 2.0 | 1.6 | 4 |
| | | 51 | 97 | 3,650 | | 4.0 | 2.1 | 2 |
| | | 51 | 97 | 2,900 | | 3.2 | 1.6 | 2 |
| | | 51 | 97 | 2,150 | | 2.4 | 1.2 | 2 |
| | | 51 | 97 | 1,300 | | 1.4 | 0.7 | 2 |
| | | 50 | 97 | | | 4.7 | 2.5 | 2 |
| | | 63 | 99 | | 5,000 | 6.2 | 3.1 | 2 |
| | | 63 | 99 | | 2,550 | 3.2 | 1.6 | 2 |
| | | 63 | 99 | | 1,900 | 2.4 | 1.2 | 2 |
| | | 63 | 99 | | 1,150 | 1.5 | 0.7 | 2 |
| | | 85 | >99 | | | 9.0 | 3.1 | 2 |
| | | 85 | >99 | | | 3.1 | 1.6 | 6 |
| | 36 | 89 | >99 | | 3,000 | 9.0 | 3.1 | 2 |
| | 36 | 89 | >99 | | 1,600 | 4.7 | 1.6 | 4 |
| | 36 | 89 | >99 | | 1,100 | 3.1 | 1.1 | 6 |
| | 35 | 88 | >99 | | 2,000 | 6.2 | 2.2 | 6 |
| | 35 | 88 | >99 | | 1,500 | 4.7 | 1.6 | 4 |
| | 35 | 88 | >99 | | 1,000 | 3.1 | 1.1 | 6 |
| | 35 | 88 | >99 | | 460 | 1.5 | 0.5 | 6 / 12 |
| | 55 | 95 | >99 | | 2,200 | 9.0 | 3.1 | 2 / 5 |
| | 55 | 95 | >99 | | 1,150 | 4.7 | 1.7 | 4 |
| | 55 | 95 | >99 | | 800 | 3.1 | 1.2 | 6 |
| | 55 | 95 | >99 | | 350 | 1.5 | 0.5 | 6 / 12 |

# Pocket filters
## WinAir | Coarse dust

energy efficiency
performance

| Specifications | |
|---|---|
| Filter medium | Polyester fibers |
| 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.

### Special features

- Good filtration characteristics thanks to progressively structured filter media made of synthetic-organic fibers.
- Filter pockets foamed into the PU front frame, and welded in a leakproof configuration.
- Pocket forming through integrated welded seams.
- The pocket filters are microbiologically inactive and meet all hygiene requirements of the German VDI Guideline 6022 “Hygiene requirements for ventilation and air-conditioning systems and units”.
- Free of glass-fibers, non-corroding, moisture-resistant up to 100% relative humidity, self-extinguishing under DIN 53438 (fire class F1).
- Simple, secure installation, suitable for all commonly used mounting frames.

### Delivery notes

Customized dimensions are available on request.

| Article number | Article | Dimensions (W x H x D) [mm] | Number of pockets | Filter class | Nominal volume flow [m³/h] | Initial pressure drop [Pa] | EE class | Energy consumption [kWh/a] | Average arrestance efficiency [%] | Filter area [m²] | Weight [kg] | Packaging unit [units/carton] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 53393071 | WinAir 35 1/1 330 mm | 592x592x330 | 5 | G3 | 3,400 | 28 | | | 86 | 2.0 | 1.2 | 2 |
| 53393073 | WinAir 35 5/6 330 mm | 492x592x330 | 4 | G3 | 2,700 | 28 | | | 86 | 1.6 | 0.9 | 2 |
| 53393072 | WinAir 35 1/2 330 mm | 289x592x330 | 3 | G3 | 2,050 | 28 | | | 86 | 1.2 | 0.7 | 2 |
| 53393159 | WinAir 35 1/4 330 mm | 289x289x330 | 4 | G3 | 1,200 | 28 | | | 86 | 0.7 | 0.5 | 2 |
| 53390774 | WinAir 45 1/1 330 mm | 592x592x330 | 5 | G4 | 3,400 | 30 | D | 810 | 90 | 2.0 | 1.2 | 2 |
| 53390780 | WinAir 45 5/6 330 mm | 492x592x330 | 4 | G4 | 2,700 | 30 | D | | 90 | 1.6 | 0.9 | 2 |
| 53390777 | WinAir 45 1/2 330 mm | 289x592x330 | 3 | G4 | 2,050 | 30 | D | | 90 | 1.2 | 0.7 | 2 |
| 53393160 | WinAir 45 1/4 330 mm | 289x289x330 | 4 | G4 | 1,200 | 30 | D | | 90 | 0.7 | 0.5 | 2 |
| 53390775 | WinAir 45 1/1 510 mm | 592x592x510 | 5 | G4 | 3,400 | 30 | A | 530 | 91 | 3.1 | 1.3 | 8 |
| 53390781 | WinAir 45 5/6 510 mm | 492x592x510 | 4 | G4 | 2,700 | 30 | A | | 91 | 2.5 | 1.1 | 10 |
| 53390778 | WinAir 45 1/2 510 mm | 289x592x510 | 3 | G4 | 2,050 | 30 | A | | 91 | 1.9 | 0.8 | 10 |
| 53393161 | WinAir 45 1/4 510 mm | 289x289x510 | 4 | G4 | 1,200 | 30 | A | | 91 | 1.1 | 0.6 | 2 |
| 53390776 | WinAir 45 1/1 625 mm | 592x592x625 | 5 | G4 | 3,400 | 25 | A | 490 | 92 | 3.8 | 1.4 | 8 |
| 53390782 | WinAir 45 5/6 625 mm | 492x592x625 | 4 | G4 | 2,700 | 25 | A | | 92 | 3.0 | 1.2 | 4 |
| 53390779 | WinAir 45 1/2 625 mm | 289x592x625 | 3 | G4 | 2,050 | 25 | A | | 92 | 2.3 | 1.0 | 6 |
| 53393162 | WinAir 45 1/4 650 mm | 289x289x650 | 4 | G4 | 1,250 | 25 | A | | 92 | 1.4 | 0.6 | 2 |

# Pocket filters
## WinAir | Fine dust

| Specifications | |
|---|---|
| Filter medium | Polyester (WinAir 50), polyolefin (others) |
| Recommended final pressure drop | 450 Pa |
| Thermal stability | 70°C |
| Moisture resistance | 100% rel. hum. |
| Frame | Polyurethane |
| Fire class | 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.

### Special features

- Good filtration characteristics thanks to progressively structured filter media made of synthetic-organic fibers.
- Filter pockets foamed into the PU front frame, and welded in a leakproof configuration.
- Pocket forming through integrated welded seams.
- The pocket filters are microbiologically inactive and meet all hygiene requirements of the German VDI Guideline 6022 "Hygiene requirements for ventilation and air-conditioning systems and units".
- Free of glass-fibers, non-corroding, moisture-resistant up to 100% relative humidity, self-extinguishing under DIN 53438 (fire class F1).
- Simple, secure installation, suitable for all commonly used mounting frames.

# Pocket filters
## WinAir | Fine dust

| Specifications | |
|---|---|
| Filter medium | Polyester (WinAir 50), polyolefin (others) |
| Recommended final pressure drop | 450 Pa |
| Thermal stability | 70 °C |
| Moisture resistance | 100% rel. hum. |
| Frame | Polyurethane |
| Fire class | F1 acc. to DIN 53438 |
| | |
| | |

| Article number | Article | Dimensions (W x H x D) [mm] | Number of pockets | Filter class | Nominal volume flow [m³/h] | Initial pressure drop [Pa] | EE class | |
|---|---|---|---|---|---|---|---|---|
| 53390783 | WinAir 50 1/1 330 mm | 592x592x330 | 5 | M5 | 2,500 | 40 | G | |
| 53390795 | WinAir 50 5/6 330 mm | 492x592x330 | 4 | M5 | 2,000 | 40 | G | |
| 53390787 | WinAir 50 1/2 330 mm | 289x592x330 | 3 | M5 | 1,500 | 40 | G | |
| 53393163 | WinAir 50 1/4 330 mm | 289x289x330 | 4 | M5 | 900 | 40 | G | |
| 53390784 | WinAir 50 1/1 510 mm | 592x592x510 | 5 | M5 | 3,400 | 50 | D | |
| 53390796 | WinAir 50 5/6 510 mm | 492x592x510 | 4 | M5 | 2,700 | 50 | D | |
| 53390788 | WinAir 50 1/2 510 mm | 289x592x510 | 3 | M5 | 2,000 | 50 | D | |
| 53393169 | WinAir 50 1/4 510 mm | 289x289x510 | 4 | M5 | 1,200 | 50 | D | |
| 53390785 | WinAir 50 1/1 625 mm | 592x592x625 | 5 | M5 | 3,400 | 45 | B | |
| 53390797 | WinAir 50 5/6 625 mm | 492x592x625 | 4 | M5 | 2,700 | 45 | B | |
| 53390794 | WinAir 50 1/2 625 mm | 289x592x625 | 3 | M5 | 2,000 | 45 | B | |
| 53393170 | WinAir 50 1/4 650 mm | 289x289x650 | 4 | M5 | 1,250 | 45 | B | |
| 53390798 | WinAir 75 1/1 510 mm | 592x592x510 | 8 | M6 | 3,400 | 100 | G | |
| 53390803 | WinAir 75 5/6 510 mm | 492x592x510 | 6 | M6 | 2,550 | 100 | G | |
| 53390801 | WinAir 75 1/2 510 mm | 289x592x510 | 4 | M6 | 1,700 | 100 | G | |
| 53393171 | WinAir 75 1/4 510 mm | 289x289x510 | 4 | M6 | 800 | 100 | G | |
| 53390799 | WinAir 75 1/1 625 mm | 592x592x625 | 8 | M6 | 3,400 | 75 | G | |
| 53390804 | WinAir 75 5/6 625 mm | 492x592x625 | 6 | M6 | 2,550 | 75 | G | |
| 53390802 | WinAir 75 1/2 625 mm | 289x592x625 | 4 | M6 | 1,700 | 75 | G | |
| 53393172 | WinAir 75 1/4 650 mm | 289x289x650 | 4 | M6 | 800 | 75 | G | |
| 53464906 | Win-Air 90 1/1 N 510 mm | 592x592x510 | 8 | F7 | 3,400 | 170 | G | |
| 53390810 | WinAir 90 5/6 510 mm | 492x592x510 | 6 | F7 | 2,550 | 170 | G | |
| 53390808 | WinAir 90 1/2 510 mm | 289x592x510 | 4 | F7 | 1,700 | 170 | G | |
| 53393173 | WinAir 90 1/4 510 mm | 289x289x510 | 4 | F7 | 800 | 170 | G | |
| 53464907 | Win-Air 90 1/1 N 625 mm | 592x592x625 | 8 | F7 | 3,400 | 140 | G | |
| 53390811 | WinAir 90 5/6 625 mm | 492x592x625 | 6 | F7 | 2,550 | 140 | G | |
| 53390809 | WinAir 90 1/2 625 mm | 289x592x625 | 4 | F7 | 1,700 | 140 | G | |
| 53393174 | WinAir 90 1/4 650 mm | 289x289x650 | 4 | F7 | 800 | 140 | G | |

# Pocket filters
## WinAir | Fine dust

| Specifications | |
|---|---|
| Filter medium | Polyester (WinAir 50), polyolefin (others) |
| Recommended final pressure drop | 450 Pa |
| Thermal stability | 70°C |
| Moisture resistance | 100% rel. hum. |
| Frame | Polyurethane |
| Fire class | F1 acc. to DIN 53438 |
| | |
| | |

### Delivery notes

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

| | Energy consumption [kWh/a] | Initial efficiency [%] | Minimum efficiency [%] | Average efficiency [%] | Average arrestance efficiency [%] | Filter area [m²] | Weight [kg] | Packaging unit [units / carton] |
|---|---|---|---|---|---|---|---|---|
| | >1,300 | | | 50 | 95 | 2.0 | 1.0 | 2 |
| | | | | 50 | 95 | 1.6 | 1.0 | 2 |
| | | | | 50 | 95 | 1.2 | 0.8 | 2 |
| | | | | 50 | 95 | 0.7 | 0.6 | 2 |
| | 960 | | | 50 | 96 | 3.1 | 1.3 | 6 |
| | | | | 50 | 96 | 2.5 | 1.2 | 10 |
| | | | | 50 | 96 | 1.9 | 0.9 | 10 |
| | | | | 50 | 96 | 1.1 | 0.6 | 2 |
| | 750 | | | 50 | 97 | 3.8 | 1.5 | 6 |
| | | | | 50 | 97 | 3.1 | 1.3 | 6 |
| | | | | 50 | 97 | 2.3 | 1.0 | 10 |
| | | | | 50 | 97 | 1.4 | 0.7 | 2 |
| | >1,550 | | | 72 | >99 | 4.9 | 1.8 | 6 |
| | | | | 72 | >99 | 3.7 | 1.3 | 4 |
| | | | | 72 | >99 | 2.5 | 0.9 | 6 |
| | | | | 72 | >99 | 1.2 | 0.5 | 12 |
| | >1,550 | | | 77 | >99 | 6.0 | 2.0 | 8 |
| | | | | 77 | >99 | 4.5 | 1.5 | 4 |
| | | | | 77 | >99 | 3.0 | 1.0 | 6 |
| | | | | 77 | >99 | 1.4 | 0.5 | 12 |
| | >2,450 | 60 | 35 | 81 | | 4.9 | 1.8 | 6 |
| | | 60 | 35 | 81 | >99 | 3.7 | 1.3 | 4 |
| | | 60 | 35 | 81 | >99 | 2.5 | 0.9 | 6 |
| | | 60 | 35 | 81 | >99 | 1.2 | 0.5 | 12 |
| | >2,450 | 62 | 35 | 83 | | 6.0 | 2.0 | 8 |
| | | 62 | 35 | 83 | >99 | 4.5 | 1.5 | 4 |
| | | 62 | 35 | 83 | >99 | 3.0 | 1.0 | 6 |
| | | 62 | 35 | 83 | >99 | 1.4 | 0.5 | 12 |

# Cassette filters

MaxiPleat, NanoPleat, eMaxx, MVP, MVPGT

energy efficiency
performance

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

# Cassette filters
## MaxiPleat | Fine dust

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

### Application

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

### Special features

- The optimum V-shaped pleat geometry of the filter medium, as created by the thermal embossing process, enables the entire filtering area to be utilized, with uniform dust loading, and a homogeneous media velocity with a low average pressure drop.
- The high dust holding capacity of the MaxiPleat filters, in conjunction with a low pressure drop and superlative constructional stability, ensures cost-efficient and dependable operation over a very long operational lifetime.
- MaxiPleat cassette filters achieve energy efficiency class A (MX 95 and MX 98) and B (MX 85), thus ensuring reduced energy costs and downsized $CO_2$ emissions.
- Casting the dimensionally stable pleat package in the torsion-resistant plastic frame assures exceptional sturdiness plus high security against dust breakthrough. Gripping lugs facilitate installation and removal, and the protection grid on both sides minimizes the risk of damage to the filter medium.
- With the MaxiPleat modular filter system, MaxiPleat filters of different filter classes and construction depths can be positively combined simply by clipping them on, thus enabling another filter stage to be inserted without any structural modifications.
- MaxiPleat filters meet in full the requirements laid down in VDI 6022.

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

# Cassette filters
## MaxiPleat | Fine dust

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

### Delivery notes

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

| | Energy consumption [kWh/a] | Initial efficiency [%] | Minimum efficiency [%] | Average efficiency [%] | Dust holding capacity (AC Fine / 800 Pa) [g] | Filter area [m²] | Weight [kg] | Packaging unit [units / carton] |
|---|---|---|---|---|---|---|---|---|
| | | | | 75 | 960 | 7.5 | 4.0 | 2 |
| | | | | 75 | 1,850 | 14.5 | 6.0 | 1 |
| | | | | 75 | 2,240 | 17.5 | 7.0 | 1 |
| | 1,780 | | | 75 | 2,300 | 18.0 | 7.0 | 1 |
| | | | | 75 | 2,600 | 21.0 | 7.0 | 1 |
| | | 45 | 41 | 86 | 550 | 4.3 | 2.0 | 4 |
| | | 45 | 41 | 86 | 790 | 7.5 | 4.0 | 2 |
| | | 45 | 41 | 86 | 1,530 | 14.5 | 6.0 | 1 |
| | | 45 | 41 | 86 | 1,850 | 17.5 | 7.0 | 1 |
| | 1,240 | 45 | 41 | 86 | 1,900 | 18.0 | 7.0 | 1 |
| | | 46 | 42 | 86 | 2,200 | 21.0 | 7.0 | 1 |
| | | 65 | 61 | 92 | 710 | 7.5 | 4.0 | 2 |
| | | 65 | 61 | 92 | 1,370 | 14.5 | 6.0 | 1 |
| | | 65 | 61 | 92 | 1,650 | 17.5 | 7.0 | 1 |
| | | 66 | 62 | 92 | 1,900 | 21.0 | 7.0 | 1 |
| | 1,300 | 65 | 61 | 92 | 1,700 | 18.0 | 7.0 | 1 |
| | | 80 | 76 | 96 | 630 | 7.5 | 4.0 | 2 |
| | | 80 | 76 | 96 | 1,210 | 14.5 | 6.0 | 1 |
| | | 80 | 76 | 96 | 1,460 | 17.5 | 7.0 | 1 |
| | | 82 | 78 | 96 | 1,700 | 21.0 | 7.0 | 1 |
| | 1,830 | 80 | 76 | 96 | 1,500 | 18.0 | 7.0 | 1 |

# Cassette filters
## MaxiPleat | EPA

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

### Application

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

### Special features

- The optimum V-shaped pleat geometry of the filter medium, as created by the thermal embossing process, enables the entire filtering area to be utilized, with uniform dust loading over the filtering area and a homogeneous media velocity with a low average pressure drop.
- The high dust holding capacity of the MaxiPleat filters, in conjunction with a low pressure drop and superlative constructional stability, ensures cost-efficient and dependable operation over a very long operational lifetime.
- Casting the dimensionally stable pleat package in the torsion-resistant plastic frame assures exceptional sturdiness plus high security against dust 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.

| Article number | Article | Dimensions (W x L x D) [mm] | Filter class | Nominal volume flow [m³/h] | Initial pressure drop [Pa] | Arrestance efficiency MPPS [%] | Dust holding capacity (AC Fine/ 800 Pa) [g] | Face velocity [m/s] | Filter area [m²] | Packaging unit [units/carton] |
|---|---|---|---|---|---|---|---|---|---|---|
| 53438221 | MXH10-M-0592x0592x292x25-Z08N-E84 | 592x592x292 | H10 | 4,250 | 235 | ≥85 | 630 | 3.2 | 18.0 | 1 |
| 53360015 | MX100-R-0592x0287x292x25-Z08N-F84 | 592x287x292 | H11 | 1,500 | 195 | ≥95 | 300 | 2.3 | 7.5 | 2 |
| 53360016 | MX100-R-0592X0490X292X25-Z08N-F84 | 592x490x292 | H11 | 2,700 | 195 | ≥95 | 505 | 2.4 | 14.5 | 1 |
| 53360017 | MX100-R-0592X0579X292X25-N18N-F84 | 592x579x292 | H11 | 3,350 | 195 | ≥95 | 600 | 2.5 | 17.5 | 1 |
| 53415622 | MX100-M-0592X0592X292X25-Z08N-F84 | 592x592x292 | H11 | 3,400 | 195 | ≥95 | 610 | 2.5 | 18.0 | 1 |
| 53372031 | MX100-R-0592X0592X292X25-Z08D-F84 | 592x592x292 | H11 | 3,400 | 190 | ≥95 | 690 | 2.5 | 21.0 | 1 |
| 53359975 | MX120-R-0592X0287X292X25-Z08N-G60 | 592x287x292 | H11 | 1,500 | 320 | ≥99.9 | 235 | 2.3 | 11.0 | 2 |
| 53359976 | MX120-R-0592X0490X292X25-Z08N-G60 | 592x490x292 | H12 | 2,700 | 320 | ≥99.9 | 400 | 2.4 | 19.0 | 1 |
| 53359977 | MX120-R-0592X0579X292X25-N18N-G60 | 592x579x292 | H12 | 3,300 | 320 | ≥99.9 | 475 | 2.5 | 22.0 | 1 |
| 53415627 | MX120-M-0592X0592X292X25-Z08N-G60 | 592x592x292 | H12 | 3,400 | 320 | ≥99.9 | 485 | 2.5 | 23.0 | 1 |

# Cassette filters

## 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.

### Special features

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

### Delivery notes

The MaxiPleat basic filters are supplied with connecting pins inserted (RB types).
N = with 25 mm front frame; U = with 20.5 mm front frame; D = without front frame.
The MaxiPleat modular prefilters (RC types) are available in 292 and 140 mm construction depths.
The standard version does not include a front frame, but is delivered with a clean air side seal and connecting caps inserted.
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 side.
Customized dimensions are available on request.

| Article number | Article | Dimensions (W x L x D) [mm] | Filter class | Nominal volume flow [m³/h] | Initial pressure drop [Pa] | Average efficiency [%] | Dust holding capacity (AC Fine/ 800 Pa) [g] | Filter area [m²] | Weight [kg] | Packaging unit [units/carton] |
|---|---|---|---|---|---|---|---|---|---|---|
| 53372039 | MX75-RC-0554x0554x140x10-N58D-A45 | 554x554x140 | M6 | 3,400 | 135 | 79 | >1,500 | 12 | 4 | 1 |
| 53378239 | MX75-RC-0554x0554x292x25-N58D-A84 | 554x554x292 | M6 | 3,400 | 95 | 79 | >2,300 | 18 | 7 | 1 |
| 53403631 | MX85-RB-0592x0592x292x25-Z08N-B84 | 592x592x292 | F7 | 3,400 | 100 | 87 | >1,900 | 18 | 7 | 1 |
| 53371192 | MX85-RC-0554x0554x140x10-N58D-B45 | 554x554x140 | F7 | 3,400 | 140 | 82 | >1,250 | 12 | 4 | 1 |
| 53375083 | MX85-RC-0554x0554x292x25-N58D-B84 | 554x554x292 | F7 | 3,400 | 100 | 87 | >1,900 | 18 | 7 | 1 |
| 53371193 | MX95-RB-0592x0592x292x25-Z08N-C84 | 592x592x292 | F8 | 3,400 | 105 | 92 | >1,700 | 18 | 7 | 1 |
| 53372040 | MX95-RC-0554x0554x140x10-N58D-C45 | 554x554x140 | F8 | 3,400 | 150 | 91 | >1,150 | 12 | 4 | 1 |
| 3379914 | MX95-RC-0554x0554x292x25-N58D-C84 | 554x554x292 | F8 | 3,400 | 105 | 92 | >1,700 | 18 | 7 | 1 |
| 53372041 | MX98-RB-0592x0592x292x25-Z08N-D84 | 592x592x292 | F9 | 3,400 | 125 | 96 | >1,500 | 18 | 7 | 1 |
| 53431249 | MX98-RC-0554x0554x140x10-N58D-D45 | 554x554x140 | F9 | 3,400 | 175 | 96 | >1,000 | 12 | 4 | 1 |
| 53372421 | MX98-RC-0554X0554X292X25-N58D-D84 | 554x554x292 | F9 | 3,400 | 125 | 96 | >1,500 | 18 | 7 | 1 |

# Cassette filters
## MaxiPleat | Modular filter system | EPA

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

### Application

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

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

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

### Special features

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

### Delivery notes

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

| Article number | Article | Dimensions (W x L x D) [mm] | Filter class | Nominal volume flow [m³/h] | Initial pressure drop [Pa] | Dust holding capacity (AC Fine / 800 Pa) [g] | Filter area [m²] | Weight [kg] | Packaging unit [units / carton] |
|---|---|---|---|---|---|---|---|---|---|
| 53440228 | MXH10-RB-0592x0592x292x25-Z08N-E84 | 592 x 592 x 292 | H10 | 3,400 | 175 | 700 | 18 | 7.0 | 1 |
| 53381884 | MX100-RB-0592x0592x292x25-Z08N-F84 | 592 x 592 x 292 | H11 | 3,400 | 195 | 610 | 18 | 7.0 | 1 |
| 53372043 | MX120-RB-0592x0592x292x25-Z08N-G60 | 592 x 592 x 292 | H12 | 3,400 | 320 | 485 | 23 | 8.3 | 1 |

# Cassette filters
## NanoPleat | Fine dust

| Specifications | |
|---|---|
| Filter medium | Hybrid-synthetic nanofiber nonwoven |
| Recommended final pressure drop | 450 Pa |
| Bursting pressure | 5,000 Pa |
| Thermal stability | up to 70 °C |
| Moisture resistance | 100% rel. hum. |
| Frame | Top frame 25 mm, halogen-free plastic |
| | |
| | |

### Application

The Viledon® NanoPleat filter, thanks to its innovative hybrid-synthetic nanofiber (HSN) technology, ensures superlative results in sophisticated air-conditioning technology. Wherever stringent requirements apply in terms of clean air quality, operational dependability, and cost-efficiency, this premium filter sets new standards.

### Special features

- **Extremely sturdy:** a significantly higher withstand capability than conventional glass-fiber-paper filters of this kind.
- **Simple handling:** thanks to the sturdy construction, installation is considerably easier.
- **Highly water-repellent:** the filter is moisture-resistant up to 100% relative humidity and extremely hydrophobic. Water droplets roll off the filter; the pressure drop shows only a marginal and temporary rise.
- **Microbiologically inactive, conforms to VDI Guideline 6022:** Viledon® NanoPleat meets all the relevant criteria in terms of hygiene requirements. It is thus ideal for use in sensitive applications, e.g. the food and beverage industries (particularly in humid environments entailed by the production process involved), pharmaceuticals, chemicals, and in operating theaters and intensive care units.
- **Cost savings:** consistently high arrestance with efficient, energy-economical operating characteristics and long lifetime.
- **Eco-friendliness:** the entire filter element is free of metals and halogens, and is therefore fully incinerable, leaving almost no residues behind when it is burned. This means it is eco-friendly and easy to dispose of.

| Article number | Article | Dimensions (W x L x D) [mm] | Filter class | Nominal volume flow [m³/h] | Initial pressure drop [Pa] | EE class | Energy consumption [kWh/a] | Initial efficiency [%] | Minimum efficiency [%] | Average efficiency [%] | Weight [kg] |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 53424217 | MV 75 HSN 1/1 MP | 592x592x292 | M6 | 3,400 | 85 | G | 1,640 | 40 | | ≥70 | 5.8 |
| 53429115 | MV 75 HSN 5/6 MP | 490x592x292 | M6 | 2,700 | 85 | G | | 40 | | ≥70 | 4.8 |
| 53429114 | MV 75 HSN 1/2 MP | 287x592x292 | M6 | 1,500 | 85 | G | | 40 | | ≥70 | 3.3 |
| 53424218 | MV 85 HSN 1/1 MP | 592x592x292 | F7 | 3,400 | 100 | C | 1,500 | 60 | 57 | ≥85 | 5.8 |
| 53429117 | MV 85 HSN 5/6 MP | 490x592x292 | F7 | 2,700 | 100 | C | | 60 | 57 | ≥85 | 4.8 |
| 53441273 | MV 85 HSN 4/6 MP | 405x592x292 | F7 | 2,100 | 100 | C | | 60 | 57 | ≥85 | 4.6 |
| 53429116 | MV 85 HSN 1/2 MP | 287x592x292 | F7 | 1,500 | 100 | C | | 60 | 57 | ≥85 | 3.3 |
| 53424229 | MV 95 HSN 1/1 MP | 592x592x292 | F8 | 3,400 | 110 | B | 1,700 | 70 | 67 | ≥90 | 5.8 |
| 53429124 | MV 95 HSN 5/6 MP | 490x592x292 | F8 | 2,700 | 110 | B | | 70 | 67 | ≥90 | 4.8 |
| 53441279 | MV 95 HSN 4/6 MP | 405x592x292 | F8 | 2,100 | 110 | B | | 70 | 67 | ≥90 | 4.6 |
| 53429118 | MV 95 HSN 1/2 MP | 287x592x292 | F8 | 1,500 | 110 | B | | 70 | 67 | ≥90 | 3.3 |

# Cassette filters
## 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

### Their characteristics and benefits

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

### Special features

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

| Article number | Article | Dimensions (W x L x D) [mm] | Filter class | Nominal volume flow [m³/h] | Initial pressure drop [Pa] | Arrestance efficiency MPPS [%] | Dust holding capacity (AC Fine/800 Pa) [g] | Filter area [m²] |
|---|---|---|---|---|---|---|---|---|
| 53457960 | EMAXX E10-P-1/1-W19N | 593 x 593 x 420 | H10 | 4,250 | 170 | ≥ 85 | > 1,800 | 30 |
| 53457959 | EMAXX E10-P-1/1-Z09N | 593 x 593 x 420 | H10 | 4,250 | 170 | ≥ 85 | > 1,800 | 30 |

# Cassette filters
## MVP | Fine dust

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

### Application

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

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

### Special features

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

### Delivery notes

MVP cassette filters are available on request in filter classes E10 to E12, and with a glued-on seal on the clean air side.
Also available with 6 instead of 8 panels.

| Article number | Article | Dimensions (W x L x D) [mm] | Filter class | Nominal volume flow [m³/h] | Initial pressure drop [Pa] | EE class | Energy consumption [kWh/a] | Initial efficiency [%] | Minimum efficiency [%] | Average efficiency [%] | Filter area [m²] |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 53412032 | MVP75-P-0593x0593x292/V08x25-Z00N | 592 x 592 x 292 | M6 | 4,250 | 100 | F | 1,500 | | | ≥70 | 18.0 |
| 53412030 | MVP75-P-0491x0593x292/V08x25-Z00N | 490 x 592 x 292 | M6 | 3,500 | 100 | F | | | | ≥70 | 14.5 |
| 53412623 | MVP75-P-0402x0593x292/V08x25-Z00N | 402 x 592 x 292 | M6 | 2,800 | 100 | F | | | | ≥70 | 11.8 |
| 53412029 | MVP75-P-0288x0593x292/V08x25-Z00N | 287 x 592 x 292 | M6 | 2,000 | 100 | F | | | | ≥70 | 8.5 |
| 53412035 | MVP85-P-0593x0593x292/V08x25-Z00N | 592 x 592 x 292 | F7 | 4,250 | 115 | A | 1,100 | 56 | 52 | ≥85 | 18.0 |
| 53412034 | MVP85-P-0491x0593x292/V08x25-Z00N | 490 x 592 x 292 | F7 | 3,500 | 115 | A | | 56 | 52 | ≥85 | 14.5 |
| 53412634 | MVP85-P-0402x0593x292/V08x25-Z00N | 402 x 592 x 292 | F7 | 2,800 | 115 | A | | 56 | 52 | ≥85 | 11.8 |
| 53412033 | MVP85-P-0288x0593x292/V08x25-Z00N | 287 x 592 x 292 | F7 | 2,000 | 115 | A | | 56 | 52 | ≥85 | 8.5 |
| 53412038 | MVP95-P-0593x0593x292/V08x25-Z00N | 592 x 592 x 292 | F8 | 4,250 | 130 | A | 1,200 | 63 | 59 | ≥90 | 18.0 |
| 53412037 | MVP95-P-0491x0593x292/V08x25-Z00N | 490 x 592 x 292 | F8 | 3,500 | 130 | A | | 63 | 59 | ≥90 | 14.5 |
| 53412635 | MVP95-P-0402x0593x292/V08x25-Z00N | 402 x 592 x 292 | F8 | 2,800 | 130 | A | | 63 | 59 | ≥90 | 11.8 |
| 53412036 | MVP95-P-0288x0593x292/V08x25-Z00N | 287 x 592 x 292 | F8 | 2,000 | 130 | A | | 63 | 59 | ≥90 | 8.5 |
| 53412046 | MVP98-P-0593x0593x292/V08x25-Z00N | 592 x 592 x 292 | F9 | 4,250 | 140 | A | 1,470 | 82 | 78 | ≥95 | 18.0 |
| 53412045 | MVP98-P-0491x0593x292/V08x25-Z00N | 490 x 592 x 292 | F9 | 3,500 | 140 | A | | 82 | 78 | ≥95 | 14.5 |
| 53412637 | MVP98-P-0402x0593x292/V08x25-Z00N | 402 x 592 x 292 | F9 | 2,800 | 140 | A | | 82 | 78 | ≥95 | 11.8 |
| 53412044 | MVP98-P-0288x0593x292/V08x25-Z00N | 287 x 592 x 292 | F9 | 2,000 | 140 | A | | 82 | 78 | ≥95 | 8.5 |

# Cassette filters
## MVPGT | Fine dust

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

### Application

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

### Advantages

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

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

# Cassette filters
## MVPGT | EPA

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

### Application

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

### Advantages

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

| Article number | Article | Dimensions (W x L x D) [mm] | Filter class | Nominal volume flow [$m^3/h$] | Initial pressure drop [Pa] | Arrestance efficiency MPPS [%] | Filter area [$m^2$] |
|---|---|---|---|---|---|---|---|
| 53464952 | MVPGTE10-P-0593x0593x292 / V08x25-W19N | 592 x 592 x 292 | H10 | 4,250 | 240 | ≥ 85 | 18 |

# EPA | HEPA | ULPA filters

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

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

# EPA | HEPA | ULPA filters

## Aluminum frame | Construction depths 68 + 88 mm | HEPA

| Specifications | |
|---|---|
| Filter medium | Micro-glass-fiber paper |
| Recommended final pressure drop | 600 Pa |
| Thermal stability | 70 °C |
| Moisture resistance | 100% rel. hum. |
| Frame | Extruded aluminum profile, anodized |
| Seal | Semicircular PU profile, endlessly foamed |
| Protection grids | On both sides, 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 of hospitals and medical institutes, pharmacies, sterile rooms, labs, research centers, etc.)
- in sensitive and highly sensitive industrial processes (pharmaceuticals, biotechnology, chemicals, optics, food / beverage, micro-electronics, etc.)
- in ceiling outlets and modules for flexible cleanroom systems

### Special features

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

### Delivery notes

Customized dimensions and other filter classes are available on request.

| Article number | Article | Dimensions (W x L x D) [mm] | Pleat depth [mm] | Filter class | Nominal volume flow [m³/h] | Initial pressure drop [Pa] | Arrestance efficiency MPPS [%] |
|---|---|---|---|---|---|---|---|
| 53417676 | SF13-A-0305x0610x068x05-N13N | 305 x 610 x 68 | 50 | H13 | 580 | 250 | ≥99.95 |
| 53417677 | SF13-A-0305x0762x068x05-N13N | 305 x 762 x 68 | 50 | H13 | 730 | 250 | ≥99.95 |
| 53417679 | SF13-A-0457x0457x068x05-N13N | 457 x 457 x 68 | 50 | H13 | 660 | 250 | ≥99.95 |
| 53417681 | SF13-A-0610x0610x068x05-N13N | 610 x 610 x 68 | 50 | H13 | 1,200 | 250 | ≥99.95 |
| 53417683 | SF13-A-0610x0762x068x05-N13N | 610 x 762 x 68 | 50 | H13 | 1,500 | 250 | ≥99.95 |
| 53417686 | SF13-A-0610x1220x068x05-N13N | 610 x 1,220 x 68 | 50 | H13 | 2,400 | 250 | ≥99.95 |
| 53417688 | SF13-A-1220x1220x068x05-N13N | 1,220 x 1,220 x 68 | 50 | H13 | 5,000 | 250 | ≥99.95 |
| 53411760 | SF14-A-0305x0305x068x05-N13N | 305 x 305 x 68 | 50 | H14 | 135 | 120 | ≥99.995 |
| 53411849 | SF14-A-0305x0305x088x07-N13N | 305 x 305 x 88 | 70 | H14 | 135 | 90 | ≥99.995 |
| 53411822 | SF14-A-0610x0610x068x05-N13N | 610 x 610 x 68 | 50 | H14 | 600 | 120 | ≥99.995 |
| 53411851 | SF14-A-0610x0610x088x07-N13N | 610 x 610 x 88 | 70 | H14 | 600 | 90 | ≥99.995 |
| 53411835 | SF14-A-0610x1220x068x05-N13N | 610 x 1,220 x 68 | 50 | H14 | 1,200 | 120 | ≥99.995 |
| 53411853 | SF14-A-0610x1220x088x07-N13N | 610 x 1,220 x 88 | 70 | H14 | 1,200 | 90 | ≥99.995 |
| 53411836 | SF14-A-0610x1525x068x05-N13N | 610 x 1,525 x 68 | 50 | H14 | 1,500 | 120 | ≥99.995 |
| 53411854 | SF14-A-0610x1525x088x07-N13N | 610 x 1,525 x 88 | 70 | H14 | 1,500 | 90 | ≥99.995 |
| 53411837 | SF14-A-0610x1830x068x05-N13N | 610 x 1,830 x 68 | 50 | H14 | 1,800 | 120 | ≥99.995 |
| 53411855 | SF14-A-0610x1830x088x07-N13N | 610 x 1,830 x 88 | 70 | H14 | 1,800 | 90 | ≥99.995 |
| 53411842 | SF14-A-0762x1220x068x05-N13N | 762 x 1,220 x 68 | 50 | H14 | 1,500 | 120 | ≥99.995 |
| 53411858 | SF14-A-0762x1220x088x07-N13N | 762 x 1,220 x 88 | 70 | H14 | 1,500 | 90 | ≥99.995 |
| 53411844 | SF14-A-0762x1830x068x05-N13N | 762 x 1,830 x 68 | 50 | H14 | 2,250 | 120 | ≥99.995 |
| 53411846 | SF14-A-0915x1220x068x05-N13N | 915 x 1,220 x 68 | 50 | H14 | 1,800 | 120 | ≥99.995 |
| 53427337 | SF14-A-0915x1220x088x07-N13N | 915 x 1,220 x 88 | 70 | H14 | 1,800 | 90 | ≥99.995 |
| 53411848 | SF14-A-0915x1830x068x05-N13N | 915 x 1,830 x 68 | 50 | H14 | 2,700 | 120 | ≥99.995 |

# EPA | HEPA | ULPA filters

## Aluminum frame | Construction depth 78 mm | HEPA

| Specifications | |
|---|---|
| Filter medium | Micro-glass-fiber paper |
| Recommended final pressure drop | 600 Pa |
| Thermal stability | 70°C |
| Moisture resistance | 100% rel. hum. |
| Frame | Extruded aluminum profile, anodized |
| Seal | Semicircular PU profile, endlessly foamed |
| Protection grids | On both sides, 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 of hospitals and medical institutes, pharmacies, sterile rooms, labs, research centers, etc.)
- in sensitive industrial processes (pharmaceuticals, biotechnology, chemicals, optics, food / beverage, micro-electronics, etc.)
- in ceiling outlets and modules for flexible cleanroom systems

### Delivery notes

Customized dimensions and other filter classes are available on request.

### Special features

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

| Article | Dimensions (W x L x D) [mm] | Pleat depth [mm] | Filter class | Nominal volume flow [m³/h] | Initial pressure drop [Pa] | Arrestance efficiency MPPS [%] |
|---|---|---|---|---|---|---|
| SF13-A-0305x0305x078x06-N13N | 305 x 305 x 78 | 60 | H13 | 290 | 210 | ≥99.95 |
| SF13-A-0305x0457x078x06-N13N | 305 x 457 x 78 | 60 | H13 | 420 | 210 | ≥99.95 |
| SF13-A-0305x0610x078x06-N13N | 305 x 610 x 78 | 60 | H13 | 600 | 210 | ≥99.95 |
| SF13-A-0305x0762x078x06-N13N | 305 x 762 x 78 | 60 | H13 | 750 | 210 | ≥99.95 |
| SF13-A-0305x0915x078x06-N13N | 305 x 915 x 78 | 60 | H13 | 900 | 210 | ≥99.95 |
| SF13-A-0305x1120x078x06-N13N | 305 x 1,120 x 78 | 60 | H13 | 1,200 | 210 | ≥99.95 |
| SF13-A-0457x0457x078x06-N13N | 457 x 457 x 78 | 60 | H13 | 680 | 210 | ≥99.95 |
| SF13-A-0457x0610x078x06-N13N | 457 x 610 x 78 | 60 | H13 | 900 | 210 | ≥99.95 |
| SF13-A-0545x0545x078x06-N13N | 545 x 545 x 78 | 60 | H13 | 1,000 | 210 | ≥99.95 |
| SF13-A-0545x1155x078x06-N13N | 545 x 1,155 x 78 | 60 | H13 | 2,000 | 210 | ≥99.95 |
| SF13-A-0610x0610x078x06-N13N | 610 x 610 x 78 | 60 | H13 | 1,200 | 210 | ≥99.95 |
| SF13-A-0610x0762x078x06-N13N | 610 x 762 x 78 | 60 | H13 | 1,500 | 210 | ≥99.95 |
| SF13-A-0610x0915x078x06-N13N | 610 x 915 x 78 | 60 | H13 | 1,800 | 210 | ≥99.95 |
| SF13-A-0610x1220x078x06-N13N | 610 x 1,220 x 78 | 60 | H13 | 2,400 | 210 | ≥99.95 |
| SF13-A-0610x1525x078x06-N13N | 610 x 1,525 x 78 | 60 | H13 | 3,000 | 210 | ≥99.95 |
| SF13-A-0610x1830x078x06-N13N | 610 x 1,830 x 78 | 60 | H13 | 3,600 | 210 | ≥99.95 |
| SF13-A-0762x0762x078x06-N13N | 762 x 762 x 78 | 60 | H13 | 1,900 | 210 | ≥99.95 |
| SF13-A-0762x0915x078x06-N13N | 762 x 915 x 78 | 60 | H13 | 2,250 | 210 | ≥99.95 |
| SF13-A-0762x1220x078x06-N13N | 762 x 1,220 x 78 | 60 | H13 | 3,000 | 210 | ≥99.95 |
| SF13-A-0762x1525x078x06-N13N | 762 x 1,525 x 78 | 60 | H13 | 3,750 | 210 | ≥99.95 |
| SF13-A-0762x1830x078x06-N13N | 762 x 1,830 x 78 | 60 | H13 | 4,500 | 210 | ≥99.95 |
| SF13-A-0915x0915x078x06-N13N | 915 x 915 x 78 | 60 | H13 | 2,700 | 210 | ≥99.95 |
| SF13-A-0915x1220x078x06-N13N | 915 x 1,220 x 78 | 60 | H13 | 3,600 | 210 | ≥99.95 |
| SF13-A-0915x1525x078x06-N13N | 915 x 1,525 x 78 | 60 | H13 | 4,500 | 210 | ≥99.95 |
| SF13-A-0915x1830x078x06-N13N | 915 x 1,830 x 78 | 60 | H13 | 5,400 | 210 | ≥99.95 |

Continued on page 52 ▸

# EPA | HEPA | ULPA filters
## Aluminum frame | Construction depth 78 mm | HEPA

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

| Article | Dimensions (W x L x D) [mm] | Pleat depth [mm] | Filter class | Nominal volume flow [m³/h] | Initial pressure drop [Pa] | Arrestance efficiency MPPS [%] |
|---|---|---|---|---|---|---|
| SF14-A-0305x0305x078x06-N13N | 305 x 305 x 78 | 60 | H14 | 135 | 100 | ≥ 99.995 |
| SF14-A-0305x0457x078x06-N13N | 305 x 457 x 78 | 60 | H14 | 200 | 100 | ≥ 99.995 |
| SF14-A-0305x0610x078x06-N13N | 305 x 610 x 78 | 60 | H14 | 280 | 100 | ≥ 99.995 |
| SF14-A-0305x0762x078x06-N13N | 305 x 762 x 78 | 60 | H14 | 360 | 100 | ≥ 99.995 |
| SF14-A-0305x0915x078x06-N13N | 305 x 915 x 78 | 60 | H14 | 430 | 100 | ≥ 99.995 |
| SF14-A-0305x1120x078x06-N13N | 305 x 1,120 x 78 | 60 | H14 | 600 | 100 | ≥ 99.995 |
| SF14-A-0457x0457x078x06-N13N | 457 x 457 x 78 | 60 | H14 | 335 | 100 | ≥ 99.995 |
| SF14-A-0457x0610x078x06-N13N | 457 x 610 x 78 | 60 | H14 | 450 | 100 | ≥ 99.995 |
| SF14-A-0545x0545x078x06-N13N | 545 x 545 x 78 | 60 | H14 | 500 | 100 | ≥ 99.995 |
| SF14-A-0545x1155x078x06-N13N | 545 x 1,155 x 78 | 60 | H14 | 1,000 | 100 | ≥ 99.995 |
| SF14-A-0610x0610x078x06-N13N | 610 x 610 x 78 | 60 | H14 | 600 | 100 | ≥ 99.995 |
| SF14-A-0610x0762x078x06-N13N | 610 x 762 x 78 | 60 | H14 | 750 | 100 | ≥ 99.995 |
| SF14-A-0610x0915x078x06-N13N | 610 x 915 x 78 | 60 | H14 | 900 | 100 | ≥ 99.995 |
| SF14-A-0610x1220x078x06-N13N | 610 x 1,220 x 78 | 60 | H14 | 1,200 | 100 | ≥ 99.995 |
| SF14-A-0610x1525x078x06-N13N | 610 x 1,525 x 78 | 60 | H14 | 1,500 | 100 | ≥ 99.995 |
| SF14-A-0610x1830x078x06-N13N | 610 x 1,830 x 78 | 60 | H14 | 1,800 | 100 | ≥ 99.995 |
| SF14-A-0762x0762x078x06-N13N | 762 x 762 x 78 | 60 | H14 | 950 | 100 | ≥ 99.995 |
| SF14-A-0762x0915x078x06-N13N | 762 x 915 x 78 | 60 | H14 | 1,125 | 100 | ≥ 99.995 |
| SF14-A-0762x1220x078x06-N13N | 762 x 1,220 x 78 | 60 | H14 | 1,500 | 100 | ≥ 99.995 |
| SF14-A-0762x1525x078x06-N13N | 762 x 1,525 x 78 | 60 | H14 | 1,875 | 100 | ≥ 99.995 |
| SF14-A-0762x1830x078x06-N13N | 762 x 1,830 x 78 | 60 | H14 | 2,250 | 100 | ≥ 99.995 |
| SF14-A-0915x0915x078x06-N13N | 915 x 915 x 78 | 60 | H14 | 1,350 | 100 | ≥ 99.995 |
| SF14-A-0915x1220x078x06-N13N | 915 x 1,220 x 78 | 60 | H14 | 1,800 | 100 | ≥ 99.995 |
| SF14-A-0915x1525x078x06-N13N | 915 x 1,525 x 78 | 60 | H14 | 2,250 | 100 | ≥ 99.995 |
| SF14-A-0915x1830x078x06-N13N | 915 x 1,830 x 78 | 60 | H14 | 2,700 | 100 | ≥ 99.995 |

# EPA | HEPA | ULPA filters

## Aluminum frame | Construction depth 150 mm | HEPA

| Specifications | |
|---|---|
| Filter medium | Micro-glass-fiber paper |
| Recommended final pressure drop | 600 Pa |
| Thermal stability | 70°C |
| Moisture resistance | 100% rel. hum. |
| Frame | 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 of hospitals and medical institutes, pharmacies, sterile rooms, labs, research centers, etc.)
- in highly sensitive industrial processes (pharmaceuticals, biotechnology, chemicals, optics, food and beverage processing, micro-electronics, etc.)
- in ceiling outlets and modules for flexible cleanroom systems

### Special features

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

### Delivery notes

Customized dimensions and other filter classes are available on request.

| Article | Dimensions (W x L x D) [mm] | Pleat depth [mm] | Filter class | Nominal volume flow [m³/h] | Initial pressure drop [Pa] | Arrestance efficiency MPPS [%] |
|---|---|---|---|---|---|---|
| SF13-A-0305x0305x150x05-N13N | 305 x 305 x 150 | 50 | H13 | 270 | 250 | ≥99.95 |
| SF13-A-0305x0457x150x05-N13N | 305 x 457 x 150 | 50 | H13 | 420 | 250 | ≥99.95 |
| SF13-A-0305x0610x150x05-N13N | 305 x 610 x 150 | 50 | H13 | 580 | 250 | ≥99.95 |
| SF13-A-0305x0762x150x05-N13N | 305 x 762 x 150 | 50 | H13 | 730 | 250 | ≥99.95 |
| SF13-A-0305x0915x150x05-N13N | 305 x 915 x 150 | 50 | H13 | 900 | 250 | ≥99.95 |
| SF13-A-0457x0457x150x05-N13N | 457 x 457 x 150 | 50 | H13 | 660 | 250 | ≥99.95 |
| SF13-A-0457x0610x150x05-N13N | 457 x 610 x 150 | 50 | H13 | 900 | 250 | ≥99.95 |
| SF13-A-0610x0610x150x05-N13N | 610 x 610 x 150 | 50 | H13 | 1,200 | 250 | ≥99.95 |
| SF13-A-0610x0762x150x05-N13N | 610 x 762 x 150 | 50 | H13 | 1,500 | 250 | ≥99.95 |
| SF13-A-0610x0915x150x05-N13N | 610 x 915 x 150 | 50 | H13 | 1,800 | 250 | ≥99.95 |
| SF13-A-0610x1220x150x05-N13N | 610 x 1,220 x 150 | 50 | H13 | 2,400 | 250 | ≥99.95 |
| SF13-A-0610x1525x150x05-N13N | 610 x 1,525 x 150 | 50 | H13 | 3,000 | 250 | ≥99.95 |
| SF13-A-0610x1830x150x05-N13N | 610 x 1,830 x 150 | 50 | H13 | 3,600 | 250 | ≥99.95 |
| SF13-A-0762x0762x150x05-N13N | 762 x 762 x 150 | 50 | H13 | 1,900 | 250 | ≥99.95 |
| SF13-A-0762x0915x150x05-N13N | 762 x 915 x 150 | 50 | H13 | 2,250 | 250 | ≥99.95 |
| SF13-A-0762x1220x150x05-N13N | 762 x 1,220 x 150 | 50 | H13 | 3,000 | 250 | ≥99.95 |
| SF13-A-0762x1525x150x05-N13N | 762 x 1,525 x 150 | 50 | H13 | 3,750 | 250 | ≥99.95 |
| SF13-A-0762x1830x150x05-N13N | 762 x 1,830 x 150 | 50 | H13 | 4,500 | 250 | ≥99.95 |
| SF13-A-0915x0915x150x05-N13N | 915 x 915 x 150 | 50 | H13 | 2,700 | 250 | ≥99.95 |
| SF13-A-0915x1220x150x05-N13N | 915 x 1,220 x 150 | 50 | H13 | 3,600 | 250 | ≥99.95 |
| SF13-A-0915x1525x150x05-N13N | 915 x 1,525 x 150 | 50 | H13 | 4,500 | 250 | ≥99.95 |
| SF13-A-0915x1830x150x05-N13N | 915 x 1,830 x 150 | 50 | H13 | 5,400 | 250 | ≥99.95 |

Continued on page 54 ▸

# EPA | HEPA | ULPA filters

## Aluminum frame | Construction depth 150 mm | HEPA

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

| Article | Dimensions (W x L x D) [mm] | Pleat depth [mm] | Filter class | Nominal volume flow [m³/h] | Initial pressure drop [Pa] | Arrestance efficiency MPPS [%] |
|---|---|---|---|---|---|---|
| SF14-A-0305x0305x150x05-N13N | 305 x 305 x 150 | 50 | H14 | 135 | 120 | ≥99.995 |
| SF14-A-0305x0457x150x05-N13N | 305 x 457 x 150 | 50 | H14 | 200 | 120 | ≥99.995 |
| SF14-A-0305x0610x150x05-N13N | 305 x 610 x 150 | 50 | H14 | 280 | 120 | ≥99.995 |
| SF14-A-0305x0762x150x05-N13N | 305 x 762 x 150 | 50 | H14 | 360 | 120 | ≥99.995 |
| SF14-A-0305x0915x150x05-N13N | 305 x 915 x 150 | 50 | H14 | 430 | 120 | ≥99.995 |
| SF14-A-0457x0457x150x05-N13N | 457 x 457 x 150 | 50 | H14 | 335 | 120 | ≥99.995 |
| SF14-A-0457x0610x150x05-N13N | 457 x 610 x 150 | 50 | H14 | 450 | 120 | ≥99.995 |
| SF14-A-0610x0610x150x05-N13N | 610 x 610 x 150 | 50 | H14 | 600 | 120 | ≥99.995 |
| SF14-A-0610x0762x150x05-N13N | 610 x 762 x 150 | 50 | H14 | 750 | 120 | ≥99.995 |
| SF14-A-0610x0915x150x05-N13N | 610 x 915 x 150 | 50 | H14 | 900 | 120 | ≥99.995 |
| SF14-A-0610x1220x150x05-N13N | 610 x 1,220 x 150 | 50 | H14 | 1,200 | 120 | ≥99.995 |
| SF14-A-0610x1525x150x05-N13N | 610 x 1,525 x 150 | 50 | H14 | 1,500 | 120 | ≥99.995 |
| SF14-A-0610x1830x150x05-N13N | 610 x 1,830 x 150 | 50 | H14 | 1,800 | 120 | ≥99.995 |
| SF14-A-0762x0762x150x05-N13N | 762 x 762 x 150 | 50 | H14 | 950 | 120 | ≥99.995 |
| SF14-A-0762x0915x150x05-N13N | 762 x 915 x 150 | 50 | H14 | 1,125 | 120 | ≥99.995 |
| SF14-A-0762x1220x150x05-N13N | 762 x 1,220 x 150 | 50 | H14 | 1,500 | 120 | ≥99.995 |
| SF14-A-0762x1525x150x05-N13N | 762 x 1,525 x 150 | 50 | H14 | 1,875 | 120 | ≥99.995 |
| SF14-A-0762x1830x150x05-N13N | 762 x 1,830 x 150 | 50 | H14 | 2,250 | 120 | ≥99.995 |
| SF14-A-0915x0915x150x05-N13N | 915 x 915 x 150 | 50 | H14 | 350 | 120 | ≥99.995 |
| SF14-A-0915x1220x150x05-N13N | 915 x 1,220 x 150 | 50 | H14 | 1,800 | 120 | ≥99.995 |
| SF14-A-0915x1525x150x05-N13N | 915 x 1,525 x 150 | 50 | H14 | 2,250 | 120 | ≥99.995 |
| SF14-A-0915x1830x150x05-N13N | 915 x 1,830 x 150 | 50 | H14 | 2,700 | 120 | ≥99.995 |

# EPA | HEPA | ULPA filters

## 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 | Silgel |
| Protection 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 of hospitals and medical institutes, pharmacies, sterile rooms, labs, research centers, etc.)
- in highly sensitive industrial processes (pharmaceuticals, biotechnology, chemicals, optics, food / beverage, micro-electronics, etc.)
- in ceiling outlets and modules for flexible cleanroom systems

### Delivery notes

Customized dimensions and other filter classes are available on request.

### Special features

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

| Article | Dimensions (W x L x D) [mm] | Pleat depth [mm] | Filter class | Nominal volume flow [m³ / h] | Initial pressure drop [Pa] | Arrestance efficiency MPPS [%] |
|---|---|---|---|---|---|---|
| SF14-A-0305x0305x080x05-F13N | 305 x 305 x 80 | 50 | H14 | 135 | 120 | ≥ 99.995 |
| SF14-A-0305x0457x080x05-F13N | 305 x 457 x 80 | 50 | H14 | 200 | 120 | ≥ 99.995 |
| SF14-A-0305x0610x080x05-F13N | 305 x 610 x 80 | 50 | H14 | 280 | 120 | ≥ 99.995 |
| SF14-A-0305x0762x080x05-F13N | 305 x 762 x 80 | 50 | H14 | 360 | 120 | ≥ 99.995 |
| SF14-A-0305x0915x080x05-F13N | 305 x 915 x 80 | 50 | H14 | 430 | 120 | ≥ 99.995 |
| SF14-A-0457x0457x080x05-F13N | 457 x 457 x 80 | 50 | H14 | 335 | 120 | ≥ 99.995 |
| SF14-A-0457x0610x080x05-F13N | 457 x 610 x 80 | 50 | H14 | 450 | 120 | ≥ 99.995 |
| SF14-A-0610x0610x080x05-F13N | 610 x 610 x 80 | 50 | H14 | 600 | 120 | ≥ 99.995 |
| SF14-A-0610x0762x080x05-F13N | 610 x 762 x 80 | 50 | H14 | 750 | 120 | ≥ 99.995 |
| SF14-A-0610x0915x080x05-F13N | 610 x 915 x 80 | 50 | H14 | 900 | 120 | ≥ 99.995 |
| SF14-A-0610x1220x080x05-F13N | 610 x 1,220 x 80 | 50 | H14 | 1,200 | 120 | ≥ 99.995 |
| SF14-A-0610x1525x080x05-F13N | 610 x 1,525 x 80 | 50 | H14 | 1,500 | 120 | ≥ 99.995 |
| SF14-A-0610x1830x080x05-F13N | 610 x 1,830 x 80 | 50 | H14 | 1,800 | 120 | ≥ 99.995 |
| SF14-A-0762x0762x080x05-F13N | 762 x 762 x 80 | 50 | H14 | 950 | 120 | ≥ 99.995 |
| SF14-A-0762x0915x080x05-F13N | 762 x 915 x 80 | 50 | H14 | 1,125 | 120 | ≥ 99.995 |
| SF14-A-0762x1220x080x05-F13N | 762 x 1,220 x 80 | 50 | H14 | 1,500 | 120 | ≥ 99.995 |
| SF14-A-0762x1525x080x05-F13N | 762 x 1,525 x 80 | 50 | H14 | 1,875 | 120 | ≥ 99.995 |
| SF14-A-0762x1830x080x05-F13N | 762 x 1,830 x 80 | 50 | H14 | 2,250 | 120 | ≥ 99.995 |
| SF14-A-0915x0915x080x05-F13N | 915 x 915 x 80 | 50 | H14 | 1,350 | 120 | ≥ 99.995 |
| SF14-A-0915x1220x080x05-F13N | 915 x 1,220 x 80 | 50 | H14 | 1,800 | 120 | ≥ 99.995 |
| SF14-A-0915x1525x080x05-F13N | 915 x 1,525 x 80 | 50 | H14 | 2,250 | 120 | ≥ 99.995 |
| SF14-A-0915x1830x080x05-F13N | 915 x 1,830 x 80 | 50 | H14 | 2,700 | 120 | ≥ 99.995 |

# EPA | HEPA | ULPA filters

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

| Specifications | |
|---|---|
| Filter medium | Micro-glass-fiber paper |
| Recommended final pressure drop | 600 Pa |
| Thermal stability | 70 °C |
| Moisture resistance | 100% rel. hum. |
| Frame | Extruded aluminum profile, anodized |
| Seal | Silgel |
| Protection grids | On both sides, 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 of hospitals and medical institutes, pharmacies, sterile rooms, labs, research centers, etc.)
- in highly sensitive industrial processes (pharmaceuticals, biotechnology, chemicals, optics, food / beverage, micro-electronics, etc.)
- in ceiling outlets and modules for flexible cleanroom systems

### Special features

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

### Delivery notes

Customized dimensions and other filter classes are available on request.

| Article | Dimensions (W x L x D) [mm] | Pleat depth [mm] | Filter class | Nominal volume flow [m³/h] | Initial pressure drop [Pa] | Arrestance efficiency MPPS [%] |
|---|---|---|---|---|---|---|
| SF15-A-0305x0305x080x05-F13N | 305 x 305 x 80 | 50 | U15 | 135 | 140 | ≥99.9995 |
| SF15-A-0305x0457x080x05-F13N | 305 x 457 x 80 | 50 | U15 | 200 | 140 | ≥99.9995 |
| SF15-A-0305x0610x080x05-F13N | 305 x 610 x 80 | 50 | U15 | 280 | 140 | ≥99.9995 |
| SF15-A-0305x0762x080x05-F13N | 305 x 762 x 80 | 50 | U15 | 360 | 140 | ≥99.9995 |
| SF15-A-0305x0915x080x05-F13N | 305 x 915 x 80 | 50 | U15 | 430 | 140 | ≥99.9995 |
| SF15-A-0457x0457x080x05-F13N | 457 x 457 x 80 | 50 | U15 | 335 | 140 | ≥99.9995 |
| SF15-A-0457x0610x080x05-F13N | 457 x 610 x 80 | 50 | U15 | 450 | 140 | ≥99.9995 |
| SF15-A-0610x0610x080x05-F13N | 610 x 610 x 80 | 50 | U15 | 600 | 140 | ≥99.9995 |
| SF15-A-0610x0762x080x05-F13N | 610 x 762 x 80 | 50 | U15 | 750 | 140 | ≥99.9995 |
| SF15-A-0610x0915x080x05-F13N | 610 x 915 x 80 | 50 | U15 | 900 | 140 | ≥99.9995 |
| SF15-A-0610x1220x080x05-F13N | 610 x 1,220 x 80 | 50 | U15 | 1,200 | 140 | ≥99.9995 |
| SF15-A-0610x1525x080x05-F13N | 610 x 1,525 x 80 | 50 | U15 | 1,500 | 140 | ≥99.9995 |
| SF15-A-0610x1830x080x05-F13N | 610 x 1,830 x 80 | 50 | U15 | 1,800 | 140 | ≥99.9995 |
| SF15-A-0762x0762x080x05-F13N | 762 x 762 x 80 | 50 | U15 | 950 | 140 | ≥99.9995 |
| SF15-A-0762x0915x080x05-F13N | 762 x 915 x 80 | 50 | U15 | 1,125 | 140 | ≥99.9995 |
| SF15-A-0762x1220x080x05-F13N | 762 x 1,220 x 80 | 50 | U15 | 1,500 | 140 | ≥99.9995 |
| SF15-A-0762x1525x080x05-F13N | 762 x 1,525 x 80 | 50 | U15 | 1,875 | 140 | ≥99.9995 |
| SF15-A-0762x1830x080x05-F13N | 762 x 1,830 x 80 | 50 | U15 | 2,250 | 140 | ≥99.9995 |
| SF15-A-0915x0915x080x05-F13N | 915 x 915 x 80 | 50 | U15 | 1,350 | 140 | ≥99.9995 |
| SF15-A-0915x1220x080x05-F13N | 915 x 1,220 x 80 | 50 | U15 | 1,800 | 140 | ≥99.9995 |
| SF15-A-0915x1525x080x05-F13N | 915 x 1,525 x 80 | 50 | U15 | 2,250 | 140 | ≥99.9995 |
| SF15-A-0915x1830x080x05-F13N | 915 x 1,830 x 80 | 50 | U15 | 2,700 | 140 | ≥99.9995 |

# EPA | HEPA | ULPA filters

## Aluminum frame | Construction depth 102 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 | Silgel |
| Protection 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 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.)
- in ceiling outlets and modules for flexible cleanroom systems

### Delivery notes

Customized dimensions and other filter classes are available on request.

### Special features

- The filter media used are high-arrestance micro-glass-fiber papers.
- The MiniPleat technology employed ensures flow-friendly geometry and equidistance of the pleats, with homogeneous media velocity coupled with a very low pressure drop. This means particularly cost-efficient and dependable operation plus a quasi-laminar outflow.
- 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. 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).
- Simple handling and installation thanks to high distortion-resistance.
- The filter elements feature protection grids on both sides made of powder-coated expanded metal.
- Silgel seal for mounting systems with a sword profile.

| Article | Dimensions (W x L x D) [mm] | Pleat depth [mm] | Filter class | Nominal volume flow [m³/h] | Initial pressure drop [Pa] | Arrestance efficiency MPPS [%] |
|---|---|---|---|---|---|---|
| SF14-A-0305x0305x102x07-F13N | 305 x 305 x 102 | 70 | H14 | 135 | 90 | ≥ 99.995 |
| SF14-A-0305x0457x102x07-F13N | 305 x 457 x 102 | 70 | H14 | 200 | 90 | ≥ 99.995 |
| SF14-A-0305x0610x102x07-F13N | 305 x 610 x 102 | 70 | H14 | 280 | 90 | ≥ 99.995 |
| SF14-A-0305x0762x102x07-F13N | 305 x 762 x 102 | 70 | H14 | 375 | 90 | ≥ 99.995 |
| SF14-A-0305x0915x102x07-F13N | 305 x 915 x 102 | 70 | H14 | 450 | 90 | ≥ 99.995 |
| SF14-A-0305x1120x102x07-F13N | 305 x 1,120 x 102 | 70 | H14 | 600 | 90 | ≥ 99.995 |
| SF14-A-0457x0457x102x07-F13N | 457 x 457 x 102 | 70 | H14 | 335 | 90 | ≥ 99.995 |
| SF14-A-0457x0610x102x07-F13N | 457 x 610 x 102 | 70 | H14 | 450 | 90 | ≥ 99.995 |
| SF14-A-0545x0545x102x07-F13N | 545 x 545 x 102 | 70 | H14 | 500 | 90 | ≥ 99.995 |
| SF14-A-0545x1155x102x07-F13N | 545 x 1,155 x 102 | 70 | H14 | 1,000 | 90 | ≥ 99.995 |
| SF14-A-0610x0610x102x07-F13N | 610 x 610 x 102 | 70 | H14 | 600 | 90 | ≥ 99.995 |
| SF14-A-0610x0762x102x07-F13N | 610 x 762 x 102 | 70 | H14 | 750 | 90 | ≥ 99.995 |
| SF14-A-0610x0915x102x07-F13N | 610 x 915 x 102 | 70 | H14 | 900 | 90 | ≥ 99.995 |
| SF14-A-0610x1220x102x07-F13N | 610 x 1,220 x 102 | 70 | H14 | 1,200 | 90 | ≥ 99.995 |
| SF14-A-0610x1525x102x07-F13N | 610 x 1,525 x 102 | 70 | H14 | 1,500 | 90 | ≥ 99.995 |
| SF14-A-0610x1830x102x07-F13N | 610 x 1,830 x 102 | 70 | H14 | 1,800 | 90 | ≥ 99.995 |
| SF14-A-0762x0762x102x07-F13N | 762 x 762 x 102 | 70 | H14 | 950 | 90 | ≥ 99.995 |
| SF14-A-0762x0915x102x07-F13N | 762 x 915 x 102 | 70 | H14 | 1,125 | 90 | ≥ 99.995 |
| SF14-A-0762x1220x102x07-F13N | 762 x 1,220 x 102 | 70 | H14 | 1,500 | 90 | ≥ 99.995 |
| SF14-A-0762x1525x102x07-F13N | 762 x 1,525 x 102 | 70 | H14 | 1,875 | 90 | ≥ 99.995 |
| SF14-A-0762x1830x102x07-F13N | 762 x 1,830 x 102 | 70 | H14 | 2,250 | 90 | ≥ 99.995 |
| SF14-A-0915x0915x102x07-F13N | 915 x 915 x 102 | 70 | H14 | 1,350 | 90 | ≥ 99.995 |
| SF14-A-0915x1220x102x07-F13N | 915 x 1,220 x 102 | 70 | H14 | 1,800 | 90 | ≥ 99.995 |
| SF14-A-0915x1525x102x07-F13N | 915 x 1,525 x 102 | 70 | H14 | 2,250 | 90 | ≥ 99.995 |
| SF14-A-0915x1830x102x07-F13N | 915 x 1,830 x 102 | 70 | H14 | 2,700 | 90 | ≥ 99.995 |





Freudenberg

# EPA | HEPA | ULPA filters

## Aluminum frame | Construction depth 102 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 of hospitals and medical institutes, pharmacies, sterile rooms, labs, research centers, etc.)
- in highly sensitive industrial processes (pharmaceuticals, biotechnology, chemicals, optics, food and beverage processing, micro-electronics, etc.)
- in ceiling outlets and modules for flexible cleanroom systems

### Special features

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

### Delivery notes

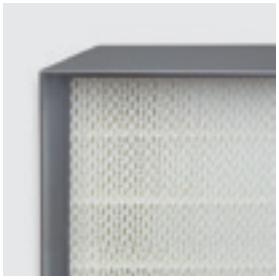
Customized dimensions and other filter classes are available on request.

| Article | Dimensions (W x L x D) [mm] | Pleat depth [mm] | Filter class | Nominal volume flow [m³/h] | Initial pressure drop [Pa] | Arrestance efficiency MPPS [%] |
|---|---|---|---|---|---|---|
| SF15-A-0305x0305x102x07-F13N | 305 x 305 x 102 | 70 | U15 | 135 | 115 | ≥99.9995 |
| SF15-A-0305x0457x102x07-F13N | 305 x 457 x 102 | 70 | U15 | 200 | 115 | ≥99.9995 |
| SF15-A-0305x0610x102x07-F13N | 305 x 610 x 1,025 | 70 | U15 | 280 | 115 | ≥99.9995 |
| SF15-A-0305x0762x102x07-F13N | 305 x 762 x 102 | 70 | U15 | 375 | 115 | ≥99.9995 |
| SF15-A-0305x0915x102x07-F13N | 305 x 915 x 102 | 70 | U15 | 450 | 115 | ≥99.9995 |
| SF15-A-0305x1120x102x07-F13N | 305 x 1,120 x 102 | 70 | U15 | 600 | 115 | ≥99.9995 |
| SF15-A-0457x0457x102x07-F13N | 457 x 457 x 102 | 70 | U15 | 335 | 115 | ≥99.9995 |
| SF15-A-0457x0610x102x07-F13N | 457 x 610 x 102 | 70 | U15 | 450 | 115 | ≥99.9995 |
| SF15-A-0545x0545x102x07-F13N | 545 x 545 x 102 | 70 | U15 | 500 | 115 | ≥99.9995 |
| SF15-A-0545x1155x102x07-F13N | 545 x 1,155 x 102 | 70 | U15 | 1,000 | 115 | ≥99.9995 |
| SF15-A-0610x0610x102x07-F13N | 610 x 610 x 102 | 70 | U15 | 600 | 115 | ≥99.9995 |
| SF15-A-0610x0762x102x07-F13N | 610 x 762 x 102 | 70 | U15 | 750 | 115 | ≥99.9995 |
| SF15-A-0610x0915x102x07-F13N | 610 x 915 x 102 | 70 | U15 | 900 | 115 | ≥99.9995 |
| SF15-A-0610x1220x102x07-F13N | 610 x 1,220 x 102 | 70 | U15 | 1,200 | 115 | ≥99.9995 |
| SF15-A-0610x1525x102x07-F13N | 610 x 1,525 x 102 | 70 | U15 | 1,500 | 115 | ≥99.9995 |
| SF15-A-0610x1830x102x07-F13N | 610 x 1,830 x 102 | 70 | U15 | 1,800 | 115 | ≥99.9995 |
| SF15-A-0762x0762x102x07-F13N | 762 x 762 x 102 | 70 | U15 | 950 | 115 | ≥99.9995 |
| SF15-A-0762x0915x102x07-F13N | 762 x 915 x 102 | 70 | U15 | 1,125 | 115 | ≥99.9995 |
| SF15-A-0762x1220x102x07-F13N | 762 x 1,220 x 102 | 70 | U15 | 1,500 | 115 | ≥99.9995 |
| SF15-A-0762x1525x102x07-F13N | 762 x 1,525 x 102 | 70 | U15 | 1,875 | 115 | ≥99.9995 |
| SF15-A-0762x1830x102x07-F13N | 762 x 1,830 x 102 | 70 | U15 | 2,250 | 115 | ≥99.9995 |
| SF15-A-0915x0915x102x07-F13N | 915 x 915 x 102 | 70 | U15 | 1,350 | 115 | ≥99.9995 |
| SF15-A-0915x1220x102x07-F13N | 915 x 1,220 x 102 | 70 | U15 | 1,800 | 115 | ≥99.9995 |
| SF15-A-0915x1525x102x07-F13N | 915 x 1,525 x 102 | 70 | U15 | 2,250 | 115 | ≥99.9995 |
| SF15-A-0915x1830x102x07-F13N | 915 x 1,830 x 102 | 70 | U15 | 2,700 | 115 | ≥99.9995 |

# EPA | HEPA | ULPA filters

## Aluminum frame | Construction depth 109 mm | Sword profile | 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 |
| Protection grids | On both sides, steel grid, powder-coated |
| | |
| | |



### 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 quality and sterility, e. g.

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

### Delivery notes

Customized dimensions and other filter classes are available on request.

### Special features

- The filter media used are high-arrestance micro-glass-fiber papers.
- The MiniPleat technology employed ensures flow-friendly geometry and equidistance of the pleats, with homogeneous media velocity coupled with a very low pressure drop. This means particularly cost-efficient and dependable operation plus a quasi-laminar outflow.
- 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 distortion-resistance.
- The filter elements feature protection grids on both sides made of powder-coated expanded metal.
- Filter with sword profile for mounting systems with a fluid gel channel.

| Article | Dimensions (W x L x D) [mm] | Pleat depth [mm] | Filter class | Nominal volume flow [m³/h] | Initial pressure drop [Pa] | Arrestance efficiency MPPS [%] |
|---|---|---|---|---|---|---|
| SF14-I-0305x0305x109x05-Z03N | 305 x 305 x 109 | 50 | H14 | 135 | 120 | ≥99.995 |
| SF14-I-0305x0457x109x05-Z03N | 305 x 457 x 109 | 50 | H14 | 200 | 120 | ≥99.995 |
| SF14-I-0305x0610x109x05-Z03N | 305 x 610 x 109 | 50 | H14 | 280 | 120 | ≥99.995 |
| SF14-I-0305x0762x109x05-Z03N | 305 x 762 x 109 | 50 | H14 | 360 | 120 | ≥99.995 |
| SF14-I-0305x0915x109x05-Z03N | 305 x 915 x 109 | 50 | H14 | 430 | 120 | ≥99.995 |
| SF14-I-0305x1120x109x05-Z03N | 305 x 1,120 x 109 | 50 | H14 | 600 | 120 | ≥99.995 |
| SF14-I-0457x0457x109x05-Z03N | 457 x 457 x 109 | 50 | H14 | 335 | 120 | ≥99.995 |
| SF14-I-0457x0610x109x05-Z03N | 457 x 610 x 109 | 50 | H14 | 450 | 120 | ≥99.995 |
| SF14-I-0545x0545x109x05-Z03N | 545 x 545 x 109 | 50 | H14 | 500 | 120 | ≥99.995 |
| SF14-I-0545x1155x109x05-Z03N | 545 x 1,155 x 109 | 50 | H14 | 1,000 | 120 | ≥99.995 |
| SF14-I-0610x0610x109x05-Z03N | 610 x 610 x 109 | 50 | H14 | 600 | 120 | ≥99.995 |
| SF14-I-0610x0762x109x05-Z03N | 610 x 762 x 109 | 50 | H14 | 750 | 120 | ≥99.995 |
| SF14-I-0610x0915x109x05-Z03N | 610 x 915 x 109 | 50 | H14 | 900 | 120 | ≥99.995 |
| SF14-I-0610x1220x109x05-Z03N | 610 x 1,220 x 109 | 50 | H14 | 1,200 | 120 | ≥99.995 |
| SF14-I-0610x1525x109x05-Z03N | 610 x 1,525 x 109 | 50 | H14 | 1,500 | 120 | ≥99.995 |
| SF14-I-0610x1830x109x05-Z03N | 610 x 1,830 x 109 | 50 | H14 | 1,800 | 120 | ≥99.995 |
| SF14-I-0762x0762x109x05-Z03N | 762 x 762 x 109 | 50 | H14 | 950 | 120 | ≥99.995 |
| SF14-I-0762x0915x109x05-Z03N | 762 x 915 x 109 | 50 | H14 | 1,125 | 120 | ≥99.995 |
| SF14-I-0762x1220x109x05-Z03N | 762 x 1,220 x 109 | 50 | H14 | 1,500 | 120 | ≥99.995 |
| SF14-I-0762x1525x109x05-Z03N | 762 x 1,525 x 109 | 50 | H14 | 1,875 | 120 | ≥99.995 |
| SF14-I-0762x1830x109x05-Z03N | 762 x 1,830 x 109 | 50 | H14 | 2,250 | 120 | ≥99.995 |
| SF14-I-0915x0915x109x05-Z03N | 915 x 915 x 109 | 50 | H14 | 1,350 | 120 | ≥99.995 |
| SF14-I-0915x1220x109x05-Z03N | 915 x 1,220 x 109 | 50 | H14 | 1,800 | 120 | ≥99.995 |
| SF14-I-0915x1525x109x05-Z03N | 915 x 1,525 x 109 | 50 | H14 | 2,250 | 120 | ≥99.995 |
| SF14-I-0915x1830x109x05-Z03N | 915 x 1,830 x 109 | 50 | H14 | 2,700 | 120 | ≥99.995 |

# EPA | HEPA | ULPA filters

## Aluminum frame | Construction depth 109 mm | Sword profile | 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 |
| Protection grids | On both sides, steel grid, powder-coated |
| | |
| | |

### 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 of hospitals and medical institutes, pharmacies, sterile rooms, labs, research centers, etc.)
- in highly sensitive industrial processes (pharmaceuticals, biotechnology, chemicals, optics, food / beverage, micro-electronics, etc.)
- in ceiling outlets and modules for flexible cleanroom systems

### Special features

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

### Delivery notes

Customized dimensions and other filter classes are available on request.

| Article | Dimensions (W x L x D) [mm] | Pleat depth [mm] | Filter class | Nominal volume flow [m³/h] | Initial pressure drop [Pa] | Arrestance efficiency MPPS [%] |
|---|---|---|---|---|---|---|
| SF15-I-0305x0305x109x05-Z03N | 305 x 305 x 109 | 50 | U15 | 135 | 140 | ≥ 99.9995 |
| SF15-I-0305x0457x109x05-Z03N | 305 x 457 x 109 | 50 | U15 | 200 | 140 | ≥ 99.9995 |
| SF15-I-0305x0610x109x05-Z03N | 305 x 610 x 109 | 50 | U15 | 280 | 140 | ≥ 99.9995 |
| SF15-I-0305x0762x109x05-Z03N | 305 x 762 x 109 | 50 | U15 | 360 | 140 | ≥ 99.9995 |
| SF15-I-0305x0915x109x05-Z03N | 305 x 915 x 109 | 50 | U15 | 430 | 140 | ≥ 99.9995 |
| SF15-I-0305x1120x109x05-Z03N | 305 x 1,120 x 109 | 50 | U15 | 600 | 140 | ≥ 99.9995 |
| SF15-I-0457x0457x109x05-Z03N | 457 x 457 x 109 | 50 | U15 | 335 | 140 | ≥ 99.9995 |
| SF15-I-0457x0610x109x05-Z03N | 457 x 610 x 109 | 50 | U15 | 450 | 140 | ≥ 99.9995 |
| SF15-I-0545x0545x109x05-Z03N | 545 x 545 x 109 | 50 | U15 | 500 | 140 | ≥ 99.9995 |
| SF15-I-0545x1155x109x05-Z03N | 545 x 1,155 x 109 | 50 | U15 | 1,000 | 140 | ≥ 99.9995 |
| SF15-I-0610x0610x109x05-Z03N | 610 x 610 x 109 | 50 | U15 | 600 | 140 | ≥ 99.9995 |
| SF15-I-0610x0762x109x05-Z03N | 610 x 762 x 109 | 50 | U15 | 750 | 140 | ≥ 99.9995 |
| SF15-I-0610x0915x109x05-Z03N | 610 x 915 x 109 | 50 | U15 | 900 | 140 | ≥ 99.9995 |
| SF15-I-0610x1220x109x05-Z03N | 610 x 1,220 x 109 | 50 | U15 | 1,200 | 140 | ≥ 99.9995 |
| SF15-I-0610x1525x109x05-Z03N | 610 x 1,525 x 109 | 50 | U15 | 1,500 | 140 | ≥ 99.9995 |
| SF15-I-0610x1830x109x05-Z03N | 610 x 1,830 x 109 | 50 | U15 | 1,800 | 140 | ≥ 99.9995 |
| SF15-I-0762x0762x109x05-Z03N | 762 x 762 x 109 | 50 | U15 | 950 | 140 | ≥ 99.9995 |
| SF15-I-0762x0915x109x05-Z03N | 762 x 915 x 109 | 50 | U15 | 1,125 | 140 | ≥ 99.9995 |
| SF15-I-0762x1220x109x05-Z03N | 762 x 1,220 x 109 | 50 | U15 | 1,500 | 140 | ≥ 99.9995 |
| SF15-I-0762x1525x109x05-Z03N | 762 x 1,525 x 109 | 50 | U15 | 1,875 | 140 | ≥ 99.9995 |
| SF15-I-0762x1830x109x05-Z03N | 762 x 1,830 x 109 | 50 | U15 | 2,250 | 140 | ≥ 99.9995 |
| SF15-I-0915x0915x109x05-Z03N | 915 x 915 x 109 | 50 | U15 | 1,350 | 140 | ≥ 99.9995 |
| SF15-I-0915x1220x109x05-Z03N | 915 x 1,220 x 109 | 50 | U15 | 1,800 | 140 | ≥ 99.9995 |
| SF15-I-0915x1525x109x05-Z03N | 915 x 1,525 x 109 | 50 | U15 | 2,250 | 140 | ≥ 99.9995 |
| SF15-I-0915x1830x109x05-Z03N | 915 x 1,830 x 109 | 50 | U15 | 2,700 | 140 | ≥ 99.9995 |

# EPA | HEPA | ULPA filters

## 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 (N10N) |
| | |

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

### Special features

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

### Delivery notes

Customized dimensions are available on request.
Also available as MaxiPleat filters with and without a top frame.

| Article number | Article | Dimensions (W x L x D) [mm] | Pleat depth [mm] | Filter class | Nominal volume flow [m³/h] | Initial pressure drop [Pa] | Arrestance efficiency MPPS [%] |
|---|---|---|---|---|---|---|---|
| 53392321 | SF11-K-0305x0305x150x10-N18N-F45 | 300x305x150 | 100 | H11 | 440 | 160 | ≥95 |
| 53359319 | SF11-K-0457x0457x150x10-N10N-F45 | 457x457x150 | 100 | H11 | 1,100 | 160 | ≥95 |
| 53360528 | SF11-K-0610x0610x150x10-N10N-F45 | 610x610x150 | 100 | H11 | 2,000 | 160 | ≥95 |
| 53386630 | SF11-K-0610x0610x150x10-N18N-F45 | 610x610x150 | 100 | H11 | 2,000 | 160 | ≥95 |
| 53352684 | SF11-K-0610x0305x292x20-N10N-F60 | 610x305x292 | 200 | H11 | 1,400 | 160 | ≥95 |
| 53352648 | SF11-K-0610x0610x292x20-N10N-F60 | 610x610x292 | 200 | H11 | 3,000 | 160 | ≥95 |
| 53357238 | SF11-K-0610x0762x292x20-N10N-F60 | 610x762x292 | 200 | H11 | 4,000 | 160 | ≥95 |
| 53351145 | SF11-K-0610x0305x292x28-N18N-F60 | 610x305x292 | 280 | H11 | 1,600 | 160 | ≥95 |
| 53351144 | SF11-K-0610x0610x292x28-N18N-F60 | 610x610x292 | 280 | H11 | 3,400 | 160 | ≥95 |
| 53357518 | SF11-K-0610x0762x292x28-N18N-F60 | 610x762x292 | 280 | H11 | 4,300 | 160 | ≥95 |

# EPA | HEPA | ULPA filters

## Plastic frame | Construction depths 150 + 292 mm | HEPA

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

### Application

Viledon® HEPA filters of filter classes 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 of hospitals, labs, cleanrooms etc.)
- in highly sensitive industrial processes (pharmaceuticals, biotechnology, chemicals, optics, food and beverages, micro-electronics, etc.)
- in the treatment of dangerous substances (asbestos disposal, heavy metals, carcinogenic dusts, etc.)
- in the preliminary filtration of turbomachinery

### Special features

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

### Delivery notes

Customized dimensions and other filter classes are available on request.

| Article number | Article | Dimensions (W x L x D) [mm] | Pleat depth [mm] | Filter class | Nominal volume flow [m³/h] | Initial pressure drop [Pa] | Arrestance efficiency MPPS [%] | Dust class* |
|---|---|---|---|---|---|---|---|---|
| 53357911 | SF13-K-0305x0305x150x10-N18N-H45 | 305 x 305 x 150 | 100 | H13 | 325 | 220 | ≥99.95 | |
| 53380609 | SF13-K-0305x0305x292x20-N10N-H60 | 305 x 305 x 292 | 200 | H13 | 500 | 250 | ≥99.95 | H |
| 53358438 | SF13-K-0305x0305x292x28-N18N-G60 | 305 x 305 x 292 | 280 | H13 | 700 | 250 | ≥99.95 | H |
| 53361285 | SF13-K-0457x0457x150x10-N18N-H45 | 457 x 457 x 150 | 100 | H13 | 800 | 220 | ≥99.95 | |
| 53352681 | SF13-K-0457x0457x292x20-N10N-H60 | 457 x 457 x 292 | 200 | H13 | 1,300 | 250 | ≥99.95 | H |
| 53353934 | SF13-K-0457x0457x292x28-N18N-G60 | 457 x 457 x 292 | 280 | H13 | 1,800 | 250 | ≥99.95 | H |
| 53440647 | SF13-K-0575x0575x150x10-N18N-H45 | 575 x 575 x 150 | 100 | H13 | 1,400 | 220 | ≥99.95 | |
| 53364637 | SF13-K-0610x0305x150x10-N18N-H45 | 610 x 305 x 150 | 100 | H13 | 700 | 220 | ≥99.95 | |
| 53352680 | SF13-K-0610x0305x292x20-N10N-H60 | 610 x 305 x 292 | 200 | H13 | 1,100 | 250 | ≥99.95 | H |
| 53351143 | SF13-K-0610x0305x292x28-N18N-G60 | 610 x 305 x 292 | 280 | H13 | 1,550 | 250 | ≥99.95 | H |
| 53383118 | SF13-K-0610x0305x292x28-N18N-J60 | 610 x 305 x 292 | 280 | H13 | 1,800 | 330 | ≥99.95 | H |
| 53367419 | SF13-K-0610x0457x292x20-N10N-H60 | 610 x 457 x 292 | 200 | H13 | 1,800 | 250 | ≥99.95 | H |
| 53363063 | SF13-K-0610x0457x292x28-N18N-G60 | 610 x 457 x 292 | 280 | H13 | 2,500 | 250 | ≥99.95 | H |
| 53392755 | SF13-K-0610x0610x150x10-N18N-H45 | 610 x 610 x 150 | 100 | H13 | 1,500 | 220 | ≥99.95 | |
| 53352647 | SF13-K-0610x0610x292x20-N10N-H60 | 610 x 610 x 292 | 200 | H13 | 2,500 | 250 | ≥99.95 | H |
| 53351139 | SF13-K-0610x0610x292x28-N18N-G60 | 610 x 610 x 292 | 280 | H13 | 3,400 | 250 | ≥99.95 | H |
| 53383117 | SF13-K-0610x0610x292x28-N18N-J60 | 610 x 610 x 292 | 280 | H13 | 4,000 | 350 | ≥99.95 | H |
| 53373991 | SF13-K-0610x0762x292x20-N10N-H60 | 610 x 762 x 292 | 200 | H13 | 3,150 | 250 | ≥99.95 | H |
| 53373837 | SF13-K-0610x0762x292x28-N18N-G60 | 610 x 762 x 292 | 280 | H13 | 4,300 | 250 | ≥99.95 | H |
| 53390438 | SF14-K-0305x0305x292x28-N18N-J60 | 305 x 305 x 292 | 280 | H14 | 375 | 150 | ≥99.995 | |
| 53381017 | SF14-K-0457x0457x292x28-N18N-J60 | 457 x 457 x 292 | 280 | H14 | 900 | 150 | ≥99.995 | |
| 53367662 | SF14-K-0610x0305x292x28-N18N-J60 | 610 x 305 x 292 | 280 | H14 | 850 | 150 | ≥99.995 | |
| 53358594 | SF14-K-0610x0457x292x28-N18N-J60 | 610 x 457 x 292 | 280 | H14 | 1,250 | 150 | ≥99.995 | |
| 53353557 | SF14-K-0610x0610x292x28-N18N-J60 | 610 x 610 x 292 | 280 | H14 | 1,700 | 150 | ≥99.995 | |
| 53361167 | SF14-K-0610x0762x292x28-N18N-J60 | 610 x 762 x 292 | 280 | H14 | 2,150 | 150 | ≥99.995 | |

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

# EPA | HEPA | ULPA filters
## 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

### Characteristics and pluses

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

### Delivery notes

Customized dimensions are available on request.

| Article | Dimensions (W x L x D) [mm] | Pleat depth [mm] | Filter class | Nominal volume flow [m³ / h] | Initial pressure drop [Pa] | Arrestance efficiency MPPS [%] |
|---|---|---|---|---|---|---|
| SF11-M-0305x0305x078x05-N10N | 305 x 305 x 78 | 50 | H11 | 220 | 160 | ≥95 |
| SF11-M-0305x0457x078x05-N10N | 305 x 457 x 78 | 50 | H11 | 350 | 160 | ≥95 |
| SF11-M-0305x0610x078x05-N10N | 305 x 610 x 78 | 50 | H11 | 480 | 160 | ≥95 |
| SF11-M-0305x0762x078x05-N10N | 305 x 762 x 78 | 50 | H11 | 600 | 160 | ≥95 |
| SF11-M-0457x0457x078x05-N10N | 457 x 457 x 78 | 50 | H11 | 550 | 160 | ≥95 |
| SF11-M-0457x0610x078x05-N10N | 457 x 610 x 78 | 50 | H11 | 750 | 160 | ≥95 |
| SF11-M-0610x0610x078x05-N10N | 610 x 610 x 78 | 50 | H11 | 1,000 | 160 | ≥95 |
| SF11-M-0610x0762x078x05-N10N | 610 x 762 x 78 | 50 | H11 | 1,300 | 160 | ≥95 |
| SF11-M-0762x0762x078x05-N10N | 762 x 762 x 78 | 50 | H11 | 1,640 | 160 | ≥95 |

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

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

### Application

Viledon® HEPA filters of filter classes 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

### Characteristics and pluses

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

### Delivery notes

Customized dimensions are available on request.

| Article | Dimensions (W x L x D) [mm] | Pleat depth [mm] | Filter class | Nominal volume flow [m³/h] | Initial pressure drop [Pa] | Arrestance efficiency MPPS [%] |
|---|---|---|---|---|---|---|
| SF13-M-0305x0305x078x05-N10N | 305 x 305 x 78 | 50 | H13 | 250 | 250 | ≥ 99.95 |
| SF13-M-0305x0457x078x05-N10N | 305 x 457 x 78 | 50 | H13 | 400 | 250 | ≥ 99.95 |
| SF13-M-0305x0610x078x05-N10N | 305 x 610 x 78 | 50 | H13 | 550 | 250 | ≥ 99.95 |
| SF13-M-0305x0762x078x05-N10N | 305 x 762 x 78 | 50 | H13 | 700 | 250 | ≥ 99.95 |
| SF13-M-0457x0457x078x05-N10N | 457 x 457 x 78 | 50 | H13 | 630 | 250 | ≥ 99.95 |
| SF13-M-0457x0610x078x05-N10N | 457 x 610 x 78 | 50 | H13 | 850 | 250 | ≥ 99.95 |
| SF13-M-0610x0610x078x05-N10N | 610 x 610 x 78 | 50 | H13 | 1,200 | 250 | ≥ 99.95 |
| SF13-M-0610x0762x078x05-N10N | 610 x 762 x 78 | 50 | H13 | 1,500 | 250 | ≥ 99.95 |
| SF13-M-0762x0762x078x05-N10N | 762 x 762 x 78 | 50 | H13 | 1,900 | 250 | ≥ 99.95 |
| SF14-M-0305x0305x078x05-N10N | 305 x 305 x 78 | 50 | H14 | 120 | 125 | ≥ 99.995 |
| SF14-M-0305x0457x078x05-N10N | 305 x 457 x 78 | 50 | H14 | 200 | 125 | ≥ 99.995 |
| SF14-M-0305x0610x078x05-N10N | 305 x 610 x 78 | 50 | H14 | 280 | 125 | ≥ 99.995 |
| SF14-M-0305x0762x078x05-N10N | 305 x 762 x 78 | 50 | H14 | 350 | 125 | ≥ 99.995 |
| SF14-M-0457x0457x078x05-N10N | 457 x 457 x 78 | 50 | H14 | 335 | 125 | ≥ 99.995 |
| SF14-M-0457x0610x078x05-N10N | 457 x 610 x 78 | 50 | H14 | 420 | 125 | ≥ 99.995 |
| SF14-M-0610x0610x078x05-N10N | 610 x 610 x 78 | 50 | H14 | 600 | 125 | ≥ 99.995 |
| SF14-M-0610x0762x078x05-N10N | 610 x 762 x 78 | 50 | H14 | 750 | 125 | ≥ 99.995 |
| SF14-M-0762x0762x078x05-N10N | 762 x 762 x 78 | 50 | H14 | 900 | 125 | ≥ 99.995 |

# EPA | HEPA | ULPA filters

## 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

### Characteristics and pluses

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

### Delivery notes

Customized dimensions are available on request.

| Article | Dimensions (W x L x D) [mm] | Pleat depth [mm] | Filter class | Nominal volume flow [m³/h] | Initial pressure drop [Pa] | Arrestance efficiency MPPS [%] |
|---|---|---|---|---|---|---|
| SF11-M-0305x0305x150x12-N10N | 305 x 305 x 150 | 125 | H11 | 370 | 140 | ≥95 |
| SF11-M-0305x0457x150x12-N10N | 305 x 457 x 150 | 125 | H11 | 560 | 140 | ≥95 |
| SF11-M-0305x0610x150x12-N10N | 305 x 610 x 150 | 125 | H11 | 750 | 140 | ≥95 |
| SF11-M-0305x0762x150x12-N10N | 305 x 762 x 150 | 125 | H11 | 950 | 140 | ≥95 |
| SF11-M-0457x0457x150x12-N10N | 457 x 457 x 150 | 125 | H11 | 850 | 140 | ≥95 |
| SF11-M-0457x0610x150x12-N10N | 457 x 610 x 150 | 125 | H11 | 1,200 | 140 | ≥95 |
| SF11-M-0610x0610x150x12-N10N | 610 x 610 x 150 | 125 | H11 | 1,500 | 140 | ≥95 |
| SF11-M-0610x0762x150x12-N10N | 610 x 762 x 150 | 125 | H11 | 2,100 | 140 | ≥95 |
| SF11-M-0762x0762x150x12-N10N | 762 x 762 x 150 | 125 | H11 | 2,600 | 140 | ≥95 |

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

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

### Application

Viledon® HEPA filters of filter classes 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

### Characteristics and pluses

- The filter media used are high-arrestance micro-glass-fiber papers.
- The MiniPleat technology employed ensures flow-friendly geometry and equidistance of the pleats, with homogeneous media velocity coupled with a very low pressure drop. This means particularly cost-efficient and dependable operation plus a quasi-laminar outflow.
- Each filter element is tested for 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.

| Article | Dimensions (W x L x D) [mm] | Pleat depth [mm] | Filter class | Nominal volume flow [m³/h] | Initial pressure drop [Pa] | Arrestance efficiency MPPS [%] |
|---|---|---|---|---|---|---|
| SF13-M-0305x0305x150x12-N10N | 305 x 305 x 150 | 125 | H13 | 400 | 250 | ≥ 99.95 |
| SF13-M-0305x0457x150x12-N10N | 305 x 457 x 150 | 125 | H13 | 600 | 250 | ≥ 99.95 |
| SF13-M-0305x0610x150x12-N10N | 305 x 610 x 150 | 125 | H13 | 820 | 250 | ≥ 99.95 |
| SF13-M-0305x0762x150x12-N10N | 305 x 762 x 150 | 125 | H13 | 1,000 | 250 | ≥ 99.95 |
| SF13-M-0457x0457x150x12-N10N | 457 x 457 x 150 | 125 | H13 | 950 | 250 | ≥ 99.95 |
| SF13-M-0457x0610x150x12-N10N | 457 x 610 x 150 | 125 | H13 | 1,300 | 250 | ≥ 99.95 |
| SF13-M-0610x0610x150x12-N10N | 610 x 610 x 150 | 125 | H13 | 1,700 | 250 | ≥ 99.95 |
| SF13-M-0610x0762x150x12-N10N | 610 x 762 x 150 | 125 | H13 | 2,200 | 250 | ≥ 99.95 |
| SF13-M-0762x0762x150x12-N10N | 762 x 762 x 150 | 125 | H13 | 2,850 | 250 | ≥ 99.95 |
| SF14-M-0305x0305x150x12-N10N | 305 x 305 x 150 | 125 | H14 | 210 | 125 | ≥ 99.995 |
| SF14-M-0305x0457x150x12-N10N | 305 x 457 x 150 | 125 | H14 | 320 | 125 | ≥ 99.995 |
| SF14-M-0305x0610x150x12-N10N | 305 x 610 x 150 | 125 | H14 | 430 | 125 | ≥ 99.995 |
| SF14-M-0305x0762x150x12-N10N | 305 x 762 x 150 | 125 | H14 | 560 | 125 | ≥ 99.995 |
| SF14-M-0457x0457x150x12-N10N | 457 x 457 x 150 | 125 | H14 | 500 | 125 | ≥ 99.995 |
| SF14-M-0457x0610x150x12-N10N | 457 x 610 x 150 | 125 | H14 | 700 | 125 | ≥ 99.995 |
| SF14-M-0610x0610x150x12-N10N | 610 x 610 x 150 | 125 | H14 | 900 | 125 | ≥ 99.995 |
| SF14-M-0610x0762x150x12-N10N | 610 x 762 x 150 | 125 | H14 | 1,200 | 125 | ≥ 99.995 |
| SF14-M-0762x0762x150x12-N10N | 762 x 762 x 150 | 125 | H14 | 1,500 | 125 | ≥ 99.995 |

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

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

### Application

Viledon® EPA filters of filter class 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 and highly sensitive industrial processes

### Characteristics and pluses

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

### Delivery notes

Customized dimensions are available on request.

| Article | Dimensions (W x L x D) [mm] | Pleat depth [mm] | Filter class | Nominal volume flow [m³/h] | Initial pressure drop [Pa] | Arrestance efficiency MPPS [%] |
|---|---|---|---|---|---|---|
| SF11-M-0288x0593x292x20-N10N | 288 x 593 x 292 | 200 | H11 | 950 | 140 | ≥95 |
| SF11-M-0305x0305x292x20-N10N | 305 x 305 x 292 | 200 | H11 | 500 | 140 | ≥95 |
| SF11-M-0305x0610x292x20-N10N | 305 x 610 x 292 | 200 | H11 | 1,050 | 140 | ≥95 |
| SF11-M-0457x0457x292x20-N10N | 457 x 457 x 292 | 200 | H11 | 1,200 | 140 | ≥95 |
| SF11-M-0457x0610x292x20-N10N | 457 x 610 x 292 | 200 | H11 | 1,650 | 140 | ≥95 |
| SF11-M-0593x0593x292x20-N10N | 593 x 593 x 292 | 200 | H11 | 2,150 | 140 | ≥95 |
| SF11-M-0610x0610x292x20-N10N | 610 x 610 x 292 | 200 | H11 | 2,250 | 140 | ≥95 |
| SF11-M-0610x0762x292x20-N10N | 610 x 762 x 292 | 200 | H11 | 2,870 | 140 | ≥95 |

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

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

### Application

Viledon® HEPA filters of filter classes 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

### Characteristics and pluses

- The filter media used are high-arrestance micro-glass-fiber papers.
- The MiniPleat technology employed ensures flow-friendly geometry and equidistance of the pleats, with homogeneous media velocity coupled with a very low pressure drop. This means particularly cost-efficient and dependable operation plus a quasi-laminar outflow.
- Each filter element is tested for 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 grid on request.

### Delivery notes

Customized dimensions are available on request.

| Article | Dimensions (W x L x D) [mm] | Pleat depth [mm] | Filter class | Nominal volume flow [m³/h] | Initial pressure drop [Pa] | Arrestance efficiency MPPS [%] |
|---|---|---|---|---|---|---|
| SF13-M-0288x0593x292x20-N10N | 288 x 593 x 292 | 200 | H13 | 900 | 250 | ≥99.95 |
| SF13-M-0305x0305x292x20-N10N | 305 x 305 x 292 | 200 | H13 | 470 | 250 | ≥99.95 |
| SF13-M-0305x0610x292x20-N10N | 305 x 610 x 292 | 200 | H13 | 1,000 | 250 | ≥99.95 |
| SF13-M-0457x0457x292x20-N10N | 457 x 457 x 292 | 200 | H13 | 1,100 | 250 | ≥99.95 |
| SF13-M-0457x0610x292x20-N10N | 457 x 610 x 292 | 200 | H13 | 1,500 | 250 | ≥99.95 |
| SF13-M-0593x0593x292x20-N10N | 593 x 593 x 292 | 200 | H13 | 1,900 | 250 | ≥99.95 |
| SF13-M-0610x0610x292x20-N10N | 610 x 610 x 292 | 200 | H13 | 2,000 | 250 | ≥99.95 |
| SF13-M-0610x0762x292x20-N10N | 610 x 762 x 292 | 200 | H13 | 2,750 | 250 | ≥99.95 |
| SF14-M-0288x0593x292x20-N10N | 288 x 593 x 292 | 200 | H14 | 900 | 160 | ≥99.995 |
| SF14-M-0305x0305x292x20-N10N | 305 x 305 x 292 | 200 | H14 | 270 | 160 | ≥99.995 |
| SF14-M-0305x0610x292x20-N10N | 305 x 610 x 292 | 200 | H14 | 600 | 160 | ≥99.995 |
| SF14-M-0457x0457x292x20-N10N | 457 x 457 x 292 | 200 | H14 | 680 | 160 | ≥99.995 |
| SF14-M-0457x0610x292x20-N10N | 457 x 610 x 292 | 200 | H14 | 940 | 160 | ≥99.995 |
| SF14-M-0593x0593x292x20-N10N | 593 x 593 x 292 | 200 | H14 | 1,200 | 160 | ≥99.995 |
| SF14-M-0610x0610x292x20-N10N | 610 x 610 x 292 | 200 | H14 | 1,280 | 160 | ≥99.995 |
| SF14-M-0610x0762x292x20-N10N | 610 x 762 x 292 | 200 | H14 | 1,620 | 160 | ≥99.995 |

# EPA | HEPA | ULPA filters

## Steel sheet 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 | Steel sheeting, galvanized |
| 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 and ultra-stringent requirements for clean air quality and sterility, e. g.

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

### Characteristics and pluses

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

### Delivery notes

Customized dimensions are available on request.

| Article | Dimensions (W x L x D) [mm] | Pleat depth [mm] | Filter class | Nominal volume flow [m³/h] | Initial pressure drop [Pa] | Arrestance efficiency MPPS [%] |
|---|---|---|---|---|---|---|
| SF11-B-0305x0305x150x12-N10N | 305 x 305 x 150 | 125 | H11 | 350 | 140 | ≥95 |
| SF11-B-0305x0610x150x12-N10N | 305 x 610 x 150 | 125 | H11 | 750 | 140 | ≥95 |
| SF11-B-0457x0457x150x12-N10N | 457 x 457 x 150 | 125 | H11 | 850 | 140 | ≥95 |
| SF11-B-0575x0575x150x12-N10N | 575 x 575 x 150 | 125 | H11 | 1,300 | 140 | ≥95 |
| SF11-B-0610x0610x150x12-N10N | 610 x 610 x 150 | 125 | H11 | 1,500 | 140 | ≥95 |
| SF11-B-0610x0762x150x12-N10N | 610 x 762 x 150 | 125 | H11 | 1,900 | 140 | ≥95 |
| SF11-B-0610x0915x150x12-N10N | 610 x 915 x 150 | 125 | H11 | 2,250 | 140 | ≥95 |
| SF11-B-0610x1220x150x12-N10N | 610 x 1,220 x 150 | 125 | H11 | 3,000 | 140 | ≥95 |

# EPA | HEPA | ULPA filters
## Steel sheet frame | Construction depth 150 mm | HEPA

| Specifications | |
|---|---|
| Filter medium | Micro-glass-fiber paper |
| Recommended final pressure drop | 600 Pa |
| Thermal stability | 70 °C |
| Moisture resistance | 100% rel. hum. |
| Frame | Steel sheeting, galvanized |
| 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 and ultra-stringent requirements for clean air quality and sterility, e. g.

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

### Characteristics and pluses

- The filter media used are high-arrestance micro-glass-fiber papers.
- The MiniPleat technology employed ensures flow-friendly geometry and equidistance of the pleats, with homogeneous media velocity coupled with a very low pressure drop. This means particularly cost-efficient and dependable operation.
- Each filter is tested in accordance with EN 1822, and delivered together with the corresponding test certificate.
- Endlessly and homogeneously foamed-on polyurethane seal; on request available with flat seal.
- On request with protection grid.
- The frame consists of galvanized steel sheeting. The sturdy construction is moisture-resistant and provides a high degree of security against the growth of bacteria and fungi (thus permissible according to VDI 6022).

### Delivery notes

Customized dimensions are available on request.

| Article | Dimensions (W x L x D) [mm] | Pleat depth [mm] | Filter class | Nominal volume flow [m³/h] | Initial pressure drop [Pa] | Arrestance efficiency MPPS [%] |
|---|---|---|---|---|---|---|
| SF13-B-0305x0305x150x12-N10N | 305 x 305 x 150 | 125 | H13 | 420 | 250 | ≥99.95 |
| SF13-B-0305x0610x150x12-N10N | 305 x 610 x 150 | 125 | H13 | 860 | 250 | ≥99.95 |
| SF13-B-0457x0457x150x12-N10N | 457 x 457 x 150 | 125 | H13 | 1,000 | 250 | ≥99.95 |
| SF13-B-0575x0575x150x12-N10N | 575 x 575 x 150 | 125 | H13 | 1,550 | 250 | ≥99.95 |
| SF13-B-0610x0610x150x12-N10N | 610 x 610 x 150 | 125 | H13 | 1,800 | 250 | ≥99.95 |
| SF13-B-0610x0762x150x12-N10N | 610 x 762 x 150 | 125 | H13 | 2,300 | 250 | ≥99.95 |
| SF13-B-0610x0915x150x12-N10N | 610 x 915 x 150 | 125 | H13 | 2,780 | 250 | ≥99.95 |
| SF13-B-0610x1220x150x12-N10N | 610 x 1,220 x 150 | 125 | H13 | 3,700 | 250 | ≥99.95 |
| SF14-B-0305x0305x150x12-N10 | 305 x 305 x 150 | 125 | H14 | 230 | 120 | ≥99.995 |
| SF14-B-0305x0610x150x12-N10N | 305 x 610 x 150 | 125 | H14 | 450 | 120 | ≥99.995 |
| SF14-B-0457x0457x150x12-N10N | 457 x 457 x 150 | 125 | H14 | 525 | 120 | ≥99.995 |
| SF14-B-0575x0575x150x12-N10N | 575 x 575 x 150 | 125 | H14 | 850 | 120 | ≥99.995 |
| SF14-B-0610x0610x150x12-N10N | 610 x 610 x 150 | 125 | H14 | 950 | 120 | ≥99.995 |
| SF14-B-0610x0762x150x12-N10N | 610 x 762 x 150 | 125 | H14 | 1,200 | 120 | ≥99.995 |
| SF14-B-0610x0915x150x12-N10N | 610 x 915 x 150 | 125 | H14 | 1,470 | 120 | ≥99.995 |
| SF14-B-0610x1220x150x12-N10N | 610 x 1,220 x 150 | 125 | H14 | 1,950 | 120 | ≥99.995 |

# EPA | HEPA | ULPA filters

## Steel sheet frame | Construction depth 292 mm | EPA

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

### Application

Viledon® EPA filters of filter class 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

### Characteristics and pluses

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

### Delivery notes

Customized dimensions are available on request.

| Article | Dimensions (W x L x D) [mm] | Pleat depth [mm] | Filter class | Nominal volume flow [m³/h] | Initial pressure drop [Pa] | Arrestance efficiency MPPS [%] |
|---|---|---|---|---|---|---|
| SF11-B-0288x0593x292x20-N10N | 288 x 593 x 292 | 200 | H11 | 1,000 | 140 | ≥95 |
| SF11-B-0305x0305x292x20-N10N | 305 x 305 x 292 | 200 | H11 | 550 | 140 | ≥95 |
| SF11-B-0305x0610x292x20-N10N | 305 x 610 x 292 | 200 | H11 | 1,150 | 140 | ≥95 |
| SF11-B-0457x0457x292x20-N10N | 457 x 457 x 292 | 200 | H11 | 1,300 | 140 | ≥95 |
| SF11-B-0457x0610x292x20-N10N | 457 x 610 x 292 | 200 | H11 | 1,750 | 140 | ≥95 |
| SF11-B-0593x0593x292x20-N10N | 593 x 593 x 292 | 200 | H11 | 2,270 | 140 | ≥95 |
| SF11-B-0610x0610x292x20-N10N | 610 x 610 x 292 | 200 | H11 | 2,400 | 140 | ≥95 |
| SF11-B-0610x0762x292x20-N10N | 610 x 762 x 292 | 200 | H11 | 3,000 | 140 | ≥95 |

# EPA | HEPA | ULPA filters
## Steel sheet 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 | Steel sheeting, galvanized |
| 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 and ultra-stringent requirements for clean air quality and sterility, e. g.

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

### Characteristics and pluses

- The filter media used are high-arrestance micro-glass-fiber papers.
- The MiniPleat technology employed ensures flow-friendly geometry and equidistance of the pleats, with homogeneous media velocity coupled with a very low pressure drop. This means particularly cost-efficient and dependable operation.
- Each filter is tested in accordance with EN 1822, and delivered together with the corresponding test certificate.
- Endlessly and homogeneously foamed-on polyurethane seal; on request available with flat seal.
- On request with protection grid.
- The frame consists of galvanized steel sheeting. The sturdy construction is moisture-resistant and provides a high degree of security against the growth of bacteria and fungi (thus permissible according to VDI 6022).

### Delivery notes

Customized dimensions are available on request.

| Article | Dimensions (W x L x D) [mm] | Pleat depth [mm] | Filter class | Nominal volume flow [m³/h] | Initial pressure drop [Pa] | Arrestance efficiency MPPS [%] |
|---|---|---|---|---|---|---|
| SF13-B-0288x0593x292x20-N10N | 288 x 593 x 292 | 200 | H13 | 1,000 | 250 | ≥99.95 |
| SF13-B-0305x0305x292x20-N10N | 305 x 305 x 292 | 200 | H13 | 520 | 250 | ≥99.95 |
| SF13-B-0305x0610x292x20-N10N | 305 x 610 x 292 | 200 | H13 | 1,100 | 250 | ≥99.95 |
| SF13-B-0457x0457x292x20-N10N | 457 x 457 x 292 | 200 | H13 | 1,250 | 250 | ≥99.95 |
| SF13-B-0457x0610x292x20-N10N | 457 x 610 x 292 | 200 | H13 | 1,750 | 250 | ≥99.95 |
| SF13-B-0593x0593x292x20-N10N | 593 x 593 x 292 | 200 | H13 | 2,270 | 250 | ≥99.95 |
| SF13-B-0610x0610x292x20-N10N | 610 x 610 x 292 | 200 | H13 | 2,400 | 250 | ≥99.95 |
| SF13-B-0610x0762x292x20-N10N | 610 x 762 x 292 | 200 | H13 | 3,000 | 250 | ≥99.95 |
| SF14-B-0288x0593x292x20-N10N | 288 x 593 x 292 | 200 | H14 | 1,000 | 140 | ≥99.995 |
| SF14-B-0305x0305x292x20-N10N | 305 x 305 x 292 | 200 | H14 | 310 | 140 | ≥99.995 |
| SF14-B-0305x0610x292x20-N10N | 305 x 610 x 292 | 200 | H14 | 640 | 140 | ≥99.995 |
| SF14-B-0457x0457x292x20-N10N | 457 x 457 x 292 | 200 | H14 | 730 | 140 | ≥99.995 |
| SF14-B-0457x0610x292x20-N10N | 457 x 610 x 292 | 200 | H14 | 980 | 140 | ≥99.995 |
| SF14-B-0593x0593x292x20-N10N | 593 x 593 x 292 | 200 | H14 | 1,250 | 140 | ≥99.995 |
| SF14-B-0610x0610x292x20-N10N | 610 x 610 x 292 | 200 | H14 | 1,320 | 140 | ≥99.995 |
| SF14-B-0610x0762x292x20-N10N | 610 x 762 x 292 | 200 | H14 | 1,680 | 140 | ≥99.995 |

# EPA | HEPA | ULPA filters

## High volume flow | Construction depth 292 mm | HEPA

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

### Application

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

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

### Special features

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

### Delivery notes

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

| Article number | Article | Dimensions (W x L x D) [mm] | Filter class | Nominal volume flow [m³ / h] | Initial pressure drop [Pa] | Arrestance efficiency MPPS [%] |
|---|---|---|---|---|---|---|
| 53438538 | SF13-B-0288x0288x292 / V06x25-N10N | 288 x 288 x 292 | H13 | 850 | 250 | ≥99.95 |
| 53412638 | SF13-B-0288x0593x292 / V06x25-N10N | 288 x 593 x 292 | H13 | 1,800 | 250 | ≥99.95 |
| 53411980 | SF13-B-0305x0305x292 / V06x25-N10N | 305 x 305 x 292 | H13 | 1,000 | 250 | ≥99.95 |
| 53412052 | SF13-B-0305x0610x292 / V06x25-N10N | 305 x 610 x 292 | H13 | 2,000 | 250 | ≥99.95 |
| 53412644 | SF13-B-0593x0593x292 / V12x25-N10N | 593 x 593 x 292 | H13 | 3,600 | 250 | ≥99.95 |
| 53412060 | SF13-B-0610x0610x292 / V10x25-N10N | 610 x 610 x 292 | H13 | 3,400 | 250 | ≥99.95 |
| 53412054 | SF13-B-0610x0610x292 / V12x25-N10N | 610 x 610 x 292 | H13 | 4,000 | 250 | ≥99.95 |
| 53412056 | SF13-B-0610x0762x292 / V14x25-N10N | 610 x 762 x 292 | H13 | 4,700 | 250 | ≥99.95 |
| | SF14-B-0288x0288x292 / V06x25-N10N | 288 x 288 x 292 | H14 | 850 | 320 | ≥99.995 |
| 53417294 | SF14-B-0288x0593x292 / V06x25-N10N | 288 x 593 x 292 | H14 | 1,800 | 320 | ≥99.995 |
| 53415772 | SF14-B-0305x0305x292 / V06x25-N10N | 305 x 305 x 292 | H14 | 1,000 | 320 | ≥99.995 |
| 53418697 | SF14-B-0305x0610x292 / V06x25-N10N | 305 x 610 x 292 | H14 | 2,000 | 320 | ≥99.995 |
| 53429101 | SF14-B-0593x0593x292 / V12x25-N10N | 593 x 593 x 292 | H14 | 3,600 | 320 | ≥99.995 |
| 53412194 | SF14-B-0610x0610x292 / V12x25-N10N | 610 x 610 x 292 | H14 | 4,000 | 320 | ≥99.995 |

# EPA | HEPA | ULPA filters
## 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.

| Article | Nominal diameter / Nominal height [mm] | Filter class | Nominal volume flow [m³/h] | Initial pressure drop [Pa] | Arrestance efficiency MPPS [%] |
|---|---|---|---|---|---|
| SP11-A-0175x0173-LH | 175 / 173 | H11 | 130 | 120 | ≥95 |
| SP11-A-0175x0224-LH | 175 / 224 | H11 | 170 | 120 | ≥95 |

| 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.

| Article | Nominal diameter / Nominal height [mm] | Filter class | Nominal volume flow [m³/h] | Initial pressure drop [Pa] | Arrestance efficiency MPPS [%] |
|---|---|---|---|---|---|
| SP13-A-0175x0173-LH | 175 / 173 | H13 | 130 | 200 | ≥99.95 |
| SP13-A-0175x0224-LH | 175 / 224 | H13 | 170 | 200 | ≥99.95 |

# EPA | HEPA | ULPA filters
## 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.)

### Special features

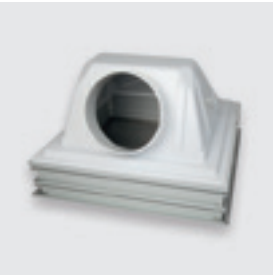
- The filter media used are high-arrestance micro-glass-fiber papers.
- The MiniPleat technology employed ensures flow-friendly geometry and equidistance of the pleats, with homogeneous media velocity coupled with a very low pressure drop. This means particularly cost-efficient and dependable operation,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

### Delivery notes

On request also with integrated control and stop valve plus clean air side flat gasket.
Also available as ULPA filter of class U15.
Customized dimensions (then with metal hood) available on request.

| Article number | Article | Dimensions (W x L x D) [mm] | Filter class | Nominal volume flow [m³/h] | Arrestance efficiency MPPS [%] |
|---|---|---|---|---|---|
| 53417702 | SF14-A-0305x0610x150x05-Z02H-250x50 | 305×610×150 | H14 | 280 | ≥99.995 |
| 53412922 | SF14-A-0610x0610x150x05-Z02H-250x50 | 610×610×150 | H14 | 600 | ≥99.995 |
| 53413831 | SF14-A-0610x1220x150x05-Z02H-250x50 | 610×1,220×150 | H14 | 1,200 | ≥99.995 |

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



## Application

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

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

## Special features

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

### Delivery notes

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

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

| Specifications | |
|---|---|
| Description | Fan with AC motor (220 V, 50–60 Hz single-phase, 0.9 A/0.17 kW);<br>Integrated electronic control system with main switch and heat protection; Noise level <52 dB (A) 1.5 m below the filter element;<br>Outflow velocity max. 0.6 m/s, depending on the filter efficiency involved |
| | |
| | |
| | |
| | |
| | |

## Housing

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

## Filter element

Associated filter elements such as Viledon® HEPA/ULPA filters of filter classes H14 and U15 with aluminum frames can be ordered separately (see table for technical data). A prefilter panel is integrated as a standard feature.

### Delivery notes

A prefilter panel is integrated as a standard feature.
Please order suitable filters as a separate item.

**Housing**

| Article number | Article | Dimensions (W x L x D) [mm] | Outflow area (W x L) [mm²] | Filter class | Nominal volume flow [m³/h] | Initial pressure drop [Pa] | Weight [kg] |
|---|---|---|---|---|---|---|---|
| 53413832 | FFU-AK-0660x1270x380-AC | 660 x 1,270 x 380 | 580 x 1,190 | | 1,200 | | 26 |

**Applicable filters**

| Article number | Article | Dimensions (W x L x D) [mm] | Outflow area (W x L) [mm²] | Filter class | Nominal volume flow [m³/h] | Initial pressure drop [Pa] | Weight [kg] |
|---|---|---|---|---|---|---|---|
| 53411835 | SF14-A-0610x1220x068x05-N13N | 610 x 1,220 x 68 | | H14 | 1,200 | 120 | |
| 53415898 | SF14-A-0610x1220x078x07-N13N | 610 x 1,220 x 78 | | H14 | 1,200 | 100 | |
| 53411853 | SF14-A-0610x1220x088x07-N13N | 610 x 1,220 x 88 | | H14 | 1,200 | 90 | |
| 53427808 | SF15-A-0610x1220x068x05-N13N | 610 x 1,220 x 68 | | U15 | 1,200 | 140 | |
| 53431655 | SF15-A-0610x1220x088x07-N13N | 610 x 1,220 x 88 | | U15 | 1,200 | 115 | |

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

## Housing

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

## Bench

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

## Filter element

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

### Delivery notes

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

**Housing**

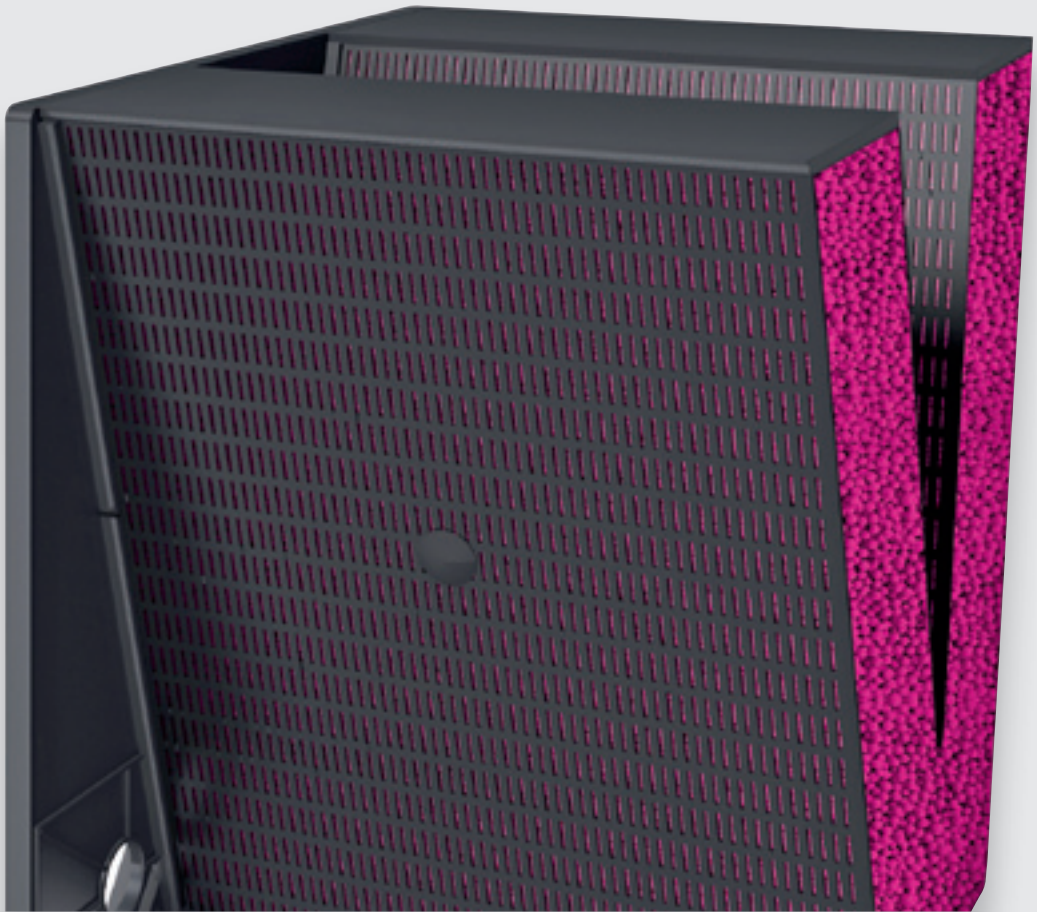
| Article number | Article | Dimensions (W x L x D) [mm] | Dimensions of matching filters (W x L x D) [mm] | Housing material | Number of filter stages | Integrated option |
|---|---|---|---|---|---|---|
| 53424126 | SFSafe-V-363 | 755 x 495 x 570 | 610 x 305 x 292 | Steel, powder coated RAL 7035 | |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

**Bench**

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

# Gas phase filtration

## CarboPleat, DuoPleat, activated-carbon cartridges, ChemControl pellets, ChemControl modules



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 odours.

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

# Gas phase filters
## CarboPleat / DuoPleat | Fine dust

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

**Application**

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

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 installed 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 stated are referenced to DIN 71460, part 2.

| Article number | Article | Dimensions (W x H x D) [mm] | Filter class | Nominal volume flow [m³/h] | Initial pressure drop [Pa] | Average efficiency [%] | Recommended final pressure drop [Pa] | Filter capacity toluene [g] | Filter capacity $SO_2$ [g] | Filter capacity n-butane [g] |
|---|---|---|---|---|---|---|---|---|---|---|
| 53439756 | CP 1/1 | 592x592x292 | | 3,400 | 70 | | | 910 | 210 | 105 |
| 53439758 | CP 5/6 | 592x491x292 | | 2,700 | 70 | | | 740 | 170 | 85 |
| 53439770 | CP 1/2 | 592x288x292 | | 1,500 | 70 | | | 410 | 95 | 48 |
| 53438699 | DP85 1/1 | 592x592x292 | M6 | 3,400 | 130 | 85 | 450 | 715 | 165 | 85 |
| 53438701 | DP85 5/6 | 592x491x292 | M6 | 2,700 | 130 | 85 | 450 | 570 | 132 | 68 |
| 53438700 | DP85 1/2 | 592x288x292 | M6 | 1,500 | 130 | 85 | 450 | 310 | 72 | 37 |

# Gas phase filters

## Activated-carbon cartridges | Modules + individual elements

| Specifications | |
|---|---|
| Adsorption medium | Activated-carbon, granulated |
| Operating temperature | ≤ 50 °C |
| Thermal stability | 70 °C |
| Moisture resistance | 70% 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 odours.

### Special features

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

**Module**

| Article | Optimized for | Dimensions (W x H x D) [mm] | Number of cartridges | Nominal volume flow [m³/h] | Initial pressure drop [Pa] | Activated-carbon volume [dm³] |
|---|---|---|---|---|---|---|
| C bank B-0305x0610x430/08x140 odour | Odours \| organic solvents | 305 x 610 x 430 | 8 | 1,700 | 200 | 32 |
| C bank B-0507x0610x430/12x140 odour | Odours \| organic solvents | 507 x 610 x 430 | 12 | 2,500 | 200 | 48 |
| C bank B-0610x0610x430/16x140 odour | Odours \| organic solvents | 610 x 610 x 430 | 16 | 3,400 | 200 | 64 |
| C bank B-0305x0610x430/08x140 acid | Acidic gases | 305 x 610 x 430 | 8 | 1,700 | 200 | 32 |
| C bank B-0507x0610x430/12x140 acid | Acidic gases | 507 x 610 x 430 | 12 | 2,500 | 200 | 48 |
| C bank B-0610x0610x430/16x140 acid | Acidic gases | 610 x 610 x 430 | 16 | 3,400 | 200 | 64 |
| C bank B-0305x0610x430/08x140 iodine | Radioactive iodine | 305 x 610 x 430 | 8 | 1,700 | 200 | 32 |
| C bank B-0507x0610x430/12x140 iodine | Radioactive iodine | 507 x 610 x 430 | 12 | 2,500 | 200 | 48 |
| C bank B-0610x0610x430/16x140 iodine | Radioactive iodine | 610 x 610 x 430 | 16 | 3,400 | 200 | 64 |
| C bank B-0305x0610x430/05x160 odour | Odours \| organic solvents | 305 x 610 x 430 | 5 | 1,500 | 150 | 30 |
| C bank B-0507x0610x430/07x160 odour | Odours \| organic solvents | 507 x 610 x 430 | 7 | 2,550 | 150 | 42 |
| C bank B-0610x0610x430/09x160 odour | Odours \| organic solvents | 610 x 610 x 430 | 9 | 3,000 | 150 | 54 |
| C bank B-0305x0610x430/05x160 acid | Acidic gases | 305 x 610 x 430 | 5 | 1,500 | 150 | 30 |
| C bank B-0507x0610x430/07x160 acid | Acidic gases | 507 x 610 x 430 | 7 | 2,550 | 150 | 42 |
| C bank B-0610x0610x430/09x160 acid | Acidic gases | 610 x 610 x 430 | 9 | 3,000 | 150 | 54 |
| C bank B-0305x0610x430/05x160 iodine | Radioactive iodine | 305 x 610 x 430 | 5 | 1,500 | 150 | 30 |
| C bank B-0507x0610x430/07x160 iodine | Radioactive iodine | 507 x 610 x 430 | 7 | 2,550 | 150 | 42 |
| C bank B-0610x0610x430/09x160 iodine | Radioactive iodine | 610 x 610 x 430 | 9 | 3,000 | 150 | 54 |
| C plate B-0610x0610x40/09x160 | | 610 x 610 x 40 | 9 | | | |

**Individual elements (cartridges)**

| Article | Optimized for | Nominal diameter/ Nominal height [mm] |
|---|---|---|
| C cart B-0140x0400x035 odour | Odours \| organic solvents | 140 x 400 |
| C cart B-0140x0400x035 acid | Acidic gases | 140 x 400 |
| C cart B-0140x0400x035 iodine | Radioactive iodine | 140 x 400 |
| C cart B-0160x0400x035 odour | Odours \| organic solvents | 160 x 400 |
| C cart B-0160x0400x035 acid | Acidic gases | 160 x 400 |
| C cart B-0160x0400x035 iodine | Radioactive iodine | 160 x 400 |

**Individual elements (plates)**

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

# Gas phase filters
## CCP Pellets | CCP Survey

### Applications

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 centre
- 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. Excellent performance, lifetime and reactivity.

### CCP 310

Ideal for filtration of acidic gases in highly corrosive environments, e. g. pulp & paper industry. Very effective in removing hydrogen sulfide, sulfurdioxide and chlorine. Porous structure based on activated alumina impregnated with activated carbon, evenly distributed to achieve high efficiency over long lifetimes.

### 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. Ideal for restricted spaces or to provide effective filtration via oxidization of contaminants and adsorption of hydrocarbons, aldehydes and VOCs.

### CCP 903

Specifically used for removal of gaseous ammonia from airstreams. They capture ammonia by means of adsorption and absorption inside their zeolite structure. High inner surface provides good removal capacity over a long service life.

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

### Delivery notes

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

| Article | Diameter [mm] | Face velocity [m/s] | Ambient temperature [C°] | Removal capacity for $Cl_2$ of own weight [%] | Removal capacity for $H_2S$ of own weight [%] | Removal capacity for $NH_3$ of own weight [%] | Removal capacity for $SO_2$ of own weight [%] | Moisture content (approx.) [%] | Crush strength (minimum) [kg] |
|---|---|---|---|---|---|---|---|---|---|
| CCP 104 | 3.80 | 0.3 – 2.5 | –20 ... +50°C | | 7% | | 4% | 20% | 2 |
| CCP 108 | 3.80 | 0.3 – 2.5 | –20 ... +50°C | | 14% | | 7% | 20% | 2 |
| CCP 210 | 3.80 | 0.3 – 2.5 | –20 ... +50°C | | 25% | | 12% | 20% | 2 |
| CCP 310 | 3.80 | 0.3 – 2.5 | –20 ... +50°C | 10% | 15% | | 10% | 20% | 2 |
| CCP 510 | 3.80 | 0.3 – 2.8 | –20 ... +50°C | 15% | | | | 15% | 2 |
| CCP 610 | 4x8 | 0.3 – 2.5 | –20 ... +50°C | 10% | 7% | | | 3% | 2 |
| CCP 810 | 3.80 | 0.3 – 2.9 | –20 ... +50°C | 4% | 7% | | 3% | | 2 |
| CCP 840 | 3.80 | 0.3 – 2.1 | –20 ... +58°C | 10% | 12% | | 6% | | 2 |
| CCP 903 | 3.80 | 0.3 – 2.7 | –20 ... +50°C | | | 10% | | | 3 |

### Application

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

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

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

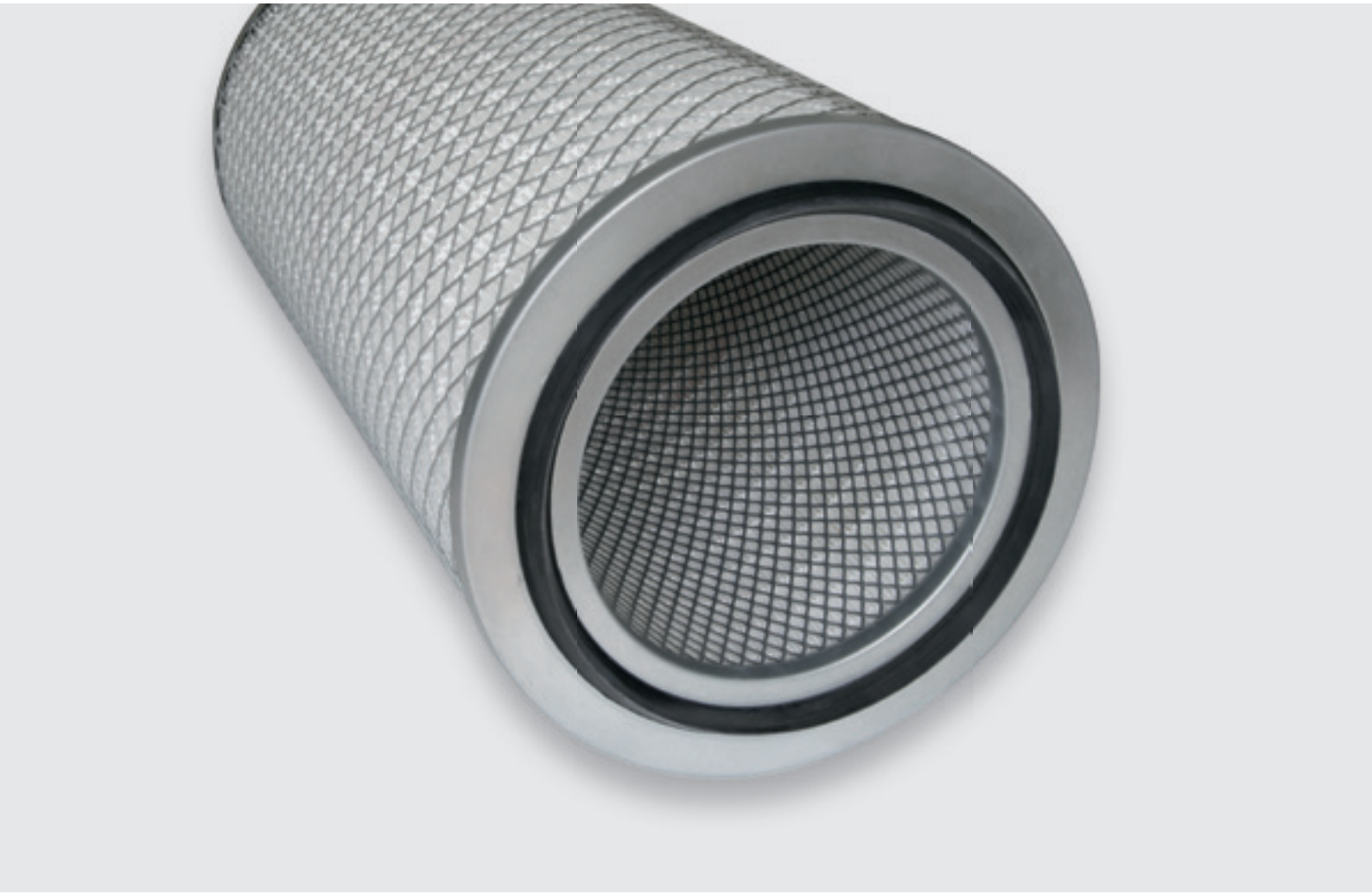
**Delivery notes**

Please consult your local Viledon® partner for further information.

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

# Filter cartridges (turbomachinery)

## Pulse-jet, depth-loading filters



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

# Filter cartridges for turbomachinery
## Pulse-jet | Fine dust

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

### Application

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

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

### Characteristics and pluses of the GTS filter cartridges

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

### Characteristics and pluses of the GTB filter cartridges

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

### Delivery notes

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

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

# Filter cartridges for turbomachinery
## Depth-loading filters | Fine dust

| Specifications | |
|---|---|
| Filter medium | TFP 60: synthetic-organic high-performance nonwoven; TFP 95: 3-layered synthetic-organic high-performance nonwoven; GTG: synthetic microglass-fiber nonwoven with water repellent coating |
| Recommended final pressure drop | 800 Pa |
| Maximum permitted operating pressure | 3,000 Pa |
| Material cover, base and support cages | TFP 60 \| TFP 95: Polystyrene |
| Seal | Foamed-on polyurethane |
| | |
| | |

### Application

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

### Characteristics and pluses of the GTG filter cartridges

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

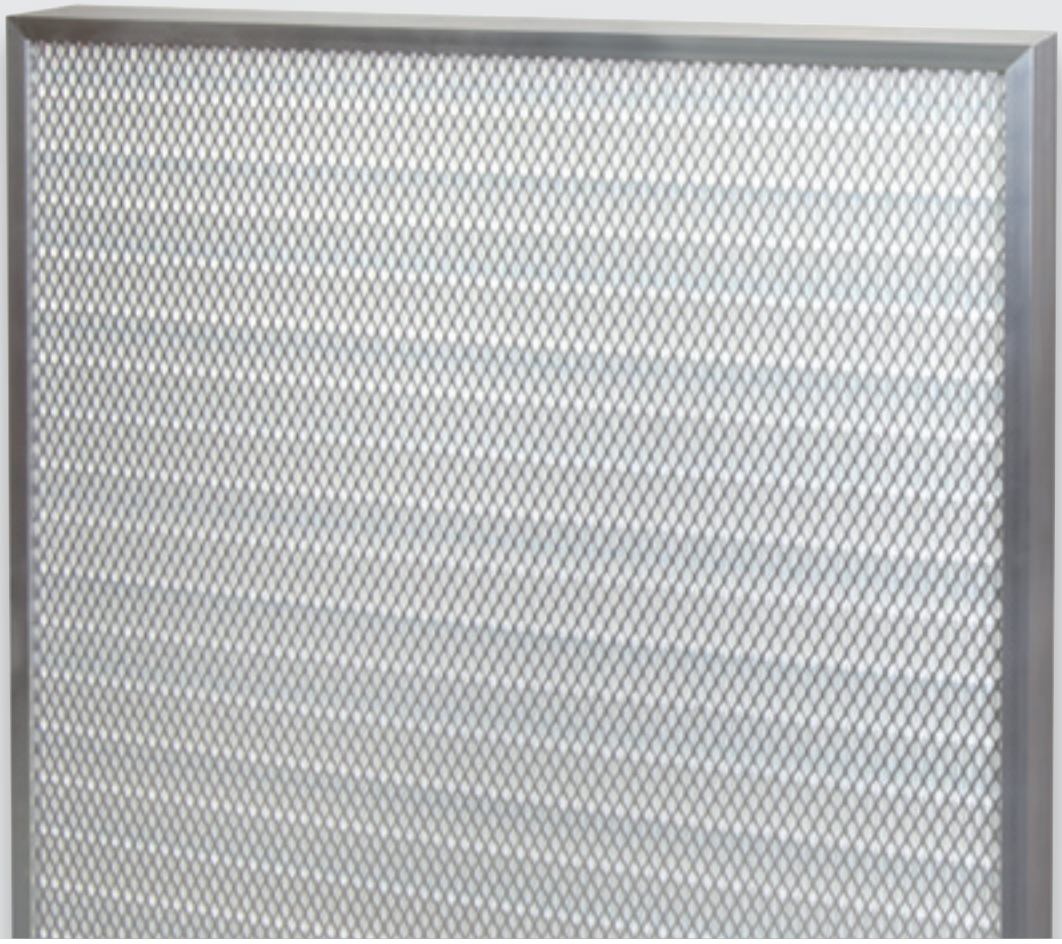
### Delivery notes

TFP 60 / 95: Other versions (e. g. metal version) and adapter (bayonet, Tenkay, etc.) available on request.
GTG filter cartridges can be obtained in a variety of other dimensions, stainless steel end caps and support cages.

| Article number | Article | Construction height [mm] | Outer diameter [mm] | Filter class | Nominal volume flow [m³/h] | Initial pressure drop [Pa] | Average efficiency [%] | Average arrestance efficiency [%] | Dust holding capacity (AC Fine/ 800 Pa) [g] | Dust holding capacity (ASHRAE/ 450 Pa) [g] | Filter area [m²] |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 53279363 | TFP 60 P66P2 | 660 | 330 | M6 | 1,000 | 110 | 65.0 | >99.0 | 1,200 | | 2.9 |
| 53371572 | TFP 95 P66P2 | 660 | 330 | F8 | 1,000 | 110 | 92.0 | >99.0 | 1,300 | | 11.0 |
| | GTG 324-445 W 66S0-Set | 1,330 | 445 \| 324 | F9 | 2,500 | 135 | 98 | >99.0 | | >1,750 | 40.1 |
| 53458789 | GTG 445 K66S0 | 660 | 445 \| 324 | F9 | 1,400 | 70 | 98 | >99.9 | | >800 | 22.0 |
| 53454436 | GTG 324 W66S0 | 660 | 324 | F9 | 1,100 | 120 | 98 | >99.9 | | >800 | 18.1 |

# High-temperature filters

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



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

# High-temperature filters
## HT filter mats | Fine dust

| Specifications | |
|---|---|
| Filter medium | LH 243: Filter medium made from ultra-fine, homogeneously spun glass-fibers, Clean air side with special final layer made of glass-fiber nonwoven; LH 244: Filter medium made from ultra-fine homogeneously spun glass-fibers, Clean air side with special final layer made of synthetic nonwoven |
| 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 | F1 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.

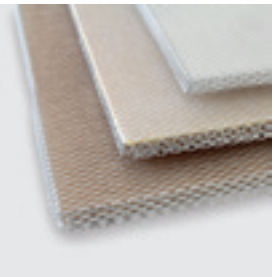
**Delivery notes**

Rolls are available up to a maximum of 10 x 1.5 m, customized dimensions are available as roll goods or blanks on request.

| Article | Thickness approx. [mm] | Filter class | Nominal media velocity [m³ / h x m²] | Initial pressure drop [Pa] | Average efficiency [%] | Average arrestance efficiency [%] |
|---|---|---|---|---|---|---|
| LH 243 | 20 | M5 | 2,200 | 125 | 46 | 97 |
| LH 244 | 20 | M5 | 2,200 | 125 | 46 | 97 |
| LH 620 | 20 | M5 | 2,200 | 125 | 46 | 97 |

# 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, lean air side with additional glass-fiber nonwoven;<br>LH 1000 OV: Glass-fiber nonwoven framed in expanded aluminum metal, type sticker on the clean air side;<br>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 53438 |
| | |



### Application

HT filter packs are used for recirculating 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 x 480 x 14 mm, customized dimensions available on request.
Delivery unit: 30 pcs. / carton

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

# High-temperature filters

## HiProtec cassette filters | Construction depth 78 mm | Fine dust

| Specifications | |
|---|---|
| Recommended final pressure drop | 300 Pa |
| Thermal stability | 385°C (aluminum frame) \| 260°C (steel sheeting frame) |
| Frame | S: Extruded aluminum profile; A: Steel sheeting, galvanized |
| Seal | Textile glass round-cord seal; G1: Raw air side; G2: Clean air side |
| Fire class | F1 acc. to DIN 53438 |
| | |
| | |
| | |

### Application

The principal application category for Viledon® HiProtec cassette filters HPT 2.5 and HPT 1.0 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 HPT 2.5 A 480 x 480 mm (class M6) frequently serves as an upgrade for expanded-metal filter packs and cells.

### Special features

- The Viledon® HiProtec cassette filters HPT 2.5 and HPT 1.0 excel in terms of a high dust holding capacity and very good mechanical sturdiness even when subjected to inhomogeneous air flows.
- Thanks to low filter resistances, very long operational lifetimes can be achieved, coupled with exceptionally cost-efficient operating characteristics.

### Delivery notes

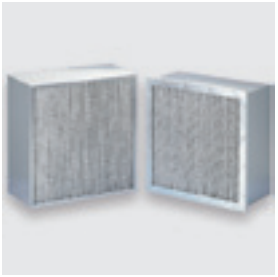
Available in all dimensions commonly encountered on the market.
Customized dimensions, filtering areas or frame materials available on request.

| Article number | Article | Dimensions (L x W x D) [mm] | Filter class | Nominal volume flow [m³/h] | Initial pressure drop [Pa] | Average efficiency [%] | Average arrestance efficiency [%] | Filter area [m²] | Weight [kg] | Seal position |
|---|---|---|---|---|---|---|---|---|---|---|
| 53463978 | HPT2.5-S-0915x0457x078-1 | 915 x 457 x 78 | M6 | 1,900 | 30 | 65 | 99 | 7.4 | 5.5 | Raw air side |
| 53457313 | HPT2.5-S-0915x0457x055-1 | 915 x 457 x 55 | M6 | 1,800 | 30 | 65 | 99 | 6.5 | 4.5 | Raw air side |
| 53463986 | HPT2.5-S-0915x0457x055-2 | 915 x 457 x 55 | M6 | 1,800 | 30 | 65 | 99 | 6.5 | 4.5 | Clean air side |
| 53458958 | HPT2.5-S-0805x0575x055-2 | 805 x 575 x 55 | M6 | 2,000 | 30 | 65 | 99 | 7.2 | 6.5 | Clean air side |
| 53299750 | HPT2.5-S-0610x0610x078-2 | 610 x 610 x 78 | M6 | 1,700 | 30 | 65 | 99 | 6.6 | 5.0 | Clean air side |
| 53463984 | HPT2.5-S-0610x0610x078-1 | 610 x 610 x 78 | M6 | 1,700 | 30 | 65 | 99 | 6.6 | 5.0 | Raw air side |
| 53457319 | HPT2.5-S-0610x0610x055-1 | 610 x 610 x 55 | M6 | 1,600 | 30 | 65 | 99 | 5.8 | 5.5 | Raw air side |
| 53457404 | HPT2.5-S-0610x0610x055-2 | 610 x 610 x 55 | M6 | 1,600 | 30 | 65 | 99 | 5.8 | 5.5 | Clean air side |
| 53457321 | HPT2.5-S-0490x0490x040-2 | 490 x 490 x 40 | M6 | 860 | 35 | 65 | 99 | 2.1 | 1.5 | Raw air side |
| 53456716 | HPT2.5-S-0480x0480x078-1 | 480 x 480 x 78 | M6 | 1,050 | 30 | 65 | 99 | 4.1 | 3.0 | Raw air side |
| 53463978 | HPT1.0-S-0915x0457x078-1 | 915 x 457 x 78 | F8 | 1,900 | 85 | 93 | >99 | 7.4 | 5.0 | Raw air side |
| 53463977 | HPT1.0-S-0915x0457x078-2 | 915 x 457 x 78 | F8 | 1,900 | 85 | 93 | >99 | 7.4 | 5.0 | Clean air side |
| 53457320 | HPT1.0-S-0915x0457x055-1 | 915 x 457 x 55 | F8 | 1,800 | 95 | 93 | >99 | 6.5 | 5.5 | Raw air side |
| 53456199 | HPT1.0-S-0915x0457x055-2 | 915 x 457 x 55 | F8 | 1,800 | 95 | 93 | >99 | 6.5 | 5.5 | Clean air side |
| 53463984 | HPT1.0-S-0610x0610x078-1 | 610 x 610 x 78 | F8 | 1,700 | 85 | 93 | >99 | 6.6 | 5.0 | Raw air side |
| 53456196 | HPT1.0-S-0610x0610x078-2 | 610 x 610 x 78 | F8 | 1,700 | 85 | 93 | >99 | 6.6 | 5.0 | Clean air side |
| 53457312 | HPT1.0-S-0610x0610x055-1 | 610 x 610 x 55 | F8 | 1,600 | 95 | 93 | >99 | 5.8 | 5.5 | Raw air side |
| 53457621 | HPT1.0-S-0610x0610x055-2 | 610 x 610 x 55 | F8 | 1,600 | 95 | 93 | >99 | 5.8 | 5.5 | Clean air side |
| 53463309 | HPT1.0-S-0490x0490x040-2 | 490 x 490 x 40 | F8 | 860 | 160 | 93 | >99 | 2.1 | 1.5 | Clean air side |
| 53456195 | HPT1.0-S-0305x0610x055-1 | 305 x 610 x 78 | F8 | 850 | 85 | 93 | >99 | 3.3 | 4 | Raw air side |
| 53458016 | HPT1.0-S-0305x0305x055-1 | 305 x 305 x 55 | F8 | 400 | 95 | 93 | >99 | 1.45 | 2.5 | Raw air side |

# High-temperature filters

## HT cassette filters | Construction depth 292 mm | Fine dust

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



### Application

The principal application category for the Viledon® HT 60 and HT 90 high-temperature cassette filters with an construction depth of 292 mm is air filtration in recirculating air equipment of paint drying processes in the automotive industry. The filters meet particularly stringent requirements for air purity, process dependability and cost-efficiency.

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

### Special features

- The Viledon® HT 60 and HT 90 high-temperature cassette filters excel in terms of a particularly high dust holding capacity and very good mechanical strength, even when subjected to inhomogeneous air flows.
- Thanks to low filter resistances, very long operational lifetimes can be achieved, coupled with exceptionally cost-efficient operating characteristics.

### Special variants

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

For unfavourable 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.

### Delivery notes

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

| Article number | Article | Dimensions (L x W x D) [mm] | Filter class | Nominal volume flow [m³/h] | Initial pressure drop [Pa] | Average efficiency [%] | Average arre-stance efficiency [%] | Filter area [m²] | Weight [kg] | Seal position |
|---|---|---|---|---|---|---|---|---|---|---|
| 53366788 | HT60-A-0610x0610x292-G-2-M-3-Q-2-F | 610 x 610 x 292 | M6 | 3,400 | 80 | 71 | 99 | 12.0 | 10.0 | Clean air side |
| 53414743 | HT60-A-0610x0610x292-G-1-M-3-Q-2-F | 610 x 610 x 292 | M6 | 3,400 | 80 | 71 | 99 | 12.0 | 10.0 | Raw air side |
| 53366698 | HT60-B-0592x0592x292-G-2-M-3-Q-2-F | 592 x 592 x 292 | M6 | 3,400 | 100 | 71 | 99 | 9.0 | 7.0 | Clean air side |
| 53366787 | HT60-B-0592x0592x292-G-1-M-3-Q-2-F | 592 x 592 x 292 | M6 | 3,400 | 100 | 71 | 99 | 9.0 | 7.0 | Raw air side |
| 53394225 | HT60-B-0592x0592x292-G-2-M-3-Q-2F-547 mm | 592 x 592 x 292 | M6 | 3,400 | 100 | 71 | 99 | 9.0 | 7.0 | Clean air side |
| 53414564 | HT60-B-0592x0592x292-G-2-M-3-Q-2F-547-Re | 592 x 592 x 292 | M6 | 3,400 | 100 | 71 | 99 | 9.0 | 7.0 | Clean air side |
| 53414564 | HT60-B-0592x0592x292-G-2-M-3-Q-2F-547-Re | 592 x 592 x 292 | M6 | 3,400 | 100 | 71 | 99 | 9.0 | 7.0 | Clean air side |
| 53429703 | HT60-B-0490x0592x292-G-2-M-3-Q-2-F | 490 x 592 x 292 | M6 | 2,800 | 100 | 71 | 99 | 9.0 | 7.0 | Clean air side |
| 53367242 | HT60-A-0305x0610x292-G-2-M-3-Q-2-F | 305 x 610 x 292 | M6 | 1,700 | 90 | 71 | 99 | 6.0 | 6.0 | Clean air side |
| 53426898 | HT60-A-0305x0610x292-G-2-M-3-Q-2F-reinfo | 305 x 610 x 292 | M6 | 1,700 | 90 | 71 | 99 | 6.0 | 6.0 | Clean air side |
| 53366705 | HT60-B-0287x0592x292-G-2-M-3-Q-2-F | 287 x 592 x 292 | M6 | 1,700 | 110 | 71 | 99 | 4.5 | 4.5 | Clean air side |
| 53366706 | HT60-B-0287x0592x292-G-1-M-3-Q-2-F | 287 x 592 x 292 | M6 | 1,700 | 110 | 71 | 99 | 4.5 | 4.5 | Raw air side |
| 53394224 | HT60-B-0287x0592x292-G-2-M-3-Q-2F-547 mm | 287 x 592 x 292 | M6 | 1,700 | 110 | 71 | 99 | 4.5 | 4.5 | Clean air side |
| 53340443 | HT90-A-0610x0610x292-G-2-M-3-Q-2-F | 610 x 610 x 292 | F8 | 3,400 | 120 | 93 | >99 | 12.0 | 10.0 | Clean air side |
| 53433314 | HT90-A-0610x0610x292-G-1-M-3-Q-2-F | 610 x 610 x 292 | F8 | 3,400 | 120 | 93 | >99 | 12.0 | 10.0 | Raw air side |
| 53366717 | HT90-B-0592x0592x292-G-2-M-3-Q-2-F | 592 x 592 x 292 | F8 | 3,400 | 140 | 93 | >99 | 9.0 | 7.0 | Clean air side |
| 53409792 | HT90-B-0592x0592x292-G-1-M-3-Q-2-F | 592 x 592 x 292 | F8 | 3,400 | 140 | 93 | >99 | 9.0 | 7.0 | Raw air side |
| 53371208 | HT90-A-0305x0610x292-G-2-M-3-Q-2-F | 305 x 610 x 292 | F8 | 1,700 | 130 | 93 | >99 | 6.0 | 6.0 | Clean air side |
| 53366727 | HT90-B-0287x0592x292-G-2-M-3-Q-2-F | 287 x 592 x 292 | F8 | 1,700 | 150 | 93 | >99 | 4.5 | 4.5 | Raw air side |
| 53382668 | HT90-B-0287x0592x292-G-1-M-3-Q-2-F | 287 x 592 x 292 | F8 | 1,700 | 150 | 93 | >99 | 4.5 | 4.5 | Raw air side |

# Filters for dust removal

## Filter cartridges, filter bags, filter plates, filter media

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

# Filters for dust removal
## Filter cartridges

### DIN standard cartridges

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

### Twist&Fix filter cartridges

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

### Snap&Fix filter cartridges

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

### Pluses

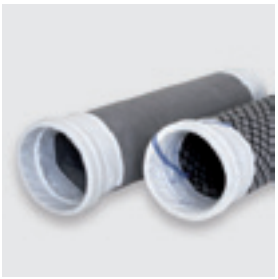
- Low pressure drop values
- Minimized compressed-air-consumption for the cleaning routine
- Pleat geometry optimally matched to the application concerned
- All cartridges are fitted with surface media, and can be cleaned using a pulse-jet procedure or rotary nozzles
- Long operational lifetimes
- Low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

### Delivery notes

Available in the nominal diameters of 327 mm and 200 mm, and in the standard heights 400, 600, 660, 1,000 and 1,200 mm.

| Article number | Article | Version | Filter medium | Nominal diameter / Nominal height [mm] | Filter area [m²] | Pleat depth [mm] | Dust class* |
|---|---|---|---|---|---|---|---|
| 53457670 | LP 351 D-71-A 17-76 | DIN open / open | sinTexx Plus as | 351 / 710 | 17 | 48 | M |
| 53343700 | LP 327 S-12-A 15-06 | DIN standard cartridge | FE 2506-sinus, PES (antistatic) | 327 / 1,205 | 15.6 | 48 | M |
| 53322727 | LP 200 S-40-A 20-07 | DIN standard cartridge | FE 2507-sinus, PES | 200 / 400 | 2.0 | 48 | M |
| 53421628 | LP 327 S-66-A 14-07-L | DIN standard cartridge | FE 2507-sinus, PES | 327 / 660 | 14.0 | 48 | M |
| 53324309 | LP 327 S-12-A 25-07 | DIN standard cartridge | FE 2507-sinus, PES | 327 / 1,205 | 25.0 | 48 | M |
| 53279884 | LP 02 S 30S0N | DIN standard cartridge | FE 2509, PP | 327 / 305 | 5.0 | 48 | M |
| 8905042 | LP 02 D 66S2N | DIN standard cartridge | FE 2509, PP | 327 / 660 | 11.0 | 48 | M |
| 7572040 | LP 02 S 66S2N | DIN standard cartridge | FE 2509, PP | 327 / 660 | 11.0 | 48 | M |
| 53274360 | LP 02 S 76S2N | DIN standard cartridge | FE 2509, PP | 327 / 765 | 12.8 | 48 | M |
| 8980677 | LP 01 S 10S4N | DIN standard cartridge | FE 2509, PP | 327 / 1,005 | 13.0 | 48 | M |
| 8931038 | LP 30 S 12S0C | DIN standard cartridge | FE 2521, PES + PTFE membrane | 327 / 1,205 | 15.6 | 48 | M |
| 53458532 | LP 327 S-60-A 10-76 | DIN standard cartridge | sinTexx Plus as | 327 / 600 | 10 | 48 | M |
| 53321826 | LP 152 B-15-A 54-07 | Snap&Fix cartridge | FE 2507-sinus, PES | 152 / 1,505 | 5.4 | 25 | M |
| 53327406 | LP 155 B-15-A 54-07 | Snap&Fix cartridge | FE 2507-sinus, PES | 155 / 1,505 | 5.4 | 25 | M |
| 53375277 | LP 145 G-10-A 27-06 | Twist&Fix cartridge | FE 2506-sinus, PES (antistatic) | 145 / 1,005 | 2.7 | 25 | M |
| 53372251 | LP 156 G-10-A 36-06 | Twist&Fix cartridge | FE 2506-sinus, PES (antistatic) | 156 / 1,005 | 3.6 | 25 | M |
| 53295115 | LP 218 G-15-A 75-09 | Twist&Fix cartridge | FE 2509, PP drainage nonwoven | 218 / 1,505 | 7.5 | 32 | M |
| 53306324 | LP 324 G-60-B 77-21 | Twist&Fix cartridge | FE 2521, PES + PTFE membrane | 324 / 605 | 7.7 | 48 | M |
| 53457204 | LP 324 G-12-A 25-77 | Twist&Fix cartridge | sinTexx Plus | 324 / 1,205 | 25.0 | 48 | M |
| 53458531 | LP 145 G-15-A 54-77 | Twist&Fix cartridge | sinTexx Plus | 145 / 1,505 | 5.4 | 25 | M |

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



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

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

### Viledon® NEXX Bags

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

### Viledon® Fiber Bags

- Filter bag with unique characteristics.
- 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 2519 + FE 2520 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.

### Viledon® MAXX Bags

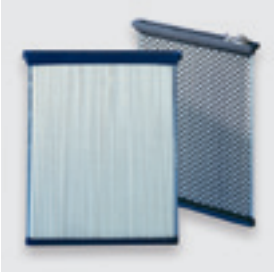
- For maximized filtration performance.
- MAXX Bags are finished with a PTFE membrane on the face side.
- Ultra-fine dusts in the nm range are efficiently arrested, and clean-gas concentrations of < 1 mg / m³ achieved.
- Very good regenerability using a pulse-jet routine.

**Delivery notes**

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

| Article | Filter medium | Weight per unit area approx. [g / m²] | Maximum tensile force along / across [N / 5 cm] | Thermal stability [°C] | Application |
|---|---|---|---|---|---|
| NEXX Bags | NEXX | 240 | 700 / 800 | 150 | E. g. pigment, cement, metal industries, fine dusts |
| NEXX Bags as | NEXX as | 240 | 700 / 800 | 150 | E. g. pigment, cement, metal industries, fine dusts |
| Fiber Bags | FE 2520 | 250 | 750 / 750 | 150 | Wood industry, paper industry, fibrous dusts |
| Fiber Bags as | FE 2519 | 260 | 750 / 750 | 150 | Wood industry, paper industry, fibrous dusts |
| MAXX Bags | FE 2921 | 280 | 750 / 750 | 150 | Ultra-fine dusts |
| MAXX Bags as | FE 2523 | 280 | 750 / 750 | 150 | Ultra-fine dusts |

# Filters for dust removal
## Filter plates



| Specifications | |
|---|---|
| Note | Electrostatically conductive filter plates must be properly earthed |
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**Product characteristics**

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

**Delivery notes**

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

| Specifications | |
|---|---|
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### FE 2506-sinus and FE 2507-sinus

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

### Antistatic filter media

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

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

**Delivery notes**

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

### sinTexx Plus

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

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

### NEXX + NEXX as

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

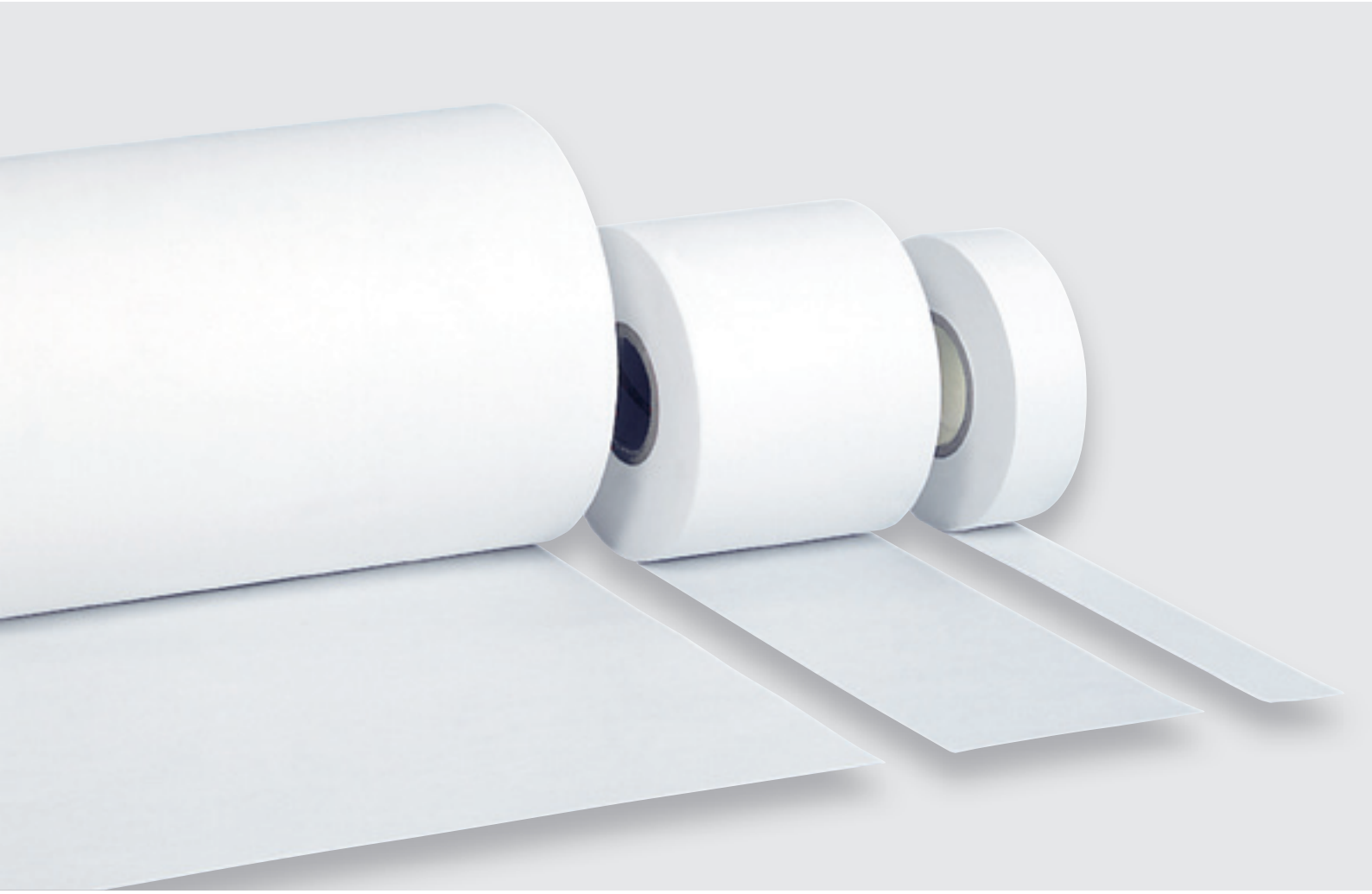
- Dusts can be quickly and easily washed off the microfiber layer of the Viledon® NEXX filter medium.
- With Viledon® NEXX clean-gas values of < 1 mg / $m^3$ can be lastingly achieved.
- Resource-saving manufacturing allows active contribution to environmental protection.

| Article | Filter medium | Thickness approx. [mm] | Dust class* | Air-permeability at 200 Pa [l / s x $m^2$] | Elongation at maximum tensile force along / across [%] | Maximum tensile force along / across [N / 5 cm] | Weight per unit area approx. [g / $m^2$] |
|---|---|---|---|---|---|---|---|
| FE 2501 | PES, thermally bonded, antistatic halftone print | 0.45 | M | 280 | 12 / 25 | 300 / 600 | 260 |
| FE 2502 | PES, thermally bonded | 0.45 | M | 280 | 12 / 25 | 300 / 600 | 250 |
| FE 2506 | PES, thermally bonded, antistatic halftone print | 0.45 | M | 300 | 25 / 40 | 300 / 600 | 250 |
| FE 2507 | PES, thermally bonded | 0.45 | M | 300 | 25 / 40 | 300 / 600 | 240 |
| FE 2508 | 100% Polyolefin, thermally bonded, antistatic halftone print | 0.3 | M | 500 | 25 / 25 | 350 / 600 | 130 |
| FE 2509 | 100% Polyolefin, thermally bonded | 0.3 | M | 500 | 25 / 25 | 350 / 200 | 120 |
| FE 2519 | PES, thermally bonded, antistatic halftone print | 1.0 | | 3,400 | 35 / 35 | 750 / 750 | 260 |
| FE 2520 | PES, thermally bonded | 1.0 | | 3,400 | 35 / 35 | 750 / 750 | 250 |
| FE 2521 | PES, thermally bonded, + PTFE membrane | 1.0 | M | 220 | 35 / 35 | 750 / 750 | 270 |
| FE 2523 | PES, thermally bonded, antistatic halftone print, + PTFE membrane | 1.0 | M | 220 | 35 / 35 | 750 / 750 | 280 |
| NEXX | PES / PA, microfilaments | 1.0 | M | 360 | 35 / 35 | 700 / 800 | 240 |
| NEXX as | PES / PPA, microfilaments; anistatic finish | 1.0 | M | 360 | 35 / 35 | 700 / 800 | 240 |
| sinTexx Plus | PES, thermally bonded with nanofiber lining | 0.55 | M | 450 | 25 / 40 | 500 / 700 | 240 |
| sinTexx Plus as | PES, thermally bonded with nanofiber lining; antistatic finifh | 0.55 | M | 400 | 25 / 40 | 500 / 700 | 240 |

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

# Liquid filtration

# nutritexx, hydrotexx, cooltexx, pluratexx, novatexx



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

# Liquid filtration
## nutritexx | Food-grade nonwovens

| Specifications | |
|---|---|
| Production process | Wet-laid nonwoven process |
| Material | Polyester (some with cellulose content) |
| Bonding | Chemical or thermal |
| Food-grade testing | 2002/72/EC and 2011/10/EC |
| | |
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### Application

For filtering beverages like milk, wine and beer, Viledon®'s food-grade nonwovens are made into bags. Besides a food-grade approval, our media also, thanks to being made from polyester-cellulose fibers, exhibit a high wet strength and a long operational lifetime.

Our nutritexx portfolio also includes filter media that can withstand the high-temperatures and meet the chemical-related requirements encountered in deep-frying-oil filtration.

### Product advantages

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

### Delivery notes

Customized roll dimensions available on request.

| Article | Weight per unit area approx. [g/m²] | Air permeability at 100 Pa [l/s x m²] | Maximum tensile force along/across [N/5 cm] | Thickness approx. [mm] |
|---|---|---|---|---|
| FFL 2640 | 100 | 150 | 130/220 | 0.24 |
| FFL 2641 | 100 | 900 | 120/75 | 0.64 |
| FFL 2690N | 75 | 1,600 | 90/60 | 0.6 |
| FFL 2693N | 65 | 1,800 | 80/60 | 0.5 |
| FFM 2681 | 30 | 3,500 | 20/14 | 0.25 |

| Specifications | |
|---|---|
| Fiber | Polyester |
| Principal application | Drinking water filtration |

## Application

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

## Food-grade testing to:

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

### Delivery notes

Standard roll: ca. 1.8 x 20 m

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

# Liquid filtration
## cooltexx | Polyester spunbonded nonwovens

cooltexx

| Specifications | |
|---|---|
| Standard dimensions | Length [m]: 150, 250, 500; width max. [mm]: 2,400 |

### Anwendung

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

### Product advantages

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

### Product characteristics

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

**Delivery notes**

Customized lengths available on request.

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

# cooltexx | Polypropylene spunbonded nonwovens

| Specifications | |
|---|---|
| Standard dimensions | Length [m]: 100, 150, 200, 250, 500; width max. [mm]: 2,400 |
| Band filter principle | Pressure | vacuum |
| Filter medium | Polypropylene fibers |
| Bonding | Thermal, punctiform-bonded |
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## Application

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

## Product advantages

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

## Product characteristics

- Oleophilic and hydrophobic fibers
- Pure polypropylene
- Smooth surface

### Delivery notes

Customized lengths available on request.

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

# Liquid filtration
## cooltexx | Cellulose-polyester media

| Specifications | |
|---|---|
| Material | Cellulose + Polyester |
| Bonding | Chemical |
| Max. width | 2.3 m |
| Band filter principle | Gravitation and where appropriate vacuum |
| Machining process | Grinding | honing | lapping (fine-smoothing) |
| | |
| | |
| | |

### Application

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

### Product advantages

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

| Article | Weight per unit area approx. [g/m²] | Air permeability at 100 Pa [l/s x m²] | Pore size: Largest pore / MFP [µm] | Thickness approx. [mm] |
|---|---|---|---|---|
| cooltexx 2652 | 17 | 3,000 | >200 | 0.19 |
| cooltexx 2653 | 23 | 1,900 | 300 / 160 | 0.19 |
| cooltexx 2654 | 32 | 1,500 | 230 / 100 | 0.28 |
| cooltexx 2662 | 25 | 4,000 | >200 | 0.28 |
| cooltexx 2663 | 50 | 1,800 | 250 / 130 | 0.37 |
| cooltexx 2666 | 60 | 1,600 | 220 / 130 | 0.45 |
| cooltexx 2689 | 130 | 1,000 | 140 / 75 | 1.0 |
| cooltexx 2693 | 70 | 2,000 | 200 / 100 | 0.53 |

| Specifications | |
|---|---|
| Production process | Wet laid process |
| Material | Polyester (partly with cellulose content) |
| Bonding | needled + chemical |
| Standard dimensions | [m]: 100, 150, 200, 250, 500; width max. [mm]: 2,000 |
| Band filter principle | Pressure | vacuum |
| Machining process | Grinding | honing | lapping [fine-smoothing] |
| | |
| | |

cooltexx

### Product advantages

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

### Product characteristics

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

### Delivery notes

Customized lengths available on request.

| Article | Dimensions (W x L) [mm / m] | Weight per unit area approx. [g / m²] | Air permeability at 100 Pa [l / s x m²] | Maximum tensile force along / across [N / 5 cm] | Elongation at maximum tensile force along / across [%] | Particle size at 50% arrestance efficiency [µm] | Particle size at 90% arrestance efficiency [µm] | Dust holding capacity [g / m²] | Thickness approx. [mm] |
|---|---|---|---|---|---|---|---|---|---|
| cooltexx 9210N | 500 / 150 | 100 | 900 | 120 / 100 | 12 / 15 | 18 | 30 | 150 | 0.7 |
| cooltexx 9210N | 1,000 / 250 | 100 | 900 | 120 / 100 | 12 / 15 | | | | 0.7 |
| cooltexx 2689 | 750 / 150 | 130 | 1,000 | 160 / 90 | 13 / 16 | 25 | 40 | 270 | 1.0 |
| cooltexx 2689 | 1,500 / 250 | 130 | 1,000 | 160 / 90 | 13 / 16 | | | | 1.0 |







Freudenberg

# Liquid filtration
## pluratexx | Hydraulic filters >15µm

| Specifications | |
|---|---|
| Material | Polyester |
| Bonding | Thermal |

### Application

Modern-day hydraulic filter systems demand top-class filter media, which by virtue of their high mechanical strength and resistance to chemicals will withstand even extremely high pressure drop, pressure surges and high volume flows. Only very homogeneous materials meet the stringent requirements for consistently constant arrestance efficiencies coupled with simultaneously high dust holding capacity. Fully synthetic media made of Viledon® do without conventional glass-fibers, thus preventing filter breakage even at low temperatures and fiber release in filter operation and during production. With Viledon®, there are no compromises in terms of occupational safety.

### Product advantages

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

### Delivery notes

Customized roll dimensions available on request.

| Article | Weight per unit area approx. [g/m²] | Air-permeability at 200 Pa [l/s x m²] | Pore size: Largest pore / MFP [µm] | Particle size at 90% arrestance efficiency [µm] | Particle size at 99% arrestance efficiency [µm] | Dust holding capacity [g/m²] | Thickness approx. [mm] |
|---|---|---|---|---|---|---|---|
| pluratexx 2033 | 165 | 650 | 72/32 | 24 | 30 | 180 | 0.95 |
| pluratexx 2037 | 155 | 400 | 55/22 | 15 | 22 | 150 | 0.9 |
| pluratexx 5100 | 190 | 200 | 40/20 | 10 | 15 | 100 | 1.1 |
| pluratexx 5120 | 120 | 500 | 50/20 | 20 | 30 | 80 | 0.54 |
| pluratexx 5121 | 120 | 800 | 80/30 | 23 | 35 | 85 | 0.7 |

| Specifications | |
|---|---|
| Material | Polyester + polyamide |
| Bonding | Thermal |

## Application

Modern-day hydraulic filter systems demand top-class filter media, which by virtue of their high mechanical strength and resistance to chemicals will withstand even extremely high pressure drop, pressure surges and high volume flows. Only very homogeneous materials meet the stringent requirements for consistently constant arrestance efficiencies coupled with simultaneously high dust holding capacity. Fully synthetic media made of Viledon® do without glass-fibers, thus preventing filter breakage even at low temperatures and fiber release in filter operation and during production. With Viledon®, there are no compromises in terms of occupational safety.

## Product advantages

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

### Delivery notes

Customized roll dimensions available on request.

| Article | Weight per unit area approx. [g/m²] | Air-permeability at 200 Pa [l/s x m²] | Pore size: Largest pore / MFP [µm] | Particle size at 90% arrestance efficiency [µm] | Particle size at 99% arrestance efficiency [µm] | Dust holding capacity [g/m²] | Thickness approx. [mm] |
|---|---|---|---|---|---|---|---|
| pluratexx 2310S | 100 | 90 | 60/21 | 7 | 11 | 100 | 0.45 |
| pluratexx 2313S | 130 | 40 | 45/15 | <4 | 7 | 100 | 0.5 |
| pluratexx 2317S | 170 | 40 | 32/13 | <4 | 6 | 150 | 0.7 |

# Liquid filtration

## novatexx | Drainage nonwoven for filter cartridges

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

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

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

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

**Delivery notes**

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

| Article | Filter medium | Weight per unit area approx. [g/m²] | Air permeability at 100 Pa [l/s x m²] | Maximum tensile force along/across [N/5 cm] | Elongation at maximum tensile force along/across [%] | Thickness approx. [mm] |
|---|---|---|---|---|---|---|
| novatexx 2010 | PP Biko | 50 | 1,300 | 155/90 | 60/70 | 0.24 |
| novatexx 2019 | PP Biko | 70 | 1,200 | 170/90 | 60/70 | 0.44 |
| novatexx 2035 | PP Biko | 30 | 1,800 | 85/50 | 50/50 | 0.15 |
| novatexx 2036 | PP Biko | 30 | 3,900 | 60/35 | 60/60 | 0.23 |
| novatexx 2043 | PP Biko | 50 | 1,800 | 140/70 | 60/70 | 0.32 |
| novatexx 2044 | PP Biko | 15 | 5,000 | 25/15 | 60/60 | 0.12 |
| 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 6330 | PP | 30 | 2,000 | 55/55 | 60/60 | 0.33 |
| novatexx 6340 | PP | 40 | 1,300 | 85/85 | 70/70 | 0.40 |
| novatexx 6350 | PP | 50 | 1,000 | 100/100 | 60/60 | 0.42 |

| Specifications | |
|---|---|
| Minimum width | 15 mm |
| Standard lengths | 500 m, 1,000 m |
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Viledon® novatexx products for flat membranes stand for superior results in membrane production. The carrier materials are made of synthetic polymers, and are crucial to the mechanical and filtering properties of the filtration membranes. The specially created surface porosity enables the membrane solution to penetrate into the nonwoven, so as to achieve good adhesion results.

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

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

**Delivery notes**

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

| Article | Filter medium | Weight per unit area approx. [g/m²] | Air-permeability at 200 Pa [l/s x m²] | Maximum tensile force along/across [N/5 cm] | Elongation at maximum tensile force along/across [%] | Thickness approx. [mm] |
|---|---|---|---|---|---|---|
| novatexx 2413 | PET | 100 | 300 | 125/240 | 10/25 | 0.19 |
| novatexx 2429 | PET/PBT | 90 | 190 | 240/200 | 25/30 | 0.15 |
| novatexx 2430 | PP/PE | 100 | 150 | 200/300 | 65/65 | 0.22 |
| novatexx 2431 | PP/PE | 60 | 500 | 110/170 | 60/85 | 0.14 |
| novatexx 2432 | PP/PE | 32 | 700 | 60/80 | 50/70 | 0.11 |
| novatexx 2442 | PET | 25 | 1,800 | 30/17 | 10/10 | 0.06 |
| novatexx 2463 | PP/PE | 50 | 2,500 | 100/85 | 30/30 | 0.35 |
| novatexx 2465 | PP/PE | 30 | 4,000 | 65/60 | 25/30 | 0.31 |
| novatexx 2470 | PP/PE | 60 | 200 | 200/150 | 28/28 | 0.12 |
| novatexx 2471 | PP/PE | 85 | 150 | 270/170 | 25/30 | 0.18 |
| novatexx 2473 | PP/PE | 27 | 2,100 | 80/55 | 20/25 | 0.11 |
| novatexx 2481 | PET/PBT | 100 | 120 | 270/180 | 25/30 | 0.15 |
| novatexx 2483 | PET/PBT | 70 | 100 | 170/110 | 25/30 | 0.10 |
| novatexx 2597 | PA66/PA6 | 70 | 1,300 | 300/150 | 40/40 | 0.20 |

# Liquid filtration

## novatexx | Carrier materials for tubular membranes

| Specifications | |
|---|---|
| Minimum width | 15 mm |
| Roll length | 500 m |

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

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

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

**Delivery notes**

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

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

# Accessories

# Mounting frames, seals, dust removal accessories

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

# Accessories
## Mounting frames

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

## Clip-on seal

- U-shaped seal profile made of closed-pore EPDM soft rubber with embedded wire clamping band and formed sealing lips plus a hollow compartment made of EPDM cellular rubber; 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**

Other seals available on request.

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

# Accessories

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

### Support cages

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

### Pulse-jet reflectors

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

### Displacer unit

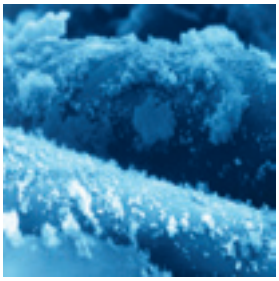
Use of the displacer unit leads to a significant increase in cleaning intensity, which means real savings in terms of operating and capital investment costs. The tank pressure must be restricted to a maximum of 3 bar, or if the maximum tank pressure is retained, the valves must be reduced by one size.

**Delivery notes**

Customized dimensions are available on request.

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

# Accessories for dust removal filters | Filtering Aid FHM 1500



**Application**

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

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

Why precoating?

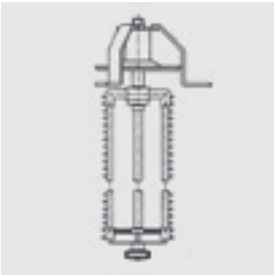
- To improve the cleaning characteristics
- For lower stable pressure drops

How is precoating performed with FHM 1500?

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

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

| Article number | Article | Weight [kg] |
|---|---|---|
| 53301586 | Filtering Aid | 1 |



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

### Application

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

### Special features

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

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

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### 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.

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### 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

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

**Use**

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

**Application category**

Arresting fibrous dusts, for example.

**Montage**

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

**Delivery notes**

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

# Order | order inquiry form
# Information | legal notes

# Order | order inquiry form

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

**Customer number:** _____

**Company name:** _____

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

**Your contact data:**

Company name: _____

Street / No.: _____

Post code / Town: _____

Contact person: _____

Telephone: _____

Email: _____

**Your direct route to us**

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

☐ **Order**
☐ **Inquiry**

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

Place, date

Signature

# Information | legal notes

Dear Viledon® Customers,

we not only provide effective and efficient filters and reliable services, we are also thriving to constantly improving our product documentation for you. Therefore, we appreciate your comments on how we could further upgrade our product catalogue to serve you in the best possible way. Please send an email to **marketing@freudenberg-filter.com**. We look forward to your message.

Your "Viledon® product catalogue" editors

## Important notes

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Subject to technical changes, errors and misprints.
Product pictures may vary from actual product.

For our **General Terms and Conditions** please refer to our website:
**www.freudenberg-filter.com/en/agb.**



## Notes on technical specifications

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

**Energy efficiency classes | Energy consumption**
According to EUROVENT 4/11 measured at 3,400 $m^3/h$

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*Quick information search thanks to user-friendly navigation.*

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® fine-dust 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 more than 1,700 associates at over 30 facilities all over the world, customer satisfaction is the overriding goal.

www.freudenberg-filter.com

Freudenberg Filtration Technologies is part of the Freudenberg Group, a family-owned group of companies active on the global stage. Besides filtration solutions, Freudenberg develops and manufactures seals, vibration control components, nonwovens, surface treatment products, release agents, speciality lubricants, medical technology, mechatronic and household products. Creativity, quality, diversity and innovative strength are the company's cornerstones. Reliability and responsible conduct rank among the basic values of the company which was founded over 160 years ago. Freudenberg is committed to partnerships with customers, and believes in a long-term orientation, financial solidity and the excellence of more than 37,000 associates in 58 countries around the globe.

www.freudenberg.com

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