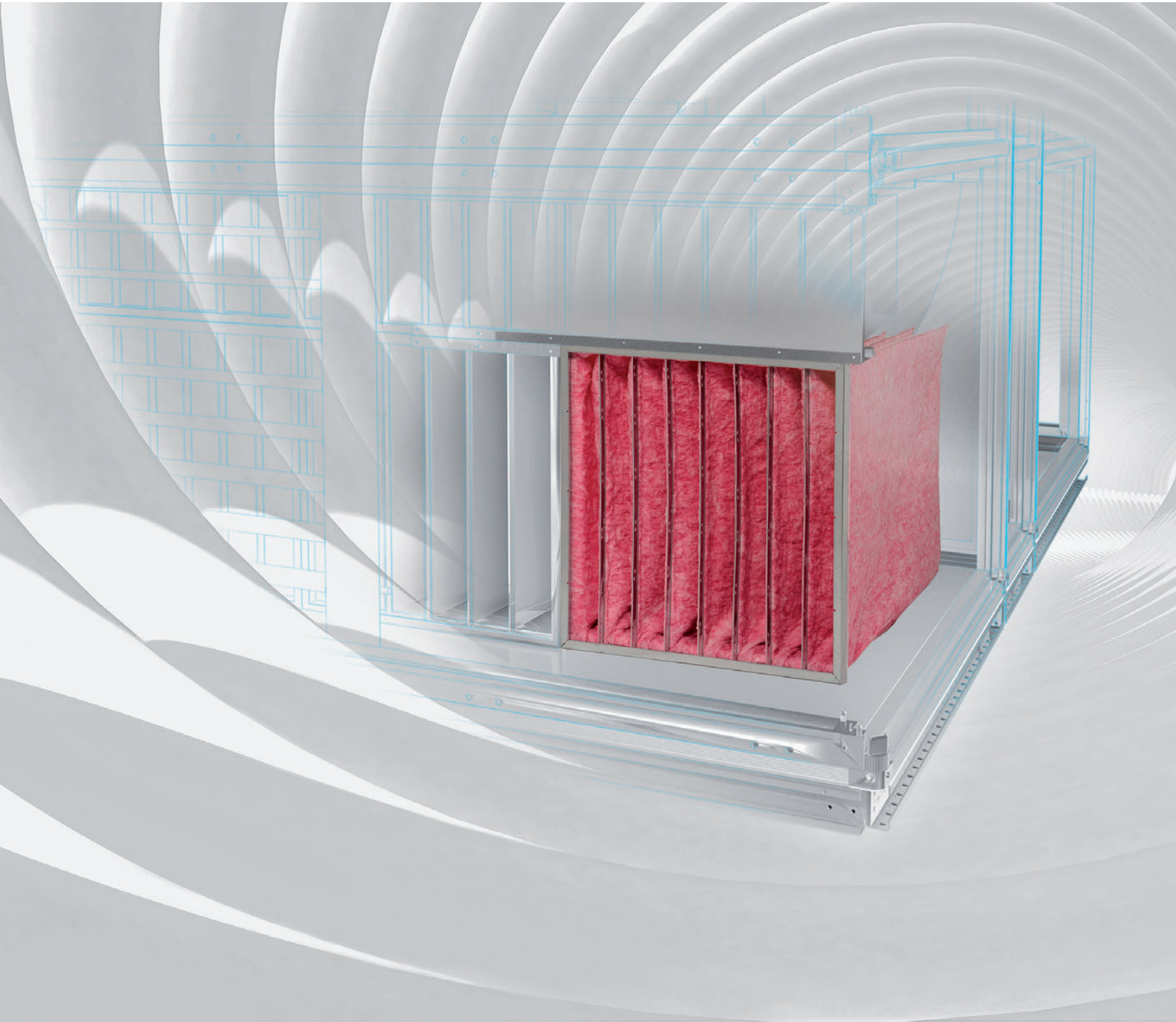


PRODUCT BROCHURE

Filter Media

DELBAG® Air Filtration

Custom-Made and Efficient Air Handling



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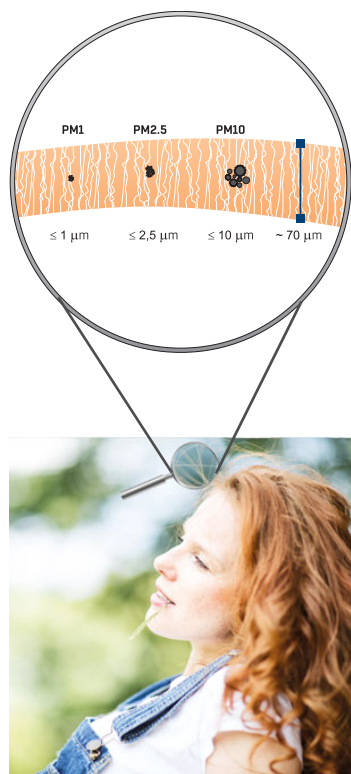
Classified as of ISO 16890

New classification as of ISO 16890

The new worldwide valid filter standard ISO 16890 introduces a classification of filters into new filter groups and a realistic filter test, which primarily makes it easier for the user to select the filter capacity of the filter in relation to the outdoor-air pollution in its environment. The new system reduces the filter classification to only four groups compared to the previous nine filter classes. It is oriented on the size of the particles to be filtered. This makes it easier for the user to find and select the demand-driven filter configuration in practice – also with respect to the degree of arresstance and energy efficiency.

The filters are classified into three fine-particle filter groups: ePM10, ePM2.5 and ePM1 as well as one coarse-particle filter group "ISO Coarse". The filter group ePM1 is the group with the highest filter capacity.

Coarse dust $\geq 10 \mu\text{m}$	Particles ≤ 0.3 to $10 \mu\text{m}$	Particles ≤ 0.3 to $2.5 \mu\text{m}$	Particles ≤ 0.3 to $1 \mu\text{m}$
Reaches the respiratory tract and is absorbed by the mucus, can cause irritations.	Can reach the lung channels and possibly reduce pulmonary function	Can penetrate the lung channels and reduce pulmonary function and result in skin and eye problems.	Are small and dangerous. Can enter the blood circulation and cause cancer, cardiovascular diseases, or dementia.



Since there are now only four filter groups (instead of the previous nine filter classes), the prescribed indication of the percentage of filtration efficiency is of great significance.

A filter must separate at least 50% of the respective particle size (PM) in order to be assigned to one of the four filter groups.

Coarse-dust filters – i.e. the new class "ISO Coarse" – are those filters that achieve less than 50% degree of arresstance at ePM10 (also particles larger than $10 \mu\text{m}$).

Filter group according to ISO 16890	Degree of arresstance
ePM ₁	ePM ₁ $\geq 50 \%$
ePM _{2,5}	ePM _{2,5} $\geq 50 \%$
ePM ₁₀	ePM ₁₀ $\geq 50 \%$
ISO Coarse	ePM ₁₀ $< 50 \%$

ISO 16890

The suitable air filters

Practical consequences for the selection of air filters

Filter media that retain all the fine dust particles in the air do not exist. Much like before, the filtration efficiency (arrestance) rate will be set at minimum 50%. Clustering the air and dust mixtures, will make filter classification more transparent and simplifies product selection for the facility managers as well as planners and servicing personnel. Measuring and analyzing outdoor air in accordance to the outdoor-air standard as of DIN EN 13779 and the succeeding DIN EN norm 16798 Part 3, makes it clear very quickly which type of dust concentrations need to be taken into account. Accordingly an application focused selection of filter units is made possible to ensure the desired rate of indoor air quality, see table.

ODA (Outdoor Air) and SUP (Supply Air) are the abbreviations for outdoor-air and supply-air quality.

Recommended minimum ePMx filtration efficiency depending on ODA and SUP category:

Ranges with:	Areas with high hygienic requirements	Areas with medium hygienic requirements	Areas with basic hygienic requirements	Areas without hygienic requirements.	Production areas of heavy industry
PM _{2.5} PM ₁₀	SUP1 (ePM ₁)	SUP2 (ePM ₁)	SUP3 (ePM _{2.5})	SUP4 (ePM ₁₀)	SUP5 (ePM ₁₀)
ODA1 ≤ 10 ≤ 20	60 %	50 %	60 %	60 %	50 %
ODA2 ≤ 15 ≤ 30	80 %	70 %	70 %	80 %	60 %
ODA3 > 15 > 30	90 %	80 %	80 %	90 %	80 %



These also include areas with high hygienic requirements such as hospitals, pharmaceutical industry and manufacturing of food products or Life Science industry.



... also areas that are continually used by persons, such as kindergartens, offices, hotels, residential buildings, meeting rooms, industrial-fair buildings, conference rooms, theaters, cinemas or concert halls



... also include areas that are temporarily used by persons, such as shopping centers, washrooms, server rooms



... also include areas that are only briefly in use by persons, such as toilets, warehouse facilities or staircases



... also include areas that are rarely used by persons, such as parking garages, computer centers, or waste disposal sites

Based the following example, we will show you the impact of filter selection according to the new ISO 16890:

Example: A hospital in Bonn (North Rhine Westphalia)
 Annual average 2016: Emission of PM_{2.5} at height of 23 µg/m³ (ODA3)
 Required total filter capacity: 90 % of PM₁
 Last filter stage: ePM₁ > 50 %



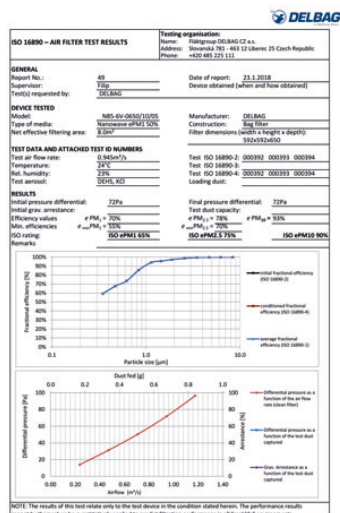
The following table shows four possible filter combinations for achieving a desired target concentration for the inside air:

Outside air pollution	Required total capacity	1. Filter level	Type of filter used (first filter stage)	Supply Quality	2nd filter level	Type of filter used (second filter stage)	Supply Quality	Total efficiency factor	Target concentration
µg/m ³	%	ePM ₁	Filter type	µg/m ³	ePM ₁	Filter type	µg/m ³	%	µg/m ³
23	90 %	60 %	G85-6V-0600/10/05-L75	9,2	75 %	MFPR95-6-F75	2,3	90 %	2,3
23	90 %	65 %	MFEC90-F65	8,0	75 %	MFPR95-6-F75	2,0	91 %	2,3
23	90 %	50 %	MF85-6-F50	12,7	85 %	G95-6V-0600/12/05-F85	1,9	92 %	2,3
23	90 %	65 %	N85-6V-0650/10/05-L65	8,0	80 %	MP95J-3400/K0-F80	1,6	93 %	2,3

TESTING PROCESS

Tested to follow standards, determined to be "good"

Test criteria for ISO 16890



The filter test for the DELBAG® air filter is an integrated component of the manufacturing process. It ensures that degree of arrestance and pressure difference are checked by random batch-based sampling, thus guaranteeing a constant product quality.

The test procedures required by ISO 16890 are implemented by DELBAG®. The filters are now tested in the particle-size spectrum of 0.3 µm to 10 µm particles. The measurements are taken using the test aerosols DEHS and KCl, exclusively in the undusted condition. The results of the measurements are given in the new test records of DELBAG® (as shown here on the left).

According to ISO 16890, new test components are now used for filter testing:

- New test dust ISO A2 Fine
- New aerosol to generate large particles
- New discharge procedure of entire filter units

The Eurovent seal gives operators of climate and ventilation plants the certainty that the published characteristics of our air filters have been examined and confirmed by independent test laboratories according to ISO 17025.



- DELBAG® Air Filtration with Eurovent label for energy efficiency classification
- Certified product quality according to ISO 16890
- Additional quality control by Eurovent tests in independent accredited test labs.
- DIN EN ISO 9001 - recognized world-wide standard, which defines effective quality-management requirements in business
- ISO 14001 - With this certification, we provide proof that we consciously and responsibly handle energy and natural resources efficiently, minimize waste and purposively prevent risks.



DELBAG® also offers the following support:

- Information on site, at your facilities, for understanding and correctly applying the new standard.
- Training and information events.
- Customer information by means of written materials.
- Double identification of the filters according to EN 779 (old) and ISO 16890 (new).



HEPA FILTERS

From universal to customized**Classes for HEPA filters – according to DIN EN 1822:2011**

For the determination of the absence of leaks, the filtration efficiency and the pressure drop, all particulate air filters undergo a leakage and scan test according to DIN EN 1822:2011. In doing so, a local minimum degree of penetration (MPPS) is being measured and compared with the normatively prescribed local limit.

Filter classes	Integral value		Local value	
	Degree of arrestance [%]	Degree of penetration [%]	Degree of arrestance [%]	Degree of penetration [%]
E10	85 %	15 %	–	–
E11	95 %	5 %	–	–
E12	99.5 %	0.5 %	–	–
H13	99.95 %	0.05 %	99.75 %	0.25 %
H14	99.995 %	0.005 %	99.975 %	0.025 %
U15	99.9995 %	0.0005 %	99.9975 %	0.0025 %
U16	99.99995 %	0.00005 %	99.99975 %	0.00025 %
U17	99.999995 %	0.000005 %	99.9999 %	0.0001 %

Separation and degree of penetration in MPPS (Most Penetrating Particle Size)

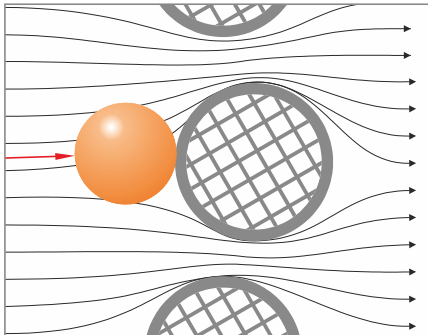
Behavior of suspended matter and dust

Figure 1

In the illustration, the fraction degree of separation and physical separation mechanism of the HEPA filter is schematically presented. Significant criteria for the classification are:

- Concluding determination with great penetration of the integral filtration efficiency compared to the quasi monodispersion aerosol in the range of the particle size
- The pressure drop determination at rated air volume flow.

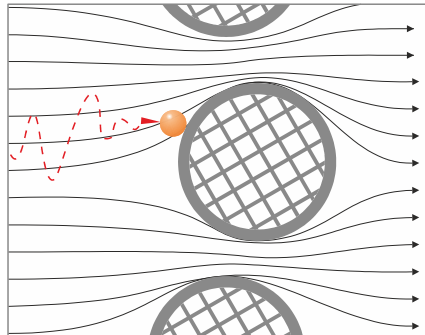


Figure 2

Particles which are larger than $0.3 \mu\text{m}$, because of their inertia, cannot follow the volume flow around the fibers and are thereby directly taken up by the filter fibers (figure 1).

Smallest particles with a particle size up to $0.05 \mu\text{m}$ behave in the air stream much like molecules on which the air flow volume has no direct influence. They are diffused on the fibers (figure 2).

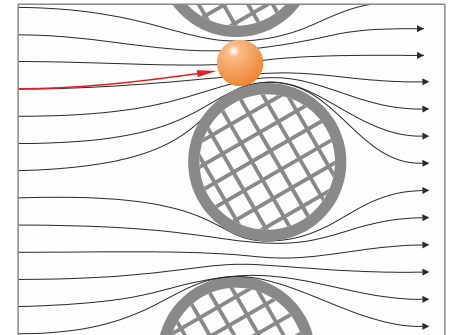


Figure 3

Particles with a particle size of about $0.2 \mu\text{m}$ are steered around the fibers by the air flow, however because of their critical size, are in the position to penetrate the fibrous structure of the filter medium (figure 3). This critical size is termed as the “Most Penetrating Particle Size” (MMPS).

For the classification of HEPA filters according to DIN EN 1822:2011, it is the most important parameter for the determination of the filter class.

For special model types and dimensions for filters of the filter classes as of or higher than H13, which are not included in a conventional scan process, DELBAG® Air Filtration offers a special innovative scan testing method which also guarantees the absence of leaks and filter class according to the strictest guidelines. Well trained DELBAG® specialists can on request conduct or support on-site installation of HEPA filters as well as facilitate certification of filter systems.

FILTER CLASSES AND ENERGY EFFICIENCY

Advantages You Can Count On

Finally you have been given a firm grounds for your decision

In the light of ever increasing costs for energy and more restrictive directives for CO² emissions, energy efficiency has become the most important criteria for purchasing air filters. How does one find an air filter that has the best energy saving features? The new worldwide valid filter standard ISO 16890 introduces a classification of filters into new filter groups and a realistic filter test, which primarily makes it easier for the user to select the filter capacity of the filter in relation to the outdoor-air pollution in its environment. The new system reduces the filter classification to only four groups compared to the previous nine filter classes. It is oriented on the size of the particles to be filtered. This makes it easier for the user to find and select the demand-driven filter configuration in practice – also with respect to the degree of arrestance and energy efficiency. The filters are classified into three fine-particle filter groups: ePM₁₀, ePM_{2,5} and ePM₁ as well as one coarse-particle filter group "ISO Coarse". The filter group ePM₁ is the group with the highest filter capacity. The manufacturer's declared filter product values are under constant surveillance by independent laboratories.

Filter class ePM ₁					
Efficiency	50 - 55	60 - 65	70 - 75	80 - 85	> 90
ISO fine dust	200 g	200 g	200 g	200 g	200 g
A+	0 - 800 kWh	0 - 850 kWh	0 - 950 kWh	0 - 1050 kWh	0 - 1200 kWh
A	> 800 - 900 kWh	> 850 - 950 kWh	> 950 - 1100 kWh	> 1050 - 1250 kWh	> 1200 - 1400 kWh
B	> 900 - 1050 kWh	> 950 - 1100 kWh	> 1100 - 1250 kWh	> 1250 - 1450 kWh	> 1400 - 1550 kWh
C	> 1050 - 1400 kWh	> 1100 - 1450 kWh	> 1250 - 1550 kWh	> 1450 - 1800 kWh	> 1550 - 1900 kWh
D	> 1400 - 2000 kWh	> 1450 - 2050 kWh	> 1550 - 2150 kWh	> 1800 - 2400 kWh	> 1900 - 2500 kWh
E	> 2000 kWh	> 2050 kWh	> 2150 kWh	> 2400 kWh	> 2500 kWh

Filter class ePM _{2,5}					
Efficiency	50 - 55	60 - 65	70 - 75	80 - 85	> 90
ISO fine dust	250 g	250 g	250 g	250 g	250 g
A+	0 - 700 kWh	0 - 750 kWh	0 - 800 kWh	0 - 900 kWh	0 - 1000 kWh
A	> 700 - 800 kWh	> 750 - 850 kWh	> 800 - 900 kWh	> 900 - 1000 kWh	> 1000 - 1100 kWh
B	> 800 - 950 kWh	> 850 - 1000 kWh	> 900 - 1050 kWh	> 1000 - 1200 kWh	> 1100 - 1300 kWh
C	> 950 - 1300 kWh	> 1000 - 1350 kWh	> 1050 - 1400 kWh	> 1200 - 1500 kWh	> 1300 - 1600 kWh
D	> 1300 - 1900 kWh	> 1350 - 1950 kWh	> 1400 - 2000 kWh	> 1500 - 2100 kWh	> 1600 - 2200 kWh
E	> 1900 kWh	> 1950 kWh	> 2000 kWh	> 2100 kWh	> 2200 kWh

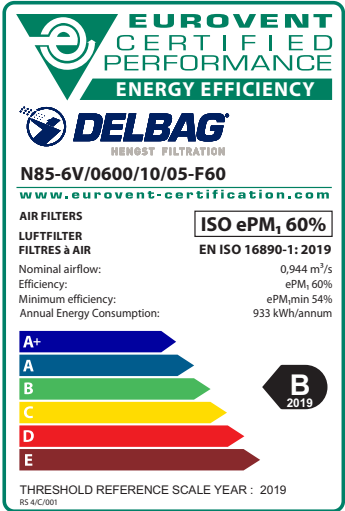
Filter class ePM ₁₀					
Efficiency	50 - 55	60 - 65	70 - 75	80 - 85	> 90
ISO fine dust	400 g	400 g	400 g	400 g	400 g
A+	0 - 450 kWh	0 - 500 kWh	0 - 600 kWh	0 - 700 kWh	0 - 800 kWh
A	> 450 - 550 kWh	> 500 - 600 kWh	> 600 - 700 kWh	> 700 - 800 kWh	> 800 - 900 kWh
B	> 550 - 650 kWh	> 600 - 700 kWh	> 700 - 800 kWh	> 800 - 900 kWh	> 900 - 1050 kWh
C	> 650 - 750 kWh	> 700 - 850 kWh	> 800 - 900 kWh	> 900 - 1000 kWh	> 1050 - 1400 kWh
D	> 750 - 1100 kWh	> 850 - 1200 kWh	> 900 - 1300 kWh	> 1000 - 1400 kWh	> 1400 - 1500 kWh
E	> 1100 kWh	> 1200 kWh	> 1300 kWh	> 1400 kWh	> 1500 kWh

The most important criteria for selecting air filters is the required degree of arrestance and efficiency. We provide test certification that documents the technical specifications for the performance of our filters.

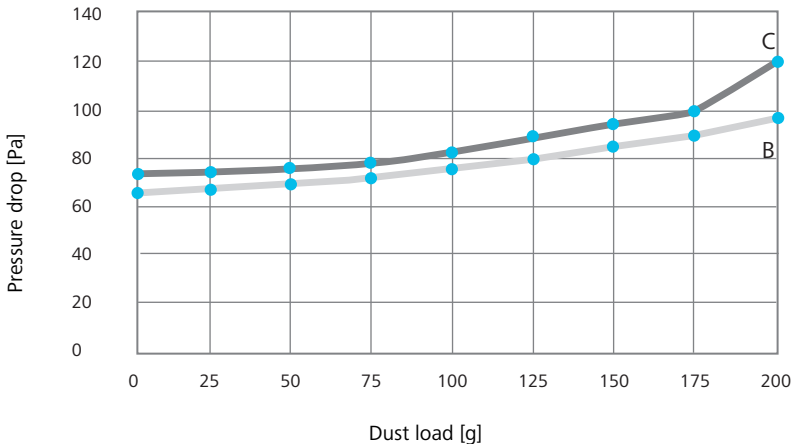
You will find ample information about DELBAG® air filters in the Internet at <http://www.delbag.com> We'll gladly advise you at length and deliver you high quality air filters or filter media according to your requirements – also for retooling or retrofitting purposes.

FILTER CLASSES AND ENERGY EFFICIENCY

Advantages You Can Count On



Sample calculation of energy efficiency
 Pressure drop at a dust load of DELBAG filters according to ISO 16890 with ISO fine normal dust – comparison of two filter with ePM₁ 60%



Your advantages at a glance

- DELBAG® Air Filtration with Eurovent label for energy efficiency classification
- Certified product quality according to actual ISO 16890
- Test records according to this standard are available on request
- Additional quality control by Eurovent tests in independent accredited test labs
- Minimum energy consumption using first-class filter media and optimal structural design
- Wide range of filter media available for the suitable application

By calculating the mean pressure drop with dust load up to 200 g of one ePM₁ the following example applies:

C

$$\frac{0,944 \text{ m}^3/\text{s} \times 95 \text{ Pa} \times 6000 \text{ h}}{0,50 \times 1000} = 1133 \text{ kWh}$$

For bag filter G85-6V/600/10/05-F60 made of micro glass-fibre filter material class ePM₁ 60%. At an average of 0.25 €/kWh gross annual energy costs of 283 € would be incurred.

B

$$\frac{0,944 \text{ m}^3/\text{s} \times 88 \text{ Pa} \times 6000 \text{ h}}{0,50 \times 1000} = 997 \text{ kWh}$$

For bag filter N85-6V/0600/10/05-F60 made of synthetic filter material in class ePM₁ 60%. At an average costs of 0.25 €/kWh gross annual energy costs of 249 € would be incurred..

Description of fixed values in calculation:

- Nominal volume flow: 0.944 m³/s
- Assumed annual hours of operation: 6.000 h
- Assumed fan total efficiency: 0.50 (50 %)
- Correction factor for calculation the unit kWh: 1.000



Hint: The exact value in kWh may vary depending on specific operational conditions

PRODUCT LINE FOR THE EXPLOSION PROTECTION

Filters for Explosion-Risk Areas



Filters for risk areas

With its products for numerous applications, DELBAG® Air Filtration provides the necessary safety for explosion-endangered areas. A critical element here is presented by the filters supplied by DELBAG® Air Filtration.

An atmosphere can be explosive as a result of local conditions and/or operational circumstances. Such specific conditions involve mixtures of air and combustible gas, vapor, mist, or dust. For an explosion of these substances, atmospheric conditions are necessary under which the process of combustion – after successful ignition – spreads to the entire non-combusted mixture. Explosion-endangered areas can develop where explosive gases, mist, vapor, or dust exist or could form. Areas in which hazardous, explosive atmospheres can exist are classified by zones according to the probability of occurrence of hazardous atmospheres. Explosion-protected bag air filters are available with DELBAG® Air Filtration and are exclusively suitable in explosion risk areas in zones 1, 2, 21 and 22 in accordance with the Directive on explosion protection.



DELBAG® explosion-protected air filters of the equipment category 2, group II in accordance with the explosion-protection Directive are exclusively used to filter solid matter particles and dust of any kind and size out of air in air handling systems. Filtered air can be loaded with foreign matter and the relevant surroundings can be classified as an explosion risk areas in accordance with 1999/92/EG directive on explosion protection.

What you should keep in mind

Air flow velocity through filter may not exceed 10 m/s and nominal air volume flow specified in the technical data may not be exceeded under any circumstances.

In case of proper use of the DELBAG® explosion-protected filters at specified nominal air volume flow the air flow velocity through filter medium will not exceed 0.5 m/s, even if the filter has reached the intended operating period or compulsory maximum end differential pressure. The standard value for dimensioning is specific maximum air volume flow 0.3 m³/s per m² of filter surface. It must possible to check and monitor the maximum nominal air volume flow by the testing devices at any time (e.g. differential pressure monitor or flow measuring devices).

Facts

- Operational policy 1999/92/EG
- Explosion-protection Directive 94/9/EG or EN 13463-1:2001
- Explosion-protection labeling II 2 GD IIB T6
- Can be used in temperature range -40 to +80 °C



vitöl – THE PRODUCT LINE FOR SENSITIVE AREAS

Filters in Food Production and Medical Equipment



If you are looking for filters that meet the highest requirements or particularly sensitive areas of life science industry, then check to find this logo.



CERTIFICATE

vitöl Filter
DELBAG® Air Filtration

DELBAG® GmbH hereby certifies that all vitöl air filters: **MultiTask, MultiFlow, MultiForm, MultiStar and MultiStar** including frame, composite material, gaskets and their seals, meet the following requirements:

- Health and safety requirements according to DIN EN 18252/04. This regulation specifies the quality of materials and machinery intended to come into contact with food products.
- Directive 2002/32/EC regarding the quality of plastic materials and machinery used in the manufacturing process of food products.
- Regulation of the European Commission (EC) No 1831/2003 regarding plastic materials and machinery that come into contact with food products in their manufacturing process.
- ISO 846 evaluation of fungi and bacteria effect on plastic materials.
- VDI 6022 Hygienic monitoring of air handling units and HVAC equipment.

This certificate of compliance bases its validity on the filters to be used under normal operating conditions in an operational modification of the filter is carried out.

The signed DELBAG® equipment support documents, including data sheets, provided by the supplier and testing institutions.



Food & beverage industry

The very highest requirements apply to air purification for the production of foods. Filters from DELBAG® Air Filtration are used worldwide in the manufacturing and processing of foods. Because only perfectly harmonized filter systems guarantee seamless air control and thereby enable the qualitatively high standards of the food industry.

vitöl The filter line comprises all necessary advantages for use in the highly sensitive food production environment:

- Especially developed for process reliability in food production
- Food-safe according to EU 1935:2004 – European regulation for materials that come into contact with foods in their manufacture and packaging
- Food-safe according to EU 1935:2004 – European regulation for materials that come into contact with foods in their manufacture and packaging
- Microbiologically inert, according to DIN EN ISO 846:1997-10 – European standard to determine the impact of microorganisms on plastics
- Conforms to the hygiene requirements of VDI 6022, sheet 1 – Directive on hygiene of air treatment systems, technical devices and units

Pharmaceutics and medical technology

The design of filter systems in the pharmaceutical and medical industry poses complex challenges to air handling and requires absolute competence in technical execution. Since 1909, DELBAG® Air Filtration has produced and delivered a comprehensive system of filter systems which have reduced the quantity of undesired particles in the air to a degree in the pharmaceutical industry suitable for public health and thereby fully meet the requirements of EN ISO 14644-8.

vitöl The filter line unites all necessary requirements for use in the highly sensitive pharmaceutical and medical technology environment:

- **ISO 14644-1**
European standard for classification of air quality based on particle concentration in clean rooms
- **VDI 2083 Sheet 8.1**
for air quality based on chemical contamination in clean areas
- **VDI 6022 Sheet 1**
Directive on hygiene of air treatment systems, technical devices and units
- **GMP EU**
European guideline for the manufacturing practice of human and animal medical products
- **FDA**
Food and Drug Administration; „US surveillance institution for food and medical products“

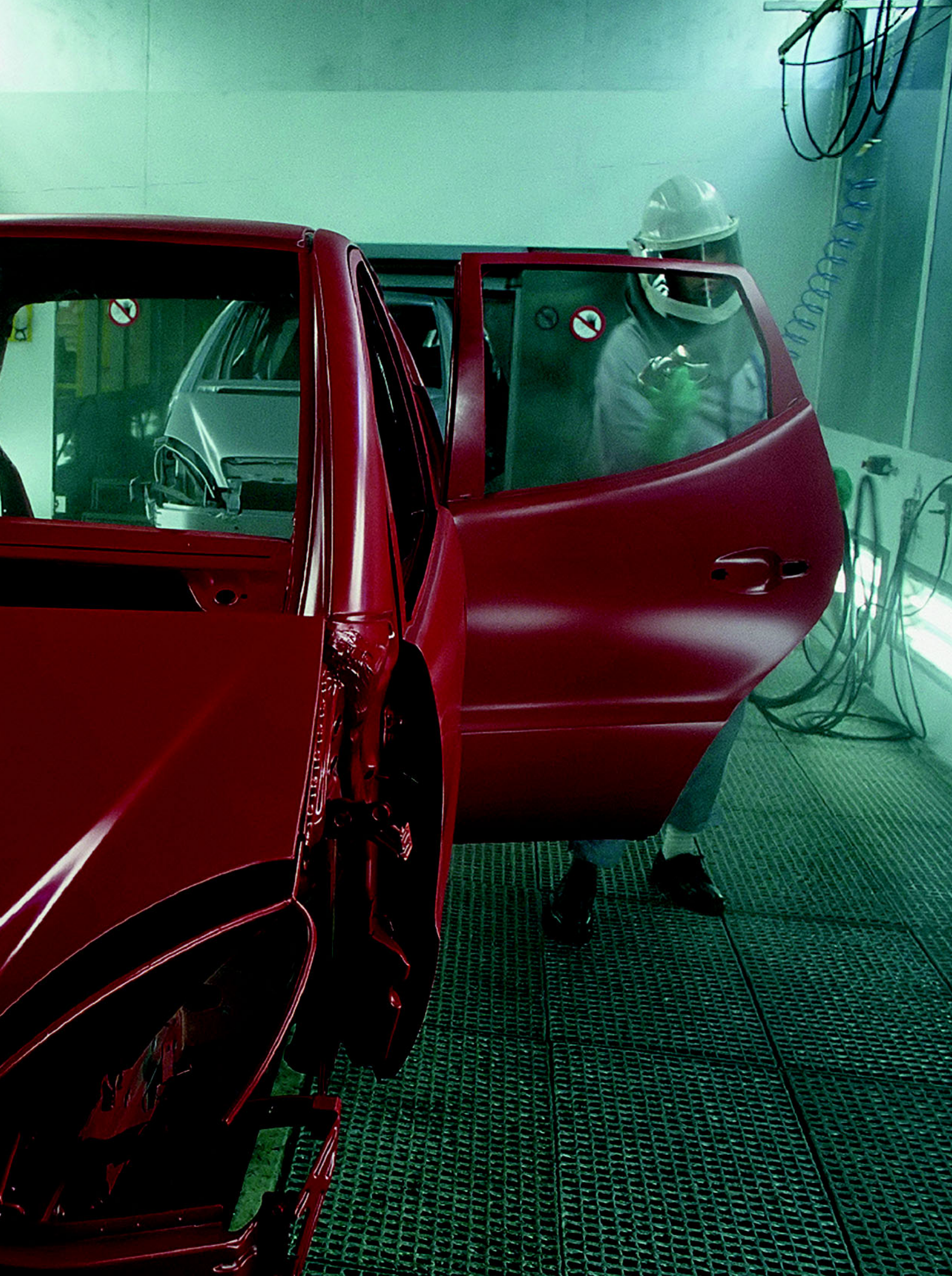
SPECIAL FILTERS FOR PROCESS-AIR TECHNOLOGY

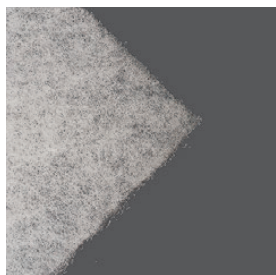
Filter Mats, Filter Bands and Filter Plates

All renown automobile producers in Europe as well as their suppliers are among our customers. For these companies we develop and implement comprehensive filtration concepts according to preset technical standards. The filters, required for the process-air equipment, are produced in large series under consideration of highest quality standards and functional range.

The filter plates are characterized by the following features:

- Health safety for employees and customers
- Complete equipment for production lines and other industrial areas of application
- High-temperature resistant filters for thermal processes
- Multi-stage filtration systems with fine-dust and paint-mist filters
- High operational safety and extended service life





Filter mats CTM

consist of polyester fibres with pronounced labyrinth structure and with progressive depth structure.

Application:

Pre-filter for small air handling systems with high dust concentration and for coarse dust filtration in standard air handling units.

Special features:

Elastic, not provided with a wetting agent, and regenerable.

Areas of application:

Standard ventilation and air handling units, climate control facilities, cabinet air handling units, cooling of switch boxes, heat exchangers, recirculating-air units, unit heaters, cooling of large machines and switchgear as well as paint spray compartments.

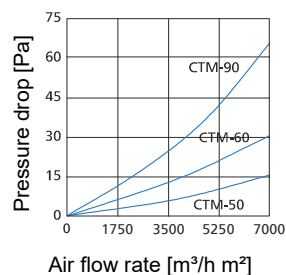
Filter class as of EN 779:2012
G2, G3 & G4

For the NEW Filter class as of ISO 16890
refer to table

Medium
polyester fibres

Temperature resistance
< 80 °C

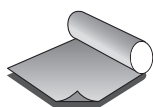
Pressure drop diagrams



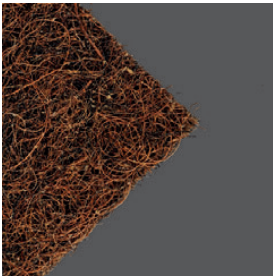
Technical data

CTM		CTM-50	CTM-60	CTM-90
Filter class <i>OLD</i>	[EN 779:2012]	G2	G3	G4
Filter class <i>NEW</i>	[ISO 16890]	ISO Coarse 45 %	ISO Coarse 50 %	ISO Coarse 55 %
Installation depth/thickness	[mm]	5	10	20
Nominal air volume flow	[m³/h m²]	5400	5400	5400
Maximum volume flow	[m³/h m²]	7000	7000	7000
Initial pressure drop	[Pa]	11	18	50
Maximum allowed pressure drop	[Pa]	250	250	250
Mean degree of arrestance	[%]	72.0	81.4	91.7
Dust holding capacity:	[g/m²]	425	590	518
Fire behaviour	[DIN 53438]	F1/K1	F1/K1	F1/K1
Max. operating temperature	[°C]	80	80	80
Max. relative air humidity	[%]	100	100	100

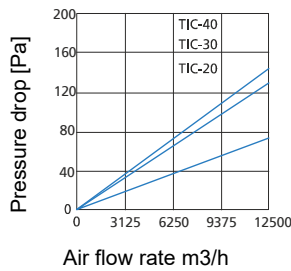
**Form of delivery/
Order number**



CTM	Size	ORD.No.
Special-dimension elements		
CTM-50	0 to 80 m², maximum width 2 m	X-CTM-50-C45
CTM-60	0 to 40 m², maximum width 2 m	X-CTM-60-C50
CTM-90	0 to 40 m², maximum width 2 m	X-CTM-90-C55
Rolls		
CTM-50	2 x 40 m, packaging unit 1	26 02 849-C45
CTM-60	2 x 20 m, packaging unit 1	40 72 531-C50
CTM-90	2 x 20 m, packaging unit 1	40 72 831-C55



Pressure drop diagrams



Filter mats FibroidElastic

consist of latex-bonded, randomly structured natural mixed fibres with uniform depth structure and great intrinsic stiffness, the mats are elastic, not provided with a wetting agent, and repeatedly regenerable.

Application:

Primarily used with high dust concentration and filtration of especially coarse dust.

Special features:

Very efficient thanks to extremely low initial pressure drop, with high air volume flow as well; very high dust holding capacity.

Areas of application:

Climate control facilities and air handling units in the cement industry or similar areas, intake and combustion air for fans, compressors, internal-combustion engines and pneumatic conveyor systems.

*Filter class as of
EN 779:2012
G2 & G3*

*For the NEW Filter class
as of ISO 16890
refer to table*

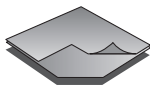
*Medium
natural mixed fibres*

*Temperature
resistance
< 60 °C*

Technical data

FibroidElastic		TIC-20	TIC-30	TIC-40
Filter class <i>OLD</i>	[EN 779:2012]	G2	G2	G3
Filter class <i>NEW</i>	[ISO 16890]	ISO Coarse 35 %	ISO Coarse 45 %	ISO Coarse 60 %
Installation depth/thickness	[mm]	20	30	40
Volumetric flow rate	[m³/h m²]	10000	10000	10000
Initial pressure drop	[Pa]	65	75	95
Maximum allowed pressure drop	[Pa]	250	250	250
Mean degree of arrestance	[%]	73.1	77.1	84.6
Dust holding capacity:	[g/m²]	920	933	1064
Fire behaviour	[DIN 53438]	F1/K1	F1/K1	F1/K1
Max. operating temperature	[°C]	60	60	60
Max. relative air humidity	[%]	100	100	100

*Form of delivery/
Order number*



FibroidElastic	Size	ORD.No.
Special-dimension elements		
TIC-20	0 to 2 m², maximum width 1 m	X-TIC-20-C35
TIC-30	0 to 2 m², maximum width 1 m	X-TIC-30-C45
TIC-40	0 to 2 m², maximum width 1 m	X-TIC-40-C60
Plate		
TIC-20	1 x 2 m, packaging unit 1	16 08 481-C35
TIC-30	1 x 2 m, packaging unit 1	16 08 881-C45
TIC-40	1 x 2 m, packaging unit 1	16 09 281-C60



Filter mats FibroidElastov

consist of robust fleece made of randomly structured polyester fibres with progressive depth structure, the filter layer, not provided with a wetting agent, is elastic and regenerable.

Application:

Reliable filtration of coarse dust in climate control and air handling systems.

Special features:

Very efficient thanks to extremely low initial pressure drop, with high air volume flow as well; very high dust holding capacity.

Areas of application:

General purpose climate control facilities and air handling units, protection against contamination of large machines and switchgear, air intake and combustion air for fans, compressors, internal-combustion motors.

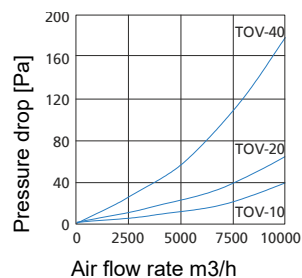
Filter class as of EN 779:2012
G3 & G4

For the NEW Filter class as of ISO 16890
refer to table

Medium
polyester fibres

Temperature resistance
< 80 °C / < 70 °C

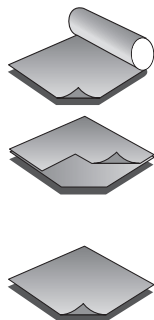
Pressure drop diagrams



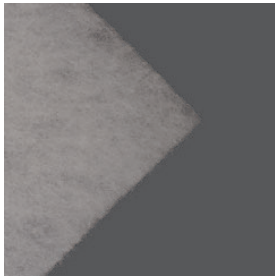
Technical data

FibroidElastov		TOV-10	TOV-20	TOV-40
Filter class <i>OLD</i>	[EN 779:2012]	G3	G3	G4
Filter class <i>NEW</i>	[ISO 16890]	ISO Coarse 35 %	ISO Coarse 45 %	ISO Coarse 55 %
Installation depth/thickness	[mm]	10	20	40
Nominal air volume flow	[m³/h m²]	2500	2500	2500
Maximum volume flow	[m³/h m²]	10000	10000	10000
Initial pressure drop	[Pa]	9	14	26
Maximum allowed pressure drop	[Pa]	250	250	250
Mean degree of arrestance	[%]	81.0	87.0	93.0
Dust holding capacity:	[g/m²]	635	530	477
Fire behaviour	[DIN 53438]	F1/K1	F1/K1	F1/K1
Max. operating temperature	[°C]	80	70	70
Max. relative air humidity	[%]	100	100	100

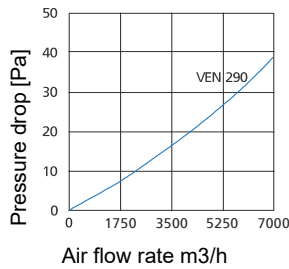
**Form of delivery/
Order number**



FibroidElastov	Size	ORD.No.
Rolls		
TOV-10	2 X 30 m, units of shipment 1	X-TOV-10-C35
TOV-20	2 X 20 m, units of shipment 1	X-TOV-20-C45
Special-dimension elements		
TOV-20	0 to 2 m², maximum width 1 m	X-TOV-20-C45
TOV-40	0 to 2 m², maximum width 1 m	X-TOV-40-C55
Plate		
TOV-10	1 x 1.5 m, packaging unit 5	16 06 581-C35
TOV-20	1 x 1.5 m, packaging unit 5	16 07 021-C45
TOV-40	1 x 1.5 m, packaging unit 5	16 08 021-C55



Pressure drop curve:



Filter mats Venufa 290

consist of polyester fibres with progressive depth structure.

Application:

Filtration of dust particles in air handling systems.

Special features:

Progressively constructed, without wetting agent and regenerable; meets F1/K1 fire protection class; maximum continuous operating temperature 80 °C-

Areas of application:

Climate control and cabinet air handling units, decentral HVAC units, pre-fan and pre-heat exchanger units.

Filter class as of
EN 779:2012
G3

For the NEW Filter class
as of ISO 16890
refer to table

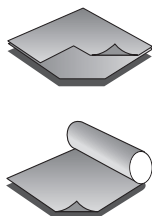
Medium
polyester fibres

Temperature
resistance
< 80 °C

Technical data

Venufa 290		VEN 290
Filter class <i>OLD</i>	[EN 779:2012]	G3
Filter class <i>NEW</i>	[ISO 16890]	ISO Coarse 50 %
Installation depth/thickness	[mm]	20
Nominal air volume flow	[m³/h m²]	5400
Maximum volume flow	[m³/h m²]	7000
Initial pressure drop	[Pa]	31
Maximum allowed pressure drop	[Pa]	250
Mean degree of arrestance	[%]	87.7
Dust holding capacity:	[g/m²]	572
Fire behaviour	[DIN 53438]	F1/K1
Max. operating temperature	[°C]	80
Max. relative air humidity	[%]	100

*Form of delivery/
Order number*



Venufa 290	Size	ORD.No.
Special-dimension elements		
VEN 290	0 to 40 m², maximum width 2 m	X-VEN-290-C50
Rolls		
VEN 290	2 x 20 m, packaging unit 1	40 72 631-C50



Filter mats MyStop 500

consist of polyester fibres that have been spun to produce a very robust fleece with progressive structure, the especially smoothed pure-air side prevents migration of fibres and assures great dust-storage capacity.

Application:

Reliable filtration of coarse dust in climate control and air handling units.

Special features:

Elastic, without wetting agent and regenerable, with progressive structure.

Areas of application:

Standard ventilation and air handling units, supply air units, units for cooling large machines and switchgear, first filter stage for filtration of coarse dust, pre-filter for paint spray compartments and painting installations.

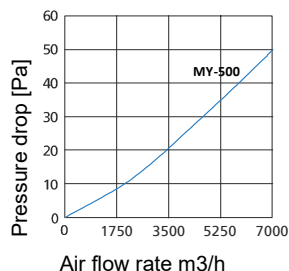
**Filter class as of
EN 779:2012**
G4

**For the NEW Filter class
as of ISO 16890**
refer to table

Medium
polyester fibres

**Temperature
resistance**
< 80 °C

Pressure drop curve:



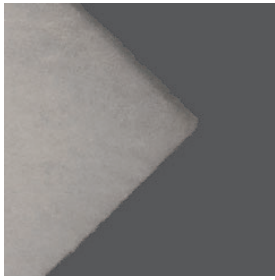
Technical data

MyStop 500		MY-500
Filter class <i>OLD</i>	[EN 779:2012]	G4
Filter class <i>NEW</i>	[ISO 16890]	ISO Coarse 50 %
Installation depth/thickness	[mm]	20
Nominal air volume flow	[m³/h m²]	5400
Maximum volume flow	[m³/h m²]	7000
Initial pressure drop	[Pa]	40
Maximum allowed pressure drop	[Pa]	250
Mean degree of arrestance	[%]	94.4
Dust holding capacity:	[g/m²]	700
Fire behavior	[DIN 53438]	F1/K1
Max. operating temperature	[°C]	80
Max. relative air humidity	[%]	100

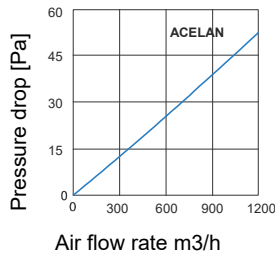
*Form of delivery/
Order number*



MyStop 500	Size	ORD.No.
Special-dimension elements		
MY-500	0 to 40 m², maximum width 2 m	X-MY-500-C50
Rolls		
MY-500	2 x 20 m, packaging unit 1	40 72 731-C50



Pressure drop curve:



Filter mats Acelan

consist of thermally bonded polyester fibres, the elastic medium is not provided with a wetting agent, is progressive, and is constructed with compression on the pure-air side.

Application:

Filtration of fine dust in climate control and air handling systems.

Special features:

with progressive structure, without wetting agent, meets standards for the NEW filter class as of ISO 16890 **ISO ePM₁₀ 50 %** (OLD: M5)

Areas of application:

filtration of supply air of sensitive switchgear, water treatment facilities, pre-filter for paint spray compartments and painting installations, standard climate control and air handling units.



**Filter class as of
EN 779:2012**
M5

**For the NEW Filter class
as of ISO 16890**
refer to table

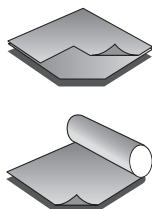
Medium
polyester fibres

**Temperature
resistance**
< 80 °C

Technical data

Acelan		Acelan
Filter class <i>OLD</i>	[EN 779:2012]	M5
Filter class <i>NEW</i>	[ISO 16890]	ISO Coarse 90 %
Installation depth/thickness	[mm]	30
Nominal air volume flow	[m³/h m²]	900
Maximum volume flow	[m³/h m²]	1200
Initial pressure drop	[Pa]	35
Maximum allowed pressure drop	[Pa]	450
Mean degree of arrestance	[%]	97
Mean filtration efficiency	[%]	51
Dust holding capacity:	[g/m²]	211
Fire behaviour	[DIN 53438]	F1/K1
Max. operating temperature	[°C]	80
Max. relative air humidity	[%]	100

**Form of delivery/
Order number**



Acelan	Size	ORD.No.
Special-dimension elements		
Acelan	0 to 40 m², maximum width 2 m	X-Acelan-C90
Rolls		
Acelan	2 x 20 m, packaging unit 1	26 02 850-C90



Filter mats Perfekt 300

consist of superfine, thermally bonded polyester fibres not provided with a wetting agent, with progressive structure, and with compression on the pure-air side.

Filter mats Perfekt 600

are wetted with a bond-active agent, and their pure-air side is reinforced with a lattice structured fabric.

Perfekt 600 filter mats are certified by Eurovent.

Application:

For air handling units with very high standards in air purity.

Areas of application:

Standard climate control and air handling systems, paint spray compartments and paint installations, HVAC equipment.



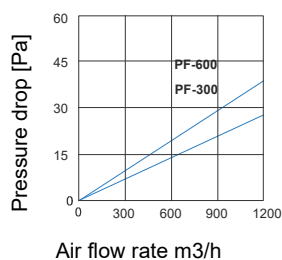
Filter class
M5

Test norm
EN 779:2012

Medium
polyester fibres

Temperature resistance
< 80 °C

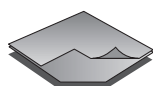
Pressure drop diagrams



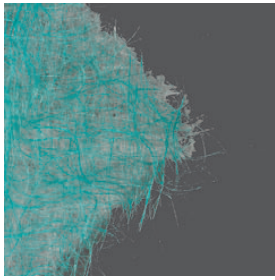
Technical data

	Perfekt	Perfekt 300	Perfekt 600
Filter class <i>OLD</i>	[EN 779:2012]	M5	M5
Filter class <i>NEW</i>	[ISO 16890]	ISO Coarse 85 %	ISO Coarse 95 %
Installation depth/thickness	[mm]	15	20
Nominal air volume flow	[m³/h m²]	900	900
Maximum volume flow	[m³/h m²]	1200	1200
Initial pressure drop	[Pa]	20	27
Maximum allowed pressure drop	[Pa]	450	450
Mean degree of arrestance	[%]	96.4	97.9
Mean filtration efficiency	[%]	53.3	56.6
Dust holding capacity:	[g/m²]	342	387
Fire behavior	[DIN 53438]	F1/K1	F1/K1
Max. operating temperature	[°C]	80	80
Max. relative air humidity	[%]	100	100

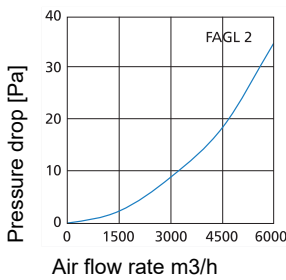
**Form of delivery/
Order number**



Perfekt	Size	ORD.No.
Special-dimension elements		
Perfekt 300	0 to 40 m², maximum width 2 m	X-PF-300-C85
Perfekt 600	0 to 40 m², maximum width 2 m	X-PF-600-C95
Rolls		
Perfekt 300	2 x 20 m, packaging unit 1	40 72 931-C85
Perfekt 600	2 x 20 m, packaging unit 1	40 73 131-C95



Pressure drop curve:



Filter mats FarbGlas 2

consists of fine glass-fibre fabric with compression on the pure-air side, the glass-fibre medium has no wetting agent and is odourless, non-inflammable, and insensitive to moisture in the air.

Application:

Application example:
filtration of paint mist in paint spray compartments and paint facilities.

Special features:

Progressively constructed, maximum continuous operating temperature 120 °C.

Areas of application:

Standard climate control and air handling systems, paint spray compartments and paint installations, HVAC equipment.

Medium
fine glass fibres

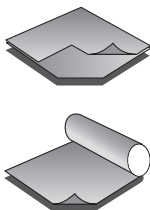
Temperature resistance
< 120 °C

Technical data

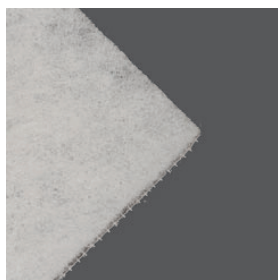
FarbGlas 2		FAGL-2
Installation depth/thickness	[mm]	approx. 55
Max. flow rate	[m ³ /h m ²]	6300
Initial pressure drop	[Pa]	40
Maximum allowed pressure drop	[Pa]	80
Mean degree of arrestance	[%]	97.0 *
Dust holding capacity:	[g/m ²]	–
Fire behaviour	[DIN 53438]	F1/K1
Max. operating temperature	[°C]	120
Max. relative air humidity	[%]	100

* mean degree of arrestance with respect to paint mist

**Form of delivery/
Order number**



FarbGlas 2	Size	ORD.No.
Special-dimension elements		
FarbGlas 2	0 to 40 m ² , maximum width 2 m	X-FAGL-2
Rolls		
FarbGlas 2	2 x 20 m, packaging unit 1	40 60 831



Filter bands Fibroband

consist of fine, randomly structured polyester fibres, the filter layer is constructed on a stiff, tear-resistant polyester gauze which is mounted on a cardboard spool with insertion sleeve for the DELBAG system.

Application:

Filtration of coarse and fine dust in large air-flow volumes, in particular in roll-band filter systems.

Special features:

Cardboard spool with an insertion sleeve; to be used in filter-band DELBAG systems.

Areas of application:

Climate control facilities and air handling units with great air-flow

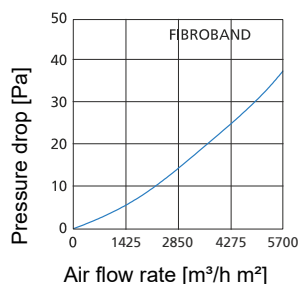
Filter class
G3

Test Norm
EN 779:2012

Medium
polyester fibres

Temperature resistance
< 80 °C

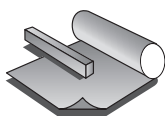
Pressure drop curve:



Technical data

Fibroband		Fibroband
Filter class	[EN 779:2012]	G3
Installation depth/thickness	[mm]	10
Nominal air volume flow	[m³/h m²]	5700
Maximum volume flow	[m³/h m²]	7000
Initial pressure drop	[Pa]	40
Maximum allowed pressure drop	[Pa]	250
Mean degree of arrestance	[%]	88.1
Dust holding capacity:	[g/m²]	398
Fire behavior	[DIN 53438]	F1/K1
Max. operating temperature	[°C]	80
Max. relative air humidity	[%]	100

*Form of delivery/
Order number*



Fibroband	Size	ORD.No.
Cardboard spool with insertion sleeve for DELBAG system, packaging unit 1		
Size 1	0.81 m x 20 m, weight/unit 6.2 kg	40 09 021
Size 2	1.11 m x 20 m, weight/unit 8.3 kg	40 09 121
Size 3	1.41 m x 20 m, weight/unit 10.4 kg	40 09 221
Size 4	1,71 m x 20 m, weight/unit 12,5 kg	40 09 321
Size 5	2.01 m x 20 m, weight/unit 14.6 kg	40 09 521

Filter bands 402/411/412

consist of glass fibres with progressive structure. High dust-holding capacity is achieved by wetting the fibres with an antibacterial and water-resistant dust binder. The filter bands are suitable for three different mounting systems:

- 402 for CEAG/AAF system
- 411 for SCHIRP system
- 412 for DELBAG system

Application:

Filtration of coarse and fine dust in large air-flow volumes, in particular in roll-band filter systems

Special features:

When placing your order please consider three different mounting systems!

- 402 steel spool with side window
- 411 cardboard spool
- 412 cardboard spool with insertion sleeve

Areas of application:

Climate control facilities and air handling units with great air-flow

Filter class
G4

Test Norm
EN 779:2012

Medium
glass fibres

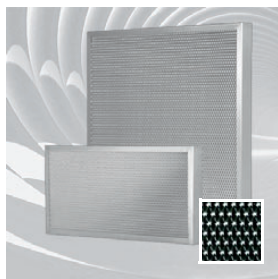
Temperature resistance
< 65°C

Technical data

Filterband		402	411	412
Filter class	[EN 779:2012]	G4	G4	G4
Installation depth/thickness	[mm]	50	50	50
Nominal air volume flow	[m ³ /h m ²]	10800	10800	10800
Maximum volume flow	[m ³ /h m ²]	15000	15000	15000
Initial pressure drop	[Pa]	40	50	50
Recommended final pressure drop	[Pa]	180	180	180
Mean degree of arrestance	[%]	91.0	91.0	91.0
Fire behaviour	[DIN 53438]	F1/K1	F1/K1	F1/K1
Max. operating temperature	[°C]	65	65	65
Max. relative air humidity	[%]	100	100	100

*Form of delivery/
Order number*

Filterband	Width [mm]	Weight [kg]	ORD.No.
402, steel spool with side window, roll à 20 m, packaging unit 1			
402-3	832	11.0	40 52 031
402-4	1137	12.4	40 52 131
402-5	1442	16.8	40 52 231
402-6	1747	21.7	40 52 331
402-7	2052	27.6	40 52 431
402, cardboard spool, roll à 20 m, packaging unit 1			
411-3	832	8.3	40 51 031
411-4	1137	9.9	40 51 131
411-5	1442	12.0	40 51 231
411-6	1747	13.8	40 51 331
411-7	2052	19.0	40 51 431
412, steel spool with insertion sleeve, roll à 21 m, packaging unit 1			
412-1	810	10.0	40 51 531
412-2	1110	14.8	40 51 631
412-3	1410	18.5	40 51 731
412-4	1710	21.0	40 51 831
412-5	2010	26.5	40 51 931



Filter Plates GAL

several layers of aluminium or stainless-steel woven wire mesh are installed between metal support plates made of expanded metal mesh on two sides, and are framed by a sturdy U-shaped profile frame made of aluminium or stainless steel, the filter cells are regenerable.

Application:

Pre-filter elements for filtration of highly concentrated dust and oil and emulsion mist.

Special features:

High maximum operating temperature (400 °C); high dust holding capacity.

Areas of application:

Steel and metallurgical industry in highly dust-laden and harsh conditions, power stations, off-shore facilities, air treatment facilities in arid and tropical regions, filtration of mist in cooling and lubrication processes with metal cutting and non-cutting tools, engineering, tools and vehicle industries, rolling mills.

Frame material

Aluminium or stainless steel

Filter class

G3

Test norm

EN 779:2012

Medium

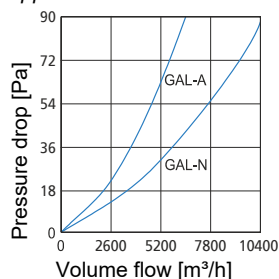
Aluminium or stainless-steel woven wire mesh

Temperature resistance

< 400 °C

Pressure drop diagrams

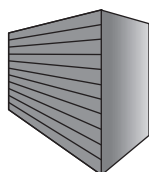
applies to size 592 x 592 x 48 mm



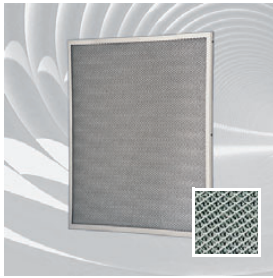
Technical data

GAL		GAL-A	GAL-N
Filter class	[EN 779:2012]	G3	G3
Installation depth/thickness	[mm]	48	48
Nominal air volume flow	[m³/h m²]	6850	10400
Initial pressure drop	[Pa]	84	86
Maximum allowed pressure drop	[Pa]	500	500
Mean degree of arrestance	[%]	87.0	86.0
Dust holding capacity:	[g/m²]	400	400
Max. operating temperature	[°C]	400	400
Chassis		Aluminium	Stainless steel

Form of delivery/ Order number



GAL	Size W/H/D [mm]	Volume flow [m³/h]	Approx. weight [kg]	Order number
Filter plate, packaging unit 1				
GAL aluminium	287/287/48	600	1.3	00 02 592
GAL aluminium	287/592/48	1200	1.5	00 02 591
GAL aluminium	592/592/48	2400	2.9	60 04 481
GAL stainless steel	287/592/48	1800	3.1	00 39 401
GAL stainless steel	592/592/48	3600	5.6	60 04 581
GAL stainless steel	287/287/48	900	2.8	20 48 300



Filter plates HL 12.5

consist of several layers of bonded expanded metal mesh, which is effective for separation of coarse dust due to the labyrinth structure of the plates; the filter plates are wetted with a dust-trapping agent VISCINOL*, and are regenerable.

Application:

Filtration of coarse dust in climate control and air handling units.

Special features:

High dust-holding capacity resulting in extended service life; use with 2 or 3 plates.

Areas of application:

Steel and metallurgical industry, roll mills, power stations, engineering, tools and vehicle industries, machine-room ventilation, filtration of mist in cooling and lubrication processes with metal cutting and non-cutting tools, filtration of wax mist in car-making industry and automated welding facilities, spark protection.

Frame material
galvanized steel

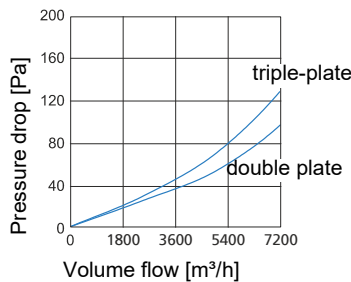
Filter class
G3 & G4

Test norm
EN 779:2012

Medium
bonded expanded metal mesh

Temperature resistance
< 45 °C
depending on wetting agent

Pressure drop diagrams

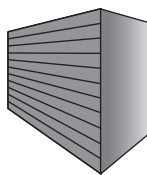


Technical data

HL 12,5	double plate	triple-plate
Filter class [EN 779:2012]	G3	G4
Installation depth/thickness [mm]	2/12.5	3/12.5
Nominal air volume flow [m³/h m²]	7200	7200
Initial pressure drop [Pa]	70	100
Maximum allowed pressure drop [Pa]	500	500
Mean degree of arrestance [%]	86.0	91.0
Dust holding capacity: [g/m²]	450	494
Max. operating temperature [°C]	45 *	45 *
Max. relative air humidity [%]	100	100

* depending on wetting agent

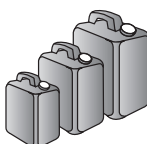
**Form of delivery/
Order number**



HL 12.5	Size W/H [mm]	Approx. weight [kg]	Order number
Filter plate, packaging unit 1			
surface sendizimir galvanized	494/494 with key hole	2.5	60 01 021
surface galvanized		2.5	60 02 281
aluminium		0.8	60 01 521
surface sendizimir galvanized	494/494 with handle	2.5	60 01 121
surface galvanized		2.5	00 00 098
aluminium		0.8	60 01 681
Aluminium	494/988 with key hole	2.0	60 01 881

* Dust-trapping agent VISCINOL

**Form of delivery/
Order number**



VISCINOL	Temperature range [°C]	Approx. weight [kg]	Order number
Container – minimum purchase quantity 20 l			
VISCINOL A-30 20 liter	-15 to +45	0.9	20 00 365

IDEAL BUSINESS CLIMATE FOR EMPLOYEES AND CUSTOMERS

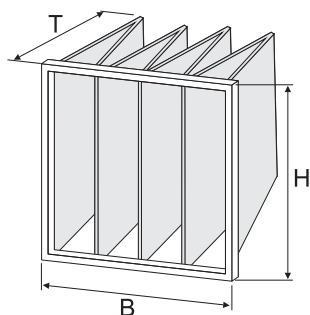
Bag Filters

The layout of the HVAC equipment has to be as individual and flexible, as the building with its dimensioning and architecture, where this equipment is installed. Shopping malls set a good example and make it clear that different requirements and specifications meet in this place: customers should feel comfortable and at ease, stay in the mall as long as possible while making their purchases. The goods should not be covered with a dust layer.

The bag filters are characterized by the following features:

- High initial efficiency
- Good energy-efficiency classes
- High dust holding capacities
- Wide selection of sizes and bag combinations
- Availability of different media





Bag Filter MultiSack synthetic filter medium/plastic (K), Premium NANOWAVE® synthetic filter medium (N), welded synthetic filter medium (R) and glass fiber fleece (G)

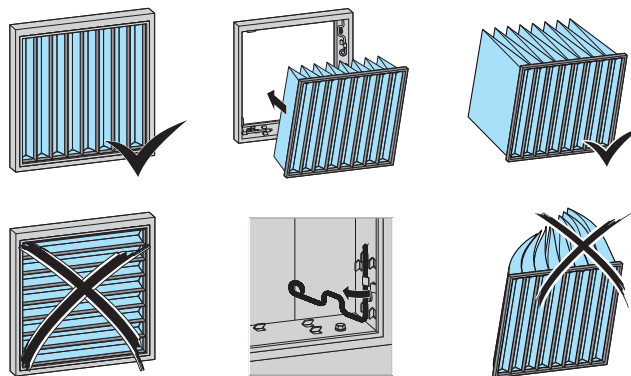
are composed of several filter bags. The individual bags, made of synthetic fibre or micro-fibreglass fleece, have been shaped so as to provide wedge-shaped filter bags. The spacers in the individual filter bags ensure complete utilization of the full bag depth and, in turn, of the entire filter surface. The ready-to-install filter bags are secured to sturdy U-shaped profile frames (25 mm) by clamp fittings. The frame is made of galvanized sheet steel or of sturdy plastic (available upon request).

Width, height and depth are specified like in the drawing!

Ambient conditions:

Maximum operating temperature: 80 °C
Maximum relative air humidity: 100 %

Installation instruction:



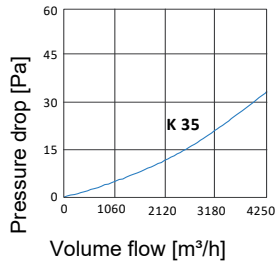
Unit type code

Example: MultiSack K 6 5 6 V / 0 6 0 0 / 0 8 / 0 5 / EX / F1

MultiSack	Product description	Filter medium	Modular grid Nominal air flow volume	Frame type	Bag length	Number of filter bags	Frame thickness	Optional configuration	Optional configuration
K35, K50, K55, K65, K85, K95	Synthetic filter media								
N85, N95	Premium synthetic filter media								
R90, R60	Welded synthetic filter media								
G55, G65, G85, G95	Micro glass-fibre fleece								
1	Size B/H [mm] 592/287	Rated volume flow [m³/h]	1700						
2	287/287		850						
3	287/592		1700						
5	490/592		2800						
6	592/592		3400						
Other sizes are available on request.									
K	Synthetic								
V	Galvanized metal sheet								
0195; 0360; 0380; 0500; 0534; 0600	standard sizes [mm]								
Individual size on request									
Number of filter bags									
05	Standard thickness 25 mm								
00	20 mm in galvanized frame								
N	OPTIONAL: neutral								
EX	OPTIONAL EX-version (available in micro-glass fibre medium)								
F1	OPTIONAL: design including flat profile gasket on the crude air side								
F2	OPTIONAL: design incl. flat profile gasket on the clean air side								



Pressure drop diagram:
Applies to size 592x592x600 mm/
6 bags



Bag filter MultiSack K35

consist of synthetic fibre fleece with progressive depth structure, the spacers ensure complete utilization of the full bag length; sealing of spacer seams; as compared to rated air-flow volume, operating air-flow volume can be increased by 25%, cone-shaped bags.

Application:

Coarse dust filtration

Areas of application:

All HVAC and air handling installations with a filtration function.

Type:

designed in galvanized frame – surcharge for plastic frame on request.


Frame material
Plastic or galvanized

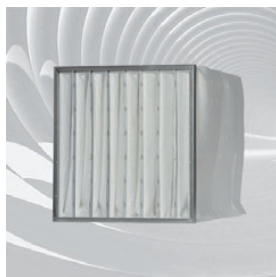
Filter class as of EN 779:2012
G4

For the NEW filter class as of ISO 16890
refer to table

Medium
synthetic filter media

Temperature resistance
< 70 °C

 Bag filter MultiSack K35 Filter medium: Synthetic									
Item number	Type code	Width [mm]	Height [mm]	Depth [mm]	Number of bags [quantity]	Filter surface [m ²]	Volume flow [m ³ /h]	Initial pressure drop [Pa]	NEW filter class as of ISO 16890
2000518	K35-6V/0600/06/05-C65	592	592	600	6	4.4	3400	20	ISO Coarse 65 %
2000546	K35-5V/0600/05/05-C65	490	592	600	5	3.8	2800	20	
2000519	K35-3V/0600/03/05-C65	287	592	600	3	2.2	1700	20	
2102136	K35-2V/0600/03/05-C65	287	287	600	3	1.1	850	20	
2000604	K35-1V/0600/06/05-C65	592	287	600	6	2.2	1700	20	
2000717	K35-6V/0600/04/05-C65	592	592	600	4	3.0	3400	25	ISO Coarse 65 %
2102225	K35-5V/0600/03/05-C65	490	592	600	3	2.2	2800	25	
2102162	K35-3V/0600/02/05-C65	287	592	600	2	1.5	1700	25	
2000721	K35-2V/0600/02/05-C65	287	287	600	2	0.7	850	25	
2000520	K35-1V/0600/04/05-C65	592	287	600	4	1.5	1700	25	
1011142	K35-6V/0360/06/05-C65	592	592	360	6	2.7	3400	35	ISO Coarse 65 %
1011141	K35-5V/0360/05/05-C65	490	592	360	5	2.2	2800	35	
1011140	K35-3V/0360/03/05-C65	287	592	360	3	1.3	1700	35	
1042127	K35-2V/0360/03/05-C65	287	287	360	3	0.7	850	35	
2000964	K35-1V/0360/06/05-C65	592	287	360	6	1.3	1700	35	
1011116	K35-6V/0360/04/05-C65	592	592	360	4	1.8	3400	40	ISO Coarse 65 %
1011139	K35-5V/0360/03/05-C65	490	592	360	3	1.3	2800	40	
1011117	K35-3V/0360/02/05-C65	287	592	360	2	0.9	1700	40	
1011118	K35-2V/0360/02/05-C65	287	287	360	2	0.5	850	40	
1042130	K35-1V/0360/04/05-C65	592	287	360	4	0.9	1700	40	
2000469	K35-6V/0195/06/05-C65	592	592	195	6	1.5	3400	60	ISO Coarse 65 %
2102219	K35-5V/0195/05/05-C65	490	592	195	5	1.2	2800	60	
2102156	K35-3V/0195/03/05-C65	287	592	195	3	0.7	1700	60	
2102128	K35-2V/0195/03/05-C65	287	287	195	3	0.3	850	60	
2102099	K35-1V/0195/06/05-C65	592	287	195	6	0.7	1700	60	
1011113	K35-6V/0195/04/05-C65	592	592	195	4	1.0	3400	80	ISO Coarse 65 %
1011150	K35-5V/0195/03/05-C65	490	592	195	3	0.7	2800	80	
1011114	K35-3V/0195/02/05-C65	287	592	195	2	0.5	1700	80	
1011115	K35-2V/0195/02/05-C65	287	287	195	2	0.2	850	80	
1042222	K35-1V/0195/04/05-C65	592	287	195	4	0.5	1700	80	



Bag filter MultiSack K50

consist of Premium synthetic fibre fleece with progressive depth structure, the spacers ensure complete utilization of the full bag length; sealing of spacer seams; as compared to rated air-flow volume, operating air-flow volume can be increased by 25%, cone-shaped bags.

Application:

Fine particle filtration

Special features:

featuring a high dust holding capacity and inducing a low energy consumption.

Areas of application:

All HVAC and air handling installations with a filtration function.

Type:

designed in galvanized frame – surcharge for plastic frame on request.

The recommended final pressure difference:

200 Pa



Frame material
Plastic or galvanized

Filter class as of EN 779:2012
M5

For the NEW filter class as of ISO 16890
refer to table

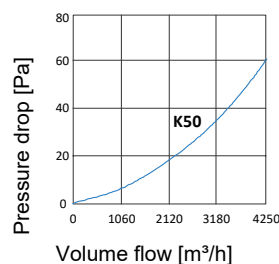
Medium:
Premium synthetic

Temperature resistance
< 70 °C


Energy class
A *

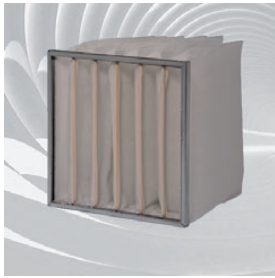
Pressure drop diagram:

Applies to size 592 x 592 x 600 mm/
8 bags

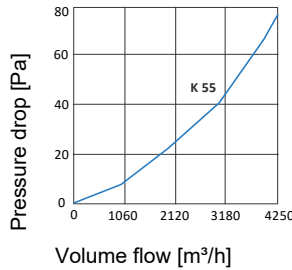


* applies only to certain sizes – see table

 Bag filter MultiSack K50 Filter medium: Premium synthetic		Width [mm]	Height [mm]	Depth [mm]	Number of bags [quantity]	Filtration surface [m²]	Volume flow [m³/h]	Initial pressure drop [Pa]	Energy class certified by the Eurovent 4/21	NEW filter class as of ISO 16890
FI6600196	K50-6V/0600/08/05-L50	592	592	600	8	6	3400	45	A	ISO ePM ₁₀ 50 %
FI6600235	K50-5V/0600/06/05-L50	490	592	600	6	4.5	2800	45		
FI6600233	K50-3V/0600/04/05-L50	287	592	600	4	3	1700	45		
FI6600231	K50-2V/0600/04/05-L50	287	287	600	4	1.5	850	45		
FI6600228	K50-1V/0600/08/05-L50	592	287	600	8	3	1700	45		
FI6600225	K50-6V/0500/08/05-L50	592	592	500	8	5	3400	50	A	ISO ePM ₁₀ 50 %
FI6600224	K50-5V/0500/06/05-L50	490	592	500	6	3.8	2800	50		
FI6600226	K50-3V/0500/04/05-L50	287	592	500	4	2.5	1700	50		
FI6600230	K50-2V/0500/04/05-L50	287	287	500	4	1.3	850	50		
FI6600227	K50-1V/0500/08/05-L50	592	287	500	8	2.5	1700	50		
FI6600219	K50-6V/0360/08/05-L50	592	592	360	8	3.6	3400	75	D	ISO ePM ₁₀ 50 %
FI6600234	K50-5V/0360/06/05-L50	490	592	360	6	2.8	2800	75		
FI6600232	K50-3V/0360/04/05-L50	287	592	360	4	1.8	1700	75		
FI6600229	K50-2V/0360/04/05-L50	287	287	360	4	1	850	75		
FI6600218	K50-1V/0360/08/05-L50	592	287	360	8	1.8	1700	75		



Pressure drop diagram:
Applies to size 592 x 592 x 600 mm/
6 bags



Bag filter MultiSack K55

consist of synthetic fibre fleece with progressive depth structure, the spacers ensure complete utilization of the full bag length; sealing of spacer seams; as compared to rated air-flow volume, operating air-flow volume can be increased by 25%, cone-shaped bags.

Application:

Fine particle filtration

Areas of application:

All HVAC and air handling installations with a filtration function.

Type:

designed in galvanized frame – surcharge for plastic frame on request.

The recommended final pressure difference:

200 Pa



Frame material

Plastic or galvanized

Filter class as of

EN 779:2012

M5

For the NEW filter

class as of ISO 16890

refer to table

Medium:

synthetic


Temperature

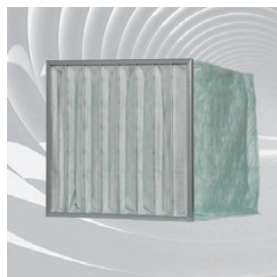
resistance

< 70 °C

Energy class

E

 Bag filter MultiSack K55 Filter medium: Synthetic		Width [mm]	Height [mm]	Depth [mm]	Number of bags [quantity]	Filtration surface [m ²]	Volume flow [m ³ /h]	Initial pressure drop [Pa]	Energy class certified by the Eurovent 4/21	NEW filter class as of ISO 16890
2015717	K55-6V/0600/06/05-L50	592	592	600	6	4.5	3400	50	E	ISO ePM ₁₀ 50 %
2015830	K55-5V/0600/05/05-L50	490	592	600	5	3.8	2800	50		
2015829	K55-3V/0600/03/05-L50	287	592	600	3	2.3	1700	50		
2015828	K55-2V/0600/03/05-L50	287	287	600	3	1.2	850	50		
2015827	K55-1V/0600/06/05-L50	592	287	600	6	2.3	1700	50		
2601596	K55-6V/0500/06/05-L50	592	592	500	6	3.8	3400	65	E	ISO ePM ₁₀ 50 %
2601595	K55-5V/0500/05/05-L50	490	592	500	5	3.2	2800	65		
2601594	K55-3V/0500/03/05-L50	287	592	500	3	1.8	1700	65		
2601593	K55-2V/0500/03/05-L50	287	287	500	3	0.8	850	65		
2601592	K55-1V/0500/06/05-L50	592	287	500	6	1.8	1700	65		
2015817	K55-6V/0360/06/05-L50	592	592	360	6	2.7	3400	90	E	ISO ePM ₁₀ 50 %
2015821	K55-5V/0360/05/05-L50	490	592	360	5	2.2	2800	90		
2015820	K55-3V/0360/03/05-L50	287	592	360	3	1.3	1700	90		
2015819	K55-2V/0360/03/05-L50	287	287	360	3	0.7	850	90		
2015818	K55-1V/0360/06/05-L50	592	287	360	6	1.3	1700	90		



Bag filter MultiSack K65

consist of synthetic fibre fleece with progressive depth structure, the spacers ensure complete utilization of the full bag length; sealing of spacer seams; as compared to rated air-flow volume, operating air-flow volume can be increased by 25%, cone-shaped bags.

Application:

Fine particle filtration

Areas of application:

All HVAC and air handling installations with a filtration function.

Type:

designed in galvanized frame – surcharge for plastic frame on request.

The recommended final pressure difference:

200 Pa



Frame material
Plastic or galvanized

Filter class as of EN 779:2012
M6

For the NEW filter class as of ISO 16890
refer to table

Medium:
synthetic

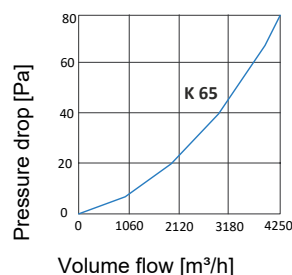
Temperature resistance
< 70 °C

Energy class
B *

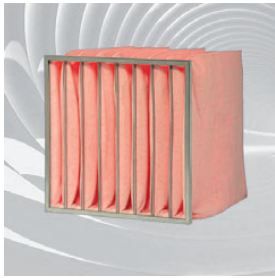
* applies only to certain sizes – see table

Pressure drop diagram:

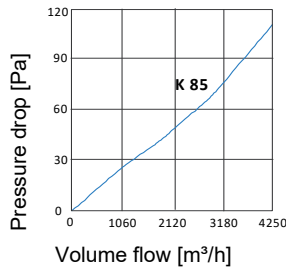
Applies to size 592 x 592 x 600 mm/
8 bags



Bag filter		MultiSack K65								
Filter medium:		Synthetic								
Item number	Type code	Width [mm]	Height [mm]	Depth [mm]	Number of bags [quantity]	Filter surface [m²]	Volume flow [m³/h]	Initial pressure drop [Pa]	Energy class certified by the Eurovent 4/21	NEW filter class as of ISO 16890
1041833	K65-6V/0600/08/05-L75	592	592	600	8	6.0	3400	50	B	ISO ePM ₁₀ 75 %
1041824	K65-5V/0600/06/05-L75	490	592	600	6	4.4	2800	50		
1041818	K65-3V/0600/04/05-L75	287	592	600	4	3.0	1700	50		
1041815	K65-2V/0600/04/05-L75	287	287	600	4	1.5	850	50		
1041830	K65-1V/0600/08/05-L75	592	287	600	8	3.0	1700	50	C	ISO ePM ₁₀ 75 %
2013726	K65-6V/0600/06/05-L75	592	592	600	6	4.4	3400	60		
2015811	K65-5V/0600/05/05-L75	490	592	600	5	3.8	2800	60		
2013724	K65-3V/0600/03/05-L75	287	592	600	3	2.2	1700	60		
2015810	K65-2V/0600/03/05-L75	287	287	600	3	1.1	850	60	E	ISO ePM ₁₀ 75 %
2015809	K65-1V/0600/06/05-L75	592	287	600	6	2.2	1700	60		
1041773	K65-6V/0534/08/05-L75	592	592	534	8	5.2	3400	50		
1041764	K65-5V/0534/06/05-L75	490	592	534	6	3.9	2800	50		
1041758	K65-3V/0534/04/05-L75	287	592	534	4	2.6	1700	50	E	ISO ePM ₁₀ 75 %
1041755	K65-2V/0534/04/05-L75	287	287	534	4	1.3	850	50		
2102495	K65-1V/0534/08/05-L75	592	287	534	8	2.6	1700	50		
2015803	K65-6V/0534/06/05-L75	592	592	534	6	3.9	3400	65		
2015802	K65-5V/0534/05/05-L75	490	592	534	5	3.3	2800	65	E	ISO ePM ₁₀ 75 %
2015801	K65-3V/0534/03/05-L75	287	592	534	3	1.9	1700	65		
2015800	K65-2V/0534/03/05-L75	287	287	534	3	0.9	850	65		
2015799	K65-1V/0534/06/05-L75	592	287	534	6	1.9	1700	65		
2102641	K65-6V/0380/08/05-L75	592	592	380	8	3.9	3400	65	E	ISO ePM ₁₀ 75 %
2102613	K65-5V/0380/06/05-L75	490	592	380	6	2.9	2800	65		
2102549	K65-3V/0380/04/05-L75	287	592	380	4	1.9	1700	65		
2102520	K65-2V/0380/04/05-L75	287	287	380	4	0.9	850	65		
2102489	K65-1V/0380/08/05-L75	592	287	380	8	1.9	1700	65	E	ISO ePM ₁₀ 75 %
2015793	K65-6V/0380/06/05-L75	592	592	380	6	2.9	3400	75		
2015792	K65-5V/0380/05/05-L75	490	592	380	5	2.4	2800	75		
2015791	K65-3V/0380/03/05-L75	287	592	380	3	1.5	1700	75		
2015790	K65-2V/0380/03/05-L75	287	287	380	3	0.7	850	75		
2015789	K65-1V/0380/06/05-L75	592	287	380	6	1.5	1700	75		



Pressure drop diagram:
Applies to size 592 x 592 x 600 mm/
8 bags



Bag filter MultiSack K85

consist of synthetic fibre fleece with progressive depth structure, the spacers ensure complete utilization of the full bag length; sealing of spacer seams; as compared to rated air-flow volume, operating air-flow volume can be increased by 25%, cone-shaped bags.

Application:

Fine particle filtration

Areas of application:

All HVAC and air handling installations with a filtration function.

Type:

designed in galvanized frame – surcharge for plastic frame on request.

The recommended final pressure difference:

250 Pa



Frame material
Plastic or galvanized

Filter class as of
EN 779:2012
F7


For the NEW filter
class as of ISO 16890
refer to table

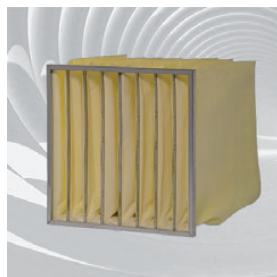
Medium:
synthetic

Temperature
resistance
< 70 °C

Energy class
D *

*Applies only to certain sizes - see table

 Bag filter Filter medium: Synthetic		MultiSack K85								
Item number	Type code	Width [mm]	Height [mm]	Depth [mm]	Number of bags [quantity]	Filter surface [m²]	Volume flow [m³/h]	Initial pressure drop [Pa]	Energy class certified by the Eurovent 4/21	NEW filter class as of ISO 16890
1041480	K85-6V/0600/08/05-M65	592	592	600	8	6.0	3400	90	D	ISO ePM _{2.5} 65 %
1041471	K85-5V/0600/06/05-M65	490	592	600	6	4.4	2800	90		
1041465	K85-3V/0600/04/05-M65	287	592	600	4	3.0	1700	90		
1041462	K85-2V/0600/04/05-M65	287	287	600	4	1.5	850	90		
1041477	K85-1V/0600/06/05-M65	592	287	600	6	3.0	1700	90		
2015783	K85-6V/0600/06/05-M65	592	592	600	6	4.4	3400	135	D	ISO ePM _{2.5} 65 %
2015782	K85-5V/0600/05/05-M65	490	592	600	5	3.8	2800	135		
2013725	K85-3V/0600/03/05-M65	287	592	600	3	2.2	1700	135		
2015781	K85-2V/0600/03/05-M65	287	287	600	3	1.1	850	135		
2015780	K85-1V/0600/06/05-M65	592	287	600	6	2.2	1.700	135		
1041420	K85-6V/0534/08/05-M65	592	592	534	8	5.2	3400	100	D	ISO ePM _{2.5} 65 %
2102925	K85-5V/0534/06/05-M65	490	592	534	6	3.9	2800	100		
1041405	K85-3V/0534/04/05-M65	287	592	534	4	2.6	1700	100		
2102834	K85-2V/0534/04/05-M65	287	287	534	4	1.3	850	100		
2102802	K85-1V/0534/08/05-M65	592	287	534	8	2.6	1700	100		
2015774	K85-6V/0534/06/05-M65	592	592	534	6	3.9	3400	115	D	ISO ePM _{2.5} 65 %
2015773	K85-5V/0534/05/05-M65	490	592	534	5	3.3	2800	115		
2015772	K85-3V/0534/03/05-M65	287	592	534	3	1.9	1700	115		
2015771	K85-2V/0534/03/05-M65	287	287	534	3	0.9	850	115		
2015770	K85-1V/0534/06/05-M65	592	287	534	6	1.9	1700	115		
2102948	K85-6V/0380/08/05-M65	592	592	380	8	3.9	3400	155	D	ISO ePM _{2.5} 65 %
2000713	K85-5V/0380/04/05-M65	490	592	380	4	1.9	2800	155		
2000713	K85-3V/0380/04/05-M65	287	592	380	4	1.9	1700	155		
2102828	K85-2V/0380/04/05-M65	287	287	380	4	0.9	850	155		
2102796	K85-1V/0380/08/05-M65	592	287	380	8	1.9	1700	155		
2015764	K85-6V/0380/06/05-M65	592	592	380	6	2.9	3400	160	E	ISO ePM _{2.5} 65 %
2015763	K85-5V/0380/05/05-M65	490	592	380	5	2.4	2800	160		
2015762	K85-3V/0380/03/05-M65	287	592	380	3	1.5	1700	160		
2015761	K85-2V/0380/03/05-M65	287	287	380	3	0.7	850	160		
2015760	K85-1V/0380/06/05-M65	592	287	380	6	1.5	1700	160		



Bag filter MultiSack K95

consists of synthetic fibre fleece

Special features:

The spacers ensure complete utilization of the full bag length; sealing of spacer seams; as compared to rated air-flow volume, operating air-flow volume can be increased by 25%, cone-shaped bags.

Application:

Fine particle filtration

Areas of application:

All HVAC and air handling installations with a filtration function.

Type:

designed in galvanized frame – surcharge for plastic frame on request.

The recommended final pressure difference:

250 Pa



Frame material

Plastic or galvanized

Filter class as of

EN 779:2012

F8

For the NEW filter class as of ISO 16890

refer to table

Medium:

synthetic

Temperature

resistance

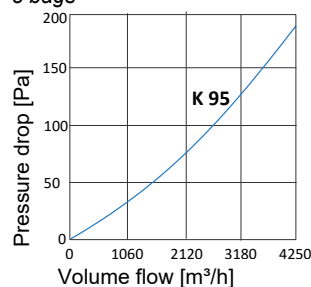
< 70 °C


Energy class

E

Pressure drop diagram:

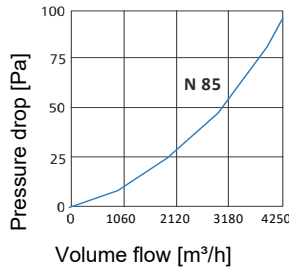
Applies to size 592 x 592 x 600 mm/
8 bags



 Bag filter MultiSack K95 Filter medium: Synthetic		Width [mm]	Height [mm]	Depth [mm]	Number of bags [quantity]	Filtration surface [m ²]	Volume flow [m ³ /h]	Initial pressure drop [Pa]	Energy class certified by the Eurovent 4/21	NEW filter class as of ISO 16890
1041126	K95-6V/0600/08/05-F65	592	592	600	8	6	3400	120	E	ISO ePM ₁ 75 %
1041117	K95-5V/0600/06/05-F65	490	592	600	6	4.4	2800	120		
1041111	K95-3V/0600/04/05-F65	287	592	600	4	3	1700	120		
1041108	K95-2V/0600/04/05-F65	287	287	600	4	1.5	850	120		
1041123	K95-1V/0600/08/05-F65	592	287	600	8	3	1700	120		
2103267	K95-6V/0534/08/05-F65	592	592	534	8	5.2	3400	170	E	ISO ePM ₁ 75 %
2103238	K95-5V/0534/06/05-F65	490	592	534	6	3.9	2800	170		
2103173	K95-3V/0534/04/05-F65	287	592	534	4	2.6	1700	170		
2103142	K95-2V/0534/04/05-F65	287	287	534	4	1.3	850	170		
2103110	K95-1V/0534/08/05-F65	592	287	534	8	2.6	1700	170		
2103261	K95-6V/0380/08/05-F60	592	592	380	8	3.9	3400	220	E	ISO ePM ₁ 60 %
2103232	K95-5V/0380/06/05-F60	490	592	380	6	2.9	2800	220		
2103167	K95-3V/0380/04/05-F60	287	592	380	4	1.9	1700	220		
2103136	K95-2V/0380/04/05-F60	287	287	380	4	0.9	850	220		
2103104	K95-1V/0380/08/05-F60	592	287	380	8	1.9	1700	220		



Pressure drop diagram:
Applies to size 592 x 592 x 600 mm/
bags



Bag filter MultiSack N85

consist of Premium NANOWAVE® synthetic fibre fleece with progressive depth structure, the spacers ensure complete utilization of the full bag length; sealing of spacer seams; as compared to rated air-flow volume, operating air-flow volume can be increased by 25%, cone-shaped bags

Application:

Fine particle filtration

Special features:

NANOWAVE® fibres in the fleece guarantee low pressure losses and large dust holding capacity

Areas of application:

All HVAC and air handling installations with a filtration function

Type:

designed in galvanized frame – surcharge for plastic frame on request

The recommended final pressure difference:

250 Pa



Frame material

Plastic or galvanized

Filter class as of

EN 779:2012

F7

For the NEW filter

class as of ISO 16890

refer to table

Medium

NANOWAVE®

Premium Synthetic

Temperature

resistance

< 70 °C

Energy class

B *

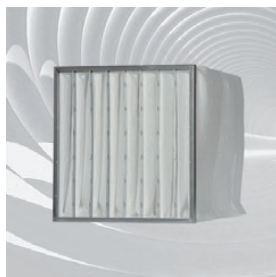


Filter also available as

Life-Science Version

* applies only to certain sizes – see table

Bag filter Premium MultiSack N85 Filter medium: Premium NANOWAVE® synthetic									
Type code	Width [mm]	Height [mm]	Depth [mm]	Number of bags [quantity]	Filtration surface [m²]	Volume flow [m³/h]	Initial pressure drop [Pa]	Energy class certified by the Eurovent 4/21	NEW filter class as of ISO 16890
N85-6V/0650/10/05-M55	592	592	650	10	8	3400	65	B	ISO ePM ₁ 60 %
N85-5V/0650/08/05-M55	490	592	650	8	6.4	2800	65		
N85-3V/0650/05/05-M55	287	592	650	5	4	1700	65		
N85-2V/0650/05/05-M55	287	287	650	5	2	850	65		
N85-1V/0650/10/05-M55	592	287	650	10	4	1700	65		
N85-6V/0600/10/05-M55	592	592	600	10	7.5	3400	65	B	ISO ePM ₁ 60 %
N85-5V/0600/08/05-M55	490	592	600	8	6	2800	65		
N85-3V/0600/05/05-M55	287	592	600	5	3.8	1700	65		
N85-2V/0600/05/05-M55	287	287	600	5	1.9	850	65		
N85-1V/0600/10/05-M55	592	287	600	10	3.8	1700	65		
N85-6V/0600/08/05-M55	592	592	600	8	6	3400	75	D	ISO ePM ₁ 60 %
N85-5V/0600/06/05-M55	490	592	600	6	4.4	2800	75		
N85-3V/0600/04/05-M55	287	592	600	4	3	1700	75		
N85-2V/0600/04/05-M55	287	287	600	4	1.5	850	75		
N85-1V/0600/08/05-M55	592	287	600	8	3	1700	75		
N85-6V/0534/10/05-M55	592	592	534	10	7.5	3400	80	D	ISO ePM ₁ 60 %
N85-5V/0534/08/05-M55	490	592	534	8	6	2800	80		
N85-3V/0534/05/05-M55	287	592	534	5	3.8	1700	80		
N85-2V/0534/05/05-M55	287	287	534	5	1.9	850	80		
N85-1V/0534/10/05-M55	592	287	534	10	3.8	1700	80		
N85-6V/0380/10/05-M55	592	592	380	10	4.5	3400	100	E	ISO ePM ₁ 55 %
N85-5V/0380/08/05-M55	490	592	380	8	3.9	2800	100		
N85-3V/0380/05/05-M55	287	592	380	5	2.4	1700	100		
N85-2V/0380/05/05-M55	287	287	380	5	1.1	850	100		
N85-1V/0380/10/05-M55	592	287	380	10	2.4	1700	100		



Bag filter MultiSack N95

consist of Premium NANOWAVE® synthetic fibre fleece with progressive depth structure, the spacers ensure complete utilization of the full bag length; sealing of spacer seams; as compared to rated air-flow volume, operating air-flow volume can be increased by 25%, cone-shaped bags.

Application:

Fine particle filtration

Special features:

NANOWAVE® fibres in the fleece guarantee low pressure losses and large dust holding capacity.

Areas of application:

All HVAC and air handling installations with a filtration function.

Type:

designed in galvanized frame – surcharge for plastic frame on request.

The recommended final pressure difference:

250 Pa



Frame material
Plastic or galvanized

Filter class as of EN 779:2012
F9

For the NEW filter class as of ISO 16890
refer to table

Medium
NANOWAVE®
Premium Synthetic

Temperature resistance
< 70 °C

Energy class
C *

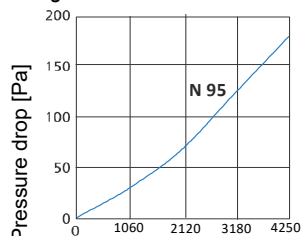


Filter also available as Life-Science Version

* applies only to certain sizes – see table

Pressure drop diagram:

Applies to size 592 x 592 x 600 mm/
8 bags

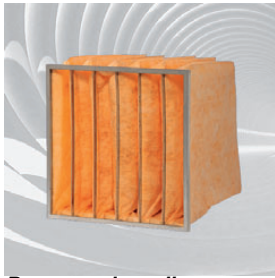


Volume flow [m³/h]

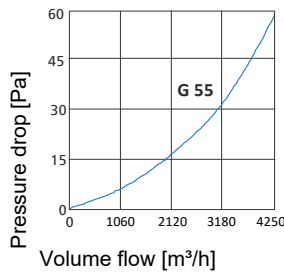


Bag filter Premium MultiSack N95
Filter medium: Premium NANOWAVE® synthetic

Type code	Width [mm]	Height [mm]	Depth [mm]	Number of bags [quantity]	Filter surface [m²]	Volume flow [m³/h]	Initial pressure drop [Pa]	Energy class certified by the Eurovent 4/21	NEW filter class as of ISO 16890
N95-6V/0600/10/05-F85	592	592	600	10	7,5	3.400	125	C	ISO ePM ₁ 85 %
N95-5V/0600/08/05-F85	490	592	600	8	6	2.800	125		
N95-3V/0600/05/05-F85	287	592	600	5	3,8	1.700	125		
N95-2V/0600/05/05-F85	287	287	600	5	1,9	850	125		
N95-1V/0600/10/05-F85	287	287	600	10	3,8	1.700	125		
N95-6V/0600/08/05-F85	592	592	600	8	6,0	3.400	140	C	ISO ePM ₁ 85 %
N95-5V/0600/06/05-F85	490	592	600	6	4,4	2.800	140		
N95-3V/0600/04/05-F85	287	592	600	4	3,0	1.700	140		
N95-2V/0600/04/05-F85	287	287	600	4	1,5	850	140		
N95-1V/0600/08/05-F85	592	287	600	8	3,0	1.700	140		
N95-6V/0534/10/05-F85	592	592	534	10	6,5	3.400	150	C	ISO ePM ₁ 85 %
N95-5V/0534/08/05-F85	490	592	534	8	5,2	2.800	150		
N95-3V/0534/05/05-F85	287	592	534	5	3,2	1.700	150		
N95-2V/0534/05/05-F85	287	287	534	5	1,6	850	150		
N95-1V/0534/10/05-F85	592	287	534	10	3,2	1.700	150		
N95-6V/0380/10/05-F80	592	592	380	10	4,5	3.400	210	D	ISO ePM ₁ 80 %
N95-5V/0380/08/05-F80	490	592	380	8	3,9	2.800	210		
N95-3V/0380/05/05-F80	287	592	380	5	2,4	1.700	210		
N95-2V/0380/05/05-F80	287	287	380	5	1,1	850	210		
N95-1V/0380/10/05-F80	592	287	380	10	2,4	1.700	210		



Pressure drop diagram:
Applies to size 592 x 592 x 600 mm/
6 bags



Bag filter MultiSack G55

consist of first-class micro glass-fibre fleece, the spacers ensure complete utilization of the full bag depth; sealing of spacer seams; additional pure-air side gauze prevents migration of fibreglass particles; compared to rated air-flow volume - operating air-flow volume can be increased by 25%, cone-shaped bags.

Application:

Fine particle filtration

Areas of application:

All HVAC and air handling installations with a filtration function.

Type:

designed in galvanized frame – surcharge for plastic frame on request.

Optionally available as an ex-proof filter

The recommended final pressure difference:

200 Pa



Frame material
Plastic or galvanized

Filter class as of EN 779:2012
M5

For the NEW filter class as of ISO 16890
refer to table

Medium
micro glass-fibre fleece

Ex-version on request
II 2 GD T6
(-40 to +80 °C)




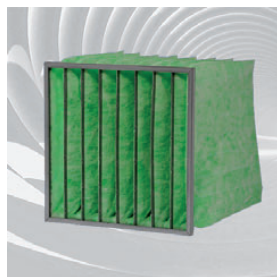
Temperature resistance
< 70 °C

Energy class
D



Filter also available as Life-Science Version

 Bag filter MultiSack G55 Filter medium: micro glass-fibre fleece		Width [mm]	Height [mm]	Depth [mm]	Number of bags [quantity]	Filtration surface [m²]	Volume flow [m³/h]	Initial pressure drop [Pa]	Energy class certified by the Eurovent 4/21	NEW filter class as of ISO 16890
1011119	G55-6V/0600/06/05-L65	592	592	600	6	4.4	3400	55	D	ISO ePM ₁₀ 65 %
1011144	G55-5V/0600/05/05-L65	490	592	600	5	3.8	2800	55		
1011120	G55-3V/0600/03/05-L65	287	592	600	3	2.2	1700	55		
1011121	G55-2V/0600/03/05-L65	287	287	600	3	1.1	850	55		
1043338	G55-1V/0600/06/05-L65	592	287	600	6	2.2	1700	55		
0004358	G55-6V/0534/06/05-L65	592	592	534	6	3.9	3400	55	D	ISO ePM ₁₀ 65 %
1000775	G55-5V/0534/05/05-L65	490	592	534	5	3.3	2800	55		
0004359	G55-3V/0534/03/05-L65	287	592	534	3	1.9	1700	55		
0004360	G55-2V/0534/03/05-L65	287	287	534	3	0.9	850	55		
1043324	G55-1V/0534/06/05-L65	592	287	534	6	1.9	1700	55		
2000157	G55-6V/0380/06/05-L65	592	592	380	6	2.9	3400	60	D	ISO ePM ₁₀ 65 %
2000557	G55-5V/0380/05/05-L65	490	592	380	5	2.4	2800	60		
2000470	G55-3V/0380/03/05-L65	287	592	380	3	1.5	1700	60		
2000803	G55-2V/0380/03/05-L65	287	287	380	3	0.7	850	60		
2000696	G55-1V/0380/06/05-L65	592	287	380	6	1.5	1700	60		



Bag filter MultiSack G65

consist of first-class micro glass-fibre fleece, the spacers ensure complete utilization of the full bag depth; sealing of spacer seams; additional pure-air side gauze prevents migration of fibreglass particles; compared to rated air-flow volume - operating air-flow volume can be increased by 25%, cone-shaped bags.

Application:

Filtration of fine dust

Areas of application:

All HVAC and air handling installations with a filtration function.

Type:

designed in galvanized frame – surcharge for plastic frame on request.

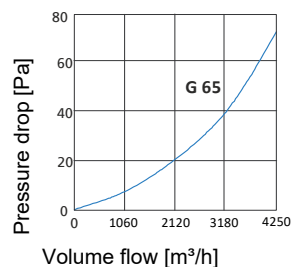
Optionally available as an ex-proof filter

The recommended final pressure difference:

200 Pa

Pressure drop diagram:

Applies to size 592 x 592 x 600 mm/
8 bags



Frame material

Plastic or galvanized

Filter class as of EN 779:2012

M6

For the NEW filter class as of ISO 16890

refer to table

Medium

micro glass-fibre fleece

Ex-version on request

II 2 GD T6

(-40 to +80 °C)



Temperature resistance

< 70 °C


Energy class

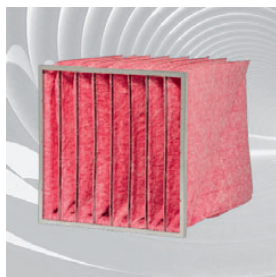
B *



* applies only to certain sizes – see table

Bag filter MultiSack G65		Filter medium: micro glass-fibre fleece								
Item number	Type code	Width [mm]	Height [mm]	Depth [mm]	Number of bags [quantity]	Filtration surface [m²]	Volume flow [m³/h]	Initial pressure drop [Pa]	Energy class certified by the Eurovent 4/21	NEW filter class as of ISO 16890
1011122	G65-6V/0600/08/05-M50	592	592	600	8	6	3400	40	B	ISO ePM ₁₀ 75 %
1011145	G65-5V/0600/06/05-M50	490	592	600	6	4.4	2800	40		
1011123	G65-3V/0600/04/05-M50	287	592	600	4	3	1700	40		
1011124	G65-2V/0600/04/05-M50	287	287	600	4	1.5	850	40		
1042992	G65-1V/0600/08/05-M50	592	287	600	8	3	1700	40	B	ISO ePM ₁₀ 75 %
1011146	G65-6V/0600/10/05-M50	592	592	600	10	7.5	3400	40		
1011147	G65-5V/0600/08/05-M50	490	592	600	8	6	2800	40		
1011148	G65-3V/0600/05/05-M50	287	592	600	5	3.8	1700	40		
1042984	G65-2V/0600/05/05-M50	287	287	600	5	1.9	850	40	B	ISO ePM ₁₀ 75 %
1042993	G65-1V/0600/10/05-M50	592	287	600	10	3.8	1700	40		
2001246	G65-6V/0600/12/05-M50	592	592	600	12	8.8	3400	40		
1042989	G65-5V/0600/10/05-M50	490	592	600	10	7.4	2800	40		
2001247	G65-3V/0600/06/05-M50	287	592	600	6	4.4	1700	40	B	ISO ePM ₁₀ 75 %
1042985	G65-2V/0600/06/05-M50	287	287	600	6	2.2	850	40		
2147889	G65-1V/0600/12/05-M50	592	287	600	12	4.5	1700	40		
2000801	G65-6V/0534/08/05-M50	592	592	534	8	5.2	3400	45		
2101119	G65-5V/0534/06/05-M50	490	592	534	6	3.9	2800	45		
2101054	G65-3V/0534/04/05-M50	287	592	534	4	2.6	1700	45		
2101023	G65-2V/0534/04/05-M50	287	287	534	4	1.3	850	45		
2100991	G65-1V/0534/08/05-M50	592	287	534	8	2.6	1700	45		

 Bag filter Filter medium:		MultiSack G65 micro glass-fibre fleece								
Item number	Type code	Width [mm]	Height [mm]	Depth [mm]	Number of bags [quantity]	Filtration surface [m ²]	Volume flow [m ³ /h]	Initial pressure drop [Pa]	Energy class certified by the Eurovent 4/21	NEW filter class as of ISO 16890
1042943	G65-6V/0534/10/05-M50	592	592	534	10	6.5	3400	45	C	ISO ePM₁₀ 75 %
1042934	G65-5V/0534/08/05-M50	490	592	534	8	5.2	2800	45		
1042928	G65-3V/0534/05/05-M50	287	592	534	5	3.2	1700	45		
2101026	G65-2V/0534/05/05-M50	287	287	534	5	1.6	850	45		
2100994	G65-1V/0534/10/05-M50	592	287	534	10	3.2	1700	45		
1042944	G65-6V/0534/12/05-M50	592	592	534	12	7.9	3400	45	C	ISO ePM₁₀ 75 %
1042935	G65-5V/0534/10/05-M50	490	592	534	10	6.6	2800	45		
1042929	G65-3V/0534/06/05-M50	287	592	534	6	3.9	1700	45		
1042926	G65-2V/0534/06/05-M50	287	287	534	6	1.9	850	45		
1042941	G65-1V/0534/12/05-M50	592	287	534	12	3.9	1700	45		
2051139	G65-6V/0380/12/05-M50	592	592	380	12	5.6	3400	60	D	ISO ePM₁₀ 75 %
2001147	G65-5V/0380/10/05-M50	490	592	380	10	4.7	2800	60		
2051137	G65-3V/0380/06/05-M50	287	592	380	6	2.8	1700	60		
FI610385 ₅	G65-2V/0380/06/05-M50	287	287	380	6	1.4	850	60		
2288216	G65-1V/0380/12/05-M50	592	287	380	12	2.8	1700	60	E	ISO ePM₁₀ 75 %
2101145	G65-6V/0380/10/05-M50	592	592	380	10	4.8	3400	70		
2101116	G65-5V/0380/08/05-M50	490	592	380	8	3.9	2800	70		
2101051	G65-3V/0380/05/05-M50	287	592	380	5	2.4	1700	70		
2101020	G65-2V/0380/05/05-M50	287	287	380	5	1.1	850	70		
2100988	G65-1V/0380/10/05-M50	592	287	380	10	2.4	1700	70		
2000458	G65-6V/0380/08/05-M50	592	592	380	8	3.9	3400	80	E	ISO ePM₁₀ 75 %
2000457	G65-5V/0380/06/05-M50	490	592	380	6	2.9	2800	80		
2101048	G65-3V/0380/04/05-M50	287	592	380	4	1.9	1700	80		
2101017	G65-2V/0380/04/05-M50	287	287	380	4	0.9	850	80		
2000607	G65-1V/0380/08/05-M50	592	287	380	8	1.9	1700	80		



Bag filter MultiSack G85

consist of first-class micro glass-fibre fleece, the spacers ensure complete utilization of the full bag depth; sealing of spacer seams; additional pure-air side gauze prevents migration of fibreglass particles; compared to rated air-flow volume - operating air-flow volume can be increased by 25%, cone-shaped bags

Application:

Filtration of fine and superfine dust

Areas of application:

All HVAC and air handling installations with a filtration function

Type:

designed in galvanized frame – surcharge for plastic frame on request

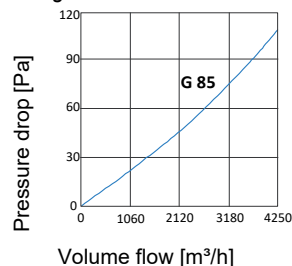
Optionally available as an ex-proof filter

The recommended final pressure difference:

250 Pa

Pressure drop diagram:

Applies to size 592 x 592 x 600 mm/
8 bags



Frame material

Plastic or galvanized

Filter class as of

EN 779:2012

F7

For the NEW filter class as of ISO 16890

refer to table

Medium

micro glass-fibre fleece

Ex-version on request

II 2 GD T6

(-40 to +80 °C)



Temperature resistance

< 70 °C


Energy class


C*

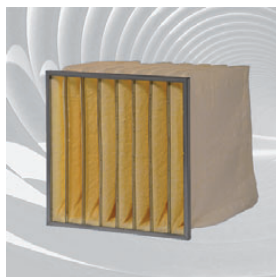


Filter also available as Life-Science Version

* applies only to certain sizes – see table

 Bag filter MultiSack G85										
		Filter medium: micro glass-fibre fleece								
Item number	Type code	Width [mm]	Height [mm]	Depth [mm]	Number of bags [quantity]	Filtration surface [m²]	Volume flow [m³/h]	Initial pressure drop [Pa]	Energy class certified by the Euro-vent 4/21	NEW filter class as of ISO 16890
1011151	G85-6V/0600/10/05-F60	592	592	600	10	7.5	3400	70	C	ISO ePM₁ 60 %
1011152	G85-5V/0600/08/05-F60	490	592	600	8	6	2800	70		
1011153	G85-3V/0600/05/05-F60	287	592	600	5	3.8	1700	70		
1042638	G85-2V/0600/05/05-F60	287	287	600	5	1.9	850	70		
1042647	G85-1V/0600/10/05-F60	592	287	600	10	3.8	1700	70		
2001210	G85-6V/0600/12/05-F60	592	592	600	12	8.8	3400	65	C	ISO ePM₁ 60 %
1042643	G85-5V/0600/10/05-F60	490	592	600	10	7.4	2800	65		
2001211	G85-3V/0600/06/05-F60	287	592	600	6	4.4	1700	65		
1042639	G85-2V/0600/06/05-F60	287	287	600	6	2.2	850	65		
1042648	G85-1V/0600/12/05-F60	592	287	600	12	4.5	1700	65		

 Bag filter MultiSack G85 Filter medium: micro glass-fibre fleece										
Item number	Type code	Width [mm]	Height [mm]	Depth [mm]	Number of bags [quantity]	Filtration surface [m ²]	Volume flow [m ³ /h]	Initial pressure drop [Pa]	Energy class certified by the Euro-vent 4/21	NEW filter class as of ISO 16890
1011125	G85-6V/0600/08/05-F60	592	592	600	8	6	3400	80	C	ISO ePM ₁ 50 %
1011149	G85-5V/0600/06/05-F60	490	592	600	6	4.4	2800	80		
1011126	G85-3V/0600/04/05-F60	287	592	600	4	3	1700	80		
1011127	G85-2V/0600/04/05-F60	287	287	600	4	1.5	850	80		
1042646	G85-1V/0600/08/05-F60	592	287	600	8	3	1700	80		
FI6600679	G85-6V/0534/12/05-F60	592	592	534	12	7.6	3400	100	D	ISO ePM ₁ 50 %
1042589	G85-5V/0534/10/05-F60	490	592	534	10	6.6	2800	100		
1042583	G85-3V/0534/06/05-F60	287	592	534	6	3.9	1700	100		
1042595	G85-2V/0534/06/05-F60	287	287	534	6	1.9	1700	100		
1042580	G85-1V/0534/12/05-F60	592	287	534	12	3.9	850	100		
1042597	G85-6V/0534/10/05-F60	592	592	534	10	6.5	3400	105	D	ISO ePM ₁ 60 %
1042588	G85-5V/0534/08/05-F60	490	592	534	8	5.2	2800	105		
1042582	G85-3V/0534/05/05-F60	287	592	534	5	3.2	1700	105		
2101328	G85-2V/0534/05/05-F60	287	287	534	5	1.6	850	105		
2101298	G85-1V/0534/10/05-F60	592	287	534	10	3.2	1700	105		
2000081	G85-6V/0534/08/05-F60	592	592	534	8	5.2	3400	120	D	ISO ePM ₁ 60 %
2000078	G85-5V/0534/06/05-F60	490	592	534	6	3.9	2800	120		
2000077	G85-3V/0534/04/05-F60	287	592	534	4	2.6	1700	120		
2101325	G85-2V/0534/04/05-F60	287	287	534	4	1.3	850	120		
2101295	G85-1V/0534/08/05-F60	592	287	534	8	2.6	1700	120		
2101432	G85-6V/0380/10/05-F55	592	592	380	10	4.5	3400	90	D	ISO ePM ₁ 55 %
2101409	G85-5V/0380/08/05-F55	490	592	380	8	3.9	2800	90		
2000730	G85-3V/0380/05/05-F55	287	592	380	5	2.4	1700	90		
2101322	G85-2V/0380/05/05-F55	287	287	380	5	1.1	850	90		
2101292	G85-1V/0380/10/05-F55	592	287	380	10	2.4	1700	90		
2051141	G85-6V/0380/12/05-F60	592	592	380	12	5.6	3400	95	D	ISO ePM ₁ 55 %
2051142	G85-5V/0380/10/05-F55	490	592	380	10	4.7	2800	95		
2051140	G85-3V/0380/06/05-F55	287	592	380	6	2.8	1700	95		
2600948	G85-2V/0380/06/05-F55	287	287	380	6	1.4	850	95		
2145854	G85-1V/0380/12/05-F60	592	287	380	12	2.8	1700	95		
2000082	G85-6V/0380/08/05-F55	592	592	380	8	3.6	3400	140	E	ISO ePM ₁ 55 %
2101407	G85-5V/0380/06/05-F55	490	592	380	6	2.9	2800	140		
2000782	G85-3V/0380/04/05-F55	287	592	380	4	1.9	1700	140		
2000731	G85-2V/0380/04/05-F55	287	287	380	4	0.9	850	140		
2101290	G85-6V/0600/10/05-F60	592	287	380	8	1.9	1700	140		



Bag filter MultiSack G95

consist of first-class micro glass-fibre fleece, the spacers ensure complete utilization of the full bag depth; sealing of spacer seams; additional pure-air side gauze prevents migration of fibreglass particles; compared to rated air-flow volume - operating air-flow volume can be increased by 25%, cone-shaped bags.

Application:

Filtration of fine and superfine dust

Areas of application:

All HVAC and air handling installations with a filtration function.

Type:

designed in galvanized frame – surcharge for plastic frame on request.

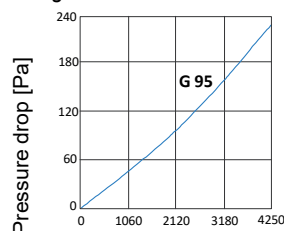
Optionally available as an ex-proof filter

The recommended final pressure difference:

250 Pa

Pressure drop diagram:

Applies to size 592 x 592 x 600 mm/
8 bags



Volume flow [m³/h]



Frame material

Plastic or galvanized

Filter class as of

EN 779:2012

F9

For the NEW filter class as of ISO 16890

refer to table

Medium

micro glass-fibre fleece

Ex-version on request

II 2 GD T6

(-40 to +80 °C)



Temperature

resistance

< 70 °C


Energy class


D*



Filter also available as Life-Science Version

* applies only to certain sizes – see table

 Bag filter MultiSack G95 Filter medium: micro glass-fibre fleece										
Item number	Type code	Width [mm]	Height [mm]	Depth [mm]	Number of bags [quantity]	Filtration surface [m ²]	Volume flow [m ³ /h]	Initial pressure drop [Pa]	Energy class certified by the Eurovent 4/21	NEW filter class as of ISO 16890
2001248	G95-6V/0600/12/05-F85	592	592	600	12	8.8	3400	125	E	ISO ePM ₁ 85 %
2287609	G95-5V/0600/10/05-F85	490	592	600	10	7.4	2800	125		
2001249	G95-3V/0600/06/05-F85	287	592	600	6	4.4	1700	125		
1042293	G95-2V/0600/06/05-F50	287	287	600	6	2.2	850	125		
1011155	G95-6V/0600/10/05-F85	592	592	600	10	7.5	3400	160	D	ISO ePM ₁ 85 %
1011156	G95-5V/0600/08/05-F85	490	592	600	8	6	2800	160		
1011157	G95-3V/0600/05/05-F85	287	592	600	5	3.8	1700	160		
1042292	G95-2V/0600/05/05-F85	287	287	600	5	1.9	850	160		
2101590	G95-1V/0600/10/05-F85	592	287	600	10	3.8	1700	160		

 Bag filter MultiSack G95 Filter medium: micro glass-fibre fleece										
Item number	Type code	Width [mm]	Height [mm]	Depth [mm]	Number of bags [quantity]	Filtration surface [m ²]	Volume flow [m ³ /h]	Initial pressure drop [Pa]	Energy class certified by the Eurovent 4/21	NEW filter class as of ISO 16890
1011128	G95-6V/0600/08/05-F85	592	592	600	8	6	3400	220	E	ISO ePM ₁ 85 %
1011154	G95-5V/0600/06/05-F85	490	592	600	6	4.4	2800	220		
1011129	G95-3V/0600/04/05-F85	287	592	600	4	3	1700	220		
1011130	G95-2V/0600/04/05-F85	287	287	600	4	1.5	850	220		
1042300	G95-1V/0600/08/05-F85	592	287	600	8	3	1700	220		
2000099	G95-6V/0534/12/05-F80	592	592	534	12	7.9	3400	200	E	ISO ePM ₁ 85 %
2602691	G95-5V/0534/10/05-F80	490	592	534	10	6.6	2800	200		
1042237	G95-3V/0534/06/05-F80	287	592	534	6	3.9	1700	200		
1042234	G95-2V/0534/06/05-F80	287	287	534	6	1.9	850	200		
1042249	G95-1V/0534/12/05-F80	592	287	534	12	3.9	1700	200		
1042251	G95-6V/0534/10/05-F80	592	592	534	10	6.5	3400	210	E	ISO ePM ₁ 85 %
1042242	G95-5V/0534/08/05-F80	490	592	534	8	5.2	2800	210		
1042236	G95-3V/0534/05/05-F80	287	592	534	5	3.2	1700	210		
1042233	G95-2V/0534/05/05-F80	287	287	534	5	1.6	850	210		
2000379	G95-1V/0534/10/05-F80	592	287	534	10	3.2	1700	210		
2000083	G95-6V/0534/08/05-F80	592	592	534	8	5.2	3400	210	E	ISO ePM ₁ 80 %
2101705	G95-5V/0534/06/05-F80	490	592	534	6	3.9	2800	210		
1042235	G95-3V/0534/04/05-F80	287	592	534	4	2.6	1700	210		
2101615	G95-2V/0534/04/05-F80	287	287	534	4	1.3	850	210		
2101584	G95-1V/0534/08/05-F80	592	287	534	8	2.6	1700	210		
2145685	G95-6V/0380/12/05-F80	592	592	380	12	5.6	3400	250	E	ISO ePM ₁ 80 %
FI6102705	G95-5V/0380/10/05-F80	490	592	380	10	4.7	2800	250		
FI6101388	G95-3V/0380/06/05-F80	287	592	380	6	2.8	1700	250		
2605715	G95-2V/0380/06/05-F80	287	287	380	6	1.4	850	250		
2605716	G95-1V/0380/12/05-F80	592	287	380	12	2.8	1700	250		
2101731	G95-6V/0380/10/05-F80	592	592	380	10	4.8	3400	275	E	ISO ePM ₁ 80 %
2101702	G95-5V/0380/08/05-F80	490	592	380	8	3.9	2800	275		
2101651	G95-3V/0380/05/05-F80	287	592	380	5	2.4	1700	275		
2101612	G95-2V/0380/05/05-F80	287	287	380	5	1.1	850	275		
2101581	G95-1V/0380/10/05-F80	592	287	380	10	2.4	1700	275		
2101728	G95-6V/0380/08/05-F80	592	592	380	8	3.9	3400	300	E	ISO ePM ₁ 80 %
2101699	G95-5V/0380/06/05-F80	490	592	380	6	2.9	2800	300		
2101638	G95-3V/0380/04/05-F80	287	592	380	4	1.9	1700	300		
2101609	G95-2V/0380/04/05-F80	287	287	380	4	0.9	850	300		
2101578	G95-1V/0380/08/05-F80	592	287	380	8	1.9	1700	300		

SYSTEMATIC AIR HYGIENE FOR COMPLEX REQUIREMENTS

Filter Elements

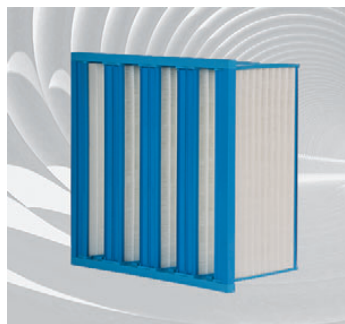
Solutions using filters from DELBAG® Air Filtration ensure a 100% success for all tasks.

One reason is because our comprehensive filter program enables a complete filtration – exactly tailored to any individual requirement, and in addition, we combine this offer with the minimum and energy-saving pressure drops. Another reason is that DELBAG® Air Filtration systems are constructed so that interior dirt and microbe pockets cannot develop from the very beginning.

The filter elements are characterized by the following features:

- High filtration surface enables low pressure drop
- Special fold geometry is suitable for turbulent air flow volumes
- Very robust construction for highest demands
- Best energy-efficiency classes for reduction of electric power consumption
- Space-saving design for short filter chambers





MultiForm filter elements are made of micro-fibreglass fleece which is pleated to form a stable package of folds; the number and the height of the folds are optimally designed to match operating conditions; peripheral but merged synthetic strips keep individual pleats at a distance along the entire pleat depth and ensure greater stability and complete utilisation of the entire filter surface; the individual filter plates are arranged in a V-shape (in 3 or 4 compartments) inside a synthetic frame made of ABS, so as to assure a stable form of the filter plates, and are glued to assure air-tightness.

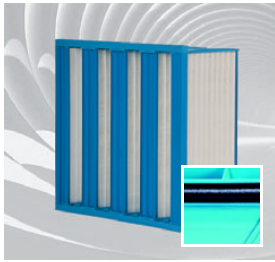
Grip protection can be optionally selected for both sides of the filter element.

Ambient conditions: Operating temperature (max. °C)
Maximum relative air humidity: 100 %

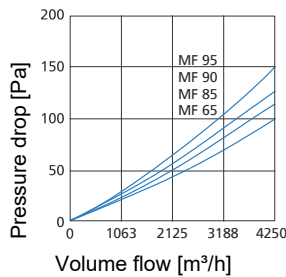
Type code

Example: MF 95 - 6 / BA2 G2

	Product name	Type	Size code (rated size)	Position of grip protection	Position of gasket
MF/MFEC/MFPR MultiForm					
55	ISO ePM _{2,5} 50 %				
65	ISO ePM _{2,5} 55 %				
65EC	ISO ePM _{2,5} 50 %				
85	ISO ePM ₁ 50 %				
85PR	ISO ePM ₁ 50 %				
90	ISO ePM ₁ 65 %				
95	ISO ePM ₁ 80 %				
95PR	ISO ePM ₁ 80 %				
98	E10				
99	E11				
100	E12				
101	H13				
Nominal size					
3	592 x 287 mm				
5	592 x 490 mm				
6	592 x 592 mm				
grip protection optional:					
BA2	grip protection clean air side Alu				
BR2	grip protection clean air side RAL				
grip protection optional:					
F1	flat profile gasket crude air side				
F2	flat profile gasket clean air side				
G1	polyurethane crude air side				
G2	polyurethane clean air side				



Pressure drop diagram:
Applies for 592 x 592 x 298 mm



Filter Elements MultiForm MF65, MF85, MF90 and MF95

4 V-shape filter design consisting of pleated micro-glass fiber paper

Application:

All applications requiring maximum operating safety and highest standards in air purity; for filtration of fine and superfine dust, bacteria, pollen etc. in HVAC systems and air handling units of all types, as well as a pre-filter for HEPA filters

Special features:

Self-supporting, shape-steady, synthetic design with high mechanical stability; great air volume flow with small installation depth; large filter surface; can be completely incinerated

The **MultiForm** has been designed for 4250 m³/h air flow volume.

Areas of application:

standard climate control facilities and air handling units, photographic, electrical and food product industry, high value assembly rooms and switch-gear facilities, chemical, pharmaceutical industry and hospitals, pre-filters for clean-room facilities, air intake filter for power stations

Type:

Design without sealing – sealing and handle guard in metal or plastic on request



Frame material
PP

Filter class as of EN 779:2012
M6, F7, F8 & F9

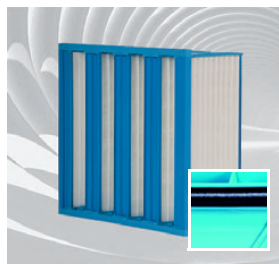
For the NEW filter class as of ISO 16890
refer to table

Filter media
Micro glass fiber paper

Gasket
on request,
flat or foam

Temperature resistance
< 70 °C

Filter Elements MultiForm MF65, MF85, MF90 and MF95 Filter medium: Micro glass fiber paper								
Type	Width [mm]	Height [mm]	Depth [mm]	Filter surface [m²]	Volume flow [m³/h]	Initial pressure drop [Pa]	Filter class [EN 779:2012]	NEW filter class as of ISO 16890
MF95-3-F80	592	287	298	8	2125	150	F9	ISO ePM ₁ 80 %
MF95-5-F80	592	490	298	15	3500	150		
MF95-6-F80	592	592	298	18	4250	150		
MF90-3-F65	592	287	298	8	2125	125	F8	ISO ePM ₁ 65%
MF90-5-F65	592	490	298	15	3500	125		
MF90-6-F65	592	592	298	18	4250	125		
MF85-3-F50	592	287	298	8	2125	110	F7	ISO ePM ₁ 50 %
MF85-5-F50	592	490	298	15	3500	110		
MF85-6-F50	592	592	298	18	4250	110		
MF65-3-M55	592	287	298	7	2125	100	M6	ISO ePM _{2,5} 55 %
MF65-5-M55	592	490	298	13	3500	100		
MF65-6-M55	592	592	298	16	4250	100		



Filter elements MultiForm MFPR85 and MFPR95

4 V-shape filter design consisting of pleated micro-glass fiber paper.

Application:

All applications requiring maximum operating safety and highest standards in air purity; for filtration of fine and superfine dust, bacteria, pollen etc. in HVAC systems and air handling units of all types, as well as a pre-filter for HEPA filters.

Special features:

Self-supporting, shape-steady, synthetic design with high mechanical stability; great air volume flow with small installation depth; large filter surface; can be completely incinerated.

MultiForm MFPR85 and MFPR95

are designed for 3400 m³/h and are tested for energy consumption.

Areas of application:

standard climate control facilities and air handling units, photographic, electrical and food product industry, high value assembly rooms and switchgear facilities, chemical, pharmaceutical industry pre-filters for clean-room facilities.

Type:

Design with seal, flat or foamed, handle guard in metal or plastic on request.

The recommended final pressure difference:

250 Pa



Frame material
PP

Filter class as of
EN 779:2012
F7 & F9

For the NEW filter class
as of ISO 16890
refer to table

Filter media
Micro glass fiber paper

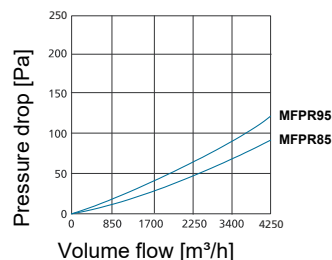
Gasket
conform with VDI 6022

Temperature
resistance
< 70 °C

Construction
fully cast

Energy class
B *

Pressure drop diagram:
Applies for 592 x 592 x 298 mm



Filter also available as
Life-Science Version

* applies only to
certain sizes – see table



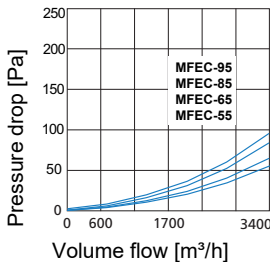
Filter elements MultiForm MFPR85 and MFPR95

Filter medium: Micro glass fiber paper

Type	Width [mm]	Height [mm]	Depth [mm]	Filter surface [m ²]	Volume flow [m ³ /h]	Initial pressure drop [Pa]	Energy class certified by the Eurovent 4/21	Filter class as of EN 779:2012	NEW filter class as of ISO 16890
MFPR95-3-F80	592	287	298	8	1700	105	D	F9	ISO ePM ₁ 80 %
MFPR95-5-F80	592	490	298	15	2800	105			
MFPR95-6-F80	592	592	298	18	3400	105			
MFPR85-3-F50	592	287	298	8	1700	60	B	F7	ISO ePM ₁ 50 %
MFPR85-5-F50	592	490	298	15	2800	60			
MFPR85-6-F50	592	592	298	18	3400	60			



Pressure drop diagram:
Applies for 592 x 592 x 292 mm



Filter Elements MultiForm-Eco MFEC55, MFEC65 and MFEC85

3 V-shape filter design consisting of pleated micro-glass fiber paper

Application:

All applications requiring maximum operating safety and highest standards in air purity; for filtration of fine and superfine dust, bacteria, pollen etc. in HVAC systems and air handling units of all types, as well as a pre-filter for HEPA filters

Special features:

Self-supporting, shape-steady, synthetic design with high mechanical stability; great air volume flow with small installation depth; large filter surface; can be completely incinerated

MultiForm-Eco

is designed for 3400 m³/h and tested for energy consumption.

Areas of application:

Standard climate control facilities and air handling units, photographic, electrical and food product industry, high value assembly rooms and switchgear facilities, and hospitals, pre-filters for clean-room facilities, all three filter classes of **MultiForm Eco** are equipped with a condensate drip tray and handles for easy transport.

Type:

Design without sealing – sealing and handle guard on request



Frame material
ABS

Filter class as of EN 779:2012
M5, M6 & F7 & F9

For the NEW filter class as of ISO 16890
refer to table

Filter media
Micro glass fiber paper

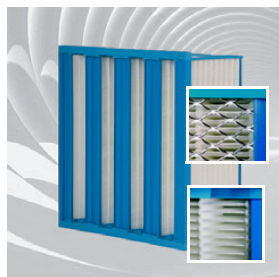
Gasket
conform with VDI 6022

Temperature resistance
< 70 °C

Energy class
C *

* applies only to certain sizes – see table

Filter Elements: MultiForm-Eco MFEC55, MFEC65, MFEC85 and MFEC95									
Filter medium: Micro glass fiber paper									
Type	Width [mm]	Height [mm]	Depth [mm]	Filter surface [m ²]	Volume flow [m ³ /h]	Initial pressure drop [Pa]	Energy class certified by the Eurovent 4/21	Filter class as of EN 779:2012	NEW filter class as of ISO 16890
MFEC95-3-F80	592	287	292	6.8	1700	85	D	F9	ISO ePM ₁ 80 %
MFEC95-5-F80	592	490	292	12.5	2800	85			
MFEC95-6-F80	592	592	292	15.3	3400	85			
MFEC85-3-F50	592	287	292	6.8	1700	82	E	F7	ISO ePM ₁ 50 %
MFEC85-5-F50	592	490	292	12.5	2800	82			
MFEC85-6-F50	592	592	292	15.3	3400	82			
MFEC65-3-M50	592	287	292	5.5	1700	65	D	M6	ISO ePM _{2,5} 60 %
MFEC65-5-M50	592	490	292	10.0	2800	65			
MFEC65-6-M50	592	592	292	12.3	3400	65			
MFEC55-3-M50	592	287	292	6.8	1700	60	C	M5	ISO ePM _{2,5} 50 %
MFEC55-5-M50	592	490	292	12.5	2800	60			
MFEC55-6-M50	592	592	292	15.3	3400	60			



Filter Elements MultiForm MF98, MF99 and MF100
4 V-shape filter design consisting of pleated microglass fiber paper.

Application:

All applications requiring maximum operating safety and highest standards in air purity; for filtration of fine and superfine dust, bacteria, pollen etc. in HVAC systems and air handling units of all types, as well as a pre-filter for HEPA filters.

Special features:

Self-supporting, shape-steady, synthetic design with high mechanical stability; great air volume flow with small installation depth; large filter surface; can be completely incinerated.

Areas of application:

standard climate control facilities and air handling units, photographic, electrical and food product industry, high value assembly rooms and switchgear facilities, chemical, pharmaceutical industry and hospitals, pre-filters for clean-room facilities, air intake filter for power stations.

Type:

Design without sealing – sealing and handle guard (metal or plastic) on request;
the MF100 has an aluminum grip protection on the clean air side in its standard design.

Frame material
Plastic

Filter class
E10, E11 & E12

Test norm
EN 1822:2011

Filter media
Micro glass fiber paper

Gasket
conform with VDI 6022

Temperature resistance
< 70 °C

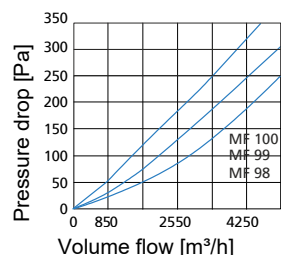
Relative humidity
max. 100 %

Construction
fully cast

Filter also available as
Life-Science Version



Pressure drop diagram:
Applies for 592 x 592 x 298 mm



Filter Elements: MultiForm MF98, MF99 and MF100							
Filter class: E10, E11 & E12 [EN 1822:2011]							
Filter medium: Micro glass fiber paper							
Type	Width [mm]	Height [mm]	Depth [mm]	Filter surface [m²]	Volume flow [m³/h]	Initial pressure drop [Pa]	Filter class [EN 1822:2011]
MF100-3	592	287	298	12.0	1700	290	E12
MF100-5	592	490	292	12.5	2800	290	
MF100-6	592	592	298	26.0	3400	290	
MF99-3	592	287	298	8.0	1700	185	E11
MF99-5	592	490	292	12.5	2800	185	
MF99-6	592	592	298	18.0	3400	185	
MF98-3	592	287	298	8.0	2125	185	E10
MF98-5	592	490	292	10.0	2800	185	
MF98-6	592	592	298	18.0	4250	185	



Filter Elements MultiForm MF101

consisting of pleated microglass fiber paper.

Application:

All applications requiring maximum operating safety and highest standards in air purity; for filtration of fine and superfine dust, bacteria, pollen etc. in HVAC systems and air handling units of all types, as well as a pre-filter for HEPA filters.

Special features:

Self-supporting, shape-steady, synthetic design with high mechanical stability; great air volume flow with small installation depth; large filter surface; can be completely incinerated.

Areas of application:

standard climate control facilities and air handling units, photographic, electrical and food product industry, high value assembly rooms and switchgear facilities, chemical, pharmaceutical industry and hospitals, pre-filters for clean-room facilities, air intake filter for power stations.

Type:

design without gasket – sealing and varnished grip protection on request.

Frame material
Plastic

Filter class
H13

Test norm
EN 1822:2011

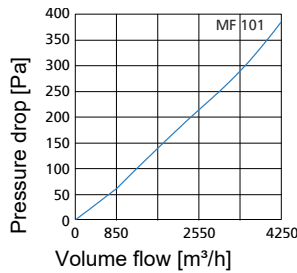
Filter media
Micro glass fiber paper

Gasket
conform with VDI 6022

Temperature resistance
< 70 °C

Construction
fully cast

Pressure drop diagram:
Applies for 592 x 592 x 298 mm



**Filter also available as
Life-Science Version**



	Filter Elements: MultiForm MF101						
	Filter class: H13 [EN 1822:2011]						
	Filter medium: Micro glass fiber paper						
Type	Width [mm]	Height [mm]	Depth [mm]	Filter surface [m²]	Volume flow [m³/h]	Initial pressure drop [Pa]	Filter class [EN 1822:2011]
MF101-3	592	287	298	12	1700	260	H13
MF101-6	592	592	298	26	3400	260	



Filter elements MultiPlan I (MP65, 85, 95)

uses special paper-like fleece made of superfine micro-glass fibres, which are processed to form a stable package of folds; number and height of folds is designed to match the optimal rated operating points; here the individual folds are separated down to the greatest depth of the folds by continuous synthetic threads (hot melt) that are bonded together, which provides great stability as a result of the compact fold structure; as standard version the filter element is provided with a peripheral seal on the intake (dusty)-air side and the filter frame is made of MDF or plastic.

Application:

Primarily as pre filter of EPA and HEPA filters; hereby improving the service intervals of premium EPA and HEPA filters

Special features:

High volume flows with small installation depth; great mechanical stability through established fold design; metal-free separation of folds.

Areas of application:

Microelectronics, production of semiconductors, health care, chemical, pharmaceutical industries, microbiology.

Type:

Standard configuration with PUR seal (polyurethane) and frame made of MDF, galvanized frame and other dimensions are available on request.



Frame material
 medium-density fibreboard (MDF),
 galvanized steel

Filter class as of EN 779:2012
 M6, F7 & F9

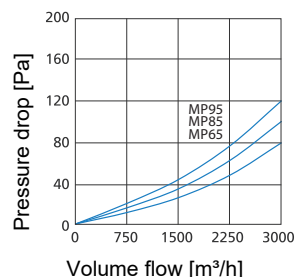
For the NEW filter class as of ISO 16890
 refer to table on page 54

Filter media
 Micro glass fiber paper

Gasket
 PUR semicircular seal
 others seals on request

Temperature resistance
 < 70 °C

Pressure drop diagram:
 Applies to size 610 x 610 x 292



Environmental conditions: Operating temperature(max. °C)
 Maximum relative air humidity: 100 %

Unit type code

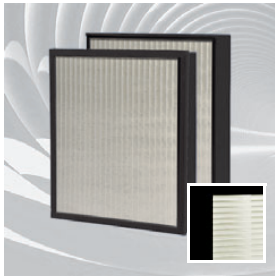
Example: **M P 95 S - 3 0 0 0 / M G 1 N**

	Product name	Type	Installation depth	Nominal air flow volume	Frame type	Seal design	Seal position	Option
M P	MultiPlan							
65	ISO ePM_{2.5} 55 %							
85	ISO ePM₁ 50 %							
95	ISO ePM₁ 80 %							
C	installation depth 46 mm							
S	installation depth 78 mm							
H	installation depth 150 mm							
T	installation depth 292 mm							
Rated volume flow rate – refer to table „form of delivery/order number“ on the next page								
M	MDF							
V	Galvanized steel							
G	Polyurethane, foamed							
F	Flat profile							
0	Without							
1	Seal on the dust-air side – Standard							
2	Seal on pure-air side							
3	Seal on both sides							
N	Neutral							

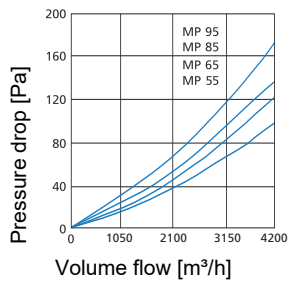


Filter elements **MultiPlan I**
Filter medium: **Pleated micro glass fiber paper**
Sealing position: **by default on the dust air side, on the clean air side available on request**

Unit Type Code	Width [mm]	Height [mm]	Depth [mm]	Filter surface [m ²]	Volume flow [m ³ /h]	Initial pressure drop [Pa]
MultiPlan I MP65						
<i>OLD filter class [EN 779:2012] – M6</i>						
NEW filter class [ISO 16890] – ISO ePM_{2.5} 55 %						
MP65C-1500/MG1-M55	610	610	46	7,0	1.500	40
MP65C-750/MG1-M55	305	610	46	3,7	750	40
MP65S-3000/MG1-M55	610	610	78	10,8	3.000	70
MP65S-1500/MG1-M55	305	610	78	5,0	1.500	70
MP65H-1500/MG1-M55	610	610	150	6,2	1.500	70
MP65H-750/MG1-M55	305	610	150	2,9	750	70
MP65H-3000/MG1-M55	610	610	150	10,8	3.000	70
MP65H-1500/MG1-M55	305	610	150	5,0	1.500	70
MP65T-3000/MG1-M55	610	610	292	10,8	3.000	70
MP65T-1500/MG1-M55	305	610	292	5,0	1.500	70
MultiPlan I MP85						
<i>OLD filter class [EN 779:2012] – F7</i>						
NEW filter class [ISO 16890] – ISO ePM₁ 50 %						
MP85C-1500/MG1-F50	610	610	46	7,0	1.500	65
MP85C-750/MG1-F50	305	610	46	3,7	750	65
MP85S-3000/MG1-F50	610	610	78	10,0	3.000	100
MP85S-1500/MG1-F50	305	610	78	5,2	1.500	100
MP85H-1500/MG1-F50	610	610	150	6,2	1.500	100
MP85H-750/MG1-F50	305	610	150	2,9	750	100
MP85H-3000/MG1-F50	610	610	150	10,0	3.000	100
MP85H-1500/MG1-F50	305	610	150	5,2	1.500	100
MP85T-3000/MG1-F50	610	610	292	10,0	3.000	100
MP85T-1500/MG1-F50	305	610	292	5,2	1.500	100
MultiPlan I MP95						
<i>OLD filter class [EN 779:2012] – F9</i>						
NEW filter class [ISO 16890] – ISO ePM₁ 80 %						
MP95C-1500/MG1-F80	610	610	46	7,0	1.500	110
MP95C-750/MG1-F80	305	610	46	3,7	750	110
MP95S-3000/MG1-F80	610	610	78	10,8	3.000	150
MP95S-1500/MG1-F80	305	610	78	5,0	1.500	150
MP95H-1500/MG1-F80	610	610	150	6,2	1.500	150
MP95H-750/MG1-F80	305	610	150	2,9	750	150
MP95H-3000/MG1-F80	610	610	150	10,8	3.000	150
MP95H-1500/MG1-F80	305	610	150	5,0	1.500	150
MP95T-3000/MG1-F80	610	610	292	10,8	3.000	150
MP95T-1500/MG1-F80	305	610	292	5,0	1.500	150



Pressure drop diagram:
 Applies to size 592 x 592 x 96



Filter Elements MultiPlan II (MP55, 65, 85, 95)

uses special paper-like fleece made of superfine micro-glass fibres, which are processed to form a stable package of folds; number and height of folds is designed to match the optimal rated operating points; here the individual folds are separated down to the greatest depth of the folds by continuous synthetic threads (hot melt) that are bonded together, which provides great stability as a result of the compact fold structure; as standard version the filter element is provided with a peripheral seal on the intake (dusty)-air side and the filter frame is made of plastic.

Application:

Primarily as pre filter of EPA and HEPA filters; hereby improving the service intervals of premium EPA and HEPA filters

filter classes M5/M6/F7/F9 [EN 779:2012].

Special features:

High volume flows with small installation depth; great mechanical stability through established fold design; metal-free separation of folds.

Areas of application:

Microelectronics, production of semiconductors, health care, chemical, pharmaceutical industries, microbiology

Type:

Standard configuration without gasket; plastic frame and other sizes are available on request

Ambient conditions: Operating temperature (max. 70°C)
 Maximum relative air humidity: 100 %



Frame material
ABS

Filter class as of
EN 779:2012
 M5, M6, F7 & F9

For the NEW filter class
as of ISO 16890
 refer to table
 on page 57

Filter media
 Micro glass fiber paper

Gasket
 on request

Temperature
resistance
 < 70 °C



Unit type code

Example:		M P	9 5	S	-	3 0 0 0	/	K	F	1	B V	N
		Product name	Type	Installation depth		Nominal air flow volume		Frame type	Seal design	Seal position	Grip protection 1.4301	Option
M P	MultiPlan											
55	ISO ePM ₁₀ 70 %											
65	ISO ePM _{2,5} 55 %											
85	ISO ePM ₁ 50 %											
95	ISO ePM ₁ 80 %											
L	installation depth 48 mm											
S	installation depth 78 mm											
J	installation depth 96 mm											
SF	installation depth 78 mm (head frame)											
JF	installation depth 100 mm (head frame)											
<p>Rated volume flow rate – refer to table „form of delivery/order number“ on the next page</p>												
K	Synthetic											
F	flat profile											
0	none											
<p>optional gasket:</p>												
1	gasket on crude air side – standard											
2	gasket on clean air side											
3	gasket on both sides of the filter element											
BV1	grip protection on crude air side											
BV2	grip protection clean air side											
BV3	grip protection on both sides of the filter element											
N	Neutral											



Filter Elements: MultiPlan II
Filter medium: Pleated micro glass fiber paper
Optional gasket: Flat section
Sealing position: optional by default on the dust air side, on the clean air side available on request

Unit Type Code	Width [mm]	Height [mm]	Depth [mm]	Filter surface [m ²]	Volume flow [m ³ /h]	Initial pressure drop [Pa]
MultiPlan II MP55						
<i>OLD filter class [EN 779:2012] – M5</i>						
NEW filter class [ISO 16890] – ISO ePM₁₀ 70 %						
MP55L-1200/K0-L70	592	382	48	3,6	1.200	45
MP55L-1570/K0-L70	490	592	48	4,6	1.570	45
MP55L-1840/K0-L70	892	382	48	5,4	1.840	45
MP55L-1900/K0-L70	592	592	48	5,7	1.900	45
MP55L-2360/K0-L70	892	490	48	7,0	2.360	45
MP55L-475/K0-L70	287	287	48	1,3	475	45
MP55L-950/K0-L70	287	592	48	2,7	950	45
MP55S-3000/K0-L70	592	592	78	9,7	3.000	75
MP55S-1500/K0-L70	287	592	78	4,6	1.500	75
MP55J-1700/K0-L70	287	592	96	4,8	1.700	90
MP55J-2200/K0-L70	592	382	96	6,5	2.200	90
MP55J-2800/K0-L70	592	490	96	8,2	2.800	90
MP55J-3300/K0-L70	892	382	96	9,7	3.300	90
MP55J-3400/K0-L70	592	592	96	10,1	3.400	90
MP55J-4200/K0-L70	892	490	96	12,5	4.200	90
MP55J-850/K0-L70	287	287	96	2,3	850	90
MultiPlan II MP65						
<i>OLD filter class [EN 779:2012] – M6</i>						
NEW filter class [ISO 16890] – ISO ePM_{2,5} 55 %						
MP65L-1570/K0-M55	490	592	48	4,6	1.570	50
MP55L-1200/K0-M55	592	382	48	3,6	1.200	50
MP65L-1900/K0-M55	592	592	48	5,7	1.900	50
MP65L-2000/K0-M55	610	610	48	6,0	2.000	50
MP65L-475/K0-M55	287	287	48	1,3	475	50
MP65L-950/K0-M55	287	592	48	2,7	950	50
MP65S-3000/K0-M55	592	592	78	9,7	3.000	80
MP65S-1500/K0-M55	287	592	78	4,6	1.500	80
MP65J-1700/K0-M55	287	592	96	4,8	1.700	95
MP65J-1750/K0-M55	305	610	96	2,9	1.750	95
MP65J-2800/K0-M55	490	592	96	4,6	2.800	95
MP65J-3400/K0-M55	592	592	96	10,1	3.400	95
MP65J-3500/K0-M55	610	610	96	6,0	3.500	95
MP65J-850/K0-M55	287	287	96	1,3	850	95

Filter Elements


MultiPlan II (MP55, 65, 85, 95)

DELBAG® Air Filtration



Filter Elements: MultiPlan II
Filter medium: Pleated micro glass fiber paper
optional gasket: Flat section
Sealing position: optional by default on the dust air side, on the clean air side available on request

Unit Type Code	Width [mm]	Height [mm]	Depth [mm]	Filter surface [m ²]	Volume flow [m ³ /h]	Initial pressure drop [Pa]
MultiPlan II MP68						
<i>OLD filter class [EN 779:2012] – F7</i>						
NEW filter class [ISO 16890] – ISO ePM₁ 50 %						
MP85L-1200/K0-F50	592	382	48	3,6	1.200	70
MP85L-1570/K0-F50	592	490	48	4,6	1.570	70
MP85L-1840/K0-F50	892	382	48	5,4	1.840	70
MP85L-1900/K0-F50	592	592	48	5,6	1.900	70
MP85L-2360/K0-F50	892	490	48	7,0	2.360	70
MP85L-475/K0-F50	287	287	48	1,3	475	70
MP85L-950/K0-F50	287	592	48	2,7	950	70
MP85J-1700/K0-F50	287	592	96	4,8	1.700	110
MP85J-2200/K0-F50	592	382	96	6,5	2.200	110
MP85J-2800/K0-F50	592	490	96	8,2	2.800	110
MP85J-3300/K0-F50	892	382	96	9,7	3.300	110
MP85J-3400/K0-F50	592	592	96	10,1	3.400	110
MP85J-4200/K0-F50	892	490	96	12,5	4.200	110
MP85J-850/K0-F50	287	287	96	2,3	850	110
MP85S-1500/K0-F50	287	592	78	4,6	1.500	120
MP85S-3000/K0-F50	592	592	78	9,7	3.000	120
MultiPlan II MP95						
<i>OLD filter class [EN 779:2012] – F9</i>						
NEW filter class [ISO 16890] – ISO ePM₁ 80 %						
MP95L-1000/K0-F80	305	610	48	6,0	1.000	120
MP95L-1570/K0-F80	490	592	48	4,6	1.570	120
MP95L-1900/K0-F80	592	592	48	5,7	1.900	120
MP95L-2000/K0-F80	610	610	48	1,3	850	120
MP95L-475/K0-F80	287	287	48	1,3	475	120
MP95L-950/K0-F80	287	592	48	2,7	950	120
MP95S-3000/K0-F80	592	592	78	9,7	3.000	150
MP95S-1500/K0-F80	287	592	78	4,6	1.500	150
MP95J-1700/K0-F80	287	592	96	4,8	1.700	190
MP95J-1750/K0-F80	305	610	96	5,2	1.750	190
MP95J-2800/K0-F80	490	592	96	8,2	2.800	190
MP95J-3400/K0-F80	592	592	96	10,1	3.400	190
MP95J-3500/K0-F80	610	610	96	10,7	3.500	190

 Filter Elements: MultiPlan II Filter medium: Pleated micro glass fiber paper Optional gasket: Flat section Sealing position: optional by default on the dust air side, on the clean air side available on request								
Unit Type Code	Width [mm]	Height [mm]	Depth [mm]	Filter surface [m ²]	Volume flow [m ³ /h]	Initial pressure drop [Pa]	Filter class as of EN 779:2012	NEW filter class as of ISO 16890
MultiPlan II including head frame								
MP55SF-2400/K0-L70	592	592	78	6,0	2.400	105	M5	ISO ePM ₁₀ 70 %
MP55SF-1200/K0-L70	287	592	78	4,6	1.200	105		
MP55JF-3400/K0-L70	592	592	100	8,9	3.400	105		
MP55JF-1700/K0-L70	287	592	100	3,6	1.200	105		
MP65SF-1200/K0-M55	287	592	78	4,6	1.200	105	M6	ISO ePM _{2,5} 55%
MP65SF-2400/K0-M55	592	592	78	6,0	2.400	110		
MP65JF-3400/K0-M55	592	592	100	8,9	3.400	110		
MP85JF-1700/K0-F50	287	592	100	3,6	1.200	110	F7	ISO ePM ₁ 50 %
MP85SF-2400/K0-F50	592	592	78	6,0	2.400	110		
MP85SF-1200/K0-F50	287	592	78	4,6	1.200	110		
MP85JF-3400/K0-F50	592	592	100	8,9	3.400	125		
MP85JF-1700/K0-F50	287	592	100	3,0	1.200	125		
MP95SF-2400/K0-F80	592	592	78	6,0	2.400	125	F9	ISO ePM ₁ 80 %
MP95SF-1200/K0-F80	287	592	78	4,6	1.200	125		
MP95JF-3400/K0-F80	592	592	100	8,9	3.400	215		
MP95JF-1700/K0-F80	287	592	100	3,6	1.200	215		

Type code MULTICOL:

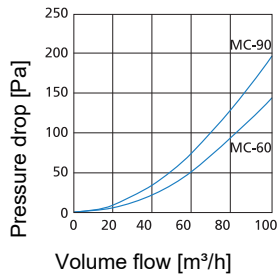
Example:

M C	E F	90	F	-	3	/	V	2	A	B V	N
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	Product name	Head frame type	Filter class [EN 779:2012]	Design type	Model size	Chassis	Option	Option	Burst Protection	Option
M C	MULTICOL									
D F	Double-head frame									
E F	Single-head frame									
60	ISO ePM _{2.5} 55 %									
90	ISO ePM ₁ 60%									
F	Installation depth 292									
G	Installation depth 150									
1	592/287									
3	287/592									
5	490/592									
6	592/592									
V	Galvanized									
0	Without flange profile seal									
1	Flange profile seal on dust-air side									
2	Flange profile seal on pure-air side (standard with DF)									
3	Flange profile seal on both sides									
A	Standard model (592/592 = 10 m ²)									
B	Extended surface model (592/592 = 13 m ²)									
C	Reduced surface model (592/592 = 8 m ²)									
B V	Burst protection galvanized steel									
N	Neutral									
	Explosion protection									



Pressure drop curve
applies for size 592 x 592 x 292 mm



Filter Elements MultiCol

Wave-shaped aluminium separators are used for stabilisation instead of synthetic threads, package of folds in galvanized steel frame; as an option flange is available on the dust-air side (EF model) or on the dust and pure-air side (DF model).

Application:

Filtration of supply or extract air in climate control and air handling unit.

Areas of application:

In areas with very irregular air flows involving unusual turbulences and high dust concentration;

MultiCol are by default designed including grip protection.

Optionally available as an ex-proof filter

Frame material
galvanized steel

Filter class as of EN 779:2012
M6 & F8

For the NEW filter class as of ISO 16890
refer to table

Filter media
Micro glass fiber paper

Ex-version on request
II 2 GD T6
(-40 to +80 °C)



Temperature resistance
< 80 °C

Technical data

MultiCol		DF60/EF60	DF90/EF90
Filter class	[EN 779:2012]	M6	F8
NEW filter class	[EN ISO 16890]	ISO ePM_{2.5} 55 %	ISO ePM₁ 60%
Installation depth	[mm]	292	292
Nominal air volume flow	[m³/h]	3400	3400
Initial pressure drop	[Pa]	130	170
Maximum allowed pressure drop	[Pa]	450	450
Filter surface area	[m²]	10	10
Mean degree of arrestance	[%]	98	98
Mean filtration efficiency	[%]	66	91
Max. operating temperature	[°C]	80	80

NO CHANCE FOR FINE DUST, MICROBES AND GERMS

HEPA/ULPA Filters

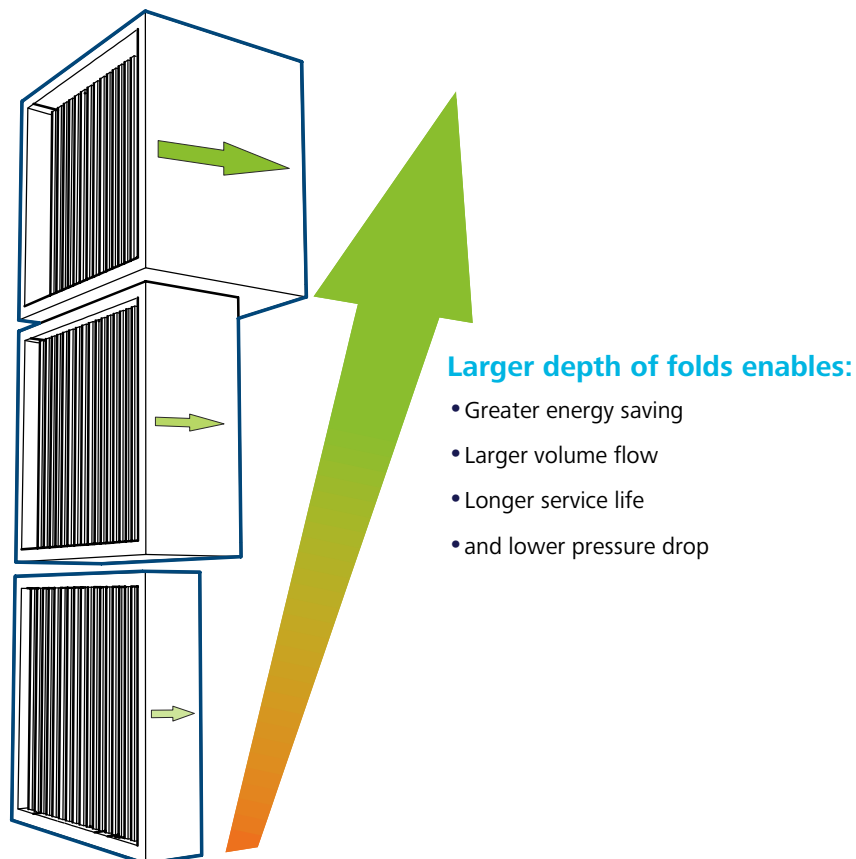
Consumers around the world articulate the need for high-value pharmaceutical products for the prevention, diagnostics and treatment. The markets for health services and Life Science are very dynamic and growing at above-average pace.

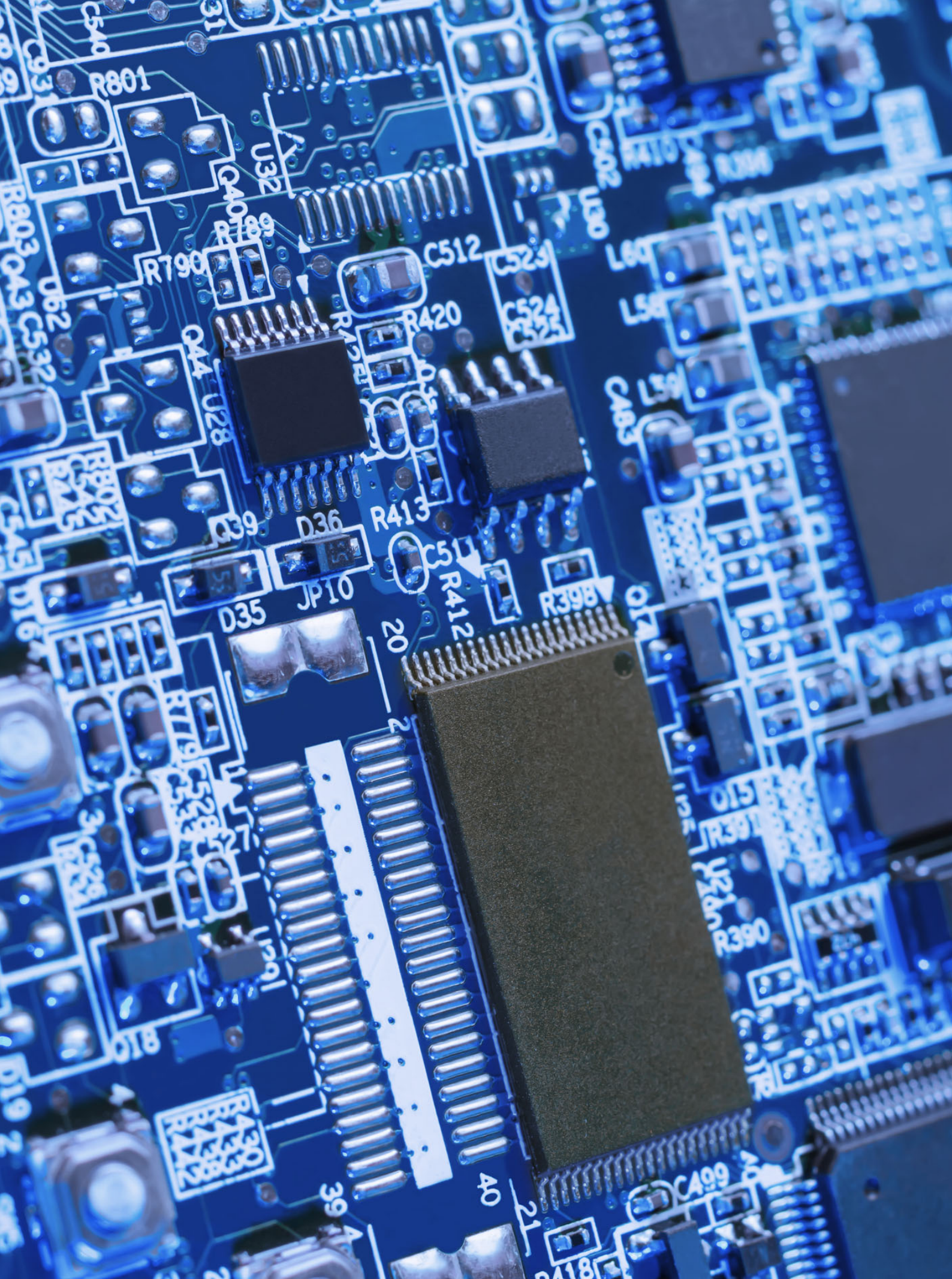
For decades DELBAG® Air Filtration has been a renown and competent partner for the value creation in the pharmaceutical and chemical industry. The success concept is based on the specially developed filtration technology and ventilation systems – designed to ensure a continuous process in the industry and applicable safety standards in the personnel protection.

The HEPA filters are characterized by the following features:

- Leak test for every filter element
- Individual scan report in accordance with DIN EN 1822
- Wide selection of filter frames and profiles
- Comprehensive range of gaskets and handle guards is available
- Customized sizes available

Depth of folds has an influence on the pressure-drop curve and thus the energy consumption:





Delbag high efficiency submicron particulate air (HEPA) filters consist of special, paper-like fleece made of superfine micro-glass fibres that have different filtration and air-flow capacity depending on the filter class.

The filter fleece is processed to form a stable package of folds; number and height of folds are designed for maximize product life and to match the optimal rated operating points and long service intervals.

The individual folds are separated down to the entire depth by continuous synthetic threads (hot melt) that are bonded together, which provides great stability and even thread runs as a result of the compact fold structure.

The packages of folds are cast airtight in robust frames. A number of different framing material is available:

- MDF
- Plywood
- Aluminium
- Galvanized steel
- Stainles steel

Ambient conditions

Operating temperature(max. °C)

Maximum relative air humidity: 100 %



Note!

Specific pressure drop depends on overall unit depth.

Type code	Example:	M13	F	H	1 2 0 0	/	M	G	1	BR	2
Pleated filter packs & Aluminium separators E11 - H13		Product description	Model design	Installation	Nominal air volume flow		Frame type	Gasket design	Gasket position	Grip protection	Grip protection position
M11	Filter class	E11 [EN 1822:2011]									
M13	Filter class	H13 [EN 1822:2011]									
F	Pleated pack design										
A	With aluminium separators										
S	Installation depth 78 [mm] (F only)										
H	Installation depth 150 mm										
T	Overall depth 292 mm										
Rated volume flow rate – refer to tables „form of delivery/order numbers“ on the next pages											
A	Aluminium										
M	MDF										
V	Galvanized										
G	Polyurethane										
F	Flat profile										
U	Test groove seal										
1	Dust air side – standard										
2	Pure-air side										
BR	Varnished steel, white epoxied										
BA	Aluminium										
BV1	Galvanized metal sheet										
1	crude air side										
2	Pure-air side										
3	Both sides										

Type code	Example:	A 1 4 F	A	G	-	800	/	A1	BR	2	
pleated filter packs with fluid gasket H13 - U15		Product name	Installation	Gasket Version:		Nominal air volume flow		Frame type	Grip protection	Grip protection position	
M 13 F	Filter class	H13 [EN 1822:2011]									
A 14 F	Filter class	H14 [EN 1822:2011]									
U 15 F	Filter class	U15 [EN 1822:2011]									
A	Installation depth 80 mm										
Other sizes are available on request.	Installation depths 104 & 128 mm										
G	Fluid gasket										
Rated volume flow rate – refer to tables „form of delivery/order numbers“ on the next pages											
A1	Aluminium, crude air side fluid gasket										
BR	varnished steel, white epoxied										
1	crude air side										
2	Pure-air side										
3	Both sides										

HEPA Filter

Explanation of Type Code

DELBAG® Air Filtration

Type code
Pleated filter packs
H14 - U15

Example:

A 14 F / A 600 / A G 1 BR 2

	Product name	Installation depth	Nominal air flow volume	Frame type	Seal design	Seal position	Grip protection	Grille position
A 14 F	Filter class H14 [EN 1822:2011]							
U 15 F	Filter class U15 [EN 1822:2011]							
A	Installation depth 69 mm							
S	Installation depth 78 mm							
E	Installation depth 90 mm							
B	Installation depth 117 mm							
Rated volume flow rate – refer to tables „form of delivery/order numbers“ on the next pages								
A	Aluminium							
G	Polyurethane							
F	Flat profile							
U	Test groove seal only available in frame depth 78 mm							
1	Dust air side – standard							
2	Pure-air side							
BR	Varnished steel, white epoxied							
BA	Aluminium							
1	Dust air side – standard							
2	Pure-air side							
3	Both sides							

Type code	Example:	M 13 V	T	3500	/	V	G	1	EX
V-shaped filter packs H13 - H14		Product	Installation depth	Nominal air flow volume		Frame type	Seal design	Seal position	Optional configuration
M 11 V	Filter class	E11 [EN 1822:2011]							
M 13 V	Filter class	H13 [EN 1822:2011]							
A 14 V	Filter class	H14 [EN 1822:2011]							
T	Installation depth	292 mm							
Rated volume flow rate – refer to tables „form of delivery/order numbers“ on the next pages									
V		Galvanized							
N		Stainless steel							
K		Plastic							
G		Polyurethane							
F		Flat profile							
U		Test groove seal							
1		Dust air side – standard							
2		Pure-air side							
N		Neutral							
EX		EX model							



MicroPur HEPA filter E11

are cast in a frame with polyurethane so as to be airtight

Application:

Designed as final filters with great capacity in filtration of all aerosol types in a multiple filter chain to be used in climate control and air handling units; for cleaning supply and extract air in industrial processes; for filtration of health endangering dust, viruses and bacteria.

Special features:

Great mechanical stability through established fold design; high volume flows with small installation depth, metal-free separation of folds.

Areas of application:

Health-care industry, chemical, pharmaceutical production, food product industry, electronics, production of semiconductors, nuclear technology.

Type:

Design with a MDF frame and PUR semicircular seal – others seals and handle guard on request.

The recommended final pressure difference:

650 Pa

Frame material
medium-density fibreboard (MDF),
aluminium
galvanized steel

Filter class
E11

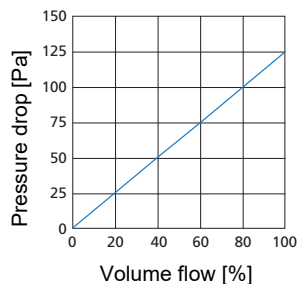
Test norm
EN 1822:2011

Filter media
Micro glass fiber paper

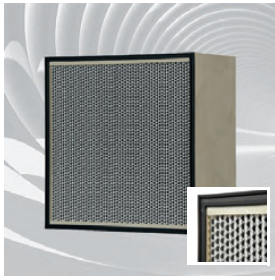
Gasket
PUR semicircular seal
flat-profile seal
test-groove seal
others seals on request

Temperature resistance
< 70 °C

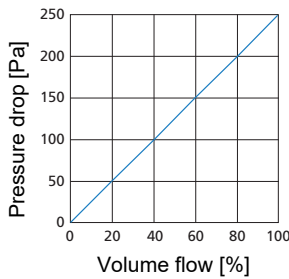
Pressure drop diagram



		HEPA filters		M11F..							
		Filter class:		E11 [EN 1822:2011]							
		Filter medium:		Pleated filter packs							
		Type M11FS installation depth 78 mm			Type M11FH installation depth 150 mm			Type M11FT installation depth 292 mm			
Size W/H [mm]	Air flow volume [m³/h]	Filtration surface [m²]	Approx. weight [kg]	Air flow volume [m³/h]	Filtration surface [m²]	Approx. weight [kg]	Size W/H [mm]	Air flow volume [m³/h]	Filtration surface [m²]	Approx. weight [kg]	
305/305	210	1.8	1.8	260 330	2.2 2.7	3.0 3.2	305/305	430	3.6	6.7	
	260	2.2	2.0					530	4.7	7.3	
	300	2.9	2.1					640	6.5	8.2	
305/610	460	3.7	2.7	550 710	4.7 5.8	4.7 5.2	305/610	930	7.8	10.2	
	550	4.6	3.1					1.160	10.0	11.6	
	640	6.1	3.4					1380	13.8	13.0	
457/457	530	4.3	3.0	640 820	5.4 6.8	5.0 5.6	457/610	1460	12.5	13.5	
	640	5.4	3.3					1820	15.9	15.4	
	740	7.1	3.6					2190	21.5	18.0	
575/575	880	7.1	4.1	1060 1350	8.7 11.0	6.7 7.7	610/610	2000	16.5	18.0	
	1060	8.7	4.8					2510	21.5	20.0	
	1230	11.6	4.9					3000	29.5	23.5	
610/610	1000	8.0	4.5	1200 1530	10.0 12.5	7.2 8.3					
	1200	10.0	5.2								
	1400	13.2	5.3								
762/610	1270	10.2	5.4	1520 1940	8.7 11.0	7.6 8.4					
	1520	12.5	5.9								
	1780	16.7	6.4								
915/610	1540	12.3	6.2	1850 2350	15.0 19.2	9.7 11.4					
	1850	15.0	6.9								
	2150	20.2	7.2								
1220/610	2100	16.7	7.8	2500 3180	20.5 26.0	12.2 14.4					
	2540	20.4	8.7								
	2900	27.1	9.3								



Pressure drop diagram



MacroPur HEPA filter H13 with aluminium separators

wave-shaped aluminum separators are used for stabilization instead of synthetic threads; the packages of folds are cast in a wooden frame with polyurethane so as to be air-tight.

Application:

Designed as final filters with great capacity in filtration of all aerosol types in a multiple filter chain to be used in climate control and air handling units; for cleaning supply and extract air in industrial processes; for filtration of health endangering dust, viruses and bacteria.

Areas of application:

Health-care industry, chemical, pharmaceutical production, food product industry, electronics, production of semiconductors, nuclear technology Filter design using aluminum separators makes operational temperature to max. 100 °C possible.

Type:

with a PUR semicircular seal – others seals and handle guard on request.

Frame material

medium-density fibreboard (MDF),
aluminium
galvanized steel

Filter class

H13

Test norm

EN 1822:2011

Medium


Micro glass fiber paper with aluminium separators

Gasket

PUR semicircular seal
flat-profile seal
test-groove seal
others seals on request

Temperature resistance

< 100 °C

 HEPA filters Filter class: Filter medium:				M13A.. H13 [EN 1822:2011] aluminum separators			
Type M13AH installation depth 150 mm				Type M13AT installation depth 292 mm			
Size W/H/D + seal [mm]	Air flow volume [m³/h]	Filtration surface [m²]	Approx. weight [kg]	Size W/H/D + seal [mm]	Air flow volume [m³/h]	Filtration surface [m²]	Approx. weight [kg]
305/305/150 + 8	240 320	2.0 3.1	2.3 3.7	305/305/292 + 8	415 520	3.9 6.1	3.6 6.0
305/610/150 + 8	530 710	4.3 6.6	4.3 6.9	290/595/292 + 8	850	7.5	5.6
610/610/150 + 8	1150 1530	9.0 13.5	6.2 10.0	305/610/292 + 8	930 1.160	8.4 13.0	5.7 9.5
762/610/150 + 8	1450 1930	11.3 17.0	7.8 12.5	595/595/292 + 8	1900 2390	16.8 26.3	9.6 15.7
				610/610/292 + 8	2000 2510	17.7 27.7	9.7 16.0
				762/610/292 + 8	2540 3190	22.2 35.1	13.2 19.3



MacroPur HEPA filter H13

are cast in a frame with polyurethane so as to be airtight.

Application:

Designed as final filters with great capacity in filtration of all aerosol types in a multiple filter chain to be used in climate control and air handling units; for cleaning supply and extract air in industrial processes; for filtration of health endangering dust, viruses and bacteria.

Special features:

Great mechanical stability through established fold design; high volume flows with small installation depth, metal-free separation of folds.

Areas of application:

Health-care industry, chemical, pharmaceutical production, food product industry, electronics, production of semiconductors, nuclear technology.

Type:

Design with a MDF frame and PUR semicircular seal – others seals and handle guard on request.

Frame material
medium-density fibreboard (MDF),
aluminium
galvanized steel

Filter class
H13

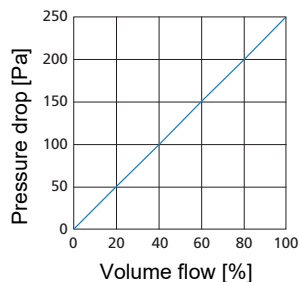
Test norm
EN 1822:2011

Filter media
Micro glass fiber paper

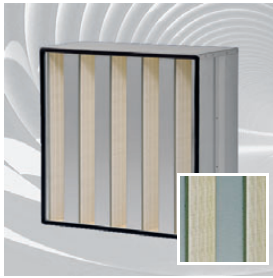
Gasket
PUR semicircular seal
others seals on request

Temperature resistance
< 70 °C

Pressure drop diagram



HEPA filters M13F.. Filter class: H13 [EN 1822:2011] Filter medium: Pleated filter packs													
	Type M13FS installation depth 78 mm			Type M13FH installation depth 150 mm			Type M13FT installation depth 292 mm						
Size W/H [mm]	Air flow volume [m³/h]	Filtration surface [m²]	Approx. weight [kg]	Air flow volume [m³/h]	Filtration surface [m²]	Approx. weight [kg]	Size W/H [mm]	Air flow volume [m³/h]	Filtration surface [m²]	Approx. weight [kg]			
305/305	210	1.8	1.8	260 330	2.2 2.7	3.0 3.2	305/305	430	3.6	6.7			
	260	2.2	2.0					530	4.7	7.3			
	300	2.9	2.1					640	6.5	8.2			
305/610	460	3.7	2.7	550 710	4.7 5.8	4.7 5.2	305/610	930	7.8	10.2			
	550	4.6	3.1					1.160	10.0	11.6			
	640	6.1	3.4					1.380	13.8	13.0			
457/457	530	4.3	3.0	640 820	5.4 6.8	5.0 5.6	457/610	1450	12.5	13.5			
	640	5.4	3.3					1820	15.9	16.0			
	740	7.1	3.6					2190	21.5	18.0			
575/575	880	7.1	4.1	1060 1350	8.7 11.0	6.7 7.7	610/610	2000	16.5	18.0			
	1060	8.7	4.8					2510	21.5	20.0			
	1230	11.6	4.9										
610/610	1000	8.0	4.5	1200 1530	10.0 12.5	7.2 8.3	610/610	3000	29.5	23.5			
	1200	10.0	5.2										
	1400	13.2	5.3										
915/610	1540	12.3	6.2	1850 2350	18.0 19.0	9.7 11.4							
	1850	15.0	6.9										
	2150	20.2	7.2										
1220/610	2100	16.6	7.8	2500 3180	20.4 25.6	12.2 14.4							
	2500	20.4	8.7										
	2400	27.2	9.3										



Micro-/MacroPur HEPA filter E11/H13 in V-Form

are cast airtight in U-shaped profiles, and are arranged in a V shape.

Application:

Designed as final filters with great capacity in filtration of all aerosol types in a multiple filter chain to be used in climate control and air handling units; for cleaning supply and extract air in industrial processes; for filtration of health endangering dust, viruses and bacteria.

Special features:

Great mechanical stability through established fold design; high volume flows with small installation depth, metal-free separation of folds.

Areas of application:

Health-care industry, chemical, pharmaceutical production, food product industry, electronics, production of semiconductors, nuclear technology.

Type:

Galvanized frame and PUR semicircular seal – other seals and handle guard on request.

Optionally available as an ex-proof filter

Frame material
galvanized steel

Filter class
E11 & H13

Test norm
EN 1822:2011

Filter media
Micro glass fiber paper

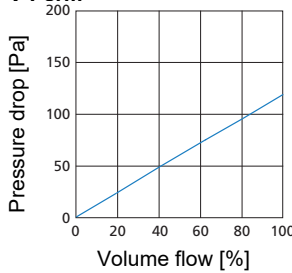
Gasket
PUR semicircular seal
others seals on request

Ex-version on request
II 2 GD T6
(-40 to +80 °C)

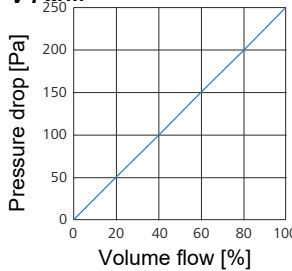


Temperature resistance
< 70 °C

Pressure drop diagram E11 V-Form



Pressure drop diagram H13 V-Form



	HEPA filters	M11VT and M13VT
	Filter classes:	E11 and H13 [EN 1822:2011]
	Filter medium:	V-shaped filter packs

Type M11VT (Filter class E11)			
Size W/H [mm]	Volume flow [m³/h]	Filter surface [m²]	Approx. weight [kg]
305/305	730	7.3	5.8
	830	8.5	5.9
305/610	1600	18.2	11.2
	1800	21.3	11.3
610/610	3500	36.3	17.0
	4000	42.6	17.2

Type M13VT (filter class H13)			
Size W/H [mm]	Volume flow [m³/h]	Filter surface [m²]	Approx. weight [kg]
305/305	730	7.3	5.8
	830	8.5	5.9
305/610	1600	18.2	11.2
	1800	21.3	11.3
610/610	3500	36.3	17.0
	4000	42.6	17.2

HEPA Filter

MacroPur H13 in V-Form in Plastic Frame

DELBAG® Air Filtration



MacroPur HEPA filter H13 in V-Form with plastic frame

are cast airtight in U-shaped profiles, and are arranged in a V shape.

Application:

Designed as final filters with great capacity in filtration of all aerosol types in a multiple filter chain to be used in climate control and air handling units; for cleaning supply and extract air in industrial processes; for filtration of health endangering dust, viruses and bacteria.

Special features:

Great mechanical stability through established fold design; high volume flows with small installation depth, metal-free separation of folds.

Areas of application:

Health-care industry, chemical, pharmaceutical production, food product industry, electronics, production of semiconductors, nuclear technology.

Type:

Design in durable ABS framing including PUR semicircular gaskets – others gaskets and grip protection available on request.

Frame material
ABS

Filter class
H13

Test norm
EN 1822:2011

Filter media
Micro glass fiber paper

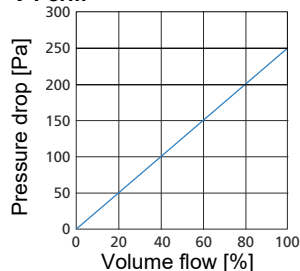
Gasket
PUR semicircular seal
others seals on request

Temperature resistance
< 70 °C

*Filter also available as
Life-Science Version*



Pressure drop diagram H13 V-Form



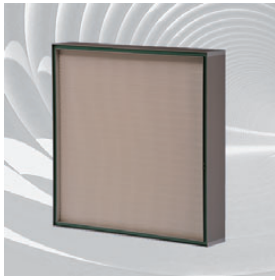
Delbag V-Shape for HEPA filter in durable ABS plastic frame

Filter classes: H13 [EN 1822:2011]
Filter medium: V-shaped filter packs

Type M13VT-3500/KU2			
Size W/H [mm]	Volume flow [m³/h]	Filter surface [m²]	Approx. weight [kg]
610/610	3500	40	14.5

Type M13VT-1800/KU2			
Size W/H [mm]	Volume flow [m³/h]	Filter surface [m²]	Approx. weight [kg]
305/610	1800	22	9

Type M13VT-830/KU2			
Size W/H [mm]	Volume flow [m³/h]	Filter surface [m²]	Approx. weight [kg]
305/305	830	9	7



UltraPur HEPA filter H14/U15

Filter packages are cast airtight in aluminium frames and are provided with handle guard on the pure-air side.

Application:

For systems with very high standards in air purity; in supply air ceilings and walls of fully-equipped clean rooms with turbulence-free (laminar flow) replacement ventilation, for workbenches and workroom cabins.

Special features:

high mechanical stability, metal-free separation of folds, pure-air side laminator on downstream air flow.

Areas of application:

Electronics or microelectronics, production of semiconductors, health care, chemical, pharmaceutical industries, microbiology.

Type:

with a PUR semicircular seal – others seals and handle guard on request.

Frame material
Aluminium

Filter class
H14 & U15

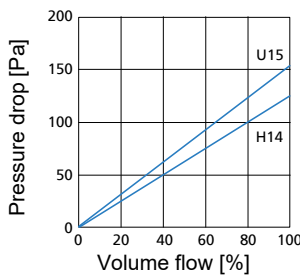
Test norm
EN 1822:2011

Filter media
Micro glass fiber paper

Gasket
PUR semicircular seal
flat-profile seal
test-groove seal
others seals on request

Temperature resistance
< 70 °C

Pressure drop diagram



**Filter also available as
Life-Science Version**



Size W/H [mm]	Typ A14FA installation depth 69 mm *			Type U15FA installation depth 69 mm		
	Volume flow [m³/h]	Filter surface [m²]	Approx. weight [kg]	Volume flow [m³/h]	Filter surface [m²]	Approx. weight [kg]
305/305	150	2.5	1.6	150	2.5	1.6
305/610	300	5.0	2.7	300	5.0	2.7
457/457	340	5.7	2.9	340	5.7	2.9
610/610	600	10.2	4.6	600	10.2	4.6
610/915	900	15.3	6.6	900	15.3	6.6
610/1220	1200	21.0	8.5	1200	21.0	8.5

* Installation depth [mm] 78, 90, and 117 are available on request

ONLY GERM-FREE AIR DELIVERS FRESHNESS AND TASTE

Activated Carbon Filters

Glistening colors, intensive flavor, juicy meat ... wholesale buyers and end consumers demand first-class quality of food products. The decisive factor here is the freshness of products. So that easily perishable goods can be optimally processed, hygienic air conditions are indispensable. They also directly affect the quality and shelf life of food.

Experts from DELBAG® Air Filtration have a profound understanding of the requirements in the food-processing industry. Using a wide-range and deep assortment of solutions we can satisfy every demand for filters in the sensitive and ultra-sensitive areas – comprising conventional as well as highly complex applications.

The activated-carbon filter are characterized by the following features:

- Easy installation with a bayonet-type fixation
- High absorption capacity thanks to premium activated carbon
- Robust design of cartridges
- Impregnated carbon types are available for different toxic gases
- Extended service life



Activated Carbon, loose

*Technical Data/
Form of delivery/
Order number*

Grain size	Weight [kg/bag]	Density [g/l]	Special treatment	Application for example	Minimum contact time	Order number
AKOLIT-A1	25	490	no	Odours Hydrocarbons Solvents	0.1-0.2 s	00 01 294
AKOLIT-A2	25	490	no		0.1-0.2 s	00 01 581
AKOLIT-A3	25	460	no		0.1-0.2 s	00 01 793
AKOLIT-C1	25	640	yes	Sulphuric acid Hydrochloric acid Sulphur dioxide Hydrogen fluoride	0.2 s	00 03 572
AKOLIT-CG1	25	560	yes	Radioactive gas types (methyl iodide)	0.25 s	20 02 410
AKOLIT-CG1,5	8.0	520	yes		0.25 s	20 01 606
AKOLIT-D	25	460	yes	Sulfate, propylene Hydrogen sulphide	0.4 s	On request
AKOLIT-E	25	460	yes	Ammonia, amine	1.0	On request

Grain size 1=Rods with diameter 1 mm
2=Rods with diameter 2 mm
3=Rods with diameter 3 mm

Plate element AK-20

consists of MDF-frame with a V-shaped arranged and airtight cast activated carbon plate

Application:

Filtration of odours and gaseous pollutants

Areas of application:

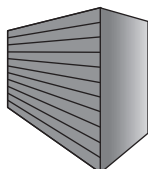
EBE duct filter & Multisafe

Technical data

Filter plate element		AK-20 305/610/292	AK-20 610/610/292
Dimensions W/H/D + gasket	[mm]		
Volumetric flow rate	[m³/h]	625	1250
Pressure difference	[Pa]	50	50
Contact period	[s]	0.15	0.15
Layer thickness	[mm]	20	20
Activated carbon volume	[l]	25	50
Weight	[kg]	approx. 22	approx. 37

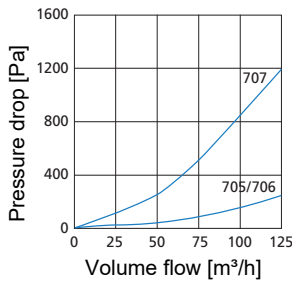
*Form of delivery/
order number*

AK-20	Size	ORD.No.
Akolit-A1	305/610/292	20 01 202
Packaging unit 1	610/610/292	60 22 581





Pressure drop diagram



Activated Carbon Cartridge 705/706/707

consist of perforated, concentric synthetic cylinders; the interstices of the cartridge are filled with activated carbon; expansion adjustment ring in each cartridge ensures that the cartridges can be used in any arrangement and that no air leakages occur allowing in such a way dust air to escape; carbon content can be replaced; mounting is performed as plug or screw connection The cartridges are fully incinerable.

Activated charcoal cartridges **705, 706 und 707** are fitted into the holding frames via a plug or screw connection.

Application:

Adsorption of odors, toxic gaseous pollutants, hydrocarbons and solvents.

Special features:

Different activated carbon types; regeneration is possible, fully incinerable.

Special areas of application:

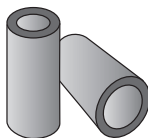
Activated Carbon Cartridges **705** and **707** are replacement cartridges for Filter cell 711 or 721.

Activated charcoal cartridges **706** as replacement cartridges for slanted activated charcoal holder CHL

Technical data

Activated carbon cartridges	705	706	707
Activated carbon type	AKOLIT-A2	AKOLIT-A2	AKOLIT-A2
Diameter/height [mm]	119/291	119/291	119/291
Max. operating temperature [°C]	40	40	40
Max. relative air humidity [%]	70	70	70
Activated carbon volume [l]	1.7	1.7	2.0
Layer thickness [mm]	22	22	31
Flange diameter [mm]	67.1	67.1	38.0
Connection type	screw fixture	plug fixture	screw fixture

*Form of delivery/
order number*

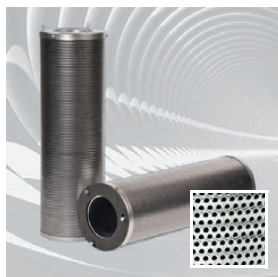


Activated carbon cartridge	Activated carbon type	Packaging-units [#]	Empty weight [kg]	Order number
705	Akolit-A2	25	0.2	60 50 331
706	Akolit-A2	25	0.2	60 50 431
707	Akolit-A2	25	0.2	00 37 109

Intake capacity and degree of arrestance of activated carbon filters depend on gas composition and concentration as well as contact period of gas molecules with activated carbon.

Maximum allowed air humidity 70 %, max. temperature 40 °C, minimum contact period depending on application 0.05 s to 1.0 s, pre-filtration is necessary, required filter class F7 (DIN EN 779).

For cartridges **705, 706 an 707** regeneration is available. In this case a used activated carbon cartridge is opened, cleared, cleaned, recharged with unused activated carbon, closed and is available in regenerated form. Used activated carbon is then recycled by an authorized and certified waste management company.



Activated Carbon Cartridges 708/709

consist of concentric perforated cylinders steel sheet or stainless steel or synthetics. The carbon content of the steel sheet cartridges can be replaced, connection is performed via 3-point bayonet.

Application:

Adsorption of odors, toxic gaseous pollutants, hydrocarbons and solvents.

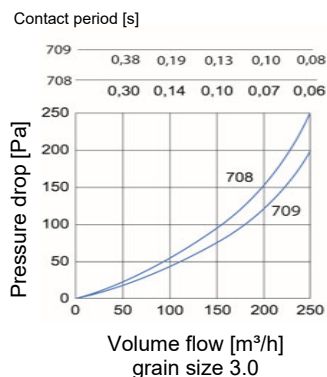
Special features:

Different activated carbon types; regeneration is possible.

Areas of application:

CKG holding frame

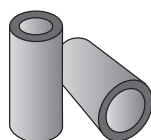
Pressure drop diagram



Technical data

Activated carbon cartridge	708	709
Activated carbon type	AKOLIT-A3	AKOLIT-A3
Insert	CKG holding frame	
Diameter/height [mm]	145/450	145/600
Max. operating temperature [°C]	40	40
Max. relative air humidity [%]	70	70
Activated carbon volume [l]	4.3	5.7
Layer thickness [mm]	26	26
Connection type	3-point bayonet	3-point bayonet

**Form of delivery/
order number**



Activated carbon cartridge	Activated carbon type	Packaging-units [#]	Weight (empty) [kg]	Order number
708	AKOLIT-A3 galvanized steel	8	1.6	00 03 499
	Stainless steel AKOLIT-A3	8	1.6	20 01 418
709	AKOLIT-A3 galvanized steel	8	2.0	10 37 410
	Stainless steel AKOLIT-A3	8	2.0	10 37 415
708-K	Plastic AKOLIT A3	8	1.6	26 03 223
709-K	Plastic AKOLIT A3	8	2.0	20 51 091

Intake capacity and degree of arrestance of activated carbon filters depend on gas composition and concentration as well as contact period of gas molecules with activated carbon.

Maximum allowed air humidity 70 %, max. temperature 40 °C, minimum contact period depending on application 0,05 s to 1,0 s, pre-filtration is necessary, required filter class F7 (DIN EN 779).

Activated carbon cartridges 708 & 709 are also regenerable. In this case a used activated carbon cartridge is opened, cleared, cleaned, recharged with unused activated carbon, closed and is available in regenerated form. Used activated carbon is then recycled by an authorized and certified waste management company.



CKG holding frame

individual, exchangeable activated carbon bayonet-fitted type 708/709 & 708-K/709-K cartridges are used in frames made of galvanized or stainless steel.

Special features:

The cartridges can be individually replaced and have a 3-point bayonet-type connection.

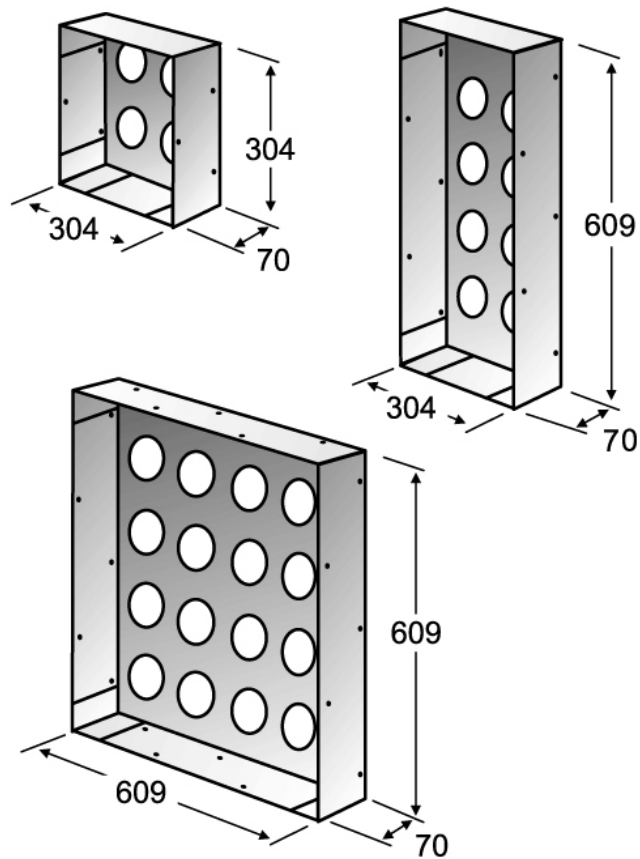
Areas of application:

Frames are used in duct air filters EBE (CKG-E) with 472 + 620 mm installation depth (on request), or as wall frames.



Note!

Cartridge type 709 is only available for CKG-2 and CKG-3 frames!



*Technical data/
order numbers:*

CKG holding frame	CKG-2-V-708-03	CKG-3-V-708-03	CKG-6-V-708-03
Unit size [mm]	304/304/70	304/609/70	609/609/70 *
Number of cartridges [quantity]	4	8	16
Activated carbon volume [l]	16	32	64
Packaging unit [quantity]	1	1	1
ORD.No.			
Galvanized steel frame (V)	10 39 837	10 39 323	10 39 321
Stainless steel frame (N)	26 03 560	26 03 559	26 03 558

* only for 708

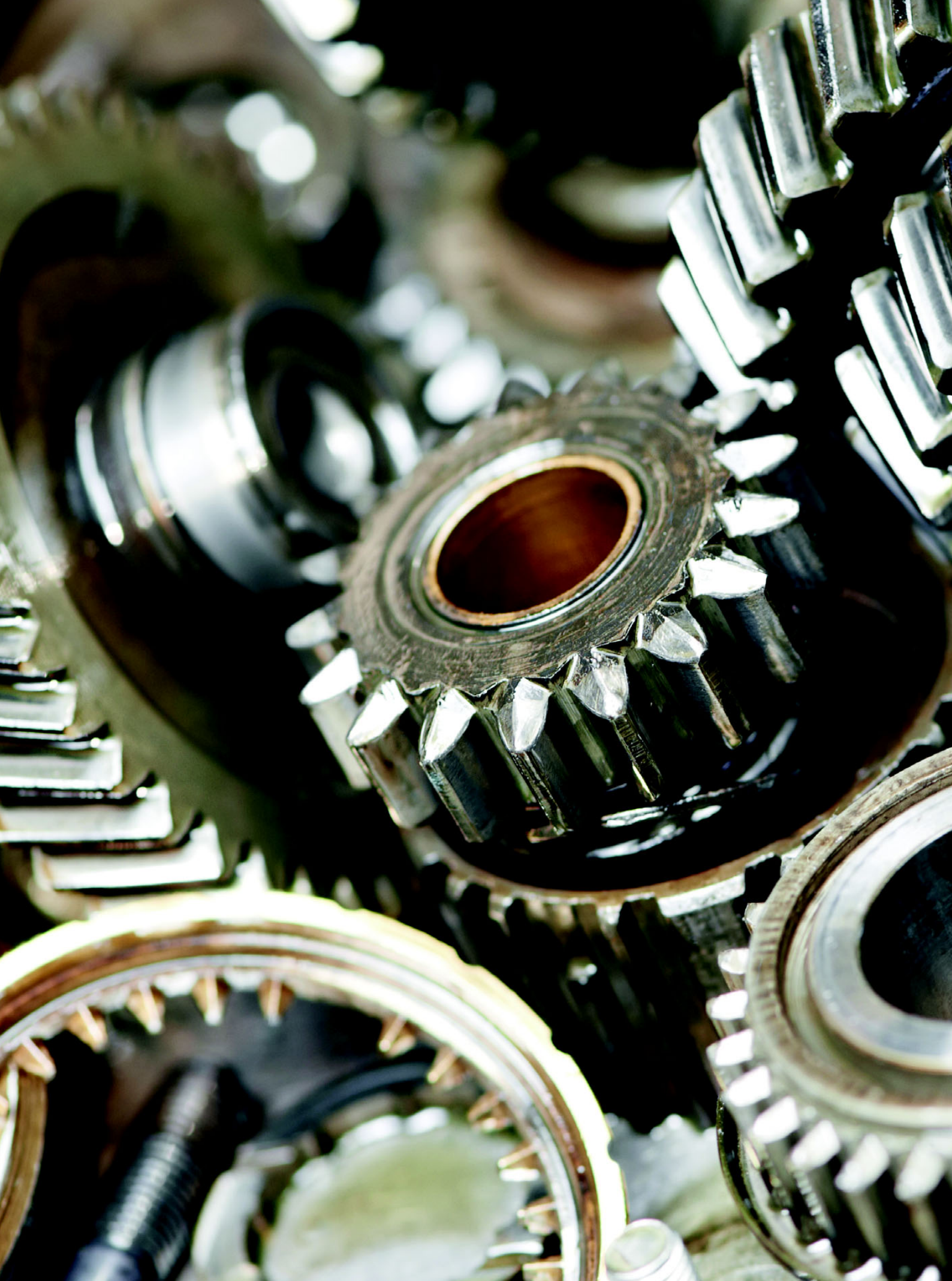
EQUALLY COST EFFECTIVE AND ENVIRONMENTALLY FRIENDLY

Round Air Filters

When oil is used as cooling lubricant, submicron aerosols are produced in high concentrations. An efficient filtration system must be capable of reliably capturing these aerosols and of removing the separated oil from the flow of extracted air, before the oil can evaporate and re-enter the extracted air in a gaseous phase. Round air filters from DELBAG® Air Filtration offer an ideal solution here.

The round air filters are characterized by the following features:

- For cleaning intake air of internal-combustion motors, fans and compressors
- Various structural designs, sizes, and filter media are available, depending on the purpose of use.
- The filter modules can be exactly tailored to their operational situations.

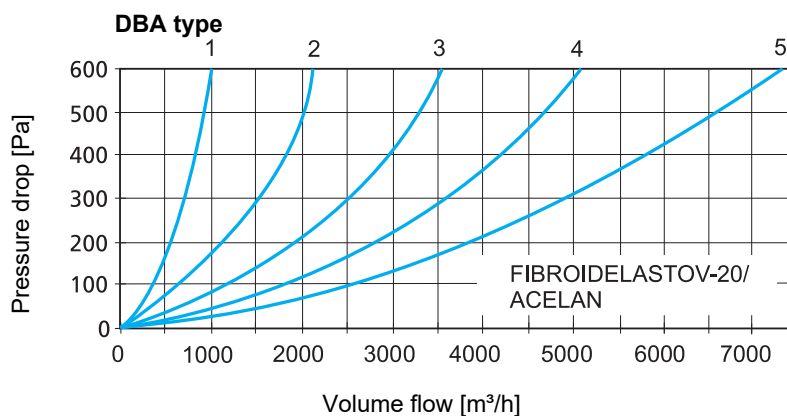
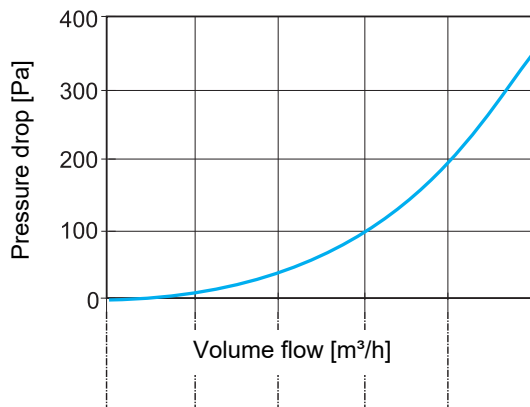


These round filters are used to purify the intake air for internal-combustion engines and for fans. Various structural designs, sizes, and filter media are available, depending on the purpose of use. Weather-protection hoods are available for outdoor applications.

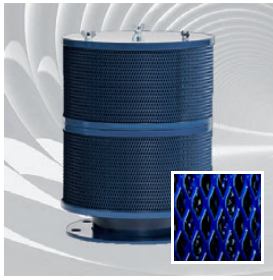
Explanation of specifications for all round air filters

Type description	Filter medium	Wetting
DAH	High performance (HL)	wetted
DAC	FibroidElastic-30	unwetted
DBH	High performance (HL)	wetted
DBA	FIBROIDELASTOV-20/ACELAN	unwetted
DBC	FibroidElastic-30	unwetted
DBV	FibroidElastov-40	unwetted

Pressure difference for types DAH, DBC, DBH, DBV, DAC



DAH type							
Size	1	0	85	170	250	340	420
	2	0	145	290	440	580	730
	3	0	260	520	780	1040	1300
	DBC, DBH, DBV types						
Size	1	0	200	400	600	800	1000
	2	0	400	800	1200	1600	2000
	3	0	700	1400	2100	2800	3500
	4	0	1000	2000	3000	4000	5000
	5	0	1400	2800	4200	5600	7000
DAC type							
Size	1	0	45	90	130	180	220
	2	0	100	200	300	400	500
	3	0	200	400	600	800	1000



Round air filter DAH

and weather-protection hoods are manufactured of painted steel (RAL 5001); metal filter cartridges (HL high performance model) are used as a filter medium; round air filters DA for clamping are supplied with a slotted fitting with a clip.

Application:

For cleaning intake air of internal-combustion motors, fans and compressors.

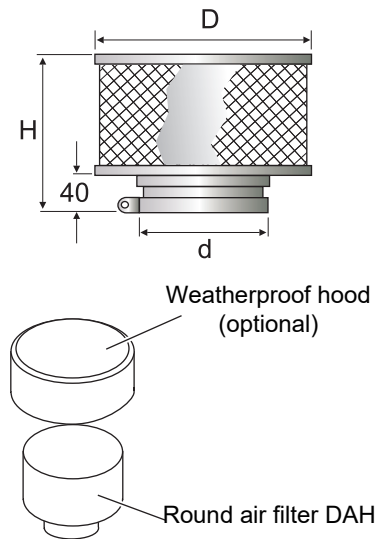
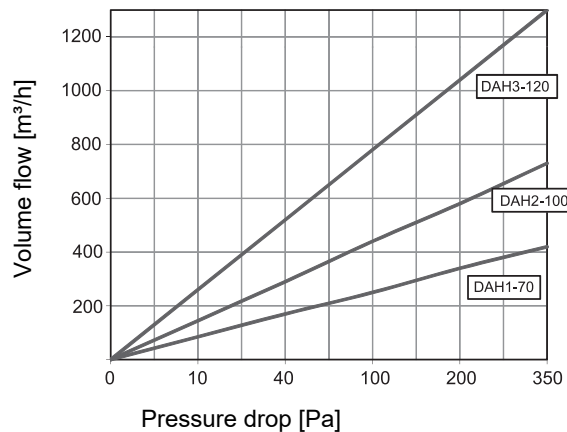
Special features:

Slotted fitting with a clip.

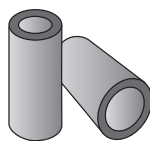
Areas of application:

Industrial facilities requiring process air treatment, heavy industry, cement industry, sewage treatment plants, water treatments plants.

Pressure drop diagram:



Technical Data/
Form of delivery/
Order number



		DAH1-70	DAH2-100	DAH3-120
Round air filter DAH				
Filter class	[EN 779:2012]	G2	G2	G2
Diameter/height	[mm]	130/140	180/155	180/230
Nominal air volume flow	[m³/h]	250	440	780
Initial pressure drop	[Pa]	100	100	100
Diameter of top frame	[mm]	70	100	120
Weight	[kg]	0.9	1.6	2.3
Multi-stage model		no	no	no
Wetting		yes	yes	yes
Packaging unit	[quantity]		1	
ORD.No.		20 00 333	20 00 339	20 00 340
DAH weatherproof hood				
Diameter/height	[mm]	180/145	225/160	225/235
Weight	[kg]	0.6	1.0	1.3
Packaging unit	[quantity]		1	
ORD.No.		20 00 631	20 00 204	20 00 632
Wetting agent VISCINOL A 30 – 15 to + 45 °C 20 liter container				
Net weight	[kg/l]		0.9	
ORD.No.			20 00 365	



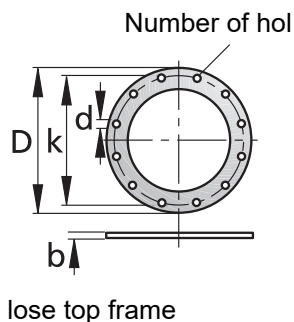
Round air filters DBH/DBA/DBV

The cartridge can be exchanged and can be used again after being cleaned and wetted; the filter medium can be exchanged and can be used again after cleaning (except for M5)

Technical data

Round air filter, multi-stage design, with and without wetting		Size 1	Size 2	Size 3	Size 4	Size 5
Diameter/height	[mm]	240/255	360/305	360/505	500/505	500/705
DBH HL wetted / Filter class G2 [EN 779:2012]						
Cartridge height	[mm]	150	200	200	200	200
Number of cartridges	[quantity]	1	1	2	2	3
Filter weight	[kg]	8.5	15.5	24.5	40.5	51.0
Weight per cartridge set	[kg]	3.0	4.0	8.0	11.0	17.0
Wetting agent VISCINOL A 30 – 15 to + 45 °C 20 liter container						
Net weight	[kg/l]	0.9				
ORD.No.		20 00 365				
DBV FIBROIDELASTOV-40 Filter class G4 [EN 779:2012]						
Filter layer size	[mm]	150/670	200/1050	200/1050	200/1500	300/1500
Number of cartridges/ filter layer	[quantity]	1	1	2	2	2
Filter weight	[kg]	8.0	12.0	19.0	26.0	36.0
Weight	[kg]	0.7	1.2	1.2	2.4	2.4
DBA 2-stage FIBROIDELASTOV-20/ACELAN Filter class M5 [EN 779:2012]						
Filter layer size	[mm]	150/670	200/1050	200/1050	200/1500	300/1500
Number of cartridges/ filter layer	[quantity]	1	1	2	2	2
Filter weight	[kg]	8.7	13.2	20.2	28.4	38.4
Weight per package	[kg]	1.4	2.4	2.4	4.8	4.8

Nominal width:



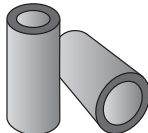
Top frame for DB		Nominal width NW				
DIN 2641 for PN 6		125	200	250	350	400
Diameter	D [mm]	240	320	375	490	540
Bolt circuit diameter	k [mm]	200	280	335	445	495
Number of bolt holes	n	8	8	12	12	16
Hole diameter	d [mm]	18	18	18	23	23
Reduced thickness	b [mm]	8	8	8	12	12
DIN 2642 for PN 10		100	150	200	250	300
Diameter	D [mm]	220	285	340	395	445
Bolt circuit diameter	k [mm]	180	240	295	350	400
Number of bolt holes	n	8	8	8	12	12
Hole diameter	d [mm]	18	23	23	23	23
Reduced thickness	b [mm]	8	8	8	8	12

Type code

Example: **DBH 1 - 100 / 2642**

	Type	Size	top frame NW	top frame DIN
DBH	Round air filter DBH (G2) High performance HL			
DBA	Round air filter DBA (M5) FIBROIDELASTOV-20/ACELAN			
DBV	Round air filter DBV (G4) FIBROIDELASTOV-40			
Diameter/Height				
1240/255				
2360/305				
3360/505				
4500/505				
5500/705				
nominal width of top frame acc. to table „nominal "width" on page 84				
DIN 2641 for PN 6				
DIN 2642 for PN 10				

Form of delivery/
order number



Round air filter colour RAL 5001	DBH (G2) High performance HL	DBA (M5) FIBROIDELASTOV-20/ACELAN	DBV (G4) FIBROIDELASTOV-40
1-100/2642	20 02 007	20 00 630	20 01 469
1-125/2641	20 01 145	20 08 541	20 15 024
2-150/2642	20 00 723	20 14 051	20 02 912
2-200/2641	20 00 581	20 02 149	20 01 531
3-200/2642	20 15 028	20 01 616	20 01 144
3-250/2641	20 15 029	20 08 542	20 15 025
4-250/2642	20 15 030	20 14 050	20 03 548
4-350/2641	20 01 541	20 15 027	20 15 026
5-300/2642	20 04 659	20 01 642	20 00 671
5-400/2641	20 15 031	20 02 822	20 01 880
Packaging unit	1	1	1

*Order numbers
DBH accessories:*

Spare cartridges	Size 1	Size 2	Size 3	Size 4	Size 5
DBH high performance HFilter class G2 [EN 779:2012]					
Quantity/size	1	1	2	2	3
Diameter/height [mm]	240/150	360/200	360/200	500/200	500/200
Weight per unit [kg]	3.0	4.0	4.0	5.5	5.5
ORD.No.	20 00 501	20 00 500		20 00 502	
Wetting agent VISCINOL A 30; – 15 to + 45 °C 20 liter container					
Net weight [kg/l]	0.9				
ORD.No.	20 00 365				

*Order numbers
DBA accessories:*

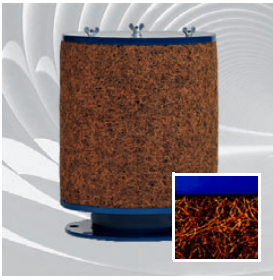
Spare	Size 1	Size 2	Size 3	Size 4	Size 5
DBA FIBROIDELASTOV-20/ACELANFilter class M5 [EN 779:2012]					
Width/length [mm]	150/670	200/1050	200/1050	200/1050	300/1050
Weight per unit [kg]	0.7	1.2	1.2	2.4	2.4
Packaging unit [quantity]	10				
Quantity/size	1	1	2	2	2
DB, FIBROIDELASTOV-20 order number	20 00 208	20 00 205		20 00 206	20 00 207
DB, ACELAN order number	20 00 213	20 00 214		20 00 215	20 00 216

*Order number
DBV accessories:*

Spare	Size 1	Size 2	Size 3	Size 4	Size 5
DBA FIBROIDELASTOV-40Filter class G4 [EN 779:2012]					
Width/length [mm]	150/670	200/1050	200/1050	200/1050	300/1050
Weight per unit [kg]	0.7	1.2	1.2	2.4	2.4
Packaging unit [quantity]	10				1
Quantity/size	1	1	2	2	2
ORD.No.	20 00 209	20 00 210		20 00 211	20 00 212

*Order numbers
weather protection hood
DBH/DBA/DBV:*

Weather protection hood DBH/DBA/DBV color RAL 5001	Size 1	Size 2	Size 3	Size 4	Size 5
Quantity/size	1	1	2	2	3
Diameter/height [mm]	310/295	430/350	430/550	575/560	575/760
Weight per unit [kg]	3.0	4.0	7.0	9.0	14.0
Packaging unit [quantity]	1				
ORD.No.	20 00 635	20 00 636	20 00 637	20 00 638	20 00 639



Round air filter DAC

are made of immersion painted steel (RAL 5001); ring packs (FIBROIDELASTIC-30) are used as a filter medium; round air filters DA for clamping are supplied with a slotted fitting with clamps.

Application:

For cleaning intake air of internal-combustion motors, fans and compressors.

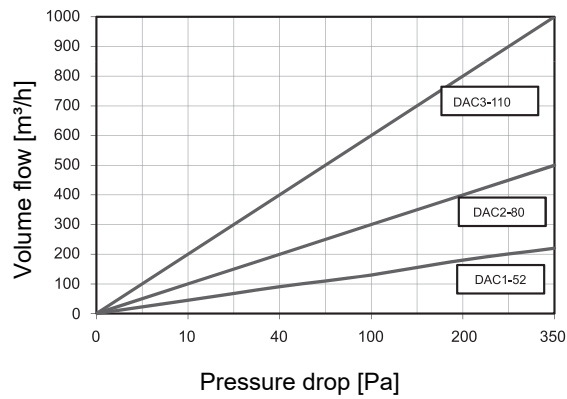
Special features:

Slotted fitting with a clip.

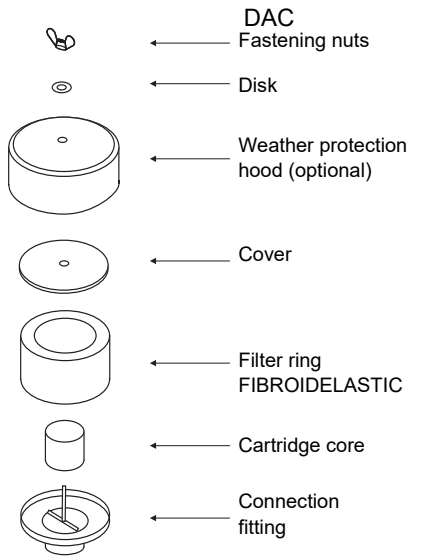
Areas of application:

Industrial facilities requiring process air treatment, heavy industry, cement industry, sewage treatment plants, water treatments plants.

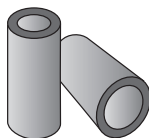
Pressure drop curve:



Structure of round air filter



Technical Data/
Form of delivery/
Order numbers DAC:

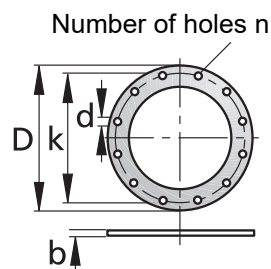


		DAC1-52	DAC2-80	DAC3-110
Round air filter DAC, single stage model, without wetting				
Filter class	[EN 779:2012]	G2	G2	G2
Diameter/height	[mm]	180/120	180/180	180/250
Nominal air volume flow	[m³/h]	130	300	600
Initial pressure drop	[Pa]	100	100	100
Diameter of top frame	[mm]	52	80	110
Ring pack height h	[mm]	60	120	190
Filter weight	[kg]	1.8	2.0	2.3
Packaging unit	[quantity]	1		
ORD.No.		20 00 494	20 00 492	20 00 493
Weatherproof hood DAC				
Diameter/height	[mm]	225/125	225/185	225/255
Weight	[kg]	0.7	1.0	1.5
Packaging unit	[quantity]	1		
ORD.No.		20 00 633	20 00 491	20 00 634
Filter ring FIBROIDELASTIC-30				
Diameter/height	[mm]	180/60	180/120	180/190
Weight	[kg/l]	0.15	0.3	0.4
Packaging unit	[quantity]	240	120	60
ORD.No.		20 00 103	20 00 104	20 00 105

Technical data DBC:

	DBC, FIBROIDELASTIC-30	Filter class G2 [EN 779:2012]				
		150	200	400	400	600
Ring pack height	[mm]	150	200	400	400	600
Filter weight	[kg]	6.0	8.0	12.0	17.0	21.0
Weight per package	[kg]	0.4	0.8	1.6	2.2	3.3

Nominal width:



lose top frame

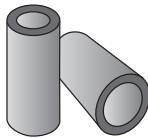
Top frame for DB		Nominal width NW				
DIN 2641 for PN 6		125	200	250	350	400
Diameter	D [mm]	240	320	375	490	540
Bolt circuit diameter	k [mm]	200	280	335	445	495
Number of bolt holes	n	8	8	12	12	16
Hole diameter	d [mm]	18	18	18	23	23
Reduced thickness	b [mm]	8	8	8	12	12
DIN 2642 for PN 10		100	150	200	250	300
Diameter	D [mm]	220	285	340	395	445
Bolt circuit diameter	k [mm]	180	240	295	350	400
Number of bolt holes	n	8	8	8	12	12
Hole diameter	d [mm]	18	23	23	23	23
Reduced thickness	b [mm]	8	8	8	8	12

Product type code DBC:

Example: **DBC 1 - 100 / 2642**

	Type	Size	top frame NW	top frame DIN
DBC	Round air filter DBC (G2) FIBROIDELASTIC-30			
Diameter/Height				
1240/255				
2360/305				
3360/505				
4500/505				
5500/705				
Nominal width of top frame acc. to table „nominal "width" on page 88				
DIN 2641 for PN 6				
DIN 2642 for PN 10				

Form of delivery/
Order Numbers DBC:



Round air filter color RAL 5001	DBC (G2) FIBROIDELASTIC-30
DBC 1-100/2642	20 15 021
DBC 1-125/2641	20 00 627
DBC 2-150/2642	20 00 580
DBC 2-200/2641	20 00 628
DBC 3-200/2642	20 15 022
DBC 3-250/2641	20 00 958
DBC 4-250/2642	20 01 072
DBC 4-350/2641	20 00 629
DBC 5-300/2642	20 15 023
DBC 5-400/2641	20 02 261
Packaging unit	1

Order numbers
DBC accessories:

Spare filter ring DBC	Size 1	Size 2	Size 3	Size 4	Size 5
DB, FIBROIDELASTIC-30 Filter class G2 [EN 779:2012]					
Quantity/size	1	1	1	1	1
Diameter/height [mm]	240/150	360/200	360/400	500/400	500/600
Weight per unit [kg]	0.4	0.8	1.6	2.2	3.3
Packaging unit [quantity]	45	20	20	15	8
ORD.No.	20 00 106	20 00 107	20 00 108	20 00 109	20 00 110

EASY FILTER CHANGE AND SAFE OPERATION

Glove Box Filters, Frames and Casings

Glove-box filters from DELBAG® Air Filtration are used to separate dust and gas pollutants from industrial process and atmospheric air. Glove-box filters are best suitable for the filtration of exhaust air from glove boxes in the nuclear and chemical industry as well as laboratories.

These wall filter frames and casing are made of galvanized or stainless steel. The frames can be bolted together to form a filter wall and enable a very easy and at the same time safe filter replacement. Filter frames with reinforced edges satisfy the most stringent demands for leak-free conditions of HEPA filters.

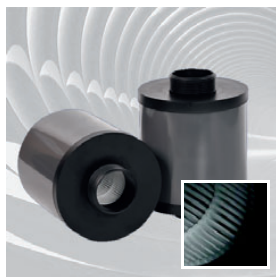
The glove-box filters are characterized by the following features:

- They meet the highest requirements for the filtration in the final stage.
- The filters can be installed on the air-intake or the air-outlet sides.

The wall frame and casing are characterized by the following features:

- Fast and safe filter replacement
- Easy installation to form a complete wall-frame system
- Modular design





Glove box filter DKA/DKB

are high-efficiency submicron particulate air filters (HEPA) in encapsulated form; the filters can be installed on the air-intake or the air-outlet sides, maximum pressure load for the cartridge casing makes up 5000 Pa.

Application:

Filtration of dust and gas pollutants from industrial process and atmospheric air.

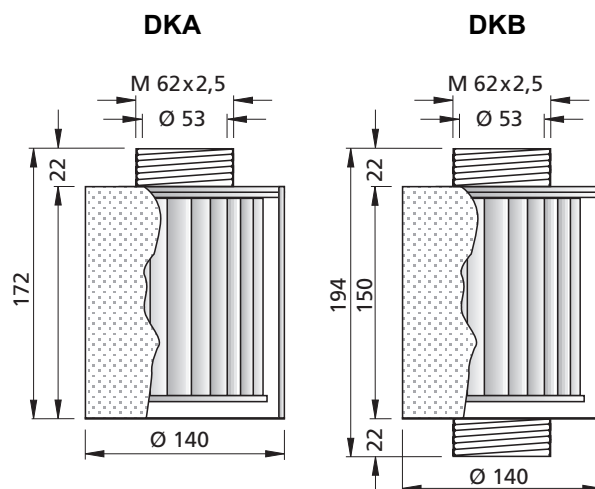
Special features:

Filtration meeting highest standards (HEPA); filters can be installed on the air-intake or the air-outlet sides; encapsulated form.

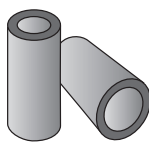
Areas of application:

Disinfecting and sterilisation equipment, insulating boxes, glove boxes, laboratory and photo laboratory equipment, ventilation of drink water containers, fermentation and yeast processing plants.

Glove box filter



*Technical Data/
Form of delivery/
Order number*



Glove Box Filters		DKA	DKB
Filter class (HEPA)	[EN 1822]	H13	H13
Diameter/height	[mm]	140/172	140/194
Nominal air volume flow	[m³/h]	25	25
Initial pressure drop	[Pa]	115	140
Maximum allowed pressure drop	[Pa]	1000	1000
Degree of arrestance	[%]	> 99.95	> 99.95
Max. operating temperature	[°C]	60	60
Max. relative air humidity	[%]	100	100
Connection fitting	[quantity]	1	2
Connection		M62x2.5	M62x2.5
ORD.No.		20 00 711	20 00 712

Filter classes F9 and H14 available on special request.



Glove box filter DKC/DKD

are high-efficiency submicron particulate air filters (HEPA) in encapsulated form; the filters can be installed on the air-intake or the air-outlet sides, maximum pressure load for the cartridge casing makes up 5000 Pa, these filters can be combined with gas sorption filters using activated-carbon cartridges that can be installed only vertically

Application:

Filtration of dust and gas pollutants from industrial process and atmospheric air

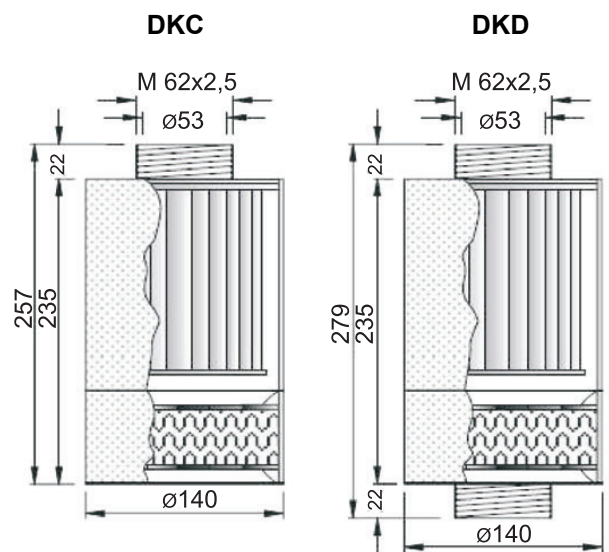
Special features:

Filtration that meets highest standards (HEPA); filters can be installed on the air-intake or the air-outlet sides; encapsulated form, combination with activated-carbon filters

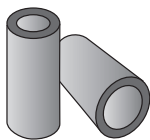
Areas of application:

Disinfecting and sterilisation equipment, insulating boxes, glove boxes, laboratory and photo laboratory equipment, ventilation of drink water containers, fermentation and yeast processing plants

Glove box filter



*Technical Data/
Form of delivery/
Order number*



Glove Box Filter		DKC	DKD
Filter class (HEPA)	[EN 1822]	H13 and activated carbon	H13 and activated carbon
Diameter/height	[mm]	140/257	140/279
Nominal air volume flow	[m³/h]	25	25
Initial pressure drop	[Pa]	815	840
Maximum allowed pressure drop	[Pa]	1700	1700
Degree of arrestance	[%]	> 99.95	> 99.95
Max. operating temperature	[°C]	40	40
Max. relative air humidity	[%]	70	70
Connection fitting	[quantity]	1	2
Connection		M62x2.5	M62x2.5
Depending on activated carbon type	AKOLIT-A1	20 02 396	20 01 931
	AKOLIT-CG	20 04 289	20 01 930



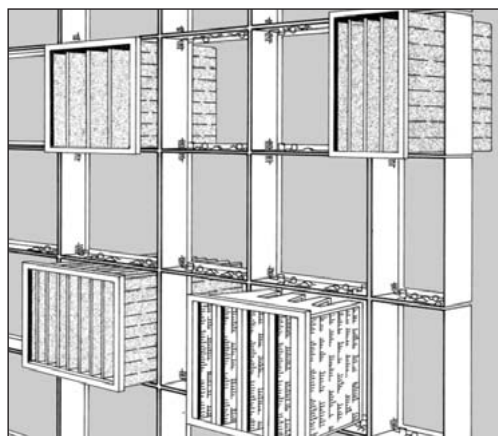
CDD Wall Frames

are made of galvanized or stainless steel; 4 spring clamps hold the air filters to the frame; the frames can be bolted together to form a filter wall.



CDD Wall Frames with reinforced edges

are made of galvanized or stainless steel; bolted edges enable to prevent air leakage and ensure an enhanced tightness and frame fit. 4 spring clamps hold the air filters to the frame; the frames can be bolted together to form a filter wall.



Technical Data/ Order number

Filter frame for wall or ceiling installation CDD/CDD-VA					
Nominal size	[mm]	305305	3054/610	508/610	610/610
Filter class (depending on complement items installed)		G2 to F9 [EN 779:2012]			
Filter size	[mm]	287/287	287/592	490/592	592/592
Installation depth	[mm]	72	72	72	72
Weight/each	[kg]	1.5	1.6	2.1	2.2
Order number CDD					
Range of terminals 20-25	[mm]	10 08 381	62 06 744	62 07 144	62 07 544
Range of terminals 45-50	[mm]	21 00 004	21 00 010	10 48 535	10 44 360
Order number CDD-VA					
Range of terminals 20-25	[mm]	10 14 432	62 06 844	62 07 244	62 07 644
Range of terminals 45-50	[mm]	21 00 001	21 00 007	21 00 013	20 47 925
Order number CDD-VA order number for frame with reinforced edges					
Filter class (depending on complement items installed)		E10 to H14 [EN 1822]			
Range of terminals 45-50	[mm]	On request	On request	On request	On request
Range of terminals 20-25	[mm]	On request	On request	On request	On request



CGF Ceiling air outlets

are made of powder-coated sheet steel (colour RAL 9010) and are equipped with the following:

- shut-off flap is installed in the intake-air fitting at the side, closes airtight (as per DIN 1946, Part 4)
- The shut-off flap is operated manually (version 230 V or 24 V can be selected)
- Check device for filter airtight fit of recommended HEPA filter element with a U-shaped of fluid profile seal
- integrated pressure-gauge connection for monitoring pressure drop
- fitting for oil-mist passage
- sealing of filters using four non-slip clamping elements
- Connection of different air distributing outlets by using central or 4-point locks

Application:

CGF ceiling air outlets with integrated HEPA filters operate as last filter stage in efficient filtration of particle-shaped air pollutants of all types, including microorganisms.

Special features:

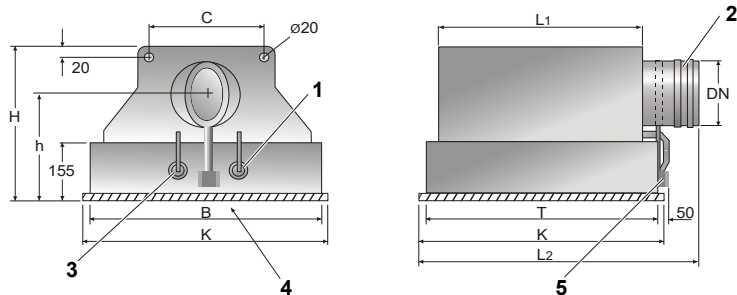
Compact shape; high-quality and high-value model; high operating safety; using different air distributors is possible.

Areas of application:

AHU systems in hospitals according to DIN 1946 Part 4 for Indoor Class I, operating rooms Type B and auxiliary room in operating area, intensive care units and emergency room, clean rooms, pharmaceutical industry, genetic technology, microbiology, food product industry, production of semiconductors.

Refer to separate documentation for further details on CGx.

- 1 Connection for checking airtight fit
- 2 Hose or pipe connection
- 3 Connection for pressure drop measurement
- 4 Air diffuser
- 5 Manual actuator for shut-off flap



*Technical Data/
Order number*

Ceiling Air Outlet	CGF 318-1/1	CGF 470-1/1	CGF 587-1/1	CGF 623-1/1
Filter size W/H/D seal [mm]	305/305/78 + 7	457/457/78 + 7	575/575/78 + 7	610/610/78 + 7
for filter class	E10 to H14 [EN 1822]			
Weight [kg]	6.4	10.7	15.5	16.4
Installation depth [mm]	345	380	435	435
Packaging unit [units]	1	1	1	1
ORD.No.				
with shut off flap	10 13 596	10 13 691	10 31 377	10 13 692
without shut off flap	10 17 639	10 18 526	10 31 378	10 13 694

Order numbers accessories:

Air diffuser with central mounting W/H	350/350	500/500	623/623	650/650
Twist outlet 358 steel RAL 9010	00 05 414	10 09 824	10 13 618	10 09 825
Ventilation grille aluminium, discharge on 4 sides	10 13 597	10 09 822	10 13 619	10 09 823
Ventilation grille steel RAL 9010, discharge on 4 sides	10 13 611	10 13 609	10 13 620	10 13 610
Packaging unit	1	1	1	1



CKC Wall Frames

CKC wall frame is especially developed for holding HEPA filters; five different filter sizes are available; filter media of different installation depth can be used (78, 150, 292 mm); profile frame is gastight welded and is either made of galvanized steel or stainless steel 1.4301 (material can be selected); four supporting brackets with a centering function enable fast and safe sealing of a HEPA filter on the sealing surface; all frames are equipped with a monitoring device for checking seat tightness of HEPA filter.

Application:

Climate control and air handling units with highest standards in air purity.

Special features:

Easy assembly of a complete wall frame system; different frame sizes in Euro grid size; combination of complete-size and half-size units is possible; easy mounting and disassembly of HEPA filter elements; high operating safety.

For checking airtight fit filters with a U-shaped profile seal are required.

Areas of application: Pharmaceutical industry and health care, chemical and clean room technology.

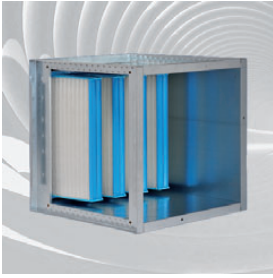
Technical data

CKC Wall Frame		Size 2	Size 3	Size 6
Filter size	[mm]	290/290/292	290/595/292	595/595/292
Thickness/depth/length	[mm]	355	355	355
Width/height (nominal)	[mm]	305/305	305/610	610/610

Other sizes are available on request.

Accessories: Angular steel mounting frame

Mounting set



ELA filter casing

has a stable and light construction made of steel sheet and supplied as galvanized model; individual modules are assembled through clinch connections to casing sizes of 385 x 690 mm to 1910 x 690 mm; undrilled run-around flange (40 mm) enables flexible adjustment to upstream and/or downstream duct components; filters are fixed in an integrated CDD frame; the casing is designed for intake and pressure-side operation (max. 1000 Pa); an easily removable service door on side enables filter replacement in airflow direction from left or right (can be selected); doors are fixed by four star bolts; the modular design enables casing combinations up to three vertical levels.

Application:

For all types of climate control and air handling units that are designed for installation of pleated filters of series MULTISACK and filter elements of series MULTIFORM; filter media of classes G3 - F9.

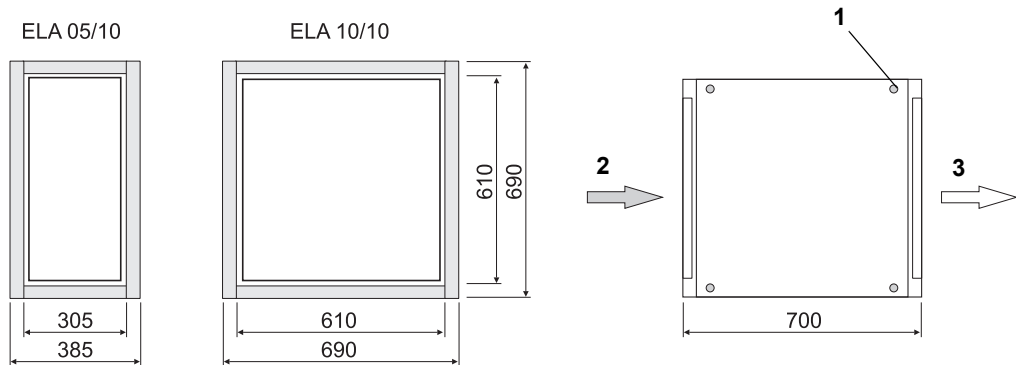
Special features:

Modular construction; stable light design with galvanized sheet steel; filter replacement in air flow direction can be selected on left or right side (from size 2/2 filter change on both sides is necessary); run-around, undrilled flange frame; casing is designed for intake and pressure-side operation (max. 1000 Pa) Each air duct compartment is equipped with an individual service access door.

Areas of application:

Standard HVAC applications with a filtration function in all air handling units.

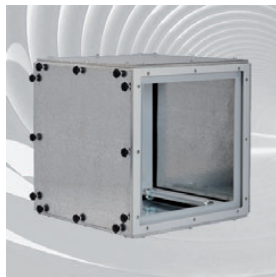
- 1 Star formed screws
- 2 Untreated air
- 3 Clean air



Technical data

ELA Filter Casing		ELA 05/10	ELA 10/10
Width/height	[mm]	385/690	690/690
Thickness/depth/length	[mm]	700	700
Filter size	[mm]	287/592	592/592

Accessory items Pressure drop measuring devices



EBE casings

EBE **casings** have a stable and light construction made of galvanized steel sheet or stainless steel (1.4571 or 1.4301); because of modular design - a combination with different unit sizes and use of different filter media with different filter sizes is possible; use of filter media of classes G2 - H13 is also possible; several filter stages can be combined straight through; four threaded rods with clamping nuts are used to secure HEPA filters, filter elements and activated carbon filters; an additional holding frame is required for MULTIFORM filter elements and activated carbon cartridges; MULTISACK bag filters are secured with an integrated CDD frame; easy open and close functions of airtight service cover with a star grip.

The air-tight casing service lid can be easily removed and closed using the star shaped bolts.

Application:

For all HVAC and air handling applications

Special features:

Airtight design thanks to soldered or welded profile connections; suction and pressure-side operation (max. 2000 Pa); wide-range accessories: pressure drop measuring devices, connection fittings, contact grille etc.; combination of duct air filters of full-size and half-size units for different unit sizes; assembly of vertical casing units or securing of transition fittings is done through prefabricated bolt connection (rivet nuts of size M8); drilled flange frame (M8) enables easy and quick vertical connection.

Special custom design available on request

Areas of application:

Cleaning of supply air for protection of corrosion-risk electronic components, control centres and data processing units, air filtration in industrial processes, air cleaning for protection of valuable items in libraries and museums; ventilation of drinking water processing plants and containers, filtration of exhaust air to comply with emission standards, safety filter in de-dusting facilities, combined filter for filtration of coarse, fine dust and odour pollutants, e.g. kitchen exhaust, multi-stage adsorption filter

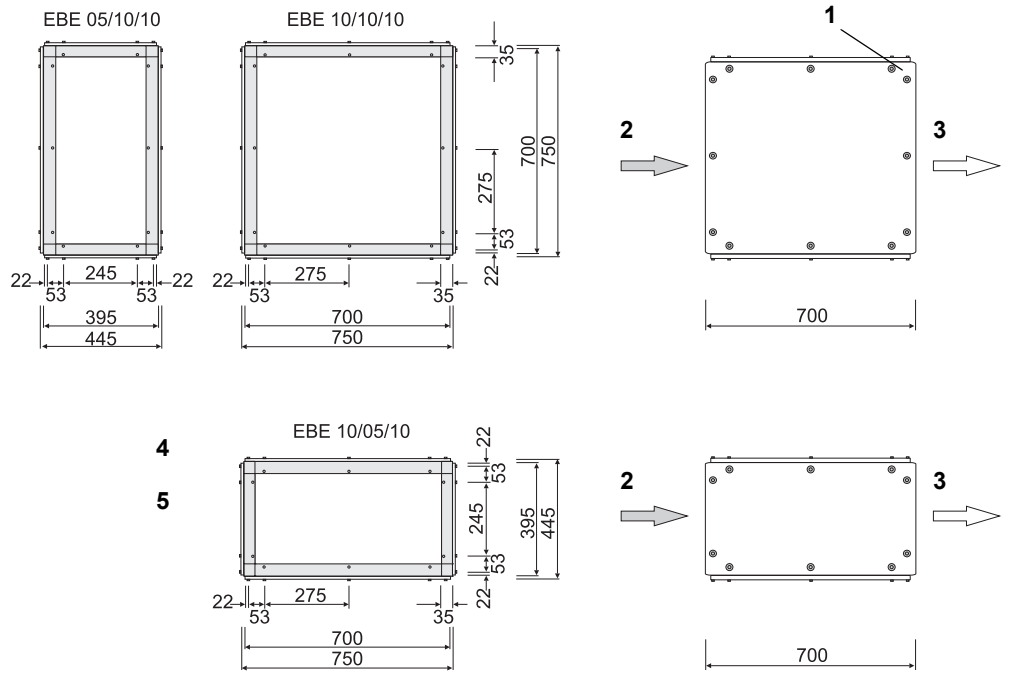
Optionally available as an explosion-proof filter casing.

Refer to separate documentation for further details on EBE.



II 2 GD T6
(-40 to +80°C)

- 1 Star formed screws
- 2 Untreated air
- 3 Clean air
- 4 Air flow cross section
- 5 Connection lange frame, 35 mm run-around



Technical data

EBE filter casing		EBE 05/10	EBE 10/10
Width/height	[mm]	445/750	750/750
Thickness/depth/length	[mm]	700	700
Filter size	[mm]	305/610	610/610

***DELBAG® Air Filtration is a dynamic globally active company
within air treatment - filter technology - air quality.***

**Our local consultant and service teams gladly take their time to develop ideas and
solutions together with our clients - creatively and professionally**

