

# EMW

filtertechnik

*Excellence in filtration*



## Air Filters

For HVAC Systems

[www.emw.de](http://www.emw.de)

# Excellence in filtration

EMW® air filters for heating, air conditioning and ventilation systems are expertly engineered to provide users long service life with low pressure drop and consistently high filtration efficiency.

## Long Service Life

The filter medium and frame are harmonized in design for optimum aerodynamic compatibility. Even at high flow rates, they provide low initial pressure drop which remains virtually constant during subsequent service. The medium and its plastic housing are fully incinerable for easy disposal after use.



## High Filtration Efficiency



Our filters use time-proven pleating technology to ensure long service life and constant filtration efficiency. Each filter unit contains a medium surface of up to 40 m<sup>2</sup>, providing high resistance from the first day of operation onwards.

## Stability

The filter medium is securely mounted on the frame with a cast airtight joint. Even at high air flow rates, the medium remains in place, ensuring outstanding filtration efficiency.



## Secure Airtightness

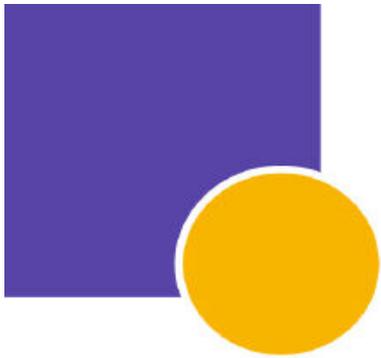


Airtightness is further ensured by a continuous outer seal which provides additional protection against lateral leakage.

## Independent Testing

EMW® air filters are tested by third-party institutes to confirm compliance with the ISO 16890, EN 779 and EN 1822 standards.





**EMMW**  
filtertechnik

**For**

more than 60 years, specialists  
for air filtration and (waste)water filtration technologies

*Excellence in filtration*

Air filters in all ISO 16890, EN 779 and EN 1822 Filter Classes.

## Product Overview

**ISO Coarse**  
ISO 16890

formerly  
**G1-G4**  
EN 779



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**ISO Coarse**  
ISO ePM<sub>10</sub>  
ISO ePM<sub>2.5</sub>  
ISO ePM<sub>1</sub>  
ISO 16890

formerly  
**M5-M6**  
**F7-F9**  
EN 779



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**E10-E12**  
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**Adsorption**



**EMW**® filters comply with ISO 16890, EN 779 and EN 1822 as confirmed by independent laboratory testing.

# Filter Classes

# Filter Media

## VERFILTAN Glass-Fibre Medium

VERFILTAN is a glass-fibre medium with progressively compressed fibres, i.e. a fibre structure which is increasingly tighter from the inlet side to the outlet side. This permits dust collection throughout the full thickness of the medium. These media are available with binder impregnation for enhanced dust retention.

- Available in ISO 16890 Filter Classes (formerly EN 779, G1-G4)
- Reliable service even at 100% relative humidity
- Maximum service temperature: 180 °C

Roll-form product



### Roll dimensions (LxW)

61,000 x 2000 mm

91,000 x 1000 mm

91,000 x 1500 mm

91,000 x 2000 mm

Cut-to-size sections and other dimensions  
available on request

## SYNFASAN - Synthetic Medium

SYNFASAN is a synthetic medium with progressively compressed fibres, i.e. a fibre structure which is increasingly tighter from the inlet side to the outlet side. This allows dust arrestance throughout the full thickness of the medium. These media are available with adhesive impregnation for enhanced dust collection.

- Available in ISO 16890 Filter Classes (formerly EN 779, G3-M5)
- Reliable service even at 100% relative humidity
- Maximum service temperature: 100 °C

Roll-form product

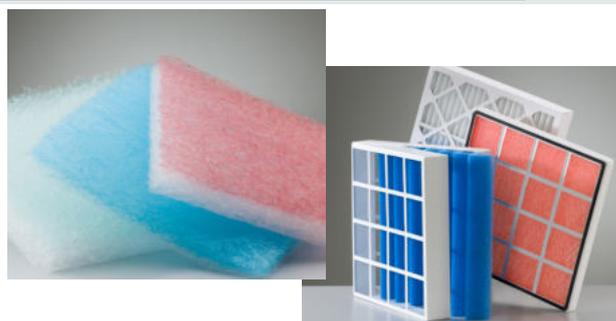


### Roll dimensions (LxW)

40,000 x 2000 mm

20,000 x 2000 mm

Cut-to-size sections and other dimensions  
available on request



VERFILTAN and SYNFASAN are available as cut-to-size sections and in various frame designs.



**Glass-fibre and synthetic media  
in ISO 16890 Filter Classes (formerly EN 779)**

# Filter Media

# Filter Cells

## Z-Line Filter Cells

Z-Line filter media are made up of 100% synthetic materials and are available in cardboard, plastic or metal frames.

- Available in ISO 16890 Filter Classes (formerly EN 779, G4-F9)
- Reliable service even at 100% relative humidity
- Supplied in cardboard, plastic or metal frame

Z-Line  
cardboard frame



### Dimensions (WxHxD)

594 x 594 x 48 mm

594 x 594 x 96 mm

495 x 594 x 48 mm

495 x 594 x 96 mm

290 x 594 x 48 mm

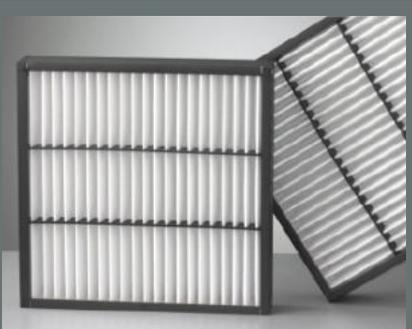
290 x 594 x 96 mm

Other dimensions  
available on request

**TOUGHER** demands are mastered routinely by EMW® Z-Line GT filters.

Their filter medium is mounted as solid as a rock in their plastic frame. Even under high aerodynamic stresses, they are not leakage permitting lateral air flow around the filter. Stabilizers provide additional reinforcement of the filter medium. The design configuration prevents distortion while maintaining low pressure drop and virtually constant filtration efficiency.

Z-Line GT  
plastic frame



### Dimensions (WxHxD)

592 x 592 x 48 mm

592 x 592 x 96 mm

592 x 592 x 100 mm

592 x 592 x 150 mm

Other dimensions  
available on request

## Filter Media in Reusable Plastic Frames

EMW® reusable plastic frames are ideal for cost-efficient filter changes. The used filter medium is simply taken out and replaced by a new medium without changing the frame. This option is available with our Verfiltan and Synfasan media as well as our Poret® open-cell foam filters.

Filter media in  
reusable plastic frames



### Dimensions (WxHxD)

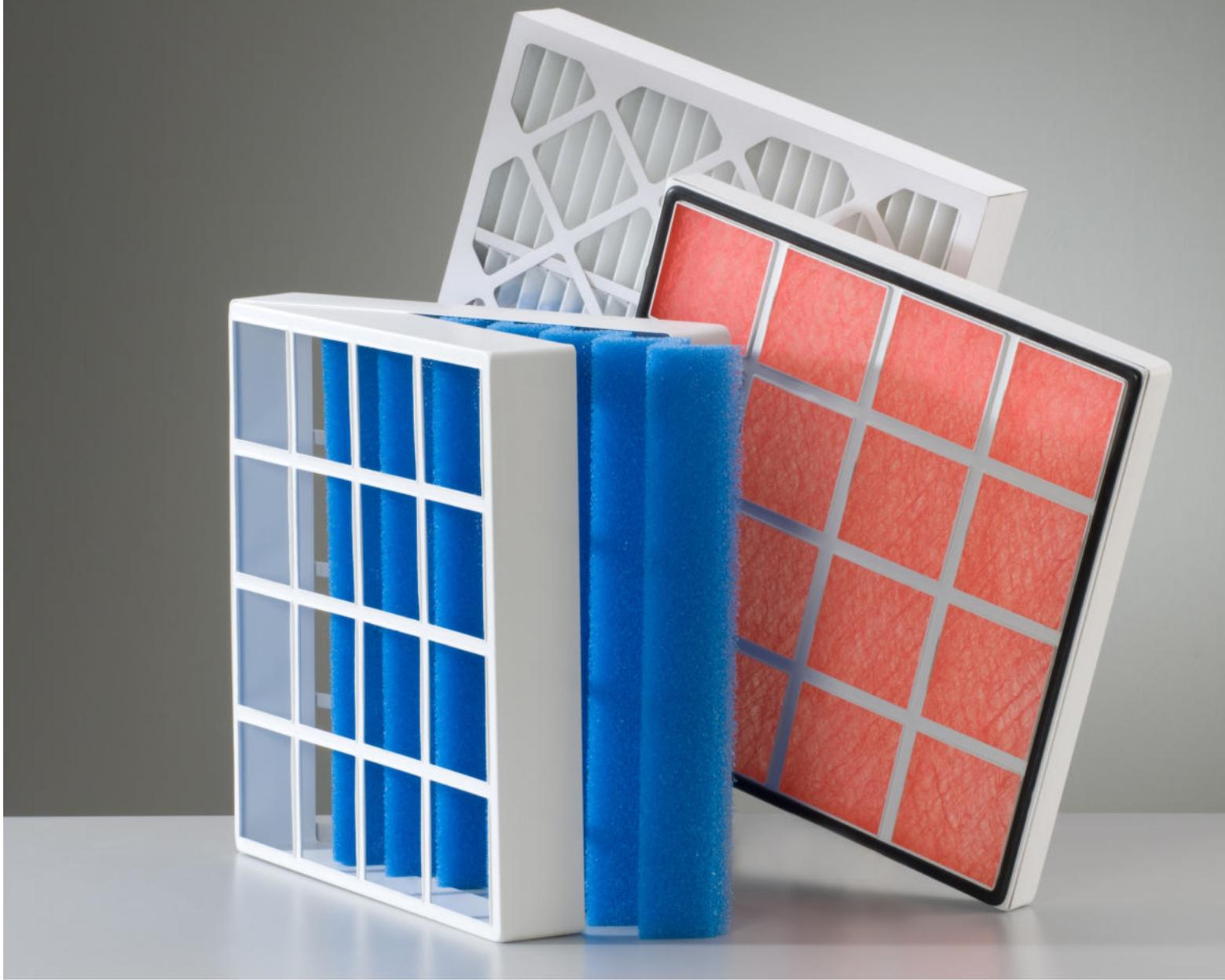
596 x 596 x 25 mm

596 x 596 x 50 mm

596 x 596 x 75 mm

596 x 596 x 100 mm

Other dimensions  
available on request



**Filter media** mounted in various frames, in ISO 16890 Filter Classes (formerly EN 779).

# Filter Cells

# Pocket Filters

EMW® pocket filters are made of synthetic media and are available in all common dimensions and ISO 16890 (formerly EN 779) filter classes. They can be supplied in 25 mm thick plastic frames as well as in 20 mm or 25 mm thick metal frames. A continuous foamed-in-place seal over the edge of the filter assures fully airtight mounting.

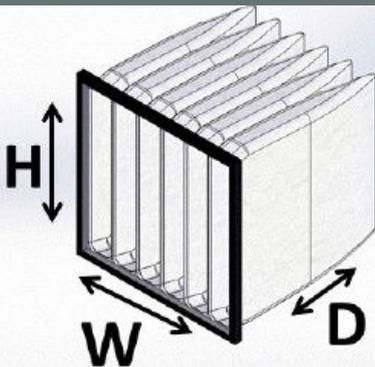
We offer pocket filters with 3 to 12 pockets and pocket depths up to 635 mm. Their progressively structured filter media provide high dust arrestance. Versions with self-supporting pockets, stabilizers and partition guards prevent pocket deformation and therefore ensure low pressure drop.



- Available in ISO 16890 Filter Classes (formerly EN 779, G3-F9)
- With 3 - 12 synthetic medium pockets
- With plastic or metal frame
- Reliable service even at 100% relative humidity

## In ISO 16890 Filter Classes (formerly EN 779, G3-F9)

Pocket Filter



592 x 592 x 180 mm
592 x 592 x 190 mm
592 x 592 x 360 mm
592 x 592 x 500 mm
592 x 592 x 600 mm
592 x 592 x 635 mm
490 x 592 x 360 mm
490 x 592 x 500 mm
490 x 592 x 600 mm
490 x 592 x 635 mm
287 x 592 x 360 mm
287 x 592 x 500 mm
287 x 592 x 600 mm
287 x 592 x 635 mm
500 x 500 x 180 mm
500 x 500 x 360 mm

Other dimensions available on request



**With** 3 - 12 pockets, in ISO 16890  
(formerly EN 779) Filter Classes

# Pocket Filters

# MDF Filters

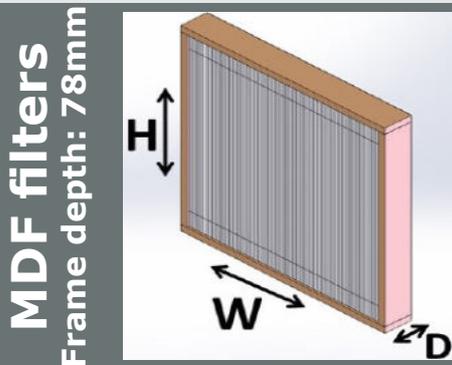


We offer air filters with MDF fibreboard frames in ISO 16890 (formerly EN 779) Filter Classes and EN 1822 Filter Classes E10-H14. The filters are available in all common dimensions.

These filters incorporate a minipleat filter medium which is securely mounted on the MDF frame with a cast airtight joint. Protective grids on the inlet and/or outlet sides and a continuous foamed-in-place seal over the joint are available as options.

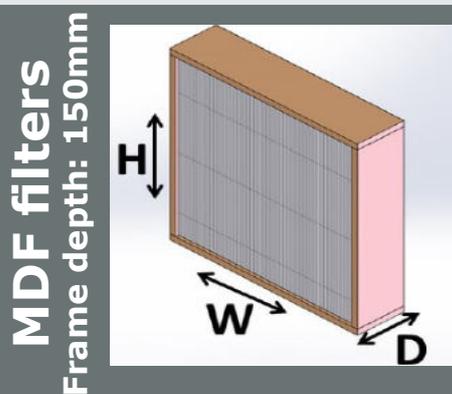
Besides MDF, frames are also available in other materials of construction including plastic and stainless steel.

## In ISO-ePM (formerly M6-F9) & E10-H14 Filter Classes



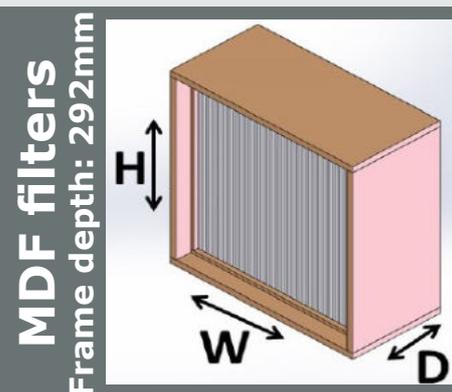
### Dimensions (WxHxD)

- 305 x 305 x 78 mm
- 457 x 457 x 78 mm
- 610 x 610 x 78 mm
- 762 x 762 x 78 mm
- 915 x 915 x 78 mm



### Dimensions (WxHxD)

- 305 x 305 x 150 mm
- 457 x 457 x 150 mm
- 610 x 610 x 150 mm
- 762 x 762 x 150 mm
- 915 x 915 x 150 mm



### Dimensions (WxHxD)

- 305 x 305 x 292 mm
- 457 x 457 x 292 mm
- 610 x 610 x 292 mm
- 762 x 762 x 292 mm
- 915 x 915 x 292 mm

Other dimensions available on request



**In** ISO 16890 (formerly EN 779) Filter Classes  
and EN 1822 Filter Classes E10-H14.

# MDF Filters

# Wedge & Cartridge Filters

## Wedge Filters - In ISO-ePM, EPA and HEPA Filter Classes



Due to their compact design, wedge filters are ideal for use in ducts with small cross sections. EMW® wedge filters are used in clean rooms, ventilation systems for large commercial vehicles and many other applications. These filters are fully incinerable for easy disposal.

- Available in ISO 16890 Filter Classes (formerly EN 779, M6-F9) & EN 1822 EPA and HEPA E10-H14 Filter Classes
- Reliable service even at 100% relative humidity
- Maximum service temperature: 80 °C

Wedge Filters



### Dimensions (WxHxD)

86.5 x 202 x 375 mm

86.5 x 202 x 600 mm

600 x 65 x 202 mm

Other dimensions  
available on request

## Cartridge Filters - In ISO-ePM, EPA and HEPA Filter Classes



EMW® cartridge filters are available in ISO 16890 (formerly EN 779) Filter Classes and EN 1822 Filter Classes E10-H14. Their multiple filter medium is securely mounted on the plastic frame with a cast airtight joint. A continuous foamed-in-place seal over the joint further ensures airtightness. A perforated metal guard is available as an option for additional stability under high aerodynamic stress.

- Available in ISO 16890 Filter Classes (formerly EN 779, M6-F9) & EN 1822 E10-H14 Filter Classes
- Reliable service even at 100% relative humidity
- Maximum service temperature: 80 °C

Cartridge filters



### Dimensions (DxH)

176 x 226 mm

176 x 176 mm

200 x 200 mm

200 x 400 mm

220 x 140 mm

Other dimensions  
available on request



**In** ISO 16890 Filter Classes (formerly EN 779, M6-F9)  
and EN 1822 Filter Classes E10-H14.

# Wedge & Cartridge Filters

# Compact Filters

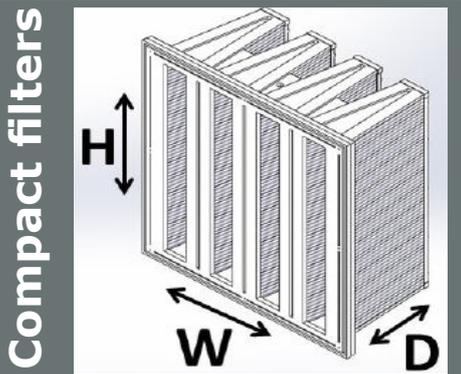
EMW® compact filters provide extremely long service life. Their medium structure and inlet flow masks are harmonized in design for optimum aerodynamic compatibility. This ensures low initial pressure drop which remains virtually constant throughout subsequent operation.

EMW® compact filters have high-quality glass-fibre media which provide consistently high filtration efficiency over the filter's service life. Available in ISO 16890 (formerly EN 779) and HEPA Filter Classes, they offer up to 40m<sup>2</sup> filter surface area in a space-saving compact configuration.

The filter medium is securely mounted on the plastic frame with a cast airtight joint. A continuous foamed-in-place seal over the joint further ensures airtightness.



## In ISO-ePM (formerly M6-F9) and E10-H14 filter classes



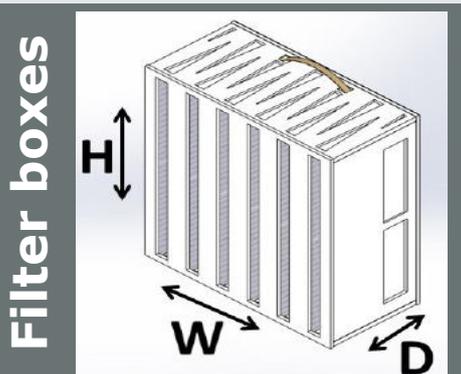
### Dimensions (WxHxD)

592 x 592 x 296 mm

490 x 592 x 296 mm

287 x 592 x 296 mm

592 x 592 x 400 mm



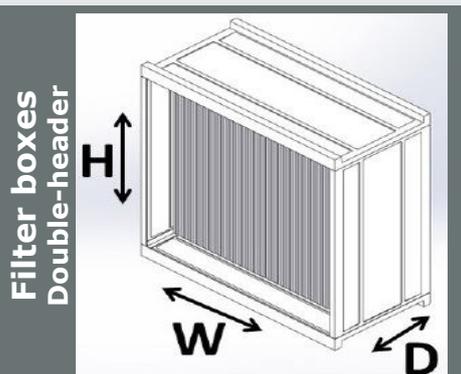
### Dimensions (WxHxD)

610 x 610 x 292 mm

305 x 610 x 292 mm

592 x 592 x 292 mm

287 x 592 x 292 mm



### Dimensions (WxHxD)

592 x 592 x 292 mm

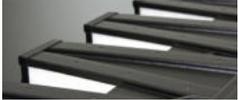
Other dimensions available on request



**EMW®** compact filters in ISO 16890 Filter Classes (formerly EN 779) and EN 1822 Filter Classes E10-H14

# Compact Filters

EMW® offers electrically dissipative air filters for use in potentially explosive environments in accordance with IECEx-Standard 80079-34. Different versions are available including compact filters, filter boxes and panel filters.



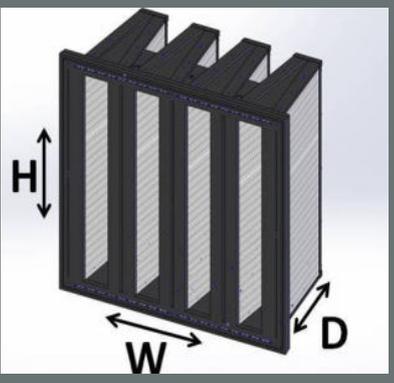
They are mounted in electrically dissipative plastic frames which are much lighter in weight than metals and other conventional materials.

The filter box and panel filter versions are earthed by means of integrated earthing lugs. The compact filter versions incorporate recesses on the inlet and outlet sides of the filter frame which are used to mount the earthing lug (supplied with the filter) on either side as desired.



## In ISO-ePM filter classes (formerly M6-F9) and E10-H14

Compact filters



Dimensions (WxHxD)

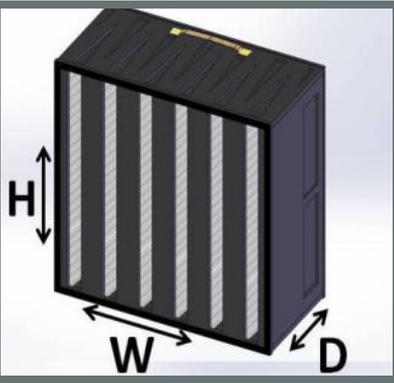
592 x 592 x 296 mm

490 x 592 x 296 mm

287 x 592 x 296 mm

592 x 592 x 155 mm

Filter boxes



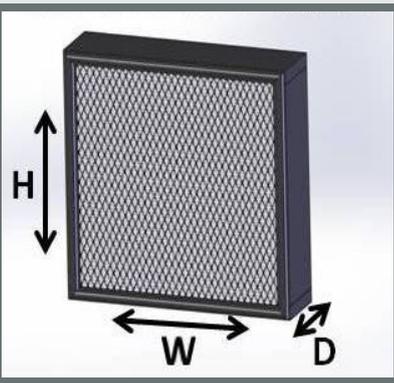
Dimensions (WxHxD)

610 x 610 x 292 mm

305 x 610 x 292 mm

592 x 592 x 292 mm

Panel filters



Dimensions (WxHxD)

610 x 610 x 48 mm

610 x 610 x 78 mm

610 x 610 x 110 mm

610 x 610 x 150 mm

Other dimensions available on request



**For** filtration in potentially explosive environments,  
EMW<sup>®</sup> offers IECEx-certified air filters.

# IECEX Filters

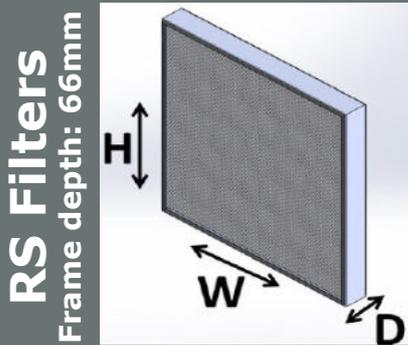
# (H)EPA Filters

Removal of particulates (bacteria, spores, viruses, radioactive fallout, toxic dust, etc.) smaller than 1 micron in size from air can be a particularly demanding task. EMW® offers air filter range for these applications in EN 1822 Filter Classes E10-E12 (EPA) and H13-H14 (HEPA). EMW® filters are used in hospitals, clean rooms and any other applications requiring clean air in conformance with strictest standards.

EMW®'s RS filters are available in all common dimensions. Their high-quality glass-fibre medium is securely joined to the filter frame with a cast airtight joint. Various frame versions are offered including anodised aluminium and other materials. Protective grids are available as options which can be installed on either side as required. A continuous foamed-in-place seal over the joint further enhances airtightness.

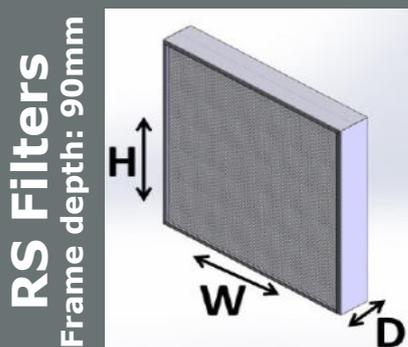


## In Filter Classes E10-E12 and H13-H14



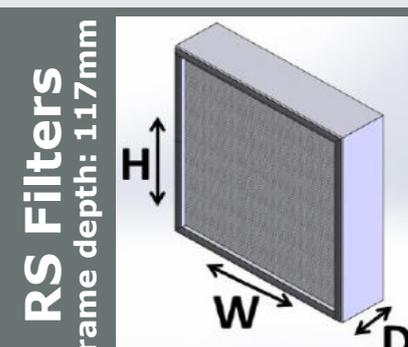
### Dimensions (WxHxD)

- 305 x 305 x 66 mm
- 457 x 457 x 66 mm
- 610 x 610 x 66 mm
- 762 x 762 x 66 mm
- 915 x 915 x 66 mm



### Dimensions (WxHxD)

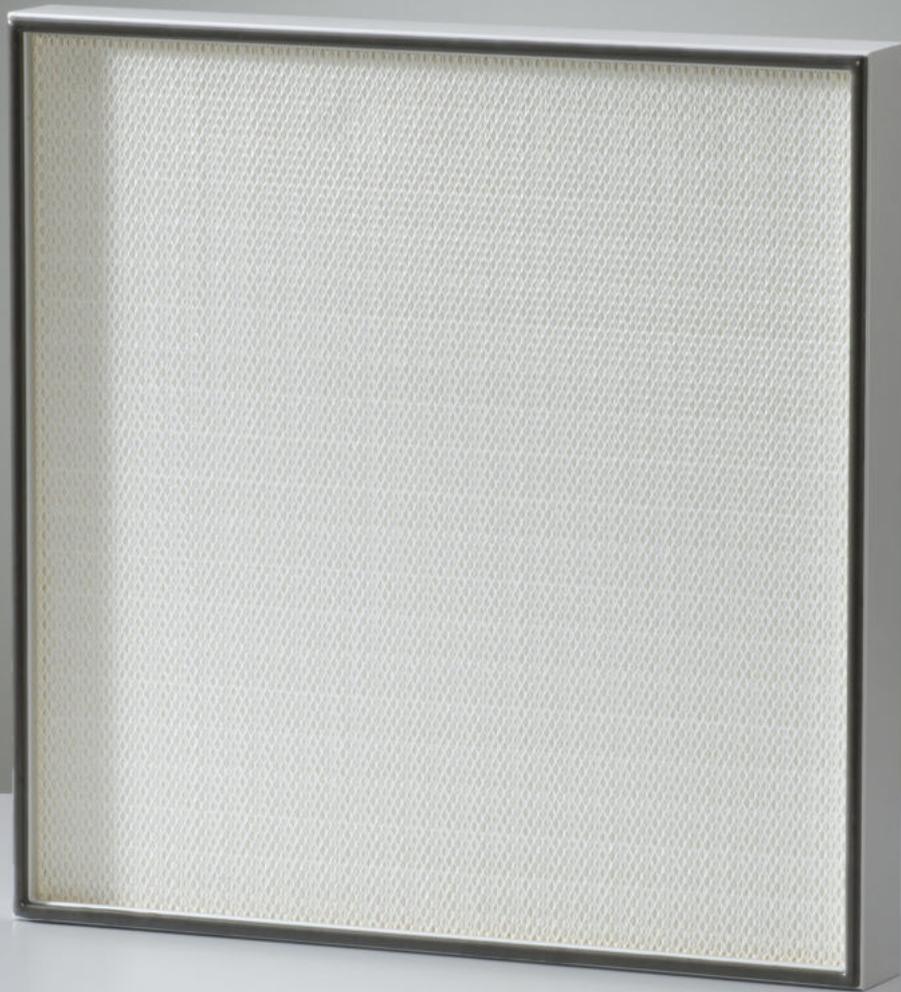
- 305 x 305 x 90 mm
- 457 x 457 x 90 mm
- 610 x 610 x 90 mm
- 762 x 762 x 90 mm
- 915 x 915 x 90 mm



### Dimensions (WxHxD)

- 305 x 305 x 117 mm
- 457 x 457 x 117 mm
- 610 x 610 x 117 mm
- 762 x 762 x 117 mm
- 915 x 915 x 117 mm

Other dimensions available on request



**In** EN 1822 Filter Classes E10-E12 and H13-H14.

**(H)EPA Filters**

# Activated Carbon Filters

EMW® offers a broad range of activated carbon filters for odour and/or pollutant removal from ambient air. For particularly high contaminant levels, EMW® offers activated carbon filters enclosed in synthetic media. EMW® activated carbon filters can be provided in various versions.

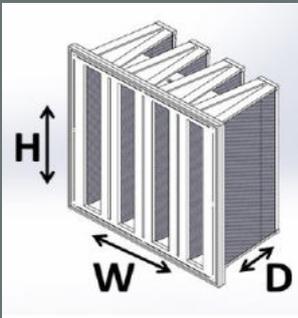


Activated carbon filters incorporating Poret® Carbon open-cell filter foam are also available in various versions. Poret® Carbon is an activated-carbon impregnated medium with very high active surface area.

EMW® also offers combined filters incorporating physical filtration and activated carbon adsorption. The inlet air stream first passes through a filter medium (available in all ISO 16890 and EN 1822 Filter Classes) and then through an activated carbon bed. The result: rapid and thorough cleaning action.



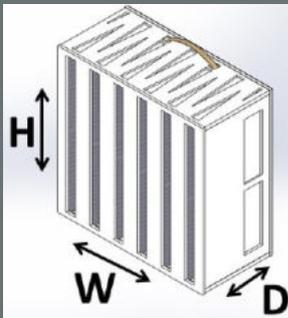
Activated carbon compact filters



## Dimensions (WxHxD)

- 592 x 592 x 296 mm
- 490 x 592 x 296 mm
- 287 x 592 x 296 mm
- 592 x 592 x 400 mm

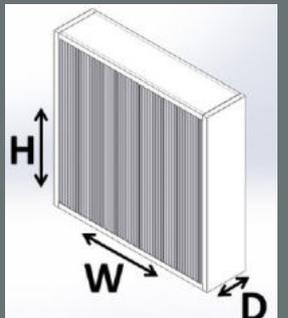
Activated carbon filter boxes



## Dimensions (WxHxD)

- 610 x 610 x 292 mm
- 305 x 610 x 292 mm
- 592 x 592 x 292 mm

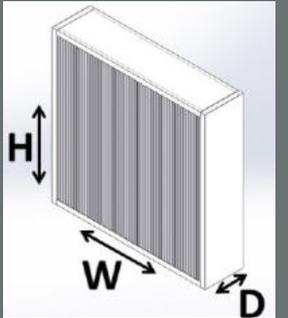
Activated carbon panel filters



## Dimensions (WxHxD)

- 305 x 305 x 182 mm
- 400 x 200 x 114 mm

Combined filters filter medium & activated carbon



## Dimensions (WxHxD)

- 305 x 305 x 182 mm
- 400 x 200 x 114 mm
- 175 x 175 x 96 mm

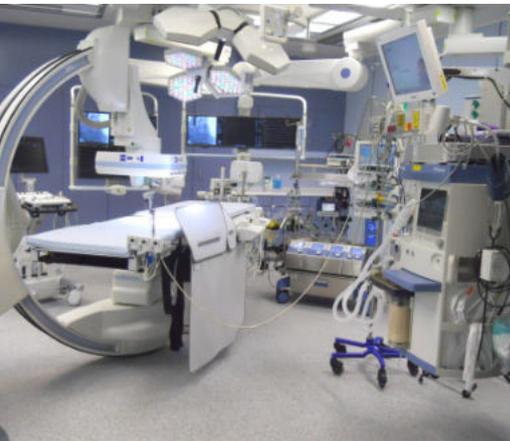
Other dimensions available on request



**2x Filtration**

Particle filtration paired with activated carbon adsorption.

**Activated Carbon Filters**



MADE IN GERMANY



**EMW**

filtertechnik

*Excellence in filtration*

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