



## Compact Finedust / HEPA Filter Type GW



### Features:

- High quality micro fibreglass paper
- Lowest initial pressure drop
- High quality standard due to Quality Assurance System
- Highly economic through high final pressure drop
- Any airflow direction possible making installation easy
- Rigid frame



### Collective Protection Inc.

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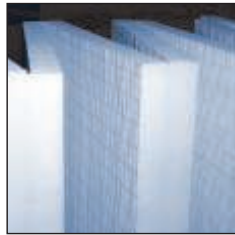
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## Overview

The GW compact finedust / HEPA filter for high airflow is designed and tested to extract the smallest particles out of the air. Each GW compact filter contains eight (8), ten (10) or twelve (12) "Minipleat-Media Packs" pleated in one piece and assembled in V-shape technology to achieve lowest pressure drop results.

### Applicable Standards:

- EN 1822
- IEST-RP-CC001.3
- EN 779
- ASHRAE 52.1



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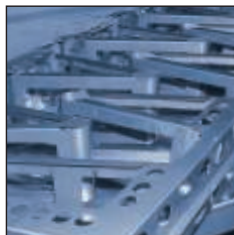
- High quality micro fibreglass media
- Lowest initial pressure drop
- Rigid frame
- Zinc coated profiles
- Filter height only 292 mm
- High quality standard due to Quality Assurance System
- Highly economical through high final pressure drop
- Usable in bidirectional flow
- HEPA filter tested according to EN 1822



### Design

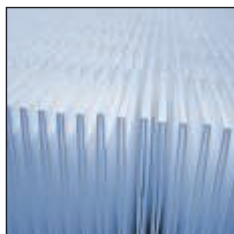
#### Steel Frame:

The filter frame is made from zinc coated steel, bent on each side for stability, in order to save space for the media pack and to get the maximum mechanical strength. The fibreglass media is pleated in "Minipleat shape" to a one piece cake and assembled in V-shape technology into the frame. The sealing of the filter housing is achieved through a leak-free fluid or dry-seal system.



#### MDF Frame:

The filter frame is made from MDF-boards and is screwed together to a rigid solid frame. The fibreglass media is pleated in "Minipleat Shape" to a one piece cake and assembled in V-shape technology into the frame. The sealing of the filter housing is achieved through a leak-free dry-seal system.



### Testing

Each HEPA filter is tested and packed in accordance with American Standard IEST-RP-CC001.3 (HEPA and ULPA Filters) or in accordance with the European standard EN 1822-1, 4&5 (Testing filter elements HEPA and ULPA efficiency and scan method) or customer requested tests. The prefilters are tested in accordance with European Standard EN 779 (Particulate air filters for general ventilation). This standard is based on ASHRAE 52.1 (Gravimetric and Dust-Spot Procedures for Testing Air Cleaning Devices Used in General Ventilation for Removing Particulate Matter 1992).



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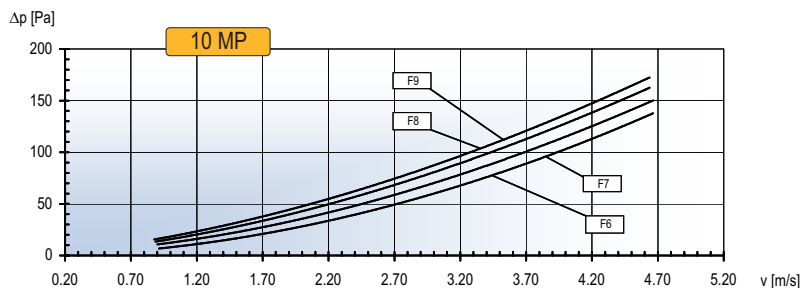
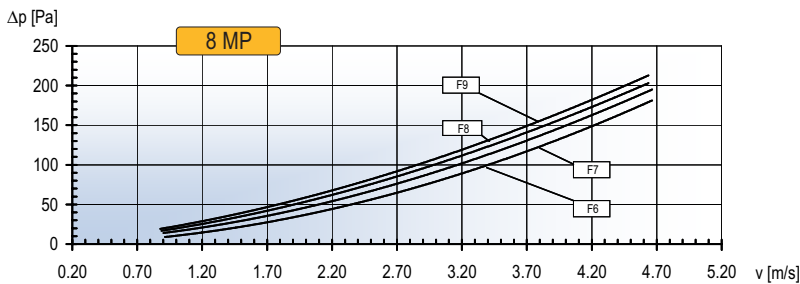
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## Finedust Filter Type

Finedust Filter data		F 6	F 7	F 8	F 9
Filter consists of # Media Packs		8 / 10	8 / 10	8 / 10	8 / 10
Initial pressure drop @ rated airflow	Pa	98/ 75	112/ 88	123/ 96	134/ 105
Rated face velocity	m/s	3.4	3.4	3.4	3.4
Filter class according EN 779 <sup>1</sup>		F 6	F 7	F 8	F 9
Atmospherical dust spot efficiency @ rated airflow: average <sup>2</sup>	%	65 (60-65)	85 (80-90)	95 (90-95)	97 (95-98)
Recommended final pressure drop	Pa	600	600	600	600
Bursting pressure	Pa	> 2000	> 2000	> 2000	> 2000
Max. continuous temperature	°C	80	80	80	80
Max. relative humidity	%	100	100	100	100
Flammability classification to DIN 53438		K1/F1	K1/F1	K1/F1	K1/F1

1) Standard EN 779 (1995) based on ASHRAE 52.1  
2) Final pressure drop 450 Pa

## Finedust Filter Initial Pressure Drop

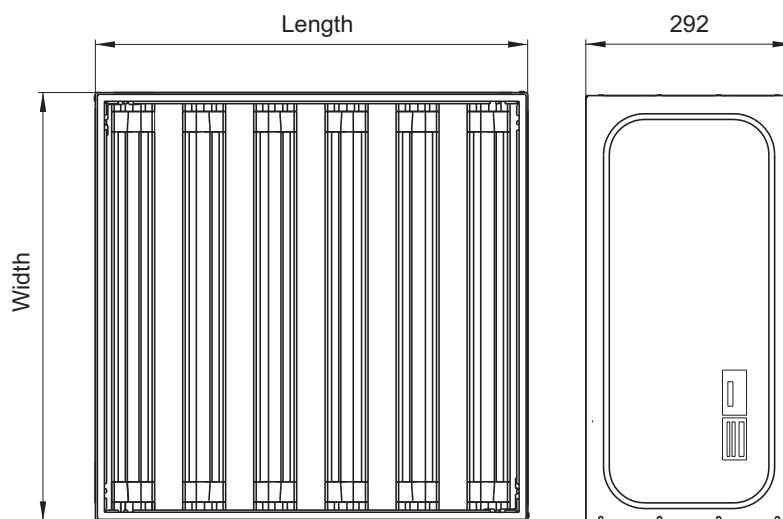




## Finedust Filter Size

Finedust Filter size		Finedust Filter Rated Airflow @ velocity of 3.4 m/s
305 x 610	mm	2280 m <sup>3</sup> /h
457 x 610	mm	3410 m <sup>3</sup> /h
592 x 287	mm	2080 m <sup>3</sup> /h
592 x 592	mm	4290 m <sup>3</sup> /h
610 x 610	mm	4550 m <sup>3</sup> /h
762 x 610	mm	5690 m <sup>3</sup> /h

## Dimensional Drawing



## Order Numbers (Finedust Filter)

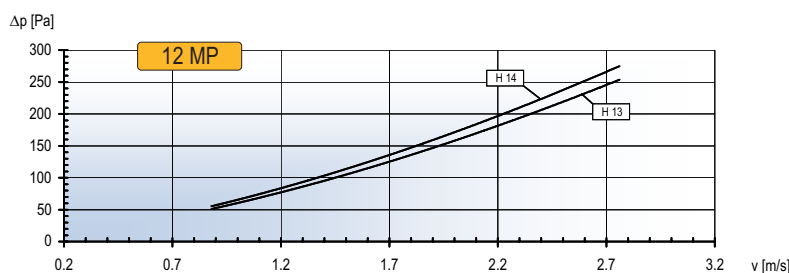
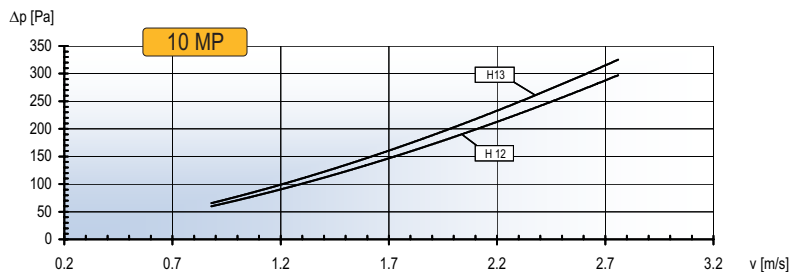
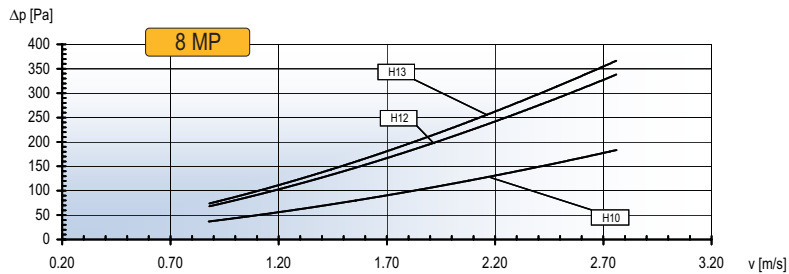
Order no.    **GW** - **A** - **B**    **C** - **D**    **E**    **F**    **G**  
 Example    **GW** - **8** - **08**    **66** - **D**    **0**    **0**    **D**

Media Packs	A	Efficiency	B	Size L x W	C	Frame	D	free	E	free	F	Seal	G
8 Packs	8	F 6	06	592 x 287 mm	29	MDF	4		0		0	No Seal	0
10 Packs	A	F 7	07	592 x 592 mm	59	Steel Zinc Coated	D					1x Dry	D
		F 8	08	610 x 305 mm	63							1x Fluid	1
		F 9	09	610 x 457 mm	64							Both Sides Dry	B
				610 x 610 mm	66								
				762 x 610 mm	76								
				Other dimensions available upon request									

## HEPA Filter Type

HEPA Filter data		H 10	H 12	H 13	H 14
Filter consists of # Media Packs		8	8 / 10	8 / 10 / 12	12
Initial pressure drop @ rated airflow	Pa	165	310 / 270	332/ 298/ 230	250
Rated face velocity	m/s	2.5	2.5	2.5	2.5
Filter class as per EN 1822		H 10	H12	H13	H14
Filter class as per EUROVENT 4/4		EU 10	EU 12	EU 13	EU 14
Filter class as per DIN 24184		R	S	S	T
<b>Initial efficiency @ rated airflow</b>					
Test with MPPS (integral)	%	>85	>99.5	>99.90	>99.99
Test with aerosol Ø 0.3 µm (integral)	%	>95	>99.97	>99.990	>99.999
Recommended final pressure drop	Pa	600	600	600	600
Flammability classification to DIN 53438		K1/F1	K1/F1	K1/F1	K1/F1
Max. relative humidity	%	100	100	100	100
Max. continuous temperature	°C	80	80	80	80

## HEPA Filter Initial Pressure Drop

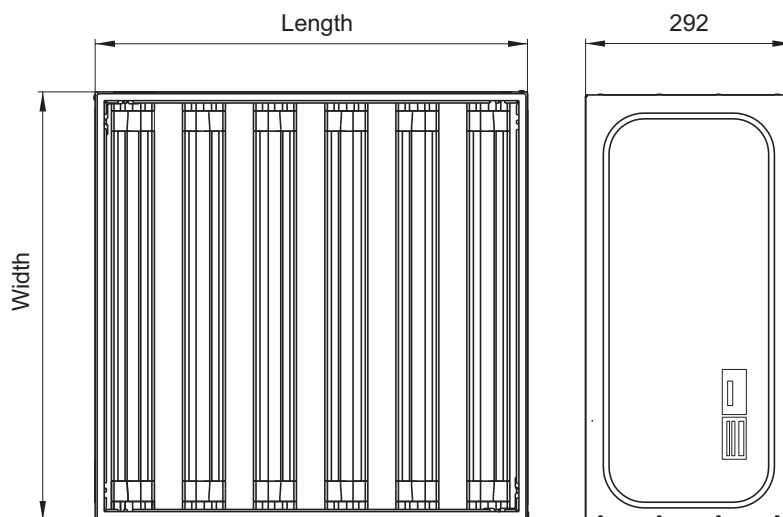




## HEPA Filter Size

HEPA Filter size		HEPA Filter Rated Airflow velocity of 2.5 m/s
305 x 610	mm	1670 m <sup>3</sup> /h
457 x 610	mm	2510 m <sup>3</sup> /h
610 x 610	mm	3350 m <sup>3</sup> /h
762 x 610	mm	4180 m <sup>3</sup> /h

## Dimensional Drawing



## Order Numbers (HEPA Filter)

Order no. **GW** - **A** - **B** **C** - **D** **E** **F** **G**  
 Example **GW** - **C** - **13** **66** - **D** **0** **0** **D**

Media Packs	A	Efficiency	B	Size L x W	C	Frame	D	free	E	free	F	Seal	G
8 Packs	8	H 10	10	610 x 305 mm	36	MDF	4		0		0	No Seal	0
10 Packs	A	H 12	12	610 x 457 mm	46	Steel Zinc Coated	D					1x Dry	D
12 Packs	C	H 13	13	610 x 610 mm	66							Both Sides Dry	B
		H 14	14	610 x 762 mm	76							1x Fluid	1
		Other dimensions available upon request											

Specifications are subject to change without prior notice