Finedust - HEPA/ULPA





# **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

#### FILT AIR Ltd. Member of the Beth-El Zikhron Yaaqov Group

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# Finedust - HEPA/ULPA

#### **Overview**

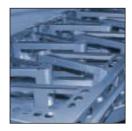
The GW compact finedust / HEPA filter for high airflow is designed and tested to extract the smallest particles out of the air. Each GW compact filter contains eight (8), ten (10) or twelve (12) "Minipleat-Media Packs" pleated in one piece and assembled in V-shape technology to achieve lowest pressure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

#### Applicable Standards:

- EN 1822
- IEST-RP-CC001.3
- EN 779
- ASHRAE 52.1
- ISO 9001:2000











#### **Compact Finedust / HEPA Filter Type GW**

- 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 ridgid 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).

## **Finedust Filter Initial Pressure Drop**

8 MP

∆p [Pa]

250

100

50

0 -

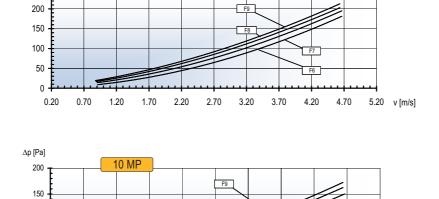
0.20

0.70

1.20

1.70

2.20



F8

2.70

3.20

F7

4.20

3.70

F6

4.70

5.20 v [m/s]

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 1		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. continous temparature	°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 Type**

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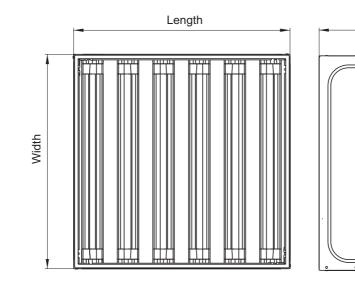


## **Finedust Filter Size**

Finedust Filter size	Finedust Filter Rated Airflow @ velocity of 3.4 m/s			
305 x 610 mm	2280 m³/h			
457 x 610 mm	3410 m³/h			
592 x 287 mm	2080 m³/h			
592 x 592 mm	4290 m³/h			
610 x 610 mm	4550 m³/h			
762 x 610 mm	5690 m³/h			

292

# **Dimensional Drawing**



## **Order Numbers (Finedust Filter)**

Order no Example		GW - GW -	- 2	A - B 8 - 08		C - 66 -	D D	E 0	F 0	G			
Media Packs	Α	Efficiency	В	Size L x W	С	Frame	D	free	Ε	free	F	Seal	G
8 Packs	8	F 6	06	592 x 287 mm	29	MDF	4		0		0	No Seal	0
10 Packs	Α	F 7	07	592 x 592 mm	59	Steel Zinc	D					1x Dry	D
		F 8	08	610 x 305 mm	63	Coated						1x Fluid	1
		F 9	09	610 x 457 mm	64							Both Sides Dry	В
				610 x 610 mm	66								
				762 x 610 mm	76								
				Other dimensions available	upon request								

Specifications are subject to change without prior notice





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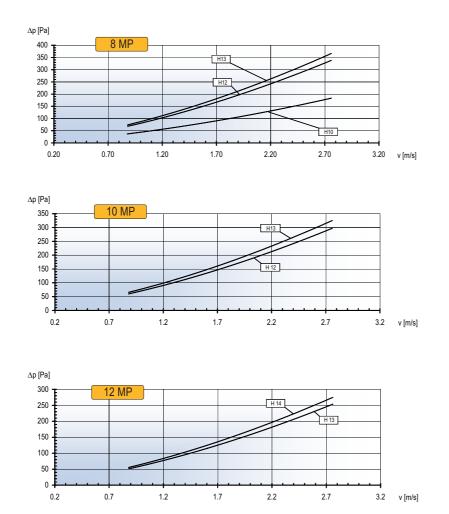
## **HEPA Filter Type**

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	т
Initial efficiency @ rated airflow					
Test with MPPS (integral)	%	>85	>99.5	>99.90	>99.99
Test with aerosol Ø 0.3 $\mu m$ (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



**I** 

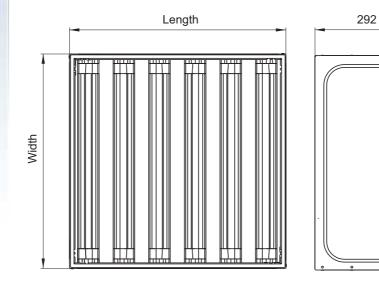
## **HEPA Filter Initial Pressure Drop**



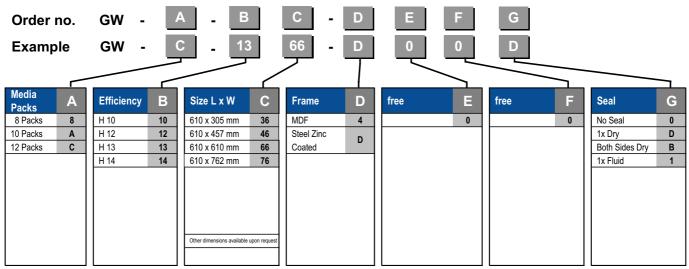
### **HEPA Filter Size**

HEPA Filter size	HEPA Filter Rated Airflow velocity of 2.5 m/s				
305 x 610 mm	1670 m³/h				
457 x 610 mm	2510 m³/h				
610 x 610 mm	3350 m³/h				
762 x 610 mm	4180 m³/h				

#### **Dimensional Drawing**



# Order Numbers (HEPA Filter)



Specifications are subject to change without prior notice



