



Panel Finedust / HEPA Filter

Type GP



Overview

The GP filter is designed and tested to extract the smallest particles out of the air.

The GP series contains a fibreglass media pack in four (4) different heights (47mm, 56mm, 70mm, and 93mm) and in different kinds of extruded aluminium frames. The filter media is pleated

in 'Minipleat shape' with a new application technology of 'Hot Melt Spacers' to achieve the lowest pressure drop results.

FEATURES

- HEPA efficiencies of 95% up to 99.99995% (@ 0.3 μm)
- Finedust efficiencies of 60% up to 98% ASHRAE
- High quality micro-fibreglass paper
- Lowest initial pressure drop
- Rigid frames



FILT-AIR LTD.

- Fine Dust Filter
- Final Filter for Fan Filter Units
- Final Filter for Clean Rooms
- Final Filter for Channel Installation
- Highly Active Filter Surface - Low Pressure Drop
- Final Filter for Grid Systems

Finedust - HEPA / ULPA

FEATURES

- **Frame heights of 70 mm up to 197 mm**
- **High quality standards due to Quality Assurance System**
- **HEPA filter tested by laser particle counting system**
- **Highly economical through high final pressure drop**
- **For use in clean rooms up to class 1**
- **Usable in bidirectional airflow**

Finedust - HEPA Filter Type GP

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- Finedust efficiencies of 60% up to 98% ASHRAE
- High quality micro fibreglass paper
- Lowest initial pressure drop
- Rigid frames
- Frame height of 70 mm up to 197 mm
- High quality standards due to Quality Assurance System
- HEPA filter tested by laser particle counting system
- Highly economical although high final pressure drop
- For use in clean rooms up to class 1
- Usable in two flow directions

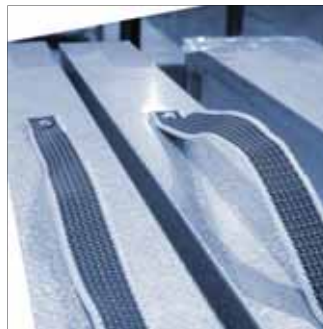
Design

The filter frame is made from an anodized extruded aluminium profile with two-angled corners producing a rigid straight filter.

Each different type of extruded aluminium profile has several built-in seal fasteners that anchor the profile in order to prevent any leakage between frame and media during the filter life.

In addition, other features are available such as a knife for fluid-seal connection or a fluid seal on the filter.

All types of GP filters are available with one or two screens and EPDM gaskets.



The fibreglass media pleated in 'Minipleat shape,' available in four (4) different heights (47, 56, 70, and 93 mm) is cast with polyurethane sealant into the frame. This design achieves a highly active filter surface and ensures the minimal pressure drop of the GP model.

Testing

Each HEPA filter is tested and packed in accordance with American Standard IEST-RP-CC001.3 (HEPA and ULPA Filters), in accordance with the European standard EN 1822-1 4&5 (Testing filter elements HEPA and ULPA efficiency and scan method), or customer requested testing.

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).

APPLICABLE STANDARDS:

- EN 1822-5
- IEST-RP-CC001.3
- EN 779
- ASHRAE 52.1
- ISO 9001:2008



XY - Scan Testing Device

Filt Air XY-scan testing device is able to perform automated filter leak testing of high efficiency air filters using automatic particle counters and a motorized scan table. While the particle counter probe passes over the filter face, the computer

compares the counted particles with the given leak tolerance setting. In addition, it calculates the overall efficiency for each checked filter and measures the pressure drop @ nominal airflow.

Finedust - HEPA / ULPA



Technical Data

Finedust Filter Data		F 6	F 7	F 8	F 9
Rated Face Velocity	m/s	2.4	2.4	2.4	2.4
Media Pack	mm	47/56/70	47/56/70	47/56/70	47/56/70
Initial pressure drop @ rated airflow	Pa	90/75/70	125/105/100	155/130/125	200/170/165
Filter class as per EN 779		F 6	F 7	F 8	F 9
Atmospherical dust-spot efficiency					
@ Rated airflow: average (final pressure drop 450 Pa)	%	65 (60-65)	85 (80-90)	95 (90-95)	97 (95-98)
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 Data (low velocity)		H 10	H 13	H 14	U15	U16
Rated face velocity	m/s	0.5	0.5	0.5	0.5	0.5
Media Pack	mm	47/ 56/ 70/ 93	47/ 56/ 70/ 93	47/ 56/ 70/ 93	47/ 56/ 70/ 93	47/ 56/ 70/ 93
Initial pressure drop @ rated airflow	Pa	53/ 48/ 40/ 36	120/110/ 88/ 80	133/120/100/88	155/138/115/98	176/158/140/122
Filter class as per EN 1822		H 10	H13	H14	U15	U16
Filter class as per EUROVENT 4/4		EU 10	EU 13	EU 14		
Filter class as per DIN 24184		R	S	T		
Initial efficiency @ rated airflow						
Test with MPPS (integral)	%	>85	>99.95	>99.995	>99.9995	>99.99995
Test with aerosol Ø 0.3 µm (integral)	%	>95	>99.995	>99.9995	>99.99995	
Recommended final pressure drop	Pa	600	600	600	600	600
Flammability classification to DIN 53438		K1/F1	K1/F1	K1/F1	K1/F1	K1/F1
Max. relative humidity	%	100	100	100	100	100
Max. continuous temperature	°C	80	80	80	80	80

Specifications are subject to change without prior notice

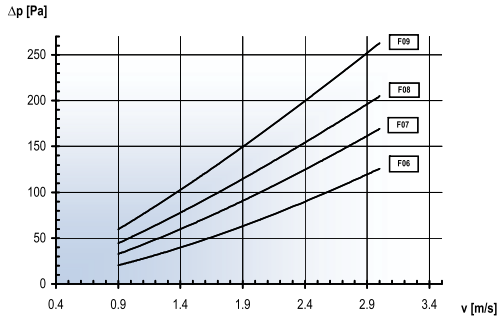
Filter Sizes

Filter Size		HEPA Filter Airflow Media Pack 47-93 mm Velocity of 0.5 m/s		Finedust Filter Rated Airflow Media Pack 47-70 mm Velocity of 2.4 m/s	
305 x 305	mm	170	m³/h	800	m³/h
305 x 610	mm	335	m³/h	1610	m³/h
457 x 305	mm	250	m³/h	1205	m³/h
457 x 457	mm	375	m³/h	1805	m³/h
457 x 610	mm	500	m³/h	2410	m³/h
610 x 610	mm	670	m³/h	3215	m³/h
762 x 610	mm	840	m³/h	4015	m³/h
915 x 610	mm	1005	m³/h	4820	m³/h
1220 x 610	mm	1340	m³/h	6430	m³/h

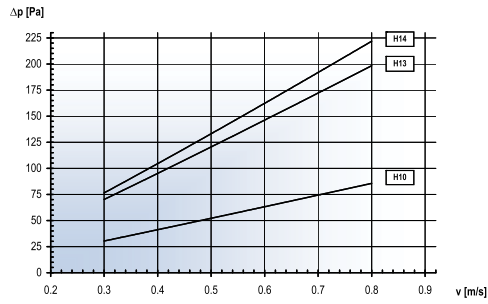
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Initial Pressure Drop

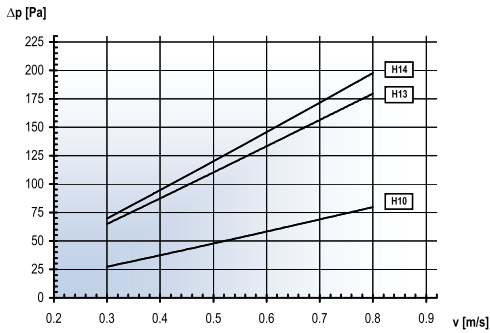
For 47 mm height 'Minipleat-Media pack' in finedust grades



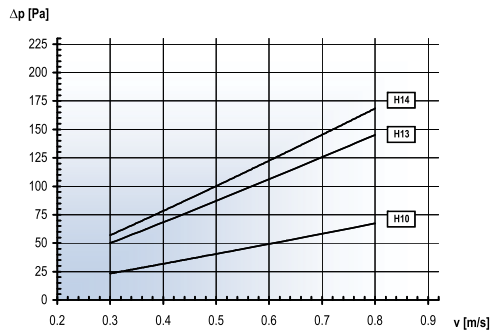
For 47 mm height 'Minipleat-Media pack' in HEPA grades



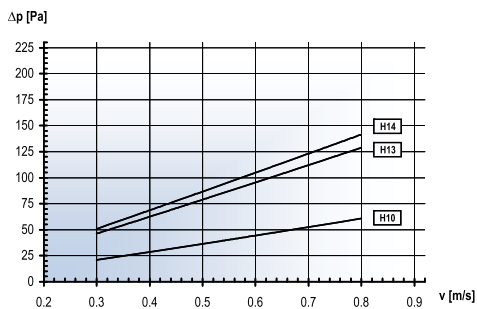
For 56 mm height 'Minipleat-Media pack' in HEPA grades



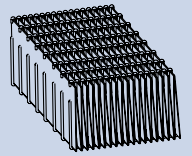
For 70 mm height 'Minipleat-Media pack' in HEPA grades



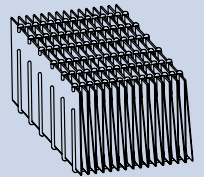
For 93 mm height 'Minipleat-Media pack' in HEPA grades



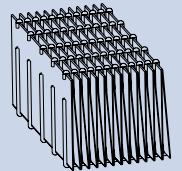
Media Pack 47 mm



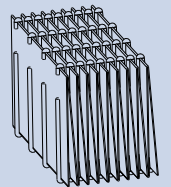
Media Pack 56 mm



Media Pack 70 mm



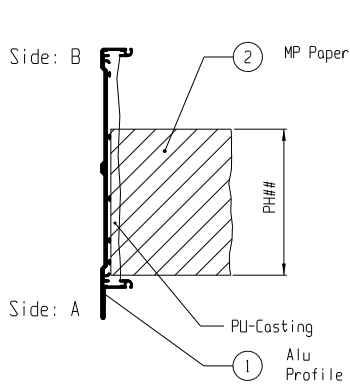
Media Pack 93 mm



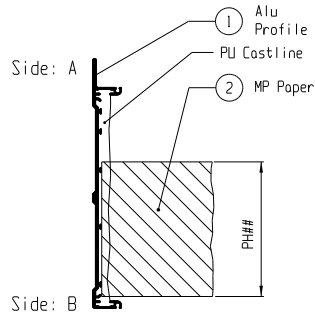
Finedust - HEPA / ULPA



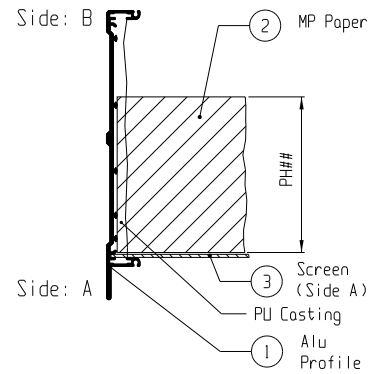
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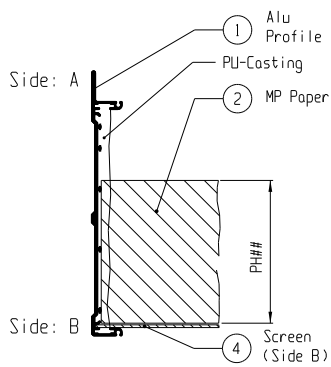
Construction Code: C



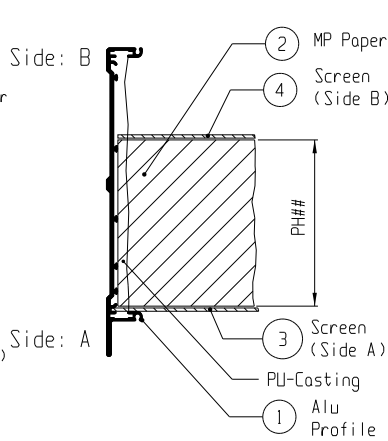
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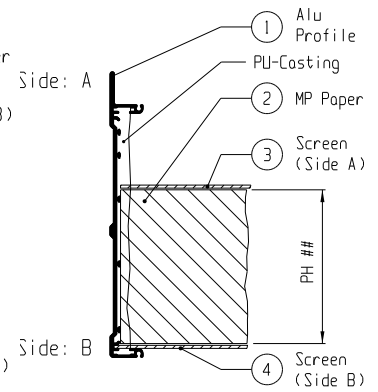
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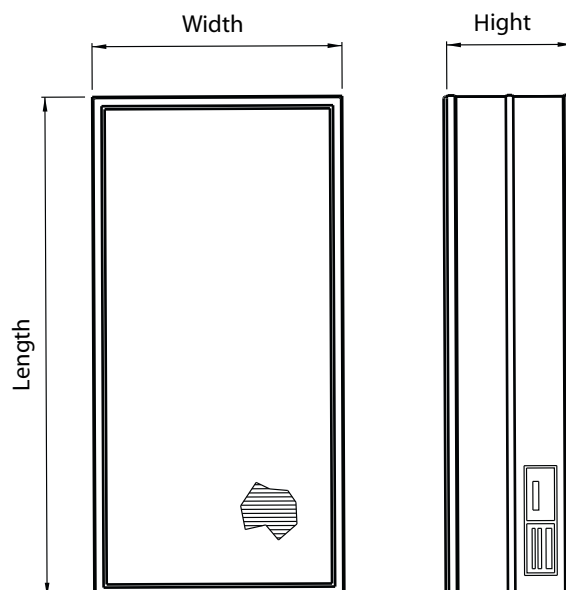
Construction Code: F



Construction Code: G

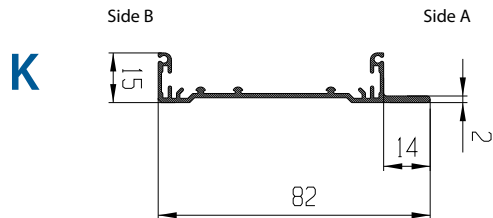


Dimensional Drawing

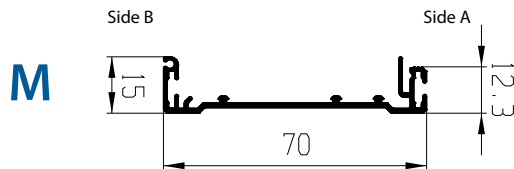


Order Code Dimensional Sketch of Profiles

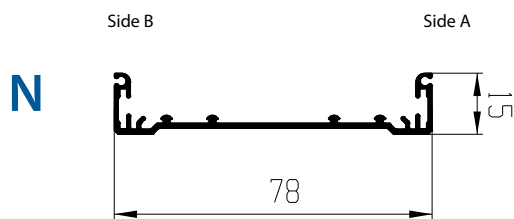
Application



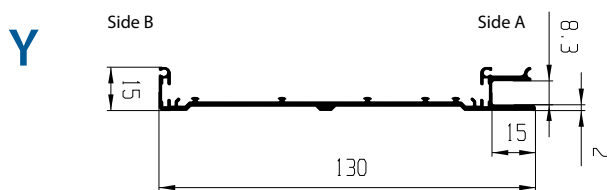
Special profile with 'knife edge' (suitable for 'fluid seal' system) for GP filters with Media Pack Order Code 4



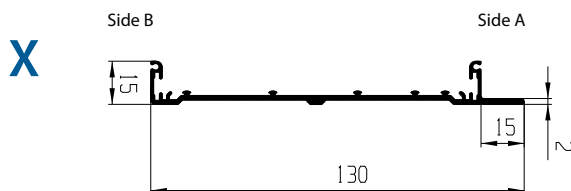
Standard profile for GP filters with Media Pack Order Code 4



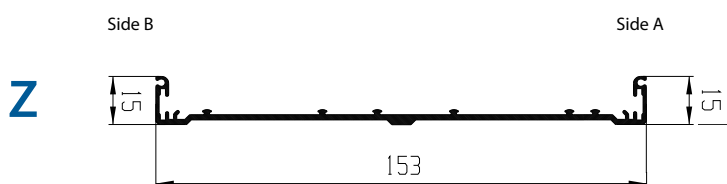
Standard profile for GP filters with Media Pack Order Code 4 or 5



Special profile with 'fluid seal' (suitable for 'knife edge' system) for GP filters with Media Pack Order Code 4, 5, 7, or 9



Special profile with 'knife edge' (suitable for 'fluid seal' system) for GP filters with Media Pack Order Code 4, 5, 7, or 9



Standard profile for GP filters with Media Pack Order Code 4, 5, 7, or 9

Order Numbers

Order no.	GP	A	-	B	C	-	D	E	F	G
Example	GP	4	-	13	66	-	N	D	C	0

Media Pack	A	Efficiency	B	Size L x W	C	Frame	D	Construction	E	Screen Material	F	Seal	G	
47 mm	4	F 6	06	305x305 mm	33	82 mm (K14-1)	K	No Screen/ Media at Profile Side A	B	No Sreen	0	No Seal	1	
56 mm	5	F 7	07	305x610 mm	36	70 mm (S-1)	M	No Screen/ Media at Profile Side B	C	Exp. Aluminium	A	1x Dry, Side A	A	
70 mm	7	F 8	08	457x305 mm	43	78 mm (S-1)	N	1x Screen/ Media at Profile Side A	D	Exp. Steel/ Powder Coated	C	1x Dry, Side B	B	
93 mm	9	F 9	09	457x457 mm	44	130 mm (K 15-1)	X	1x Screen/ Media at Profile Side B	E	Exp. Stainless Steel	U	Both Side, Dry	C	
		H 10	10	457x610 mm	46	130 mm (U15-1)	Y	2x Screen/ Media at Profile Side A	F			1x Fluid, Side A	D	
		H 13	13	610x610 mm	66	153 mm (S-1)	Z	2x Screen/ Media at Profile Side B	G			1x Fluid, Side A 1x Dry, Side B	F	
		H 14	14	762x610 mm	76	Other dimensions available upon request								
		U 15	15	915x610 mm	96									
		U 16	16	1220x610 mm	06									

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HEPA & ULPA Filters for Industrial Clean Rooms

FILT AIR Ltd. specializes in the use of advanced technologies to implement a purified air supply for high-tech industry clean rooms, the microelectronics business sectors, and pharmaceutical industries. FILT AIR Ltd. has a broad range of client groups, such as hospitals, industrial plants, commercial buildings, and companies requiring clean air inside gas turbines.

FILT AIR's range of products is designed and produced in order to achieve the highest possible quality and offers safety and reliability with optimum prices and product availability. Since 2001, FILT AIR Ltd. has been registered and certified for Quality Management according to ISO 9001 (Registration No: IQNet: IL-24203).

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