



Terminal HEPA Filter Type GT



Features

- Efficiencies of 95% up to 99.9995% (@ 0.3 μm).
- High quality micro fibreglass media.
- Lowest initial pressure drop.
- Adjustable airflow by means of a damper.
- Two different damper designs.

FILT AIR Ltd.

Member of the Beth-El Zikhron Yaaqov Group

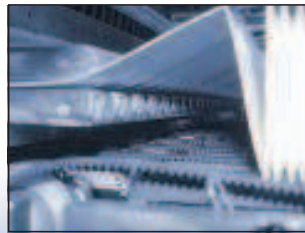
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Overview

The GT terminal high efficiency filter is designed and tested to extract the smallest particles out of the air. Each GT terminal filter contains a "Minipleat-Mediapack" available in different heights with a new application technology of the "Hot Melt Spacers" to achieve lowest pressure drop results.



Features

- Anodized rigid aluminum frame.
- High quality standard due to Quality Assurance System.
- Tested by laser particle counting system.
- High economic through high final pressure drop.
- For use in clean rooms up to class 1.

Design

The filter frame is made from anodized extruded aluminum profile with two angles in each corner to get a rigid straight frame. The zinc coated hood with an attached collar is tie glued on top of the filter. At the damper, version A, the aerosol / pressure drop checking inlet is placed in a special middle bridge and is adjustable from downstream. The fiberglass media which is pleated in "Minipleat shape", available in three (3) different heights (47, 56 and 70 mm), is cast into the frame and middle bridge. This design gives a highly active filter surface and ensures the minimal pressure drop of the GT model.



Testing

Each 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 testings.



XY-Scanning Probes



Control Unit



PSL-Generator

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.

Applicable Standards:

- EN 1822-5
- IEST-RP-CC001.3
- EN 779
- ASHRAE 52.1
- ISO 9001:2000

Technical Data

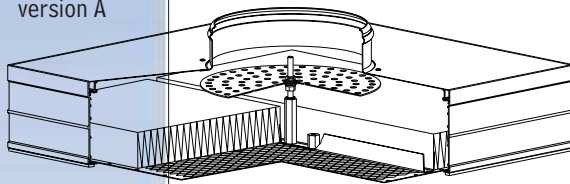
Filter data		H 10	H 13	H 14
Rated face velocity	m/s	0.5	0.5	0.5
Media Pack	mm	47 / 56 / 70	47 / 56 / 70	47 / 56 / 70
Initial pressure drop @ rated airflow	Pa	53 / 48 / 40	120 / 110 / 88	133 / 120 / 100
Filter class as per EN 1822		H 10	H13	H14
Initial efficiency @ rated airflow				
Test with MPPS (integral)	%	>85	>99.95	>99.995
Test with aerosol Ø 0.3 µm	%	>95	>99.995	>99.9995
Filter class as per DIN 24184		R	S	T
Recommended final pressure drop	Pa	600	600	600
Flammability classification to DIN 53438		K1/F1	K1/F1	K1/F1
Max. relative humidity	%	100	100	100
Max. continous temperature	°C	80	80	80



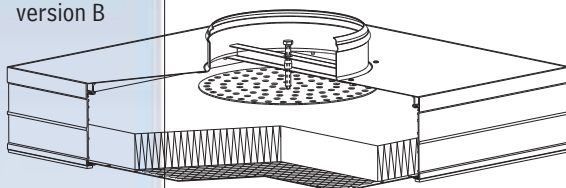
Filter Sizes

Filter size	Rated Airflow
610 x 610 mm	670 m³/h
1220 x 610 mm	1340 m³/h
600 x 600 mm	650 m³/h
1210 x 600 mm	1310 m³/h

version A



version B



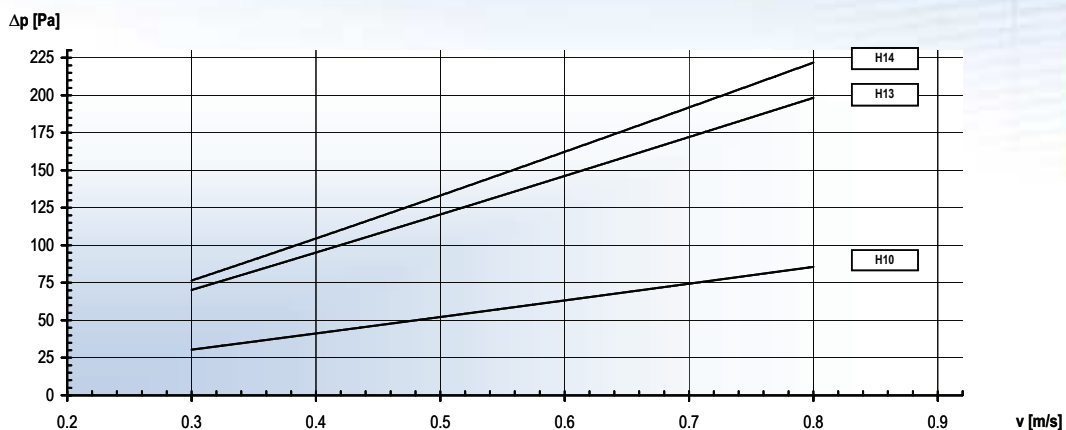
Dampers

The **version A** of our damper system is a combination of inroom adjustable damper with an aerosol inlet for efficiency checking on the installed filter. This gives the opportunity to change the airflow (filter velocity) very easily during checking with a velocity meter from the clean room side. Furthermore, for DOP efficiency testing (of installed filters) there is an aerosol entry provided to easily bring the test aerosol to the upstream side of the filter media. Both are covered with a sealed screw to prevent any leaks.

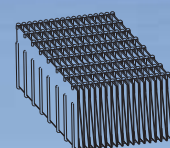
The **version B** of our damper system gives a functional possibility for a simple low cost adjusting of the entering air volume. This means that there is a bridge attached to the collar that carries the damper on a thread pin. Furthermore, a gasket buffer prevents movements caused by the airflow.



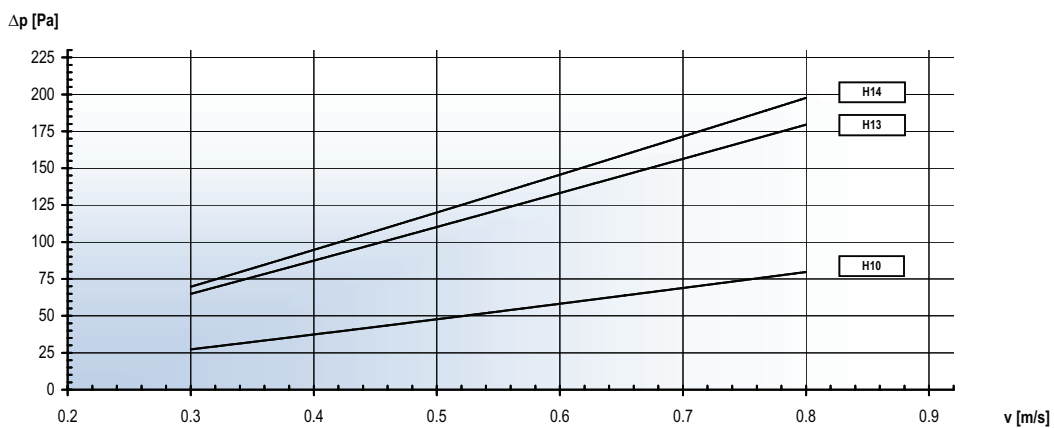
Initial Pressure Drop for "Minipleat-Media Pack" in 47 mm Height



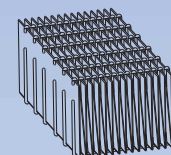
Media Pack 47 mm



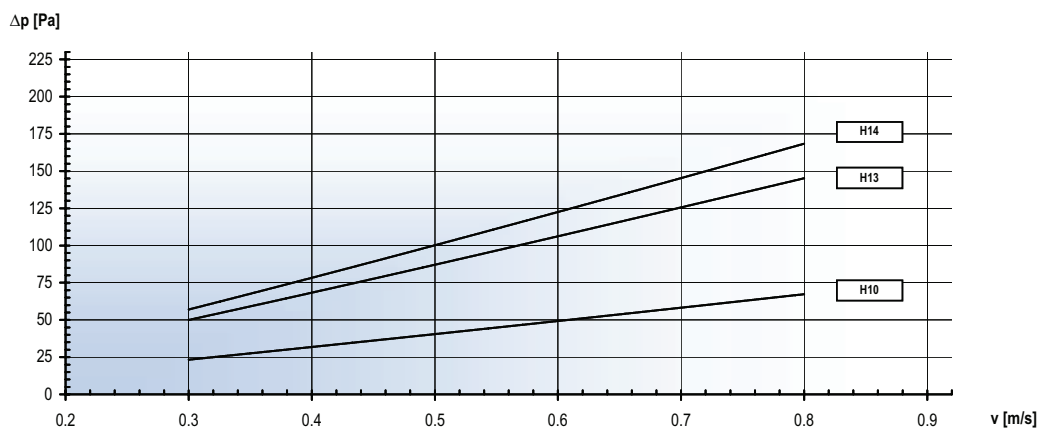
Initial Pressure Drop for "Minipleat-Media Pack" in 56 mm Height



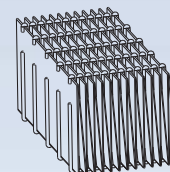
Media Pack 56 mm



Initial Pressure Drop for "Minipleat-Media Pack" in 70 mm Height

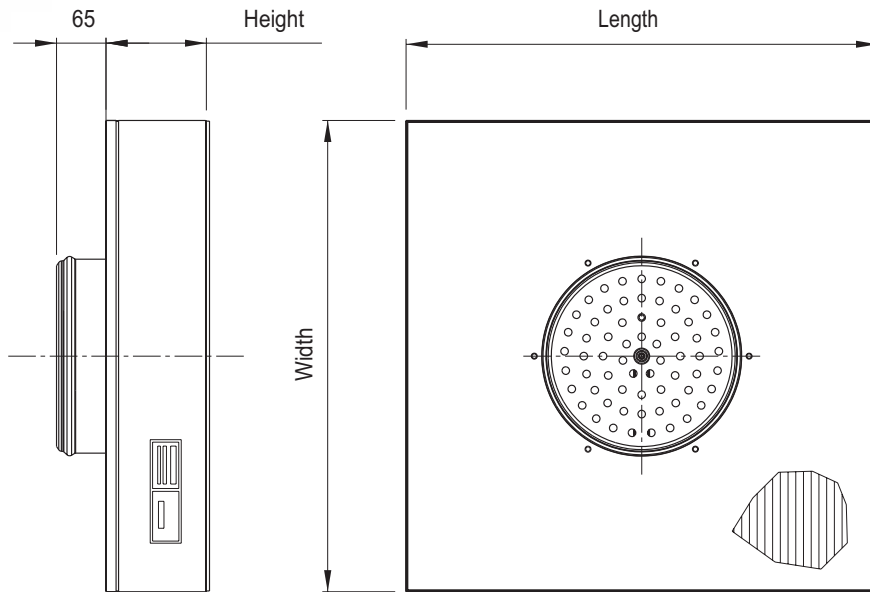


Media Pack 70 mm





Dimensional Drawing



Order Numbers

Order no. GT - **A** - **B** **C** - **D** **E** **F** **G**
 Example GT - **4** - **13** **66** - **Y** **1** **C** **0**

Media Pack	A	Efficiency	B	Size L x W	C	Frame	D	Damper & Collar	E	Screen Material	F	Seal	G
47 mm	4	H10	10	610 x 610 mm	66	130mm (U15-1)	Y	8" without damper	A	Exp. Steel /	C	No Seal	0
56 mm	5	H13	13	1220 x 610 mm	06	197mm (K-19-1)	9	10" without damper	B	Powder Coated		1x Downstream	D
70 mm	7	H14	14	600 x 600 mm	AD			12" without damper	C	Exp. Stainless Steel	U		
				1210 x 600 mm	AE			8" with damper Ver. A	1				
								10" with damper Ver. A	2				
								12" with damper Ver. A	3				
								8" with damper Ver. B	N				
								10" with damper Ver. B	P				
								12" with damper Ver. B	Q				
				Other dimensions available upon request		Walkable version available upon request							

Specifications are subject to change without prior notice