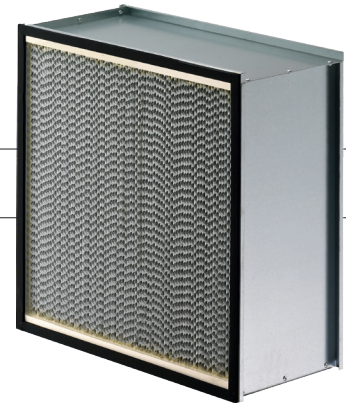


AstroCel® I

HEPA FILTER



Features and Benefits

- Available in E12, H13 and H14
- H13 and H14 are individually tested and approved according to EN1822:2009 for guaranteed performance
- High capacity execution with unique separator design for handling airflow rates up to 3000 m³/h
- Available with stainless steel frame, silicone sealant and silicone gasket for withstanding temperatures up to 260 °C

Applications

- Final filtration in central air handling systems and industrial installations
- Clean processes, such as pharmaceutical, food and beverage, electronics and healthcare
- Removal of hazardous materials, such as APIs

The AstroCel I HEPA filter offers reliable contamination control for multiple applications, varying from central air handling systems to demanding industrial installations. The filter can be supplied in a high capacity design for handling high airflow rates. A wide variety of sizes and configuration options is available for the AstroCel I filter to meet any requirement at the most beneficial operating costs.

Improved Process Performance

The AstroCel I filter is available in filter classes E12, H13 and H14 according to EN1822:2009. The difference between the E and H group is, that H group is individually tested for guaranteed filtration performance. The media pack is carefully sealed to the frame to prevent leakage. For demanding applications, a high capacity execution is available for airflows up to 3000 m³/h. With a temperature resistance of up to 260°C, AstroCel I filters allow for installation in a broad range of critical applications.

Environmental Savings

The AstroCel I filter owes its beneficial operating resistance to a precise pleat spacing, which is maintained by corrugated aluminum separators that permit maximum usage of the filter medium. The flat resistance curve minimises energy consumption and equivalent CO₂ emission, whereas the long filter life reduces disposal and waste.

Beneficial Total Cost of Ownership

The advantageous operating resistance of the AstroCel I filter limits energy costs, and the longer service life minimises filter replacement costs. The high capacity execution requires fewer filters to handle the same volume of air, which means that less costly installation space is required. The robust filter construction with unique separator design reduces risk of media damage, so that premature filter replacements are prevented.

AstroCel® I Filter

Standard configuration

Filter medium		Filter frame	
Material	Fibreglass	Material	Anodized extruded aluminum, galvanized steel, stainless steel or MDF
Pack design	Deep-pleat	Sealant	Polyurethane or silicone
Separator	Aluminum	Gasket	
		Material	Polyurethane foamed, silicone, neoprene or polychloroprene

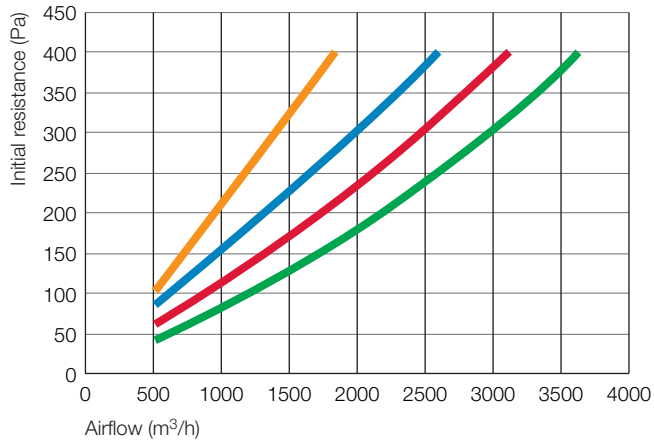
Performance

Version	Dimensions (mm)			Media pack depth (mm)	Nominal airflow		Face velocity (m/s)	Filter medium surface (m ²)	Initial resistance (Pa)		
	W	H	D		m ³ /h	m ³ /s			E12	H13	H14
Standard	305	305	149	119	250	0,07	0,75	1,7	250	250	320
Standard	305	610	149	119	500	0,14	0,75	3,7	250	250	320
Standard	610	610	149	119	1000	0,28	0,75	7,9	250	250	320
Standard	762	610	149	119	1250	0,35	0,75	9,7	250	250	320
Standard	305	305	292	265	500	0,14	1,50	3,7	250	250	320
Standard	305	610	292	265	1000	0,28	1,50	7,9	250	250	320
Standard	610	610	292	265	2000	0,56	1,50	17,0	250	250	320
Standard	762	610	292	265	2500	0,70	1,50	21,6	250	250	320
High Capacity	305	305	292	265	750	0,21	2,25	7,5	300	300	350
High Capacity	305	610	292	265	1500	0,42	2,25	15,1	300	300	350
High Capacity	610	610	292	265	3000	0,84	2,25	30,4	300	300	350
High Capacity	762	610	292	265	3750	1,05	2,25	38,1	300	300	350

Other sizes available on request, be it maximum 762 x 610 x 292 mm. The height (H) dimension also indicates the position of the separators, which should always be installed in vertical position. All performance data are based on EN1822:2009. Recommended final resistance is subject to optimisation of lifecycle costs, be it maximum 500 Pa. Filters can be operated at 75% to 125% of the nominal airflow. Maximum operating temperature varies from 70 - 260 °C, subject to the temperature resistances of the selected components.

AstroCel® I Filter

Airflow versus operating resistance



AstroCel I H12 and H13 610x610x149 mm
 AstroCel I H12 and H13 610x610x292 mm
 AstroCel I H14 610x610x292 mm
 AstroCel I HC H13 610x610x292 mm

Temperature resistance matrix

	Sealant	
	Polyurethane	Silicone
Polyurethane foamed gasket		
① ② ④	80 °C	-
Silicone flat gasket		
②	120 °C	-
③	-	260 °C
Neoprene flat gasket		
① ② ④	70 °C (100 °C, 1h)	-
Polychloroprene flat gasket		
① ② ④	90 °C (100 °C, 1h)	-
No gasket		
① ②	120 °C	-
③	-	260 °C
④	100 °C	-

The lowest maximum temperature for a single component defines the maximum operating temperature of the complete configuration. Temperatures indicated are maximum continuous operating temperatures.

- ① Anodized extruded aluminum frame
- ② Galvanized steel frame
- ③ Stainless steel frame
- ④ MDF frame

AstroCel® is a registered trademark of AAF International in the U.S. and other countries.



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