

AstroCel[®] III Metal

High Efficiency Particulate Air Filters (HEPA)

- **Rigid Construction Improves Performance Under Turbulent Operating Conditions**
- **High air volume capacity**
- **H12 and H13 to EN1822**



AstroCel III is a heavy duty, high efficiency particulate air filter (HEPA) designed for both Constant Air Volume (CAV) and Variable Air Volume (VAV) systems. The AstroCel III filter is made of multiple mini-pleat media packs assembled in a V-shaped configuration, into an electro-galvanized steel housing with an aluminium flange at the air entry side.

This configuration substantially increases the amount of media contained in the filter over conventional rigid type filter. In existing installations, the filter's high media area ensures low-pressure drop, which reduces energy cost. The filter is designed for installation in AHU's.

It is suitable for use in hospital operating theatres, semi-conductor, microelectronic, food and pharmaceutical industries and

gasturbine inlet applications where airborne contaminants must be carefully controlled.

High Capacity, Mini-Pleat Design

The AstroCel III is made from ultra fine, moisture resistance and fire-retardant fiberglass media. Separators made from special thermoplastic beads maintain even spacing between pleats for optimal airflow with minimal air resistance.

The consistent pleat spacing of the media allows higher dust holding capacity and full use of the entire depth of the media. The rigid metal construction improves performance under turbulent operating conditions. The AstroCel III is ideal for extremely difficult conditions such as high turbulence and frequent fan shut down.

High Air Volume Capacity

The filter is designed for use in high air volume applications up to 4000 m³/h. Its high capacity design provide competitive advantage to other conventional HEPA filter of the same size; fewer filters are required to handle the same volume of air in the systems, which reduces costs, installation space and time.

For system operating at lower velocities, the AstroCel III service life will be significantly prolonged thus reducing the operating cost further.

Classification

All AstroCel III HEPA filters are classified H12 or H13 to EN1822.

Better Air is Our Business[®]



AstroCel® III Metal

An AstroVee can be ordered using the following Component Code Definition System.
Use the table to specify a product suitable to your application requirements.

Selection Table

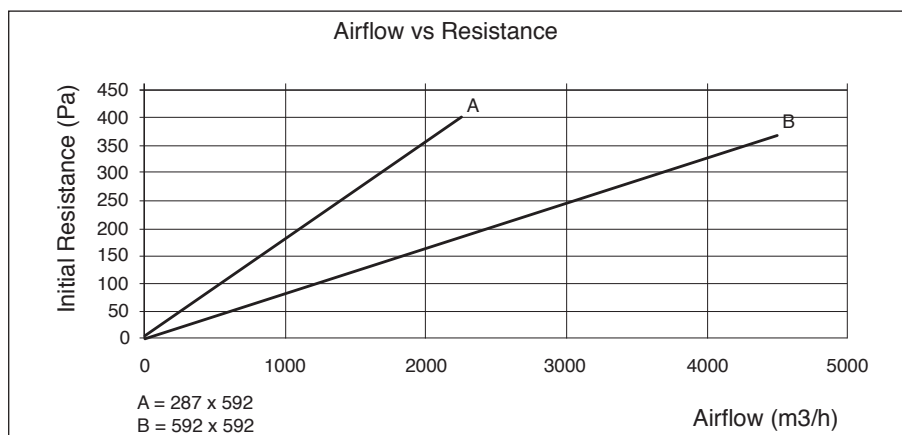
Item	Component	Component Code Definition
A	Type of Filter	A39 = AstroCel III
B	Media	A = Waterproof Glass Fibre
C	Cell Sides	35 = Galv. steel with aluminium flange
D	Separators	C = Thermoplastic
E	Bond	9 = Polyurethane Cold Cured Resin
F	Gasket	P = No gasket D = Polyurethane foam, half round profile, one piece
G	Gasket Location	0 = No gasket 1 = Gasket clean air side (CAS) 2 = Gasket dirty air side (DAS)
H	Acceptance Level	G = H12, Min. 99.5% @ MPPS acc. to EN1822 H = H13, Min. 99.95% @ MPPS acc. to EN1822
I	Faceguard Location	O = No faceguard
K	Options	Consult local sales office

Bold typeface: standard execution

Specification

Maximum operating temperature:	70 °C
Media:	High efficiency, water resistant glass fibre
Separators:	Hot melt
Cell sides and Header:	Galv. steel and extruded aluminium
Gasket:	Gasket on clean air side as standard

Airflow versus Resistance



How to Order

Below a typical example of how to order a standard AstroVee filter using the Component Code Definition System.

Item	A	B	C	D	E	F	G	H	I	K
Component Definition	A39	A	35	C	9	S	1	G	0	-

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Standard Sizes and Ratings

Size in mm without gasket			Media area	Nominal airflow
H	W	D	m ²	m ³ /h
592	287	292	15	1500
592	592	292	30	3400

Notes:

- 1) Final resistance 750 Pa.
- 2) Initial resistance at nominal airflow: 275 Pa.
- 3) Filters can operate up to 125% of rated volume

Efficiency

Efficiency @ 0.3 µm	Efficiency EN1822 @ MPPS	
99.97%	H12	99.5%
99.99%	H13	99.95%