THE WORLD LEADER IN CLEAN AIR SOLUTIONS

AstroCel® III

HEPA FILTERS

The AstroCel III High Efficiency Particulate Air (HEPA) filter is designed to meet the demanding airflow and efficiency requirements of the most critical applications.

- Ideal for demanding operating conditions in critical applications
- Longer service life 436 square feet of media — means fewer changeouts
- Low energy consumption and lower operating costs
- High capacity operation with minimal resistance to airflow;
 2400 CFM rated airflow at 1 in. w.g.
- Chemical-resistant anodized aluminum frame provides superior strength
- One piece polyurethane gasket seal and gel seal designs available





Gel Seal Frame

Extractor Clips

Gel Seal Frame

AstroCel[®] III filters are designed for installation into high integrity filter holding frames, side access housings, and bag in/bag out systems including one piece urethane. Multiple gasket seal filters are available, as well as gel seal filters for frames and systems designed with knife-edge seal framing. Extractor clips are offered for side access systems requiring gel seal frames.

Longer Service Life and Lower Energy Consumption

Multiple mini-pleat media packs, assembled into a series of V-banks, permit substantially more



media to be contained in the filter — double the media typically found in most HEPA filters. Maximum effective media area provides greater airflow capacity, low resistance, high dust holding capacity, and unusually long service life.

The V-bank configuration provides greater airflow capacity and longer service life, while lowering operating costs.

Typical Applications

AstroCel III HEPA filters are ideal for applications operating with higher airflows, up to 600 FPM, and requiring ultra low pressure drop:

- Semiconductor and electronics manufacturing
- Pharmaceutical processing
- Photo film manufacturing/processing
- Hospitals, laboratories, and optical facilities
- Food processing

Designed for High Performance

Media Configuration Reduces Operating Costs

AstroCel III filter media is made from sub-micron glass fibers formed into a high density paper. Glass filament separators are used to form the media into mini-pleat panels that withstand high velocity airflow. The V-bank configuration optimizes media performance for high airflow at very low resistance. Mini-pleat packs are sealed to the frame with two-component polyurethane to increase rigidity and prevent bypass leakage.

Construction

Extruded aluminum frame components resist chemical corrosion, provide high strength, and are lighter. Cell sides are made from a single extrusion to maximize construction integrity.



AstroCel[®] III

Life Cycle Valuation Program

The large media area and lower resistance of the AstroCel III filter can greatly reduce operating costs. Your local AAF sales representative uses an exclusive software tool, Life Cycle Valuation (LCV), to help you choose the optimum filter design for your specific operating conditions.

System 1			System 2			System 3				
System Name•		AstroCel III	•	System Name-		High Capacit	ин 😄	System Name-		•
Filtration System Oper	aŭng	Hrs 🕕		Filtration System Ope	rating	Hrs 🕕		Filtration System Ope	rating Hrs 🕕	
Hrs per Day		24.0		Hrs per Day		24.0		Hrs per Day		
Days per Week		7		Days per Week		7		Days per Week		
Airllow	0	20000	dm	Airflow	0	20000	dm	Airflow•		dm
Filter Stage 1				Filter Stage 1				Filter Stage 1		
Filter Name*		AstroCel III		Filter Name*		HC HEPA		Filter Name+		
Filter Efficiency or MERV Rating	0	99.99		Filter Efficiency or NERV Rating	0	99.97		Filter Efficiency or MERV Rating		
Filter Cost	0	0.00	5	Filter Cost	0	0.00	5	Filter Cost		
Disposal Cost	0	40.00	5	Disposal Cost	0	40.00	5	Disposal Cost		
Labor Hirs	0	2	hs	Labor Hrs	0	2.0	hs	Labor Hrs		
Filter Life	0	24	mos	Filter Life	0	24	mos	Filter Life*		
Initial Resistance	0	1.0	-w.o.	Initial Resistance	0	1.4	* M.C.	Initial Resistance+		
Final Resistance	0	2.0	-wc.	Final Resistance*	0	2.8	*M.Q.	Final Resistance•		
Add Another Filter Stage			Add Another Filter Stage							

Guaranteed Performance

Every AstroCel III filter is individually tested before it leaves the factory — your assurance that it meets rated efficiency. The actual test data is indicated on the label. Each filter is also assigned a serial number and a permanent record is kept of the materials of construction and performance.

Efficiency: 99.995% Resistance: 1.0 IN. W			11 1/2 TE	
Part No: 3015302-001 Inspector No. : 33	1 Date Tested: 5/1	1/2009 Serial No: 11818	80 FLO	AIR FLOW

Product Information

Seal Method	Nominal Size (in.)	Rated Airflow Capacity (CFM)	Rated Initial Resistance (in. w.g.)	Media Area (sq. ft.)
Gasket	24 x 12 x 11½	1125	1.0	174
Gasket	24 x 24 x 11½	2400	1.0	436
Gasket	23% x 23% x 11½	2270	1.0	426
Gel	24 x 12 x 11½	1025	1.0	160
Gel	24 x 24 x 11½	2150	1.0	398

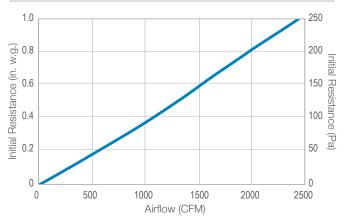
Efficiency for all models is 99.99% @ 0.3 micron.

Dimensions are actual and do not include gasket.

Additional sizes are available. Call your local AAF sales representative, 888.AAF.2003, for availability.

Performance Data

Initial Resistance vs. Airflow Capacity



Performance data is based on AstroCel III 24" x 24" x 111/2" gasket seal filter.

Maximum Operating Temperature 200°F (93°C).

Underwriters Laboratories Classification

AstroCel III filters are UL Classified in accordance with UL Standard 900 and ULC-S111.



AAF has a policy of continuous product research and improvement and reserves the right to change design and specifications without notice.

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