

## PRODUCT OVERVIEW

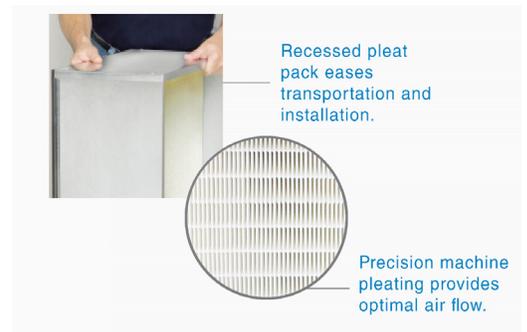
- Available in 95%, 99.97%, 99.99%, 99.995% or 99.999% efficiencies
- Standard and High Capacity designs available
- HVAC supply and exhaust application for protection of people, processes, equipment & the environment
  - Health Care
  - Pharmacy
  - Chemical manufacturing
  - Food Processing
  - Laboratories
  - Aerospace
  - Contamination clean-up
  - Gun Ranges
- Available Options
  - Extraction Clips
  - Gel Seal
  - Face Screens



## **AEROSTAR** M-SERIES HEPA

### WHY THE M-SERIES HEPA?

- The M-Series mini-pleat HEPA is designed for value versatility and performance
- Advanced aerodynamic pleating structure designed for bi-directional flow reduces pressure drop and lowers operating costs
- Reduced weight due to mini-pleat bead separators that eliminate the need for the traditional corrugated aluminum separators
- 100% relative humidity and lightweight design
- Maximum temperature - 180°F
- Recessed pack allows for easy handling, installation and reduced media damage
- Rugged galvanized steel for standard box frames and lightweight extruded aluminum for non-standard sizes and gel seal option
- Filters are individually tested and labeled with efficiency, part number, tested CFM and a unique serial number to validate true HEPA efficiency performance
- Filters with efficiencies of 99.99% and higher are scan tested according to IEST-RP-CC034 latest revision
- Filters are constructed in accordance with IEST-RP-CC001 latest revision



# AEROSTAR M-SERIES HEPA

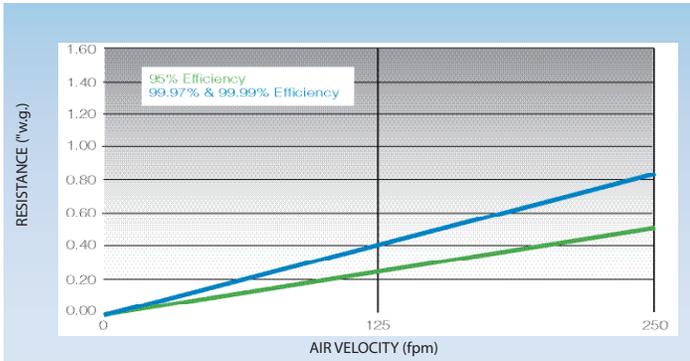
## PERFORMANCE DATA (24 x 24 x 12)

CAPACITY	EFFICIENCIES	INITIAL RESISTANCE* ("w.g.)		FINAL RESISTANCE ("w.g.)
		250 fpm	500 fpm	
Standard	95.00%	0.50	-	1.0
	99.97%	0.82	-	2.0
	99.99%**	0.82	-	2.0
High	95.00%	-	1.00	2.0
	99.97%	-	1.26	3.0
	99.99%**	-	1.26	3.0

\*Allowable Range of Initial Resistance +/-10%

\*\*Scanned per IEST-RP-CC034

### INITIAL RESISTANCE (STANDARD CAPACITY)



### INITIAL RESISTANCE (HIGH CAPACITY)



### PRODUCT DATA-STANDARD CAPACITY

PART NUMBER				ACTUAL SIZE (H" x W" x D")	APPROX. WEIGHT (LBS.)
99.97% Gasket	99.97% Gel Seal	99.99% Gasket	99.99% Gel Seal		
41702	44878	41706	45691	24 x 24 x 11½	34
41703	44412	41707	45692	23 ¾ x 23 ¾ x 11½	34
41704	45910	41708	45894	24 x 12 x 11½	18
41705	44755	41709	45911	23 ¾ x 11 ¾ x 11½	18

### PRODUCT DATA- HIGH CAPACITY

PART NUMBER				ACTUAL SIZE (H" x W" x D")	APPROX. WEIGHT (LBS.)
99.97% Gasket	99.97% Gel Seal	99.99% Gasket	99.99% Gel Seal		
41702HC	44332	41706HC	41781	24 x 24 x 11½	55
41703HC	42153	41707HC	41780	23 ¾ x 23 ¾ x 11½	55
41704HC	44344	41708HC	42785	24 x 12 x 11½	28
41705HC	44222	41709HC	44464	23 ¾ x 11 ¾ x 11½	28

## ENGINEERING SPECIFICATIONS

### 1.0 General

- Filters shall be Aerostar® M-Series HEPA manufactured by Filtration Group or approved equivalent.
- The size of the filter shall be H x W x D". Overall dimensions shall be correct to within +0", - 1/8".
- Filters shall be available in nominal depth of 12" only.
- Filters are manufactured by an ISO 9001 registered company.

### 2.0 Materials of Construction

- Filter media shall be microglass fiber type pleated and separated with thermoplastic resin beads. Formed dimpled media separators shall not be allowed.
- The filter frame shall be manufactured in galvanized steel for gasket-seal or anodized extruded aluminum for gel-seal and the sides of the frame shall be joined together so that any contamination of the filter by metal shavings is prevented. Sharp edges where the edges are joined together will not be accepted.
- The media pack shall be sealed on all sides and form a completely leak-proof seal with the frame. A 2-component polyurethane is used on the top and bottom panels to encapsulate each pleat edge.
- Gasket seal filters shall be provided with a 1/4" thick closed cell urethane gasket. Gasket shall be continuous or the joints shall use a ball-and-socket joint and be filled with foam adhesive to assure a positive seal. Gel Seal versions have a 2-component urethane gel seal in a 5/8" sealed gel track.

### 3.0 Filter Performance

- Each filter shall be individually tested and certified to have an efficiency of not less than:
  - 95% at 0.3\*, or
  - 99.97% at 0.3, or
  - 99.99% at 0.3, or
  - 99.995% at MPPS, or
  - 99.999% at MPPS

\*M-Series HEPAs rated at 95% are not individually tested.
- Each filter rated at 99.99% efficiency and higher shall be individually scanned for leaks at the factory and certified in accordance with IEST-RP-CC034, latest revision. Factory repairs shall not exceed 1% of the filter face area and no individual repair may exceed 2 in<sup>2</sup> (13 cm<sup>2</sup>).
- The clean filter static pressure drop shall be no greater than 0.90" w.g. for Standard Capacity HEPAs where the air flow is 1000 SCFM on a 24 x 24 x 11.5-inch full size filter. The clean filter static pressure drop shall be no greater than 1.39" w.g. for High Capacity HEPAs where the air flow is 2000 SCFM on a 24 x 24 x 11.5-inch full size filter. Air flow is determined as the face area x 250 feet per minute face speed for standard capacity and the face area x 500 feet per minute face speed for high capacity.
- Filters shall be marked for use and capable of flowing in both directions
- Filters shall have a recommended final resistance of 2.0" (SC) or 3.0" (HC).
- Filters shall be rated to withstand a continuous operating temperature up to 180°F.