

## PRODUCT OVERVIEW

- Available in 95%, 99.97%, 99.99%, 99.995% or 99.999% efficiencies
- High Air Volume
- 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



## HV-SERIES HEPA & ULPA

### WHY HV-SERIES HEPA & ULPA?

- The High Volume HEPA & ULPA is specifically designed to perform in adverse, demanding and critical environments
- Lowest total operating cost in high efficiency filters
  - Extended service life due to large filter media area (430 sq. ft.)
  - Higher rated air flows than other HEPA's - based on 600 fpm duct velocities
  - Low pressure drop mini-pleat design for reduced energy consumption
- Anodized aluminum frame for chemical resistance and lighter weight
- Maximum temperature - 180°F
- Filters are individually tested and labeled with efficiency, part number, rated CFM and a unique serial number to validate HEPA efficiency performance
- HEPA filters are constructed in accordance with IEST-RP-CC001 latest revision
- Available Options
  - Extraction Clips
  - Gel Seal
  - Gasket Seal



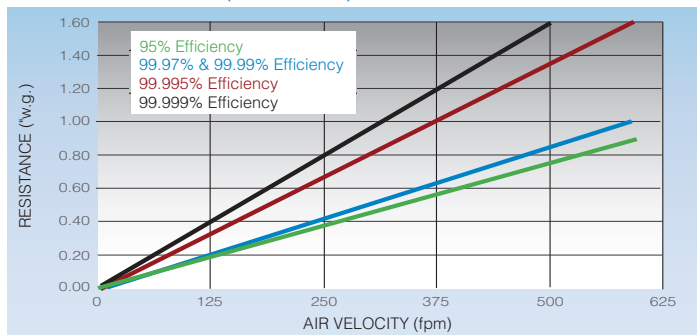
# HV-SERIES HEPA & ULPA

## PERFORMANCE DATA (24 x 24 x 12)

CAPACITY	EFFICIENCIES	INITIAL RESISTANCE ("w.g.)		FINAL RESISTANCE ("w.g.)	APPROX. EN-1822 CLASS
		500 fpm	600 fpm		
High Volume	95%*	-	0.86	3.0	E-11
	99.97%	-	1.00	3.0	H-13
	99.99%	-	1.00	3.0	-
	99.995%	-	1.60	3.0	H-14
	99.999%	1.60	-	3.0	-

\*Not Tested

## INITIAL RESISTANCE (24 x 24 x 12)



## PRODUCT DATA

PART NUMBER (WITH UPSTREAM GASKET)					PART NUMBER (WITH DOWN-STREAM GASKET)	NOMINAL SIZE (H" x W" x D")	ACTUAL SIZE (H" x W" x D")	RATED AIR FLOW (FPM)	APPROX. WEIGHT (LBS.)	MEDIA AREA (SQ. FT.)
95%	99.97%	99.99%	99.995%	99.999%	99.999%					
40424	40425	40426	43314	-	45175*	24 x 12 x 12	24 x 12 x 11½	560	22	215
40421	40418	40419	43315	44706*	45174*	24 x 24 x 12	24 x 24 x 11½	600	42	430

\*Rated at 500 fpm

## ENGINEERING SPECIFICATIONS

### 1.0 Performance Characteristics

- 1.1 Filters shall be Aerostar HV-Series HEPA & ULPA manufactured by Filtration Group. The size of the filter shall be H x W x 11.50". Overall dimensions shall be correct to within +0 / -1/8". Half-Size HV HEPAs will be made to Full dimension x Half dimension.
- 1.2 Each filter shall be tested and certified to have an efficiency of not less than:
  - 95% at 0.3 µm\*, or
  - 99.97% at 0.3 µm, or
  - 99.99% at 0.3 µm, or
  - 99.995% at MPPS, or
  - 99.999% at MPPS

\*HV HEPAs rated at 95% are not individually tested.
- 1.3 The clean filter static pressure drop for full-sized filters shall be no greater than:
  - for 95%, 0.86" W.G. at 600 FPM.
  - for 99.97%, 1.00" W.G. at 600 FPM.
  - for 99.99%, 1.00" W.G. at 600 FPM.
  - for 99.995%, 1.60" W.G. at 600 FPM.
  - for 99.999%, 1.60" W.G. at 500 FPM.
- 1.4 Underwriters Laboratories classified to UL 900.

### 2.0 Filter Materials of Construction

- 2.1 The filter frame shall be manufactured in anodized extruded aluminum and the sides of the frame shall be joined together so that any contamination of the filter by metal shavings is prevented (frame corners are secured with corner clips). Sharp edges where the edges are joined together will not be accepted.

- 2.2 The media pack will consist of 10-filter packs arranged to form five v-shapes in a full-sized HV HEPA and 5-packs to form 2-1/2 v-shapes in a half-sized HV HEPA.
- 2.3 Filter media shall be microglass fiber type mini-pleated into closely spaced pleats with fiberglass string separators.
- 2.4 The media pack shall be sealed on all sides with a solid UL-classified polyurethane sealant and form a completely leak proof seal with the frame.
- 2.5 Gasket seal filters shall be provided with a ¼" x ¾" closed cell urethane gasket. Gasket joints shall be ball-and-socket and filled with adhesive to assure a positive seal. Gel Seal versions have a two-part urethane gel seal in a 5/8" sealed gel track.
- 2.6 Filter labels shall have the following information:
  - Efficiency, tested air flow, initial resistance, serial number, part number, exact filter dimensions.

### 3.0 Quality System

- 3.1 Filters are manufactured by an ISO 9001 registered company.
- 3.2 If requested manufacturer shall make available a copy of their Corporate Quality Manual.
- 3.4 If requested the manufacturer shall make available printed performance test results or Certificate of Test. (letter of compliance).