

# E1 SERIES

## ELECTROSTATIC AIR FILTER



### MERV 8 INITIAL EFFICIENCY

**Application:** The E1 Series Washable MERV 8 Electrostatic Air Filter is a pleated permanent washable filter designed to replace disposable air filters commonly used in residential, commercial and industrial HVAC systems. Its purpose is to remove airborne particulate from the airstream. It uses a passive electrostatic media that is pleated to increase surface area, which increases this filter's initial efficiency to MERV 8. A polypropylene generates an electrostatic charge as air passes through it, and airborne pollutants such as dust, pollen, mold, bacteria and lint particles are held in place until washed away. Corner drain holes prevent water and detergent from pooling when cleaning and, therefore, facilitate faster drying time.

**Construction:** The E1 Series uses a mill-finished aluminum frame to enclose an electrostatic media pack. The patented media pack design places two layers of polypropylene mesh around one layer of air-laid polyester media, and these layers are surrounded by two layers of expanded metal. The pack is then corrugated which increases the material surface area thereby allowing greater dust holding capacity and efficiency at an exceptional pressure drop. The height of the pack is made to fit firmly inside the frame giving the filter exceptional strength and durability. The frame is made with mitered corners and is secured with pop-rivet(s). The frame has drain holes in three corners.

#### Filter Cleaning and Coating

1. The E1 Series should be cleaned every 30 days, or as often as necessary to maximize effectiveness. As with any filter, as dust loads its efficiency increases but so does air resistance, so a consistently maintained filter will last longer and cost less overtime.
2. To clean a dirty filter, rinse it with a moderate stream of warm water in the opposite direction of airflow. High-powered steam cleaning or chemical dips are not recommended.

Due to continuing research and development, we reserve the right to make modifications to any product.

AVAILABLE IN  
ONE ALLOY

**E1S**  
Aluminium

### PRODUCT HIGHLIGHTS

- MERV 8 / 87% Dust Arrestance Efficiency
- Uses Static Electricity
- Low Resistance to Airflow
- Washable and Reusable

### FAST FACTS

**Minimum Order:**

No Minimum Order

**Sizing Options:**

Standard and Special Sizes Available  
(See reverse side for details.)

**Classification:**

UL Classified 900

MAX TEMP:

E1S – 150 Degrees F

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| MODEL                            |                                       |                 |               |             |                 |               |             |                 |               |
|----------------------------------|---------------------------------------|-----------------|---------------|-------------|-----------------|---------------|-------------|-----------------|---------------|
| CONSTRUCTION                     |                                       | ECA             |               |             |                 |               |             |                 |               |
| Frame Alloy                      | .030" thick aluminum                  |                 |               |             |                 |               |             |                 |               |
| Frame Thickness                  | 1/2" exact: nominal* 1" and 2"        |                 |               |             |                 |               |             |                 |               |
| Face Grids                       | Expanded aluminum                     |                 |               |             |                 |               |             |                 |               |
| Media                            | Polypropylene & air-laid polyester    |                 |               |             |                 |               |             |                 |               |
| APPLICATION                      |                                       |                 |               |             |                 |               |             |                 |               |
| Application                      | Airborne particulate and coolant mist |                 |               |             |                 |               |             |                 |               |
| Max Operating Temperature        | 150°                                  |                 |               |             |                 |               |             |                 |               |
| Washability                      | Frequent and moderate                 |                 |               |             |                 |               |             |                 |               |
| STANDARD SIZES                   |                                       |                 |               |             |                 |               |             |                 |               |
| Nominal** Dimensions (H x W x T) | Part Number                           | Carton Quantity | Carton Weight | Part Number | Carton Quantity | Carton Weight | Part Number | Carton Quantity | Carton Weight |
| 12 x 24 x 1                      | EIS101224                             | 12              | 13.0          |             |                 |               |             |                 |               |
| 16 x 20 x 1                      | EIS101620                             | 12              | 14.0          |             |                 |               |             |                 |               |
| 16 x 25 x 1                      | EIS101625                             | 12              | 16.0          |             |                 |               |             |                 |               |
| 20 x 20 x 1                      | EIS102020                             | 12              | 16.0          |             |                 |               |             |                 |               |
| 20 x 25 x 1                      | EIS102025                             | 12              | 19.0          |             |                 |               |             |                 |               |
| 24 x 24 x 1                      | EIS102424                             | 12              | 21.0          |             |                 |               |             |                 |               |
| 12 x 24 x 2                      | EIS201224                             | 12              | 16.0          |             |                 |               |             |                 |               |
| 16 x 20 x 2                      | EIS201620                             | 6               | 9.0           |             |                 |               |             |                 |               |
| 16 x 25 x 2                      | EIS201625                             | 6               | 10.0          |             |                 |               |             |                 |               |
| 20 x 20 x 2                      | EIS202020                             | 6               | 10.0          |             |                 |               |             |                 |               |
| 20 x 25 x 2                      | EIS202025                             | 6               | 12.0          |             |                 |               |             |                 |               |
| 24 x 24 x 2                      | EIS202424                             | 6               | 13.0          |             |                 |               |             |                 |               |

### SIZING INFORMATION

- \* **Nominal Frame Thickness:** 1/2" exact, nominal 1" (7/8" actual), nominal 2" (Actual 1-3/4").
- \*\* **Nominal HxW Dimensions:** Standard size filters are of a nominal dimension. This means the height and width dimensions are undercut by a set amount.
  1. **Standard** nominal filters are 1/2" undercut on the height and width dimensions.
  2. **Special** size filters are made to the exact height and width dimensions stated on the purchase order. Please confirm prior to order.
  4. Tolerance height and width: ± 1/8"
  5. The 1/2" exact filter uses an .025" thick aluminum frame.
  6. The 1/2" exact filter is 5-ply and contains a 1/4" core.
  7. The nominal 1" (actual 7/8") filter is 5-ply and contains a 1/2" core.
  8. The nominal 2" (actual 1-3/4") filter is 7-ply and contains a 1-1/2" thick core.

### CLASSIFICATION & TEST NOTES

1. UL Classified 900
2. Rated Airflow: 300 fpm
3. Recommended Airflow Range: 250 – 350 fpm.
4. Dust Holding Capacity:
  - a. 1" thick: 9 grams per square foot
5. Average Arrestance:
  - a. 1" thick: 87.5% at rated airflow
6. Recommended final resistance is 1" W.G.
7. Independent test report available for performance details

### INSTALLATION CONSIDERATIONS

1. The E1 Series filter must be installed in HVAC systems with pleats running vertically.

