BioMAX™
HEPA Filters for Hospital, Commercial and Industrial Applications

Features

- Available in three efficiencies on 0.3 micron size particles: 99.97%, 99.99% (High Efficiency Particulate Air Filters) and 99.999% (Ultra Low Penetration Air Filters)
- Standard and high capacity models
- Multiple cell side options
- Factory tested for efficiency and performance
- Specially-designed polyurethane foam bond sealant eliminates leaks
- Available in high temperature and 95% DOP models

BioMAX HEPA Filters

Koch Filter BioMAX HEPA Filters are designed to provide the highest level of filtration available for commercial and industrial applications. They are widely used in hospitals, clean rooms, pharmaceutical plants, and in hundreds of other systems where clean air is critical in the protection of people, processes and equipment.

BioMAX HEPA Filters are constructed using the highest quality components available and are available in efficiencies of 99.97%, 99.99% and 99.999% on 0.3 micron size particles. Standard construction BioMAX HEPA Filters are manufactured with galvanized steel cell sides or particle board cell sides. Multiple cell side options are also available.

BioMAX Performance Testing

Prior to shipment, BioMAX HEPA Filters are tested individually for efficiency utilizing non-toxic polyalphaolefin (PAO) to insure that every filter meets the customer’s required efficiency specifications.

Following the individual efficiency test, depending on the acceptance criteria chosen by the customer, BioMAX filters may also be scanned for pinhole leaks with the use of a specialized high intensity light or a custom-built laser photometer.

After testing to the customer’s criteria, each filter is certified and labeled with its own serial number. All data is recorded and retained internally.

BioMAX Construction

Standard BioMAX HEPA Filters are constructed with a choice of either 18 gauge galvanized steel or durable particle board cell sides. For more specialized applications, multiple cell side options are available including stainless steel, aluminum, and aluminized steel. BioMAX media is produced from submicron glass fibers formed into a water-resistant, high efficiency, high density wet-laid paper mat. The media is fire retardant to 1000°F (538°C). Standard BioMAX HEPA Filters are furnished with neoprene gaskets. The gasket is installed on the downstream side of the filter to prevent leakage between the filter and the frame upon installation in the filter housing. Precision-crafted corrugated aluminum separators maintain exact pleat spacing and ensure proper airflow throughout the filter’s lifecycle. The leading edge of each separator is rolled over to create a separator that is twice as strong to avoid damage to the air filter media.
### BioMAX High Temperature HEPA Filters

Several models are available for use in systems with above-normal operational temperatures.

### BioMAX Construction

- **Cell Sides**
  - Standard BioMAX HEPA Filters are constructed with a choice of either 18 gauge galvanized steel or durable particle board cell sides. For more specialized applications, multiple cell side options are available including stainless steel, aluminum, and aluminized steel.

- **High Efficiency Filter Media**
  - BioMAX media is produced from submicron glass fibers formed into a water-resistant, high efficiency, high density wet-laid paper mat. The media is fire retardant to 1000°F (538°C).

- **Gaskets**
  - Standard BioMAX HEPA Filters are furnished with neoprene gaskets 1/4" x 11/16". The gasket is installed on the downstream side of the filter to prevent leakage between the filter and the frame upon installation in the filter housing (High temperature silicone and other gasket materials are also available).

- **Rolled Double-Edge Aluminum Separators**
  - Precision-crafted corrugated aluminum separators maintain exact pleat spacing and ensure proper airflow throughout the filter’s lifecycle. The leading edge of each separator is rolled over to create a separator that is twice as strong to avoid damage to the air filter media (Vinyl-coated separators are available for applications with corrosive environments).

- **Adhesive Sealant**
  - The media pack in BioMAX HEPA filters is completely sealed to the cell side frame with a specially-designed polyurethane foam bond. As the adhesive cures, the material expands into the media pack eliminating leaks.

### Notes:
- Underwriter’s Laboratories Classifications: a: Metal framed BioMAX HEPA Filters and Wood framed BioMAX HEPA Filters: UL Classified
- Sizes listed above are actual filter sizes, excluding gaskets • Manufacturing tolerance: +0", -0.125". • Install BioMAX filters with pleats in vertical position.

### BioMAX HC High Capacity

- Designed to operate in applications with higher airflows up to 500 FPM (Feet per Minute).
- Constructed with approximately 50% more filter media than Standard Capacity Filters, High Capacity BioMAX HC Filters can operate at velocities up to 2000 CFM with only a slight increase in pressure drop.

### Table: Actual Size, Airflow Capacity (CFM), Media Area (sq. ft.), Initial Resistance

<table>
<thead>
<tr>
<th>Actual Size</th>
<th>Airflow Capacity (CFM) 95.00%</th>
<th>Airflow Capacity (CFM) 99.97%</th>
<th>Airflow Capacity (CFM) 99.99%</th>
<th>Media Area (sq. ft.)</th>
<th>Initial Resistance</th>
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<td>HC</td>
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