Maxi-Cell™ High Efficiency Barrier Filter Engineered for Turbomachinery Air Inlet Systems

Maximum Performance

The Koch Maxi-Cell is an extended surface, high efficiency barrier filter designed for maximum performance in even the most extreme applications. Durable metal construction and specially designed filter media make the Maxi-Cell an ideal product for applications such as gas turbines, centrifugal compressors and other rotating machinery systems where pulsations and air turbulence are present.


• Superior filtration for gas turbines air inlets and other high velocity rotating equipment.
• Reliable performance in any climate, from arid desert environments to salty coastal locations to icy arctic installations.
• Performs in systems with airflow as high as 2500 cfm.
• Widely used by OEM’s around the world.

Maxi-Cell Construction

The Maxi-Cell is constructed with heavy-duty metal cell sides to create a durable and reliable filter. Each filter is furnished with faceguards, constructed of galvanized hardware cloth, permanently secured on both the upstream and downstream sides of the filter. These faceguards protect the media during shipping, handling, and actual operation.

Media and Separator Construction. Composed of progressively dense microfiberglass to ensure extended service life. The media is folded between layers of corrugated aluminum separators to form a pleated, extended surface design. The leading edge of each Double-Edge™ separator is folded over to prevent damage to the media. Vinyl-coated separators are available for applications with corrosive environments.

Media-to-Frame Sealant. The entire media pack, consisting of media and separators, is secured within the metal frame with a glass fiber mat and thermoplastic adhesive. This construction method fully protects against air by-pass between the media and frame. The sealant also protects the filter media from damage during handling.

Header Construction. Standard Maxi-Cell filters are constructed with peripheral headers located on the air-entry and air-exit sides of the filter. The headers are furnished with pre-drilled holes for holding clips. Units with a single upstream header for side-access installations are available upon request.

Features

• MERV 11 and 14 performance rating
• High efficiency barrier filter designed for use in gas turbine air inlets and other rotating machinery
• Durable metal frame
• Faceguards upstream and downstream
• Progressive-density filter media extends filter lifecycles
• Double-Edge™ aluminum separators
<table>
<thead>
<tr>
<th>Nominal Size</th>
<th>Actual Size</th>
<th>Maximum Pressure (in. W.G.)</th>
<th>Initial Resistance (in. W.G.)</th>
<th>Average Atmospheric Dust Spot Efficiency</th>
<th>Dust Holding Capacity @2000 CFM</th>
<th>Dust Holding Capacity @2500 CFM</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>@2000 CFM</td>
<td>@2500 CFM</td>
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<tr>
<td>MERV 11</td>
<td>24x24x12</td>
<td>23.38 x 23.38 x 11.50</td>
<td>25</td>
<td>0.42</td>
<td>0.58</td>
<td>70</td>
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<tr>
<td>MERV 11 HC</td>
<td>24x24x12</td>
<td>23.38 x 23.38 x 11.50</td>
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<td>0.44</td>
<td>0.60</td>
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<tr>
<td>MERV 14</td>
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<td>23.38 x 23.38 x 11.50</td>
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<td>0.54</td>
<td>0.75</td>
<td>93</td>
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<tr>
<td>MERV 14 HC</td>
<td>24x24x12</td>
<td>23.38 x 23.38 x 11.50</td>
<td>25</td>
<td>0.59</td>
<td>0.79</td>
<td>93</td>
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Notes:
- Maxi-Cells should be installed with pleats in the vertical position. Each filter is labeled with filter size, safety codes, and airflow indicators to insure proper installation.
- Maxi-Cell models are UL classified.
- Performance data is based on ASHRAE Test Standards 52.2-2012.
- Recommended maximum continuous operational temperature is 200° F.
- Data listed above concerning dust holding does not account for the use of prefilters. Proper use of prefilters will often result in higher overall dust holding and extend the lifecycle of the Maxi-Cell final filter.
- Maximum pressure refers to the pressure at which structural damage to the Maxi-Cell will occur.