Models FM4741, FM4746
2-Micron, Low Flow Filters

Models FM4741 and FM4746 in-line filters feature a sintered stainless steel element with a 2 micron filtration rating. The element is easily removed for cleaning.

Model FM4741, with an aluminum housing, is designed for noncorrosive gas service. The FM4746, with a Type 316 Stainless Steel housing, is suitable for corrosive service. The 1/8" NPT inlet and outlet connections make these filters convenient for use in conjunction with many of Advanced's variable area flowmeters.

Specifications
- Maximum Operating Pressure: See Table I
- Maximum Operating Temp.: See Table I
- Filtration Rating: 2 micron
- Flow Coefficient (clean): $C_v = 0.008$
- Dimensions: $2\frac{3}{32}" \times \frac{1}{2}"$ hex
- Inlet Connection: 1/8" NPT female

FM4741 Filter

Outlet Connection: 1/8" NPT male
Approximate Weight: 1.5 oz

Materials of Construction
- Body: See Table I
- Filter Element: Type 316 Stainless Steel
- Spring: Type 302 Stainless Steel
- Seals: Viton®

Table I

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Body Material</th>
<th>Maximum Operating Pressure at 70°F (psig)</th>
<th>Maximum Operating Temperature (°F)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FM4741</td>
<td>Aluminum</td>
<td>2000</td>
<td>180</td>
</tr>
<tr>
<td>FM4746</td>
<td>Type 316 Stainless Steel</td>
<td>3000</td>
<td>350</td>
</tr>
</tbody>
</table>

FM4741 Filter

FM4800 Series

In-line Filters for Mass Flow Instruments

The FM4800 Series in-line filters are specially designed to protect Advanced's Models FRM and FRC mass flow meters and controllers from foreign matter. They feature a sintered stainless steel element mounted in a protective housing that can be easily removed for cleaning or replacement. Filtration ratings of 0.5, 2, 5, 10, and 40 micron are available.

These in-line filters come with 9/16-18 threads and a Viton® O-ring seal. Installation is simple and fast. The inlet connection fitting supplied with the mass flow instrument is removed, the filter is screwed into its place and then the original fitting is attached to the female end of the filter. The filter adds only 2 inches to the installed length of the mass flow instrument, making for a compact assembly.

Specifications
- Maximum Operating Pressure: 4500 psig
- Maximum Operating Temperature: 150°F
- Filtration Rating: See Table I
- Inlet Connection: 9/16-18 UNF-2B (female)
- Outlet Connection: 9/16-18 UNF-2A (male)
- Approximate Weight: 3 oz

Materials of Construction
- Body: Type 316 Stainless Steel
- Filter Element: Type 316 Sintered Stn. Stl.
- Seals: Viton® (Buna-N or Kalrez® Seals available on special order)

Table I

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>FM4800</td>
<td>&lt;1</td>
<td>0.5 micron</td>
</tr>
<tr>
<td>FM4802</td>
<td>1–10</td>
<td>2 micron</td>
</tr>
<tr>
<td>FM4805</td>
<td>10–15</td>
<td>5 micron</td>
</tr>
<tr>
<td>FM4810</td>
<td>15–25</td>
<td>10 micron</td>
</tr>
<tr>
<td>FM4840</td>
<td>25–80</td>
<td>40 micron</td>
</tr>
</tbody>
</table>

* The filter with the greatest filtration (smallest micron size) that will produce less than a 1 psi pressure drop at the maximum gas flow and minimum inlet pressure should be selected. Please contact Advanced to properly size the correct filter for your mass flow instrument's calibrated conditions.