Models AG7100, AG7101
0.01 Micron, Depth Filters

These in-line filters are ideal for precision filtration of reactive and halogen type gases used in the micro-electronics industry. Constructed exclusively of Type 316L Stainless Steel and glass microfibers, there are no organic materials, binders or epoxies to contaminate or interfere with ultra-high purity processes. The depth filter design allows for a low delta P while providing a dirt holding capacity of 10-20 times that of membrane filters. All Model AG7100 and AG7101 filters are electropolished, nitrogen purged and individually tested with a particle counter for guaranteed performance. To insure maximum safety, all filters are helium leak checked to not exceed $1 \times 10^{-9}$ cc/sec.

**Specifications**
- Maximum Operating Pressure and Temperature: 250 psig at 250°F
- Maximum Operating Temperature: 750°F
- Filtration Rating: 0.01 micron at 99.99999% efficiency
- Maximum Flow Capacity: 100 slpm
- Pressure Drop (clean condition) at 75 psig inlet:
  - 2 psid at 17 slpm Air
  - 4 psid at 31 slpm Air
  - 6 psid at 50 slpm Air
- Inlet and Outlet Connections: See Table I
- Dimensions: 3.125" x 2.0"
- Approximate Weight: 13 oz.

**Materials of Construction**
- Body and Fittings: Type 316L Stn. Stl.
- Filter Medium: Glass Fiber supported by Type 316L Fiber Mesh

**Table I**

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Inlet and Outlet Connections</th>
</tr>
</thead>
<tbody>
<tr>
<td>AG7100</td>
<td>¼&quot; compression</td>
</tr>
<tr>
<td>AG7101</td>
<td>¼&quot; male vacuum*</td>
</tr>
</tbody>
</table>

* Connection is compatible with ¼" VCR fittings.

Models AG8100, AG8101
0.003 Micron, Membrane Filters

These in-line filters are specifically designed for applications where an extreme level of filtration is required. They feature a PTFE membrane in a small pleated cartridge which effectively removes all particles 0.003 micron or larger. The housing is 10 Ra finish electropolished Type 316L Stainless Steel and is totally welded. The final assembly is purged at a high flow rate with filtered nitrogen and helium leak checked to not exceed $1 \times 10^{-9}$ cc/sec.

**Specifications**
- Maximum Operating Pressure and Temperature: 750 psig at 250°F
- Filtration Rating: 0.003 micron at 99.9999999% efficiency
- Effective Filtration Area: 0.5 ft²
- Maximum Flow Capacity: 300 slpm
- Pressure Drop (clean condition) at 75 psig inlet:
  - 1 psid at 140 slpm Air
  - 2 psid at 195 slpm Air
  - 4 psid at 275 slpm Air
- Inlet and Outlet Connections: See Table I
- Dimensions: 5.563" x 2.0"
- Approximate Weight: 10 oz.

**Materials of Construction**
- Body and Fittings: Type 316L Stn. Stl.
- Filter Medium: PTFE

**Table I**

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<td>AG8100</td>
<td>¼&quot; compression</td>
</tr>
<tr>
<td>AG8101</td>
<td>¼&quot; male vacuum*</td>
</tr>
</tbody>
</table>

* Connection is compatible with ¼" VCR fittings.