Wafergard® II F Micro In-line Gas Filters

Superior particulate filtration for high-purity gas systems

For ultrapure gas systems, your best choice is the Wafergard® II F Micro in-line gas filter with a particle removal rating of ≥0.0015 μm. Recommended for inert and reactive gases, these filters offer excellent compatibility with all classes of semiconductor process gases.

The filter’s compact diameter enables easy installation in cramped gas panels and cabinets.

APPLICATIONS

- Life sciences applications
- Ozone applications (gas)
- Gas cabinets and panels
- Ultrapure gas systems
- Inside process tools

FEATURES & BENEFITS

<table>
<thead>
<tr>
<th>Feature</th>
<th>Benefit</th>
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<tbody>
<tr>
<td>Low pressure drop filter design</td>
<td>Reduces the risk of contamination in low vapor pressure gases</td>
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<tr>
<td>PTFE filter membrane</td>
<td>Provides excellent compatibility and high-efficiency filtration</td>
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<tr>
<td>Small, compact footprint (19.05 mm [0.75&quot;] maximum diameter)</td>
<td>Saves valuable equipment space and allows for easy installation when space is limited</td>
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<tr>
<td>Cleanroom manufactured, welded, and tested</td>
<td>Ensures clean, reliable performance</td>
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Offer excellent compatibility with all classes of semiconductor process gases
## SPECIFICATIONS

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
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<tbody>
<tr>
<td><strong>Materials</strong></td>
<td>Filter element: Hydrophobic PTFE membrane supported by molded PFA structure</td>
</tr>
<tr>
<td></td>
<td>Housing: Electropolished VAR 316L stainless steel</td>
</tr>
<tr>
<td><strong>Downstream cleanliness</strong></td>
<td>Less than 0.03 particles/liter (&lt;1 particle/ft³) greater than 0.01 µm</td>
</tr>
<tr>
<td></td>
<td>Volatiles: &lt;10 ppb moisture</td>
</tr>
<tr>
<td><strong>Removal rating</strong></td>
<td>≥0.0015 µm</td>
</tr>
<tr>
<td><strong>Surface finish interior</strong></td>
<td>≤7 µin Ra</td>
</tr>
<tr>
<td><strong>Helium leak rating</strong></td>
<td>Qualified 2 x 10⁻¹⁰ cc/sec</td>
</tr>
<tr>
<td></td>
<td>Tested: 1 x 10⁻⁹ cc/sec</td>
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<tr>
<td><strong>Operating conditions</strong></td>
<td>Maximum inlet pressure: 207 bar (3000 psig) @ 23°C (73°F)</td>
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<td></td>
<td>Maximum forward differential pressure: 4 bar (60 psid) @ 23°C (73°F)</td>
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<tr>
<td></td>
<td>Maximum reverse differential pressure: 0.07 MPa (0.7 bar, 10 psid) @ 23°C (73°F)</td>
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<tr>
<td></td>
<td>Maximum operating temperature: 120°C (248°F)</td>
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<tr>
<td><strong>Particle retention</strong></td>
<td>Greater than 99.9999999% (9 LRV) removal of all particles @ 30 slpm (referenced at the most penetrating particle size)</td>
</tr>
<tr>
<td><strong>Flow rating</strong></td>
<td>Refer to performance data</td>
</tr>
</tbody>
</table>

## PERFORMANCE DATA

![Performance Data Graph](image)

## DIMENSIONS

**W62F T1 BW2 ¾” butt weld**

[Dimensions Diagram]

**W62F T1 RR2 ¾” gasket seal fitting, male**

[Dimensions Diagram]
### ORDERING INFORMATION

<table>
<thead>
<tr>
<th>PART NUMBER</th>
<th>FITTING SIZE AND TYPE</th>
<th>LENGTH</th>
<th>APPLICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>WG2FH5RR2</td>
<td>1/4 gasket seal (compatible with VCR® fitting) male</td>
<td>84.1 mm (3.31”)</td>
<td>Semiconductor</td>
</tr>
<tr>
<td>WG2FT1BW2</td>
<td>1/4” Butt weld tube</td>
<td>89.9 mm (3.54”)</td>
<td>Semiconductor</td>
</tr>
<tr>
<td>WG2FT1RF2</td>
<td>1/4” gasket seal (compatible with VCR fitting) male inlet/ female outlet</td>
<td>88.9 mm (3.50”)</td>
<td>Semiconductor</td>
</tr>
<tr>
<td>WG2FT1RR2</td>
<td>1/4” Gasket seal (compatible with VCR Fitting) male inlet/outlet</td>
<td>84.1 mm (3.31”)</td>
<td>Semiconductor</td>
</tr>
<tr>
<td>WG2FT1RR2L</td>
<td>1/4” Gasket seal (compatible with VCR Fitting) male inlet/outlet</td>
<td>84.1 mm (3.31”)</td>
<td>Life Sciences</td>
</tr>
<tr>
<td>WG2FT1SS2</td>
<td>1/4” Compression seal (compatible with Swagelok fitting)</td>
<td>73.7 mm (2.90”)</td>
<td>Semiconductor</td>
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