**Wafergard® MAX HT In-line Gas Filters**

*Superior particulate filtration in high-temperature applications*

Wafergard® MAX HT in-line gas filters offer excellent filtration in high-temperature applications (120 – 200°C [248 – 392°F]) for vaporized materials such as liquid/solid precursors; TEOS for BEOL, high-κ materials for FEOL, and hot N₂ purge for wet cleaning/drying.

Wafergard MAX HT in-line gas filter construction consists of a PTFE membrane supported by PFA structures with an electro-polished 316L stainless housing.

This durable filter is highly recommended for high-temperature gas filtration semiconductor process equipment applications.

**APPLICATIONS**

- Point-of-use filter for CVD tools
- High-temperature applications

- Hot N₂ applications

**FEATURES & BENEFITS**

- Up to 200°C (392°F) can be used for high-temperature TEOS and high-κ applications
- Low differential pressure provides stable and improved material delivery
- Compact form (127 mm [5"] length) fits many existing delivery systems and is easy to design into new systems
- Overall design (148 mm [5.82”]) is a drop-in-replacement for similar filters
- Special baking enables rapid gas delivery startup
### SPECIFICATIONS

<table>
<thead>
<tr>
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<th>Membrane</th>
<th>PTFE</th>
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<tbody>
<tr>
<td>Support</td>
<td>PFA</td>
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<tr>
<td>Housing</td>
<td>316L stainless steel</td>
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- **Removal particle rating**: ≥0.003 µm
- **Particle retention**: ≥99.9999999% @ 25°C (77°F)
- **Initial downstream cleanliness**: ≤0.03 particles/Liter greater than 0.01 µm
- **Internal surface finish**: ≤7 µin Ra (Ra <0.17 µm)
- **Connections**: ½” gasket seal male (VCR® compatible)

**Operating conditions**
- Maximum operating pressure: 0.99 MPa (9.9 bar; 143.5 psig) @ 0 – 200°C (0 – 392°F)
- Maximum forward differential pressure: 0.70 MPa (7 bar; 101.5 psid) @ 0 – 40°C (0 – 104°F) 0.08 MPa (0.8 bar; 11.6 psid) @ 200°C (392°F)
- Maximum operating temperature: 200°C (392°F) in inert gases

**Helium leak rating**: <1 × 10⁻¹⁰ Pa•m³/sec

**Flow rating**: Refer to performance data

### PERFORMANCE DATA

![Performance Data Diagram 1](image1)

![Performance Data Diagram 2](image2)
# DIMENSIONS

![Diagram of WGMXMPRR4HT](image1)

- **WGMXMPRR4HT**
  - Dimensions: 127 mm (5.00")
  - Hex: 23.8 mm (0.93")
  - Ø33 mm (1.30")

![Diagram of WGMXMPRR4HTL](image2)

- **WGMXMPRR4HTL**
  - Dimensions: 148 mm (5.82")
  - Hex: 23.8 mm (0.93")
  - Ø38.1 mm (1.50")

# ORDERING INFORMATION

<table>
<thead>
<tr>
<th>Part number</th>
<th>Description</th>
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<tbody>
<tr>
<td>WGMXMPRR4HT</td>
<td>Wafergard MAX HT, ¼&quot; gasket seal, length 127 mm (5.00&quot;)</td>
</tr>
<tr>
<td>WGMXMPRR4HTL</td>
<td>Wafergard MAX HT, ½&quot; gasket seal, length 148 mm (5.82&quot;)</td>
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# FOR MORE INFORMATION

Please call your Regional Customer Service Center today to learn what Entegris can do for you. Visit [entegris.com](http://entegris.com) and select the Contact Us link to find the customer service center nearest you.

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