



**WAFERGARD® C2 1.125" C-SEAL
SANDWICH GAS FILTERS**

*All-metal ultra-high purity filters for
surface mount applications*



ultra-high purity filters for surface mount applications

Overview

The unique Wafergard® C2 1.125" C-Seal sandwich gas filter provides the industry's best filter in a compact design for mounting directly between a top mounted device and the surface mount substrate. This design eliminates dedicated filter space in the surface mount layout resulting in dramatic footprint reductions.

Wafergard® C2 1.125" C-Seal sandwich gas filters are designed to filter the incoming gas from the surface mount substrate. This allows the filter membrane to be isolated from atmosphere when an ISO valve is mounted above. Mounted upstream of an MFC, the design allows for an MFC change.

The Wafergard® C2 1.125" C-Seal sandwich filter's design provides ease-of-use to allow for a reduction of one substrate component from any new design and "drop in" 0.003 µm filtration to any existing C-Seal gas stick.

The Wafergard® product line provides ultimate process protection. Whatever your process needs, the Wafergard® family of filters provides ultimate purity, superior corrosion resistance and excellent compatibility with inert, hydride and reactive gases.*

* Not recommended for use with CO, O₃ and low-level hydride dopant gases.

Applications

- Ultrapure gas lines
- High-temperature applications
- Dynamic-pressure applications

Features	Benefits
Mounts below any C-Seal surface mount device	Dramatically reduces component layout footprint.
1.125" C-Seal surface mount interface	Designed to fit all standard 1.125" C-Seal surface mount interfaces.
Downstream cleanliness: <0.03 particles/liter (<1 particle/ft ³) >0.01 µm	Cleanest, most efficient all-metal filters available.
Patented, sintered nickel membrane	Minimizes outgassing, improves corrosion resistance and provides excellent chemical compatibility with most process gases.
Removal rating: ≥0.003 µm	High-efficiency particle retention. Optimized total filtration area provides superior downstream cleanliness while providing low pressure drop.

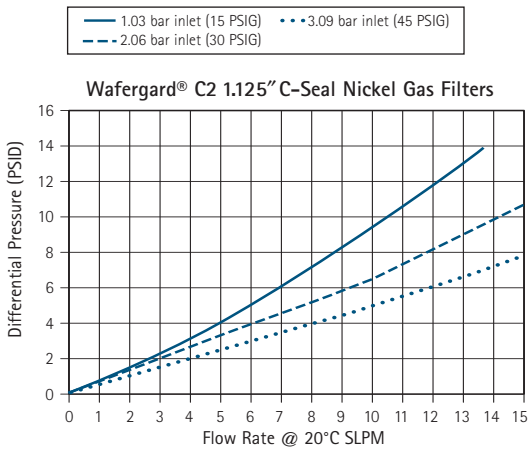
Specifications

Materials:	Filter element	Patented, sintered nickel membrane filter		
	Housing	SEMI® F20 316L electropolished stainless steel		
Downstream cleanliness:	Particles ¹	<0.03 particles/liter (<1 particle/ft ³) >0.01 µm		
	Volatiles ²	Volatile outgassing of H ₂ O, O ₂ and THC is below detectable limits (by RGA and FID at room temperature)		
Removal rating:	≥0.003 µm			
Surface finish interior:	≤5 µin Ra			
Helium leak rating:	Qualified	2 × 10 ⁻¹⁰ atm-cc/sec		
	Tested	1 × 10 ⁻⁹ atm-cc/sec		
Operating conditions:	Maximum inlet pressure	20.7 MPa (207 bar, 1000 PSIG) @ 20°C		
	Maximum forward/reverse differential pressure	0.86 MPa (8.6 bar, 125 PSID)		
	Maximum operating temperature	Inert gases	400°C @ 35 bar (500 PSIG)	
		Corrosive & reactive gases	50°C @ 35 bar (500 PSIG)	
Warranty:	5 year			
Particle:	Greater than 99.9999999% (9 LRV) removal of all particles at 10 SLPM (referenced at the most penetrating particle size)			
Flow rating:	See performance data			

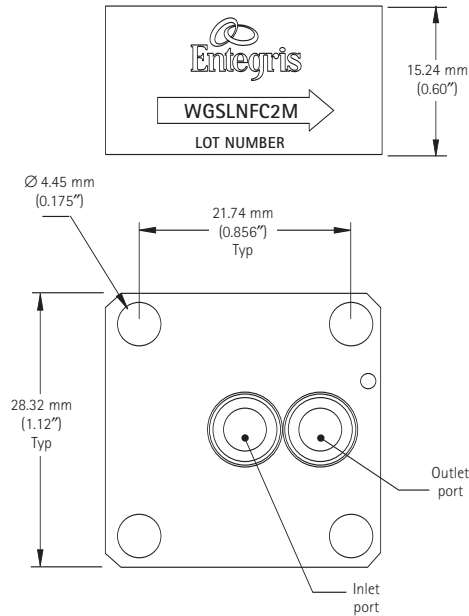
¹ Particle cleanliness qualified following SEMASPEC Test Method for Particle Shedding (#93021511A-STD).

² Volatile cleanliness qualified following SEMASPEC Test Methods for: THC Contribution (#90120396B-STD), Moisture Contribution (#90120397B-STD), Oxygen Contribution (#90120398B-STD).

Performance Data



Dimensions



Ordering Information

Part Number	Description
WGSL NF C2M	Wafergard® C2 1.125" C-Seal sandwich gas filter

For More Information

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