



**WAFERGARD® SL 1.125"
C-SEAL GAS FILTERS**

*SurfaceLine™ filters provide the industry's
smallest surface-mount design*



Overview

Wafergard® SL 1.125" C-seal filters combine the industry's best filters with the industry's smallest surface-mount design. 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 a full range of gases. Entegris' SurfaceLine™ filters consume the least amount of space on gas panels compared to standard in-line designs, while reducing parts inventories and variations. Entegris also offers additional surface-mount filters in various sizes, seals and membranes.

Features and Benefits

- Designed to meet 1.125" C-seal surface-mount interfaces
- Cleanest, most efficient all-metal filters available

- Minimizes outgassing, improves corrosion resistance and provides excellent chemical compatibility
- High-efficiency particle retention
- Reduced total flow area provides superior downstream cleanliness
- Cleanroom manufactured and cleanroom packaged

Applications

- Gas panels
- Ultra-high purity gas lines
- High-temperature applications
- Dynamic pressure applications
- Stainless steel filters for inert, hydride and CO gases; nickel filters for inert and reactive gases
- Ozone applications (gas)

Specifications

		NF-Micro	NF-Mini	NF-Mini XL	SF-Micro	SF-Mini
Materials:	Filter element	Patented, sintered nickel membrane filter			Proprietary sintered stainless steel membrane filter	
	Housing, base block, end cap	SEMI® F20 316L electropolished stainless steel				
Connections:	Inlet/outlet	SurfaceLine 1.125" C-seal				
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	34.5 bar (500 psig) @ 20°C				
	Maximum forward differential pressure	10 bar @ 23°C (150 psid)	8 bar @ 23°C (115 psid)	8 bar @ 23°C (115 psid)	10 bar @ 23°C (150 psid)	20 bar @ 23°C (300 psid)
	Maximum reverse differential pressure	10 bar @ 23°C (150 psid)	8 bar @ 23°C (115 psid)	8 bar @ 23°C (115 psid)	10 bar @ 23°C (150 psid)	20 bar @ 23°C (300 psid)
	Maximum operating temperature	Inert gases – 400°C @ 35 bar (500 psig) Corrosive and reactive gases – 50°C @ 35 bar (500 psig)				
Particle retention:	Greater than 99.9999999% removal of all particles ³				Greater than 99.9999% removal of all particles ³	
Flow rating:	See performance data					

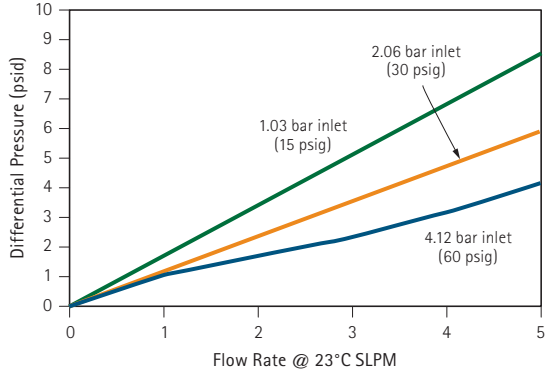
¹ Particle cleanliness qualified following SEMASPEC Test Method for Particle Shedding (#93021511A-STD).

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

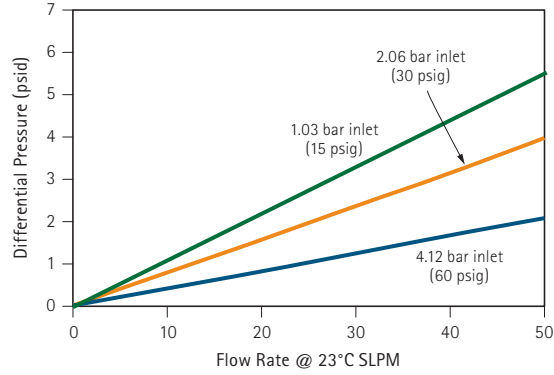
³ Referenced at the most penetrating particle size.

Performance Data

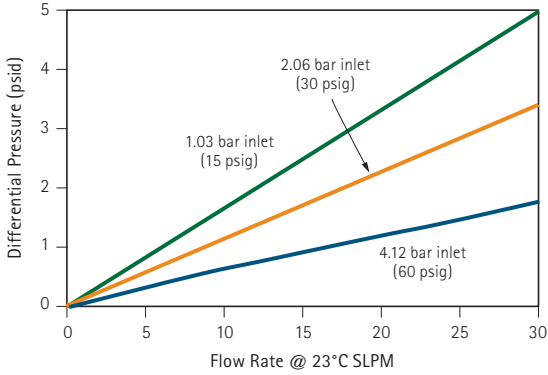
Wafergard SL 1.125" C-Seal NF-Micro



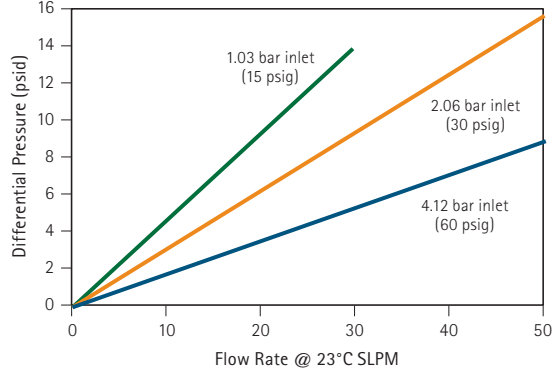
Wafergard SL 1.125" C-Seal NF-Mini XL



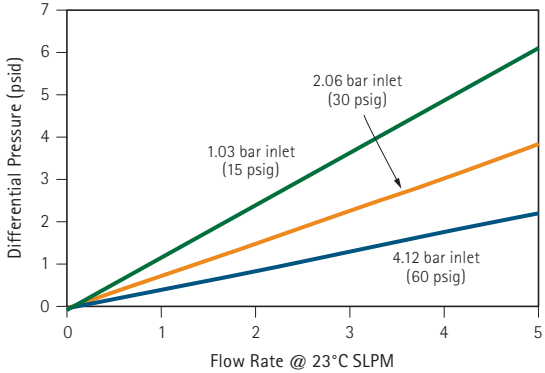
Wafergard SL 1.125" C-Seal NF-Mini



Wafergard SL 1.125" C-Seal SF-Mini

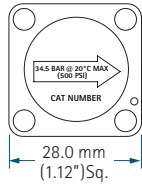


Wafergard SL 1.125" C-Seal SF-Micro

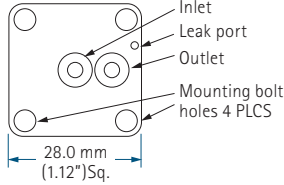


Dimensions

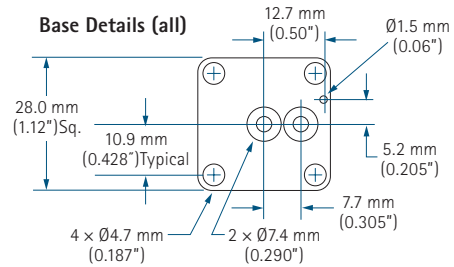
Top View (all)



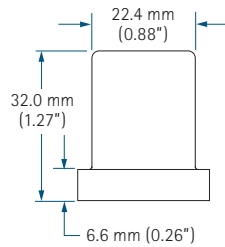
Base Bottom (all)



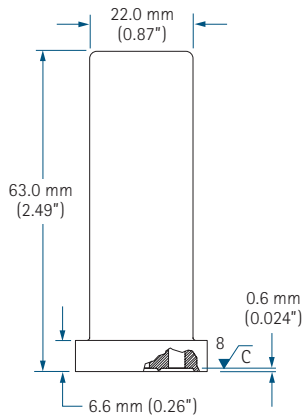
Base Details (all)



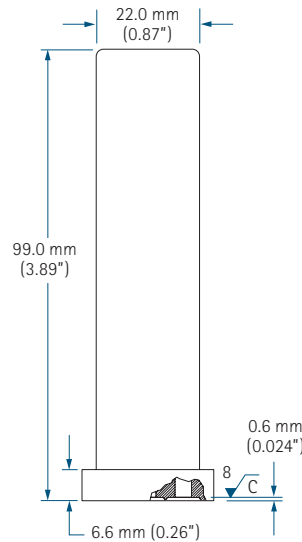
NF-Micro/SF-Micro



NF-Mini/SF-Mini



NF-Mini XL



Ordering Information

Part Number	Description
WGLNFC1L	Wafeguard SL 1.125" C-Seal NF-Micro filter
WGLNFC1M	Wafeguard SL 1.125" C-Seal NF-Mini filter
WGLNFC1H	Wafeguard SL 1.125" C-Seal NF-Mini XL filter
WGSLFC1L	Wafeguard SL 1.125" C-Seal SF-Micro filter
WGSLFC1M	Wafeguard SL 1.125" C-Seal SF-Mini filter

Additional SurfaceLine Filters

Seal Type	Nickel	Stainless Steel
C (1/2")	Yes	—
W	Yes	Yes

For More Information

Please call your Regional Customer Service Center today to learn what Entegris can do for you. Visit www.entegris.com and select the Customer Service link for the center nearest you.

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