



**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

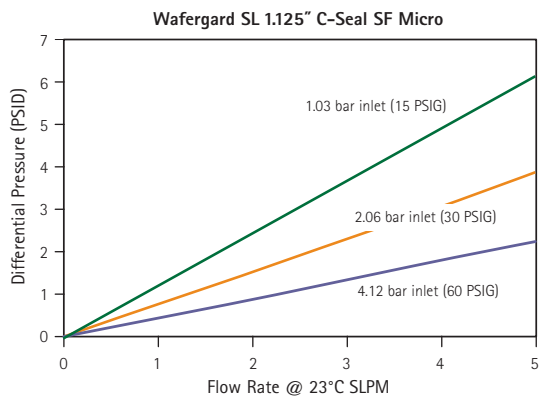
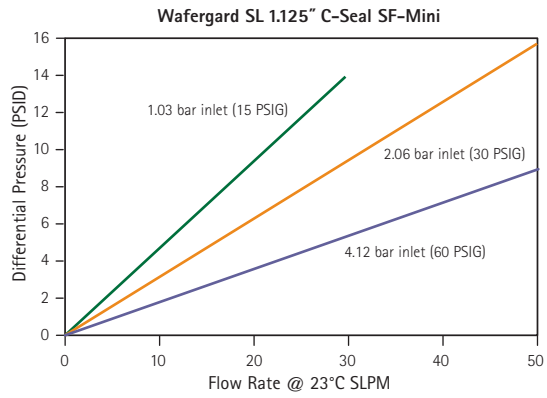
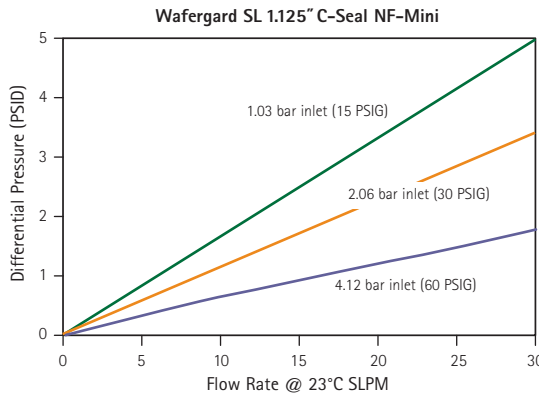
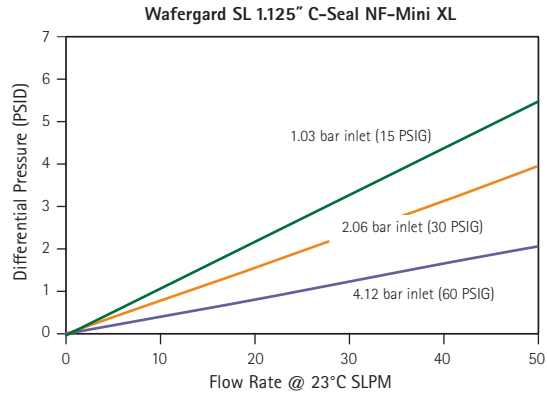
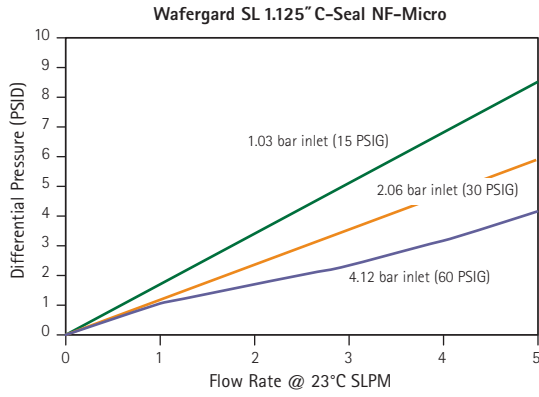
		Micro Nickel	Mini Nickel	Mini XL Nickel	Micro Stainless Steel	Mini Stainless Steel
Materials:	Filter element	Patented, sintered nickel membrane filter			Proprietary sintered stainless steel membrane filter	
	Housing, base block, end cap	SEMI® F20 316L electropolished stainless steel				
Connections:	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 x 10 ⁻¹⁰ atm cc/sec.				
	Tested	1 x 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



Ordering Information

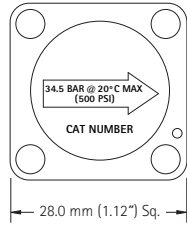
Part Number	Description
WGSLNFC1L	Wafergard SL 1.125" C-seal Micro filter – nickel
WGSLNFC1M	Wafergard SL 1.125" C-seal Mini filter – nickel
WGSLNFC1H	Wafergard SL 1.125" C-seal Mini XL filter – nickel
WGSLSFC1L	Wafergard SL 1.125" C-seal Micro filter – stainless steel
WGSLSFC1M	Wafergard SL 1.125" C-seal Mini filter – stainless steel

Additional SurfaceLine Filters

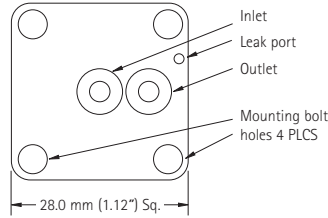
Seal Type	Nickel	Stainless Steel
C (1 1/2")	Yes	
W	Yes	Yes

Dimensions

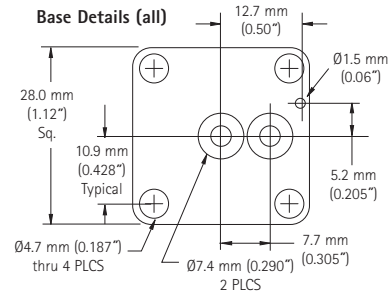
Top View (all)



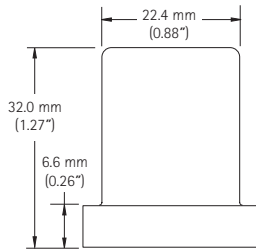
Base Bottom (all)



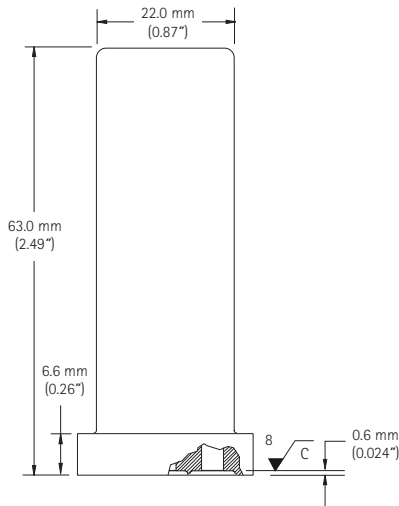
Base Details (all)



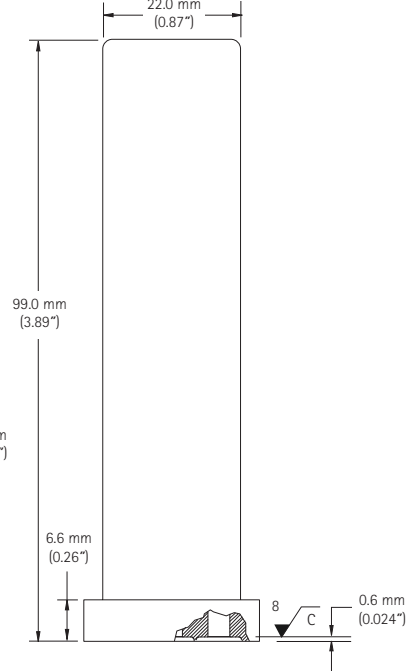
NF-Micro/SF-Micro



NF-Mini/SF-Mini



NF-Mini XL



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.

Terms and Conditions of Sale

All purchases are subject to Entegris' "Terms and Conditions of Sale." To view and print this information, visit Entegris' website at www.entegris.com and select the Legal Notices link from the footer found on the home page.

Entegris®, Wafergard® and SurfaceLine™ are trademarks of Entegris, Inc.

ENTEGRIS, INC.

Corporate Headquarters / 3500 Lyman Boulevard / Chaska, Minnesota 55318 USA
 Customer Service Tel. +1 952-556-4181 / Customer Service Fax +1 952-556-8022
www.entegris.com