

Wafergard® SL 1.125" C-seal Gas Filters

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

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, our Wafergard family of filters provides ultimate purity, superior corrosion resistance and excellent compatibility with a full range of gases. These SurfaceLine™ filters consume the least amount of space on gas panels compared to standard in-line designs, while reducing parts inventories and variations. We also offer additional surface-mount filters in various sizes, seals, and membranes.



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

FEATURES & 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

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/ft³) >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	≥0.0015 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 (68°F)				
	Maximum forward differential pressure	10 bar @ 23°C (73°F) (150 psid)	8 bar @ 23°C (73°F) (115 psid)	8 bar @ 23°C (73°F) (115 psid)	10 bar @ 23°C (73°F) (150 psid)	20 bar @ 23°C (73°F) (300 psid)
	Maximum reverse differential pressure	10 bar @ 23°C (73°F) (150 psid)	8 bar @ 23°C (73°F) (115 psid)	8 bar @ 23°C (73°F) (115 psid)	10 bar @ 23°C (73°F) (150 psid)	20 bar @ 23°C (73°F) (300 psid)
	Maximum operating temperature	Inert gases: 400°C (752°F) @ 35 bar (500 psig)				
		Corrosive and reactive gases: 50°C (122°F) @ 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					

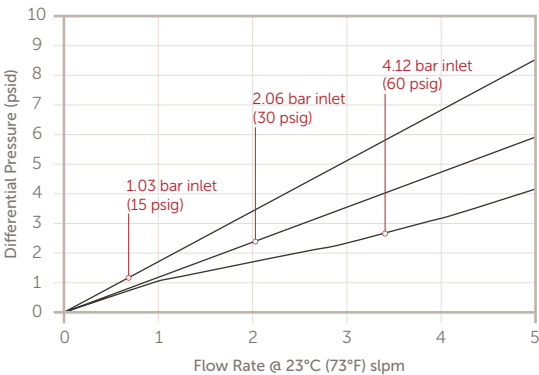
¹Particle cleanliness qualified following SEMASPEC Test Method for Particle Shedding (#93021511A-STD).

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

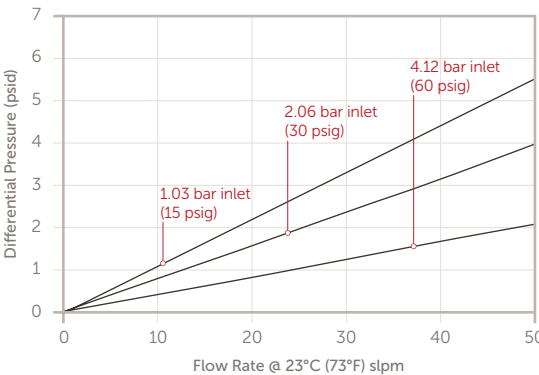
³Referenced at the most penetrating particle size.

PERFORMANCE DATA

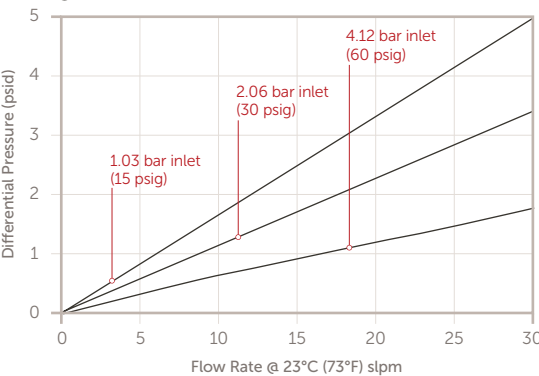
Wafergard SL 1.125" C-Seal NF-Micro



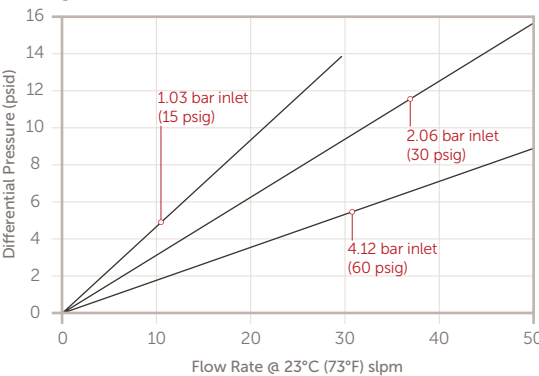
Wafergard SL 1.125" C-Seal NF-Mini XL



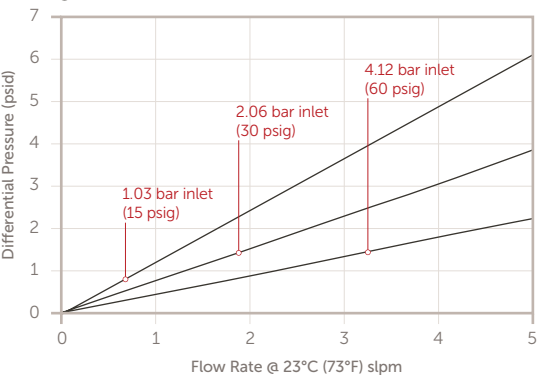
Wafergard SL 1.125" C-Seal NF-Mini



Wafergard SL 1.125" C-Seal SF-Mini

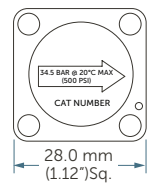


Wafergard SL 1.125" C-Seal SF-Micro

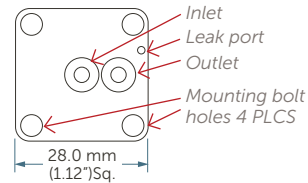


DIMENSIONS

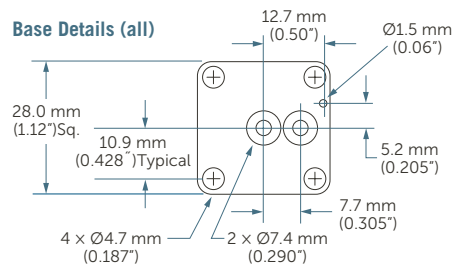
Top View (all)



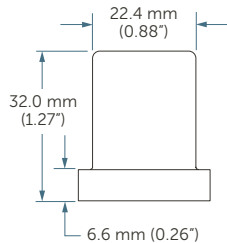
Base Bottom (all)



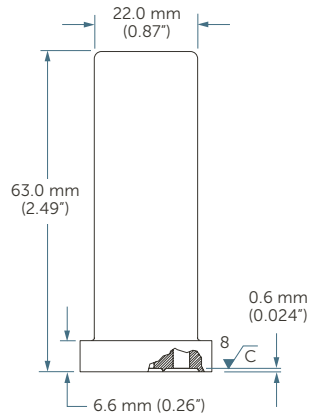
Base Details (all)



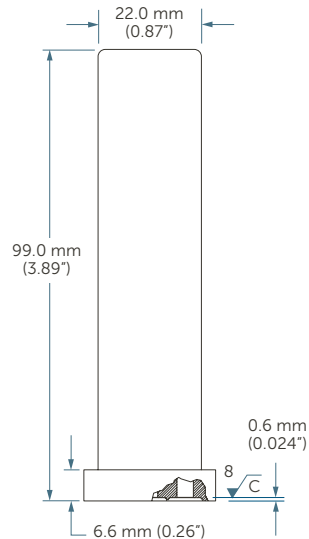
**Side View
NF-Micro/SF-Micro**



**Side View
NF-Mini/SF-Mini**



**Side View
NF-Mini XL**



ORDERING INFORMATION

Part number	Description
WGSLNFC1L	Wafergard SL 1.125" C-Seal NF-Micro filter
WGSLNFC1M	Wafergard SL 1.125" C-Seal NF-Mini filter
WGSLNFC1H	Wafergard SL 1.125" C-Seal NF-Mini XL filter
WGSLSFC1L	Wafergard SL 1.125" C-Seal SF-Micro filter
WGSLSFC1M	Wafergard SL 1.125" C-Seal SF-Mini filter

Additional SurfaceLine filters

Seal type	Nickel	Stainless steel
C (½")	Yes	—
W	Yes	Yes

FOR MORE INFORMATION

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