

Wafergard® II SF Mini and Mini XL In-line Gas Filters

*Superior particulate filtration for
ultrapure gas system filtration*

Wafergard® II stainless steel gas filters are the filter of choice for high-purity gas systems when all-stainless steel construction is preferred. A state-of-the-art housing assembly eliminates out-gassing by minimizing weld area. The all-metal construction is ideal for high-temperature and dynamic-pressure applications. Its compact size and flexible choice of fittings provide ultimate design efficiency and minimize engineering costs.



APPLICATIONS

- Ultrapure gas lines
- High-temperature applications
- Dynamic-pressure applications
- Inert and reactive gases*
- Gas cabinets
- Gas panels
- Valve manifold boxes
- Hookup

*Not compatible with O₃

FEATURES & BENEFITS

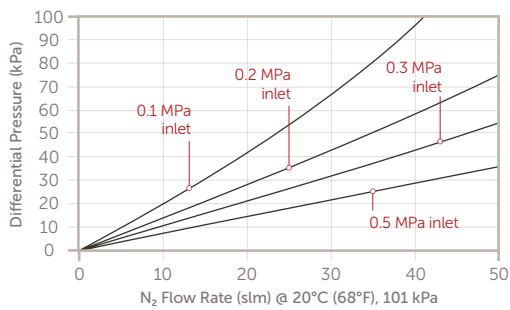
All 316L stainless steel components	Provides good chemical compatibility with most semiconductor process gases, which prevents costly use of incompatible filters and gases
Specialized cleaning and high-temperature baking process	Achieves superior initial cleanliness, which enables quick gas startup
High flow rate/low pressure drop characteristic	Suitable for use with low vapor pressure gases
High particle removal efficiency	Reduces on-wafer defects, increasing yield

SPECIFICATIONS

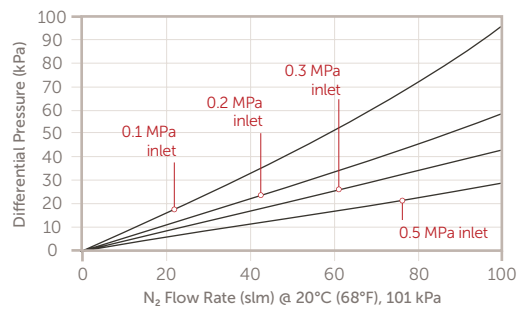
Materials	Filter membrane	316L stainless steel
	Housing	Low sulfur 316L stainless steel
	End cap	Low sulfur 316L stainless steel
Initial downstream cleanliness	≤0.03 particles/liter (≤1 particle/ft ³) ≥0.01 μm	
Removal rating	≥0.0015 μm	
Particle retention	Greater than 99.9999% (6 LRV) removal of all particles at 30 slm (Mini) and 60 slm (Mini XL); referenced at the most penetrating particle size	
Surface finish interior	≤5 μin Ra	
Helium leak rating	Qualified	2 x 10 ⁻¹¹ Pa m ³ /sec (2 x 10 ⁻¹⁰ atm cc/sec)
	Tested	9 x 10 ⁻¹⁰ Pa m ³ /sec (9 x 10 ⁻⁹ atm cc/sec)
Maximum conditions	Maximum operating pressure: 16.2 MPa (162 bar, 2346 psig) @ 20°C (68°F) Maximum forward/reverse differential pressure: 3 MPa (30 bar, 435 psid) @ RT Maximum design temperature: 460°C (860°F)	
Flow rating	See performance data	

PERFORMANCE DATA

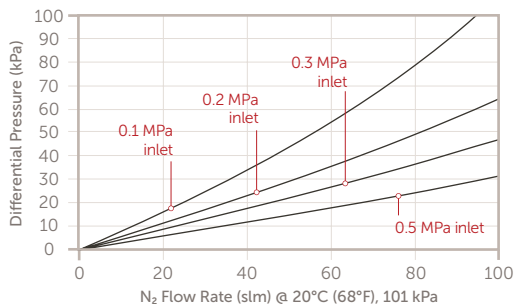
Wafergard II SF Mini
WGMSA1HRU



Wafergard II SF Mini XL
WGMS32PRU



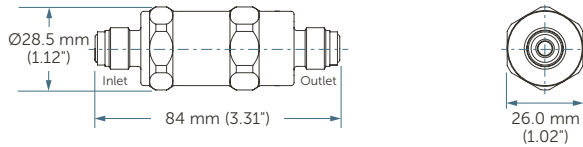
Wafergard II SF Mini XL
WGMS02PRU



DIMENSIONS

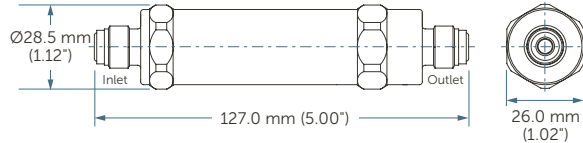
Wafergard II SF Mini

WGMS A1HRU ¼" Gasket Seal, Male Inlet/Outlet



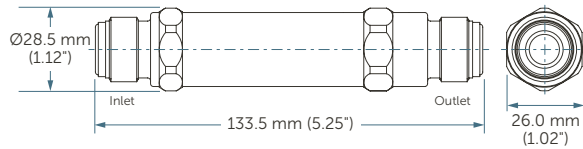
Wafergard II SF Mini XL

WGMS 02PRU ¼" Gasket Seal, Male Inlet/Outlet



Wafergard II SF Mini XL

WGMS 32PRU ½" Gasket Seal, Male Inlet/Outlet



ORDERING INFORMATION

Part number	Fitting connections	Overall length
WGMSA1HRU	¼" gasket seal (compatible with VCR® fitting), male inlet/outlet	84 mm (3.31")
WGMS 02PRU	¼" gasket seal (compatible with VCR fitting), male inlet/outlet	127.0 mm (5.00")
WGMS 32PRU	½" gasket seal (compatible with VCR fitting), male inlet/outlet	133.5 mm (5.25")

FOR MORE INFORMATION

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

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