

Wafergard® II SF Mini 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 outgassing by minimizing weld area. The all-metal construction is ideal for high-temperature and dynamic-pressure applications. The compact size and flexible choice of fittings provide ultimate design efficiency and minimizes 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 for O₃

FEATURES & BENEFITS

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



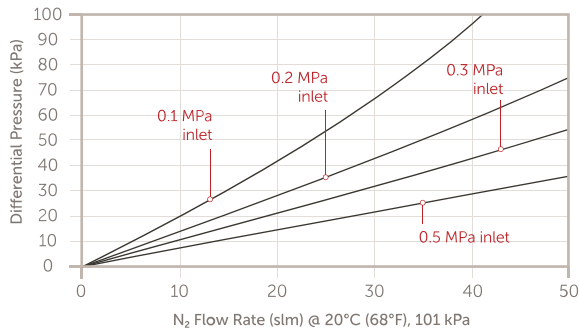
Ideal for high-temperature and dynamic-pressure applications.

SPECIFICATIONS

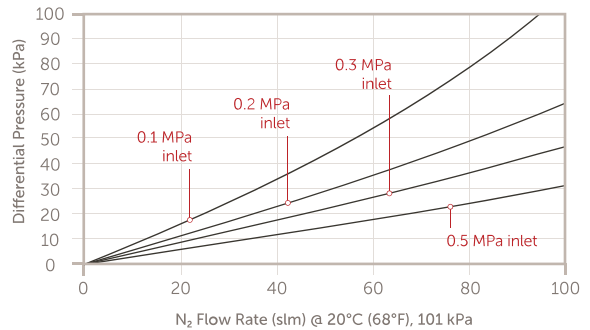
Materials	Filter element	316L stainless steel
	Housing, end cap	Low sulfur 316L stainless steel
Initial downstream cleanliness	≤ 0.03 particles/liter (≤ 1 particle/ft ³) ≥ 0.01 μm	
Removal rating	≥ 0.0015 μm	
Particle retention	Greater than 99.9999% (6 LRV) removal of all particles at 30 slm (Mini) and 60 slm (Mini XL); referenced at the most penetrating particle size	
Surface finish interior	≤ 5 $\mu\text{in Ra}$	
Helium leak rating	Qualified	2×10^{-11} Pa m ³ /sec (2×10^{-10} atm cc/sec)
	Tested	9×10^{-10} Pa m ³ /sec (9×10^{-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 operating temperature:	Inert gases: 400°C (752°F)
Flow rating	See performance data	

PERFORMANCE DATA

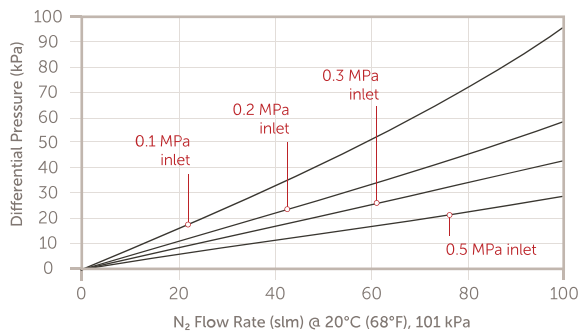
Wafergard II SF Mini
WGMSA1HRU



Wafergard II SF Mini XL
WGMS02PRU



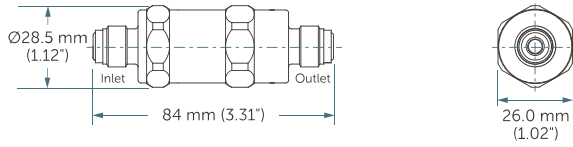
Wafergard II SF Mini XL
WGMS32PRU



DIMENSIONS

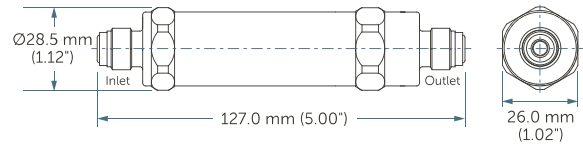
Wafergard II SF Mini

WGMS A1HRU ¼" Gasket Seal, Male Inlet/Outlet



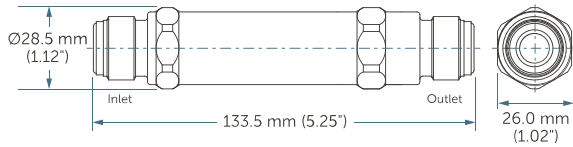
Wafergard II SF Mini XL

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 SIZE	FITTING TYPE	LENGTH
WGMS02PRU	1/4"	VCR	127 mm (5.00")
WGMS32PRU	1/2"	VCR	133.5 mm (5.26")
WGMSA1HRU	1/4"	VCR	84 mm (3.31")

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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