

Wafergard® III NF Micro In-line Gas Filters

Nickel filter membrane offers superior corrosion resistance



Wafergard® III nickel filters are the cleanest, most efficient all-metal filters available. The patented nickel filter membrane offers superior corrosion resistance and excellent compatibility with inert and reactive gases.

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. Its compact size and flexible choice of fittings provide ultimate design efficiency and minimize engineering costs.

Ideal for high-temperature and dynamic-pressure applications

APPLICATIONS

- Ultrapure gas lines
- High-temperature applications
- New fab construction
- Dynamic-pressure applications
- Inert and reactive gases

FEATURES & BENEFITS

All-metal construction	Is ideal for high-temperature and dynamic-pressure applications.
Nickel filter membrane	Provides superior corrosion resistance and excellent compatibility with inert and reactive gases
State-of-the-art housing assembly	Eliminates outgassing by minimizing weld area

SPECIFICATIONS

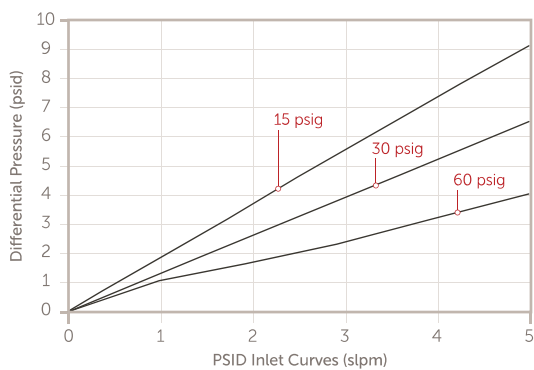
Materials	Filter element	Patented, sintered nickel membrane filter
	Housing	Electropolished VAR 316L stainless steel housing
Downstream cleanliness	Particles*	Less than 0.03 particles/liter (<1 particle/ft ³) greater than 0.01 µm
	Volatile**	Volatile outgassing of H ₂ O, O ₂ , and THC is below detectable limits (by RGA and FID at room temperature)
Removal rating	≥0.0015 µm	
Surface finish interior	≤5 µin Ra	
Helium leak rating	Qualified	2x10 ⁻¹⁰ atm cc/sec.
	Tested	1x10 ⁻⁹ atm cc/sec.
Operating conditions	Maximum allowable working pressure (design pressure): 207 bar (3000 psi) @ 100°C (212°F)	
	Maximum forward/reverse differential pressure: 35 bar (500 psid)	
	Maximum operating temperature: Inert gases 400°C (752°F) @ 35 bar (500 psi); Corrosive and reactive gases: 50°C (122°F) @ 70 bar (1000 psi)	
Warranty	5 year	
Particle retention	Greater than 99.9999999% (9 LRV) removal of all particles (referenced at the most penetrating particle size)	
Flow rating	Refer to performance data	

*Particle cleanliness qualified following SEMASPEC Test Method for Particle Shredding (#93021511A-STD)

**Volatile cleanliness qualified following SEMASPEC Test Method for THC Contribution (#90120396B-STD), Moisture Contribution (#90120397B-STD), and Oxygen Contribution (#90120398B-STD).

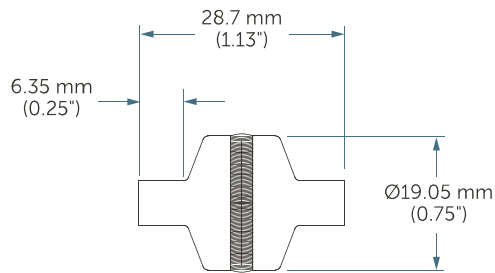
PERFORMANCE DATA

Wafergard III NF Micro Filters

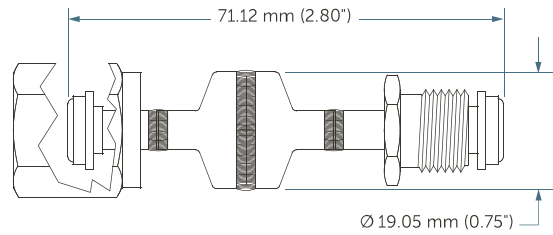


DIMENSIONS

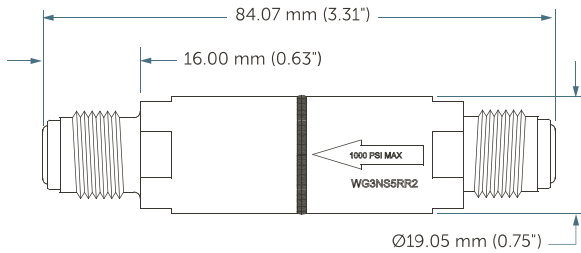
WG3N SM JJ2 – ¼" Butt Tube Inlet/Outlet



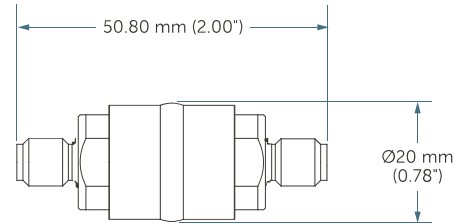
**WG3N SM RF2 – ¼" Male Gasket Seal Inlet;
¼" Female Gasket Seal Outlet**



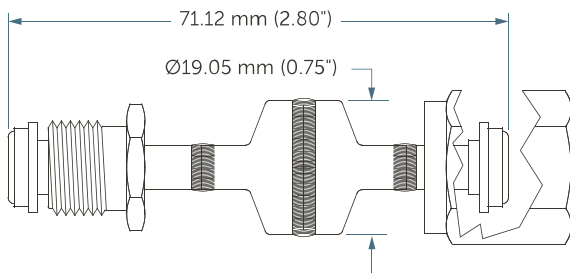
WG3N S5 RR2 – ¼" Male Gasket Seal Inlet/Outlet



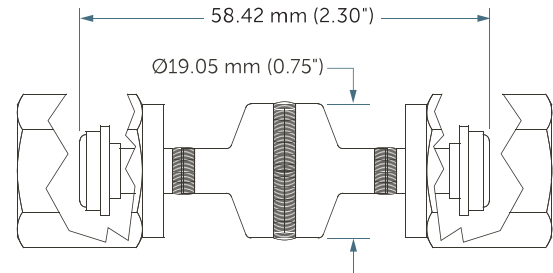
WG3L005NS2S1 – ⅛" Swagelok Compression Fitting



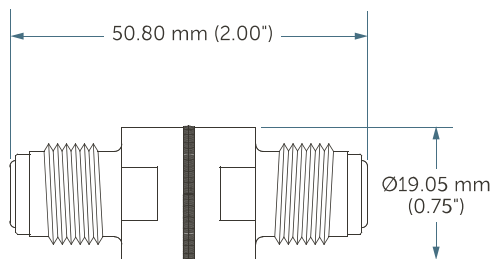
**WG3N SM FR2 – ¼" Female Gasket Seal Inlet;
¼" Male Gasket Seal Outlet**



**WG3N SM FF2 – ¼" Female Gasket Seal
Inlet/Outlet**



WG3N SM SL2 – ¼" Male Gasket Seal Inlet/Outlet



ORDERING INFORMATION

PART NUMBER	FITTING SIZE AND TYPE	LENGTH
WG3NS5RR2	1/4" Gasket seal (compatible with VCR Fitting) male inlet/outlet	84.1 mm (3.31")
WG3NSMFF2	1/4" Gasket seal (compatible with VCR fitting) female inlet/outlet	58.4 mm (2.30")

ORDERING INFORMATION

PART NUMBER	FITTING SIZE AND TYPE	LENGTH
WG3NSMFR2	1/4" Polarized gasket seal (compatible with VCR fitting) female inlet/male outlet	71.1 mm (2.80")
WG3NSMJJ2	1/4" Butt weld inlet/outlet	28.4 mm (1.12")
WG3NSMSL2	1/4" Gasket seal (compatible with VCR Fitting) male inlet/outlet	50.8 mm (2.00")

FOR MORE INFORMATION

Please call your Regional Customer Service Center today to learn what Entegris can do for you. Visit [entegris.com](https://www.entegris.com) and select the [Contact Us](#) link to find the customer service 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.com](https://www.entegris.com) and select the [Terms & Conditions](#) link in the footer.



Corporate Headquarters
129 Concord
Billerica, MA 01821
USA

Customer Service
Tel +1 952 556 4181
Fax +1 952 556 8022
Toll Free 800 394 4083

Entegris®, the Entegris Rings Design®, and other product names are trademarks of Entegris, Inc. as listed on [entegris.com/trademarks](https://www.entegris.com/trademarks). All third-party product names, logos, and company names are trademarks or registered trademarks of their respective owners. Use of them does not imply any affiliation, sponsorship, or endorsement by the trademark owner.

©1998-2021 Entegris, Inc. | All rights reserved. | Printed in the USA | 4527-5055ENT-0423

www.entegris.com