

# Wafergard® MAX In-line PTFE Gas Filters

*Superior particulate filtration in high-purity gas and general nitrogen and CDA applications*

Wafergard® MAX in-line gas filters provide the industry's best filters for ultrapure gas systems. The PTFE filter element is compatible with high-purity gases as well as general nitrogen and CDA applications.

Available in Bronze and Silver performance levels, our MAX series filters are specifically designed for high flow and low delta pressure applications and provide ultimate process protection by removing contaminants that could affect process quality.

Wafergard MAX filters are suitable for facility hook-up, valve manifold boxes, and point-of-use gas panel applications.

## APPLICATIONS

- Compatible with all classes of semiconductor process gases
- Compatible with general nitrogen and CDA applications

## FEATURES & BENEFITS

<b>Low pressure drop filter design</b>	Saves time and costs
<b>Removes particles greater than 0.0015 µm from incoming gas</b>	Minimizes process defects
<b>PTFE filter element</b>	Provides excellent compatibility with high-purity gases, including nitrogen and CDA
<b>Small, compact footprint</b>	Saves valuable equipment space and allows for easier implementation
<b>Pre-conditioned (silver only)</b>	Enables fast start-up



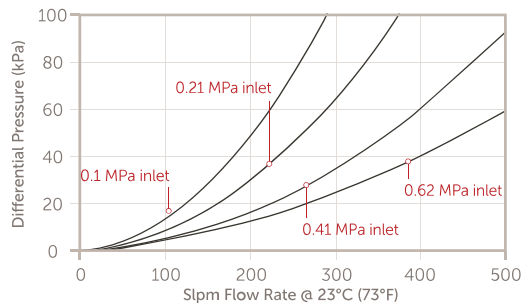
*Specifically designed for high flow and low delta pressure applications*

## SPECIFICATIONS

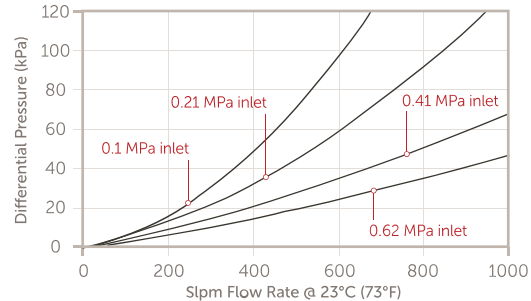
<b>Materials</b>	Filter element	Hydrophobic PTFE membrane supported by molded PFA structures
	Housing	Electropolished low sulfur 316L stainless housing
<b>Downstream cleanliness</b>	Particles	Less than 0.03 particles/liter (<1 particle/ft <sup>3</sup> ) greater than 0.01 μm
	Volatiles (Silver)	<10 ppb H <sub>2</sub> O and O <sub>2</sub> . Below LDL THC (lower detection limit is 5 ppb)
<b>Removal rating</b>	≥0.0015 μm	
<b>Surface finish interior</b>	WGMX (Bronze) MB XXXX	≤20 μin Ra
	WGMX (Silver/Bronze Plus) MS XXX/XXX	≤7 μin Ra
<b>Helium leak rating</b>	Qualified	2 x 10 <sup>-10</sup> atm-cc/sec
	Tested	1 x 10 <sup>-9</sup> atm-cc/sec
<b>Operating conditions</b>	Maximum inlet pressure	Silver and Bronze Plus 1/4" and 1/2" VCR® compatible fittings: 7.0 MPa (70 bar, 1015 psig)  Bronze 1/4" and 1/2" VCR compatible fittings: 6.0 MPa (60 bar, 870 psig)  Bronze and Bronze Plus 1/4", 3/8" and 1/2" Swagelok® compatible fitting: 6.0 MPa (60 bar, 870 psig)
	Maximum forward differential pressure	7 bar (102 psid)
	Maximum reverse differential pressure	2.5 bar (36 psid)
	Maximum operating temperature	120°C (248°F)
<b>Flow rating</b>	Refer to performance data	
<b>Warranty</b>	Bronze	1 year
	Silver	3 years
<b>Particle retention</b>	Greater than 99.999999% (9 LRV) removal of all particles (referenced at the most penetrating particle size)	

## PERFORMANCE DATA

Wafergard MAX In-line (1/4" Fittings)

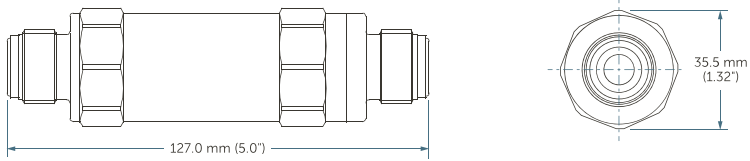


Wafergard MAX In-line (1/2" Fittings)

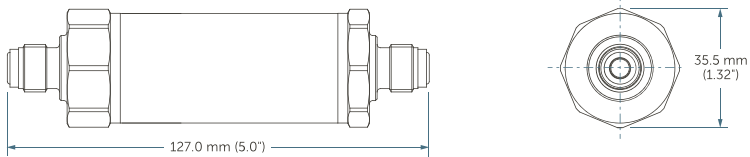


## DIMENSIONS

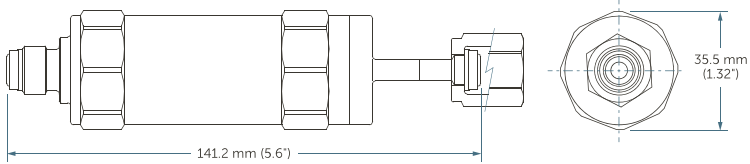
1/4" and 1/2" Gasket Seal, Male Inlet/Outlet (Silver and Bronze Plus)



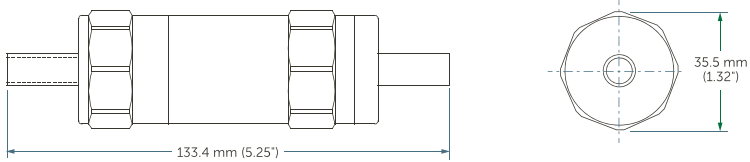
1/4" and 1/2" Gasket Seal, Male Inlet/Outlet (Bronze)



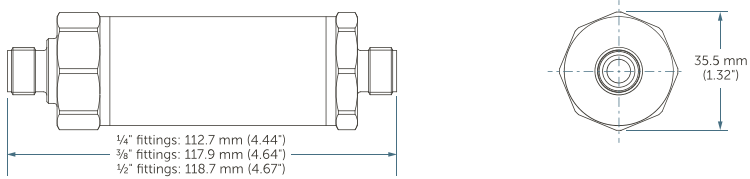
1/4" Gasket Seal, Male Inlet/Female Outlet



1/4", 3/8", and 1/2" Butt Weld Tube



Compression Seal (Bronze and Bronze Plus)



## ORDERING INFORMATION

PART NUMBER	FITTING SIZE AND TYPE	LENGTH
WGMXMBPRF2	1/4" male VCR® compatible inlet, 1/4" female VCR® compatible outlet	141.2 mm (5.6")
WGMXMBRR2	1/4" male VCR® compatible	127 mm (5.00")
WGMXMBRR4	1/2" male VCR® compatible	127 mm (5.00")
WGMXMBSS2	1/4" Swagelok® compatible	112.7 mm (4.44")
WGMXMBSS3	3/8" Swagelok® compatible	117.9 mm (4.64")

## ORDERING INFORMATION

PART NUMBER	FITTING SIZE AND TYPE	LENGTH
WGMXMBSS4	1/2" Swagelok® compatible	118.7 mm (4.67")
WGMXMPRR2	1/4" male VCR® compatible	127 mm (5.00")
WGMXMPRR4	1/2" male VCR® compatible	127 mm (5.00")
WGMXMPSS2	1/4" Swagelok® compatible	112.7 mm (4.44")
WGMXMPSS3	3/8" Swagelok® compatible	117.9 mm (4.64)
WGMXMPSS4	1/2" Swagelok® compatible	118.7 mm (4.67")
WGMXMSBW2	1/4" Butt weld tube	133.4 mm (5.25")
WGMXMSBW3	3/8" butt weld tube	133.4 mm (5.25")
WGMXMSBW4	1/2" Butt weld tube	133.4 mm (5.25")
WGMXMSRR2	1/4" male VCR® compatible	127 mm (5.00")
WGMXMSRR4	1/2" male VCR® compatible	127 mm (5.00")

### 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.

©2001-2024 Entegris, Inc. | All rights reserved. | Printed in the USA | 4524-5499DSA-0624