



**WAFERGARD® MAX IN-LINE  
TEFLON® GAS FILTERS**

*Superior particulate filtration for  
ultrapure gas applications*



# superior particulate filtration for ultrapure gas applications

## Overview

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

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

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

## Features and Benefits

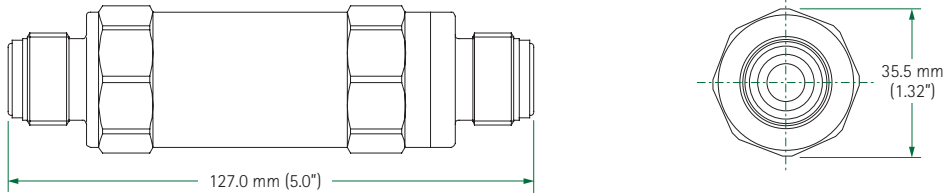
- Low pressure drop filter saves time and costs
- Removal of particles greater than 0.003 µm from incoming gas minimizes process defects
- All-Teflon filter cartridge means excellent compatibility with high-purity gases, including nitrogen and CDA
- Small footprint means easier implementation
- Pre-conditioned for fast startup (Silver only)
- Select ultra-high-purity (Silver) or high-purity (Bronze) surface finish
- Available in VCR®, Swagelok® and butt weld fittings to meet a variety of needs

## Specifications

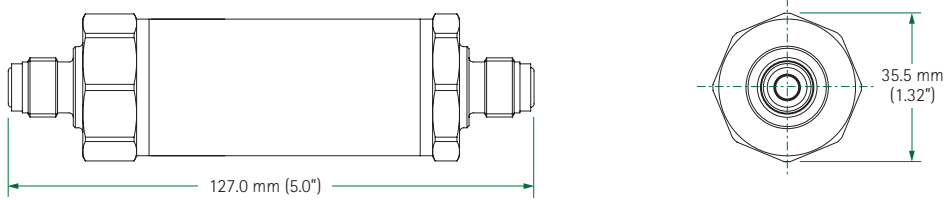
Materials:	Filter element	Hydrophobic Teflon PTFE membrane supported by molded Teflon PFA structures
	Housing	Electropolished low sulfur 316L stainless housing
Downstream cleanliness:	Particles	Less than 0.03 particles/liter (<1 particle/ft <sup>3</sup> ) >0.01 µm
	Volatiles (Silver)	<10 ppb H <sub>2</sub> O and O <sub>2</sub> . Below LDL THC (lower detection limit is 5 ppb)
Removal rating:	≥0.003 µm	
Surface finish interior:	WGMX (Bronze) MB XXXX	≤20 µin Ra
	WGMX (Silver/Bronze Plus) MS XXX / MP XXX	≤7 µin Ra
Helium leak rating:	Qualified	2 × 10 <sup>-10</sup> atm cc/sec = 2 × 10 <sup>-11</sup> Pa.m <sup>3</sup> /sec
	Tested	1 × 10 <sup>-9</sup> atm cc/sec = 1 × 10 <sup>-10</sup> Pa.m <sup>3</sup> /sec
Operating conditions:	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)
	Warranty:	WGMX MB XXXX WGMX MS XXX
Particle retention:	Greater than 99.9999999% removal of all particles (referenced at the most penetrating particle size)	

## Dimensions (Nominal)

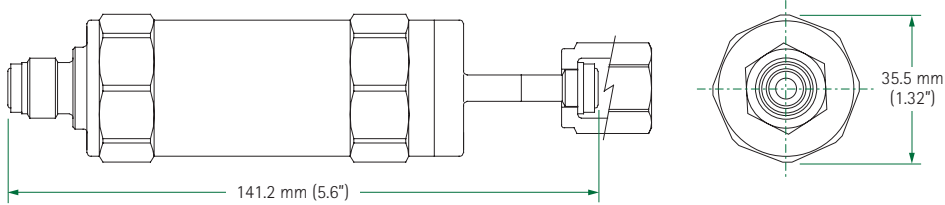
1/4" and 1/2" Gasket Seal, Male Inlet/Outlet (Silver and Bronze Plus)



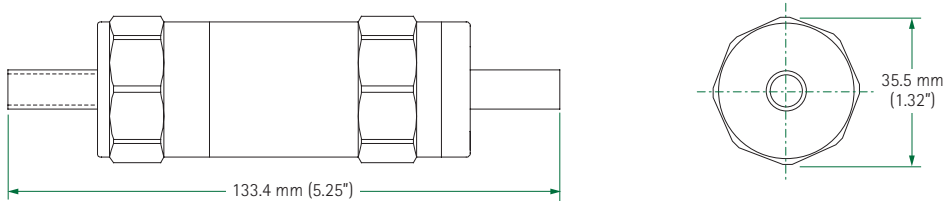
1/4" and 1/2" Gasket Seal, Male Inlet/Outlet (Bronze)



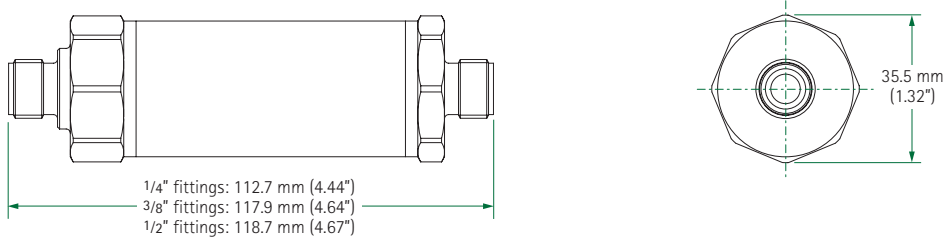
1/4" Gasket Seal, Male Inlet/Female Outlet



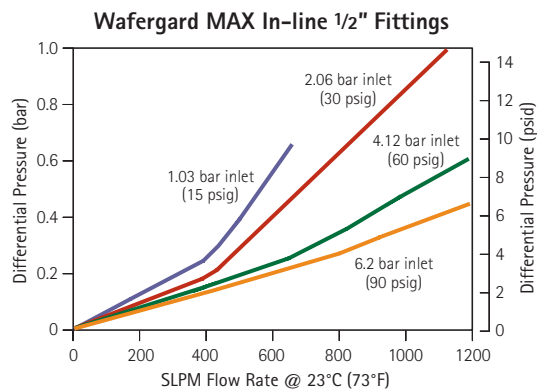
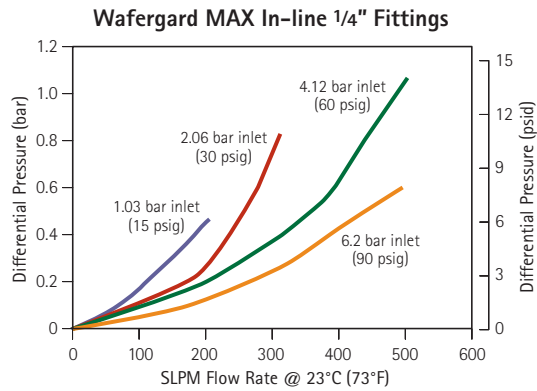
1/4," 3/8" and 1/2" Butt Weld Tube



Compression Seal (Bronze and Bronze Plus)



## Performance Data



## For More Information

Please call your Regional Customer Service Center today to learn what Entegris can do for you. Visit [www.entegris.com](http://www.entegris.com) and select the Customer Service link for the center nearest you.

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## Ordering Information

### Wafergard MAX In-line Teflon Gas Filters (Bronze)

#### Part Number

WGMX MB

#### Compatible Fittings

RR2 = 1/4" male VCR  
 RR4 = 1/2" male VCR  
 SS2 = 1/4" Swagelok  
 SS3 = 3/8" Swagelok  
 SS4 = 1/2" Swagelok  
 PRF2 = 1/4" male VCR inlet,  
 1/4" female VCR outlet

### Wafergard MAX In-line Teflon Gas Filters (Silver)

#### Part Number

WGMX MS

#### Compatible Fittings

RR2 = 1/4" male VCR  
 RR4 = 1/2" male VCR  
 BW2 = 1/4" butt weld tube  
 BW3 = 3/8" butt weld tube  
 BW4 = 1/2" butt weld tube

### Wafergard MAX In-line Teflon Gas Filters (Bronze Plus)

#### Part Number

WGMX MP

#### Compatible Fittings

RR2 = 1/4" male VCR  
 RR4 = 1/2" male VCR  
 SS2 = 1/4" Swagelok  
 SS3 = 3/8" Swagelok  
 SS4 = 1/2" Swagelok



creating a material advantage