

# Wafergard® IV HF Mini In-line Gas Filters

*Superior particulate filtration for ultrapure and corrosive gas system filtration*

Wafergard® IV alloy-22 (commonly referred to by the brand name HASTELLOY® C-22® alloy) filters are the cleanest, most efficient all-metal filters available for corrosive and ultrapure environments. The alloy-22 membrane offers the most inert and reactive gas\* compatibility in the Entegris Wafergard product line capable of filtering carbon monoxide, hydrogen bromide, chlorine, and other corrosive 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.

*\*Not recommended for use with O<sub>3</sub> gases.*

## APPLICATIONS

- Ultrapure gas lines
- High-temperature applications
- New fab construction
- Dynamic-pressure applications
- Corrosive gases

## FEATURES & BENEFITS

- Superior chemical compatibility and corrosion resistance

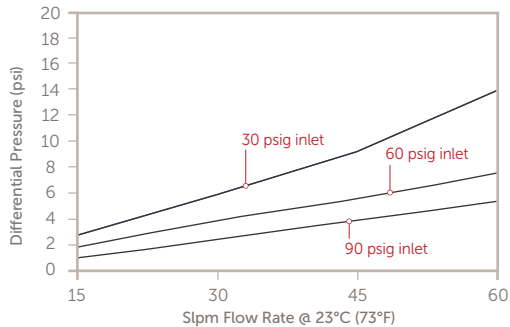


## SPECIFICATIONS

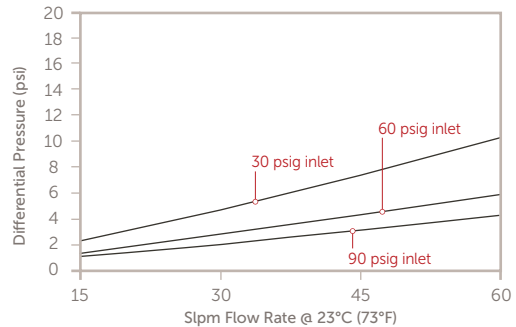
<b>Materials of construction</b>	Filter element	Sintered alloy-22 membrane filter
	Housing	Electropolished VAR 316L stainless steel housing
<b>Downstream cleanliness</b>	<0.03 particle/liter (<1 particle/ft <sup>3</sup> ) >0.01 μm at specified flow	
<b>Removal rating</b>	≥0.0015 μm	
<b>Surface finish</b>	≤5 μin Ra	
<b>Helium leak rating</b>	Qualified	2 × 10 <sup>-10</sup> atm cc/sec
	Tested	1 × 10 <sup>-9</sup> atm cc/sec
<b>Operating conditions</b>	Maximum inlet pressure: 172 bar (2500 psig) @ 20°C (68°F)  Maximum forward/reverse differential pressure: 20.7 bar (300 psid) @ 20°C (68°F)  Maximum operating temperature: 450°C (842°F) – inert gases 100°C (212°F) – corrosive and reactive gases	
<b>Warranty</b>	5 year	
<b>Particle retention</b>	Greater than 99.9999% (6 LRV) removal of all particles at rated flow; referenced at the most penetrating particle size	
<b>Flow rating</b>	Refer to performance data	

## PERFORMANCE DATA

Wafergard IV HF Mini ¼" VCR®  
WGL045HS3R2

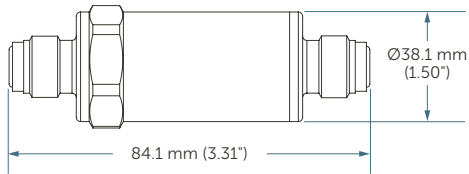


Wafergard IV HF Mini ½" VCR  
WGL045HS3R4

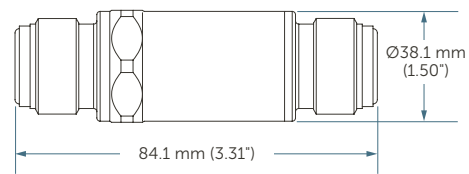


## DIMENSIONS

WGL045HS3R2 1/4" Gasket Seal, Male Inlet/Outlet



WGL045HS3R4 1/2" Gasket Seal, Male Inlet/Outlet



## ORDERING INFORMATION

Part number	Fitting options	Overall length
WGL045HS3R2	1/4" Gasket seal (compatible with VCR fitting), male inlet/outlet	84.1 mm (3.31")
WGL045HS3R4	1/2" Gasket seal (compatible with VCR fitting), male inlet/outlet	84.1 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](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 Road  
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.

©2018-2020 Entegris, Inc. | All rights reserved. | Printed in the USA | 4527-10081ENT-0220