

Wafergard® IV HF Mini In-line Gas Filters

*Superior particulate filtration for
ultrapure and corrosive gas systems*

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 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.

APPLICATIONS

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

*Not recommended for use with O₃ gases.

FEATURES & BENEFITS

Alloy-22 membrane	Offers the most inert and reactive gas compability in our Wafergard product line
State-of-the-art housing assembly	Minimized weld area, eliminates outgassing
Clean, all metal construction	Provides superior chemical compatibility and corrosion resistance Ideal for high-temperature and dynamic-pressure applications



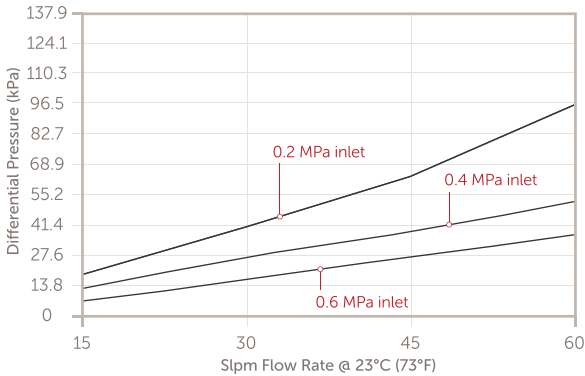
Offers the most inert and reactive gas compatibility

SPECIFICATIONS

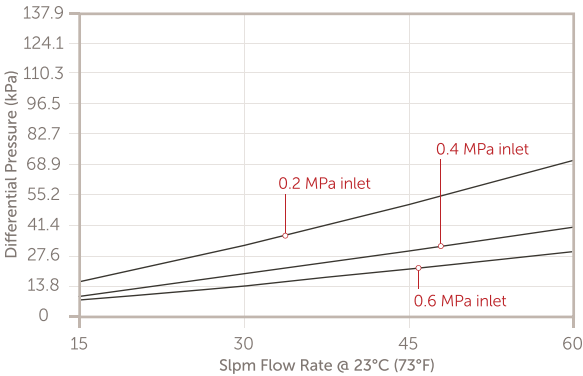
Materials	Filter element	Sintered alloy-22 membrane
	Housing	Electropolished VAR 316L stainless steel
Downstream cleanliness	<0.03 particles/liter (<1 particle/ft ³) >0.01 µm at specified flow	
Removal rating	≥0.0015 µm	
Surface finish interior	≤5 µin Ra	
Helium leak rating	Qualified	2 × 10 ⁻¹⁰ atm cc/sec
	Tested	1 × 10 ⁻⁹ atm cc/sec
Operating conditions	Maximum inlet pressure	17.2 MPa (2500 psig) @ 20°C (68°F)
	Maximum forward/reverse differential pressure	0.8 MPa (120 psid) @ 20°C (68°F)
	Maximum operating temperature	450°C (842°F) - inert gases
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	

PERFORMANCE DATA

Wafergard IV HF Mini ¼" VCR®
WGL045HS3R2

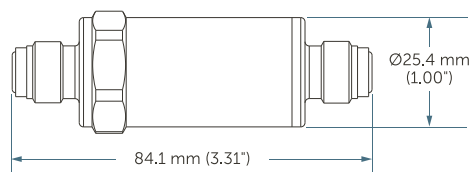


Wafergard IV HF Mini ½" VCR
WGL045HS3R4

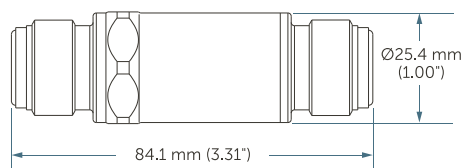


DIMENSIONS

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



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



ORDERING INFORMATION

Part number	Fitting size and type	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")

Alloy-22 filters are not recommended for use with O₃ gases.

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.

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