Wafergard® MAX HT In-line Gas Filters

Offer superior particulate filtration in high-temperature applications

Wafergard® MAX HT in-line gas filters offer excellent filtration in high-temperature applications (120 - 200°C [248 - 392°F]) for vaporized materials such as liquid/solid precursors; TEOS for BEOL, high-k materials for FEOL, and hot $\rm N_2$ purge for wet cleaning/drying. This durable filter is highly recommended for high-temperature gas filtration semiconductor process equipment applications.



Recommended for high-temperature gas filtration applications

APPLICATIONS

- Point-of-use filter for CVD tools
- High-temperature applications like TEOS and high-k
- Hot N₂ applications

FEATURES & BENEFITS

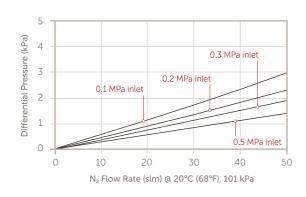
Durable, electropolished stainless steel housing	Enables use in high-temperature (up to 200°C [392°F]) TEOs and high-k applications	
Low differential pressure	Provides stable and improved material delivery	
Compact form (127 mm [5"] length)	Fits many existing delivery systems and is easy to design into new systems	
Overall design is 148 mm (5.82")	Is a drop-in replacement for similar filters, simplifying installation	
Special baking manufacturing process	Enables rapid gas delivery startup	

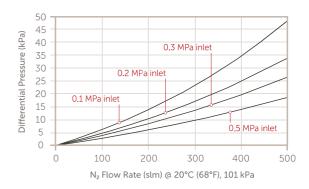


SPECIFICATIONS

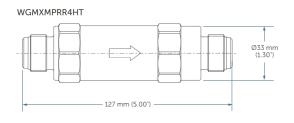
Materials	Membrane	PTFE	
	Support	PFA	
	Housing	316L stainless steel	
Removal particle rating	≥0.0015 µm		
Particle retention	≥99.999999% @ 25°C (77°F)		
Initial downstream cleanliness	≤0.03 particles/liter greater than 0.01 µm		
Internal surface finish	≤7 μin Ra (Ra <0.17 μm)		
Connections	1/2" gasket seal male (VCR® compatible)		
Operating conditions	Maximum operating pressure	0.99 MPa (9.9 bar; 143.15 psig) @ 0° to 200°C (0° to 392°F)	
	Maximum forward differential pressure	0.70 MPa (7 bar; 101.5 psid) @ 0° to 40°C (0° to 104°F)	
		0.08 MPa (0.8 bar; 11.6 psid) @ 200°C (392°F)	
	Maximum operating temperature	200°C (392°F) in inert gases	
Helium leak rating	<1 x 10 ⁻¹⁰ Pa•m³/sec		
Flow rating	Refer to performance data		

PERFORMANCE DATA



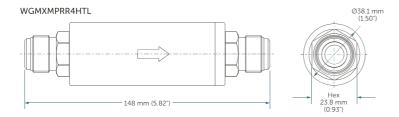


DIMENSIONS





DIMENSIONS



ORDERING INFORMATION

PART NUMBER	LENGTH
WGMXMPRR4HT	127 mm (5.00")
WGMXMPRR4HTL	148 mm (5.83")

FOR MORE INFORMATION

Please call your Regional Customer Service Center today to learn what Entegris can do for you. Visit <u>entegris.com</u> and select the <u>Contact Us</u> 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 $\underline{\text{entegris.com}}$ and select the $\underline{\text{Terms } \& \text{Conditions}}$ 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 <u>entegris.com/trademarks</u>. 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.