

Chambergard™ BGN Fast Vent Diffusers

High-volume throughput and rapid venting to atmospheres

Using a patented, sintered nickel filter element to quickly diffuse the flow of incoming gas, Chambergard™ BGN diffusers allow the load lock and/or transfer chamber to fill at a higher rate without particle disturbance or excessive turbulence. The highly retentive nickel element of the BGN diffuser removes submicron particle contamination from incoming gas and rapidly vents to the atmosphere, thereby reducing wafer defects and decreasing cycle times. The BGN diffuser is designed to meet the needs of flat panel display and 300 mm tool customers for greater efficiency, decreased chamber vent time, and greater throughput. With our global infrastructure we can provide Chambergard BGN fast vent diffusers to meet your needs worldwide.



FEATURES & BENEFITS

Industry-leading, patented, sintered nickel technology in a compact diffuser unit	Provides superior performance in all applications
Removal of particles greater than 0.0015 µm from incoming gas	Minimizes defects on wafers
Easy installation/retrofit into existing tools	Minimizes downtime
Manufactured, tested, and packaged in a cleanroom	Assures product cleanliness at time of installation
Rapid vent, gentle flow to atmosphere	Decreases cycle time, increases throughput, and OEE
Rated at 100,000 cycles before changeout	Robust and efficient

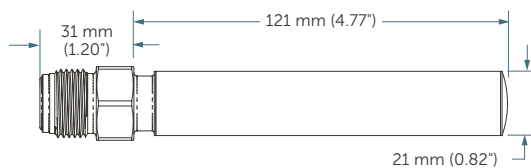
SPECIFICATIONS

Materials of construction	Diffuser element	Patented, sintered nickel membrane filter
	O-ring	Fluorocarbon
	Housing	316 L stainless steel
	Surface finish	≤32 µin Ra
Connections	Inlet	Gasket seal (VCR® compatible)
	Outlet	ISO NW bulkhead mounting compatible vacuum flange (compatible with standard ISO quick fitting, KF or QF, bulkhead clamps), or none (flangeless)
Downstream cleanliness	<0.003 particles/liter (<1 particle/ft³) >0.01 µm	
Removal rating	≥0.0015 µm	
Reliability	100,000 cycle reliability at maximum rated inlet pressure @ 25°C (77°F)	
Maximum operating conditions	Maximum inlet pressure with outlet to vacuum:	
	4 bar (60 psig)	
	Maximum differential pressure:	
	5 bar (75 psid)	
	Maximum operating temperature:	
	100°C (212°F)	
Warranty	2 years*	

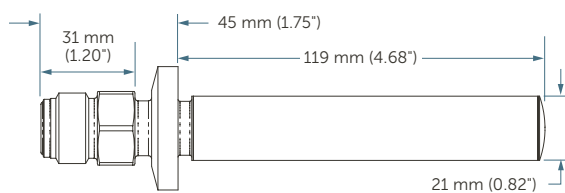
*after shipment date

DIMENSIONS

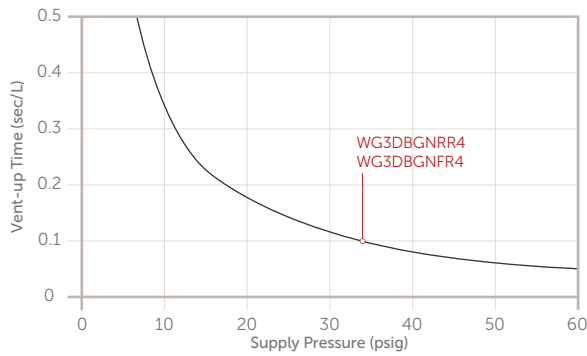
WG3DBGNRR4



WG3DBGNFR4



PERFORMANCE DATA



ORDERING INFORMATION

Part number	Inlet	Outlet
WG3DBGNRR4	1/2" MVCR	Flangeless
WG3DBGNFR4	1/2" MVCR	ISO NW-25

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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