



CHAMBERGARD™ BGN FAST VENT DIFFUSERS

High-volume throughput and rapid venting to atmosphere

Overview

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 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.



Features and Benefits

- Entegris' industry-leading, patented, sintered nickel technology in a compact diffuser unit provides superior performance in all applications
- Removal of particles greater than 0.003 μm from incoming gas minimizes defects on wafers
- Easy installation/retrofit into existing tools with minimal downtime
- Manufactured, tested and packaged in a clean-room to assure product cleanliness at time of installation
- Rapid vent, gentle flow to atmosphere decreases cycle time, increases throughput and OEE
- Robust and efficient, Chambergard diffusers are rated at 100,000 cycles before changeout
- Available worldwide through Entegris' global infrastructure

Specifications

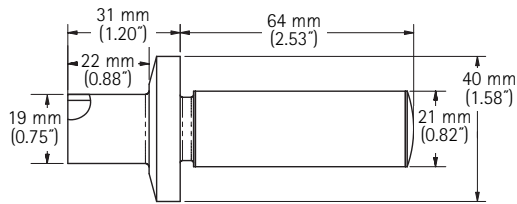
Materials:	Diffuser element	Patented, sintered nickel membrane filter
	O-ring	Fluorocarbon
	Housing	316L stainless steel
	Surface finish internal	≤32 μin Ra
Connections:	Connection fitting types	Inlet gasket seal (VCR® compatible) or butt weld. Outlet – ISO NW bulkhead mounting compatible vacuum flange (compatible with standard ISO quick fitting, KF or QF, bulkhead clamps), or none (flangeless)
	Inlet/outlet	See ordering information
Performance:	Downstream cleanliness	Less than 0.003 particles/liter (<1 particle/ft ³) greater than 0.01 μm
	Removal rating	≤0.003 μm
	Reliability	100,000 cycle reliability at maximum rated inlet pressure at 25°C (77°F)

Specifications (continued)

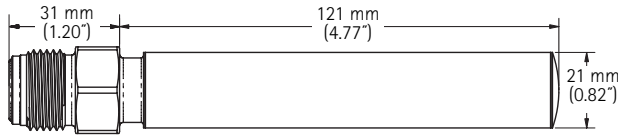
Operating Conditions:	Maximum inlet pressure with outlet to vacuum	4 bar (60 PSID)
	Maximum differential pressure	5 bar (75 PSID)
	Maximum operating temperature	100°C (212°F)
	Warranty	5 year or 100,000 cycles

Dimensions

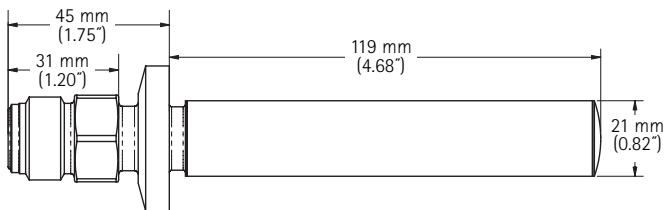
WG3DBGNJ6



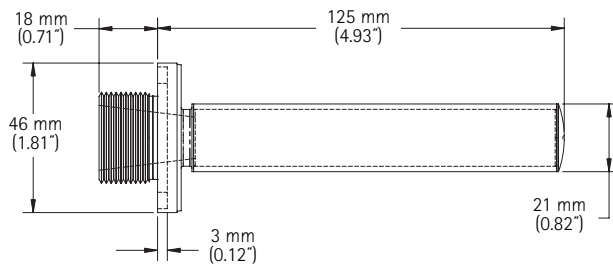
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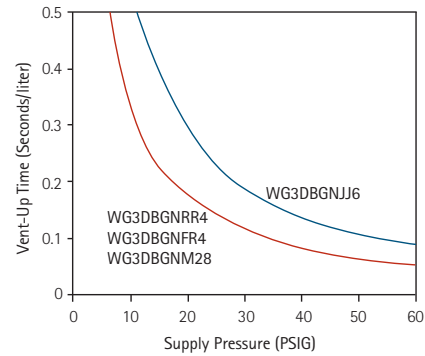
WG3DBGNFR4



WG3DBGNM28



Performance Data



Ordering Information

Part No.	Inlet	Outlet
WG3DBGNJ6	3/4" tube	ISO NW-25
WG3DBGNRR4	1/2" MVCR	N/A
WG3DBGNFR4	1/2" MVCR	ISO NW-25
WG3DBGNM28	28 x 1.5 Metric Thd	N/A

For More Information

Please call your Regional Customer Service Center today to learn what Entegris can do for you. Visit www.entegris.com and select the "Customer Service" link for the center nearest you.

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