



CHAMBERGARD™ FV50D XL FAST VENT DIFFUSER

*Rapidly reduce particles and vent times
in load lock and transfer chambers*

Overview

FV50D XL diffusers are the choice to reliably increase system throughput by minimizing load lock vent cycle time. This second-generation diffuser can withstand the higher operating pressure (60 psig) and is rated for 1 million cycles to greatly improve the performance and lower the cost of ownership.

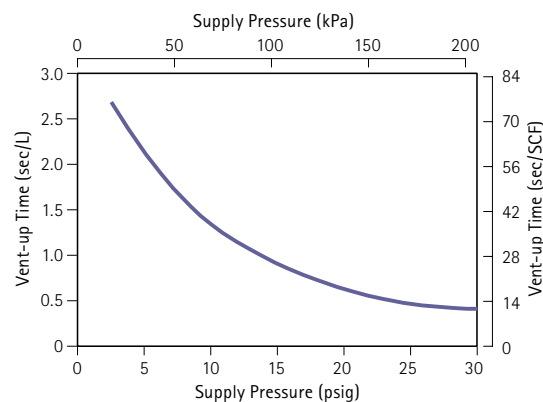
The Chambergard™ family of products provides rapid venting to atmosphere without disturbing or adding particles to wafers in the chamber. They combine the flow characteristics of a diffuser with a high-efficiency filter to increase efficiency and throughput.



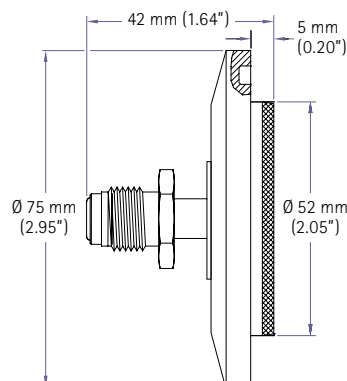
Features and Benefits

- Rated at 1,000,000 cycles and designed to operate at higher inlet pressures compared to first-generation Chambergard products
- 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 wafer
- Easy installation/retrofit into existing tools with minimal downtime (including load lock chambers, cooling chambers, transfer chambers and process chambers)
- Manufactured, tested and packaged in a cleanroom to assure product cleanliness at time of installation
- Rapid vent, gentle flow to atmosphere decreases cycle time, increases throughput and Overall Equipment Effectiveness (OEE)
- Available worldwide through Entegris' global infrastructure

Performance Data



Dimensions



Specifications

Materials:	Diffuser element	Patent pending, sintered nickel membrane filter
	Housing	316L stainless steel
	Surface finish interior	≤32 µin Ra
O-ring:	Material	Fluoroelastomer
	Size	2-229
	Groove ID	59.9 mm (2.36")
	Groove OD	67.9 mm (2.67")
	Groove depth	2.6 mm (0.10")
Connections:	Inlet	1/4" VCR® compatible male gasket seal fitting
	Outlet	ISO NW50 bulkhead mounting compatible with standard ISO bulkhead clamps
Downstream cleanliness:	Cleanliness less than 0.03 particles/liter (<1 particle/ft³) >0.01 µm rated flow	
Removal rating:	≥0.003 µm	
Operating conditions:	Maximum inlet pressure with outlet to vacuum	4 bar (60 psi)
	Maximum differential pressure	5 bar (75 psid)
	Maximum operating temperature	100°C (212°F) with o-ring 400°C (752°F) with no o-ring
Warranty:	5 years or 1,000,000 cycles	

Ordering Information

Part Number	Description
CG2 NDD 050R2	Chambergard FV50D XL

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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U.S. Patent pending.

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