

Chambergard™ FV50D XL Fast Vent Diffuser

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

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.

Our 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. With our global infrastructure we can provide Chambergard fast vent diffusers to meet your needs worldwide.

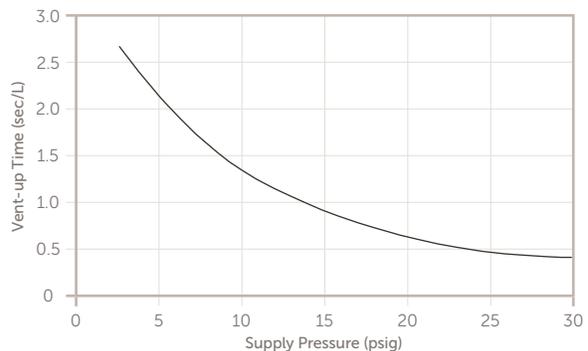
FEATURES AND BENEFITS

Rated at 1,000,000 cycles	Designed to operate at higher inlet pressures compared to first-generation Chambergard products
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 wafer
Easy installation/retrofit into existing tools	Minimizes downtime (including load lock chambers, cooling chambers, transfer chambers and process chambers)
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 Overall Equipment Effectiveness (OEE)

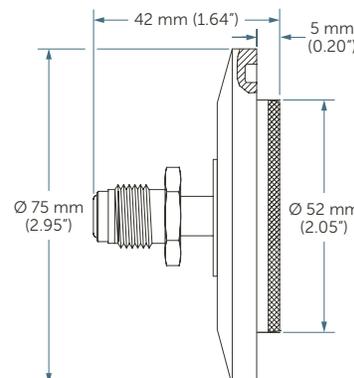


PERFORMANCE DATA

Supply Pressure (kPa)



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	¼" 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	≥0.0015 μm	
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) 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

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