

ChamberKleen™ Diffusers

Description

Gas diffusers are ideally suited for vent applications on load lock interfaces or other vacuum chambers where large volumes of gas are flowing in a short amount of time.

The Pall ChamberKleen™ 1100 and 5500 Series diffusers combine a stainless steel filter and a unique diffuser membrane that allows flow in 360 degrees. This combination allows large volumes of gas to flow in a uniform manner, limiting the disturbance of particles in the chamber. Consequently, fast vent times can be achieved with little particle disturbance.

- Reduces turbulent gas flow during venting of process chambers
- 360° diffuser design optimizes gas flow
- 316L stainless steel filter medium
- 316L stainless steel diffuser
- Cleanroom manufactured and packaged

Specifications

Materials	<ul style="list-style-type: none"> • 316L stainless steel filter medium • 316L stainless steel diffuser • Viton¹ O-ring • $\leq 22 \mu\text{in} / 0.56 \mu\text{m Ra}$ internal surface finish
Removal Rating	<ul style="list-style-type: none"> • $\geq 0.003 \mu\text{m}$ • No particle contribution above background; ≤ 1 particle / (ft³ or m³)
Connections	<ul style="list-style-type: none"> • 1100 Series: NW25 ISO Vacuum Flange • 5500 Series: NW63 ISO Vacuum Flange

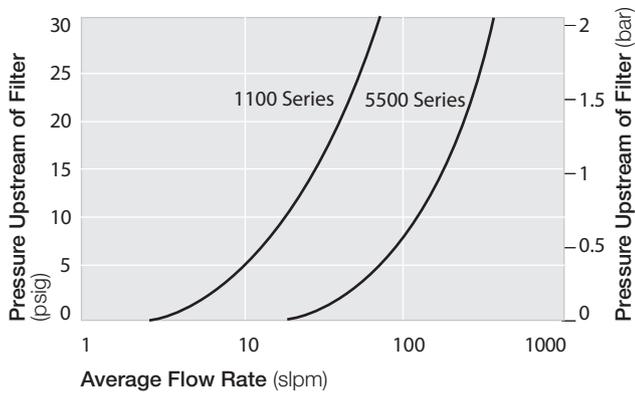


Operating Conditions	<p>Design Flow Rate²</p> <ul style="list-style-type: none"> • 1100 Series: 15 slpm @ 15 psig / 1 bar inlet and outlet to full vacuum (<10 torr) • 5500 Series: 150 slpm @ 15 psig / 1 bar inlet and outlet to full vacuum (<10 torr) <p>Maximum Operating Temperature</p> <ul style="list-style-type: none"> • 1100, 5500 Series: 300°F / 149°C (limited by O-ring flange connection)
Recommended Applications	<ul style="list-style-type: none"> • Vacuum chamber • Load lock chamber

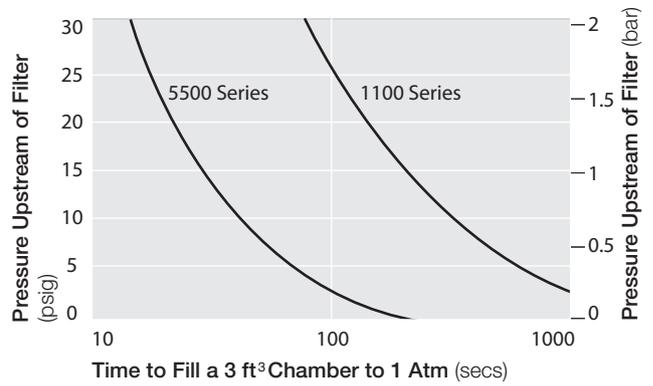
¹ Viton is a registered trademark of DuPont Dow Elastomers

² Additional designs are available. Please contact Pall Microelectronics for more information.

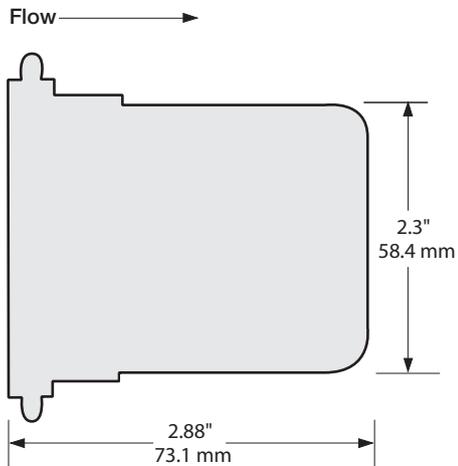
Pressure vs. Average Flow Rate



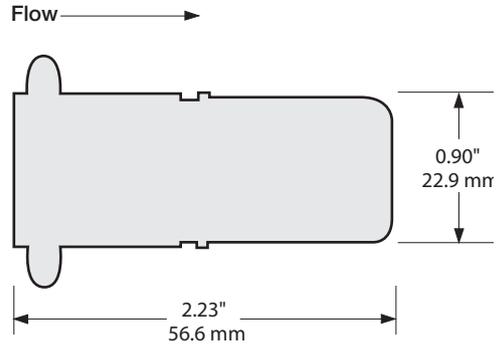
Pressure vs. Chamber Fill Time



Dimensions



5500 Series



1100 Series

Part Numbers / Ordering Information

Part Number	Description	Design Flow Rate (slpm)
CK1100I25H	1100 Series, 316L stainless steel filter, Viton ¹ O-ring	0-15
CK5500I63H	5500 Series, 316L stainless steel filter, Viton O-ring	0-150