

## 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

<b>Materials</b>	<ul style="list-style-type: none"> <li>• 316L stainless steel filter medium</li> <li>• 316L stainless steel diffuser</li> <li>• Viton<sup>1</sup> O-ring</li> <li>• <math>\leq 22 \mu\text{in} / 0.56 \mu\text{m}</math> Ra internal surface finish</li> </ul>
<b>Removal Rating</b>	<ul style="list-style-type: none"> <li>• <math>\geq 0.003 \mu\text{m}</math></li> <li>• No particle contribution above background; <math>\leq 1</math> particle / (ft<sup>3</sup> or m<sup>3</sup>)</li> </ul>
<b>Connections</b>	<ul style="list-style-type: none"> <li>• 1100 Series: NW25 ISO Vacuum Flange</li> <li>• 5500 Series: NW63 ISO Vacuum Flange</li> </ul>

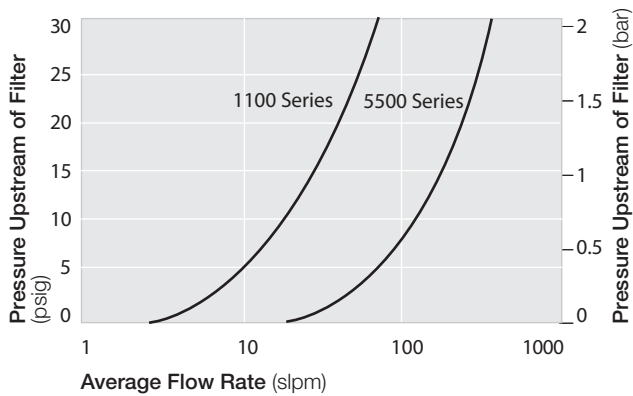


<b>Operating Conditions</b>	Design Flow Rate <sup>2</sup> <ul style="list-style-type: none"> <li>• 1100 Series: 15 slpm @ 15 psig / 1 bar inlet and outlet to full vacuum (&lt;10 torr)</li> <li>• 5500 Series: 150 slpm @ 15 psig / 1 bar inlet and outlet to full vacuum (&lt;10 torr)</li> </ul> Maximum Operating Temperature <ul style="list-style-type: none"> <li>• 1100, 5500 Series: 300°F / 149°C (limited by O-ring flange connection)</li> </ul>
<b>Recommended Applications</b>	<ul style="list-style-type: none"> <li>• Vacuum chamber</li> <li>• Load lock chamber</li> </ul>

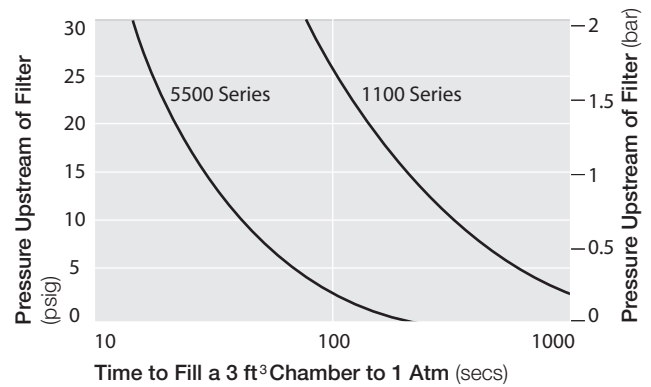
<sup>1</sup> Viton is a registered trademark of DuPont Dow Elastomers

<sup>2</sup> Additional designs are available. Please contact Pall Microelectronics for more information.

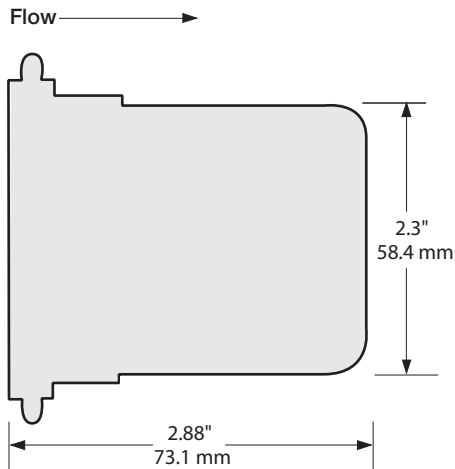
## Pressure vs. Average Flow Rate



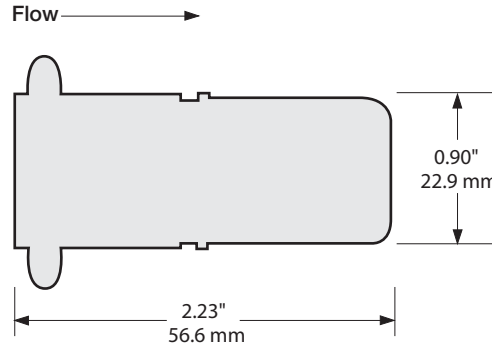
## Pressure vs. Chamber Fill Time



## Dimensions



5500 Series



1100 Series

## Part Numbers / Ordering Information

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



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