

ChamberKleen™ Diffusers— NW40 / NW50

Description

ChamberKleen 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.

Features

- Reduced turbulent flow during venting of process chambers
- High differential pressure capability
- 316L stainless steel housing
- Filters wide variety of gases
- Cleanroom manufactured and packaged



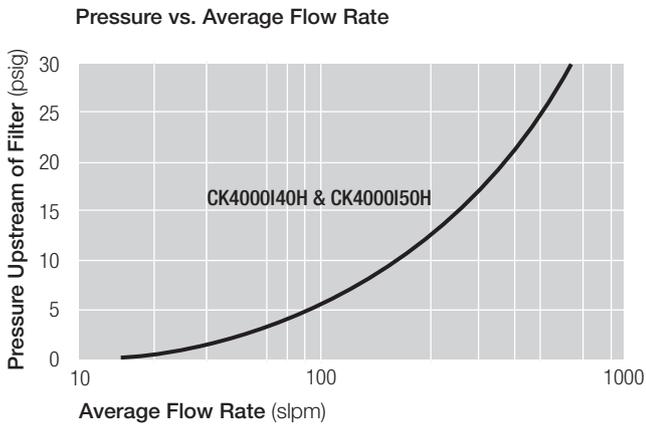
Specifications

Materials	<ul style="list-style-type: none"> • 316L SS filter and housing ≤ 0.51 μm / 20 μin R_a wetted surface finish • Fluorocarbon o-ring
Particle Removal Rating	<ul style="list-style-type: none"> • ≥ 3 nm • Particle contribution above background: <1 particle / (m³ or ft³) > 0.01 μm at 75 slpm
Connections	<ul style="list-style-type: none"> • ¼" Gasket seal inlet (VCR¹ or compatible) I40: NW40 ISO vacuum flange* I50: NW50 ISO vacuum flange* *Compatible with standard ISO bulkhead clamps

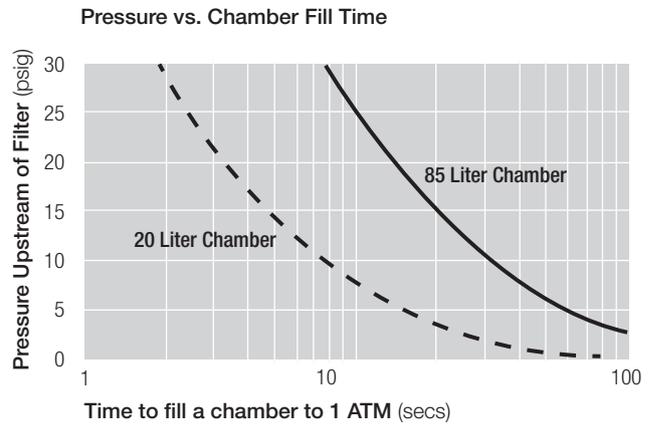
Maximum Vent-Up Cycles	<ul style="list-style-type: none"> • 100,000 cycles at maximum differential pressure: 0.7 MPa @ 20°C / 105 psid @ 68°F
Operating Conditions	<ul style="list-style-type: none"> • Maximum allowable differential pressure: 0.7 MPa @ 20°C / 105 psid @ 68°F • Maximum operating temperature: 100°C / 212°F (o-ring limited)
Design Flow Rate	<ul style="list-style-type: none"> • 75 slpm

¹ VCR is a trademark of Swagelok Co.

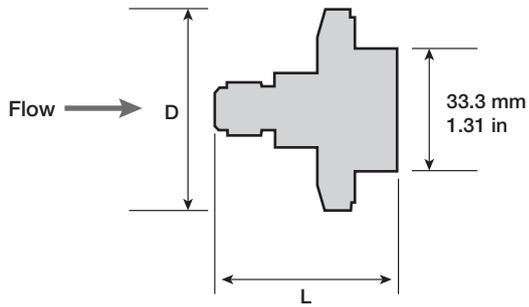
Pressure Drop vs. Gas Flow Rate



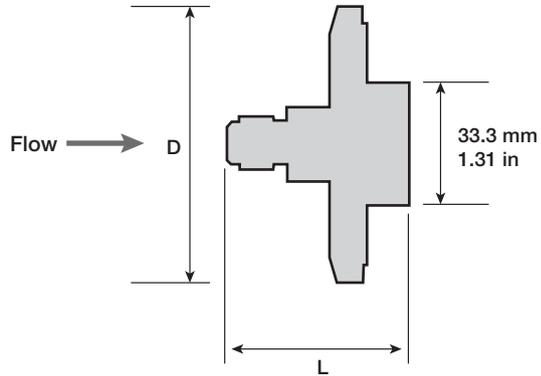
Pressure vs. Chamber Fill Time



Dimensions



NW40



NW50

Part Numbers / Ordering Information

Part Number	Description	Nominal Diameter (D) (mm / in)	Nominal Length (L) (mm / in)
CK4000I40H	NW40 ISO vacuum flange	55 / 2.16	49 / 1.93
CK4000I50H	NW50 ISO vacuum flange	75 / 2.95	49 / 1.93