

# **Gaskleen® V Series** Filter Assembly

## Description

The Gaskleen V filter assembly is Pall's latest generation gas filter assembly, designed to provide filtration of ultrahigh-purity semiconductor process gases. Our patented o-ringless design eliminates the need for an elastomeric seal. As a result, there are no downstream (wetted surface) welds.

The preconditioned option provides the cleanest PTFE filter assemblies available.

- 316L stainless steel housing
- All-fluoropolymer filter element
- High temperature and pressure resistance
- 100% helium leak tested
- Manufactured and packaged in a cleanroom environment



## Specifications

### Materials of Construction

Filter Medium	PTFE		
Support	Fluoropolymer		
Core and End caps	PFA		
Internal Surface Finish	≤ 0.18 μm / 7 μin R₄ ≤ 0.51 μm / 20 μin R₄		
Housing	Electropolished 316L stainless steel		
	Housing material meets or exceeds VIM/VAR specifications.		
	EU pressure equipment directive: Assemblies have been evaluated and designed using SEP per the European Union's Pressure Equipment Directive 2014/68/EU and are not CE marked.		
Internal Housing Surface Chemistry	Cr:Fe (≥1.2:1) chromium-enriched		

Removal Rating <sup>1</sup>	≥ 3 nm	
Preconditioned Cleanliness Option	< 10 ppb moisture contribution < 10 ppb total hydrocarbon (THC) contribution < 10 ppb oxygen (O <sub>2</sub> ) contribution	
Connections	<ul> <li>1/4 in, 1/2 in or 3/4 in Gasket Seal</li> <li>(VCR<sup>2</sup> or compatible)</li> <li>1/4 in 3/8 in or 1/2 compression fitting</li> </ul>	
Leak Rating	100% helium leak tested to 10 <sup>-9</sup> atm cm <sup>3</sup> /sec Design validated to 10 <sup>-11</sup> atm cm <sup>3</sup> /sec	
Design Pressure (Maximum Operating Pressure)	5.2 MPa @ 140 °C / 750 psig @ 284 °F	
Maximum Allowable Differential Pressure	0.7 MPa @ 20 °C / 100 psid @ 68 °F	
Maximum Allowable Reverse Differential Pressure	0.34 MPa @ 20 °C / 50 psid @ 68 °F	

<sup>1</sup> Particle rating based on laboratory testing with NaCl aerosol.

<sup>2</sup> VCR is a trademark of Swagelok Co.

### Pressure Drop vs. Gas Flow Rate





### **Dimensions**



Unit conversion: 100 kilopascals = 1 bar

## Part Numbers / Ordering Information

Part Number <sup>3</sup>	Description	Nominal Length (L) (mm / inch)	Preconditioned
SGLFPF6501VMM4	1/4 " Gasket seal, (VCR or compatible) male / male	127 / 5.0	No
SGLFPF6502VMM4	1/4 " Gasket seal, (VCR or compatible) male / male	127 / 5.0	Yes
SGLFPF6501VMM8	1/2 " Gasket seal, (VCR or compatible) male / male	127 / 5.0	No
SGLFPF6502VMM8	1/2 "Gasket seal, (VCR or compatible) male / male	127 / 5.0	Yes
SGLFPF6501VMM12	3/4 " Gasket seal, (VCR or compatible) male / male	140 / 5.5	No
GLFPF6501VMF4	1/4 "Gasket seal, (VCR or compatible) male / female	141 / 5.6	No
SGLFPF6501SM4	1/4 "Compression seal, (Swagelok <sup>4</sup> or compatible) male / male	113 / 4.4	No
GLFPF6501SM4	1/4 " Compression seal, (Swagelok or compatible) male / male	141 / 5.6	No
SGLFPF6501SM6	3/8 " Compression seal, (Swagelok or compatible) male / male	118 / 4.6	No
GLFPF6501SM6	3/8 " Compression seal, (Swagelok or compatible) male / male	148 / 5.8	No
SGLFPF6501SM8	1/2 "Compression seal, (Swagelok or compatible) male / male	119 / 4.7	No

<sup>3</sup>To order in box quantities of 24, please add "SB24" at the end of the part number. Example: SGLFPF6502VMM4SB24 <sup>4</sup>Swagelok is a trademark of Swagelok Co.



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Products in this document may be covered by one or more of the following patent numbers: US5543047; US5690765; US6113784; US7083564; US7318800; EP0982061; EP0667800; EP1380331.

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