Pall Corporation

Mini Gaskleen® High-Flow Filter Assemblies

Description

The Mini Gaskleen Hi-Flow filter assembly is designed for ultra-high-purity point-of-use gas filtration applications.

The unique filter design allows significantly higher flow capacity than previously offered in this envelope.

Features & Benefits

- 316L stainless steel electropolished housing
- All-fluoropolymer element
- Wide range of chemical compatibility
- High temperature and pressure capabilities
- Compact size for ease of installation
- 100% integrity tested
- Cleanroom manufactured and packaged
- 100% helium leak tested
- Housing meets or exceeds VIM VAR material specifications

Specifications

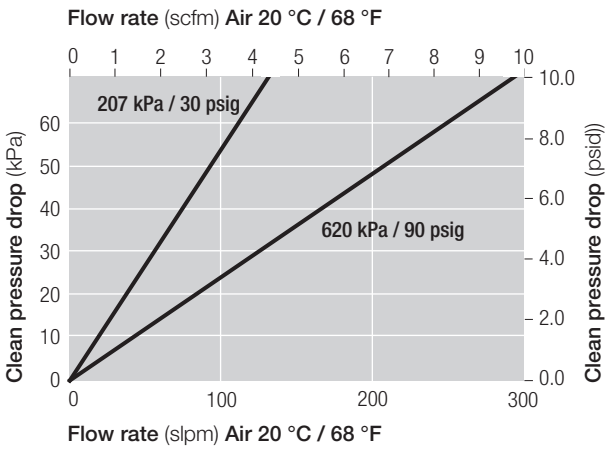
Materials of Construction

Components	Materials
Filter Medium	PTFE
Core	PFA
O-ring	FEP encapsulated fluorocarbon
Internal Surface Finish	≤ 0.13 µm / 5 µin Ra (gasket and butt weld fittings) ≤ 0.50 µm / 20 µin Ra (compression fittings)
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 chmistry	Cr:Fe (1:1) chromium-enriched

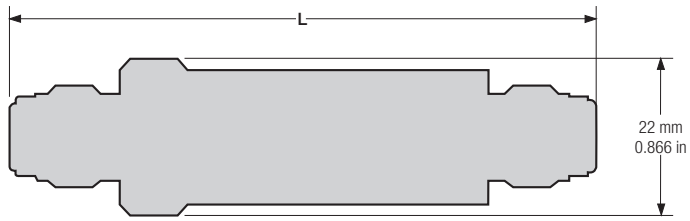
Removal Rating	≥ 3 nm
Connections	• 1/4 in gasket seal (VCR[1] or compatible) • 1/4 in butt weld (0.035" wall) • 1/4 in compression seal (Swagelok[1] or compatible)
Leak Rating	100% helium leak tested to 10^{-9} atm cm^3 / sec Design validated to 10^{-11} atm cm^3 / sec
Maximum Operating Pressure	20.7 MPa @ 121 °C / 3000 psig @ 250 °F
Maximum Forward Differential Pressure	0.69 MPa @ 40 °C / 100 psid @ 104 °F
Maximum Reverse Differential Pressure	0.34 MPa @ 21 °C / 50 psid @ 70 °F

[1] VCR and Swagelok are registered trademarks of Swagelok Company.

Pressure Drop vs. Gas Flow Rate



Dimensions



Preconditioned Options (3102 Series)

- < 10 ppb moisture contribution (qualified per SEMASPEC test method #90120397B-STD)
- < 10 ppb THC contribution (qualified per SEMASPEC test method #90120396B-STD)
- < 10 ppb O_2 contribution (qualified per SEMASPEC test method #90120398B-STD)
- No particle contribution above background ≤ 1 particle / (m^3 or ft^3)

Part Numbers / Ordering Information

Part Number	Description	Nominal Length (L) (mm / in)	Preconditioned
GLFPF3101VMM4	1/4 in Gasket seal (VCR or compatible) male / male	84 / 3.31	No
GLFPF3101BW4	1/4 in Butt weld, 0.89 mm / 0.035 in wall	90 / 3.54	No
GLFPF3101SM4	1/4 in Compression seal, male inlet/outlet (Swagelok compatible)	73 / 2.88	No
GLFPF3101VFM4	1/4 in Gasket seal (VCR or compatible) female inlet / male outlet	88 / 3.47	No
GLFPF3101VMF4	1/4 in Gasket seal Outlet (VCR or compatible) male inlet / female outlet	100 / 3.94	No
GLFPF3102VMM4	1/4 in Gasket seal (VCR or compatible) male / male	84 / 3.31	Yes
GLFPF3111VMM4	1/4 in Gasket seal (VCR or compatible) male / male	127 / 5.00	No

Unit conversion: 1 bar = 100 kilopascals

Pall Corporation

Microelectronics

25 Harbor Park Drive
Port Washington, NY 11050
+1 800 360 7255 toll free US
+1 516 484 3600 telephone
+1 516 801 9711 fax

Nihon Pall Ltd.
6-5-1, Nishishinjuku,
Shinjuku-ku
Tokyo 163-1325 Japan
+81 3 6901 5700 telephone
+81 3 5322 2109 fax

Visit us on the Web at microelectronics.pall.com

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