

Mini Gaskleen® High-Flow Filter Assembly (1.5 nm)



Data Sheet MEMGHFENa

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



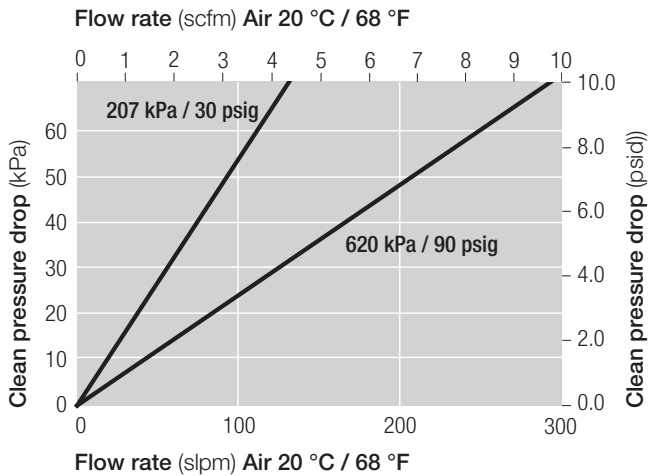
Specifications

Filter Medium	PTFE
Core and End Caps	PFA
O-ring	FEP encapsulated fluorocarbon
Internal Surface Finish	$\leq 0.13 \mu\text{m} / 5 \mu\text{in } R_a$ (gasket and butt weld fittings) $\leq 0.50 \mu\text{m} / 20 \mu\text{in } R_a$ (compression fittings)
Housing	Electropolished 316L stainless steel
Internal Housing Surface Chemistry	Cr:Fe (1:1) chromium-enriched
Removal Rating	$\geq 1.5 \text{ nm}$
Connections	1/4" gasket seal (VCR ¹ or compatible)
	1/4" butt weld (0.035" wall)
	1/4" compression seal (Swagelok ¹ or compatible)

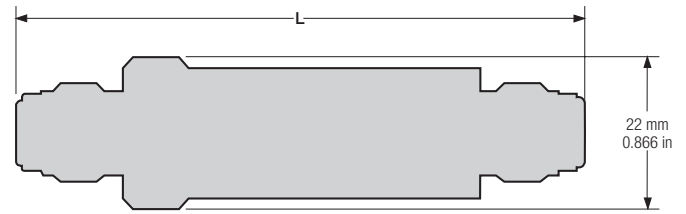
Leak Rating	100% helium leak tested to $10^{-9} \text{ atm cm}^3/\text{sec}$ Design validated to $10^{-11} \text{ atm cm}^3/\text{sec}$
Maximum Operating Pressure	20.7 MPa @ 121 °C / 3000 psig @ 250 °F
Maximum Forward Differential Pressure	0.69 MPa @ 40 °C / 100 psid @ 104 °F
Maximum Reverse Differential Pressure	0.34 MPa @ 21 °C / 50 psid @ 70 °F
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.

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 O₂ contribution (qualified per SEMASPEC test method #90120398B-STD)
- No particle contribution above background ≤ 1 particle / (m³ or ft³)

Part Numbers / Ordering Information

Part Number	Description	Nominal Length (L) (mm / in)	Preconditioned
GLFPF3101VMM4	¼" Gasket seal (VCR or compatible) male / male	84 / 3.31	No
GLFPF3101BW4	¼" Butt weld, 0.89 mm / 0.035" wall	90 / 3.54	No
GLFPF3101SM4	¼" Compression seal, male inlet / outlet (Swagelok compatible)	73 / 2.88	No
GLFPF3101VFM4	¼" Gasket seal (VCR or compatible) female inlet / male outlet	88 / 3.47	No
GLFPF3101VMF4	¼" Gasket seal Outlet (VCR or compatible) male inlet / female outlet	100 / 3.94	No
GLFPF3102VMM4	¼" Gasket seal (VCR or compatible) male / male	84 / 3.31	Yes
GLFPF3111VMM4	¼" Gasket seal (VCR or compatible) male / male	127 / 5.00	No

Unit conversion: 1 bar = 100 kilopascals