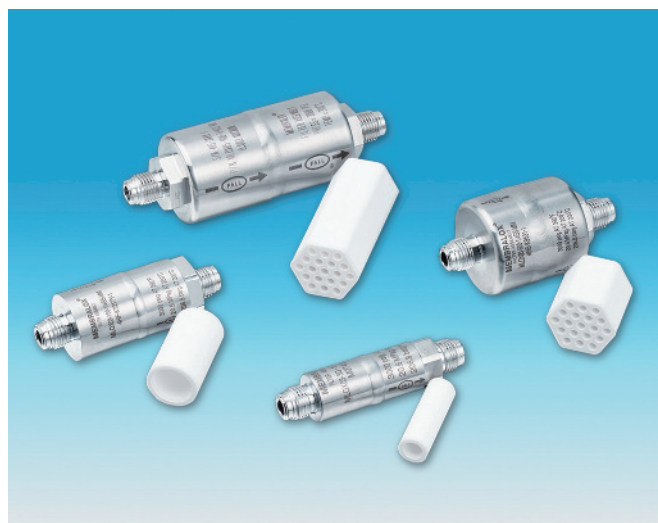


Description

The Membralox® ceramic filter assemblies are designed for ultra-high purity gas filtration applications, providing removal of particles ≥ 3 nanometer.

- Inert alumina medium with a precise pore structure
- 316L stainless steel housing
- Excellent temperature and corrosion resistance
- Superior dry down characteristics
- Clean room manufactured and packaged
- 100% helium leak tested



Specifications

Materials of Construction

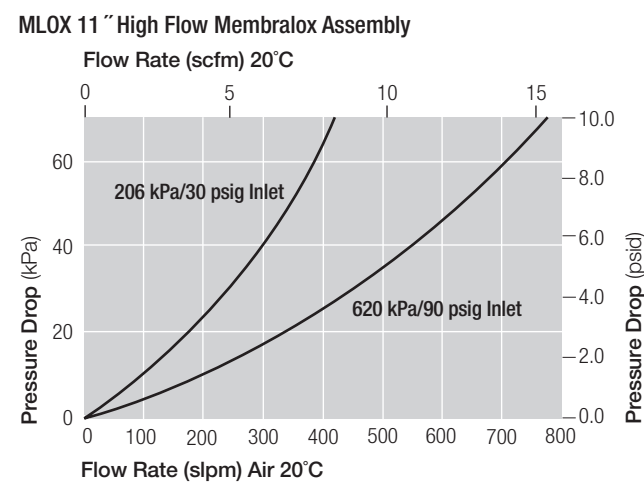
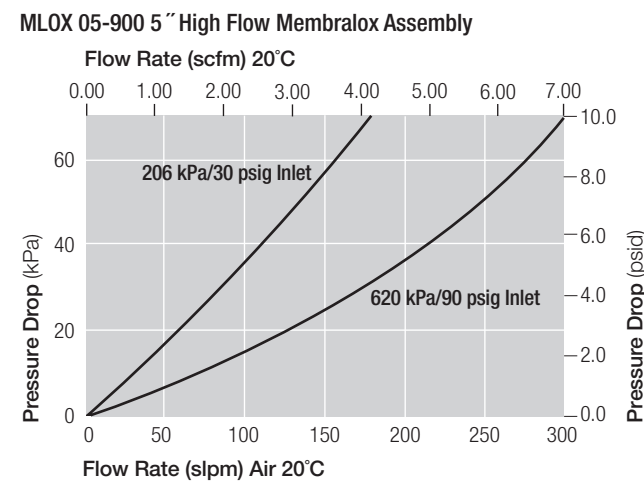
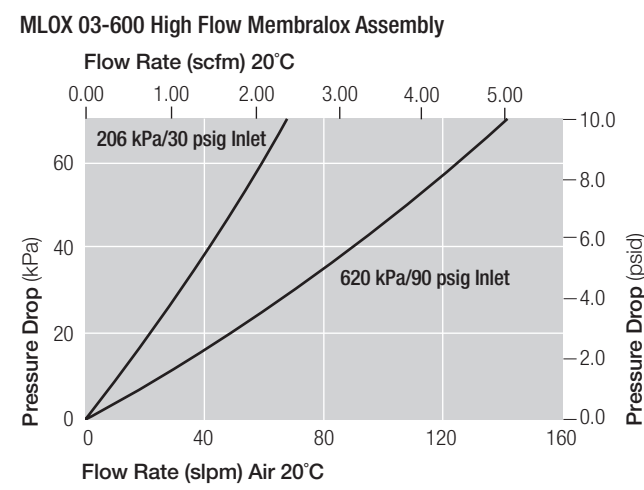
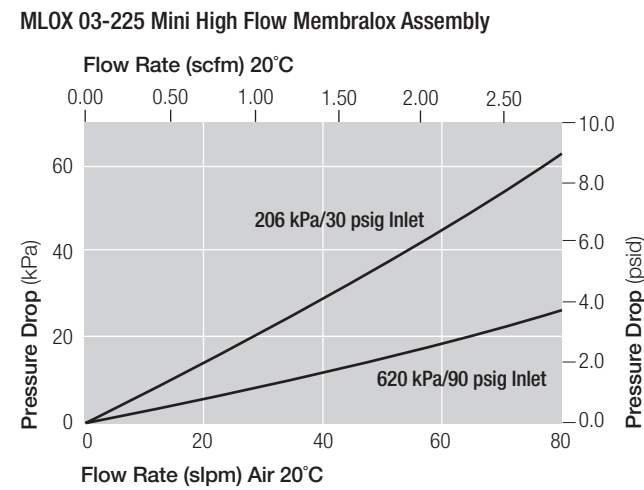
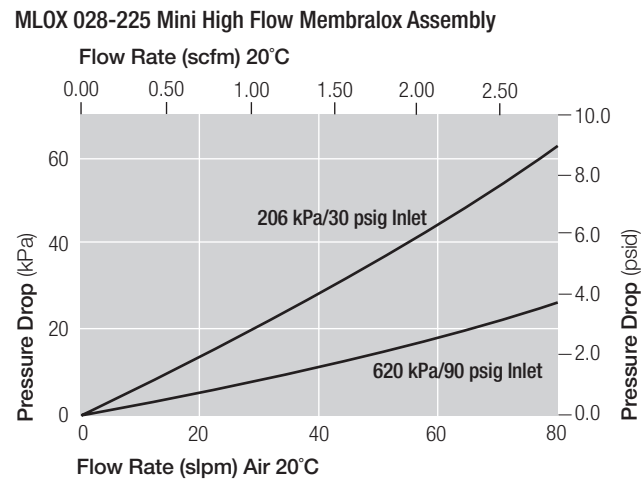
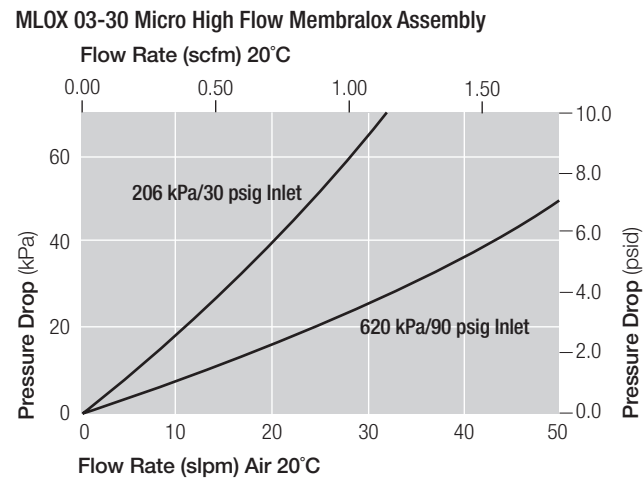
Filter Medium	High purity, inert alumina oxide
Internal Surface Finish	$\leq 0.38 \mu\text{m}$ / $15 \mu\text{in}$ R _a
Housing	Electropolished 316L stainless steel Housing material meets or exceeds VIM/VAR specifications. EU pressure equipment directive: Assemblies have been evaluated and designed using SEP per the European Union's Pressure Equipment Directive 2014/68/EU and are not CE marked.
Internal housing surface chemistry	Cr:Fe (1:1) chromium-enriched
Gaskets	PTFE

Removal Rating	$\geq 3 \text{ nm}$
Particle Removal Characteristics	10^9 particle reduction ¹
Connections	1/4 in, 1/2 in or 3/4 in Gasket Seal (VCR ² or compatible) 1/4 in buttweld or compression fitting
Leak Rating	100% helium leak tested to 10^{-9} atm cm^3/sec Design validated to 10^{-11} atm cm^3/sec
Design Pressure (Maximum Operating Pressure)	Non-CE marked parts 20.7 MPa @ 50 °C / 3000 psig @ 122 °F CE marked parts 13.8 MPa @ 50 °C / 2000 psig @ 122 °F
Maximum Allowable Differential Pressure	1.0 MPa @ 50 °C / 145 psid @ 122 °F

¹ Particle rating based on laboratory testing with NaCl aerosol.

² VCR is a trademark of Swagelok Co.

Pressure Drop vs. Gas Flow Rate Curves



Part Numbers / Ordering Information

Part Number ³	Fitting Type	Nominal Length (L) (mm/inch)	Nominal Diameter (D) (mm/inch)
MLOX 03-30-1/4BW	1/4 in Buttweld	84.1/3.31	20.8/0.82
MLOX 03-30-1/4GS-MM	1/4 in Gasket Seal, Male/Male	84.1/3.31	20.8/0.82
MLOX 03-30-1/4CS	1/4 in Compression Seal, Male/Male	84.1/3.31	20.8/0.82
MLOX 028-225-1/4GS-MF	1/4 in Gasket Seal, Male/Female	71.1/2.80	29.7/1.17
MLOX 03-225-1/4BW	1/4 in Buttweld	84.1/3.31	29.7/1.17
MLOX 03-225-1/4GS-MM	1/4 in Gasket Seal, Male/Male	84.1/3.31	29.7/1.17
MLOX 03-225-1/2GS-MM	1/2 in Gasket Seal, Male/Male	84.1/3.31	29.7/1.17
MLOX 03-600-1/4GS-MM	1/4 in Gasket Seal, Male/Male	84.1/3.31	42.4/1.67
MLOX 03-600-1/2GS-MM	1/2 in Gasket Seal, Male/Male	84.1/3.31	42.4/1.67
MLOX 05-900-1/4GS-MM	1/4 in Gasket Seal, Male/Male	127.0/5.00	42.4/1.67
MLOX 05-900-1/2GS-MM	1/2 in Gasket Seal, Male/Male	127.0/5.00	42.4/1.67
MLOX 11-2700-1/2GS-MM	1/2 in Gasket Seal, Male/Male	285.1/11.22	42.4/1.67
MLOX 11-2700-3/4GS-MM	3/4 in Gasket Seal, Male/Male	285.1/11.22	42.4/1.67

³For CE marked parts, add a “-CE” suffix to the part number (example, MLOX 03-30-1/4BW-CE).

Other configurations are available upon request. Please consult Pall Microelectronics.

Unit Conversion: 1 bar = 100 kilopascals