

Small Flow Emflon® Filter



Description

Emflon® filter elements are designed for ≥ 3 nanometer ($0.003 \mu\text{m}$) filtration of inert gas applications used in the production of semiconductor devices.

- Wide variety of applications
- High particle removal efficiency
- Flow rates up to 50 scfm
- High flow rates vs. differential pressure
- Optimized cartridge design
- Manufactured in a cleanroom environment
- 100% integrity tested

Specifications

Materials

- Medium: PTFE
- Core, cage, and end caps: Polypropylene
- Support and drainage: Polypropylene
- O-rings: Viton¹, Viton-A

Removal Rating

- $\geq 0.003 \mu\text{m}$

Configurations

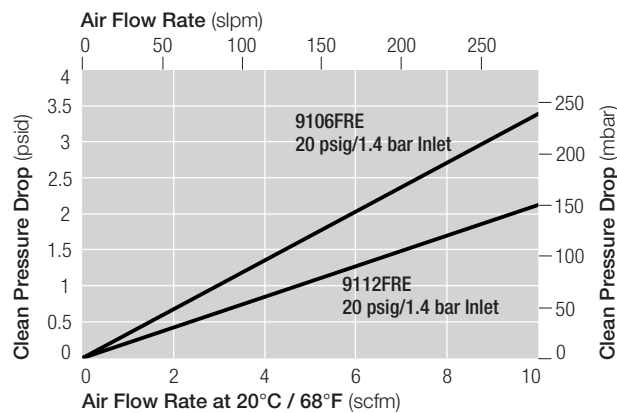
- Nominal length: 1"/25 mm, 1.75"/44 mm, 2.5"/64 mm, 5"/127 mm
- Diameter: 2.18"/55 mm
- O-ring size/end caps:
 - 115 internal/flat end (9106/9112)
 - 116 internal/flat end (2230/4463)
 - 118 external/flat end (4440)
 - 209 internal/flat end (9130/9163)

Operating Conditions

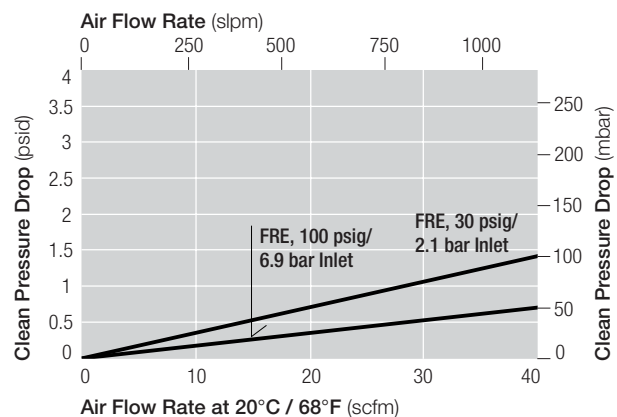
- Maximum Temperature: 194°F/90°C
- Maximum Forward Differential Pressure:
 - 80 psid @ 120°F/5.5 bar @ 50°C
 - 50 psid @ 194°F/3.5 bar @ 90°C

¹ Viton is a trademark of DuPont Dow Elastomers

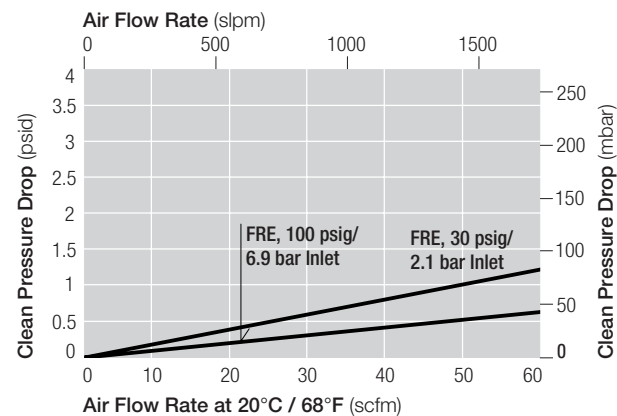
Pressure Drop vs. Gas Flow Rate



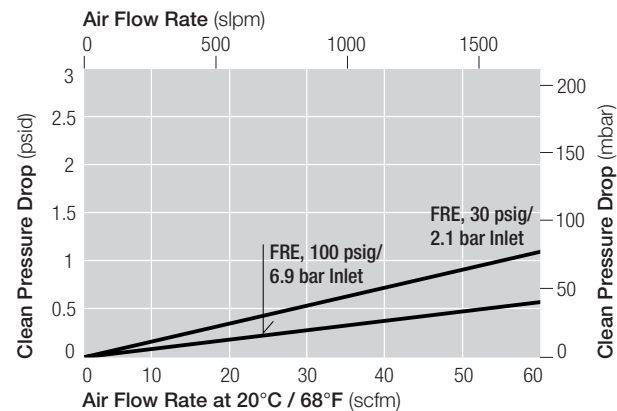
Cartridge Style Junior 9106/9112



Cartridge Style Junior 2230/9130



Cartridge Style Junior 4440



Cartridge Style Junior 4463/9163

Part Numbers / Ordering Information

Part Number	Removal Rating (µm)	Nominal Length (in / mm)	O-Ring Size/Material
MCY9106FREH	0.003	1 / 25	115 / Viton (Internal)
MCY9112FREH	0.003	1.75 / 44	115 / Viton (Internal)
MCY9130FREH	0.003	2.5 / 64	209 / Viton (Internal)
MCY9163FREH	0.003	5 / 127	209 / Viton (Internal)
MDY2230FREHF	0.003	2.5 / 64	116 / Viton A (Internal)
MCY4463FREHF	0.003	5 / 127	116 / Viton A (Internal)
MCY4440FREHF	0.003	5 / 127	118 / Viton A (External)

Unit conversion: 1 bar = 100 kilopascals