

Ultra High Purity Filters

FP Series

Introduction

FP Series Ultra High Purity Filters feature a removal rating of 0.003 μm . Designed with a PTFE filter element, these filters offer excellent chemical compatibility, making them ideal for filtering gases in various semiconductor manufacturing processes such as CVD, PVD, and dry etching.



Features

- ⦿ Particle removal rating of $\geq 0.003 \mu\text{m}$, with a filter efficiency greater than 99.999999% at maximum flow rate
- ⦿ Excellent chemical compatibility
- ⦿ 100% helium leak tested

Technical Data

Material	Filter Element	PTFE		
	Support	PFA		
	Housing	316L SS or 316L SS VAR		
Removal Rating	$\geq 0.003 \mu\text{m}$			
Filter Efficiency (Log Reduction Value)	> 99.999999% (9LRV)			
Helium Leak Rate	$< 1 \times 10^{-9} \text{ std-cm}^3/\text{s}$			
Recommended Work Flow Rate	0~60 slpm (0~2.1 scfm)	0~120 slpm (0~4.2 scfm)	0~500 slpm (0~17.7 scfm)	0~1000 slpm (0~35.3 scfm)
Max. Working Pressure	3000 psig (207 bar)		1000 psig (68.9 bar)	
Max. Positive Differential Pressure	58 psig (4 bar) @23 °C		87 psig (6 bar) @23 °C	
Max. Negative Differential Pressure	10 psig (0.7 bar) @23 °C		44 psig (3 bar) @23 °C	
Max. Working Temperature	-22 ~ 248 °F (-30 ~ 120 °C)			

Process Specification

Item	Process Specification	Ultra High Purity Process (FC-03)
Material		316L SS, 316L SS VAR
Wetted Surface Roughness		Ra 5 μin . (0.13 μm)
Polishing Process		Electropolished
Assembly Environment		ISO Class 4 (FS 209E Class 10 equivalent) cleanroom
Packaging		Double bagged in cleanroom

Fittings

Valves

Regulators

Filters

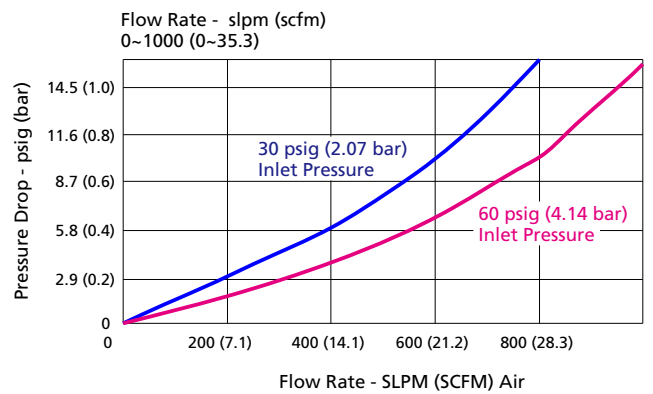
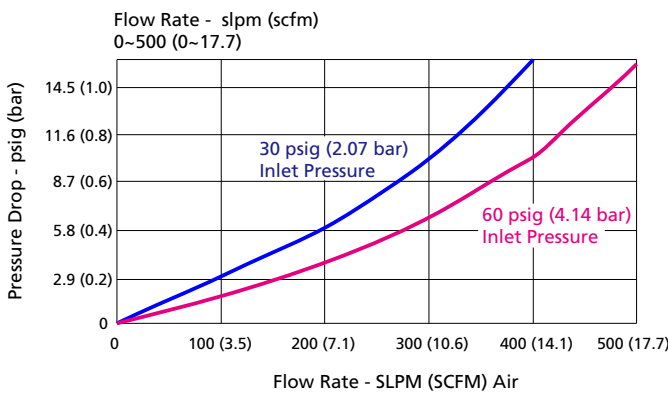
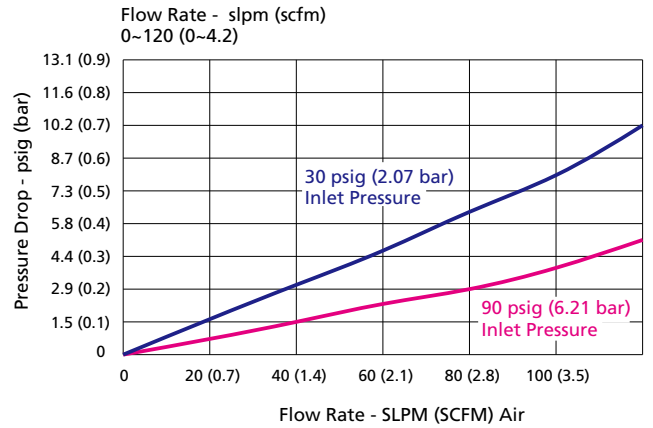
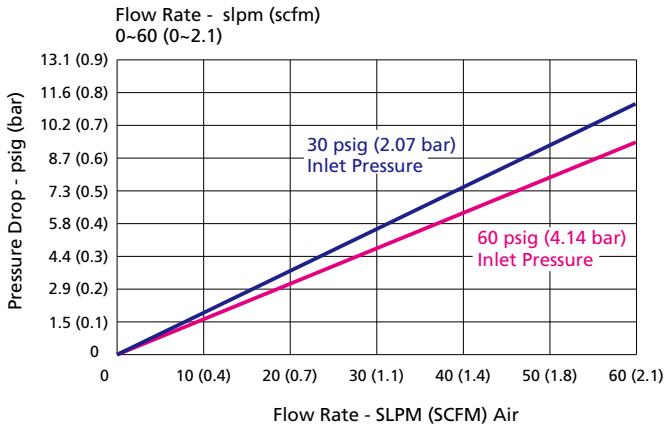
Tubing

Integrated Systems

Other Products

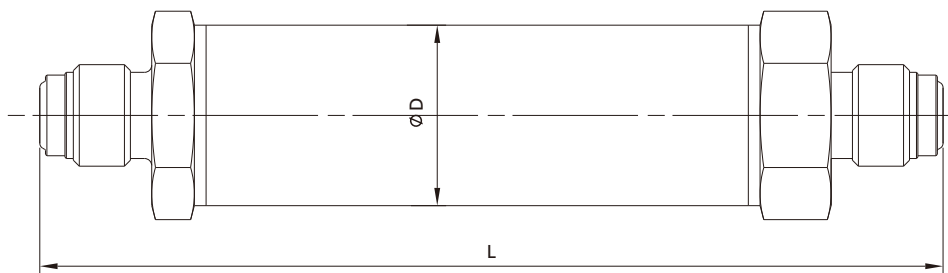
Technical Information

Flow Data



Dimensions and Ordering Information

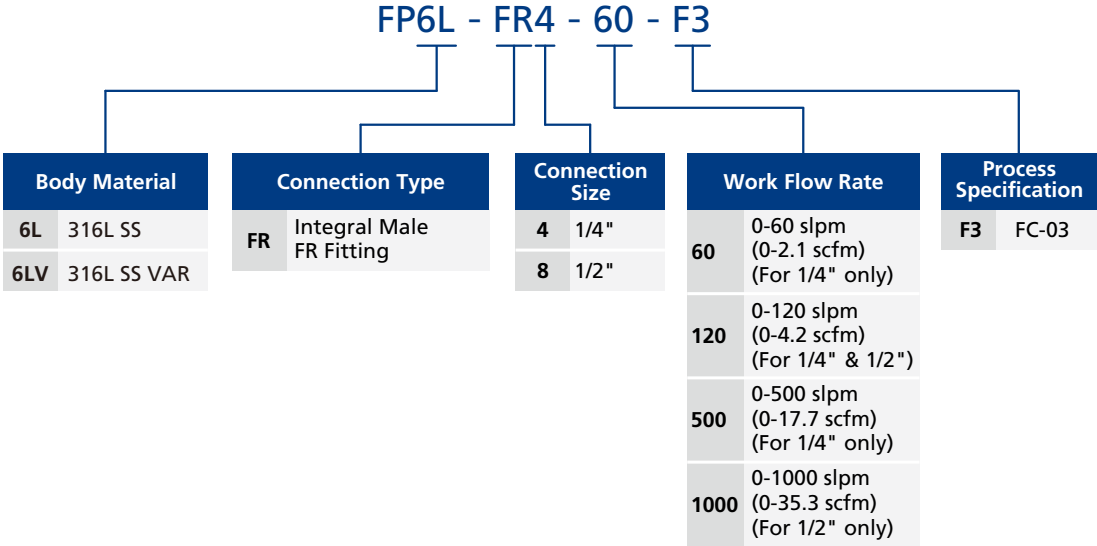
Dimensions in in. (mm) are for reference only and subject to change.



Basic Ordering Number	Connection Type and Size	L in.(mm)	Ø D in.(mm)
FP6L-FR4-60-F3	1/4" Male FR Fitting	3.31 (84.1)	0.75 (19.1)
FP6L-FR4-120-F3	1/4" Male FR Fitting	5.00 (127.0)	1.05 (26.6)
FP6L-FR4-500-F3	1/4" Male FR Fitting	5.00 (127.0)	1.30 (33.1)
FP6L-FR8-120-F3	1/2" Male FR Fitting	5.25 (133.4)	1.05 (26.6)
FP6L-FR8-1000-F3	1/2" Male FR Fitting	5.00 (127.0)	1.30 (33.1)

Fittings
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Ordering Number Description



Note: "Ordering Number Description" is a reference to understand the combination rules of FITOK product.
 Not all combinations are available.

- Fittings
- Valves
- Regulators
- Filters
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- Integrated Systems
- Other Products
- Technical Information