



VPG-A6 In-line Process Gas Filter



Ultra-high efficiency filtration down to 2nm and below

The industry leading VPG-A6 Vapor Process Gas filter is an ultra-low pressure drop, ultra-high efficiency in-line filter designed for vapor and process gas filtration. This patent-protected 316L SS filter is chemically- and thermally-resistant and provides up to 99.999999999% (twelve 9s) of efficiency at 2.5nm - an estimated particle penetration of less than one part per trillion (ppt). The extremely low pressure drop of this filter makes it easier to work in ultra-low pressure environments and reduces the risk of gas phase reactions occurring in the filter.

Conventional high-purity, point-of-use gas filters are used in a compressed gas line for particle removal. The VPG-A6 filter is also used downstream of a vaporizer under vacuum flow conditions to prevent particles, which could potentially be in the gas/vapor mixture, from entering the Chemical Vapor Deposition (CVD) or Atomic Layer Deposition (ALD) process chamber. Due to its unique design, the VPG-A6 filter has more thermal mass than competitive offerings, making it particularly well suited for use downstream of a vaporizer in a heated line – acting as almost a second stage heat exchanger.

Applications

- Vapor process gas
- Ultra-high purity gas
- High temperature
- Inert or reactive gases
- High and ultra-high vacuum
- Semiconductor manufacturing

Features & Benefits

- 316 Stainless Steel
- Ultra-high particle removal efficiency
- Ultra-low pressure drop
- High particle removal efficiency
- Solid core – more thermal mass
- 1/2" VCR fittings

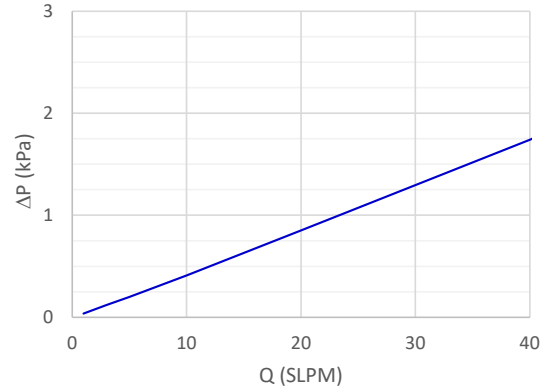
Specifications

VPG-A6 In-line Process Gas Filter

Specifications		
Efficiency* @ 1 SLPM	2.5nm	99.9999999999% (twelve 9s)
	10 nm	99.99999999% (ten 9s)
	50 nm	99.999997% (seven 9s)
Filter Media	Sintered 316L SS Powder	
Wetted Materials	Stainless Steel 316L	
Temperature Range (°C)	<400 (inert gases)	
Max. Operating Pressure (psig)	2500	
Max. Differential Pressure (psid)	500	
Flow Rate Range (SLPM)	0-30	
Weight (kg/lb)	0.45/1	
Fittings**	1/2" male VCR with 7/8-14 thread	

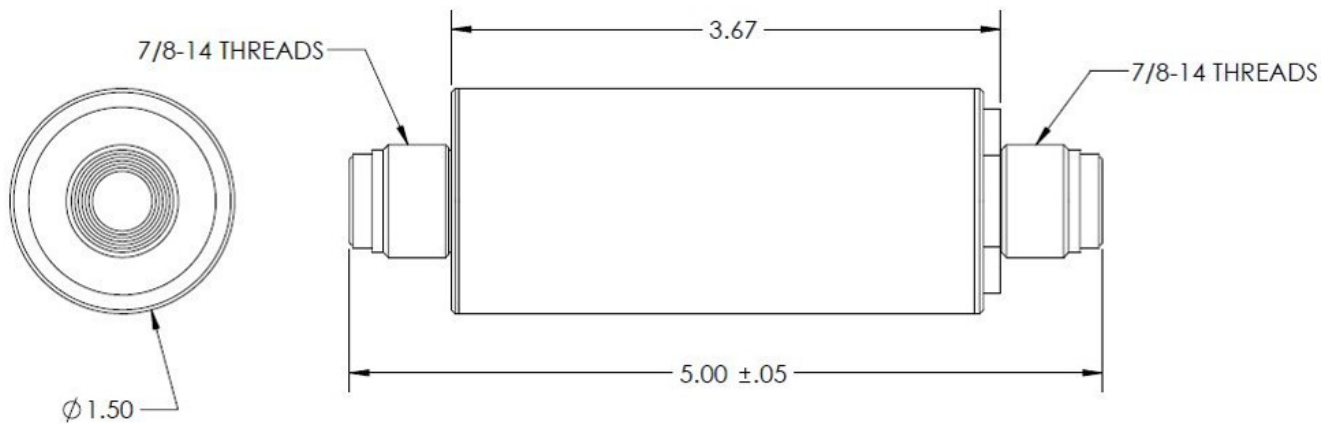
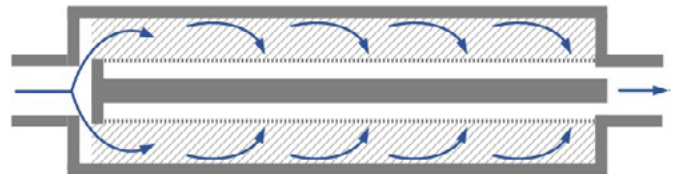
*Filtration efficiency at atmospheric pressure
 **Alternative fitting options available by request

VPG-A6 Pressure Drop vs Flow Rate



Patent-protected Design

Cross-flow construction provides highly efficient filtration with ultra-low pressure drop. 316L SS sintered powder media provides large surface area for long filter lifetimes.



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