

# VPG-A3 IN-LINE PROCESS GAS FILTER

HIGH EFFICIENCY FILTRATION DOWN TO 2nm AND UP TO 100 SLPM

The VPG-A3 Vapor Process Gas filter is an ultra-low pressure drop, highly-efficient in-line filter designed for vapor and process gas filtration. This patent-protected 316L SS filter, is chemically- and thermally-resistant and can be used up to 100 SLPM. 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.



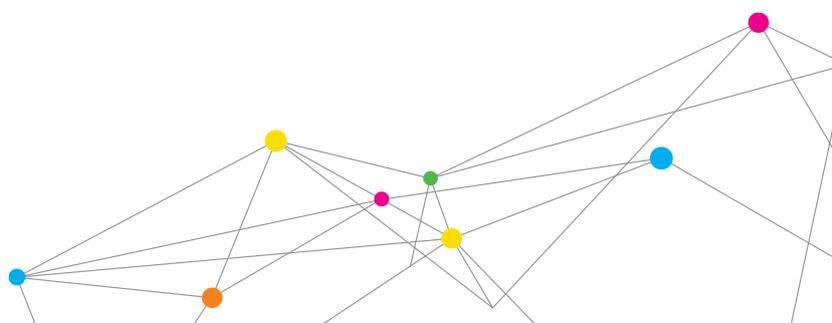
Conventional high-purity, point-of-use gas filters are used in a compressed gas line for particle removal. The VPG-A3 filter is also used downstream of a vaporizer under vacuum flow conditions to prevent particles, which could potentially be in the gas/vapor mixture, from entering the Chemical Vapor Deposition (CVD) or Atomic Layer Deposition (ALD) process chamber. The VPG-A3 filter is made from 316L SS sintered powder media and has a large surface area, giving the filter a long lifetime.

## Applications

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

## Features and Benefits

- + 316 Stainless Steel
- + Large surface area - long life
- + Use up to 100 SLPM
- + High particle removal efficiency
- + Ultra-low pressure drop
- + 1/2" VCR fittings



# SPECIFICATIONS

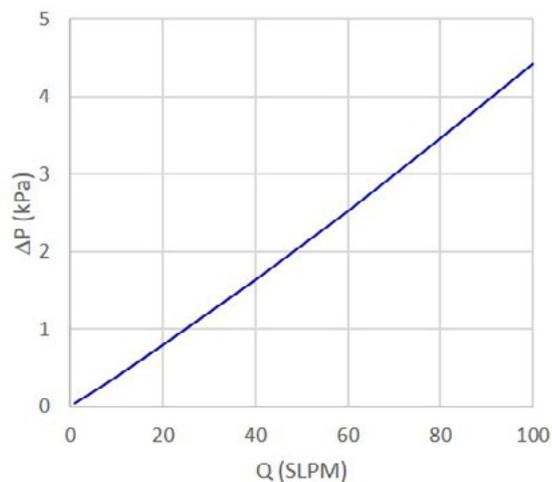
## VPG-A3 IN-LINE PROCESS GAS FILTER

| Specifications                    |                                |  |
|-----------------------------------|--------------------------------|--|
| Efficiency* @ 1 SLPM              | 2.5nm<br>10 nm<br>50 nm        | 99.9999999% (nine 9s)<br>99.9999% (six 9s)<br>99.99% (four 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)            | 0-100                          |  |
| Weight (kg/lb)                    | 0.45/1                         |  |
| Fittings**                        | ½" male VCR with 7/8-14 thread |  |

\*Filtration efficiency at atmospheric pressure

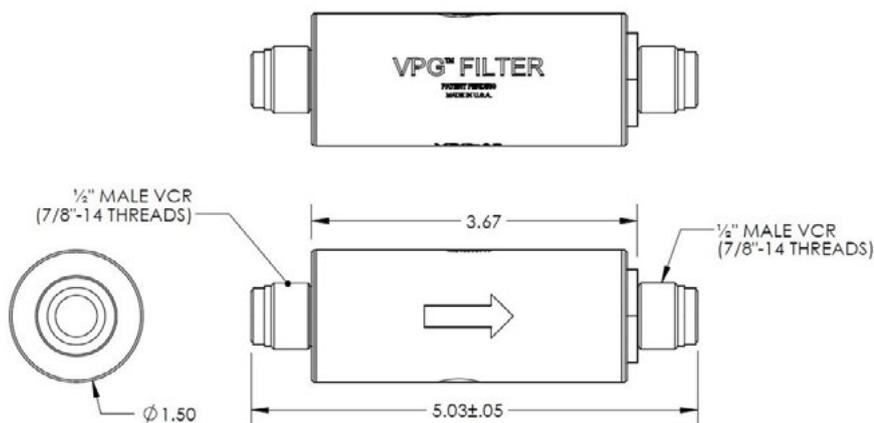
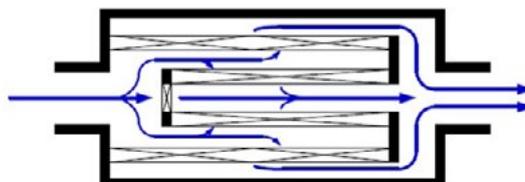
\*\*Alternative fitting options available by request

VPG-A3 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.



Specifications are subject to change without notice.

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