

# GasPro™ TEM-400

## Ultra-High Flow PTFE-316L in-Line Filter

GasPro™ TEM-400 Series filters are specifically designed for filtration of semiconductor gases when flow rates to 2,123 l/min (75 scfm) are required. This all-welded assembly will deliver 0.003 micron particle retention where a high flow rate is required and space is limited. A variety of fitting types is offered for easy installation.

A PTFE Membrane and Polypro supported Cartridge is enclosed in a 316L stainless steel electro-polished welded housing. Final assembly is purged with filtrated nitrogen for initial cleanliness.



### Features and Benefits

- **3nm Filter Rating**  
Our porous PTFE filters provide efficient particle retention efficiency at  $\geq 0.003\mu\text{m}$
- **High Flow**  
GasPro™ TEM-400 is rated to 2,123 l/min (75 scfm)
- **PTFE Media / Polypropylene / Viton construction**  
0.19 m<sup>2</sup> (2 ft<sup>2</sup>) PTFE filter media provides excellent flow and chemical resistance.
- **Electro-polished 316L housing**  
The filter assemblies have a 10Ra electro-polished 316L stainless steel housing to prevent corrosion and particle formation.
- **Temperature and Pressure**  
Operating temperature rating of 93.3°C (200°F) and operating pressure rating of 17.2 bar (250 psig).
- **Cleanroom manufactured**  
Our GasPro™ TEM-400 filters are manufactured in a cleanroom to insure particle free, chemically clean, and organic-free handling and bagging to provide high out-of-package cleanliness. Additional preconditioning is optional.
- **ISO 9001 quality system**  
Manufacturing quality and consistency is maintained in a cleanroom using ISO 9001 certified quality system. Each filter is helium leak checked to greater than 1x10<sup>-9</sup> atm cc/second.
- **100% helium tested to greater than 1x10<sup>-9</sup> atm cc/second.**

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# Specifications

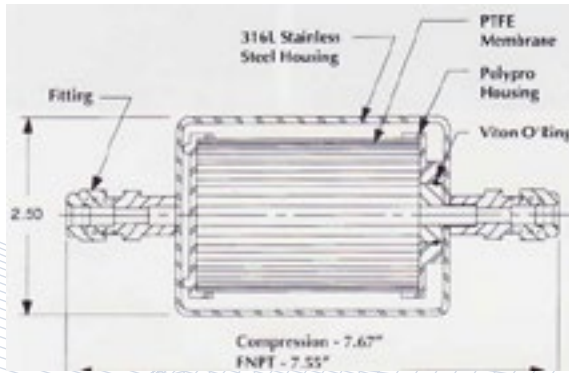
## Part Numbers / Ordering Information

Part Number	Inlet / Outlet Fittings	Filter Media / Housing	Other Materials*	Length (in/mm)
TEM-428-6	3/8" FNPT inlet/outlet	PTFE / 316L Stainless Steel	Polypropylene/Viton	7.55/192
TEM-428-8	1/2" FNPT inlet/outlet			7.55/192
TEM-411-6	3/8" compression inlet/outlet			7.67/195
TEM-411-8	1/2" compression inlet/outlet			7.67/195
TEM-415-6	3/8" male face seal inlet/outlet			8.6/218
TEM-415-8	1/2" face seal female inlet/male outlet			8.6/218
TEM-450-6	3/8" butt weld			7.7/196
TEM-450-8	1/2" butt weld			7.7/196
TEM-450-12	3/4" butt weld			7.7/196

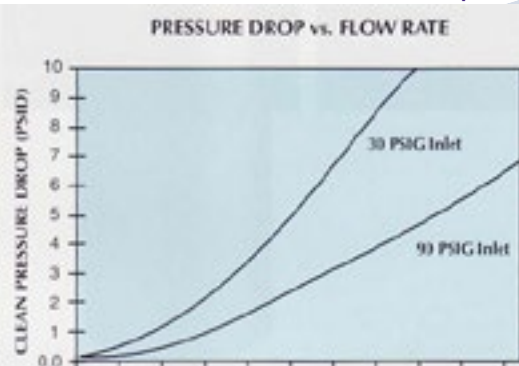
\* FEP encapsulated FKM O-rings are available upon request.

\* Not all fittings, lengths, and part numbers are shown on the chart. Please contact your Porvair or an approved Porvair distributor for special length and fitting options.

### Dimensions



### Gas Flow Rate / Pressure Drop



### Filter Chart

TEM Model	Fitting Description
TEM-42B-6	3/8" FNPT Fittings
TEM-428-8	1/2" FNPT Fittings
TEM-42B-6	3/8" Swagelck Fittings
TEM-411-8	1/2" Swagelck Fittings
TEM-411-6	3/8" VCR Fittings
TEM-415-8	1/2" VCR Fittings
TEM-450-BW8	3/8" Butt Welding
TEM-450-BW8	1/2" Butt Weld Fitting
TEM-450-BW12	3/4" Butt Weld Fitting

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filtration group

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