

# GasPro™ TEM-500

PTFE-316L In-Line Filter



GasPro™ TEM-500 series filters are specifically designed for the filtration of semiconductor grade inert gases and CDA (clean dry air). This all-welded assembly will deliver 0.003 micron particle retention.

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

A variety of fitting types are offered for easy installation.

## Applications

- General and process inert facilities gases for semiconductor, flat panel display, and other high-purity applications.
- Clean-dry air (CDA\*) for critical metrology, test and lithography applications.

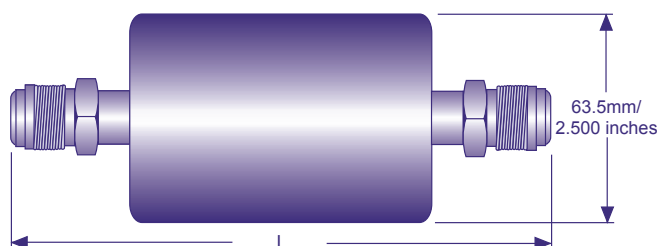
*\* In CDA and other facilities gas filtration applications, flow, temperature, particle challenge, and other differences unique to each system, can affect overall filtration performance, and may affect the useful filtration period for each filter.*

## Specifications

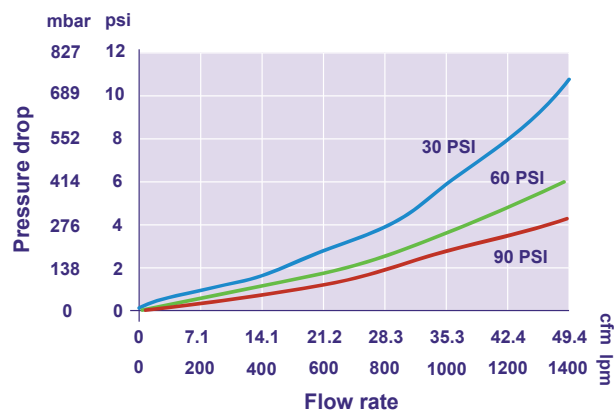
- **3nm filter rating**  
Our porous PTFE filters provide efficient particle retention efficiency at 0.003µm.
- **Maximum operating temperature**  
80°C (176°F) in inert gas. For CDA please consult Porvair for suggested filter lifetime in applications above 60°C (140°F).
- **Maximum operating pressure**  
17.2bar (250psig) at 20°C (68°F).

## Features

- **PTFE media / polypropylene / Viton® construction**  
0.11 m<sup>2</sup> (1.2 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.
- **Cleanroom manufactured**  
Our GasPro™ TEM-500 filters are manufactured in a cleanroom to ensure particle free, chemically clean, and organic-free handling and bagging to provide high out-of-package cleanliness. Additional preconditioning is optional.
- **Multiple fitting options**  
Ease of installation and flexibility. Special fitting options including tri-clamp(clover) and sanitary types may be available upon request.
- **100% helium**  
100% helium leak tested to greater than 1 x 10<sup>-9</sup> atm cc/second.



Gas flow rate Vs Pressure drop (1/2" VCR)



## TEM-500 Part Numbers and Ordering Information

Part number	Inlet/outlet fittings	Filter media/housing	Other materials*	Length (L)
TEM-511	1/4" compression inlet/outlet	PTFE / 316L stainless steel	Polypropylene Viton®	131.3mm (5.17")
TEM-511-6	3/8" compression inlet/outlet			131.3mm (5.17")
TEM-511-8	1/2" compression inlet/outlet			129.0mm (5.08")
TEM-511-12	3/4" compression inlet/outlet			142.2mm (5.60")
TEM-513-8	1/2" face seal female inlet/male outlet			156.0mm (6.14")
TEM-515	1/4" male face seal inlet/outlet			139.7mm (5.50")
TEM-515-6	3/8" male face seal inlet/outlet			156.0mm (6.14")
TEM-515-8	1/2" male face seal inlet/outlet			156.0mm (6.14")
TEM-515-12	3/4" male face seal inlet/outlet			156.0mm (6.14")
TEM-515-16	1" male face seal inlet/outlet			165.1mm (6.50")
TEM-528-6	3/8" FNPT inlet/outlet			133.4mm (5.25")
TEM-528-8	1/2" FNPT inlet/outlet			146.6mm (5.77")
TEM-528-12	3/4" FNPT inlet/outlet			150.9mm (5.94")
TEM-550-8	1/2" butt weld inlet/outlet			137.2mm (5.4")
TEM-550-12	3/4" butt weld inlet/outlet			137.2mm (5.4")

\* 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 representative or an approved Porvair distributor for special length and fitting options.

**porvair**  
filtration group

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