



# Guardian™ ATX Disposable Filters

Delivering protection for high-purity chemicals with safe, disposable filters optimized for use in ultra-clean chemical delivery systems



Chem-Line™ II Style

Chem-Line I Style

Disposable filters are available in a wide range of fitting types.

## Superior Filtration Efficiency and High Flow

The combination of a high-efficiency PTFE membrane and a large filtration-area device allows Guardian ATX disposable filters to deliver low particle counts without compromising flow rates, even with high-viscosity fluids such as sulfuric and phosphoric acids. Recommended applications for Guardian ATX disposable filters include filtration of sulfuric acid, nitric acid, acetic acid, phosphoric acid, hydrochloric acid, hydrogen peroxide, organic strippers, and various nonflammable solvents. The Guardian ATX disposable filter is ideal for single pass and spray tool filtration applications and bulk chemical delivery.

### Exceptional Cleanliness

Rigorous flushing and cleaning during the manufacturing process ensure that Guardian ATX disposable filters consistently meet the high-purity requirements of demanding wafer processing environments. This process minimizes ionic and organic extractables, and prevents contamination of ultra-clean chemicals. Disposable filters eliminate handling of filter elements and reduces the possibility of contamination, making these filters ideal for final filtration applications that require high-purity fluids. Plus, disposable filters reduce handling and potential operator exposure to hazardous chemicals.

### Compact Design

The Guardian ATX disposable permits fast, easy changeout because the compact design provides a space-saving advantage over cartridge filters. For example, changing cartridge filters requires enough room in the filtration system to remove the housing bowl, while Guardian disposable filters swap out with a minimum of clearance. The disposable's compact design provides a smaller "footprint" for the filter within the filtration system.

## Product Features

Highly retentive hydrophobic PTFE membrane made of Teflon® fluoropolymer resin

Large membrane area

All-fluoropolymer materials of construction

Compact, disposable design

Several configurations and connection options

Designed without O-rings

## Product Benefits

Provides excellent removal of small, critical-size particles to ensure low particle counts in chemical delivery systems.

Produces high flow in chemical delivery systems to deliver process chemicals to the point-of-use rapidly and efficiently.

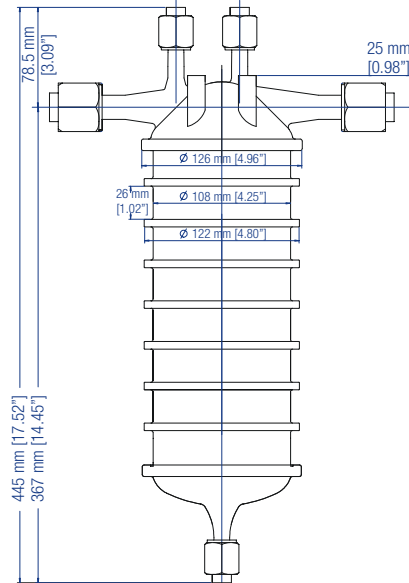
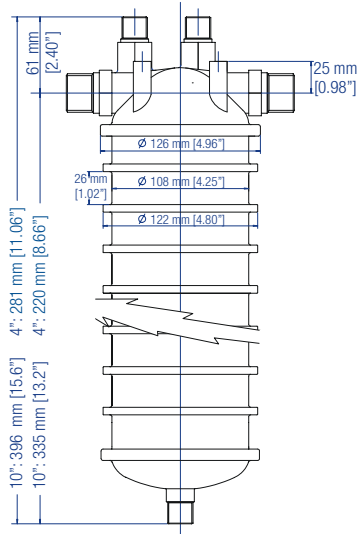
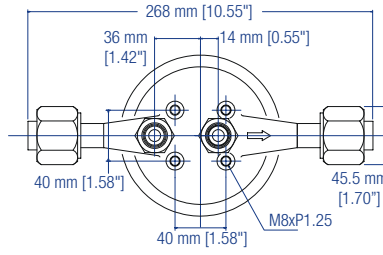
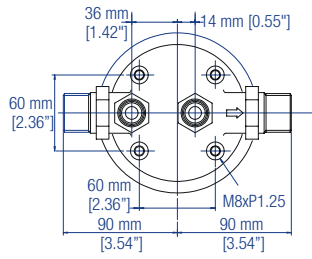
Provides a broad range of chemical compatibility. Suitable for a variety of chemicals and solvents.

Allows quick installation and minimizes downtime while limiting the handling of hazardous chemicals during the installation and disposal processes.

Simplified installation: allows convenient retrofitting and easy filter changeout.

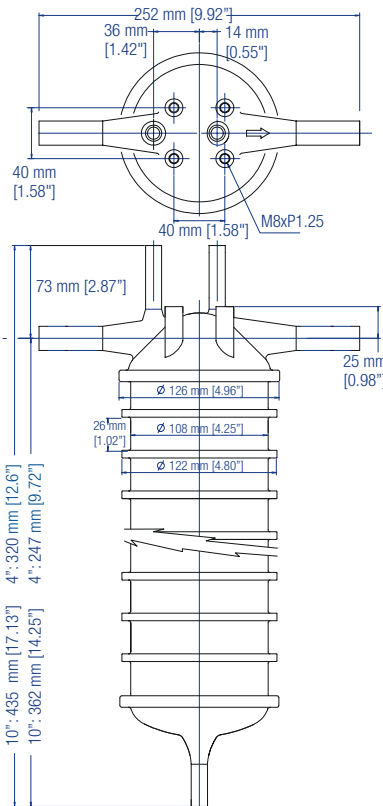
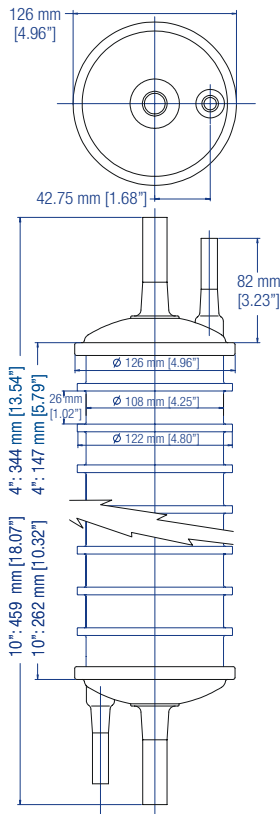
Design incorporates no O-rings to avoid potential sources of contamination.

## Chem-Line I Disposables Dimensions



**T-Line 3/4" Super Type Pillar Fittings**

**T-tube 3/4" Super Type Pillar Fittings**

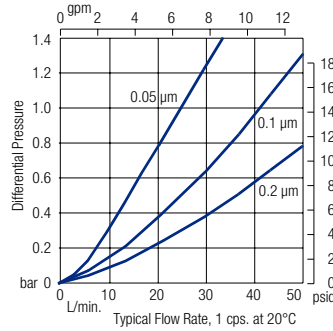


**S-Line 3/4" Tube**

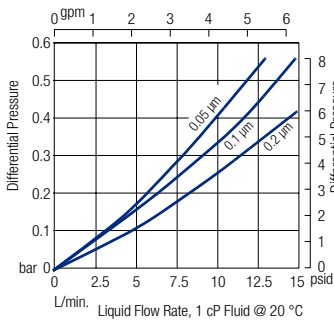
**T-tube 3/4"**

# Guardian ATX Disposable Filters - Dimensions, Flow Rates

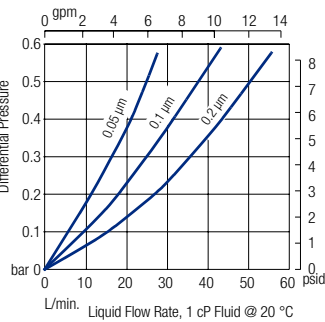
## Flow Rates



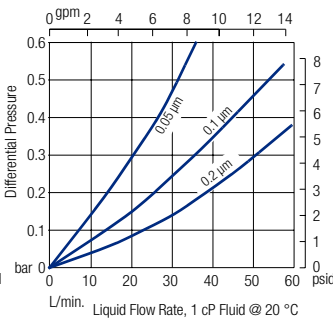
Guardian ATX 4" Disposable Filters  
3/4" Fittings



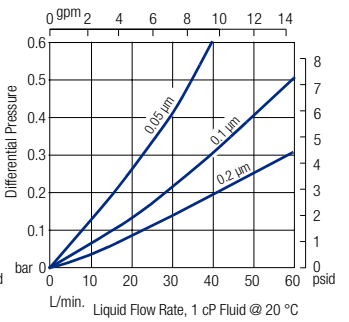
Guardian ATX 10" Disposable Filters  
3/8" Fittings



Guardian ATX 10" Disposable Filters  
1/2" Fittings



Guardian ATX 10" Disposable Filters  
3/4" Fittings

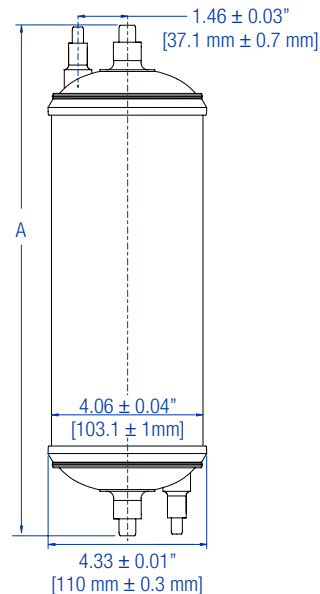


Guardian ATX 10" Disposable Filters  
1" Fittings

## Chem-Line II Disposables Dimensions

Inlet/Outlet Fittings	Dim A	
	10" Filters	
3/8"	13.59 ± 0.05"	[345.2 mm ± 1.3 mm]
1/2"	13.95 ± 0.05"	[354.3 mm ± 1.3 mm]
3/4"	14.03 ± 0.05"	[356.4 mm ± 1.3 mm]
1"	14.43 ± 0.05"	[366.5 mm ± 1.3 mm]

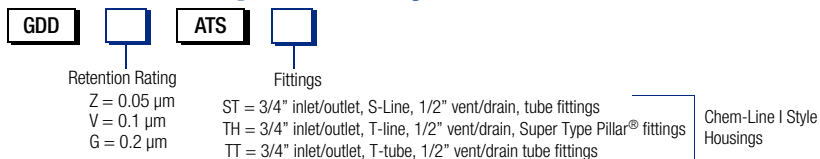
Chem-Line™ II Style,  
Flaretek® Compatible  
Fittings



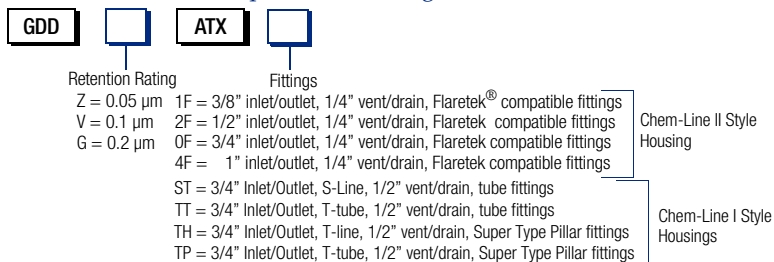
# Guardian ATX Disposable Filters - Ordering Information

Materials	Membrane: Patented hydrophobic PTFE
	Supports: PFA 440 HP supports, core, and sleeve
	Shell: PFA 440 HP vent plugs and housing shell made of Teflon fluoropolymer resin
	Nuts: Non-wetted component, PFA 440 HP
Membrane Area	10: 13,000 cm <sup>2</sup> (14 ft. <sup>2</sup> ) 4": 5,000 cm <sup>2</sup> (5.4 ft. <sup>2</sup> )
Operating Conditions	Maximum Forward Differential Pressure: 0.45 MPa (4.5 bar, 64 psid) @ 25° C
	Maximum Reverse Differential Pressure: 0.34 MPa (3.4 bar, 50 psid) @ 25° C
	Maximum Operating Temperature: 150° C (302° F) @ 0.5 bar (7.3 psi)
	Cleanliness: Filter contributes < 2 particles/mL > 0.2 µm after five-minute flush at 5 L/min.
	Guardian ATX disposable filters are optimized for performance in chemical delivery systems for sulfuric acid, nitric acid, acetic acid, phosphoric acid, hydrochloric acid, hydrogen peroxide, organic strippers and various non-flammable solvents. For point-of-use recirculation applications and filtration of other liquids, consult the Mykrolis web site or contact Mykrolis Technical Service.

## Guardian ATX 4" Disposable Ordering Information



## Guardian ATX 10" Disposable Ordering Information



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