

FLUOROGARD® ATE FILTERS

All-PTFE filters with broad chemical and temperature range compatibility for high flow and low cost of ownership



delivering efficient, high-flow performance

Overview

Entegris Fluorogard® ATE cartridge and disposable filters' all-fluoropolymer construction is designed to consistently remove particles from a wide range of acids, bases and other process chemicals. Ideal for medium to high-flow extended lifetime applications, dry and prewet Fluorogard filters deliver a low cost of ownership (COO).

Extended Filtration Efficiency

Increased filtration surface area minimizes pressure drop across the filter without compromising the enhanced particle removal characteristics.

The Teflon® fluoropolymer materials minimize extractables and other contaminants that may be detrimental to process performance and yield. Fluorogard filters provide the high-retention performance required in a clean, durable device.

High Quality and Reliability

All Fluorogard ATE filters are manufactured in ISO 9001 certified facilities under cleanroom conditions. All devices are fully tested for integrity to ensure product performance standards are met.

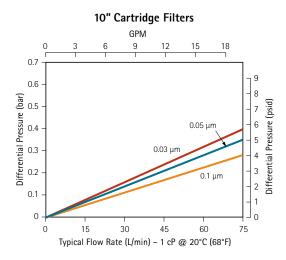
Feature	Advantage	Benefit	
Retention rating down to 0.03 μm		Increased yield	
Low particle shedding	Improved chemical cleanliness	Higher throughout	
Low extractable level		Higher throughput	
Higher surface area using M pleat structure	Higher flow	Faster bath cleanup	
	Longer lifetime	- - Lower COO	
	Lower pressure drop (less stress on other components like pumps, etc.)		
Prewet version available	No solvent needed for prewetting or flushing required	Lower Coo	
	Quicker/easier installation	•	

Specifications

Materials:	Membrane	PTFE	
	Supports	PFA	
	Cartridge o-rings	Chemraz,® Kalrez® 4079, Teflon encapsulated Viton® (TEV), Teflon encapsulated Viton® Extreme™ ETP, Teflon encapsulated EPDM/EPR (TEE)	
	Disposable shell	PFA	
Retention ratings:	Dry	0.1, 0.05 and 0.03 μm	
	Prewet	0.1 and 0.05 μm	
Membrane surface area:	>2.2 m ²		
Maximum operating	Maximum forward differential pressure	0.44 MPa (4.4 bar; 64 psi) @ 25°C	
conditions:		0.05 MPa (0.5 bar; 7.5 psi) @ 180°C	
	Maximum reverse differential pressure 0.35 MPa (0.35 MPa (3.5 bar; 50 psi) @ 25°C	
Ma	Maximum operating temperature	180°C (at the above conditions)	
Particle cleanliness:	<15 particles/10 mL ≥0.2 µm after a 5-minute flush at 5 L/min.		
Metallic extractable levels:	<40 μg/10" element		

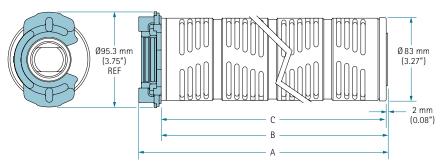
Fluorogard ATE Cartridge Filters

Performance Data



Dimensions

Fluorogard ATE Cartridge Filter – End View with Chemlock® Key

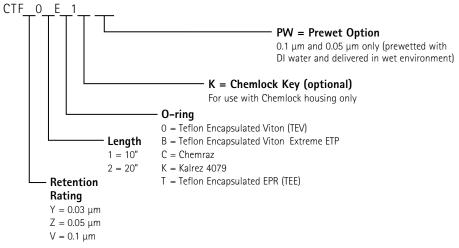


Length	Α	В	С
10"	244.0 mm ±2.0 mm	227.0 mm ±2.0 mm	225.0 mm ±2.0 mm
	(9.61" ±0.079")	(8.94" ±0.079")	(8.86" ±0.079")
20"	471.0 mm ±3.0 mm	453.5 mm ±3.0 mm	451.5 mm ±3.0 mm
	(18.54" ±0.118")	(17.85" ±0.118")	(17.78" ±0.118")

Ordering Information

Fluorogard ATE Code 0 Cartridge

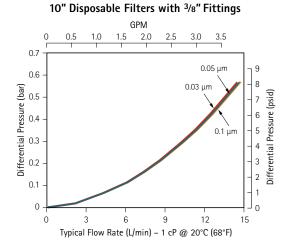


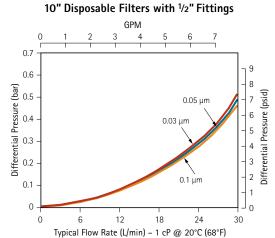


Fluorogard ATE Chem-Line™ Disposable Filters

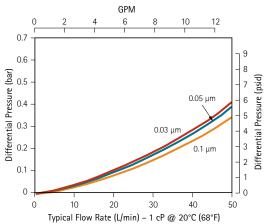
Performance Data



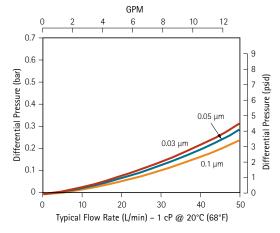




10" Disposable Filters with 3/4" Fittings



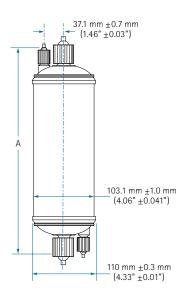
10" Disposable Filters with 1" Fittings



Dimensions

FLUOROGARD ATE CHEM-LINE II DISPOSABLE FILTERS

	A		
Inlet/ Outlet Size	Flaretek® Compatible Fittings	Flowell® 60 Series Compatible Fittings	
3/8"	345.2 mm ±1.3 mm (13.59" ±0.05")	_	
1/2"	354.3 mm ±1.3 mm (13.95" ±0.05")	_	
3/4"	356.4 mm ±1.3 mm (14.03" ±0.05")	357.6 mm ±1.3 mm (14.08" ±0.05")	
1"	366.5 mm ±1.3 mm (14.43" ±0.05")	367.0 mm ±1.3 mm (14.45" ±0.05")	

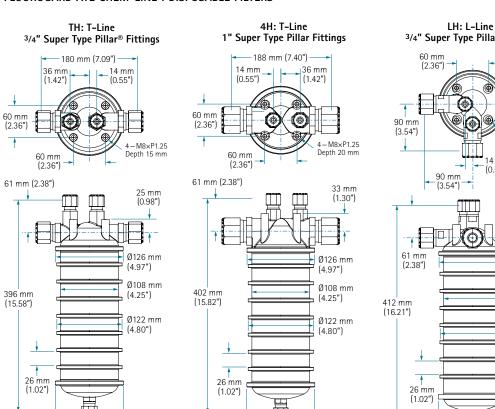


FLUOROGARD ATE CHEM-LINE I DISPOSABLE FILTERS

Ø127 mm

(5.00")

6



3/4" Super Type Pillar Fittings 60 mm (2.36") • 4-M8×P1.25 Depth 15 mm 14 mm (0.55") 90 mm (3.54") 25 mm (0.98")Ø126 mm (4.97") Ø108 mm (4.25") Ø122 mm (4.80")Ш Ø127 mm

(5.00")

ENTEGRIS, INC.

Ø127 mm

(5.00")

60 mm (2.36")

33 mm (1.30")

Ø126 mm (4.97")

Ø108 mm (4.25")

Ø122 mm (4.80")

60 mm (2.36")

4S: T-Line 1" Super Type Pillar Fittings 3S: T-Line 3/4" Super Type Pillar Fittings 182 mm (7.17") 172 mm (6.77") 36 mm (1.42") 36 mm (1.42") 60 mm (2.36") **@ (** 4 – M8×P1.25 Depth 20 mm 4-M8×P1.25 Depth 20 mm _60 mm (2.36") 58 mm (2.28") 58 mm (2.28") 33 mm (1.30") Ø126 mm (4.97") Ø108 mm 399 mm (15.70") 399 mm (15.70") (4.25")Ø122 mm (4.80")

26 mm (1.02")

Ø127 mm (5.00")

26 mm (1.02")

Ø127 mm (5.00")

Ordering Information

Fluorogard ATE Chem-Line I Disposable Filters

Part Number CTD ATE PW = Prewet Option 0.1 µm and 0.05 µm only (prewetted with DI water) **Fittings** LH = L-line, 3/4" inlet/outlet, 1/2" vent/drain, Super Type Pillar Retention TH = T-line, 3/4" inlet/outlet, 1/2" vent/drain, Super Type Pillar Rating 4H = T-line, 1" inlet/outlet, 1/2" vent/drain, Super Type Pillar $Y = 0.03 \ \mu m$ $3S = T-line, \frac{3}{4}$ " inlet/outlet, $\frac{1}{2}$ " vent/drain, Super 300 Type Pillar (90° vent offset) $Z = 0.05 \, \mu m$ 4S = T-line, 1" inlet/outlet, 1/2" vent/drain, Super 300 Type Pillar (90° vent offset) $V = 0.1 \, \mu m$

Fluorogard ATE Chem-Line II Disposable Filters

Part Number WDF ATE PW = Prewet Option 0.1 µm and 0.05 µm only (prewetted with DI water) **Fittings** $F = \frac{3}{8}$ " inlet/outlet, $\frac{1}{4}$ " vent/drain, Flaretek Retention $2F = \frac{1}{2}$ " inlet/outlet, $\frac{1}{4}$ " vent/drain, Flaretek Rating $OF = \frac{3}{4}$ " inlet/outlet, $\frac{1}{4}$ " vent/drain, Flaretek $Y=0.03~\mu m$ 4F = 1" inlet/outlet, 1/4" vent/drain, Flaretek $Z = 0.05 \mu m$ $OW = \frac{3}{4}$ " inlet/outlet, $\frac{1}{4}$ " vent/drain, Flowell 60 series $V = 0.1 \, \mu m$

4W = 1" inlet/outlet, 1/4" vent/drain, Flowell 60 series

For More Information

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