

Fluorogard® NX Liquid Filters

Cost-effective, hydrophobic PTFE/PFA filters for advanced wet etch and clean applications

Fluorogard® NX filters offer a cost-effective alternative for advanced wet etch and clean applications. Designed for aggressive aqueous chemicals and solvent applications, Fluorogard NX's hydrophobic PTFE membrane maximizes surface area to improve flow rate performance and increase device yields at elevated temperatures. Ideal for medium- to high-flow extended lifetime applications, Fluorogard NX filters remove particles from a wide range of acids, bases and other process chemicals. In addition, the PTFE/PFA fluorine resin materials and thermally bonded construction minimize chloride, metal extractables and other contaminants that can impact yield and throughput.

Fluorogard NX filters are available in various device configurations with a wide range of retention ratings to balance performance with cost of ownership. The dry configuration utilizes 15 nm and 30 nm retention ratings for solvent filtration. The optional prewet configuration ships "0.9% H₂O₂ wet", enabling rapid startup in aqueous chemicals while avoiding alcohol-chemical interactions.



APPLICATIONS

- Medium- to high-flow chemical applications in both semiconductor and display market applications
 - Wet etch and clean applications/one pass and recirculation
 - Bulk chemical manufacturing
 - Bulk chemical delivery systems (BCDS)
 - Aggressive aqueous chemistries
 - Advanced solvents

Fluorogard NX is not recommended for high-outgassing solutions like SPM, SC1 and SC2. Entegris recommends QuickChange® NX for these applications.

FEATURES & BENEFITS

Retention ratings from 10 µm to 15 nm	<p>Removes particles from a wide range of acids, bases and other process chemicals</p> <p>Requires minimal setup time, promoting a lower cost of ownership in advanced wet etch and clean processes</p> <p>Ideal for medium- to high-flow extended lifetime applications</p> <p>Dry configuration utilizes 15 nm and 30 nm retention ratings</p>
Rugged materials of construction	<p>Hydrophobic membrane's increased surface area</p> <ul style="list-style-type: none"> Improves flow rate performance with low pressure drop Enables higher throughput and increased device yield at elevated temperatures <p>PTFE/PFA fluorine resin materials and thermally bonded PFA construction</p> <ul style="list-style-type: none"> Ensures excellent chemical compatibility Minimizes chloride and metals extractables that can impact process performance Enables low particle shedding to increase yield and throughput
Cost-effective prewet cartridge filter option	<p>Ships "0.9% H₂O₂ wet"</p> <ul style="list-style-type: none"> Allows for rapid startup in aqueous chemicals Prevents alcohol-chemical interactions

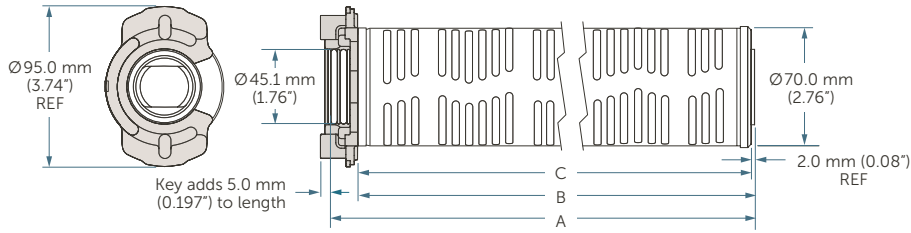
SPECIFICATIONS

	NXT Cartridge (Dry)	NXT Cartridge (Prewet**)
Materials of construction	Membrane	Hydrophobic PTFE
	Supports, core, sleeve and end caps	PFA
	O-ring options	E-FKM, E-ETP
Retention ratings*	Chemlock key: 0.05, 0.1, 0.2, 0.5, 1.0, 5, 10 µm; 15, 30 nm	PFA: 0.05, 0.1, 0.2, 0.5, 1.0, 5, 10 µm
Membrane surface area		4": 0.36 m ² (3.88 ft ²) 10": 0.9 m ² (9.68 ft ²) 20": 1.8 m ² (19.38 ft ²) 30": 2.7 m ² (29.06 ft ²)
Metallic extractables		Testing conducted for 23 metals
Operating conditions		<p>Maximum operating pressure: 0.58 MPa (5.8 bar, 84 psi @ 25°C [77°F])</p> <p>Maximum forward differential pressure: 0.44 MPa (4.4 bar, 64 psi @ 25°C [77°F]) 0.05 MPa (0.5 bar, 7.5 psi @ 180°C [356°F])</p> <p>Maximum reverse pressure: 0.34 MPa (3.4 bar, 50 psi @ 25°C [77°F])</p> <p>Maximum operating temperature: 180°C (356°F)</p>

*Retention ratings of 15 nm and 30 nm apply to solvent filtration (dry configuration only).

**The prewet option ships 0.9% H₂O₂ wet. Contact Entegris for proper use and handling. Note: Fluorogard NX filters are PFOA free. Shelf life (prewet option) is one year.

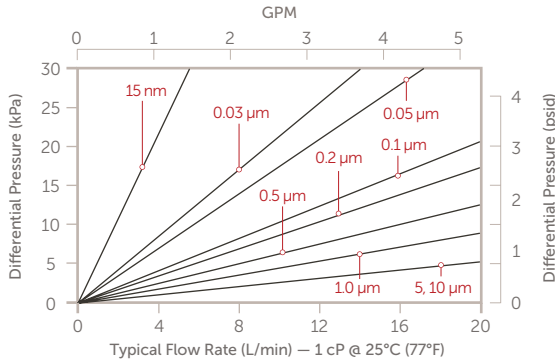
DIMENSIONS



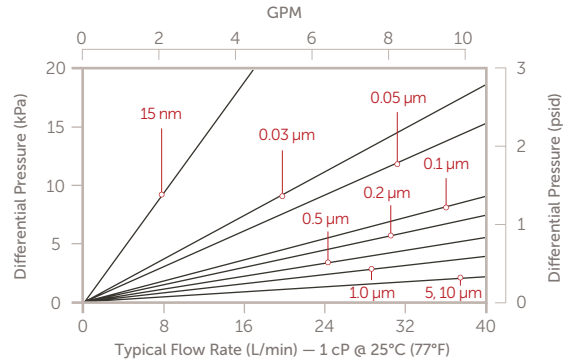
Cartridge length	A (overall)	B (control)	C (shoulder)
4"	132.3 mm (5.21")	115.0 mm (4.53")	113.0 mm (4.45")
10"	262.3 mm (10.33")	245.0 mm (9.65")	243.0 mm (9.57")
20"	498.3 mm (19.62")	481.0 mm (18.94")	479.0 mm (18.86")
30"	738.0 mm (29.07")	721.0 mm (28.39")	719.0 mm (28.31")

PERFORMANCE DATA

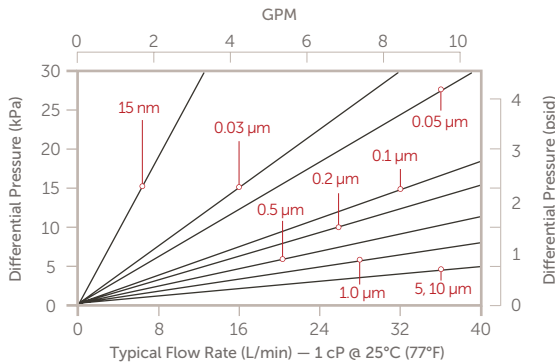
Fluorgard NXT 4" Cartridge Filters



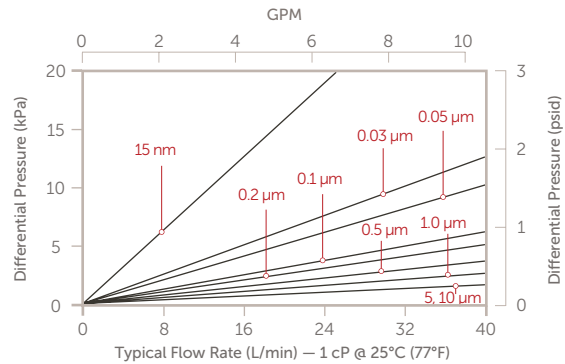
Fluorgard NXT 20" Cartridge Filters



Fluorgard NXT 10" Cartridge Filters



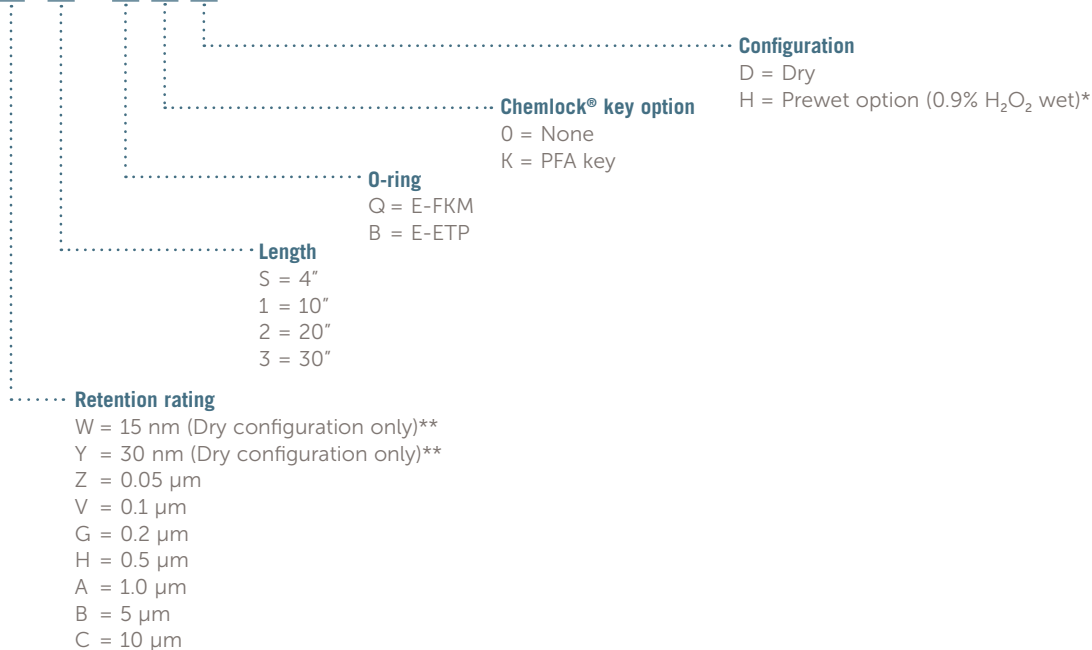
Fluorgard NXT 30" Cartridge Filters



ORDERING INFORMATION

Fluorogard NXT Cartridge Filters (Dry and Prewet Configurations): part number

CTC T 00



*Prewet units with 0.05 µm retention ratings are not recommended for high-temperature applications. Please consult your Entegris representative for more details.

**Retention ratings of 15 nm and 30 nm apply to solvent filtration (dry configuration only).

FOR MORE INFORMATION

Please call your Regional Customer Service Center today to learn what Entegris can do for you. Visit entegris.com and select the Contact Us link to find the customer service center nearest you.

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