

# Protego® Plus HTX 1 nm DI Water Purifiers

*All-in-one metal purifier/filter devices  
that deliver ultimate protection from  
metal contamination in critical  
DI water applications*

Entegris has expanded the high-performance Protego® Plus DI water purifier portfolio to include Protego Plus HTX 1 nm purifiers. These advanced, clean purifier/filter devices enable superior flow rate performance and contaminant retention capabilities in critical cleaning DI water applications.

The ultraclean product design promotes fast startups and high yields at high-temperature ranges.

Protego Plus DI water devices enable superior removal rates of multiple metallic contamination in single-pass or recirculation DI water applications. The high-ion exchange capability delivers proven particles performance and low metals extractables with fewer particles on wafer, and the metal ion removal technology minimizes system downtime.

## APPLICATIONS

- DI water
- Bulk and point of use
- High-temperature processes <80°C (176°F)



## FEATURES & BENEFITS

<b>Ultraclean Purifier/filter design</b>	Enables superior flow rate performance and contaminant retention capabilities in critical cleaning DI water applications  Promotes fast startups and high yields at high temperatures
<b>1 nm retention rating</b>	Provides advanced filtration for high-temperature, critical-cleaning applications at sub-2x nm technology nodes: <ul style="list-style-type: none"><li>• Improves single-pass retention efficiency</li><li>• Reduces on-wafer defects</li><li>• Enables higher yield</li></ul>
<b>High-ion exchange capability</b>	Proven particles performance and low metals extractables with fewer particles on wafer  Metal ion removal technology minimizes system downtime  Superior removal rates of multiple metallic contamination in single-pass or recirculation DI water applications

SPECIFICATIONS

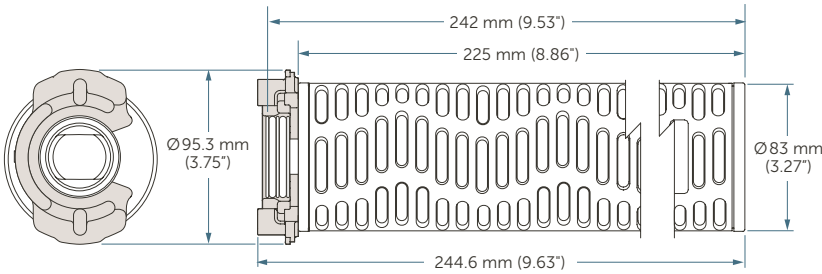
HTX Type

Materials	Membrane	Non dewetting polysulfone (PS)
	Supports, sleeve, core, end caps	Polypropylene (PP)
	Ion exchange media	Polyethylene (PE)
	O-rings	Encapsulated fluoropolymer (E-FKM) or Kalrez® 6375 UP
	Chemlock® key	Polypropylene
Retention rating	1 nm	
Membrane surface area	0.93 m² (10.01 ft²)	
Maximum operating conditions	<p>Maximum forward differential pressure: 0.27 MPa (2.7 bar; 40 psid) @ 25°C (77°F) 0.05 MPa (0.5 bar; 7 psid) @ 80°C (176°F)</p> <p>Maximum reverse pressure: 0.27 MPa (2.7 bar; 40 psi) @ 25°C (77°F)</p> <p>Maximum operating temperature: 80°C (176°F)</p>	

DIMENSIONS

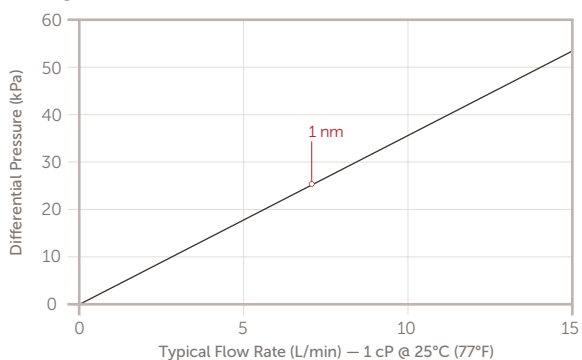
HTX 10" Cartridges

Code 0 – with Chemlock Key



## PERFORMANCE DATA

### Protego Plus HTX Purifier



## ORDERING INFORMATION

Part number	O-ring	Chemlock key
PRHE01PQ10T	E-FKM	No
PRHE01PQ1YT	E-FKM	Yes
PRHE01PPR0T	Kalrez	No
PRHE01PPRYT	Kalrez	Yes

Note: Filters are prewet – enclosed in a bag filled with 100% DI water.

## FOR MORE INFORMATION

Please call your Regional Customer Service Center today to learn what Entegris can do for you. Visit [entegris.com](http://entegris.com) and select the [Contact Us](#) link to find the customer service center nearest you.

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