



## PHASOR® X HEAT EXCHANGER

*Preserve absolute fluid purity  
with maximum heat transfer*

### Overview

The pHasor® X heat exchanger provides maximum heat transfer for process chemicals while preserving absolute fluid purity. It is ideal where controlled fluid temperature is desired or fluid temperature must be maintained to the point-of-use.

#### Uniform Heat Exchange

Entegris' pHasor X heat exchanger's unique design (patent-pending) maximizes heat exchange efficiency and prevents channeling and streaming. In addition, the device is fully bonded without o-rings, ensuring that both fluid streams remain separate.

#### Safe, Ultra-Clean, Compact Design

The device is constructed from 100% PFA, which maintains process fluid purity and ensures ultimate chemical compatibility and safety. The small footprint saves space and allows for a controlled process fluid temperature with a low pressure drop over the fluid paths.

### Features and Benefits

Features	Benefits
Large contact	Maximizes heat transfer surface area
All-PFA shell	Provides excellent chemical construction compatibility and ensures chemical cleanliness
O-ring free design	Eliminates maintenance and material compatibility concerns, while maintaining seal integrity and fluid purity
Compact, easy-to-install design	Minimizes the required tool space required



### Specifications

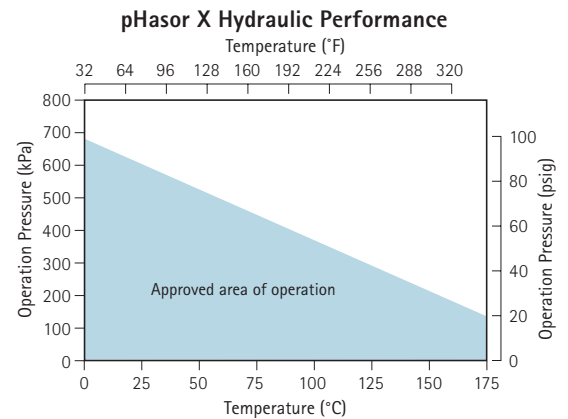
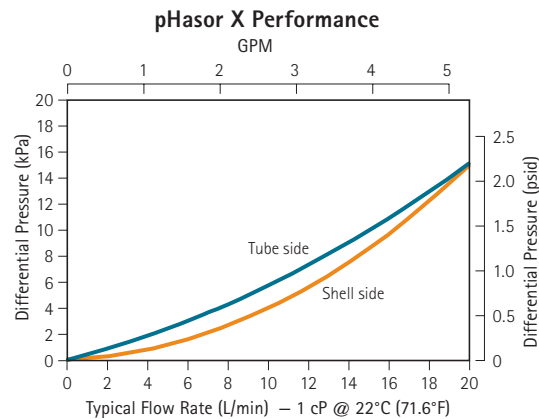
Description	
Materials:	Shell, tube and end caps are PFA
Exchange media area:	PHX03 = 0.3 m <sup>2</sup> PHX08 = 0.8 m <sup>2</sup>
Heat transfer efficiency:*	>568 w/m <sup>2</sup> , °K (>100 Btu/hr.f <sup>2</sup> , °F)
Trace ionic metals:**	<10 µg/unit
Total organic contaminants:	<1 ppb

\*Efficiency ratings between 4 – 12 L/min @ 20 psi line pressure

\*\*Extracted in 10% HCl for 24 hours

Note: Specifications are subject to change without notice.  
Please consult the factory for the most current information.

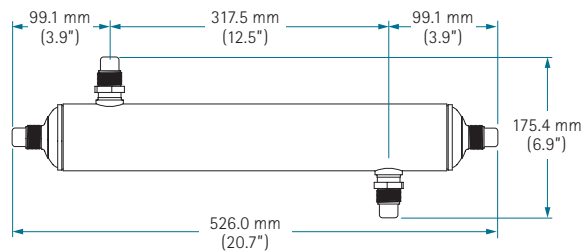
## Performance Data



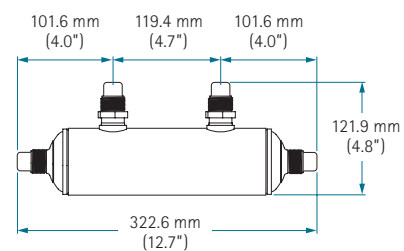
## Dimensions

These drawings show pHasor X configured with Flaretek® fittings.

**S-line Flow Path Configuration**



**U-line Flow Path Configuration**



## Ordering Information

Part Number	Media Exchange Area	Flow Path Configuration	Inlet/Outlet Fitting Size	Fitting Style
PHX03U00F	0.3 m <sup>2</sup>	U-line flow path	3/4"	Flaretek flare tube fitting
PHX03U00P	0.3 m <sup>2</sup>	U-line flow path	3/4"	Super 300 Type Pillar® fitting
PHX08S00F	0.8 m <sup>2</sup>	S-line flow path	3/4"	Flaretek flare tube fitting
PHX08S00P	0.8 m <sup>2</sup>	S-line flow path	3/4"	Super 300 Type Pillar fitting
PHX08U00F	0.8 m <sup>2</sup>	U-line flow path	3/4"	Flaretek flare tube fitting
PHX08U00P	0.8 m <sup>2</sup>	U-line flow path	3/4"	Super 300 Type Pillar fitting

Note: Other connection sizes are available. Please consult the factory for more information.

## For More Information

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

## Terms and Conditions of Sale

All purchases are subject to Entegris' Terms and Conditions of Sale. To view and print this information, visit [www.entegris.com](http://www.entegris.com) and select the Legal Notices link from the footer.

Entegris®, the Entegris Rings Design®, Creating a Material Advantage®, Flaretek® and pHasor® are registered trademarks of Entegris, Inc. Pillar® is a registered trademark of Nippon Pillar Packing Company, Ltd. U.S. Patent Nos. 7,308,932; 8,091,618; patents pending.

### ENTEGRIS, INC.

Corporate Headquarters | 129 Concord Road | Billerica, MA 01821 USA  
 Customer Service Tel. +1 952 556 4181 | Customer Service Fax +1 952 556 8022  
 In North America 800 394 4083 | [www.entegris.com](http://www.entegris.com)

