PRODUCT DATA SHEET

XC Series

Inline Heat Exchanger

Ideal for one-pass cooling of chemicals dumping to waste stream!

- Exceptionally clean performance
- Leak free operation
- Compact size
- Extremely rugged construction

FLUOROPOLYMER INLINE HEAT EXCHANGERS

<table>
<thead>
<tr>
<th>EXCHANGE AREA</th>
<th>LENGTH</th>
<th>DIA.</th>
<th>POLYPROPYLENE SHELL</th>
<th>PVDF SHELL</th>
</tr>
</thead>
<tbody>
<tr>
<td>ft²/(m²)</td>
<td>in/(mm)</td>
<td>in/(mm)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.5 (0.14)</td>
<td>10 (254)</td>
<td>4.5 (115)</td>
<td>XCP1.5-***</td>
<td>XCK1.5-***</td>
</tr>
<tr>
<td>2.5 (0.23)</td>
<td>14 (356)</td>
<td>(229)</td>
<td>XCP2.5-***</td>
<td>XCK2.5-**</td>
</tr>
<tr>
<td>3.5 (0.33)</td>
<td>18.5 (470)</td>
<td>14</td>
<td>XCP3.5-***</td>
<td>XCK3.5-**</td>
</tr>
</tbody>
</table>

***Connections and drain specified.

-50°C (-60°F) to 150°C (302°F)

- Tube (PFA): 172 kPa (25 PSIG) at 135°C (275°F)
- Shell (PP): 207 kPa (30 PSIG) at 82°C (180°F)
- Optional shell (PVDF): 207 kPa (30 PSIG) at 135°C (275°F)

- Tube: PFA
- Shell: PP
- Optional Shell: PVDF

North America +1 800 621 1998 • International +1 440 974 1300 • processtechnology.com
### Features & Values
- Inline chemical heat exchanger with all fluoropolymer wetted surfaces (tubing side) for virtually any wet chemistry application.
- **Exceptionally Clean Performance**: Assembled and tested in a cleanroom environment to ensure the highest cleanliness and manufacturing standards.
- **Leak Free Operation**: Integral inlet/outlet for single point fluid connections simplifies installation and greatly reduces the potential for chemical leaks.
- **Compact Size**: Less surface area required for same BTU exchange compared to most other fluoropolymer exchangers.
- **Extremely Rugged Construction**: Thick wall, welded construction provides extremely long service life.

### Specifications

#### Sizes
- .14m² (1.5 ft²) of exchange area
- .23m² (2.5 ft²) of exchange area
- .33m² (3.5 ft²) of exchange area

#### Standard Features
- 13mm (1/2") PFA tubing, .76mm (.030") thick
- All welded construction (shell)
- 114mm (4.5") diameter polypropylene or PVDF shell
- Internally baffled for enhanced heat exchanger performance
- "U" value (depending on flow rate): 142-284 J/(s x m² x °C) = 25-50 BTU/(hr x ft² x °F)
- Shell-side drain connection

#### Fluid Connections
- Tube, Shell, & Drain: Flared connections standard, choose sizes and other options when ordering.

#### Maximum Pressure/Temperature
- Tube (PFA): 172 kPa (25 PSIG) at 135°C (275°F)
- Shell (PP): 207 kPa (30 PSIG) at 82°C (180°F)
- Optional shell (PVDF): 207 kPa (30 PSIG) at 135°C (275°F)

#### Options
- 6.4mm (1/4") to 19mm (3/4") Super 300 Pillar Type6 connections
- Custom sizes based on application
- Heavy-wall PFA tubing, 15.7mm (.062") thick
- 121mm (4.75") PTFE shell

### Dimensions

![Diagram](image)

### Model Number Breakdown

<table>
<thead>
<tr>
<th>XC</th>
<th>P</th>
<th>1.5</th>
<th>-</th>
<th>A</th>
<th>C</th>
<th>A</th>
<th>-</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>XC</td>
<td>P = Polypro Chamber</td>
<td>1.5 = 1.5 ft²</td>
<td>1.5 = 3.5 ft²</td>
<td>A = 1/2&quot; Flared</td>
<td>C = 1&quot; Flared</td>
<td>A = 1/2&quot; Flared</td>
<td>C = 1&quot; Flared</td>
<td>THK = .062&quot; wall exchanger tubing</td>
</tr>
<tr>
<td>A</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>A = 1/2&quot; Flared</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>P = PFA Ferrule (standard is PVDF)</td>
</tr>
<tr>
<td>C</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>G = 3/8&quot; Pipe size stube</td>
</tr>
<tr>
<td>A</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>No drain = Blank</td>
</tr>
</tbody>
</table>

**Process Technology**

DS061418