ONE-PASS CHILLER

MODEL .................................................... PC-4000-430

DESCRIPTION
A completely packaged liquid chiller designed for applications where the liquid to be cooled passes through the chiller only once before either being added as an ingredient to a product or fouled by the product it is cooling. It is most important that a one-pass chiller be able to chill liquids at high and low flow rates without significant pressure drop or danger of freeze up, and yet have close, accurate temperature control.

Filtrine PC chillers are specifically designed for one-pass cooling. A high transfer immersion coil evaporator supplies maximum capacity at any flow rate with no pressure drop. Storage tank design permits close temperature control without short-cycling.

SPECIFICATIONS

COOLING CAPACITY

<table>
<thead>
<tr>
<th>BTU/HR</th>
<th>Watts</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Rating Conditions

<table>
<thead>
<tr>
<th>Coolant Discharge Temperature</th>
<th>68°F [20°C]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ambient Temperature</td>
<td>90°F [32°C]</td>
</tr>
</tbody>
</table>

Flow rate

| 30 gpm [114 lpm] |

COMPRESSOR HP

| 40 |

Cooling Tank & Evaporator

- Water cooled condenser for hookup to city or tower water
- Remote air cooled condenser for outdoor installation

STANDARD CONDENSERS [Designated by suffix]

- W Water cooled condenser
- AR Remote air cooled condenser

THERMOSTAT: Adjustable Range ............... 40°F to 90°F [5°C to 32°C]

Temperature Stability .................. ± 2°F [1°C]

CABINET: Enameled aluminum panels and top with stainless steel corner legs. Panels removable for access to all components.

SUPPLY POWER: .................. 208-230/60/3 or 460/60/3

FLA Amps Maximum: .................. 175 or 88

NOTE: FLA may vary depending on options. See MCA and MOP ratings on as-built unit.

PLUMBING CONNECTIONS IN & OUT .............. 2-1/2" [63 mm] FPT

SHIPPING WEIGHT ........................................ SEE CHART ON REVERSE

APPLICATIONS

Photo Developing | Reverse Osmosis
Ingredient Make-up | Ice Machines
Poultry Cooling | Spray Washes
Bottling | Beverages
Dispensers | Eye Wash Water
Pharmaceuticals | Boiler Feed Samples

FEATURES

Energy Saving Design
Unlike most process chillers, compressor runs only as needed. Storage design provides close temperature control and safety from freeze-up without constant operation.

Complete Temperature Control
Temperature adjustable range of 40°F to 90°F [5°C to 32°C] and will hold temperature within ± 2°F [1°C] of setting.

Welded Stainless Steel Cooling Tank
Coolant sealed from the atmosphere, eliminates bacterial build-up and internal corrosion.

Uses HFC Refrigerant
Eliminates use of ozone-depleting refrigerant as per Montreal Protocol.

Unlimited Options
Design the perfect cooling system for any application. Over 50 options to meet almost any special need.

Refer to Bulletin O & A.

LIFETIME WARRANTY Consult factory for details.

ONE YEAR WARRANTY All parts covered FOB job site for [12] months from start-up date or [15] months from date of shipment, whichever comes first. Consult factory for details.

START-UP and FIRST YEAR SERVICE Filtrine can arrange start-up and first year service on all parts and labor. Regular maintenance, to help prevent costly down-time, is available on a contractual basis. Consult factory for details.
NOTE: Chiller dimensions and shipping wts. may vary depending on options - confirm with factory.

**LEGEND**

1. Gauges
2. Control Panel
3. Coolant In
4. Coolant Discharge
5. Electrical Connection
6. To Remote Condenser [AR Models]
7. From Remote Condenser [AR Models]
8. Channel Skids

**VENTILATION PANELS**

Recommend 3 ft. clearance at front for service and 18 in. clear space opposite all ventilation panels.

**REMOVABLE SERVICE PANELS**

Front & rear on all models

**CHANNEL SKIDS**

Channel skids project 2" [5 cm] front and rear. Center of mounting holes located 6" [15 cm] from chiller end and 1" [2.5 cm] from chiller edge front and rear. Skids add 2" [5 cm] to overall height.

**STANDARD OPERATING CONDITIONS**

OUTDOOR AMBIENT

-20°F to 100°F [-29°C to 38°C]

**OPTIONAL OPERATING CONDITIONS**

OUTDOOR AMBIENT

Up to 110°F [43°C]
Up to 120°F [49°C]
Down to -30°F [-34°C]

NOTE: Higher ambient options may affect unit dimensions.

**REMOTE CONDENSER**

AR model furnished complete w/controls for operating in ambient temperatures to minus 20°F [-29°C]. Connections for remote condenser are at right end of chiller cabinet.

**CHILLER DIMENSIONS and WEIGHTS**

<table>
<thead>
<tr>
<th>FILTRINE Model No.</th>
<th>W (in)</th>
<th>D (in)</th>
<th>H (in)</th>
<th>SHIP WT (lb)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PC-4000-430-AR</td>
<td>116</td>
<td>295</td>
<td>62</td>
<td>70</td>
</tr>
<tr>
<td>PC-4000-430-W</td>
<td>116</td>
<td>295</td>
<td>62</td>
<td>70</td>
</tr>
</tbody>
</table>

**GPM - CHILLER COOLING CAPACITY**

<table>
<thead>
<tr>
<th>CHILLER MODEL NUMBER</th>
<th>MAKE UP WATER</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5°F</td>
</tr>
<tr>
<td>PC-4000-430</td>
<td></td>
</tr>
<tr>
<td>90°F</td>
<td>180</td>
</tr>
<tr>
<td>80°F</td>
<td>172</td>
</tr>
<tr>
<td>70°F</td>
<td>170</td>
</tr>
<tr>
<td>60°F</td>
<td>154</td>
</tr>
<tr>
<td>50°F</td>
<td>132</td>
</tr>
<tr>
<td>40°F</td>
<td>114*</td>
</tr>
</tbody>
</table>

* Agitation pump required

**CHILLER CAPACITY**

<table>
<thead>
<tr>
<th>AMBIENT TEMP</th>
</tr>
</thead>
<tbody>
<tr>
<td>80°F 27°C</td>
</tr>
<tr>
<td>90°F 32°C</td>
</tr>
<tr>
<td>100°F 38°C</td>
</tr>
<tr>
<td>110°F 43°C</td>
</tr>
</tbody>
</table>

**NOTE:** Drawing is composite of various models to demonstrate plumbing locations. Confirm footprint with factory.