

# ONE-PASS CHILLER



### **APPLICATIONS**

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

#### **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  $40^{\circ}$  to  $90^{\circ}$ F [5° to  $32^{\circ}$ C] and will hold temperature within  $\pm$  1.5°F [1°C] of setting.

## **Welded Stainless Steel Cooling Tank**

Coolant sealed from the atmosphere, eliminates bacterial build-up and internal corrosion.

## **Uses HFO Refrigerant**

Ozone Safe - Low Global Warming Potential (GWP)

## **Unlimited Options**

Design the perfect cooling system for any application. 60+ options to meet any special need. See *Options & Accessories* (www.filtrine.com/chillers/options-and-accessories) for more information.

#### START-UP and FIRST YEAR SERVICE

**FILTRINE Mfg. Co.** provides start-up and first year service on all parts and labor. Regular maintenance on a yearly contract basis is a wise investment and will prevent costly downtime.

#### WARRANTY

All parts are covered FOB jobsite for (12) months from the start date or (15) months from date of shipment or whichever comes first.

## SERVICE MAKES THE DIFFERENCE

Recognizing that downtime on critical medical equipment is unacceptable, Filtrine has established a national network of qualified service technicians, selected because of their extensive experience working on medical equipment chillers and their location within the "Emergency Response Zone" (approximately 40 miles). This expert and quick service is available on an 8/5 or 24/7 basis for all Filtrine medical chillers and heat exchangers.

## MODEL PC-500S-62

## **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**

BTU/HR	62,000
Watts	18,166
Rating Conditions	
Coolant Discharge Temperature	68°F (20°C)
Ambient Temperature	90°F (32°C)
Flow rate	10 gpm (38 lpm)
COMPRESSOR HP	5

Field serviceable semi-hermetic type supplied with high/low pressure stat, freeze control, head and suction gauges, oil pressure switch, pump down solenoid valve, thermostatic expansion valve, refrigerant sight glass and dehydrator.

STANDARD CONDENSERS (Designated by suffix)

A Fan cooled condenser for indoor installation

Water cooled condenser for hookup to city or tower water

**AR** Remote air cooled condenser for outdoor installation

**A-WP** Air cooled, weather-resistant condenser for outdoor installation

## **COOLING TANK & EVAPORATOR**

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

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

PLUMBING CONNECTIONS IN & OUT ...... 1" (25 mm) FPT SHIPPING WEIGHT ...... see chart on reverse

ENERGY SAVING OPTIONS AVAILABLE CONSULT FACTORY





CHILLER DIMENSIONS & WEIGHTS										
Model	W		D		Н		SHIP WT			
Number	in	cm	in	cm	in	cm	lb	kg		
PC-500S-A	72	183	35	89	60	152				
PC-500S-W	72	183	30	76	60	152				
PC-500S-AR	72	183	30	76	60	152				
PC-500S-A-WP*	72	183	35	89	70	178	1800	810		
PC-500S-A-SSD**	48	130	35	89	90	229				
PC-500S-W-SSD**	40	102	30	76	84	213				
PC-500S-AR-SSD**	40	102	30	76	84	213				

<sup>\*</sup>Low, profile, weather-resistant for rooftop mounting

NOTE: Chiller dimensions and shipping weights may vary depending on options, confirm with factory.

### **VENTILATION PANELS**

Standard A and A-WP models: air intake at rear, air discharge out front and right end. LP models: air intake rear, air discharge out both ends and top. Manufacturer recommends 24" [61 cm] minimum clear space opposite all ventilation panels.

#### **REMOVABLE SERVICE PANELS**

Front and rear on all models. Manufacturer recommends 36" [91 cm] clearance at front for service.

### **CHANNEL SKIDS**

Channel skids project 2" [5 cm] front and rear. Allow additional 2" [5 cm] to height for channel skids. Center of 5/8" [1.6 cm] mounting holes located 6" [15 cm] from chiller end and 1" [2.5 cm] from chiller edge front and rear.

### STANDARD OPERATING CONDITIONS

**OUTDOOR AMBIENT** 

-20° to 100°F [-29° to 38°C]

## **OPTIONAL OPERATING CONDITIONS**

**OUTDOOR AMBIENT** 

Up to 110°F [43°C]

Up to 120°F [49°C]

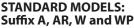
Down to -30°F [-34°C]

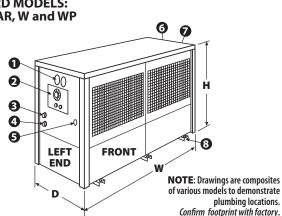
NOTE: Higher ambient options may affect unit dimensions.

## **REMOTE CONDENSER**

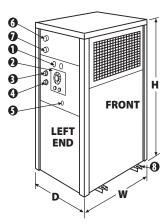
Use w/standard or SSD models: Furnished complete w/controls for operating in ambient temperatures to minus 20°F [-29°C], consult factory for specs. Connections for remote condenser are at right end of chiller cabinet.

GPH - CHILLER COOLING CAPACITY								
MODEL NUMBER	MAKE UP	CHANGE IN TEMPERATURE THROUGH CHILLER						
	WATER	5ºF	10ºF	20°F	30°F	40°F		
PC-500S-62	90°F	_	-	360	180	120		
	80°F	1560	720	300	120	120*		
	70°F	1440	660	240	120*	120 <del>*</del>		
	60°F	1260	600	180*	180*	60 <del>*</del>		
	50°F	1020	420 <del>*</del>	300*	120*	60 <del>*</del>		
	40°F	420*	360*	180*	60*	18*		



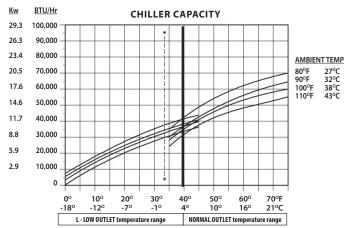


SSD - SPACE SAVING DESIGN MODELS: Suffix A, AR & W [A-WP not available in SSD model]



## **LEGEND**

- 1. Gauges
- 2. Control Panel
- 3. Coolant In
- 4. Coolant Discharge
- 5. Electrical Connection 8. Channel Skids
- 6. To Remote Condenser (AR Models) **Condenser Water Out (W Models)**
- 7. From Remote Condenser (AR Models) Condenser Water In (W Models)



\* For outlet temperatures below 34° F - use appropriate antifreeze

NOTE: Information given in this bulletin for general use only. Confirm exact specs with factory for your specific requirements.

<sup>\*\*</sup>Space Saving Design