

# ONE-PASS CHILLER



## **APPLICATIONS**

**Photo Developing** Ingredient Make-up **Poultry Cooling Bottling** Dispensers **Pharmaceuticals** 

**Reverse Osmosis** Ice Machines Spray Washes Beverages **Eye Wash Water 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  $40^{\circ}$  to  $90^{\circ}$ F ( $5^{\circ}$  to  $32^{\circ}$ C) and will hold temperature within  $\pm 1.5^{\circ}F$  (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 jobsite 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 startup 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.

# 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	• • • • • • • • • • • • • • • • • • • •

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)

- Fan cooled condenser for indoor installation
- -W 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

Capacity...... 50 gal (190 ltr) Welded stainless steel shell and immersion coil evaporator. Tank tested at 250# for 125# working pressure and insulated with

closed cell thermo-elastomer with an R factor of 3.7 and enclosed in rust-proof steel jacket.

THERMOSTAT: Adjustable Range ......40° to 90°F (5° to 32°C) Temperature Stability.....  $\pm$  1.5°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: ...... 16 or 8

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

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

## **CHILLER DIMENSIONS and WEIGHTS**

FILTRINE Model No.	W		D		Н		SHIP WT	
	in	cm	in	cm	in	cm	lb	kg
PC-500S-62-A	72	183	35	89	60	152		
PC-500S-62-W	72	183	30	76	60	152		
PC-500S-62-AR	72	183	30	76	60	152		
PC-500S-62-A-WP*	72	183	35	89	60	152	1800	810
PC-500S-62-A-SSD**	48	130	35	89	90	229		
PC-500S-62-W-SSD**	40	102	30	76	84	213		
PC-500S-62-AR-SSD**	40	102	30	76	84	213		

<sup>\*</sup> Weather-resistant for rooftop mounting

**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 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)

#### **VENTILATION PANELS**

Standard models: air intake at rear, air discharge at right end and front. 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° to 100°F (-29° to 38°C)

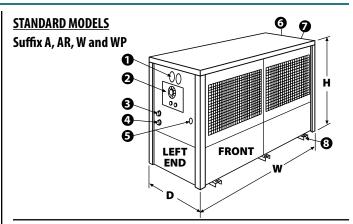
# **OPTIONAL OPERATING CONDITIONS**

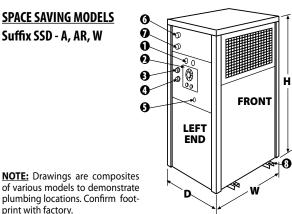
OUTDOOR AMBIENT Up to 110°F (43°C) Up to to 120°F (49°C) Down to -30°F (-34°C)

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.

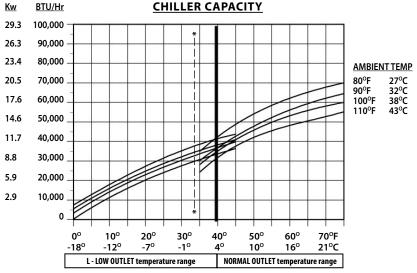




## **GPH - CHILLER COOLING CAPACITY**

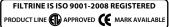
CHILLER MODEL NUMBER	MAKE UP WATER	CHANGE IN TEMPERATURE THROUGH CHILLER						
		5°F	10°F	20°F	30°F	40°F		
PC-500S-62	90°F	-	-	360	180	120		
	80°F	1560	720	300	120	120*		
	70°F	1440	660	240	120*	120*		
	60°F	1260	600	180*	180*	60*		
	50°F	1020	420*	300*	120*	60*		
	40°F	420*	360 <del>*</del>	180*	60*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

<sup>\*</sup> Agitation pump required



<sup>\*</sup> For outlet temperatures below 34°F - use appropriate antifreeze





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