

# ONE PASS CHILLER



TYPICAL CHILLER SHOWN

## 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° to 90°F [5° to 32°C] and will hold temperature within  $\pm 1.5^\circ\text{F}$  [ $1^\circ\text{C}$ ] 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](http://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-300S-38

## 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..... 38,000

Watts..... 11,134

### Rating Conditions

Coolant Discharge Temperature..... 68°F (20°C)

Ambient Temperature ..... 90°F (32°C)

Flow rate..... 10 gpm (38 lpm)

COMPRESSOR HP..... 3

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

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

**W** Water cooled condenser for hookup to city or tower water

**WP** Weather-resistant, air cooled condenser for outdoor installation

### COOLING TANK & EVAPORATOR

Capacity..... 30 gal (114 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.....  $\pm 1.5^\circ\text{F}$  ( $1^\circ\text{C}$ )

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 nameplate of as-built unit.

PLUMBING CONNECTIONS IN & OUT ..... 3/4" (19 mm) FPT

SHIPPING WEIGHT ..... SEE CHART ON REVERSE

**ENERGY SAVING OPTIONS AVAILABLE  
CONSULT FACTORY**

## CHILLER DIMENSIONS & WEIGHTS

Model Number	W		D		H		SHIP WT	
	in	cm	in	cm	in	cm	lb	kg
PC-300S-38-A	62	158	32	81	48	122	1400	630
PC-300S-38-W	62	158	32	81	48	122		
PC-300S-38-AR	62	158	32	81	48	122		
PC-300S-38-A-WP*	62	158	32	81	70	178		
PC-300S-38-A-SSD**	34	86	28	71	78	198		
PC-300S-38-W-SSD**	34	86	26	66	72	183		
PC-300S-38-AR-SSD**	34	86	26	66	72	183		

\*Low, profile, weather-resistant for rooftop mounting

\*\*Space Saving Design

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]

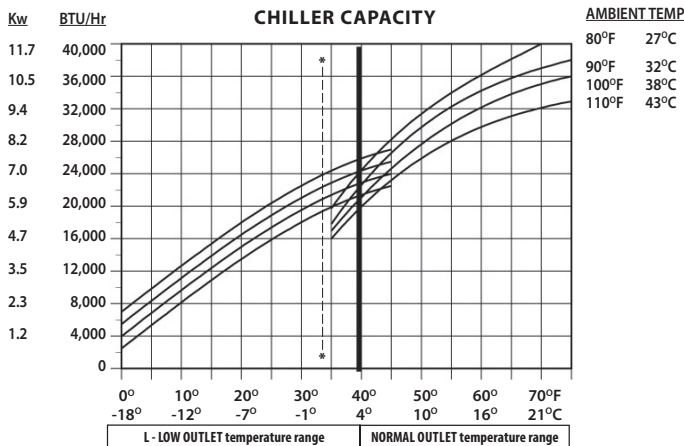
Up to 120°F [49°C]

Down to -30°F [-34°C]

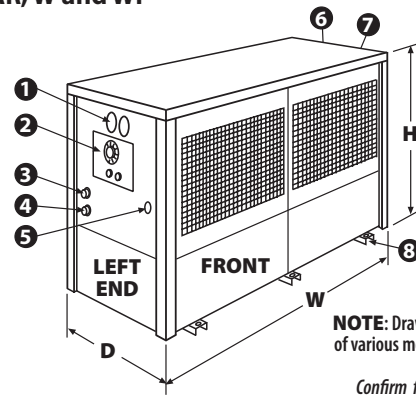
NOTE: Higher ambient options may affect unit dimensions.

### REMOTE CONDENSER

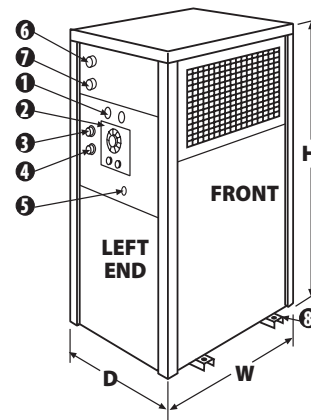
Use w/standard or SSD models: Furnished complete w/controls for operating in ambient temperatures to minus 20°F [-29°C], consult factory for specs. Connections for remote condenser are at right end of chiller cabinet.



## STANDARD MODELS: Suffix A, AR, W and WP



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



### LEGEND

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

## GPH - CHILLER COOLING CAPACITY

MODEL NUMBER	MAKE UP WATER	CHANGE IN TEMPERATURE THROUGH CHILLER				
		5°F	10°F	20°F	30°F	40°F
PC-300S-38	90°F	—	—	240	120	120
	80°F	900	480	204	120	60*
	70°F	840	420	180	60*	60*
	60°F	780	360	120*	60*	4.8*
	50°F	600	240*	120*	60*	3.6*
	40°F	420*	240*	120*	4.2*	1.8*

\* Agitation pump required.

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