

# ONE-PASS CHILLER



TYPICAL CHILLER SHOWN

## MODEL..... PC-50-5 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 ..... 5,000  
Watts..... 1,465

### Rating Conditions

Coolant Discharge Temperature .....68°F [20°C]  
Ambient Temperature.....90°F [32°C]  
Flow rate.....2 gpm [7.6 lpm]

### COMPRESSOR HP..... 1/2

Lifetime lubricated, welded hermetic type supplied with condenser as specified [see Standard Condensers], charging port, expansion valve and dehydrator.

### STANDARD CONDENSERS [Designated by suffix]

- **A**..... Fan cooled condenser for indoor installation.
- **W** ..... Water cooled condenser for hookup to city or tower water

### COOLING TANK & EVAPORATOR

Capacity.....5 gal [19 ltr]  
Welded stainless steel shell and immersion coil evaporator.  
Tank tested at 250# for 125# working pressure. Supplied with liquid level gauge 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..... ± 2°F [1°C]

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

SUPPLY POWER: ..... 115/60/1 or 230/60/1  
FLA Amps Maximum:..... 14 or 7

PLUMBING CONNECTIONS IN & OUT ..... 1/2" [13 mm] FPT  
SHIPPING WEIGHT .....150 lbs [68 kg]

## 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 within a range of 40° to 90°F [5° 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

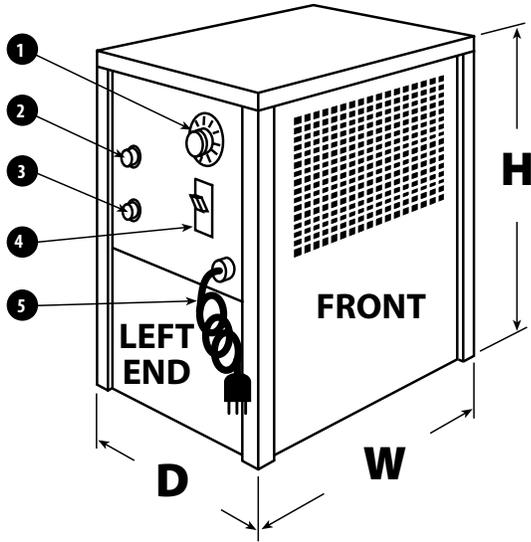
Eliminates use of ozone-depleting refrigerant as per Montreal Protocol.

### Unlimited Options

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

Refer to Bulletin O & A.

## STANDARD MODELS: Suffix -A and -W



### LEGEND

- ① Temperature Control
- ② Coolant Make Up
- ③ Coolant Discharge
- ④ On/Off Switch
- ⑤ Power Cord

**NOTE:** Chiller dimensions and shipping wts. may vary depending on options. All information given on this bulletin is for general use only. Confirm specifications with factory for your specific requirement.

**NOTE:** Drawing is a not-to-scale composite of various models to demonstrate plumbing locations. Confirm footprint with factory.

DIMENSIONS		
W	D	H
26"	16"	30"

### VENTILATION PANELS

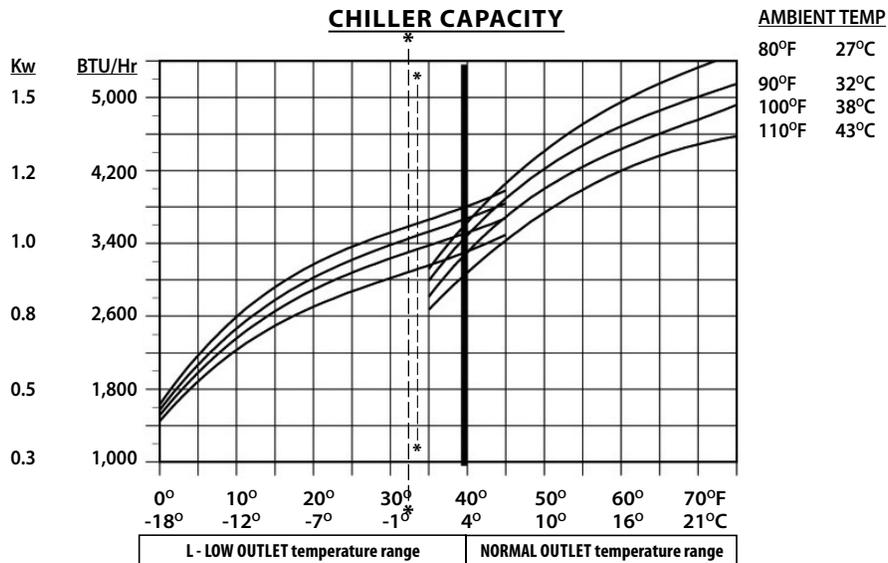
Standard models — air intake at RIGHT, air discharge at REAR on -A models. Manufacturer recommends 12 inch minimum clear space opposite all ventilation panels.

### REMOVABLE SERVICE PANELS

Front & rear on all models. Manufacturer recommends 16 inch clearance at LEFT END and 22 inch clearance at FRONT for service.

CHILLER COOLING CAPACITY - GPH					
MAKE-UP WATER TEMP	CHANGE IN TEMPERATURE THROUGH CHILLER				
	5°F	10°F	20°F	30°F	40°F
90°F	128	65	19	19	13
80°F	123	63	29	17	11*
70°F	118	58	27	15*	9*
60°F	112	54	23*	12*	6*
50°F	98	46*	18*	9*	—
40°F	78*	37*	12*	5*	—

\* Agitation pump required



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