

ONE-PASS CHILLER



MODEL PC-500G 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 @ 68°F discharge and 90°F ambient

MODEL	BTU/HR	WATTS	FLA @ 230 / 460
PC-500G-48	48,000	14,064	24 / 12
PC-500G-60	60,000	17,580	26 / 13
PC-500G-70	70,000	20,510	28 / 14

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° to 90°F [5° to 32°C] and will hold temperature within ± 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 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 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.

COMPRESSOR HP 5

Lifetime lubricated, hermetic scroll type supplied with high/low pressure stat, freeze control, head and suction gauges, liquid line solenoid valve, thermo-static expansion valve, refrigerant sight glass and dehydrator.

STANDARD CONDENSERS [Designated by suffix]

- **A** Fan cooled condenser for indoor installation
- **AR** Remote Air cooled condenser furnished separately for mounting on roof
- **W** Water cooled condenser for hookup to city or tower water
- **A-WP** Weather-resistant 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..... ± 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 460/30/3

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

PLUMBING CONNECTIONS IN & OUT1" [25 mm] FPT

SHIPPING WEIGHT SEE CHART ON OTHER SIDE

CHILLER DIMENSIONS and WEIGHTS

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

* Weather-resistant for rooftop mounting
** Space Saving Design

NOTE: Chiller dimensions and shipping wts. may vary depending on options - confirm with factory.

LEGEND

- Gauges
- Control Panel
- Coolant In
- Coolant Discharge
- Electrical Connection
- To Remote Condenser [AR Models]
Condenser Water Out [W Models]
- From Remote Condenser [AR Models]
Condenser Water In [W Models]
- Channel Skids

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]

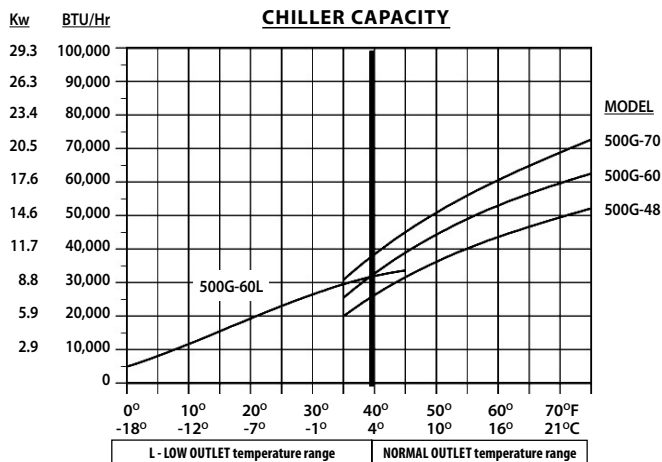
OPTIONAL OPERATING CONDITIONS

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

NOTE Higher ambient options may affect unit dimensions.

REMOTE CONDENSER

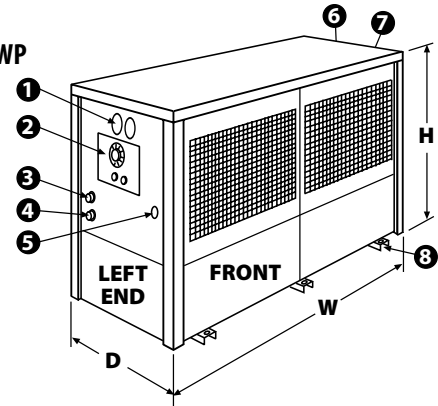
Use w/Standard or SSD Models - Furnished complete w/controls for operating in ambient temperatures to minus 20°F [-29°C]; consult factory for specs. Connections for remote condenser are at right end of chiller cabinet.



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

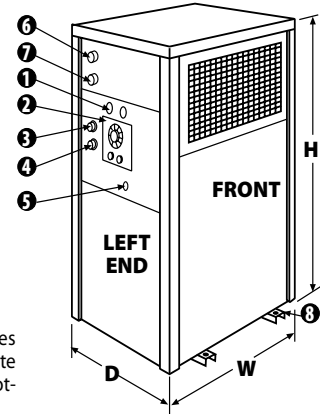
STANDARD MODELS

Suffix A, AR, W and WP



SPACE SAVING MODELS

Suffix SSD - A, AR, W



NOTE: Drawings are composites of various models to demonstrate plumbing locations. Confirm foot-print with factory.

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-500G-70	90°F	■	■	422	241	145
	80°F	1831	843	361	193	99*
	70°F	1325	723	289	121*	78*
	60°F	964	576	181*	104*	60*
	50°F	482	361*	157*	80*	30*
	40°F	72*	313*	121*	40*	15*
PC-500G-60	90°F	■	■	361	201	120
	80°F	1590	723	301	161	75*
	70°F	1349	602	241	100*	78*
	60°F	1064	482	151*	104*	60*
	50°F	795	301*	157*	80*	30*
	40°F	361*	313*	121*	40*	15*
PC-500G-48	90°F	■	■	289	169	97
	80°F	1253	578	253	131	54*
	70°F	1064	506	196	72*	78*
	60°F	916	391	108*	104*	60*
	50°F	626	217*	157*	80*	50*
	40°F	241*	313*	121*	40*	40*

* Agitation pump required