ONE-PASS CHILLER

TYPICAL CHILLER SHOWN

MODEL PC-150

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.

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 within a 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.*

SPECIFICATIONS

COOLING CAPACITY @ 68°F discharge and 90°F ambient

MODEL	BTU/HR	WATTS	208-230/60/1	208-230/60/3	460/60/3
PC-150-15	15,000	4,400	FLA 14	FLA 11	FLA 6
PC-150-17	17,000	4,981	FLA 18	FLA 12	FLA 6
PC-150-19	19,000	5,570	FLA 18	FLA 12	FLA 6
PC-150-21	21,000	6,153	FLA 22	FLA 15	FLA 7

COMPRESSOR HP 1.5
Lifetime lubricated, welded hermetic type supplied with high/low pressure stat, anti-migration solenoid valve, thermostatic expansion valve, refigerant 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 ..... 16 gal [60 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 thermoelastomer 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 with stainless steel corner legs and top. Panels removable for access to all components.

SUPPLY POWER: ..... 208-230/60/1 or 208-230/60/3 or 460/60/3
NOTE: FLA may vary depending on options. See MCA and MOP ratings on as-built unit.

PLUMBING CONNECTIONS IN & OUT ..... 3/4" [19 mm] FPT

SHIPPING WEIGHT ..... *SEE CHART ON REVERSE*

FILTRINE Mfg Co • 15 Kit St. Keene, NH 03431 USA
800-930-3367 • 603-352-5500 • FAX 603-352-0330
WEB www.filtrine.com • EMAIL cool@filtrine.com

LABOR & PARTS

FILTRINE IS ISO 9001-2008 REGISTERED
PRODUCT LINE ETL APPROVED CE MARK AVAILABLE

CHILLER DIMENSIONS & WEIGHTS

FILTRINE MODEL NUMBER	W		D		H		SHIP WT	
	in	cm	in	cm	in	cm	lb	kg
PC-150-A	42	107	27	69	42	107	600	270
PC-150-W	42	107	27	69	42	107		
PC-AR	42	107	27	69	42	107		
PC-150-A-SSD*	27	69	27	69	74	188		
PC-150-W-SSD*	27	69	24	61	72	183		
PC-150-AR-SSD*	27	69	24	61	72	183		
* *Space Saving Design*								

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

LEGEND

1. Air Vent
2. Fill Port
3. Coolant Return
4. Coolant Discharge
5. Control Panel
6. Gauges
7. To Remote Condenser [AR Models] Condenser Water Out [W Models]
8. From Remote Condenser [AR Models] Condenser Water In [W Models]
9. Electrical Connection
10. 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]

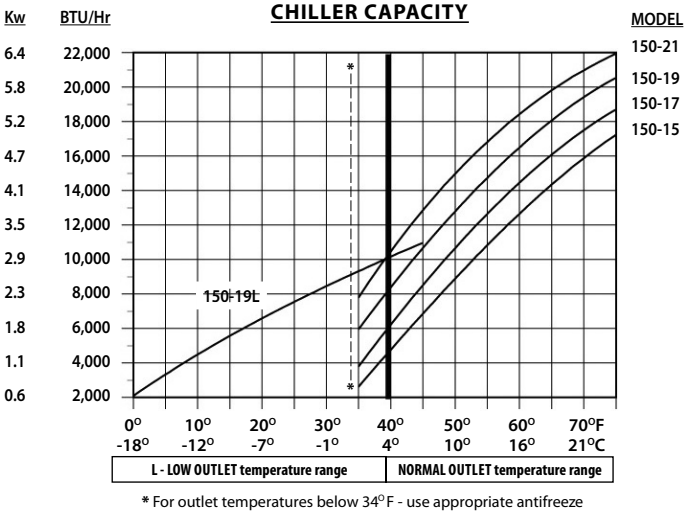
OPTIONAL OPERATING CONDITIONS

OUTDOOR AMBIENT
Up to 110°F [43°C]
Up to to 120°F [49°C]
Down to -30°F [-34°C]
NOTE Higher ambient options may affect unit dimensions.

REMOTE CONDENSER

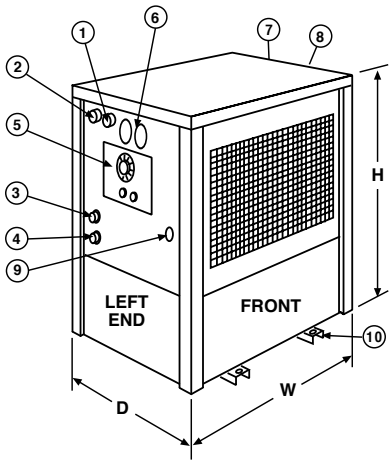
Use w/Standard or SSD Models - Furnished complete w/controls for operating in ambient temperatures to minus 20°F [-29°C]; consult factory for specs. Connections for remote condenser are at right end of chiller cabinet.

CHILLER CAPACITY



* 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.



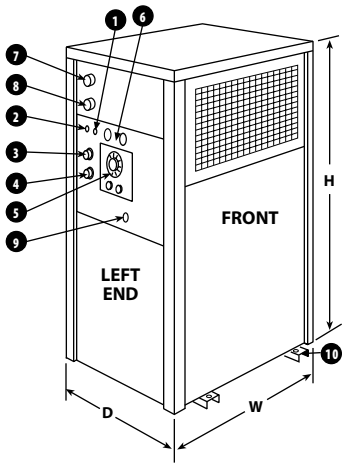
STANDARD MODELS:

Suffix A, AR, and W

NOTE: Manufacturer recommends 36 inch clearance at front for service and 18 in.clear space opposite all ventilation panels.

NOTE: Allow an additional 4" to depth and 2" to height for channel skids.

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



SPACE SAVING DESIGN MODELS:

Suffix SSD - A, AR & W

NOTE: Manufacturer recommends 36 inch clearance at front for service and 18 in.clear space opposite all ventilation panels.

NOTE: Allow an additional 4" to depth and 2" to height for channel skids.

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

CHILLER GPH COOLING CAPACITY

CHILLER MODEL NUMBER	MAKE UP WATER	CHANGE IN TEMPERATURE THROUGH CHILLER				
		5°F	10°F	20°F	30°F	40°F
PC-150-21	90°F	▬	▬	127	72	57
	80°F	530	253	106	76	45*
	70°F	482	217	115	60*	30*
	60°F	410	229	90*	40*	21*
	50°F	361	181*	60*	26*	14*
	40°F	193*	121*	42*	18*	6*
PC-150-19	90°F	▬	▬	115	66	40
	80°F	482	229	99	54	24*
	70°F	434	199	61	32*	24*
	60°F	349	163	46*	32*	19*
	50°F	265	96*	46*	26*	14*
	40°F	145*	96*	39*	18*	6*
PC-150-17	90°F	▬	▬	102	56	33
	80°F	458	206	84	44	18*
	70°F	386	169	66	24*	24*
	60°F	313	133	36*	32*	20*
	50°F	205	72*	46*	26*	14*
	40°F	217*	96*	39*	18*	6*
PC-150-15	90°F	▬	▬	90	52	30
	80°F	410	181	78	40	15*
	70°F	337	157	60	20*	24*
	60°F	265	121	30*	32*	20*
	50°F	169	60*	46*	26*	14*
	40°F	72*	96*	39*	18*	6*

*** Agitation pump required**

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