RECIRCULATING LOOP CHILLERS

SINCE 1901

TYPICAL CHILLER

MODEL ..... PCP or POC-750G

HERMETIC SCROLL MODELS

DESCRIPTION

Filtrine's PCP and POC chillers recirculate a clean coolant at constant temperature and pressure to increase the stability and consistency of water cooled machines and instruments. Choose from different condenser configurations to match your specific site requirements.

• **PCP - Closed Loop Chillers:** Use a storage type cooling tank, with immersion coil evaporator, to provide close temperature control of recirculating coolants. The tank is sealed to prevent coolant evaporation and fouling, and supplied with a liquid level gauge, fill port and clean out. The pump recirculates coolant at constant pressure and flow, which is adjustable by turning a manual bypass valve.

• **POC - Open Loop Chillers:** Pump liquid from an open tank or sump, through the chiller and back to the sump. An adjustable thermostat senses the make up liquid temperature, cycling the chiller to insure constant temperature in the sump.

APPLICATIONS

Jacket Cooling
Lasers
Induction Heaters
Machine Tools
Welders
MRI Equipment
CAT Scans
Computers
Power Supplies
Vacuum Ovens
Injection Molding
Plasma Spraying
Linear Accelerators
Electron Microscopes

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. (1°F optional)

Welded Stainless Steel Cooling Tank: Recirculates clean coolant sealed from the atmosphere, eliminates bacterial build-up and internal corrosion.

Uses HFO Refrigerant: Eliminates use of ozone-depleting and high GWP (Global Warming Potential) refrigerant as per Montreal Protocol.

Chiller Options and Accessories: Design the perfect cooling system for any application. 50+ options to meet any special requirement. Custom engineering available, consult factory.

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.

SPECIFICATIONS

COOLING CAPACITY @ 68°F [20°C] Discharge & 90°F [32°C] Ambient

MODEL	BTU/HR	WATTS	FULL LOAD AMPS @230 / 460
PCP or POC-750G-80	80,000	23.400	42 / 21
PCP or POC-750G-96	96,000	28,128	42 / 21

COMPRESSOR: HP 7.5
Lifetime lubricated, hermetic scroll type supplied with high/low pressure stat, freeze control, head and suction gauges, pump down solenoid valve, thermostatic expansion valve, refrigerant sight glass 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
- **AR** Remote air cooled condenser furnished separately for mounting on roof.
- **A-WP** Self-contained condenser; complete unit made weather-resistant for outdoor installation
- **A-WP-LP** Self-contained condenser; weatherproof, low profile

COOLING TANK & EVAPORATOR: Capacity ..... 95 gal (361 l)
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.

PUMP: HP 1.5

Capacity ..... 35 gpm (138 lpm) @ 25 PSI
Stainless steel centrifugal pump mounted on rubber pads over a stainless steel condensation tray and supplied with unions and service valves and manually adjustable bypass valve. All piping and fittings brass, copper, or bronze and insulated with closed cell thermo-elastomer with an R factor of 3.7.

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 on a welded angle iron frame. Panels removable for access to all components.

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

PLUMBING CONNECTIONS IN & OUT ..... 1-1/4" [31mm] MPT

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MADE IN USA

FILTRINE IS ISO 9001:2015 CERTIFIED
PRODUCT LINE APPROVED MARK AVAILABLE

608-7.5G
[PCP-750G]
REV. 06.11.18

CHILLER DIMENSIONS and WEIGHTS

FILTRINE Model No.	W		D		H		SHIP WT	
	in	cm	in	cm	in	cm	lb	kg
PCP or POC-750G-A	82	208	39	99	70	178	2200	990
PCP or POC-750G-W	82	208	30	76	60	152		
PCP or POC-750G-AR	82	208	30	76	60	152		
PCP or POC-750G-A-WP	92	234	39	99	70	178		
PCP or POC-750G-A-WP-LP*	94	238	87	221	44	112		
PCP or POC-750G-A-SSD**	52	132	32	81	88	234		
PCP or POC-750G-W-SSD**	52	132	32	81	82	208		
PCP or POC-750G-AR-SSD**	52	132	32	81	82	208		

* Low profile weather-resistant unit for rooftop installation
** 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 on A & WP models. On A-WP-LP model, air discharge out top.

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.

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.

NOTE

Connections for remote condenser are at right end of chiller cabinet.

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.

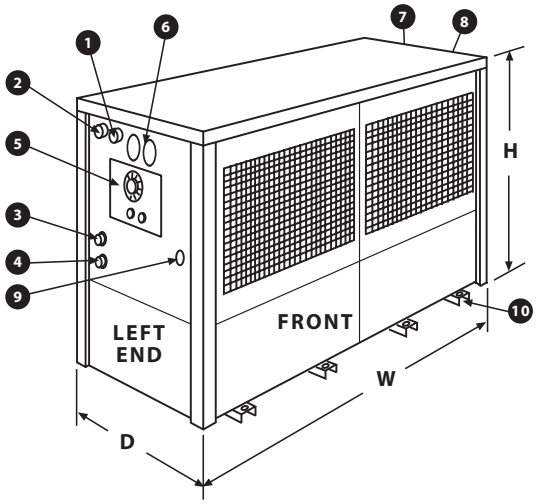
NOTE: Information given in this bulletin for general use only.
Confirm exact specs with factory for your specific requirements.

PUMP CAPACITY CHART

PUMP MODEL	GPM at PRESSURE SHOWN							
	psi	10	20	30	40	60	80	100
	ft	23	46	69	92	138	184	231
STD-1.5C		55	45	32	24	▬	▬	▬
OP-2C		65	57	46	30	▬	▬	▬
OP-0.5T		8	8	8	8	8	7	6
OP-0.75T		13	13	12	12	11	10	8

* **Standard pump is 1 1/2 HP, centrifugal [C]. Optional pumps [OP] include centrifugal or turbine [T] pumps. All turbine pumps include an adjustable pressure relief bypass in lieu of a manual bypass valve.**

STANDARD MODELS: Suffix A, W, AR, A-WP & A-WP-LP



NOTE: Manufacturer recommends 36 in. 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.

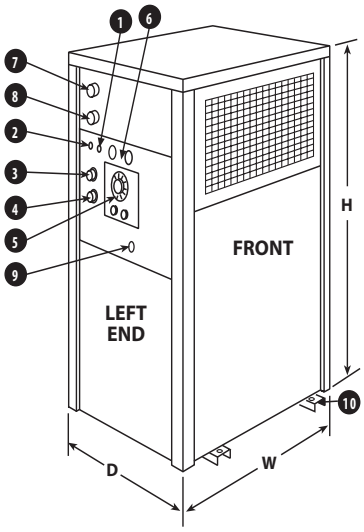
SSD MODEL: SPACE SAVING DESIGN

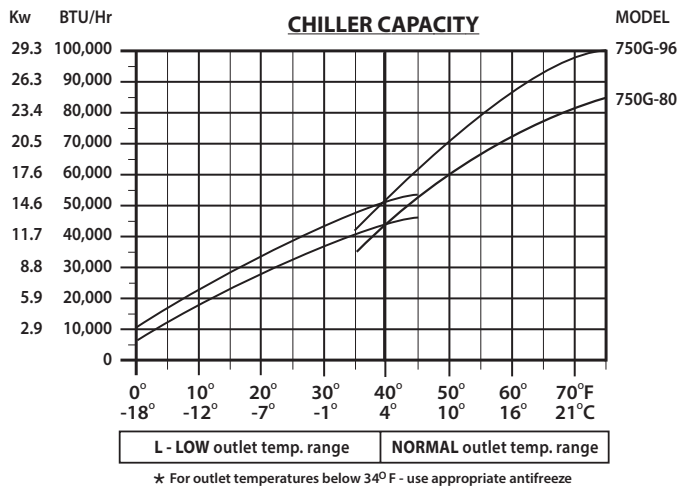
Suffix A, AR & W [AWP not available in SSD model]

NOTE: Manufacturer recommends 36 in. 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.





★ For outlet temperatures below 34° F - use appropriate antifreeze

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