

## PTCS AND PTSS SERIES



Model PTSS-0450

# EFFICIENT OPERATION AND QUALITY CONSTRUCTION

Conair's PTCS (carbon steel), and PTSS (stainless steel) Series Pump Tanks are designed to meet and exceed the needs of your application. Fully engineered for a complete range of tower or chiller applications, Conair's tanks provide the highest quality design and construction features available.

This series of pump tanks promises years of trouble-free operation with the use of high quality components and NEMA 4 lights and switches as standard.

## CHOOSE CARBON STEEL OR STAINLESS STEEL

Conair incorporates more value-added features into every pump/reservoir system than anyone else. Every PTCS and PTSS tank includes standard, full-size pump trim, extended pump suction legs, inside and outside welded seams, and solid steel decking under the pump.

High-efficiency, close-coupled, non-overloading centrifugal pumps are precisely matched to your application, providing optimum flow and pressure to the process with reduced electrical costs, and improving motor life by assuring the motor operates within its horsepower rating.

Conair's full-sized pump suction legs feature a 45° angle opening to prevent vortexing and pump cavitation. This also enables the tank to operate at a lower water level, saving water costs and reducing the use of valuable chemicals that may otherwise overflow to drain at shutdown.

### ■ Quality construction, safe operation and simple maintenance

All pumps are mounted on a solid deck for added strength, serviceability, and safety. Reservoirs are constructed of rugged plate steel for superior strength and reliability.

### ■ Leak-free construction

Steel reservoir seams are double welded, inside and out, for the ultimate protection from leaks and corrosion. Carbon steel reservoir interiors are carefully covered with a thick coat of marine duty coal tar epoxy to prevent water-to-metal contact and extend reservoir life.

### ■ Easy to operate

The Conair programmable controller comes with digital temperature display and RTD probe that controls temperature by cycling the tower fan and recirculating pump. The control includes a high temperature alarm with indicator light. Liquid-filled pressure gauges enable accurate flow adjustment.

### ■ Quick installation

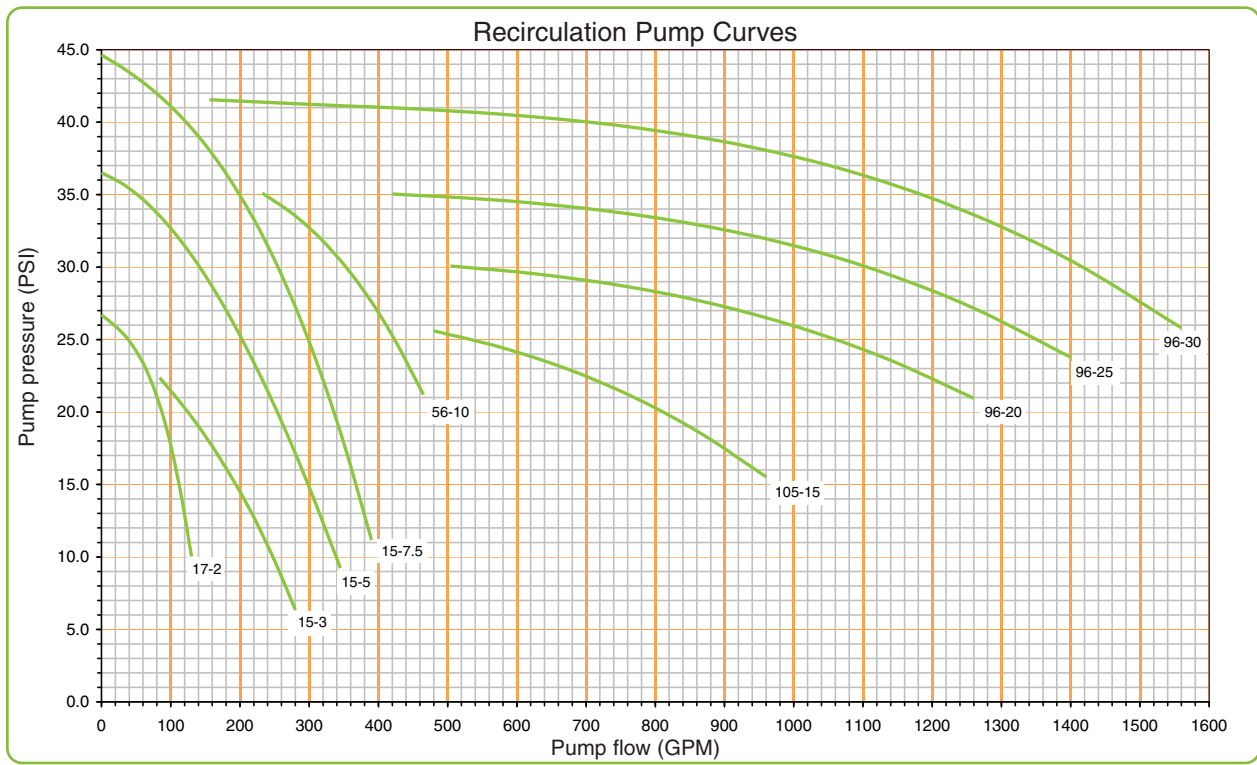
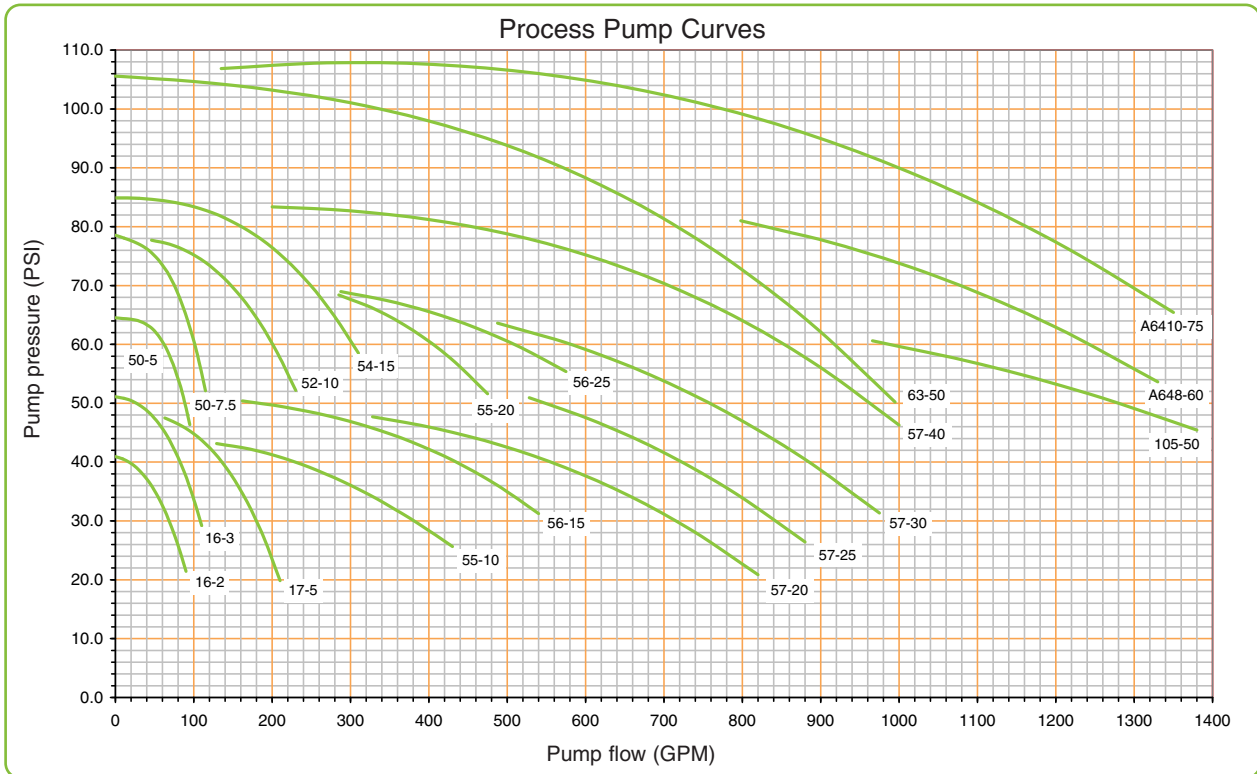
By using the grooved pipe connecting system, the need for flexible couplings is reduced, eliminating pipe stress at start-up. Grooved connections quickly assemble and disassemble for fast installation, maintenance, and reconfiguration when adding or changing pumps. Conair's prewired and mounted NEMA 4 control panel is hardwired to pump motors and all alarms, simplifying field installation and significantly reducing installation costs.



# PUMP CURVES

## PTCS AND PTSS SERIES

Water temperature at 50°F {10°C}



**SPECIFICATION NOTES**

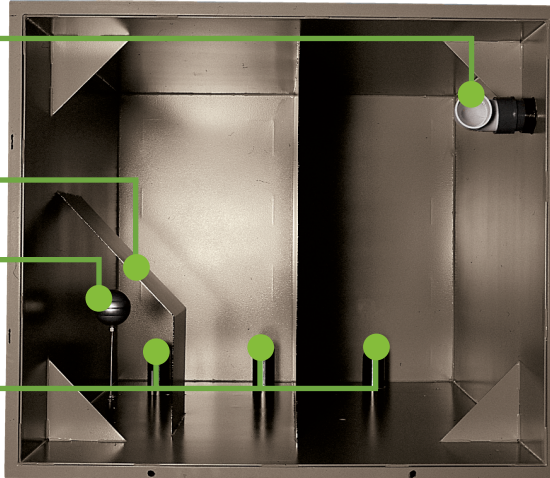
- Pump curves do not reflect pressure drops due to internal piping.
- These pump curves are non-overloading using the service factor of the motors.
- Specifications may change without notice. Check with your Conair representative for the most current information.



## RESERVOIR FEATURES

## PTCS AND PTSS SERIES

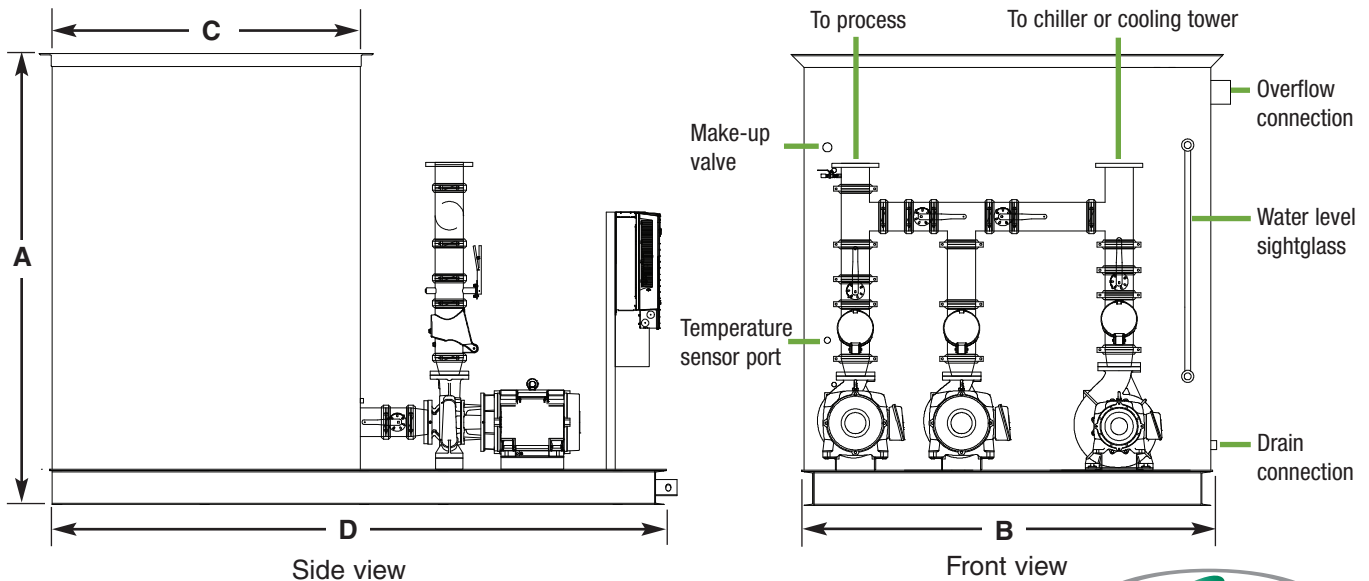
- PVC elbow at reservoir overflow increases holding capacity
- Water baffle reduces turbulence
- Make-up valve assembly guarantees constant water level
- PVC pump suction legs prevent vortexing and pump cavitation



## OPTIONS

- Single or dual standby pumps for process and recirculating eliminate downtime. Pumps are available with complete connecting trim, including discharge manifold and isolation valves.
- Automatic switching to standby pump protects against downtime due to pump failure.
- Full 0.75 inch {19 mm} insulation maintains reservoir water temperature and eliminates "sweating".
- Premium efficiency motors cut electrical operating costs and offer rapid payback with utility rebate programs.
- Unbreakable sight glass features shutoff valves and brass safety rods; allows for a quick visual check of reservoir operating level.
- Tank cover prevents contamination and evaporation.
- Factory-installed and wired alarms with panel mounted indicator lights warn of low flow, low pressure, low level and high temperatures. Sonalert horn with silencer switch warns of system failure.
- Solid-state sensor with alarm provides trouble-free sensing of low water levels.
- For operator protection, a fused disconnect shuts off power before door is opened for maintenance or inspection.
- Panel-installed programmable logic controller (PLC) allows control sequences and alarm settings to be customized for individual process requirements.
- Reservoir support legs conserve valuable floor space, support a cooling tower to reduce roof loading and eliminate additional roof support costs.

## SPECIFICATIONS



## PTCS AND PTSS SERIES

## SPECIFICATIONS

## Carbon Steel Models

Models	PTCS-2100	PTCS-2800	PTCS-3700	PTCS-4500*	PTCS-6000*
<b>Performance characteristics gallon (liter)†</b>					
Capacity to overflow	2075 {7855}	2775 {10,504}	3710 {14,044}	4700 {17,791}	5645 {21,369}
Operating capacity	1575 {5962}	2100 {7949}	2815 {10,652}	3560 {13,476}	4280 {16,202}
Operating chiller	1750 {6624}	2450 {9274}	3300 {12,491}	4155 {15,728}	4990 {18,889}
<b>Dimensions inch (mm)‡</b>					
A - Height	78 {1981}	102 {2591}	102 {2591}	107 {2718}	107 {2718}
B - Width	96 {2438}	96 {2438}	96 {2438}	127 {3226}	151 {3835}
C - Tank length	71 {1803}	71 {1803}	95 {2413}	105 {2667}	105 {2667}
D - Total length	156 {3962}	168 {4267}	168 {4267}	173 {4394}	173 {4394}
<b>Connections inch NPT</b>					
Overflow	4.0	4.0	4.0	4.0	4.0
Make-up	1.0	1.0	1.0	1.0	1.0
Drain	2.0	2.0	2.0	2.0	2.0
<b>Weight lb (kg)</b>					
Shipping	5000 {2268}	5500 {2495}	7500 {3402}	10,500 {4763}	16,000 {7257}
Operating	22,500 {10,206}	29,500 {13,381}	39,000 {17,690}	50,000 {22,680}	63,000 {28576}

## Stainless Steel Models

Models	PTSS-0275	PTSS-0450	PTSS-0700	PTSS-1000	PTSS-1000XL	PTSS-1300	PTSS-1300XL
<b>Performance characteristics gallon (liter)†</b>							
Capacity to overflow	265 {1003}	430 {1628}	695 {2630}	1025 {3880}	1000 {3785}	1290 {4883}	1250 {4731}
Operating capacity	185 {700}	305 {1154}	485 {1836}	720 {2725}	700 {2650}	905 {3426}	880 {3331}
Operating chiller	225 {852}	370 {1400}	590 {2233}	875 {3312}	850 {3218}	1090 {4126}	1060 {4012}
<b>Dimensions inch (mm)‡</b>							
A - Height	49 {1244}	52 {1321}	52 {1321}	52 {1321}	52 {1321}	64 {1626}	52 {1321}
B - Width	60 {1524}	60 {1524}	72 {1829}	72 {1829}	84 {2133}	72 {1829}	84 {2133}
C - Tank length	23 {584}	36 {914}	48 {1219}	71 {1803}	59 {1498}	71 {1803}	59 {1498}
D - Total length	60 {1524}	72 {1829}	96 {2438}	144 {3657}	144 {3657}	144 {3657}	144 {3657}
<b>Connections inch NPT</b>							
Overflow	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Make-up	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Drain	1.0	1.0	1.0	1.5	1.5	1.5	1.5
<b>Weight lb (kg)‡</b>							
Shipping	2000 {907}	2500 {1134}	3000 {1361}	3400 {1542}	3400 {1542}	3600 {1633}	3600 {1633}
Operating	4500 {2041}	6500 {2948}	9000 {4082}	12,500 {5670}	12,500 {5670}	14,500 {6577}	14,500 {6577}

Models	PTSS-1600	PTSS-1600XL	PTSS-1700	PTSS-2100	PTSS-2800	PTSS-3700	PTSS-4500*	PTSS-6000*
<b>Performance characteristics gallon (liter)†</b>								
Capacity to overflow	1570 {5943}	1525 {5773}	1725 {6530}	2075 {7855}	2775 {10,504}	3710 {14,043}	4700 {17,791}	5645 {21,368}
Operating capacity	1105 {4183}	1060 {4013}	1210 {4580}	1575 {5962}	2100 {7949}	2815 {10,655}	3560 {13,476}	4280 {16,201}
Operating chiller	1330 {5035}	1270 {4807}	1460 {5527}	1750 {6624}	2450 {9274}	3300 {12492}	4155 {15,728}	4990 {18,889}
<b>Dimensions inch (mm)‡</b>								
A - Height	76 {1930}	76 {1930}	66 {1676}	78 {1981}	102 {2591}	102 {2591}	107 {2718}	107 {2718}
B - Width	72 {1829}	84 {2133}	96 {2438}	96 {2438}	96 {2438}	96 {2438}	127 {3226}	151 {3835}
C - Tank length	71 {1803}	59 {1498}	71 {1803}	71 {1803}	71 {1803}	95 {2413}	105 {2667}	105 {2667}
D - Total length	144 {3657}	144 {3657}	144 {3657}	156 {3962}	168 {4267}	168 {4267}	173 {4394}	173 {4394}
<b>Connections inch NPT</b>								
Overflow	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Make-up	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Drain	1.5	1.5	2.0	2.0	2.0	2.0	2.0	2.0
<b>Weight lb (kg)‡</b>								
Shipping	4000 {1814}	4000 {1814}	4500 {2041}	5000 {2268}	5500 {2495}	7500 {2495}	10,500 {4763}	16,000 {7257}
Operating	17,000 {7711}	17,000 {7711}	19,500 {8845}	22,500 {10,205}	29,500 {13,380}	39,000 {17,690}	50,000 {22,679}	63,000 {28,576}

## SPECIFICATION NOTES

\* Pump deck shipped separately, field connection required.

† Operating level based upon allowing for 30 ft {9144 mm} of vertical riser drain down and for tower systems the typical cooling tower drain down.

‡ Dimensions and weights shown are for a typical 3-pump arrangement. Actual weights and dimensions will vary depending on pump and option selections.

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