# Tamson Instruments Specification sheet

### **Specifications T17000**



<del>0</del>	Stainless steel inner bath
<del>0</del>	High precision stability

- Easy to operate
- RS232 communication
- Drain and overflow outlet

### General

Tamson T17000 thermostatic bath is specially designed for tests that require ultra-precise temperature control and when a large bath opening is required. The bath has a volume of 170 Litres.

One of the applications is to use the T17000 as a diffusion bath for making dynamic gas mixtures with volatile organic components. Another application is to place stirrers on the edge of the bath to heat various cups with samples at the required temperature. The bath can also be used to simultaneously do various tests, because of its large opening.

### Construction

The stainless steel construction ensures an exceptionally stable bath temperature which is further improved by an ingenious stirring mechanism with baffle plates. All wetted parts are made from stainless steel, providing resistance against all usual bath fluids. The bath is fitted with adjustable feet for levelling. To work at temperatures below ambient, use of cooling must be made.

Item	Unit	T17000	
P/N 230V/50~60Hz		00T0731	
P/N 115V/60Hz		00T0732	
Power	[kW]	2.9	2.9
Heating	[kW]	2.8	2.8
Used materials inside bath		Stainless steel,	brass bearings
Range		Ambien Ambien	t150°C t248°F
Reading		°C c	or ∘F
Setting ±	[°]	0.01	
Stability ±	@50°C	0.01°C Water	
Bath volume	[L]	17	70
Top lid		Inclu	lded
Opening bath	[mm]	243 * 1768 (effective use)	
Depth	[mm]	310	
Length	[mm]	358	
Width	[mm]	2067	
Height	[mm]	583	
Weight	[kg]	87	
CE	All models conform to CE regulation		

Cooling fluid can be pumped through the cooling coil inside the apparatus. Tap water or a combination with the external Tamson TLC15-5 cooling circulators can be used for this purpose.

### Agitation

A vane type stirrer with brass bearings moves the bath fluid past the heaters and then from under the main baffle plate, thus directing the freshly heated bath fluid to the walls as well as other areas and is creating an optimal temperature uniformity inside the bath.

### Span

The bath can be operated from ambient  $+5^{\circ}$ C up to  $+150^{\circ}$ C (41..302°F). With the use of the built-in cooling coil, span lies 5°C above the temperature of the cooling liquid.

### Accuracy and set point

The set point can be set in steps of 0.01°. The system overall accuracy is within  $\pm$  0.01°C. Please see the graphs for more details. After the temperature control is stable, the offset can even be adjusted with  $\pm$  0.005°C.



## Specifications T17000

### Temperature stability, stable ambient temp.

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Specification s

### Safety

The bath conforms to CE regulations. It also is equipped with a mechanical adjustable and resettable safety thermostat. Advanced safety features are microprocessor control of:

- Electronic- and processor system,
- Control and feedback from each heating,
- System accuracy.

System error results in total cut-off from the power supply.

### **Optional equipment**

See below.

#### Stability when ambient ∆<0,2°C Probe B Probe A Ambient 21,628 21,636 23,344 °C 21,618 21,628 23,168 °C 0,010 0,008 0,176 °C 0,005 0,004 0,088 °C 0,002156 0,001664 0,0437 °C [hh:mm] 01:28

### Cooling down with TLC15-5, ambient @ 25°C



Accessories				
P/N	Picture	Description		
00T0565		Cooling circulator TLC15-5 - 230V/50Hz		
00T0567		Cooling circulator TLC15-5 - 230V/60Hz		
00T0570		Cooling circulator TLC15-5 - 115V/60Hz		
12T1075	Tubing with connectors and clamps to be used between a TLC15- 5 and a T17000			

