



Thermostatic Water Bath

LB-19TWB

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1. Introduction

Thermostatic Water Bath LB-19TWB is a space-saving unit capable of holding up to 26 liters for ample storage. Operates within a temperature range of RT+5°C to 99.9°C with a display precision of 0.1°C. Enhanced with a hidden stretch drain system to facilitate cleanliness in the work area. Offers precise temperature control with a countdown feature, ensuring accuracy in experimentation.

2. Features

1. Anti-corrosion cold plate shell
2. 304 stainless steel inner liner
3. Adjustable ring cover
4. Real-time temperature display
5. Accurate temperature control

3. Specifications

Model No	LB-19TWB
Capacity	26 L
Temperature Range	RT+5 to 99.9°C
Temperature Display Precision	0.1°C
Temperature Fluctuation	± 0.5 °C
Temperature Uniformity	± 0.5 °C
Working Chamber Row	2
Working Chamber Cabinet	8
Timing Range	1 to 999 min
Chamber Material	Integrated SS
Heating Power	1800W
Power Supply	220V 50/60Hz
Chamber Dimensions	620 × 305 × 100 mm
Outer Dimensions	680 × 365 × 195 mm
Packing Dimensions	705 × 410 × 265 mm
Net Weight	7 kg
Gross Weight	8.6 kg

4. Applications

Thermostatic Water Bath enables precise temperature control for various laboratory tasks such as sample incubation, enzyme reactions, melting point determinations, and microbiological culture preparations.

5. Instrument Introduction

This **LB-19TWB** is of water bath type. Its diameter of the maximum opening is 125mm, each opening is provided with 4 rings and 1 cover. The inner bath is of one-piece sheet copper molded by punching. The outer casing is made of choice sheet steel of high quality to be finished in spray lacquer. The gap between the outer casing and the inner bath is stuffed with glass wool for heat preservation. The heating element is immersed in water so that rapid heating can be obtained and power consumption economized. A metal regulator is also equipped for adjusting the temperature from 37 °C to 100°C according to requirements. These are for the adjuster's reference only.

6. Operations

6.1 Set temperature

Press the **SET** key to set the temperature. After pressing the **SET** key, data on the lower line digital tube will flash (the upper low temperature normally), which means the meter enters the status of the temperature setting. Press Δ the key to increase the set value, and press ∇ the key to decrease the set value. If continuously press the increase key or decrease key, the set value will change rapidly. Press the **SET** key again, and the meter returns to temperature under normal working status. The setting is finished.

6.2 Parameter setting

Press the **SET** key for 3 seconds to enter the setting status of the internal menu. The following parameters appear one by one.

E: offset of proportion zone, parameter E can move the actual control point. Even though the center of time proportion moves, value E can be positive or negative depending on the heating system.

P: proportion zone, that is, proportion control value. For easy understanding and for the proportion zone to have bigger representation space, the proportion zone of this meter is unilateral, that is, the actual proportion zone is twice the value P. With the actual control point as the center, output heating proportion within the range of value P from down to up is evenly distributed at 0% – 100%.

T: Heating output circulation period, that is the working circulation period of the relay. Value T is small, and the control effect is good, but if value T is too small, the relay's lifetime will shorten due to frequent working. Generally, value T is 20-40s.

For example: If P is set to 4.0 (actual proportion zone is 8.0), temperature is set to 60.0°C, E is set to 2.0, and the actual control point is 58.0°C. When the temperature reaches 54.0°C, the meter will enter the status of proportion zone control

6.3 Correction of Error

When confirming that the displayed value on the meter is not the correct measured value, correct displayed value. Press the **SET** key for 3 seconds to enter the internal menu of the meter, and the first parameter that appears is E, and press the **SET** key, the meter data will flash, this flashing parameter is the correcting parameter of error, and press Δ or ∇ key to correct this parameter. The correction range of error is -9.9°C~+9.9°C. Press the **SET** key again and parameters P, and T will appear one by one, and then press the **SET** key again to exit. Correction value of meter when ex-work is 0. When using, one shall prevent the correct meter from being corrected incorrectly.

6.4 Circuit

This equipment is operated on 220VAC. A rubber 3-strand main cord is provided, of which the black one is for grounding. One of the terminals of the cord is connected to the floorboard of the outer casing, while the other terminal is connected to the longest and thickest pin in the 3-pin plug. When in operation, the ground wire for the 3-pin receptacle must be connected effectively. Generally, the ground wire is welded to the water pipe or to a galvanized tube of 2m long and 25mm, in diameter to be buried underground. But do never connect to the gaspipe!



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