

BATHS

SHAKERS

STIRRERS

HOTPLATES

INCUBATORS

HEATING
MANTLES



BATHS

WATER BATH FOR FULL VISIBILITY OF SAMPLES

WB-Series, For Full Visibility Of Samples



WBS-Series, With Safety Thermostat

These Water Baths are identical to the WB models but are equipped with an additional Safety Thermostat.

Features:

- Low-cost fully compatible substitute for expensive Water Bath.
- Seamless transparent polycarbonate tank-withstands temperature 120°C.
- Fast-Acting thermostat also serves as low-water-level protector, preventing heating-element burn-out & fire hazard.
- Temperature setting in °C from ambient to +100°C
- Temperature control accuracy of approximately $\pm 1^\circ\text{C}$ ensures precise test conditions
- Robust & reliable - designed for years of trouble-free service.

Options:

WB-Special:



According to customer dimensions

WBSD Series: With Digital Control



WBSD-7

C-7

WBSD Series, Transparent Polycarbonate Thermostatic Bath

Ideal for sample pre treatment in QC, pathology and educational purposes, routine laboratory purposes, procedures requiring visibility of reactions inside the vessels & as a 'personal' water bath for scientists needing only a small working area with a compact footprint. Temperature control accuracy of approximately $\pm 0.2^\circ\text{C}$ ensures precise test conditions.

Removable Modular Heating Assembly enables convenient cleaning of all parts & makes it usable in other vessels.



Temp. Range: from slightly above ambient to +100°C (with cover) Accuracy: approx. $\pm 0.3^\circ\text{C}$ at 37°C (depending on operating conditions). Voltage: 230 V, 50 Hz (or 120 V, 50/60 Hz).							Accessories		
Standard model	With safety thermostat model	Digital model	Bath capacity (Liters)	Inside dim's (cm) W1xD1xH1	Outside dim's (cm) W2xD2xH2	Watts	Bath cover model	Floating balls model	Evap. lid model
WB-3	WBS-3	WBSD-3	2.7	10 x 17 x 10	15 x 31 x 24	500	C-3	FB-3	-
WB-4	WBS-4	WBSD-4	4.5	10 x 27 x 10	16 x 41 x 24	600	C-4	FB-4	-
WB-5	WBS-5	WBSD-5	5.5	16 x 20 x 11	22 x 34 x 24	750	C-5	FB-5	EL-5
WB-7	WBS-7	WBSD-7	7.0	16 x 3 x 11	22 x 44 x 24	1000	C-7	FB-7	-
WB-8	WBS-8	WBSD-8	8.5	21 x 35 x 12	28 x 50 x 26	1000	C-8	FB-8	-
WB-11	WBS-11	WBSD-11	11.0	18 x 27 x 16	24 x 43 x 30	1200	C-11	FB-11	-
WB-14	WBS-14	WBSD-14	14.0	21 x 35 x 16	28 x 50 x 30	1500	C-14	FB-14	EL-14
WB-30	WBS-30	WBSD-30	30	32 x 51 x 18	38 x 66 x 24	*2000	C-30	FB-30	EL-30/8/11

*1500W at 120V

Accessories:



Floating balls

A balls blanket of Floating Polypropylene Balls is most effective for reducing evaporation and loss of heat from the Water Bath. The Balls act as effectively as a lid (flat or gabled), while enabling immersion and removal of flasks & other vessels without having to lift a lid. Usable UP to 110°C.



EL-30/8

Evaporation lids

Evaporation Lids (EL) for use with WB and WBS Baths. Each Lid has openings equipped with concentric rings. The rings reduce the diameters of the openings to accommodate containers of all sizes. The EL-5 Lids, for use with WB(S)-5 Baths, have four 80mm diameter openings.

IMMERSION CIRCULATOR

TEPS-1



TEPS-4



TEPS-1, Immersion Circulator – Basic Model

Features:

- Temperature range: ambient to 100°C (with cooling +10 to 100°C).
- Accuracy: approx. ± 0.3 to $\pm 1^\circ\text{C}$.
- Pumping capacity: up to 12 l/min.
- Safety Cut Off.
- 12L/min max. head 2m.
- Immersion depth: min. 6cm, max. 15.5cm.
- Glass Thermometer
- **Optional: External circulation apparatus.**

TEPS-4, Digital Immersion Circulator

Features:

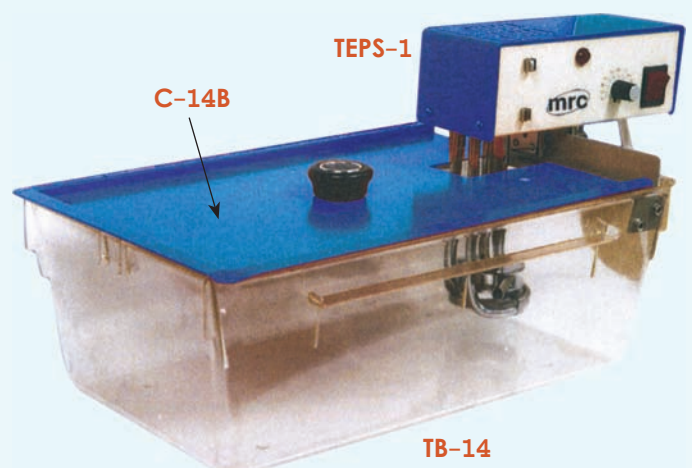
- Digital set and display of actual operating temperatures.
- PID controller provides very precise temperature control.
- Adapts to many different containers.
- Temperature range: ambient +5°C to 100°C (with cooling -10°C to 100°C),
- Accuracy: approx. $\pm 0.1^\circ\text{C}$.
- Pumping capacity: up to 12 l/min.
- Immersion depth: minimum 6 cm, maximum 15.5 cm.
- Safety Cut Off.
- **Optional up to 200°C (for oil).**

Model	TEPS-1	TEPS-4
Temperature range	up to 100°C	
Temperature stability	$\pm 0.3^\circ\text{C}$ to 1°C	$\pm 0.1^\circ\text{C}$
Controller	Basic analog	PID Digital
Readout	Thermometer	Digital °C/°F
Pumping flow	12 Liter/min	
Immersion	Minimum 6cm, Maximum 155mm	
Heater	1000Watt (optional, 1500, 2000watt)	
Over temp. safety	Adjustable	
Dimensions (mm)	W200xD240xH90 / W120xD140xH135	W200xD240xH90 / W120xD140xH135
Weight	2kg	2.3kg

TB-Series, Polycarbonate Tank TB Type For Immersion Thermostat / Circulator

PC Tank with bridge for fixing immersion circulator TEPS-1/TEPS-4, Seamless Transparent Polycarbonate Tank - withstands 120°C. Heating circulators are commonly used for cell cultures, enzyme assays, coliform testing, DNA incubation & procedures.

TB-7	16x30x13cm-Height, 7 Liter
TB-8	21x35x14cm-Height, 8.5 Liter
TB-11	18x27x18cm-Height, 11 Liter
TB-14	21x35x18cm-Height, 14 Liter
TB-30	32x51x20cm-Height, 30 Liter



PORTABLE CLIP-ON DIGITAL IMMERSION CIRCULATOR



TEPS-V6

TEPS-V6 SPL

TEPS-V6, Portable clip-on digital immersion circulator

MRC immersion heaters and water baths with a precise temperature controlled environment, to produce consistently perfect results. Ideal for sous vide and other demanding applications.

MRC immersion circulator is a space saving clip on heater/stirrer unit. It can be easily fitted to a standard stainless or polycarbonate gastronorm square tank or round (minimum depth 18cms) and maximum volume of approximately 60 Liters.

For large tanks and pots there are several immersion heaters with higher wattage and immersion lengths. Precise temperature achieved by PID high precision controller, accuracy and repeatability are guaranteed. Actual temperature is clearly displayed to 0.1°C. Temperature settings are retained in memory even after 'power off'.

Temperatures can be easily and rapidly set with the push button, wipe clean control panel. Easy clamping method, safety protection for low water level and optional sturdy handle for easy carrying.

The case is constructed from high quality stainless steel. If the water drops below the recommended minimum level or the unit is inadvertently switched.

Applications:

- Laboratory water baths
- Calibration baths
- Sous vide.

Options:

TEPS-V6SPL

Longer immersion heater for deep and large containers.

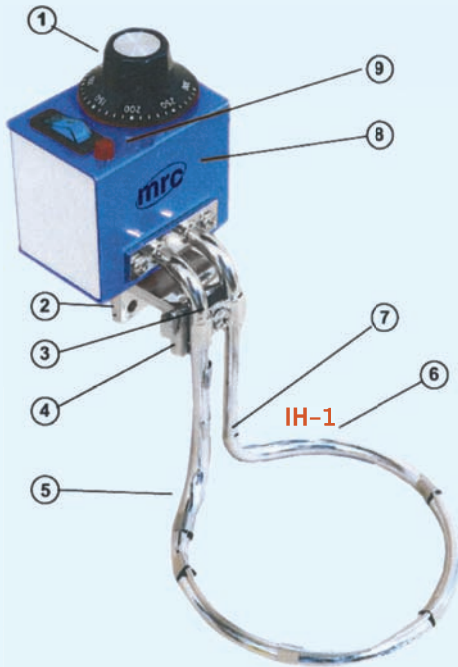


TEPS-V6



Model	TEPS-V6
Display/resolution	Digital LED/0.1°C
Temp. range	Ambient + 5°C - 95°C
Temp. setting	Push button
Stability	±0.1°C
Display/resolution	Digital LED/1 min. increments
Dimensions (mm)	Stirrer case: W122 x D153 x H200 (includes handle) Guard: W122 x D132 x H148 Allow 90mm at rear of unit for mains cable/ventilation
Electrical supply	230V
Power consumption	1kW (Optional: 2000, 2600, 3000 watt)

THERMOSTATIC CONTROLLED IMMERSION HEATERS



IMMERSION HEATER IH-1

- 1- Temperature setting in °C
- 2- Threaded hole for attachment to stand
- 3- Height adjustment permits wide range of application
- 4- Mounting bracket (patented design) with teflon-tipped disc permitting secure clamping to all surfaces, including glass
- 5- Heating element chromium-plated copper sheath: also available in stainless steel on special order
- 6- Fast-acting thermostat also serves as low-level cut-out, preventing element burn-out and fire hazard
- 7- Shallow immersion depth (3 cm)
- 8- The control housing is located outside the vessel and thus protected against vapors and temperature effects
- 9- Indicator light

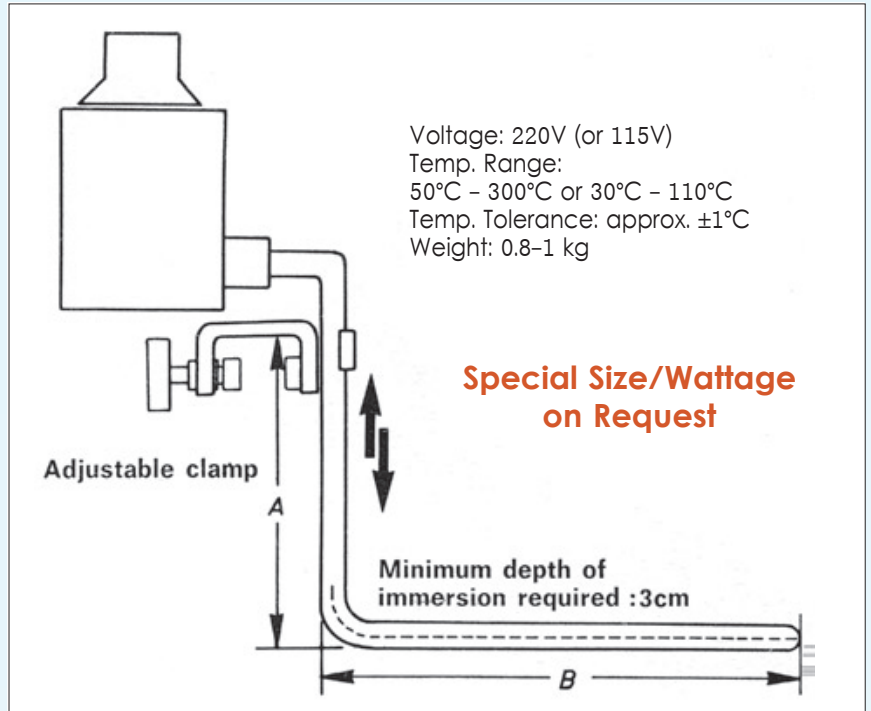


IH-Series, Thermostatic Controlled Immersion Heaters

Immersion heat:

Thermostatically Controlled Immersion Heaters.

Reliable element for accurately heating liquids to temperatures of up to 300°C with a tolerance of approx. ±1°C. Designed for trouble-free application. Suitable for use in science and industry for: Distillation, evaporation, sterilization, rotary evaporation, ultrasonic cleaning, photographic bath etc.



Model 50-300°C	Digital 50-300°C	Model 50-110°C	Digital 50-110°C	Watts	"A" mm	"B" mmØ
IH3/13	IHSD-3/13	IH1/13	IHSD-1/13	500	100	130
IH3/15	IHSD-3/15	IH1/15	IHSD-1/15	750	110	150
IH3/17	IHSD-3/17	IH1/17	IHSD-1/17	750	120	170
IH3/19	IHSD-3/19	IH1/19	IHSD-1/19	1000	130	190
IH3/21	IHSD-3/21	IH1/21	IHSD-1/21	1000	150	210
IH3/23	IHSD-3/23	IH1/23	IHSD-1/23	1250	180	230
IH3/25	IHSD-3/25	IH1/25	IHSD-1/25	1500	200	250
IH3/27	IHSD-3/27	IH1/27	IHSD-1/27	1500	200	270

Immersion heater Features:

- Easily converts any container into a thermostatically controlled bath from ambient to 300°C.
- Rugged, reliable, convenient, maintenance-free, energy-saving & reasonable priced.
- Fully valid substitute for expensive water and oil baths.
- Permits utilization of the entire contents of the container, without effecting the functioning of stirrers.
- Heat is applied directly to the liquid, ensuring rapid rise of temperature.
- Safe - fast acting thermostat server as low-water level cut out.
- You get the temperature you set.
- Control box is located on the outside and is unaffected by vaporous and temperature effects.

DIGITAL PRECISE SHAKING WATER BATH

WBT-200/400/401, Digital Precise Shaking Water Bath, 22 & 38 Liter, & Digital PID Control, Reciprocating Motion, 20~200rpm, to 100°C, ±0.1°C, up to 1 Liter Flask



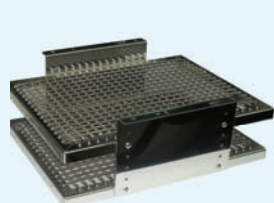
These reciprocating water bath shakers are available in three models. Model WBT-200 small platform 250x300mm, Model WBT-400 large platform 300x400mm & Model WBT-401 refrigerated to 0°C. Temperature control is precise, temp. range of 5°C above ambient to 100°C, speed range 20 - 200 rpm, heat loss and evaporation minimized with use of stainless steel hood cover.

Easy emptying through a drain at the lowest point. Micro processor temperature PID controller with dual display of measured temperature and set temperature.

Electronically Controlled Shaking Mechanism Provides Quiet Reciprocating Motion and Precise Speed Control.

Options:

- Water level protector.
- Universal platform.
- Digital speed control.



Universal Spring Racks

Optional: Tube Holders



AC-220-30-16



**WBT-200D
Optional: Dig. Speed Control**



500ml



250ml

Flask Holders

Features:

Stainless Steel Bath for Superior Durability & High Thermal Efficiency • Innovative Easy-to-Use Digital PID Controller • Electronically Controlled Shaking Mechanism Provides Quiet Reciprocating Motion and Precise Speed Control • Universal Stainless Steel Spring Rack (Optional): for various kind of Flasks dishes and Tubes (optional) • Patent shaking mechanism: minimum noise and vibration.

Model	WBT-200	WBT-400	WBT-401
System	Reciprocation shaking circulation		
Temp. range	Room temperature - 100°C		0°C-100°C
Temp. constancy	±0.1°C		
Temp. control	PID		
Temp sensor	PT-100Ω		
Inside material	SUS304		
Rate of shaking	20~200 rpm		
Shaking width	20 and 40 mm variable		
Shaking plate (mm)	W300xD250xH130	W400xD300xH160	
Refrigerator			1/4HP
Heater	1.0KW	1.6KW	
Safety devices	Short circuit breaker, over heat protector, sensor abnormality, refrigerator over protector		
Inside dimensions (mm)	W500xD300xH150	W600xD350xH180	
Outside dimensions (mm)	W700xD350xH300	W830xD415xH350	W980xD415xH430
Volume (Liters)	22.5	37.8	
Weight	25kg	30kg	53kg

capacity of flasks	50 ml	125 ml	250 ml	500 ml	1000 ml
WBT-200 number of flasks	20	12	6	4	2
WBT-400/401 number of flasks	35	20	12	6	4

DIGITAL PRECISE CIRCULATION WATER BATH

WBH-Series, Digital Precise Circulation Water Bath

There are 2 models with internal circulation pump, 10 & 20 Liters. The immersion circulator bridge can easily remove for easy cleaning of the tank.



WBH-100

WBH-200

Features:

Ideal for Biotechnology, Clinical, Environmental, Medical, Petroleum, Food Industry, Pharmaceutical or Industrial Applications

- Powerful Circulation Pump Assures Temp. Uniformity.: Internal and optional external Circulation
- Stainless Steel Bath(#304) for Superior Durability & High Thermal Efficiency
- Stainless Steel lid Prevents Evaporation and keeps Constant Temperature.



External Circulation Option

Model	WBH-100	WBH-200	WBH-200I
Temp. range	Ambient +5°C to 100°C		
Temp. constancy	±0.1		
Temp. control	PID		
Internal circulating pump	9Liter/Minute		
External circulating pump	No	No	Yes
Heater	800W	1000W	
Safety devices	Short circuit, over head protector, sensor abnormality		
Bath opening (mm)	W200xD235xH150	W400xD295xH150	
Inside dimensions (mm)	W295xD235xH150	W495xD295xH150	
Outside dimensions (mm)	W340xD280xH320	W540xD340xH320	
Volume	10L	20L	
Weight	7kg	10kg	

WBO-Series, Unstirred Up To 80°C Water Bath

The MRC stainless steel water bath are available in 2 sizes: 10 & 20 Liters. Model WBO-100 and WBO-200 unstirred bath are used for general applications in laboratories. They provides excellent temperature uniformity of the liquid. A PID temperature controller provides instant and accurate temperature. The tank of the bath is made of corrosion resistant stainless steel with round corners for easy cleaning. Include hood cover.



WBO-200

Features:

- Ideal for biotechnology, clinical, environmental, medical, petroleum, food industry
- Stainless steel lid prevents evaporation & keeps constant temperature
- Excellent uniformity & stability
- Seamless, corrosion-resistant, stainless steel chamber
- Available in 10, 20 Liters
- Gable cover included.



WBO-100

Applications:

- Incubate cultures
- Warm bacteriological media
- Perform chemical reactions
- Thaw samples.



Model	WBO-100	WBO-200
Temp. range	Room temperature ~ +5°C to 80°C	
Temp. constancy	±0.1	
Temp. control	PID	
Heater	300W	600W
Safety devices	Short circuit, over head protector, sensor abnormality	
Bath opening (mm)	W295xD235xH150	W495xD295xH150
Inside dimensions (mm)	W295xD235xH150	W495xD295xH150
Outside dimensions (mm)	W420xD280xH185	W620xD340xH185
Volume	10L	20L
Weight	6.5 kg	9 kg

DIGITAL PRECISE REFRIGERATED BATH

WBL-Series, Digital Precise Refrigerated Bath, Internal and External Circulator



Refrigerated Circulating Baths

- Compact design.
- For external & internal temperature applications.
- Low noise level.
- Rapid cool down and heating time.
- Water drain for easy cleaning of the inner tank.
- Models WBL-200 has casters.
- Water level protector.
- Ideal for direct immersion of samples or external circulating system in the field of biotechnology and laboratories.
- Powerful circulation pump ensures temp. uniformity: internal and external circulation.
- Connection with evaporator or viscometer is applicable.

Options:

- Display resolution to 0.01°C
- Build in RS-232/485
- PT-100Ω temperature probe for direct measurements and control of external systems
- Analog inputs and outputs for external programmer and temperature recorder.

Model	WBL-100	WBL-101	WBL-200
Temperature range	-30°C~100°C		
Temp. constancy	±0.1°C		
Temp. control	PID		
Temp. sensor	PT-100Ω		
Circulation pump	9L/min. max. head 2m	18L/min. max. head 7m	27L/min. max. head 7m
Heater	1600W		2500W
Refrigerator	1/3HP		1 HP
Safety devices	Short circuit breaker, over heat protector, sensor abnormality, overload protector		
Bath opening (mm)	W200xD150xH150		W300xD210xH180
Bath dimension	W200xD300xH150		W300xD360xH180
Outside dimensions	W315xD450xH630		W420xD530xH800
Volume	9.0L		19.4L
In/Output	9.5mm		12.5mm
Weight	35kg		63kg

Available Products Catalogs:



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