

# Waterbaths







# Intuitive. Flexible. Easy calibration.

A success story right from the start.

Since the 1970s, the temperature control bath has been an integral part of the Memmert product range. More than several hundred thousand waterbaths have left our factory in Buechenbach to date and are used on all continents of the world. In 2020, the new generation of waterbaths was introduced — with a convenient design and unique operation.

The Memmert waterbath WTB is a prime example of successful appliance design: modular, compact, with a convincing operating concept and dynamic heating and control technology.

Intelligent design looks simple.

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Temperature control of samples, plates, breeding media and emulsions in the laboratory, long-term exposure to heat of plastics to determine dimensional stability and post-shrinkage, softening temperature testing of plastic, warming of baby food

ADDITIONAL INFORMATION

**PAGF 15** 



Waterbath WTB

Model sizes: 6 / 11 / 15 / 24 / 35 / 50

+10 °C above ambient to +100 °C

**WATERBATH WTB** What makes this modern, compact generation of waterbaths from Memmert so extraordinary? The temperature bath adapts flexibly to your wishes. It maintains the temperature of nutrient solutions, samples, ointments and emulsions with absolute precision. It is easy to clean and it is best in class in safety.





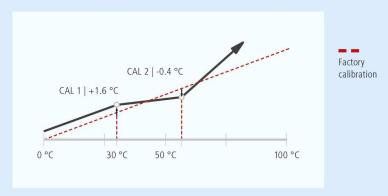
# Compact and easy to clean

Every square centimeter of space in the laboratory is valuable. That is why we have designed the Memmert WTB as totally compact that it can easily be placed on any laboratory bench. With its rounded corners, the high-quality stainless steel tub is easy to clean and can be emptied with the standard water drainage without tilting.



# 2-point calibration

Each Memmert waterbath is temperature-calibrated and adjusted before delivery. If readjustment is necessary, for example, due to the influence of the load, you can adjust the device using two self-selected adjustment temperatures.



- CAL 1 Temperature adjustment at low temperature
- CAL 2 Temperature adjustment at high temperature

# 3-level safety system

Memmert waterbaths WTB come with a unique, 3-stage safety system. The reliable protection of the silicone heating element against overheating saves high service costs for replacement and repair.

If there is no (more) water in the waterbath, the dry run protection switches off the heating. A soft start of the heating prevents critical temperature overshoots in the event of a safety shutdown. As the last safety measure, a thermal fuse on the heating element interrupts the circuit when a temperature of over +240 °C is reached.



# Unique control and menu navigation

Swipe, tap, done. Thanks to the intuitive touchscreen control and the minimalist menu navigation, the Memmert waterbaths WTB are ready for operation in no time. Perfectly coordinated heating and control technology guarantee maximum precision and safe operation with optimized water requirements.



#### Personalizable remote screen CustomView

One, two or three: Immediately after switching on the Memmert waterbath, the CustomView view appears. It only shows the values that have been activated on the display — at least one, maximum three. The individual selection such as setting temperature, timer, alarm, 2-point calibration and temperature unit °C or °F can be easily changed in the device settings. Simply tap the display and the home screen appears.







# Fast and highly precise temperature control

The temperature is controlled by an extremely responsive silicone heating element in combination with a high-precision, digital temperature sensor on the bath. This ensures a high level of control accuracy during the entire program runtime.



# Peltier-cooling device CDP115

The advantages: compact design and cooling with environmentally friendly Peltier technology without time-consuming installation on the waterbath.

### One cooling device for all sizes

It extends the temperature range of the Memmert waterbaths from 10 °C and fits all baths sizes (from 7 to 51 liters bath volume). The water is continuously circulated and cooled in the process using special water cooling hoses. Simply place the CDP115 next to the waterbath, connect the hoses, connect to the power supply and off you go! Simultaneous operation with the shaking device is possible without any problems.



# Safety and precision when it comes to cooling

The desired temperature for cooling is also set on the touchscreen of the waterbath WTB. Frost protection switches off the cooling element if there is no liquid flow and thus protects the Peltier through-flow cooling unit from freezing. After the fault has been eliminated, the frost protection switch is automatically reset. The cooling device CDP115 can be switched on and off via its own main switch.



# FLEXIBLE AND MODULARLY EXPANDABLE

The waterbath WTB adapts to your needs with its modular concept. If the application requires it, a circulation pump, Peltier-cooling unit or shaking device, can easily be retrofitted. Thanks to the racks for test tubes and flasks, the reaction vessels are gently and safely heated in the waterbath.





# Shaking device SV

If the liquid in the reaction vessels must not rest, the shaking device SV, which is placed on the waterbath, ensures constant movement in the horizontal direction. The shaking frequency, freely selectable between 30 and 150 strokes per minute, can be set on the display of the shaking device - as can the program runtime and alarm protection.

We have suitable racks in our range so that the reaction vessels do not tip over in the temperature control bath. The support basket with integrated perforated mounting shelfs prevents the flasks from slipping or even falling over. Please note: Pay close attention to the flask size when ordering the fixation clips. The shaking device can only be used with a special gable cover.



# Special racks for shaking device SV

When using a shaking device, the flasks are securely held in a support basket with a perforated fixing mounting shelf. They are firmly fixed on the perforated shelf with clips and can neither slip nor tilt.

For the safe storage of the test tubes, we have racks specially designed for the shaking device in our range. They are available for three different glass sizes ( $\emptyset$  14.5 / 18 / 32 mm). Only one insert rack per waterbath is possible. Normal test tube racks cannot be used when using a shaking device SV.



### Pump device CPM

The continuous circulation of the tempering medium with a Memmert pump device CPM improves the thermal homogeneity. This self-priming pump is suitable for continuous operation. The flow capacity is 1.2 liters per minute. The device has its own power plug and can be flexibly switched on or off at any time using the ON/OFF switch. Please note that the circulation pump cannot be used in combination with the cooling device.



#### Waterbath covers

In order to protect the bath contents from foreign objects, we also recommend the use of a gable or flat cover. With a cover, your waterbath also works more efficiently and saves energy, because the heat is stored and evaporation is reduced.

Choose a gable cover if you want to temper test tubes and a flat cover for experiments with flasks. The openings for the flasks recessed in the flat cover can be flexibly closed with ring sets. The gable cover is equipped with one or two handles and can be mounted to the left or right as required. When using with cooling, pumping or shaking devices, suitable special covers with additional cutouts must be used for an optimal fit.

#### Reversible bottom shelfs

If the load is placed on the waterbath bottom without a shelf, the heater transfers the heat directly to the load and thus prevents the tempering medium from heating up evenly. The load may have the same weight as the maximum filling volume of the bath. Reversible bottom shelfs for the Memmert waterbath can alternatively be used with a height of 30 or 60 mm.







# SERVICES FOR THE WATERBATH WTB

IQ/OQ documents



We carry out IQ/OQ measurements in our factory. You can freely select a temperature value; the distribution measurement is carried out according to DIN 12876.2 for nine measuring points in the waterbath. Further temperature values and validation on site are available upon request.

#### Maintenance



The Memmert service team will be happy to maintain your temperature control bath at your location. Documentation (available upon request) is made of the maintenance accordingly.

To ensure that your device remains intact over a long service life and errors are detected and rectified at an early stage, we offer you a one-time maintenance and a maintenance contract on special terms. The minimum duration for a maintenance contract is three years – the maintenance is carried out by our service team in Germany, Austria and France. If you would like maintenance in another country, please contact us for getting in touch with our broad service network.

#### Calibration

To ensure that the temperature shown in the display actually corresponds to the temperature measured in the waterbath, we recommend that the temperature bath is regularly calibrated. As with an IQ/OQ measurement, the calibration value can also be freely selected here and any number of temperature values can be calibrated. We also offer this service in Germany, Austria and France, and other areas upon request.

Our team will be happy to answer any questions you may have:



service@memmert.com



+49 9171 9792-911

#### **WATERBATHS WTB**

according to DIN 12876-3, EN 61010, EN 61010-1 (IEC 61010-1), EN 61010-2-010



Interior:

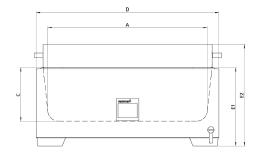
Deep-drawn stainless steel tray (stainless steel W.St. 1-4301), heating mounted from the outside, without corners and edges for easy cleaning incl. central drain (no disturbing installations)

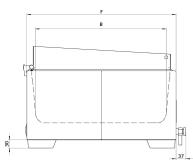
textured stainless steel (material 1.4301) intuitive 3.5" colour graphic display with touch Housing:

cover is not included in standard delivery, but available as accessory

mains cable with plug (German type) Connection:

Installation:





Model sizes/Description		6	11	15	24	35	50		
Stainless steel interior	Contents Length Width	approx. I (A) mm (B) mm	7.5 277 217	10 267 207	17.1 482 277	23.1 472 267	37.5 602 482	51 592 472	
	Height	(C) mm	150	200	150	200	150	200	
Textured stainless steel exterior	Width	(D) mm	349 554			674			
	Height (with flat cover)	(E1) mm	245	295	245	295	245	295	
	Height (with gable cover)	(E2) mm	348	398	348	398	348	398	
	Depth	(F) mm	289		349		554		
Temperature	Setting accuracy	°C	0.1						
	Working temperature range	°C	at least 5 above ambient to +100 (with cover, depending on ambient pressure)						
	Setting temperature range	°C	+10 to +100						
Further data	Electrical load at 230 V, 50/60 Hz	approx. W	1000 1420 280					00	
	Electrical load at 115 V, 50/60 Hz	approx. W	1000 1420 2					000	
Packing data	Net weight (with one cover option)	approx. kg	6	7	9	10	14	16	
	Gross weight (in carton)	approx. kg	10	12	14	16	20	23	
	Length	approx. mm	570 670			910			
	Width	approx. mm	450 53		30	610			
	Height	approx. mm	420	380	400	460	400	460	
Order No. Waterbaths		WTB6	WTB11	WTB15	WTB24	WTB35	WTB50		

Options		11	15	24	35	50			
Voltage 115 V, 50/60 Hz	X2								
Works calibration certificate +37 °C		D00123							
World campiation certained (13)			500	123					

Works calibration certificate +37 °C	D00123						
Accessories	6 11	15 24	35 50				
Stainless steel gable cover	B39844	B39845	B39846				
Special stainless steel gable cover (only in combination with CDP115/ CDP115X2/ CPM650/ SV1524/ SV1524X2/ SV3550/ SV3550X2)	B50775	B50763	B50764				
Flat stainless steel cover with openings and concentric ring sets; 3 openings, Ø 87 mm	B48804		-				
Flat stainless steel cover with openings and concentric ring sets; 6 openings, Ø 107 mm	-	B48805	-				
Flat stainless steel cover with openings and concentric ring sets; 8 openings, Ø 107 mm	-		B48806				
Special flat stainless steel cover with openings and concentric ring sets; 3 openings, Ø 87 mm (only in combination with CDP115/ CDP115X2/ CPM650)	B48807		-				
Special flat stainless steel cover with openings and concentric ring sets; 6 openings, Ø 107 mm (only in combination with CDP115/ CDP115X2/ CPM650)	-	B48808	-				
Special flat stainless steel cover with openings and concentric ring sets; 8 openings, Ø 107 mm (only in combination with CDP115/ CDP115X2/ CPM650)	-		B48809				
Perforated bottom shelf, reversible for 2 heights (30 or 60 mm), stainless steel	B50767	B50769	B50771				
Peltier-cooling device CDP115 for waterbaths for temperatures below ambient from +10 °C, Voltage 230 V, 50/60 Hz. Please do not forget to order the installation and connection set (B48813)!	CDP115						
Peltier-cooling device CDP115 for waterbaths for temperatures below ambient from +10 °C, Voltage 115 V 60 Hz. Please do not forget to order the installation and connection set (B48813)!	CDP115X2						
Pump device for continuous circulation of the tempering medium. Voltage 230 V, 50/60 Hz. Please do not forget to order the installation and connection set (B48813)!	CPM650						
Installation and connection set for Peltier cooling device CDP115 or pump device CPM650 (incl. mounting bars for all different bath sizes)		B48813					
Shaking device for waterbaths incl. support frame, shaking frequency 30 - 150 strokes per minute (horizontal back/forth movement), requires special gable cover. Voltage 230 V, 50/60 Hz. Please do not forget to order the support basket.	-	SV1524	SV3550				
Shaking device for waterbaths incl. support frame, shaking frequency 30 - 150 strokes per minute (horizontal back/forth movement), requires special gable cover. Voltage 115 V, 60 Hz. Please do not forget to order the support basket.	-	SV1524X2	SV3550X2				
Support basket with perforated mounting shelf (stainless steel) with grid perforations to take clips for conical flasks (use of test tube racks not possible)	-	B48814	B48815				
Clip for 100 ml flask, max. flasks see sketch on demand	-	B02	2692				
Clip for 200 ml flask, max. flasks see sketch on demand	-	2693					
Clip for 300 ml flask, max. flasks see sketch on demand	-	B02	2694				
Clip for 500 ml flask, max. flasks see sketch on demand	-		2695				
Rack for shaking device for 171 test tubes Ø 14.5 mm	-	B48816					
Rack for shaking device for 475 test tubes Ø 14.5 mm	-		B48817				
Rack for shaking device for 119 test tubes Ø 18 mm	-	B48818	-				
Rack for shaking device for 357 test tubes Ø 18 mm	-		B48819				
Rack for shaking device for 45 test tubes Ø 32 mm	-	B48820	-				
Rack for shaking device for 117 test tubes Ø 32 mm	-		B48821				
Test tube racks, holes 2-row racks, 34 holes, Ø 10 mm each	B48822	D.40022	<del>-</del>				
Test tube racks, holes 2-row racks, 58 holes, Ø 10 mm each	-	B48823	-				
Test tube racks, holes 2-row racks, 74 holes, Ø 10 mm each	D 4002 4	•	B50656				
Test tube racks, holes 2-row racks, 30 holes, Ø 12 mm each	B48824	D4003E	-				
Test tube racks, holes 2-row racks, 58 holes, Ø 12 mm each	-	B48825	- DE00E7				
Test tube racks, holes 2-row racks, 66 holes, Ø 12 mm each	B48826	•	B50657				
Test tube racks, holes 2-row racks, 26 holes, Ø 14.5 mm each	D400ZU	B48827	_				
Test tube racks, holes 2-row racks, 46 holes, Ø 14.5 mm each	-	D40027	DEUCEO				
Test tube racks, holes 2-row racks, 58 holes, Ø 14.5 mm each Test tube racks, holes 2-row racks, 22 holes, Ø 18 mm each	B48828		B50658				
Test tube racks, holes 2-row racks, 38 holes, Ø 18 mm each	D400Z0	B48829	-				
Test tube racks, holes 2-row racks, 50 holes, Ø 18 mm each	-	548829	B50659				
	D40020	•	D30039				
Test tube racks, holes 2-row racks, 18 holes, Ø 21 mm each Test tube racks, holes 2-row racks, 34 holes, Ø 21 mm each	B48830	B48831					
Test tube racks, holes 2-row racks, 44 holes, Ø 21 mm each	•	D4003 I	B50660				
Test tube racks, holes 2-row racks, 44 holes, Ø 21 mm each	B48832		-				
Test tube racks, holes 2-row racks, 14 holes, Ø 32 mm each	D4003Z	B48833	_				
Test tube racks, holes 2-row racks, 30 holes, Ø 32 mm each		0.0000	B50661				
Test tube racks, holes 2-row racks, 33 holes, Ø 18 mm each	B48834		-				
Test tube racks, holes 3-row racks, 57 holes, Ø 18 mm each	-	B48835	_				
Test tube racks, holes 3-row racks, 75 holes, Ø 18 mm each		D-10033	B50662				
Test tube racks, holes 4-row racks, 44 holes, Ø 18 mm each	B48836		-				
Test tube racks, holes 4-row racks, 76 holes, Ø 18 mm each	-	B48837	_				
Test tube racks, holes 4-row racks, 100 holes, Ø 18 mm each			B50663				
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Accessories	6	11	15	24	35	50	
IQ/OQ document with device-specific works test data for one free-selectable temperature value, incl. temperature distribution survey at Memmert for 9 measuring points to DIN 12876.2. 305 € for further temperature values	D00125						
Maintenance WTB - carrying out and documentation according to Memmert maintenance plan (excluding travel costs, not subject to discount, GER, AT, FR only)	S00321						
Maintenance contract WTB - carrying out and documentation according to Memmert maintenance plan, minimum duration 3 years (excluding travel costs, not subject to discount, GER, AT, FR only)		S00321J					
Calibration of one freely selectable temperature value (excluding travel costs, not subject to discount, GER, AT, FR only)							
Calibration of an additional temperature value (not subject to discount)		S00215					

#### **24 HOURS AT YOUR SERVICE**

#### www.memmert.com

Here you can find the latest news concerning our company and products, as well as detailed descriptions of every single product. Additional information on the technologies used will support your sales arguments. In addition to this, data sheets, certificates, operating instructions and brochures are available for download. Service notifications can be submitted to our service team using the corresponding form.

# Dedicated login area for our trading partners

- Technical information:
  - Service instructions, software download, wiring diagrams, maintenance schedules etc.
- Marketing/sales information:
  - Press releases, product photos, image photos, videos, order form for advertising material etc.
- Download of price list and customisation department price list
- Dates and registration form for sales and service trainings

#### Our tip:

Please consider the Memmert customer information, which we regularly send exclusively to our trading partners. We inform you about campaigns, upcoming product launches, service offers and new application reports!



#### CLIMATE CHAMBERS

CONSTANT CLIMATE CHAMBERS HPPeco

HUMIDITY CHAMBERS HCP

CLIMATE CHAMBERS ICHeco / ICH

ENVIRONMENTAL TEST CHAMBERS CTC / TTO

HEATING AND DRYING OVENS

UNIVERSAL OVENS L

PASS-THROUGH OVENS UF TS

PARAFFIN OVENS UNpa

VACUUM OVENS VO

#### **INCUBATORS**

INCUBATORS I

CO, INCUBATORS ICO

COMPRESSOR-COOLED INCUBATORS ICPeco / ICP

PELTIER-COOLED INCUBATORS IPPeco

#### MEDICAL DEVICES

UNIVERSAL OVENS Um

NCUBATORS Im

STERILISERS S

CO, INCUBATORS ICOmed

BLANKET WARMERS IFbw

#### **WATERBATHS**

#### WATERBATHS WTB





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