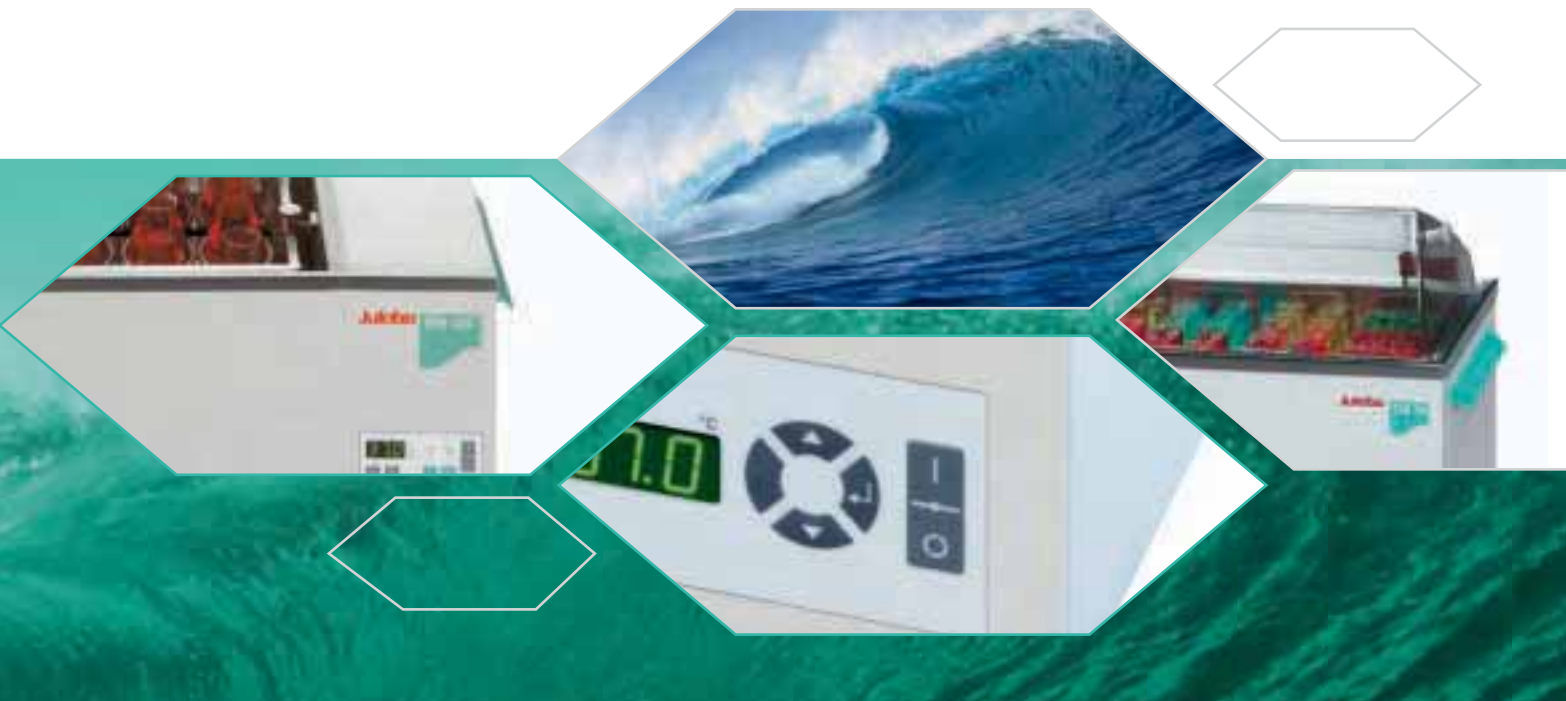


# Quality Technology for Routine Applications





## Water Baths and Shaking Water Baths

The TW and SW Water Bath Series are microprocessor-controlled, durable, and long-lasting high quality products that accommodate any common temperature application from +20 °C to +99.9 °C. Examples include temperature control of samples, incubations, material testing, corrosion tests, and cell cultivation.

- User-friendly operation via keypad
- Bright LED-Display
- Bath volumes from 2 to 26 liters
- Lift-up bath cover (optional)
- Splash-proof design
- Power switch integrated in keypad (patented)
- High temperature stability of  $\pm 0.2$  °C or  $\pm 0.02$  °C
- Dry-running protection with audible and optical alarm
- Warning and cut-off protection for high/low temperature
- Adjustable shaking frequencies from 20 to 200 RPM's in SW models
- Convenient bath drains
- Removable bottom plate and shaking insert
- Wide selection of accessories for temperature control of samples
- All wetted parts are made of stainless steel or high grade plastics

Large selection of accessories for all routine laboratory applications: For example: the all-purpose tray accommodates Erlenmeyer flasks in all common sizes. Various racks for test tubes and microliter tubes are also available.



## TW Series



### Water Baths

+20 °C ... +99.9 °C

4 different models  
from 2 to 26 liters



User-friendly operation via splash water protected keypad with integrated power switch and bright LED temperature display.

## SW Series



### Shaking Water Baths

+20 °C ... +99.9 °C

2 different models  
with 20 liters filling volume



Keypad with Multi-Display (LED) for adjusting setpoint, high/low temperature early warning function, and shaking frequency.

# Features & Benefits



Wide Selection of Test Tube Racks



Durable Handles



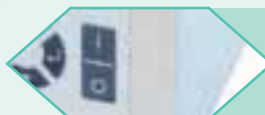
Integrated High Performance Heater

## TW Models



Lift-up Bath Covers available in Makrolon® or Stainless Steel

User-Friendly Keypad with LED Display



Integrated Power Switch with Auto-Start Feature

Easy-Access Drain



High Quality Stainless Steel Bath Tank Design for Minimum Fluid Loss

Small Footprint – Large Bath Volume



## SW Models

also offer:



Temperature Stability up to  $\pm 0.02$  °C



Adjustable Shaking Frequency (20 ... 200 rpm)

Removable Shaking Insert



Integrated Timer (0...10 Operating Hours)

RS232 Interface

**RS232**



Test tube racks and cover not included (optional).

## Water Baths TW Series

for working temperatures from +20 °C to +99.9 °C

JULABO Water Baths provide many benefits for your common day-to-day laboratory tasks. Features like easy operation, splash water protection, and an optimized bath tank design maximize user-friendliness.

### TW2

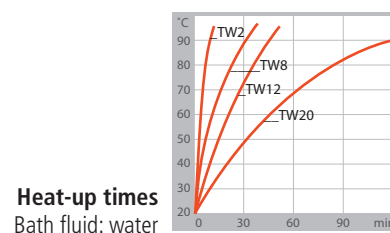
- Space-saving design, suitable for samples and for up to 24 test tubes

### TW8, TW12, TW20

- Convenient bath drain
- Durable handles for easy transport
- Removable bottom plate for easy cleaning

## Applications

- Routine laboratory applications
- Cell cultivation
- Food & cosmetics
- Temperature control of samples
- Incubations
- Material / corrosion tests



JULABO Order No.	JULABO Model	Working temperature range °C	Temp. stability °C	Heating capacity kW	Bath opening / bath depth W x L / D cm	Insert capacity test tube racks		Filling volume liters	Dimensions W x L x H cm w/o / with cover
9 550 102	TW2	+20 ... +99.9	±0.2	1	15 x 13 / 11	--	24	1 ... 2	17 x 16 x 26 / 37
9 550 108	TW8	+20 ... +99.9	±0.2	2	23 x 27 / 14	180	120	3 ... 8	29 x 32 x 28 / 44
9 550 112	TW12	+20 ... +99.9	±0.2	2	35 x 27 / 14	270	180	5 ... 14	40 x 32 x 28 / 44
9 550 120	TW20	+20 ... +99.9	±0.2	2	50 x 30 / 18	360	240	8 ... 26	56 x 35 x 32 / 49

# Accessories

JULABO Order No.	Description / Dimensions	Suitable for
<b>Lift-up Makrolon® covers (to +80 °C), transparent</b>		
8 970 289	Lift-up Makrolon® cover, 17 x 16 x 16 cm	TW2
8 970 286	Lift-up Makrolon® cover, 29 x 32 x 16 cm	TW8
8 970 287	Lift-up Makrolon® cover, 40 x 32 x 16 cm	TW12
8 970 288	Lift-up Makrolon® cover, 56 x 35 x 17 cm	TW20
<b>Lift-up stainless steel bath covers (to +100 °C)</b>		
8 970 259	Lift-up stainless steel cover	TW2
8 970 266	Lift-up stainless steel cover	TW8
8 970 267	Lift-up stainless steel cover	TW12
8 970 268	Lift-up stainless steel cover	TW20
<b>Flat stainless steel bath covers with sets of rings</b>		
8 970 270	with 1 opening 190 mm dia.	TW8
8 970 271	with 4 openings 92 mm dia.	TW8
8 970 278	with 6 openings 92 mm dia.	TW12
8 970 272	with 2 openings 190 mm dia.	TW20
8 970 273	with 6 openings 115 mm dia.	TW20
<b>Cooling installation / continuous water supply</b>		
8 970 415	Liquid level/cooling set	TW8, TW12, TW20
<b>Test tube racks to +80 °C, Polypropylene</b>		
8 970 380	for 60 test tubes 16/17 mm dia.	TW8, TW12, TW20
8 970 381	for 90 test tubes 12/13 mm dia.	TW8, TW12, TW20
8 970 382	for 90 microliter tubes 11/12 mm dia.	TW8, TW12, TW20
8 970 383	for 21 test tubes 30 mm dia.	TW8, TW12, TW20
<b>Test tube racks to +100 °C, stainless steel</b>		
8 970 330	for 24 test tubes 16/17 mm dia.	TW2
8 970 344	for 50 test tubes 16/17 mm dia.	TW8, TW12, TW20
8 970 345	for 90 test tubes 12/13 mm dia.	TW8, TW12, TW20
8 970 346	for 90 test tubes 11/12 mm dia.	TW8, TW12, TW20
8 970 347	for 21 test tubes 30 mm dia.	TW8, TW12, TW20
<b>Additional accessories</b>		
8 970 331	Stents lifter	TW2
8 970 339	Hygiene insert, stainless steel	TW2
8 970 453	Drain tap with tube 8 mm inner dia.	TW8, TW12, TW20
8 970 010	Hollow balls, Polypropylene, 20 mm dia. (1000 pcs.)	TW2, TW8, TW12, TW20
<b>Water bath protective media <i>Aqua Stabil</i></b>		
8 940 006	6 bottles, 100 ml each, to prevent formation of algae	
8 940 012	12 bottles, 100 ml each, to prevent formation of algae	

## Lift-up Covers

Prevent liquid losses due to evaporation and protect samples from contamination. Made of either Makrolon® or stainless steel.



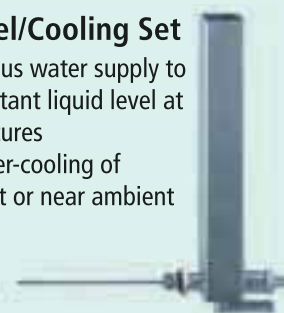
## Flat Bath Covers

Beakers or Erlenmeyer flasks can be placed directly onto the perforated stainless steel bottom plate.



## Liquid Level/Cooling Set

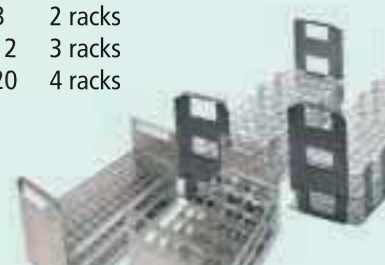
With continuous water supply to maintain constant liquid level at high temperatures and for counter-cooling of applications at or near ambient temperature.



## Insert Capacity

of test tube racks for water baths:

TW2	1 rack
TW8	2 racks
TW12	3 racks
TW20	4 racks



# Julabo Shaking Water Baths



## Applications

- Biochemical research
- Material testing
- Enzyme and tissue studies
- Homogenization
- Corrosion tests
- Fermentation
- Incubations
- Blood plasma thawing
- Food & cosmetics

Test tube racks and cover not included (optional).

## Shaking Water Baths SW Series

for working temperatures from +20 °C to +99.9 °C

JULABO Shaking Water Baths provide state-of-the-art features for your common day-to-day laboratory tasks. For example: sloped edges keep the water in the stainless steel bath tank - even when the lid is open.

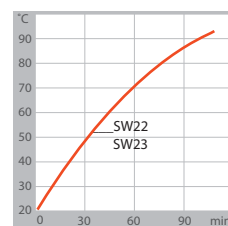
- Overall splash water protection
- Dry-running protection and audible warning / cut-off functions
- Integrated timer (0 ... 10 operating hours)
- Side drain
- User-friendly operation and consistent reproducibility
- 1-point calibration

Model SW22 is the basic model featuring a temperature stability of  $\pm 0.2$  °C.

Model SW23 is the advanced model featuring a temperature stability of  $\pm 0.02$  °C with integrated circulation pump.



The shaking insert is removable: No direct contact with the bath fluid, carrier trays can be assembled outside the bath.



Heat-up time  
Bath fluid: water

JULABO Order No.	JULABO Model	Working temperature range °C	Temp. stability °C	Heating capacity kW	Bath opening / bath depth W x L / D cm	Filling volume liters	Shaking frequency rpm	Shaking stroke mm	Dimensions W x L x H cm w/o / with cover
9 550 322	SW22	+20 ... +99.9	$\pm 0.2$	2	50 x 30 / 18	8 ... 20	20 ... 200	15	70 x 35 x 26 / 43
9 550 323	SW23	+20 ... +99.9	$\pm 0.02$	2	50 x 30 / 18	8 ... 20	20 ... 200	15	70 x 35 x 26 / 43

# Accessories

JULABO Order No.	Description
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## Lift-up bath covers / hollow balls

8 970 288	<b>Lift-up Makrolon® cover</b> (to +80 °C), transparent
8 970 268	<b>Lift-up stainless steel cover</b> (to +100 °C)

## Cooling installation / continuous water supply

8 970 415	<b>Liquid level/cooling set</b>
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## All-purpose spring tray

8 970 630	<b>All-purpose spring tray</b> pre-assembled for 11 Erlenmeyer flasks 250 ml, incl. set of springs for Erlenmeyer flasks 25 ... 1000 ml
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## Standard carrier trays

8 970 360	for 45 flasks	25 ml
8 970 361	for 32 flasks	50 ml
8 970 362	for 18 flasks	100 ml
8 970 363	for 15 flasks	200 ml

## Base tray and spring clamps

8 970 620	<b>Base tray</b> for assembling spring clamps on a mix and match basis	
8 970 601	<b>Spring clamp</b> for 10 ml flasks	8 970 606 for 200-250 ml flasks
8 970 602	<b>Spring clamp</b> for 25 ml flasks	8 970 607 for 300 ml flasks
8 970 603	<b>Spring clamp</b> for 50 ml flasks	8 970 608 for 500 ml flasks
8 970 604	<b>Spring clamp</b> for 100 ml flasks	8 970 609 for 1000 ml flasks

## Carrier tray with test tube racks

8 970 369	<b>Base tray</b> for assembling a maximum of 4 test tube racks	
<b>Test tube racks made of Polypropylene (to +80 °C)</b>		
8 970 380	for 60 test tubes, 16/17 mm dia.	8 970 344 for 50 test tubes, 16/17 mm dia.
8 970 381	for 90 test tubes, 12/13 mm dia.	8 970 345 for 90 test tubes, 12/13 mm dia.
8 970 382	for 90 Microliter tubes, 11/12 mm dia.	8 970 346 for 90 Microliter tubes, 11/12 mm dia.
8 970 383	for 21 test tubes, 30 mm dia.	8 970 347 for 21 test tubes, 30 mm dia.

## Complete carrier trays with test tube racks (to +80 °C)

8 960 440	for 240 test tubes, 16/17 mm dia.	8 960 442 for 360 microliter tubes, 30 x 11/12 mm dia.
8 960 441	for 360 test tubes, 12/13 mm dia.	8 960 443 for 84 test tubes, 30 mm dia.

## Software

8 901 102	<i>EasyTemp</i> software free of charge at <a href="http://www.julabo.de">www.julabo.de</a>	8 980 075	RS232 interface cable, 3 m, for direct PC connection
8 900 110	USB Interface adapter cable		

## Water bath protective media *Aqua Stabil*

8 940 006	6 bottles, 100 ml each, to prevent formation of algae
8 940 012	12 bottles, 100 ml each, to prevent formation of algae

JULABO Order No.	Description
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8 970 010	<b>Hollow balls, Polypropylene</b> 20 mm dia., (1000 pcs.)
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8 970 416	Cooling coil
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8 970 631	Set of springs consisting of 5 springs 190 mm and 12 springs 135 mm (for tray 8 970 630)
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8 970 364	for 11 flasks	250-300 ml
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8 970 365	for 8 flasks	500 ml
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8 970 366	for 5 flasks	1000 ml
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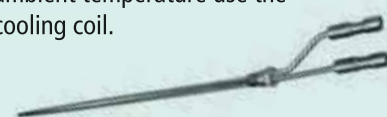
## Lift-up Covers

prevent liquid losses due to evaporation and protect samples from contamination.



Makrolon® cover

For counter-cooling near ambient temperature use the cooling coil.



## All-purpose spring tray



## Standard carrier tray



## Base tray with spring clamps



## Carrier tray with test tube racks

