

# Baths & Circulators

- › Heating Baths
- › Shaking & Heating Baths
- › Viscometer Heating Baths
- › Heating Bath Circulators
- › Refrigerated & Heating Bath Circulators
- › Cold Trap Bath



## General Applications

### Heating Baths

Routine laboratory applications, Coliform determinations, Sample thawing, Bacteriological examinations, Microbiological assays, Cell cultivation.

### Bath Circulators

External/Internal temperature control, Photometers, Refractometers, Polarimeters, Viscometers, Fermentors, Electrophoresis chambers, Chromatography columns, Rotary evaporators.

Product Name		Heating Baths (Economy)		Heating Baths (General)	Shaking & Heating Baths	Viscometer Heating Baths
Model		BW-B	BW-H (Dual)	BW3-G	BS	VB-G
Bath volume (L)		3.5, 11.5, 20	3.5, 11.5, 20	3.5, 11.5, 20	17, 25, 37, 55	25, 40
Temp. control	Temp. range (°C/°F)	Amb. +7 to 100 / Amb. +12.6 to 212	Amb. +5 to 100 / Amb. +9 to 212	Amb. +7 to 100 / Amb. +12.6 to 212	Amb. +5 to 100 / Amb. +9 to 212	Amb. +5 to 150 / Amb. +9 to 302
	Temp. stability at 50°C <sup>1)</sup> (±°C/°F)	0.5 / 0.9	0.1 / 0.18	0.4, 0.3 / 0.72, 0.54	0.2 / 0.36	0.05, 0.1 (at 70°C) / 0.09, 0.18 (at 158°F)
Control	Timer	-	-	Wait on/off	Wait on/off	Wait on/off
	Auto-tuning	-	0	0	0	0
	Program function	-	-	-	-	-
	Computer interface	-	-	-	-	RS-232 port
	JeioTech network	-	-	-	-	-
Safety	Over temp. limit	0	0	0	0	0
	Low fluid level alarm	-	-	0	-	0
	Over current limit	0	0	0	0	0
	Auto-run (power failure)	-	-	0	0	0

1) Technical data according to DIN 12876.

# Technical Benefits

## > Performance

- Designed and tested in accordance with the international standard DIN 12876.
- Microprocessor PID control for precise temperature control.
- Temperature calibration and auto-tuning functions for optimizing the unit to the various test environment.
- Bath circulators are suitable for both internal and external bath environments.
- Programmable models are specially designed for satisfying convenient sophisticated control.
  - Intelligent program and scheduler.
  - Digital input and output control.

## > Convenience

- Wide selection covers all of your application needs.
  - Temperature / Volume / Control type / Circulation.
- Easy maintenance design.
  - Rounded corners for easy cleaning.
  - Corrosion resistant, seamless, leak-proof, stainless steel interior bath.
  - Dirt-repellent external surface with power coating.
- User-friendly functions for easy operating.
  - Wait on/off dual timer. (except for BW-B and BW-H / CTB)
  - Three commonly used temperature memories.
- Intuitive touch LCD controller with easy icons and logical menus for easy operating.(for programmable models)

## > Safety

- Patented CLS-CS (Custom Logical Safe Control System)
  - Protection against low fluid level and dry running.
  - Automatic power cut-off system against overheating.
  - Protection system by fuses against overcurrent.
  - Automatic run or Manual run after power interruption.
- Eco-friendly CFC-free refrigerant use (for refrigerated models)

Heating Bath Circulators (General)	Heating Bath Circulators (Programmable)	Refrigerated & Heating Bath Circulators (General)		Refrigerated & Heating Bath Circulators (Programmable)		Cold Trap Bath
CW3	CW3-P	RW3		RW3-P		CTB
5, 10, 20, 30	5, 10, 20, 30	5, 10, 20, 30		5, 10, 20, 30		4.8
Amb. +5 to 150 / Amb. +9 to 302	Amb. +5 to 150 / Amb. +9 to 302	-25 to 150 / -13 to 302	-35 to 150 / -31 to 302	-25 to 150 / -13 to 302	-35 to 150 / -31 to 302	Down to -40 / -40
0.05, 0.08 / 0.09, 0.14	0.05, 0.08 / 0.09, 0.14	0.05 / 0.09		0.05 / 0.09		-
Wait on/off	Wait on/off	Wait on/off		Wait on/off		-
0	0	0		0		-
-	0	-		0		-
RS-232 port, USB port	RS-232 port, USB port	RS-232 port, USB port		RS-232 port, USB port		-
0	0	0		0		-
0	0	0		0		0
0	0	0		0		-
0	0	0		0		0
0	0	0		0		-

# Heating Baths (Economy-Analog)



Economical water baths for optimal temperature control.



## BW-10B

with optional transparent PP gable cover, Test tube rack

**Optional accessories**  
see page 30-31

- Open-ring covers
- Spring wire racks
- Half-shelf adjusters

## Performance

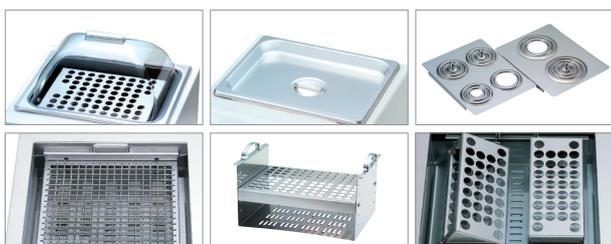
- Temperature range from ambient +7°C to 100°C.
- On/off temperature control.

## Convenience

- Simple and quick control panel.
- Corrosion-resistant stainless steel construction allowing other bath fluids as well as water and silicone fluids.
- Low-profile design with sloped control panel for easier access and better safety.
- Variety of accessories are available to meet application demands.

## Safety

- Isolated design of heater, and sensor by a baffle plate to protect users and samples against direct contact.
- Complete safety protection system with warning alarms.
  - Over-temperature, over-current protection.
- Splash-proof keypad.



Wide selection of accessories



Simple and quick control

Model		BW-05B		BW-10B		BW-20B	
Bath volume (L / cu ft)		3.5 / 0.1		11.5 / 0.4		20 / 0.7	
Working temperature range (°C / °F)		Amb. +7 to 100 / Amb. +12.6 to 212					
Temperature stability <sup>1)</sup> (±°C / °F)		0.5 / 0.9					
Dimension	Bath opening / depth (WxL, D) (mm / inch)	240×136, 115 / 9.4×5.4, 4.5		300×240, 165 / 11.8×9.5, 6.5		498×300, 165 / 19.6×11.8, 6.5	
	Exterior (WxLxH) (mm / inch)	303×242×245 / 11.9×9.5×9.6		357×330×290 / 14.1×13×11.4		564×392×290 / 22.2×15.4×11.6	
	Net weight (kg / lbs)	6.5 / 14.3		10 / 22		18.5 / 40.8	
Electrical requirements (230V)		60Hz, 3A    50Hz, 3A		60Hz, 4.3A    50Hz, 4.3A		60Hz, 8.7A    50Hz, 8.7A	
Cat. No.		<b>AAH46011K</b>	<b>AAH46012K</b>	<b>AAH46021K</b>	<b>AAH46022K</b>	<b>AAH46031K</b>	<b>AAH46032K</b>
Electrical requirements (120V)		60Hz, 5.8A		60Hz, 8.3A		60Hz, 8.3A	
Cat. No.		<b>AAH46013U</b>		<b>AAH46023U</b>		<b>AAH46033U</b>	

1) Technical data according to DIN 12876. (bath fluid : water at 50°C)  
 ※ FDA establishment registered company. FDA listed products.



## Performance

- Temperature range from ambient +5°C to 100°C.
- Microprocessor PID control / Automatic tuning / Calibration.
- Powerful circulation system using our patented agitator.

## Convenience

- Two independently controlled reservoirs merged into a single unit for space saving. (for Dual models)
- Corrosion-resistant stainless steel construction allowing other bath fluids as well as water and silicone fluids.
- Digital LED displays with quick adjustable dial knob. (0.1°C resolution)
- Low-profile design with sloped control panel for easier access and better safety. Also side handles for easy transport.

## Safety

- Isolated design of heater, and sensor by a baffle plate to protect users and samples against direct contact.
- Complete safety protection system with warning alarms.
  - Over-temperature, over-current protection.
- Keypad lock function prevents accidental changes.

Economical, digital heating baths.  
Model selection between single and dual baths.



## BW-10H / BW-0510H

with optional accessories

**Optional accessories**  
see page 30-31

- Transparent PP gable covers
- Test tube racks, Open-ring covers



Powerful circulation by built in agitator



Accurate value setting and display

Digital Model		BW-05H	BW-10H	BW-20H	
Bath volume (L / cu ft)		3.5 / 0.1	11.5 / 0.4	20 / 0.7	
Working temperature range (°C / °F)		Amb. +5 to 100 / Amb. +9 to 212			
Temperature stability <sup>1)</sup> (±°C / °F)		±0.1 / 0.18			
Dimension	Bath opening / depth (WxL, D) (mm / inch)	240×136, 150 / 9.4×5.4, 5.9	300×240, 200 / 11.8×9.5, 7.9	498×300, 200 / 19.6×11.8, 7.9	
	Exterior(WxLxH) (mm / inch)	307×216×266 / 12.1×8.5×10.5	364×316×318 / 14.3×12.4×12.5	564×372×318 / 22.2×14.6×12.5	
	Net weight (kg / lbs)	6.5 / 14.3	9.5 / 21	15.5 / 34.2	
Electrical requirements (230V, 50 / 60Hz)		3.0A	4.3A	8.7A	
Cat. No.		AAH45115K	AAH45125K	AAH45135K	
Electrical requirements (120V, 60Hz)		5.8A	8.3A	8.3A	
Cat. No.		AAH45113U	AAH45123U	AAH45133U	
Dual Model		BW-0505H	BW-0510H	BW-1010H	BW-1020H
Bath volume (L / cu ft)		3.5 & 3.5 / 0.1 & 0.1	3.5 & 11.5 / 0.1 & 0.4	11.5 & 11.5 / 0.4 & 0.4	11.5 & 20 / 0.4 & 0.7
Working temperature range (°C / °F)		Amb. +5 to 100 / Amb. +9 to 212			
Temperature stability <sup>1)</sup> (±°C / °F)		±0.1 / 0.18			
Dimension	Bath opening / depth (WxL, D & WxL, D) (mm / inch)	240×136, 150per chamber	240×136, 150 & 300×240, 200	300×240, 200 per chamber	300×240, 200 & 498×300, 200
		9.4×5.4, 5.9 per chamber	9.4×5.4, 5.9 & 11.8×9.5, 7.9	11.8×9.5, 7.9 per chamber	11.8×9.5, 7.9 & 19.6×11.8, 7.9
	Exterior (WxLxH) (mm / inch)	590×216×265 / 23.2×8.5×10.4	544×316×318 / 21.4×12.4×12.5	706×300×318 / 27.8×11.8×12.5	844×372×318 / 33.2×14.6×12.5
	Net weight (kg / lbs)	9.7 / 21.3	12.4 / 27.3	14 / 30.8	17.6 / 38.7
Electrical requirements (230V, 50 / 60Hz)		3 & 3A	3 & 4.3A	4.3A & 4.3A	4.3A & 8.7A
Cat. No.		AAH47115K	AAH47125K	AAH47135K	AAH47145K
Electrical requirements (120V, 60Hz)		5.8A & 5.8A	5.8A & 8.3A	8.3A & 8.3A	8.3A & 8.3A
Cat. No.		AAH47113U	AAH47123U	AAH47133U	AAH47143U

1) Technical data according to DIN 12876. (bath fluid : water, using agitator at 50°C)  
\* FDA establishment registered company. FDA listed products.

## Heating Baths (General)



Outstanding temperature control water baths for diverse applications.



### BW3-05G

**Optional accessories**  
see page 30-31

- Open-rings covers, Test tube racks
- Spring wire racks, Half-shelf adjusters

### Performance

- Temperature range from ambient +7°C to 100°C.
- Microprocessor PID control.
- Temperature calibration / Automatic tuning / Automatic run.

### Convenience

- User friendly control panel
  - Bright VFD with membrane touch switch and control knob.
- Side handles for easy transportation.
- Dual wait on/off timer modes. (1 min. to 99 hr. 59 min.)
- Convenient memory function of up to three frequently set temperature.
- Corrosion-resistant stainless steel construction allowing other bath fluids as well as water and silicone fluids. Easy access drain valve for convenient handling.
- Low-profile design with sloped control panel for easier access and better safety.

### Safety

- Isolated design of heater, and sensor by a baffle plate to protect users and samples against direct contact.
- Complete safety protection system with warning alarms.
  - Low fluid level and dry-running, over-temperature, over-current.
- Control lock function prevents accidental changes during operation.
- Splash-proof keypad.



User friendly control

Model		BW3-05G	BW3-10G	BW3-20G
Bath volume (L / cu ft)		3.5 / 0.1	11.5 / 0.4	20 / 0.7
Working temperature range (°C / °F)		Amb. +7 to 100 / Amb. +12.6 to 212		
Temperature stability <sup>1)</sup> (±°C / °F)		0.4 / 0.72	0.3 / 0.54	0.3 / 0.54
Dimension	Bath opening / depth (WxL, D) (mm / inch)	240×136, 150 / 9.4×5.4, 5.9	300×240, 200 / 11.8×9.5, 7.9	498×300, 200 / 19.6×11.8, 7.9
	Exterior (WxLxH) (mm / inch)	307×200×264 / 12.1×7.9×10.4	360×300×294 / 14.2×11.8×11.6	564×356×294 / 22.2×14×11.6
	Net weight (kg / lbs)	6.5 / 14.3	10 / 22	18.5 / 40.8
Electrical requirements (230V, 50 / 60Hz)		3A	4.3A	8.7A
Cat. No.		AAH41305K	AAH41315K	AAH41325K
Electrical requirements (120V, 60Hz)		5.8A	8.3A	8.3A
Cat. No.		AAH41306U	AAH41316U	AAH41326U

<sup>1)</sup> Technical data according to DIN 12876. (bath fluid : water at 50°C)  
\* FDA establishment registered company. FDA listed products.



## Performance

- Temperature range from ambient +5°C to 100°C.
- Reciprocating shaking up to 180rpm while maintaining uniform temperature.
- Microprocessor PID control / Temperature calibration / Automatic tuning / Automatic run.
- Separate control keys for shaker mechanism allows the unit also to be used as heating bath.

## Convenience

- Multiple LED displays (0.1°C and 1 rpm resolution) for various values.
- Dual wait on/off timer modes. (1 min. to 99 hr. 59 min.)
- Minimal shock to the samples thanks to the shaker's gentle feature.
- Spring wire rack is easy to equip and the height of the rack is easily adjustable.
- Gable cover minimizes of the liquid loss and prevents dripping of the bath liquid into the samples.
- Silent and anti-vibration BLDC motor.
- SUS 304 spring wire rack (two tier rack with flexible crossed spring) provides various ways of glassware settings.

## Safety

- Isolated design of agitator, heater, and sensor by a baffle plate to minimize the turbulence in the bath fluid and also to protect users and samples against direct contact.
- Complete safety protection system with warning alarms.
  - Over-temperature, over-current protection.



Specially designed inner gable cover for protection of sample contamination

## Reciprocating shaking & heating baths.

Ideal for sample incubation conditions for DNA, tissue, or cell culture applications.



## BS-31

### Standard accessories

- Stainless steel gable cover
- Spring wire rack

### Optional accessories see page 29

- Universal platforms
- Dedicated platforms, Flask clamps

Model	BS-06	BS-11	BS-21	BS-31
Bath volume (L / cu ft)	17 / 0.6	25 / 0.9	37 / 1.3	55 / 1.9
Working temperature range (°C / °F)	Amb. +5 to 100 / Amb. +9 to 212			
Temperature stability <sup>1)</sup> (±°C / °F)	0.2 / 0.36			
Shaking system	Motion / Speed range (rpm) Reciprocating / 20 to 180			
	Recip stroke length (mm / inch) 30 / 1.2 (25, 35 / 1.0, 1.4 available)			
Dimension	Bath opening / depth (WxL, D) (mm / inch)		629x350, 235 / 24.8x13.8, 9.3	
	Exterior (WxLxH) (mm / inch)		860x490x355 / 33.9x19.3x14	
	Net weight (kg / lbs)		42 / 93	
Electrical requirements (230V, 60Hz)	3.7A	4.6A	8.9A	8.9A
Cat. No.	AAH44061K	AAH44111K	AAH44211K	AAH44311K
Electrical requirements (230V, 50Hz)	3.7A	4.6A	8.9A	8.9A
Cat. No.	AAH44062K	AAH44112K	AAH44212K	AAH44312K
Electrical requirements (120V, 60Hz)	7.1A	8.8A	-	-
Cat. No.	AAH44063U	AAH44113U	-	-

1) Technical data according to DIN 12876. (bath fluid : water at 50°C)

\* FDA establishment registered company. FDA listed products.

# Viscometer Heating Baths



Ultra precise temperature control with excellent visibility.



## VB-40G

### Standard accessories

- Stainless steel covers for holes on the top
- Cooling coil

### Optional accessories

see page 31

- Viscometer tube holders
- Cooling Circulators

## Performance

- Temperature range from ambient +5°C to 150°C.
- Microprocessor PID control / Temperature calibration / Automatic tuning / Automatic run.
- Optimal temperature equilibrium achieved by a vane type stirrer with strong circulation power.

## Convenience

- Easy readout digital LED displays. (0.01°C resolution at 0 to 99.9°C / 0.1°C resolution at 100 to 150°C)
- Dual wait on/off timer modes. (1 min. to 99 hr. 59 min.)
- Convenient memory function of up to three frequently set temperature.
- Clear visibility provided by double tempered safety glass windows in front and rear sides.
- Operations at below or slightly above ambient temperature allowed by stainless steel cooling coil. (for operation from 10°C, use an optional cooling circulator)
- Ø 51 mm holes (for glass capillary viscometer tubes) and a Ø 12.6 mm hole. (for a thermometer)
- RS-232 interface for external control and data collection.

## Safety

- Isolated design of agitator, heater, and sensor by a baffle plate to minimize the turbulence in the bath fluid and also to protect users and samples against direct contact.
- Complete safety protection system with warning alarms.
  - Low fluid level and dry-running, over-temperature, over-current.
- Keypad lock function prevents accidental changes.



Ideal for application requiring high visibility



Easy holding of U-shaped viscometer glass tubes (optional)

Model		VB-25G		VB-40G	
Bath volume (L / cu ft)		25 / 0.9		40 / 1.4	
Working temperature range <sup>2)</sup> (°C / °F)		Amb. +5 to 150 / Amb. +9 to 302			
Temperature stability <sup>1)</sup> (±°C / °F)		0.05 / 0.09		0.1 / 0.18	
Dimension	Bath opening / depth (WxL, D) (mm / inch)	145x265, 330 / 5.7x10.4, 13		295x265, 330 / 11.6x10.4, 13	
	Cover lids / Hole for thermometer (mm)	5ea / Ø51, 1ea / Ø12.6		8ea / Ø51, 1ea / Ø12.6	
	Exterior (WxLxH) (mm / inch)	492x374x536 / 19.4x14.7x21.1		642x374x536 / 25.3x14.7x21.1	
	Net weight (kg / lbs)	28 / 61.7		37 / 81.6	
Electrical requirements (230V)		60Hz, 13A	50Hz, 13A	60Hz, 13A	50Hz, 13A
Cat. No.		AAH43301K	AAH43302K	AAH43401K	AAH43402K

1) Technical data according to DIN 12876. (bath fluid : water at 70°C)

2) If you want to operate the unit below Amb. + 5°C, an optional cooling circulator is required.

The lowest temperature when using an optional cooling circulator is 10°C. For ordering information, see page 31.

\* FDA establishment registered company. FDA listed products.



## Performance

- Temperature range from ambient +5°C to 150°C.
- Microprocessor PID control.
- Three point temperature calibration / Automatic tuning / Automatic run.
- Accurate, stable, and efficient temperature management by using a powerful variable-speed pump. (1 to 3 steps of pump for internal circulation and 4 to 5 steps for external circulation)
- Powerful pump pressure and flow rate throughout the whole temperature range.

## Convenience

- Bright VFD display with quick adjustable dial knob. (0.1°C resolution)
- Dual wait on/off timer modes. (1 min. to 99 hr. 59 min.)
- Convenient memory function of up to three frequently set temperature.
- Corrosion-resistant, leak-proof, round-cornered, and easy-to-clean stainless steel bath with easy access drain valve.
- Built-in RS-232 port and USB port for external control and data collection.
- Side handles enables convenience handling and transport.

## Safety

- Isolated design of agitator, heater, and sensor by a baffle plate to minimize the turbulence in the bath fluid and also to protect users and samples against direct contact
- Complete safety protection system with warning alarms.
  - Low fluid level and dry-running, over-temperature, over-current.
- Keypad lock function prevents accidental changes during operation.

## External and internal circulation with powerful pumping capability



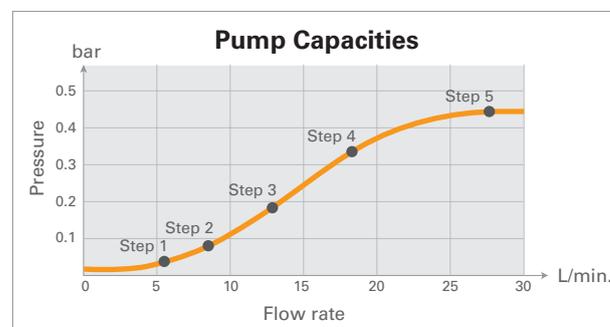
## CW3-10

### Standard accessories

- Stainless steel flat cover
- Silicone rubber tubing (305mm length / 12mm inner dia.)

### Optional accessories

- Test tube racks, Spring wire racks
- Gateway



\* Bath fluid : Water at the normal temperature.

Model	CW3-05	CW3-10	CW3-20	CW3-30
Bath volume (L / cu ft)	5 / 0.2	10 / 0.4	20 / 0.7	30 / 1.1
Working temperature range <sup>2)</sup> (°C / °F)	Amb. +5 to 150 / Amb. +9 to 302			
Temperature stability <sup>1)</sup> (±°C / °F)	0.05 / 0.09			0.08 / 0.144
Pump	Max. pressure	5.9 PSI (406.8 millibar)		
	Max. flow rate	28 liters / minute (7.4 gallons / minute)		
Dimension	Bath opening / depth (W×L, D) (mm / inch)	150×99, 160 / 5.9×3.9, 6.3	211×154, 180 / 8.3×6.1, 7.1	290×214, 200 / 11.4×8.4, 7.9
	Exterior (W×L×H) (mm / inch)	228×395×424 / 8.9×15.6×16.7	289×450×444 / 11.4×17.7×17.5	368×510×464 / 14.5×20.1×18.3
	Net weight (kg / lbs)	12.5 / 27.6	15 / 33	17.5 / 38.6
Electrical requirements (230V, 50/60 Hz)	8.5A			
Cat. No.	AAH52341K	AAH52351K	AAH52361K	AAH52371K
Electrical requirements (120V, 60 Hz)	8.6A			
Cat. No.	AAH52342U	AAH52352U	AAH52362U	AAH52372U

1) Technical data according to DIN 12876. (bath fluid : water at 50°C)

2) If you operate the unit in 1 to 3 steps of pump, the temperature range can be from Amb. +5°C but in 4 and 5 steps, the range will be from Amb. +15°C.

\* FDA establishment registered company. FDA listed products.

# Heating Bath Circulators (Programmable)

Highly intuitive user interface is insured by equipping the new smart programmable controller.



**REMOTE CONTROL**  
with your **MOBILE DEVICE**  
see page 8-9



## CW3-P models

### Standard accessories

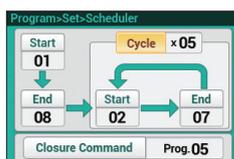
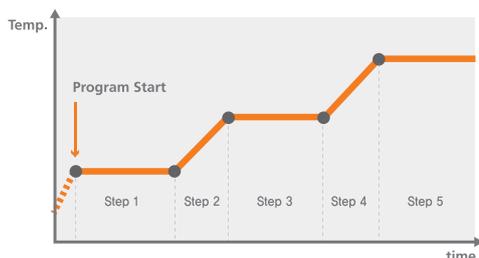
- Stainless steel flat cover
- Silicone rubber tubing (305mm length / 12mm inner dia.)

### Optional accessories

see page 30-31

- Test tube racks, Spring wire racks, Gateway

### Intelligent program control



Convenient scheduler

Step No.	Temp.	Time	DO Ch.
01	3500.0 °C	20:50	3
02	80.0 °C	10:25	4
03	350.0 °C	20:50	3
04	80.0 °C	10:25	4
05	100.0 °C	30:15	1

Program view at a glance

**Program Mode**

Program No. **01** Step No. **SSP** Cycles **01/05**

Set **150.0 °C** Pump **3/5**

**Actual 150.0 °C**

Step set time **12:54:32** Elapsed time **01:54:32**

Digital output **1 2 3** Digital input **1 2**

Touch LCD Controller



## Intelligent program control

- 10 programs available for temperature ramp up and dwell control.
- 10 steps per a program and 99 hours 59 minutes per a step.
- Stored programs are easily linkable.
- Programs can be repeated up to 99 cycles.
- Pre-heating and heating time are settable before program starts.

## Performance

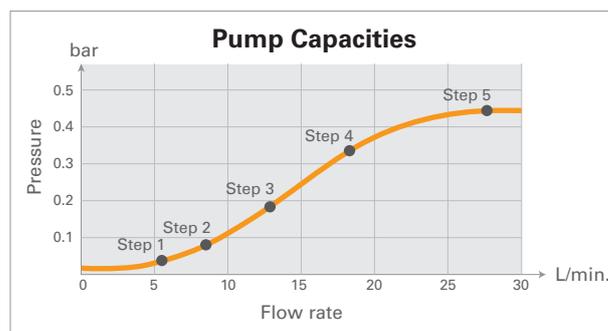
- Temperature range from ambient +5°C to 150°C.
- Microprocessor PID control.
- Three point temperature calibration / Automatic tuning / Automatic run.
- Accurate, stable, and efficient temperature management by using a powerful variable-speed pump. (1 to 3 steps of pump for internal circulation and 4 to 5 steps for external circulation)
- Powerful pump pressure and flow rate throughout the whole temperature range.

## Convenience

- Intuitive touch screen LCD controller with easy icons and logical menus.
- Dual wait on/off timer modes. (1 min. to 99 hr. 59 min.)
- Digital input and output control function for interlocking external devices.
- Corrosion-resistant, leak-proof, round-cornered, and easy-to-clean stainless steel bath with easy access drain valve.
- Built-in RS-232 port and USB port for external control and data collection.
- Built-in casters and side handles for easy transport and installation.

## Safety

- Isolated design of agitator, heater, and sensor by a baffle plate to minimize the turbulence in the bath fluid and also to protect users and samples against direct contact.
- Complete safety protection system with warning alarms.
  - Low fluid level and dry-running, over-temperature, over-current.
- Keypad lock function prevents accidental changes during operation.
- Splash-proof keypad.



Pump Step	1	2	3	4	5
Max. pressure (psi)	0.5	1.1	2.4	4.9	5.9
Max. flow rate (L/min)	5.6	8.0	12.8	18.8	28.0

※ Bath fluid: water at the normal temperature.

Model	CW3-05P	CW3-10P	CW3-20P	CW3-30P
Bath volume (L / cu ft)	5 / 0.2	10 / 0.4	20 / 0.7	30 / 1.1
Working temperature range <sup>2)</sup> (°C / °F)	Amb. +5 to 150 / Amb. +9 to 302			
Temperature stability <sup>1)</sup> (±°C / °F)	0.05 / 0.09			0.08 / 0.14
Pump	Max. pressure			
	5.9 PSI (406.8 millibar)			
Pump	Max. flow rate			
	28 liters / minute (7.4 gallons / minute)			
Dimension	Bath opening / depth (WxL, D) (mm / inch)			
	150×99, 160 / 5.9×3.9, 6.3	211×154, 180 / 8.3×6.1, 7.1	290×214, 200 / 11.4×8.4, 7.9	300×264, 230 / 11.8×10.4, 9
	Exterior (WxLxH) (mm / inch)			
Dimension	228×395×424 / 8.9×15.6×16.7	289×450×444 / 11.4×17.7×17.5	368×510×464 / 14.5×20.1×18.3	378×560×494 / 14.9×22×19.4
	Net weight (kg / lbs)			
Electrical requirements (230V, 50/60 Hz)	8.5A			
	Cat. No.	AAH52741K	AAH52751K	AAH52761K
Electrical requirements (120V, 60 Hz)	8.6A			
	Cat. No.	AAH52742U	AAH52752U	AAH52762U

1) Technical data according to DIN 12876. (bath fluid : water at 50°C)

2) If you operate the unit in 1 to 3 steps of pump, the temperature range can be from Amb. +5°C but in 4 and 5 steps, the range will be from Amb. +15°C.

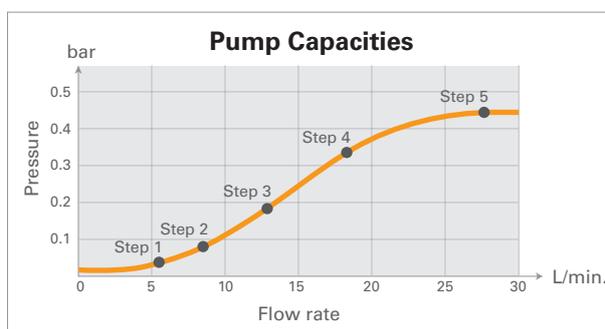
※ FDA establishment registered company. FDA listed products.

# Refrigerated & Heating Bath Circulators (General)

Rapid heating and cooling throughout the entire temperature range.



**REMOTE CONTROL**  
with your **MOBILE DEVICE**  
see page 8-9



Pump Step	1	2	3	4	5
Max. pressure (psi)	0.5	1.1	2.4	4.9	5.9
Max. flow rate (L/min)	5.6	8.0	12.8	18.8	28.0

※ Bath fluid: water at the normal temperature.

## RW3-2025

### Standard accessories

- Stainless steel flat cover
- Silicone rubber tubing (305mm length / 12mm inner dia.)

### Optional accessories

see page 30-31

- Test tube racks, Spring wire racks, Gateway



Easy maintenance of condenser by removable gridded vent



Condenser air-filter for refrigerating efficiency



Convenient side handles



## Performance

- Temperature range.
  - RW3-35 models from -35°C to 150°C.
  - RW3-25 models from -25°C to 150°C.
- Optimum refrigeration system by Microprocessor PID control. Energy efficient refrigeration operation is available within full range of temperature control.
- Three point temperature calibration / Automatic tuning / Automatic run.
- Suitable for both internal and external bath environments due to reduced turbulence by using five-speed adjustable pump and built-in cooling coil. (1 to 3 steps of the pump for internal circulation and 4 to 5 steps for external circulation)

## Convenience

- Bright VFD display with quick adjustable dial knob. (0.1°C resolution)
- Dual wait on/off timer modes. (1 min. to 99 hr. 59 min.)
- Convenient memory function of up to three frequently set temperature.

- Corrosion-resistant, leak-proof, round-cornered, and easy-to-clean stainless steel bath with easy access drain valve.
- Detachable condenser air-filter for easy maintenance of refrigerating efficiency.
- CFC-free refrigerant (R-507, R-404A) and a double service valve for leakage prevention.
- Quick-release front grill for easy cleaning of the condenser.
- Built-in RS-232 port and USB port for external control and data collection.
- Side handles enables convenience handling and transport.

## Safety

- Isolated design of agitator, heater, and sensor by a baffle plate to minimize the turbulence in the bath fluid and also to protect users and samples against direct contact.
- Complete safety protection system with warning alarms.
  - Low fluid level and dry-running, over-temperature, over-current.
- Keypad lock function prevents accidental changes during operation.

### for temperature range from -25°C to 150°C

Model	RW3-0525	RW3-1025	RW3-2025	RW3-3025	
Bath volume (L / cu ft)	5 / 0.2	10 / 0.4	20 / 0.7	30 / 1.1	
Working temperature range (°C / °F)	-25 to 150 / -13 to 302				
Temperature stability <sup>1)</sup> (±°C / °F)	0.05 / 0.09				
Cooling capacity <sup>2)</sup> (bath fluid: ethanol)	at -20°C (-4°F), W	140	180	310	
	at 0°C (+32°F), W	270	360	610	
	at +20°C (+68°F), W	400	560	850	
	Refrigerator	1/3 LBP, R-507	1/3 LBP, R-507	1/2 LBP, R-404A	3/4 LBP, R-404A
Pump (bath fluid: water)	Max. pressure	5.9 PSI (406.8 millibar)			
	Max. flow rate	28 liters / minute (7.4 gallons / minute)			
Dimension	Bath opening / depth (WxL, D) (mm / inch)	150x99, 160 / 5.9x3.9, 6.3	211x154, 180 / 8.3x6.1, 7.1	290x214, 200 / 11.4x8.4, 7.9	300x264, 230 / 11.8x10.4, 9
	Exterior (WxLxH) (mm / inch)	308x480x733 / 12.1x18.9x28.9	366x532x780 / 14.4x20.9x30.7	386x602x825 / 15.2x23.7x32.5	446x662x895 / 17.6x26.1x35.2
	Net weight (kg / lbs)	38 / 83.8	44 / 97	60 / 132.2	67 / 147.7
	Electrical requirements (230V, 60Hz)	11A	11A	12.5A	13.5A
<b>Cat. No.</b>	<b>AAH57041K</b>	<b>AAH57051K</b>	<b>AAH57061K</b>	<b>AAH57071K</b>	
Electrical requirements (230V, 50Hz)	11A	11A	12.5A	13.5A	
<b>Cat. No.</b>	<b>AAH57042K</b>	<b>AAH57052K</b>	<b>AAH57062K</b>	<b>AAH57072K</b>	
Electrical requirements (120V, 60Hz)	12.6A	12.6A			
<b>Cat. No.</b>	<b>AAH57043U</b>	<b>AAH57053U</b>	-	-	

### for temperature range from -35°C to 150°C

Model	RW3-0535	RW3-1035	RW3-2035	RW3-3035	
Bath volume (L / cu ft)	5 / 0.2	10 / 0.4	20 / 0.7	30 / 1.1	
Working temperature range (°C / °F)	-35 to 150 / -31 to 302				
Temperature stability <sup>1)</sup> (±°C / °F)	0.05 / 0.09				
Cooling capacity <sup>2)</sup> (bath fluid: ethanol)	at -20°C (-4°F), W	140	180	310	
	at 0°C (+32°F), W	270	360	610	
	at +20°C (+68°F), W	400	560	850	
	Refrigerator	1/2 LBP, R-404A	1/2 LBP, R-404A	3/4 LBP, R-404A	1 LBP, R-404A
Pump (bath fluid: water)	Max. pressure	5.9 PSI (406.8 millibar)			
	Max. flow rate	28 liters / minute (7.4 gallons / minute)			
Dimension	Bath opening / depth (WxL, D) (mm / inch)	150x99, 160 / 5.9x3.9, 6.3	211x154, 180 / 8.3x6.1, 7.1	290x214, 200 / 11.4x8.4, 7.9	300x264, 230 / 11.8x10.4, 9
	Exterior (WxLxH) (mm / inch)	308x480x733 / 12.1x18.9x28.9	366x532x780 / 14.4x20.9x30.7	386x602x825 / 15.2x23.7x32.5	446x662x895 / 17.6x26.1x35.2
	Net weight (kg / lbs)	38 / 83.8	44 / 97	60 / 132.2	67 / 147.7
	Electrical requirements (230V, 60Hz)	12.5A	12.5A	13.5A	14.5A
<b>Cat. No.</b>	<b>AAH57141K</b>	<b>AAH57151K</b>	<b>AAH57161K</b>	<b>AAH57171K</b>	
Electrical requirements (230V, 50Hz)	12.5A	12.5A	13.5A	14.5A	
<b>Cat. No.</b>	<b>AAH57142K</b>	<b>AAH57152K</b>	<b>AAH57162K</b>	<b>AAH57172K</b>	

1) Technical data according to DIN 12876. (bath fluid : ethanol at -10°C)

2) The cooling capacity is measured under 230V / 60Hz electrical condition.

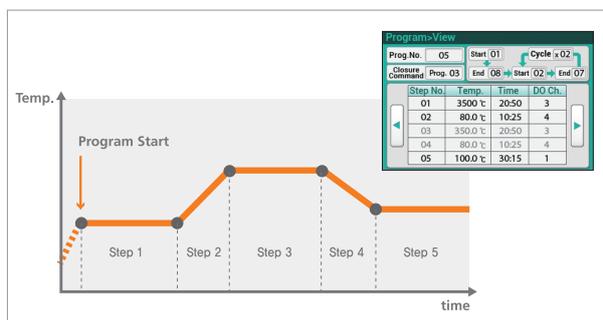
※ FDA establishment registered company. FDA listed products.

# Refrigerated & Heating Bath Circulators (Programmable)

Newly developed bath circulator with the intelligent programmable controller brings the best intuitive control performance to your laboratory.



**REMOTE CONTROL**  
with your **MOBILE DEVICE**  
see page 8-9



## Intelligent program control

- 10 programs available for temperature ramp up and dwell control.
- 10 steps per a program and 99 hours 59 minutes per a step.
- Stored programs are easily linkable.
- Programs can be repeated up to 99 cycles.
- Pre-heating and heating time are settable before program starts.

## RW3-0525P

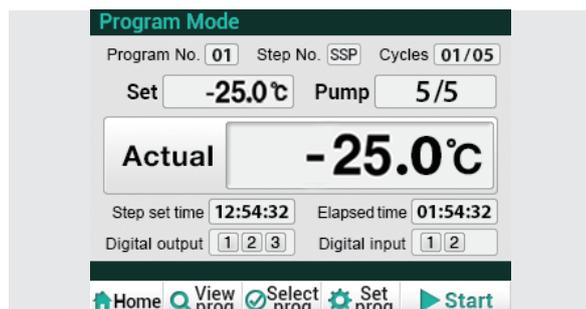
### Standard accessories

- Stainless steel flat cover
- Silicone rubber tubing (305mm length / 12mm inner dia.)

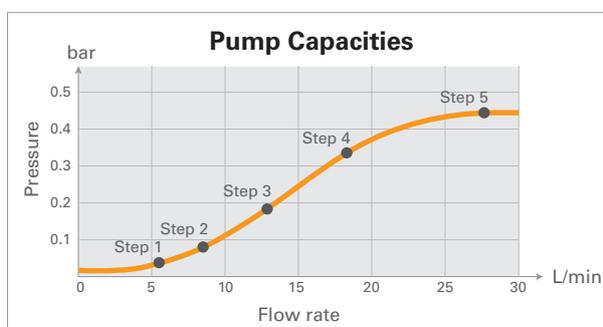
### Optional accessories

see page 30-31

- Suction function for pumps
- Test tube racks, Spring wire racks, Gateway



Touch LCD Controller



Pump Step	1	2	3	4	5
Max. pressure (psi)	0.5	1.1	2.4	4.9	5.9
Max. flow rate (L/min)	5.6	8.0	12.8	18.8	28.0

\* Bath fluid: water at the normal temperature.



## Performance

- Temperature range.
  - RW3-35P models from -35°C to 150°C.
  - RW3-25P models from -25°C to 150°C.
- Optimum refrigeration system by Microprocessor PID control. Energy efficient refrigeration operation is available within full range of temperature control.
- Three point temperature calibration / Automatic tuning / Automatic run.
- Suitable for both internal and external bath environments due to reduced turbulence by using five-speed adjustable pump and built-in cooling coil. (1 to 3 steps of the pump for internal circulation and 4 to 5 steps for external circulation)

## Convenience

- Intuitive touch screen LCD controller with easy icons and logical menus.
- Dual wait on/off timer modes. (1 min. to 99 hr. 59 min.)
- Digital input and output control function for interlocking external devices.

- Built-in RS-232 port and USB port for external control and data collection.
- Corrosion-resistant, leak-proof, round-cornered, and easy-to-clean stainless steel bath with front access drain valve.
- Detachable condenser air-filter for easy maintenance of refrigerating efficiency.
- Usage of CFC-free refrigerant (R-507, R-404A) and a double service valve for leakage prevention.
- Quick-release front grill for easy cleaning of the condenser.
- Built-in casters and side handles for easy transport and installation.

## Safety

- Isolated design of agitator, heater, and sensor by a baffle plate to minimize the turbulence in the bath fluid and also to protect users and samples against direct contact.
- Complete safety protection system with warning alarms.
  - Low fluid level and dry-running, over-temperature, over-current.
- Keypad lock function prevents accidental changes during operation.
- Splash-proof keypad.

### for temperature range from -25°C to 150°C

Model	RW3-0525P	RW3-1025P	RW3-2025P	RW3-3025P	
Bath volume (L / cu ft)	5 / 0.2	10 / 0.4	20 / 0.7	30 / 1.1	
Working temperature range (°C / °F)	-25 to 150 / -13 to 302				
Temperature stability <sup>1)</sup> (±°C / °F)	0.05 / 0.09				
Cooling capacity <sup>2)</sup> (bath fluid: ethanol)	at -20°C (-4°F), W	80	150	300	
	at 0°C (+32°F), W	230	270	420	
	at +20°C (+68°F), W	320	380	550	
	Refrigerator	1/3 LBP, R-507	1/3 LBP, R-507	1/2 LBP, R-404A	3/4 LBP, R-404A
Pump (bath fluid: water)	Max. pressure	5.9 PSI (406.8 millibar)			
	Max. flow rate	28 liters / minute (7.4 gallons / minute)			
Dimension	Bath opening / depth (WxL, D) (mm / inch)	150x99, 160 / 5.9x3.9, 6.3	211x154, 180 / 8.3x6.1, 7.1	290x214, 200 / 11.4x8.4, 7.9	300x264, 230 / 11.8x10.4, 9
	Exterior (WxLxH) (mm / inch)	308x480x733 / 12.1x18.9x28.9	366x532x780 / 14.4x20.9x30.7	386x602x825 / 15.2x23.7x32.5	446x662x895 / 17.6x26.1x35.2
	Net weight (kg / lbs)	38 / 83.8	44 / 97	60 / 132.2	67 / 147.7
	Electrical requirements (230V, 60Hz)	11A	11A	12.5A	13.5A
Cat. No.	AAH57641K	AAH57651K	AAH57661K	AAH57671K	
Electrical requirements (230V, 50Hz)	11A	11A	12.5A	13.5A	
Cat. No.	AAH57642K	AAH57652K	AAH57662K	AAH57672K	
Electrical requirements (120V, 60Hz)	12.6A	12.6A	-	-	
Cat. No.	AAH57643U	AAH57653U	-	-	

### for temperature range from -35°C to 150°C

Model	RW3-0535P	RW3-1035P	RW3-2035P	RW3-3035P	
Bath volume (L / cu ft)	5 / 0.2	10 / 0.4	20 / 0.7	30 / 1.1	
Working temperature range (°C / °F)	-35 to 150 / -31 to 302				
Temperature stability <sup>1)</sup> (±°C / °F)	0.05 / 0.09				
Cooling capacity <sup>2)</sup> (bath fluid: ethanol)	at -20°C (-4°F), W	80	150	400	
	at 0°C (+32°F), W	150	330	660	
	at +20°C (68°F), W	280	450	800	
	Refrigerator	1/2 LBP, R-404A	1/2 LBP, R-404A	3/4 LBP, R-404A	1 LBP, R-404A
Pump (bath fluid: water)	Max. pressure	5.9 PSI (406.8 millibar)			
	Max. flow rate	28 liters / minute (7.4 gallons / minute)			
Dimension	Bath opening / depth (WxL, D) (mm / inch)	150x99, 160 / 5.9x3.9, 6.3	211x154, 180 / 8.3x6.1, 7.1	290x214, 200 / 11.4x8.4, 7.9	300x264, 230 / 11.8x10.4, 9
	Exterior (WxLxH) (mm / inch)	308x480x733 / 12.1x18.9x28.9	366x532x780 / 14.4x20.9x30.7	386x602x825 / 15.2x23.7x32.5	446x662x895 / 17.6x26.1x35.2
	Net weight (kg / lbs)	38 / 83.8	44 / 97	60 / 132.2	67 / 147.7
	Electrical requirements (230V, 60Hz)	12.5A	12.5A	13.5A	14.5A
Cat. No.	AAH57741K	AAH57751K	AAH57761K	AAH57771K	
Electrical requirements (230V, 50Hz)	12.5A	12.5A	13.5A	14.5A	
Cat. No.	AAH57742K	AAH57752K	AAH57762K	AAH57772K	

1) Technical data according to DIN 12876. (bath fluid : ethanol at -10°C)

2) The cooling capacity is measured under 230V / 60Hz electrical condition.

\* FDA establishment registered company. FDA listed products.

# Cold Trap Bath



Effective capture of moisture or condensate. Also useful as quick cooling baths.



## Performance

- Temperature control down to ambient to -40°C.
- Built-in dissolving system to easily remove ice or solid matter stuck on the bath.

## Convenience

- LED temperature display.
- Easy installation and maintenance of glass traps. (two glass traps provided)
- Quick-release front grill for easy cleaning of the condenser.
- Compact size and silent operation.
- Durable stainless steel bath.
- Transparent acrylic lids on top of the glass trap to check condensate level in the trap.

## Safety

- Complete safety protection system with warning alarms.
  - Over-temperature, over-current protection.

## Information of accessories



## CTB-10

**Standard accessories** • U-type glass traps (2ea)

Cat. No.	Description
FCA1110	U-type glass trap (1ea)

Model		CTB-10
Temperature range (°C / °F)		Down to -40 / -40
Material	Bath external	Stainless steel, 1.2t, Double painted & baked
	Bath up desk	Stainless steel, 1.5t
	Insulation	Polyurethane foam (30mm)
	Refrigerator	1/2 HP, R-404A (LBP)
Dimension	Volume (L / cu ft)	4.8 / 0.17
	Bath (ØxH, mm / inch)	210x204 / 8.3x8
	Glass trap (ØxH, mm / inch)	60x262 / 2.4x103
	Exterior (WxDxH) (mm / inch)	360x465x555 / 14.1x18.3x21.9
	Net weight (kg / lbs)	46 / 101.4
Electrical requirements (230V, 60Hz)		4.5 A
<b>Cat. No.</b>		<b>AAH62011K</b>
Electrical requirements (230V, 50Hz)		4.5 A
<b>Cat. No.</b>		<b>AAH62012K</b>

\* FDA establishment registered company. FDA listed products.

## for Shaking & Heating Baths



Universal platforms



Flask clamps



Dedicated platforms



Test tube racks

## Universal platforms & Flask clamps

The universal platforms provide flexibility for mixing different size test tubes and glassware on a single platform. Various clamps or racks can be interchanged or added easily using mounting holes on the platform.

Model		BS-06	BS-11	BS-21	BS-31
Universal platform	Cat. No.	AAA44521	AAA44522	AAA44523	AAA44524
Flask clamps	Erlenmeyer flask size	Max. mountable flask clamps			
	AAA23550 for 50mL	9	12	20	32
	AAA23551 for 100mL	3	9	15	24
	AAA23552 for 250ml	2	4	8	12
	AAA23556 for 300mL	2	4	8	12
	AAA23553 for 500ml	2	4	6	12
	AAA23554 for 1L	1	2	4	6
	AAA23555 for 2L <sup>o</sup>	-	1	2	3
AAA23557 for 2.8L <sup>o</sup>	-	1	1	2	

<sup>o</sup> 2 and 2.8L flasks must be used while bath cover is opened due to height restrictions.

\* Flask clamps for universal platforms are sold separately.

## Dedicated platforms

When using glassware of the same size, dedicated platforms with preinstalled 250 mL or 500 mL clamps provide maximum capacity for each platform size. If you need to use different size glassware, purchase other suitable clamps separately.

Cat. No.	Description	Suitable for
AAA44531	Universal platform with 250mL flask clamps 2ea	BS-06
AAA44532	Universal platform with 500mL flask clamps 2ea	
AAA44541	Universal platform with 250mL flask clamps 4ea	
AAA44542	Universal platform with 500mL flask clamps 4ea	BS-11
AAA44551	Universal platform with 250mL flask clamps 8ea	
AAA44552	Universal platform with 500mL flask clamps 6ea	BS-21
AAA44561	Universal platform with 250mL flask clamps 12ea	
AAA44562	Universal platform with 500mL flask clamps 12ea	
		BS-31

※ Dedicated platforms are sold with maximum number of flask clamps pre-installed.

## Test tube racks

Highly durable stainless steel test tube racks feature adjustable angle and tube height support without requiring any base plate. You can easily mount and release test tube racks.

Cat. No.	Description	Insert capacity of racks*			
		BS-06	BS-11	BS-21	BS-31
AAA44581	for 86 test tubes	1EA	2EA	3EA	4EA
AAA44582	for 86 test tubes				
AAA44583	for 58 test tubes				
AAA44585	for 32 test tubes				
AAA44586	for 19 test tubes				

\* No declination.

※ Customized accessories to meet your specific requirements can be also provided. For inquiries, please contact your dealer.

# Accessories & Options

## for Heating Baths & Bath Circulators



Transparent polypropylene gable covers



Stainless steel flat covers



Open-rings covers

### Transparent polypropylene gable covers

Designed to protect samples from contamination due to direct dripping of the bath liquid.

Cat. No.	Suitable for
AAA45531	BW-05H / BW-05B / BW3-05G
AAA45532	BW-10H / BW-10B / BW3-10G
AAA45533	BW-20H / BW-20B / BW3-20G

### Stainless steel flat covers

Made of stainless steel to prevent corrosion and rust.

Cat. No.	Suitable for
AAA45541	BW-05H / BW-05B / BW3-05G
AAA45542	BW-10H / BW-10B / BW3-10G
AAA45543	BW-20H / BW-20B / BW3-20G

### Open-rings covers

Beakers or Erlenmeyer flasks can be placed directly onto the perforated stainless steel half-shelf adjuster or water tank bottom. By adjusting ring size for each glassware, liquid loss due to evaporation is minimized.

Cat. No.	Description	Suitable for
AAA45521	with 2 openings ø80mm / ø3.1"	BW-05H / BW-05B / BW3-05G
AAA45524	with 1 opening ø110mm / ø4.3"	
AAA45522	with 4 openings ø80mm / ø3.1"	BW-10H / BW-10B / BW3-10G
AAA45525	with 2 openings ø110mm / ø4.3"	
AAA45526	with 1 opening ø185mm / ø7.3"	BW-20H / BW-20B / BW3-20G
AAA45523	with 8 openings ø80mm / ø3.1"	
AAA45527	with 6 openings ø110mm / ø4.3"	
AAA45528	with 2 openings ø185mm / ø7.3"	

### Test tube racks

Highly durable stainless steel test tube racks feature adjustable angle and tube height support without requiring any base plate. You can easily mount and release test tube racks.

Cat. No.	Description	Insert Capacity of Racks*
AAA44581	for 86 test tubes ø8mm / ø0.3"	CW3-20/P, 30/P RW3-2025/P, 2035/P RW-33025/P, 3035/P 2ea
AAA44582	for 86 test tubes ø10mm / ø0.4"	
AAA44583	for 58 test tubes ø12mm / ø0.5"	
AAA44585	for 32 test tubes ø16mm / ø0.6"	
AAA44586	for 19 test tubes ø25mm / ø1.0"	BW-05H BW-05B BW3-05G RW3-1025/P RW3-1035/P CW3-10/P 1ea
AAA41531	for 50 test tubes ø8mm / ø0.3"	
AAA41532	for 50 test tubes ø10mm / ø0.4"	
AAA41533	for 33 test tubes ø12mm / ø0.5"	
AAA41535	for 16 test tubes ø16mm / ø0.6"	
AAA41539	for 10 test tubes ø25mm / ø1.0"	BW-10H BW-10B BW3-10G BW-20H BW-20B BW3-20G 1ea   2ea
AAA45551	for 176 test tubes ø8mm / ø0.3"	
AAA45552	for 176 test tubes ø10mm / ø0.4"	
AAA45554	for 84 test tubes ø12mm / ø0.5"	
AAA45556	for 68 test tubes ø16mm / ø0.6"	
AAA45561	for 33 test tubes ø25mm / ø1.0"	

\* No declination.

## Spring wire racks

Ideal for holding a wide variety of tubes, flasks, and other glassware. All components are made of stainless steel.

Cat. No.	Suitable for
AAA45502	BW-10H / BW-10B / BW3-10G
AAA45503	BW-20H / BW-20B / BW3-20G
AAA51522	CW3-20/P / RW3-2025/P, 2035/P
AAA51523	CW3-30/P / RW3-3025/P, 3035/P



Spring wire racks (two tier rack with flexible crossed spring)

## Half-shelf adjusters

Stainless steel perforated sample tray shelves with adjustable height support prevent leaks and guard against rust and contamination.

Cat. No.	Suitable for
AAA45511	BW-05H / BW-05B / BW3-05G
AAA45512	BW-10H / BW-10B / BW3-10G
AAA45513	BW-20H / BW-20B / BW3-20G



Half-shelf adjusters

## Gateway

Establish Jeio Tech Network by Gateway. No computer use is required at all. Remote monitoring of operating status through a mobile device(Android only) is simply available when you place a Gateway in your laboratory. Maximum 4 units can be connected to Gateway by RS-232 cable.

Cat. No.	Description	Suitable for
AAAQ1011	Gateway (2.4GHz, 100~240V, 50/60Hz)	CW3, RW3 models



Gateway

## for Viscometer Heating Baths

### Viscometer tube holders

Specially designed to hold a two-opening viscometer glass tube and made of Bakelite, renowned for its high thermal endurance.

Cat. No.	Suitable for
AAA43501	VB-25G (need max. 5 holders)
	VB-40G (need max. 8 holders)



Viscometer tube holders

## Cooling circulators

The temperature range of viscometer heating baths can be lowered up to +10°C (+50°F) when used with an optional cooling circulator.

Cat. No.	Description	Suitable for
AAH57051K	RW3-1025 (230V, 60Hz)	VB-25G (230V, 60Hz)
AAH57651K	RW3-1025P (230V, 60Hz)	
AAH57052K	RW3-1025 (230V, 50Hz)	VB-25G (230V, 50Hz)
AAH57652K	RW3-1025P (230V, 50Hz)	
AAH57061K	RW3-2025 (230V, 60Hz)	VB-40G (230V, 60Hz)
AAH57661K	RW3-2025P (230V, 60Hz)	
AAH57062K	RW3-2025 (230V, 50Hz)	VB-40G (230V, 50Hz)
AAH57662K	RW3-2025P (230V, 50Hz)	

\* Refer to p.24 to 27 for more information on the cooling circulators.