

Water Bath (Precision Constant Temp.)

BK · BA Series

Operating temp. range RT+5~80°C

Temperature control accuracy $\pm 0.02^{\circ}\text{C} \sim \pm 0.07^{\circ}\text{C}$

Bath capacity 27L BK/BA300 42L BK/BA400 70L BK/BA500 109L BK/BA610 144L BK/BA710

- BK series - Fixed temperature operation
BA series - Program operation.
- In addition to BK series function, BA series adopted controller with program operation function (1 pattern 30 steps or 2 pattern 15 steps).
- Tank capacity: 27L, 42L, 70L, 109L, 144L
- Extremely high degree of temperature adjustment precision achieved by adopting high-precision thermostat and circulation pump.
- Digital display setting and indicated value of temperature and time.
- Equipped with observation window.
- Optional items include cooling coil, top cover, mounting rack, and viscosity meter support.

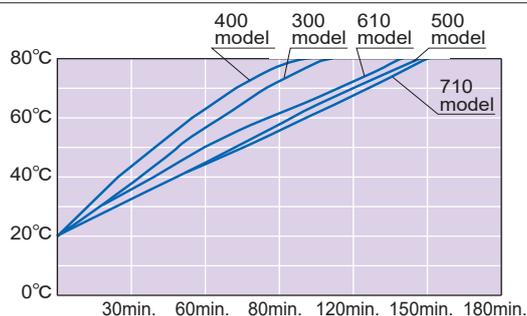


Specifications

Product code	221144	221153	221145	221154	221146	221155	221147	221156	221148	221157
Model	BK300	BA300	BK400	BA400	BK500	BA500	BK610	BA610	BK710	BA710
Stirring method	Stir by pump									
Operating temp. range	RT+5~80°C									
Temp. control accuracy*1	$\pm 0.02 \sim \pm 0.07^{\circ}\text{C}$									
Temp. distribution accuracy*1	$\pm 0.3^{\circ}\text{C}$									
Max. temp. reaching time*1	Approx. 120min.		Approx. 110min.		Approx. 165min.		Approx. 160min.		Approx. 200min.	Approx. 200min.
Interior material	Stainless steel and glass									
Temp. controller	PID control by microprocessor (BK: Fixed temperature operation, BA: Fixed temperature and program operation, 1 pattern 30 steps or 2 pattern 15 steps)									
Sensor	W sensor: Pt resistance thermometer, Pt 100Ω(temp. controller) + K thermocouple (overheat protector)									
Temp. setting / display method	Digital setting / display									
Overheat protector	ON / OFF by microprocessor									
Heater (SUS316)	1.3kW		2.2kW		2.4kW		3.5kW		4.5kW	
Stirring System (Magnet pump)	6W		30W				60W			
Timer	1min.~99hrs. 59min. to 999hrs. 50mins, digital setting, Auto start, auto stop, quick auto stop									
Safety device	Self-diagnostic functions (Heater disconnection, SSR short circuit, Abnormal sensor, over current), Electric leakage breaker, over heat protector									
Internal dimensions*2	W300×D300×H300mm		W400×D350×300mm		W500×D400×350mm		W548×D500×400mm		W640×D500×H450mm	
External dimensions*2	W490×D360×H367mm		590×D410×H367mm		W690×D460×H417mm		W738×D560×H467mm		W830×D560×H517mm	
Window dimensions	W240×H215mm		W340×H215mm		W440×H265mm		W340×H215mm		W440×H265mm	
Bath capacity	Approx. 27L		Approx. 42L		Approx. 70L		Approx. 109L		Approx. 144L	
Shelf pitch	30mm									
Number of plates	5pcs.				6pcs.		9pcs.		10pcs.	
Drain hose (Dia.)	ø15×20mm									
Power source 50/60Hz	Single phase AC100V / AC220V						Single phase AC220V			
	14 / 7A		23A / 11A		25A / 12A		18A		23A	
Weight	Approx. 19kg		Approx. 25kg		Approx. 30kg		Approx. 36kg		Approx. 46kg	
Included accessories	Shelf plate 1pc., clamp 2pcs., stand 1pc., clamp holder 2pcs., tube connector 1pc., drainage cap 1pc.									
Optional accessories	Shaking rack / Viscometer holder/Cooling coil (for 300/400/500 series), External circulating pump / Top cover (for all models), Trolley with caster (for 610/710 series)									

*1 Conditions: Temp. 20°C (no load), Power source 50Hz. *2 Do not include protrusions.
The length of the power cord is about 2m outside the unit.

Temperature Rising Curve



Control Panel



BK series control panel



BA series control panel

Optional items

Shaking unit

Model	Specifications	Product code
BN300	Shaking Width: 10 to 30mm changeable Shaking Times: 20 to 160 times/min.	221506



BK400+BN300

Coolong coil

Applicable model	Specifications	Product code
BK/BA300, BK/BA400, BK/BA500	Nickel-plated copper tube I.D. 8mm×O.D. 12mm×1.8m length	221182

Convenient for cooling the water bath and testing at room temperature. (Cooling water hose not included)



Viscometer holder

Applicable model	Specifications	Product code
BK/BA300	for 4 viscometers	221189
BK/BA400	for 4 viscometers	221183
BK/BA500	for 5 viscometers	221184



Viscometers such as Cannon-fenske type and Ubbelohde type can be attached and are convenient for measuring kinematic viscosity. (If kinematic viscosity is measured using a BK/BA type water bath, it does not comply with JIS K 2283.)

Shaking rack Spring pitch (Vertical/Horizontal 20 mm)

Applicable model	Specifications	Product code
BK/BA300	294×272×148.5mm	221195
BK/BA400	394×322×148.5mm	221196
BK/BA500	494×372×148.5mm	221197



External circulating pump

Model	Specifications	Product code
PT-16	Operating temp. range: Room temp. to 80°C Lift: Approx. 2m Water flow: approx. 9 L/min (at the head 0) Connection diameter: O.D. 17mm	221190

The solution at constant temperature is continuously fed into a distillation column, refractometer, or other equipment with a closed circulation, and can be circulated between them to keep warm or or heating.



Top lid

Applicable model	Specifications	Product code
BK/BA300	Made of stainless steel	221192
BK/BA400		221193
BK/BA500		221194
BK/BA610		221383
BK/BA710		221384



Top lid for BK/BA300 Top lid for BK/BA400 Top lid for BK/BA500



Top lid for BK/BA610, 710

Cart with casters

Applicable model	Model	Product code
BK/BA610	OBK62	221385
BK/BA710	OBK72	221386