

Economy Constant Temp. Water Bath



BM Series

Setting system	Analog (BM100/110)	Digital (BM302A/312A/401/500/510)	Operating temp. range	RT +5~95°C (BM100/110/401)	RT +10~90°C (BM302A/312A)	RT +5~90°C (BM500/510)	Bath capacity	4L (BM100/110/500/510)	5L (BM302A/312A)	7L (BM401)
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Easy to use, compact design water bath



BM100/110

- Analog set up system
- Thermometer is included to verify actual temperature
- Protected water tank prevents burns caused by contact



BM302A/312A

- Digital temperature setting by ▲/▼ keys
- Flat-shaped bath with no heater or sensor inside for ease in cleaning
- Optional bath protection cover



BM401

- Digital temperature setting by ▲/▼ keys
- Protected water tank prevents burns caused by contact
- Equipped with a drain



BM500/510

- Digital temperature setting by ▲/▼ keys
- Removable water tank for convenient clean-ing and changing of water
- Heater situated outside the water tank

Specifications

Model		BM100	BM110	BM302-A	BM312-A	BM401	BM500		BM510
Operating temp. range * ¹		Room temp. +5~95°C		Room temp. +10~90°C		Room temp. +5~95°C		Room temp. +5~90°C	
Temp. adjustment accuracy* ²		±2°C (at 60°C)		±1°C		±1°C (at 60°C)		±1.5°C (at agitation)	
Temp. control system		ON/OFF control		PID control by microprocessor					
Temp. setting / display method		Analog setting (Glass thermometer indication)		White LED digital display, key entry, min. digit of 1°C		Digital setting by ▲/▼ keys, LED display		Digital 7 segment LED Digital setting by ▲/▼ keys	
Operation function		Operation at fixed point				Fixed temperature, quick auto stop, auto stop, auto start		Fixed temperature, quick auto stop, auto stop, auto start	
Additional function		--		Overshoot alert, Auto-resume (selectable), calibration offset		Calibration offset, power failure recovery, keypad lock		Keypad lock, maintenance function (RE signal transmission and reception), calibration offset, power failure recovery	
Heater		SUS316 pipe heater 500W		1000W aluminum sheathed heater		SUS316 pipe heater 1kW		1kW (100V) 1.44kW (120V)	1kW (200V) 1.44kW (220V)
Sensor		Liquid expansion type		Pt100Ω				K thermocouple	
Safety device		Bath protection cover				Bath protection cover		Bath protection cover (ABS heat-resistant resin)	
		Overcurrent protection (fuse: 7A), thermal fuse		Automatic overheat prevention, independent overheat prevention (fixed temp.), temperature upper limit error, Overcurrent protection fuse		Self-diagnostic functions (Automatic overheat prevention, Sensor trouble, Triac short circuit, heater disconnection, main relay failure), circuit protector, thermal fuse		Self-diagnostic functions (Automatic overheat prevention, Sensor trouble, Triac short circuit, heater disconnection, main relay failure), circuit protector, thermal fuse, micro switch to detect heating without water	
Water tank	Capacity	~4L		~5L		~7L		~4L	
	Dimensions	I.D.200 x D120mm						Max. I.D.240 x bottom dia165 x D122mm	
External dimensions* ³		W240 x D300 x H150mm		φ262 (max. D286) x H240 mm		W310 x D360 x H230mm		W340 x D349 x H231mm	
Weight		~3.5kg		~4.5kg		~7kg		~5.5kg	
Power source (50/60 Hz)		AC115V 4.5A paddle switch	AC220V 2.3A paddle switch	100-115V, 10-12A	200-230V, 5-6A	AC115V 11A		AC100V~120V 12.5~10.5A	AC200~240V 6.5~5.5A
Accessories		Bar thermometer (10~110°C) with immersion line		Power cable (1), Spare fuse for main power (large)(1), Spare fuse for service outlet 2A for BM302A (small)(1), BC102 bath protection cover (optional)		Thermal fuse		--	
Country of Origin		Japan		China		Japan		Japan	

*1 No load operation of bath only. Maximum temperature varies based on different circumstances and operational conditions

*2 Measured under ambient temperature of 23°C±5°C, humidity of 65%RH±20%

*3 Dimensions excludes protrusions