

Programmable Precision Constant Temperature Water Bath

BH Series

Operating temp. range

RT+15~100°C (BH401)
Water bath

RT+15~200°C (BH501)
Water or oil bath

Temp. adjustment accuracy

±0.01°C

Bath capacity

~13L(liquid 10L)

Benchtop precision constant temperature bath equipped with high performance controller for higher precision and wider temperature range.



BH401-115V
BH401-220V
Water bath

BH501-115V
BH501-220V
Water or oil bath

■ Operation and functions

- Precision controller enables temperature adjustment accuracy of $\pm 0.01^{\circ}\text{C}$ (at 20°C)
- BH501 can be used as precision water or oil bath
- Maximum of 99 steps of programming operation, fixed temperature operation, Quick auto stop, Auto stop and Auto start functions
- RS485 communication function, Temperature output terminal ($1\sim 5\text{V}$), Alarm output terminal, calibration offset function and key lock function
- Better external circulation with powerful circulation pump
- Circulation pump flow changeable up to 10 patterns
- Circulated water temperature (closed type) can be controlled precisely by external sensor
- Control panel can be removed for remote control by using communication cable (sold separately)

■ Safety features

- Self diagnostic functions, Earth leakage circuit breaker, Empty boiling prevention switch, Automatic overheating prevention, Independent overheating prevention

■ Specifications

Model	BH401-115V BH401-220V	BH501-115V BH501-220V
Circulation system	Water jet pump circulation (closed system circulation)	
Operating temperature range	RT+15~100°C	RT+15~200°C
Temperature adjustment accuracy	$\pm 0.01^{\circ}\text{C}$ (water: RT+15°C~80°C), ± 0.1 (silicon oil: KF96/50cst 70°C~200°C)	
Temperature indication unit	0.1°C	
Circulation Pump	Water jet pump circulation	
(50/60Hz)	Pump max. flow	14/15L/min. (Circulation pressure loss when below 10kPa)
	Pump max. lift	2.8/3.4m (water flow about 0.5L/min)
Heater	1kW	1.2kW
Ambient temperature range	5~30°C	
Temperature control / system	PID control by microprocessor	
Temperature setting / display method	Digital setting / display	
Sensor	W sensor: Pt 100Ω A-class (for temperature control)+ K-thermocouple (for overheat prevention) double sensor	
Timer	1min.~99hrs.59min., 100~9999hrs Timer/Time switchable function	
Operation function	Fixed temp. operation, Quick auto stop, Auto stop / start at setting time, Program operation (max. 99 steps, repeating, gradient operation), Program auto start operation	
Safety device	Earth leakage circuit breaker, Key lock function, Breakout protection function, Automatic overheating prevention, Independent overheating prevention, Float switch	
Other functions	RS485 communication function, Temperature output terminal, Alarm output terminal, Calibration offset function	
Dimensions	W239 x D299 x H200mm	
Internal capacity	13L (liquid 10L)	
Effective water bath dimension	W227 x D150 x H200mm (front corner R34)	
External dimension	W310 x D396 x H607mm (water bath height)	
Power source	AC115V 10A AC220V 5A	AC115V 11.5A AC220V 6A
Weight	~20kg	
Accessories	Hose nipple (1/2 x ϕ 14mm) 2pcs.	

*1. Performance value test condition: room temperature 20°C , no load, power source 50Hz

*2. Protrusions not included



Detachable control panel.
Remote control power source (optional item) needed in case remote control communication cable is longer than 5m.

Control Panel

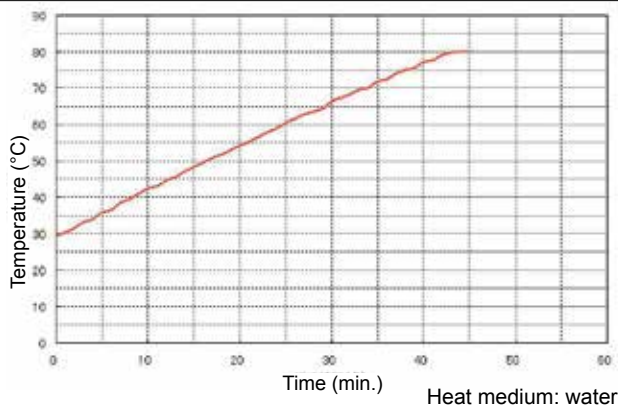


Program controller CR5 model

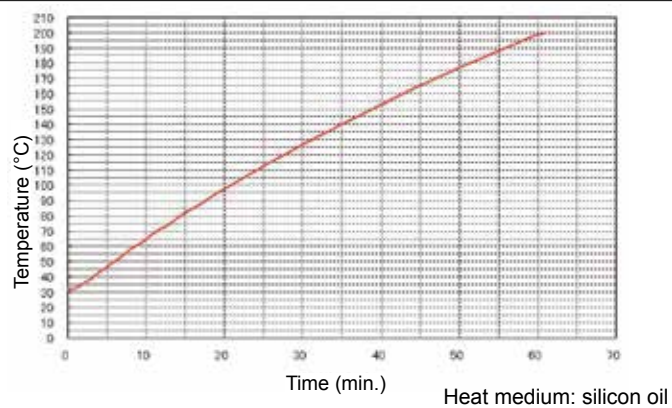
Rear View (Circulation port)



BH401 Heating Performance



BH501 Heating Performance



Optional items

Product code	Description	Specifications
280094	Silicon hose for circulation	I.D. ϕ 12mm, Length 2m, 1pc.
281388	External communication adapter	RS485 - RS232C conversion
281350	External Pt sensor	Pt 100 Ω , A level with protection tube, 3m
281397	Communication cable for remote control	4 holes, 5m
281398	Remote control panel stand	
281399	Remote control power	AC100V - DC5V (For 115V/220V compatibility verification)



Remote control panel stand



Remote control power