Water Bath (High Precision Constant Temp., Programmable)

Thermo-Elite® BH401/501

Operating temp. range	RT +15~100°C (BH401)	RT +15~200°C (BH501)	Temp. adjustment accuracy	±0.01°C	Bath capacity	13L (Approx. 10L of liquid)

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

■ Operation and functions

● Precision controller enables temperature adjustment accuracy of ±0.01°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 (1~5V), 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)
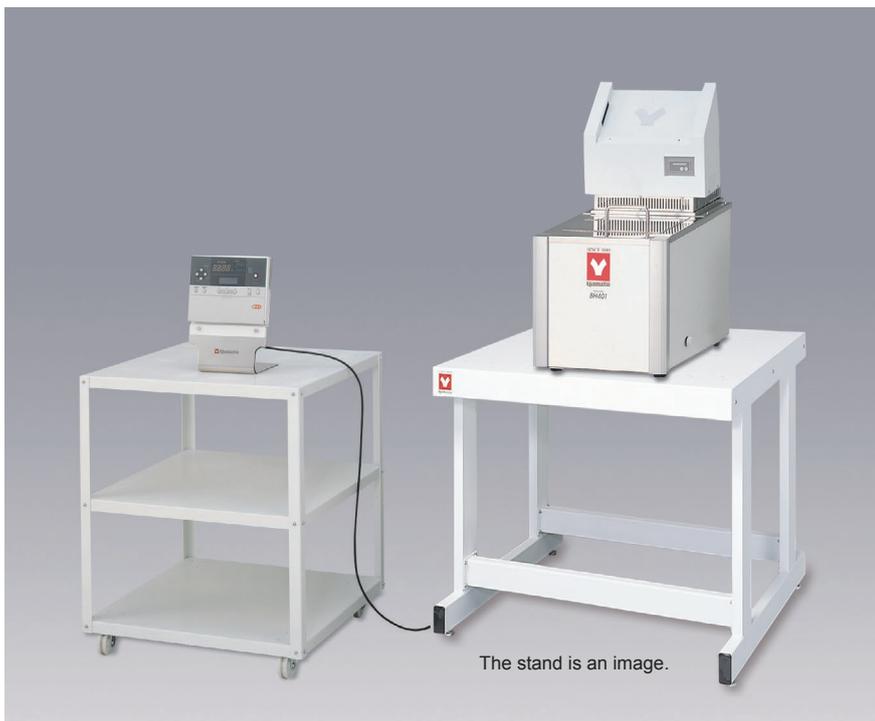
BH401   BH501

■ Specifications

Product code	222057	222058
Model	**BH401**	**BH501**
Circulation system	Water jet pump circulation (External closed circulation)	
Operating temp. range*1	RT+15 to 100°C	RT+15 to 200°C
Temp. adjustment accuracy*1	±0.01°C (at water: RT+15°C to 80°C), ± 0.1 (at silicon oil: KF96/50cst 70°C~200°C)	
Temp. indication unit*1	0.1°C	
Circulation ability (50/60Hz) — Max. flow	14/15L/min. (Circulation pressure loss when below 10kPa)	
Circulation ability (50/60Hz) — Max. lift	2.8/3.4m (water flow approx. 0.5L/min)	
Heater	1kW	1.2kW
Ambient temperature range	5~30°C	
Temperature control	PID control by microprocessor	
Temperature setting / display	Digital setting / LED display, Guidance display by fluorescent display tube	
Sensor	Double sensor: Pt 100Ω A-class (for temperature control)+ K-thermocouple (for overheat prevention)	
Timer	1min.~99hrs.59min., 100~9999hrs Timer / Time switchable function	
Operation function	Fixed temp. operation, Fixed temp. auto-stop operation, Fixed temp. auto-start operation, Programmed operation (up to 99 steps, repetition, slope operation etc.), Programmed auto-start operation, Pause operation function	
Safety device	Earth leakage circuit breaker, Key lock function, Power failure compensation function, Automatic overheat prevention function, Independent overheat prevention device, Float switch	
Other functions	RS485 communication function, Temperature output terminal, alarm output terminal, calibration offset function	
Dimensions	W239×D299×H200mm	
Internal capacity	13L (Approx. 10L of liquid)	
Effective water bath dimension	W227×D150×H200mm (front corner R34)	
External dimension*2	W310×D396×H607mm (Water bath height: 307mm, Including the height of rubber legs)	
Power source (50/60Hz)	AC220V 5A Single phase with step-down transformer	AC220V 6A Single phase with step-down transformer
Weight	Approx. 20kg	
Accessories	Hose nipple (1/2×ø14mm) 2pcs.	

*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.

The stand is an image.

The control panel can be detached from the main unit for remote control.
If the remote control communication cable exceeds 5m, an optional power supply for remote control is required.
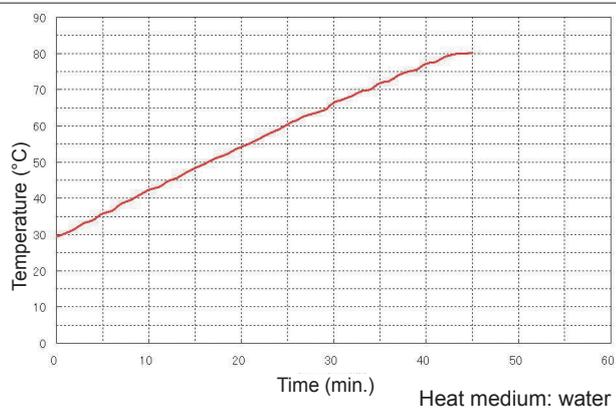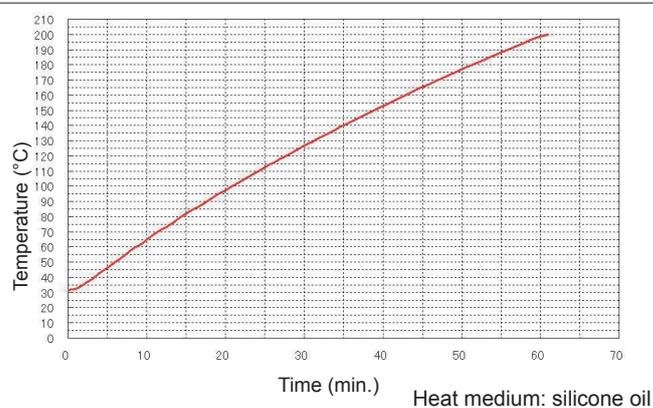
Control Panel

Program controller CR5 model

Rear View (Circulation port)

BH401 Heating Performance

Heat medium: water

BH501 Heating Performance

Heat medium: silicone oil

■Optional items

No.	Description	Specifications	Product code
①	Silicone hose for circulation	I.D. ø12mm, Length 2m, 1pc.	280094
②	External communication adapter	RS485－RS232C conversion	281388
③	External Pt sensor	Pt 100Ω, A level with protection tube, 3m	281350
④	Communication cable for remote control	4 core cable, 5m	281397
⑤	Remote control panel stand		281398
⑥	Remote control power supply	AC100V－DC5V	281399

⑤Remote control panel stand

⑥Remote control power supply