

# Low Temperature Bath

## BLG100/200

Guaranteed Achievable Temperature

-80°C  
BLG100

-40°C  
BLG200

Bath capacity

300mL  
BLG100

1,000mL  
BLG200

Stirring setting range

100 ~ 1,200rpm

An all-in-one liquid cooling bath with stirrer that eliminates constant monitoring and replenishment of dry ice and liquid nitrogen.

- Lowest temp. reach time is approximately one hour after commencing operation (or within 30 minutes in a no-load state).
- Powerful neodymium magnet is used, which enables simultaneous stirring of multiple reactors.
- Equipped with ON-timer function (which facilitates preparation for the next day's experiments).
- Temp. of 80°C below zero (BLG100) is optimum for small-scale experiments (up to 100ml).
- The type for 40°C below zero (BLG200) is optimum for raw material synthesizing scale (up to 500ml). Aluminum beads are used in the bath.



-80°C/300mL  
BLG100

-40°C/1,000mL  
BLG200

### Specifications

Product code	221704	221705
<b>Model</b>	<b>BLG100</b>	<b>BLG200</b>
System	Stirring cooler 80W, with helium refrigerant (not Freon)	
Temp. control range	-80°C to 0°C (at ambient temp. of 23°C ± 5°C)	-40°C to 0°C (at ambient temp. of 23°C ± 5°C)
Temp. control accuracy	±0.3°C (the cooling bath temp. in the stable state)	
Temp. fluctuation	0.6°C	
Lowest temp. reaching time*1	Approx. 55min (20°C → -80°C)	Approx. 65min (20°C → -40°C)
Bath material / capacity	Aluminum made/ approx. 300ml	Aluminum made / approx. 1000ml
Temperature control	PID control + Inverter control	
Temperature display and setting	Digital	
Maximum applicable container size	100mL three-neck flask	500mL three-neck flask
Stirring function	Neodymium magnet type. 100 to 1200 rpm, with the rotation speed displayed digitally	
Timer	ON timer only (maximum 99hrs. 50min.)	
Overall dimensions*2	W210×D425×H295mm	W210×D450×H295mm
Weight	Approx. 15kg	
Power supply (50/60Hz)	AC115V / 220V Single phase with step-down transformer	
Accessories*3	Adiabatic cover, Stainless steel rod×2 pcs.	

\*1 When using approx. 300mL (BLG100) and 1,000mL (BLG200) of ethanol and operating at approx. 25°C, the rated power supply voltage is 50Hz.

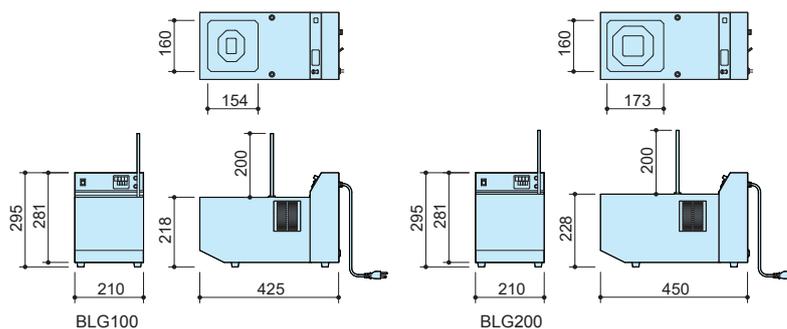
\*2 Does not include a rod and protruding object.

\*3 Does not include a stirrer.

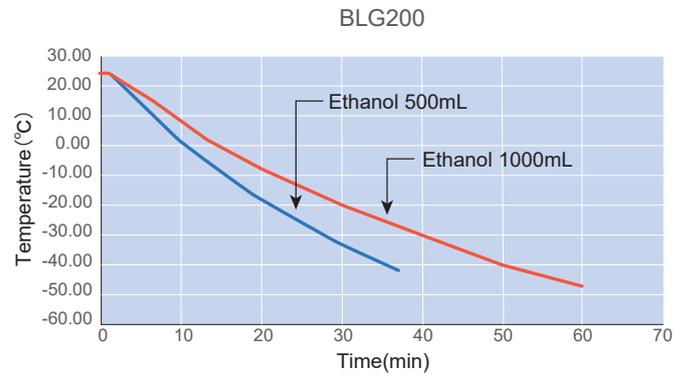
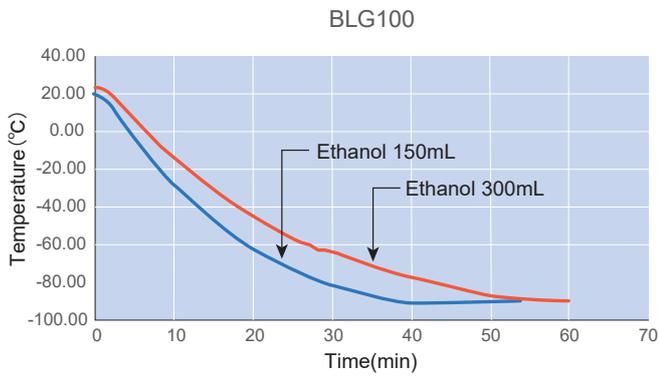
### Control Panel



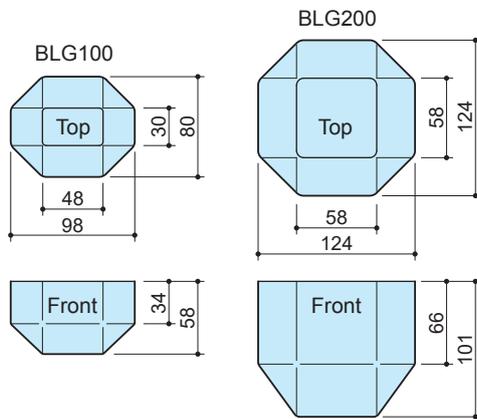
### Dimensions (mm)



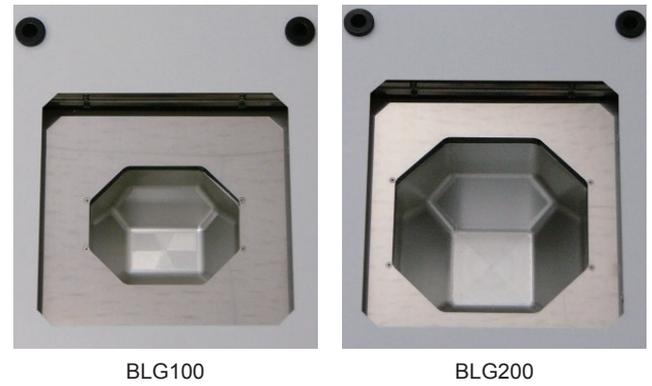
## Data (Temperature drop curve)



## Bath dimensions



## Bath size comparison



### Related components (recommended)

- Crank type clamp and square holder (with flat head screw) set



Name of Product	Product code
Clamp with crank handle opened on both sides, and square holder (5 to 13 mm-dia.) with flat head screw set	221774

- Side-arm eggplant flask (arm size:  $\phi 8 \times 30$  mm)



Capacity	Main tube (T/S)	Product code
5ml	15/25	221763
10ml	15/25	221764
20ml	15/25	221765
30ml	15/25	221766
50ml	15/25	221767

- Teflon-made stirrer, FO type (10-piece set)



Length	Diameter	Product code
10mm	5mm	221775
20mm	10mm	221776
30mm	15mm	221777

- Three-neck round-bottom flask (side tube T/S 15/25)



Capacity	Main tube (T/S)	Product code
50ml	15/25	221768
100ml	15/25	221769
100ml	29/42	221770
200ml*	29/42	221771
300ml*	29/42	221772
500ml*	29/42	221773

\*For BLG200 only