



HOTPLATE MAGNETIC STIRRER

HOTPLATE MAGNETIC STIRRER

Compact, automatic and powerful hotplate magnetic stirrer has stainless steel material with a ceramic coating which prevents corrosion. It is available with external temperature sensor PT1000, timer, PC control. A warning sign is display when over-temperature. Timer can be set from 1min to 99h 59min. Used with a wide variety of accessories.

Used in Cell Culture, Laboratory, Research, Medical.

Also known as Laboratory Magnetic Hotplate Stirrer, Digital Magnetic Stirrer.

BHMS-101 HOTPLATE MAGNETIC STIRRER



Stainless steel with ceramic coated hotplate resists to corrosion

Separated safety circuit, automatically stop heating when temperature over 350°C

Motor with electronic speed control, constant speed even during changes in load

Variable speed of motor

High magnetic adhesion, prevent the stirrer bar escape

Enclosed assembly with protection class IP42 and DC brushless motor guarantees long service

SPECIFICATIONS

Model	BHMS-101
Capacity	20 L
Stirring Positions	1
Speed Range	0~1500 rpm
Temperature	RT~340°C
Permissible Ambient Temperature	5-40°C
Safety Temperature	350°C
Permissible Relative Humidity	0.8
Motor rating Input [W]	18
Motor rating output [W]	10
Heating Output	500 W
Work Plate Size	135 mm
Stirrer Dimension	80 mm
Platform Material	Stainless steel with ceramic coating
Speed Display	Scale
Temperature Display	Scale
Motor Type	DC motor
Protection Class	IP42
Overall Dimension	160Wx280Dx85H mm
Weight	2.8 kg
Power	530 W
Power Supply	100-120V/200-240V, 50/60Hz

OPTIONAL ACCESSORIES

Accessory Code	Name	Description	Dimension
BX-60225	Stirrer bar		10mm x 6mm
BX-60226	Stirrer bar		15mm x 8mm
BX-60227	Stirrer bar		20mm x 8mm
BX-60228	Stirrer bar		25mm x 8mm
BX-60229	Stirrer bar		30mm x 6mm
BX-60230	Stirrer bar		40mm x 8mm
BX-60231	Stirrer bar		50mm x 8mm
BX-60232	Stirrer bar remover	Length of 200mm	
BX-60250	Stirrer bar	Stirrer bar (65mm x 8mm), 1pc/pk	
BX-60251	Stirrer bar	Stirrer bar (80mm x 13mm), 1pc/pk	
BX-60252	Protective cover	For hotplate model	

BHMS-102 HOTPLATE MAGNETIC STIRRER



External temperature sensor PT1000 is available for hotplate model, real-time control medium temperature.

Simple running interface easy to use and program.

Automatically identify temperature sensor PT1000 and transfer to PT1000 operation mode.

Record and display the last running parameters when switch on.

LCD display target and actual temperature, as well as set speed and actual speed can be displayed.

PID temperature technology precise controls heating process, rapidly reaches target temperature and enhances control accuracy

Brushless DC motor maintenance free and explosion-proofed, accurately control speed

Separate safety circuits with fixed safety temperature of 580°C, automatically stops heating once exceed secure temperature

HOT warning indicates residual hotplate temperature.

LCD display would show "Hot" when hotplate temperature over 50°C warning point, even if switched off.

Software StirPC, computer can control and document all operation values via RS232 interface

SPECIFICATIONS

Model	BHMS-102
Capacity	20 L
Stirring Positions	1
Speed Range	100-1500 rpm
Temperature	RT-550°C
Permissible Ambient Temperature	5-40°C
Temperature Increment	1°C
Control Accuracy of Work Plate	±1(<100°C), ±1%(>100°C)
Temperature Accuracy	±0.1°C
Safety Temperature	580°C
Control Accuracy with Sensor PT1000	±0.2°C

Permissible Relative Humidity	0.8
Heating Warning	50°C
Motor rating Input [W]	18
Motor rating output [W]	10
Heating Output	1000 W
Work Plate Size	184x184 mm
Stirrer Dimension	80 mm
Platform Material	Glass ceramic
Speed Display	LCD
Speed Display Resolution	±1 rpm
Temperature Display	LCD
Remote Control (RS232 interface)	Yes
Motor Type	Brushless DC motor
Protection Class	IP21
Overall Dimension	215Wx360Dx112H mm
Weight	5.3 kg
Power	1050 W
Power Supply	100-120V/200-240V, 50/60Hz

OPTIONAL ACCESSORIES

Accessory Code	Name	Description	Dimension
BX-60225	Stirrer bar		10mm x 6mm
BX-60226	Stirrer bar		15mm x 8mm
BX-60227	Stirrer bar		20mm x 8mm
BX-60228	Stirrer bar		25mm x 8mm
BX-60229	Stirrer bar		30mm x 6mm
BX-60230	Stirrer bar		40mm x 8mm
BX-60231	Stirrer bar		50mm x 8mm
BX-60232	Stirrer bar remover	Length of 200mm	
BX-60235	Temperature sensor	Length of 230mm	
BX-60236	Temperature sensor with glass coating	Length of 230mm	
BX-60237	Temperature sensor	Length of 100mm	

BHMS-103 HOTPLATE MAGNETIC STIRRER



LED display target and actual temperatures

External temperature sensor PT1000 is available, display and control actual medium temperature, control accuracy of ±1°C

Separated safety circuits, fixed safety temperature of 580°C, automatically stops heating once exceed secure temperature

HOT warning indicates residual hotplate temperature.

LCD display would show "Hot" when hotplate temperature over 50°C warning point, even if switched off

SPECIFICATIONS

Model	BHMS-103
Capacity	10 L
Stirring Positions	1
Speed Range	0-1500 rpm
Temperature	RT-550°C
Permissible Ambient Temperature	5-40°C
Temperature Increment	5°C
Control Accuracy of Work Plate	±10°C
Temperature Accuracy	±1°C
Safety Temperature	580°C
Control Accuracy with Sensor PT1000	±0.5°C
Permissible Relative Humidity	0.8
Heating Warning	50°C
Motor rating Input [W]	15
Motor rating output [W]	1.5
Heating Output	1000 W
Work Plate Size	184x184 mm
Stirrer Dimension	80 mm
Platform Material	Glass ceramic
Speed Display	Scale
Temperature Display	LED
Remote Control (RS232 interface)	No
Motor Type	Shaded pole motor
Protection Class	IP21
Overall Dimension	215Wx360Dx112H mm
Weight	4.5 kg
Power	1030 w
Power Supply	100-120V/200-240V, 50/60Hz

OPTIONAL ACCESSORIES

Accessory Code	Name	Description	Dimension
BX-60225	Stirrer bar		10mm x 6mm
BX-60226	Stirrer bar		15mm x 8mm
BX-60227	Stirrer bar		20mm x 8mm
BX-60228	Stirrer bar		25mm x 8mm
BX-60229	Stirrer bar		30mm x 6mm
BX-60230	Stirrer bar		40mm x 8mm
BX-60231	Stirrer bar		50mm x 8mm
BX-60232	Stirrer bar remover	Length of 200mm	
BX-60235	Temperature sensor	Length of 230mm	
BX-60236	Temperature sensor with glass coating	Length of 230mm	
BX-60237	Temperature sensor	Length of 100mm	
BX-60244	Red quarter pie	11 holes, 4 ml reaction vessel, Ø15.2mm, 20mm depth, used with SX1019 and SX1020	

BX-60245	Purple quarter pie	4 holes, 20 ml reaction vessel, Ø28mm, 24mm depth, used with SX1019 and SX1020	
BX-60246	Blue quarter pie	4 holes, 30 ml reaction vessel, Ø28mm, 30mm depth, used with SX1019 and SX1020	
BX-60247	Black quarter pie	4 holes, 40 ml reaction vessel, Ø28mm, 43mm depth, used with SX1019 and SX1020	
BX-60248	Green quarter pie	6 holes, 8ml reaction vessel, Ø17.8mm, 26mm depth, used with SX1019 and SX1020	
BX-60249	Golden quarter pie	4 holes, 16ml reaction vessel, Ø21.6mm, 31.7mm depth, used with SX1019 and SX1020	
BX-60250	Stirrer bar	Stirrer bar (65mm x 8mm), 1pc/pk	
BX-60251	Stirrer bar	Stirrer bar (80mm x 13mm), 1pc/pk	

BHMS-104 HOTPLATE MAGNETIC STIRRER



Conforms to international safety standards and regulations
 Brushless DC motor is maintenance free and explosion-proof
 Fully closed aluminum alloy casing has a high IP protection class (IP42)
 The temperature sensor consists of two independent safety circuits, which switches off heating in case of any over temperature situation
 "HOT" sign warning to prevent burns, even if switched off.
 Intergrated temperature sensor PT 1000 for precise temperature control.
 Excellent heat control accuracy at the work plate: $\pm 1(^{<100^{\circ}\text{C}})$ $\pm 1\%(^{>100^{\circ}\text{C}})$
 Digital process timer allows for unattended operation and can be set from 1min to 99h 59min. When the set time has elapsed, the operation stops
 Backlit LCD display target and actual temperatures and speed
 Automatically identifies temperature sensor PT1000 and transfer to PT1000 operation mode.
 Stainless steel with ceramic coated hotplate allows immediate heat transfer for quick heat-up times, chemical-resistant and scratch proof
 PC can control and document all parameters via RS232 interface
 Used with a wide variety of accessories

SPECIFICATIONS

Model	BHMS-104
Capacity	20 L
Stirring Positions	1
Speed Range	100-1500 rpm
Temperature	RT-340°C
Permissible Ambient Temperature	5-40°C
Temperature Increment	1°C
Control Accuracy of Work Plate	$\pm 1(^{<100^{\circ}\text{C}})$, $\pm 1\%(^{>100^{\circ}\text{C}})$
Temperature Accuracy	$\pm 0.1^{\circ}\text{C}$
Safety Temperature	360°C
Control Accuracy with Sensor PT1000	$\pm 0.2^{\circ}\text{C}$
Permissible Relative Humidity	0.8
Heating Warning	50°C
Timing Range	1 min to 99h 59min
Motor rating Input [W]	18

Motor rating output [W]	10
Heating Output	500 W
Work Plate Size	135 mm
Stirrer Dimension	80 mm
Platform Material	Stainless steel with ceramic coating
Speed Display	LCD
Speed Display Resolution	±1 rpm
Temperature Display	LCD
Remote Control (RS232 interface)	Yes
Motor Type	Brushless DC motor
Protection Class	IP42
Overall Dimension	160Wx280Dx85H mm
Weight	2.8 kg
Power	550 W
Power Supply	100-120V/200-240V, 50/60Hz

OPTIONAL ACCESSORIES

Accessory Code	Name	Description	Dimension
BX-60225	Stirrer bar		10mm x 6mm
BX-60226	Stirrer bar		15mm x 8mm
BX-60227	Stirrer bar		20mm x 8mm
BX-60228	Stirrer bar		25mm x 8mm
BX-60229	Stirrer bar		30mm x 6mm
BX-60230	Stirrer bar		40mm x 8mm
BX-60231	Stirrer bar		50mm x 8mm
BX-60232	Stirrer bar remover	Length of 200mm	
BX-60235	Temperature sensor	Length of 230mm	
BX-60236	Temperature sensor with glass coating	Length of 230mm	
BX-60237	Temperature sensor	Length of 100mm	

BHMS-105 HOTPLATE MAGNETIC STIRRER



Heating temperature up to 280°C

Stainless steel with ceramic coated hotplate resists to corrosion

External temperature sensor PT1000 is available and control accuracy of ±1°C, real-time control medium temperature.

LED display temperature and speed.

50°C HOT warning indicates residual hotplate temperature.

ABS casing with fire retardant material, resistance of weak acid and alkali

SPECIFICATIONS

Model	BHMS-105
Capacity	3 L
Stirring Positions	1
Speed Range	100-1500 rpm
Temperature	RT-280°C
Permissible Ambient Temperature	5-40°C
Temperature Increment	1°C
Control Accuracy of Work Plate	±1(<100°C), ±1%(>100°C)
Temperature Accuracy	±1°C
Safety Temperature	320°C
Control Accuracy with Sensor PT1000	±0.5°C
Permissible Relative Humidity	0.8
Heating Warning	50°C
Motor rating Input [W#93;	5
Motor rating output [W#93;	3
Heating Output	500 W
Work Plate Size	135 mm
Stirrer Dimension	50 mm
Platform Material	Stainless steel with ceramic coating
Speed Display	LED
Temperature Display	LED
Remote Control (RS232 interface)	No
Motor Type	Brushless DC motor
Protection Class	IP21
Overall Dimension	150Wx260Dx80H mm
Weight	1.8 kg
Power	515 W
Power Supply	100-120V/200-240V, 50/60Hz

OPTIONAL ACCESSORIES

Accessory Code	Name	Description	Dimension
BX-58021	Support clamp of PT1000		
BX-60225	Stirrer bar		10mm x 6mm
BX-60226	Stirrer bar		15mm x 8mm
BX-60227	Stirrer bar		20mm x 8mm
BX-60228	Stirrer bar		25mm x 8mm
BX-60229	Stirrer bar		30mm x 6mm
BX-60230	Stirrer bar		40mm x 8mm
BX-60231	Stirrer bar		50mm x 8mm
BX-60232	Stirrer bar remover	Length of 200mm	
BX-60235	Temperature sensor	Length of 230mm	
BX-60236	Temperature sensor with glass coating	Length of 230mm	
BX-60237	Temperature sensor	Length of 100mm	

BX-60238	Reaction block	For 50ml round bottom flask (one flask capacity)	
BX-60239	Reaction block	For 100ml round bottom flask (one flask capacity)	
BX-60240	Reaction block	For 250ml round bottom flask (one flask capacity)	
BX-60241	Reaction block	For 500ml round bottom flask (one flask capacity)	
BX-60253	Protective cover		

BHMS-106 HOTPLATE MAGNETIC STIRRER



External temperature sensor PT1000 is available for hotplate model, real-time controls medium temperature.

Simple running interface easy to use and program.

Automatically identify temperature sensor PT1000 and transfer to PT1000 operation mode.

Record and display the last running parameter when switch on.

LCD display target and actual temperatures, as well as set and actual speed can be displayed.

PID temperature technology precise controls heating process, rapidly reaches target temperature and enhances control accuracy.

Brushless DC motor maintenance free and explosion-proofed, accurately control speed

Fully closed assembly guarantees safety and long service life, effectively prevents the liquid into unit to protect the components from damage

Separate safety circuits, fixed safety temperature of 360°C, Automatically stops heating once exceed secure temperature

HOT warning indicates residual hotplate temperature.

LCD display would show "Hot" when hotplate temperature over 50°C warning point, even if switched off

Software StirPC, computer can control and document all operation values via RS232 interface

SPECIFICATIONS

Model	BHMS-106
Capacity	20 L
Stirring Positions	1
Speed Range	100-1500 rpm
Temperature	RT-340°C
Permissible Ambient Temperature	5-40°C
Temperature Increment	1°C
Control Accuracy of Work Plate	±1(<100°C), ±1%(>100°C)
Temperature Accuracy	±0.1°C
Safety Temperature	360°C
Control Accuracy with Sensor PT1000	±0.2°C
Permissible Relative Humidity	0.8
Heating Warning	50°C
Motor rating Input [W]	18
Motor rating output [W]	10

Heating Output	500 W
Work Plate Size	135 mm
Stirrer Dimension	80 mm
Platform Material	Stainless steel with ceramic coating
Speed Display	LCD
Speed Display Resolution	±1 rpm
Temperature Display	LCD
Remote Control (RS232 interface)	Yes
Motor Type	Brushless DC motor
Protection Class	IP42
Overall Dimension	160Wx280Dx85H mm
Weight	2.8 kg
Power	550 W
Power Supply	100-120V/200-240V, 50/60Hz

OPTIONAL ACCESSORIES

Accessory Code	Name	Description	Dimension
BX-60225	Stirrer bar		10mm x 6mm
BX-60226	Stirrer bar		15mm x 8mm
BX-60227	Stirrer bar		20mm x 8mm
BX-60228	Stirrer bar		25mm x 8mm
BX-60229	Stirrer bar		30mm x 6mm
BX-60230	Stirrer bar		40mm x 8mm
BX-60231	Stirrer bar		50mm x 8mm
BX-60232	Stirrer bar remover	Length of 200mm	
BX-60235	Temperature sensor	Length of 230mm	
BX-60236	Temperature sensor with glass coating	Length of 230mm	
BX-60237	Temperature sensor	Length of 100mm	
BX-60238	Reaction block	For 50ml round bottom flask (one flask capacity)	
BX-60239	Reaction block	For 100ml round bottom flask (one flask capacity)	
BX-60240	Reaction block	For 250ml round bottom flask (one flask capacity)	
BX-60241	Reaction block	For 500ml round bottom flask (one flask capacity)	
BX-60242	Blue carrying plate	Used with BKSTR-1021 to BKSTR-1026	
BX-60243	Blue Fixed ring	Used with BKSTR-1021 to BKSTR-1026	
BX-60244	Red quarter pie	11 holes, 4 ml reaction vessel, Ø15.2mm, 20mm depth, used with SX1019 and SX1020	
BX-60245	Purple quarter pie	4 holes, 20 ml reaction vessel, Ø28mm, 24mm depth, used with SX1019 and SX1020	
BX-60246	Blue quarter pie	4 holes, 30 ml reaction vessel, Ø28mm, 30mm depth, used with SX1019 and SX1020	
BX-60247	Black quarter pie	4 holes, 40 ml reaction vessel, Ø28mm, 43mm depth, used with SX1019 and SX1020	
BX-60248	Green quarter pie	6 holes, 8ml reaction vessel, Ø17.8mm, 26mm depth, used with SX1019 and SX1020	
BX-60249	Golden quarter pie	4 holes, 16ml reaction vessel, Ø21.6mm, 31.7mm depth, used with SX1019 and SX1020	
BX-60250	Stirrer bar	Stirrer bar (65mm x 8mm), 1pc/pk	

BX-60251	Stirrer bar	Stirrer bar (80mm x 13mm), 1pc/pk	
BX-60252	Protective cover	For hotplate model	



Biolab Scientific Ltd.

3660 Midland Avenue, Suite 300, Toronto, Ontario M1V 0B8, Canada
Email: contact@biolabscientific.com | Website: www.biolabscientific.com