

# MAGNETIC HOTPLATE STIRRER



# MAGNETIC HOTPLATE STIRRER

Rugged and compact magnetic hotplate stirrers are ergonomically designed and provide uniform heating surfaces. It delivers reliable and consistent stirring quickly and efficiently. The low-profile design of these magnetic hotplate stirrers makes them easy to store and fit into fume hoods.

Used in Cell Culture, Laboratory, Research, Medical.

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

## STR21 MAGNETIC HOTPLATE STIRRER

Available for heating and stirring standard/non-standard reaction flasks between 50 ml and 20 L

DC brushless motor make stable operation, low noise, long using life and no spark

Metal plate shell, firm and durable, thermostability and anti-corrosion

The control panel designed 30° slopes for convenient operation

Steady working at low speed, powerful working at high speed

Temperature Sensor:PT1000



## SPECIFICATIONS

Model	STR21-340T1	STR21-340T
Capacity	20 L	-
Temperature Setting Range	30°C~340°C	
Temperature Stability	±3°C	
1	Speed Range	
100~1800 rpm	Temperature	-
RT~340°C	Permissible Ambient Temperature	
5°C	Temperature Increment	
350°C	Control Accuracy with Sensor PT1000	
50°C	Timing Range	
continuous	Motor rating Input [W&#93	-
80 mm	Platform Material	-
Enamel	Platform Dimension	
Φ137 mm	Remote Control (RS232 interface)	Speed Display
156Wx270Dx70H mm	Package Size (WxDxH)	Fuse
250 V,4 A/8 A, Φ5x20	Weight	
2.6 kg	Power	-
600 W	Power Supply	
1 min to 99h 59 min	-	Motor rating Input [W&#93
2.2 kg	-	Power

## OPTIONAL ACCESSORIES

Accessory Code	Name	Description
LS55169	Support rod and Temperature probe	



STR21-340T1



STR21-340T

## STR21-550 MAGNETIC HOTPLATE STIRRER

Magnetic Hotplate Stirrer



## SPECIFICATIONS

Model	STR21-550
Control Accuracy of Work Plate	$\pm 10^{\circ}\text{C}$
Temperature Display Accuracy	$\pm 1^{\circ}\text{C}$
RT-550°C	Permissible Ambient Temperature
5-40°C	Maximum Temperature
5°C	Temperature Increment
580°C	Control Accuracy with Sensor PT1000
$\pm 0.5^{\circ}\text{C}$	Humidity
80%RH	Permissible Relative Humidity
184x184 mm	Stirrer Dimension
Glass ceramic	Platform Dimension
LED	Speed and Time Display
IP21	Overall Dimension
215Wx360Dx112H mm	Package Size (WxDxH)
4.5 kg	Power
1010 W	Power Supply

# STR21-340T2 MAGNETIC HOTPLATE 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	STR21-340T2
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
18	Motor rating output [W&#93
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
LS55170	Stirrer bar		10mm x 6mm
LS55171	Stirrer bar		15mm x 8mm
LS55172	Stirrer bar		20mm x 8mm
LS55173	Stirrer bar		25mm x 8mm
LS55174	Stirrer bar		30mm x 6mm
LS55175	Stirrer bar		40mm x 8mm

LS55176	Stirrer bar		50mm x 8mm
LS55177	Stirrer bar remover	Length of 200mm	
LS55195	Stirrer bar	Stirrer bar (65mm x 8mm), 1pc/pk	
LS55196	Stirrer bar	Stirrer bar (80mm x 13mm), 1pc/pk	
LS55197	Protective cover	For hotplate model	

## STR23-550C MAGNETIC HOTPLATE 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	STR23-550C
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
18	Motor rating output [W&#93
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
LS55170	Stirrer bar		10mm x 6mm
LS55171	Stirrer bar		15mm x 8mm
LS55172	Stirrer bar		20mm x 8mm
LS55173	Stirrer bar		25mm x 8mm
LS55174	Stirrer bar		30mm x 6mm
LS55175	Stirrer bar		40mm x 8mm
LS55176	Stirrer bar		50mm x 8mm
LS55177	Stirrer bar remover	Length of 200mm	
LS55180	Temperature sensor	Length of 230mm	
LS55181	Temperature sensor with glass coating	Length of 230mm	
LS55182	Temperature sensor	Length of 100mm	

## STR23-550 MAGNETIC HOTPLATE 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	STR23-550
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
15	Motor rating output [W&#93
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
LS55170	Stirrer bar		10mm x 6mm
LS55171	Stirrer bar		15mm x 8mm
LS55172	Stirrer bar		20mm x 8mm
LS55173	Stirrer bar		25mm x 8mm
LS55174	Stirrer bar		30mm x 6mm
LS55175	Stirrer bar		40mm x 8mm
LS55176	Stirrer bar		50mm x 8mm
LS55177	Stirrer bar remover	Length of 200mm	
LS55180	Temperature sensor	Length of 230mm	
LS55181	Temperature sensor with glass coating	Length of 230mm	
LS55182	Temperature sensor	Length of 100mm	
LS55189	Red quarter pie	11 holes, 4 ml reaction vessel, Ø15.2mm, 20mm depth, used with SX1019 and SX1020	
LS55190	Purple quarter pie	4 holes, 20 ml reaction vessel, Ø28mm, 24mm depth, used with SX1019 and SX1020	
LS55191	Blue quarter pie	4 holes, 30 ml reaction vessel, Ø28mm, 30mm depth, used with SX1019 and SX1020	
LS55192	Black quarter pie	4 holes, 40 ml reaction vessel, Ø28mm, 43mm depth, used with SX1019 and SX1020	
LS55193	Green quarter pie	6 holes, 8ml reaction vessel, Ø17.8mm, 26mm depth, used with SX1019 and SX1020	
LS55194	Golden quarter pie	4 holes, 16ml reaction vessel, Ø21.6mm, 31.7mm depth, used with SX1019 and SX1020	

LS55195	Stirrer bar	Stirrer bar (65mm x 8mm), 1pc/pk	
LS55196	Stirrer bar	Stirrer bar (80mm x 13mm), 1pc/pk	

## STR22-340C MAGNETIC HOTPLATE 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.

Integrated 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	STR22-340C
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
18	Motor rating output [W&#93
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	$\pm 1 \text{ rpm}$
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
LS55170	Stirrer bar		10mm x 6mm
LS55171	Stirrer bar		15mm x 8mm
LS55172	Stirrer bar		20mm x 8mm
LS55173	Stirrer bar		25mm x 8mm
LS55174	Stirrer bar		30mm x 6mm
LS55175	Stirrer bar		40mm x 8mm
LS55176	Stirrer bar		50mm x 8mm
LS55177	Stirrer bar remover	Length of 200mm	
LS55180	Temperature sensor	Length of 230mm	
LS55181	Temperature sensor with glass coating	Length of 230mm	
LS55182	Temperature sensor	Length of 100mm	

## STR21-280 MAGNETIC HOTPLATE 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  $\pm 1^{\circ}\text{C}$ , 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	STR21-280
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	$\pm 1(<100^{\circ}\text{C})$ , $\pm 1\%(>100^{\circ}\text{C})$
Temperature Accuracy	$\pm 1^{\circ}\text{C}$

Safety Temperature	320°C
Control Accuracy with Sensor PT1000	±0.5°C
Permissible Relative Humidity	0.8
Heating Warning	50°C
5	Motor rating output [W&#93
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
LS52966	Support clamp of PT1000		
LS55170	Stirrer bar		10mm x 6mm
LS55171	Stirrer bar		15mm x 8mm
LS55172	Stirrer bar		20mm x 8mm
LS55173	Stirrer bar		25mm x 8mm
LS55174	Stirrer bar		30mm x 6mm
LS55175	Stirrer bar		40mm x 8mm
LS55176	Stirrer bar		50mm x 8mm
LS55177	Stirrer bar remover	Length of 200mm	
LS55180	Temperature sensor	Length of 230mm	
LS55181	Temperature sensor with glass coating	Length of 230mm	
LS55182	Temperature sensor	Length of 100mm	
LS55183	Reaction block	For 50ml round bottom flask (one flask capacity)	
LS55184	Reaction block	For 100ml round bottom flask (one flask capacity)	
LS55185	Reaction block	For 250ml round bottom flask (one flask capacity)	
LS55186	Reaction block	For 500ml round bottom flask (one flask capacity)	
LS55198	Protective cover		

# STR22-340 MAGNETIC HOTPLATE 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	STR22-340
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
18	Motor rating output [W&#93
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
LS55170	Stirrer bar		10mm x 6mm
LS55171	Stirrer bar		15mm x 8mm
LS55172	Stirrer bar		20mm x 8mm
LS55173	Stirrer bar		25mm x 8mm
LS55174	Stirrer bar		30mm x 6mm
LS55175	Stirrer bar		40mm x 8mm
LS55176	Stirrer bar		50mm x 8mm
LS55177	Stirrer bar remover	Length of 200mm	
LS55180	Temperature sensor	Length of 230mm	
LS55181	Temperature sensor with glass coating	Length of 230mm	
LS55182	Temperature sensor	Length of 100mm	
LS55183	Reaction block	For 50ml round bottom flask (one flask capacity)	
LS55184	Reaction block	For 100ml round bottom flask (one flask capacity)	
LS55185	Reaction block	For 250ml round bottom flask (one flask capacity)	
LS55186	Reaction block	For 500ml round bottom flask (one flask capacity)	
LS55187	Blue carrying plate	Used with BKSTR-1021 to BKSTR-1026	
LS55188	Blue Fixed ring	Used with BKSTR-1021 to BKSTR-1026	
LS55189	Red quarter pie	11 holes, 4 ml reaction vessel, Ø15.2mm, 20mm depth, used with SX1019 and SX1020	
LS55190	Purple quarter pie	4 holes, 20 ml reaction vessel, Ø28mm, 24mm depth, used with SX1019 and SX1020	
LS55191	Blue quarter pie	4 holes, 30 ml reaction vessel, Ø28mm, 30mm depth, used with SX1019 and SX1020	
LS55192	Black quarter pie	4 holes, 40 ml reaction vessel, Ø28mm, 43mm depth, used with SX1019 and SX1020	
LS55193	Green quarter pie	6 holes, 8ml reaction vessel, Ø17.8mm, 26mm depth, used with SX1019 and SX1020	
LS55194	Golden quarter pie	4 holes, 16ml reaction vessel, Ø21.6mm, 31.7mm depth, used with SX1019 and SX1020	
LS55195	Stirrer bar	Stirrer bar (65mm x 8mm), 1pc/pk	
LS55196	Stirrer bar	Stirrer bar (80mm x 13mm), 1pc/pk	
LS55197	Protective cover	For hotplate model	

## STR21-000 MAGNETIC HOTPLATE STIRRER

Available for heating and stirring standard/non-standard reaction flasks between 50 ml and 20 L

DC brushless motor make stable operation, low noise, long using life and no spark

Metal plate shell, firm and durable, thermostability and anti-corrosion

The control panel designed 30° slopes for convenient operation

Steady working at low speed, powerful working at high speed



### SPECIFICATIONS

Model	STR21-000
Capacity	20 L
Stirring Positions	1
Speed Range	0~1800 rpm
Timing Range	continuous
Stirrer Dimension	80 mm
Platform Material	Silicone Pad
Platform Dimension	154x163 mm
Overall Dimension	156Wx270Dx70H mm
Fuse	250 V,1 A, Φ5x20
Weight	2.6 kg
Power	30 W
Power Supply	AC100-230 V, 50/60 Hz

## STR21-040 MAGNETIC HOTPLATE STIRRER

Available for heating and stirring standard/non-standard reaction flasks between 50 ml and 20 L.

DC brushless motor make stable operation, low noise, long using life and no spark.

Metal plate shell, firm and durable, thermostability and anti-corrosion.

The control panel designed 30° slopes for convenient operation.

Steady working at low speed, powerful working at high speed.



## SPECIFICATIONS

Model	STR21-040
Capacity	3 L
Stirring Positions	1
Speed Range	100-1800 rpm
Temperature	5-40°C
Permissible Relative Humidity	0.8
15	Motor rating output [W&#93
Work Plate Size	φ135 mm
Stirrer Dimension	50 mm
Platform Material	Stainless steel
Speed and Time Display	Digital Display
Motor Type	Brushless DC Motor
Overall Dimension	270Wx156Dx70H mm
Weight	2.3 kg
Power Supply	100-240V, 50/60Hz

## OPTIONAL ACCESSORIES

Accessory Code	Name	Description
LS55169	Support rod and Temperature probe	

# Centrifugen

**Centrifugen**

82 Wendell Avenue, STE 100, Pittsfield, MA, 01201, USA  
Email: [info@centrifugen.com](mailto:info@centrifugen.com) | Website: [centrifugen.com](http://centrifugen.com)