

# Magnetic Hotplate Stirrers

## 7 Inch Square Magnetic Hotplate Stirrers

SCIOLOGEX 7 inch square magnetic hotplate stirrers with 550°C heating temperature, glass ceramic plate, brushless DC motor and external temperature sensor PT1000, which provides excellent product performance. They are widely used in chemical synthesis, physical and chemical analysis, bio-pharmaceuticals and other fields.

Temperature up to 550°C

**MS7-H550-Pro**

With external temperature sensor PT1000

Plug and play PT1000 temperature sensor accessor

- Control accuracy is  $\pm 0.2^{\circ}\text{C}$

Glass ceramic plate

- High temperature resistance
- Excellent chemical resistance
- Easy to clean

Brushless DC motor

- Explosion-proof
- Maintenance free
- Accurate speed control

Digital LCD display

- For precise temperature and speed control
- "Hot" indicator warning to prevent burns

Enclosed aluminum alloy casing

- Excellent chemical resistance
- Excellent thermal resistance



# MS7-H550-Pro

## LCD Digital Magnetic Hotplate Stirrer

### Features

- Backlit LCD display for precise monitoring of speed and temperature
- Built-in PID controller ensures maximum heat-up times while preventing an over temperature of the sample
- Temperature up to 550°C
- Separate safety circuits with fixed safety temperature of 580°C
- Plug and play PT 1000 sensor accessory for precise temperature control. Control accuracy:  $\pm 0.2^{\circ}\text{C}$
- Excellent heat control accuracy of the work plate:  $\pm 1 (<100^{\circ}\text{C}) \pm 1\% (>100^{\circ}\text{C})$
- Electronic speed control, the max speed is 1500rpm maximum
- Brushless DC motor is maintenance free, explosion-proofed with accurate speed control
- Independent control knobs for adjusting the speed and temperature
- "HOT" indicator warning, even if switched off
- PC can control and document all parameters via RS232 interface using 3rd party software



### MS7-H550-Pro

With colored reaction blocks



# Magnetic Hotplate Stirrers

## MS7-H550-S

### LED Digital Magnetic Hotplate Stirrer

#### Features

- LED displays target and actual temperatures
- Speed range is 0-1500rpm
- Temperature up to 550°C
- Separate safety circuits with fixed safety cut off temperature of 580°C
- Plug and play PT1000 external temperature sensor is available. The control accuracy is  $\pm 0.5^{\circ}\text{C}$
- "HOT" indicator warning, even if switched off



#### MS7-H550-S

With external PT1000 temperature sensor



## 5 Inch Round-top Magnetic hotplate Stirrers

SCIOLOGEX's 340°C magnetic hotplate stirrers include all leading safety standards and features for superior ease of use and reduced cost of ownership. They are widely used in chemical synthesis, physical and chemical analysis, bio-pharmaceuticals and other fields.

SCIOLOGEX's 280°C magnetic hotplate stirrer is the only low temperature magnetic stirrer in the world, incorporating a microprocessor and LED display with the option probe used with an plug and play PT1000 temperature sensor.

### Temperature to 340°C

Plug and play PT1000 temperature sensor and support stand accessory

- Control accuracy is  $\pm 0.2^{\circ}\text{C}$

Brushless DC motor

- Explosion-proof
- Maintenance free
- Accurate speed control

Digital LCD display

- For precise temperature and speed control
- "Hot" sign warning to prevent burns

RS232 interface

- Fully closed aluminum alloy casing
- High IP protection class(IP42)



### MS-H-Pro+

With external temperature sensor PT1000



## MS-H-Pro<sup>+</sup> LCD Digital Magnetic Hotplate Stirrer

## MS-H-Pro<sup>T</sup> **NEW** LCD Digital Magnetic Hotplate Stirrer with Timer

### Features:

#### Safe Heating and Mixing

- 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

#### Precise temperature and speed control

- Temperature to 340°C
- Plug and play PT1000 temperature sensor accessory for precise temperature control. Control accuracy is  $\pm 0.2^{\circ}\text{C}$
- Excellent heat control accuracy at the work plate:  $\pm 1 (<100^{\circ}\text{C}) \pm 1\% (>100^{\circ}\text{C})$
- Electronic speed control, max speed is 1500rpm

#### Convenient

- Digital process timer provides unattended operation and can be set from 1min to 99h 59min. When the set time has elapsed, the heat turns off. (MS-H-Pro<sup>T</sup>)
- Backlit LCD displays target and actual temperatures and speed
- Integral temperature sensor technology with plug and play transfer to PT1000 sensor operating mode
- Stainless steel with ceramic coated hotplate allows immediate heat transfer for quick heat-up times, chemical-resistant and scratch proof
- Max. stirring quantity 20L
- PC can control and document all parameters via RS232 interface
- A wide variety of accessories are available



MS-H-Pro<sup>T</sup>



MS-H-Pro<sup>+</sup>





## MS-H-S

### Classic Magnetic Hotplate Stirrer

#### Features:

#### Safe Heating and Mixing

- Temperature to 340°C
- Stirring speed up to 1500rpm
- Stainless steel with ceramic coated hotplate allows immediate heat transfer for quick heat-up times, chemical-resistant and scratch proof
- Separated safety circuit, automatically stops heating if temperature goes over 350°C
- Enclosed assembly with protection class IP42
- Brushless DC motor maintenance free and explosion-proof



## MS-H280-Pro

### LED Digital Magnetic Hotplate Stirrer

#### Features:

- Digital control system is ideal for applications of Analytical and biological Laboratory.
- Temperature to 280°C
- Electronic speed control, the max speed is 1500rpm.
- Stainless steel with ceramic coated hotplate allows immediate heat transfer for quick heat-up times, chemical-resistant and scratchproof
- External PT1000 temperature sensor accessory is available with control accuracy of  $\pm 0.5^\circ\text{C}$ .
- LED display shows temperature and speed.
- 50°C HOT warning indicates residual hotplate temperature.
- ABS casing with heat resistant and resistance of weak acids and alkalis



#### MS-H280-Pro

With external temperature sensor  
PT1000 accessory

# Magnetic Hotplate Stirrers

## MS-H-S10 10-Channel Classic Magnetic Hotplate Stirrer

### Features:

- Temperature to 120°C
- High-performance multi-position magnetic stirrer with uniform temperature distribution
- Specially controlled stirring for consistency with various samples
- Electronic speed control motor provides constant speed
- Speed range of 0-1100rpm
- Brushless DC motor for maintenance free operation and quiet operation
- Stainless steel plate with anti-slip and anti-corrosion silicone surface





## Stirrer bars

Stirrer bars and stirrer bar remover(PTFE), use below 150°C

### Models

MS-H550-Pro  
MS-H550-S  
MS-H-Pro<sup>+</sup>  
MS-H-Pro<sup>T</sup>  
MS-H-S  
MS-S

MS-H280-Pro  
MS-PA  
MS-PB

MS-H-S10  
MS-M-S10

Cat. No.	Size of stirrer bars (L x Ø) [mm]	Suitable for Max. stirrer bar 80mm	Suitable for Max. stirrer bar 50mm	Suitable for Max. stirrer bar 40mm
18900006	10mm x 6mm	•	•	•
18900007	15mm x 8mm	•	•	•
18900008	20mm x 8mm	•	•	•
18900009	25mm x 8mm	•	•	•
12500005	30mm x 6mm	•	•	•
18900011	40mm x 8mm	•	•	•
12500004	51mm x 8mm	•	•	
18900013	65mm x 8mm	•		
18900014	80mm x 13mm	•		
18900015	Stirrer bar remover, length of 200mm	•	•	•

# Magnetic Hotplate Stirrers

## Specifications of Hotplate Magnetic Stirrers



	<b>MS7-H550-Pro</b>	<b>MS7-H550-S</b>	<b>MS-H-Pro+</b>	<b>MS-H-ProT</b>	<b>MS-H-S</b>	<b>MS-H280-Pro</b>	<b>MS-H-S10</b>
Dimension of work plate [mm]	184x184 (7 inch)	184x184 (7 inch)	φ135(5 inch)	φ135(5 inch)	φ135(5 inch)	φ135(5 inch)	180x450
Work plate material	Glass ceramic	Glass ceramic	Stainless steel with ceramic coated	Stainless steel with silicone Film			
Motor type	Brushless DC motor	Shaded pole motor	Brushless DC motor	Brushless DC motor	Brushless DC motor	DC motor	Brushless DC motor
Motor rating input [W]	18	15	18	18	18	5	12
Motor rating output [W]	10	1.5	10	10	10	3	4
Power [W]	1050	1030	550	550	530	515	490
Voltage [VAC]	100-120/200-240	100-120/200-240	100-120/200-240	100-120/200-240	100-120/200-240	100-120/200-240	100-120/200-240
Frequency [Hz]	50/60	50/60	50/60	50/60	50/60	50/60	50/60
Stirring positions	1	1	1	1	1	1	10
Max. stirring quantity[H <sub>2</sub> O], L	20	10	20	20	20	3	0.4 (each stirring position)
Max. magnetic bar(L x Ø) [mm]	80	80	80	80	80	50	40
Speed range [rpm]	100-1500	0-1500	100-1500	100-1500	0-1500	100-1500	0-1100
Speed display	LCD	Scale	LCD	LCD	Scale	LED	Scale
Speed display resolution [rpm]	±1	-	±1	±1	-	-	-
Heating output [W]	1000	1000	500	500	500	500	470
Heating temperature range [°C]	Room Temp.-550, increment 1	Room temp.-550, increment 5	Room temp.-340, increment 1	Room temp.-340, increment 1	Room temp.-340, increment 1	Room temp.-280, increment 1	Room temp.-120
Control accuracy of work plate [°C]	±1(<100°C) ±1%(>100°C)	±10	±1(<100°C) ±1%(>100°C)	±1(<100°C) ±1%(>100°C)	-	±1(<100°C) ±1%(>100°C)	-
Safety temperature [°C]	580	580	360	360	350	320	140
Temperature display	LCD	LED	LCD	LCD	Scale	LED	Scale
Temperature display accuracy [°C]	±0.1	±1	±0.1	±0.1	-	±1	-
External temperature sensor	PT1000	PT1000	PT1000	PT1000	N/A	PT1000	N/A
Control accuracy with external temperature sensor PT1000 [±°C]	±0.2	±0.5	±0.2	±0.2	-	±0.5	-
Heating warning [°C]	50°C	50°C	50°C	50°C	N/A	50°C	N/A
Time setting range	-	-	1min to 99h 59min	Yes	-	-	-
Remote control (RS232 interface)	Yes	N/A	Yes	Yes	N/A	N/A	N/A
Protection class	IP21	IP21	IP42	IP42	IP42	IP21	IP42
Dimension [W x D x H] mm	215x360x112	215x360x112	160x280x85	160x280x85	160x280x85	150x260x80	182x622x65
Weight [kg]	5.3	4.5	2.8	2.8	2.8	1.8	3.2
Permissible ambient temperature [°C]	5-40	5-40	5-40	5-40	5-40	5-40	5-40
Permissible relative humidity	80%	80%	80%	80%	80%	80%	80%

## Accessories



**MS-H-Pro<sup>+</sup>**  
with PT1000  
and 1/4 color  
pies

Cat. No.	18900001	18900065	18900002	18900003	18900004	18900005	18900048	18900049	18101006	18101007	18101008	18101009
Descriptions	Blue carrying plate, use with color quarter pies	Blue Fixed ring, use with color quarter pies	Red quarter pie, 11 holes, 4 mL reaction vessel, Ø15.2mm, 20mm depth	Purple quarter pie, 4 holes, 20 mL reaction vessel, Ø28mm, 24mm depth	Blue quarter pie, 4 holes, 30mL reaction vessel, Ø28mm, 30mm depth	Black quarter pie, 4 holes, 40mL reaction vessel, Ø28mm, 43mm depth	Green quarter pie, 6 holes, 8mL reaction vessel, Ø17.8mm, 26mm depth	Golden quarter pie, 4 holes, 16mL reaction vessel, Ø21.6mm, 31.7mm depth	Reaction block for 50mL round bottom flask (one flask capacity)	Reaction block for 100mL round bottom flask (one flask capacity)	Reaction block for 250mL round bottom flask (one flask capacity)	Reaction block for 500mL round bottom flask (one flask capacity)

Magnetic hotplate stirrers are available to hold quarter color pies (volume range from 4mL to 16mL) and reaction blocks (volume range from 50mL to 500mL), which ensure uniform heating distribution and excellent resistance to chemicals. The color pies and blocks with aluminum material which are easy to clean and safety for lab.

## Models

	MS7-H550-Pro	MS7-H550-S	MS-H-Pro <sup>+</sup>	MS-H-Pro <sup>T</sup>	MS-H-S	MS-H280-Pro
	•	•	•	•	•	•
	•	•	•	•	•	•
	•	•	•	•	•	•
	•	•	•	•	•	•
	•	•	•	•	•	•



Cat. No.	18900019	18900016	189000136	18900017	189000148
Descriptions	F101 protective cover, for hotplate models, temperature resistance of 135°C	PT1000-A, temperature sensor for digital hotplate models, length of 230mm	PT1000-B, temperature sensor with glass coated, length of 230mm, used for digital hotplate models	Support clamp of PT1000	Support clamp of PT1000, use with MS-H280-Pro

## Models

	MS7-H550-Pro	MS7-H550-S	MS-H-Pro <sup>+</sup>	MS-H-Pro <sup>T</sup>	MS-H-S	MS-H280-Pro
	•	•	•	•	•	•
	•	•	•	•	•	•
	•	•	•	•	•	•
	•	•	•	•	•	•
	•	•	•	•	•	•

**MS-H-Pro<sup>+</sup>**  
with PT1000  
and reaction  
block



# Magnetic Stirrers

## MS-S Classic Magnetic Stirrer

### Features:

- Speed range of 0-1500 rpm
- Max. stirring quantity 20L
- Stainless steel with ceramic coated hotplate provides chemical-resistancy and scratch resistance
- High magnetic adhesion prevents stirrer spin bar release
- Enclosed assembly with protection class IP42
- Brushless DC motor is maintenance free and explosion-proof



MS-S



MS-PA

## MS-PA LED Digital Magnetic Stirrer

### Features:

- Speed range of 100-1500 rpm
- Max. stirring quantity 3L
- LED display shows set and actual speeds
- Microprocessor control technology guarantees speed control accuracy
- ABS casing with heat resistancy and resistance of weak acids and alkalis

## MS7-S 7" Square Classic Magnetic Stirrer

### Features:

- Speed range of 0-1500 rpm
- Max. stirring quantity 10L
- Glass ceramic plate, excellent chemical resistance and easy to clean



MS7-S



MS-PB

## MS-PB Classic Magnetic Stirrer

### Features:

- Speed range of 0-1500 rpm
- Max. stirring quantity 3L
- ABS casing with heat resistancy and resistance of weak acids and alkalis

## MS-M-S10

### 10-Channel Classic Magnetic Stirrer

#### Features:

- Speed range of 0-1100rpm
- High-performance magnetic stirrer with 10 stirring positions benefit laboratory space
- Individually controlled stirring for consistency with various samples
- Brushless DC motor provides maintenance free and constant speed
- Stainless steel plate with anti-slip and anti-corrosion silicone surface



MS-M-S10

## MS-M-S16

### 16-Channel Classic Magnetic Stirrer

#### Features:

- Speed range of 0-1100rpm
- High-performance magnetic stirrer with 16 stirring positions minimizes bench space
- Individually controlled stirring for consistency with various samples
- Stainless steel plate with anti-slip and anti-corrosion silicone surface
- 16 stirring positions in total, 4 rows with individual speed control

**NEW**



MS-M-S16

# Magnetic Stirrers

## Specifications



**MS7-S**



**MS-S**



**MS-PA**



**MS-PB**



**MS-M-S10**



**MS-M-S16**

	MS7-S	MS-S	MS-PA	MS-PB	MS-M-S10	MS-M-S16
Dimension of work plate [mm]	184 x 184(7 inch)	φ135(5 inch)	φ135(5 inch)	φ135(5 inch)	180x450	365x345
Work plate material	Glass ceramic	Stainless steel with ceramic coated	Plastic	Plastic	Stainless steel with silicone Film	Stainless steel with silicone Film
Motor type	Shaded pole motor	Brushless DC motor	DC motor	DC motor	Brushless DC motor	DC motor
Motor rating input [W]	15	18	5	5	12	12
Motor rating output [W]	1.5	10	3	3	4	4
Power [W]	30	30	15	10	20	20
Voltage [VAC]	100-120/200-240	100-240	100-240	100-240	100-240	100-240
Frequency [Hz]	50/60	50/60	50/60	50/60	50/60	50/60
Stirring positions	1	1	1	1	10	16
Max. stirring quantity[H <sub>2</sub> O], L	10	20	3	3	0.4 (each stirring position)	0.4 (each stirring position)
Max. magnetic bar(L x Ø) [mm]	80	80	50	50	40	40
Speed range [rpm]	0-1500	0-1500	100-1500	0-1500	0-1100	0-1100
Speed display	Scale	Scale	LED	Scale	Scale	Scale
Protection class according to DIN EN60529	IP21	IP42	IP42	IP42	IP42	IP42
Dimension [W x D x H] mm	215 x 360 x 112	160x280x85	150x260x80	150x260x80	182x622x65	380x622x65
Weight [kg]	3.8	2.8	1.8	1.8	3.2	6
Permissible ambient temperature [°C]	5-40	5-40	5-40	5-40	5-40	5-40
Permissible relative humidity	80%	80%	80%	80%	80%	80%



## FlatSpin

### Ultra-flat Compact Magnetic Stirrer

Ultra-flat compact magnetic stirrer, provides excellent mixing and is ideal for physical-chemical, analysis and biotech labs.

- Speed range of 15-1500rpm
- Automatic reverse rotation for excellent mixing
- High IP protection class (IP 65)
- Plate is made from chemically resistant materials
- Slip-resistant and stable



### Specifications

Voltage[VAC]	100-240
Frequency [Hz]	50/60
Motor rating input[W]	5
Motor rating output[W]	3
Speed range[rpm]	15-1500
Max. stirring quantity[H <sub>2</sub> O,L]	0.8
Max. load capacity[kg]	2.0
Dimension of work plate[mm]	90×90
Material	ABS
Dimension[W×D×H]	175×120×15
Weight[kg]	0.3
Permissible relative temperature[°C]	5-40
Permissible relative humidity	80%
DIN EN60529	IP65

## HP550-S LED Digital Hotplate

### Features:

- LED displays target and actual temperatures
- Temperature to 550°C.
- Separate safety circuits with a fixed safety temperature of 580°C
- PT1000 external temperature sensor is available. The control accuracy is  $\pm 0.5^\circ\text{C}$
- "HOT" sign warning to prevent burns, even if switched off.



### Specifications

Dimension of work plate [mm]	184x184 (7 inch)
Work plate material	Glass ceramic
Power [W]	1010
Voltage [VAC]	100-120/200-240
Frequency [Hz]	50/60
Heating Power [W]	1000
Heating temperature range [°C]	Room temp.-550, increment 5
Control accuracy of work plate [°C]	$\pm 10$
Safety temperature [°C]	580
Temperature display	LED
Temperature display accuracy [°C]	$\pm 1$
External temperature sensor	PT1000
Control accuracy with external temperature sensor PT1000 [ $\pm$ °C]	$\pm 0.5$
Heating warning [°C]	50°C
Protection class according to DIN EN60529	IP21
Dimension [W x D x H] mm	215x360x112
Weight [kg]	4.5
Permissible ambient temperature [°C]	5-40
Permissible relative humidity	80%

