

# MS-H-PRO<sup>A</sup>

## LCD Digital Magnetic Hotplate Stirrer

Three heating models for selecting (fast heating, standard heating and stable heating)

# MS-H-PRO<sup>+</sup>

## LCD Digital Magnetic Hotplate Stirrer

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

## LCD Digital Magnetic Hotplate Stirrer with Timer

# MS-H-S

## Analog Magnetic Hotplate stirrer



## Features

- Brushless DC motor is maintenance free and explosion-proof
- Digital temperature control up to 340°C
- Digital speed control up to 1500rpm
- Maximum stirring quantity of H<sub>2</sub>O is 20L
- Safety circuits provide overheating protection
- "HOT" warning flashes if plate temperature is above 50°C even when hotplate is turned off
- Wide range timer function from 1 min to 99h 59min (MS-H-Pro<sup>AT</sup> only)
- High-resolution LCD display shows actual temperatures and speed (MS-H-Pro<sup>AT</sup> displays the time)
- External temperature control is possible by connecting the temperature sensor (PT 1000) with accuracy at  $\pm 0.2^\circ\text{C}$
- Work plate with ceramic coating provides good chemical-resistant performance
- Remote function provides PC control and data transmission
- Wide variety of accessories available to choose

## Security

- International safety certification: CE, CTÜVus, FCC and other product safety cert, certifications issued by TUV Rheinland
- Safety circuits provide overheating protection
- "HOT" warning flashes if the work plate temperature is above 50°C
- Brushless DC motor is maintenance free and explosion-proof
- Fully enclosed aluminum alloy housing with good heat dissipation performance and reliable protection capability



External sensor



RS232 connector



Wide range of accessories



Chemical resistance



Brushless DC motor

Specifications	MS-H-Pro <sup>A</sup>	MS-H-Pro <sup>+</sup>	MS-H-Pro <sup>T</sup>	MS-H-S	MS-H380-Pro	MS-H280-Pro
Work plate Dimension [W x D]	Ø135mm (5 inch)	Ø135mm (5 inch)	Ø135mm (5 inch)	Ø135mm (5 inch)	140x140mm	Ø135mm (5 inch)
Work plate material	Aluminum cover with ceramic coating	stainless steel cover with ceramic coating	stainless steel cover with ceramic coating	stainless steel cover with ceramic coating	Aluminum cover with ceramic coating	stainless steel cover with ceramic coating
Motor type	Brushless DC motor	Brushless DC motor	Brushless DC motor	Brushless DC motor	Brushless DC motor	Brushless DC motor
Stirring positions	1	1	1	1	1	1
Max. stirring quantity, [H <sub>2</sub> O]	20L	20L	20L	20L	5L	3L
Max. magnetic bar[length]	80mm	80mm	80mm	80mm	50mm	50mm
Speed range	100-1500rpm resolution ±1rpm	100-1500rpm resolution ±1rpm	100-1500rpm resolution ±1rpm	0-1500rpm	200-1500rpm	200-1500rpm
Speed display	LCD	LCD	LCD	Scale	LCD	LED
Temperature display	LCD	LCD	LCD	Scale	LCD	LED
Heating temperature range	Room temp.-340°C, increment 1°C	Room Temp.-340°C, increment 1°C	Room Temp.-340°C, increment 1°C	Room Temp.-340°C	Room Temp-380°C	Room Temp-280°C
Heating liquid temperature control accuracy	±1°C(<100°C) ±1%(>100°C)	±1°C(<100°C) ±1%(>100°C)	±1°C(<100°C) ±1%(>100°C)	-	±1°C(<100°C) ±1%(>100°C)	±1°C (<100°C) ±1% (>100°C)
Overheating temperature protection	420°C	420°C	420°C	420°C	420°C	320°C
Temperature display accuracy	±0.1°C	±0.1°C	±0.1°C	-	±0.1°C	±1°C
External temperature sensor	PT1000 ( accuracy±0.2°C )	PT1000 ( accuracy±0.2°C )	PT1000 (accuracy ±0.2°C)	-	PT1000 ( accuracy±0.2°C )	PT1000 ( accuracy±0.2°C )
"Hot" warning	50°C	50°C	50°C	-	-	50°C
Data connector	RS232	RS232	RS232	-	-	-
Protection class	IP21	IP21	IP21	IP21	IP21	IP42
Timer function	1min to 99h59min	-	1min to 99h59min	-	-	-
Motor rating input	18W	18W	18W	18W	2.4W	5W
Motor rating output	10W	10W	10W	10W	1.8W	3W
Power	720W	550W	550W	530W	510W	515W
Heating output	600W	500W	500W	500W	500W	500W
Voltage,Frequency	100-120/200-240V, 50/60Hz	100-120/200-240V, 50/60Hz	100-120/200-240V, 50/60Hz	100-120/200-240V, 50/60Hz	100-120/200-240V, 50/60Hz	100-120/200-240V, 50/60Hz
Dimension [WxDxH]	280x160x100mm	160x280x100mm	160x280x100mm	160x280x100mm	320x180x108mm	150x260x100mm
Weight	2.8kg	2.8kg	2.8kg	2.8kg	2.2kg	1.8kg
Permissible ambient temperature and humidity	5-40°C,80%RH	5-40°C,80%RH	5-40°C,80%RH	5-40°C,80%RH	5-40°C,80%RH	5-40°C,80%RH

