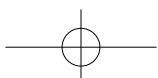
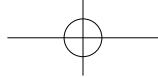


Mixing & Heating

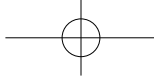




Magnetic hotplate stirrers are used for low viscosity liquids or solid mixing, widely used in chemical synthesis, physical and chemical analysis, bio-pharmaceuticals etc. DLAB provides different series, heating range covers from 120°C-550°C:

Magnetic Hotplate Stirrers:

Series	Model	Image	Stirring Position	Display	Work plate Size	Max. Heating Temp.	Max. stirring quantity[H ₂ O]	Page
550 series	MS7-H550-Pro		1	LCD	184x184mm	550°C	20L	P.62
	MS7-H550-S		1	LED	184x184mm	550°C	10L	P.62
380 series	MS-H380-Pro		1	LCD	140x140mm	380°C	20L	P.68
340 series	MS-H-Pro ^T (with timer)		1	LCD	φ135mm	340°C	20L	P.64
	MS-H-Pro ^A		1	LCD	φ135mm	340°C	20L	P.66
	MS-H-Pro ⁺		1	LCD	φ135mm	340°C	20L	P.64
	MS-H-S		1	Scale	φ135mm	340°C	20L	P.64
	MS-H340-S		4	LCD	φ135mm	340°C	10L for single position	P.69
280 series	MS-H280-Pro		1	LED	φ135mm	280°C	3L	P.67
120 series	MS-H-S10		10	Scale	180x450mm	120°C	0.4Lx10	P.70

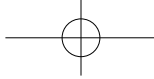


Magnetic Stirrers:

Image	Model	Stirring Position	Display	Work plate Size	Max. Stirring Quantity[H ₂ O]	Page
	MS7-S	1	Scale	184x184mm	10L	P.75
	MS-S	1	Scale	φ135mm	20L	P.75
	MS6-Pro	1	LCD	140x140mm	5L	P.75
	MS-PA	1	LED	φ135mm	3L	P.76
	MS-PB	1	Scale	φ135mm	3L	P.76
	EcoStir	1	Scale	120x115mm	1.5L	P.79
	EcoStir	1	Scale	φ120mm	1.5L	P.78
	FlatSpin	1	--	φ90mm	0.8L	P.78
	MS-M-S10	10	Scale	180x450mm	0.4Lx10	P.77

Hotplate:

Image	Model	Display	Work plate Size	Max. Heating Temp.	Page
	HP550-S	LED	184x184mm	550°C	P.74
	HP380-Pro	LCD	140x140mm	380°C	P.74





Application guidance:

Notice: MS-H380-Pro, HP380-Pro & MS-H280-Pro are not available for chemical fields.

Fields		MS7-H550-Pro/ MS7-H550-S/ HP550-S	MS-H-Pro ^A / MS-H-Pro ^T / MS-H-Pro ⁺ / MS-H-S/ MS-H340-S	MS-H380-Pro/ HP380-Pro	MS-H280-Pro	MS-H-S10	Magnetic Stirrers (none heating models)
Pharmaceutical	Chemical Synthesis	■	■				
	Biochemical Drugs	■	■				
	Medicine Testing	■	■				
	Drug Formulation	■	■				
Chemical Industry	Petrochemical Industry	■	■				
	Inorganic Chemical Synthesis	■	■				
	Organic Chemical Synthesis	■	■				
	Daily Use Chemical Industry	■	■				
	Painting/Rubber/Plastic	■	■				
Fertilizer/Pesticide	■	■					
Environmental	Water Quality Analysis					■	■
	Pesticide Residue Testing					■	■
	Chemical Pollution Analysis					■	■
Research & Education	Basic Chemical Experiments	■	■			■	■
	Material Analysis			■	■	■	■
	Liquid Mixing			■	■	■	■
	Chemical Synthesis	■	■				
Food Industry	Food Additive	■	■	■	■		
	Dairy Products	■	■	■	■		
	Nutrition Analysis	■	■	■	■		
Biological Engineering	Cell Culture						
	Biological Reagents		■	■	■	■	
	Biochemistry		■	■	■	■	

Overhead stirrers are used for middle or high viscosity samples mixing, widely used in chemical synthesis, pharmaceutical synthesis, physical and chemical analysis, petrochemical industries etc.

Overhead stirrers:

Image					
Models	OS20-Pro	OS20-S	OS40-Pro	OS40-S	OS70-Pro
Max. Stirring Quantity[H₂O]	20L	20L	40L	40L	70L
Constant Speed	YES	NO	YES	NO	YES
Display	LCD	LED	LCD	LED	LCD
Speed Range	50-2200rpm	50-2200rpm	50-2200rpm	50-2200rpm	50-1100rpm
Max. Torque	40N•cm	40N•cm	60N•cm	60N•cm	300N•cm
Viscosity Max.	10000mPa•s	10000mPa•s	50000mPa•s	50000mPa•s	100000mPa•s
Page	P.76	P.77	P.76	P.77	P.76

Overhead Stirrer

DLAB 550°C series magnetic stirrer is developed for demanding applications. It is widely used in chemical synthesis, physical and chemical analysis, bio-pharmaceuticals etc. Combining with glass ceramic work plate, brushless DC motor and external temperature sensor, the work plate temperature is optimized up to 550°C.



MS7-H550-Pro

LCD Digital Magnetic Hotplate Stirrer

Features

- LCD display for precise monitoring of speed and temperature
- Built-in PID controller ensures safe heating of the medium with overheating protection
- Max. heating plate temperature 550°C
- Glass ceramic work plate provides excellent chemical resistant performance and most efficient heat transfer
- External temperature control is possible by connecting the temperature sensor(PT1000) with an accuracy at $\pm 0.2^{\circ}\text{C}$
- Digital speed controlling, max. speed at 1500rpm
- Outstanding brushless DC motor enables more stirring power
- Two rotating knobs enable easy adjustment of speed and temperature
- The "HOT" warning will flash when the work plate temperature is above 50°C even when the hotplate is turned off
- Remote function provides PC control and data transmission

MS7-H550-S

LED Magnetic Hotplate Stirrer

Features

- LED display for precise monitoring of temperature
- A wide speed range of 0 to 1500rpm
- Max. Heating plate temperature 550°C
- External temperature control is possible by connecting the temperature sensor(PT1000) with accuracy at $\pm 0.2^{\circ}\text{C}$
- The "HOT" warning will flash if the work plate temperature is above 50°C





Overheating protection



External sensor



Wide range of accessories



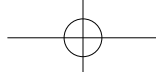
Chemical resistance



Magnetic Hotplate Stirrers

Specifications

	MS7-H550-Pro	MS7-H550-S
Work plate Dimension [W x D]	184x184mm (7 inch)	184x184mm (7 inch)
Work plate material	Glass ceramic	Glass ceramic
Motor type	Brushless DC motor	Shaded pole motor
Stirring positions	1	1
Max. stirring quantity, [H ₂ O]	20L	10L
Max. magnetic bar[length]	80mm	80mm
Speed range	100-1500rpm resolution ±1rpm	0-1500rpm
Speed display	LCD	Scale
Temperature display	LCD	LED
Heating temperature range	Room Temp.-550°C, increment 1°C	Room temp.-550°C, increment 5°C
Temperature control accuracy	±1°C(<100°C) ±1%(>100°C)	±10°C
Overheating protection	580°C	580°C
Temperature display accuracy	±0.1°C	±1°C
External temperature sensor	PT1000 (accuracy ±0.2)	PT1000 (accuracy ±0.2)
"Hot" warning	50°C	50°C
Data connector	RS232	-
Protection class	IP21	IP21
Motor rating input	18W	15W
Motor rating output	10W	1.5W
Power	1050W	1030W
Heating output	1000W	1000W
Voltage	100-120/200-240V 50/60Hz	100-120/200-240V 50/60Hz
Dimension [WxDxH]	215x360x112mm	215x360x112mm
Weight	5.3kg	4.5kg
Permissible ambient temperature and humidity	5-40°C, 80%RH	5-40°C, 80%RH



DLAB 340°C magnetic hotplate stirrers include all leading safety standards and features for superior ease of use and are cost-effective. They are widely used in chemical synthesis, physical and chemical analysis, bio-pharmaceuticals, etc.

MS-H-Pro^T LCD Digital Magnetic Hotplate Stirrer with Timer

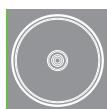
MS-H-Pro⁺ LCD Digital Magnetic Hotplate Stirrer

Features

- Brushless DC motor is maintenance free and explosion-proof
- Digital temperature control with max. temperature at 340°C
- Digital speed control with max. speed up to 1500rpm
- Max. stirring quantity of H₂O at 20L
- Safety circuits provide overheating protection
- The "HOT" warning will flash if the plate temperature is above 50°C even when the hotplate is turned off
- Wide range timer function from 1min to 99h59min(MS-H-Pro^T only)
- High-resolution LCD display shows actual temperatures and speed (MS-H-Pro^T displays the time also)
- External temperature control is possible by connecting the temperature sensor(PT 1000) with accuracy at ±0.2°C
- Stainless steel work plate with ceramic coating provides good chemical-resistant performance
- Remote function provides PC control and data transmission
- A wide variety of accessories are available



External sensor



Brushless DC motor



Wide range of accessories



RS232 connector



Chemical resistance

MS-H-S Magnetic Hotplate Stirrer

Features

- Maintenance free brushless DC motor
- Max. temperature to 340°C
- Stirring speed up to 1500 rpm
- Stainless steel work plate with ceramic coating provides good chemical-resistant performance
- Safety circuits provide overheating protection
- A wide variety of accessories are available

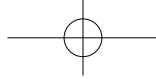




Magnetic Hotplate Stirrers

Specifications

	MS-H-PRO ⁺	MS-H-PRO ^T	MS-H-S
Work plate dimension	φ135mm(5 inch)	φ135mm(5 inch)	φ135mm(5 inch)
Work plate material	stainless steel cover with ceramic	stainless steel cover with ceramic	stainless steel cover with ceramic
Motor type	Brushless DC motor	Brushless DC motor	Brushless DC motor
Stirring positions	1	1	1
Max. stirring quantity[H ₂ O]	20L	20L	20L
Max. magnetic bar[length]	80mm	80mm	80mm
Speed range	100-1500rpm resolution±1rpm	100-1500rpm resolution±1rpm	0-1500rpm resolution±1rpm
Speed display	LCD	LCD	Scale
Temperature display	LCD	LCD	Scale
Heating temperature range	Room temp.-340°C, increment 1°C	Room temp.-340°C, increment 1°C	Room temp.-340°C
Temperature control accuracy	±1°C(<100°C) ±1%(>100°C)	±1°C(<100°C) ±1%(>100°C)	-
Over temperature protection	420°C	420°C	420°C
Temperature display accuracy	±0.1°C	±0.1°C	±0.5°C
External temperature sensor	PT1000 (accuracy ±0.2)	PT1000 (accuracy ±0.2)	-
"Hot" warning	50°C	50°C	-
Timer function	-	1min to 99h 59min	-
Data connector	RS232	RS232	-
Protection class	IP42	IP42	IP42
Motor rating input	18W	18W	18W
Motor rating output	10W	10W	10W
Power	550W	550W	530W
Heating output	500W	500W	500W
Voltage	100-120/200-240V 50/60Hz	100-120/200-240V 50/60Hz	100-120/200-240V 50/60Hz
Dimension[WxDxH]	160×280×85mm	160×280×85mm	160×280×85mm
Weight	2.8kg	2.8kg	2.8kg
Permissible ambient temperature and humidity	5-40°C, 80%RH	5-40°C, 80%RH	5-40°C, 80%RH



DLAB new heating magnetic stirrer with aluminum cover with ceramic coating work plate, is capable of rapid heating and stable heating as well as precise temperature control. Almost all leading safety standards and features are included for superior and are cost-effective. They are widely used in chemical synthesis, physical and chemical analysis, bio-pharmaceuticals, etc.

MS-H-Pro^A LCD Digital Magnetic Hotplate Stirrer

Features

- Digital control with max. temperature at 340°C, max. speed up to 1500rpm
- Aluminum cover with ceramic coating work plate provides fast heating performance, and strong compatibility with various heating containers and heating blocks
- High-resolution LCD display shows actual temperatures and speed
- PID controller ensures a precise and steady heating process
- External temperature control is possible by connecting the temperature sensor(PT 1000) with accuracy at $\pm 0.2^{\circ}\text{C}$
- Brushless DC motor enables more powerful speed control.
- Three heating modes for selected (fast heating, standard heating and stable heating)
- Remote control function through RS232 interface provides PC control and data transmission



Security

- International safety certification: obtained the CE, CTÜVus, FCC and other product safety certifications issued by TUV Rheinland
- Safety circuits provide overheating protection
- The “HOT” warning will flash if the plate temperature is above 50°C even when the hotplate is turned off
- Brushless DC motor is maintenance free and explosion-proof
- Fully enclosed aluminum alloy housing with good heat dissipation performance and reliable protection capability



Specifications

	MS-H-Pro ^A
Work plate dimension	φ135mm(5inch)
Work plate material	Aluminum cover with ceramic coating
Motor type	Brushless DC motor
Heating temperature range	Room temp.-340°C, increment 1°C
Temperature display accuracy	$\pm 0.1^{\circ}\text{C}$
Speed range	100-1500rpm resolution ± 1 rpm
Max. stirring quantity[H ₂ O]	20L
Speed display	LCD
Temperature display	LCD
Max. magnetic bar[length]	80mm
Temperature control accuracy	$\pm 1^{\circ}\text{C}(<100^{\circ}\text{C}) \pm 1\%(>100^{\circ}\text{C})$
External temperature sensor	PT1000 (accuracy $\pm 0.2^{\circ}\text{C}$)
Over temperature protection	420°C
"Hot" warning	50°C
Data connector	RS232
Protection class	IP21
Voltage	100~120/200-240V 50/60Hz
Heating power	600w
Power	650w
Motor rating input	18w
Motor rating output	10w
Dimension[WxDxH]	280×160×100mm
Weight	2.8kg
Permissible ambient temperature and humidity	5-40°C; 80%RH

DLAB MS-H280-Pro is a perfect device for handling small volume task on daily application, as a low temperature magnetic stirrer with max. temperature at 280°C.

MS-H280-Pro LED Digital Magnetic Hotplate Stirrer

Features

- Digital temperature control with max. temperature up to 280°C
- Digital speed control with max. speed up to 1500rpm
- Stainless steel work plate with ceramic coating provides good chemical resistant performance
- External temperature control is possible by connecting the temperature sensor(PT1000) with an accuracy at $\pm 0.5^{\circ}\text{C}$
- LED display shows temperature and speed
- The "HOT" warning will flash when the work plate temperature is above 50°C even if the hotplate is turned off



External sensor



Wide range of accessories



Chemical resistance



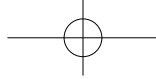
LED display



Magnetic Hotplate Stirrers

Specifications

	MS-H280-Pro
Work plate Dimension	$\phi 135\text{mm}(5\text{ inch})$
Work plate material	stainless steel cover with ceramic
Motor type	Brushless DC motor
Stirring positions	1
Max. stirring quantity	3L
Max. magnetic bar[length]	50mm
Speed range	200-1500rpm
Speed display	LED
Temperature display	LED
Speed display resolution	$\pm 1\text{rpm}$
Heating temperature range	Room temp.-280, increment 1°C
Control accuracy of work plate	$\pm 1^{\circ}\text{C}(<100^{\circ}\text{C}) \pm 1\%(>100^{\circ}\text{C})$
Overheating protection	320°C
Temperature display accuracy	$\pm 1^{\circ}\text{C}$
External temperature sensor	PT1000 (accuracy $\pm 0.5^{\circ}\text{C}$)
"Hot" warning	50°C
Protection class	IP21
Motor rating input	5W
Motor rating output	3W
Power	515W
Heating output	500W
Voltage	100-120/200-240V 50/60Hz
Dimension[WxDxH]	150x260x100mm
Weight	1.8kg
Permissible ambient temperature and humidity	$5-40^{\circ}\text{C}$, 80%RH



MS-H380-Pro

LCD Digital Magnetic Hotplate Stirrer

DLAB 380°C magnetic hotplate stirrers include all leading safety standards and is chemically-resistant with white ceramic work plate. They can be used in physical, chemical, analytical and biological laboratories.

Features

- Max. heating temperature is 380°C
- High resolution LCD displays actual temperature and speed.
- Brushless DC motor is maintenance free
- Aluminum cover with ceramic work plate, allows for immediate heat transfer
- External temperature control is possible with temperature sensor PT1000
- Digital temperature control with max. temperature at 380°C
- Digital speed control with max. speed up to 1500rpm
- Max. stirring quantity of H₂O at 5L



Specifications

MS-H380 Pro

Work plate Dimension	140x140mm
Work plate material	Aluminum cover with ceramic coating
Motor type	Brushless DC motor
Stirring positions	1
Max. stirring quantity[H ₂ O]	5L
Max. magnetic bar[length]	50mm
Speed range	200-1500rpm
Speed display	LCD
Temperature display	LCD
Heating temperature range	Room temp.+5°C - 380°C
Over heat Protection	420°C
Temperature display accuracy	±0.1°C
External temperature sensor	PT1000 (accuracy ±0.5°C)
Control accuracy of sensor	±20rpm
Protection class	IP21
Motor rating input	2.4W
Motor rating output	1.8W
Power	510W
Heating output	500W
Voltage	100-120/200-240V, 50/60Hz
Dimension [W x D x H]	320x180x108mm
Weight	2.2kg
Permissible ambient temperature and humidity	5-40°C 80%RH

MS-H340-S4

LCD 4-Channel Digital Magnetic Hotplate Stirrer



Magnetic Hotplate Stirrers

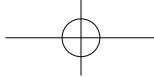
It is widely used in chemical synthesis, physical and chemical analysis, bio-pharmaceuticals etc.

Features

- Independent heating and stirring control
- LCD display shows actual temperatures and speed
- PID controller ensures a precise and steady heating process, Max. temperature up to 340°C
- Brushless DC motor enables more powerful speed control
- External temperature sensor(PT1000) with accuracy at 0.2°C
- Overheating protection temperature at 420°C
- Stainless steel work plate with ceramic coating provides good chemical-resistant performance
- A wide variety of accessories are available

Specifications

	MS-H340-S4
Work plate dimension	Φ135mm (5inch)
Plate material	Stainless steel with ceramic coating
Motor type	Brushless DC motor
Stirring positions	4
Max. stirring quantity of single position (H ₂ O)	10L
Max. magnetic bar	40mm
Speed range	200-1500rpm
Speed display	LCD
Temperature display	LCD
Control accuracy of sensor	±20rpm
Temperature range	25-340°C
Over temperature protection	420°C
Temperature display accuracy	±0.1°C
External temp. sensor	PT1000 (Accuracy±0.2°C)
IP Protection class	IP21
Motor rating input	1.8W×4
Power	515W×4
Heating Power	500W×4
Voltage	100-120V,60Hz; 200-240V,50 Hz
Dimensions[WxDxH]	698×270×128mm
Weight	9.5kg
Permissible ambient temperature	5~40°C
Permissible relative humidity	80%RH



MS-H-S10

10-Position Magnetic Hotplate Stirrer

Features

- Maintenance-free brushless DC motor
- Max speed 1100rpm
- Max. temperature 120°C
- Stainless steel work plate, covered with silicone cushion, provides the excellent performance of heating uniformity and skid resistance



Skid resistance



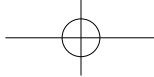
Multiple position



Brushless DC motor

Specifications

	MS-H-S10
Work plate dimension[W x D]	180x450mm
Work plate material	Stainless steel with silicone
Motor type	Brushless DC motor
Stirring positions	10
Max. stirring quantity	0.4Lx10
Max. magnetic bar[length]	40mm
Speed range	0-1100rpm
Speed display	scale
Temperature display	scale
Heating temperature range	Room temp.-120°C
Overheating protection	140°C
Protection class	IP42
Motor rating input	12W
Motor rating output	4W
Power	490W
Heating output	470W
Voltage	100-120/200-240V 50/60Hz
Dimension[WxDxH]	182x622x65mm
Weight	3.2kg
Permissible ambient temperature and humidity	5-40°C, 80%RH



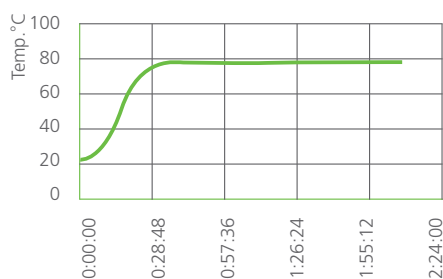
Alloy-Bead Heating Bath

Features

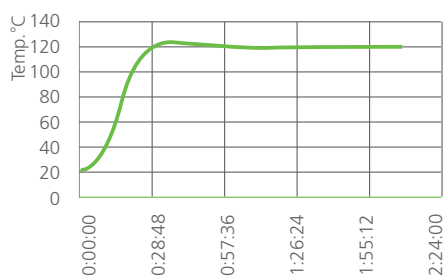
- High strength aluminum alloy bead with high thermal conductivity over wide temperature range
- Flexible, convenient, easy to operate and adaptable to reaction vessels with different shapes and sizes
- Accommodate the external temperature probe on the hotplate magnetic stirrer to achieve precise temperature control
- The alloy bead does not adhere to the container inside surface, while the silicone oil is difficult to clean in the oil bath application
- Eco-friendly, pollution free, poison free, fume free, highly safe and splash free heating
- PTFE shell can effectively retain the heat and ensure human safety from burning injuries
- The beads are easy to handle with. The contaminated portion can be cleaned and replaced separately



250ml water heated up to 80°C
(MS-H-ProA)

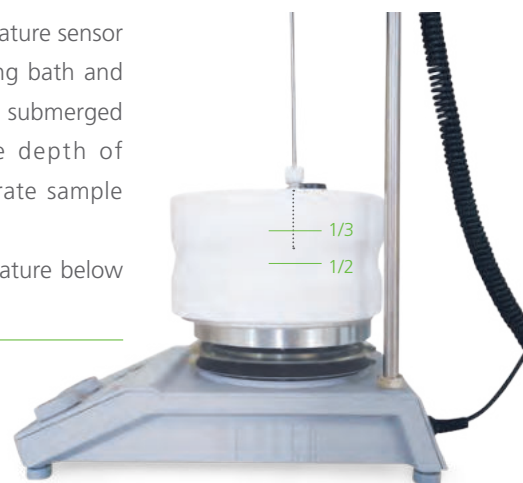


250ml silicone oil heated up to 120°C
(MS-H-ProA)



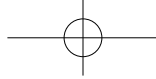
Tips for temperature control

- We recommend to use the beads with DLAB 340, 550 and 280 series hotplate magnetic stirrers
- Place the external temperature sensor in the hole on the heating bath and ensure that the probe is submerged within 1/2~1/3 of the depth of the bead bath for accurate sample temperature control.
- Keep the heating temperature below 260°C





Cat. No.	Description	MS7-H550-Pro	MS7-H550-S	MS-H-Pro ⁺	MS-H-Pro ^T	MS-H-S	MS-H280-Pro
① 18900001	Blue carrying plate, use with color quarter pies			■	■	■	■
② 18900065	Blue Fixed ring, use with color quarter pies			■	■	■	■
③ 18900002	Red quarter pie, 11 holes, 4 mL reaction vessel, Ø15.2mm, 20mm depth	■	■	■	■	■	■
④ 18900003	Purple quarter pie, 4 holes, 20 mL reaction vessel, Ø28mm, 24mm depth	■	■	■	■	■	■
⑤ 18900004	Blue quarter pie, 4 holes, 30mL reaction vessel, Ø28mm, 30mm depth	■	■	■	■	■	■
⑥ 18900005	Black quarter pie, 4 holes, 40mL reaction vessel, Ø28mm, 43mm depth	■	■	■	■	■	■
⑦ 18900048	Green quarter pie, 6 holes, 8mL reaction vessel, Ø17.8mm, 26mm depth	■	■	■	■	■	■
⑧ 18900049	Golden quarter pie, 4 holes, 16mL reaction vessel, Ø21.6mm, 31.7mm depth	■	■	■	■	■	■
⑨ 18101006	Reaction block for 50mL round bottom flask (one flask capacity)			■	■	■	■
⑩ 18101007	Reaction block for 100mL round bottom flask (one flask capacity)			■	■	■	■
⑪ 18101008	Reaction block for 250mL round bottom flask (one flask capacity)			■	■	■	■
⑫ 18101009	Reaction block for 500mL round bottom flask (one flask capacity)			■	■	■	■
⑬ 18900019	F101 protective cover, temperature resistance of 135°C			■	■	■	■
⑭ 18900016	PT1000-A, length of 230mm	■	■	■	■		■
⑮ 18900136	PT1000-B, temperature sensor with glass coated, length of 230mm	■	■	■	■		■
⑯ 18900017	Support clamp of PT1000	■	■	■	■		
⑰ 18900148	Support clamp of PT1000						■



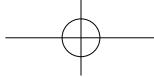
Stirrer bars

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

Models

MS7-H550-Pro MS7-H550-S MS-H-Pro+ MS-H-Pro [†] MS-H-S MS-S	MS-H280-Pro MS-PA MS-PB	MS-H-S10 MS-M-S10 FlatSpin EcoStir
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Cat. No.	Size of stirrer bars (LxØ)[mm]	Suitable for max. stirrer bar 80mm	Suitable for max. stirrer bar 50mm	Suitable for max. stirrer bar 40mm
18900006	10mmx6mm	■	■	■
18900007	15mmx8mm	■	■	■
18900008	20mmx8mm	■	■	■
18900009	25mmx8mm	■	■	■
12500005	30mmx6mm	■	■	■
18900011	40mmx8mm	■	■	■
12500004	50mmx8mm	■	■	
18900013	65mmx8mm	■		
18900014	80mmx13mm	■		
18900015	Stirrer bar remover, length of 200mm	■	■	■



HP550-S LED Hotplate

Features

- LED screen shows temperature
- Max. temperature up to 550°C
- Separate safety circuits with fixed safety temperature of 580°C
- External temperature control is possible by connecting the temperature sensor(PT 1000) with an accuracy at $\pm 0.5^\circ\text{C}$
- Glass ceramic work plate provides excellent chemical-resistant performance and most efficient heat transfer
- The "HOT" warning will flash if the work plate temperature is above 50°C even when the hotplate is turned off

Specifications

	HP380-Pro
Work plate Dimension	140x140mm
Work plate material	Aluminum cover with ceramic coating
Motor type	-
Stirring positions	-
Max. stirring quantity[H ₂ O]	-
Max. magnetic bar[length]	-
Speed range	-
Speed display	-
Temperature display	LCD
Heating temperature range	Room temp.+5°C - 380°C
Over heat Protection	420°C
Temperature display accuracy	$\pm 0.1^\circ\text{C}$
External temperature sensor	PT1000 (accuracy $\pm 0.5^\circ\text{C}$)
Control accuracy of sensor	-
Protection class	IP21
Motor rating input	-
Motor rating output	-
Power	510W
Heating output	500W
Voltage	100-120/200-240V, 50/60Hz
Dimension [W x D x H]	320x180x108mm
Weight	2.2kg
Permissible ambient temperature and humidity	5-40°C 80%RH

Specifications

	HP550-S
Work plate dimension[WxD]	184x184mm(7 inch)
Work plate material	Glass ceramic
Heating position	1
Heating temperature range	Room temp.-550°C, increment 5°C
Control accuracy of work plate	$\pm 10^\circ\text{C}$
Safety temperature	580°C
Temperature display	LED
Temperature display accuracy	$\pm 1^\circ\text{C}$
External temperature sensor	PT1000($\pm 0.5^\circ\text{C}$)
Heating warning	50°C
Protection class	IP21
Power	1010W
Voltage Frequency	100-120/200-240V, 50/60Hz
Heating Power	1000W
Dimension[WxDxH]	215x360x112mm
Weight	4.5kg
Permissible ambient temperature and humidity	5-40°C, 80%RH

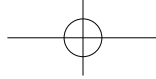


HP380-Pro LCD Digital Hotplate

DLAB 380°C magnetic hotplate stirrers include all leading safety standards and is chemically-resistant with white ceramic work plate. They can be used in physical, chemical, analytical and biological laboratories.

Features

- Max. heating temperature is 380°C
- High resolution LCD displays actual temperature
- Aluminum cover with ceramic work plate, allows for immediate heat transfer
- External temperature control is possible with temperature sensor PT1000
- Digital temperature control with max. temperature at 380°C
- Max. stirring quantity of H₂O at 5L



MS7-S 7" Square Magnetic Stirrer

Features

- Speed range of 0-1500rpm
- Max. stirring quantity of H₂O at 10L
- Ceramic work plate provides excellent chemical resistant performance



MS-S Magnetic Stirrer

Features

- Maintenance free brushless DC motor
- Speed range of 0-1500 rpm
- Max. stirring quantity of H₂O at 20L
- Stainless steel work plate cover with ceramic material provides good chemical resistance performance

F100 protective cover

for non-hotplate model,
use with MS-S



MS6-Pro LCD Digital Magnetic Stirrer

Features

- High resolution LCD displays actual speed
- Brushless DC motor is maintenance free
- Aluminum cover with ceramic work plate
- Digital speed control with max. speed up to 1500rpm
- Max. stirring quantity of H₂O at 5L



Specifications	MS7-S	MS-S	MS6-Pro
Work plate dimension[WxD]	184x184mm(7 inch)	φ135mm(5 inch)	140x140mm
Work plate material	Glass ceramic	Stainless steel cover with ceramic	Aluminum cover with ceramic coating
Motor type	Shaded pole motor	Brushless DC motor	Brushless DC motor
Stirring positions	1	1	1
Max. stirring quantity[H ₂ O]	10L	20L	5L
Max. magnetic bar[length]	80mm	80mm	40mm
Speed range	0-1500rpm	0-1500rpm	200-1500rpm
Speed display	Scale	Scale	LCD
Protection class	IP21	IP42	IP21
Motor input power	15W	18W	2.4W
Motor output power	1.5W	10W	1.8W
Power	30W	30W	10W
Voltage	100-120/200-240V,50/60Hz	100-240V,50/60Hz	100-240V, 50-60Hz
Dimension[WxDxH]	215x360x112mm	160x280x85mm	320x180x108mm
Weight	3.8kg	2.8kg	2.2kg
Permissible ambient temperature and humidity	5-40°C, 80%RH	5-40°C, 80%RH	5-40°C 80%RH

MS-PA LED Digital Magnetic Stirrer

Features

- Digital speed control within the range of 0-1500rpm
- Max. stirring quantity of H₂O at 3L
- LED display shows speed
- Nylon+GF housing provides a good performance of chemical resistance



MS-PB Magnetic Stirrer

Features

- A wide range of 0-1500rpm
- Max. stirring quantity of H₂O at 3L
- Nylon+GF housing provides a good performance of chemical resistance



Chemical resistance



Strong magnetism

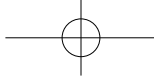


LED display



Specifications

	MS-PA	MS-PB
Work plate dimension	φ135mm(5 inch)	φ135mm(5 inch)
Work plate material	Nylon+GF	Nylon+GF
Motor type	Brushless DC motor	Brushless DC motor
Stirring positions	1	1
Max. stirring quantity[H ₂ O]	3L	3L
Max. magnetic bar[length]	50mm	50mm
Speed range	0-1500rpm	0-1500rpm
Speed display	LED	Scale
Protection class	IP42	IP42
Motor input power	5W	5W
Motor output power	3W	3W
Power	15W	10W
Voltage	100-120/200-240V,50/60Hz	100-120/200-240V,50/60Hz
Dimension[WxDxH]	150×260×80mm	150×260×80 mm
Weight	1.8kg	1.8kg
Permissible ambient temperature and humidity	10-40°C, 80%RH	10-40°C, 80%RH



MS-M-S10 10-Position Magnetic Stirrer

Features

- Maintenance-free brushless DC motor
- Speed range of 0-1100rpm
- Stainless steel work plate covered with silicone cushion, provides excellent performance of skid resistance



Skid resistance



Multiple position



Specifications

Work plate Dimension[WxD]	
Work plate material	
Motor type	
Stirring positions	
Max. stirring quantity[H ₂ O]	
Max. magnetic bar[length]	
Speed range	
Speed display	
Protection class	
Motor input power	
Motor output power	
Power	
Voltage	
Dimension[WxDxH]	
Weight	
Permissible ambient temperature and humidity	

MS-M-S10	
Work plate Dimension[WxD]	180x450mm
Work plate material	Stainless steel with silicone coating
Motor type	Brushless DC motor
Stirring positions	10
Max. stirring quantity[H ₂ O]	0.4LX10
Max. magnetic bar[length]	40mm
Speed range	0-1100rpm
Speed display	Scale
Protection class	IP21
Motor input power	12W
Motor output power	4W
Power	20W
Voltage	100-120/200-240V,50/60Hz
Dimension[WxDxH]	622x205x65mm
Weight	3.2kg
Permissible ambient temperature and humidity	5-40°C, 80%RH



FlatSpin

Ultra-flat Compact Magnetic Stirrer

With excellent stirring functionality, the compact shape of FlatSpin takes less bench space and makes storage easier.

Features

- A wide range of speed from 15 to 1500rpm
- Automatic reverse rotation for excellent mixing
- Protection class (IP65)
- PET top provides excellent chemical resistance
- Ultra silence and vibration-free

EcoStir is a magnetic stirrer customized for liquid mixing, suitable for chemical analysis, biology reagent mixing, regular laboratory experiments and liquid handling.

EcoStir

Economical Magnetic Stirrer

Features

- Maintenance free brushless DC motor
- Rare earth magnets give powerful stirring
- Stepless speed regulation 300-2000rpm
- Ultra silence and vibration-free design.
- PET top provides excellent chemical resistance
- Shaft can be fitted with a PH sensor or sensors for other purposes



Specifications

	FlatSpin	EcoStir
Work plate Dimension	φ90mm	φ120mm
Work plate material	PET	PET
Motor type	Motorless	Brushless DC motor
Stirring positions	1	1
Max. stirring quantity[H ₂ O]	0.8L	1.5L
Max. magnetic bar[length]	40mm	40mm
Speed range	15-1500rpm	300-2000rpm
Speed setting	button	scale
Protection class	IP65	IP21
Motor output power	3W	1.2W
Power	5W	7.2W
Voltage	100-120/200-240V,50/60Hz	100-120/200-240V,50/60Hz
Dimension [W x D x H]	175x120x15mm	150x145x50mm
Weight	0.3kg	0.3kg
Permissible ambient temperature and humidity	5-40°C,80%RH	5-40°C,80%RH

EcoStir

Square Plate Magnetic Stirrer

DLAB Square Plate Magnetic Stirrer with electrode holder has a reliable design and a powerful stirring ability. It is a basic and ideal tool for electrochemistry measurements or water & environment monitoring; drug or food analysis; liquid culture mixing, etc.

Features

- Compact design with small footprint, 12V voltage available for mobile labs.
- Square work plate supports 1.5L stirring capacity.
- Holder with clamp for pH electrode or other sensor.
- Default PET top provides excellent chemical resistance.
- Extra colorful stickers satisfy DIY design by yourself.
- Maintenance free brushless DC moto.
- An economical choice of a reliable & durable magnetic stirrer with an electrode holder for stable & powerful stirring ability.



Powerful stirring capacity



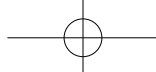
Specifications

	EcoStir
Work plate size	120x115mm
Work plate material	PET
Motor type	Brushless DC Motor
Stirring position	1
Max. stirring quantity (H ₂ O)	1.5L
Max. magnetic bar (length)	40mm
Speed range	300-2000rpm
Speed setting	Scale
Protection class	IP21
Motor output power	1.2W
Power	7.2W
Voltage	DC 12V, 100-240V,50/60Hz
Dimension [WxDxH]	150x144x54mm
Weight	0.3Kg
Permissible ambient temp.&humidity	5-40°C80%RH

Applications outside lab:

- Home brewing
- Wine aeration
- Yeast and bacteria ferment





OS20-Pro OS40-Pro OS70-Pro LCD Digital Overhead Stirrer

DLAB Overhead Stirrers are competent for most demanding tasks with guaranteed safety and performance. They are widely used in chemical synthesis, pharmaceutical synthesis, physical and chemical analysis, petrochemical industries, etc.



Speed 50~1100rpm with control accuracy of ± 10 rpm



Brushless DC motor for long life, maintenance free



Constant speed despite viscosity change of the sample



Spillage and overload protection safety circuits



Remote PC control and data transmission



LCD display of set and actual speed, torque and time (for OS70)



Self - locking drill chuck, tools free



Stirring paddle "top-cross" design, easy to replace the container



Start/run smoothly, prevent sample splatter or overflow



Silicone cover protecting drill chuck from erosive vapor



Specifications

	OS20-Pro	OS40-Pro	OS70-Pro
Max. stirring quantity[H ₂ O]	20L	40L	70L
Speed range	50~2200rpm	50~2200rpm	50~1100rpm
Speed display accuracy	± 3 rpm	± 3 rpm	± 10 rpm
Time settings range	-	-	0-99h59min
Max. torque	40N•cm	60N•cm	300N•cm
Viscosity max.	10000mPa•s	50000mPa•s	100000mPa•s
Weight	2.8kg	2.8kg	3.2kg
Motor type		Brushless DC motor	
Voltage		100~240V, 50/60 Hz	
Speed display		LCD	
Torque display		LCD	
Overload protection display		LCD	
Chuck range diameter		0.5~10mm	
Motor input/output power	60W/50W	120W/100W	180W/160W
Power	70W	130W	200W
Dimension[WxHxD]		83 x 220 x 186mm	
Protection class		IP21	
Permissible ambient temperature and humidity		5~40°C, 80%RH	
Data interface		RS232	

OS20-S OS40-S LED Overhead Stirrer

Features

- High reliability and outstanding performance
- A wide range of speed from 50 to 2200rpm
- Brushless DC motor for long life, maintenance free and explosion proof
- LED screen for monitoring actual speed
- Safety circuits allow for safe stop function in anti-stall or overload conditions



Explosion-proof



Wide range of accessories

Stirring paddle "top-cross" design, easy to replace the container

Spillage and overload protection safety circuit

LED display of set and actual speed

Brushless DC Motor

- Maintenance free
- Explosion-proof
- Precision speed control

Self-locking drill chuck, tools free



Specifications

	OS20-S	OS40-S
Max. stirring quantity[H ₂ O]	20L	40L
Speed range	50~2200rpm	50~2200rpm
Max. torque	40N•cm	60N•cm
Viscosity max.	10000mPa•s	50000mPa•s
Weight	2.8kg	2.8kg
Motor type	Brushless DC motor	
Speed display	LED	
Overload protection display	LED	
Chuck range diameter	0.5~10mm	
Motor input power	60W	120W
Motor output power	50W	100W
Power	70W	130W
Voltage	100~240V, 50/60 Hz	
Dimension[WxHxD]	83 x 220 x 186mm	
Protection class	IP21	
Permissible ambient temperature and humidity	5~40°C, 80%RH	

Overhead Stirrers

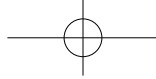


Plate Stands

Universal Plate Stand (for OS20/40/70)

Dimension [W x D x H] :
200x310x780mm
Material: stainless steel
Cat. No.
18900258



Grand Plate Stand (for OS70)

Dimension [W x D x H] :
335 x 463 x 780mm
Material: stainless steel
Cat. No.
18900497



Stirrer

Stainless Steel Series

Propeller stirrer

Shaft length 40cm
Stirrer diameter 50mm
Material: 304L stainless steel
Standard stirring applications
at medium and high speed

Cat No. 18900071



Paddle stirrer

Shaft length 40cm
Stirrer diameter 68mm
Material: 304L stainless steel
For gentle mixing at low and
medium speeds

Cat No. 18900073



Straight stirrer

Shaft length 40cm
Stirrer diameter 60mm
Material: 304L stainless steel
For low viscosity media at
medium and high speeds

Cat No. 18900072



Centrifugal stirrer

Shaft length 40cm
Stirrer diameter 90mm
Material: 304L stainless steel
Blades open while speeding.
For narrow neck vessels at
medium to high speed.

Cat No. 18900074



PTFE Coating Series

Propeller stirrer

Shaft length 40cm
Stirrer diameter 50mm
Material: PTFE coated
Standard stirring applications
at medium and high speed

Cat No. 18900075



Paddle stirrer

Shaft length 40cm
Stirrer diameter 68mm
Material: PTFE coated
For gentle mixing at low and
medium speeds

Cat No. 18900077



Straight stirrer

Shaft length 40cm
Stirrer diameter 60mm
Material: PTFE coated
For low viscosity media at
medium and high speeds

Cat No. 18900076



Centrifugal stirrer

Shaft length 40cm
Stirrer diameter 90mm
Material: PTFE coated
Blades open while speeding.
For narrow neck vessels at
medium to high speed.

Cat No. 18900078



Grand Series (for OS70)

Grand propeller stirrer

Shaft length 60cm
Stirrer diameter 100mm
Material: 316L stainless steel
Standard stirring

Cat No. 18900478



Grand paddle stirrer

Shaft length 60cm
Stirrer diameter 100mm
Material: 316L stainless steel
Gentle mixing for those stratify
easily or sensitive to shear

Cat No. 18900499



Grand anchor stirrer

Shaft length 60cm
Stirrer diameter 100mm
Material: 316L stainless steel
Standard stirring or for those
easily precipitate

Cat No. 18900498

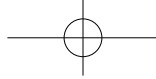


Grand dissolving stirrer

Shaft length 60cm
Stirrer diameter 100mm
Material: 316L stainless steel
Breaking down granules in the
mixture with strong shear

Cat No. 18900500





D-160 Handheld Homogenizer

Features

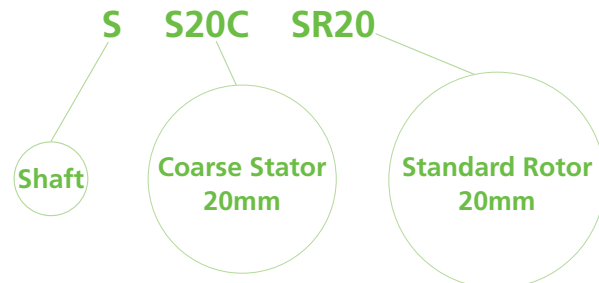
- Ideal for manual operation due to its light weight and ergonomic design
- Processing range: 0.1-50mL or 1-250mL
- 316L stainless steel shafts are fully autoclavable and inert for highly corrosive solutions
- All shafts are interchangeable for easy dismantling and cleaning.
- Speed from 8,000 to 32,000 rpm

D-500 Homogenizer

Features

- Viscosity up to 10,000 mPas
- 6 modes of motor speed from 10,000 to 30,000 rpm
- All-round safety guarantee for motor drive, overload protection and smooth operation
- 316L stainless steel shafts are fully autoclavable and inert for highly corrosive solutions
- Easy dismantling for fast preparation
- All shafts are interchangeable for easy dismantling and cleaning

D160



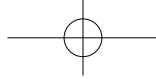
Specifications

	D-160	D-500
Power Supply	110-120V/60Hz 220-240V / 50-60 Hz	110-120V/60Hz 220-240V/50-60 Hz
Motor Type	Universal motor 160 W AC carbon brush motor	500 W AC carbon brush motor
Speed Range	8000-32000rpm	10000-30000rpm
Max. Circum. Speed	6.3-14m/sec	22.7-36m/sec
Speed Control	Dial knob 10 stage	6 stage
Working Volume [H ₂ O]	0.1-50mL (Dispersing shaft DS-160/5) 1-250mL (Dispersing shaft DS-160/10)	10-40000mL (Optional)
Max. Viscosity	5,000mPas	10,000 mPas
Material of Dispersing Shaft	SS 316L stainless steel, PTFE	SS 316L stainless steel, PTFE
Weight	0.54 kg	1.3 kg
Dimension [L x W x H]	45mm x 55mm x 190mm	70mm x 70mm x 255mm
Noise	72 dB(A)	79 dB(A)
Operating Environment	0-40°C, 85% rel. humidity	0-40°C, 85% rel. humidity
Protection Class	IP20	IP20

D500



Homogenizers



D-500 Homogenizer

DS-500/1

SS20CSR20

Volume 10-5000mL

Max. Circum. Speed 22.7m/sec

Material: 316L

Application: for solid/liquid media

Cat. No.

18201331



DS-500/2

SS20FER20

Volume 10-5000mL

Max. Circum. Speed 22.7m/sec

Material: 316L

Application: for water and oil mixing

Cat. No.

18201332



DS-500/5

SS5CSR5

Volume 10-5000mL

Max. Circum. Speed 5,8m/sec

Material: 316L

Application: Ideal for all homogenizing applications such as tissue homogenization, cell disruption, suspensions and clinical and medical diagnostics

Cat. No.

18900117



D-160 Handheld Homogenizer

DS-160/5

Volume 0.1-50ml

Max. Circum. Speed 6.3m/sec

Material: 316L

Application: small amounts of solid-liquid mixed

DS-160/10

Volume 1-250mL

Max. Circum. Speed 14m/sec

Material: 316L

Application: small amounts of solid-liquid mixed

Cat. No.

18900543



Cat. No.

18900544



Stator



S20C



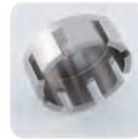
S20F



S30C



S30F



S40C

Rotor



SR20



SR30



CR20



CR30



MR20



MR30

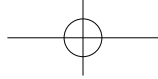


ER20



ER30





Combination

Cat. No.	Compatibility	Description of Shaft	Function	Applications	Treatable Volume (refer to water)
18900543	D-160		dispersing tool for solid/liquid media		0.1-50ml
18900544	D-160		dispersing tool for solid/liquid media		1-250ml
18900117	D-500	SS5CSR5	dispersing tool for solid/liquid media	Dispersing of tissue decomposition, clinical & medical diagnostics and suspensions	1-50ml
18900115	D-500	SS20CSR20	dispersing tools for solid/liquid media	Coarse crushing of hard solids in liquid	10-5000ml
18900116	D-500	SS20FER20	Dispersing tools for W/O or O/W emulsions	Emulsions, intensive mixing of w/o and o/w emulsions Dispersing of resins and pigments for paint and lacquer industry	10-5000ml
18900118/ 18900125	D-500	S20C CR20	dispersing tool with knives for fibrous/stringy materials	Fragmentation of vegetable, animal and human tissues	10-5000ml
18900118/ 18900127	D-500	S20C MR20	dispersing tool for solid/liquid media	Suspensions, intensive mixing	10-5000ml
18900119/ 18900125	D-500	S20F CR20	dispersing tool with knives for fibrous/stringy materials	Fragmentation of vegetable, animal and human tissues	10-5000ml
18900119/ 18900127	D-500	S20F MR20	dispersing tools for solid/liquid media	Emulsions, intensive mixing of w/o and o/w emulsions	10-5000ml
18900120/ 18900124	D-500	S30C SR30	dispersing tools for solid/liquid media	Coarse crushing of hard solids in liquid	100-8000ml
18900120/ 18900126	D-500	S30C CR30	dispersing tool with knives for fibrous/stringy materials	Fragmentation of vegetable, animal and human tissues	100-8000ml
18900120/ 18900128	D-500	S30C MR30	dispersing tools for solid/liquid media	Suspensions, intensive mixing	100-8000ml
18900121/ 18900124	D-500	S30F SR30	dispersing tools for solid/liquid media	Dispersing of resins and pigments for paint and lacquer industry	100-8000ml
18900121/ 18900130	D-500	S30F ER30	Dispersing tools for W/O or O/W emulsions	Emulsions, intensive mixing of w/o and o/w emulsions Dispersing of resins and pigments for paint and lacquer industry	100-8000ml
18900121/ 18900128	D-500	S30F MR30	dispersing tools for solid/liquid media	Emulsions, intensive mixing of w/o and o/w emulsions	100-8000ml
18900120/ 18900127	D-500	S30C MR20	Stirring Shaft	High speed mixing without crushing	250-20000ml
18900122/ 18900128	D-500	S40C MR30	Stirring Shaft	High speed mixing without crushing	1000-40000ml