

Powerful magnets and motors guarantee a high-speed and a good-management of the devices.



MS-B / T



MS-G



MS-M with optional plate mat

All models (MS-B/T, MS-G, MS-M)

- Ergonomic designed, lightweight, easy to operate, and low profile.
- Best-in-the-class with broad speed range and suitable for high-speed rotation experimental environment.
- Spark-less, silent and durable BLDC motor.
- Wide top plate.
- Two non-slip silicon plate covers (white & black) provided for MS-B, T, G.
- Non-slip strength rubber feet.
- Strong magnetic coupling to ensure constant stirring.

Digital models (MS-G)

- Digital PID feedback control for reproducible stirring results.
- Convenient program control.
- Gradual start-up to protect users against splashing of samples.
- Bright and vivid VFD and responsive touch buttons.
- Easy-settable digital timer (1 min. to 99hr. 59min.)
- M10 threaded hole to hold a support rod.

Multi-position models (MS-M)

- Digital PID feedback control for every single point, separately.
- Speed and time setting modes allowing various ways of multi-position stirring to meet users' demands: single point, multiple point, whole row, whole column, etc.
- Easy-to-read VFD and intuitive control panel.
- Bright and vivid LED position indicating lamps.
- Non-slip see-through silicon plate mat. (optional)
- Chemical-resistant #304 grade stainless steel top-plate.

Safety

- Unit is safely designed to protect internal components from accidental spills.
- Built-in thermal shutdown and current limit protection.

Standard accessories (except for MS-M)

- Plate covers(white & black)
- Magnetic stirring bar

Optional accessories see page 174-175

- Silicone plate mats
- Plastic retrievers



Model		MS-12B	MS-12T	MS-17B	MS-17T	MS-22B
Technical data	Speed control	Electronic speed control				
	Stirring capacity (Liter, H ₂ O)	2		4		5
	Speed range (rpm)	150 to 2,500				
	Speed display	None				
	Motor rating input / output (W)	2.9 / 1.6				
	Magnetic bar, Max. (Ø×L) (mm / inch)	8×30 / 0.31×1.18	8×30 / 0.31×1.18	8×40 / 0.31×1.57	8×30 / 0.31×1.18	10×50 / 0.39×1.97
Top plate	Load, max (kg / lbs)	15 / 33.07	10 / 22.05	20 / 44.09	20 / 44.09	25 / 55.12
	Material	Polypropylene with non-slip silicon cover				
General data	Dimension (Ø, mm / inch)	120 / 4.72	115 / 4.53	170 / 6.69	165 / 6.5	220 / 8.66
	Body shape	Round type	Triangle type	Round type	Triangle type	Round type
	Body material	Polypropylene				
	Dimension (W×D×H) (mm / inch)	130×133×65 / 5.1×5.2×2.56	181×176×64 / 7.1×6.9×2.5	180×186×65 / 7.1×7.3×2.6	246×243×64 / 9.7×9.6×2.5	230×235×65 / 9.1×9.3×2.6
	Net weight (kg / lbs)	0.6 / 1.32		0.9 / 1.98		1.1 / 2.43
	Electrical requirements	AC 100 ~ 240V, 50 / 60Hz with power adapter				
Cat. No.	Power consumption (W)	5				
	Protection class (DIN EN 60529)	IP42				
	Persian blue	KR plug	AAH330115BK	AAH333115BK	AAH330215BK	AAH333215BK
		US plug	AAH330115BU	AAH333115BU	AAH330215BU	AAH333215BU
	Orange	KR plug	AAH330115YK	AAH333115RK	AAH330215YK	AAH333215RK
		US plug	AAH330115YU	AAH333116RU	AAH330215YU	AAH333216RU

RoHS except for MS-T.

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Model		MS-17G	MS-22G
Technical data	Speed control	Feedback control with PID	
	Stirring capacity (Liter, H ₂ O)	4	5
	Speed range (rpm)	30 to 2,000	
	Speed display	VFD	
	Motor rating input / output (W)	2.9 / 1.6	
	Magnetic bar, Max. (Ø×L) (mm / inch)	8×40 / 0.31×1.57	10×50 / 0.39×1.97
Top plate	Load, Max (kg / lbs)	20 / 44.09	25 / 55.12
	Material	Polypropylene with non-slip silicon cover	
General data	Dimension (Ø, mm / inch)	170 / 6.69	220 / 8.66
	Body material	Polypropylene	
	Dimension (W×D×H) (mm / inch)	210×280×72 / 8.3×11×2.8	260×355×72 / 10.2×14×2.8
	Net weight (kg / lbs)	1.35 / 2.98	1.75 / 3.86
	Electrical requirements	AC 100 ~ 240V, 50 / 60Hz	
	Power consumption (W)	6	
Cat. No.	Protection class (DIN EN 60529)	IP42	
	Persian blue	KR plug	AAH331215BK
		US plug	AAH331215BU
	Orange	KR plug	AAH331215YK
		US plug	AAH331215YU

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Model		MS-23M	MS-32M	MS-33M	MS-51M	MS-52M	MS-53M
Technical data	Speed control	Feedback control with PID					
	Stirring	Position	6	6	9	5	10
		Speed range (rpm)	30 to 2,000				15
	Stirring point distance (W×D) (mm / inch)	117×170 / 4.6×6.69	117×90 / 4.6×3.54	117×90 / 4.6×3.54	90 / 3.54	117×90 / 4.6×3.54	
	Timer	1 min. to 99 hr. 59 min.					
	Speed display	VFD					
	Motor rating input / output (W) per each point	2.9 / 1.6					
	Load, Max (kg / lbs)	30 / 66.14					
General data	Dimension (W×D×H) (mm / inch)	377×436×82 / 14.8×17.2×3.2	254×436×82 / 10×17.2×3.2	377×436×81 / 14.8×17.2×3.2	131×603×82 / 5.2×23.7×3.2	254×602×82 / 10×23.7×3.2	377×599×82 / 14.9×23.6×3.2
	Weight (kg / lbs)	6 / 13.23	5 / 11.02	7 / 15.43	4 / 8.82	8 / 17.64	11 / 24.25
	Electrical requirements	AC 100 ~ 240V, 50 / 60Hz					
	Power consumption (W)	45	45	54	45	85	135
	Protection class (DIN EN 60529)	IP 21					
Cat. No.	KR plug	AAH332115K	AAH332215K	AAH332315K	AAH332415K	AAH332515K	AAH332615K
	US plug	AAH332115U	AAH332215U	AAH332315U	AAH332415U	AAH332515U	AAH332615U

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Accessories & Options

Magnetic stirring bars



Octahedral magnetic stirring bar



Cylindrical magnetic stirring bar



Oval magnetic stirring bar

Cat. No.	Ø (mm / inch)	L (mm / inch)
BCW1513	8 / 0.31	13 / 0.51
BCW1515	8 / 0.31	15 / 0.59
BCW1522	8 / 0.31	22 / 0.86
BCW1525	8 / 0.31	25 / 0.98
BCW1528	8 / 0.31	28 / 0.10
BCW1538	8 / 0.31	38 / 1.49
BCW1541	8 / 0.31	41 / 1.61
BCW1551	8 / 0.31	51 / 2.00
BCW155110	10 / 0.39	51 / 2.00

Cat. No.	Ø (mm / inch)	L (mm / inch)
BCW11138	8 / 0.31	13 / 0.51
BCW11156	6 / 0.23	15 / 0.59
BCW11208	8 / 0.31	20 / 0.78
BCW11258	8 / 0.31	25 / 0.98
BCW11308	8 / 0.31	30 / 1.18
BCW1140	8 / 0.31	40 / 1.57
BCW1150	8 / 0.31	50 / 1.96

Cat. No.	Ø (mm / inch)	L (mm / inch)
BCW1610	5 / 0.19	10 / 0.39
BCW1615	6 / 0.23	15 / 0.59
BCW1620	10 / 0.39	20 / 0.78
BCW162510	10 / 0.39	25 / 0.98
BCW1630	16 / 0.63	30 / 1.18
BCW1635	16 / 0.63	35 / 1.38
BCW1640	20 / 0.78	40 / 1.57
BCW1650	20 / 0.78	50 / 1.96

Plastic retrievers



Plastic retriever (PP)



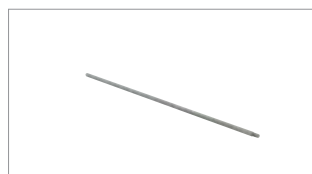
Plastic retriever (PTFE)



Cat. No.	Ø (mm / inch)	L (mm / inch)
BCW41300	10 / 0.39	300 / 11.81
BCW41350	10 / 0.39	350 / 13.77
BCW41450	10 / 0.39	450 / 17.71

Cat. No.	Ø (mm / inch)	L (mm / inch)
BCW4150	10 / 0.39	150 / 5.90
BCW4250	10 / 0.39	250 / 9.84
BCW4350	10 / 0.39	350 / 13.77
BCW4450	10 / 0.39	450 / 17.71

Support rod / Clamp holders



Support rod (M10)



Clamp holder (C-10)



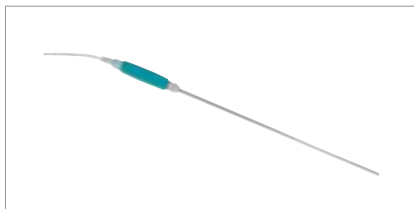
Clamp holder (C-7)



Clamp holder (C-5)

Cat. No.	Description
MTT0132	Support rod, M10 (Ø12x400mm / Ø0.47x15.75")
AAA37512	Clamp holder, C-10 (Al body, Ø17mm / Ø0.66")
AAA37513	Clamp holder, C-7 (Al body, Ø12mm / Ø0.47")
AAA37514	Clamp holder, C-5 (PP body, Ø12mm / Ø0.47")
BEA1000014	2 Prong clamp (60mm / 2.36" grip)

for Hotplates / Hotplate Stirrers



Temperature probe



Heating bath



Transparent safety shield

Cat. No.	Description	Suitable for
AAA34501	Temperature Probe (PT 100, Max. 250 , SN-8-4 connector sensor)	TS series
AAA34502	Temperature Probe (PT 100, Max. 350 , SN-8-4 connector sensor)	
HPS0012	Heating Bath	T-14S/R, TM-14SB/RB, TS-14S
HPS0015	Heating Bath	T-17S/R, TM-17SB/RB, TS-14S
HPS0059	Transparent Safety Shield (PC)	T-14S/R, TM-14SB/RB, TS-14S
HPS0039	Transparent Safety Shield (PC)	T-17S/R, TM-17SB/RB, TS-17S
HPS0137	Sensor Holder (PP body, Hole 1: Ø11mm / Ø0.43", Hole 2: Ø10mm / Ø0.39", Hole 3: Ø4.2mm / Ø0.16")	TS series

for Magnetic Stirrers



Plate covers (black & white)



Silicone pad


Power divider (5 channels¹⁾)

Cat. No.	Description	Suitable for
MTT0144	Plate cover (White color, Silicone Ø115mm / Ø4.53")	MS-12T
MTT0146	Plate cover (White color, Silicone Ø165mm / Ø6.49")	MS-17T
MTT0002	Plate cover (White color, Silicone Ø120mm / Ø4.72")	MS-12B
MTT0003	Plate cover (White color, Silicone Ø170mm / Ø6.69")	MS-17B/G
MTT0004	Plate cover (White color, Silicone Ø220mm / Ø8.66")	MS-22B/G
MTT0143	Plate cover (Black color, Silicone Ø115mm / Ø4.53")	MS-12T
MTT0145	Plate cover (Black color, Silicone Ø165mm / Ø6.49")	MS-17T
MTT0005	Plate cover (Black color, Silicone Ø120mm / Ø4.72")	MS-12B
MTT0006	Plate cover (Black color, Silicone Ø170mm / Ø6.69")	MS-17B/G
MTT0007	Plate cover (Black color, Silicone Ø220mm / Ø8.66")	MS-22B/G
MTS0015	Silicone pad (355x475x1mm / 13.98x18.70x0.04")	MS-53M
MTS0016	Silicone pad (235x475x1mm / 9.25x18.70x0.04")	MS-52M
MTS0017	Silicone pad (115x475x1mm / 4.53x18.70x0.04")	MS-51M
MTS0041	Silicone pad (235x310x1mm / 9.25x12.20x0.04")	MS-32M
MTS0042	Silicone pad (355x310x1mm / 13.98x12.20x0.04")	MS-23M/33M
MTT0001	Power adapter (100~240V, 50/60Hz)	MS-12B/T, MS-17B/T
AAH33501	Power divider (5 channels) ¹⁾ with M10 rod, adapter(100~240V, 50/60Hz), five DC plugs	

1) Power supply to max. five units at the same time.