

# **Hotplates & Stirrers**

# Magnetic Stirrers (Scale & Digital & Multi-position Models)



MS-B / T with the included Plate Covers

### Features of MS-B, T, G Models

- Best-in-the-class with broad speed range and suitable for high-speed rotation experimental environment.
- Ergonomic designed, lightweight, easy to operate, and low profile.
- Wide top plate.
- Two non-slip silicon plate covers (white & black) provided for all MS-B, T, G Models.
- Non-slip strength rubber feet.
- Sparkless, silent and durable BLDC motor.
- Built-in thermal shutdown and current limit protection.



MS-G with the included Plate Covers



MS-M with an optional Plate Mats

#### Additional MS-G Features

- Bright and vivid VFD and responsive touch buttons.
- Gradual start-up to protect users against splashing of samples.
- M12 threaded hole to hold a support rod.

#### Additional MS-M Features

- User-friendly operation 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.
- Uncompromising safety devices.

#### Included Accessories (without MS-M Models)

- Plate Covers(white & black)
- Magnetic Stirring Bars

#### **Optional Accessories**

- Silicone Plate Mats
- Plastic Retrievers

see page 152-153

# **Hotplates & Stirrers**

# Magnetic Stirrers (Scale & Digital & Multi-position Models)

## Specifications & Ordering Information



	Model <sup>1)</sup>		MS-12B	MS-12T	MS-17B	MS-17T	MS-22B	
Technical Data	Speed Control		Electronic speed control					
	Stirring Capacit	Stirring Capacity (Liter, H <sub>2</sub> O)		2		4		
	Speed Range (RPM)		150 ~ 2,500					
	Speed Display		None					
	Motor Rating Input / Output (W)		2.9 / 1.6					
	Magnetic Bar (ØxL, mm / Inch), Max.		8×30 /	8×30 /	8×40 /	8×30 /	10×50 /	
			0.31×1.18	0.31×1.18	0.31×1.57	0.31×1.18	0.39×1.97	
	Load, Max (kg / lbs)		15 / 33.07	10 / 22.05	20 / 44.09	20 / 44.09	25 / 55.12	
Top Plate	Material		Polypropylene with non-slip silicon cover					
	Dimension (mm / inch, Ø)		120 / 4.72	115 / 4.53	170 / 6.69	165 / 6.5	220 / 8.66	
General Data	Body Material		Poly propylene					
	Dimension (mm / inch, WxDxH)		130×130×65 / 5.12×5.12×2.56	181×176×57 / 7.13×6.93×2.24	185×185×65 / 7.28×7.28×2.56	246×243×57 / 9.69×9.57×2.24	230×230×65 / 9.06×9.06×2.56	
	Weight (kg / lbs)		0.6 / 1.32		0.9 / 1.98		1.1 / 2.43	
	Electrical Requirements						AC 100 ~ 240V, 50 / 60Hz	
	Power Consumption (W)		5		6			
	Protection Class (DIN EN 60529)		IP42					
Cat. No.	Persian Blue	KR plug	AAH330115BK	AAH333115BK	AAH330215BK	AAH333215BK	AAH330315BK	
	Persian Blue	US plug	AAH330115BU	AAH33316BU	AAH330215BU	AAH33326BU	AAH330315BU	
	Yellow	KR plug	AAH330115YK	-	AAH330215YK	-	AAH330315YK	
		US plug	AAH330115YU	-	AAH330215YU	-	AAH330315YU	
	Orange	KR plug	-	AAH333115RK	-	AAH333215RK	-	
		US plug	-	AAH33316RU	-	AAH33326RU	-	

<sup>1)</sup> B-models: round type, T-models; triangle type.

### Specifications & Ordering Information



	Model		MS-17G	MS-22G		
Technical Data	Speed Control		Feedback control with PID			
	Stirring Capacity (Liter, H <sub>2</sub> O)		4	5		
	Speed Range (RPM)		30 to 2,000			
	Speed Display		VFD			
	Motor Rating Input / Output (W)		2.9 / 1.6			
	Magnetic Bar (ØxL, mm / Inch), Max.		8×40 / 0.31×1.57	10×50 / 0.39×1.97		
	Load, Max (kg / lbs)		20 / 44.09	25 / 55.12		
Top Plate	Material		Polypropylene with non-slip silicon cover			
	Dimension (mm / inch, Ø)		170 / 6.69	220 / 8.66		
General Data	Body Material		Poly propylene			
	Dimension (mm / inch, WxDxH)		210×280×72 / 8.27×11.02×2.82	260×360×72 / 10.24×14.17×2.82		
	Weight (kg / lbs)		1.35 / 2.98	1.75 / 3.86		
	Electrical Requirements		AC 100 ~ 240V, 50 / 60Hz			
	Power Consumption (W)		6			
	Protection Class (DIN EN 60529)		IP42			
Cat. No.	Persian Blue	KR plug	AAH331215BK	AAH331315BK		
		US plug	AAH331215BU	AAH331315BU		
	Yellow	KR plug	AAH331215YK	AAH331315YK		
		US plug	AAH331215YU	AAH331315YU		

## Specifications & Ordering Information



Model		MS-23M	MS-32M	MS-33M	MS-51M	MS-52M	MS-53M		
Technical Data	Speed Control		Feedback control with PID						
	Stirring	Positions	6	6	9	5	10	15	
		Speed Range (RPM)	30 to 2,000						
	Stirring Point Distance (mm / inch, WxD)		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 hours 59 min.						
	Speed Display		VFD						
	Motor Rating Input / Output (W)		2.9 / 1.6						
	Load, Max (kg / lbs)		30 / 66.14						
General Data	Dimension (mm / inch,		377×434×81 / 14.84×17.09×3.19	254×434×81 / 10×17.09×3.19	377×434×81 / 14.84×17.09×3.19	130×591×75 / 5.12×23.27×2.95	251×591×75 / 9.88×23.27×2.95	378×591×75 / 14.89×23.27×2.95	
	Weight (k	g / Ibs)	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	