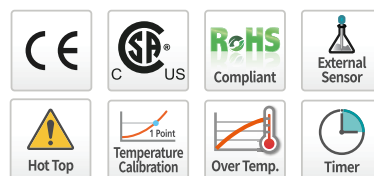


Hotplate & Magnetic Stirrer

Digital type



Precise control based on sample temperature

Structural Functional Features

- Includes temperature probe (B class) as standard.
- Displays external temperature sensor errors.
- Top plate coated with white ceramic for excellent corrosion resistance.
- Excellent heat transfer and durability due to heater-integrated structure.
- Using special permanent magnets for maintaining stirring ability.

Use Convenience Features

- Precise temperature/stirring control with PID feedback control.
- Temperature control mode selection function. (Optimal/Fast/Slow/User/Point)
- Includes temperature auto-tuning and calibration functions.
- Count-down timer provided. (up to 99 hours and 59 minutes)
- Clamp Rod (option) can be added to the main body fix other experiment equipment.
- Convenient experiment observation with removable transparent shield. (option)
- Silicone Cover protects from the dust and overflow of samples. (TS/TM/T)

Outstanding Safety

- Spill-proof design minimizes inflow solution into device.
- Safety ensured by BLDC motor that does not generate sparks.
- Preventing equipment failure with multiple over temperature prevention devices.
- Warning displayed when top plate is 50°C or more.
- Prevents sample run-off thanks to smooth stirring start.
- The heating bath (option) is combined with the top plate to ensure safety. (except TS-QG)



TS-18QG

with 3 Prong Clamp, Clamp Rod, Magnetic Bar (option)



TS-17SG



Specification

Model		TS-14SG	TS-17SG	TS-18QG
Heating	Temperature range (°C / °F)	Top plate, Max, 350 / 662	Top plate, Max, 350 / 662	Top plate, Max, 350 / 662
	Control mode	PID Feedback (optimal, fast, slow)	PID Feedback (optimal, fast, slow)	PID Feedback (optimal, fast, slow)
	Display resolution (°C / °F)	0.1 / 32.18	0.1 / 32.18	0.1 / 32.18
Stirring	Speed range (rpm)	30 to 2000	30 to 2000	30 to 2000
	Capacity (L / cu ft, H ₂ O)	20 / 0.71	20 / 0.71	20 / 0.71
	Magnetic bar, Max. (L x Ø, mm / inch)	40 x 8 / 0.31 x 1.57	40 x 8 / 0.31 x 1.57	40 x 8 / 0.31 x 1.57
Material	Top plate	White ceramic coated aluminum alloy	White ceramic coated aluminum alloy	White ceramic coated aluminum alloy
	Body	Powder coated aluminum alloy	Powder coated aluminum alloy	Powder coated aluminum alloy
	Motor type	BLDC (Brushless Direct Current)	BLDC (Brushless Direct Current)	BLDC (Brushless Direct Current)
Dimensions	Temperature probe	PT 100 (B class, Max. 250°C, 482°F)	PT 100 (B class, Max. 250°C, 482°F)	PT 100 (B class, Max. 250°C, 482°F)
	Top plate (Ø or W x D, mm / inch)	140 / 5.51	170 / 6.69	180 x 180 / 7.08 x 7.08
	Exterior (W x D x H, mm / inch)	161 x 290 x 100 / 6.34 x 11.42 x 3.94	191 x 330 x 101 / 7.52 x 12.99 x 3.98	209 x 326 x 102 / 8.22 x 12.83 x 4.0
	Net weight (kg / lbs)	2.8 / 6.17	3.5 / 7.71	3.8 / 8.36
Timer (Heating and/or Stirring)		Max. 99 hrs 59 min.	Max. 99 hrs 59 min.	Max. 99 hrs 59 min.
Electrical requirements (230V, 50/60Hz, A)		3.0	4.0	4.0
Cat. No.		AAH34445K	AAH34475K	AAH34485K
Electrical requirements (120V/60Hz, A)		5.0	6.7	6.7
Cat. No.		AAH34443U	AAH34473U	AAH34483U

※ Except TS-18QG CSA certification

Accessories Page 152 Temperature Probe, Heating Bath, Clamp Rod, Clamp, Transparent Shield, Silicone Cover

Accessories for Hotplate & Magnetic Stirrer



Temperature Probe

With external temperature sensor, it is possible to check and control the temperature of the sample when it is connected to the equipment. (TS model)



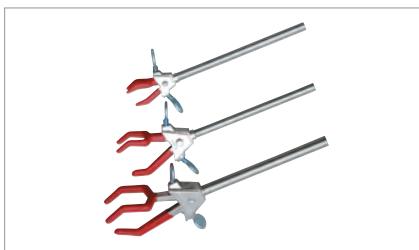
Heating Bath

Top plate combines concave and convex structure, resulting in no slippage.



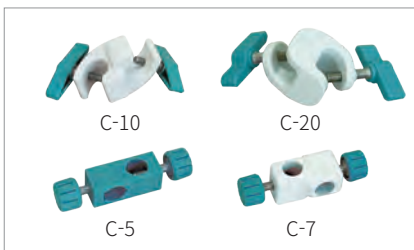
Clamp Rod

Two pieces can be fixed on the left and right of the back of the main body.



3 Prong Clamp

Various types of instruments can be fixed.



Clamp Holder

Clamp rod and clamp can be fixed.



Transparent Shield

Safely observe experiments.



Silicone Cover

- Protect from the dust and overflow of samples.
- Simple and easy installation with lightweight silicone materials.



Magnetic Bar

Page 154

- Applied to a magnetic stirrer when stirring within the temperature range up to +280°C.
- Turbo type can be applied at high temperature of 400°C.



Magnetic Retriever

Page 155

- Used when taking out magnetic bar.
- Uses ALNICO V magnets and samarium cobalt magnets.

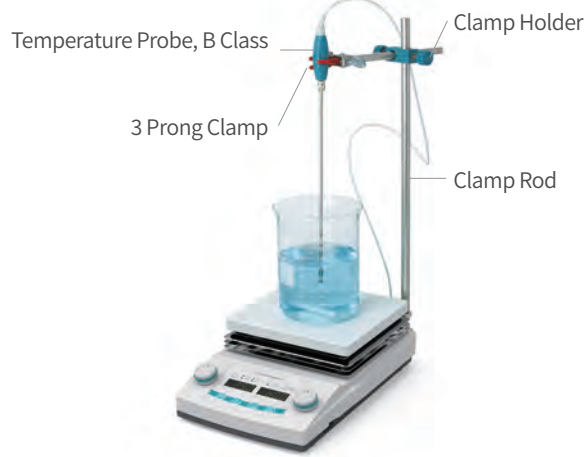
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Jeio Tech



Protective Silicone Cover for Hotplate and hotplate stirrer

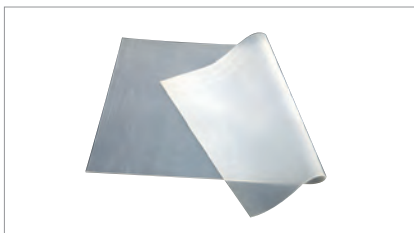
Cat. No.	Description
AAA34501	Temperature Probe, B Class (Max. 250°C)
AAA34502	Temperature Probe, A Class (Max. 400°C)
00HPS0000012	Heating Bath (TS-14SG, TM-14SG, T-14SG)
00HPS0000015	Heating Bath (TS-17SG, TM-17SG, T-17SG)
00MTT0000132	Clamp Rod (Ø12, 400 mm)
BEA1000011	3 Prong Clamp (80 mm grip)
BEA1000012	3 Prong Clamp (60 mm grip)
BEA1000013	3 Prong Clamp (20 mm grip)
AAA37511	Clamp Holder (max. Ø27, C-20)
AAA37512	Clamp Holder (max. Ø17, C-10)
AAA37513	Clamp Holder (max. Ø12, C-7)
AAA37514	Clamp Holder (max. Ø12, C-5)
00HPS0000059	Transparent Shield (TS-14SG, TM-14SG, T-14SG)
00HPS0000039	Transparent Shield (TS-17SG, TM-17SG, T-17SG)
00HPS0000190	Silicone cover (TS-14SG, TM-14SG, T-14SG)
00HPS0000191	Silicone cover (TS-17SG, TM-17SG, T-17SG)
00HPS0000192	Silicone cover (TS-18SG, TM-18SG, T-18SG)



Accessories for Magnetic Stirrer



Plate Cover (Black, White)



Silicone Pad



Clamp Rod

Plate Cover

Cat. No.	Description	Model
00MTT0000002	White color, Silicone (Ø120)	MS-12B
00MTT0000003	White color, Silicone (Ø170)	MS-17B/G
00MTT0000004	White color, Silicone (Ø220)	MS-22B/G
00MTT0000005	Black color, Silicone (Ø120)	MS-12B
00MTT0000006	Black color, Silicone (Ø170)	MS-17B/G
00MTT0000007	Black color, Silicone (Ø220)	MS-22B/G

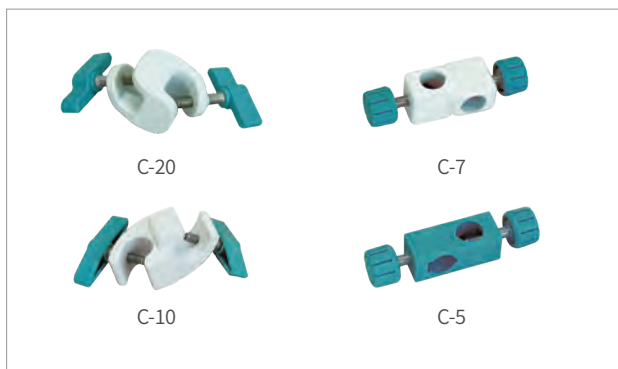
Silicone Pad

Cat. No.	Description (W x D x H, mm / inch)	Model
00MTS0000015	355 x 475 x 1 / 13.98 x 18.7 x 0.04	MS-53M
00MTS0000016	235 x 475 x 1 / 9.25 x 18.7 x 0.04	MS-52M
00MTS0000017	115 x 475 x 1 / 4.53 x 18.7 x 0.04	MS-51M
00MTS0000041	235 x 310 x 1 / 9.25 x 12.2 x 0.04	MS-32M
00MTS0000042	355 x 310 x 1 / 13.98 x 12.2 x 0.04	MS-23M / 33M

Power Adapter & Clamp Rod

Cat. No.	Description	Model
00MTT0000001	Power Adapter (100~240V, 50/60Hz)	MS-12B/17B
00MTT0000132	Clamp Rod (Ø12 x 400 / Ø0.47 x 15.75", M10)	MS-17G/22G

Clamp Holder



- Up to Ø27 mm rods mountable.
- Manufactured using aluminum die-casting and plastic for lightweight but strong fixation.
- Knob structure that is comfortable to handle when locking / unlocking.
- The contact surface with the stand support is stable and does not slip.
- C-20 and C-10 models are suitable for the overhead stirrer.
- The C-10, C-7 and C-5 models are suitable for use with hotplate and magnetic stirrer.

Model	C-20	C-10	C-7	C-5
Max. Ø (mm / inch)	27 / 1.06	17 / 0.66	12 / 0.47	12 / 0.47
Open Ø (mm / inch)	20 / 0.79	15 / 0.59	-	-
Body material	Aluminum	Aluminum	Aluminum	Polypropylene
Knob material	Polypropylene	Polypropylene	Polypropylene	Polypropylene
Bolt material	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel
Suitable for	Overhead Stirrer	Overhead Stirrer	-	-
	-	Hotplate & Magnetic Stirrer	Hotplate & Magnetic Stirrer	Hotplate & Magnetic Stirrer
Cat. No.	AAA37511	AAA37512	AAA37513	AAA37514

Accessories Magnetic Bar

Features of Magnetic Bar

- Chemically stable with PTFE inert material.
- Completely sealed structure with no cracks or pores.
- Smooth finish to avoid absorption or cross contamination.
- Working Temperature Range: up to +280°C.
- Can be sterilized using chemical or physical (thermal) methods. (except γ Radiation)
- Magnet-ALNICO V, PTFE Coated.

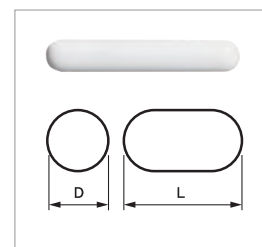
※ The size of the magnetic bar is the average value, and there may be an error of $\pm 5\%$ in length and $\pm 10\%$ in diameter.



Cylindrical Magnetic Bar

- Smooth and round shape.
- The most commonly used magnetic bar for a variety of applications.

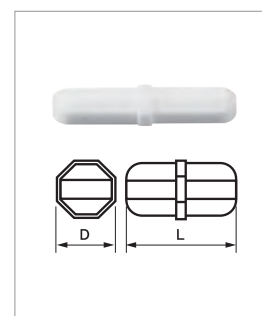
Cat. No.	D (mm / inch)	L (mm / inch)
BCW0011138	8 / 0.31	13 / 0.51
BCW0011156	6 / 0.23	15 / 0.59
BCW0011208	8 / 0.31	20 / 0.78
BCW0011258	8 / 0.31	25 / 0.98
BCW0011308	8 / 0.31	30 / 1.18
BCW001140	8 / 0.31	40 / 1.57
BCW001150	8 / 0.31	50 / 1.96



Octahedral Magnetic Bar

- Octagonal design for more efficient sample mixing.
- Used in containers having slight slopes or uneven surfaces.
- The center of the pivot ring selects the best position for stirring.
- Bigger turbulence than pivot ring is generated at lower speeds.
- Pivot ring reduces friction and noise.

Cat. No.	D (mm / inch)	L (mm / inch)
BCW001513	8 / 0.31	13 / 0.51
BCW001515	8 / 0.31	15 / 0.59
BCW001522	8 / 0.31	22 / 0.86
BCW001525	8 / 0.31	25 / 0.98
BCW001528	8 / 0.31	28 / 0.10
BCW001538	8 / 0.31	38 / 1.49
BCW001541	8 / 0.31	41 / 1.61
BCW001551	8 / 0.31	51 / 2.00
BCW00155110	10 / 0.39	51 / 2.00



Oval Magnetic Bar

- Designed to fit round-bottom flasks, the bar itself has a central axis.

Cat. No.	D (mm / inch)	L (mm / inch)
BCW001610	5 / 0.19	10 / 0.39
BCW001615	6 / 0.23	15 / 0.59
BCW001620	10 / 0.39	20 / 0.78
BCW00162510	10 / 0.39	25 / 0.98
BCW001630	16 / 0.63	30 / 1.18
BCW001635	16 / 0.63	35 / 1.38
BCW001640	20 / 0.78	40 / 1.57
BCW001650	20 / 0.78	50 / 1.96

