Hotplate & Magnetic Stirrer
Digital type

CE | C US | RoHS Compliant | External Sensor | Hot Top | 1 Point Temperature Calibration | Over Temp. | Timer | 2 year Warranty

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)

TS-18QG
with 3 Prong Clamp,
Clamp Rod (option)



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-Q)



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 (H_2O, L)	20	20	20
	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)
	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)
Dimensions	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-18Q CSA certification ※ Except TS-17S, 18Q RoHS certification.

Accessories Page 133 Temperature Probe, Heating Bath, Clamp Rod, Clamp, Transparent Shield

Hotplate
Digital type

Precise hotplate using digital method

Structural Functional Features

- Five models provided according to the size and shape of hot plate.
- Top plate coated with white ceramic for excellent corrosion resistance.
- Excellent heat transfer and durability due to heater-integrated structure.
- Possible to set the upper and lower limit of temperature control range.



T-14SG

with Clamp Holder, 3 Prong Clamp, Clamp Rod (option)



Use Convenience Features

- Temperature control by adjustment of heating rate.
- 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 to fix other experiment equipment.
- Convenient experiment observation with removable transparent shield. (option)

Outstanding Safety

- Spill-proof design minimizes inflow solution into device.
- Preventing equipment failure with multiple over temperature prevention devices.
- Separate buttons for safe operating.
- Warning displayed when top plate is 50°C or more.
- Malfunction prevented by controller lock function.
- The heating bath (option) is combined with the top plate to ensure safety. (except T-QG)



T-18QG



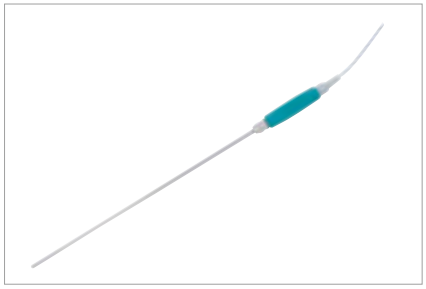
Specification

Model		T-14SG	T-14R	T-17SG	T-17R	T-18QG
Heating	Temperature range (°C /°F)	Top plate, Max, 350 / 662	Top plate, Max, 350 / 662	Top plate, Max, 350 / 662	Top plate, Max, 350 / 662	Top plate, Max, 350 / 662
	Control mode	PID Feedback (optional, fast, slow)	PID Feedback (optional, fast, slow)	PID Feedback (optional, fast, slow)	PID Feedback (optional, fast, slow)	PID Feedback (optional, fast, slow)
	Display resolution (°C /°F)	0.1 / 32.18	0.1 / 32.18	0.1 / 32.18	0.1 / 32.18	0.1 / 32.18
Material	Top plate	White ceramic coated aluminum alloy	White ceramic coated aluminum alloy	White ceramic coated aluminum alloy	White ceramic coated aluminum alloy	White ceramic coated aluminum alloy
	Body	Powder coated aluminium alloy	Powder coated aluminium alloy	Powder coated aluminium alloy	Powder coated aluminium alloy	Powder coated aluminium alloy
Dimensions	Top plate (Ø or W x D, mm / inch)	140 / 5.51	140 / 5.51	170 / 6.69	170 / 6.69	180 x 180 / 7.09 x 7.09
	Exterior (W x D x H, mm / inch)	161 x 290 x 100 / 6.34 x 11.41 x 3.94	161 x 290 x 100 / 6.34 x 11.41 x 3.94	191 x 330 x 101 / 7.52 x 12.99 x 3.98	191 x 330 x 101 / 7.52 x 12.99 x 3.98	209 x 326 x 102 / 8.23 x 12.83 x 4.01
	Net weight (kg / lbs)	2.2 / 4.85	2.4 / 5.29	2.9 / 6.39	2.9 / 6.39	3.4 / 7.49
Timer		Max. 99 hrs 59 min.	Max. 99 hrs 59 min.	Max. 99 hrs 59 min.	Max. 99 hrs 59 min.	Max. 99 hrs 59 min.
Electrical requirements (230V, 50/60Hz, A)		3.0	3.0	4.0	4.0	4.0
Cat. No.		**AAH35045K**	**AAH35115K**	**AAH35075K**	**AAH35125K**	**AAH35085K**
Electrical requirements (120V, 60Hz, A)		5.0	5.0	6.7	6.7	6.7
Cat. No.		**AAH35043U**	**AAH35113U**	**AAH35073U**	**AAH35123U**	**AAH35083U**

※Except T-18QG CSA certification ※Only T-14SG RoHS certification

Accessories Page 133 Heating Bath, Clamp Rod, Clamp, Transparent Shield

Accessories for Hotplate & Magnetic Stirrer



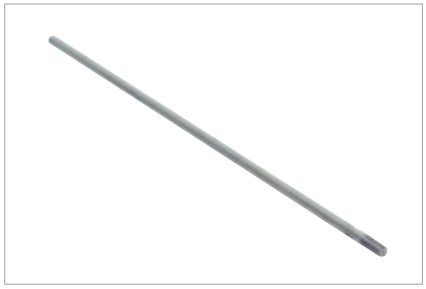
Temperature Probe, B Class

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)



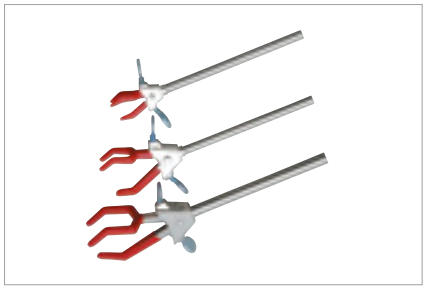
Heating Bath

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



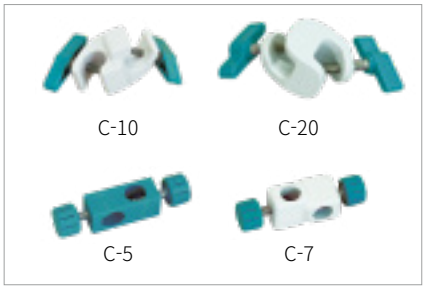
Clamp Rod

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.

Magnetic Bar

- 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.

Accessories Page 140



Magnetic Retriever

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

Accessories Page 141



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)

