Safe

Heating and Mixing

Leading Safety Standards | Superior Ease of Use | Reduced Cost of Ownership

heidolph
research made easy

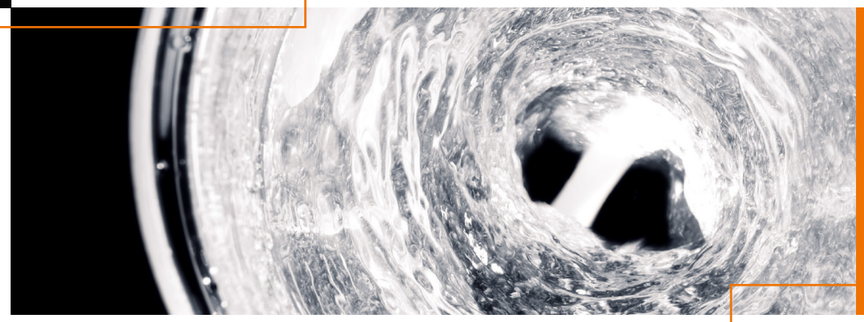
Have you ever heard of hotplates with fast heat-up times and chemical resistance?

Safe Heating and Mixing

The unique Kera-Disk® heating plate of aluminum provides fast heating times, and the wafer-thin ceramic coating makes the heating plate both chemically and scratch resistant!

Leading **Safety Standards**

- To prevent accidents or laboratory fires, all magnetic stirrers feature **two independent safety circuits** which switch off heating in case of any overtemperature situation
- In combination with Heat-On attachments you can convert your lab into a **“safety zone”**
- A residual heat indicator for all models **prevents you from potential burning hazards**
- For your safety, the **unit will power off** in case of a short-circuit, a damage to the temperature sensor, a motor failure or other incidences during operation
- To protect you from splashes and scalding from bath media, rotation speed **ramps up slowly** until unit has reached the pre-programmed speed
- A separate on/off switch for heating **prevents unintentional heat-up.** If heating is switched on, the on/off button is illuminated for visual control
- Even if the stirrer is exposed to the highest temperatures, damage is categorically ruled out – all models come with a **fire-resistant aluminum die-cast housing**



Superior **Ease of Use**

- All units with digital display allow for easy setting and monitoring values on the **illuminated readout**
- You can even **work with dry ice** – a robust thermal insulation prevents corrosion inside the housing by preventing condensate from collecting and dripping on any electronic components
- A free software program is available for the MR Hei-Connect and MR Hei-End which supports you to automate and to **safe your process parameters**
- The strong magnetic field allows for **easy stirring** of even higher **viscosity media**
- The unique Kera-Disk® coating is extremely chemical-resistant and scratch-proof, and therefore the plate can be **cleaned easily** from solvents, oil or other contaminations
- The chemically resistant Kera-Disk® hot plate allows for **immediate heat transfer** resulting in quick heat-up times
- In case the heating function fails, stirring will not be discontinued to **avoid thermal damage** to your sample

Reduced Cost of Ownership

- **Reduce your process times!** The extended heating capacity of 800 W reduces your heat-up time by 35 % compared to other units at 600 W
- The **hermetically-sealed housing** protects all mechanical and electronic components from aggressive environments
- The maintenance-free non-sparking motors **reduce down times**
- The design and features give an **increased lifespan of 10 years** along with significantly **reduced maintenance and repair costs**

Kera-Disk® top plate

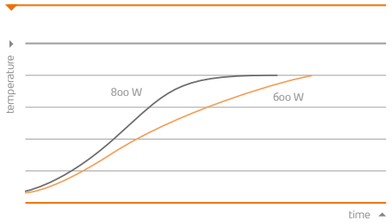
With Kera-Disk® material coating, fast heat-up times and chemical resistance!

YOUR ADVANTAGES

- Glass ceramic top plates offer the benefits of chemical and scratch resistance but produce longer heat-up times
- Aluminum top plates allow for immediate heat transfer but are not chemical-resistant or scratch-proof
- Kera-Disk® top plates take the best of two worlds: The aluminum top plate allows for immediate heat transfer for quick heat-up times and a thin layer of ceramic coating makes the top plate chemical-resistant and scratch-proof

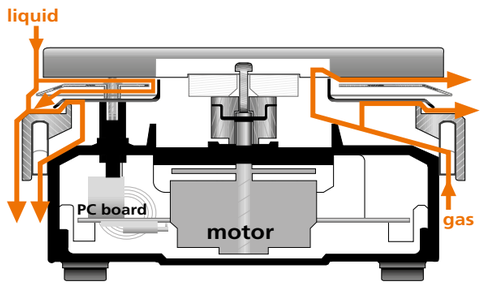
Performance and Accuracy

Take advantage of a built-in PID controller that ensures fastest heat-up times while preventing an overtemperature situation of your sample



Sealed housing

The sealed housing of the MR series guarantees extended performance life and reduced maintenance!



YOUR ADVANTAGES

- Protection against aggressive fumes, liquids and vapors which prevents internal corrosion. This results in an increased lifespan of 10 years on average at reduced maintenance and repair cost
- Protection of all mechanical and electronic components against aggressive environmental conditions

The hermetically-sealed housing that protects the PC board and the motor is marked in black. The way a liquid would take flowing down from the hotplate is marked in orange. As one can see, even if the liquid reaches the heat shields, it cannot ingress to the PC board and the motor but is drained off. The other line marked in orange shows that gas can neither ingress to the PC board nor to the motor. The apparent gap is due to temperature insulation. Because of that gap the temperature inside the magnetic stirrer stays substantially lower, which significantly increases the durability of the magnetic stirrer. For protection against liquid and gas, the heating elements are completely embedded in ceramic.

Safe
Heating and Mixing

heidolph research made easy
MADE IN GERMANY

Leading Safety Standards | Superior Ease of Use | Reduced Cost of Ownership

The average operational lifespan of 10 years is backed by a 3 year warranty and makes your purchase a worthwhile investment.

The standard RS 232 interface of the MR Hei-Connect and MR Hei-End enables the **documentation and controlling via PC**. A free software is available on our website

The extended heating capacity of **800 W reduces heat-up times by 35 %** compared to other units at 600 W

The chemically resistant Kera-Disk® hot plate allows for **immediate heat transfer** resulting in quick heat-up times

Hermetically-**sealed housing protects** all mechanical and electronic components **from aggressive environments**

In case the heating function fails, stirring will not be discontinued to **prevent bumping**

The temperature sensor consists of **two independent safety circuits** which switches off heating in case of any overtemperature situation

In case of a short-circuit, a damage or removal of the temperature sensor from the media, the **unit powers off completely**

Damage to the stirrer is categorically ruled out even if exposed to highest temperatures – all models come with **a fire-resistant aluminum die-cast housing**

A separate on/off button for heating **prevents unintentional heat-up** – the button is illuminated for visual control. In addition, the residual heat indicator **prevents from potential burning hazards**

Magnetic Stirring Hotplates

Preferred use of the MR Series magnetic stirrers includes smooth to intense mixing and heating of low-viscosity fluids. Your first choice for decomposing organic and inorganic substances

- With a heating power of 800 W the hotplate reaches a maximum temperature of 300 °C in a significantly reduced time period
- Safety circuits avoid an overheat situation of your hotplate: if the temperature overshoots the heating will be powered off immediately
- The strong magnetic field allows for stirring even higher viscosity media or volumes of 20 liters of water with ease
- Speed is adjustable from 30 respectively 100 to 1,400 rpm at an accuracy of up to ± 1 % for gentle mixing

For standard applications without temperature sensor

MR Hei-Standard

For higher requirements

MR Hei-Tec

For comprehensive process documentation

MR Hei-Connect

For highest safety

MR Hei-End

MR Hei-Standard

Model for standard applications without temperature sensor
Easy handling and direct access to all parameters due to two separate knobs

- For your protection an independent safety circuit will switch off heating if hotplate temperature exceeds 25 °C over set temperature
- A separate on/off switch for heating prevents an unintentional heat-up. If heating is switched on the on/off button is illuminated for visual control. In addition, a residual heat indicator prevents from burning hazards when heat function is switched off
- Analog knobs allow for convenient speed setting from 100 to 1,400 rpm at an accuracy of ± 2 % and temperature setting up to 300 °C

MR Hei-Standard
P/N 505-20000-00

MR Hei-Tec

Model for higher requirements with temperature sensor
A digital display enables full process monitoring and precise setting of all parameters

- This unit features a digital display and allows for easy setting and monitoring of values in the illuminated readout
- For your protection an independent safety circuit will switch off heating if hotplate temperature exceeds 25 °C over set temperature
- Digital speed setting from 100 to 1,400 rpm at an accuracy of ± 2 % and temperature setting up to 300 °C
- A separate on/off switch for heating prevents an unintentional heat-up. If heating is switched on the on/off button is illuminated for visual control. In addition, a residual heat indicator prevents from burning hazards when heat function is switched off
- An illuminated button indicates clearly if the stirring mode is activated
- Upgrade this magnetic stirrer with the optional Pt 1000 temperature sensor for precise temperature control, overshoot protection and reproducible results
- To protect your sample from overheating, a safety circuit switches off heating if the temperature sensor is not inserted into your media vessel when heating is commenced

MR Hei-Tec
P/N 505-30000-00

MR Hei-Tec with Pt 1000
P/N 505-30081-00

MR Hei-Connect

Model for comprehensive process documentation and reproducible results
The MR Hei-Connect includes all features of the MR Hei-Tec unit but comes with an additional RS 232 interface

- Monitor and control your process with the Hei-Control software or your own program
- Benefit from reproducible results and the option to program ramps and interval processes
- Hei-Control software included in the scope of delivery

MR Hei-Connect
P/N 505-40000-00

MR Hei-Connect with Pt 1000
P/N 505-40081-00

MR Hei-End

Model for highest safety

Exact settings and individual definition of safety parameters for highly sensitive media

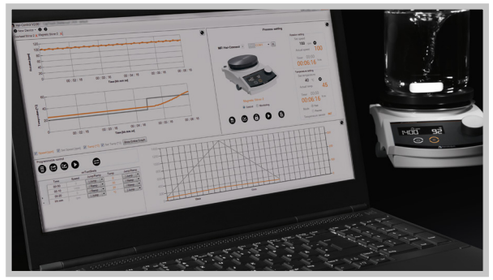
- An independent safety circuit switches off heating at an operator-programmed temperature value above your set temperature
- An additional operational safety step is required to change parameters which prevents unwanted changes to the actual setting
- The digital display allows for easy setting and monitoring of values on the illuminated readout. Speed setting from 30 to 1,400 rpm at an accuracy of ± 1 % and temperature setting up to 300 °C
- Hotplate residual heat indicator in the digital display illuminates when unit is turned off and hotplate temperature is above 50 °C to prevent accidental operator injury
- To protect your sample from overheating a safety circuit switches off heating if the temperature sensor is not immersed in your media vessel
- A separate on/off switch for heating prevents an unintentional heat-up. If heating is switched on the on/off button is illuminated for visual control
- Upgrade this magnetic stirrer with the optional Pt 1000 temperature sensor for precise temperature control, overshoot protection and reproducible results

MR Hei-End
P/N 505-50000-00

MR Hei-End with Pt 1000
P/N 505-50081-00

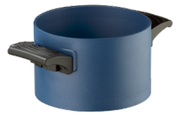
Software Hei-Control

- Utilize the optional software to control and document the entire process
- MR Hei-End and MR Hei-Connect featuring a digital RS 232 interface for connecting the optional software easily
- Connect up to four units at the same time
- Included in scope of delivery with MR Hei-Connect
- Compatible with MR Hei-End and Hei-TORQUE devices



Free download of Hei-Control Software for MR Hei-Connect and MR Hei-End at
www.heidolph.com/support

Accessories



1-l Heating bath
PTFE-coated
P/N 504-93100-00

2-l Heating bath
PTFE-coated
P/N 504-92100-00

4-l Heating bath
PTFE-coated
P/N 504-91100-00

Concave block adaptor
For 1-l round-bottom flasks
P/N 504-94000-00

1-l Heating bath for oil
Max. temperature 250 °C
P/N 504-93000-00

2-l Heating bath for oil
Max. temperature 250 °C
P/N 504-92000-00

4-l Heating bath for oil
Max. temperature 250 °C
P/N 504-91000-00

Holding device MR
For safe fixation on lab frames to gain extra lab space. Comes with clamp as standard
P/N 509-96000-00

Pt 1000 clamping system
(includes support rod and attachment with cable inlet)
P/N 509-63100-00

Pt 1000 clamping system for bath attachments from 3 to 5 liter
(includes support rod and attachment with cable inlet)
P/N 509-63200-00

Pt 1000 temperature sensor stainless steel
For MR Hei-Tec, MR Hei-Connect and MR Hei-End
P/N 509-67910-00

Pt 1000 temperature sensor glass-coated
For MR Hei-Tec, MR Hei-Connect and MR Hei-End
P/N 509-67920-00

RS 232 cable (9-pole)
For MR Hei-Connect and Hei-TORQUE Precision models
P/N 14-007-040-72

RS 232 cable (15-pole)
For MR Hei-End
P/N 14-007-045-17

Silicone protective cover
Replaceable cover against splashes and dripping water

For MR Hei-Tec, MR Hei-Connect and MR Hei-End
P/N 23-07-06-05-59
For MR Hei-Standard
P/N 23-07-06-05-63

Stirring bars	P/N
Stirring bars - cylindrical shape (25, 40, 50 mm each)	509-56000-00
Stirring bars - cross shape (16.5 mm) pack of 20 pcs. for 25-ml to 50-ml flasks	509-58500-00
Stirring bars Evaluation Kit pack of 10 pcs.	509-58300-00
Stirring bars - oval shape (15x6 mm) pack of 3 pcs. for 10-ml flasks	509-53000-00
Stirring bars - oval shape (25x10 mm) pack of 3 pcs. for 25-ml to 50-ml flasks	509-54000-00
Stirring bars - oval shape (30x10 mm) pack of 3 pcs. for 100-ml to 250-ml flasks	509-55000-00

Heat-On Attachments

The Heat-On attachments are suitable to replace oil baths and heating mantles in your lab and reduce the risk of fire hazards. Moreover the attachments minimize the messy oil clear-ups that result from changing oil or removing flasks from an oil bath!

- Our attachments are by far the safest, fastest and most efficient method for heating and mixing solutions in round-bottom flasks from 10 ml to 5 liter
- Heat-On fits precisely to every flask, thus ensuring maximum surface contact and fast heat transfer. Eliminates the mess from cleaning flasks after removal from an oil bath or hazardous spills when an oil bath slips off a stirring plate. As a result, oil as a heat transfer media is made redundant and your lab is a safer place with the Heat-On block system

Flask volume	Volume of water	Hotplate temperature	Time to reach boiling
10 ml	6 ml	300 °C	6.8 min
25 ml	15 ml	300 °C	8.0 min
50 ml	30 ml	300 °C	8.5 min
100 ml	60 ml	300 °C	8.8 min
150 ml	100 ml	300 °C	10.0 min
250 ml	150 ml	300 °C	10.8 min
500 ml	300 ml	300 °C	16.4 min
1,000 ml	600 ml	300 °C	21.1 min
2,000 ml	1,200 ml	300 °C	35.1 min
3,000 ml	1,800 ml	300 °C	47.3 min
4,000 ml	2,400 ml	300 °C	51.0 min
5,000 ml	3,000 ml	300 °C	75.5 min

Leading Safety Standards

- Prevents accidents, fires and contamination by completely banning all oil baths from your laboratory
- This unique design prevents glass breakage and protects you from spilled chemicals or solvents
- The high temperature range provides unlimited safety for applications up to 260 °C

Superior Ease of Use

- A unique PTFE-coating on the aluminum Heat-On body allows for superior chemical resistance and many years of service life
- Precise temperature control inside the vessel or on the heating block with a thermocouple port that provides actual block temperature back to your MR series hotplate

Reduced Cost of Ownership

- Increase your daily work throughput significantly and reduce your overall process times by quick changing of Heat-On blocks
- Save energy costs – 1,000 ml of water heats up 66 % faster than conventional oil baths
- 150 ml of water boils in less than 11 minutes

Heat-On Attachments

Heat-On blocks

Each Heat-On block is a stand-alone product that can be placed directly onto the stirring hotplate

Heat-On 100-ml block with flask sidearm cutouts	505-80066-00
Heat-On 250-ml block	505-80067-00
Heat-On 250-ml block with flask sidearm cutouts	505-80067-01
Heat-On 500-ml block	505-80069-00
Heat-On 1-l block	505-80071-00
Heat-On 2-l block	505-80073-00
Heat-On 3-l block	505-80075-00
Heat-On 4-l block	505-80078-00
Heat-On 5-l block	505-80076-00

Heat-On 250-ml block with flask sidearm cutouts

Heat-On 2-l block

Heat-On accessories

Support rod for bath attachments from 3 to 5 liter	509-97000-00
Retort clamp	505-81075-00
Boss head	570-31100-00
Flask Stand & Clamp Kit (including Support rod for bath attachments from 3 to 5 liter, Retort clamp, Boss head)	505-81400-00

PTFE Safety Covers*

For Heat-On Multi-Well holder	505-80080-00
For Heat-On 200-300-ml block	505-80081-00
For Heat-On 500-ml block	505-80082-00
For Heat-On 1-l block	505-80083-00

PTFE safety covers

PTFE safety cover 500 ml

* Not available in the USA

Multi-Well holder and inserts

This unique Multi-Well holder is designed to hold either one or two inserts for flasks*.
The inserts are available for 10-ml, 25-ml, 50-ml, 100-ml and 150-ml flasks. Flask inserts also feature cut-away sides for use with two or three-neck flasks and accept the optional safety lifting handles

** Only accepts one 150-ml insert*

Heat-On Multi-Well holder
P/N 505-80060-00

Heat-On safety lifting handles
P/N 505-80077-00

Insert for Multi-Well holder

Heat-On 10-ml insert	505-80061-00
Heat-On 25-ml insert	505-80062-00
Heat-On 50-ml insert	505-80063-00
Heat-On 100-ml insert	505-80064-00
Heat-On 150-ml insert	505-80065-00

Heat-On 10-ml insert

Heat-On 50-ml insert

Heat-On Multi-Well packages

Package Heat-On Multi-Well Basic Including 1x Multi-Well holder and 3 inserts for 25-ml, 50-ml and 100-ml flasks	505-81300-00
Package Heat-On Multi-Well Including 1x Multi-Well holder and 6 inserts, 2 each for 25-ml, 50-ml and 100-ml flasks	505-81200-00

StarFish Workstations

Have you always been looking for a system to perform numerous reactions on a small footprint to significantly reduce space and process times?
With our attachments you can turn your magnetic stirrer into an efficiency-increasing reaction station for up to 45 samples simultaneously!

- Upgrade your magnetic stirrer to a product with multiple capabilities
- From simple heating and mixing tasks to chemical reactions under inert gas, concentrations or extractions - everyhing is possible
- No special glassware purchase required - use your own glassware and cherry-pick the appropriate attachments for your applications
- StarFish workstations are ideal for soxhlet applications

Base plate

Base plate with optional handles fits securely onto the top plate maintaining good thermal contact with the heated surface

StarFish base plate (145 mm)
505-81000-00

StarFish base plate handles (pair)
505-81001-00

Numerous combinations
Cherry-pick from different PolyBlock options in different sizes or one MonoBlock system for identical round-bottom flasks or vials. In addition, you can choose from a large selection of inserts ranging from 5 ml to 150 ml

MonoBlocks

MonoBlocks are single blocks with multiple wells all of the same size and are ideal for experiments using the same vessel

MonoBlock for 5 x 250-ml flasks	505-80001-00

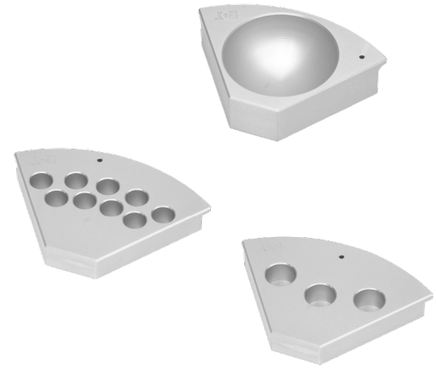
Inserts for MonoBlock 5 x 250 ml

150-ml Flask insert	505-80040-00
100-ml Flask insert	505-80041-00
50-ml Flask insert	505-80042-00
25-ml Flask insert	505-80043-00
10-ml Flask insert	505-80044-00
5-ml Flask insert	505-80045-00
MonoBlock for 16 x 25-mm tubes	505-80002-00
MonoBlock for 16 x 24-mm tubes	505-80003-00
MonoBlock for 40 x 16-mm tubes	505-80004-00
MonoBlock for 40 x 12-mm tubes	505-80005-00
MonoBlock for 16 x 28-mm vials	505-80006-00
MonoBlock for 20 x 21-mm vials	505-80007-00
MonoBlock for 40 x 17-mm vials	505-80008-00
MonoBlock for 40 x 15-mm vials	505-80009-00
MonoBlock for 40 x 12-mm vials	505-80010-00

PolyBlocks

PolyBlocks are smaller segments (five per StarFish) which can be mixed to accommodate any combination of vessels; allowing the use of different vessel types and sizes at the same time

PolyBlock for 1 x 250-ml flask	505-80020-00
PolyBlock for 3 x 25-mm tubes	505-80021-00
PolyBlock for 3 x 24-mm tubes	505-80022-00
PolyBlock for 9 x 16-mm tubes	505-80023-00
PolyBlock for 9 x 12-mm tubes	505-80024-00
PolyBlock for 3 x 28-mm vials	505-80025-00
PolyBlock for 3 x 21-mm vials	505-80026-00
PolyBlock for 7 x 17-mm vials	505-80027-00
PolyBlock for 9 x 15-mm vials	505-80028-00
PolyBlock for 9 x 12-mm vials	505-80029-00



5-way clamp
(Velcro)
P/N 505-81010-00

5-way clamp
(Silicone strap and handle)
P/N 505-81020-00

Universal 5-way clamps

The StarFish clamp allows you to hold glassware of virtually any size and comes with a choice of Silicone rubber or Velcro support straps

Each clamp features five telescopic arms which can be extended and locked in place to suit your needs. Using different straps on separate clamps allows you to grip the flask neck with the Silicone rubber strap for lifting, whilst the condenser above slides through the Velcro strap

Water-Distribution Manifold

Allows coolant from a single source to be evenly distributed to up to five condensers and then recombines the flow to one outlet pipe

Two manifolds are used in each set-up, one to distribute water to the condenser and one to collect coolant for recirculation or to drain. Connectors feature leak-proof shut-off valves

Water Manifold
With connector
P/N 505-81030-00

Gas/Vacuum Manifold
With connector
P/N 505-81040-00

Gas/Vacuum-Distribution Manifold

Allows gas or vacuum from a single source to be evenly distributed to up to five positions or vessels (does not control or regulate gas/vacuum flow). Connectors feature leak-proof shut-off valves

Replacement Self Adhesive Velcro Pads, 200 mm (pack of 10)	505-81070-00
Replacement Velcro Loop Strips, 200 mm (pack of 5)	505-81080-00
Replacement Silicone Straps, 200 mm (pack of 5)	505-81090-00
650 mm Support rod	505-81050-00
650 mm Support split rod	505-81060-00

Magnetic Stirrer without Heating

For gentle stirring in biology and microbiology applications

Hei-Mix S

- Stir quickly and efficiently with an extended speed range up to 2,200 rpm
- Space-saving unit for efficiently mixing sample sizes up to 5 liter. Small footprint of L 140 / W 126 / H 80 mm only and the top plate comes with a diameter of 104 mm
- Ideal for titrations due to white-colored top plate
- Long-lasting polyamide housing and PVDF top plate material

MR Hei-Mix S
P/N 503-02000-00

Magnetic Stirrer Packages

MR Silver 1 Package

P/N 505-30080-00

This package includes:
- Magnetic Stirrer MR Hei-Tec
- Temperature sensor Pt 1000 (AISI 316Ti)
- Pt 1000 clamping system (includes support rod and attachment with cable inlet)

MR Silver 2 Package

P/N 505-40080-00

This package includes:
- Magnetic Stirrer MR Hei-Connect
- Temperature sensor Pt 1000 (AISI 316Ti)
- Pt 1000 clamping system (includes support rod and attachment with cable inlet)
- Interface cable RS 232

MR Gold 1 Package

P/N 505-81600-00

This package includes:
- Magnetic Stirrer MR Hei-Tec
- Temperature sensor Pt 1000 (AISI 316Ti)
- Pt 1000 clamping system (includes support rod and attachment with cable inlet)
- Heat-On Multi-Well system including Multi-Well holder and the following inserts: 2 x 25 ml, 2 x 50 ml, 2 x 100 ml

MR Gold 2 Package

P/N 505-81500-00

This package includes:
- Magnetic Stirrer MR Hei-Standard
- Heat-On Multi-Well system including Multi-Well holder and the following inserts: 2 x 25 ml, 2 x 50 ml, 2 x 100 ml

MR Platinum Package

P/N 505-81100-00

This package includes:
- Magnetic Stirrer MR Hei-End
- Temperature sensor Pt 1000 (AISI 316Ti)
- Base plate
- MonoBlock for 5 x 250-ml flasks
- 2 x 100-ml flask insert
- 2 x 50-ml flask insert
- 1 x 25-ml flask insert
- 5-way clamp (velcro strap)
- 5-way clamp (silicone strap & handle)
- 2 x Water Manifold
- 1 x Gas/Vacuum Manifold
- 650-mm split rod

Technical Specifications - Magnetic Stirrers

Model		MR Hei-Mix S	MR Hei-Standard	MR Hei-Tec	MR Hei-Connect	MR Hei-End
P/N	**(230 V)**	503-02000-00	505-20000-00	505-30000-00	505 - 40000 - 00	505-50000-00
Speed range	**(rpm)**	0 - 2,200	100 - 1,400	100 - 1,400	100 - 1,400	30 - 1,400
Speed accuracy	**(%)**	±5	±2	±2	±2	±1
Drive		Shaded pole motor	EC-motor	EC-motor	EC-motor	EC-motor
Operating mode		continuous	continuous	continuous	continuous	continuous
Display		–	–	digital	digital	digital
Analog/digital interface		–	–	–	yes (digital)	yes
Heating power	**(W)**	–	800 *	800 *	800 *	800 *
Hotplate temperature	**(°C)**	–	20 – 300	20 – 300	20 – 300	20 – 300
Medium temperature, max.	**(°C)**	–	250	250	250	250
Accuracy temperature setting	**(°C)**	–	±5	±1	±1	±1
External temperature sensor		–	Pt 1000	Pt 1000	Pt 1000	Pt 1000
Temperature accuracy with external temperature sensor	**(°C)**	–	±1	±1	±1	±0.2
Sensor breakage protection		–	with Pt 1000	with Pt 1000	with Pt 1000	with Pt 1000
Temperature control		–	Micro controller	Micro controller	Micro controller	Micro controller
Temperature accuracy hotplate	**(°C)**	–	±5	±5	±5	±5
Residual heat indicator		–	yes	yes	yes	yes
Safety circuit hotplate	**(°C)**	–	25 °C over hotplate temperature	25 °C over hotplate temperature	25 °C over hotplate temperature	10 - 25 °C over nominal temperature
Stirring capacity, max. (H_2O)	**(l)**	5	20	20	20	20
Load, max.	**(kg)**	6	25	25	25	25
Power consumption	**(W)**	7	820	820	820	825
Permissible ambient conditions		5 – 31 °C at 80 % rel. humidity 32 – 40 °C decreasing linearly up to max. 50 % rel. humidity	5 – 31 °C at 80 % rel. humidity 32 – 40 °C decreasing linearly up to max. 50 % rel. humidity	5 – 31 °C at 80 % rel. humidity 32 – 40 °C decreasing linearly up to max. 50 % rel. humidity	5 – 31 °C at 80 % rel. humidity 32 – 40 °C decreasing linearly up to max. 50 % rel. humidity	5 – 31 °C at 80 % rel. humidity 32 – 40 °C decreasing linearly up to max. 50 % rel. humidity
Plate diameter	**(mm)**	ø 104	ø 145	ø 145	ø 145	ø 145
Plate material		PVDF	Kera-Disk® (Silumin with ceramic coating)	Kera-Disk® (Silumin with ceramic coating)	Kera-Disk® (Silumin with ceramic coating)	Kera-Disk® (Silumin with ceramic coating)
Weight	**(kg)**	1.1	2.9	2.9	2.9	2.6
Dimensions (l x w x h)	**(mm)**	140 x 126 x 80	173 x 277 x 94	173 x 277 x 94	173 x 277 x 94	173 x 277 x 94
Protection class	**(DIN EN 60529)**	IP 21	IP 32	IP 32	IP 32	IP 32

* 600 W for 115 V-units
Standard supply voltage: 230 V - other voltages upon request, please specify for order

heidolph
research made easy

Certificate

To confirm the ability for

continuous operation

of the MR series Magnetic Stirrers with hotplate

The MR series Magnetic Stirrers with hotplate feature overtemperature safety circuits according to DIN EN 61010-1:2001 and DIN EN 61010-2-010:2014 and therefore is designed for continuous operation.

This statement is made under the precondition that all units are operated in accordance with the operation manual and in accordance with good practice standards for safety in laboratories, rules for accident preventions, and compliance with directions on hazardous materials.

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