



Leading Safety Standards

- Multiple independent safety mechanisms monitor the ongoing process. In the event of an error, the heating plate is switched off automatically
- If combined with Heat-On blocks, there is no need to use oil
- All models are equipped with a visual residual heat indicator to prevent burns
- For safety reasons, the relevant functions are switched off completely in the event of a short-circuit, temperature sensor break, defective motor and in case of a processor fault
- Unwanted heating is prevented by separate activation of the heating function. The activated heating function can be clearly identified by the illumination of the button or the rotary knob (depending on the model)
- To prevent any splashing, the rotation speed ramps up slowly until it has reached the desired value
- Damage to the device is impossible even at the highest temperatures – all models are equipped with a fire-resistant die-cast housing
- The integrated PID controller ensures precise reaching of the target temperature



Superior ease of use

- The unique Kera-Disk® coating is extremely resistant to chemicals and scratches. The plate is therefore easy-care and dirt can be removed easily
- The powerful stirring magnet allows the stirring rod to be safely entrained even with larger quantities of up to 20 l
- If the hotplate fails, the stirring process is not interrupted. This prevents the sample from overheating
- Efficient (low temperature) thermal insulation prevents condensation in the housing and thus the contact between condensation water and electronic components
- On devices with a display, all parameters can be read from the large, illuminated display, even from a greater distance



MADE IN
GERMANY

All Benefits at a Glance

3-year warranty on all devices and an average operational lifespan of 10 years

Safe Heating and Mixing

Reduced Cost of Ownership

- Clearly shorter process times. The high heating power of 800 watts enables significantly faster heating times in comparison to conventional magnetic stirrers with 600 watts
- Thanks to its aluminum core, the patented Kera-Disk® heating plate ensures the fastest heating up times. Due to the resistant ceramic coating, the plate is chemical-resistant and scratch-proof
- Corrosion-protected electronics add many years to the operational lifespan and reduce expenditure for new purchases
- Wear and maintenance-free motors save repair and spare part costs
- The average use period is over 10 years and therefore makes its acquisition a worthwhile investment
- A high IP protection class and a closed housing ensure a long life with low repair susceptibility



With the free Hei-Control software for the Hei-Connect, process parameters can be controlled and stored via a PC

The closed housing protects the electronic and mechanical components of the magnetic stirrer from aggressive media and fumes

Multiple independent safety mechanisms monitor the ongoing process and switch off the heating plate in the event of an error or fault

In the event of a short-circuit, sensor break of the temperature sensor and a processor fault, the device completely switches off the relevant functions

A heating power of 800 watt means significantly faster heating times compared to magnetic stirrers with 600 watt.

The patented Kera-Disk® heating plate ensures the fastest heating times; an extremely thin ceramic coating makes the plate chemical-resistant

In the event of a heating plate failure, the stirring process is NOT interrupted; this prevents overheating of the sample

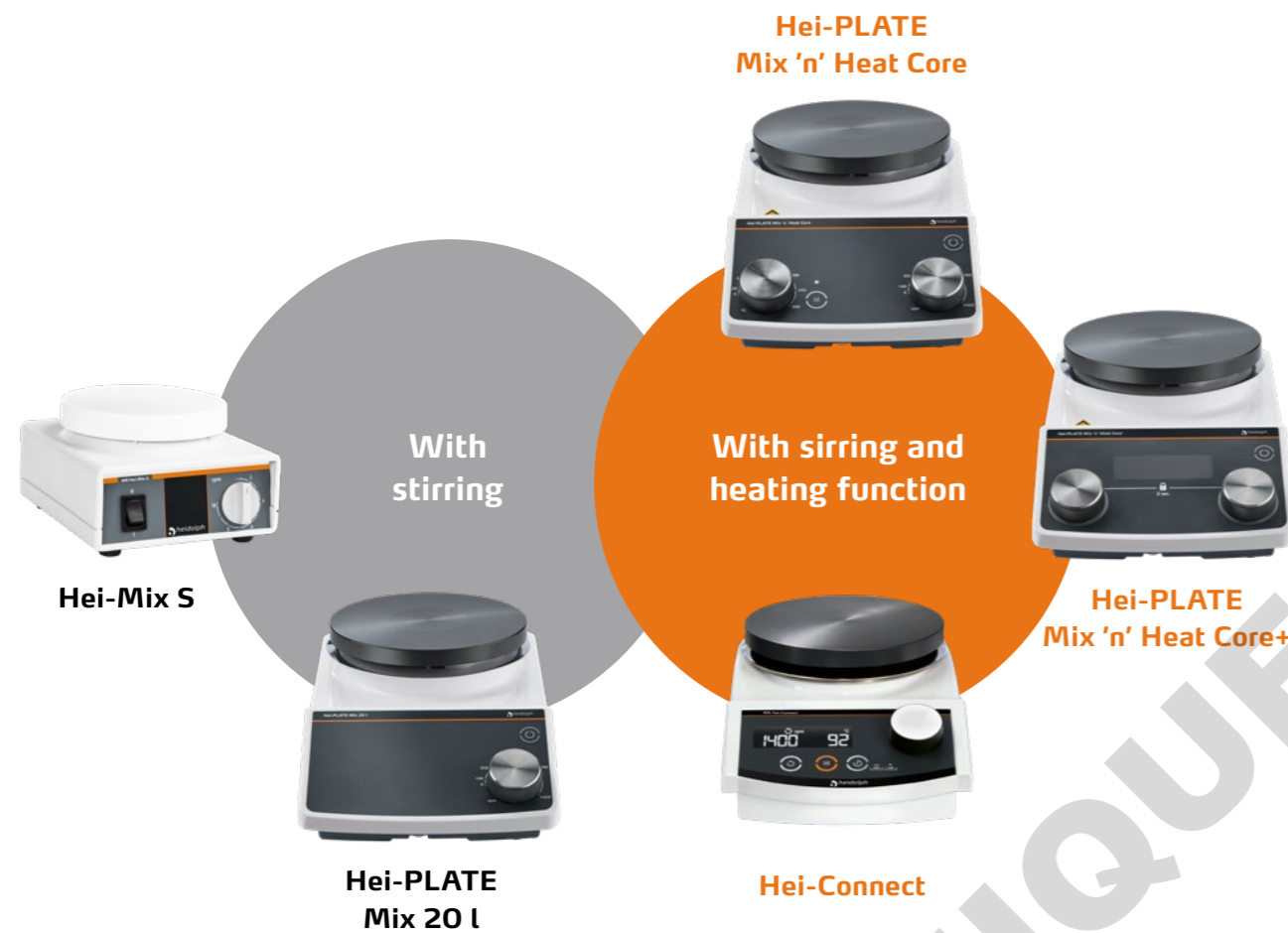
Damage to the device is excluded, even at the highest temperatures – the models have a fireproof die-cast housing

A separate On/Off button for the heating function prevents unwanted heating. The activated heating function is clearly detectable. In addition, a residual heat indicator effectively protects against burns after the heating function has been switched off



The Hei-PLATE series

Whether with or without a heating function, all our magnetic stirrers have one thing in common: A gentle and yet powerful stirring function, which enables up to 20 liters of low-viscosity media to be mixed.



- Absolutely robust and durable
- Leading safety standards and superior ease of use
- Top chemical resistance and fastest heating times due to the patented Kera-Disk® plate

Magnetic stirrers

Hei-Mix S

For biology and biochemistry stirring tasks

- With space-saving polyamide housing
- The white PVDF top plate is ideally suited for titration and has a diameter of 104 mm
- The speed range of up to 2,200 rpm is sufficient for applications up to 5 l



Hei-PLATE Mix 20 l

For large stirring tasks

- Due to the Kera-Disk® ceramic coating, the top plate is chemical-resistant and scratch-proof
- In order to handle the sample gently, following a soft start, the speed is slowly increased to the required value
- Ideal for applications up to 20 l, as the diameter of the plate is 145 mm and the speed range extends from 100 to 1,400 rpm



Model	P/N
Hei-Mix S	503-02000-00
Hei-PLATE Mix 20 l	506-54100-00

Magnetic stirrer with heating function

Hei-PLATE Mix 'n' Heat Core

For easy and safe entry level

Hei-PLATE Mix 'n' Heat Core+

For academic standards with temperature sensor

Precise setting options and monitoring of the device parameters via the digital display and connection for the external Pt 1000 temperature sensor.

Precise values without temperature fluctuations are achieved with the optional Pt 1000 temperature sensor.



NEW

- **Innovative product design:** Underside with grip; flattened edges, which discharge liquids from the device; enlarged safety distance of the control elements from the heating plate, enclosure tested to IP 42
- Two rotary knobs with scale make adjustment of the speed between 100 and 1,400 rpm easier, with a speed accuracy of $\pm 2\%$ and the max. temperature of 300 °C
- A separate button for the heating function prevents unwanted heating. The button illumination indicates the activated heating function
- Flashing of the heating button signals residual heat and thus also effectively warns to protect against burns even after the heating function is switched off

Available from mid-2022

Combinable with the Hei-Con electronic contact thermometer (optional) for even more precision when setting the values.

- Fast access and activation of the heating and stirring function due to the separate rotary-pressure controller for intuitive setting of the parameters – precise or large jumps between 100 and 1,400 rpm and the maximum temperature of 300 °C
- The controller's locking function protects against accidental adjustment
- The values in the illuminated display are easy to read even from a distance. Activated functions are easily detectable due to the LED rings
- Flashing of the orange LED ring signals residual heat and thus also effectively warns to protect against burns even after the heating function is switched off
- Fast and precise temperature control via the connection of an optional external temperature sensor and two selectable heating modes (FAST and PRECISE)
- To protect the sample, the external sensor monitoring switches off the heating automatically if the temperature sensor is no longer immersed in the medium



NEW

Model	Heating plate	P/N
Hei-PLATE Mix 'n' Heat Core	Ø 145 mm	506-11100-00

Model	Heating plate	P/N
Hei-PLATE Mix 'n' Heat Core+	Ø 135 mm	506-22100-00
Hei-PLATE Mix 'n' Heat Core+	Ø 145 mm	506-21100-00

Hei-Connect

For comprehensive process documentation and reproducible results

For exact process documentation with precise setting option and monitoring of the device parameters via the digital display and connection for the Pt 1000 temperature sensor.

- With connection for the optional Pt 1000 temperature sensor for precise values without temperature fluctuations
- All values can be easily read on the illuminated display even from a distance
- Illuminated buttons indicate activated functions
- The speed can be set precisely via the rotary knob from 100 to 1,400 rpm with a speed accuracy of $\pm 2\%$ and a max. temperature of 300 °C
- An independent safety circuit switches off the heating to protect against overheating if the set temperature is exceeded by 25 °C
- To protect the sample, the external sensor monitoring switches off the heating automatically if the temperature sensor is not immersed in the medium
- With the timer function, process times for the heating and rotation functions can be defined separately; an acoustic signal sounds at the end of the process
- Residual heat indicator effectively protects from burns



Model	P/N
Hei-Connect	505-40000-00
Hei-Connect with Pt 1000 temperature sensor	505-40081-00

Reproducible results through programming of ramps and interval processes. With RS 232 interface for detailed process documentation directly on the PC.



The Hei-Control software is included in the scope of supply and is available to download for free at www.heidolph.com

Technical Specifications

Magnetic stirrers

Model	Hei-Mix S	Hei-PLATE Mix 20 L
Speed range	0–2.200 rpm	100–1.400 rpm
Speed accuracy	±5 %	±2 %
Drive	Shaded pole motor	EC motor, left-handed
Overheat protection	–	–
Operating mode	Continuous operation	Continuous operation
Power input	7 W	20 W
Connection	L+N+PE	L+N+PE
Sound pressure level	IEC 61010 <70 dB (A)	<50 dB (A)
Display	–	–
Analog/digital interface	–	–
Heating power	–	–
Heating temperature range	–	–
Heating control	–	–
Accuracy temperature setting	–	–
Sensor connection	–	–
Control accuracy hotplate	–	–
Residual heat indicator	–	–
Timer	–	–
Max. stirring capacity	H₂O 5 l	20 l
Max. load	6 kg	25 kg
Usable area of heating plate	Ø 104 mm	145 mm
Top plate material	PVDF	Kera-Disk® aluminum alloy, coated
Weight	1.1 kg	3.0 kg
Dimensions	w/d/h 126 × 140 × 80 mm	168 × 299 × 101 mm
Maximum height above sea level	up to 2,000 mamsl	up to 2,000 mamsl
Admissible permissible ambient conditions	5–31 °C at up to 80 % rel. humidity, 32–40 °C at up to 50 % rel. humidity (linearly reducing)	5–31 °C at up to 80 % rel. humidity, 32–40 °C at up to 50 % rel. humidity (linearly reducing)
EMC class		B, Group 1
Overvoltage category		II
Protection class	IEC 61140	I
Degree of protection	IEC 60529 IP 21	IP 42

Standard supply voltage: 230 V. Other supply voltages on request.

Technical Specifications

Magnetic stirrers with heating function

Hei-PLATE Mix 'n' Heat Core	Hei-PLATE Mix 'n' Heat Core+	Hei-Connect
100–1.400 rpm	100–1.400 rpm	100–1.400 rpm
±2 %	±2 %	±2 %
EC motor, left-handed	EC motor, left-handed	EC motor
–	–	no, but error message
Continuous operation	Continuous operation	Continuous operation
825 W	825 W	825 W
L+N+PE	L+N+PE	L+N+PE
<50 dB (A)	<50 dB (A)	<70 dB (A)
–	LCD display	digital
–	–	digital (RS 232)
800 W	800 W	800 W
20–300 °C	20–300 °C	20–300 °C
PID	PID	Micro controller
–	±1 K	±1 K with sensor
EKT Hei-Con	Pt 1000	Pt 1000
±5 °C	±5 °C	±5 °C
yes	yes	yes
–	–	yes
20 l	20 l	20 l
25 kg	25 kg	25 kg
145 mm	135 /145 mm	145 mm
Kera-Disk® aluminum alloy, coated	Kera-Disk® aluminum alloy, coated	Kera-Disk® aluminum alloy, coated
3.0 kg	3.0 kg	2.9 kg
168 × 299 × 101 mm	168 × 299 × 101 mm	173 × 277 × 94 mm
up to 2,000 mamsl	up to 2,000 mamsl	up to 2,000 mamsl
5–31 °C at up to 80 % rel. humidity, 32–40 °C at up to 50 % rel. humidity (linearly reducing)	5–31 °C at up to 80 % rel. humidity, 32–40 °C at up to 50 % rel. humidity (linearly reducing)	5–31 °C at up to 80 % rel. humidity, 32–40 °C at up to 50 % rel. humidity (linearly reducing)
B, Group 1	B, Group 1	
II	II	
I	I	I
IP 42	IP 42	IP 32

Standard supply voltage: 230 V. Other supply voltages on request.

Packages

Hei-PLATE sensor packages

Hei-PLATE reflux packages

HEI-PLATE SENSOR ADVANCED PACKAGE CORE+

- Hei-PLATE Mix 'n' Heat Core+
- Pt 1000 temperature sensor
- Clamping system for Pt 1000 (includes support rod and attachment with cable conduit)
- Silicone protective cover

Ø 135 mm
P/N 506-22151-00

Ø 145 mm
P/N 506-21151-00



HEI-PLATE REFLUX PACKAGE CORE+

- Hei-PLATE Mix 'n' Heat Core+
- Pt 1000 temperature sensor
- Heat-On block 1 l
- Findenser NS29/24
- Attachment kit

P/N 506-21156-00

HEI-PLATE PACKAGE SILVER 2

- Hei-Connect
- Pt 1000 temperature sensor (V4A)
- Clamping system for Pt 1000 (includes support rod and attachment with cable conduit)
- Interface cable RS 232

P/N 505-40080-00

HEI-PLATE SENSOR ADVANCED PACKAGE CORE

- Hei-PLATE Mix 'n' Heat Core
- Hei-Con contact thermometer incl. clamping system
- Silicone protective cover

P/N 506-11157-00

Available from mid-2022

HEI-PLATE SENSOR BASIC PACKAGE CORE+

- Hei-PLATE Mix 'n' Heat Core+
- Pt 1000 temperature sensor (V4A)
- Clamping system for Pt 1000 (includes support rod and attachment with cable conduit)

Ø 135 mm
P/N 506-22150-00

Ø 145 mm
P/N 506-21150-00

HEI-PLATE REFLUX PACKAGE CORE+ MINI

- Hei-PLATE Mix 'n' Heat Core+
- Pt 1000 temperature sensor
- Heat-On block 250 ml
- Findenser Mini NS24/24
- Attachment kit

P/N 506-21155-00

HEI-PLATE REFLUX PACKAGE CONNECT

- Hei-Connect
- Pt 1000 temperature sensor
- Heat-On block 1 l
- Findenser NS29/24
- Attachment kit

P/N 505-40715-00

HEI-PLATE REFLUX PACKAGE CONNECT MINI

- Hei-Connect
- Pt 1000 temperature sensor
- Heat-On block 250 ml
- Findenser Mini NS24/24
- Attachment kit

P/N 505-40732-00