

STIRRING MADE

S

HEI-PLATE

Hel-PLATE Mix 'n' Heat Core

Heidolph magnetic stirrers are traditionally among the daily lab helpers. Whether in research laboratories, industrial applications, or at universities, Heidolph's magnetic stirrers carry out synthesis, extraction, and other common chemistry applications with the highest precision.

Heidolph's German engineered magnetic stirrers provide users with a reliable and durable unit that is built to last with an average lifetime of 10 years! Whether with or without a heating function, all our magnetic stirrers have one thing in common: smooth and powerful stirring that allows both low and high viscosity solutions to be mixed evenly. Heidolph offers a variety of models that feature a sealed, fire-resistant die-cast aluminum housing and a unique Kera Disk top plate that combines the advantages of aluminum and ceramic for efficient heating and chemical resistivity. Each model also has specific functionalities for your needs. From our analog magnetic stirrers to our digital magnetic stirring hotplates for automated process solutions, Heidolph has a magnetic stirring hotplate for you!

WHERE POWER MEETS SAFETY

UNIQUE KERA-DISK

Our Kera-Disk[®] plate features an aluminum top plate for immediate heat transfer with a chemical and scratch-resistant ceramic coating.

DIE-CAST HOUSING

The Hei-PLATE's fire-resistant die-cast aluminum housing protects against fumes, liquids, vapors, and internal corrosion.

SAFETY FEATURES

6

Ŗ

A residual heating indicator lets user's know the top plate is hot even if it is not actively heating.

NO SPLASH ZONE

All units ramp up to their set stir speed to protect you from splashes and burns.

SAFETY CIRCUITS

To prevent facility fires, the Hei-PLATE includes two independent safety circuits that automatically cut heating power in the event of an overshoot or an undershoot.

NRTL CERTIFIED

The Hei-PLATE Series has been tested and certified by OSHA's National Recognized Testing Laboratory (NRTL) Program.

		18 50 ⁰
		C
	HEI-PLATE MIX 'N' HEAT CORE Simply Stir & Heat	HEI-PLATE MIX 'N' HEAT CORE+ Simply On Point
Analog/Digital	Analog	Digital
	-	-
Heating Modes	Standard	Fast, Precise
External Temperature Sensor	EKT Hei-Con	PT1000
Temperature Set-point Limit	N/A	N/A
Timer	N/A	N/A
Stir Ramping	N/A	N/A
Stir Bar Detection	N/A	N/A
On-board Process Programming	N/A	N/A
Interfaces	N/A	N/A
Connection to E-Lift	N/A	N/A
PN	145mm Plate - 036110200 135mm Plate - 036110203	145mm Plate - 036110210 135mm Plate - 036110212
Basic Package (Includes PT1000)	Not available	145mm Plate - 036110278 135mm Plate - 036110268
Advanced Package (Temp. Sensor, Clamping System, Silicon Cover)	145mm Plate - 036110272 135mm Plate - 036110262	145mm Plate - 036110273 135mm Plate - 036110263





ecise+

PT1000

SB-B, USB-C

6110232 6110233

6110238 6110239

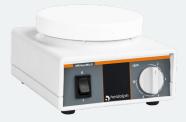
6110228 6110229

ADDITIONAL STIRRING **OPTIONS**



HEI-PLATE MIX 20L

The Robust Stirrer PN: 036110220



HEI-PLATE S

The Gentle Stirrer PN: 036110460



Learn more about the Hei-PLATE Series and accessories. https://bit.ly/3W2YPla

ACCESSORIES







EKT HEI-CON For measuring and regulating the temperature of mediums. Compatible

Hei-Con 036110600 Hei-Con (Glass Coated) 036110620

with Hei-PLATE Mix 'N' Heat Core



PT1000

For measuring and regulating the temperature of mediums. For the models Hei-PLATE models except for the Hei-PLATE Mix 'N' Heat Core

Stainless Steel 036110350 Glass Coated 036110360



DUAL PT 1000 For temperature monitoring of sample and heating accessory

PN 036119356



SILICONE COVERS Protects magnetic stirrer against splashes and dripping media

Mix 20L 036306041 Mix 'N' Heat 036306042



CLAMPING SYSTEM Includes support rod and attachment with cable inlet for PT1000 temperature probe. PN 036300883

Extended Version: 036300884



RS232 CABLE For Hei-PLATE Ultimate and Hei-TORQUE Ultimate models

9 pin 036306014





CONCAVE ADAPTER For 1 liter round bottom flasks PN 036110450



WATER HEATING BATH PTFE Coated

1 liter 036110440 2 liter 036110420 4 liter 036110400

STIRRING BARS

Stirring Bars - Cylindrical Shape (25, 40, 50mm each)	036300930
Stirring Bars - Cross Shape Pack of 20 pcs. for 25 to 50ml flasks	015880270
Stirring Bars - Oval Shape Pack of 3 pcs. for 10ml flasks	036111260
Stirring Bars - Oval Shape Pack of 3 pcs. for 25 to 50 ml flasks	036111270
Stirring Bars - Oval Shape Pack of 3 pcs. for 100 to 250ml flasks	036111280
Stirring Bars Evaluation Kit Pack of 10 pcs.	015882570



E-LIFT

The E-Lift is an electronic lab jack designed for seamless integration with the Hei-PLATE Mix 'N' Heat Ultimate, offering researchers a practical solution for laboratory automation. Its compact design ensures it fits easily into your workspace, and its versatility makes it suitable for a wide range of laboratory tasks. PN 03611057





OIL HEATING BATH

Max temperature 250°C

1 liter 036110430 2 liter 036110410 4 liter 036110390





FINDENSER

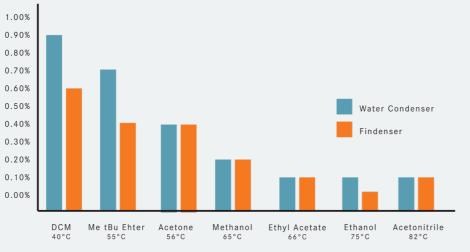
A Safer & Greener Condenser Alternative

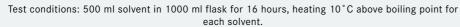
The super air Findenser comprises of an internal glass condenser and an external, finned aluminum jacket, between which a small amount of water is permanently sealed. Not only does the Findenser provide excellent heat transfer, but it also removes the need for water cooling. As a result, this system can be used for 95% of all typical chemistry applications, replacing the need for water-cooled condensers.

- No risk of flooding from running water
- Eliminates water purchase & disposal costs
- For solvent volumes from 5ml to 1 liter
- Helps meet sustainable water reduction targets \checkmark
- Finned aluminum jacket creates excellent thermal conductivity and high performance air-cooling

Water Condenser Vs. Findenser

In identical flasks and set-ups, various solvents were tested with a Findenser and water condenser to record solvent loss by weight.





Findenser B24 Cone B24 Socket	015610000
Findenser B29 Cone B24 Socket	015610001
Findenser B19 Cone B19 Socket	015610002
Findenser Mini B24 Cone B24 Socket	015610003
Findenser Mini B19 Cone B24 Socket	015610004
Findenser Mini B14 Cone B14 Socket	015610005

HEAT-ON BLOCKS Safe & Fast Heating

Heat-On Blocks are versatile and efficient heating solutions for laboratory applications. They provide uniform and precise heating for various vessel sizes and configurations. With their innovative design, Heat-On Blocks eliminate the need for oil baths or heating mantles, simplifying the setup and reducing the risk of spills, contamination, and laboratory fires. They are a reliable choice for researchers seeking consistent and controlled heating in their experiments, enhancing productivity and safety in the laboratory.

- ✓ A fluoroplymer coating along an anodized aluminum finish offers superb chemical resistance
- Unique well design prevents flask cracking
- ✓ Works up to 260°C, uses 30% less energy and heats water 66% faster
- Compatible with tubes and round bottom flasks from 1 ml to 5 liters.
- ✓ Solid aluminum blocks provide even heating



CLEANER

Heating mantles are expensive, difficult to clean, do not respond well to spills, and often create hot spots when heating.

Heat-On Blocks eliminate the risk or oil related lab fires and injury from oil spills as well as the mess and cost associated with oil usage.



The Multi-Well holder is designed to hold one or two inserts for flasks or tubes. Flask inserts feature cut-away sides for use with two or three-neck flasks.







SAFER



GREENER

Scientists increasingly turn to specially designed aluminum blocks on stirring hotplates to heat standard round bottom flasks.

MULTI-WELL UNITS

Heat-On Blocks - Polymer

Heat-On Multi-Well Block System	015852000	Heat-On 1 Liter Block	015882080
Heat-On Multi-Well Block Basic	015852010	Heat-On 2 Liter Block	015882090
Heat-On Multi-Well Holder	015882000	Heat-On 3 Liter Block	015882100
Heat-On Multi-Well Holder	015882000	Heat-On 4 Liter Block	015882105
Heat-On 10ml Insert	015882010	Heat-On 5 Liter Block	015882300
Heat-On 25ml Insert	015882020	Heat-On Insert for 8x16mm Tubes	015882110
Heat-On 50ml Insert	015882030	Heat-On Insert for 6x17mm Tubes	015882115
Heat-On 100ml Insert	015882040	Heat-On Insert for 4x20mm Tubes	015882120
Heat-On 150ml Insert	015882050	Heat-On Insert for 4x24mm Tubes	015882130
Heat-On 100ml w/ Flask Sidearm Cutouts	015882055	Heat-On Insert for 2x1in Tubes	015882135
Heat-On 250ml Block	015882060	Heat-On Insert for 3x28mm Tubes	015882136
Heat-On 500ml Block	015882370	Heat-On Safety Lifting Handles	015882140
Heat-On 200ml Pear Block	015882380	Heat-On Adapter Plate for 135mm	015882150
Heat-On 300ml Pear Block	015882390	Heat-On Multi-well Holder PTFE	015882161
Heat-On 500ml Pear Block	015882301	Heat-On 250ml Block w/Flask Cutout	015882580
Heat-On 2 Liter Pear Block	015882350	Heat-On 250ml Block w/ Flask Sidearms	015882590
Heat-On 1 Liter Pear Block	015882360		

Heat-On Blocks - Anodized

Heat-On Multi-Well Block System	015852020
Heat-On 100ml Block w/Sidearm Cutout	015882056
Heat-On Multi-Well Holder	015882160
Heat-On Multi-Well Block Basic	015852030
Heat-On 10ml Insert	015882170
Heat-On 25ml Insert	015882180
Heat-On 50ml Insert	015882190
Heat-On 100ml Insert	015882200
Heat-On 150ml Insert	015882210
Heat-On 250ml Block	015882220
Heat-On 500ml Block	015882230

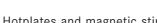
Heat-On 1 Liter Block	015882240
Heat-On 2 Liter Block	015882250
Heat-On 3 Liter Block	015882260
Heat-On 4 Liter Block	015882265
Heat-On 5 Liter Block	015882310
Heat-On Insert 8x16mm Tubes	015882270
Heat-On Insert 4x20mm Tubes	015882280
Heat-On Insert 4x24mm Tubes	015882290
Heat-On 200ml Pear Block	015882400
Heat-On 300ml Pear Block	015882410
Heat-On 1 Liter Pear Block	015882412
Heat-On 2 Liter Pear Block	015882413





APPLICATIONS





Hotplates and magnetic stirrers are commonly used in the R&D stage of the production process. Heidolph's Hei-PLATE offers precise temperature control, powerful mixing of up to 20 L of water, and process integration capabilities to help optimize your process on a small scale before scaling up.

MINING

Extracting precious metals from mined compounds is accelerated using heat. Heidolph's hotplates heat up to 350 C with precise heating to ensure your product can be extracted effectively and efficiently.

WASTEWATER TREATMENT

When disposing of wastewater, it is crucial to ensure it is environmentally safe. Hotplates can be used to extract contaminants. Precise and Fast heating modes allow users to heat samples without any overshoot, and various control features help to automate the process for repeatable results.

RESEARCH & DEVELOPMENT



HEI-TORQUE

The Hei-TORQUE laboratory overhead stirrer series consists of versatile and reliable models designed to meet various mixing and stirring needs. With variable speed capabilities ranging from gentle stirring to vigorous mixing, these stirrers can accommodate a broad spectrum of viscosities and volumes.

The Hei-TORQUE has durable motors and robust construction, ensuring longevity and reliability in demanding laboratory environments, featuring user-friendly interfaces, including digital displays, intuitive controls, and programmable settings, enabling researchers to fine-tune stirring parameters quickly. All Heidolph overhead stirrers have built-in safety features such as overload protection and safety shutdown, providing peace of mind during experiments. Whether you require basic stirring or advanced mixing, Heidolph's overhead stirrers provide a comprehensive range of options to suit your specific research requirements, making it an essential tool for laboratories seeking precision, versatility, and technical excellence in their stirring operations.

S M A L L B U T F I E R C E

e H 6

MADE IN GERMANY

Spark-less German made motors designed for additional safety.

SEALED HOUSING

Sealed house, which complies with high protection class IP 54.

SAFETY FEATURES

An over-temperature sensor prevents heat up situations, particularly valuable in unattended continuous operation.

QUICK CHUCK

The Quick Chuck creates a fast and easy way to change impeller with only one hand.

NO SPLASH ZONE

The electronic stirrers feature a smooth start operation which prevents spills and splashing media.

NRTL CERTIFIED

The Hei-TORQUE Series has been tested and certified by OSHA's National Recognized Testing Laboratory (NRTL) Program.



HEI-TORQUE CORE

HEI-TORQUE EXPERT

Light Weight & Powerful

The Gentle Powerhouse



HEI-TORQUE ULTIMATE

Made for Precise Control

		100	200	400
Power Rating, Motor Input/Output	105/75 W	90/50 W	120/80 W	150/90 W
Number of Speed Gears	1	1	1	2
Speed Range	20 - 2,000 rpm	10 - 2,000 rpm	10 - 2,000 rpm	10 - 400 rpm 20 - 2,000 rpm
Speed Indicator	Digital	Digital	Digital	Digital
Maximum Torque	40 Ncm*	100 Ncm*	200 Ncm*	400 Ncm*
Torque Indicator	Symbol	Symbol	Symbol	Symbol
Motor Protection	Temperature Control Software	Temperature Control Software		
Maximum Viscosity	10,000 mPas	60,000 mPas	100,000 mPas	250,000 mPas
Maximum Stirring Capacity	25 Liters	50 Liters	50 Liters	100 Liters
Interface	N/A	N/A	N/A	N/A
Maximum Shaft Diameter	10.5 mm	10.5 mm	10.5 mm	10.5 mm
Weight	2.3 kg	4.4 kg	5.1 kg	5.3 kg
PN	036090005	036093030	036093050	036093070

100	200	400	
90/50 W	120/80 W	150/90 W	
1	1	2	
10 - 2,000 rpm	10 - 2,000 rpm	10 - 400 rpm 20 - 2,000 rpm	
Digital	Digital	Digital	
100 Ncm*	200 Ncm*	400 Ncm*	
Symbol	Symbol	Symbol	
Temperature Control Software			

60,000 mPas	100,000 mPas	250,000 mPas		
50 Liters	50 Liters	100 Liters		
USB and RS232 Interfaces				
10.5 mm 10.5 mm		10.5 mm		
4.4 kg	5.1 kg	5.3 kg		
036093090	036093110	036093150		

ADDITIONAL ACCESSORIES



UNIVERSAL STAND S2

Stand Tube Ø: 25 mm Length: 700 mm Leg Distance: 370 mm Weight: 5.8 kg

PN 036300520 XXL 1,000 mm 036300530



TELESCOPE STAND

Stand Tube Ø: 32 mm Length: 725 - 1,025 mm Leg Distance: 370 mm Weight: 7.7 kg

PN 036300540



CLAMP For stands S2, S2 XL and the telescope stand; Ø 13 to 32 mm

PN 036300550



FLEXIBLE SHAFT Supplied with chuck; Overall length is 1,300mm PN 036300600



Learn more about the Hei-TORQUE Series and accessories. https://bit.ly/45XxWTM

HEI-TORQUE CORE



The Hei-TORQUE Core is a fierce and reliable laboratory overhead stirrer designed for precision and versatility. It features robust construction and a user-friendly interface, enabling efficient mixing and stirring of various substances in the laboratory. This overhead stirrer offers precise control over speed and torque, making it suitable for various applications, from basic stirring to demanding mixing tasks. Its ergonomic design ensures ease of use, enhancing productivity and accuracy in the laboratory, making it an essential tool for researchers and scientists.

Power Rating, Motor Input/ Output	105/75 W		
Number of Speed Gears	1		
Speed Range	20 - 2,000 rpm		
Speed Indicator	Digital		
Maximum Torque	40 Ncm*		
Torque Indicator	Symbol		
Motor Protection	Temperature Control Software		
Maximum Viscosity	10,000 mPas		
Maximum Stirring Capacity	25 Liters		
Interface	N/A		
Maximum Shaft Diameter	10.5 mm		
Weight	2.3 kg		
PN	036090005		

HEI-TORQUE EXPERT

The Hei-TORQUE Expert is a high-performance laboratory overhead stirrer renowned for its precision and versatility. It offers exceptional control over speed and torque, making it suitable for a wide range of mixing and stirring applications. With its robust design and user-friendly interface, this stirrer is a reliable choice for researchers and scientists seeking precise and efficient solutions in the laboratory.

	100	200
Power Rating, Motor Input/Output	90/50 W	120/80 W
Number of Speed Gears	1	1
Speed Range	10 - 2,000 rpm	10 - 2,000 rpm
Speed Indicator	Digital	Digital
Maximum Torque	100 Ncm*	200 Ncm*
Torque Indicator	Symbol	Symbol
Motor Protection	Temp	perature Control So
Maximum Viscosity	60,000 mPas	100,000 mPas
Maximum Stirring Capacity	50 Liters	50 Liters
Interface	N/A	N/A
Maximum Shaft Diameter	10.5 mm	10.5 mm
Weight	4.4 kg	5.1 kg
PN	036093030	036093050



heidolph

HEI-TORQUE ULTIMATE



The Hei-TORQUE Ultimate is a pinnacle in laboratory overhead stirrers, renowned for its exceptional precision and versatility. It provides unparalleled control over speed and torque, making it ideal for an extensive range of mixing and stirring tasks. With its robust construction and user-friendly interface, this stirrer is the ultimate choice for researchers and scientists seeking top-tier performance and precision in laboratory operations.

	100	200	400
Power Rating, Motor Input/Output	90/50 W	120/80 W	150/90 W
Number of Speed Gears	1	1	2
Speed Range	10 - 2,000 rpm	10 - 2,000 rpm	10 - 400 rpm 20 - 2,000 rpm
Speed Indicator	Digital	Digital	Digital
Maximum Torque	100 Ncm*	200 Ncm*	400 Ncm*
Torque Indicator	Symbol	Symbol	Symbol
Motor Protection	Temperature Control Software		
Maximum Viscosity	60,000 mPas	100,000 mPas	250,000 mPas
Maximum Stirring Capacity	50 Liters	50 Liters	100 Liters
Interface	 Image: A second s	 Image: A second s	~
Maximum Shaft Diameter	10.5 mm	10.5 mm	10.5 mm
Weight	4.4 kg	5.1 kg	5.3 kg
PN	036093090	036093110	036093150

ACCESSORIES



UNIVERSAL STAND S2 Stand Tube Ø: 25 mm Length: 700 mm Leg Distance: 370 mm Weight: 5.8 kg

PN 036300520 XXL 1,000mm 036300530

TELESCOPE STAND Stand Tube Ø: 32 mm Length: 725 - 1,025 mm Leg Distance: 370 mm Weight: 7.7 kg PN 036300540



CLAMP For stands S2, S2 XL and the telescope stand; Ø 13 to 32 mm

PN 036300550



FLEX COUPLING Includes clamping stud for stirrer shaft and accepts Ø 10 mm shafts

PN 036210335



FLEXIBLE SHAFT Supplied with chuck; Overall length is 1,300mm

PN 036300600



STIRRER GUIDE PTFE with adjustable seal; accepts Ø 8 mm shafts

NS 24/29 036300591 NS 29/32 036300590







IMPELLERS

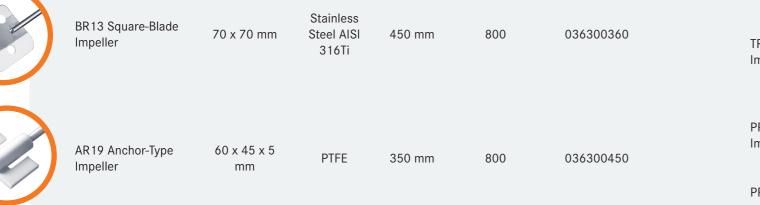
AXIAL FLOW

Axial flow in sample mixing provides vertical motion, making it ideal for stratification or solid suspension tasks. It typically generates lower shear forces than radial flow, resulting in gentle and less forceful mixing. Axial flow creates a bottom-totop motion within the sample, effectively achieving its mixing objectives.

Туре	Blade Size	Material	Length	Max rpm	PN
PR39 Pitched Blade Impeller	75 mm	PTFE	350 mm	800	036300440
HR18 Half Moon Impeller	65 x 18 x 3mm	PTFE	350 mm	800	036300460
PR30 Pitched Blade Impeller	58 mm	Stainless Steel AISI 316Ti	400 mm	2,000	036300400

TANGENTIAL FLOW

Tangential mixing involves moving fluid horizontally around the vessel. This approach is particularly suited for gentle mixing tasks and materials with high viscosity. It effectively blends substances within the vessel by creating a horizontal flow pattern.



RADIAL FLOW

Radial mixing involves moving fluid sideways, either up or down, ultimately returning it to the vessel's center. This mixing technique is characterized by its more aggressive flow and is ideal for processes such as emulsification and liquid/gas dispersion. Radial mixing is often employed when a more vigorous mixing approach is required, as it imparts a higher level of energy and turbulence, ensuring thorough blending of media.

Туре	Blade Size	Material	Length	Max rpm	PN	
BR10 Cross-Blade Impeller	50 x 12 mm	Stainless Steel AISI 316Ti	400 mm	2,000	036300390	
BR11 Straight-Blade Impeller	50 x 12 mm	Stainless Steel AISI 316Ti	400 mm	2,000	036300340	
BR12 Pivoting-Blade Impeller	60 x 15 mm	Stainless Steel AISI 316Ti	400 mm	2,000	036300350	
BR14 Collapsible- Blade Impeller	90 x 10 mm	Stainless Steel AISI 316Ti	400 mm	800	036300370	
TR20/21 Radial-Flow Impeller	28/50 mm	Stainless Steel AISI 316Ti	400 mm	2,000	036300380 036300390	
PR31/32 Ringed Impeller	33/45 mm	Stainless Steel AISI 316Ti	400 mm	2,000	036300410 036300420	
PR33 Ringed Impeller	66 mm	Stainless Steel AISI 316Ti	400 mm	800	036300430	

VISCO JET[®] IMPELLERS

The ViscoJet® Impellers are characterized by their ability to create accelerated laminar flow at the cone exit, accompanied by reverse turbulence flow at the cone entrance. This approach results in a highly efficient mixing process. ViscoJet® is well-suited for various applications, including mixing high-viscosity liquids, homogenization, dispersion, suspension, general, and even vigorous mixing tasks. Their versatility makes them a valuable tool in laboratory and industrial settings, ensuring effective and consistent blending across various materials and processes.

\sim	Туре	Diameter Size	Material	Vessel Diameter	Operating Speed Range	PN
	VISCO JET [®] 60 mm	60 mm	Stainless Steel	80 - 150 mm	200 - 800 rpm	036300470
	VISCO JET [®] 80 mm	80 mm	Stainless Steel/POM	115 - 200 mm	200 - 700 rpm	036300480 036300490
	VISCO JET [®] 120 mm	120 mm	Stainless Steel/POM	120 - 500 rpm	170 - 300 mm	036300500 036300510
	VISCO JET [®] Crack 80	80 mm	Stainless Steel AISI 316Ti	200 - 700 rpm	115 - 200 mm	036300505
HE 4.	VISCO JET [®] Crack 120	120 mm	Stainless Steel AISI 316Ti	120 - 500 rpm	170 - 300 mm	036300506





APPLICATIONS

POLYMER CHEMISTRY

The Hei-TORQUE Precision provides accuracy and programmability to increase accuracy in polymer processes. As changes to the mixture occur and polymers form, the overhead stirrer will not move off the set-point even under large torque loads.

COSMETICS

Heidolph's overhead stirrer impeller choices give the flexibility to stir cosmetic media. Some applications require low sheer gentle mixing, while others require radial flow impellers to break up material and provide high sheer.

PAINT PRODUCTION

Paint creation and mixing require flexibility and complete homogenization. The flexible stir shaft allows you to move outside the confines of your stirrer stand while axial flow impellers and secondary rotors thoroughly mix your material.



INTERNATIONAL

Heidolph Instruments GmbH & Co. KG Walpersdorfer St. 12 | 91126 Schwaback, Germany Phone: +49 9122 9920-67 | Fax: +49 9122 9920-65 sales@heidolph.de | heidolph-instruments.com

NORTH AMERICA

Heidolph North America 1235 N. Mittel Blvd. Suite B | Wood Dale, IL 60191 (224) 265-9600 | hello@heidolph.com | heidolphna.com

