Heidolph Process Chemistry Solutions





| Product | P/N |
|---|-----------|
| Reactor-Ready Core System | 015950100 |
| Reactor-Ready Duo Core System | 015970100 |
| Double Circulator Manifold & Hose Kit | 015970210 |
| Single Circulator Manifold & Hose Kit | 015970200 |
| Reactor-Ready Pilot Core System | 015908000 |
| 5 Neck Lid for Reactor Ready & Duo (Included with Reactor Ready Core) | 015950127 |
| 6 Neck Lid DN200 - 1xB19, 1xB24, 1xB29, 2xB34, 1xB45 | 015908005 |
| 7 Neck Lid DN200 - 1xB19, 1xB24, 1xB29, 3xB34, 1xB45 | 015908006 |
| 15 L Single Jacketed Pilot Process Vessel Kit | 015908013 |
| 15 L Vacuum Jacketed Pilot Process Vessel Kit | 015908014 |
| 20 L Single Jacketed Pilot Process Vessel Kit | 015908016 |
| 20 L Vacuum Jacketed Pilot Process Vessel Kit | 015908017 |
| AVA Level 1 Software Kit - US Plug | 015200005 |
| AVA Level 2 Software Kit - US Plug | 015200006 |
| AVA Level 3 Software Kit - US Plug | 015200007 |
| AVA Level 4 Software Kit - US Plug | 015200008 |
| AVA Software Level 1 & 1 Year AVA Care | 015200001 |
| AVA Software Level 2 & 1 Year AVA Care | 015200002 |
| AVA Software Level 3 & 1 Year AVA Care | 015200003 |
| AVA Software Level 4 & 1 Year AVA Care | 015200004 |
| AVA Software Upgrade Level 1 to 2 & 1 Year AVA Care | 015200009 |
| AVA Software Upgrade Level 1 to 3 & 1 Year AVA Care | 015200010 |
| AVA Software Upgrade Level 1 to 4 & 1 Year AVA Care | 015200011 |
| AVA Software Upgrade Level 2 to 3 & 1 Year AVA Care | 015200012 |
| AVA Software Upgrade Level 2 to 4 & 1 Year AVA Care | 015200013 |
| AVA Software Upgrade Level 3 to 4 & 1 Year AVA Care | 015200014 |
| AVA Care Level 1 - 1 Year | 015200015 |
| AVA Care Level 2 - 1 Year | 015200016 |
| AVA Care Level 3 - 1 Year | 015200017 |
| AVA Care Level 4 - 1 Year | 015200018 |
| Laptop Controller - US Plug | 015200020 |
| Data Hub 4 Port - US Plug | 015200021 |
| Data Hub 2 Port -US Plug | 015200022 |

| Product | P/N |
|--|-----------|
| I-L Heating Bath | 036110440 |
| 2-L Heating Bath | 036110420 |
| I-L Heating Bath | 036110400 |
| Concave Block Adapter | 036110450 |
| I-L Heating Bath for Oil | 036110430 |
| 2-L Heating Bath for Oil | 036110410 |
| I-L Heating Bath for Oil | 036110390 |
| Holding Device MR | 036306060 |
| PT 1000 Clamping System | 036300883 |
| PT 1000 Clamping System for 3 - 5 L | 036399884 |
| PT 1000 Temperature Sensor Stainless Steel | 036110350 |
| PT 1000 Temperature Sensor Glass-coated | 036110360 |
| RS 232 Cable | 036306014 |
| Silicone Proactive Cover | 036306050 |
| Stirring Bars - Cylindrical Shape | 036300930 |
| Stirring Bars - Cross Shape | 015880270 |
| Stirring Bars - Evaluation Kit | 015882570 |
| Stirring Bars - Oval Shape (15x6 mm) | 036111260 |
| Stirring Bars - Oval Shape (25x10 mm) | 036111270 |
| Stirring Bars - Oval Shape (30x10 mm) | 036111280 |
| 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 Multi-Well Block System | 015852000 |
| Heat-On Multi-Well Block Basic | 015822010 |
| Heat-On Multi-Well System Polymer | 015852015 |
| Heat-On Multi-Well Block Basic Polymer | 015852025 |
| Heat-On Multi-Well Holder | 015882000 |
| Heat-On Safety Lifting Handles | 015882140 |
| Heat-On 10ml Insert | 015882010 |





PREMIUM EQUIPMENT | INSTALLATION & TRAINING | 3 YEAR WARRANTY

Heidolph North America's goal is to give our customers the ability to focus on their research. Accomplishing this is done largely in part by providing best in class service and support for solution oriented equipment. Heidolph specializes in both benchtop and industrial rotary evaporation, making distillation more efficient, and in turn allowing the researcher's focus to be their research.

Heidolph's product lineup includes a full range of chemistry and biology tools designed to increase lab productivity, including but not limited to overhead stirrers, magnetic stirring hotplates and shakers. Quality without compromise is Heidolph's commitment to you. All Heidolph equipment is designed and made in Germany, backed by a 3 year warranty, and carries an average 10 year lifespan; making it a worth while investment.



HEI-VAP INDUSTRIAL

20L BATCH TO 24/7 CONTINUOUS ROTARY EVAPORATORS

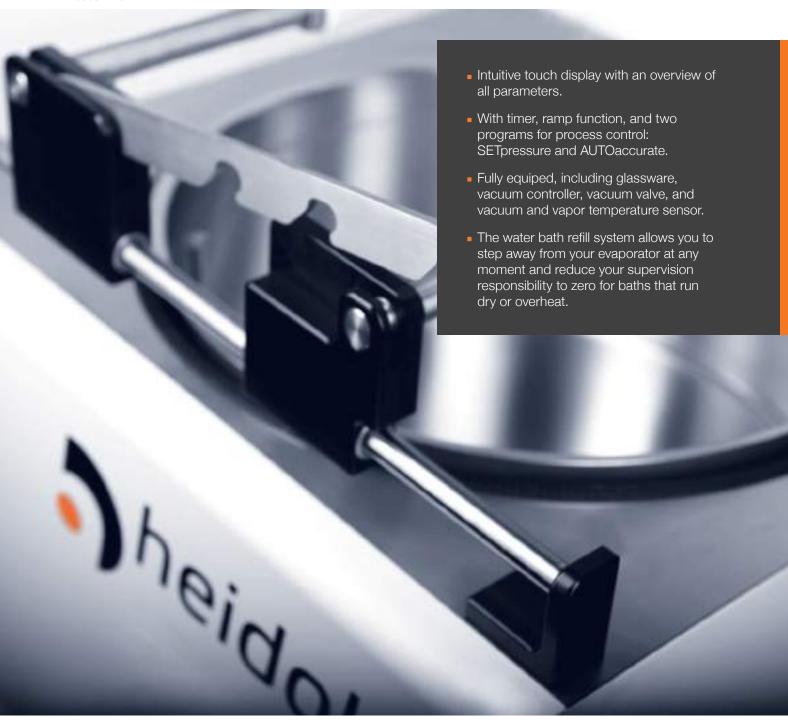
The Heidolph large scale evaporators of the Hei-VAP Industrial Series are perfectly designed for a great deal of different distilling processes, from standard evaporation without vacuum control to complex distillation processes with vacuum control.

Aspects such as safety, convenience and cost savings have been considerably taken into account during the development of the large scale evaporators. This is reflected in various unique product advantages.

HEI-VAP INDUSTRIAL

Our large scale Hei-VAP rotary evaporators can be operated in batch operations with flask sizes up to 20 liters. The many safety features and easy operation allows for safe user interaction and convenience - even with one operator. Our application consultants can advise you on process optimization techniques as well as configuring a perfect all in one package.

PN: 036072402



POWERFUL GERMAN ENGINEERING

Benefits at a Glance





The Hei-VAP Industrial has been tested and certified by OSHA's National Recognized Testing Laboratory (NRTL) Program. The certification states that the product complies with the requirements of one or more appropriate product safety test standards.

RECIRCULATING CHILLERS

The Hei-CHILL models with cooling capacities from 3,000 to 5,000 W are specifically designed for reliable continuous operation in the laboratory. The magnetic coupling of the pump and the electric motor prevents leakage.





VALVE-REGULATED VACUUM PUMP

This vacuum system can be applied in many different fields in order to evacuate, evaporate and pump out gases and vapors. Thanks to the emission condenser it is possible to achieve a chemical recovery of almost 100%

- Ultimate Vacuum of 2mbar
- High Suction Capacity of 3.0 m^{3/h}
- Secondary condenser included

PN 036304775

ENCLOSURES

The Industrial enclosure is designed to protect ther operator of industrial rotary evaporators from harmful fumes and vapors. The enclosure is designed to be attached to two 4" HVAC ducting collars and used as a full enclosure of the industrial evaporator system. This allows for precious walk-in-hood space to be used for synthetic chemistry, such as jacket reactors, separation funnels or even waste storage, rather than housing the industrial 20 L rotary evaporator.

- Designed to provide vapor/fume safety to an industrial evaporator when attached to an exhaust system (HVAC)
- Made of polycarbonate panels with multiple entry panels/doors to provide complete access to Industrial evaporator while containing vapors
- Allows operator protection while freeing up the use of a walk-in-hood.
- Complete application worksheet that will be provided by your sales rep.



| | Industrial Roto Vap Enclosure |
|----------------------------|-------------------------------|
| Dimensions (in) | 68" x 34.75" x 96" |
| Volume of Filter Air (CFM) | 600 Mas CFM at Full Opening |
| Linear Face Velocity | 60 FLPM Average |
| Weight (lbs) | 300 lbs |
| PN | 035100230 |

ACCESSORIES



Evaporating Flask

Evaporating Flask 6 L PN 036303015

Evaporating Flask 10 L PN 036303005

Evaporating Flask 20 L PN 036302995



Powder Flask

Powder Flask 10 L PN 036303035

Powder Flask 20 L PN 036303025



Receiving Flask

With drain valves, 10 L (included as a standard for all Hei-VAP Industrial models).

PN 036303040



Amber Evaporating Flask

Protect your light-sensitive media with the dark color of this 20L evaporator flask

PN 036302996



Base Cart

For all Hei-VAP Industrial models

PN 036303090



Heating Bath Liquid

Heating bath liquid up to 220°C (5 L)

PN 036300941



Tubing

Tubing for vacuum and water connection. Available as package or individual length.

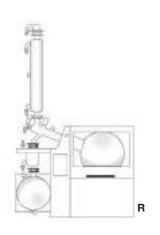
16 M Package

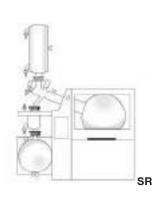
PN 036303100

By Meter

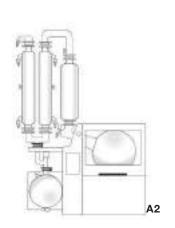
PN 036294800

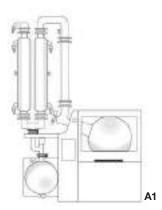
GLASSWARE

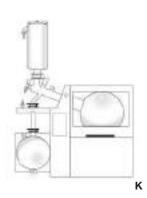












^{*} All glassware packages come with the option of having two receiving flasks.

Glassware R

 This glassware assembly includes one ascending condenser, one 20L evaporating flask, one 10L receiving flask and is recommended for all standard distillations.

Glassware Shorty R

- Identical to glassware R, but features a condenser that is 320mm shorter.
- Distillation capacity remains the same. This assembly is ideal in laboratories for hood applications or where height is restricted.

Glassware A

 This glassware assembly includes one descending condenser, one expansion vessel, one 20L evaporating flask, one 10L receiving flask and is recommended for solvents that tend to splash and foam.

Glassware A2

- This glassware assembly includes one ascending, one descending condenser and one expansion vessel, one 20L evaporating flask, one 10L receiving flask.
- For low boiling solvents and highest recovery rates.

Glassware A1

- This glassware assembly includes one ascending, one descending condenser, one 20L evaporating flask, one 10L receiving flask.
- For low boiling solvents and highest recovery rates.

Glassware K

- Condensate trap for low boiling solvents; cooling by dry ice.
- Comes with one 20L evaporating flask and one 10L receiving flask.

HEI-VOLUME DISTIMATIC

24/7 Evaporation

The Automatic Module Distimatic is perfectly designed for the automated distillation process in your lab. Run fast, reliable, automated and continuous solvent evaporation applications at the highest safety standards.

The world's first drainage of residue the Automatic Module Distimatic enables you to easily evaporate over night and during the weekend in an unattended continuous manner.

Choose from two different programs and achieve solvent separations of nealy 100% with Automatic Module Distimatic. Moreover, the degree of concentration for final product can be determined to rule out dehydration, crystallization and formation of powder.

The Automatic Module Distimatic is compatible with all Hei-VAP rotary evaporators and large-scale rotary evaporators.

Sensor Mode

A sensor detects the fill-level inside the environment flask and the requested fill-level can be set individually. The flask refill is achieved via control and under system pressure. An additional sensor monitors the quanity of the solvent mixture and powers off the unit once it is complete.

Time Mode

All parameters are controlled by individually pre-programed automatic time. The process is powered off once the pre-programed number of cycles have expired.





| | Benchtop | Industrial |
|-----------------------------------|-----------|------------|
| PN | 036294600 | 036064700 |
| Automatic Refill | Yes | Yes |
| Automatic Discharge of Condensate | Yes | Yes |
| Noise Level (db(a)) | < 80 dba | < 80 d |
| Total Power (W) | 3,500 W | 3,500 W |
| Protection Class | IP 54 | IP 54 |

TECHNICAL SPECIFICATIONS

Large-Scale Rotary Evaporators

| Model | Hei-VAP Industrial | | |
|---|--|--|--|
| Rotation speed | 6–160 rpm | | |
| Rotation speed setting | digital | | |
| Display | 7" touch display | | |
| Lift | motor lift | | |
| Height adjustment speed | 45 mm/s | | |
| Height adjustment | 180 mm | | |
| Drive | EC-motor | | |
| Heating capacity | 4,000 W | | |
| emperature range heating bath | 20–180 °C | | |
| emperature accuracy | ±1 °C | | |
| Overheat cut-off protection | 110 (H ₂ O)/210 (oil) | | |
| Bath temperature setting | digital | | |
| Automatic heating bath control | micro processor | | |
| Material heating bath | stainless steel AISI 316 L | | |
| Diameter heating bath | 400 mm | | |
| olume heating bath | 24 (H ₂ O)/22 (oil) | | |
| evel regulation of water bath | automatically due to level sensor and refill function | | |
| Display vapor temperature equired accessories | digital temperature sensor | | |
| ndicating range vapor temperature sensor | 0–200 °C (accuracy 0.1 °C) | | |
| ntegrated vacuum controller | yes | | |
| Timer | yes | | |
| acuum control program SET _{pressure} 2 | yes | | |
| /acuum control program AUTO _{accurate} 2 equires AUTO _{accurate} -sensor | yes | | |
| Programmable ramps | yes | | |
| Supply power | 4,600 W | | |
| Neight w/o glass assembly | approx. 120 kg | | |
| Dimensions w/d/h | /h 970×690×1,600mm | | |
| Rate of evaporation1 at 40 °C temperature difference | Toluene 26.0 l/h Acetone 25.9 l/h Ethanol 12.9 l/h Water 4.7 l/h | | |
| Maximum condensing surface | 1.2 m ² | | |
| Permissible ambient conditions | 5–31 °C at 80 % rel. humidity, 32–40 °C decreasing linearly up to max. 50 % rel. humidity | | |
| Protection class DIN EN 60529 | IP 20 | | |

¹ $\Delta\,\rm T$ = difference between heating bath temperature and boiling temperature 2 Only in combination with vacuum systems

TECHNICAL SPECIFICATIONS

Automatic modules

| Model | Distimatic Bench-top without drainage of residue | Distimatic Bench-top including drainage of residue |
|---|--|--|
| Compatibility Rotary Evaporators | Hei-VAP and Laborota 4000 series ³ | Hei-VAP and Laborota 4000 series ³ |
| Separate control panel | yes | yes |
| Display | digital | digital |
| Automatic refill of sample | yes | yes |
| Automatic discharge of condensate | yes | yes |
| Automatic drainage of residue | _ | - |
| Power input control box | 50 VA | 50 VA |
| Noise level | < 80 dB (A) | < 80 dB (A) |
| Total power multiple switched socket | 3,500 W | 3,500 W |
| Weight | 5 kg | 5 kg |
| Measurements w/o mounted components w/d/h | 340×135×200 mm | 340 × 135 × 200 mm |
| Permissible ambient conditions | 5–31 °C at 80 % rel. humidity, 32–40 °C decreasing linearly up to max. 50 % rel. humidity 0–2,000 m a.s.l., Contamination level 2, Overvoltage category II | 5–31 °C at 80 % rel. humidity, 32–40 °C decreasing linearly up to max. 50 % rel. humidity 0–2,000 m a.s.l., Contamination level 2, Overvoltage category II |
| Protection class DIN EN 60529 | IP 54 | IP 54 |

| Model | Distimatic Industrial without drainage of residue | Distimatic Industrial including drainage of residue | |
|---|--|--|--|
| Compatibility (Rotary Evaporators) | Hei-VAP Industrial and Laborota 20 series | Hei-VAP Industrial and Laborota 20 series | |
| Separate control panel | yes | yes | |
| Display | digital | digital | |
| Automatic refill of sample | yes | yes | |
| Automatic discharge of condensate | yes | yes | |
| Automatic drainage of residue | _ = | yes | |
| Power input control box | 50 VA | 50 VA | |
| Noise level | < 80 dB (A) | < 80 dB (A) | |
| Total power multiple switched socket | 3,500 W | 3,500 W | |
| Weight | 5 kg | 5 kg | |
| Measurements w/o mounted components w/d/h | 340×135×200 mm | 340×135×200 mm | |
| Permissible ambient conditions | 5–31 °C at 80 % rel. humidity, 32–40 °C decreasing linearly up to max. 50 % rel. humidity 0–2,000 m a.s.l., Contamination level 2, Overvoltage category II | 5–31 °C at 80 % rel. humidity, 32–40 °C decreasing linearly up to max. 50 % rel. humidity 0–2,000 m a.s.l., Contamination level 2, Overvoltage category II | |
| Protection class DIN EN 60529 | IP 54 | IP 54 | |

REACTOR-READY

TOOL LESS REACTORS

The Heidolph Radleys Reactor-Ready Series includes three different vessel models and various vessels. All Reactors are designed to be easily and quickly configured to suit the chemistry and scale you need for each project.

The innovative support collars, quick release vessel clamp and self aligning stirrer coupling makes it easy to change the vessel out in minutes. Our high quality glass blown vessel come in a variety of sizes from 100ml to 5 liters.



The Reactor-Ready Series – Most Versatile Reaction Stations

The Reactor Ready Series is the one reactor work station that can replace many, saving you money and fumehood space.







Reactor-Ready Lab Reactor

The Reactor-Ready is designed as a universal reactor workstation that can be used for different vessel sizes and different experiments. Vessels are avaliable in sizes 100 ml to 5 L.

Reactor-Ready Duo Lab Reactor

The Reactor-Ready Duo shares the same unique features as the Reactor-Ready, except it supports two separate jacketed glass reaction vessels. Vessels are avaliable in sizes 100 ml to 5 L.

Reactor-Ready Pilot Lab Reactor

The Reactor-Ready Pilot is designed as a universal reactor station that can be used with different vessels and for different projects. Vessels are avaliable in size 100 ml to 20 L.

VESSELS

Standard Reaction Vessel Kits

Includes: Glass Reaction Vessel, PTFE Anchor Stirrer Paddle, PTFE Pt 1000 Temp. Probe, (with Lemo plug for connection to the thermoregulator), and PTFE Temperature Probe Adapter

Process Reaction Vessel Kits

Includes: Process Vessel, Turbine Stirrer Paddle, PTFE Pt 1000 Temp. Probe, (with Lemo plug for connection to the thermoregulator), and PTFE Temperature Probe Adapter









Standard Reaction Kits

| Туре | PN |
|-----------------------------------|-----------|
| 250ml Single Jacketed Vessel Kit | 015950103 |
| 250ml Vacuum Jacketed Vessel Kit | 015950104 |
| 500ml Single Jacketed Vessel Kit | 015950105 |
| 500ml Vacuum Jacketed Vessel Kit | 015950106 |
| 1000ml Single Jacketed Vessel Kit | 015950107 |
| 1000ml Vacuum Jacketed Vessel Kit | 015950108 |
| 2000ml Single Jacketed Vessel Kit | 015950109 |
| 2000ml Vacuum Jacketed Vessel Kit | 015950110 |
| 5000ml Vacuum Jacketed Vessel Kit | 015950112 |

Process Reaction Kits

| Туре | PN |
|---|-----------|
| 100ml Single Jacketed Process Vessel Kit | 015952350 |
| 100ml Vacuum Jacketed Process Vessel Kit | 015950114 |
| 250ml Single Jacketed Process Vessel Kit | 015952360 |
| 250ml Vacuum Jacketed Process Vessel Kit | 015951115 |
| 500ml Single Jacketed Process Vessel Kit | 015951120 |
| 500ml Vacuum Jacketed ProcessVessel Kit | 015950189 |
| 1000ml Single Jacketed Process Vessel Kit | 015950187 |
| 1000ml Vacuum Jacketed Process Vessel Kit | 015952170 |
| 2000ml Single Jacketed Process Vessel Kit | 015950188 |
| 2000ml Vacuum Jacketed Process Vessel Kit | 015952200 |
| 5000ml Single Jacketed Process Vessel Kit | 015952060 |
| 5000ml Vacuum Jacketed Process Vessel Kit | 015950190 |
| | |



MYA 4

REACTION STATION

The Mya 4 Reaction Station is a 4-zone reaction station offering safe and precise heating, active cooling, software control, automatic reporting and data-logging for 24/7 unattended chemistry.

- 4 different temperature zones, each with heating and active cooling
- Use one compact system for a range of experiments
- Accepts a wide range of vessel sizes and styles
- Control your experiments and log results automatically
- Up to 200°C difference between adjacent positions
- Choose to control block by block or solution temperature
- Magnetic and overhead stirring (100 1,000 rpm)
- Temperature range: -30°C to 180°C



PACKAGES

Process Package

Choose the manifold head for use with glass condensers; overhead stirrers and process vessels; ideal for mimicking jacketed reactions.

Discovery Package

Choose the reflux head for integrated reflux cooling; combines well with magnetic stirring; ideal for use with round bottom flasks.

VESSEL STYLES & VOLUMES

- Vials and tubes range from 2 ml to 50 ml.
- Round bottom flasks 25 ml, 50 ml, 100 ml, and 250 ml
- Process reaction vessels: 50 ml, 100 ml, 150 ml, 250 ml and 400 ml
- 3 or 5 Multi-neck glass lids
- Additional glassware includes condensers, dropping funnels, solid addition funnels, stoppers, etc.



Ask your local specialist for a no obligation consultation and demo.

Learn more on our YouTube channel https://youtu.be/n5HjVpUlsxM



HYDROGEN GENERATOR

The H-Genie™ is a compact high pressure hydrogen gas generator designed to be the safest and most powerful gas generator in the world specifically for chemists. As the only generator capable of generating up to 1,450psi of hydrogen gas from water at up to 1 NL/min, the Genie is designed to be the true smart gas cylinder replacement for any chemistry laboratory. It utilizes patented pressure cell technology to produce 4.0 purity from water pressure up to 100 bar (145.5 - 1450 psi) at flow rates up to 1 NL/min. The H-Genie will then monitor hydrogen consumption and notify you when the reaction has stopped. The new H-Genie: Generating Chemistry Safely!

The system is designed to be simple to use with any reactor system. The H-Genie will fill the vessel until the pressure or required volume is reached and automatically maintain the pressure of hydrogen in the vessel as it is continuously consumed by the reaction.

SAFETY & FEATURES



ON-DEMAND GENERATING

Hydrogen is generated on demand from water electrolysis and 3 liters of deionized water. No hydrogen cylinders necessary.



NO HYDROGEN CYLINDERS

No Hydrogen cylinders means the H-Genie can be used in any fume hood freeing up additional space.



PATENTED PRESSURE CELL TECHNOLOGY

The H-Genie utilizes patented pressure cell technology to produce 4.0 purity from water at pressures up to 100 bar (145.5 - 1450 pxi) at flow rates up to 1 NL/min.



SAFETY DETECTION

The system includes hydrogen detectors to automatically detect if there is a gas leak, pressure drop, or the concentration of hydrogen gas has risen above a safe level.



NO STORAGE OF HYDROGEN

The H-Genie does not store hydrogen but generates it on-demand. If there is an earthquake there is no hydrogen internally to cause a risk and a power cut would stop production of hydrogen automatically.

WATER GOES IN

OXYGEN REMOVED

HYDROGEN IS LEFT

| | H-Genie |
|-----------------------------------|----------------------|
| Pressure Range (bar) | 1 - 100 |
| Purity (%) | 99.99 |
| Gas Flow Range (NL/min) | 0.1 to 1.0 |
| Hydrogen Production Rate (NL/min) | 110V |
| Water Consumption Rate (ml/hr) | 200 |
| Water Reservoir Capacity (L) | 3 |
| Water Requirement | Deionized Water |
| Recommended Environment | Ventilated Fume Hood |
| PN | 06500000 |



HEI-TORQUE

OVERHEAD STIRRERS

Our overhead stirrers enrich your lab with enhanced performance, reliability and powerful stirring for years. The Hei-TORQUE laboratory stirrers are equipped with the latest drive technology and the sealed housing protects the inside from vapor and dust.

Your lab agitator should not just be robust, but also practical. With its unique Quick-Chuck, you can change impellers fast and easy without any additional tools.

The Hei-TORQUE Series provides a suitable stirring tool for every application.

HEI-TORQUE

The Hei-TORQUE models are suitable for all requirements, including small and light equipment, easy operation with high torque, precise adjustment options and an interface for documentation.



HEI ON POWER

Benefits at a Glance





The Hei-TORQUE Series has been tested and certified by OSHA's National Recognized Testing Laboratory (NRTL) Program. The certification states that the product complies with the requirements of one or more appropriate product safety test standards.

The Hei-TORQUE Series – Infinite Stirring Capabilities

The Hei-TORQUE Series has a suitabe solution for all requirements, including small and light equipment, easy operation with high torque, precise adjustment options and an interface for documentation.



Hei-TORQUE Core

The Hei-TORQUE Core is lightweight for big tasks and has a compact design with enough power for large volumes. The smallest of the devices can mix up to 25L at low viscosity with ease.

PN 036090005



Hei-TORQUE Value

The Hei-TORQUE Value is ideal for standard stirring tasks. They are designed to mix and disperse medias that require non-reproducible results in high-viscosity applications.

Value 100: 036093030 Value 200: 036093050 Value 400: 036093070



Hei-TORQUE Precision

The Hei-TORQUE Precision is ideal for demanding tasks which have to be reproducible and documentable. The huge number of additional features and operation modes allows for a perfect adjustment to your individual application.

Precision 100: 036093090
Precision 200: 036093110
Precision 400: 036093150

IMPELLERS

Precise working with an overhead stirrer depends on the right choice of the stirrer tool. When choosing a stirrer tool you have to consider its different characteristics and their effects.







| Blade & Half Moon Impellers | | | | | |
|--------------------------------------|------------------------|-------------------------------|----------------|---------|-----------|
| Туре | Blade Size (mm) | Material | Length (mm) | Max rpm | PN |
| BR 10 Cross-Blade Impeller | 50 x 12 | Stainless Steel AISI 316Ti | 400 | 2,000 | 036304390 |
| BR 11 Straight- Blade Impeller | 50 x 12 | Stainless Steel AISI 316Ti | 400 | 2,000 | 036300340 |
| BR 12 Pivoting- Blade Impeller | 60 x 15 | Stainless Steel AISI 316Ti | 400 | 2,000 | 036300350 |
| BR 13 Square- Blade Impeller | 70 x 70 | Stainless Steel AISI 316Ti | 450 | 800 | 036300360 |
| BR 14 Collapsible- Blade Impeller | 90 x 10 | Stainless Steel AISI 316Ti | 400 | 800 | 036300370 |
| HR 18 Half-Moon Impeller | 65 x 18 x 3 | PTFE | 350 | 800 | 036300460 |
| Radial-Flow In | npellers | | | | |
| Туре | Ø Turbine Size (mm) | Material | Length (mm) | Max rpm | PN |
| TR 20 Radial-Flow Impeller | 28 | Stainless Steel AISI 316Ti | 400 | 2,000 | 036300380 |
| TR 21 Radial-Flow Impeller | 50 | Stainless Steel AISI 316Ti | 400 | 2,000 | 036300390 |
| Anchor-Type Impellers | | | | | |
| Туре | Blade Size (mm) | Material | Length (mm) | Max rpm | PN |
| AR 19 Anchor-Type Impeller | 60 x 45 x5 | PTFE | 350 | 800 | 036300450 |

Propeller-Type Impellers

These impellers are recommended for applications which require average or high speed and mixing tasks with medium or high viscosity.

| Туре | Prop Size (mm) | Material | Length (mm) | Max rpm | PN |
|----------------------------------|-------------------|-------------------------------|----------------|---------|-----------|
| PR 39 Pitched- Blade Impeller | 75 | PTFE | 350 | 800 | 036300440 |
| PR 30 Pitched- Blade Impeller | 58 | Stainless Steel AISI 316Ti | 400 | 2,000 | 036300400 |
| PR 31 Ringed Propeller | 33 | Stainless Steel AISI 316Ti | 400 | 2,000 | 036300410 |
| PR 32 Ringed Propeller | 45 | Stainless Steel AISI 316Ti | 400 | 2,000 | 036300420 |
| PR 33 Ringed Propeller | 66 | Stainless Steel AISI 316Ti | 400 | 800 | 036300430 |



VISCO JET®

VISCO JET® Impellers are an all-rounder for low to high viscosity medias. These impellers can reduce your process times while preforming the best mixing results.



VISCO JET® 60 mm

Material: Stainless Steel

Ø (mm): 60

Speed Range (rpm): 200 - 800 Vessel dia. (mm): 80 -150

PN 036300470



VISCO JET® 80 mm

Material: Stainless Steel/Plastic

Ø (mm): 80

Speed Range (rpm): 200 - 700 Vessel dia. (mm): 115 - 200

PN 036300480 Plastic PN 036300490



VISCO JET® 120 mm

Material: Stainless Steel/Plastic

Ø (mm): 120

Speed Range (rpm): 120-500 Vessel dia. (mm): 170 - 300

PN 036300500 Plastic PN 036300510

| | Ø (mm) | Material | Speed Range | Vessel Dia. (mm) | PN |
|----------------------|--------|----------------------------|-------------|------------------|-----------|
| VISCO JET® Crack 80 | 80 | Stainless Steel AISI 316Ti | 200 -700 | 115 - 200 | 036300505 |
| VISCO JET® Crack 120 | 120 | Stainless Steel AISI 316Ti | 120 - 500 | 170 - 300 | 036300506 |

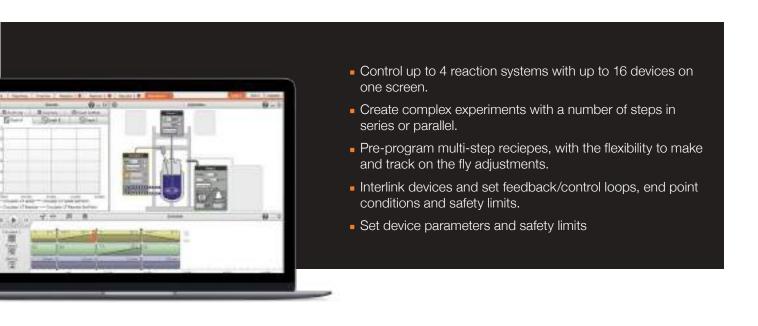
HEI-CONTROL SOFTWARE

For automated and reproducible processes, the simultaneous operation of multiple devices and applications with high viscosities in conjunction with required heat output (e.g. cosmetics). Combine the fastest heat-up times of the Hei-PLATE magnetic stirrers with the power and precision of the Hei-TORQUE Precision.



AVA™ SOFTWARE

AVA™ allows you to take control of your multi-device jacketed reaction systems by automatically logging your process data and allowing for unattended chemistry.



TECHNICAL SPECIFICATIONS

Overhead Stirrers

| Model | Hei-TORQUE Core | Hei-TORQUE Value 100 | Hei-TORQUE Value 200 |
|----------------------------------|---|---|---|
| Power Rating, Motor Input/Output | 105/75 W | 90/50 W | 120/80 W |
| Number of Speed Gears | 1 | 1 | 1 |
| Speed Range | 20 - 2,000 rpm | 10 - 2,000 rpm | 10 - 2,000 rpm |
| Direction of Rotation | <u> </u> | | - |
| Speed Indicator | Digital | Digital | Digital |
| Operating Panel | Monochrome 2" | Monochrome 2.4" | Monochrome 2.4" |
| Speed Control | Electronic | Electronic | Electronic |
| Torque Max | 40 Ncm* | 100 Ncm* | 200 Ncm |
| Torque Indicator | Symbol | Symbol | Symbol |
| Overheat Protection | Automatic Cut-Out | Automatic Cut-Out | Automatic Cut-Out |
| Motor Protection | Temperature Control Software | Temperature Control Software | Temperature Control Software |
| Viscoisty Max. | 10,000 mPas | 60,000 mPas | 100,000 mPas |
| Stirring Cap Max | 25 L | 50 L | 50 L |
| Analog/Digital Interface | <u> </u> | | - |
| Admissible Session | Continuous Operation | Continuous Operation | Continuous Operation |
| Counter/Timer | Yes | | - |
| Shaft Diameter Max | 10.5 mm | 10.5 mm | 10.5 mm |
| Dimensions | 70 x 195 x 281.5 mm | 86 x 247 x 350 mm | 86 x 247 x 350 mm |
| Stay Bar Size (Ø x w) | 10.5 mm | 10.5 mm | 13 x 160 mm |
| Weight | 2.3 kg | 4.4 | 5.1 kg |
| 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 |
| Protection Class | IP 42 | IP 54 | IP 54 |

Standard supply voltage: 115 V. Other voltags upon request, please specify for order.

^{*} temporary overload 65 Ncm

| Hei-Torque Value 400 | Hei-TORQUE Precision 100 | Hei-TORQUE Precision 200 | Hei-TORQUE Precision 400 | |
|---|---|---|---|--|
| 150/90 W | 90/50 W | 120/180 W | 150/90 W | |
| 2 | 1 | 1 | 2 | |
| 10 - 400 rpm 20 - 2,000 rpm | 10 - 2,000 rpm | 10 - 2,000 rpm | 10 - 400 rpm 20 - 2,000 rpm | |
| _ | Yes | Yes | - | |
| Digital | Digital | Digital | Digital | |
| Monochrome 2.4" | Color 3.2" | Color 3.2" | Color 3.2" | |
| Electronic | Electronic | Electronic | Electronic | |
| 400 Ncm | 100 Ncm | 200 Ncm | 400 Ncm | |
| Symbol | Precise Value | Precise Value | Precise Value | |
| Automatic Cut-Out | Automatic Cut-Out | Automatic Cut-Out | Automatic Cut-Out | |
| Temperature Control Software | Temperature Control Software | Temperature Control Software | Temperature Control Software | |
| 250,000 mPas | 60,000 mPas | 100,000 mPas | 250,000 mPas | |
| 100 L | 50 L | 50 L | 100 L | |
| _ | USB and RS 232 | USB and RS 232 | USB and RS 232 | |
| Continuous Operation | Continuous Operation | Countinuous Operation | Continuous Operation | |
| _ | Yes | Yes | Yes | |
| 10.5 mm | 10.5 mm | 10.5 mm | 10.5 mm | |
| 93 x 247 x 350 mm | 86 x 247 x 350 mm | 86 x 247 x 350 mm | 93 x 247 x 350 mm | |
| 13 x 160 mm | 13 x 160 mm | 10.5 mm | 10.5 mm | |
| 5.3 kg | 4.4 kg | 5.1 kg | 5.3 kg | |
| 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 | |
| IP 54 | IP 54 | IP 54 | IP 54 | |

HEI-PLATE

MAGNETIC STIRRERS

Even the smallest daily helper should inspire and accompany you for many years. That is the reason for our Magnetic Stirrers to be uncompromising when it comes to quality and reliability. The Hei-PLATE magnetic stirrers impress through a sealed and fireproof housing and an unique Kera-Disk® hotplate coating, which stands for chemical resistance and faster heat-up times.

The powerful and extended heating capacity of 600 W reduces process times noticeably. Intelligent functions such as dynamic residual heat indicator, a separate way to activate the heat-function and an independent second safety circuit make the Heidolph Magnetic Stirrer the safest in terms of heating and mixing in your lab.















HEI-PLATE

The premium devices of the Hei-PLATE Series offer the highest operating safety and comfort standards. 600 W heating capacity and the special Kera-Disk® hotplate with aluminum core allow for minimum heat-up phases that result in cost reductions.



UNCOMPROMISING QUALITY

Benefits at a Glance





The Hei-PLATE Series has been tested and certified by OSHA's National Recognized Testing Laboratory (NRTL) Program. The certification states that the product complies with the requirements of one or more appropriate product safety test standards.

The Hei-PLATE Series – When Power Meets Safety

STANDARD MODELS

The premium devices of the Hei-PLATE Series are ideal for decomposing organic and inorganic substances from smooth to intense.



MR Hei-Standard

The Hei-Standard is for all standard applications. The two separate control knobs give direct access to parameters making it simple to use.

145mm: 036110519 135mm: 036110521



MR Hei-Tec

The Hei-Tec has precise control options and device parameter monitoring on the digital display. It can also be connected to a temperature sensor.

145mm: 036110550 135mm: 036110620

145mm with PT1000: 036110582 135mm with PT1000: 036110583



MR Hei-Connect

The Hei-Connect is for precise process documentation. The digital display provides precise control options and device monitoring with the compatibility with the PT 1000 temperature sensor. Inclues Hei-Control Software.

145mm: 036110601 135mm: 036110602

145mm with PT1000: 036110603 135mm With PT1000: 036110604

NON-HEATING MODELS

The non-heating models of the Hei-PLATE Series are ideal for gentle stirring in biology and microbiology applications.



MR Hei-MIX L

The Hei-MIX L includes a 145 mm Kera-Disk® top plate and the powerful stirring magnet allows stirring with the volume up to 20 liters. The speed range is from 100 to 1,400 rpm.

PN 036110465



MR Hei-MIX S

The Hei-MIX S has a space saving polyamide housing. The white PVDF top plate is perfect for titration and comes with a diameter of 104 mm. The speed range of up to 2,200 rpm is sufficient for applications up to 5 liters.

PN 036110460

ACCESSORIES



Findenser - Air Condenser

The Findenser is comprised of an internal glass condenser and an external, finned aluminum jacket, with a small amount of water permanently sealed inside. The award winning condenser is designed to replace the need for water cooled condensers.



Heat-On Blocks

Heat-On Blocks allow you quick and safe personal heating and stirring of your round bottom flasks, without the risks of fire or personal injury and the messy clean up associated with using oil. Sizes up to 5 liters.



Multi-Well Holders

Multi-Well Holders are designed to hold either one or two inserts for flasks. Inserts are available in sizes 10ml, 25ml, 50ml, 100ml and 150ml.



Wide Neck Flasks

Choice of flask sizes and styles with a wide neck option. Wide neck flasks allow easier removal of viscous and solid samples an the use of larger stirrer blades.



Regular Flasks

Various flask sizes available with dropping funnel, a zeotropic, side arm, etc.



Stir Bars

Rare earth stirring bars in various sizes and shapes provide powerful stirring and a deep vortex.



Starfish Workstation

The Starfish Multi-Experiment Workstation will save you the time and reduce clutter on your lab bench by performing multiple experiments at the same time.



MonoBlocks

Monoblocks are single blocks with multiple wells of the same size. Vial sizes up to 500ml.



PolyBlocks

Polyblocks are small segments which can be mixed to accommodate any combination of vessels, vials, tubes and flasks.



Manifolds

Allows for coolant, gas or vacuum to be evenly distrubuted to up to five condensers or vessels. Water-Distrubtuion and Gas/ Vacuum Distribution Manifolds avaliable.



Carousel 12 Plus

The unique patented Carousel simultaneously heats, cools, stirs and reflux multiple samples under an inert atmosphere. Accomodates vessels up to 20 ml.



Carousel 6 Plus

The Carousel 6 Plus Reaction Station simultaneously heats and stirs up to 6 round bottom flasks. Flexibility is inherent in its design: choose any combination of flask sizes with different side arm combinations and accessories. Accomodates vessels up to 250ml.



Cooled Carousel 12 Plus

The innovative cooled Carousel 12 Plus reservoir is designed to accept the removable reflux/inerting head from the Carousel 12 Plus allowing for the reaction tubes to be easily and rapidly transferred between heating and cooling bases.



Cooled Carousel 6 Plus

Simultaneously stir and cool reaction from ambient down to -70°C using up to 6 round bottom flasks. As with the Carousel 6 Plus, you can use any combination of flask sizes.



Cool-It Cooling Bowls

Cool-It is designed to fit on a stirring hotplate, for controlled stirring through a magnetic stirring bar in the reaction flask. Cooling is obtained by using an appropriate cooling mixture such as dry ice and acetone.



Storm Heating & Cooling Workstation

Combined with a suitable heating/cooling ciculatory, the powerful Storm can provide controlled heating and cooling.



Breeze Heating & Cooling Workstation

The compact Breeze provides rapid controlled heating and cooling from -30° to +165°C; ideal for control by solution temperature.



Tornado Plus Overhead Stirring Station

The Tornado is a modular add-on for the Carousel 6 Plus, replacing the magnetic stirring of the stirring hotplate with direct stirring from a single overhead stirrer.

TECHNICAL SPECIFICATIONS

Magnetic Stirrers

| Model | Hei-Mix S | Hei-Mix L |
|--|---|---|
| Speed Range | 0 - 2,200 rpm | 100 - 1400 rpm |
| Speed Accuracy | ±5% | ±2% |
| Drive | Shaded Pole Motor | EC-Motor |
| Operating Mode | Continuous | Continuous |
| Display | | |
| Analog/Digital Interface | | - |
| Heating Power | - | - |
| Hotplate Temperature | - | - |
| Medium Temperature Max | | - |
| Accuracy Temperature Setting | - | |
| External Temperature Sensor | - | - |
| Temperature Accuracy with External Temperature Sensor | - | - |
| Sensor Breakage Protection | - | _ |
| Temperature Control | - | - |
| Temperature Accuracy Hotplate | - | - |
| Residual Heat Indicator | - | - |
| Safety Circuit Hotplate | - | - |
| Time | - | - |
| Stirring Capacity Max (H ₂ O) | 5L | 20L |
| Load Max | 6 kg | 25 kg |
| Power Consumption | 7 W | 20 W |
| Plate Diameter | 104 mm | 145 mm |
| Plate Material | PVDF | Kera-Disk® - Aluminum alloy coated |
| Weight | 1.1 kg | 2.9 kg |
| Dimensions (w/d/h) | 140 x 126 x 80 mm | 173 x 277 x 94 mm |
| Permissible Ambient Conditions | 5 - 31°C at 80% rel. humidity, 32 - 40°C decreasing linearly up max. 50% rel.humidity | 5 - 31°C at 80 % rel. humidity 32 - 40°C decreasing linearly up to max. 50% rel. humidity |
| Protection Class | IP 21 | IP 32 |

| Hei-Standard | Hei-Tect | Hei-Connect |
|---|---|---|
| 100 - 1,400 rpm | 100 - 1,400 rpm | 100 - 1,400 rpm |
| ±2% | ±2% | ±2% |
| EC-Motor | EC-Motor | EC-Motor |
| Continuous | Continuous | Continuous |
| - | Digital | Digital |
| _ | - | Digital (RS 232) |
| 800 W* | 800 W* | 800 W* |
| 20 - 300° C | 20 - 300° C | 20 - 300°C |
| 250° C | 250° C | 250° C |
| - | ±1°C | ±1°C |
| Pt 1000 | Pt 1000 | Pt 1000 |
| _ | ±1°C | ±1°C |
| with Pt 1000 | with Pt 1000 | with Pt 1000 |
| Micro Controller r | Micro Controller | Micro Controller |
| ±5°C | ±5°C | ±5°C |
| Yes | Yes | Yes |
| 25°C - over hotplate temperature | 25°C - over hotplate temperature | 25°C - over hotplate temperature |
| - | - | Yes |
| 20 L | 20 L | 20 L |
| 25 kg | 25 kg | 25 Kg |
| 600 W | 600 W | 600 W |
| 135mm & 145 mm | 135mm & 145 mm | 135mm & 145 mm |
| Kera-Disk® - Aluminum alloy coated | Kera-Disk® - Aluminum alloy coated | Kera-Disk® - Aluminum alloy coated |
| 2.9 kg | 2.9 kg | 2.9 kg |
| 173 x 277 x 94 mm | 173 x 277 x 94 mm | 173 x 277 x 94 mm |
| 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 |
| IP 32 | IP 32 | IP 32 |

NOTES



| Product | P/N |
|---------------------------------------|-----------|
| Heat-On 25ml Insert | 015882020 |
| Heat-On 50ml Insert | 015882030 |
| Heat-On 100ml Insert | 015882040 |
| Heat-On 150ml Insert | 015882050 |
| Heat-On 100ml Block Polymer | 015882055 |
| Heat-On 250ml Block Polymer | 015882060 |
| Heat-On 500ml Block Polymer | 015882070 |
| Heat-On 1 Liter Block Polymer | 015882080 |
| Heat-On 2 Liter Block Polymer | 015882090 |
| Heat-On 3 Liter Block Polymer | 015882100 |
| Heat-On 4 Liter Block Polymer | 015882105 |
| Heat-On Insert for 8x16mm Tube | 015882110 |
| Heat-On Insert for 6x17mm Biot | 015882115 |
| Heat-On Insert for 2x20mm Tube | 015882120 |
| Heat-On Insert for 4x24mm Tube | 015882130 |
| Heat-On 2x1 in Tube | 015882135 |
| Heat-On Insert for 3x28 Biogate | 015882136 |
| Heat-On Safety Lift Handles | 015882140 |
| Heat-On Multi-Well Holder PTFE | 015882161 |
| Heat-On Insert for 4x20mm Tube | 015882270 |
| Heat-On Insert for 4x24mm Tube | 015882290 |
| leat-On 5 Liter Block | 015882300 |
| Heat-On 2L Florentine Block | 015882350 |
| Heat-On 1L Florentine Block | 015882360 |
| Heat-On 500ml Florentine Block | 015882370 |
| Heat-On 200ml Pear Block | 015882380 |
| Heat-On 300ml Pear Block | 015882390 |
| Heat-On Adaptor Plate F Square | 015882490 |
| Heat-On Insert Upgrade Kit | 015882491 |
| Heat-On 200ml Block with Flask Cutout | 015882580 |
| Heat-On 250ml Block with Flask Cutout | 015882590 |
| Heat-On Mtp Holder | 015882610 |
| Heat-On Mtp Insert 24x16mm | 015882620 |

| Product | P/N |
|--|-----------|
| Heat-On Mtp Insert 48x12mm | 015882620 |
| Support Rod for Bath Attachments from 3 to 5 L | 036306030 |
| Retort Clamp | 015882540 |
| Boss Head | 015882550 |
| Flask Stand and Clamp Kit | 015882510 |
| Starfish Base Plate (135mm) | 015890010 |
| Starfish Base Plate (145mm) | 015890020 |
| Starfish Base Plate Handles (Pair) | 015890060 |
| 150ml Flask Insert | 015890250 |
| 100ml Flask Insert | 015890260 |
| 50ml Flask Insert | 015890270 |
| IOml Flask Insert | 015890280 |
| 5ml Flask Insert | 015890290 |
| Monoblock for 16x25mm Tubes | 015890080 |
| Monoblock for 16x24mm Tubes | 015890090 |
| Monoblock for 40x12mm Tubes | 015890100 |
| Monoblock for 16x28mm Vials | 015892040 |
| Monoblock for 20x21mm Vials | 015890100 |
| Monoblock for 40x17mm Vials | 015890130 |
| Monoblock for 40x15mm Vials | 015890140 |
| Monoblock for 40x12mm Vials | 015890150 |
| Polyblock for 1 x 250ml Flask | 015890160 |
| Polyblock for 3 x 25mm Tubes | 015890170 |
| Polyblock for 3 x 24mm Tubes | 015890180 |
| Polyblock for 9 x 16mm Tubes | 015890190 |
| Polyblock for 9 x 12mm Tubes | 015892000 |
| Polyblock for 3 x 28mm Vials | 015892050 |
| Polyblock for 3 x 21mm Vials | 015890210 |
| Polyblock for 7 x 17mm Vials | 015890220 |
| Polyblock for 9 x 15mm Vials | 015890230 |
| Polyblock for 9 x 12mm Vials | 015890240 |
| 5 Way Clamp - Velcro | 015890310 |
| Way Clamp - Silicone | 015892140 |

| roduct | P/N |
|---|-----------|
| /ater Manifold | 015890340 |
| as/Vacuum Manifold | 015890350 |
| eplacement Self Adhesive Velcro Pads (200mm, 10 pack) | 015890320 |
| eplacement Velcro Loop Strips (200mm, 5 pack) | 015890330 |
| eplacement Silicone Straps (200mm, 5 pack) | 015892170 |
| 50mm Support Rod | 015890410 |
| 50mm Support Split Rod | 015890420 |
| arousel 12 Reaction System | 015862450 |
| uick Thread Glass Reaction Tube (6 pack) | 015862540 |
| uick Thread Glass Reaction Tube (12 pack) | 015862550 |
| asy-On Fluoropolymer Cap (6 pack) | 015862520 |
| ctagonal Stirring Bar 16.5mm RE (20 pack) | 015880240 |
| ross Shape Stirring Bar 13mm (20 pack) | 015880270 |
| TFE Magnetic Stirring Bar Retriever 350mm | 015880280 |
| TFE Magnetic Stirring Bar Evaluation Kit (30 pack) | 015880290 |
| ilicone Seals for all Caps (100 pack) | 015880430 |
| inc Plated Wire Rack for 36x24mm Tubes | 015860430 |
| arousel 12 Plus Stand | 015862500 |
| arousel Stirring Hotplate 115V US Plug | 015750024 |
| arousel Temperature Controller | 015750003 |
| arousel 12 Plus Cooling Reservoir & Lid | 015862460 |
| igital Thermometer (-250°C to +400°C) | 015860140 |
| ry Ice Scoop | 015860170 |
| ilicone Septa for PTFE Caps | 015880430 |
| 50ml Reaction Flask, Reflux Tube and Connecting Set | 015861962 |
| 24/29 Rodaviss Sealing Cap | 015880500 |
| otary Evaporator Adaptors Ordinary B29 Socket to B24 Cone | 015880530 |
| 00ml Reaction Flask | 015880610 |
| x 250ml Azeotropic Reaction Flask (3 pack) | 015881552 |
| luminum Insert for 100ml Reaction Flask (6 pack) | 015860480 |
| eaction Flask Support Ring (6 pack) | 015860500 |
| lliptical Stirring Bar 25mm RE (10 pack) | 015880330 |
| ubing for inert Gas or Reflux Cooling (2 meters) | 015860550 |

| Product | P/N |
|---|-----------|
| 250ml Reaction Flask with B24/29 Sidearm & Septa Port (6 pack) | 015880670 |
| 2x B24/29 Liquid Additions Dropping Funnel & Pressure Equalizing Arm (3 pack) | 015880680 |
| B24/29 Solid Additions Funnel (3 pack) | 015880690 |
| PTFE/Silicone Septa 29mm - B24/29 (50 pack) | 015880680 |
| Cooled Carousel 6 Plus (Reservoir, Head, Stand & Cover) | 015850410 |
| Protective Cold Temperature Gloves | 015860830 |
| Cold Temperature Apron 1060mm Long Waterproof | 015860180 |
| Protective Face Shield | 015860190 |
| Cool-It Small Bowl & Lid | 015882420 |
| Cool-It Large Bowl & Lid | 015882460 |
| Adaptor Plate for 135mm Hotplate | 015882450 |
| Silicone Seals for All Caps (100 pack) | 015880430 |
| Zinc Plated Wire Rack for 36x24mm Tubes | 015860430 |
| Universal Stand S2 | 026200520 |
| Stand S2 XXL | 036300530 |
| Telescope Stand | 036300540 |
| Clamp | 036300550 |
| Flex-Coupling | 036300585 |
| Flexible Shaft | 036300600 |
| Stirrer Guide (NS 24/29 PTFE) | 036300591 |
| Stirrer Guide (NS 29/32 PTFE) | 036300590 |
| Shaft Guard | 036300611 |
| Shaft Guard Adapter Set | 036300612 |
| RS232 Cabloe for Hei-Connect/Hei-TORQUE Precision | 036306014 |



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