

Intelligent Evaporation

Leading Safety Standards

Superior Ease of Use

Reduced Cost of Ownership

 **Heidolph**
Research made easy



Do you demand the highest safety standards, perfectly engineered ease of use and reduced cost of ownership?

Intelligent Evaporation...

... stands for an overheat protection design that prevents water baths running dry, provides a detachable panel for superior ease of use from outside closed fume hoods and offers a proven vacuum seal and vapor tube system guaranteed for years of operation!

Leading Safety Standards

- Two independent safety circuits **avoid an overheat situation** of your heating bath: If bath temperature overshoots by 5 °C and if your water bath runs dry, heating will be switched off automatically
- To avoid** an overtemperature situation and potential **thermal damage** to your sample, you can individually pre-program a maximum temperature on the Hei-VAP Precision, at which the bath powers off
- In case of a power cut, all motor lift models will remove the flask from the heating bath **preventing safety hazards** and potential thermal damage to your sample
- To protect you from splashes and scalding**, the Hei-VAP heating bath features an integrated pour spout to remove bath fluid safely
- Heating bath is constructed with a **double wall** for your protection against burns and scalding
- The guard hood **covers the entire bath completely** even if the heating bath is adjusted horizontally to its most extreme limit
- A **metal support** between the heating bath and the base unit **prevents bath instability**
- To **protect** your heating bath **against short-circuits and systematic corrosion**, the cable coupling complies with the protection class IP 67
- For your protection, the operating panel is located near the base so as to **keep your hands out of the dangerous zone** of rotating flasks, steam and splashing bath fluids
- All heating baths feature **non-slip handles** with safety grip to protect you from scalding bath liquids and allow for easy installation/removal of the bath
- A separate on/off switch for heating **prevents unintentional heat-up**. The button is illuminated for visual control
- In case of an overshoot of any parameter setting, all models will show a **warning on the operating panel**
- Glassware assemblies are optionally available with **transparent plastic safety coating** ensuring ultimate protection while allowing visual control at all times
- IQ-OQ documentation** is available for Hei-VAP models on request

Hei-VAP heating bath



YOUR ADVANTAGES

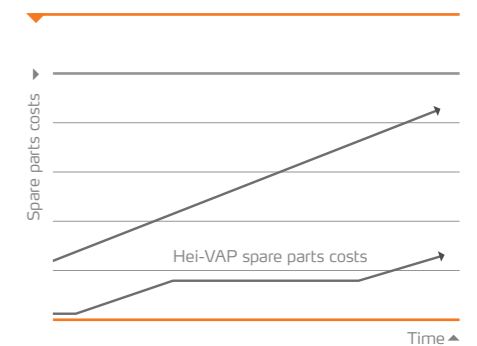
- Only the Hei-VAP heating bath reaches a temperature of 210 °C
- The universal heating bath can even accommodate 5-liter flasks
- The heating bath can be adjusted horizontally up to 200 mm
- To prevent short circuits and corrosion, the cable coupling complies with the protection class IP 67
- Non-slip handles for safe transportation eliminate the risk of scalding
- An integrated pour spout to remove bath fluid safely

Superior **Ease of Use**

- The detachable operating panel can be attached via velcro or with a special suspension at eye level for your convenience from **outside closed fume hoods**
- The patented evaporating flask **clamp Easy-Clip cannot be lost** due to a connection to the vapor tube coupling ring
- The integrated screwed ring allows you to **remove sticking evaporating flasks** from the vapor tube **just in seconds** in a safe manner
- The universal heating bath can be adjusted horizontally up to 200 mm and offers efficient space to **accommodate even 5-liter flasks**
- For your convenience, the **height of 160 mm** and the **angle** of the evaporating flask can be **adjusted easily from 20° to 80°**
- The optional automatic module Hei-VAP Distimatic allows for **continuous and unattended automatic operations**

Reduced **Cost** of Ownership

- **Reduce your process times** up to 30 %
- The chemical-resistant vacuum seal **reduces your spare parts budget** up to 75 % with prolonged operational lifespan
- The patented clamping sleeve ensures a **long life performance of the vapor tube**
- Increase your range of applications by using 5-liter flasks in the universal bath at **no added costs**
- Maintenance-free and non-sparking motors **reduce repairs and down times significantly** to ensure years of continuous operation
- The flange on the condenser side of the drive is made of PPS (Polyphenylene sulfide), a robust industrial-designed resin with **superior chemical resistance** which provides more chemical resistance than stainless steel or welded aluminum. This reduces corrosion to a minimum which results in additional savings on maintenance and replacement components
- Only Hei-VAP heating baths reach a temperature of 210 °C which is 30 °C higher than other evaporators on the market and allow for a **broader range of applications** which previously could not be performed on any rotary evaporator (for example bitumen distillation). Thus, increasing the range of applications eliminates the need for investment in other equipment
- Spend your working hours more effectively on other challenges which require your attention and **evaporate large quantities continuously** with the automatic module Hei-VAP Distimatic
- Maximize your initial investment significantly: the automatic module Hei-VAP Distimatic is an **affordable and more flexible alternative** to large-scale rotary evaporators
- Reduce your maintenance costs. The sealed housing protects your rotary evaporator from aggressive fumes, liquids and vapors to prevent internal corrosion. This results in an **increased lifespan of 10 years** on average at a reduced maintenance and repair cost



 **Heidolph**

Intelligent Evaporation

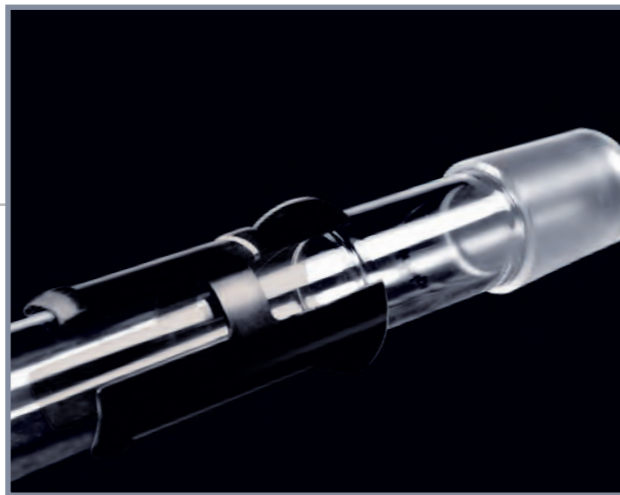
Leading Safety Standards

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.

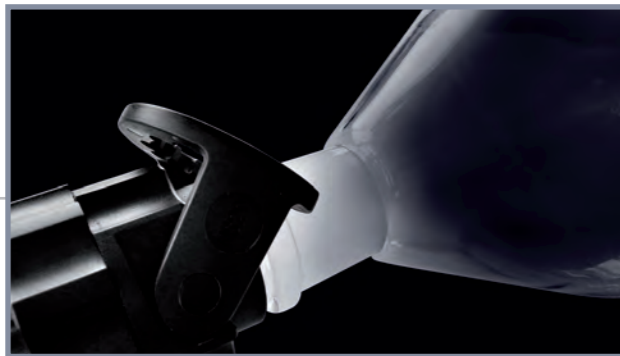
Vapor tube with patented clamping sleeve



YOUR ADVANTAGES

- The patented clamping sleeve system allows to remove the vapor tube easily from the drive
- Years of performance life reduce your spare parts budget up to 75 %
- The Hei-VAP vapor tube does not get stuck in the drive, thus eliminating the risk of broken glass
- Immediate removal of the vapor tube from the drive facilitates your work

Patented flask clamp Easy-Clip



YOUR ADVANTAGES

- Easy-Clip can't get lost due to a direct connection to the drive
- The integrated screwing allows an easy removal of sticking flasks
- The Easy-Clip is made of highly resistant synthetic material which ensures a long life performance

Operating panel



YOUR ADVANTAGES

- Changing all parameters from outside closed fume hoods guarantees the highest safety level
- Standard for all models is a panel with 1 m cable connection. Thus data security is guaranteed at any time
- Immediate access to the panel ensures ultimate control of the process while increasing your ease of use
- A separate on/off switch for heating prevents unintentional heat-up – the button is illuminated for visual control

Chemical-resistant **vacuum seal** allows for **years of operation** and reduces spare parts budget up to 75 %

Bath power cable coupling complies with protection class IP 67 to **prevent corrosion and short circuits**

Detachable panel allows for the **highest operational safety** from outside closed fume hoods

Continuous unattended evaporation without limits: the automatic module Hei-VAP Distimatic with automatic release of condensate is an affordable and more flexible alternative to large-scale rotary evaporators

The flange made of **chemical-resistant PPS** reduces corrosion, maintenance and spare parts cost to a minimum

Non-sticking vapor tube with patented clamping sleeve eliminates broken glass and reduces spare parts cost significantly

The **patented Easy-Clip** provides an **easy removal** of sticking flasks and **can't get lost** due to the direct connection to the drive

Safety bath will power off if temperature overshoots by 5 °C or runs dry

210 °C heating bath with safety handles and pour spout accommodates **5-liter flasks**



A separate on/off switch for heating **prevents unintentional heat-up** – the button is illuminated for visual control

A metal support between the heating bath and the base unit **prevents bath instability**

➤ Hei-VAP Value / Hei-VAP Value Digital

Affordable model with hand lift for all standard applications

Includes leading safety standards and features for superior ease of use and reduced cost of ownership, plus:

- The convenience of large dial controls for adjustment of rotation speed and bath temperature
- For limited budgets, we recommend the optional Manual vacuum controller
- **Hei-VAP Value Digital** models come with a digital display for set and actual heating bath temperature
- **Hei-VAP Value** models have no digital display



Adjust the required angle of the evaporating flask individually according to your needs

Limit the height of your evaporating flask in just seconds

The patented flask clamp Easy-Clip cannot get lost due to a connection to the vapor tube coupling ring

For your protection the detachable operating panel is located below the bath and thus outside the dangerous zone

Hei-VAP Value Digital HL/G3
P/N 560-01302-00

| Model | Hei-VAP Value hand lift (HL) | | Hei-VAP Value Digital hand lift (HL) | |
|------------------------|------------------------------|--------------|--------------------------------------|--------------|
| | standard | coated | standard | coated |
| G1 Diagonal | 560-01100-00 | 560-01110-00 | 560-01102-00 | 560-01112-00 |
| G3 Vertical | 560-01300-00 | 560-01310-00 | 560-01302-00 | 560-01312-00 |
| G5 Dry Ice Condenser | 560-01500-00 | 560-01510-00 | 560-01502-00 | 560-01512-00 |
| G6 Vertical for Reflux | 560-01600-00 | 560-01610-00 | 560-01602-00 | 560-01612-00 |

➤ Hei-VAP Advantage

For your routine distillation applications and reproducible results

Includes leading safety standards and features for superior ease of use and reduced cost of ownership, plus:

- Available in hand lift or motor lift configurations
- Experience the advantages of our large digital 3.5" LCD display which indicates rotation speed, heating bath and vapor temperature
- We recommend the optional Manual vacuum controller
- Experience the advantages of the automatic process timer which turns off your evaporator at a pre-programmed time and removes evaporating flasks from bath on motor lift models
- Upgrade your Hei-VAP Advantage to a Hei-VAP Precision:



Large digital LCD display which allows you to monitor all parameters even from a distance

Convenient motor lift adjusts height by the press of a button

Upgrade-KIT Advantage Precision-HL
P/N 569-30009-00

Upgrade-KIT Advantage Precision-ML
P/N 569-40009-00

Hei-VAP Advantage ML/G3
P/N 562-01300-00

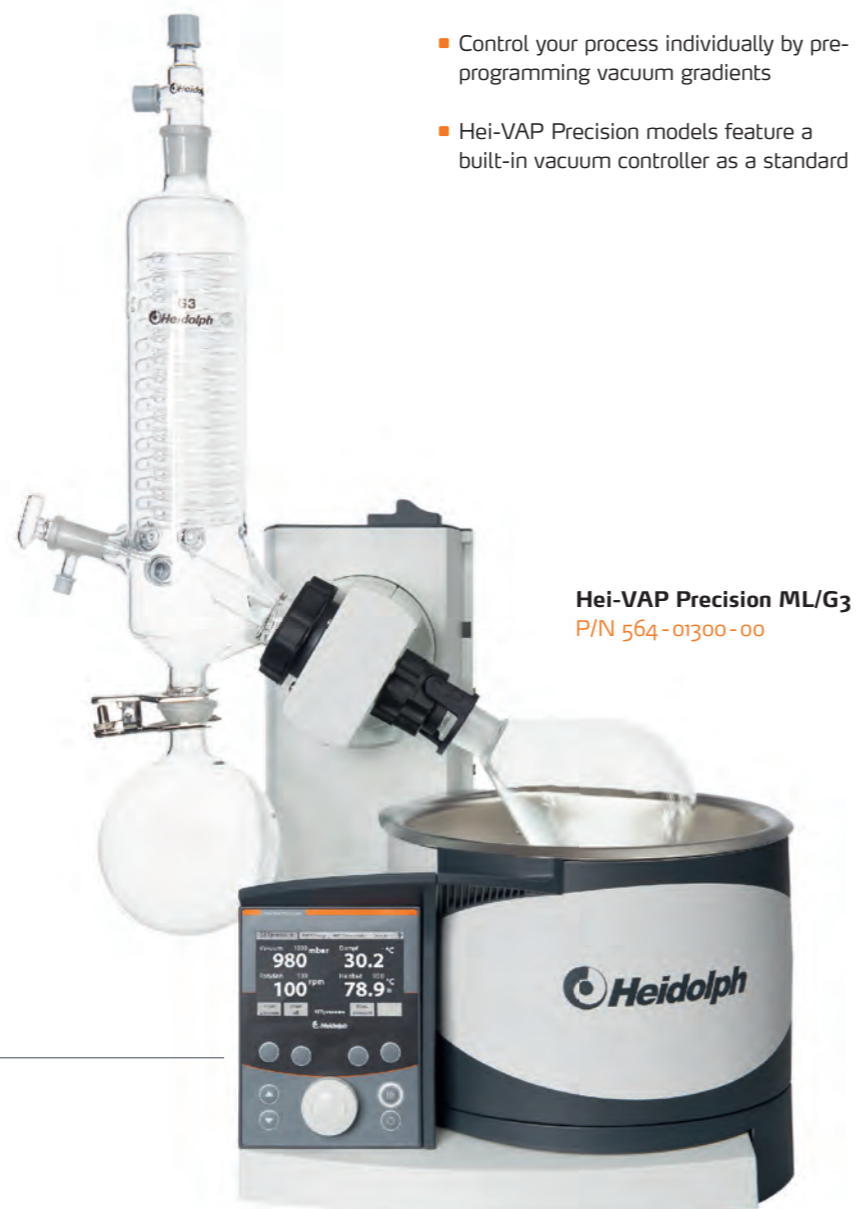
| Model | Hei-VAP Advantage hand lift (HL) | | Hei-VAP Advantage motor lift (ML) | |
|------------------------|----------------------------------|--------------|-----------------------------------|--------------|
| | standard | coated | standard | coated |
| G1 Diagonal | 561-01100-00 | 561-01110-00 | 562-01100-00 | 562-01110-00 |
| G3 Vertical | 561-01300-00 | 561-01310-00 | 562-01300-00 | 562-01310-00 |
| G5 Dry Ice Condenser | 561-01500-00 | 561-01510-00 | 562-01500-00 | 562-01510-00 |
| G6 Vertical for Reflux | 561-01600-00 | 561-01610-00 | 562-01600-00 | 562-01610-00 |

➤ Hei-VAP Precision

Most demanding applications and the finest integrated vacuum control capabilities

Includes leading safety standards and features for superior ease of use and reduced cost of ownership, plus:

- Available in hand lift or motor lift configurations
- Experience the advantages of our large 4.3" color graphic display which features all parameters, integrated vacuum controller and includes programs for automated distillations
- Make your life easier by utilizing the integrated software support which leads you through the capabilities of the evaporator
- For data management Hei-VAP Precision models feature a USB interface
- Save time by configuring the unit - all connected devices will be recognized by the evaporator, which eliminates the need to configure the unit manually
- Now you can manage even the most demanding applications easily and prevent foaming, excessive bubbling or bumping
- Save time with your individualized pre-programmed parameter settings for your 30 most common applications used on a daily basis by saving them in a "Favorites" section
- Each ramp offers 20 separate steps for demanding applications
- Apply an individual name to those ramps to avoid a mix-up
- Experience the advantages of the automatic process timer which turns off your evaporator at a pre-programmed time by raising the flask on motor lift models and releasing vacuum
- Control your process individually by pre-programming vacuum gradients
- Hei-VAP Precision models feature a built-in vacuum controller as a standard



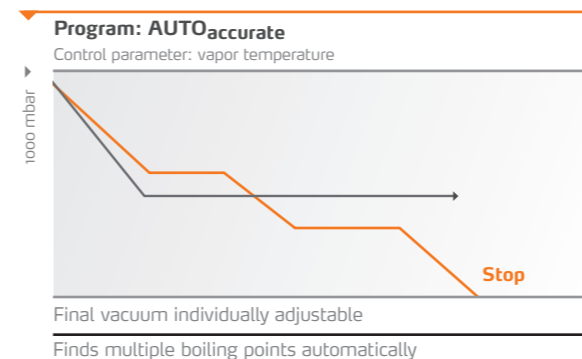
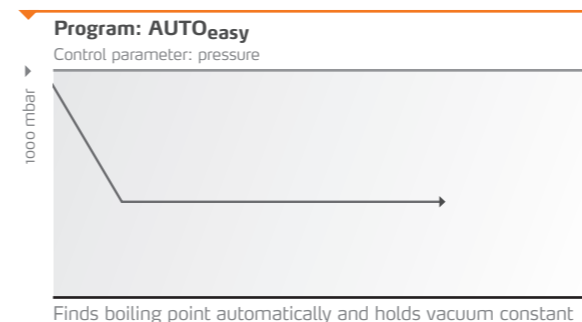
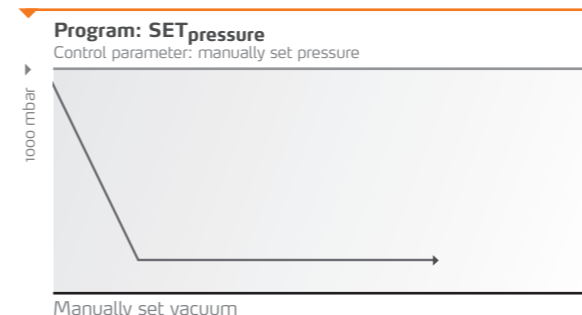
For increased safety all bath temperature adjustments can be limited

Even from a distance you will be able to monitor the numbers on the display easily

Large color graphic display for all parameters and automated programs

Programs facilitate process control

Reduce your process times significantly by using these three programs for automated distillation



SET_{pressure}

Program for solvent separations

This program holds a pre-set vacuum constant. During the evacuation you have the full flexibility to choose another level of vacuum by the press of a button

AUTO_{easy}

Supports the automatic pressure control for solvent separations

The pressure level for the first boiling point is found automatically. This program can be used with all Heidolph glassware assemblies and does not require any accessories

AUTO_{accurate}

Supports very precise automatic pressure control for solvent separations

This program works similar to AUTO_{easy} but in addition is able to identify multiple boiling points automatically by reducing vacuum accordingly. Also the AUTO_{accurate} program delivers the finest and most precise vacuum control. To take advantage of this program, the optional AUTO_{accurate}-sensor is required. This program cannot be used on Heidolph G1 and G5 glassware assemblies. Leading parameter of this program is the vapor temperature

➤ Reduce your process times via automated distillation programs

| Model | Hei-VAP Precision hand lift (HL) | | Hei-VAP Precision motor lift (ML) | |
|------------------------|----------------------------------|--------------|-----------------------------------|--------------|
| | standard | coated | standard | coated |
| G1 Diagonal | 563-01100-00 | 563-01110-00 | 564-01100-00 | 564-01110-00 |
| G3 Vertical | 563-01300-00 | 563-01310-00 | 564-01300-00 | 564-01310-00 |
| G5 Dry Ice Condenser | 563-01500-00 | 563-01510-00 | 564-01500-00 | 564-01510-00 |
| G6 Vertical for Reflux | 563-01600-00 | 563-01610-00 | 564-01600-00 | 564-01610-00 |

➤ Vacuum Pumps

Advantages of all chemical-resistant diaphragm vacuum pumps



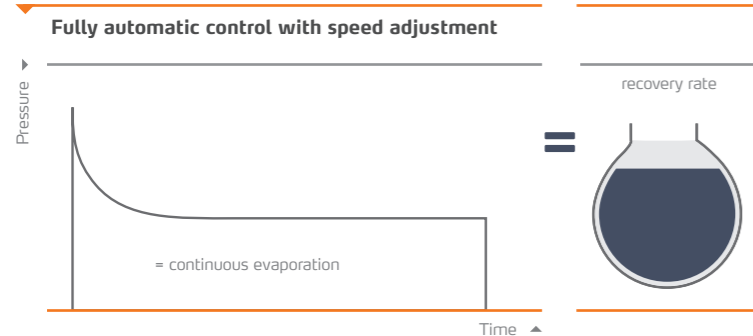
- All components which come in contact with media are built from chemically resistant fluoropolymer
- The durable PTFE design guarantees an superior diaphragm lifespan
- The head cover and clamping disc have a stable core made of metal which offers unsurpassed long-term performance of your operational parameters
- The direct pump drive (without belt) is exceptionally quiet, creates a very low vibrational environment and reduces the need of wear and tear parts to a minimum
- The gas ballast valve has been optimized to prevent media condensing in the pump

➤ RPM Regulated Vacuum Pumps

RPM regulated pumps adjust their speed individually and come to a complete stop when the required vacuum level is reached

YOUR ADVANTAGES

- Speed adjustment stops completely if vacuum is reached and runs intermittently at very low speed to hold vacuum constant
- Increased diaphragm performance life due to periods of non-operation
- Low energy consumption due to intermittent operation
- Significant noise and vibration reduction due to periods of non-operation
- Operates without vacuum valve
- Most precise vacuum level at all times



➤ Highest distillation rates possible and reducing process time by 30 %

➤ Stable distillation conditions account for solvent recovery up to 100 %

➤ RPM Regulated Vacuum Pumps

Rotovac Vario Pumping Unit

Fully controllable stand-alone pumping unit including vacuum controller.
For Hei-VAP Value and Hei-VAP Advantage



Rotovac Vario Pumping Unit
P/N 591-00142-00
Condenser
P/N 591-00084-00

- Three-stage diaphragm pump is made from chemical-resistant material
- High suction capacity of 1.7 m³/h for fastest evacuation
- Achieves an ultimate vacuum of 5 mbar
- Precise vacuum control avoids bumping and eliminates foaming of your evaporation solution
- Due to automatic vacuum supply to the process parameters you have more time for important laboratory activities
- Can be combined with a condenser
- Power input: 160 W, Weight: 6.0 kg
- Dimensions (without condenser): L263 / W193 / H299 mm

Rotovac Vario Tec

For Hei-VAP Precision



Rotovac Vario Tec
P/N 591-00171-00
Condenser
P/N 591-00084-00

- Two-stage diaphragm pump is made from chemical-resistant material
- Suction capacity of 1.0 m³/h
- Achieves an ultimate vacuum of 12 mbar
- Recommended for solvents with low or medium boiling points
- Can be combined with a condenser
- Power input: 160 W, Weight: 4.3 kg
- Dimensions (without condenser): L156 / W236 / H196 mm

Rotovac Vario Control

For Hei-VAP Precision



Rotovac Vario Control
P/N 591-00141-00
Condenser
P/N 591-00084-00

- Three-stage diaphragm pump is made from chemical-resistant material
- High suction capacity of 1.7 m³/h for fastest evacuation
- Achieves an ultimate vacuum of 2 mbar
- Even if the gas ballast valve is open an excellent ultimate vacuum is reached when working with easily condensable vapors. This makes distilling high boiling point solvents such as DMF or DMSO possible at low bath temperatures
- Can be combined with a condenser
- Power input: 160 W, Weight: 5.4 kg
- Dimensions (without condenser): L167 / W236 / H196 mm

➤ Valve-Regulated Vacuum Pumps

Standard vacuum pumps can be controlled manually or via valve operated vacuum controllers

Rotavac Valve Tec

For all Hei-VAP models



Rotavac Valve Tec P/N 591-00160-00
Condenser P/N 591-00083-00

- Two-stage diaphragm vacuum pump made of chemical-resistant material
- Suction capacity of 0.75 m³/h
- Achieves an ultimate vacuum of 12 mbar
- Recommended for solvents with low or medium boiling points
- Vacuum can be controlled manually or via valve operated vacuum controllers
- Can be combined with a condenser
- Power input: 80 W, Weight: 6.0 kg
- Dimensions (without condenser): L145 / W315 / H169 mm

Rotavac Valve Control

For all Hei-VAP models



Rotavac Valve Control P/N 591-00130-00
Condenser P/N 591-00083-00

- Two-stage diaphragm pump made from chemical-resistant material
- High suction capacity of 2.0 m³/h for fastest evacuation
- Achieves an ultimate vacuum of 7 mbar
- Suction capacity for up to 3 rotary evaporators at the same time
- Vacuum can be controlled manually or via valve operated vacuum controllers
- Depending on your application you can switch on and off the vacuum pump via switchbox
- Can be combined with a condenser
- Power input: 180 W, Weight: 12.8 kg
- Dimensions (without condenser): L195 / W245 / H310 mm

➤ Chillers

RotaChill L

Highest cooling capacity at minimal bench space



RotaChill L
P/N 591-00200-00

- This chiller is designed specifically for rotary evaporators
- Minimal bench space due to unique "L-shape design"
- Provides space of 470 x 405 mm for evaporator
- Temperature range from -10 °C to +40 °C
- Temperature control accuracy of ±0.5 °C
- Display for setting temperature and reading out actual temperature
- Maximum cooling capacity of 420 W
- Footprint of chiller: L580 / W470 / H420 mm

Rotacool Mini

Ideal for standard applications



Rotacool Mini
P/N 591-00210-00

- Chiller for all standard applications
- Cooling temperature: +7 °C (not adjustable)
- Cooling capacity at +7 °C: 370 W
- Temperature control accuracy of ±1 °C
- No digital display
- Small footprint of chiller: L450 / W225 / H400 mm

RotaChill

The affordable model



RotaChill
P/N 591-00220-00

- Temperature range from 0 °C to +100 °C
- Precise temperature control accuracy of ±0.2 °C
- The RotaChill should be placed directly besides the evaporator to ensure a sufficient pump performance
- Footprint of chiller: L450 / W210 / H570 mm

| | | RotaChill L | Rotacool Mini | RotaChill |
|------------------------------|--------|-------------|---------------|-----------|
| Temperature range | [°C] | -10 to +40 | +7 constant | 0 to +100 |
| Coolant volume | [L] | 2 | 3 | 6 |
| Cooling capacity* at: +20 °C | [W] | 420 | - | 200 |
| | +7 °C | - | 370 | - |
| | 0 °C | 350 | - | 140 |
| | -10 °C | 220 | - | - |

* at 20 °C ambient temperature

➤ The Modular Concept

The modular concept consists of rotary evaporator, vacuum pump, controller and chiller



YOUR ADVANTAGES

- All components are technically designed to function perfectly together
- Self-contained system eliminates the need for water, dry ice and vacuum source
- Heidolph offers you a complete system available from one manufacturer
- Use your lab space efficiently: The modular concept has a footprint of 470 x 580 mm only

➤ Accessories



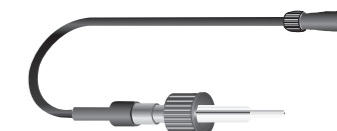
Guard hood

- Strong and transparent guard hood to protect you from implosions
 - Provides easy and immediate access to flask and bath
- P/N 569-00010-00



Guard shield

- Strong and transparent guard shield for your protection while changing flasks
 - Attached at the edge of the bath
- P/N 569-00020-00



Vapor temperature sensor

- For Hei-VAP Advantage and Hei-VAP Precision
- P/N 569-00030-00



AUTOaccurate-sensor

- For Hei-VAP Precision
 - Only in combination with glassware set G3 and G6
- P/N 569-00040-00



Tube set

- Includes 6.25 meter vacuum tubing and 6.25 meter water tubing
- P/N 591-35000-00



Spare PTFE vacuum seal

- P/N 23-30-01-01-30



Aqua-Stop

The integrated valve closes automatically by turning off the evaporator. The system saves money by reducing your consumption of cooling tap water. Moreover the safety mechanism avoids flooding in your laboratory. (Only for Hei-VAP Advantage and Hei-VAP Precision)

P/N 569-00500-00



Spare clamping sleeve

- P/N 23-30-01-05-31

Spare vapor tube NS 29/32

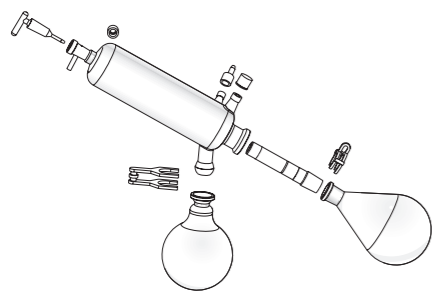
- P/N 514-00000-01

➤ Glassware

- Glassware set includes one 1,000-ml evaporating flask and one 1,000-ml receiving flask
- All glassware sets are also available with transparent plastic coating (Surlyn[®]-coated) for added safety, except for glassware set G5 which is Halar-coated
- Evaporating flasks and vapor tubes which come with a standard NS 29/32 joint size are also available with NS 24/29 ground joints
- Also available upon request: glassware sets for Soxhlet extraction and descending condenser system
- All glassware sets feature GL 10 thread; the inlet tube can be connected with a threaded fitting
- Glassware sets G3 and G6 allow for the automated distillation program AUTOaccurate on Hei-VAP Precision models

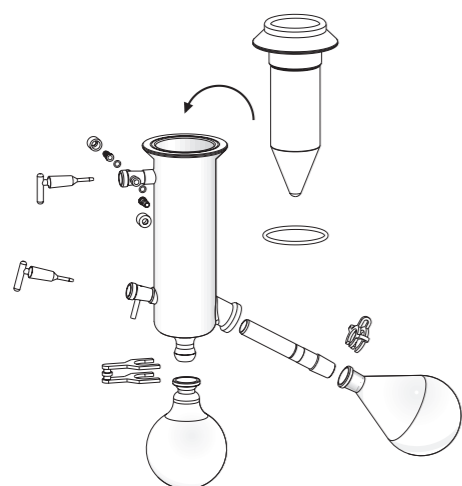
Glassware set G1

- Diagonal condenser for all standard distillations; the option with the **most affordable price**



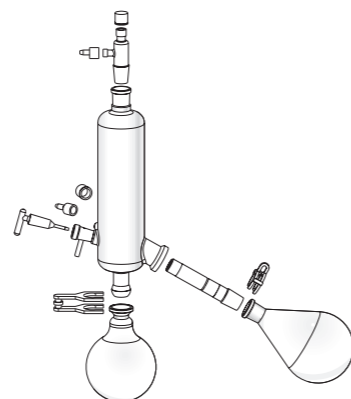
Glassware set G5

- **Dry Ice** condenser for low-boiling solvents



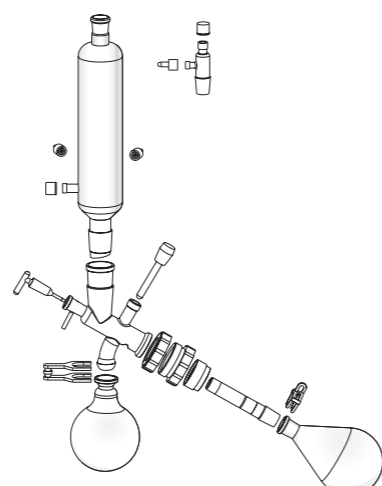
Glassware set G3

- Vertical condenser for all standard distillations; the option with the **smallest space requirement**



Glassware set G6

- Vertical condenser; centerpiece with valve for **reflux distillation**



➤ Accessories



| Evaporating flasks | NS 29/32 | NS 24/29 |
|----------------------------|--------------|--------------|
| Evaporating flask* 50 ml | 514-70000-00 | 514-70000-01 |
| Evaporating flask 100 ml | 514-71000-00 | 514-71000-01 |
| Evaporating flask 250 ml | 514-72000-00 | 514-72000-01 |
| Evaporating flask 500 ml | 514-73000-00 | 514-73000-01 |
| Evaporating flask 1,000 ml | 514-74000-00 | 514-74000-01 |
| Evaporating flask 2,000 ml | 514-75000-00 | 514-75000-01 |
| Evaporating flask 3,000 ml | 514-76300-00 | 514-76300-01 |
| Evaporating flask 5,000 ml | 514-78000-00 | 514-78000-03 |

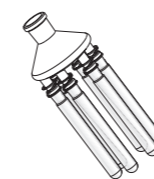
* Evaporating flask NS 14,5 incl. adaptor (NS 29 or NS 24)



| Receiving flasks | standard | coated |
|-------------------------------------|--------------|--------------|
| Receiving flask - NS 35/20 100 ml | 514-81000-00 | 514-81000-02 |
| Receiving flask - NS 35/20 250 ml | 514-82000-00 | 514-82000-02 |
| Receiving flask - NS 35/20 500 ml | 514-83000-00 | 514-83000-02 |
| Receiving flask - NS 35/20 1,000 ml | 514-84000-00 | 514-84000-02 |
| Receiving flask - NS 35/20 2,000 ml | 514-85000-00 | 514-85000-02 |
| Receiving flask - NS 35/20 3,000 ml | 514-87000-00 | 514-87000-02 |



| Powder flasks | NS 29/32 | NS 24/29 |
|-----------------------|--------------|--------------|
| Powder flask 500 ml | 514-73200-00 | 514-73200-01 |
| Powder flask 1,000 ml | 514-74200-00 | 514-74200-01 |
| Powder flask 2,000 ml | 514-75300-00 | 514-75300-01 |



| Spider | NS 29/32 | NS 24/29 |
|---|---------------|---------------|
| Spider with 6 distillation sleeves NS 14,5 20 ml | 15-300-005-09 | 15-300-005-12 |
| Spider with 12 distillation sleeves NS 14,5 20 ml | 15-300-005-10 | 15-300-005-13 |
| Spider with 20 distillation sleeves NS 14,5 20 ml | 15-300-005-11 | 15-300-005-06 |



| Spider | NS 29/32 | NS 24/29 |
|-----------------------------------|---------------|---------------|
| Spider with 5 flasks NS 24 50 ml | 15-300-005-04 | 15-300-005-08 |
| Spider with 5 flasks NS 24 100 ml | 15-300-005-07 | 15-300-005-05 |



| Evaporating cylinder | NS 29/32 | NS 24/29 |
|-------------------------------|--------------|--------------|
| Evaporating cylinder 500 ml | 514-00070-00 | 514-00070-01 |
| Evaporating cylinder 1,500 ml | 514-00071-00 | 514-00071-01 |



| Foam brake | NS 29/32 | NS 24/29 |
|-----------------------------|--------------|--------------|
| Foam brake with flask clamp | 514-00004-00 | 514-00005-00 |



| Vial-Adaptor | NS 29/32 |
|--------------------|-----------------|
| Vial-Adaptor GL 18 | 15-300-002-81-0 |
| Vial-Adaptor GL 25 | 15-300-002-82-0 |

➤ Vacuum Accessories

Switchbox

Connect up to 3 rotary evaporators to one vacuum pump



Switchbox

P/N 569-00400-00

- Connect up to 3 rotary evaporators to one pump and control vacuum individually
- Pump switches off automatically at required vacuum
- Reduces energy consumption of pump
- Increases performance life of the pump due to a complete switch-off if vacuum is reached
- Vacuum valve and non-return valve are required for every evaporator if you work with different pressures at the same time
- Delivery includes 3 non-return valves
- Designed for Hei-VAP Precision
- Weight: 0.6 kg
- Dimensions: L80 x W160 x H45 mm

Manual vacuum controller

For Hei-VAP Value and Hei-VAP Advantage



Manual vacuum controller

P/N 591-26000-00

- Control your house vacuum or any other vacuum source
- Pressure range from 0 to 1,020 mbar
- Scaling on display in steps of 50 mbar
- Connection for tubes with 8 mm inner diameter
- Support rod included
- A vacuum valve is not required
- Dimensions: L80 x W80 x H150 mm

Vacuum valve

Required to control vacuum for Hei-VAP Precision models with valve-regulated pumps



Vacuum valve

P/N 569-00060-00

- External attachment design for easy cleaning
- Can be combined with the Woulff Bottle to one unit
- Not required if you utilize a Manual vacuum controller

Woulff bottle

P/N 569-00070-00

- Additional recovery of solvent to protect vacuum valve and vacuum pump
- Compatible with all Hei-VAP configurations
- Direct connection to the vacuum valve is possible
- Features connection to vacuum controller
- Volume of 250 ml

➤ Equipment Combinations

Rotary Evaporator



Hei-VAP Value / Hei-VAP Value Digital



Hei-VAP Advantage



Hei-VAP Precision

Vacuum source

Rotavac Vario Pumping Unit

included

not required

Rotavac Valve Control
Rotavac Valve Tec
House vacuum

optional

Rotavac Vario Pumping Unit

included

optional

not required

Rotavac Valve Control
Rotavac Valve Tec
House vacuum

optional

Rotavac Valve Control
Rotavac Valve Tec
House vacuum

included

required

optional

Rotavac Vario Control
Rotavac Vario Tec

included

not required

optional

Accessories

Vacuum controller

Vacuum valve

Manual vacuum controller

Vacuum controller

Vapor temperature sensor
(all glassware sets)

Vacuum valve

Manual vacuum controller

Vapor temperature sensor
(all glassware sets)

Vacuum controller

Vacuum valve

Autoaccurate-sensor
(glassware G3/G6 only)

Vapor temperature sensor
(all glassware sets)

Vacuum controller

Vacuum valve

Autoaccurate-sensor
(glassware G3/G6 only)

Vapor temperature sensor
(all glassware sets)



Rotavac Valve Control with condenser



Rotavac Valve Tec with condenser



Rotavac Vario Control with condenser



Rotavac Vario Tec with condenser



Rotavac Vario Pumping Unit with condenser



Manual vacuum controller



Vacuum valve with Woulff bottle



AUTOaccurate-sensor



Vapor temperature sensor

➤ Hei-VAP Plug & Play Packages



Hei-VAP Plug & Play Value Cool
P/N 560-91309-00

Hei-VAP Plug & Play Value

Standard equipment for your lab

Hei-VAP Plug & Play Value 1

- Hei-VAP Value with hand lift and vertical glassware set G3
- Vacuum pump Rotovac Valve Tec
- Manual vacuum controller
- Tube set

P/N 560-91300-00

Hei-VAP Plug & Play Value 2

- Hei-VAP Value with hand lift and coated vertical glassware set G3B
- Vacuum pump Rotovac Valve Control
- Manual vacuum controller
- Tube set

P/N 560-81310-00

Hei-VAP Plug & Play Value Cool

- Hei-VAP Value with hand lift and vertical glassware set G3
- Vacuum pump Rotovac Valve Tec
- Manual vacuum controller
- Chiller RotaChill
- Tube set

P/N 560-91309-00



Hei-VAP Plug & Play Advantage Cool
P/N 562-91307-00

Hei-VAP Plug & Play Advantage

For standard distillations with vacuum control

Hei-VAP Plug & Play Advantage 1

- Hei-VAP Advantage with hand lift and vertical glassware set G3
- Vapor temperature sensor
- Vacuum pump Rotovac Valve Tec
- Manual vacuum controller
- Tube set

P/N 561-41300-00

Hei-VAP Plug & Play Advantage 2

- Hei-VAP Advantage with motor lift and coated vertical glassware set G3B
- Vapor temperature sensor
- Vacuum pump Rotovac Vario Pumping Unit
- Tube set

P/N 562-11310-00

Hei-VAP Plug & Play Advantage Cool

- Hei-VAP Advantage with motor lift and vertical glassware set G3
- Vacuum pump Rotovac Valve Tec
- Manual vacuum controller
- Chiller Rotacool Mini
- Tube set

P/N 562-91307-00



Hei-VAP Plug & Play Precision 2
P/N 563-51310-00

Hei-VAP Plug & Play Precision

Automatic distillations with Hei-VAP Precision hand lift models and valve-regulated vacuum pumps

Hei-VAP Plug & Play Precision 1

- Hei-VAP Precision with hand lift and vertical glassware set G3
- Vapor temperature sensor
- Vacuum valve
- Vacuum pump Rotovac Valve Tec with condenser
- Tube set

P/N 563-61300-00

Hei-VAP Plug & Play Precision 2

- Hei-VAP Precision with hand lift and coated vertical glassware set G3B
- AUTOaccurate-sensor
- Vacuum valve
- Vacuum pump Rotovac Valve Control with condenser
- Tube set

P/N 563-51310-00

Hei-VAP Plug & Play Safety Upgrade

For highest safety

Hei-VAP Plug & Play Safety Upgrade

Additional guard hood and coating of glassware for your Hei-VAP Plug & Play Package

P/N 569-00311-00



Hei-VAP Plug & Play Premium Cool
P/N 564-31318-00

Hei-VAP Plug & Play Premium

Automatic distillations with Hei-VAP Precision motor lift models and RPM-regulated vacuum pumps

Hei-VAP Plug & Play Premium 1

- Hei-VAP Precision with motor lift and vertical glassware set G3
- AUTOaccurate-sensor
- Vacuum pump Rotovac Vario Tec with condenser
- Woulff bottle
- Tube set

P/N 564-21300-00

Hei-VAP Plug & Play Premium 2

- Hei-VAP Precision with motor lift and coated vertical glassware set G3B
- AUTOaccurate-sensor
- Vacuum pump Rotovac Vario Control with condenser
- Woulff bottle
- Tube set

P/N 564-31310-00

Hei-VAP Plug & Play Premium Cool

- Hei-VAP Precision with motor lift and coated vertical glassware set G3B
- AUTOaccurate-sensor
- Vacuum pump Rotovac Vario Control with condenser
- Woulff bottle
- Chiller RotaChill L
- Tube set

P/N 564-31318-00

Technical Specifications - Rotary Evaporators

| Model | Hei-VAP Value (HL) / Value Digital (HL) | Hei-VAP Advantage (HL) | Hei-VAP Advantage (ML) | Hei-VAP Precision (HL) | Hei-VAP Precision (ML) |
|---|---|---------------------------------|---------------------------------|---------------------------------|---------------------------------|
| Hand / Motor lift | hand lift | hand lift | motor lift | hand lift | motor lift |
| Height adjustment speed | manual | manual | 30 mm/s | manual | 30 mm/s |
| Height adjustment (mm) | 155 | 155 | 155 | 155 | 155 |
| Rotation speed (rpm) | 10 – 280 | 10 – 280 | 10 – 280 | 10 – 280 | 10 – 280 |
| Rotation speed setting | scale | 3.5" LCD display | 3.5" LCD display | 4.3" LCD color graphic display | 4.3" LCD color graphic display |
| Drive | brushless DC motor with electronic speed control | | | | |
| Heating capacity (W) | 1,300 | 1,300 | 1,300 | 1,300 | 1,300 |
| Temp. range heating bath (°C) | 20 – 210 | 20 – 210 | 20 – 210 | 20 – 210 | 20 – 210 |
| Temperature accuracy bath (°C) | ±1 | ±1 | ±1 | ±1 | ±1 |
| Overheat protection bath (°C) | cut-off at 5 °C over set temperature via separate Pt 1000 | | | | |
| Bath temperature setting**** | scale / digital | 3.5" LCD display | 3.5" LCD display | 4.3" LCD color graphic display | 4.3" LCD color graphic display |
| Heating bath temperature control | electronic / digital | electronic / digital | electronic / digital | electronic / digital | electronic / digital |
| Secondary overtemp. cut-off (°C) | 250 | 250 | 250 | 250 | 250 |
| Material heating bath | stainless steel AISI 316L | stainless steel AISI 316L | stainless steel AISI 316L | stainless steel AISI 316L | stainless steel AISI 316L |
| Diameter heating bath | 255 | 255 | 255 | 255 | 255 |
| Volume heating bath | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 |
| Display vapor temperature required accessories | no | yes vapor temperature sensor | yes vapor temperature sensor | yes vapor temperature sensor | yes vapor temperature sensor |
| Integrated vacuum controller | no | no | no | yes | yes |
| Timer | no | yes | yes | yes | yes |
| Vacuum program SET _{pressure} ** | no | no | no | yes | yes |
| Vacuum program AUTO _{easy} ** | no | no | no | yes | yes |
| Vacuum program AUTO _{accurate} ** requires AUTO _{accurate} -sensor | no | no | no | yes | yes |
| Remote control function | | | | | |
| - Lift | no | no | yes | no | yes |
| - Start rotation | yes | yes | yes | yes | yes |
| - Start vacuum | no | no | no | yes | yes |
| - Start heating bath | yes | yes | yes | yes | yes |
| Programmable ramps | no | no | no | yes | yes |
| Supply power (W) | 1,400 | 1,400 | 1,400 | 1,400 | 1,400 |
| Weight (w/o glassware assembly) (kg) | 16 | 16 | 16 | 17 | 17 |
| Dimensions with glassware set G3 (l x w x h) (mm) | 739 x 490 x 887 | 739 x 490 x 887 | 739 x 420 x 887 | 739 x 490 x 887 | 739 x 420 x 887 |
| Protection class*** (DIN EN 60529) | IP 20 | IP 20 | IP 20 | IP 20 | IP 20 |
| Operating conditions (°C) | 0 - 40 at 80 % rel. humidity | 0 - 40 at 80 % rel. humidity | 0 - 40 at 80 % rel. humidity | 0 - 40 at 80 % rel. humidity | 0 - 40 at 80 % rel. humidity |
| Rate of evaporation* (L/h) | | | | | |
| - Toluene | 8.5 | 8.5 | 8.5 | 8.5 | 8.5 |
| - Acetone | 5.8 | 5.8 | 5.8 | 5.8 | 5.8 |
| - Ethanol | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 |
| - Water | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 |
| Condensing surface (cm ²) | 1,200 | 1,200 | 1,200 | 1,200 | 1,200 |

* ΔT of 40 °C between heating bath temperature and boiling temperature

** Only in combination with vacuum systems

*** IP 67 cable connection on heating bath

**** Hei-VAP Value Digital: digital display

Standard supply voltage: 230 V - other voltages upon request, please specify for order

Certificate

To confirm the ability for
continuous operation
of the Hei-VAP Series Rotary Evaporators

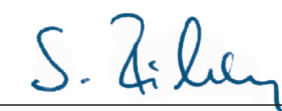
Hei-VAP Series Rotary Evaporators feature overtemperature safety circuits according to DIN EN 61010-1:2001 and DIN EN 61010-2-010:2003 and therefore are designed for continuous operation.

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.

Schwabach, January 2013



i. V. Jan Welzien
Technical Director



i. V. Stefan Richter
Quality Control Director



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