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ROTARY EVAPORATORS | SEPARATION



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## **Rotary Evaporators**

/// Modular design and highest precision

IKA's rotary evaporator's award winning design and performance will make a significant difference in your laboratory. The IKA range of RV 3, RV 8, RV 10 digital and RV 10 auto pro rotary evaporators offers excellent distilling solutions to the demanding user. Value for money, design and technology - all for your convenience.

With the new packages, IKA is offering complete solutions at an attractive price. In addition to the vacuum source and chiller, all parts and connections required for operation are also included in the packages. All components come from a single source. In the event of queries or service cases IKA is your competent contact for the whole setup.

The RV 3 rotary evaporator is the ideal entry-level model of the IKA rotary evaporator portfolio. It comes with a single-handed manual lift for precise positioning of the glassware and an adjustable immersion angle.

The **RV 8** rotary evaporator is the manual basic model in the family of IKA rotary evaporators. The device has an integrated safety lift-out function in case of power failure. In addition it provides a flask clamping mechanism with integrated push-off function for easy exchange of evaporation flasks.

Our advanced RV 10 rotary evaporators stand out because of their extraordinary features such as a digital temperature display, interval operation, soft start and an adjustable end position recognition to protect the glassware from breaking. The digital version offers an RS 232 interface for connection to labworldsoft® and for online firmware updates. RV 10 auto pro additionally includes the vacuum pump VACSTAR digital.

### **5-YEAR WARRANTY\***

\* 2 + 3 years after registering online.

### **RV 3**

### /// The Beginner



### RV 3 V

#### Ident. No. 0010003324

- > RV 3 eco rotary evaporator
- + HB eco heating bath
- + RV 10.1 glassware set

#### RV 3 V-C

#### Ident. No. 0010003328

- > RV 3 eco rotary evaporator
- + HB eco heating bath
- + RV 10.10 glassware set, coated

### **RV 3 FLEX**

#### Ident. No. 0010003331

- > RV 3 eco rotary evaporator
- + HB eco heating bath
- + clamps for glassware

### RV 3 with Dry Ice Condenser

### Ident. No. 0010006363

- > RV 3 eco rotary evaporator
- + HB eco heating bath
- + RV 10.4 dry ice condenser

### RV 3 with Dry Ice Condenser, coated

### Ident. No. 0010006362

- > RV 3 eco rotary evaporator
- + HB eco heating bath
- + RV 10.40 dry ice condenser, coated













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# Motorized lift with "safety-stop" function RS 232 interface for documentation and control with labworldsoft® Adjustable timer-mode and interval mode

Protection cover HB 10.3 for all RV heating baths to protect the user e.g. from hot fluid splashes

or glass breakage

**RV 10 digital FLEX** 

Ident. No. 0010004805

+ HB digital heating bath

+ clamps for glassware

+ Woulff bottle

> RV 10 digital rotary evaporator

### **RV 8 V**

Ident. No. 0010003482

- > RV 8 rotary evaporator
- + HB digital heating bath
- + RV 10.1 glassware set

### **RV 8 V-C**

Ident. No. 0010003485

- > RV 8 rotary evaporator
- + HB digital heating bath
- + RV 10.10 glassware set, coated

### **RV 8 FLEX**

Ident. No. 0010003488

- > RV 8 rotary evaporator
- + HB digital heating bath
- + clamps for glassware

### **RV 8 with Dry Ice Condenser**

Ident. No. 0010006361

- > RV 8 rotary evaporator
- + HB digital heating bath
- + RV 10.4 dry ice condenser

### RV 8 with Dry Ice Condenser, coated

Ident. No. 0010006360

- > RV 8 rotary evaporator
- + HB digital heating bath
- + RV 10.40 dry ice condenser, coated

### RV 10 digital V

Ident. No. 0010004799

> RV 10 digital rotary evaporator

**RV 10 digital** 

/// The Reliable

- + HB digital heating bath
- + RV 10.1 glassware set
- + Woulff bottle

### RV 10 digital with Dry Ice Condenser

Ident. No. 0010006365

- > RV 10 digital rotary evaporator
- + HB digital heating bath
- + RV 10.4 dry ice condenser

⊥ Woulff hottle

### RV 10 digital V-C

Ident. No. 0010004802

- > RV 10 digital rotary evaporator
- + HB digital heating bath
- + RV 10.10 glassware set, coated
- + Woulff bottle

### RV 10 digital with Dry Ice

Condenser, coated Ident. No. 0010006364

- > RV 10 digital rotary evaporator
- + HB digital heating bath
- + RV 10.40 dry ice condenser, coated

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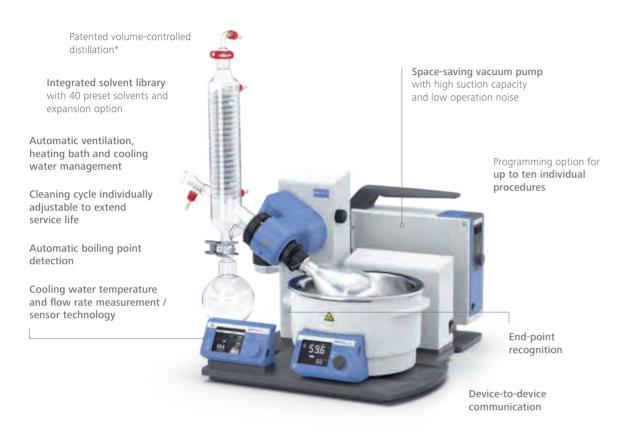




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# RV 10 auto pro

### /// The Pioneer



### RV 10 auto pro V

Ident. No. 0010004815

- > RV 10 auto rotary evaporator
- + VACSTAR digital pump
- + HB digital heating bath
- + RV 10.1 glassware set
- + Woulff bottle

### RV 10 auto pro V-C

Ident. No. 0010004812

- > RV 10 auto rotary evaporator
- + VACSTAR digital pump
- + HB digital heating bath
- + RV 10.10 glassware set, coated
- + Woulff bottle

### RV 10 auto pro FLEX

Ident. No. 0010004818

- > RV 10 auto rotary evaporator
- + VACSTAR digital pump
- + HB digital heating bath
- + Woulff bottle
- + clamps for glassware

During volume-controlled distillation, a predetermined amount of the used solvent is distilled off. Based on the measured values for cooling water flow as well as the cooling water temperature difference, the distillate volume can be calculated at any time of the distillation via physical parameters. In addition, the maximum cooler utilization is determined to prevent overloading. As soon as the specified distillate volume is reached, the distillation is automatically stopped. Volume-controlled distillation is advantageous, for example, if the sample should not to be evaporated to dryness after an extraction process.

# **Complete Packages**

/// Pre-configured and ready-to-use

Depending on your application a vacuum system (pump / controller / valve) and cooling is required to get everything out of your distillation. With powerful vacuum pumps and recirculating chillers, IKA is offering peripheral devices that are perfectly matched to the IKA rotary evaporator portfolio. With devices from one single supplier you will be able to set up a well-coordinated system. It is even possible to supply multiple rotary evaporators with only one pump and chiller.

With the newly compiled packages, IKA offers complete solutions at attractive prices. All components and connections required for operation are included in the package and come from the same manufacturer. In case of gueries or service, IKA is your competent contact for the entire setup.

### YOUR BENEFITS

- > Everything from a single source: Only one contact for questions or service cases
- > Ready for operation: All components required for connection are included
- > Intelligent laboratory equipment: all devices are perfectly coordinated and can even communicate with each other
- > High energy efficiency: chiller and vacuum pump run only when necessary. This saves valuable resources.

Packages include all ca











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# Technical data & Scope of delivery

Technical data	RV 3 pro V Complete Ident No.: 0010011410	RV 8 pro V Complete Ident No.: 0010011411	RV 10 digital pro V Complete Ident No.: 0010011963	RV 10 digital pro V double Complete Ident No.: 0010011964	RV 10 auto pro V-C Complete Ident No.: 0010007353
Motor lift	Manual	Manual	Motorized	Motorized	Motorized
Safety lift-out function	No	Yes	Yes	Yes	Yes
Speed display	Scale	LED	LED	LED	TFT
Max. heating bath temperature	99 °C	180 °C	180 °C	180 °C	180 °C
Max. heating bath filling volume	4	4	4	4	4
Vacuum solution	Manual mode	Manual mode	Manual mode	Manual mode	Automatic
Vacuum regulation	Speed controlled	Speed controlled	Speed controlled	ON / OFF valve vacuum regulation	Automatic boiling point detection
Max. pump rate	1.32 m³/h	1.32 m <sup>3</sup> /h	1.32 m³/h	1.32 m <sup>3</sup> /h	1.32 m <sup>3</sup> /h
Cooling capacity of recir- culating chiller	400 W	400 W	400 W	800 W	400 W

### Scope of delivery

Rotary evaporator	RV 3 V	RV 8 V	RV 10 digital V	RV 10 digital (2 pcs.)	RV 10 auto pro
Heating bath	НВ есо	HB digital	HB digital	HB digital	HB digital
Vacuum pump	Vacstar digital	Vacstar digital	Vacstar digital	Vacstar digital	Vacstar digital
Vacuum controller	VC 10 lite	VC 10 lite	VC 10 lite	VC 10 pro (2 pcs.)	integrated
Emission condenser	-	-	-	VSE 1	VSE 1
Chiller	RC 2 lite	RC 2 lite	RC 2 lite	RC 2 GREEN basic	RC 2 lite



# **Key Components**

### Vacuum solution

The result of a distillation is significantly influenced by the used vacuum system. IKA offers various vacuum solutions that perfectly match to the rotary evaporators. The portfolio includes pumps with and without integrated vacuum control as well as speed-controlled pumps and pumps with fixed speed. The degree of automation of the complete system can be influenced by the selection of the vacuum solution. For example, a speedcontrolled pump with controller enables automatic boiling point detection.

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Max. pump rate Final pressure

Speed control

Adjustable vacuum value

Number of rotary evaporators which can be supplied

### VACSTAR digital Ident No.: 0020016236

22 l/min

2 mbar

control / valve

0/285 - 1200 rpm Requires external





### VC 10 lite Ident. No. 0020111998

### Speed-controlled

Compatible only with VACSTAR digital, cable connection with vacuum pump is required.



VC 10 pro Ident. No. 0020112031

### Valve-controlled

Can be used with all standard vacuum sources; supply of multiple controllers with one vacuum source possible.

Universal vacuum controllers VC 10 lite and pro for controlled evacuation of air (gas) from laboratory equipment, as well as for classical separation, filtration or drying tasks in the laboratory. The controllers are ready-to-use in numerous applications and can be easily installed.











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### Recirculating chiller

In order to select the right chiller, the following parameters are important: size of the evaporation flask, number of rotary evaporators that are to be supplied with one chiller, requirements for flow or condensate temperature. On this basis, the cooling power requirement can be determined and the right cooling source can be selected. The decision for a recirculation chiller from IKA is also the decision for high energy savings and reduction of operating noises.







Model	RC 2 lite Ident No.: 0025006624	RC 2 GREEN basic Ident No.: 0025004186
Cooling agent	R290	R290
Cooling capacity at 20 °C	400 W	800 W
Energy efficiency	high	very high
Max. pump pressure	0.35 bar	0.5 bar
Max. flow rate	18 l/min	21 l/min

# Set-up example: RV 10 digital pro V double Complete

With only one vacuum system and chiller, multiple rotary evaporators can be supplied. This set-up shows the package RV 10 digital pro V double Complete, including two rotary evaporators with suitable vacuum and cooling system. The pro version is designed to be particularly space-saving and ensures a reduction in acquisition costs.



Scope of delivery:

- > 2 x RV 10 digital V
- + 2 x VC 10 pro
- + 1 x VACSTAR digital
- + 1 x VSE 1
- + 2 x RV 10.5005 hoses
- + 2 x VC 10.300
- + 2 x VC 10.400
- + 1 x RC 2 GREEN basic
- + 2 x Y-hose connector, 8 mm





