

# designed for scientists



### СинЭкс - официальный представитель ІКА в РФ

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EN



# EASY TO USE

Passionately enabling chemists to create a better world since 1910. From A to Z.

# **Rotary Evaporators**

/// Modular design and highest precision

# The award-winning design and performance of the IKA rotary evaporators will make a significant difference in your laboratory.

Our RV 8, RV10 digital and control evaporators offer excellent distilling solutions to the demanding work of scientists. Great value, design and technology - all at your convenience!

In our product range, the RV 8 is the entry level option with manual lift and adjustable immersion angle.

Our advanced RV10 evaporators stand out because of their extraordinary features, such as: digital display for heating bath and drive, interval option, soft start and adjustable end point recognition to protect the glassware from breaking. The digital and control models offer RS 232 and RS232/USB interfaces respectively for using labworldsoft® and for online firmware updates.

### 5-YEAR WARRANTY\*

\*2+3 years after registering at www.ika.com/register, glassware and wearing parts excluded











Find out more about IKA and order our fascinating products online: www.ika.com.

8 4 /// RV 10 DIGITAL /// RV 8 12 16 /// RV 10 CONTROL /// RV 10 CONTROL AUTO 20 22 /// HB 10 /// ROTARY EVAPORATORS 24 26 /// TECHNICAL DATA /// ACCESSORIES 40 44 /// PACKAGES /// SOFTWARE 45 /// IKA SERVICE

# **RV** 8

### /// The smart choice

The RV 8 rotary evaporator comes equipped with an easy to use semimanual lift with integrated safety "lift out function" and is ideal for all standard evaporating applications. Digital displays for both rotation speed and heating bath temperature allow for optimal controlling of all distillation processes. The RV 8 provides a user-friendly operation and distills the required solvent accurately with precise results. Additionally a Woulff bottle is included in all the RV 8 packages.





**Two digital displays** for an optimal overview.



Advanced heating bath HB 10 **included in delivery.** 



Compatible with the complete range of **IKA RV 10 glassware**.



Push-out function.



Can be moved by **130 mm** to accommodate different flasks.



**Adjustable** immersion angle and height.

PERFORMANCE /// RV 8 V, Ident.	No. 0010002170   RV 8 V-C, Ident. No. 0010002173   RV 8 FLEX, Ident. No. 0010002166
RV 8 V	with booting both LID 10 and DV 10.1 set of placeware waited
NV O V	with heating bath HB 10 and RV 10.1 set of glassware, vertical
RV 8 V-C	with heating bath HB 10 and RV 10.10 set of glassware, vertical, coated
RV 8 FLEX	with heating bath HB 10, incl. Woulff bottle

# **RV** 8

# /// RV 8 in detail



**OVERVIEW OF COMPONENTS** 

- 1 vertical glassware (other options available)
- 2 various flask sizes
- 3 vacuum connection plus Woulff bottle;
- 4 two displays for optimal view
- **5** heating bath can be used separately
- 6 ergonomic carrying handles on heating bath; can be 11 vapor tube held in plastic sleeves moved by 120 mm to accommodate different flasks
- 7 motorized height-adjustable lift;

lift raised automatically in case of power outage

- 8 choice of angle
- 9 black and white display
- **10** locking mechanism red for unlocked state of vapor tube
- to prevent sticking
- 12 solvent resistant PTFE seal for long-term use

RV 8 IS THE LATEST IN
DISTILLING TECHNOLOGY
THAT GIVES YOU MORE OPTIONS TO FIT WITHIN YOUR BUDGET



### SEMI-MANUAL MECHANISM

The new RV 8 offers a semi-manual mechanism. The ambidextrous design makes working more convenient and comfortable.



# **RV 10 digital**

/// Robust and reliable lab companion





**Two digital displays** for an optimal overview.



Compatible with the complete range of **IKA RV 10 glassware**.



Can be moved by **140 mm** to accommodate different flasks.



Advanced heating bath HB 10 **included in delivery.** 



Push-out function.



**Adjustable** immersion angle and height.

### BENEFITS

- > universal water/oil heating bath
- motorized lift with "safety-stop" function
- > RS 232 Interface
- optimized heating bath volume for fast heat-up
- ergonomically placed handles on heating bath
- > smooth start
- > left-right interval
- > timer function
- > safety temperature circuits
- > lower-end stop
- > push-off mechanism to loosen tight fitted glassware



# **RV 10 digital**

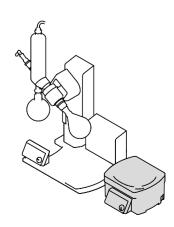
/// RV 10 digital in detail



### **OVERVIEW OF COMPONENTS**

- 1 vertical glassware (other options available)
- 2 various flask sizes
- 3 vacuum connection plus Woulf bottle
- 4 adjustable safety stop
- 5 two displays for optimal view
- 6 heating bath can be used separately; ergonomic carrying handles on heating bath
- 7 can be moved by lift to accommodate different flasks

- 8 motorized height-adjustable lift; lift raised automatically in case of power outage
- **9** choice of angle
- 10 vapor tube held in plastic sleeves to prevent sticking
- 11 solvent resistant PTFE seal for long-term use



Heating bath with ergonomic carrying handles, can also be used separately.

# **RV 10 control**

/// Efficient and safe distillation

With the integrated vacuum controller, a user can work with any vacuum source, or other single vacuum pump.

BEST-IN-CLASS COOLING SURFACE 1,500 CM<sup>2</sup>



Compatible with the complete range of **IKA RV 10 glassware**.



Can be moved by **140 mm** to accommodate different flasks.



Advanced heating bath HB 10 **included in delivery.** 



Push-out function.



**Adjustable** immersion angle and height.

### **BENEFITS**

- > RV 10 control with advanced technology
- > automatic solvent boiling point detection
- integrated solvent library (extendible by the customer)
- > integrated vacuum controller
- > USB interface and graphical display
- direct connection to a speed-controlled pump possible
- automatic monitoring of heating bath temperature
- online-firmware update via USB or RS 232 possible
- complete and customized system solution through combination of a rotary evaporator, a vacuum pump and a chiller
- push-off mechanism to loosen tight fitted glassware
- 3 different operating modes: manual, auto destillation, user-defined

PATENTED
VOLUME CONTROLLED
DISTILLATION!



# RV 10 control packages

/// Best price offers





RV 10.4002 magnetic valve included in RV 10 control package



N 920 speed controlled pump included in RV 10 control auto package

### **RV 10 control**

### for lab vacuum system

- > 2 × RV 10 control
- > 1 × MVP 10 basic
- + RV 10 control
- + RV 10.4002 magnetic valve

# **RV 10 control auto** for stand alone operation

- + RV 10 control
- + N 920 speed controlled pump

### RV 10 control V package

- > RV 10 control V
- + HB 10 heating bath
- + RV 10.1 set of glassware, vertical

PLEASE VISIT WWW.IKA.COM/ DISTILLING

Ident. No. 0008037700

### RV 10 control V auto package

- > RV 10 control V auto
- + HB 10 heating bath
- + N 920 speed controlled pump
- + RV 10.1 set of glassware, vertical

Ident. No. 0008037800

### RV 10 control V-C package

- > RV 10 control V-C
- + HB 10 heating bath
- + RV 10.10 set of glassware, vertical, coated

Ident. No. 0008037900

### **RV 10 control V-C auto** package

- > RV 10 control V-C auto
- + HB 10 heating bath
- + N 920 speed controlled pump
- + RV 10.10 set of glassware, vertical, coated

Ident. No. 0008038000

### RV 10 control FLEX package

- > RV 10 control FLEX
- + HB 10 heating bath
- + Woulff bottle

### RV 10 control FLEX package

- > RV 10 control FLEX
- + HB 10 heating bath
- + N 920 speed controlled pump

15

+ Woulff bottle

Required water and vacuum hoses are included in the package.

Ident. No. 0008038100

Ident. No. 0008038200

# **RV 10 control auto**

/// Automatic distillation

The enhanced RV 10 control is now equipped with our fully automated speed control pump N 920. Additionally, the RV 10 control auto detects the required level of vacuum pressure by detecting the boiling point of the solvent. This feature has some significant benefits over a valve-regulated system.

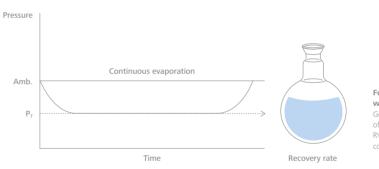
AUTOMATIC BOILING POINT DETECTION

# WHY TO USE THE RV10 CONTROL AUTO Automatic • Start heating bath • Ilft lowers • rotation starts • pump extivetes Controlled • flow rate for the condenser • dr on the condenser • correct heating bath temperature

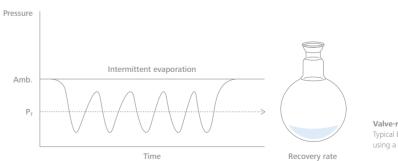
### BENEFITS

- > increased solvent recovery performance up to 100 %
- > automatic boiling point detection
- > speed controlled vacuum pump for precise vacuum level
- > reduced noise level and wearing of pump components
- > reduced process time and increased overall performance

The gentle maintenance of the vacuum level prevents over (or undershooting) of the target vacuum pressure, an occurrence that is often seen with valve-controlled systems. This feature allows for faster, more efficient and safer distilling processes. It also significantly reduces the noise level of the pump due to the motor speed management functionality of the RV 10 control auto. As a result, you save energy and increase the overall performance.



Fully automatic control with pump speed adjustment Gentle and smooth control of a steady vacuum level with RV 10 control auto and speed controlled pump.



Valve-regulated
Typical behavior of pressure when using a valve-controlled system.

Amb. = Ambient Pressure  $P_T$  = Target pressure

# **RV 10 control auto**

/// An overview



### **OVERVIEW OF COMPONENTS**

- high performance vertical cooling condenser (different options available)
- 2 various flask sizes
- 3 adjustable safety stop
- 4 two displays for optimal view
- 5 heating bath can be used separately; ergonomic carrying handles on heating bath
- **6** RS 232 and USB interface
- 7 integrated vacuum controller
- 8 vapor tube held in plastic sleeves to prevent sticking
- 9 solvent resistant PTFE seal for long-term use
- **10** motorized height-adjustable lift raised automatically in case of power outage



# **HB 10**

# /// Universal heating bath

IKA heating baths are developed with a strong focus on safety. All baths are equipped with a double jacket to protect against burns and a safety temperature monitor keeps the bath from over heating. After turning on the unit every time, the safety functions are automatically checked.

### **BENEFITS**

- > lock-function prevents accidental change of bath settings
- > dry run control stops heating the bath if the liquid level has dropped
- > adjustable safety temperature; user can set temperature limits.
- > the heating bath can be used as a stand-alone unit for other applications
- > ergonomic and well positioned handles for safe transport
- > optimized bath volume guarantees fast heat-up time
- > 3 operating modes to operate safer



HB 10 HEATING BATH: FOR A LOW VOLUME AND FAST HEAT-UP TIME



**Integrated handles** to safely move heating bath



**LCD digital** display for precise temperature setting.



Integrated **ergonomic** carrying handles.

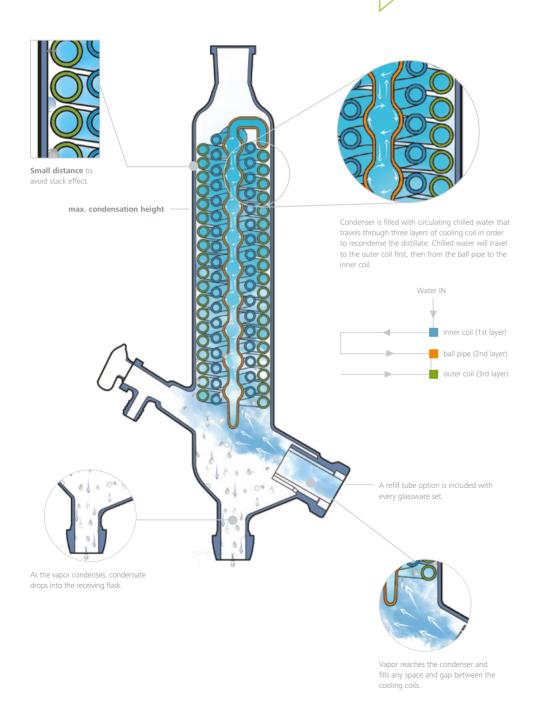


**Key-button** with locking function for the heating bath temperature.

# **Rotary Evaporators**

/// Condenser

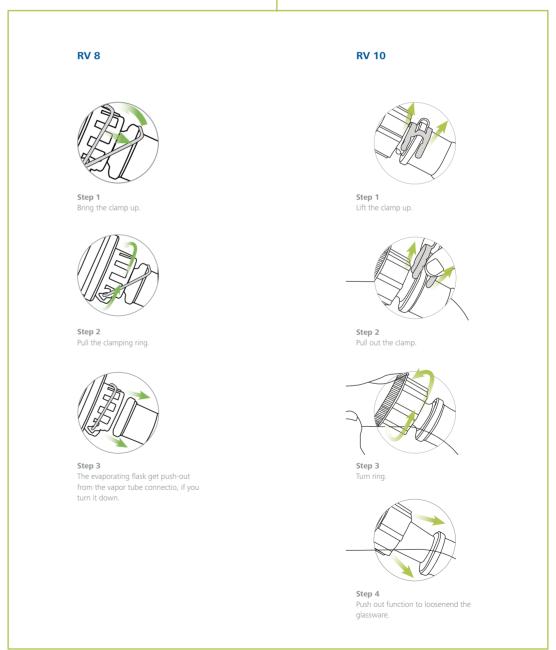
ADVANCED TECHNOLOGY
3 LAYERS FOR ALL IKA
ROTARY EVAPORATORS



# **Rotary Evaporators**

/// Push-out function





# **Technical data**

# /// Rotary Evaporators

	RV 8	RV 10 digital	RV 10 control
ackages			
	RV 8 V	RV 10 digital V	RV 10 control V*
	RV 8 V-C	RV 10 digital V-C	RV 10 control V-C*
	RV 8 FLEX	RV 10 digital FLEX	RV 10 control FLEX*
Cooler type			
		V = vertical	
		V–C = vertical-coated	
	FLEX =	= incl. Woulff bottle, glassware to be	ordered separately
Cooling surface			

<sup>\*</sup> RV 10.4002 magnetic valve now included with delivery of every RV 10 control V, V-C and FLEX package.

RV 8		RV 10 control	
RV 8 V package	0008033800	RV 10 control V package	0008037700
RV 8 V-C package	0010002173	RV 10 control V-C package	0008037900
RV 8 FLEX package	0010002166	RV 10 control FLEX package	0008038100
		RV 10 control V auto package	0008037800
RV 10 digital		RV 10 control V-C auto package	0008038000
RV 10 digital V package	0008040300	RV 10 control FLEX auto package	0008038200
RV 10 digital V-C package	0008040400	_	
RV 10 digital FLEX package	0008040500		

	RV 8	RV 10 digital	RV 10 control
Drive			
Motor type	brushless DC drive motor	brushless DC drive motor	brushless DC drive moto
Motor rating input	50 W	50 W	50 W
Speed range	5 – 300 rpm	20 – 280 rpm	20 – 280 rpm
Speed display	digital	digital	digital
Clockwise and counter-clockwise	no	yes	yes
Soft start	yes	yes	yes
Head angle adjustable	0 to 45°	0 to 45°	0 to 45°
Stroke displacement	130 mm, manual	140 mm, motorized	140 mm, motorized
Setting of lower end stop	no	60 mm, contact free	60 mm, contact free
Vacuum controller	optional	optional	integrated
Bath volume max.	31	31	3
Temperature range	RT to +180 °C	RT to +180°C	RT to +180°C
Heating power	1,300 W	1,300 W	1,300 W
Temperature display	digital	digital	digital
Setting accuracy	1°C	1°C	1°C
	± 1 K	± 1 K	± 1 K
Control Deviation			
Control Deviation  General data			
	510 × 345 × 490 mm	530 × 410 × 430 mm	530 × 410 × 430 mm
General data			530 × 410 × 430 mm 21.5 kg
General data  Dimensions (W $\times$ D $\times$ H)  Weight of the drive incl.	510 × 345 × 490 mm	530 × 410 × 430 mm	
General data  Dimensions (W × D × H)  Weight of the drive incl. heating bath without glass parts	510 × 345 × 490 mm 17.2 kg	530 × 410 × 430 mm	21.5 kg
General data  Dimensions (W × D × H)  Weight of the drive incl. heating bath without glass parts  Permissible ambient temperature	510 × 345 × 490 mm 17.2 kg +5 to +40 °C	530 × 410 × 430 mm  20 kg +5 to +40 °C	21.5 kg +5 to +40 °C

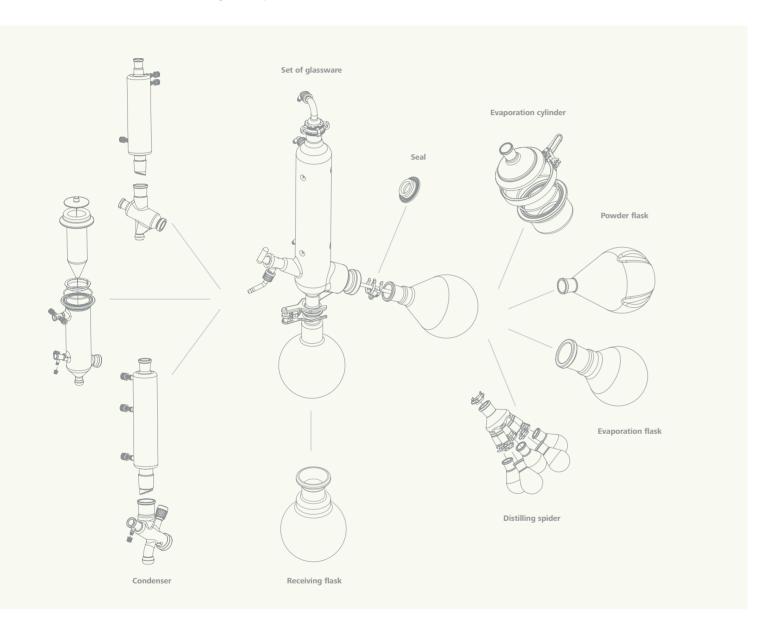
V: Rotary evaporator with set of vertical glassware.

V-C: Rotary evaporator with set of vertical coated glassware.

FLEX: Rotary evaporator without any glassware (condenser, evaporation and receiving flask); either use pre-existing IKA glassware or order separately.

# **Accessories**

/// Rotary Evaporators





### 1 | RV 10.1 SET OF GLASSWARE, VERTICAL

Compact vertical condenser for all standard distillations. Glassware included in all packages, except FLEX

### Details

RV 10.1 vertical, Ident. No. 0003655300 RV 10.10 vertical-coated, Ident. No. 0003755400

Condenser type	vertical
Cooling surface	1,500 cm <sup>2</sup>

# 2 | RV 10.2 SET OF GLASSWARE, DIAGONAL

Diagonal condenser for all standard distillations.

### Details

RV 10.2 diagonal, Ident. No. 0003755300 RV 10.20 vertical-coated, Ident. No. 0003755500

	er type	Condenser type
Cooling surface 1,500 cm <sup>2</sup>	surface	Cooling surface

### 3 | RV 10.3 VERTICAL-INTENSIVE CONDENSER WITH MANIFOLD

Vertical-intensive condenser with double jacket and manifold for particularly efficient condensation.

### Details

RV 10.3, Ident. No. 0003741000

RV 10.30 coated, Ident. No. 0003741100

Condenser type	vertical-intensive
Cooling surface	1,400 cm <sup>2</sup>

### 4 | RV 10.4 DRY ICE CONDENSER

Dry ice condenser for distilling low-boiling point solvents. Not possible with autodistillation mode on RV 10 control.

### Details

RV 10.4, Ident. No. 0003742000 RV 10.40, Ident. No. 0003742100

Cooling surface 620 cm	

### 5 | RV 10.5 VERTICAL CONDENSER WITH MANIFOLD AND CUT-OFF VALVE FOR REFLUX DISTILLATION

The solvent to be distilled can be continuously fed through the PTFE inlet tube.

Requires RV 10.74 Vapor tube short.

### Details

RV 10.5, Ident. No. 0003743000 RV 10.50 coated, Ident. No. 0003743100

Condenser type	vertical	
Cooling surface	1,200 cm <sup>2</sup>	

### 6 | RV 10.6 VERTICAL-INTENSIVE CONDENSER WITH MANIFOLD AND CUT-OFF VALVE FOR REFLUX DISTILLATION

The manifold features a condensate cover and an outlet channel which prevent the condensate from coming into contact with the seal. Requires RV 10.74 Vapor tube short.

RV 10.6, Ident. No. 0003744000 RV 10.60 coated, Ident. No. 0003744100

Condenser type	vertical-intensive
Cooling surface	1,400 cm <sup>2</sup>

### 7 | RV 10.70 VAPOR TUBE NS 29/32

Made of high quality borosilicate glass. For all glassware. Included with each RV 10 package.

### Details

RV 10.70, Ident. No. 0003812200

borosilicate glass

### 8 | RV 10.74 VAPOR TUBE SHORT NS 29/32

Made of high quality borosilicate glass. For vertical condensers RV 10.5 and RV 10.6.

RV 10.74, Ident. No. 0003971700

Material borosilicate glass

### 1 | HB 10.1 SHIELD FOR HEATING BATH HB 10

For optimal protection against splashes of hot liquid.

### Details

HB 10.1, Ident. No. 0003641800

Material polycarbonate

### 3 | POWDER FLASK NS 29/32

Optimizes powder drying applications by avoiding the accumulation of powder on the walls of the flask.

RV 10.300, 500 ml, Ident. No. 0003738200 RV 10.301, 1,000 ml, Ident. No. 0003738300 RV 10.302, 2,000 ml, Ident. No. 0003738400

Material

borosilicate glass

### and in the event of the evaporator flask breaking.

2 | HB 10.2 PROTECTION COVER FOR HEATING BATH Essential accessory if it is not possible to work in an extractor hood. Protects the user against splashes of hot liquid

### Details

HB 10.2, Ident. No. 0003641000

Material polycarbonate

### 4 | EVAPORATION CYLINDER NS 29/32

Makes retrieval of viscous substances easy.

RV 10.400, 500 ml, Ident. No. 0003738800 RV 10.401, 1,500 ml, Ident. No. 0003738900

Volume (in ml) Material

500, 1,500 borosilicate glass

### 5 | RV 10.500 FOAM BRAKE NS 29/32

The rising foam produces bursts in the glass ball extension. This stops foam from entering the receiving flask. Note: When using a 3 liter evaporation flask, RV 10.3000 extension plate is reauired.

### Details

RV 10.500, Ident. No. 0003739200

Material

borosilicate glass

### 6 | RV 10.3000 EXTENSION PLATE

Accessories required when using RV 10.500 Foam brake. Note: Allows the heating bath to be moved 150 mm horizontally. Accessories required when using the RV 10.500 foam brake and 3 liter evaporation flask.

### Details

RV 10.3000, Ident. No. 0003859000









3 | Powder flask



4 | Evaporation cylinder



200 × 270 × 27 mm

5 | RV 10.500



6 | RV 10.3000



1 | HB 10.1

7 | **RV 10.606** 



8 | RV 10.600

12 | RV 10.5005





9 | RV 10.80

12 | **RV 8.1** 



10 | **RV 10.100** 



11 | RV 10.8001



12 | RV 05.10





### 7 | DISTILLING SPIDER WITH 5 FLASKS NS 29/32

For simultaneous distillation in 5 evaporation flasks, included with purchase.

### Details

RV 10.606, 50 ml, Ident. No. 0003740800 RV 10.607, 100 ml, Ident, No. 0003740900

Volume (in ml) 50, 100 Material borosilicate glass

### 9 | EVAPORATION FLASK NS 29/32

The flask, which is made of high quality borosilicate glass, is available in seven different sizes.

RV 10.80, 50 ml, Ident. No. 0003740100 RV 10.81, 100 ml, Ident. No. 0003740200 RV 10.82, 250 ml, Ident. No. 0003740300 RV 10.83, 500 ml, Ident. No. 0003740400 RV 10.84, 1,000 ml, Ident. No. 0003740500 RV 10.85, 2,000 ml, Ident. No. 0003740600 RV 10.86, 3,000 ml, Ident. No. 0003740700

RV 10.800 coated, 50 ml, Ident. No. 0020005330\* RV 10.810 coated, 100 ml, Ident. No. 0020005331\* RV 10.820 coated, 250 ml, Ident. No. 0020005332\* RV 10.830 coated, 500 ml, Ident. No. 0020005333\* RV 10.840 coated, 1,000 ml, Ident. No. 0004221400\* RV 10.850 coated, 2,000 ml, Ident. No. 0020005334\* RV 10.860 coated, 3,000 ml, Ident. No. 0020005335\*

50, 100, 250, 500, 1,000, 2,000, 3,000 Material borosilicate glass

### 8 | DISTILLING SPIDER WITH **DISTILLING SLEEVES NS 29/32**

For simultaneous distillation in 6, 12 or 20 distilling sleeves, included with purchase.

### Details

RV 10.600, 6 distilling sleeves, Ident. No. 0003739400 RV 10.601, 12 distilling sleeves, Ident. No. 0003739500 RV 10.602, 20 distilling sleeves, Ident. No. 0003739600 RV 10.610, 20 ml, Ident. No. 0003919400

Material borosilicate glass

### 10 | RECEIVING FLASK KS 35/20

The flask, which is made of high quality borosilicate glass, is available in six different sizes, either coated or uncoated.

RV 10.100, 100 ml, Ident. No. 0003742200 RV 10.101, 250 ml, Ident. No. 0003742300 RV 10.102, 500 ml, Ident. No. 0003742400 RV 10.103, 1,000 ml, Ident. No. 0003742500 RV 10.104, 2,000 ml, Ident. No. 0003742600 RV 10.105, 3,000 ml, Ident. No. 0003742700

RV 10.200 coated, 100 ml, Ident. No. 0003743200 RV 10.201 coated, 250 ml, Ident. No. 0003743300 RV 10.202 coated, 500 ml, Ident. No. 0003743400 RV 10.203 coated, 1,000 ml, Ident. No. 0003743500 RV 10.204 coated, 2,000 ml, Ident. No. 0003743600 RV 10.205 coated, 3,000 ml, Ident. No. 0003743700

100, 250, 500, Volume (in ml) Material borosilicate glass

\* About the coated evaporating flask the coating could be use if the costumer is workiung with oel and up to an temp. from +180  $^{\circ}$ C.

Unique to IKA

### 11 | RV 10.8001 SEAL

New airtight lip-seal from PTFE with a built-in stainless steel spring.

### Details

RV 10.8001, Ident. No. 0003907000

Material PTFE, stainless steel

### 12 | OTHER ACCESSORIES

### Details

RV 05.10 balljoint clamp, Ident. No. 0000736600 RV 10.88 clamp, NS 29, Ident. No. 0003683300 RV 10.5005 hose kit, Ident. No. 0020000552

### **RV 8 Accessories**

RV 8.1 support pole, Ident. No. 0004438500 RV 8.2 mechanical end stop, Ident. No. 0025001342 RV 8.3 stand pole, Ident. No 0025004707

# **Accessories**

# /// Selection guide

	RV 8	RV 10 digital	RV 10 control
Required accessoriesfor an $\epsilon$	existing vacuum		
Magnetic valve in-house vacuum system	× <sup>1)</sup>	x <sup>1)</sup>	RV 10.4001
Magnetic valve laboratory vacuum system	×1)	×1)	RV 10.4002
Pump control including magnetic valve	X <sup>1)</sup>	x <sup>1)</sup>	RV 10.4003
Recommended accessories f	or tap water (faucet) connec	ction	
	or tap water (faucet) connec	ction	RV 10.5001
Recommended accessories f  Choke water valve  Filter  Pressure regulating valve	or tap water (faucet) connection — — — — — — RV 10.5003	RV 10.5003	RV 10.5001 RV 10.5002 RV 10.5003
Choke water valve Filter Pressure regulating valve	- - RV 10.5003		RV 10.5002
Choke water valve Filter	- - RV 10.5003	- - RV 10.5003	RV 10.5002
Choke water valve Filter Pressure regulating valve  Supplementary vacuum syst	RV 10.5003  em  MVP 10 basic +	RV 10.5003  MVP 10 basic +	RV 10.5002

<sup>1)</sup> No accessories required for vacuum pump connection (vacuum level must be controlled by external vacuum controller).







RV 10 digital

RV 10 control





### RV 10.4001 MAGNETIC VALVE IN-HOUSE VACUUM

Industrial vacuum source for many different in-house users; usually fixed pipes.

Accessory required for an existing vacuum.

<b>Details</b> RV 10.4001, Ide	ent. No. 0003902600	
Power	24 V / 9 W	
Weight	0.142 kg	

# RV 10.4002 MAGNETIC VALVE LABORATORY VACUUM

High quality vacuum valve for an optimum controlled operation. The integrated check valve eliminates external influence on the operating pressure in the vacuum chamber.

Accessory required for an existing vacuum.

Power	24 V / 6 W
Weight	0.142 kg
Integrated check valve	yes

### **RV 10.5002 FILTER**

To prevent contamination of the water pipes. With removable filter for easy cleaning.

Accessory recommended for tap water connection.

RV 10.5002, Ident. N	No. 0003903800	
Mesh thickness	100 μm	
Connection diameter	10 mm	
Pressure	max. 11 bar	





# RV 10.4003 PUMP CONTROL INCL. MAGNETIC VALVE

One rotary evaporator at one pump/tabletop operation.
The pump only works when vacuum is needed – leading to a savings of up to 90 % of operating time, increased equipment life and reduction of noise. Integrated LED display.

Accessory required for an existing vacuum.
For non EU countries a plug adapter is required.

RV 10.4003, Ident. No. 0003900200	
Power magnetic valve	24 V / 6 W
Power pump control	100 – 240 V, 50/60 Hz
Weight	0.142 kg



### RV 10.5001 CHOKE WATER VALVE

The integrated magnetic valve closes/opens the water circuit during automatic distillation.

Accessory recommended for tap water connection.

RV 10.5001, Ident. N	NO. 0003902700
Power	24 V / 6 W
Connection diameter	10 mm
Integrated fine adjustment	yes
Weight	0.142 kg



### **RV 10.5003 PRESSURE REGULATING VALVE**

For adjusting the cooling water pressure when connecting to a tap water system.

Accessory recommended for tap water connection.

<b>Details</b> RV 10.5003, Ident. No. 0003907100		
Mesh thickness	100 μm	
Pressure	max. input 25 bar	

# **Accessoires**

/// Rotary Evaporators





### MVP 10 BASIC

For dry, oil-free applications in the low vacuum range.

MVP 10 basic, Ident. No. 000398000	JU
Cylinder	2
Flow rate	28 l / min
Ultimate vacuum	7 mbar
Pumping speed	1,8 m³/h
Operating pressure	1 bar
Weight	11.5 kg
Dimensions	245 × 320 × 155 mm
Permissible ambient temperature	+10 to +40 °C
Motor protection	IP 54
Voltage / Frequency	220 – 240 V / 50/60 Hz

Y connector + 1m vacuum tube is included in the scope of delivery.



### VC 10

- > manual and program mode
- > cleaning function for long valve lifecycles
- ceramic pressure sensor with outstanding resistance to chemicals
- > programmable function for up to 10 scenarios
- An integrated ventilation valve enables simple pressure equalization and aeration with inert gas on process completion. In addition, the VENT short key button allows pressure equalization during an operation run.

Ident. No. 0020004893

Y connector + 1m vacuum tube is included in the scope of delivery.



### RC 2 BASIC | CONTROL

Refrigerated circulator designed for precise temperature control and cooling

<b>Details</b> RC 2 basic, Ident. No. 0004171000 RC 2 control, Ident. No. 0004173000	I
Temperature range	-20 °C to RT
Temperature display	LED   TFT
Temperature stability DIN 12876	± 0.1 K   ± 0.05 K
Cooling capacity at +20 °C	400 W
Dimensions	220 × 475 × 525 mm
Permissible ambient temperature	+5 to +32 °C
Motor protection	IP 21
Voltage / Frequency	220 – 240 V / 50/60 Hz



### VC 10 VACUUM CONTROLER

Universal vacuum controller for multiple vacuum sources.

VC 10, Ident. No. 0020004893	
Vacuum sensor	Ceramic, Al <sub>2</sub> O <sub>3</sub>
Measuring range	1 – 1,100 mbar
Measuring accuracy	± 1 mbar
Hose connections	ID 8 mm
Housing material	Plastic
Dimensions (W $\times$ H $\times$ D)	95 × 110 × 150 mm
Interface	USB + RS 232
Mains voltage	100 – 240 V



### VCV 1 vacuum control valve manual

> Allows for adjusting the set vacuum value on the manual manometer.



### VCV 2 vacuum control valve digital

> Allows for adjusting the set vacuum value on the digital manometer.

Ident. No. 0020004893

Ident. No. 0020004850

### VSS 1

### vacuum safety set

The Woulff bottle is a condensate trap connected ahead of the vacuum pump to prevent vapors from being released into the air.

Ident. No. 0020005194





VSS 1 stand and glassware

### N 920 SPEED CONTROL PUMP

Allows high suction speed even in the low-vacuum range.

N 920*, Ident. No. 0003919100   Ide	nt. No. 0004406000
Max. flow rate	20 I / min
Ultimate vacuum	2 mbar
Operating pressure	0.5 bar
Connectors for tube	ID 9 mm
Permissible ambient temperature	+5 to +40 °C
Dimensions (W $\times$ D $\times$ H)	324 × 158 × 226 mm
Weight	8.6 kg
Motor protection	IP 20
Voltage / Frequency	90 – 230 V / 50/60 Hz



<sup>\*</sup> Additional external vacuum controller required. | For use with RV 8, RV 10 digital and control.

# **RV 8 V complete solution**

/// Entry-level system





### **BENEFITS**

- > the entry level rotary evaporator from IKA
- with manual, effortless lifting mechanism and locking function
- > compatible with the complete range of IKA glassware
- > universal water / oil heating bath
- › digital displays for rotation and speed and heating bath temperature



### INCLUDED IN PACKAGE

/// RC 2 basic chiller + MVP 10 basic vacuum pump + VCV 1 vacuum controller + H.Sl.8 tube +  $2 \times RV$  10.8001 seal











# **RV 10 control auto solution**

/// Package offer

HIGH PERFOMANCE SOLUTION!









\*Package is also available without chiller and hose.

# **FLEX-ibility with the IKA RV FLEX packages**

/// FLEX packages

The IKA FLEX packages enable the FLEX-ibility of customizing the glassware setup for specific applications.







**Step 1**Choose your FLEX base model.

### Step 2

Select individual glassware:

- > condenser
- > evaporation flask
- > receiving flask



### Step 3

Configured RV 8 FLEX Package with selected glassware.

### RV 8 FLEX package

- > RV 8 drive
- > HB 10 heating bath
- > clamps for glassware, incl. Woulff bottle.

Ident. No. 0010002166

### RV 10 digital FLEX package

- > RV 10 digital drive
- > HB 10 heating bath
- > clamps for glassware, incl. Woulff bottle.

Ident. No. 0008040500

### RV 10 control FLEX package

- > RV 10 control drive
- > HB 10 heating bath
- clamps for glassware, incl. Woulff bottle.
- > RV 10.4002 magnetic valve

Ident. No. 0008038100

### **RV 10 control FLEX auto** package

- > RV 10 control drive
- > HB 10 heating bath
- > clamps for glassware, incl. Woulff bottle.
- > N 920 speed controlled pump

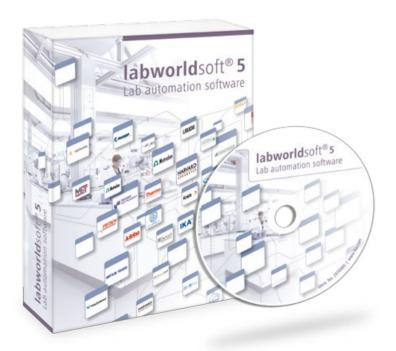
Ident. No. 0008038200

# labworldsoft® software

/// Advanced software used for lab automation

IKA's software labworldsoft® has an innovative approach to lab automation. It enables the networking of up to 64 laboratory devices which can be controlled simultaneously via one PC. Not only IKA products, but also other manufacturers laboratory devices can be integrated using labworldsoft®.

This makes the automation of your laboratory experiments and processes much more easy and efficient.



### labworldsoft® software

Ident. No. 0004720000

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# **IKA Service**

/// FAO

### What minimum vacuum can be reached with the RV 10 system (with coated glassware)?

If all vacuum connections are sealed vacuum tight and the vacuum system is strong enough, down to 1mBar.

### Is it better to use a vertical or a diagonal condenser?

It does not matter for the application. Both condensers have the same cooling surface and power.

# What is the diameter of the hose to refill the evaporating flask with medium in the RV 10 system and what is it made of?

The hose has a diameter of 5 mm and is made of PTFE (Teflon).

### Is there a warning system when the heating bath HB 10 is still hot?

Yes. The message "HOT" will be blinking for as long as the water bath temperature exceeds +60 C.

### Is it possible to move the heating bath HB 10 in the RV 10 system?

Yes, it can be moved 50 mm horizontally and can also be used as a stand-alone unit.

# Which rotary evaporator system is the right one for my application? What accessories are needed?

On www.ika.com you can use the RV 10 configurator that guides you through the process of choosing the appropriate system for your application needs.

### Can I perform a continuous distillation with IKA rotary evaporator system and 3 I flask?

Yes, even with a 3 liter receiving flask you can do a continuous distillation. Simply use the PTFE tube that comes with the glassware. Use this by opening up the vacuum shut-off valve to refill while under vacuum. The loss of vacuum pressure is little and will be stabilized by the vacuum pump.

### Is it necessary to measure vapor temperature inside the flask?

No, IKA rotary evaporators are controlled by measuring the temperature of the cooling water flow.

I work with samples that foam easily. How can I prevent foaming over into the cooling coil? Simply use our foam brake/bump trap listed under our accessories. It stops foam from entering the cooling coil or receiving flask.

### APPLICATION SUPPORT

For questions regarding applications and processes, you can call our free hotline number: **00 8000 4522777** (00 8000 IKAAPPS)\* eMail: applicationsupport@ika.de

Monday – Thursday from 8:30 – 16:30 CET Friday from 8:30 – 15:30 CET

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Our dedicated team of engineers provides comprehensive technical service on a global level. If you have any questions, please do not hesitate to contact IKA directly. Alternatively, you can get in touch with your dealer.

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# RVIAh FN IWS



# designed for scientists



# СинЭкс - официальный представитель ІКА в РФ

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