

# Rotavapor® R II



# The Rotavapor® RII – a high quality key product

**Vacuum distillation is the most frequently used method of thermal separation. For small quantities the principle of rotary evaporation is the most widely used. The rotary evaporator separates materials gently, quickly and economically. Its rotating flask produces a very effective transfer of heat, whilst ensuring thorough mixing and avoiding local overheating of the contents.**



Buchi, the company that invented the rotary evaporator, has been equipping laboratories worldwide for over half a century. Generations of chemists gain their degrees using a Rotavapor – and go on to appreciate its simplicity of operation, long service life and robustness in their professional careers. The Rotavapor RII fulfils exactly the fundamental needs of classical laboratory applications in teaching and research. It performs the important functions practically and dependably, without compromising on quality or safety – a device for gentle evaporation in the laboratory.



# Rotavapor® RII

## Vapour ducting



A continuous vapour duct and a vacuum seal made of PTFE composite material provide long service life and effective sealing.

## Basic unit

Small footprint and robust design in powder-coated aluminium.

## Combi clip



Elegant solution for the easy removal of the flask and dismantling of the vapour duct.

## Manual quick-action jack



Simple raising and lowering of the flask by hand – makes operation quick and safe.

## Heating bath



A heating bath for temperatures of 20 to 95 °C. The quick-release electrical connection means it is particularly easy to remove.



## Glass assemblies for the RII

The Rotavapor RII is available with three common glass assemblies:

### Glass assembly A



- Diagonal condenser
- Can be used where height is limited
- For standard distillations
- With optional tap for continuous feeding

### Glass assembly V



- Vertical condenser
- Minimum space requirement
- For standard distillations
- With optional tap for continuous feeding

### Glass assembly C



- Dry ice condenser
- For distilling solvents with low boiling points
- With optional tap for continuous feeding
- No cooling water necessary

If required, all glass parts (except the evaporating flask) can be P+G coated (see front page illustration). This protects against mechanical damage and provides efficient protection against glass splinters.

# Accessories

## Valve unit for vacuum controller



Unit with condensate trap and non-return valve with attachment for Rotavapor (not necessary with V-700 in stand-alone system).

Order No. 47160

## Vacuum valve for vacuum controller



For use with a central vacuum source or uncontrolled pump.

Order No. 31353

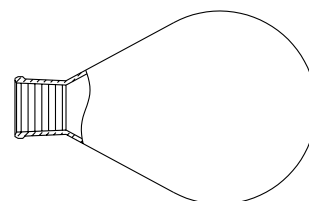
## PTFE tap



For the continuous feed of solution into the evaporation flask during evaporation.

Order No. 48100

## Evaporating flask



Pear-shaped evaporator flask, with standard joint.

| Std. joint | Order No. |       |
|------------|-----------|-------|
|            | 29/32     | 24/40 |
| 50 ml      | 00431     | 08750 |
| 100 ml     | 00432     | 08751 |
| 250 ml     | 00433     | 08754 |
| 500 ml     | 00434     | 08758 |
| 1000 ml    | 00435     | 00440 |
| 2000 ml    | 00436     | 08765 |
| 3000 ml    | 00437     | 08767 |
| 4000 ml    | 47991     | 47990 |

Other standard joints on request.

## Woulff bottle



For trapping particles and droplets for pressure equalisation (recommended in stand-alone system with V-700).

Order No. 47170

## Water jet pump



Simple principle of vacuum generation, available with or without cooling water valve. The vacuum controller switches on and off as required.

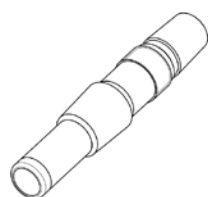
| Order No.           |       |
|---------------------|-------|
| Without water valve | 31358 |
| With water valve    | 31357 |

## Vapour ducting



### For glass assembly A

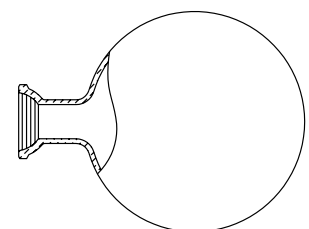
| Order No. |       |
|-----------|-------|
| NS 29/32  | 46964 |
| NS 24/40  | 48068 |
| NS 29/42  | 48072 |
| NS 34/35  | 48074 |



### For glass assemblies V+C

| Order No. |       |
|-----------|-------|
| NS 29/32  | 46962 |
| NS 24/40  | 48067 |
| NS 29/42  | 48069 |
| NS 34/35  | 48073 |

## Receiving flask



Round receiving flask with ball joint pan KS35-20. With or without P+G coating.

|         | Order No. |       |
|---------|-----------|-------|
|         | Standard  | P+G   |
| 500 ml  | 00424     | 25264 |
| 1000 ml | 00425     | 20728 |
| 2000 ml | 00426     | 25265 |
| 3000 ml | 00427     | 25266 |

A special P+G-LT low temperature coating is used for glass assembly C.

|         |       |
|---------|-------|
| 500 ml  | 40774 |
| 1000 ml | 40775 |
| 2000 ml | 40776 |
| 3000 ml | 40777 |

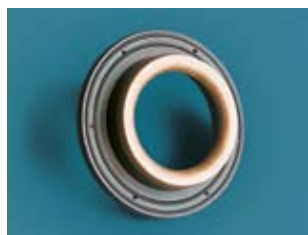
## Protective shield



Practical attachment to the bath's edge: effective protection for the user against splashing or a possible flask breakage.

Order No. 48052

## Vacuum seal



Low abrasion vacuum seal in PTFE composite material for long service life and effective sealing.

Order No. 48021

# Expansion to a complete evaporator system



## Vacuum Pump V-700

The Vacuum Pump V-700 is specially designed for laboratory use. This chemically resistant PTFE diaphragm pump can deliver all types of gases and vapours. With a capacity of 1.8 m<sup>3</sup>/h and a final vacuum of less than 10 mbar it is optimally suited to work with the Rotavapor. In combination with the Vacuum Controller V-850 it

creates the complete system "V-700 Advanced", which does not require an additional vacuum valve.

| Order No. |       |
|-----------|-------|
| 100–230 V | 71000 |



## Manual vacuum setting

The Rotavapor is fitted with a needle valve and manometer for simple manual setting of the vacuum. Recommended for use in combination with a Woulff bottle (Order No. 47170).

|           |       |
|-----------|-------|
| Order No. | 47291 |
|-----------|-------|



## Vacuum Pump V-700 EasyVac – the simple alternative for distillation task

The EasyVac vacuum module is a new concept for vacuum regulation during the distillation of single solvent systems. It couldn't be easier to operate. The process is started at the press of a button. The module then automatically finds the distillation start point, controls the pressure in accordance with the vapour pressure curve and determines the end

point for a distillation. The vacuum module EasyVac is the ideal control unit for an automatic evaporation system. Delegate the process settings to the unit and you will have more time for other tasks.

|           |       |
|-----------|-------|
| Order No. | 71410 |
|-----------|-------|



## Vacuum Controller V-850

For a clear and simple display and regulation of the vacuum. Inert construction, including integrated ventilation valve and precision pressure sensor. Menu selectable in six languages. Can be used directly

with Vacuum Pump V-700.

|           |       |
|-----------|-------|
| Order No. | 47299 |
|-----------|-------|



## A simpler recirculating chiller – the right choice for the RII

The Distillation Chiller B-741 is a low-cost recirculating chiller that is designed as the ideal replacement for cooling water for the Rotavapor. The chiller cools to a set temperature of 10 °C and has a power rating of 500 W at 15 °C. The compact design

on castors ensures space-saving set-up in the laboratory.

| Order No.    |       |
|--------------|-------|
| 230 V        | 46770 |
| 120 V/ 60 Hz | 46772 |

# Combine your R II

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## Voltage options

- 1 220–240 V
- 2 100–120 V

## Joint options for evaporating flask

- 1 NS 29/32
- 2 NS 24/40

## Glass assembly options

(including 1000 ml evaporating flask and receiving flask)

- A Glass assembly A
- V Glass assembly V
- C Glass assembly C

## P+G

- 0 Glass assembly without plastic coating
- 1 Glass assembly with plastic coating



## Technical data

|                              | Rotavapor® RII                         | Heating bath                   |
|------------------------------|----------------------------------------|--------------------------------|
| Dimensions (L x H x D)       | 550 x 575 x 415 mm                     | 285 x 240 x 300 mm             |
| Weight                       | 16–18 kg (depending on glass assembly) | 4 kg                           |
| Operating voltage            | 100–240 V                              | 100–120 V or 220–240 V         |
| Frequency                    | 50/60 Hz                               | 50/60 Hz                       |
| Power consumption            | 60 W                                   | 1300 W                         |
| IP class                     | 21                                     | 21                             |
| Rotation speed               | 20–280 rpm                             |                                |
| Flask size                   | 50–4000 ml                             | up to 4000 ml                  |
| Maximum flask capacity       | 3 kg                                   |                                |
| Controlled temperature range |                                        | 20–95 °C                       |
| Display                      | scale 0–10                             | scale 0–100 °C, Heating on/off |
| Temperature deviation        |                                        | ± 2 °C                         |
| Bath capacity                |                                        | 4 l                            |
| Approval                     | CE                                     | CE                             |

BÜCHI Labortechnik AG  
Postfach  
9230 Flawil 1  
Schweiz  
T +41 71 394 63 63  
F +41 71 394 65 65  
buchi@buchi.com  
www.buchi.com

BÜCHI Labortechnik GmbH  
Postfach 10 03 51  
45003 Essen  
Deutschland  
Freecall 0800 414 0414  
T +49 201 747 490  
F +49 201 237 082  
deutschland@buchi.com  
www.buechigmbh.de

BÜCHI Labortechnik GmbH  
Branch Office Netherlands  
Postbus 142  
3340 AC Hendrik-Ido-Ambacht  
The Netherlands  
T +31 78 684 94 29  
F +31 78 684 94 30  
netherlands@buchi.com  
www.buchi.nl

BÜCHI Italia s.r.l.  
Centro Direzionale, Milano Fiori  
Pal. A-4, Strada 4  
20090 Assago (MI)  
Italia  
T +39 02 824 50 11  
F +39 02 57 51 28 55  
italia@buchi.com  
www.buchi.it

BUCHI (THAILAND) Ltd.  
ASEAN Competence Center  
300 Phaholyothin Road  
Samsennai, Phayathai  
Bangkok 10400  
Thailand  
T +66 2 278 54 95  
F +66 2 279 05 48  
bacc@buchi.com  
www.buchi.com

BUCHI SMP  
Services Private Ltd.  
201, Magnum Opus  
Shantinagar Industrial Area  
Vakola, Santacruz (East)  
Mumbai 400 055,  
India  
T +91 22 66 98 94 50 / 51  
F +91 22 66 98 94 52  
smplisp@vsnl.com  
www.buchi.com

BUCHI Corporation  
19 Lukens Drive, Suite 400  
New Castle  
Delaware 19720  
USA  
T +1 302 652 3000  
F +1 302 652 8777  
Toll Free: +1 877 692 8244  
us-sales@buchi.com  
www.mybuchi.com

BUCHI Hong Kong Ltd.  
1810 Fortress Tower  
250 King's Road  
North Point, Hong Kong  
China  
T +852 2389 2772  
F +852 2389 2774  
china@buchi.com  
www.buchi.com

BUCHI Shanghai Trading LLC  
21/F Shanghai Industrial  
Investment Building  
18 Caoxi Bei Road  
200030 Shanghai  
China  
T +86 21 6468 1888  
F +86 21 6428 3890  
china@buchi.com  
www.buchi.com

BUCHI UK Ltd  
5 Whitegate Business Centre  
Jardine Way  
(off) Broadway  
Chadderton  
Oldham OL9 9QL  
United Kingdom  
T +44 161 633 1000  
F +44 161 633 1007  
uk@buchi.com  
www.buchi.co.uk

BUCHI Sarl  
5, rue du Pont des Halles  
Z.A. du Delta  
94656 Rungis Cedex  
France  
T +33 1 56 70 62 50  
F +33 1 46 86 00 31  
france@buchi.com  
www.buchi.fr

Nihon BUCHI K.K.  
3F IMON Bldg.,  
2-7-17 Ikenohata, Taito-ku,  
Tokyo 110-0008  
Japan  
T +81 3 3821 4777  
F +81 3 3821 4555  
nihon@buchi.com  
www.nihon-buchi.co.jp

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partners worldwide. Find your local representative at

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