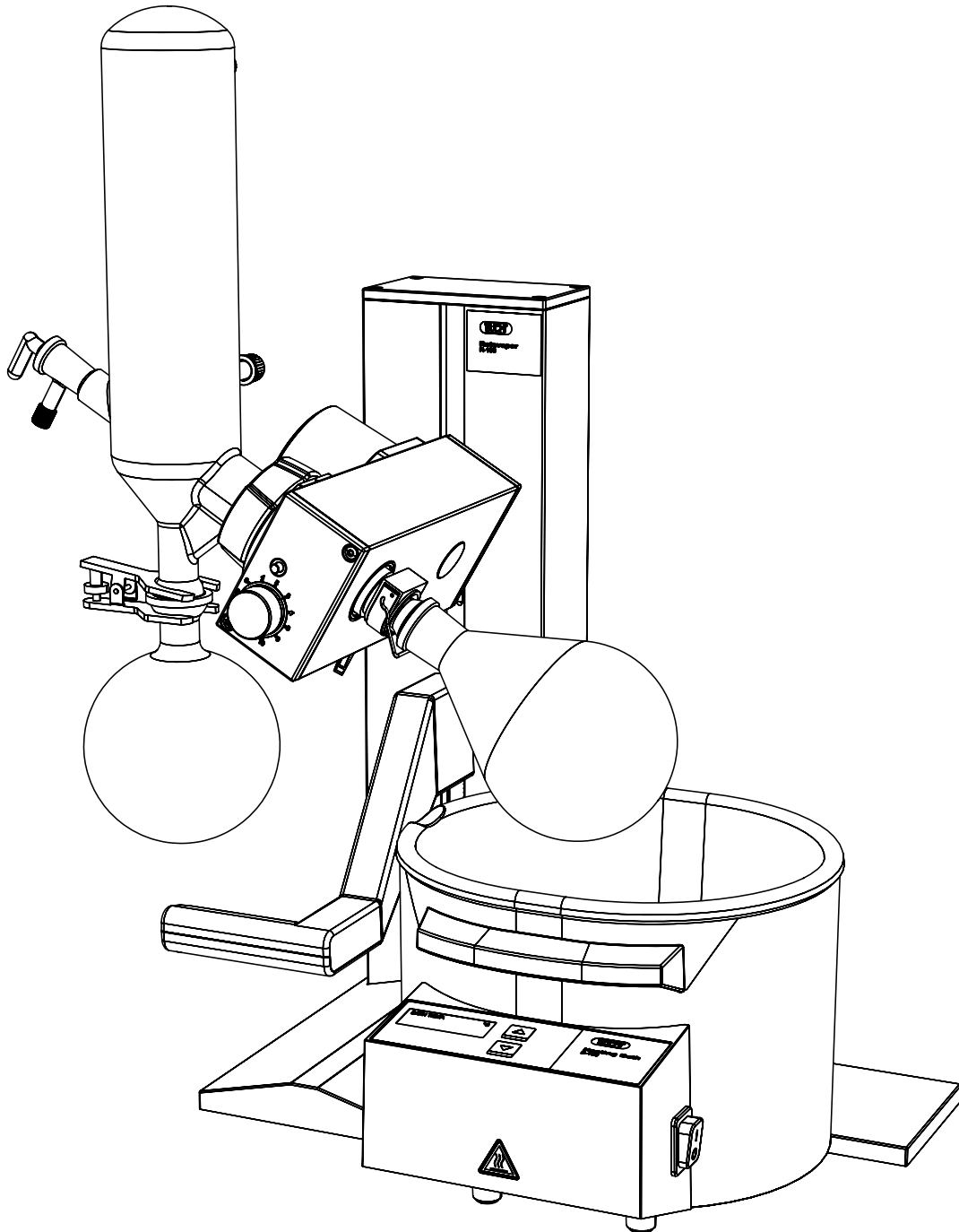




Rotavapor® R-100

Technical data sheet

The Rotavapor® R-100 is a high-quality rotary evaporator to meet the essential needs in classical laboratory applications. It is capable of a manually adjustable rotation speed of 20 to 280 rpm and equipped with an action jack lift for manual lifting of the evaporating flask. Included is the selected condenser, 1 L receiving and evaporating flasks and a vapor duct. All accessories are included for out of the box usage.



Scope of delivery

All models are delivered ready to use and are complete of:

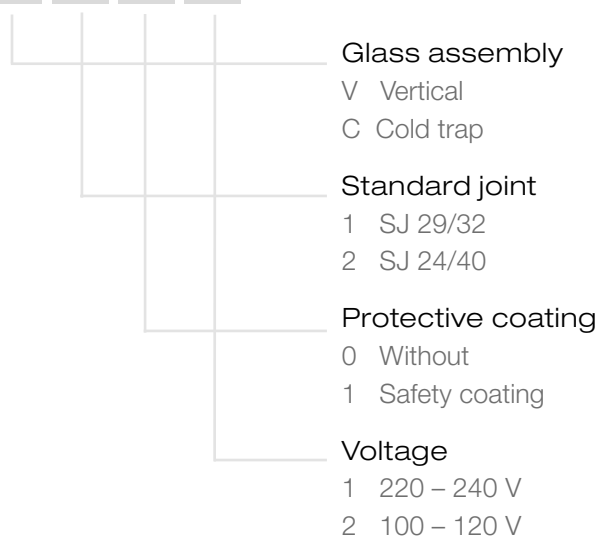
| Components | Rotavapor® with glass assembly | Rotavapor® without glass assembly | Rotavapor® system |
|--|--------------------------------------|--|----------------------|
| Rotavapor® R-100 | 1 | 1 | 1 |
| Heating Bath B-100 | 1 | 1 | 1 |
| Condenser (according to order code) | 1 | - | 1 |
| Vapor duct (with Combi-Clip) | 1 | - | 1 |
| Vacuum seal (KD22) | 1 | 1 | 1 |
| Evaporating flask (1 liter) | 1 | - | 1 |
| Receiving flask (1 liter) | 1 | - | 1 |
| Flyer "List of solvents" | 1 | 1 | 1 |
| Set of required cooling and vacuum tubings | 1 | - | 1 |
| Power cable | 1 | 1 | 1 |
| Interface I-100 (with power adapter) | - | - | 1 |
| Vacuum Pump V-100 | - | - | 1 |
| Recirculating Chiller F-100 / F-105 | - | - | * |

(*according to oder code)

Order code

Choose the configuration according to your needs:

Rotavapor® with glass assembly



Rotavapor® without glass assembly

1 1 1 0 0 N 0 0 1 Rotavapor® R-100, w/o glass, 220 – 240 V

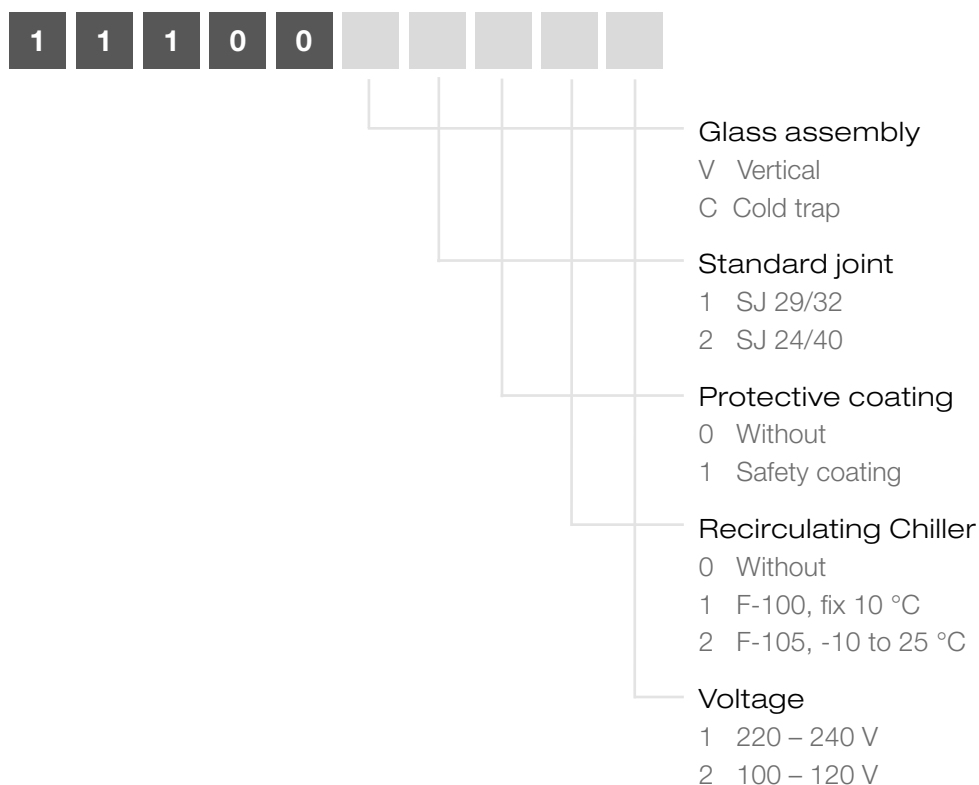
1 1 1 0 0 N 0 0 2 Rotavapor® R-100, w/o glass, 100 – 120 V

1 1 0 6 1 7 7 2 Rotavapor® R-100, w/o heating bath, w/o glass, 100 – 240 V*

* without power adapter

Rotavapor® Systems

The rotary evaporator system R-100 meets the essential needs in laboratory evaporation. It is bundled with the Vacuum Pump V-100 regulated by the Interface I-100 and can optionally include the Recirculating Chiller F-100 or F-105. All accessories and tubes are included for out of the box usage.



Description of glass assemblies

| Abbr. | Type / application | Cooling surface area |
|-------|---|----------------------|
| V | Vertical condenser For standard applications. The most common condenser. No top hole. | 1500 cm ² |
| C | Dry ice condenser For distillation of solvents with low boiling points. No cooling water is necessary. | 500 cm ² |

Dimensions

| | Dimensions (W x H x D) |
|---|------------------------|
| Rotavapor® R-100 with condenser (V or C), with heating bath | 617 x 898 x 502 mm |
| Rotavapor® R-100 without condenser, with heating bath | 480 x 626 x 502 mm |

Technical data

| | Rotavapor® R-100 (incl. Heating Bath B-100) |
|--------------------------------------|---|
| Weight (depending on glass assembly) | 18 – 19 kg |
| Operating voltage | 24 V |
| Frequency | DC |
| Power consumption | 30 W, connected to Heating Bath B-100 |
| Protection class | IP21 |
| Angle adjustable | 0 – 35 ° |
| Stroke distance | 150 mm (+ 100 mm extendable) |
| Rotation speed | 20 – 280 rpm |
| Flask size range | 50 – 4000 mL |
| Maximum flask capacity | 3 kg |
| Approval | CE |

| | Heating Bath B-100 |
|---|----------------------------|
| Dimension (WxHxD) | 285 x 219 x 326 mm |
| Weight | 4.0 kg |
| Operation voltage (according to order code) | 100 – 120 V or 220 – 240 V |
| Frequency | 50/60 Hz |
| Power consumption | 1700 W |
| Heating Power | 1300 W |
| Protection class | IP21 |
| Controlled temperature range | 20 – 95 °C |
| Maximum flask size | 4000 mL |
| Temperature regulation accuracy | ± 2 °C |
| Approval | CE |

Special features

Rotavapor® R-100

| | |
|----------------------------|---|
| Lift extension | Up to 100 mm allows use of bump traps and glass extenders |
| Stop-end position limiter | Manually adjustable prevents glass breakage and damage to bath pan |
| Multifunctional Combi-Clip | Tool for evaporating flask fixation and removal as well as vapor duct release |

Heating Bath B-100

| | |
|-----------------------------|--|
| Temperature display | Digital allows adjusting set temperature and indicates actual temperature |
| Over-temperature protection | Power cut off when actual temperature exceeds set temperature or by rapid temperature increase |
| Carry handles | Two integrated handles facilitate carry, re-filling and emptying the heating bath |
| Bath guidance | Integrated in the Rotavapor® base Allows to easily position the heating bath along the guidance (sideways) when various evaporating flasks are used |

Complementary products

See respective product brochures and technical data sheets for more information.

| | Pump V-100 | Chiller F-100 | Chiller F-105 |
|------------------|------------|---------------|---|
| R-100 | autonomous | autonomous | manually controlled |
| R-100 with I-100 | regulated | autonomous | regulated temperature manually controlled* |

*Recirculating Chiller F-105 is switched ON and OFF automatically via Interface I-100

Exemplary solution

The following items are listed based on the solution “Rotavapor® Essential”, shown in the “Laboratory Evaporation Solutions” brochure.

| | |
|--|------------|
| Rotavapor® R-100, SJ29/32, V, 220-240V | 11100V1021 |
| Interface I-100 | |
| Vacuum Pump V-100 | |
| Recirculating Chiller F-105 | |
| Woulff bottle | |

Rotavapor accessories

| | Order number |
|--|--------------|
| Heating Bath, B-100, 220-240V | 11061895 |
| Heating Bath, B-100, 100-120V | 11061894 |
| Protective shield, for Heating bath B-491, B-100 Effective user protection against splashing | 048052 |
| Top cover, for Heating bath B-491, B-100 To cover bath when not in use to save energy and to reduce evaporation of heating media | 048230 |
| Swimming balls, PP, Ø10mm (450pcs) To reduce energy consumption of heating bath and for less evaporation of heat media, for temperatures up to 100°C | 036405 |
| Cooling water valve, 24VAC Valve opens cooling water feed only during distillation | 031356 |
| Water jet pump, B-764, magnetic valve, FFKM backstroke valve, 24V Simple principle of vacuum generation, without cooling water valve, only used in combination with a vacuum controller or interface | 031358 |
| Water jet pump, B-767, magnetic valve (2 pcs), FFKM backstroke valve, 24V Simple principle of vacuum generation, for pump and cooling water, only used in combination with a vacuum controller or interface | 031357 |
| Water regulation nozzle, restrictor valve, hose clamp, sieve Used when tap water is applied as vacuum source, to reduce flow-rate of the water | 011606 |
| Stopcock, standard, SJ18.8/38 For aeration of the system | 040627 |
| Stopcock, classic, SJ18.8/38 For aeration of the system, less cross-contamination than standard stopcock (040627) | 000637 |
| Stopcock, PTFE, SJ18.8/38 For applications when grease should be avoided, used instead of standard stopcock (040627), no feeding possible | 023896 |
| Flask holder, ring, non-slippery EPDM Keeps flasks stable on the lab bench, for round-bottom flasks (50 - 5000 mL) | 048618 |
| Set of flask holders, non-slippery EPDM (5pcs) Keeps flasks stable on the lab bench, for round-bottom flasks (50 - 5000 mL) | 11059916 |
| Power adapter, 24VDC, operating range 100-240V, frequency 50/60Hz For operation of Rotavapor® without heating bath | 11055312 |

| | Order number |
|--|--------------|
| Lab grease, tube, grease Glisseal 40 blue (60g) To grease the joints | 048197 |
| Condenser holder, holding rod, screw (2pcs), rubber band Recommended to fasten condenser onto Rotavapor® R-100, for V- and C-glass assembly | 052893 |
| Tubing, for vacuum, silicone rubber, Ø6/16mm, red, per m | 017622 |
| Tubing, for vacuum, PTFE (rigid), Ø8/10mm, white/transparent, per m | 027277 |
| Tubing, for vacuum, PEP, Ø6/8mm, transparent, per m | 027900 |
| Tubing, for cooling media, Nyflex, PVC-P, Ø8/14mm, transparent, per m | 004113 |
| Tubing, for cooling media, silicone rubber, Ø6/9mm, transparent, per m | 004133 |
| Tubing, for feed, PTFE, Ø4.7/5.5mm, 330mm | 000646 |

Rotavapor® wear parts

| | Order number |
|--|--------------|
| Vacuum seal, KD22, PTFE-composite | 000636 |
| Vacuum seal, KD22, PTFE-compensite, FDA-compliant sealing material | 11056622 |
| Hose barb, bent, GL14, silicone seal | 018916 |
| Set of hose barbs, bent, GL14, silicone seal, incl. cap nut (4pcs each) | 037287 |
| Set of hose barbs, bent, GL14, FPM seal, incl. cap nut (4pcs each) | 040295 |
| Set of hose barbs, bent, GL14, EPDM seal, incl. cap nut (4pcs each) | 043129 |
| Set of hose barbs, straight, GL14, silicone seal, incl. cap nut (4pcs each) | 037642 |
| Set of hose barbs, straight, GL14, FPM seal, incl. cap nut (4pcs each) | 040296 |
| Set of hose barbs, straight, GL14, EPDM seal, incl. cap nut (4pcs each) | 043128 |
| Set of hose barbs, bent (1pc), straight (1pc), GL14, silicone seal, incl. cap nut (2pcs) | 041939 |
| Set of hose barbs, bent (4pcs), straight (2pcs), GL14, silicone seal, incl. cap nut (6pcs) | 038000 |
| Set of hose barbs, bent, GL14, silicone seal (3pcs each) | 041987 |
| Set of cap nuts, screw cap with hole, incl. FEP seal (10pcs) | 041999 |
| Set of cap nuts, screw cap with hole, GL14 (10pcs) | 041956 |
| Set of cap nuts, screw cap without hole, GL14 (5pcs) | 040624 |
| Set of seals, for hose barb, GL14, silicone, red (20pcs) | 040023 |
| Set of seals, for hose barb, GL14, FPM, green (10pcs)* | 040040 |
| Set of seals, for hose barb, GL14, EPDM, black (10pcs)* | 040029 |
| Seal GL14, for cap nut, GL14, FEP | 038225 |

* FPM and EPDM seals are more chemical resistant than silicone seals

Rotavapor® glass assemblies

The following items have to be purchased in addition to a system that is ordered without glass.

All glass assemblies include a liter receiving flask, required hoses and a ball joint clamp. Evaporating flask, vacuum seal, vapor duct (KD22) and condenser holder are not included.

| | Order number |
|---|--------------|
| Glass assembly V complete | 11057056 |
| Glass assembly V complete, P+G safety coating Receiving flask with P+G safety coating | 11057057 |
| Glass assembly C complete | 040640 |
| Glass assembly C complete, P+G safety coating Receiving flask with P+G-LT safety coating | 040642 |

Rotavapor® glass accessories

| | SJ 29/32 | SJ 24/40 |
|---------------------------------|----------|----------|
| Vapor duct compatible with KD22 | 032339 | 032341 |

Additional glassware

Additional glassware like evaporating flasks, drying flasks, receiving flasks, beaker flasks, Reitmeyer adapters (bump traps) and distillation spiders can be found in the “Laboratory Evaporation Glassware” brochure.