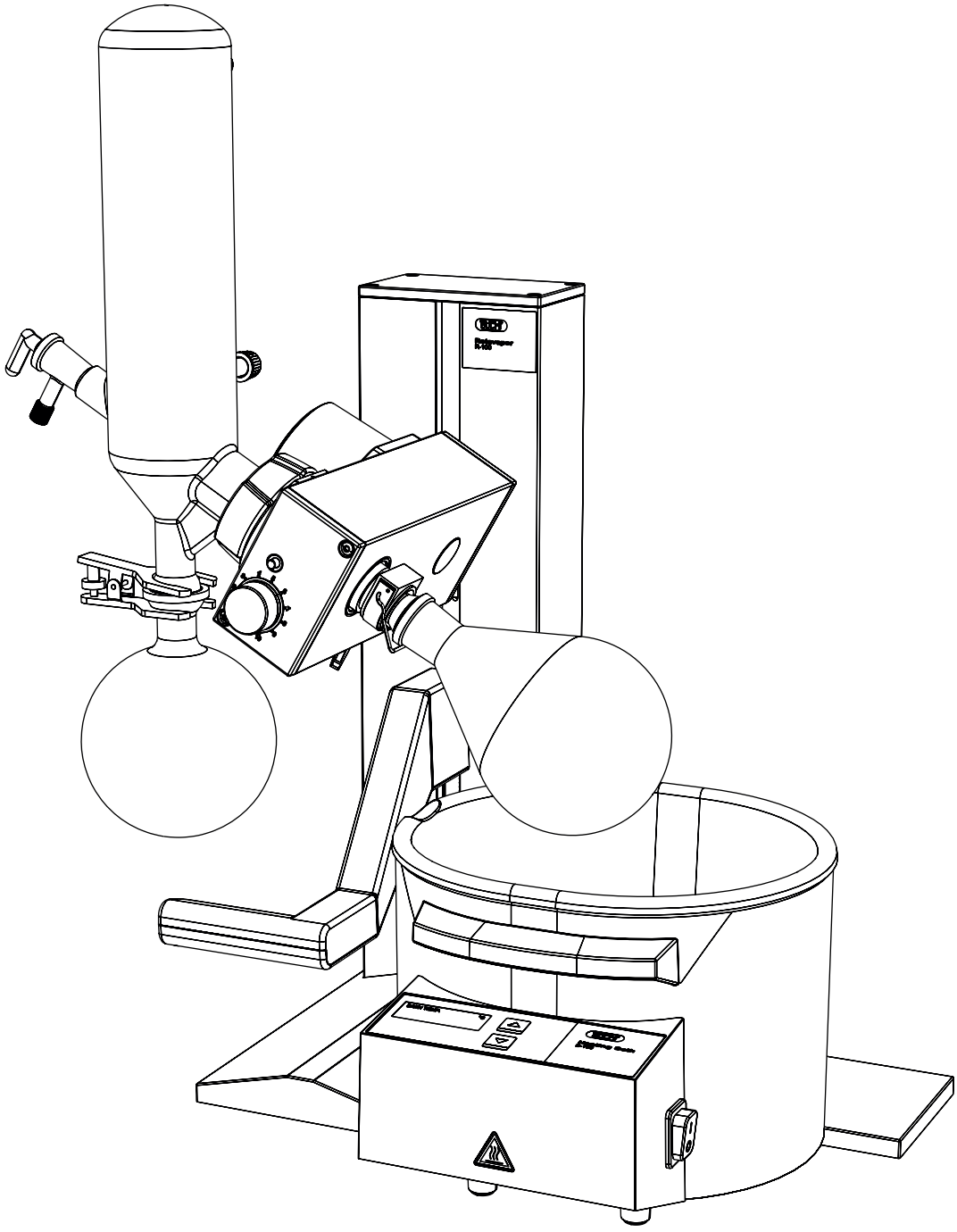
Rotavapor® R-100
Technical data sheet

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.



11594117E en Rotavapor® R-100 09.2022
Technical data are subject to change without notice
Quality Systems ISO 9001

Scope of delivery

All configurations are supplied ready to use.

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	-	-	*

* Optional, according to order code

Order code Rotavapor® with glass assembly

Choose the configuration according to your needs:

Glass assembly
- V Vertical
- C Cold trap

Standard joint
- 1 SJ 29/32
- 2 SJ 24/40

Protective coating
- 0 Without
- 1 Safety coating

Voltage
- 1 220 – 240 V
- 2 100 – 120 V

Order code Rotavapor® without glass assembly

Choose the configuration according to your needs:

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

Order code Rotavapor® Systems

Choose the configuration according to your needs:

Glass assembly
V Vertical
C Cold trap

Standard joint
1 SJ 29/32
2 SJ 24/40

Protective coating
0 Without
1 Safety coating

Recirculating Chiller
0 Without
1 F-100, fix 10 °C
2 F-105, -10 to 25 °C

Voltage
1 220 – 240 V
2 100 – 120 V

Description of glass assemblies

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

Technical data

Rotavapor® R-100

	Rotavapor® R-100
Dimensions (W x D x H) (w/o condenser and heating bath)	480 x 502 x 626 mm
Dimension (W x D x H) (inc. condenser and heating bath)	617 x 502 x 898 mm
Weight (depending on glassware included)	18 – 19 kg
Power consumption	30 W
Immersion angle	0 – 35°

	Rotavapor® R-100
Rotation speed range	20 – 280 rpm
Max. flask capacity	3 kg
Ingress protection rating	IP21
Approval	CE
Frequency	50/60 Hz

Voltage	24 V DC
Adjustable height	145 mm (+ 115 mm optional extension)
Flask size	50 – 4000 mL

Heating bath B-100

Dimensions (W x H x D)	285 x 219 x 326 mm
Weight	3.9 kg
Voltage	100 – 120 V/220 – 240 V
Frequency	50 – 60 Hz
Power consumption	1700 W
Heater output	1300 W
Enclosure rating	IP20
Fuse	T 12.5 A L 250 V (100 – 120 V) T 6.3 A L 250 V (220 – 240 V)
Temperature range	20 – 95 °C
Max. flask size	4000 mL
Adjustment accuracy	± 1 %
Bath capacity	4 L
High temperature cut-out	> 145 °C
Approval	CE

Special features

	Rotavapor® R-100
Lift extension	Up to 115 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 faciliate carry, re-filling and emptying the heating bath

	Heating Bath B-100
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	regulated
R-100 with I-100	on/off control	autonomous	regulated temperature manually controlled*

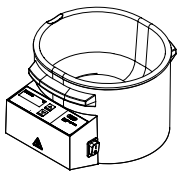
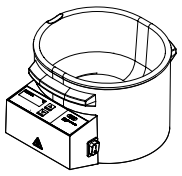
Exemplary solution

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

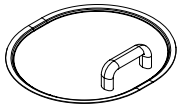
Rotavapor® R-100, SJ29/32, V, 220-240V	11100V1021
Interface I-100 Vacuum Pump V-100	
Recirculating Chiller F-105	
Woulff bottle	

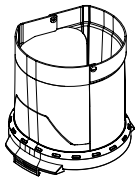
Accessories

Heating Bath

	Order no.	Image
Heating Bath, B-100, 220-240V	11061895	
Heating Bath, B-100, 100-120V	11061894	

Accessories for heating bath

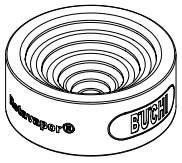
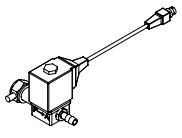
	Order no.	Image
Top cover, for Heating bath B-491, B-100 To cover bath when not in use to save energy and to reduce evaporation of heating media	048230	

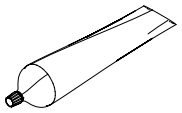
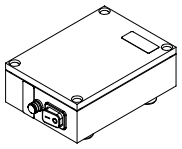
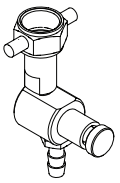
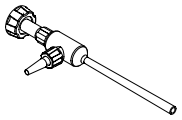
	Order no.	Image
Protective shield, for Heating bath B-491, B-100 Effective user protection against splashing	048052	
Heating bath balls. 450 pcs., PP, Ø10 mm To reduce energy consumption of heating bath and for less evaporation of the heating medium. For temperatures up to 100 °C.	036405	

Tubing

	Order no.
Tubing. FEP, Ø6/8 mm, transparent, per m Use: Vacuum, cooling media.	027900
Tubing. Natural rubber, Ø6/16 mm, red, per m Use: Vacuum.	017622
Tubing. Nylflex, PVC-P, Ø8/14 mm, transparent, per m	004113
Tubing. PTFE, Ø4.7/5.5 mm, transparent, 330 mm Use: To introduce solvent into evaporating flask during distillation.	000646
Tubing. PTFE, Ø8/10 mm, white, per m Use: Vacuum, feeding (industrial Rotavapor®).	027277
Tubing. Silicone, Ø6/9 mm, transparent, per m Use: Cooling media.	004133

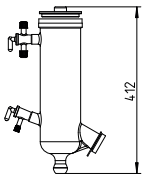
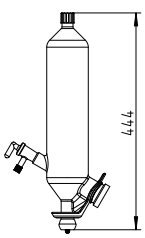
Further accessories

	Order no.	Image
Flask holder. EPDM, slip free Holder for round-bottom flasks (50-5000 mL).	048618	
Flask holders, set. 5 pcs., EPDM, slip free Holder for round-bottom flasks (50-5000 mL).	11059916	
Cooling water valve. 24VAC Valve opens cooling water feed during distillation. Meant to be used with a vacuum controller/interface.	031356	

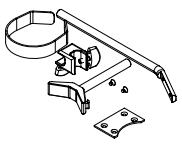
	Order no.	Image
Lab grease. Glisseal 40 (30 g) To grease joints in order to increase tightness of system.	048197	
Manometer with needle valve. Incl. holder for pump, valve, vacuum gauge For manual vacuum adjustment	047291	
Power adapter, 24 VDC, operating range 100-240 V, frequency 50/60 Hz For operation of Rotavapor® without heating bath	11055312	
Water regulation nozzle. Flow regulator, incl. hose clamp, sieve Used when tap water is used to generate vacuum. Reduces water consumption.	011606	
Water jet pump. Plastic Used when tap water is used to generate vacuum.	002913	

Glassware

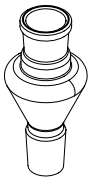
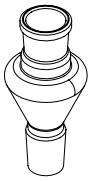
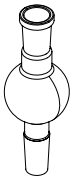
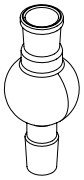
Glass assemblies

Cold trap: C 	Dry ice condenser • For distillation of solvents with low boiling points • Maximum condensation of vapors • No cooling water needed, but i.e. dry ice or ice • Use of foam sensor possible	500 cm^2		040640 040642 P+G
Vertical: V 	Vertical condenser • For standard applications, the most common condenser • Connection for vapor temperature sensor • Use of foam sensor possible	1500 cm^2		11057056 11057057 P+G

Accessories for glass assemblies

	Order no.	Image
Condenser holder, holding rod, screw (2 pcs), rubber band Recommended to fasten condenser onto Rotavapor® R-100, for V- and C-glass assembly	052893	

Foam trap adaptor

	Order no.	Image
Glass, Reitmeyer, SJ24/40, 150 mm	036577	
Glass, Reitmeyer, SJ29/32, 135 mm	036576	
Glass, SJ24/40, 175 mm	11056919	
Glass, SJ29/32, 160 mm	11056920	

Evaporating flask

	Order no.
Evaporating flask, For distillation spider, cylindric, SJ14/23, 20 mL	000477
Glass, SJ24/40, 1000 mL	000440
Glass, SJ24/40, 1000 mL, P+G	020730
Glass, SJ24/40, 100 mL	008751
Glass, SJ24/40, 2000 mL	008765
Glass, SJ24/40, 2000 mL, P+G	025262
Glass, SJ24/40, 250 mL	008754
Glass, SJ24/40, 3000 mL	008767

	Order no.
Glass, SJ24/40, 3000 mL, P+G	025263
Glass, SJ24/40, 4000 mL	047990
Glass, SJ24/40, 4000 mL, P+G	047992
Glass, SJ24/40, 500 mL	008758
Glass, SJ24/40, 500 mL, P+G	025261
Glass, SJ24/40, 50 mL	008750
Glass, SJ29/32, 1000 mL	000435
Glass, SJ29/32, 1000 mL, P+G	020729
Glass, SJ29/32, 100 mL	000432
Glass, SJ29/32, 100 mL, P+G	033404
Glass, SJ29/32, 2000 mL	000436
Glass, SJ29/32, 2000 mL, P+G	025323
Glass, SJ29/32, 250 mL	000433
Glass, SJ29/32, 250 mL, P+G	025520
Glass, SJ29/32, 3000 mL	000437
Glass, SJ29/32, 3000 mL, P+G	025324
Glass, SJ29/32, 4000 mL	047991
Glass, SJ29/32, 4000 mL, P+G	047993
Glass, SJ29/32, 500 mL	000434
Glass, SJ29/32, 500 mL, P+G	025322
Glass, SJ29/32, 50 mL	000431
Glass, SJ29/32, 50 mL, P+G	033405

Drying flask

	Order no.
Glass, SJ24/40, 1000 mL With 4 indents for better mixing/drying.	000420
Glass, SJ24/40, 2000 mL With 4 indents for better mixing/drying.	011580
Glass, SJ24/40, 500 mL With 4 indents for better mixing/drying.	011579
Glass, SJ29/32, 1000 mL With 4 indents for better mixing/drying.	000453
Glass, SJ29/32, 500 mL With 4 indents for better mixing/drying.	000452

Beaker flasks

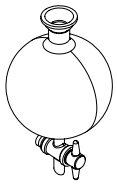
	Order no.
Glass, SJ24/40, 1500 mL, for drying	034270

	Order no.
Glass, SJ24/40, 1500 mL, for evaporation	034247
Glass, SJ24/40, 500 mL, for drying	034768
Glass, SJ24/40, 500 mL, for evaporation	034765
Glass, SJ29/32, 1500 mL, for drying	034269
Glass, SJ29/32, 1500 mL, for evaporation	034230
Glass, SJ29/32, 500 mL, for drying	034767
Glass, SJ29/32, 500 mL, for evaporation	034764

Receiving flask

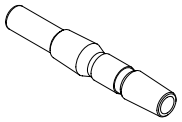
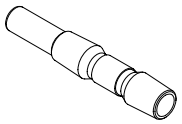
Glass, BJ35/20, 1000 mL, P+G-LT Application temperature: -70 to 40 °C.	040775

Receiving flask with drain valve. Glas, BJ35/20, 1000 mL, P+G, PTFE	036919

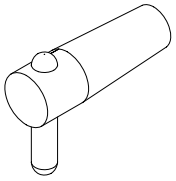
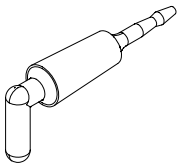
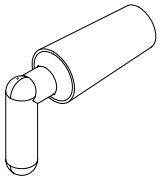


Glass, BJ35/20, 100 mL	000422
Glass, BJ35/20, 2000 mL	000426
Glass, BJ35/20, 2000 mL, P+G	025265
Glass, BJ35/20, 2000 mL, P+G-LT Application temperature: -70 to 40 °C.	040776
Glass, SJ35/20, 250 mL	000423
Glass, SJ35/20, 250 mL, P+G	11060907
Glass, BJ35/20, 250 mL, P+G-LT Application temperature: -70 to 40 °C.	11060908
Glass, BJ35/20, 3000 mL	000427
Glass, BJ35/20, 3000 mL, P+G	025266
Glass, BJ35/20, 1000 mL, P+G	020728
Glass, BJ35/20, 3000 mL, P+G	025266
Glass, BJ35/20, 3000 mL, P+G-LT Application temperature: -70 to 40 °C.	040777
Glass, SJ35/20, 500 mL	000424
Glass, SJ35/20, 500 mL, P+G	025264
Glass, BJ35/20, 500 mL, P+G-LT Application temperature: -70 to 40 °C.	040774
Glass, BJ35/20, 50 mL	000421

Vapor ducts

	Order no.	Image
Vapor duct For V/C cond., Ø22mm, SJ24/40, incl. Combi-Clip	032341	
Vapor duct For V/C cond., Ø22mm, SJ29/32, incl. Combi-Clip	032339	

Stopcocks

	Order no.	Image
Stopcock, Analytic PTFE/25% glass fiber, SJ18.8/38 For feeding of solvents and aerating the system.Less cross-contamination compared to standardstopcock. For applications where grease should be avoided. Content: PTFE stopcock (no tubing included).	11069607	
Stopcock. PTFE, SJ18.8/38 For aeration of the system. For applications when grease should be avoided, used instead of standard-stopcock	023896	
Standard, glass, SJ18.8/38 For aeration of the system.	040627	
For condenser C/CR, glass, SJ18.8/38 For aeration of the system. For cold trap outer part.	040628	

Distillation spiders

		Order no.	Image
Glass, SJ24/40, incl. 100 mL flask (5pcs)	011575		
Glass, SJ24/40, incl. 100 mL flask (5pcs)	011575		
Glass, SJ24/40, incl. 50 mL flask (5pcs)	011574		
Glass, SJ24/40, incl. 20 mL zyl. flask (20pcs)	011578		
Glass, SJ24/40, incl. 50 mL flask (5pcs)	011574		
Glass, SJ29/32, incl. 100 mL flask (5pcs)	001333		

Glass, SJ29/32, incl. 20 mL cyl. flask (12pcs)	001335
Glass, SJ29/32, incl. 20 mL cyl. flask (20pcs)	001336
Glass, SJ29/32, incl. 20 mL cyl. flask (6pcs)	001334
Glass, SJ29/32, incl. 50 mL flask (5pcs)	001332

Wear parts

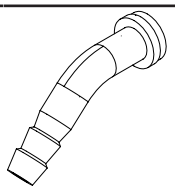
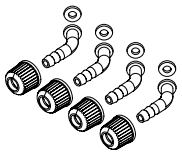
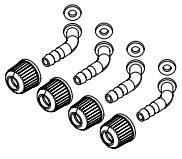
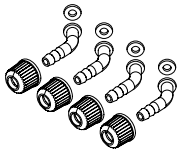
Vacuum gaskets

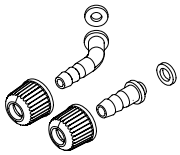
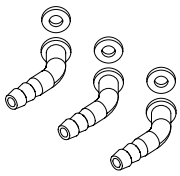
	Order no.	Image
Vacuum seal, KD22, PTFE-composite	000636	
Vacuum seal, KD22, PTFE-compensite, FDA-compliant sealing material	11056622	

Seals

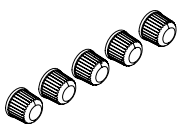
	Order no.
Seals, set. 10 pcs, for hose barbs GL14, silicone, red	040023
Seals, set. 10 pcs, for hose barbs GL14, FPM, green	040040
Seals, set. 10 pcs, for hose barbs GL14, EPDM, black	040029
Seal For cap nut GL14, EPDM seal	038225

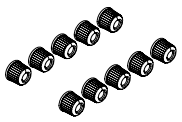
Hose barbs

	Order no.	Image
Hose barb. Bent, GL14, incl. silicone seal	018916	
Hose barbs, set. 4 pcs, bent GL14, silicone seal Content: Hose barbs, cap nuts, seals	037287	
Hose barbs, set 4 pcs, bent, GL14, FPM seal Content: Hose barbs, cap nuts, seals.	040295	
Hose barbs. set. 4 pcs, bent, GL14, EPDM seal Content: Hose barbs, cap nuts, seals.	043129	

	Order no.	Image
Hose barbs, set. 4 pcs, straight, GL14, silicone seal Content: Hose barbs, cap nuts, seals	037642	
Hose barbs. set. 4 pcs, straight, GL14, FPM seal Content: Hose barbs, cap nuts, seals.	040296	
Hose barbs. set. 4 pcs, straight, GL14, EPDM seal Content: Hose barbs, cap nuts, seals.	043128	
Hose barbs, set. 2 pcs, bent (1), straight (1), GL14, silicone seal Content: Hose barbs, cap nuts, seals	041939	
Hose barbs. set. 6 pcs, bent (4), straight (2), GL14, silicone seal Content: Hose barbs, cap nuts, seals.	038000	
Hose barbs. set. 3 pcs, bent, GL14, silicone seal Content: Hose barbs, seals.	041987	

Further wear parts

	Order no.	Image
Screw caps. set. 5 pcs, GL14	040624	
Cap nuts, set. 10 pcs, screw cap with hole GL14, seal EPDM Content: Cap nuts, seals	041999	

	Order no.	Image
Cap nuts. set. 10 pcs, screw cap with hole, GL14	041956	

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.

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