



Rotavapor® R-80 System

# Evaporation on the Smallest Footprint





## Rotavapor® R-80 System

### Eco-conscious and compact evaporation

Meet the R-80, the most energy-efficient Rotavapor® among its counterparts and the most compact Rotavapor® on the market. The R-80 is an affordable and eco-friendly solution that ensures the most efficient use of lab space while meeting BUCHI's high-quality standards.



#### Small in footprint and energy consumption

Experience the triple win with the Rotavapor® R-80: Its compact design and lower energy usage come with the added benefit of affordable pricing, delivering BUCHI quality in a cost-effective package. You can fit three Rotavapor® R-80 systems next to each other on one table or place one system alongside a chromatography system, such as the compact Pure Essential Chromatography system, into a fume hood. It's your space, energy, and budget-saver all in one!



#### Effortless operation

The user interface of the Rotavapor® R-80 clearly displays all distillation parameters at a glance and features a push-button for precise navigation control of all settings. The smooth manual lift ensures reliable, quick, and ergonomic operation, and a multifunctional Combi-Clip provides easy flask handling and vapor duct removal.



#### Flexible configuration options

Customize the Rotavapor® R-80 with the Vacuum Pump V-80 / V-180 and Interface I-80 / I-180 to maintain BUCHI quality throughout your system. The speed-controlled Vacuum Pump V-80 / V-180 ensures near-silent operation. To further customize your R-80, explore our range of glass assemblies and cooling solutions, each designed to cater to your specific requirements.



## Small in footprint and energy consumption Delivers on every front

With the Rotavapor® R-80, you get unparalleled efficiency across the board: space, energy, and cost efficiency.



### Smallest footprint

Optimize your lab space thanks to the space-saving design of the Rotavapor® R-80, the smallest Rotavapor® on the market. It features a user interface that can be rotated up to 90°, which allows you to position the R-80 as it suits you best while ensuring direct access and control of all distillation parameters.



### Reduced energy consumption

The design of the R-80, with its smaller-sized heating bath, minimizes heat waste and reduces energy consumption. This not only saves you money but also contributes to a greener future. Join us in the journey towards more environmentally conscious lab practices.



### Most cost-effective

Why compromise when you can have the best of both worlds? The R-80 comes at an attractive price while delivering BUCHI quality. We're proud to offer Swiss design and precision backed by exceptional customer support and expert application know-how. Elevate your performance and trust in a brand that values excellence above all.



### Essential integration

The Rotavapor® R-80 and our equally flexible Pure Essential Chromatography system form an affordable, compact, and robust duo. Both instruments can fit into one fume hood, or you can stack the R-80 onto the fraction collector to save even more space. The focus of each system is to get the core components right without compromising efficiency. The Pure Essential Chromatography system is modular and scalable and includes a 50-bar pump perfect for any basic flash application.



## Effortless Operation

### User-friendly design

From a handy central interface to a smooth manual lift, the Rotavapor® R-80 guarantees convenience and effortless operation.



#### Intuitive user interface

The central user interface facilitates the evaporation process thanks to the navigation control with which all parameters can be adjusted. The user can see and set the bath temperature, rotation speed, and cooling temperature.



#### Smooth manual lift

The ergonomic handle of the manual lift can easily be accessed from different directions, ensuring a reliable and quick operation regardless of your instrument's position.



#### Precision crafted convenience

Organize and secure your workspace with the R-80's integrated cable and tube holders, creating a tidier and safer work environment. The innovative Combi-Clip flask snap lock allows for quick, one-handed attachment and detachment of flasks, saving you time and hassle. The new VS22 seal is made from durable PTFE, which contributes to the longevity of your system.



#### Cableless bath

The cableless heating bath ensures hassle-free carrying during emptying and re-filling and can be horizontally adjusted to fit your evaporation glassware. The versatile heating bath accommodates flask sizes of up to 1 L and is suitable for applications that a water bath can address, thanks to its maximum working temperature of 95 °C.



## Flexible Configuration Options

### Modular design for tailored expansion

By customizing the configuration of your Rotavapor® R-80 with the Vacuum Pump V-80 / V-180, Interface I-80 / I-180, and various accessories, you secure BUCHI quality throughout your entire system.



#### Speed-controlled vacuum solutions

The optional Vacuum Pump V-80 / V-180 features precise speed control, ensuring a quiet vacuum generation and reduced bumping. The Vacuum Interface I-80 / I-180 provides an easy means for vacuum control and can conveniently be attached directly to the Rotavapor®, the pump, or a lab stand for optimal flexibility.



#### Sustainable cooling solutions

Enhance your system with our optional valve unit, which is intelligently designed to regulate water flow efficiently. The water flow is automatically stopped after a distillation or by a timer to save resources. A cooling water temperature sensor can also be installed for added precision, and its readout is displayed on the user interface.



#### Outstanding glassware for over 80 years

Experience the highest levels of efficiency and safety with original BUCHI glassware crafted with exceptional manufacturing precision perfected over decades. The R-80 includes either a V or C condenser to meet your needs best. Don't miss out on additional BUCHI quality by ordering a suitable evaporating flask in sizes ranging from 50 – 1000 mL.

#### Three configurations available for the Rotavapor® R-80

- R-80 standalone.
- R-80 + Vacuum solution V-80 with Interface I-80 for manual vacuum control.
- R-80 + Vacuum solution V-180 with Interface I-180 for automatic vacuum control.

# The Complete Evaporation Portfolio

## Overview



R-220 Pro /  
R-250 Pro



R-300



R-100



R-80

Characterization	Industrial Rotavapor to scale-up laboratory evaporation processes.	Most flexible and automated laboratory Rotavapor.	Laboratory Rotavapor for essential needs.	Laboratory Rotavapor with the smallest footprint.
Flask size	Up to 20 L / Up to 50 L	50 mL to 5 L	50 mL to 4 L	50 mL to 1 L
Temperature up to	180 °C	220 °C	95 °C	95 °C
Lift System	Electronic	Electronic	Manual	Manual
Automation/ Sensors	•	•		
Vapor temperature	•	•		
AutoDest sensor	•	•		
Foam sensor	•	•		
Number of samples	1	1 or Multiple*	1 or Multiple*	1
Extra	<ul style="list-style-type: none"> <li>· Continuous versions.</li> <li>· Ex options.</li> </ul>	<ul style="list-style-type: none"> <li>· Various condensers.</li> <li>· Cableless bath.</li> </ul>		<ul style="list-style-type: none"> <li>· Space saving design.</li> <li>· Cableless bath.</li> </ul>

\* With spider accessory.



SyncorePlus



Multivapor™



B-585 Drying



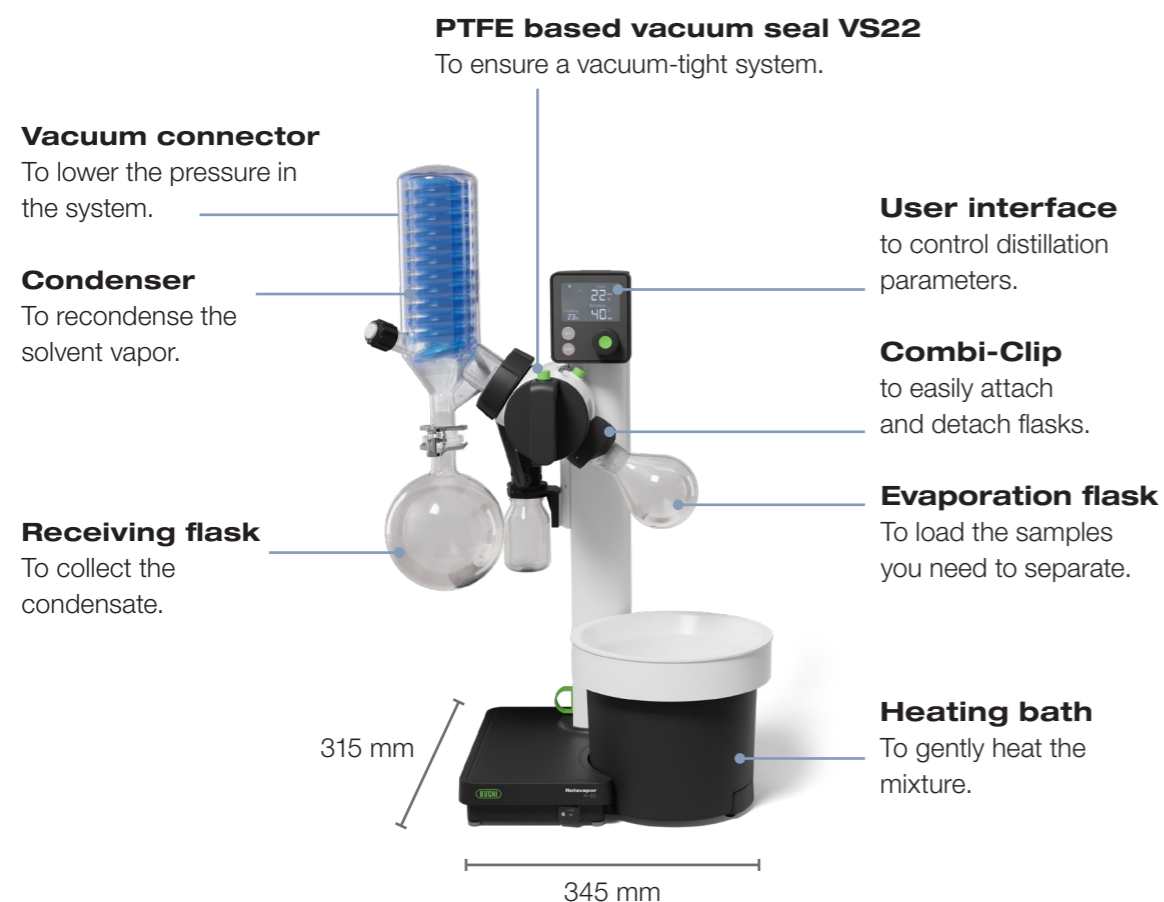
B-585 Kugelrohr

Parallel evaporation solutions to process multiple samples at once.		Glass oven instruments for various applications with small samples.	
0.5 mL to 500 mL	0.5 mL to 240 mL	100 mL to 250 mL	5 mL to 40 mL
100 °C	95 °C	300 °C	300 °C
• •** •**		•	•
4 – 96	6 or 12	1	1
<ul style="list-style-type: none"> <li>· Evaporation to specified volume or to dryness.</li> <li>· Flushback option for highest recovery.</li> </ul>	<ul style="list-style-type: none"> <li>· Wide range of adapters for sample vessels.</li> </ul>	<ul style="list-style-type: none"> <li>· Drying kugelrohr and sublimation configuration exchangeable.</li> </ul>	

\*\* Optional with a V-300 pump and I-300 pro.

## Rotavapor® R-80 Setup

### Seamless installation process



Rotary evaporation is an essential and gentle method for many laboratory applications, such as:

- Distillation of mixed solvents
- Efficient drying of samples
- Concentration

The method achieves swift and efficient evaporation thanks to a basic principle: removing the solvent by rotating the flask in a heated water bath under reduced pressure.

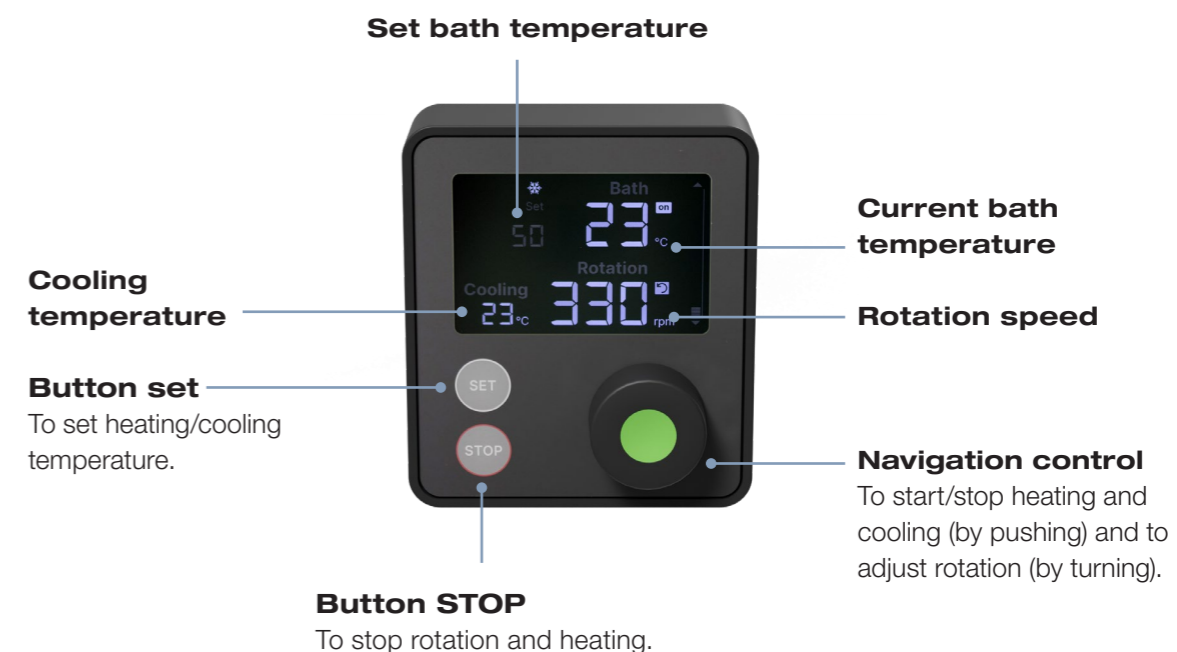
A cooling condenser enables the recovery of the evaporated solvent and prevents the release of hazardous gases.

The vacuum plays a vital role because it lowers the boiling temperature needed for the distillation; therefore, even high-boiling point solvents can evaporate at modest temperatures, thereby protecting heat-sensitive compounds. Additionally, the rotation of the flask increases the sample's surface area, further enhancing the efficiency of the evaporation process.

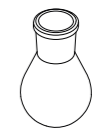
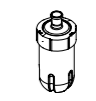


## User Interface Guide

### Control all parameters in one place

Rotary evaporation requires a heating source, a rotation drive, a cooling device, and a regulated vacuum. Distillation is most effective when these elements interact seamlessly and are perfectly tuned. BUCHI provides interfaces that enable users to manage and control everything from a central place.



## Expand your system with fitting accessories

Type		SJ 29/32	SJ 24/40	
Evaporating flask	100 mL	000432	008751	
	250 mL	000433	008754	
	500 mL	000434	008758	
Beaker flasks for drying	500 mL	11063158	11063159	
Bump trap	Bump trap	11056920	11056919	
Vacuum Seal VS22	PTFE base, NBR O-ring	11075810		

[A full list of evaporating and drying flasks can be found in the Laboratory Evaporation Glassware brochure:](#)



## Interface I-80 / I-180

### Economical vacuum regulation

The Interface I-80 / I-180 is the optimal solution for economical and efficient vacuum regulation. For the user's convenience, the Interface I-80 / I-180 can be mounted on top of the Rotavapor® R-80 to have one central control unit or be attached to the Vacuum Pump V-80 / V-180 or a lab stand.



#### Navigation control

The Interface I-180 automatically controls the vacuum and has one central navigation control with which all major parameters can be set. For more flexibility, the vacuum can be controlled by targeting a set pressure or with the continuous mode.



#### Convenient and intuitive

The Interface I-180 provides you with user-friendly handling thanks to the self-explanatory display. Benefit from precise vacuum control from the most convenient location, made possible by versatile mounting options. An external valve unit allows vacuum control in combination with a pre-installed house vacuum solution.



#### Cost-efficient option

The Interface I-80 is a suitable option for those with basic needs. The Interface I-80 is used for manual vacuum control. Thanks to the central navigation control button of the I-80, you can conveniently control the pump speed, and a needle valve allows fine-tuning of the final pressure.

#### Compare the Interfaces I-80 and I-180

	I-80	I-180
Pump control	Manual	Automatic
Vacuum control	Pump speed and needle valve	Pressure set, continuous
Leak test	No	Yes
Installation	Rotavapor® R-80 Vacuum Pump V-80 / V-180 Laboratory stand	Rotavapor® R-80 Vacuum Pump V-80 / V-180 Laboratory stand

## Vacuum Pump V-80 / V-180

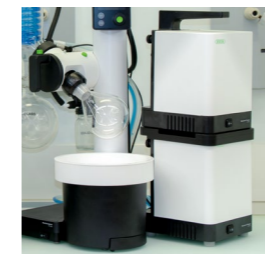
### Economical speed-controlled vacuum source

The Vacuum Pump V-80 / V-180 is a chemically resistant and economical vacuum source with a space-saving design. The speed-control solution guarantees the vacuum pump operates quietly and without hassle.



#### Quiet vacuum generation

The Vacuum Pump V-80 / V-180 is an excellent choice for economical lab equipment as it is a highly effective vacuum source. Thanks to the speed-controlled operation of the V-80 / V-180, you benefit from a quiet vacuum generation and reduced bumping.



#### Compact and convenient

The V-80 / V-180 boasts a compact design that promises exceptional convenience. Stack two pumps to effectively halve the occupied space and couple with an interface to deliver precise vacuum regulation.



#### High chemical resistance

Designed with BUCHI's dedication to quality, chemically resistant materials were selected for the Vacuum Pump V-80 / V-180. This results in a reliable product that can handle the harshest environments and is ready to operate in the most demanding labs.

#### Compare the Vacuum Pumps V-80 and V-180

	V-80	V-180
Final vacuum (absolute)	15 mbar	10 mbar
Pump Capacity	1.3 m³/h	1.5 m³/h
Carrying handle	No	Yes
Speed control (with Interface)	Yes	Yes



# Core messages to our customers

## BUCHI creates added value

“Quality in your hands” is the guiding principle that shapes our philosophy and our actions. It challenges us to provide outstanding services that are precisely tailored to your needs. This means that we must stay in close contact with our customers. That is why we keep in touch and continue to work very hard to understand you and your business even better.

We help you by providing high-quality products, systems, solutions, applications and services that offer you added value. This allows you to focus entirely on your processes and your work.



### Competent

We have the technological expertise and decades of experience needed to provide competent support and work with you to continually improve our services.



### Reliable

We guarantee the quality and functionality of our equipment and will continue to help you quickly and efficiently whenever something does not operate to your satisfaction.



### Safe

By collaborating closely with you, we do everything in our power to make our products, systems, solutions, applications and services as safe as possible for people and the environment.



### Cost-effective

We strive to create a high level of economic benefit and maximum added value for you.



### Global

As an international family-owned business with own subsidiaries and qualified distributors, we have a presence wherever you are located.



### Easy

We support you by providing carefully designed solutions as well as instruments and systems that are easy to operate.



### Sustainable

We support environmentally friendly processes and manufacture products that have a long service life. We utilize advanced technologies to leave the smallest environmental footprint possible.

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Quality in your hands

