

## Spin Dryer Light VC-36/Spin Dryer Standard VC-96R

**Microtubes, Vials, Test tubes and Disposable centrifuge tubes can be used. Versatile Centrifugal concentrator corresponding to also cooling water circulation. Two models with the different capacity.**

Cold Traps and Vacuum pumps for VC-36R / 96R --> P.150-151



VC-36R

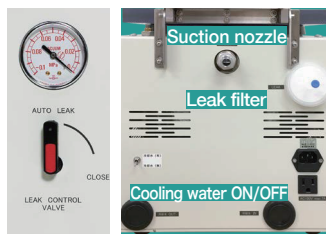
VC-96R

### Improved Reproducibility by digitization

Adopted to Magnet drive, Teflon<sup>®</sup> coated Chamber and PVC-made Lid (Chemically resistant to glass). Plus, the number of revolutions and temp. were digitized and the conditions of vague concentration drying quantified.

### Enables Automatic/Manual Vacuum release, Nitrogen purge easily, Cold water circulation

Vacuum release with Automatic and Manual. For samples with resistant to oxidation, also Nitrogen gas cylinder can be connected from Leak filter on the back. Plus, enables to keep the chamber cool by connecting a circulation device (setup required). It suppresses heat generation from Rotors and can safely concentrate heat-sensitive samples.



Leak Control valve on Main unit Front

Model	VC-36R	VC-96R
Temperature range	4°C to 70°C (Settable temp. range 0°C to 70°C) (*1)	
Rotational speed	300 to 2000r/min (*2)	
Vacuum release	Timer automatic release (also Manual)	
Rotor rotation system	Magnet drive	
Timer	1min to 99h59min (Digitally)	
Lid/Chamber material	Lid: PVC, Chamber: Stainless steel SUS304 (Teflon coated)	
Vacuum gauge	0 to -0.1MPa (Bourdon tube)	
Suction nozzle outer dia.	Rc 1/2 (φ13.8mm)	
Sterilization filter	0.2μm	
Other function	1 x Pump switch interlocking outlet (to 7A) (Pump is started after reaching 85% of the preset rotational speed.)	
Safe devices/ protections	Overcurrent protection, Heater/Rotation/Pump stopped when Lid open, High temp., Various indication (Non-volatile memory, Temp. sensor, Heater output, High/Low temp., Motor, Rotational speed limit).	
Dimensions/ Weight	310 (W) x 380 (D) x 343 (H)mm Approx. 24kg	360 (W) x 440 (D) x 410 (H)mm Approx. 36kg
Power supply (*3)	AC100V/2.7A	AC100V/3.3A

(\*1) Cooling water circulation unit required separately for use below room temp.

(\*2) VC-36R: Max. 440 x g, VC-96R: Max. 580 x g \*Reference value in Outer perimeter of 36R/96R Rotor.

(\*3) The current will increase according to the use of Pump interlocking outlet.

● Diaphragm-type Vacuum pump (DTU-20/DTC-60 etc.) or Dry scroll type with chemical resistant (VU-100HC etc.) recommended to use. Besides, Oil-sealed rotary vacuum pump required for Lyophilization.

### Features

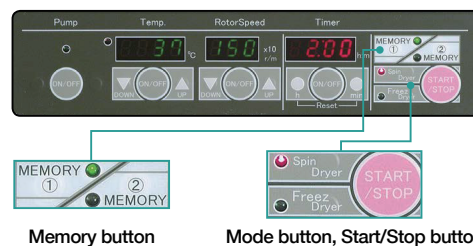
- Excellent Chemical resistance Material. Improved Reproducibility by digitization
- Invokes the frequently used conditions with memory settings at once
- Compatible with Various vessels (Rotors sold separately)

### Applications

- Concentrating and Drying of Nucleic acids, Proteins and Sugar chains
- Concentrating samples before and after analysis such as HPLC
- Concentrating in Peptide Synthesis

### Memory setting

Memorizes Temp., Rotational speed and Time. Invokes those and enables to start the operation just pressing the start button. Also enables to turn off Heater or cancel Timer manually on the way.



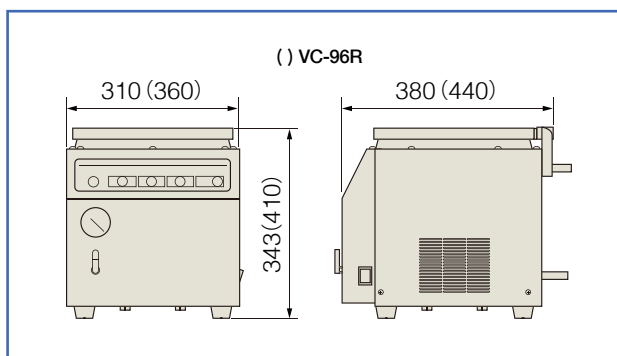
Memory button

Mode button, Start/Stop button

### "Freez Dryer" mode

Enables Frozen samples (beforehand) be Lyophilized. It is required to stop the rotation of Heater and Rotors and keep moving Vacuum pump. Such operation can be done automatically with "Freez Dryer" mode. Although necessary to consider beforehand where Heater and Rotor rotation should be stopped, "Freez Dryer" very useful for Heat-sensitive samples and Samples with chemical resistance inadequate to Freeze Dryers. Besides, Oil-sealed rotary vacuum pump required for Lyophilization.

### Dimensions (Common)

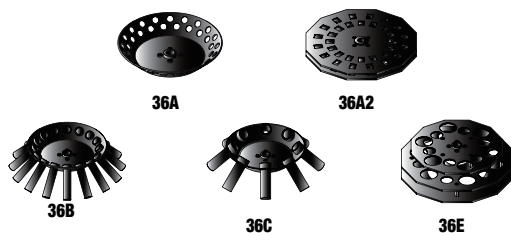


# Introduction on Options/Optional parts and Systems

Suitable Cold Traps/Vacuum pumps for VC-36R/96R --> P.150-151

## Angle rotors for VC-36R

(36A/36B/36C are the same type for former models VC-36S/36N)

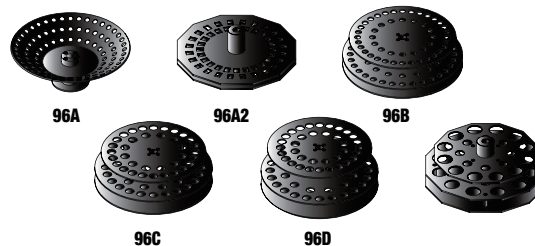


Model	Vessels / Capacity
36A	Microtube:1.5/2.0mL x 40pcs
36A2	Micro Vials:1.5/2.0mL x 32pcs
36B	Test tubes (Below φ13mm,Length 80 to 125 mm) x 16pcs
36C	Test tube (Below φ17.5mm,Length 80 to 125 mm) / 15mL Disposable centrifuge tubes x 8pcs
36E	Disposable centrifuge tubes:15mL x 6pcs + 50mL x 6pcs

- We manufacture Custom-made Rotors for VC-36R/96R such as 5ml Vials.
- The applicable vessels in length different from when 36A/36B/36C/ 96C/96A/96B/96C/96D used in former models.

## Angle rotors for VC-96R

(96A/96B/96C/96D are the same type for former model VC-96N)



Model	Vessels / Capacity
96A	Microtube:1.5/2.0mL x 96pcs
96A2	Micro Vials:1.5/2.0mL x 48pcs
96B	Test tube (φ10 to 12mm, Length 80 to 125 mm) x 48pcs
96C	Test tube (φ16.5 to 18mm, Length 80 to 125 mm) / 15mL Disposable centrifuge tubes x 36 pcs
96D	Test tube (φ17.5 to 18mm, Length 130 to 165 mm) x 36pcs
96E	Disposable centrifuge tubes:15mLx8pcs + 50mL x 12pcs

## Three way valve

Remarks
Connect to the suction nozzle and feed nitrogen instead of air to centrifugal concentrator in the process of changing the samples in the concentrator one after another without stopping the pump (see figure below for details).
<ul style="list-style-type: none"> <li>● Outer dia.φ15mm</li> <li>● Polypropylene made</li> </ul>

**Product**  
Three way valve for VC φ15 (Polypropylene made)

## Trapping Jar

Remarks
Enables simply trapping with Dry ice or Immersion Cooler (page128-129) in combination.
<ul style="list-style-type: none"> <li>● Inner dia. φ110mm</li> <li>● Outer dia. φ215mm</li> <li>● Height 310mm (Nozzles not included)</li> </ul>

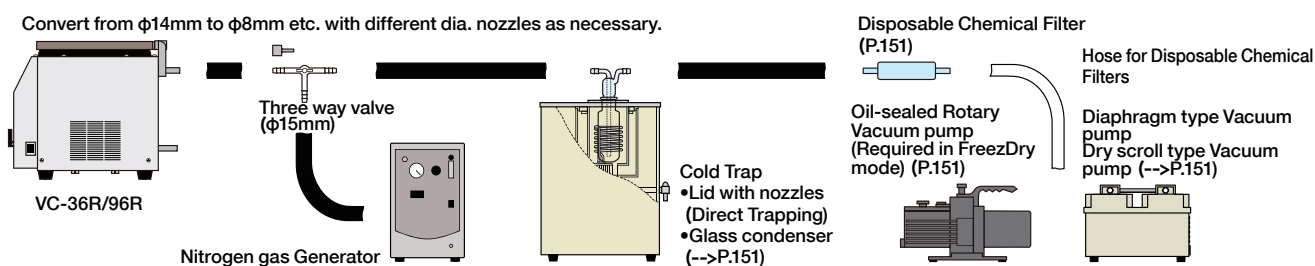
**Product**  
TraPot

## Nitrogen gas Generator

Remarks
Collects Nitrogen from the atmosphere and concentrates it Max. 99.0% (See page 43 for details).
<ul style="list-style-type: none"> <li>● Supply pressure:Max. 0.5MPa</li> <li>● 99.9% at 1.0L/min</li> <li>● 3.0L/min at 99.5%</li> <li>● Size:300x526x481Hmm</li> <li>● Power supply:AC100V-7.5A</li> </ul>

**Product**  
N<sub>2</sub> GENESIS 200

## The connection when System upgrade



## Example of VC-36R System

- 40pcs x Microtube 1.5/2.0mL
- Ultimate pressure: 200Pa
- Displacement:20L/min
- Trapping temp.: -45°C
- Trapping volume :200mL
- Power consumption:869W

VC-36R (Centrifugal Concentrator)
36A (Rotor)
VA-250F (Cold Trap)
GC-035 (Glass condenser)
DTU-20 (Vacuum pump)
System Stand G-type



## Example of VC-96R System

- Disposable centrifuge tubes (8pcs x 15mL + 10pcs x 50mL)
- Ultimate pressure:1000Pa
- Displacement:60L/min
- Trapping temp.: -45°C
- Trapping volume :200mL
- Power consumption:1157W

VC-96R (Centrifugal Concentrator)
96E (Rotor)
VA-250F (Cold Trap)
GC-035 (Glass condenser)
DTC-60 (Vacuum pump)
System Stand G-type



● Protuberances not included in Dimensions. ● Vessels of photo not included.

Selection guide

Constant temperature incubator/shaker

CO<sub>2</sub> incubator/shaker

Shaker

Mixer/Rotator/Stirrer

Bead beater/homogenizer/ultrasonic homogenizer

Aluminum block bath/Minimize bath

Water bath/Shaking water bath/Immersion cooler

Hybridization oven/Constant temperature chamber

Centrifugal concentrator/Cold trap

Freeze dryer

Electrophoresis and Blotting apparatus

Constant temperature circulating water system [Chiller]

Appendix