

Microtubes, Vials, Test tubes, and Disposable centrifuge tubes can be used. Two models with the different capacities.

•Cold Traps and Vacuum pumps for VC-36R / 96R --> P.164-165



(Rotors are sold separately.)

Versatile and Easy operation

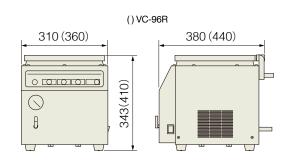
Memorizes Temp., Rotational speed, and Time. Invokes those and enables the start of operation just by pressing the start button. Also, it can turn off of the Heater or cancel the Timer during operation.



Model	VC-36R	VC-96R	
Temperature range	+5°C above RT to +70°C		
Rotational speed	300 to 2000 r/min (*1)		
Vacuum release	Timer automatic release (also Manual)		
Rotor rotation system	Magnet drive		
Timer	1 min to 99 h 59 min (Digital)		
Lid/Chamber material	Lid: PVC, Chamber: Stainless steel SUS304 (Teflon coated)		
Vacuum gauge	0 to -0.1 MPa (Bourdon tube)		
Suction nozzle outer dia.	Rc 1/2 (ф13.8 mm)		
Sterilization filter	0.2 μm		
Other function	Pump switch interlocking outlet × 1 (to 7 A) (The Pump starts after reaching 85% of the preset rotational speed.)		
Safe devices/ protections	Overcurrent protection, Heater/Rotation/Pump is stopped when the Lid is open, High temp., Various indication (Non- volatile memory, Temp. sensor, Heater output, High/Low temp., Motor, Rotational speed limit).		
Dimensions (W×D×H)/ Weight	310 × 380 × 343 mm Approx. 24 kg	360 × 440 × 410 mm Approx. 36 kg	
Power supply (*2)	AC100V/2.7A /Max.10A (Need a step-down transformer)	AC100V/3.3A /Max.10A (Need a step-down transformer)	

*1)VC-36R: Max. 440 x g, VC-96R: Max. 590 x g *Reference value in the Outer perimeter of the 36R/96R (T) O dork max vog, ro dork max solver and the second of the pump interlocking outlet.
(T) The current will increase according to the use of the Pump interlocking outlet.
(T) The Diaphragm-type Vacuum pump (DTU-20/DTC-60, etc.) or Dry scroll type with chemical resistant (VU-100HC, etc.) is recommended for use. Besides, the Oil-sealed rotary vacuum pump is required for

Dimensions (Common in all models)



Features

- Teflon coated Chamber having excellent chemical resistance
- Digital settings, numerical values to check concentration settings
- •Various rotors sold separately for Test tubes and tube vessels

Applications

- Concentrating water-soluble samples and solvents
- Concentrating in HPLC and other analytical pretreatments samples before and after analysis such as HPLC
- Concentration and drving by centrifugal

"Freeze Dryer" mode

This mode uses the main unit as a vessel drying chamber for Lyophilization. In this mode, after the set time has passed, the Vacuum pump remains running while the centrifugation stops and the Heater is turned off.

By setting the timer to turn off at the stage before drying, the drying of samples can be completed without giving unnecessary heat load. This mode can be used for samples that would melt during normal Lyophilization or for samples that are difficult to freeze. (The Oilsealed rotary vacuum pump is required for Lyophilization.)

Automatic/Manual Vacuum release

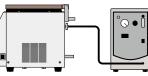
In centrifugal concentration, vacuum release by the auto-leak function is standard. For samples that are sensitive to oxidation, a Nitrogen gas Generator (or a sampling bag filled with nitrogen gas, etc.) can be connected to a leak filter that also serves as a nitrogen purge

port, and manual operation of the Leak Control valve can be used to prevent sample dispersal while minimizing the effects of oxidation.

> Leak Control valve Reduce dispersal of completely dried out samples with manual leakage.



Leak Control valve on Main unit Front





VC-36R/96R

Nitrogen gas Generator

•Suitable Cold Traps/Vacuum pumps for VC-36R/96R --> P.164-165

96A2

96C

96F

Approximate proc

capacity (*)

96 mL

48 mL

192 mL

288 mL

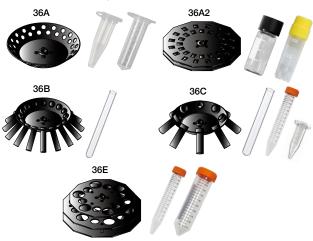
360 mL

300 mL

Introduction on Options/Optional parts and Systems

Angle rotors for VC-36R

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



Model	Vessels/Capacity	Approximate processing capacity (*1)
36A	Microtubes: 1.5/2.0 mL × 40 pcs	40 mL
36A2	Micro Vials: 1.5/2.0 mL × 32 pcs/Cryo tubes: 2.0 mL × 32 pcs	32 mL
36B	Test tubes (Below ϕ 13 mm, Length 80 to 125 mm) × 16 pcs	64 mL
36C	Test tubes (Below ϕ 17.5 mm, Length 80 to 125 mm)/15 mL Disposable centrifuge tubes × 8 pcs/5 mL tubes (*2) × 8 pcs	64 mL
36E	Disposable centrifuge tubes:15 mL × 6 pcs + 50 mL × 6 pcs	150 mL

(*1)Liquid volume: 1 mL/1.5 mL tube, 4 mL/φ13 mm Test tube, 8 mL/15 mL Centrifuge tube, 25 mL/50 mL Centrifuge tube (*2)Eppendorf Safe-lock tubes are recommended for 5 mL tubes. •The applicable vessels in length are different from when 36A/36B/36C/96A/96B/96C/96D used in the er models.

96C 15 mL Disposable centrifuge tubes × 36 pcs 96D Test tubes (\$17.5 to 18 mm, Length 130 to 165 mm) × 36 pcs 96E Disposable centrifuge tubes:15 mL \times 8 pcs + 50 mL \times 12 pcs (*)Liquid volume: 1 mL/1.5 mL tube, 4 mL/\u00e913 mm Test tube, 8 mL/15 mL Centrifuge tube, 10 mL/\u00e918 mm Test tube, 25 mL/50 mL Centrifuge tube

Model

96A

96A2

96B

Angle rotors for VC-96R

96A

96B

96D

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

Vessels/Capacity

Micro Vials: 1.5/2.0 mL × 48 pcs/Cryo tubes: 2.0 mL × 48 pcs

Test tubes (\$10 to 12 mm, Length 80 to 125 mm) × 48 pcs

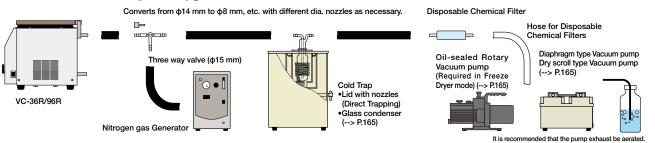
Test tubes (φ16.5 to 18 mm, Length 80 to 125 mm)/

Microtubes: 1.5/2.0 mL × 96 pcs

Optional accessories: Nitrogen gas Generator, Three way valve

Model	N ₂ GENESIS 200		Three way valve for VC $\varphi 15$ (Polypropylene made)	
Remarks		Collects Nitrogen from the atmosphere and concentrates it Max. 99.0% (See page 51 for details). • Supply pressure: Max. 0.5 MPa • Flow Rate and Concentration: 99.9% at 1.0 L/min, 99.5% at 3.0 L/min • Size (W×D×H): 300 × 526 × 481 mm	*	Connects to the suction nozzle. Nitrogen is fed instead of air to the centrifugal concentrator during the process of changing the samples in the concentrator one after another without stopping the pump (see figure below for details). Outer dia. ϕ 15 mm, Polypropylene made

The connection when System upgrade



Example of VC-36R System

•Microtube 1.5/2.0 mL × 40 pcs

- •Ultimate pressure: 200 Pa
- •Displacement: 20 L/min
- Trapping temp.: -45°C
- Trapping volume: 200 mL

•Power consumption: 869 W

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 (15 mL × 8 pcs + 50 mL × 10 pcs)

- •Ultimate pressure: 1000 Pa
- •Displacement: 60 L/min
- Trapping temp.: -45°C
- Trapping volume: 200 mL
- Power consumption: 1157 W

VC-96R (Centrifugal Concentrator) 96E (Rotor) VA-250F (Cold Trap)

GC-035 (Glass condenser)

DTC-60 (Vacuum pump)

System Stand G-type