Spin Dryer Mini VC-15S/SP

Compact-size Centrifugal Concentrator is easy to use with Benchtops. Optimal for concentration in Microtubes or Vials. For drying after Ethanol precipitation, VC-15SP with a built-in pump. With 15S, combined with a general-purpose pump, the throughput is higher.

•Cold Trap and vacuum pump are optimum for this product --> P.161



Model	VC-15S	VC-15SP	
Temperature range	Approx. +55°C when the Heater is turned on		
Rotational speed	Approx. 2000 r/min (fixed	orox. 2000 r/min (fixed)	
Vacuum release	Timer automatic release (also Manual)	Manual	
Rotor rotation system	Magnet drive		
Timer	60 min (Analog)		
Lid/Chamber material	Lid: Glass, Chamber: Stainless steel SUS304 (Teflon coated)		
Vacuum gauge	0 to -100 kPa (Bourdon tube)		
Vacuum Pump	Required separately (*1)	Built-in, Approx80 kPa, to -4 L/min (Another pump can be used) (*1)	
Suction nozzle outer dia.	φ8 and φ14 mm (Exchangeable)	Pisco φ8 mm	
Sterilization filter	·······		
Other function			
Safe devices/ protections	Overheat protection, Thermal fuse, Heater and Rotation stop when lid is open		
Dimensions (W×D×H)	171 × 236 × 175 mm		
Weight	Approx. 3 kg	Approx. 4.8 kg	
Power supply	AC100V/1A /Max.10A(*2) (Need a step-down transformer)	AC100V/1A (Need a step-down transformer)	
Standard accessories	φ8 and φ14 mm Nozzle × 1 pc	15A Rotor × 1 pc Vacuum pump protection filter × 1 pc	

^(*1)When using an external pump, the Diaphragm vacuum pump (displacement up to 50 L/min) is recommended.
(*2)In VC-15S, the current will increase according to the use of the Pump interlocking outlet.

Features

- •Compact but full-scale chemical-resistant chamber
- •Rotor that can be used while the tube lid is open
- Simple and easy-to-use controls

Applications

- Drying process after Ethanol precipitation, small volume concentration [15S]
- For concentration of water-soluble and solvent samples [15SP]
- •A wide variety of rotors sold separately for small volume vessels

Easy Operation

Centrifugal concentration is started simply by turning on the timer and switching on the rotor, heater, and pump in that order.

In the VC-15SP, the built-in pump is operated by the pump switch; in the VC-15S (as well as the larger series VC-36R/96R), the pump switch and vacuum pump operation are interlocked by using the outlet on the rear panel.



Optional accessories: Angle Rotors

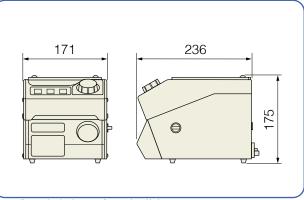


Screw cap type is not suitable

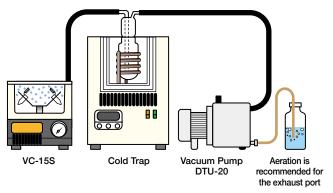
Model	Vessels and Capacity	Approximate processing capacity (*)
15A	Microtubes: 1.5/2.0 mL \times 12 pcs + 0.2 mL \times 32 pcs (included in VC-15SP)	12 mL
15B	Microtubes: 1.5/2.0 mL × 12 pcs + 0.5 mL × 24 pcs	12 mL
15C	Microtubes: 1.5/2.0 mL × 20 pcs	20 mL
15D	Micro vials: 1.5/2.0 mL × 12 pcs	12 mL
15E	Microtubes: 5 mL × 6 pcs (Screw cap type is not suitable.)	15 mL

^{(&}quot;)This is when a pump is connected to VC-15S. The maximum processing capacity of a 2.0 mL vessel and a 5.0 mL tube is 1/2 the volume of the vessel. The total processing capacity of the VC-15SP should be limited to a total of 2 mL.

Dimensions (Common in all models)



System upgrade for the VC-15 Series



When centrifugally concentrating ethanol precipitation samples with the VC-15SP, which has a built-in pump, the heater should basically be turned on.

If the total liquid volume of the sample exceeds 2 mL or if the sample can be disturbed by turning on the heater, select the VC-15S. In such cases, we recommend combining with the Teflon diaphragm pump DTU-20 (see above right), connecting a hose to the vacuum pump's exhaust port for exhausting, and "aeration" with water in a chemical bottle, etc.

When concentrating a high salt concentration sample, it is recommended to run the unit dry for 15 minutes after the completion of the concentration in order to reduce the valve deterioration of the vacuum pump.

Optional accessories: Diaphragm-type Vacuum Pump



Model	DTU-20	
Chemical resistance (*)	Water, Mild acidity, Organic solvent	
Displacement	20 L/min	
Ultimate pressure	to 0.2 kPa (adjustable by valve)	
Standard accessories	Vacuum hose (2 m), Nozzle port	
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(*)As it is not completely resistant, keep in mind that when use it.

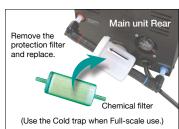
About the Cold Trap





Use a cold trap to collect vaporized or sublimated solvents. Select a lid with nozzles (NF-025/040) or a glass condenser (GC-035/070) according to the solvent to be collected, and then use in combination with the cold trap.

About the disposable chemical filter



The VC-15SP can be equipped with an optional disposable chemical filter.

As shown in the left figure, the filter is installed in place of the vacuum pump protection filter (standard accessory).

Refer to the table below for application guidelines.

After concentration, remove the filter and dry it before the next use.

For the VC-15S, please perform aeration on the exhaust side of the pump without using a chemical filter. Please dispose of the water used for aeration as industrial waste in a timely manner.

Option: Disposable Chemical Filters (for the VC-15SP) (Replace every 1 to 2 months when used frequently.)

	Model	Adsorbent	Main Adsorbable substances	
	CT-000-3	Activated carbon	Compressor oil vapor, C5 and other Hydrocarbons, Ketones, Alcohols, Esters, Organic acids, Aromatic, Oxides of Hydrocarbons, Chlorinated organic substances, Freon™, and Carbon disulfide	
_	CT-103-3		Carbon dioxide, Ammonia, Sulfur dioxide gas, Hydrogen sulfide, Acetylene, Propylene, Methane, Ethane, Ethylene oxide, Carbon disulfide linear Mercaptans, Linear Hydrocarbons (to C22), Cyclohexane, Butane-1, Isopentane, Benzene, Toluene, Xylene diphenyls, Triethylamine, and other Amines.	

•Dispose the Organic solvents contained in the exhaust from the pump in the draft or by aeration.

Reference Line graph

