

## Freeze Trap VA-120

**Ultra-compact Cold trap with Eco friendly, Electronical cooling and CFC Free. Can be cooled down to -35°C and Optimum for use with the VC-15S/15SP**

Ultra small-size Centrifugal Concentrator "Spin Dryer Mini VC-15S/SP" --> P.144



<b>Model</b>	<b>VA-120</b>
Cooling temperature	-35°C (*1)
Trapping volume	Approx. 30mL/time by Trapping bottle TB-115
Cooling chamber inside dimensions	φ50 x H100mm (Approx. 200mL) (*2)
Cooling method	Thermo module multi-stage cooling (Peltier element)
Other function	2 x Service outlet (3P/5A in total)
Safe devices/ protections	Overcurrent fuse, Overheat protection thermal fuse
Dimensions/Weight	244 (W) x 330 (D) x 285 (H)mm, Approx. 12kg
Power supply	AC100V/3A (*3)

(\*1) The limitation value is room temperature -62°C under the ambient temperature 27°C.  
 (\*2) When Trapping bottle inserted, put less than 1/3 of refrigerant to this volume (200mL).  
 (\*3) The current will increase according to the use of Service outlet.

### Optional accessories: Trapping bottle (required for trapping solvents)

Model	Vessels and Capacity
<b>TB-115</b>	Trapping volume: Approx. 30mL/time 135mm x Outer dia. φ40 (Inner dia. φ39), Connection dia. φ8mm

### Features

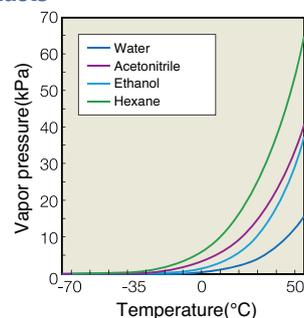
- Trapping volume approx. 30mL (Trapping bottle sold separately)
- For VC-15S / 15SP and VU-05 in combination

### Applications

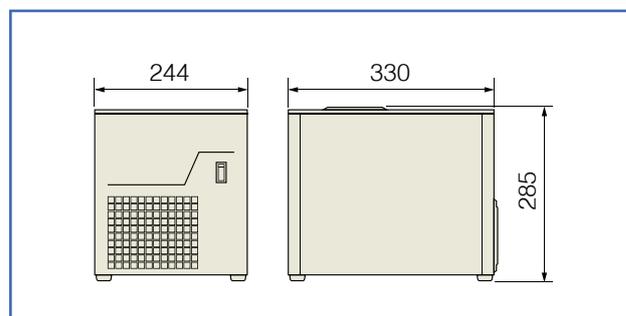
- Trapping Low boiling point solvents such as Ethanol

### Trapping capability of this products

The condensation temp of a substance changes with the degree of vacuum (vapor pressure). e.g. the relationship between the condensation temperature of ethanol etc. and the degree of vacuum shown on the right. Low boiling point solvents can be trapped well even at -35°C by selecting the appropriate degree of vacuum.



### Dimensions



## Diaphragm-type Vacuum Pump VU-05/DTU-20

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VU-05 with Chemical Trapping bottle (sold separately)



DTU-20

### Specifications

(DTU-20 comes with 2m Vacuum hose and Nozzle port)

Model	Chemical resistance (*)	Displacement	Ultimate pressure
<b>VU-05</b>	Water, Alcohols	5L/min	to 6.7kPa (adjustable by valve)
<b>DTU-20</b>	Water, Mild acidity, Organic solvent	20L/min	to 0.2kPa (adjustable by valve)

(\* ) As it is not completely resistant, keep in mind that when use it.

Combinations of VU-05 not listed in the table on page 143 and the above VA-120 (with refrigerant securely inserted) can trap low boiling solvents such as Ethanol and Acetonitrile.

### Optional accessories: Chemical Trapping bottle (for VU-5)

Model	Remarks
<b>CTB-135</b>	Dedicated bottle for VU-05 in which any adsorbent be packed in for use. Bottle: 135mm x Outer dia. φ40 (Inner dia. φ34)

● Not required when Disposable Chemical filters used.