Aspirator Q-1

Circulates water in the water bath and exerts suction with the water flow. The suction depends on the water temp. The water circulates in the tank that makes no concern discharge of contaminated water.

Test tube concentrators "Concentrator TC-8F/8G" --> P.147 Circulator for Open circuit "Cooling Pump CP-80R" --> P.170

Combined with Circulator for Open circuit

Combined with Test tube Concentrator TC-8F

Features

- The suction generated with Venturi effect by water flow
- The water flow by circulation inside water bath (w/o Tap water connection)

Applications

- Aspiration of Waste liquid in experimental operation
- Depressurization of Test tube Concentrator TC-8F/8G and that at suction filtration

Equipped with Two Suction ports

Pressure reducing Valve (sold separately) can be attached to either one. The suction (vacuum degree) can be stabilized by using Pressure reducing Valve while keeping the water temp. constant. See below for stabilization on water temp.

Water temperature and Suction (vacuum degree) in relation.

As the vacuum degree obtained from Venturi effect varies depending the water vapor pressure, the water temp. is related to the suction. Easier to maintain suction (vacuum degree) and improve reproducibility by throwing Ice or Cooling pipe into the tank or cooling the water inside bath with Circulator for Open circuit (See right table). Plus, when Cooling pipe or Circulator used, the samples are limited to those materials not damage .

Tap temp	Max. Suction (Ultimate pressure)
+5°C	0.866kPa (6.5mmHg)
+10°C	1.226kPa (9.2mmHg)
+15°C	1.813kPa (13.6mmHg)
+20°C	2.333kPa (17.5mmHg)
+25°C	3.106kPa (23.3mmHg)
+30°C	4.239kPa (31.8mmHg)
+35°C	5.439kPa (40.8mmHg)
+40°C	7.371kPa (55.3mmHg)

The disposal of water in the water bath.

Aspirator mixes the aspirated waste fluid and the evaporated solvent into the water stream in principle. Disposal the water in the tank that is after drying the organic solvent etc. under reduced pressure or sucking up the waste liquid according to the regulations (Be careful in particular Low boiling point solvents easily liquefied and mixed at once).

"Aspirator" generates suction by water flow

The simpler device than Vacuum pump to get suction effect by Venturi effect by water flow. As it causes water flow by circulating the water in the bath, suitable for long-time use compared to the method connected to tap water supply. No concern discharge of contaminated water.

Model	Q-1
Ultimate pressure	Depends on water vapor pressure (See left table)
Displacement	6 to 7L/min
Suction nozzle	Outer dia. 9 mm, Two ports (2pcs of Metal-made Aspirators built in)
Pump motor	90W
Dimensions inside bath	220 (W) x 250 (D) x 220 (H)mm (Approx. 10L)
Dimensions	230 (W) x 260 (D) x 425 (H)mm
Weight	Approx. 9kg
Power supply	AC100V/2A
Standard accessories	1 x PVC-made Transparent Lid

Optional accessories

Combined with Pressure reducing Valve

Product	Remarks
Pressure reducing Valve (*)	Comes with Bourdon tube Vacuum gauge
ϕ13mm Nozzle for Q-1	Used when changed from ϕ9mm

(*) Keep water in the bath constant to adjust the pressure stably.

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