

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 makes no concern for discharge of contaminated water.

•Test tube concentrators "Concentrator TC-8F" --> Next page, Chiller for open circuit "Coolpomp CP-80R" --> P.189

Features

- The suction generated with the Venturi effect by water flow
- The water flow by circulation inside water bath (w/o Tap water connection)
- Properly dispose of contaminated water in the water bath after use

Applications

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

Equipped with Two Suction ports

The Pressure reducing Valve (sold separately) can be attached to either ports. The suction (vacuum degree) can be stabilized by using the 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 that is obtained from the Venturi effect varies depending on the water vapor pressure, the water temp. is related to the suction. It is easier to maintain suction (vacuum degree) and improve reproducibility by throwing ice or the Cooling pipe into the tank or cooling the water inside bath with the Circulator for Open circuit (See right table). Also, when the Cooling pipe or Circulator is used, the samples that are limited to those materials are not damaged.

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

The disposal of water in the water bath.

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



Combined with Circulator for Open circuit



Combined with Test tube Concentrator TC-8F

"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 the water flow by circulating the water in the bath, it is suitable for long-time use compared to the method of connecting to the tap water supply. No concern for discharge of contaminated water.

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

Optional accessories

Product	Remarks
Pressure reducing Valve (*)	Comes with the Bourdon tube Vacuum gauge

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



Combined with the Pressure reducing Valve

NEW

Constant-temperature incubator/shaker OD Monitor

For cell culture related products

Shaker

Mixer Rotator Stirrer

Bead beater homogenizer Ultrasonic homogenizer

Aluminum block Bath Mini-size Bath

Water bath Shaking Water bath Immersion cooler

Hybridization Incubator Constant temperature Chambers

Centrifugal Concentrators Cold Trap

Freeze dryers

Submarine Electrophoresis apparatus Blotting device for hybridization

Constant-temperature water circulating system [Chiller]

Appendix