

## Complementary Products

Except for rotary evaporator, TOPTION also offers **relevant products to meet users' needs at one-stop**.  
**Our value:** Sharing & win-win, **customer success**, be thankful, keep growing, innovation and responsible.



Accurate  
& Efficient



You may often meet the below problems when operate rotary evaporator:

1. Low receiving rate while evaporating is good.
2. Vacuum pump being corroded.
3. Harmful gas escaping.
4. Sudden solvent bumping.

Rotary evaporator system vacuum degree is higher than normal is the possible reason. If vacuum degree is too high, will cause solvent steam temperature is too low so couldn't be collected efficiently. Release vacuum is need, but other problems will happen if vacuum degree is too low.

To avoid these problems, you need to equip vacuum controller and low temperature cooling circulator for your rotary evaporators, so as to be able to hold at a proper vacuum rate and condensing temperature for an efficient, stable and safe operation.

### Vacuum Pump



SHB-III



2XZ



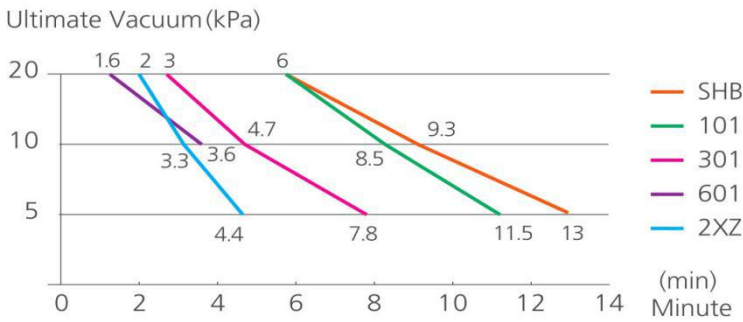
SHB-B95



MPC301z

## Complementary Products - Vacuum Pump

### Pump Performances on 20L Rotary Evaporator



**Note:**

**Vacuum pressure unit conversion:**

**1 hPa = 1 mbar = 0.75 Torr / 0.75 mmHg.**

Model	SHB-III	SHB-B95	2XZ-2	MPC101z	MPC301z	MPC601e
Type	Water Circulation Vacuum Pump	Water Jet Vacuum Pump	Vane Pump	Diaphragm Pump		
Fit For Rotary Evaporator	1L-5L	10L-50L	10L-50L	2L-10L	20L-50L	20L-50L
Ultimate Vacuum Rate	2.6kPa (26mbar /20torr)	0.098MPa	6.7 * 10 <sup>-2</sup> Pa	800Pa (8mbar / 6 torr)	800Pa (8mbar / 6 torr)	7.5kPa (75mbar / 52 torr)
Flow Rate	10L/min * 2	80L/min	120L/min	16L/min	38L/min	63L/min
Power	220V 180W	220V 370W	220V 370W	220V 60W	220V 180W	220V 180W
Dimensions(mm)	390 * 320 * 450H	450*350*820H	490 * 150 * 280H	280 * 420 * 240H	480 * 330 * 300H	490 * 330 * 300H
Features	Simple maintenance, can resist certain corrosion, no use in explosive/flammable air	Be suitable for the research experiment, small scale test and small scale production process.	High vacuum rate, fast pumping speed, not for pumping of corrosive gas or quantity of steam.	High vacuum rate, anti-corrosion, little maintenance job, not for pumping of gas with powder or grain.		
Remarks	S.S pump, two pump nozzles with vacuum meters	Static electricity spray and SS304 materials Of machine casing.	The model is made by TOPTION.	The models are dealt by TOPTION, made in Germany.		

### Vacuum Controller

Used for set, display and control vacuum rate in target system, esp. in processes of separating, condensing of low boiling temperature solution. Solvent receiving rate raise to 99% even for low boiling temperature solvent.

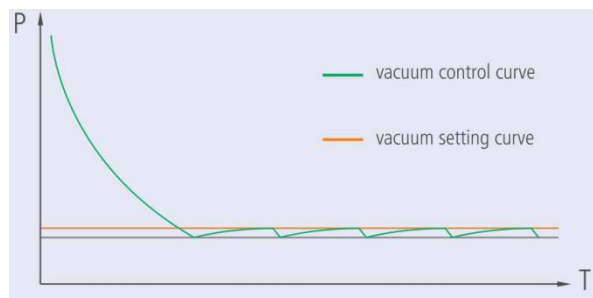
- Built-in electromagnetic valve.
- Equips in control power port for vacuum pump.
- With buffer bottle and filter bottle for protection.



### Complementary Products - Vacuum Controller

Model	VC100C
Measure Range	0-105kPa
Set Range	2.0~90kPa
Resolution	0.1kPa
Load Capacity	220V, 370W
Power	220V, 50/60Hz
Dimensions (cm)	34*16*39H
Note: not for pumping of gas with powder or grain.	

### Control Characteristic



### Cooling Circulator

Providing cooling circulation liquid for Rotary Evaporators and Reactors. Has big cooling capacity customization and is compatible with TOPTION instruments.



**DL-2005**



**LX-0250**



**LX-0400**

**LX-0700**

**LX-1450**

Model	DL-2005	LX-0250	LX-0400	LX-0700	LX-1450
Temp. Set Range (°C)	-20°C~RT	-15°C~RT	-5°C~RT	-25°C~RT	-25°C~RT
Cooling Capacity (W)	200-1000 (700W @ 10°C)	500-1500 (1000W @ 10°C)	800-2400 (1500W @ 10°C)	1500-4000	5000-10000
Flow Rate (L/min)	10	10	20	35	75
Bath Capacity (L)	4	15	25	30	45
Lift Head (m)	3	6	10	15	15
Power	220V, 50Hz	220V, 50Hz	220V, 50Hz	220V, 50Hz	380V, 50Hz
Fit For Rotary Evaporator	≤ 5L	2L 5L 10L	5L 10L 20L	10L 20L 30L 50L	20L 30L 50L
Safety Features					
Over-current Protection	Have				
Compressor over-temp. protection	Have				
Note: Cooling capacity is measured under room temperature 25°C.					