BIOSPECTRIX

ADVANCED LABORATORY EVAPORATION SOLUTIONS

BioSpectrix

Rotary Evaporator

Precise • Reliable • Efficient

Advanced Evaporation Technology

MODEL

BSR-1020



Sturdy Structure
Stable and durable construction

Precise Control
Digital display for accurate speed and temperature

High Efficiency
Efficient evaporation with excellent recovery rate

Safe Operation
Overheat protection and circuit safety

Strong Compatibility
Compatible with various vacuum systems

Temperature Range Room Temp. to 180 °C

Speed Range 20 – 280 rpm

Evaporation Flask Capacity Max - 20L Min - 10L

Condenser High Efficiency Glass Condenser

Digital Control Precise & Easy Operation

High Efficiency Fast & effective evaporation

Premium Quality Durable & High Performance

User Friendly Simple & convenient operation

Versatile Use Ideal for Labs, Research & Industry

Reliable Results Consistent & Accurate

BIOSPECTRIX

PRECISION SCIENTIFIC & LABORATORY INSTRUMENTS

BioSpectrix Rotary Evaporator BSR-1020

Fast, Efficient & Gentle Solvent Evaporation



INTRODUCTION

The evaporation flask rotates at a constant speed while the water bath maintains a stable temperature, forming a uniform thin film on the inner wall for rapid and efficient evaporation.

Under vacuum conditions, evaporation efficiency is enhanced. The solvent vapor passes through the glass condenser coil, where it is cooled, condensed into liquid, and collected for recovery.

System Requirements

For complete operation, the system should be connected to a suitable vacuum pump such as circulating water, rotary vane, or diaphragm type, along with a cooling and circulating system for efficient condensation and continuous solvent recovery..

BASIC CONFIGURATION:

- Premium Materials: High-borosilicate glass and PTFE ensure excellent chemical stability.
- Durable Construction: Anti-corrosive aluminum-alloy frame with 304 stainless-steel bath.
- Reliable Sealing: PTFE + fluororubber sealing for stable vacuum operation.
- Vacuum Monitoring: Real-time vacuum indication with pressure gauge.
- Continuous Feeding: PTFE-sleeved valve enables continuous feeding under vacuum.
- Efficient Condenser: Double-layer serpentine coil for enhanced condensation.
- Large LCD Display: Simultaneous control of rotation, heating, and lifting.
- Low-Noise Motor: Brushless DC motor provides smooth and quiet operation.
- Lift Motor: Brushless DC lifting motor for reliable height adjustment.
- Precision Temperature Control: PT100 sensor ensures accurate bath temperature.
- Electric Bath Lifting: Easy lifting with heat-insulation and anti-scalding protection.
- Safety Protection: Dual-fuse protection for rotation and heating.
- Easy Discharge: Independent glass + PTFE discharge valve for convenient recovery.
- Water Drainage: Dedicated valve for quick bath drainage.
- Vacuum Switching: Supports rotary, collection, and discharge control without disturbing vacuum.
- Over-Temperature Protection: Automatic shutdown when temperature exceeds the set limit.
- Anti-Dry Protection: Automatically stops heating when the water level is too low.
- Power-Off Protection: Heating automatically stops during power interruption.

Technical parameters

Model	BSR-1020
Voltage/Frequency	220V 50Hz/110V 60Hz
Total Power	5100W
Rotary motor power	60W1/5
Lifting motor power	40W1/12.5
Heating power	5000W
Vacuum	0.095Mpa
Rotary flask volume	20LΦ355mm/Φ95 flange port
Collecting flask volume	10LΦ280mm/upper Φ60 flange port×Φ35 flange port×2 pcs×lower Φ50 flange port
Rotary speed	0-120rpm/min
Temperature control range	Room temperature-180℃
Temperature control accuracy	±1℃
Bath lifting stroke	150mm
Condenser dimension	Main condenser Φ130×700H(mm), upper Φ60 flange port, lower Φ80 flange port Auxiliary condenser Φ160×530H(mm), upper Φ80 flange port, lower Φ60 flange port, side Φ60 flange port
Condensing area	0.94(0.46+0.48)㎡
Gas cylinder	Left Φ35 flange port, upper Φ35 flange port, side Φ60 flange port, right Φ60 flange port
Material feeding valve	Φ35 flange port, glass+PTFE valve, material feeding valve(pagoda joint) with 12mm outer diameter
Multi-function port	Φ35 flange port, glass+PTFE valve, glass valve (pagoda joint) with 12mm outer diameter
Releasing valve	Φ35 flange port×2, glass+PTFE valve, releasing valve (pagoda joint)with 12mm outer diameter
Material discharging valve	Φ50flange port, side material discharging port (pagoda joint)with 20mm outer diameter, 210mm from the ground
Vacuum nozzle	Φ60 flanged glass nozzle（pagoda joint)with 10mm outer diameter
In and out circulating nozzle of condenser coil	Pagoda joint with 16mm outer diameter
Bath dimension/weight	Φ450×260H（mm） about 41L
Overall dimension(W*D*H)	1210×610×2170mm
Net weight	78KG
Packing dimension	1050×530×1210mm wooden package 0.68m³
Packing weight	110KG

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