BIOSPECTRIX
ADVANCED LABORATORY SOLUTIONS

BSMR-2L

PRECISION EVAPORATION | GENTLE DISTILLATION | SOLVENT RECOVERY



Rotary Evaporator

BSMR-2L

Operation Manual



Manual Lift



Motorized Lift

APPLICATIONS

- Rapid & gentle distillation
- Solution/suspension processing
- Crystallization & purification
- Powder/granular drying
- Solvent recovery

The BioSpectrix BSMR-2L is a benchtop rotary evaporator for rapid and gentle distillation, concentration and solvent recovery. It combines controlled heating, variable-speed rotation and an integral condenser with anti-reflux design for efficient laboratory evaporation. Manual-lift and optional motorized-lift configurations are available.

SMART CONTROL
4.5-inch LCD, touch keys and multifunction adjustment knob for speed, temperature and timer.

CONTROLLED HEATING
1200 W constant-temperature bath; ambient to 180°C. Water accuracy ±0.5°C; oil ±2°C.

EFFICIENT CONDENSATION
Integral 2 L condenser with anti-reflux device, liquid feed port and vent.

PRECISION ROTATION
Brushless DC motor with stepless 20–300 rpm control and selectable forward/reverse operation.

FLEXIBLE LIFT
150 mm lifting travel with manual or optional motorized lift.

LAB-READY PROTECTION
Motor overload protection, bath overheat/dry-run protection and IP42 rating.

ENGINEERED FOR CONTROL. BUILT FOR CONSISTENT EVAPORATION.

BSMR-2L | Technical specifications & functional highlights

PARAMETER	SPECIFICATION
Power supply	Main unit: 1-phase, 50/60 Hz; Bath: 1-phase, 50/60 Hz
Display	4.5-inch LCD, touch keys, multifunction adjustment knob
Motor	Brushless DC motor
Main unit input power	Manual lift: 54 W; Motorized lift: 60 W + 3500 mAh lithium battery
Bath heating power	1200 W
Temperature range	Ambient to 180°C
Temperature accuracy	Water: ±0.5°C; Oil: ±2°C
Rotation speed	20–300 rpm
Adjustment	Stepless; speed 1 rpm; temperature 0.1°C
Forward / reverse	Yes; 0–9999 min
Timer	0–9999 min
Flask tilt angle	0–360°
Lifting method / travel	Manual or motorized / 150 mm
Protection	IP42; motor overload; bath overheat/dry-run protection at 185°C
Condenser	Integral anti-reflux; liquid feed port/vent; 2 L
Flasks	Evaporation: 1 L; Collection: 1 L
Power-loss lift	Manual: No; Motorized: Yes
Ambient conditions	5–40°C; £80% RH
Dimensions	Main unit 400×320×540 mm; Bath 315×325×220 mm
Weight	Main unit 9 kg; Bath 3.2 kg, excluding glassware



CONTROL	SAFETY	PROCESS FLEXIBILITY
Timer completion automatically stops speed and temperature control. Speed, temperature and time are set from the control interface.	Motor overload, bath overheat/dry-run and sensor-fault protection; IP42 ingress protection.	Forward/reverse function, 360° flask tilt, manual/motorized lift and 1 L evaporation + 1 L collection flask configuration.

SYSTEM CONNECTIONS

The condenser provides coolant inlet/outlet and vacuum connections. The manual specifies dedicated vacuum tubing with 6 mm inner diameter and 2.5 mm wall thickness. The heating bath can use water or oil as the heating medium.

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