



# REFRIGERATED CENTRIFUGE LRF-B22

Refrigerated Centrifuge LRF-B22 is a compact and tabletop, microprocessor-controlled unit, comprised with 4×250 ml of capacity, offers 16000 rpm of maximum speed and 27170×g of maximum RCF. With fluorine free compressors and brushless frequency motor, features double cycle cooling with -20 to -40°C of temperature range and 0 to 99 h 59 min of time range. Equipped with LED display, automatic electric lid lock system, and 10 programs, has over temperature and over speed protection with imbalance sensor, also supports 10 types of acceleration/deceleration and RCF/RPM conversion.

### Features

- ❑ A compact and tabletop, microprocessor-controlled unit, safe and reliable
- ❑ 4×250 ml of capacity, 16000 rpm of maximum speed and 27170×g of maximum RCF
- ❑ Fluorine free compressors, environment friendly
- ❑ Brushless frequency motor, ensures smooth and gentle acceleration / deceleration
- ❑ Double cycle cooling, easy cooling and heating alteration with precise control
- ❑ -20 to -40°C of temperature range and 0 to 99 h 59 min of time range
- ❑ LED display, for easy setting and monitoring of different parameters
- ❑ Automatic electric lid lock system, prevent unauthorized access
- ❑ 10 programs, for convenient and reliable operation
- ❑ Over temperature and over speed protection with imbalance sensor
- ❑ Supports 10 types of acceleration/deceleration with RCF/RPM conversion
- ❑ Highly efficient, stable and reliable unit with safe and convenient operation

### Application

Refrigerated Centrifuge is used to collect or separate samples of different densities such as micro-organisms, cellular debris, larger cellular organelles, proteins, yeast cells, chloroplasts, erythrocytes etc. under consistent range of temperature across chemistry, biology, biotechnology, microbiology, biochemistry, pharmaceuticals etc.

## Specifications

Model	LRF-B22
Maximum speed	16000 rpm
Maximum RCF	27170 × g
Maximum capacity	4 × 250 ml
Temperature range	-20°C to -40°C
Temperature accuracy	± 1°C
Speed accuracy	± 20 rpm
Time range	0 to 99 h 59 min
Cooling cycle	Double
Noise	≤ 55 dB
RPM/RCF convert	Yes
Acceleration/Deceleration	10 kinds
Memory	10 programs
Controller	Microprocessor
Display	LED
Sensor	Imbalance sensor
Motor	Brushless frequency motor
Lid lock	Automatic electric lid lock
Protection	Over temperature and over speed protection
Power supply	AC 220/110 V, 50/60 Hz
Package dimension (W×D×H)	620×600×360 mm
Gross weight	105 kg

## Rotor selection

Rotor Type No.	Maximum Speed	Maximum Capacity	Maximum RCF
Swing Rotor 01 (Round Bucket)	4500 rpm	4×250 ml	3650×g
Swing Rotor 02 (Square Bucket)	4500 rpm	4×250 ml	3580×g
Swing out Rotor 01	4000 rpm	4×16×7 ml	2860×g
Swing out Rotor 02	4000 rpm	4×16×5 ml	2470×g
Swing out Rotor 03	4000 rpm	4×13×10 ml	2830×g
Microplate Rotor 01 (Frame)	4000 rpm	2×3×96 well	2310×g
Microplate Rotor 02 (Box)	4500 rpm	2×3×96 well	2880×g
Swing out Rotor 04	5000 rpm	4×1×50 ml	4730×g
Swing out Rotor 05	5000 rpm	4×1×100 ml	4730×g
Swing out Rotor 06	5000 rpm	4×2×100 ml	3020×g
Swing out Rotor 07	5000 rpm	4×2×50 ml	3020×g
Swing out Rotor 08	5000 rpm	4×4×15 ml	3020×g
Swing out Rotor 09	5000 rpm	4×6×15 ml	3020×g
Swing out Rotor 10	5000 rpm	4×4×10/7 ml vacuum tube	2770×g
Swing out Rotor 11	5000 rpm	4×4×5 ml vacuum tube adapter	2360×g
Swing out Rotor 12	5000 rpm	4×6×10/7 ml vacuum tube	2770×g
Swing out Rotor 13	5000 rpm	4×6×5 ml vacuum tube adapter	2360×g
Swing out Rotor 14	5000 rpm	4×8×10/7 ml vacuum tube	2770×g
Swing out Rotor 15	5000 rpm	4×8×5 ml vacuum tube adapter	2360×g
Swing out Rotor 16	5000 rpm	4×12×5 ml vacuum tube	2480×g
Swing out Rotor 17	5000 rpm	4×12×7 ml vacuum tube	2760×g

## Refrigerated Centrifuge LRF-B22

Swing out Rotor 18	5000 rpm	4×10×10 ml vacuum tube	2880×g
Angle Rotor 01	16000 rpm	4×8 PCR	15760×g
Angle Rotor 02	14000 rpm	6×8 PCR	18650×g
Angle Rotor 03	16000 rpm	8×8 PCR	17480×g
Angle Rotor 04	14000 rpm	12×8 PCR	19970×g
Angle Rotor 05	15000 rpm	40×0.5 ml	22920×g
Angle Rotor 06	16000 rpm	12×1.5/2 ml	17940×g
Angle Rotor 07	16000 rpm	24×1.5/2 ml	23440×g
Angle Rotor 08	16000 rpm	30×1.5 ml	27170×g
Angle Rotor 09	1600 rpm	48×1.5 ml	27170×g
Angle Rotor 10	16000 rpm	16×5 ml	22020×g
Angle Rotor 11	16000 rpm	6×10 ml	21500×g
Angle Rotor 12	15000 rpm	12×10 ml	22680×g
Angle Rotor 13	13000 rpm	16×10 ml	19490×g
Angle Rotor 14	13000 rpm	8×15 ml	17790×g
Angle Rotor 15	11000 rpm	12×15 ml	14330×g
Angle Rotor 16	5000 rpm	24×15 ml	3500×g
Angle Rotor 17	5000 rpm	30×15 ml	3830×g
Angle Rotor 18	14000 rpm	6×30 ml	19060×g
Angle Rotor 19	10000 rpm	12×30 ml	12250×g
Angle Rotor 20	13000 rpm	6×50 ml(conical)	18840×g
Angle Rotor 21	10000 rpm	8×50 ml(conical)	12640×g
Angle Rotor 22	8000 rpm	10×50 ml(conical)	8880×g
Angle Rotor 23	13000 rpm	6×50 ml(round)	18730×g
Angle Rotor 24	10000 rpm	8×50 ml(round)	12410×g
Angle Rotor 25	5000 rpm	12×50 ml	3860×g

Angle Rotor 26	13000 rpm	4×85 ml	18940×g
Angle Rotor 27	10000 rpm	6×85 ml	12320×g
Angle Rotor 28	8000 rpm	8×85 ml	8820×g
Angle Rotor 29	13000 rpm	4×100 ml	17430×g
Angle Rotor 30	10000 rpm	6×100 ml	11380×g
Angle Rotor 31	8000 rpm	8×100 ml	8790×g
Angle Rotor 32	4000 rpm	12×100 ml	2970×g
Angle Rotor 33	7000 rpm	4×250 ml	6960×g
Angle Rotor 34	12000 rpm	24 capillaries	15800×g
Swing Rotor 03	15000 rpm	4×5 ml	19920×g
Swing Rotor 04	12000 rpm	4×30 ml	20090×g
Swing Rotor 05	10000 rpm	4×50 ml	16240×g
Vertical rotor 01	16000 rpm	16×5 ml	16450×g
Vertical rotor 02	14000 rpm	8×30 ml	19750×g

## Adapter

Adapter Type No.	Volume
Adapter 01	250/300 ml
Adapter 02	250/300 ml (Square cup)
Adapter 03	100/180 ml
Adapter 04	50/85 ml
Adapter 05	30 ml
Adapter 06	15/20 ml
Adapter 07	10 ml (High speed)
Adapter 08	10 ml (Low speed)
Adapter 09	1.5/2 ml