



**Labocon Floor Type High Speed Refrigerated
Centrifuge Advanced LFHCRA-100 Series**



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Labocon Floor Type High Speed Refrigerated Centrifuge Advanced LFHCRA-100 Series performs a wide range of separations, offering comprehensive control and set-up options to meet precise application needs.

It has been designed with integrated refrigeration system, superior temperature control and outstanding product quality. Each centrifuge operates at low noise levels and offers soft-touch lid closure for easy loading and unloading of samples.

Labocon Centrifuge delivers efficient sample processing in clinical protocols, cell culture applications, microplate processing and a variety of separation needs. It is also widely used in the field of blood station, pharmaceutical factory, biochemistry, biological products, etc.

FEATURES

- **Construction**

It has a Compact, light-weighted, and ergonomic design. The inner chamber is made of corrosion resistant Stainless steel. Easy to clean specially coated glossy surface. It is an ideal choice for very quiet and speedy operations. It has a very safe sliding lid for the convenience of the user.

- **Rotor**

It has a convenient rotor coupling and decoupling method complete with rotor lid closure and opening. There is no need of an additional tool for it.

- **Motor**

It comes with a maintenance free durable induction motor. The soft motor shaft is very useful for stable rotation of heavy rotors. The instrument comes with an automatic half-atmosphere vacuum control for speeds over 22,000 rpm.

- **Acceleration and Deceleration**

The rapid acceleration and deceleration helps speed up the molecular works.

- **Imbalance cut off and tracking**

The instrument has imbalance cut off system which ensures the instrument stops if the rotors are not properly balanced thereby preventing any damage to the sample.

- **Refrigerant**

The cooled used in the instrument a CFC free environment friendly refrigerant. It comes with an excellent temperature control for maintaining the required temperature. A drainage hole is provided in the instrument for refrigerated models which should be cleaned daily. It has a Distinct "Fast Cool" button for quick cooling.

- **Display and Control**

The instrument has an intuitive and easy control system which is user friendly and is also extensively informative. The display is easy to read graphical LCD display showing all the working parameters enabling the user to have the working information in one instance.

The instrument comes with a motorized lid opening and closure system.

- **Automatic rotor identification**

The instrument comes with the latest feature of Rotor Identification making it user friendly and easy to operate.

- **Security**

The instrument has a Password lock function to prevent any alterations in the set parameters.

TECHNICAL SPECIFICATIONS

Model No./ Specifications	LFHCRA-101	LFHCRA-102	LFHCRA-103	LFHCRA-104
Max. RPM / Fixed angle	12,000 rpm	17,000 rpm	22,000 rpm	30,000 rpm
Max. RCF / Fixed angle	22,265 xg	34,249 xg	57,358 xg	106,657 xg
Max. capacity / Fixed angle	6 x 1,000 mL	6 x 250 mL	4 x 1,000 mL	4 x 1,000 mL
ACC/DEC ramps	10/10 steps	9/10 steps	10/10 steps	10/10 steps
Temperature range	-10°C to 40°C	-20°C to 40°C	-10°C to 40°C	-10°C to 40°C
Fast cool	No	Yes	No	No
Time control	Pulse, Timed < 100 hr continuous	Pulse, Timed < 10 hr continuous	< 100 hr, continuous	< 100 hr, continuous
Program memory	100	100	100	100
Noise level	≤ 65 dB	≤ 56 dB	≤ 65 dB	≤ 65 dB
Vacuum system	No	No	No	Yes
Imbalance cutoff / tracking	Yes/ Yes	Yes/ No	Yes/ Yes	Yes/ No
Rotor identification	Automatic	Automatic	Automatic	Manual
Dimension (W x D x H, mm)	668.7 x 800.6 x 891.3	473 x 611 x 840	668.7 x 800.6 x 891.3	710 x 1,000 x 1,260
Weight without rotor	230 kg	114 kg	230 kg	415 kg
Power requirement (VA)	3.0 kVA	2.5 kVA	3.4 kVA	4.0 kVA
Power input (V, Hz)	210~240V 50/60 Hz (110V optional)	220V 50/60 Hz (110V optional)	210~240V 60 Hz (110V, 50 Hz optional)	210~240V 60 Hz (110V, 50 Hz optional)

Optional Accessories for LFHCRA-101

Rotor Name & No.	No. of tubes x Volume	RPM	RCF
Angle Rotor AR-7	6 x 250 mL	12000	22265
Angle Rotor AR-8	6 x 500 mL	10000	17743
Angle Rotor AR-9	4 x 1,000 mL	8000	12157
Angle Rotor AR-10	6 x 1,000 mL	7000	10962

Optional Accessories for LFHCRA-102

Rotor Name & No.	No. of tubes x Volume	RPM	RCF
Angle Rotor AR-1	36 x 1.5/2.0 mL	15000	29104
Angle Rotor AR-2	12 x 10 mL	17000	27496
Angle Rotor AR-3	12 x 15 mL	17000	34249
Angle Rotor ARc-3	12 x 15 mL Conical	15000	25004
Angle Rotor AR-4	6 x 50 mL	17000	31050
Angle Rotor ARc-4	6 x 50 mL Conical	15000	22891
Angle Rotor AR-5	8 x 50 mL	15000	24878
Angle Rotor AR-6	6 x 85 mL	15000	24551
Angle Rotor AR-7	6 x 250 mL	10000	15462

Optional Accessories for LFHCRA-103

Rotor Name & No.	No. of tubes x Volume	RPM	RCF
Angle Rotor AR-1	36 x 1.5/2.0 mL	18000	41910
Angle Rotor AR-2	12 x 10 mL	22000	46049
Angle Rotor AR-3	12 x 15 mL	22000	57358
Angle Rotor ARc-3	12 x 15 mL conical	17000	32116
Angle Rotor AR-4	6 x 50 mL	22000	52001
Angle Rotor ARc-4	6 x 50 mL Conical	17000	29402

Angle Rotor AR-5	8 x 50 mL	20000	44228
Angle Rotor AR-6	6 x 85 mL	20000	43647
Angle Rotor AR-7	6 x 250 mL	12000	22265
Angle Rotor AR-8	6 x 500 mL	9000	14372
Angle Rotor AR-9	4 x 1,000 mL	8000	12157

Optional Accessories for LFHCRA-104

Rotor Name & No.	No. of tubes x Volume	Old RPM/New RPM	Old RCF/New RCF
Angle Rotor AR-1	36 x 1.5/2.0 mL	20000	51741
Angle Rotor AR-2	12 x 10 mL	30000	85628
Angle Rotor AR-3	12 x 15 mL	30000	106657
Angle Rotor ARc-3	12 x 15 mL conical	17000	32116
Angle Rotor AR-4	6 x 50 mL	30000	96696
Angle Rotor ARc-4	6 x 50 mL Conical	17000	29402
Angle Rotor AR-5	8 x 50 mL	30000	99513
Angle Rotor AR-6	6 x 85 mL	25000	68198
Angle Rotor AR-7	6 x 250 mL	13000/10000	26131/15462
Angle Rotor AR-8	6 x 500 mL	9000/8000	14372/11355
Angle Rotor AR-9	4 x 1,000 mL	8000/7000	12157/9307



**Labocon Floor type High Speed
Refrigerated
Centrifuge Advanced Series
LFHCRA-106/07/108 Series**



Labocon Floor Standing High Speed Refrigerated Advance Centrifuge performs a wide range of separations, offering comprehensive control and set-up options to meet precise application needs. It has been designed with integrated refrigeration system, superior temperature control and outstanding product quality.

Features:

- It has micro-computer control, electronic lock and AC variable-conversion motor which delivers high torque
- Imported compressor unit with CFC-free refrigerant which measures up to environmental standards.
- Pre-cooling Function
- The machine is programmable and operation data can be stored automatically
- LED or LCD display, touching panel makes the operation easy
- The real-time conversation of speed and RCF is convenient for operation
- It has self-locking device, over-speed safety device, over-temperature safety device, imbalance safety device and automatic alarm device.
- It has 10 files of acceleration and deceleration level for your choice.
- The rotor material is Titanium alloy (LBHCAR-108)
- The rotor material is Aluminum alloy Stainless Steel ((LBHCAR-106, (LBHCAR-107)
- We are offering **Continuous Flow Rotor compare to Swing out Rotor. The Continuous Flow Rotor** is most advanced centrifugal technique.
- The **Continuous Flow Rotor** processing especially useful for:
 1. Pelleting of subcellular fractions in more efficient way
 2. Sedimentation of bacteria in more efficient way
 3. Large-scale collection of viruses for commercial vaccine preparation or for research purposes in less time
 4. Reduces material processing time
 5. Their short path lengths minimize the overall pelleting time. Therefore, they efficiently pellet solids out of a sample stream and facilitate a rapid flow of material through the rotor.

Application:

Labocon Floor Standing High Speed Refrigerated Centrifuge Advance series delivers efficient sample processing in clinical protocols, cell culture applications, and a variety of separation needs. It is also widely used in the field of blood station, pharmaceutical factory, biochemistry, biological products, etc.

Specifications:







Model	LFHCRA-108	LFHCRA-107	LFHCRA -106
Max Speed	25000 rpm	22000rpm	21000rpm
Max RCF	64983xg	52000xg	50400xg
Max Capacity	4x1000ml	6x600ml	6x500ml
Speed Accuracy	± 50rpm		
Time Setting	1min-99h59min		
Temperature Setting	-20 ~ +40 °C		
Temperature Accuracy	±1 °C		
Compressor Unit	Tecumseh Compressor Unit, R404a Refrigerant		
Noise	<55dB		
Power supply	110V/60HZ, 220V/50HZ		
Dimension (W×L×H)	840x710x1140mm		
Packing size (W×L×H)	960x890x1400mm		
Net Weight	280kg		

Accessories:

Model	Max Capacity	Max RPM	Max RCF	Adapters	Images
Angle Rotor					
For LFHCRA-108					
NO.1	10x5ml	25000 rpm	64983×g	0.5ml, 1.5ml	
NO.1	24x1.5ml/2.2ml	25000 rpm	64983×g	0.2ml, 0.5ml	
NO.2	18x10ml	23000 rpm	60900×g	1.5ml, 5ml	
NO.3	8x50ml	18000 rpm	40930×g	10ml, 20ml	
NO.4	6x250ml	14000 rpm	30200xg	50ml, 100ml It is customizable	
NO.5	6x500ml/400ml	10000 rpm	17800×g	50ml, 100ml, 250ml It is customizable	
NO.6	4x1000ml	7000 rpm	9980×g	100ml, 250ml, 300ml, 500ml It is customizable	
Continuous Flow Rotor					
NO.7	1000ml	16000 rpm	28100xg	Standard Flow: 200- 600ml/min	

NO.8	3000ml	10000 rpm	14800xg	Standard Flow: 200- 800ml/min	
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Model	Max Capacity	Max RPM	Max RCF	Adapters	Images
Angle Rotor					
For Model LFHCRA-107 & LFHCRA-106					
NO.1	36x1.5ml/2.2ml	22000 rpm	52000×g	0.2ml, 0.5ml	
NO.1	16x10ml	22000 rpm	52000×g	1.5ml, 5ml	
NO.1	16x5ml	22000 rpm	52000×g	0.5ml, 1.5ml	
NO.2	18x10ml	21000 rpm	50400×g	1.5ml, 5ml	
NO.3	6x50ml	20000 rpm	43000×g	10ml, 20ml	
NO.4	8x50ml	18000 rpm	35047×g	10ml, 20ml	
NO.5	12x20ml	16500 rpm	31100×g	5ml, 10ml	

NO.6	32x15ml	16000 rpm	30940×g	5ml, 10ml	
NO.7	6x70ml	15000 rpm	25700×g	-	
NO.8	8x100ml/85ml	14000 rpm	26952×g	10ml, 20ml It is customizable	
NO.9	6x250ml	12000 rpm	22470×g	50ml, 100ml It is customizable	
NO.10	6x300ml	11000 rpm	19650×g	50ml, 100ml It is customizable	
NO.11	6x500ml/400ml	9000 rpm	14400×g	50ml, 100ml, 250ml It is customizable	
NO.14	6x600ml (For LBHCAR-107 only)	7000 rpm	9100×g	50ml, 100ml, 250ml It is customizable	
Continuous Flow Rotor					
	1000ml	14000 rpm	21500×g	Standard flow: 200-600ml/min	
	3000ml	8000 rpm	9500×g	Standard flow: 200-800ml/min	

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