









General applications: Centrifuges micro

# **BIOCEN 22 R**

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LCD (PCBS) 🕸

One of the best options when high speed and different tube formats are required. This refrigerated microcentrifuge, which has a wide range of rotors for a cooled centrifuge, it can work with conical type tubes from 0.2 ml, to 15 ml, Dynamic cooling equipment kept the desired temperature, reaching it in a short period of time and maintaining it stable throughout the whole cycle, regardless of the operation speed. Customisation of equipment options through the software enables you to adapt the work cycles to the process as well as the user preferences, thus optimising performance in your laboratory.

For Ortoalresa, the Biocen 22 R centrifuge is the culmination of its know-how in centrifugation, materialised for the user in a robust, versatile and efficient piece of equipment that integrates perfectly into any lab, highlighting its application in research and biotechnology.

#### **Features**

#### LCD screen:

- Shows RPM and RCF, time, temperature and acceleration/deceleration (PCBS).
- Speed programming in 10 RPM/ 10 xg steps.
- Timer countdown/up from "0" or at "set RPM/ RCF" for reproducible tests.
- Timer from 5 sec. to 99 min. programmable in 5 sec. steps and hold position.
- PCBS: Progressive controlled acceleration and braking system up to 175 selectable ramps that prevents sample homogenization after separation.
- 16 programmable memories.
- Several acoustic and visual messages warning the user the device situation.

### Easy to use

- Microprocessor controlled.
- Induction motor maintenance free (brushless).
- · Rotors list on memory.
- Noise level: below 65 dB.
- Start, stop, open lid and short spin with adjustable speed buttons.
- Option of free/locked adjustment of RPM/ RCF along the run.
- · Low heigh for easy access.
- · Last values remain in memory.
- Automatic rotor recognition. Over-speed protection.

## Safety

- Lid provided with security systems:
- Automatic lid lock system, motorized.
- Emergency lid-lock release.
- Locking and protection against opening along the run.
- Lid dropping protection.
- Port in the lid for calibration and operation checking.
- · Unbalance detection and switch off.
- Protection safety ring between the centrifugation chamber and the housing.
- Chamber of centrifugation in stainless steel (easy cleaning).
- Rotors can be removed with the lid closed. Hermetic lids.
- Rotors and adapters autoclavable, easy to install by the user.
- Automatic disconnection for energy saving up to 8 h.

## Refrigeration

- Remains the refrigeration after centrifugation process.
- Precooling program with rotor spinning and temperature selectable.
- · Guarantee 4 °C at maximum RPM.
- Temperature range from -20°C (-4°F) to 40°C (104°F) in 1°C steps.
- Temperature sensor inside the chamber.
- Gas R 449A HFO (CFC free).

EU Directives: 2011/65/EU. 2012/19/EU. 2014/30/EU. 2014/35/EU. 98/79/EC.

Regulation n°: (EC) 1005/2009, (EU) 517/2014.

Standards: EN 61010-1, EN 61010-2-101, EN 61010-2-020, EN 61326-2-6, EN 61326-1.

#### **Versions**

	Dimensions (mm) (w x d x h)			Net weight	Voltage	Frecuency	Consumption		
				(Kg)	(V)	(Hz)	(W)		
CE 148	270	650	280	41	220-230	50	540		
CE 149	270	650	280	41	110-120	60	700		





# Accessories

# Centrifuge Biocen 22 R

	MICROTUBES										
		RT 224		RT 222		RT 252		RT 223			
ROTOR	DTOR			ANGLE FIXED 45 °		ANGLE FIXED 45 °		ANGLE FIXED 30 °			
Max. capacity		32 x 0,2 ml		24x1,5-2 ml		12 x 5 ml		8x15 ml			
RPM Max.		18.100		18.100		18.100		8.000			
Radius (mm)		55		82		87		91			
RCF Max. (xg)		20.	20.145		30.034		31.865		6.511		
Min. temp. at max. speed (°C)			1	0		4		-3			
SAMPLE VOLUME	Dim (mm) approx.	ADAPTERS Tubes Ref.		ADAPTERS Tubes Ref.		ADAPTERS Tubes Ref.		<b>ADAPTERS</b> Tubes Ref.			
15 ml.	ø16 x 100	-	-	-	-	-	-	8	-		
15 ml. conical	ø17 x 122	-	-	-	-	-	-	8	-		
10 ml.	ø13 x 100	-	-	-	-	-	-	8	RE 371		
10 ml. blood sample	ø16 x 107	-	-	-	-	-	-	8	-		
10 ml. (hs)	ø16 x 80	-	-	-	-	-	-	8	RE 398		
7/10 ml. blood sample	ø13 x 107	-	-	-	-	-	-	8	RE 371		
5 ml.	ø13 x 75	-	-	-	-	-	-	8	RE 377		
5 ml. conical	ø17 x 60	-	-	-	-	12	-	-	-		
5 ml. conical screw cap	ø17 x 68	-	-	-	-	6	-	-	-		
5 ml. blood sample	ø13 x 82	-	-	-	-	-	-	8	RE 377		
Microtubes 1,5 - 2 ml.	ø11 x 42	-	-	24	-	12	RE 506	8	RE 513		
Microtubes 0,5 - 0,6 ml.	ø8 x 30	-		24	RE 305	12	RE 507	8	RE 514		
Microtubes 0,2 - 0,4 ml.	ø6 x 45	32 x 0,2	-	24	RE 304	12	RE 508	8	RE 515		
Cryotubes	ø12,5 x 52	-	-	-	-	12	RE 537	-	-		

RT 128: Available rotor for capillaries (includes microhematocrit reader card)



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