

A close-up photograph of laboratory equipment. In the foreground, a black cylindrical component with a white knurled top is visible, labeled '1' and 'ortoalresa № 220759/05'. To the right, several stainless steel tubes are arranged diagonally, each engraved with 'ortoalresa № 220607/02'. In the background, a black tray holds several red caps. A dark semi-transparent banner is overlaid on the right side of the image, containing the company logo and tagline.

**orto
alresa**
About centrifugation

General applications | BIO-CEN 22 R



BIOCEN 22 R



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, can work with conical type tubes from 0,2 ml. to 15 ml. Dynamic cooling equipment keeps 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.
 - Count up/down from "0" or at "set RPM/RCF" for reproducible tests.
 - Timer: from 5 sec. to 99 minutes or from 1 min. to 99 hours and indefinite time.
 - PCBS: Progressive controlled braking system up to 175 selectable ramps that prevents sample homogenization after separation.
 - 16 programmable memories.
 - Several acoustic and visual messages showing the situation of the device to the user.

Easy to use

- Microprocessor controlled.
- Induction motor maintenance free (brushless).
- Rotors list in memory.
- Noise level: below 65 dB.
- Start, stop, open lid and short spin with adjustable speed buttons.
- Possibility to block or modify the speed during the cycle.
- Low height for easy access.
- Last values remain in memory.
- Automatic rotor recognition. Over-speed protection.

3 YEAR
WARRANTY



Max. Capacity
8 x 15 ml

Max. Speed
31.865 xg / 18.100 RPM

Screen Type
LCD

Version
✓ Refrigerated

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.

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

- Maintains the refrigeration after the centrifugation process.
- Precooling program with rotor spinning and selectable temperature.
- Guarantees 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).

Versions

	Dimensions (mm) (w x d x h)				Net Weight (Kg)	Voltage (V)	Frequency (Hz)	Consumption (W)
CE 148	270	650	280		41	220-230	50	580
CE 149	270	650	280		41	110-120	60	580

*IVD version available, please indicate it in your request



Accessories centrifuge Biocen 22 R

- Rolling table (pag. 78)
- Rotors & adapters

MICROTUBES									
		RT 224		RT 222		RT 252		RT 223	
									
ROTOR		ANGLE FIXED 45 °		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)		20.145		30.034		31.865		6.511	
Min. temp. at max. speed (°C)		-1		0		4		-3	
SAMPLE VOLUME	Dim (mm) approx.	ADAPTERS		ADAPTERS		ADAPTERS		ADAPTERS	
		Tubes	Ref.	Tubes	Ref.	Tubes	Ref.	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).

ROLLING TABLE

Centrifuges accessories

With the aim of offering an alternative to those laboratories that need to increase their equipment, but do not have enough space, we have designed these rolling tables for our centrifuges.

This accessory allows the equipment to be positioned and moved easily thanks to its four 360° rotating wheels. Once the rolling table is located, and before starting to work with the centrifuge, the wheels can be fixed with the brake system that will prevent involuntary displacement during the centrifugation process. The robust design supports the weight of the equipment and prevents vibration transfer.

We offer two types of tables, one with height to locate the equipment at the same height as if they were on the laboratory table and another, that enables you to place your centrifuge under the table of your laboratory, saving even more space.

A solution for each type of need.

References

	Dimensions (mm) (w x d x h)			Net weight (kg)	Centrifuge model
CP 007	560	590	580	65	Biocen 22 R, Bioprocen 22 R, Digicen 22 R, Consul 22 and Digtor 22
CP 008	440	500	690	65	Unicen 21 and Digicen 22
CP 009	750	730	350	70	Consul 22 R, Digtor 22 R and Dilitcen 22 R - to place under table
CP 010	750	730	580	90	Consul 22 R, Digtor 22 R and Dilitcen 22 R





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