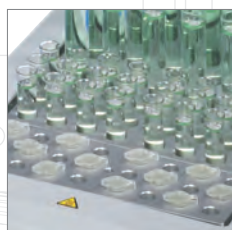


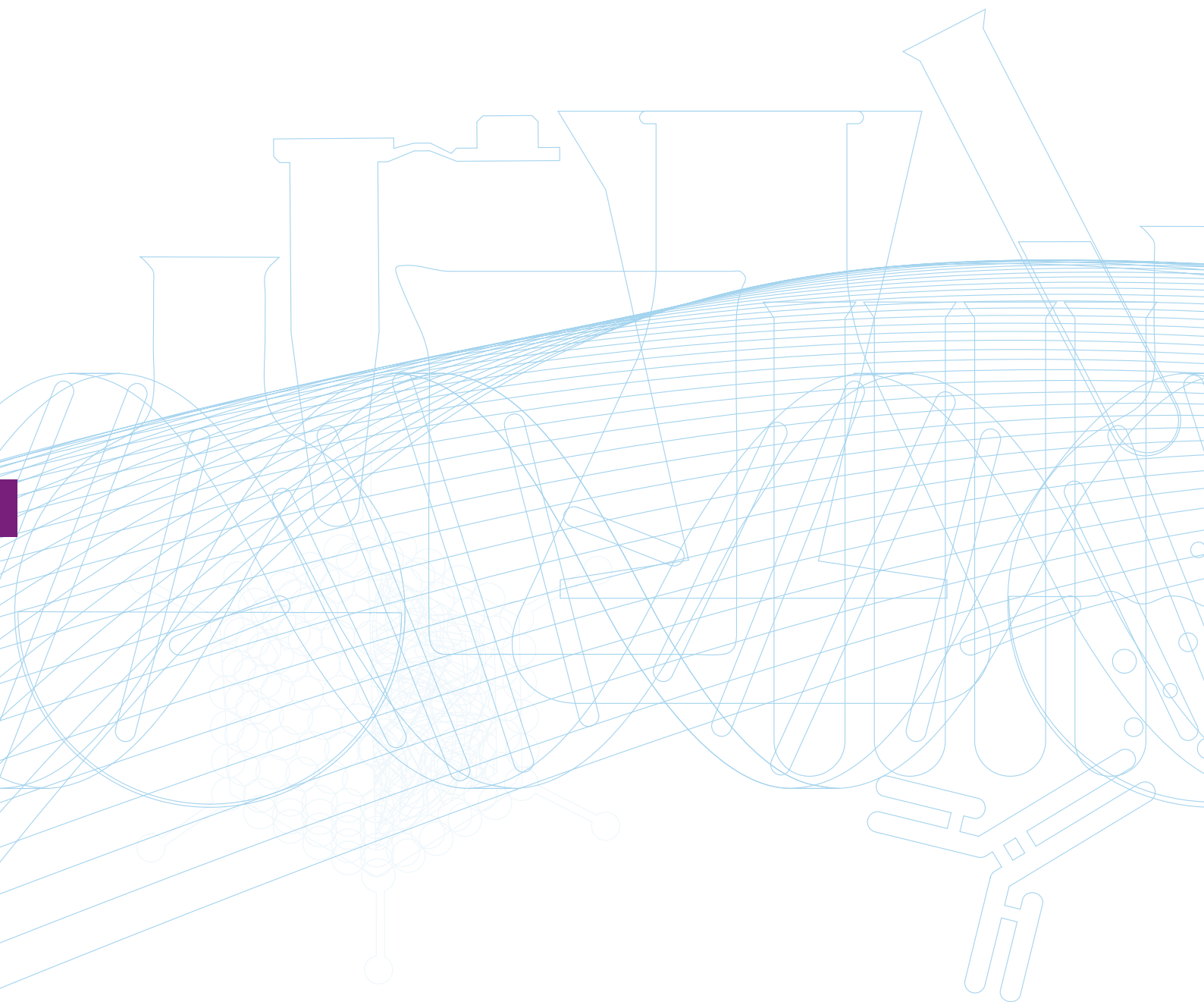
# Scientific Equipment

## Catalogue

Precision temperature control, sample preparation and life sciences products for the world's laboratories



# 14 Centrifuges



# Centrifuges

A focused range of compact, modern benchtop centrifuges for a variety of biomedical, biochemical and life science applications requiring centrifuging or a combination of centrifuging and mixing for microtubes and microtitre plates. Suitable for use in cold rooms and incubators (operating temperature range 4 to 40°C).

- General purpose low speed centrifuges
- Combined centrifuges/vortex mixers

LMC-3000



PCV-3000

PCV-2400

## Centrifuges » LMC-3000 general purpose centrifuge

# LMC-3000 general purpose centrifuge for scientific applications

Low speed benchtop centrifuge with interchangeable rotors for accommodating centrifuge tubes (10 to 15 ml or 50 ml) or 96-well microtitre plates.

- Spin speed: up to 3000 rpm for tubes, up to 2000 rpm for microtitre plates
- Timed operation (1 to 30 minutes), with automatic switch-off
- 'Soft-start' and 'run-down' functions
- Choice of interchangeable rotors for up to 12 centrifuge tubes or 2 microtitre plates

Sturdy metal housing and lid, automatic imbalance switch-off and lid lock when centrifuge is running providing safe operation in your workplace

LMC-3000 general purpose centrifuge fitted with R-2 rotor

Convenient interchangeable rotor for 6 or 12 tubes or 2 microplates (standard and deep well)

The powerful and extremely quiet motor has a 'soft' start-up and run-down function to avoid jolting of samples

Compact design with small footprint – fits neatly into the workspace

Easy set-up of speed and time via 2-line LCD display and simple push buttons



Suitable for a wide range of analytical applications including biomedical, bio-organic and immunoenzyme analysis.

### Accessory rotors for LMC-3000



**R-6** – interchangeable centrifuge rotor for 6 x 50 ml tubes with caps and conical ends



**R-12-15** – interchangeable centrifuge rotor for 12 x 15 ml tubes with caps and conical ends



**R-12-10** – interchangeable centrifuge rotor for 12 x 10 to 15 ml tubes, rounded ends, no caps



**R-2** – interchangeable centrifuge rotor for 2 x 96-well microtitre plates (standard and deep well)



## PCV-3000 Multi-spin combined centrifuge/vortex mixer

Highly versatile and efficient variable-speed combined centrifuge/vortex mixer. Programmed centrifugation and mix operations or independent centrifuging and vortex-mixing of multiple microtubes and 0.2 ml strips.

With tubes positioned in the rotor throughout the operation, Multi-spin can complete programmed spin-mix-spin sequences in significantly less time compared to individual instruments, typically 4 minutes for 100 tubes compared to 35 minutes with individual instruments – a dramatic time and cost saving. In addition, spinning samples before and after mixing allows lower reagent volumes to be used. Because of its powerful G force and accurate control of spin and mix parameters, the Multi-spin can be used with volumes as low as 5 µl.

- **Centrifugation speed: up to 3000 rpm**
- **Timed spin operation: 1 second to 99 minutes, with automatic switch-off**
- **Timed vortex mixing: 1 to 20 seconds, with automatic switch-off**
- **Three-stage adjustment for vortex mixing speed**
- **Choice of interchangeable rotors for different microtube sizes/combinations and for 0.2 ml strips**

A safety interlock stops the rotor when the lid is opened to ensure you and your workplace remain safe

Multi-spin enables consecutive spin and mix phases of multiple tubes – tubes are loaded into the rotor for spinning and remain in position for vortex mixing, saving time and labour. In addition, lower reagent volumes can be used, providing a further saving

Simple push-buttons and a clear 2-line LCD status display enable accurate and repeatable setting of spin and mix levels and times. Spin and mix phases can be linked in sequences which can be repeated up to 999 times



Multi-spin PCV-3000 fitted with optional PR2-05-02 rotor

The Multi-spin is supplied as standard with two interchangeable rotors for 12 and 24 microtubes

Optional accessory rotors – for 16 and 18 microtubes and for two 8-well 0.2ml strips – allow for quick and easy changes of application



Compact design and extremely quiet in operation – fits neatly and unobtrusively into the workspace

Suitable for spin-mix-spin applications in many fields, including clinical and hospital PCR laboratories, biochemical clinical laboratories and immunology departments. Multi-spin aids the sample preparation process for many procedures including PCR, gel electrophoresis and enzyme reactions, and is ideal for laboratories processing multiple tubes. Other specific applications include immunoprecipitations; cell permeabilisation by chelating or hydrophobic agents for reaction *in situ*; low solubility drug testing; cell washing from culture media after fermentation.

## PCV-2400 Combi-spin combined centrifuge/vortex mixer

Cost-effective fixed-speed combined centrifuge/vortex mixer for combined or independent centrifuge and mixing applications of microtubes and 0.2 ml microtube strips in low volume applications.

Tubes are loaded into the rotor for simultaneous spinning, then removed for individual mixing in the vortex cup located at the top of the central shaft. In spin-mix-spin applications, the Combi-spin can be used with reagent volumes down to approximately 50 µl, representing an overall saving in time, labour and material.

- Centrifugation speed: fixed at 2400 rpm
- Continuous operation or short spin
- Choice of interchangeable rotors for different microtube sizes/combinations and for 0.2 ml strips

### PCV-2400 Combi-spin

A safety interlock stops the rotor when the lid is opened to ensure you and your workplace remain safe

The Combi-spin is supplied as standard with two interchangeable rotors for 12 and 24 microtubes

Optional accessory rotors – for 16 and 18 microtubes and for two 8-well 0.2 ml strips – allow for quick and easy changes of application



The vortex cup emerges through an opening in the closed lid, enabling individual tubes to be mixed while a full load of tubes is spinning

Very simple to operate – use the left-hand button to select continuous or short spin. The vortex mixer is activated in the normal way by applying pressure to the vortex cup with a microtube



Combi-spin aids the sample preparation process for many procedures including PCR, gel electrophoresis and enzyme reactions, and is particularly suitable for low volume applications. Other specific applications include immunoprecipitations; cell permeabilisation by chelating or hydrophobic agents for reaction *in situ*; low solubility drug testing; cell washing from culture media after fermentation.

### Accessory rotors for Multi-spin PCV-3000 and Combi-spin PCV-2400






**PR2-05** – interchangeable centrifuge rotor for 8 x 1.5/2.0 ml plus 8 x 0.5 ml microtubes

**PR2-05-02** – interchangeable centrifuge rotor for 6 x 1.5/2.0 ml plus 6 x 0.5 ml plus 6 x 0.2 ml microtubes



**PSR-16** – interchangeable centrifuge rotor for 2 x 8-well 0.2 ml microtube strips

## Centrifuges » Models and specifications

Centrifuges – models and specifications				
<ul style="list-style-type: none"> <li>● = standard</li> <li>● = optional</li> </ul>		General purpose	Combined centrifuge/vortex mixer	
		LMC-3000	PCV-2400	PCV-3000
		low speed	combi-spin, fixed speed	multi-spin, variable speed
				
		13.5kg h: 235 mm d: 400 mm w: 470 mm	h: 115 mm d: 180 mm w: 225 mm	h: 115 mm d: 180 mm w: 225 mm
G-force	G	–	700	1000
Speed	rpm	1000 to 3000	2400	1000 to 3000
Operation		continuous or timed	continuous up to 60 mins or short spins	continuous or timed
Spin timer, with automatic switch-off		1 to 30 mins	–	1 sec to 99 mins
Mix timer, with automatic switch-off		–	–	1 to 20
Vortex mixing intensity	3-stage adjustment	–	–	soft, medium, hard
Cycle regulation		–	–	1 to 999
Capacity	12 x 1.5/2.0 ml microtubes	–	●	●
	12 x 0.5 ml plus 12 x 0.2 ml microtubes	–	●	●
	12 x 10-15 ml tubes, round end, no cap*	●	–	–
Display		2 line x 16 character LCD	–	2 line x 16 character LCD
Input voltage	V dc	–	–	12
	V ac	230 (50-60 Hz)	220-240/110-120 (50-60 Hz)	–
External power supply		–	–	●
Ambient temperature range	°C	–	4 to 40	–

### Accessories for PCV-2400/PCV-3000

<b>R-6</b> interchangeable centrifuge rotor for 6 x 50 ml tubes, with cap, conical end	●	–	–
<b>R-12-15</b> interchangeable centrifuge rotor for 12 x 15 ml tubes, with cap, conical end	●	–	–
<b>R-2</b> interchangeable centrifuge rotor for 2 x 96-well microtitre plates	●	–	–
<b>PR2-05</b> interchangeable centrifuge rotor for 8 x 1.5/ 2.0 ml plus 8 x 0.5 ml microtubes	–	●	●
<b>PR2-05-02</b> interchangeable centrifuge rotor for 6 x 1.5/ 2.0 ml plus 6 x 0.5 ml plus 6 x 0.2 ml microtubes	–	●	●
<b>PSR-16</b> interchangeable centrifuge rotor for 2 x 8-well 0.2 ml microtube strips	–	●	●

\* with R-12-10 rotor