



## High-speed refrigerated centrifuge

### Code GNF004

High-speed refrigerated centrifuge. This high-speed (up to 18,000 rpm), high-capacity (1,000 mL) multifunctional refrigerated centrifuge can utilise a very wide range of angle and swing out rotors for maximum versatility. It is capable of separating most bacteria and viruses, nucleic acids, density gradient centrifugation, blood separation and clinical sample processing, and in any process where sample integrity must be maintained or centrifuged at constant temperature. It is highly functional, highly versatile with low and high speed rotors and easy operability incorporating innovative control technology, reliable quality and superior performance. Suitable for all laboratories working with thermolabile samples and especially for experimental research in genetics, protein nucleic acids and PCR products.

- Electrically controlled automatic double locking.
- Cover of the lid with three-layer sealed insulation.
- ECO compressor start/stop function.
- Efficient refrigeration compressor.
- Flash Centrifugation.
- Digital PID temperature control.

- High-capacity, high-speed, multi-purpose centrifuge commonly used in microbiological laboratories, pharmaceuticals, universities, research centres and industry.
- Compatible with both angular and swing out rotors, allowing the widest range of tubes to be used at both low and high speeds.
- It has a compressor with R134a gas environmentally friendly **SECOP®**, for optimum cooling of the chamber with start/stop function that switches off if it detects the lid is open and switches on when it is closed. Ability to maintain the sample at 4°C at maximum speed and load.
- Automatic detection of the positioned rotor and automatic stop in case of sample imbalance.
- Equipped with experimental parameter recording function and real-time display of operation recording.
- Lid locking by electric suction for increased safety.
- 7-inch IPS LCD colour screen with adjustable brightness and 1024x600dpi resolution and with full angle of view.
- The motor is controlled by an advanced and reliable sine wave vector FOC system that can precisely control speed, time and relative centrifugal force (RCF).
- IPS display for improved image quality and viewing angle of the screen.
- External USB 2.0 port for system update and experimental data download.



## Technical specifications

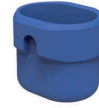
Code	GNF004
Model	2771R
Speed	200~18000rpm (Incremento de 10rpm)
FCR	23470×g (Incremento de 10×g)
Timer	1-99 horas/1-59 minutos/1-59 segundos. Tres modos disponibles. Precisión ± 1 segundo
Temperature range	-20°C~+40°C
Temp. min. to max. speed	0 °C
Capacity Max.	1000mL
Dimensions	560×680×376mm
Weight	95Kg
Feeding	AC220V/50-60Hz
Consumption	850W
Memory	30 programas personalizados (5 external buttons for quick access)
Acceleration ramps	1-9
Braking ramps	0-9



### Swing out rotors



Swing out rotor | GNP036  
4500 rpm / 3780 ×g



Cup | GNP037  
250 mL×4  
4500 rpm / 3780 ×g



Tube holder | GNP038  
250 mL×4  
4500 rpm / 3780 ×g



Tube holder | GNP039  
100 mL×8  
4500 rpm / 3710 ×g



Tube holder | GNP040  
50 mL×16  
4500 rpm / 3780 ×g



Tube holder | GNP041  
15 mL×32  
4500 rpm / 3780 ×g



Tube holder | GNP042  
5 mL×64  
4000 rpm / 2860 ×g



Tube holder | GNP043  
8/10 mL×52  
4000 rpm / 2916 ×g



Angle rotor | GLK030  
15 mL×12  
6000 rpm / 5150 ×g



Angle rotor | GLK031  
50 mL×8  
6000 rpm / 5150 ×g



Angle rotor | GLK032  
1.5/2 mL×12  
18000 rpm / 22530 ×g



Angle rotor | GLK033  
1.5/2 mL×24  
16000 rpm / 23470 ×g



Angle rotor | GLK034  
0.5 mL×36  
15000 rpm / 16350 ×g



Angle rotor | GLK035  
0.2 mL×8×4  
14800 rpm / 16200 ×g



Angle rotor | GLK036  
5 mL×12  
16000 rpm / 18890 ×g



Angle rotor | GLK037  
10 mL×12  
13000 rpm / 15315 ×g



Angle rotor | GLK038  
15 mL×8  
13000 rpm / 17570 ×g



Angle rotor | GLK039  
50 mL×6  
12000 rpm / 16501 ×g



Angle rotor | GLK040  
100 mL×4  
12000 rpm / 15940 ×g



Microplate rotor | GNP015  
4 Microplates×2×96  
2 Deep-well plates×2×96  
4000 rpm/2505 ×g

### Other rotors

### Adapters and bottom pads



Adapter | GDF001  
0.2mL



Adapter | GDF002  
0.5 mL



Adapter | GDF014  
15mL



Bottom pad | GDF015  
50mL



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### Compatibility of accessories

Code	Description	Tubes required	Used in	Including
<b>GNF004</b>				
GNP036	Swing out rotor	-	Centrifuge	Yes
GNP037	Cup 250 mLx4	-	GNP036	No
GNP038	Tube holder 250 mLx4	PP flat bottom with lid	GNP037	No
GNP039	Tube holder 100 mLx8	PP round bottom with lid	GNP037	No
GNP040	Tube holder 50 mLx16	PP conical bottom with lid	GNP037	No
GNP041	Tube holder 15 mLx32	PP conical bottom with lid	GNP037	No
GNP042	Tube holder 5 mLx64	Vacuum blood collection vesseldiameter 13×100 mm	GNP037	No
GNP043	Tube holder 8/10 mLx52	Vacuum blood collection vessel diameter 16×100 mm	GNP037	No
GNP015	Rotor 8 microplates	4Microplate ×2×96/Deep-well plate 2 pcs×2×96	Centrifuge	No
GLK030	Angle rotor for 12 x 15 mL	PP round/conical bottom with lid	Centrifuge	No
GLK031	Angle rotor for 8 x 50 mL	PP round/conical bottom with lid	Centrifuge	No
GLK032	Angle rotor for 12 x1.5/2 mL	PP round/conical bottom with lid	Centrifuge	No
GLK033	Angle rotor for 24 x1.5/2 mL	PP round/conical bottom with lid	Centrifuge	No
GLK034	Angle rotor for 36 x0.5 mL	PP conical bottom with lid	Centrifuge	No
GLK035	Angle rotor (4 x 0.2 mL PCR strips)	PP conical-bottom PCR tube with cap	Centrifuge	No
GLK036	Angle rotor for 12 x 5 mL	PP round bottom with lid	Centrifuge	No
GLK037	Angle rotor for 12 x 10 mL	PP round bottom with lid	Centrifuge	No
GLK038	Angle rotor for 8 x 15 mL tubes	PP conical bottom with lid	Centrifuge	No
GLK039	Angle rotor for 6 x 50 mL tubes	PP conical bottom with lid	Centrifuge	No
GLK040	Angle rotor for 4 x 100 mL	PP round bottom with lid	Centrifuge	No
GDF001	0.2 mL microtube adapter	PP conical bottom with lid	GLK032/033	Yes*
GDF002	0.5 mL microtube adapter	PP conical bottom with lid	GLK032/033	Yes*
GDF014	Adapter for 15mL tubes	PP conical bottom with lid	GLK039	No
GDF015	Bottom pad for 50mL tubes	PP round bottom with lid	GLK039	No

\*Included with the rotor, not with the equipment.

### RECOMMENDED TUBES

<b>0.2 mL microtubes</b>	BGN003, BGN026
<b>0.5 mL microtubes</b>	BGN004
<b>2 mL microtubes</b>	BGN025
<b>1.5 mL microtubes</b>	BGN005, BGN011, BGN012, BGN013, BGN014, BGN015, BGN027
<b>8×0.2 mL microtube strip</b>	BGN006
<b>Falcon tubes 15 mL</b>	BGD010, BGD082, BGD083, BGD084, BGD024, BGD025, BGD039, BGD029, BGD030, BGD031, BGD032, BGD033
<b>Falcon tubes 50 mL</b>	BGD011, BGD085, BGD086, BGD087, BGD072, BGD026, BGD040, BGD034
<b>Flat bottom PP bottle 250 mL</b>	GNQ001