

1,4 Low-speed Centrifuges

624R



LABOGENE 624R is a bench-top refrigerated centrifuge with versatility, convenience, stability and sophisticated design and leads to reliable experimental results. It can spin samples up to a capacity of four 100 mL at 4,200 rpm (3,059 xg) and six 50 mL at max. 6,000 rpm (3,824 xg). This model provides three kinds of fixed-angle Rotors for micro tubes, 15 mL and 50 mL tubes as well as four swing-out rotors. The comprehensive range of rotors and accessories makes it possible for efficient and versatile performance. The sleek, ergonomic design, vivid display and intuitive control will create a new laboratory environment that is never seen anywhere else. You can choose the color of the control panel between onyx black or clean white. LABOGENE 624R is used in general laboratories and clinical applications including sample separations of cellular materials and blood, and ideal for appropriate experiments for temperature-sensitive samples.

Features

- For up to 6,000 rpm (3,960 xg) with 6 x 50 mL tubes and 4,800 rpm (3,888 xg) with 4 x 100 mL tubes.
- Commonly used in the fractionation of blood samples and simple precipitation of biological samples.
- Fast cooling function to 4°C in 5 minutes for fast startup of cooled samples
- Intuitive control interface with numeric input buttons allows easy setting and editing of running conditions.
- The control panel design can be selected according to user's preference. (The black or white control panel is optionally available.)
- Selectable time mode of "at set SPEED" for counting running time only when reached the set speed.
- A separate "PULSE" key for quick spin
- Parameters can be changed during operation.
- Key lock function helps the set parameters secured during operation.
- With motorized lid mechanics, only a gentle touch is sufficient to close and open the lid.
- Lid drop protection design allows easiness and safety when loading or unloading samples.
- A large assortment of rotors, buckets and adaptors for microtubes and all sizes of tubes up to 100 mL.

Outstanding Features

- Imbalance cut-off
- Safety lid lock
- Lid drop protection
- Motorized lid open & close
- Compressor-off function when lid is open.
- White LCD display
- Automatic rotor Identification

Technical Specifications

624R

| | | | |
|----------------------------------|---|---------------------------|--------------------------------------|
| Max. RPM/PCF Fixed Angle | 6,000 rpm / 3,960 xg | Acc. time to max. speed | - |
| Max. RPM/PCF Swing-out | 4,800 rpm / 3,888 xg | Dec. time from max. speed | - |
| Max. Capacity Fixed Angle | 6 x 50 mL | ACC/DEC ramps | 9/10 |
| Max. Capacity Swing-out | 4 x 100 mL, 32 vacutainer tube, 4 MTPs | Program memory | 100 |
| Temp. range (°C) | -10°C to 40°C | Power supply (V/Hz) | 220~230 V, 60/50 Hz (110 V optional) |
| FAST cool button | Yes | Power Requirement (VA) | 900 VA |
| Time control | Pulsed, timed <10 hr or continuous | Dimension (W x D x H) | 584 x 535 x 317 mm |
| Time counting range | Selectable, at set speed or from starting | Net weight | 65 kg |
| RCF/RPM conversion | Yes | CE MARK | Yes |
| Noise level (dependent on rotor) | ≤60 dB | | |

Ordering Information

| Cat. No. | Description |
|------------------|--|
| Main Body | |
| LZ-0624R-B | 624R, low-speed refrigerated centrifuge without rotor (220V, 50/60Hz), black display panel |
| LZ-0624R-W | 624R, low-speed refrigerated centrifuge without rotor (220V, 50/60Hz), white display panel |
| LZ-0624RM | 624RM, low-speed refrigerated centrifuge without rotor (220V, 50/60Hz), white display panel - registered as medical device at MFDS |

Rotors for 624R

| | |
|----------------|--|
| GRS-SR-100-4 | Four-wing swing 100 mL rotor of 624R holding bucket, GLB-10-8-100, GLB-bd15-100, GLB-bdc15-100, GLB-b50-100, GLB-dc50-100 and GLB-b100-100 |
| GRF-SR-50-6 | A fixed angle 50 mL rotor with aluminum lid for 6 of 50 mL tubes |
| GRS-SR-50-4 | Four-wing swing 50 mL rotor of 624R for holding GLB-15-50, GLB-c15-50, GLB-d15-50, GLB-dc15-50, GLB-50-50 and GLB-c50-50 |
| GRS-SR-c50-6 | A fixed angle 50 mL conical rotor with aluminum lid for 6 of 50 mL conical tubes |
| GRS-SR-15-6 | Six-wing swing 15 mL rotor of 624R for holding GLB-15-15 |
| GRS-SR-mw-2 | Two-wing swing rotor of 624R for holding microplates |
| GRA-SR-15-24 | An angle rotor of 624R including 24 of 15 mL sleeve, GLB-15A-FA |
| GRF-SR-m2.0-24 | A fixed angle microtube rotor of 624R with aluminum lid for 24 microtubes |

Adaptors and Multi-tube Racks

| | |
|-------------|------------------------------------|
| GAS-m0.2(2) | 0.2 mL adaptor of microtube rotors |
| GAS-m0.5(2) | 0.5 mL adaptor of microtube rotors |

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Adaptors and Multi-tube Racks

| | |
|------------------|--|
| GAS-3(10) | 3 mL adaptor of bucket, GLB-10-8-100 |
| GAS-5(10) | 5 mL adaptor of bucket, GLB-10-8-100 |
| GAS-3(15) | 3 mL adaptor of 15 mL sleeve, GLB-15A-FA |
| GAS-4(15) | 4 mL adaptor of 15 mL sleeve, GLB-15A-FA |
| GAS-5(15) | 5 mL adaptor of 15 mL sleeve, GLB-15A-FA |
| GAS-15(50) | 15 mL adaptor of rotors, GRF-G/L-50-8 and GRF-SR-50-6 |
| GAS-c15(50) | 15 mL conical adaptor of rotors, GRF-G/L-50-8 and GRF-SR-50-6 |
| GAS-u15(50) | 15 mL round & conical adaptor of Bucket GLB-50-50 & GLB-b50-100 |
| GAS-c50(50) | 50 mL conical adaptor of bucket GLB-50-50 & GLB-b50-100 |
| GAS-c15(b100) | 15 mL conical adaptor of bucket GLB-b100-100 |
| GAS-50(b100) | 50 mL adaptor of bucket GLB-b100-100 |
| GAS-c50(b100) | 50 mL conical adaptor for bucket GLB-b100-100 |
| GAS-85(b100) | 85 mL adaptor for bucket GLB-b100-100 |
| GAS-100(b100) | 100 mL adaptor for bucket GLB-b100-100 |
| GAM-m2.0-6(b100) | 6 x 1.5/2.0 mL microtube multi-tube rack for bucket GLB-b100-100 |
| GAM-7-5(b100) | 5 x 7 mL multi-tube rack for bucket GLB-b100-100 |
| GAM-10-5(b100) | 5 x 10 mL multi-tube rack for bucket GLB-b100-100 |
| GAM-15-3(100) | 3 x 15 mL multi-tube rack for bucket GLB-b100-100, not applicable with cap |
| GAM-c15-3(100) | 3 x 15 mL conical multi-tube rack for bucket GLB-b100-100, not applicable with cap |





Swing-out Rotor : GRS-SR-100-4

4 loadings
 ∠ 90°



Round 100 mL Bucket with Cap
GLB-b100-100

| | |
|-------------------------------|------------------------------|
| Bucket bore (Φ x L, mm) | 47 x 99 |
| Radius (mm) | 155.1 |
| Max. RPM | 4,200 |
| Max. RCF (g-force) | 3,059 |
| Max. height for tube fit (mm) | 120 (w/ cap) / 130 (w/o cap) |

• GLB-b100-100 includes cap.
 (b100) adaptors work fine with cap but (100) adaptors not.

| | | | | | | | | | | |
|----------------------------|-------------------|----------------|-----------------|----------------|-----------------|----------------|---------------|----------------|---------------|----------------|
| Tube | | | | | | | | | | |
| Tube capacity (mL) | 1.5~2.0 | 2.6~7 | 4~10 | 9~15 | 15 mL conical | 15 mL conical | 50mL | 50 mL conical | 85 | 100 |
| Tube rack | | | | | | | | | | |
| Cat. No. | GAS-m2.0-6 (b100) | GAS-7-5 (b100) | GAS-10-5 (b100) | GAS-15-3 (100) | GAS-c15-3 (100) | GAS-c15 (b100) | GAS-50 (b100) | GAS-c50 (b100) | GAS-85 (b100) | GAS-100 (b100) |
| Rack capacity (ea/4) | 6/24 | 5/20 | 5/20 | 3/12 | 3/12 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 |
| Hole dimension (Φ x L, mm) | 11 x 39 | 13.5 x 60 | 16 x 60 | 17.5 x 105 | 17.2 x 106.5 | 17.2 x 106.5 | 29.5 x 95.9 | 30 x 100 | 38.5 x 96.3 | 44.2 x 93 |



Round 50 mL Bucket with Cap
GLB-b50-100

| | |
|-------------------------------|------------------------------|
| Bucket bore (Φ x L, mm) | 30.5 x 97 |
| Radius (mm) | 150.9 |
| Max. RPM | 4,200 |
| Max. RCF (g-force) | 2,976 |
| Max. height for tube fit (mm) | 115 (w/ cap) / 125 (w/o cap) |

| | | | | |
|----------------------------|-------------|---------------|---------------|----|
| Tube | | | | |
| Tube capacity (mL) | 15 | 15 mL conical | 50 mL conical | 50 |
| Adaptor | | | | 50 |
| Cat. No. | GAS-u15(50) | GAS-c50(50) | - | - |
| Hole dimension (Φ x L, mm) | 17.3 x 87 | 29.5 x 17.5 | - | - |



Dual Conical 50 mL Bucket
GLB-dc50-100

| | |
|-------------------------------|---------|
| Bucket bore (Φ x L, mm) | 30 x 89 |
| Radius (mm) | 155.1 |
| Max. RPM | 4,200 |
| Max. RCF (g-force) | 3,059 |
| Max. height for tube fit (mm) | 125 |

Tube



| | |
|------------------------|-----|
| Tube capacity (mL) | 50 |
| Bucket capacity (ea/4) | 2/8 |



Dual Round 15 mL Bucket with Cap
GLB-bd15-100

| | |
|-------------------------------|------------------------------|
| Bucket bore (Φ x L, mm) | 17 x 98 |
| Radius (mm) | 150.9 |
| Max. RPM | 4,200 |
| Max. RCF (g-force) | 2,976 |
| Max. height for tube fit (mm) | 123 (w/ cap) / 127 (w/o cap) |

Tube



| | |
|------------------------|-----|
| Tube capacity (mL) | 15 |
| Bucket capacity (ea/4) | 2/8 |



Dual Conical 15 mL Bucket with Cap
GLB-bdc15-100

| | |
|-------------------------------|------------|
| Bucket bore (Φ x L, mm) | 17 x 102.5 |
| Radius (mm) | 155.1 |
| Max. RPM | 4,200 |
| Max. RCF (g-force) | 3,059 |
| Max. height for tube fit (mm) | 120 |

Tube



| | |
|------------------------|---------------|
| Tube capacity (mL) | 15 mL conical |
| Bucket capacity (ea/4) | 2/8 |



Vacutainer 10 mL Bucket
GLB-10-8-100

| | |
|-------------------------------|---------|
| Bucket bore (Φ x L, mm) | 16 x 89 |
| Radius (mm) | 155.1 |
| Max. RPM | 4,200 |
| Max. RCF (g-force) | 3,059 |
| Max. height for tube fit (mm) | 120 |

Tube



| | | | |
|--------------------------|-----------|-----------|-------|
| Tube capacity (mL) | 3 | 5 | 10 |
| Bucket capacity (ea/4) | 8/32 | 8/32 | 8/32 |
| Adaptor | | | None |
| Cat. No. | GAS-3(10) | GAS-5(10) | - |
| Adaptor bore (Φ x L, mm) | 13.2 x 58 | 13.2 x 82 | - |
| Radius (mm) | 121 | 146 | 155.1 |
| Max. RPM | 4,200 | 4,200 | 4,200 |
| Max. RCF (g-force) | 2,386 | 2,879 | 3,059 |



Swing-out Rotor : GRS-SR-50-4

4 loadings
 $\angle 90^\circ$



Round 50 mL Bucket with Cap
GLB-50-50

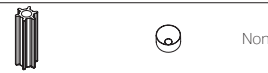
| | |
|-------------------------------------|-----------|
| Bucket bore ($\Phi \times L$, mm) | 30.5 x 91 |
| Radius (mm) | 150.9 |
| Max. RPM | 4,800 |
| Max. RCF (g-force) | 3,888 |
| Max. height for tube fit (mm) | 125 |

Tube



| | | | | |
|--------------------|----|---------------|---------------|----|
| Tube capacity (mL) | 15 | 15 mL conical | 50 mL conical | 50 |
|--------------------|----|---------------|---------------|----|

Adaptor



| | | | |
|--|-------------|-------------|---|
| Cat. No. | GAS-u15(50) | GAS-c50(50) | - |
| Hole dimension ($\Phi \times L$, mm) | 17.3 x 87 | 29.5 x 17.5 | - |



Conical 50 mL Bucket
GLB-c50-50

| | |
|-------------------------------------|-------------|
| Bucket bore ($\Phi \times L$, mm) | 29.5 x 91.5 |
| Radius (mm) | 150.9 |
| Max. RPM | 4,800 |
| Max. RCF (g-force) | 3,888 |
| Max. height for tube fit (mm) | 125 |

Tube



| | |
|--------------------|---------------|
| Tube capacity (mL) | 50 mL conical |
|--------------------|---------------|



Round 15 mL Bucket
GLB-15-50

| | |
|-------------------------------|---------|
| Bucket bore (Φ x L, mm) | 17 x 93 |
| Radius (mm) | 150.9 |
| Max. RPM | 4,800 |
| Max. RCF (g-force) | 3,888 |
| Max. height for tube fit (mm) | 125 |

Tube



| | |
|--------------------|-------|
| Tube capacity (mL) | 15 mL |
|--------------------|-------|



Conical 15 mL Bucket
GLB-c15-50

| | |
|-------------------------------|---------|
| Bucket bore (Φ x L, mm) | 17 x 93 |
| Radius (mm) | 150.9 |
| Max. RPM | 4,800 |
| Max. RCF (g-force) | 3,888 |
| Max. height for tube fit (mm) | 120 |

Tube



| | |
|--------------------|---------------|
| Tube capacity (mL) | 15 mL conical |
|--------------------|---------------|



Dual Round 15 mL Bucket
GLB-d15-50

| | |
|-------------------------------|-----------|
| Bucket bore (Φ x L, mm) | 17 x 91.5 |
| Radius (mm) | 150.9 |
| Max. RPM | 4,800 |
| Max. RCF (g-force) | 3,888 |
| Max. height for tube fit (mm) | 120 |

Tube



| | |
|------------------------|-----|
| Tube capacity (mL) | 15 |
| Bucket capacity (ea/4) | 2/8 |



Dual Conical 15 mL Bucket
GLB-dc15-50

| | |
|-------------------------------|-----------|
| Bucket bore (Φ x L, mm) | 17 x 91.5 |
| Radius (mm) | 150.9 |
| Max. RPM | 4,800 |
| Max. RCF (g-force) | 3,888 |
| Max. height for tube fit (mm) | 120 |

Tube



| | |
|------------------------|---------------|
| Tube capacity (mL) | 15 mL conical |
| Bucket capacity (ea/4) | 2/8 |



Swing-out Rotor : GRS-SR-15-6

6 loadings
 $\angle 90^\circ$



Round 15 mL Bucket
GLB-15-15

| | |
|-------------------------------------|-----------|
| Bucket bore ($\Phi \times L$, mm) | 17 x 93.8 |
| Radius (mm) | 158 |
| Max. RPM | 4,400 |
| Max. RCF (g-force) | 3,420 |
| Max. height for tube fit (mm) | 125 |

Tube



| | | |
|--------------------|----|----|
| Tube capacity (mL) | 10 | 15 |
|--------------------|----|----|



Angle Rotor
GRA-SR-15-24

24 x 15 mL

∠ 45°

Hole Diameter (mm) 18

Max. height for tube fit (mm) 125 (120 for conical tube)

Aluminum 15 mL Sleeve
GLB-15A-FA












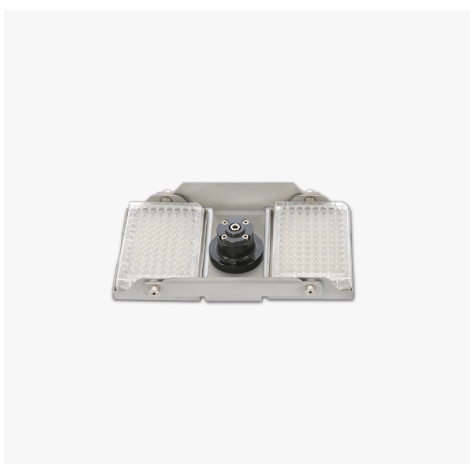
Sleeve bore (ΦxL, mm) 18 x 90

Radius (mm) 155(138)

Max. RPM 4,000

Max. RCF (g-force) 2,773(2,469)

| | | | | | | |
|------------------------|---|---|---|---|---|---|
| Tube |  |  |  |  |  |  |
| Tube capacity (mL) | 3 | 4 | 5 | 10 | 15 | 15 mL conical |
| Adaptor |  |  |  | None | None | None |
| Adaptor bore (ΦxL, mm) | 13.5 x 61 | 13.5 x 65 | 13.5 x 85 | - | - | - |
| Radius (mm) | 116.3/132.3 | 117.7/133.7 | 136.8/152.8 | 137.5/154.5 | 138/155 | 133/149 |
| Cat. No. | GAS-3(15) | GAS-4(15) | GAS-5(15) | - | - | - |
| Max. RPM | 4,000 | | | | | |
| Max. RCF (g-force) | 2,080/2,367 | 2,105/2,463 | 2,447/2,733 | 2,460/2,764 | 2,469/2,773 | 2,379/2,665 |



Swing-out Rotor : GRS-SR-mw-2

2 loadings

∠ 90°

Area Dimension (mm) 88.5 x 130.3

Max. height for microplate fit (mm) 35

Plate



Plate capacity (mL) MTP DWP

Holder capacity (ea/2) 1/2

Radius (mm) 111








Max. RPM 4,000

Max. RCF (g-force) 1,986



Fixed Angle Rotor
GRF-SR-50-6




| | |
|-------------------------------|------|
| 6 x 50 mL | |
| ∠ 25° | |
| Hole Diameter (mm) | 29.5 |
| Max. height for tube fit (mm) | 120 |

| | | | | |
|--------------------------|---|---|---|---|
| Tube |  |  |  |  |
| Tube capacity (mL) | 10 | 15 | 15 mL conical | 50 |
| Adaptor |  |  |  | None |
| Cat. No. | GAS-15(50) | GAS-15(50) | GAS-c15(50) | - |
| Adaptor bore (Φ x L, mm) | 17 x 94 | 17 x 94 | 17 x 105 | - |
| Radius (mm) | 87.9 | 88.9 | 91 | 95 |
| Max. RPM | 6,000 | 6,000 | 6,000 | 6,000 |
| Max. RCF (g-force) | 3,538 | 3,578 | 3,663 | 3,824 |



Fixed Angle Rotor
GRF-SR-c50-6

| | |
|-------------------------------|------|
| 6 x 50 mL conical | |
| ∠ 25° | |
| Hole Diameter (mm) | 29.5 |
| Max. height for tube fit (mm) | 125 |

| | | |
|--------------------------|---|---|
| Tube |  |  |
| Tube capacity (mL) | 15 mL conical | 50 mL conical |
| Adaptor |  | None |
| Cat. No. | GAS-c15(c50) | - |
| Adaptor bore (Φ x L, mm) | 17 x 105 | - |
| Radius (mm) | 93.6 | 98.4 |
| Max. RPM | 6,000 | 6,000 |
| Max. RCF (g-force) | 3,767 | 3,960 |








Fixed Angle Rotor
GRF-SR-m2.0-24

24 x 1.5/2.0 mL

∠ 45°

Hole Diameter (mm) 11.1

Max. height for tube fit (mm) 52

| | | | |
|--------------------------|---|---|---|
| Tube |  |  |  |
| Tube capacity (mL) | 0.2 | 0.5 | 1.5/2.0 |
| Adaptor |  |  | None |
| Cat. No. | GAS-m0.2(2) | GAS-m0.5(2) | - |
| Adaptor bore (Φ x L, mm) | 6.5 x 23 | 8 x 31 | - |
| Radius (mm) | 67 | 73 | 84.3 |
| Max. RPM | 6,000 | 6,000 | 6,000 |
| Max. RCF (g-force) | 2,697 | 2,938 | 3,393 |