Designed to perfectly meet your needs.

THE BEST FUNCTIONAL QUALITY

- Soft touch buttons and display screen with intuitive controls
- Highly legible blue and white LCD display
- Time control functions of pulse, timed and continuous
- Automatic RPM/RCF conversion
- Easy to check actual rotation through the viewing window in the lid
- Program memory up to 100 (or 10) programs
- Automatic rotor identification
- Automatic lid release at the completion of spinning
- A large assortment of rotors, buckets and adaptors for diverse applications
- Any rotors, sample containers and adaptors can be customized upon specified requirement
- High flexibility of structural & functional modifications
- Accredited with ISO 9001, ISO 13485, and KGMP
- Comply with CE conformity
- Approved as Class IIa medical devices (MD406 and MD416 only)

Wide range of modern centrifuges for a variety of laboratory applications

CONVENIENCE IN OPERATION

- Manufactured and tested to IE standards, stable spinning operation within ±1% variation
- Sturdy and soft deceleration with dynamic brake technology
- Unique internal air flow design preventing from sample heating
- High-capacity, strong compressor ensures fast cooling of chamber and samples
- Fast cooling function to 4°C in 5 minutes for fast start up of cooled samples
- Automatic rotor identification
- Automatic RPM/RCF conversion
- Free control of time counting by selection of “at set speed” or from starting

EASY CUSTOMIZATION

- Sturdy structured, two or three layered lid for noise-minimized and safe operation
- Safety lid lock scheme for safe and reliable work environment
- Lid drop protection protecting the operator and samples
- Automatic rotor identification for safe operation
- Automatic detection and warning for imbalance, excess speed and over-heating
- Emergency auto-lock release for power blackout or sudden stoppage
- The eco-friendly compressor-off function on when lid is open
- The aerosol tight buckets and rotors to prevent contamination
- Autoclavable and corrosion-free rotors

CERTIFICATES AND REGISTRATIONS

- Accredited with ISO 9001, ISO 13485, and KGMP
- Comply with CE conformity
- Appointed as Class IIa medical devices (MD406 and MD416 only)
## Product Selection Guide by Max Speed & Sample Container

### Centrifuges

<table>
<thead>
<tr>
<th>Refrigeration</th>
<th>Fixed Angle Rotor</th>
<th>Swing-Out Rotor</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Multi-Purpose, High-Speed Centrifuges - Max Speed & Sample Container

<table>
<thead>
<tr>
<th>Micro Centrifuges</th>
<th>Multi-Purpose, High-Speed Centrifuges</th>
<th>Low-Speed, Clinical Centrifuges</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MAX 5,000 xg</td>
<td>MAX 150 xg</td>
</tr>
<tr>
<td></td>
<td>MAX 12,000 xg</td>
<td>MAX 165 xg</td>
</tr>
<tr>
<td></td>
<td>MAX 16,000 xg</td>
<td>MAX 270 xg</td>
</tr>
<tr>
<td></td>
<td>MAX 18,000 xg</td>
<td>MAX 320 xg</td>
</tr>
<tr>
<td></td>
<td>MAX 20,000 xg</td>
<td>MAX 500 xg</td>
</tr>
<tr>
<td></td>
<td>MAX 25,000 xg</td>
<td>MAX 1,000 xg</td>
</tr>
<tr>
<td></td>
<td>MAX 30,000 xg</td>
<td>MAX 1,500 xg</td>
</tr>
<tr>
<td></td>
<td>MAX 50,000 xg</td>
<td>MAX 2,000 xg</td>
</tr>
</tbody>
</table>

### Refrigeration

<table>
<thead>
<tr>
<th>Max Force</th>
<th>Fixed Angle Rotor</th>
<th>Swing-Out Rotor</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Sample Container / Max. Force

<table>
<thead>
<tr>
<th>Micro Tube</th>
<th>Micro Filter Tube</th>
<th>1.8 ml cryotube</th>
<th>5.0 ml</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Plate

<table>
<thead>
<tr>
<th>Micro Assay Plate</th>
<th>Tissue Culture Plate</th>
<th>Deep Well Plate</th>
<th>Filter Set Plate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Syringe / 10 / 20 / 60 ml

<table>
<thead>
<tr>
<th>Blood Bag Double 200 / 400 ml</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

### Rotor Availability (Micro Centrifuges)

- [ ] Fixed Angle Rotor
- [ ] Swing-Out Rotor
- [ ] Adapters available for smaller tubes
- [ ] Refrigerated models

- The fixed angle rotors are supplied with rotor lid (except PCR strip rotors).
- The open style angle rotors are supplied with tube sleeves.
- The swing-out rotor may be ordered together with compatible buckets and adaptors.
- The colors of the rotors, buckets and adaptors may be different and changeable without notification.

---

**Product Selection Guide by Max Speed & Sample Container**

**Centrifuges**

<table>
<thead>
<tr>
<th>Micro Centrifuges</th>
<th>Multi-Purpose, High-Speed Centrifuges</th>
<th>Low-Speed, Clinical Centrifuges</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MAX 5,000 xg</td>
<td>MAX 150 xg</td>
</tr>
<tr>
<td></td>
<td>MAX 12,000 xg</td>
<td>MAX 165 xg</td>
</tr>
<tr>
<td></td>
<td>MAX 16,000 xg</td>
<td>MAX 270 xg</td>
</tr>
<tr>
<td></td>
<td>MAX 18,000 xg</td>
<td>MAX 320 xg</td>
</tr>
<tr>
<td></td>
<td>MAX 20,000 xg</td>
<td>MAX 500 xg</td>
</tr>
<tr>
<td></td>
<td>MAX 25,000 xg</td>
<td>MAX 1,000 xg</td>
</tr>
<tr>
<td></td>
<td>MAX 30,000 xg</td>
<td>MAX 1,500 xg</td>
</tr>
<tr>
<td></td>
<td>MAX 50,000 xg</td>
<td>MAX 2,000 xg</td>
</tr>
</tbody>
</table>

### Refrigeration

<table>
<thead>
<tr>
<th>Max Force</th>
<th>Fixed Angle Rotor</th>
<th>Swing-Out Rotor</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Sample Container / Max. Force

<table>
<thead>
<tr>
<th>Micro Tube</th>
<th>Micro Filter Tube</th>
<th>1.8 ml cryotube</th>
<th>5.0 ml</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Plate

<table>
<thead>
<tr>
<th>Micro Assay Plate</th>
<th>Tissue Culture Plate</th>
<th>Deep Well Plate</th>
<th>Filter Set Plate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Syringe / 10 / 20 / 60 ml

<table>
<thead>
<tr>
<th>Blood Bag Double 200 / 400 ml</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Shape</td>
</tr>
<tr>
<td>-------------</td>
</tr>
<tr>
<td>15,000/24,249</td>
</tr>
<tr>
<td>15,000/25,910</td>
</tr>
</tbody>
</table>

- The fixed angle rotors are supplied with a rotor without an adapter.
- The open style angle rotors are supplied with tube sleeves.
- The swing-out rotors may be ordered together with compatible adapters and adapters.
- The rotors of the rotors, adapters and adapters may be different and changeable without notification.
### Fixed Angle Rotor Selection Guide by Sample Container

<table>
<thead>
<tr>
<th>Name</th>
<th>Model No.</th>
<th>Capacity</th>
<th>Tube Size</th>
<th>Max. Height</th>
<th>Max. Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>GLP-mw-r250</td>
<td>GLP-mw-r250</td>
<td>4,000 / 3,068</td>
<td>15 ml</td>
<td>52</td>
<td>6 or 16</td>
</tr>
<tr>
<td>GLP-mw-750</td>
<td>GLP-mw-750</td>
<td>4,000 / 3,068</td>
<td>15 ml</td>
<td>52</td>
<td>6 or 16</td>
</tr>
<tr>
<td>GLP-mw-r750</td>
<td>GLP-mw-r750</td>
<td>4,000 / 3,068</td>
<td>15 ml</td>
<td>52</td>
<td>6 or 16</td>
</tr>
<tr>
<td>GLP-mw-1400</td>
<td>GLP-mw-1400</td>
<td>4,000 / 3,068</td>
<td>15 ml</td>
<td>52</td>
<td>6 or 16</td>
</tr>
<tr>
<td>GLB-m2.0(8)</td>
<td>GLB-m2.0(8)</td>
<td>4,000 / 3,068</td>
<td>15 ml</td>
<td>52</td>
<td>6 or 16</td>
</tr>
<tr>
<td>GLB-m2.0-4(16)</td>
<td>GLB-m2.0-4(16)</td>
<td>4,000 / 3,068</td>
<td>15 ml</td>
<td>52</td>
<td>6 or 16</td>
</tr>
<tr>
<td>GLB-15-15</td>
<td>GLB-15-15</td>
<td>4,000 / 3,068</td>
<td>15 ml</td>
<td>52</td>
<td>6 or 16</td>
</tr>
<tr>
<td>GLB-10-8-100</td>
<td>GLB-10-8-100</td>
<td>4,000 / 3,068</td>
<td>15 ml</td>
<td>52</td>
<td>6 or 16</td>
</tr>
<tr>
<td>GLB-15-50</td>
<td>GLB-15-50</td>
<td>4,000 / 3,068</td>
<td>15 ml</td>
<td>52</td>
<td>6 or 16</td>
</tr>
<tr>
<td>GLB-d15-50</td>
<td>GLB-d15-50</td>
<td>4,000 / 3,068</td>
<td>15 ml</td>
<td>52</td>
<td>6 or 16</td>
</tr>
<tr>
<td>GLB-15-15</td>
<td>GLB-15-15</td>
<td>4,000 / 3,068</td>
<td>15 ml</td>
<td>52</td>
<td>6 or 16</td>
</tr>
<tr>
<td>GLB-bd15-100</td>
<td>GLB-bd15-100</td>
<td>4,000 / 3,068</td>
<td>15 ml</td>
<td>52</td>
<td>6 or 16</td>
</tr>
<tr>
<td>GLB-c15-50</td>
<td>GLB-c15-50</td>
<td>4,000 / 3,068</td>
<td>15 ml</td>
<td>52</td>
<td>6 or 16</td>
</tr>
<tr>
<td>GLB-dc15-50</td>
<td>GLB-dc15-50</td>
<td>4,000 / 3,068</td>
<td>15 ml</td>
<td>52</td>
<td>6 or 16</td>
</tr>
<tr>
<td>GLB-bdc15-100</td>
<td>GLB-bdc15-100</td>
<td>4,000 / 3,068</td>
<td>15 ml</td>
<td>52</td>
<td>6 or 16</td>
</tr>
</tbody>
</table>

### Swing-Out Rotor Selection Guide by Sample Container

<table>
<thead>
<tr>
<th>Name</th>
<th>Model No.</th>
<th>Capacity</th>
<th>Tube Size</th>
<th>Max. Height</th>
<th>Max. Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>GAS-m0.5(2)</td>
<td>GAS-m0.5(2)</td>
<td>4,000 / 3,068</td>
<td>15 ml</td>
<td>52</td>
<td>6 or 16</td>
</tr>
<tr>
<td>GAS-m0.2(2)</td>
<td>GAS-m0.2(2)</td>
<td>4,000 / 3,068</td>
<td>15 ml</td>
<td>52</td>
<td>6 or 16</td>
</tr>
<tr>
<td>GAS-m0.5(2)</td>
<td>GAS-m0.5(2)</td>
<td>4,000 / 3,068</td>
<td>15 ml</td>
<td>52</td>
<td>6 or 16</td>
</tr>
<tr>
<td>GAS-4(15)</td>
<td>GAS-4(15)</td>
<td>4,000 / 3,068</td>
<td>15 ml</td>
<td>52</td>
<td>6 or 16</td>
</tr>
<tr>
<td>GAS-3(15)</td>
<td>GAS-3(15)</td>
<td>4,000 / 3,068</td>
<td>15 ml</td>
<td>52</td>
<td>6 or 16</td>
</tr>
<tr>
<td>GAS-4(15)</td>
<td>GAS-4(15)</td>
<td>4,000 / 3,068</td>
<td>15 ml</td>
<td>52</td>
<td>6 or 16</td>
</tr>
<tr>
<td>GAS-250(1000)</td>
<td>GAS-250(1000)</td>
<td>4,000 / 3,068</td>
<td>15 ml</td>
<td>52</td>
<td>6 or 16</td>
</tr>
<tr>
<td>GAS-c250(750)</td>
<td>GAS-c250(750)</td>
<td>4,000 / 3,068</td>
<td>15 ml</td>
<td>52</td>
<td>6 or 16</td>
</tr>
<tr>
<td>GAS-250(750)</td>
<td>GAS-250(750)</td>
<td>4,000 / 3,068</td>
<td>15 ml</td>
<td>52</td>
<td>6 or 16</td>
</tr>
<tr>
<td>GAS-c50(100)</td>
<td>GAS-c50(100)</td>
<td>4,000 / 3,068</td>
<td>15 ml</td>
<td>52</td>
<td>6 or 16</td>
</tr>
<tr>
<td>GAS-c50(100)</td>
<td>GAS-c50(100)</td>
<td>4,000 / 3,068</td>
<td>15 ml</td>
<td>52</td>
<td>6 or 16</td>
</tr>
<tr>
<td>GAS-c50(100)</td>
<td>GAS-c50(100)</td>
<td>4,000 / 3,068</td>
<td>15 ml</td>
<td>52</td>
<td>6 or 16</td>
</tr>
</tbody>
</table>

- Adaptor available for smaller tubes: *BC*, *CC* or *CD*.
- The fixed angle rotors are supplied with corresponding flat cap rotors.
- The swing-out angle rotors are supplied with corresponding flat cap rotors.
- The swing-out rotors may be extended together with compatible buckets and adaptors.
- The caps of the buckets, buckets and adaptors may be different and changeable without notification.
Fast Cooling
Cooling down to 4℃ within 5 minutes

Motorized Lid Mechanics
Only a gentle touch is sufficient to close and open the lid.

ACC/DEC Rate Control
Setting run-up (9 steps) / down (10 steps) rates

Adjustable End Alarm
alerts completion of the operation.

Automatic Lid Release
at the completion of the operation

Selectable Time Mode of “At Set Speed”
for counting running time only when reached the set speed

Up to 100 or 10 Program Memory
for convenient operation of the routine protocols

Glove-Friendly, Soft Touch Buttons
allows easy setting of running conditions.

Rotor ID
Automatic rotor identification for safe operation

A Large Assortment of Rotors, Buckets and Adaptors
support diverse applications doable with one instrument.

Imbalance Cut-Off
and accompanied warning keep the instrument protected from unsuitable operation.

Soft Start/Stop Function of 416
(to achieve gentle run-in and down)

Catalog Numbering Rule of Centrifuges and Accessories

Featured Functions

Materialized Lid Mechanics
Only a gentle touch is sufficient to close and open the lid.

Adjustable End Alarm
alerts completion of the operation.

A Large Assortment of Rotors, Buckets and Adaptors
support diverse applications doable with one instrument.

Glove-Friendly, Soft Touch Buttons
allow easy settings of running conditions.

User ID and Password Function
ideal for core laboratory or multi-user environments

Automatic Lid Release
at the completion of the operation

Automatic RPM/RCF Conversion
for easy detection of g-value forced to samples

Order & Inquiry +39 035 576614 / marketing@labtechsrl.com / www.labtechsrl.com
Multi-Purpose, High-Speed Centrifuges

1580R
15,000 / 25,910 xg

1580
15,000 / 24,249 xg

1248R
12,000 / 16,582 xg

1248
12,000 / 15,520 xg

1236R
12,000 / 16,582 xg

* All tubes shown in this catalog are not included in GYROZEN products.
1248 • 1248R • 1236R
1580 • 1580R

GYROZEN multi-purpose, high-speed centrifuges - 1248, 1248R, 1236R, 1580 and 1580R - share rotors (G-family), buckets and accessories so as to offer a cost-efficient solution and save laboratory space. 1248, 1248R and 1236R with max. 12,000 rpm can accommodate up to four of 250 ml capacity with a compact footprint and can be used for medium throughput applications. 1580 and 1580R multi-purpose centrifuges are designed for daily-working laboratories with large-volumes and quantities samples up to 3 liters (4 x 750 ml). These two go up to 15,000 rpm and offer a great variety of rotors, buckets and tube adaptors for diverse applications. The 'R' models are equipped with a powerful refrigeration system that allows the temperature to cool down to 4 °C from room temperature within 5 minutes. Therefore, you can save your time and your precious samples at a proper temperature. 1248, 1248R, 1580 and 1580R are bench-top centrifuges whereas the 1236R is a floor standing. The space-saving, compact 1236R has 4 casters at the bottom of the body so that it can be easily moved, positioned and safely locked. Also, its perfect height allows you to easily load and unload samples. GYROZEN’s multi-purpose centrifuges are ideal for cellular and molecular biology work, clinical preparations, nano-particles separations, industrial applications and food science, etc.

Features
- Max. speed of 12,000 rpm or 15,000 rpm with high capacity and a large assortment of rotor
- Fast cooling function to 4°C in 5 minutes for fast startup of cooled samples (only for “R” models)
- The compressor-off function when lid is open minimizes unnecessary cooling and frosting (only for "R" models).
- Intuitive control interface with numeric input buttons allows easy setting and editing of running conditions.
- 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 maxiness and safety when loading or unloading samples.
- The short working height of 83 cm (33 inches) ensures easy loading and unloading (only for 1236R).
- A large assortment of rotors, buckets and adaptors support diverse application doable with one instrument.
# Technical Specifications

<table>
<thead>
<tr>
<th>Model</th>
<th>RPM (dry)</th>
<th>RPM (wet)</th>
<th>Max. capacity</th>
<th>Max. weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>1248</td>
<td>12,000/16,520 xg</td>
<td>12,000/16,520 xg</td>
<td>8 x 85 ml, 120 x 15 ml</td>
<td>40 kg</td>
</tr>
<tr>
<td>1248R</td>
<td>12,000/16,520 xg</td>
<td>12,000/16,520 xg</td>
<td>8 x 85 ml, 120 x 15 ml</td>
<td>78 kg</td>
</tr>
<tr>
<td>1236R</td>
<td>12,000/16,520 xg</td>
<td>12,000/16,520 xg</td>
<td>8 x 85 ml, 120 x 15 ml</td>
<td>110 kg</td>
</tr>
<tr>
<td>1580</td>
<td>15,000/24,249 xg</td>
<td>15,000/24,249 xg</td>
<td>8 x 85 ml, 150 x 15 ml</td>
<td>57 kg</td>
</tr>
<tr>
<td>1580R</td>
<td>15,000/24,249 xg</td>
<td>15,000/24,249 xg</td>
<td>8 x 85 ml, 150 x 15 ml</td>
<td>93 kg</td>
</tr>
</tbody>
</table>

## Control Panel

- **Display Screen**: Status of Speed, Time, ACC, DEC, Temperature, Lid Open/Closed

## Applications

- Ideal for cellular and molecular biology work, clinical preparations, industrial applications, etc.

## Control Panel

- **Key Lock / Unlock**
  - **At Set Speed**
    - RPM: 15000
    - Time: 99:59
    - Acc: 99

- **Setting Speed**
  - **Touch once**: RPM
  - **Touch twice**: RCF

- **Pulse**
  - **Short Spin**
    - **Lid Open**
      - **Open**: LED turns on

- **Start / Stop**
  - **LED ON**: Start / Run
  - **LED OFF**: Stop

- **Setting Time**
  - **Setting ACC**
    - **Setting DEC**
      - **Program Save / Call**
        - **At Set Speed**
          - RPM: 15000
          - Time: 99:59
          - Acc: 99

- **End Alarm**
  - **Sound Volume**: (level: 0 ~ 10, 0: silent)

## Display Screen

- Status of Speed, Time, ACC, DEC, Temperature, Lid Open/Closed

## Technical Specifications

- **Program Memory**: 100
- **Parameters on display window**: RPM (RCF), Oper Status, Lid Open/Close, Min:Sec, ACC, DEC
- **Parameters on LCD display**: RPM (RCF), Oper Status, Lid Open/Close, Hr:Min, Temp, ACC, DEC
- **Display Mode**: Selectable, from set speed or from starting
- **RPM/RCF Conversion**: Yes
- **Noise Level**: ~ 60 dB

## Applications

- Ideal for cellular and molecular biology work, clinical preparations, industrial applications, etc.
**Centrifuges**

- **Concentrators**
- **Laboratory Shakers**

---

### Rectangular 750 ml Bucket

**GLB-r750**

- **Bucket bore** (w x d x h, mm): 99 x 99 x 98
- **Radius (mm)**: 200
- **Max. RPM**: 3,600
- **Max. RCF (g-force)**: 2,898
- **Max. height for tube fit (mm)**: 135

#### Tube Capacity

- **Capacity** (ea/4):
  - 3
  - 5
  - 10
  - 15
  - 15 ml conical
  - 50
  - 50 ml conical
  - 250
  - 250 ml conical
  - 500
  - 500 ml conical

#### Tube Rack

- **Cat. No.**:
  - GAM-5-30(r750)
  - GAM-15-20(r750)
  - GAM-c15-16(r750)
  - GAM-50-8(r750)
  - GAM-c50-5(r750)
  - GAS-250(r750)
  - GAS-c250(r750)
  - GAS-c500(r750)

- **Rack capacity (ea/4)**:
  - 30/120
  - 20/80
  - 16/64
  - 8/32
  - 5/20
  - 1/4
  - 1/4
  - 1/4

#### Hole Dimension

- **(Ф xL, mm)**:
  - 13 x 56.5
  - 13 x 85
  - 17.2 x 85
  - 17.5 x 85
  - 29.5 x 85
  - 29.5 x 85
  - 62.5 x 87
  - 61 x 93
  - 98 x 94

---

### Round 500 ml Bucket

**GLB-500-r750**

- **Bucket bore** (Ф x L, mm): 69.2 x 135
- **Radius (mm)**: 218
- **Max. RPM**: 3,600
- **Max. RCF (g-force)**: 3,159
- **Max. height for tube fit (mm)**: 165

#### Tube Capacity

- **Capacity (ml)**:
  - 500

#### Bucket Capacity

- **Capacity (ea/4)**: 1/4

---

### Microplate Holder

**GLP-mw-r750**

- **Holder bore** (w x d x h, mm): 88 x 128.5 x 80
- **Radius (mm)**: 171.5
- **Max. RPM**: 3,600
- **Max. RCF (g-force)**: 2,485

#### Plate Capacity

- **Capacity (ml)**:
  - MTP DWP

#### Plate Capacity

- **Capacity (ea/4)**:
  - 4/16
  - 1/4

---

### Swing-out Rotor, GRS-G-750-4

- **4 loadings**
- **90°**
- **Only for 1580, 1580R**

---

### Round 750 ml Bucket with Cap

**GLB-b750-750**

- **GLB-750-750**

- **Bucket bore** (Ф x L, mm): 99 x 101.5
- **Radius (mm)**: 205
- **Max. RPM**: 4,000
- **Max. RCF (g-force)**: 3,667
- **Max. height for tube fit (mm)**: 130 (w/ cap) / 142 (w/o cap)

#### Tube Capacity

- **Capacity (ml)**:
  - 3
  - 5
  - 10
  - 15
  - 15 ml conical
  - 50
  - 50 ml conical
  - 250
  - 250 ml conical
  - 500
  - 500 ml conical

#### Tube Rack

- **None**

#### Rack Capacity

- **Capacity (ea/4)**:
  - 24/96
  - 21/84
  - 19/76
  - 14/56
  - 7/28
  - 5/20
  - 1/4
  - 1/4
  - 1/4
  - 1/4

#### Hole Dimension

- **(Ф xL, mm)**:
  - 13.2 x 58
  - 13.2 x 85
  - 16 x 85
  - 17.2 x 85
  - 17 x 85
  - 29.2 x 87
  - 29.2 x 88
  - 62.3 x 87
  - 60.5 x 125
  - 95.6 x 58

---

### Swing-out Rotor, GRS-G-r750-4

- **4 loadings**
- **90°**
- **Only for 1580, 1580R**

---

### Round 500 ml Bucket with Cap

**GLB-500-750**

- **GLB-500-750**

- **Bucket bore** (Ф x L, mm): 69.2 x 135
- **Radius (mm)**: 218
- **Max. RPM**: 4,000
- **Max. RCF (g-force)**: 3,900
- **Max. height for tube fit (mm)**: 165

#### Tube Capacity

- **Capacity (ml)**:
  - 500

#### Bucket Capacity

- **Capacity (ea/4)**: 1/4

---

### Microplate Holder

**GLP-mw-750**

- **Holder bore** (w x d x h, mm): 88 x 128.5 x 80
- **Radius (mm)**: 171.5
- **Max. RPM**: 4,000
- **Max. RCF (g-force)**: 3,068

#### Plate Capacity

- **Capacity (ml)**:
  - MTP DWP

#### Plate Capacity

- **Capacity (ea/4)**:
  - 4/16
  - 1/4

---

**GLB-b750-750** includes cap.
### Microplate Holder

**Model:** GLP-mw-r250

**Holder Dimension (w x d x h, mm):** 88 x 128.5 x 80

**Radius (mm):** 153

**Max. RPM:** 4,000

**Max. RCF (g-force):** 2,737

**Plate capacity (ml):**

<table>
<thead>
<tr>
<th>Plate</th>
<th>Holder capacity (ea/4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTP DWP</td>
<td>4/16 1/4</td>
</tr>
</tbody>
</table>

**Adaptor**

Cat. No.: GAM-m2.0-20

**Rack capacity (ea/4):** 20/80

**Hole dimension:** Ф11.3 x 39

### Swing-out Rotor, GRS-G-r250-4

**Rotor capacity (ea/4):** 4/16

**Adaptor**

Cat. No.: GAS-60S(60)

**Adaptor bore:** Custom-made

### Rectangular 250 ml Bucket

**Model:** GLB-r250-r250

**Bucket bore (w x d x h, mm):** 86 x 70.3 x 102.5

**Radius (mm):** 175.2

**Max. RPM:** 4,000

**Max. RCF (g-force):** 3,134

**Max. height for tube fit (mm):** 130

**Tube capacity (ml):**

<table>
<thead>
<tr>
<th>Tube</th>
<th>Bucket capacity (ea/4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.5/2.0</td>
<td>3 5 10 15 25</td>
</tr>
<tr>
<td>3</td>
<td>15 30</td>
</tr>
<tr>
<td>5</td>
<td>15 30 45 60</td>
</tr>
<tr>
<td>10</td>
<td>30 60</td>
</tr>
<tr>
<td>15</td>
<td>60</td>
</tr>
<tr>
<td>25</td>
<td>90</td>
</tr>
</tbody>
</table>

**Adaptor**

Cat. No.: GAM-50-4

**Rack capacity (ea/4):** 20/80

**Hole dimension:** Ф13.5 x 58

### Dual Syringe Bucket

**Model:** GLB-d20/10-250

**Bucket bore (Ф x L, mm):** 22.5 x 100 (20) / 16 x 90 (10)

**Radius (mm):** 170 / 160

**Max. RPM:** 5,000

**Max. RCF (g-force):** 4,752 / 4,472

**Max. height for tube fit (mm):** 132 / 125

**Tube capacity (ml):**

<table>
<thead>
<tr>
<th>Tube</th>
<th>Bucket capacity (ea/4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 ml syringe</td>
<td>2/8</td>
</tr>
<tr>
<td>20 ml syringe</td>
<td>2/8</td>
</tr>
</tbody>
</table>

**Adaptor**

Cat. No.: GAS-10S(10) / GAS-20S(20)

**Adaptor bore:** Custom-made / Custom-made

### Round 250 ml Bucket

**Model:** GLB-250-250

**Bucket bore (Ф x L, mm):** 62 x 109

**Radius (mm):** 193

**Max. RPM:** 5,000

**Max. RCF (g-force):** 5,394

**Max. height for tube fit (mm):** 153

**Tube capacity (ml):** 250

**Bucket capacity (ea/4):** 1/4

**Conical 250 ml Bucket**

**Model:** GLB-c250-250

**Bucket bore (Ф x L, mm):** 60.5 x 130.2

**Radius (mm):** 193

**Max. RPM:** 5,000

**Max. RCF (g-force):** 5,394

**Max. height for tube fit (mm):** 153

**Tube capacity (ml):** 250 ml conical

**Bucket capacity (ea/4):** 1/4

### Microplate Holder

**Model:** GLP-mw-r250

**Dimensions:** (w x d x h, mm): 120 x 120 x 90

**Max. RPM:** 150

**Max. RCF (g-force):** 150

**Max. height for tube fit:** 90 mm

**Tube capacity (ml):**

<table>
<thead>
<tr>
<th>Tube capacity (ml): 1.5/2.0</th>
<th>CL/4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.5</td>
<td>3</td>
</tr>
<tr>
<td>2.0</td>
<td>5</td>
</tr>
</tbody>
</table>

**Tube rack**

Cat. No.: GAM-m2.0-20 / GAM-50-4 / GAM-c50-3 / GAM-85-2 / GAM-250

**Rack capacity (ea/4):** 20/80 / 12/48 / 12/48 / 9/36 / 4/16 / 3/12 / 2/8 / 1/4

**Hole dimension:** Ф11.3 x 39 / Ф13.5 x 58 / Ф13.5 x 80 / Ф17.5 x 90 / Ф17.5 x 90 / Ф30.2 x 90 / Ф30.5 x 90 / Ф17 x 86.5 / Ф38.5 x 86.5 / Ф62.5 x 87
## Dual Conical 15 ml Bucket

**GLB-bdc15-100**

- **Bucket bore (ΦxL, mm):** 17 x 102.5
- **Radius (mm):** 173.6
- **Max. RPM:** 4,000
- **Max. RCF (g-force):** 3,105
- **Max. height for tube fit (mm):** 120

<table>
<thead>
<tr>
<th>Tube capacity (ml)</th>
<th>Quantity (ea/4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 ml conical</td>
<td>2/12</td>
</tr>
</tbody>
</table>

- **Adaptor:** None

- **Cat. No.:** GAS-u15 (50)

## Dual Round 15 ml Bucket

**GLB-bd15-100**

- **Bucket bore (ΦxL, mm):** 17 x 98
- **Radius (mm):** 169.5
- **Max. RPM:** 4,000
- **Max. RCF (g-force):** 3,032
- **Max. height for tube fit (mm):** 123 (w/ cap) / 127 (w/o cap)

<table>
<thead>
<tr>
<th>Tube capacity (ml)</th>
<th>Quantity (ea/4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 ml</td>
<td>2/12</td>
</tr>
</tbody>
</table>

- **Adaptor:** None

- **Cat. No.:** GAS-c50 (50)

---

* GLB-b100-100 includes cap.
* (b100) adaptors work fine with cap but (100) adaptors not.
### Fixed Angle Rotor, GRF-G-250-6
- **Tube capacity (ml)**: 10, 15, 15 ml conical, 50, 50 ml conical
- **Radius (mm)**: 101, 103, 101, 104, 102, 110
- **Max. RPM (1580R)**: 8,000
- **Max. RCF (g-force)**: 9,395, 9,588
- **Not applicable for 1248**

### Fixed Angle Rotor, GRF-G-50-8
- **Tube capacity (ml)**: 15, 50
- **Adaptor bore (ФxL, mm)**: 17 x 94, 17 x 98
- **Radius (mm)**: 102, 103, 101, 104, 102, 110
- **Max. RPM (1580R)**: 12,000
- **Max. RCF (g-force)**: 16,424, 16,582

### Fixed Angle Rotor, GRF-G-25-6
- **Tube capacity (ml)**: 15, 50
- **Adaptor bore (ФxL, mm)**: 17 x 94
- **Radius (mm)**: 102, 103, 101, 104, 102, 110
- **Max. RPM (1580R)**: 12,000
- **Max. RCF (g-force)**: 16,424, 16,582

<table>
<thead>
<tr>
<th>Tube capacity (ml)</th>
<th>Radius (mm)</th>
<th>Max. RPM (1580R)</th>
<th>Max. RCF (g-force)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 ml</td>
<td>101</td>
<td>8,000</td>
<td>9,395</td>
</tr>
<tr>
<td>15 ml</td>
<td>103</td>
<td>8,000</td>
<td>9,588</td>
</tr>
<tr>
<td>15 ml conical</td>
<td>101</td>
<td>8,000</td>
<td>9,395</td>
</tr>
<tr>
<td>50 ml</td>
<td>104</td>
<td>8,000</td>
<td>9,588</td>
</tr>
<tr>
<td>50 ml conical</td>
<td>102</td>
<td>8,000</td>
<td>9,588</td>
</tr>
<tr>
<td>85 ml</td>
<td>104</td>
<td>8,000</td>
<td>9,588</td>
</tr>
</tbody>
</table>
### Fixed Angle Rotor, GRF-G-15-24
24 x 15 ml

- **Angle**: 45°
- **Hole diameter (mm)**: 17.5
- **Max. height for tube fit (mm)**: 125

<table>
<thead>
<tr>
<th>Tube capacity (ml)</th>
<th>14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum RPM</td>
<td>12,000</td>
</tr>
<tr>
<td>Maximum RCF (g-force)</td>
<td>1st: 9,434 / 2nd: 10,803</td>
</tr>
</tbody>
</table>

### Fixed Angle Rotor, GRF-G-c15-12
12 x 15 ml conical

- **Angle**: 25°
- **Hole diameter (mm)**: 17
- **Max. height for tube fit (mm)**: 125

<table>
<thead>
<tr>
<th>Tube capacity (ml)</th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum RPM</td>
<td>9,000</td>
</tr>
</tbody>
</table>
| Maximum RCF (g-force) | 9,000/

### Fixed Angle Rotor, GRF-G-m2.0-30
30 x 1.5/2.0 ml

- **Angle**: 45°
- **Hole diameter (mm)**: 11.1
- **Max. height for tube fit (mm)**: 52

<table>
<thead>
<tr>
<th>Tube capacity (ml)</th>
<th>0.2, 0.5, 1.5/2.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adaptor</td>
<td>None</td>
</tr>
<tr>
<td>Cat. No.</td>
<td>GAS-m0.2(2) GAS-m0.5(2)</td>
</tr>
<tr>
<td>Adaptor bore (ФxL, mm)</td>
<td>6.5 x 23 8 x 31</td>
</tr>
<tr>
<td>Radius (mm)</td>
<td>79, 86, 96.4</td>
</tr>
<tr>
<td>Maximum RPM</td>
<td>15,000</td>
</tr>
<tr>
<td>Maximum RCF (g-force)</td>
<td>19,872, 21,633, 24,249</td>
</tr>
</tbody>
</table>

### Angle Rotor, GRA-G-15-24A
24 x 15 ml

- **Angle**: 45°
- **Hole diameter (mm)**: 18
- **Max. height for tube fit (mm)**: 125 (120 for conical tubes)

<table>
<thead>
<tr>
<th>Tube capacity (ml)</th>
<th>3, 4, 5, 10, 15, 15 ml conical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adaptor</td>
<td>None</td>
</tr>
<tr>
<td>Cat. No.</td>
<td>GAS-3(15) GAS-4(15) GAS-5(15)</td>
</tr>
<tr>
<td>Adaptor bore (ФxL, mm)</td>
<td>13.5 x 61 13.5 x 65 13.5 x 85</td>
</tr>
<tr>
<td>Radius (mm)</td>
<td>155.2, 158.2, 167.2, 174.5, 175.5, 171.5</td>
</tr>
<tr>
<td>Maximum RPM</td>
<td>4,000</td>
</tr>
<tr>
<td>Maximum RCF (g-force)</td>
<td>2,776, 2,830, 2,990, 3,121, 3,134, 3,068</td>
</tr>
</tbody>
</table>

### Aluminum 15 ml Sleeve, GLB-15A-FA

- **Sleeve bore (ФxL, mm)**: 18 x 90
- **Radius (mm)**: 175.2
- **Max. RPM**: 4,000
- **Max. RCF (g-force)**: 3,134

---

**Only for R models**

---

**Not applicable for 124B**

---

**Only for R models**

---

**Not applicable for 124B**

---

**Not applicable for 124B**

---

**Not applicable for 124B**

---

**Not applicable for 124B**

---

**Only for R models**

---

**Not applicable for 124B**

---

**Not applicable for 124B**

---

**Not applicable for 124B**

---

**Not applicable for 124B**

---
MANUFACTURER

GYROZEN

GYROZEN Co., Ltd.
30-12 Gyeryong-ro 141beon-gil, Yuseong-gu,
Daejeon, 34187, Rep. of KOREA
Tel.: +82-2-3452-7736 / info@gyrozen.com

SALES

LabTech

LabTech Srl
Via Fatebenefratelli, 1/5 - 24010 Sorisole (BG) - Italy
Tel.: +39 035 576614 - Fax: +39 035 4729414
www.labtechsrl.com - email: marketing@labtechsrl.com