

Table-top Multi Purpos High-speed Centrifuges

Technical Specifications

**1248**

p. 48

**1248R**

p. 48

	1248 p. 48	1248R p. 48
Max. RPM / Fixed angle	12,000 rpm	12,000 rpm
Max. RPM / Swing-out	5,000 rpm	5,000 rpm
Max. RCF / Fixed angle	16,582 xg	16,582 xg
Max. RCF / Swing-out	5,394 xg	5,394 xg
Max. capacity / Fixed angle	6 x 85 mL, 8 x c50 mL, 30 x 1.5/2.0 mL	6 x 85 mL, 8 x c50 mL, 30 x 1.5/2.0 mL
Max. capacity / Swing-out	4 x 250 mL, 6 x 2 x c50 mL, 6 x 8 x 15 mL, 4 x 4 MTPs	4 x 250 mL, 6 x 2 x c50 mL, 6 x 8 x 15 mL, 4 x 4 MTPs
Temperature range	-	-20°C to 40°C
FAST cool button	-	Yes
Time control	Pulse, Timed < 100 min or Continuous	Pulse, Timed < 10 hr, or Continuous
CE mark	Yes	Yes
Cat. No.	GZ-1248	GZ-1248R

Function Features



Fingerprint-less

Soft glove-friendly easy-to-input touch buttons



G-family

Cost-efficient solution for Multi-purpose centrifuges sharing the same rotors, buckets and accessories.
(Also compatible with 1236R) p. 90

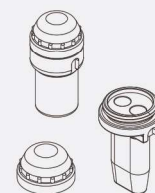


Motorized Lid

with motorized lid mechanics, only a gentle touch is sufficient to close and open the lid

NEW Bucket, GLBB Model

Containment of samples provided by a combination of physical seals and a design to prevent any sample leakage within the buckets.



- GLBB-b100-100 / GLBB-bdc15-100
- GLBB-750-750

		
1580 p. 48	1580R p. 48	1696R p. 67
15,000 rpm	15,000 rpm	16,000 rpm
5,000 rpm	5,000 rpm	5,000 rpm
24,249 xg	25,910 xg	27,590 xg
5,394 xg	5,394 xg	5,394 xg
6 x 85 mL, 8 x c50 mL, 30 x 1.5/2.0 mL	6 x (250 & 15) mL, 8 x c50 mL, 30 x 1.5/2.0 mL	6 x 250 & 15 mL 8 x c50 mL, 20 x 5.0 mL, 48 x 1.5/2.0 mL
4 x 750 mL, 4 x 5 x c50 mL, 4 x 20 x 15 mL, 4 x 4 MTPs	4 x 750 mL, 4 x 5 x c50 mL, 4 x 20 x 15 mL, 4 x 4 MTPs	4 x 1,000 mL, 4 x 750 mL, 6 x 2 x c50 mL, 6 x 8 x 15 mL, 4 x 4 MTPs
-	-20°C to 40°C	-11°C ~ 40°C
Yes	Yes	Yes
Pulse, Timed < 10 hr, or Continuous	Pulse, Timed < 10 hr, Continuous	Pulse, Timed < 10 hr, or Continuous
Yes	Yes	Yes
GZ-1580	GZ-1580R	GZ-1696R

1248, 1248R, 1580, 1580R

Table-top, High-speed Centrifuges



R model

1248 / 1580

Features

- Max. speed of 12,000 rpm or 15,000 rpm with high capacity and a large assortment of rotors
- Intuitive control interface with numeric input buttons allowing 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.
- The compressor's off-function when the lid is open minimizes unnecessary cooling and frosting. (only for "R" models).
- Fast cooling function to 4°C in 5 minutes for fast startup of cooled samples (only for "R" models).
- 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.

Technical Specifications

	1248	1248R	1580	1580R
Max. RPM/PCF for Fixed Angle	12,000 rpm / 16,582 xg	12,000 rpm / 16,582 xg	15,000 rpm / 24,249 xg	15,000 rpm / 25,910 xg
Max. RPM/PCF for Swing-out	5,000 rpm / 5,394 xg	5,000 rpm / 5,394 xg	5,000 rpm / 5,394 xg	5,000 rpm / 5,394 xg
Max. Capacity for Fixed Angle	6 x 85 mL, 30 x 1.5/2.0 mL	6 x 85 mL, 30 x 1.5/2.0 mL	6 x 85 mL, 30 x 1.5/2.0 mL	6 x (250 & 15) mL, 30 x 1.5/2.0 mL
Max. Capacity for Swing-out	4 x 250 mL, 48 x 15 mL, 4 x 4 MTPs	4 x 250 mL, 48 x 15 mL, 4 x 4 MTPs	4 x 750 mL, 80 x 15 mL, 4 x 4 MTPs	4 x 750 mL, 80 x 15 mL, 4 x 4 MTPs
Temp. Range (°C)	-	-20°C to 40°C	-	-20°C to 40°C
Fast Cool Button	-	Yes	-	Yes
Time Control	Pulse, timed <100 min or continuous	Pulse, timed <10 min or continuous	Pulse, timed <100 min or continuous	Pulse, timed <10 hr or continuous
Time Counting Range	Selectable, at set speed or from starting			
RCF/RPM Conversion	Yes			
Noise Level (dependent on rotor)	≤60 dB			
ACC/DEC Ramps	9/10			
Program Memory	100			
Power Supply	AC 230V, 50Hz (AC 220-230V, 60/50Hz; 110V optional)			
Power Requirement	900 VA	2.5 kVA	1.5 kVA	2.5 kVA
Dimension (W x D x H)	475 x 561 x 330 mm	655 x 620 x 357 mm	540 x 650 x 380 mm	770 x 650 x 390 mm
Net Weight	40 kg	78 kg	57 kg	93 kg
CE MARK	Yes			
Cat No.	GZ-1248	GZ-1248R	GZ-1580	GZ-1580R

Fixed Angle Rotor, GRF-G-250-6

- Capacity : 6 x 250 mL + 6 x 15 mL
- Max. RPM / RCF : 8,000 (9,588; 9,395)
- Hole angle from axis during rotation : $\angle 25^\circ$
- Hole dimension ($\varnothing \times L$, mm) : 62 x 100 (250 mL) / 17.1 x 94 (15 mL)
- Hole bottom type : Flat (250 mL) / Round (15 mL)
- Max. height for tube fit (mm) : 130 (250 mL) / 120 (15 mL)
- Supplied with a lid



* Only for 1580R

Tube		
Tube capacity (mL)	15	250
Tube Dimension ($\Phi \times L$, mm)	16 x 120	61.5 x 128
Max. radius (mm)	131.3	134
Max. RCF (g-force)	9,395	9,588

Fixed Angle Rotor, GRF-G-85-6

- Capacity : 6 x 85 mL
- Max. RPM / RCF (1580R) : 12,000 / 17,709
- Max. RPM / RCF (1248 / 1248R / 1580) : 10,000 / 12,298
- Hole angle from axis during rotation : $\angle 34^\circ$
- Hole dimension ($\varnothing \times L$, mm) : 38.5 x 100
- Hole bottom type : Round | Max. height for tube fit (mm) : 122
- Supplied with a lid



Tube								
Tube capacity (mL)	15	15 mL conical	25 mL conical	25 mL conical	30	50	50 mL conical	85 mL
Tube Dimension ($\Phi \times L$, mm)	16 x 120	17 x 120	28.8x83	28.8x78.5	25.7 x 101.4	29 x 108	29.5 x 118	38 x 106
Adapter								None
Cat No.	GAS-15(85)	GAS-c15(85)	GAS-c25(85)	GAS-c25(85)	GAS-30(85)	GAS-50(85)	GAS-c50(85)	-
Adaptor hole dimension ($\Phi \times L$, mm)	17 x 94	17 x 98	29.5 x 62.5	29.5 x 62.5	26 x 85.4	29 x 95	29.5 x 98	-
Adaptor hole bottom type	Round	Conical	Conical	Conical	Round	Round	Conical	-
Max. radius (mm)	103	101	87	87	102.5	104	102	110
Max. RPM (1580R)	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000
Max. RCF (g-force)	16,582	16,260	14,006	14,006	16,502	16,743	16,421	17,709
Max. RPM (1248 / 1248R / 1580)	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
Max. RCF (g-force)	11,515	11,292	9,727	9,727	11,460	11,627	11,404	12,298

Fixed Angle Rotor, GRF-G-50-8

- Capacity : 8 x 50 mL | Max. RPM / RCF (1580R) : 15,000 / 25,910
- Max. RPM / RCF (1248 / 1248R / 1580) : 12,000 / 16,582
- Hole angle from axis during rotation : $\angle 30^\circ$
- Hole dimension ($\varnothing \times L$, mm) : 29.5 x 93.2
- Hole bottom type : Round | Max. height for tube fit (mm) : 120
- Supplied with a lid and O-ring inserted



				
Tube				
Tube capacity (mL)	15	15 mL conical	30	50
Tube Dimension ($\Phi \times L$, mm)	16 x 120	17 x 120	25.7 x 101.4	29 x 108
Adapter				None
Cat No.	GAS-15(50)	GAS-c15(50)	GAS-30(50)	-
Adaptor hole dimension ($\Phi \times L$, mm)	17 x 94	17 x 105	26 x 83.8	-
Adaptor hole bottom type	Round	Conical	Round	-
Max. radius (mm)	93.5	96	96.4	103
Max. RPM (1580R)	15,000	15,000	15,000	15,000
Max. RCF (g-force)	23,520	24,149	24,249	25,910
Max. RPM (1248 / 1248R / 1580)	12,000	12,000	12,000	12,000
Max. RCF (g-force)	15,053	15,455	15,520	16,582

Fixed Angle Rotor, GRF-G-c50-8

- Capacity : 8 x 50 mL Conical | Max. RPM / RCF (1580R) : 13,000 / 20,784
- Max. RPM / RCF (1248 / 1248R / 1580) : 10,000 / 12,298
- Hole angle from axis during rotation : $\angle 25^\circ$
- Hole dimension ($\varnothing \times L$, mm) : 29.8 x 108.6
- Hole bottom type : Conical | Max. height for tube fit (mm) : 130
- Supplied with a lid and O-ring inserted



						
Tube						
Tube capacity (mL)	15 mL conical	25 mL conical	25 mL conical	30	50	50 mL conical
Tube Dimension ($\Phi \times L$, mm)	17 x 120	28.8 x 83	28.8 x 78.5	25.7 x 101.4	29 x 108	29.5 x 118
Adapter						None
Cat No.	GAS-c15(c50)	GAS-c25(c50)	GAS-c25(c50)	GAS-30(c50)	GAS-50(c50)	-
Adaptor hole dimension ($\Phi \times L$, mm)	17 x 105	27.1 x 14.1	27.1 x 14.1	26 x 83.8	27.9 x 11	-
Adaptor hole bottom type	Conical	Conical	Conical	Round	Round	-
Max. radius (mm)	105.2	94.1	94.1	106.4	107.3	110
Max. RPM (1580R)	13,000	13,000	13,000	13,000	13,000	13,000
Max. RCF (g-force)	19,877	17,779	17,779	20,103	20,273	20,784
Max. RPM (1248 / 1248R / 1580)	10,000	10,000	10,000	10,000	10,000	10,000
Max. RCF (g-force)	11,761	10,520	10,520	11,896	11,996	12,298

Fixed Angle Rotor, GRF-G-15-24

- Capacity : 24 x 15 mL
- Max. RPM / RCF : 8,000 / 8,872
- Hole angle from axis during rotation : $\angle 30^\circ$
- Hole dimension ($\Phi \times L, \text{mm}$) : 17.1 x 94
- Hole bottom type : Round
- Max. height for tube fit (mm) : 120
- Supplied with a lid and O-ring inserted



* Only for R model

Tube



Tube capacity (mL)	15
Tube Dimension ($\Phi \times L, \text{mm}$)	16 x 120
Max. radius (mm)	Inner 103 / Outer 124
Max. RCF (g-force)	Inner 7,370 / Outer 8,872

Fixed Angle Rotor, GRF-G-c15-12

- Capacity : 12 x 15 mL Conical
- Max. RPM / RCF (1580R) : 15,000 / 25,910
- Max. RPM / RCF (1248 / 1248R / 1580) : 12,000 / 16,582
- Hole angle from axis during rotation : $\angle 25^\circ$
- Hole dimension ($\Phi \times L, \text{mm}$) : 17.2 x 107.2
- Hole bottom type : Conical
- Max. height for tube fit (mm) : 125
- Supplied with a lid and O-ring inserted



Tube



Tube capacity (mL)	5 mL conical	5 mL conical	15 mL conical
Tube Dimension ($\Phi \times L, \text{mm}$)	16 x 59	16 x 67	17 x 120

Adapter



None

Cat No.	GAS-c5(c15)	GAS-c5(c15)	-
Adaptor hole dimension ($\Phi \times L, \text{mm}$)	14.8 x 20	14.8 x 20	-
Adaptor hole bottom type	Conical	Conical	-
Max. radius (mm)	75.8	75.8	103
Max. RPM (1580R)	15,000	15,000	15,000
Max. RCF (g-force)	19,067	19,067	25,910
Max. RPM (1248 / 1248R / 1580)	12,000	12,000	12,000
Max. RCF (g-force)	12,203	12,203	16,582

Fixed Angle Rotor, GRF-G-m2.0-30

- Capacity : 30 x 1.5/2.0 mL
- Max. RPM / RCF (1580, 1580R) : 15,000 / 24,249
- Max. RPM / RCF (1248, 1248R) : 12,000 / 15,520
- Hole angle from axis during rotation : $\angle 45^\circ$
- Hole dimension ($\varnothing \times L$, mm) : 11.1 x 39
- Hole bottom type : Round
- Max. height for tube fit (mm) : 52
- Supplied with a lid and two V-rings inserted



				
Tube				
Tube capacity (mL)	0.2	0.5	1.5/2.0	2.0 mL screw cap
Tube Dimension ($\varnothing \times L$, mm)	6 x 8	8 x 30	11 x 38	10.1 x 46
Adapter			None	None
Cat No.	GAS-m0.2(2)	GAS-m0.5(2)	-	-
Adaptor hole dimension ($\varnothing \times L$, mm)	6.5 x 23	8 x 31	-	-
Adaptor hole bottom type	Open	Open	-	-
Max. radius (mm)	79	86	96.4	96.4
Max. RPM (1580R / 1580)	15,000	15,000	15,000	15,000
Max. RCF (g-force)	19,872	21,633	24,249	24,249
Max. RPM (1248 / 1248R)	12,000	12,000	12,000	12,000
Max. RCF (g-force)	12,718	13,835	15,520	15,520

Fixed Angle Rotor, GRF-G-s0.2-64

- Capacity : 8 x 8-Tube PCR strips, 64 x 0.2 mL
- Max. RPM / RCF : 12,000 / 10,803
- Hole angle from axis during rotation : $\angle 45^\circ$
- Hole dimension ($\varnothing \times L$, mm) : 6.5 x 16
- Hole bottom type : Round
- Max. height for tube fit (mm) : 25
- Supplied with a lid



		
Tube		
Tube capacity (mL)	0.2	8-Strip tube
Tube Dimension ($\varnothing \times L$, mm)	6 x 8	6 x 8
Max. radius (mm)	Inner 58.6 Outer 67.1	Inner 58.6 Outer 67.1
Max. RPM	12,000	12,000
Max. RCF (g-force)	Inner 9,434 Outer 10,803	Inner 9,434 Outer 10,803

Angle Rotor, GRA-G-15-24

- Capacity : 24 x 15 mL
- Max. RPM / RCF : 4,000 / 3,134
- Hole angle rotation : $\angle 45^\circ$
- Hole dimension ($\varnothing \times L$, mm) : 20.4 x 14
- Supplied with 24 sleeves



15 mL Sleeve
GLB-15/10A

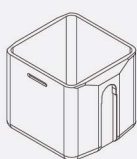
Hole dimension ($\varnothing \times L$, mm) : 18 x 87
 Max. height for tube fit (mm) : 125 (120 for conical / wider cap)
 Hole bottom type : Flat bottom with rubber pad
 Supplied with 3.0 mm thick NBR pad

Tube								
Tube capacity (mL)	2.0 ~ 4 mL VT	4 ~ 7 mL VT	5 mL conical	5 mL conical	14 mL	8 ~ 10 mL VT	15	15 mL conical
Tube Dimension ($\varnothing \times L$, mm)	13 x 75	13 x 100	16 x 59	16 x 67	15.7 x 96	16 x 100	16 x 120	17 x 120
Adapter						None	None	None
Cat No.	GAS-3(f15)	GAS-5(f15)	GAS-c5(f15)	GAS-c5(f15)	GAS-10(f15)	-	-	-
Adaptor hole dimension ($\varnothing \times L$, mm)	13.5 x 61	13.5x85	14 x 20	14 x 20	16.5 x 7	-	-	-
Adaptor hole bottom type	Round	Open	Conical	Conical	Round	-	-	-
Max. radius (mm)*	155.2	167.2	139.9	139.9	161.1	175.2	175.2	175.2
Max. RCF (g-force)*	2,776	2,990	2,503	2,503	2,882	3,134	3,134	3,134



Swing Rotor, GRS-G-r750-4

- 4 loadings
- Max. RPM : 3,600
- Angle from axis during rotation : $\angle 90^\circ$
- Supplied with a lubricant



750 mL Rectangular Bucket
GLB-r750-r750

Max. RPM / RCF : 3,600 / 2,898
Max. Radius (mm) : 175.2
Hole dimension (w x d x h, mm) : 99 x 99 x 98
Max. height for tube fit (mm) : 165
Hole bottom type : Flat

									
Tube									
Tube capacity (mL)	2.0 ~ 4 mL VT	4 ~ 7 mL VT	14 mL	8 ~ 10 mL VT	15	5 mL conical	5 mL conical	15 mL conical	50
Tube Dimension (Φ x L, mm)	13 x 75	13 x 100	15.7 x 96	16 x 100	16 x 120	16 x 59	16 x 67	17 x 120	29 x 108
Adapter									
Cat. No.	GAM-5-30(r750)	GAM-5-30(r750)	GAM-15-20(r750)	GAM-15-20(r750)	GAM-15-20(r750)	GAM-c15-16(r750)	GAM-c15-16(r750)	GAM-c15-16(r750)	GAM-50-8(r750)
Rack capacity (ea / 4)	30 / 120	30 / 120	8 / 32	20 / 80	20 / 80	16 / 64	16 / 64	16 / 64	8 / 32
Rack hole dimension (Φ x L,mm)	13 x 56.5	13 x 85	17.2 x 57	17.2 x 85	17.2 x 85	17.5 x 32	17.5 x 32	17.5 x 85	29.5 x 85
Rack hole bottom type	Round	Round	Round	Round	Round	Conical	Conical	Conical	Round
Max. height tube fit (mm)	136	136	136	136	136	139	139	139	136
Max. radius (mm)*	197	197	197	197	197	200	200	200	197
Max. RCF (g-force)*	2,894	2,894	2,894	2,894	2,894	2,898	2,898	2,898	2,854

								
Tube								
Tube capacity (mL)	25 mL conical	25 mL conical	50 mL conical	50 mL conical (skirted)	250 mL	250 mL conical	500 mL conical	500
Tube Dimension (Φ x L, mm)	28.5 x 83	28.5 x 78.5	29.5 x 118	29.5 x 118	29.5 x 118	60 x 163	96.2 x 147	73.5 x 142
Adapter				 with GAS-sc50(c50)				
Cat. No.	GAM-c50-5(r750)	GAM-c50-5(r750)	GAM-c50-5(r750)	GAM-c50-5(r750)	GAS-250 (r750)	GAS-c250 (r750)	GAS-c500 (r750)	GAS-500 (r750)
Rack capacity (ea / 4)	5 / 20	5 / 20	5 / 20	5 / 20	1 / 4	1 / 4	1 / 4	1 / 4
Rack hole dimension (Φ x L,mm)	29.5 x 58.5	29.5 x 58.5	29.5 x 85	29.5 x 67.5	62.5 x 87	61 x 93	98 x 94	74.1 x 92.5
Rack hole bottom type	Conical	Conical	Conical	Flat	Flat	Conical	Conical	Flat
Max. height tube fit (mm)	139	139	139	147.5	147	165	165	155
Max. radius (mm)*	200	200	200	151.6	197	200	200	196.5
Max. RCF (g-force)*	2,898	2,898	2,898	2,712	2,854	2,898	2,898	2,847

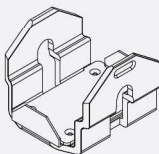


500 mL Round Bucket
GLB-500-r750

Max. RPM / RCF : 3,600 / 3,159
Max. Radius (mm) : 218
Hole dimension (Ø x L,mm) : 70 x 135
Max. height for tube fit (mm) : 172
Hole bottom type : Flat



Tube	
Tube capacity (mL)	500
Tube Dimension (Φ x L,mm)	69.5 x 170.2



Microplate Holder Bucket
GLP-mw-r750

Max. RPM / RCF : 3,600 / 2,485
Max. Radius (mm) : 171.5
Hole dimension (w x d x h,mm) : 86.5 x 128.5 x 80
Max. height for tube fit (mm) : 80
Hole bottom type : Flat bottom with Stainless steel & ABS pad



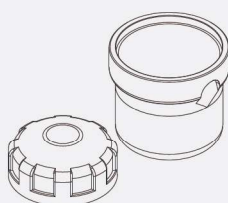
Tube		
Tube capacity (mL)	MTP	DWP
Tube Dimension (Φ x L,mm)	86 x 128 x 15	86 x 128 x 60
Bucket capacity(ea / 4)	4 / 16	1 / 4

Swing Rotor, GRS-G-750-4

- 4 loadings
- Max. RPM : 4,000
- Angle from axis during rotation : $\angle 90^\circ$
- Supplied with a lubricant


Bio-Safe

Manufacturer Validated



750 mL Round Bucket
GLBB-750-750 /
GLBB-b750-750 (with a cap)

Max. RPM / RCF : 4,000 / 3,667
 Max. Radius (mm) : 205
 Hole dimension (Ø x L, mm) : 99 x 107
 Max. height for tube fit (mm) : 140 (w / cap), 165 (w / o cap)
 Hole bottom type : Flat
 Supplied with a cap and O-ring, No cap version is available

Tube									
Tube capacity (mL)	2.0 ~ 4 mL VT	4 ~ 7 mL VT	8 ~ 10 mL VT	14 mL	15	5 mL conical	5 mL conical	15 mL conical	50
Tube Dimension (Φ x L, mm)	13 x 75	13 x 100	16 x 100	15.7 x 96	16 x 120	16 x 59	16 x 67	17 x 120	29 x 108
Adapter									
Cat. No.	GAM-5-24(750)	GAM-5-24(750)	GAM-10-21(750)	GAM-15-19(750)	GAM-15-19(750)	GAM-c15-14(750)	GAM-c15-14(750)	GAM-c15-14(750)	GAM-50-7(750)
Rack capacity (ea / 4)	24 / 96	24 / 96	21 / 84	7 / 28	19 / 76	10 / 40	10 / 40	14 / 56	7 / 28
Rack hole dimension (Φ x L, mm)	13.2 x 58	13.2 x 85	16 x 85	17.2 x 59	17.2 x 85	17 x 37	17 x 37	17 x 85	29.2 x 87
Rack hole bottom type	Round	Round	Round	Round	Round	Conical	Conical	Conical	Round
Max. height tube fit (mm)	136	136	136	136	136	140	140	140	136
Max. radius (mm)*	201	201	201	201	201	205	205	205	201
Max. RCF (g-force)*	3,595	3,595	3,595	3,595	3,595	3,667	3,667	3,667	3,595

Tube							
Tube capacity (mL)	50 mL conical	50 mL conical (skirted)	250	250 mL conical	500 mL conical	500	750
Tube Dimension (Φ x L, mm)	29.5 x 118	29.5 x 118	61.5 x 128	60 x 163	96.2 x 147	73.5 x 142	97 x 152
Adapter							None
Cat. No.	GAM-c50-5(750)	GAM-c50-5(750) with GAS-sc50(c50)	GAS-250(750)	GAS-c250(750)	GAS-c500(750)	GAS-500(750)	-
Rack capacity (ea / 4)	5 / 20	5 / 20	1 / 4	1 / 4	1 / 4	1 / 4	1 / 4
Rack hole dimension (Φ x L, mm)	29.2 x 88	29.2 x 70	62.3 x 87	60.5 x 125	95.6 x 58	75.5 x 98.7	-
Rack hole bottom type	Conical	Flat	Flat	Conical	Conical	Flat	-
Max. height tube fit (mm)	140	122	136	165	165	155	165
Max. radius (mm)*	205	190.7	201	205	205	201.5	205
Max. RCF (g-force)*	3,667	3,411	3,595	3,667	3,667	3,604	3,667

* Depending on the size of cap, there is a possibility of not fit-in.



500 mL Round Bucket
GLB-500-750

Max. RPM / RCF : 4,000 / 3,900
Max. Radius (mm) : 218
Hole dimension (Ø x L, mm) : 70 x 135
Max. height for tube fit (mm) : 172
Hole bottom type : Flat

Tube

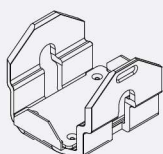


Tube capacity (mL)

500

Tube Dimension (Φ x L,mm)

69.5 x 170.2



Microplate Holder Bucket
GLP-mw-r750

Max. RPM / RCF : 4,000 / 3,068
Max. Radius (mm) : 171.5
Hole dimension (w x d x h, mm) : 86.5 x 128.5 x 80
Max. height for tube fit (mm) : 80
Hole bottom type : Flat bottom with Stainless steel & ABS pad

Tube



Tube capacity (mL)

MTP

DWP

Tube Dimension (Φ x L,mm)

86 x 128 x 15

86 x 128 x 60

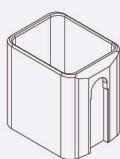
Bucket capacity(ea / 4)

4 / 16

1 / 4

Swing Rotor, GRS-G-r250-4

- 4 loadings
- Max. RPM : 4,000
- Angle from axis during rotation: $\angle 90^\circ$
- Supplied with a lubricant

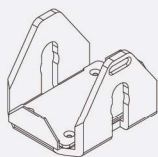


250 mL Rectangular Bucket
GLB-r250-r250

Max. RPM / RCF : 4,000 / 3,134
Max. Radius (mm) : 175.2
Hole dimension (w x d x h, mm) : 86 x 70.3 x 98.5
Max. height for tube fit (mm) : 130
Hole bottom type : Flat

Tube								
Tube capacity (mL)	1.5/2.0	2.0 ~ 4 mL VT	4 ~ 7 mL VT	14 mL	8 ~ 10 mL VT	15	15 mL conical	50
Tube Dimension (Φ x L, mm)	11 x 38	13 x 75	13 x 100	15.7 x 96	16 x 100	16 x 120	17 x 120	29 x 108
Adapter								
Cat. No.	GAM-m2.0- 20(r250)	GAM-5- 12(r250)	GAM-5- 12(r250)	GAM-15- 12(r250)	GAM-15- 12(r250)	GAM-15- 12(r250)	GAM-c15- 9(r250)	GAM-50- 4(r250)
Rack capacity (ea / 4)	20 / 80	12 / 48	12 / 48	6 / 24	12 / 48	12 / 48	9 / 36	4 / 16
Rack hole dimension (Φ x L, mm)	11.3 x 39	13.5 x 58	13.5 x 80	17.5 x 59	17.5 x 90	17.5 x 90	17.5 x 90	30.2 x 90
Rack hole bottom type	Round	Round	Round	Round	Round	Round	Conical	Round
Max. height tube fit (mm)	115	120	120	120	120	120	120	120
Max. radius (mm)*	170	173.2	173.2	173.2	173.2	173.2	175.2	173.2
Max. RCF (g-force)*	3,041	3,095	3,095	3,095	3,095	3,095	3,134	3,095

Tube							
Tube capacity (mL)	25mL conical	25mL conical	50 mL conical	50 mL conical (skirted)	15	85	250 mL
Tube Dimension (Φ x L, mm)	28.5 x 83	28.5 x 78.5	29.5 x 118	29.5 x 118	16 x 120	38 x 106	61.5 x 128
Adapter							
Cat. No.	GAM-c50- 3(r250)	GAM-c50- 3(r250)	GAM-c50- 3(r250)	GAM- sc50(r250)	GAM-85- 2(r250)	GAM-85- 2(r250)	GAS- 250(r250)
Rack capacity (ea / 4)	3 / 12	3 / 12	3 / 12	4/16	2 / 8	2 / 8	1 / 4
Rack hole dimension (Φ x L, mm)	30.5 x 60	30.5 x 60	30.5 x 90	29.8 x 93.5	17 x 86.5	38.5 x 86.5	62.5 x 87
Rack hole bottom type	Conical	Conical	Conical	Flat	Round	Round	Flat
Max. height tube fit (mm)	120	120	120	126	120	120	130
Max. radius (mm)*	175.2	175.2	175.2	172	172.5	172.5	173
Max. RCF (g-force)*	3,134	3,134	3,134	3,077	3,086	3,086	3,095



Microplate Holder Bucket
GLP-mw-r250

Max. RPM / RCF : 4,000 / 2,737
Max. Radius (mm) : 153
Hole dimension (w x d x h,mm) : 86.5 x 128.5 x 80
Max. height for tube fit (mm) : 80
Hole bottom type : Flat bottom with Stainless steel & ABS pad

		
Tube		
Tube capacity (mL)	MTP	DWP
Tube Dimension (Φ x L,mm)	86 x 128 x 15	86 x 128 x 60
Bucket capacity(ea / 4)	4 / 16	1 / 4



Swing Rotor, GRS-G-250-4

- 4 loadings
- Max. RPM : 5,000
- Angle from axis during rotation : $\angle 90^\circ$
- Supplied with a lubricant



250 mL Round Bucket
GLB-250-250

Max. RPM / RCF : 5,000 / 5,394
Max. Radius (mm) : 193
Hole dimension (Ø x L, mm) : 62 x 109
Max. height for tube fit (mm) : 153
Hole bottom type : Flat

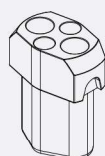
Tube									
Tube capacity (mL)	1.5 ~ 2.0	2.0 mL screw cap	5 mL conical	5 mL conical	4 ~ 7 mL VT	8 ~ 10 mL VT	15	15 mL conical	25 mL conical
Tube Dimension (Φ x L, mm)	11 x 38	10.1x46	16 x 59	16 x 67	13 x 75	16 x 100	16 x 120	17 x 120	28.5 x 83
Adapter									
Cat. No.	GAM-m2.0-9(250)	GAM-m2.0-9(250)	GAM-c5-4(250)	GAM-c5-4(250)	GAM-7-8(250)	GAM-10-7(250)	GAM-15-4(250)	GAM-c15-4(250)	GAS-c25(250)
Rack capacity (ea / 4)	9 / 36	9 / 36	4/16	4/16	8 / 32	7 / 28	4 / 16	4 / 16	1 / 4
Rack hole dimension (Φ x L, mm)	11 x 39	11 x 39	17.2 x 52	17.2 x 52	13.5 x 60	16 x 80	17.5 x 103.5	17.2 x 106.5	29.5 x 61.5
Rack hole bottom type	Round	Round	Conical	Conical	Round	Round	Round	Conical	Conical
Max. height tube fit (mm)	150	150	153	153	150	150	150	153	153
Max. radius (mm)*	190	190	193	193	190	190	190	193	193
Max. RCF (g-force)*	5,311	5,311	5,394	5,394	5,311	5,311	5,311	5,394	5,394
Tube									
Tube capacity (mL)	25mL conical	30	50	50 mL conical	50mL conical (Skirted)	85	100	250 mL conical	250
Tube Dimension (Φ x L, mm)	28.5 x 78.5	25.7 x 101.4	29 x 108	29.5 x 118	29.5 x 118	38 x 106	44 x 115	60 x 163	61.5 x 128
Adapter									None
Cat. No.	GAS-c25(250)	GAM-30-3(250)	GAM-50-2(250)	GAS-c50(250)	GAS-sc50(250)	GAS-85(250)	GAS-100(250)	GAS-c250(250)	-
Rack capacity (ea / 4)	1 / 4	3 / 12	2 / 8	1 / 4	1 / 4	1 / 4	1 / 4	1 / 4	1 / 4
Rack hole dimension (Φ x L, mm)	29.5 x 61.5	26 x 85	29.5 x 90	29.8 x 98	29.8 x 93	38.5 x 96	44.2 x 93	61.5 x 44.5	-
Rack hole bottom type	Conical	Round	Round	Conical	Flat	Round	Round	Conical	-
Max. height tube fit (mm)	153	148	148	153	148	148	148	153	153
Max. radius (mm)*	193	188	188	193	188	188	188	193	193
Max. RCF (g-force)*	5,394	5,255	5,255	5,394	5,255	5,255	5,255	5,394	5,394



60 mL Syringe Bucket
GLB-60-250

Max. RPM / RCF : 5,000 / 5,394
Max. Radius (mm) : 193
Hole dimension (Ø x L,mm) : 31.9 x 130.2
Max. height for tube fit (mm) : 162
Hole bottom type : Flat

Tube			
Tube capacity (mL)	10 mL syringe	20 mL syringe	60 mL syringe
Tube Dimension (Φ x L, mm)	16.5 x 108	21.5 x 112	29.6x160
Adapter			
Cat No.	GAS-10s(60)	GAS-20s(60)	GAS-60s(60)
Adaptor hole dimension (Φ x L, mm)	16.7 x 84	21.8 x 92	31.6 x 29.1
Adaptor hole bottom type	Conical / Flat	Conical / Flat	Conical / Open
Max. radius (mm)	167.2	169.9	193
Max. RCF (g-force)	4,673	4,749	5,394



10 mL / 20 mL Dual Syringe Bucket
GLB-d20/10-250

Max. RPM / RCF : 5,000 / 4,752 / 4,472
Max. Radius (mm) : 170 (20 mL) / 160 (10 mL)
Hole dimension (Ø x L, mm) : 22.5 x 100 (20 mL) / 16 x 90 (10 mL)
Max. height for tube fit (mm) : 132 (20 mL) / 125 (10 mL)
Hole bottom type : Flat

Tube		
Tube capacity (mL)	10 mL syringe	20 mL syringe
Tube Dimension (Φ x L,mm)	16.5 x 108	21.5 x 112
Adapter		
Cat No.	GAS-10s(10)	GAS-20s(20)
Adaptor hole dimension (Φ x L, mm)	16.5 x 13.6	22 x 16.6
Adaptor hole bottom type	Conical / Open	Conical / Open
Max. radius (mm)	160	170
Max. RCF (g-force)	4,472	4,752

Swing Rotor, GRS-G-100-6

- 6 loadings
- Max. RPM : 4,000
- Angle from axis during rotation: $\angle 90^\circ$
- Supplied with a lubricant


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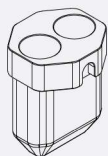
100 mL Bucket with a Cap
GLBB-b100-100

Max. RPM / RCF : 4,000 / 3,105
 Max. Radius (mm) : 173.6
 Hole dimension (Ø x L, mm) : 47 x 99
 Max. height for tube fit (mm) : 120 (w/ cap) / 130 (w/o cap)
 Hole bottom type : Flat
 Supplied with a cap and O-ring, No cap version is available

									
Tube									
Tube capacity (mL)	1.5 ~ 2.0	2.0 mL screw cap	5 mL conical	5 mL conical	2.6 ~ 7	4 ~ 10	15	15 mL conical	15 mL conical
Tube Dimension (Φ x L, mm)	11 x 38	10.1x46	16 x 59	16 x 67	13 x 75	16 x 100	16 x 120	17 x 120	17 x 120
Adaptor									
Cat. No.	GAM-m2.0-6 (b100)	GAM-m2.0-6 (b100)	GAM-c5-3(b100)	GAM-c5-3(b100)	GAM-7-5(b100)	GAM-10-5(b100)	GAM-c15-9(b100)	GAM-c15-3 (b100)	GAS-c15(b100)
Rack capacity (ea / 6)	6 / 36	6 / 36	3 / 18	3 / 18	5 / 30	5 / 30	3 / 18	3 / 18	1 / 6
Rack hole dimension (Φ x L,mm)	11 x 39	11 x 39	17.2 x 52	17.2 x 52	13.5 x 60	16 x 60	17.5 x 105	17.2 x 106.5	17.2 x 106.5
Rack hole bottom type	Round	Round	Conical	Conical	Flat	Flat	Flat	Conical	Conical
Max. height tube fit (mm)	115	115	75	75	115	115	120	120	120
Max. radius (mm)*	168.6	168.6	110.1	110.1	168.6	168.6	170.6	173.6	173.6
Max. RCF (g-force)*	3,016	3,016	1,969	1,969	3,016	3,016	3,052	3,105	3,105

								
Tube								
Tube capacity (mL)	25 mL conical	25 mL conical	30	50	50 mL conical	50 mL conical (Skirted)	85	100
Tube Dimension (Φ x L, mm)	28.8 x 83	28.8 x 78.5	25.7 x 101.4	29 x 108	29.5 x 118	29.5 x 118	38 x 106	44 x 115
Adapter								
Cat. No.	GAS-c25(b100)	GAS-c25(b100)	GAS-30(b100)	GAS-50(b100)	GAS-c50(b100)	GAS-sc50(b100)	GAS-85(b100)	GAS-100(b100)
Rack capacity (ea / 6)	1 / 6	1 / 6	1 / 6	1 / 6	1 / 6	1 / 6	1 / 6	1 / 6
Rack hole dimension (Φ x L,mm)	17.2x52	17.2x52	26x86	29.5 x 95.9	30 x 100	29.8x100	38.5 x 96.4	44.2 x 93
Rack hole bottom type	Conical	Conical	Round	Conical	Conical	Flat	Round	Round
Max. height tube fit (mm)	118	118	118	118	120	120	118	118
Max. radius (mm)*	172.1	172.1	172.1	171.6	171.6	171.6	172.1	168.6
Max. RCF (g-force)*	3,079	3,079	3,079	2,737	2,737	2,737	3,079	3,016

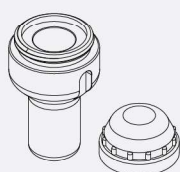
Table-top High-speed Centrifuge



50 mL Conical Bucket
GLB-dc50-100

Max. RPM / RCF : 4,000 / 3,105
Max. Radius (mm) : 173.6
Hole dimension (Ø x L, mm) : 30 x 89
Max. height for tube fit (mm) : 125
Hole bottom type : Conical

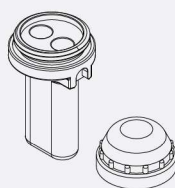
Tube						
Tube capacity (mL)	15 mL conical	25 mL conical	25 mL conical	30	50	50 mL conical
Tube Dimension (Φ x L, mm)	17 x 120	28.8 x 83	28.8 x 78.5	25.7 x 101.4	29 x 108	29.5 x 118
Adapter						None
Cat No.	GAS-c15(50)	GAS-c25(c50)	GAS-c25(c50)	GAS-30(c50)	GAS-50(c50)	-
Bucket capacity(ea / 6)	2/12	2/12	2/12	2/12	2/12	2/12
Adaptor hole dimension (Φ x L,mm)	17 x 105	27.1 x 14.1	27.1 x 14.1	26 x 83.8	27.9 x 11	-
Adaptor hole bottom type	Conical	Conical	Conical	Round	Round	-
Max. radius (mm)	171	137	137	162.4	162.6	173.6
Max. RCF (g-force)	3,059	2,451	2,451	2,905	2,909	3,105



50 mL Bucket with a Cap
GLB-b50-100

Max. RPM / RCF with : 4,000 / 3,032
Max. Radius (mm) : 169.5
Hole dimension (Ø x L, mm) : 30.5 x 97
Max. height for tube fit (mm) : 120 (w/ cap) / 125 (w/o cap)
Hole bottom type : Flat bottom with rubber pad
Supplied with a cap and O-ring, No cap version is available

Tube									
Tube capacity (mL)	14 mL	15	15 mL conical	25 mL conical	25 mL conical	30	50 mL conical	50 mL conical (Skirt)	50
Tube Dimension (Φ x L, mm)	15.7 x 96	16 x 120	17 x 120	28.8 x 83	28.8 x 78.5	25.7 x 101.4	29.5 x 118	29.5 x 118	29 x 108
Adapter								None	None
Cat No.	GAS-u14(f50)	GAS-u15(f50)	GAS-u15(f50)	GAS-c25(f50)	GAS-c25(f50)	GAS-30(f50)	GAS-c50(f50)	-	-
Adaptor hole dimension (Φ x L,mm)	17.2 x 75	17.2 x 87	17.2 x 87	27.1 x 14.1	27.1 x 14.1	26 x 86.5	29.5 x 17.5	-	-
Adaptor hole bottom type	Open	Open	Open	Conical	Conical	Round	Conical	-	-
Max. radius (mm)*	169.5	169.5	169.5	135.7	135.7	160.7	169.5	169.5	169.5
Max. RCF (g-force)*	3,032	3,032	3,032	2,427	2,427	2,875	3,032	3,032	3,032

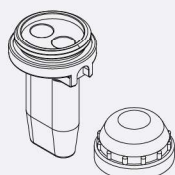


**15 mL Dual Round Bucket
with a Cap
GLB-bd15-100**

Max. RPM / RCF : 4,000 / 3,032
 Max. Radius (mm) : 169.5
 Hole dimension (Ø x L, mm) : 17 x 87
 Max. height for tube fit (mm) : 123 (w/ cap) / 127 (w/o cap)
 Hole bottom type : Round
 Supplied with a cap and O-ring

Tube			
Tube capacity (mL)	15 mL glass	15 mL open top	15
Tube Dimension (Φ x L, mm)	16 x 100	16 x 114	16 x 120
Bucket capacity (ea / 6)	2 / 12	2 / 12	2 / 12
Max. height tube fit (mm)	123	123	123
Max. radius (mm)	169.5	169.5	169.5
Max. RCF (g-force)	3,032	3,032	3,032

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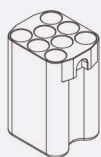


**15 mL Dual Conical Bucket
with a Cap
GLBB-bdc15-100**

Max. RPM / RCF : 4,000 / 3,105
 Max. Radius (mm) : 173.6
 Hole dimension (Ø x L, mm) : 17 x 97.5
 Max. height for tube fit (mm) : 120 (w/ cap) / 125 (w/o cap)
 Hole bottom type : Conical
 Supplied with a cap and O-ring, No cap version is available

Tube				
Tube capacity (mL)	5 mL conical	5 mL conical	14 mL	15 mL conical
Tube Dimension (Φ x L, mm)	16 x 59	16 x 67	15.7 x 96	17 x 120
Adapter				None
Cat No.	GAS-c5(c15)	GAS-c5(c15)	GAS-14(c15)	-
Bucket capacity (ea / 6)	2 / 12	2 / 12	2 / 12	2 / 12
Adaptor hole dimension (Φ x L, mm)	14.8 x 20	14.8 x 20	16 x 7.8	-
Adaptor hole bottom type	Conical	Conical	Round	-
Max. radius (mm)	120.5	120.5	156.5	173.6
Max. RCF (g-force)	2,156	2,156	2,799	3,105

Table-top High-speed Centrifuge



Vacutainer 10 mL Bucket
GLB-15-8-100

Max. RPM / RCF : 4,000 / 3,059
Max. Radius (mm) : 171
Hole dimension (Ø x L, mm) : 17 x 86
Hole bottom type : Flat with rubber pad
Max. height for tube fit (mm) : 115
Supplied with 3.0 mm thick NBR rubber pad

Tube									
Tube capacity (mL)	2.0 ~ 4 mL VT	4 ~ 7 mL VT	5 mL conical	5 mL conical	14 mL	8 ~ 10 mL VT	15 mL glass	15 mL open top	15
Tube Dimension (Φ x L, mm)	13 x 75	13 x 100	16 x 59	16 x 67	15.7 x 96	16 x 100	16 x 100	16 x 114	16 x 120
Adapter						None	None	None	None
Cat No.	GAS-3(f15)	GAS-5(f15)	GAS-c5(f15)	GAS-c5(f15)	GAS-14(f15)	-	-	-	-
Bucket capacity (ea / 6)	8 / 48	8 / 48	4 / 24	4 / 24	4 / 24	8 / 48	8 / 48	8 / 48	2 / 12
Adaptor hole dimension (Φ x L, mm)	13.5 x 61	13.5 x 85	14 x 20	14 x 20	16.5 x 7	-	-	-	-
Adaptor hole bottom type	Round	Open	Conical	Conical	Round	-	-	-	-
Max. height tube fit (mm)	88	115	75	75	103.5	115	115	115	125(center)
Max. radius (mm)*	144	171	130	130	159.5	171	171	171	171
Max. RCF (g-force)*	2,576	3,059	2,325	2,325	2,853	3,059	3,059	3,059	3,059



1696R Table-top High-speed Centrifuge



Features

- Speed : 16,000 rpm (27,590 xg); 5,000 rpm (5,374 xg)
- Motorized lid mechanics enabling a gentle touch for the lid's opening and closure
- Single action fastening of fixed angel rotor to motor shaft with lid coupling.
- Highly visible display screen and numeric keys with integrated soft touch buttons for easy maintenance and quick setting
- Fast cooling allowing a temperature drop to 4°C within 5 minutes : function for quick start of cooled samples
- Equipped with a side tool box

Technical Specifications

Max. RPM/PCF for Fixed Angle	16,000 rpm / 27,590 xg	RCF/RPM Conversion	Yes
Max. RPM/PCF for Swing-out	5,000 rpm / 5,394 xg	ACC/DEC Ramps	9/10
Max. Capacity for Fixed Angle	6 x 250 mL, 24 x 15 mL, 48 x 1.5/2.0 mL, 20 x 5.0 mL	Program Memory	100, 4 easy program save/call
Max. Capacity for Swing-out	4 x 1,000 mL, 4 x 2 x 250 mL, 4 x 29 x 15 mL	Power Supply	AC 230V, 50Hz (AC 220-230V, 60/50Hz; 110V optional)
Temp. Range (°C)	-11°C to 40°C	Power Requirement	2.0 kVA
Fast Cool Button	Yes	Dimension (W x D x H)	775 x 695 x 395 mm
Time Control	Pulse, timed <10 hr or continuous	Net Weight	116 kg
Time Counting Range	Selectable, at set speed or from starting	CE MARK	Yes
Noise Level (dependent on rotor)	≤60 dB (GRS-B-750-4 : ≤70 dB)	Cat No.	GZ-1696R

Fixed Angle Rotor, GRF-B-250-6

- Capacity : 6 x 250 mL plus 6 x 15 mL
- Max. RPM / RCF 8,500 / (9,144; 8,293)
- Hole angle from axis during rotation : $\angle 25^\circ$
- Hole dimension ($\varnothing \times L, \text{mm}$) : 62 x 100 (250 mL) / 17.1 x 94 (15 mL)
- Hole bottom type : Flat (250 mL) / Round (15 mL)
- Max. height for tube fit (mm) : 130 (250 mL) / 120 (15 mL)
- Supplied with a lid with protruding screw for coupling into motor shaft



Tube		
Tube capacity (mL)	15	250
Tube Dimension ($\varnothing \times L, \text{mm}$)	16 x 120	61.5 x 128
Max. radius (mm)	131.3	134
Max. RCF (g-force)	9,395	9,588

Fixed Angle Rotor, GRF-B-85-6

- Capacity : 6 x 85 mL
- Max. RPM / RCF : 12,000 / 16,019
- Hole angle from axis during rotation : $\angle 25^\circ$
- Hole dimension ($\varnothing \times L, \text{mm}$) : 38.5 x 100
- Hole bottom type : Round
- Max. height for tube fit (mm) : 125
- Supplied with a lid with protruding screw for coupling into motor shaft
- Two rubber O-rings inserted



Tube								
Tube capacity (mL)	15	15 mL conical	25 mL conical	25 mL conical	30	50	50 mL conical	85 mL
Tube Dimension ($\varnothing \times L, \text{mm}$)	16 x 120	17 x 120	28.8 x 83	28.8 x 78.5	25.7 x 101.4	29 x 108	29.5 x 118	38 x 106
Adapter								None
Cat No.	GAS-15(85)	GAS-c15(85)	GAS-c25(85)	GAS-c25(85)	GAS-30(85)	GAS-50(85)	GAS-c50(85)	-
Adaptor hole dimension ($\varnothing \times L, \text{mm}$)	17 x 94	17 x 98	29.5 x 62.5	29.5 x 62.5	26 x 85.4	29 x 95	29.5 x 98	-
Adaptor hole bottom type	Round	Conical	Conical	Conical	Round	Round	Conical	-
Max. radius (mm)*	92.5	90.5	80.9	80.9	92.2	93.5	91.5	99.5
Max. RCF (g-force)*	14,843	14,570	13,024	13,024	14,843	15,053	14,731	16,019

Fixed Angle Rotor, GRF-B-50-8

- Capacity : 8 x 50 mL
- Max. RPM / RCF : 15,000 / 25,910
- Hole angle from axis during rotation : $\angle 30^\circ$
- Hole dimension ($\varnothing \times L$, mm) : 29.5 x 93.2
- Hole bottom type : Round
- Max. height for tube fit (mm) : 120
- Supplied with a lid with protruding screw for coupling into motor shaft
- Two rubber O-rings inserted



Tube						
Tube capacity (mL)	15	15 mL conical	25 mL conical	25 mL conical	30	50
Tube Dimension ($\Phi \times L$, mm)	16 x 120	17 x 120	28.8 x 83	28.8 x 78.5	25.7 x 101.4	29 x 108
Adapter						None
Cat No.	GAS-15(50)	GAS-c15(50)	GAS-c25(50)	GAS-c25(50)	GAS-30(50)	-
Adaptor hole dimension ($\Phi \times L$, mm)	17 x 94	17 x 105	27.1 x 14.1	27.1 x 14.1	26 x 83.8	-
Adaptor hole bottom type	Round	Conical	Conical	Conical	Round	-
Max. radius (mm)	93.5	96	81	81	96.5	103
Max. RCF (g-force)	23,520	24,149	20,376	20,376	24,275	25,910

Fixed Angle Rotor, GRF-B-c50-8

- Capacity : 8 x 50 mL Conical
- Max. RPM / RCF : 13,000 / 20,784
- Hole angle from axis during rotation : $\angle 25^\circ$
- Hole dimension ($\varnothing \times L$, mm) : 29.8 x 108.6
- Hole bottom type : Conical
- Max. height for tube fit (mm) : 130
- Supplied with a lid with protruding screw for coupling into motor shaft
- Two rubber O-rings inserted



Tube						
Tube capacity (mL)	15 mL conical	25 mL conical	25 mL conical	30	50	50 mL conical
Tube Dimension ($\Phi \times L$, mm)	17 x 120	28.8 x 83	28.8 x 78.5	25.7 x 101.4	29 x 108	29.5 x 118
Adapter						None
Cat No.	GAS-c15(c50)	GAS-c25(c50)	GAS-c25(c50)	GAS-30(c50)	GAS-50(c50)	-
Adaptor hole dimension ($\Phi \times L$, mm)	17 x 105	27.1x14.1	27.1x14.1	26x83.8	27.9 x 11	-
Adaptor hole bottom type	Conical	Conical	Conical	Round	Round	Round
Max. radius (mm)	105.2	94.1	94.1	106.4	107.3	110
Max. RCF (g-force)	19,877	17,779	17,779	20,103	20,273	20,784

Fixed Angle Rotor, GRF-B-15-24

- Capacity : 24 x 15 mL
- Max. RPM / RCF : 8,000 / 8,872
- Hole angle from axis during rotation : $\angle 30^\circ$
- Hole dimension ($\varnothing \times L$, mm) : 17.1 x 94
- Hole bottom type : Round
- Max. height for tube fit (mm) : 120
- Supplied with a lid with protruding screw for coupling into motor shaft
- Two rubber O-rings inserted



Tube	
Tube capacity (mL)	15
Tube Dimension ($\varnothing \times L$, mm)	16 x 120
Max. radius (mm)	Inner 103 / Outer 124
Max. RCF (g-force)	Inner 7,370 / Outer 8,872

Fixed Angle Rotor, GRF-B-c15-12

- Capacity : 12 x 15 mL Conical
- Max. RPM / RCF : 15,000 / 25,910
- Hole angle from axis during rotation : $\angle 25^\circ$
- Hole dimension ($\varnothing \times L$, mm) : 17.2 x 107.2
- Hole bottom type : Conical
- Max. height for tube fit (mm) : 125
- Supplied with a lid with protruding screw for coupling into motor shaft
- Two rubber O-rings inserted



			
Tube			
Tube capacity (mL)	5 mL conical	5 mL conical	15 mL conical
Tube Dimension ($\varnothing \times L$, mm)	16 x 59	16 x 67	17 x 120
			None
Adapter			
Cat No.	GAS-c5(c15)	GAS-c5(c15)	-
Adaptor hole dimension ($\varnothing \times L$, mm)	14.8 x 20	14.8 x 20	-
Adaptor hole bottom type	Conical	Conical	-
Max. radius (mm)	75.8	75.8	103
Max. RCF (g-force)	19,067	19,067	25,910

Fixed Angle Rotor, GRF-B-m5.0-20

- Capacity : 20 x 5.0 mL
- Max. RPM / RCF : 13,500 / 22,209
- Hole angle from axis during rotation : $\angle 45^\circ$
- Hole dimension ($\varnothing \times L$, mm) : 17 x 53
- Hole bottom type : Conical
- Max. height for tube fit (mm) : 68
- Supplied with a lid with protruding screw for coupling into motor shaft
- Two rubber O-rings inserted



		
Tube		
Tube capacity (mL)	5.0	5.0
Tube Dimension ($\Phi \times L$, mm)	16 x 59	16 x 67
Max. radius (mm)	109	109
Max. RCF (g-force)	22,209	22,209

Fixed Angle Rotor, GRF-B-m2.0-48

- Capacity : 48 x 1.5/2.0 mL (24 outer, 24 inner)
- Max. RPM / RCF : 15,000 / 24,602
- Hole angle from axis during rotation : $\angle 45^\circ$
- Hole dimension ($\varnothing \times L$, mm) : 11.1 x 39
- Hole bottom type : Round
- Max. height for tube fit (mm) : 52
- Supplied with a lid with protruding screw for coupling into motor shaft
- Two rubber O-rings inserted



					
Tube					
Tube capacity (mL)	0.2	0.5	1.5/2.0	2.0 mL filter tube	2.0 mL screw cap
Tube Dimension ($\Phi \times L$, mm)	6 x 8	8 x 30	11 x 38	11 x 38	10.1 x 46
Adapter			None	None	None
Cat No.	GAS-m0.2(2)	GAS-m0.5(2)	GAS-m0.5(2)	-	-
Adaptor hole dimension ($\Phi \times L$, mm)	6.5 x 23	8 x 31	8 x 31	-	-
Adaptor hole bottom type	Open	Open	Open	-	-
Max. radius (mm)*	Inner : 67 Outer : 80.5	Inner : 74 Outer : 87.5	Inner : 84.3 Outer : 97.8	Inner : 84.3	Inner : 84.3 Outer : 97.8
Max. RCF (g-force)*	Inner : 16,854 Outer : 20,250	Inner : 18,615 Outer : 22,011	Inner : 21,206 Outer : 24,602	Inner : 21,206	Inner : 21,206 Outer : 24,602

Fixed Angle Rotor, GRF-B-m2.0-30

- Capacity : 30 x 1.5/2.0 mL
- Max. RPM / RCF : 16,000 / 27,590
- Hole angle from axis during rotation : $\angle 45^\circ$
- Hole dimension ($\varnothing \times L$, mm) : 11.1 x 39
- Hole bottom type : Round
- Max. height for tube fit (mm) : 52
- Supplied with a lid with protruding screw for coupling into motor shaft
- Two rubber O-rings inserted



				
Tube				
Tube capacity (mL)	0.2	0.5	1.5/2.0	2.0 mL screw cap
Tube Dimension ($\varnothing \times L$, mm)	6 x 8	8 x 30	11 x 38	10.1 x 46
			None	None
Adapter				
Cat No.	GAS-m0.2(2)	GAS-m0.5(2)	-	-
Adaptor hole dimension ($\varnothing \times L$, mm)	6.5 x 23	8 x 31	-	-
Adaptor hole bottom type	Open	Open	-	-
Max. radius (mm)	79	86	96.4	96.4
Max. RCF (g-force)	22,610	24,614	27,590	27,590

Fixed Angle Rotor, GRF-B-s0.2-64

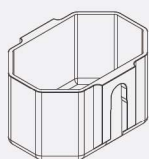
- Capacity : 8 x 8-Tube PCR strips, 64 x 0.2 mL
- Max. RPM / RCF : 12,000 / 10,803
- Hole angle from axis during rotation : $\angle 45^\circ$
- Hole dimension ($\varnothing \times L$, mm) : 6.5 x 16
- Hole bottom type : Round
- Max. height for tube fit (mm) : 25
- Supplied with a lid



		
Tube		
Tube capacity (mL)	0.2	8-Strip tube
Tube Dimension ($\varnothing \times L$, mm)	6 x 8	6 x 8
Max. radius (mm)	Inner 58.6 Outer 67.1	Inner 58.6 Outer 67.1
Max. RPM	12,000	12,000
Max. RCF (g-force)	Inner 9,434 Outer 10,803	Inner 9,434 Outer 10,803

Swing Rotor, GRS-B-1000-4

- 4 loadings
- Max. RPM : 3,700
- Angle from axis during rotation : $\angle 90^\circ$
- Rotor dimension / weight ($\varnothing \times L$, mm / g) : 337 x 83 / 5,120
- Supplied with a lubricant

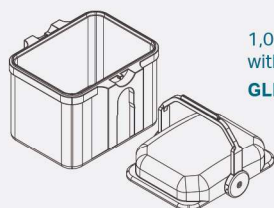


1,000 mL Hi-capacity Bucket,
GLB-h1000-1000

Max. RPM / RCF : 3,700 / 3,092
 Max. Radius (mm) : 202
 Hole dimension (w x d x h, mm) : 110 x 168.7 x 95
 Max. height for tube fit (mm) : 160
 Hole bottom type : Flat

Tube							
Tube capacity (mL)	2.0 ~ 4 mL VT	4 ~ 7 mL VT	8 ~ 10 mL VT	14 mL	15	15 mL conical	50
Tube Dimension ($\Phi \times L$, mm)	13 x 75	13 x 100	16 x 100	15.7 x 96	16 x 120	17 x 120	29 x 108
Adapter							
Cat. No.	GAM-5-48(h1000)	GAM-5-48(h1000)	GAM-10-38(h1000)	GAM-10-38(h1000)	GAM-15-29(h1000)	GAM-c15-29(h1000)	GAM-50-13(h1000)
Rack capacity (ea / 4)	48 / 192	48 / 192	38 / 152	18 / 72	29 / 116	29 / 116	13 / 52
Rack hole dimension ($\Phi \times L$, mm)	13.2 x 50	13.2 x 85	16 x 85	16 x 40	17.2 x 85	17 x 90	29.2 x 87
Rack hole bottom type	Round	Round	Round	Round	Round	Conical	Round
Max. height tube fit (mm)	125	125	125	125	130	130	130
Max. radius (mm)*	192	192	192	192	198	202	198
Max. RCF (g-force)*	2,939	2,939	2,939	2,939	3,030	3,092	3,030

Tube			
Tube capacity (mL)	50 mL conical	50 mL conical (skirted)	250
Tube Dimension ($\Phi \times L$, mm)	29.5 x 118	29.5 x 118	61.5 x 128
Adapter		 with GAS-sc50(c50)	
Cat. No.	GAM-c50-13(h1000)	GAM-c50-13(h1000)	GAM-250-2(h1000)
Rack capacity (ea / 4)	13 / 52	9 / 36	2 / 8
Rack hole dimension ($\Phi \times L$, mm)	29.5 x 92.5	29.5 x 78	62 x 87
Rack hole bottom type	Conical	Flat	Flat
Max. height tube fit (mm)	130	143	155
Max. radius (mm)*	202	184.5	198
Max. RCF (g-force)*	3,092	2,824	3,030

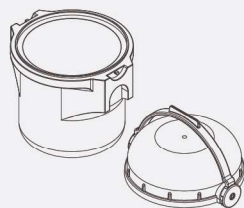


1,000 mL Rectangular Bucket
with a Click seal cap
GLB- br1000-1000

Max. RPM / RCF : 3,700 / 3,084
Max. Radius (mm) : 201.5
Hole dimension (w x d x h, mm) : 97 x 134 x 98
Max. height for tube fit (mm) : 125 (w / cap), 143 (w / o cap)
Hole bottom type : Flat
Supplied with a cap and O-ring, No cap version is also available

Tube							
Tube capacity (mL)	2.0 ~ 4 mL VT	4 ~ 7 mL VT	8 ~ 10 mL VT	15	15 mL conical	50	50 mL conical
Tube Dimension (Φ x L, mm)	13 x 75	13 x 100	16 x 100	16 x 120	17 x 120	29 x 108	29.5 x 118
Adapter							
Cat. No.	GAM-5-40(r1000)	GAM-5-40(r1000)	GAM-10-35(r1000)	GAM-15-28(r1000)	GAM-c15-22(r1000)	GAM-50-11(r1000)	GAM-c50-10(r1000)
Rack capacity (ea / 4)	40 / 160	40 / 160	35 / 140	28 / 112	22 / 88	11 / 44	10 / 40
Rack hole dimension (Φ x L, mm)	13.2 x 55	13.2 x 80	16 x 80	17.2 x 85	17 x 90	29.2 x 87	29.5 x 92.5
Rack hole bottom type	Round	Round	Round	Round	Conical	Round	Conical
Max. height tube fit (mm)	116	116	118	120	120	118	120
Max. radius (mm)*	193	193	198.5	198.5	201.5	198.5	201.5
Max. RCF (g-force)*	2,954	2,954	3,038	3,038	3,084	3,038	3,084

Tube			
Tube capacity (mL)	50 mL conical (skirted)	MTP	DWP
Tube Dimension (Φ x L, mm)	29.5 x 118	86 x 128 x 15	86 x 128 x 60
Adapter			
Cat. No.	GAM-c50-10(r1000)	GLP-mw-r1000	GLP-mw-r1000
Rack capacity (ea / 4)	10 / 40	6 / 24	1 / 4
Rack hole dimension (Φ x L, mm)	29.5 x 75	86 x 128.5	86 x 128.5
Rack hole bottom type	Flat	Flat	Flat
Max. height tube fit (mm)	120	92	92
Max. radius (mm)*	184	196.5	196.5
Max. RCF (g-force)*	2,816	3,008	3,008



1,000 mL Round Bucket
with a Click seal cap
GLB-b1000-1000

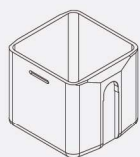
Max. RPM / RCF : 3,700 / 3,337
Max. Radius (mm) : 218
Hole dimension (Ø x L, mm) : 99 x 120
Max. height for tube fit (mm) : 155 (w / cap), 170 (w / o cap)
Hole bottom type : Flat
Supplied with a cap and O-ring, No cap version is also available

Tube									
Tube capacity (mL)	2.0 ~ 4 mL VT	4 ~ 7 mL VT	8 ~ 10 mL VT	14 mL	15	5 mL conical	5 mL conical	15 mL conical	50
Tube Dimension (Φ x L, mm)	13 x 75	13 x 100	16 x 100	15.7 x 96	16 x 120	16 x 59	16 x 67	17 x 120	29 x 108
Adapter									
Cat. No.	GAM-5-24(750)	GAM-5-24(750)	GAM-10-21(750)	GAM-15-19(750)	GAM-15-19(750)	GAM-c15-14(750)	GAM-c15-14(750)	GAM-c15-14(750)	GAM-50-7(750)
Rack capacity (ea / 4)	24 / 96	24 / 96	21 / 84	7 / 28	19 / 76	10 / 40	10 / 40	14 / 56	7 / 28
Rack hole dimension (Φ x L, mm)	13.2 x 58	13.2 x 85	16 x 85	17.2 x 59	17.2 x 85	17 x 37	17 x 37	17 x 85	29.2 x 87
Rack hole bottom type	Round	Round	Round	Round	Round	Conical	Conical	Conical	Round
Max. height tube fit (mm)	144	144	144	144	144	148	148	148	144
Max. radius (mm)*	214	214	214	214	214	218	218	218	214
Max. RCF (g-force)*	3,275	3,275	3,275	3,275	3,275	3,337	3,337	3,337	3,275

Tube								
Tube capacity (mL)	50 mL conical	50 mL conical (skirted)	250	250 mL conical	500 mL conical	500	750	1000
Tube Dimension (Φ x L, mm)	29.5 x 118	29.5 x 118	61.5 x 128	60 x 163	96.2 x 147	73.5 x 142	97 x 152	97 x 168
Adapter							None	None
Cat. No.	GAM-c50-5(750)	GAM-c50-5(750)	GAS-250(750)	GAS-c250(750)	GAS-c500(750)	GAS-500(750)	-	-
Rack capacity (ea / 4)	5 / 20	5 / 20	1 / 4	1 / 4	1 / 4	1 / 4	1 / 4	1 / 4
Rack hole dimension (Φ x L, mm)	29.2 x 88	29.2 x 70	62.3 x 87	60.5 x 125	95.6 x 58	75.5 x 98.7	-	-
Rack hole bottom type	Conical	Flat	Flat	Conical	Conical	Flat	-	-
Max. height tube fit (mm)	148	122	155	170	170	160	170	170
Max. radius (mm)*	218	190.7	214	218	218	214.5	218	218
Max. RCF (g-force)*	3,337	2,919	3,275	3,337	3,337	3,283	3,337	3,337

Swing Rotor, GRS-B-r750-4

- 4 loadings
- Max. RPM : 3,600
- Angle from axis during rotation: $\angle 90^\circ$
- Supplied with a lubricant



750 mL Rectangular Bucket
GLB-r750-r750

Max. RPM / RCF : 3,600 / 2,898
Max. Radius (mm) : 175.2
Hole dimension (w x d x h, mm) : 99 x 99 x 98
Max. height for tube fit (mm) : 165
Hole bottom type : Flat

Tube									
Tube capacity (mL)	2.0 ~ 4 mL VT	4 ~ 7 mL VT	14 mL	8 ~ 10 mL VT	15	5 mL conical	5 mL conical	15 mL conical	50
Tube Dimension (Φ x L, mm)	13 x 75	13 x 100	15.7 x 96	16 x 100	16 x 120	16 x 59	16 x 67	17 x 120	29 x 108
Adapter									
Cat. No.	GAM-5-30(r750)	GAM-5-30(r750)	GAM-15-20(r750)	GAM-15-20(r750)	GAM-15-20(r750)	GAM-c15-16(r750)	GAM-c15-16(r750)	GAM-c15-16(r750)	GAM-50-8(r750)
Rack capacity (ea / 4)	30 / 120	30 / 120	8 / 32	20 / 80	20 / 80	16 / 64	16 / 64	16 / 64	8 / 32
Rack hole dimension (Φ x L, mm)	13 x 56.5	13 x 85	17.2 x 57	17.2 x 85	17.2 x 85	17.5 x 32	17.5 x 32	17.5 x 85	29.5 x 85
Rack hole bottom type	Round	Round	Round	Round	Round	Conical	Conical	Conical	Round
Max. height tube fit (mm)	136	136	136	136	136	139	139	139	136
Max. radius (mm)*	197	197	197	197	197	200	200	200	197
Max. RCF (g-force)*	2,854	2,854	2,854	2,854	2,854	2,898	2,898	2,898	2,854

Tube								
Tube capacity (mL)	25 mL conical	25 mL conical	50 mL conical	50 mL conical (skirted)	250	250 mL conical	500 mL conical	500
Tube Dimension (Φ x L, mm)	28.5 x 83	28.5 x 78.5	29.5 x 118	29.5 x 118	61.5 x 128	60 x 163	96.2 x 147	73.5 x 142
Adapter				 with GAS-sc50(c50)				None
Cat. No.	GAM-c50-5(r750)	GAM-c50-5(r750)	GAM-c50-5(r750)	GAM-c50-5(r750)	GAS-250(r750)	GAS-c250(r750)	GAS-c500(r750)	GAS-500(r750)
Rack capacity (ea / 4)	5 / 20	5 / 20	5 / 20	5 / 20	1 / 4	1 / 4	1 / 4	1 / 4
Rack hole dimension (Φ x L, mm)	29.5 x 58.5	29.5 x 58.5	29.5 x 85	29.5 x 67.5	62.5 x 87	61 x 93	98 x 94	74.1 x 92.5
Rack hole bottom type	Conical	Conical	Conical	Flat	Flat	Conical	Conical	Flat
Max. height tube fit (mm)	139	139	139	147.5	147	165	165	155
Max. radius (mm)*	200	200	200	151.6	197	200	200	196.5
Max. RCF (g-force)*	2,898	2,898	2,898	2,712	2,854	2,898	2,898	2,847

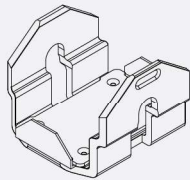


500 mL Round Bucket
GLB-500-r750

Max. RPM / RCF : 3,600 / 3,159
Max. Radius (mm) : 218
Hole dimension (Ø x L, mm) : 70 x 135
Max. height for tube fit (mm) : 172
Hole bottom type : Flat



Tube	
Tube capacity (mL)	500
Tube Dimension (Φ x L,mm)	69,5 x 170.2



Microplate Holder Bucket,
GLP-mw-r750

Max. RPM / RCF : 3,600 / 2,485
Max. Radius (mm) : 171.5
Hole dimension (w x d x h, mm) : 86.5 x 128.5 x 80
Max. height for tube fit (mm) : 80
Hole bottom type : Flat bottom with Stainless steel & ABS pad



Tube		
Tube capacity (mL)	MTP	DWP
Tube Dimension (Φ x L,mm)	86 x 128 x 15	86 x 128 x 60
Bucket capacity (ea / 4)	4 / 16	1 / 4

Swing Rotor, GRS-B-750-4

- 4 loadings
- Max. RPM : 4,600
- Angle from axis during rotation: $\angle 90^\circ$
- Supplied with a lubricant


Bio-Safe

Manufacturer Validated

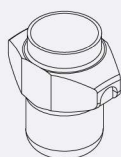


750 mL Round Bucket
with a Click seal cap
GLBB-b750-750

Max. RPM / RCF : 4,600 / 4,850
 Max. Radius (mm) : 205
 Hole dimension (Ø x L, mm) : 99 x 107
 Max. height for tube fit (mm) : 140 (w / cap), 165 (w / o cap)
 Hole bottom type : Flat
 Supplied with a cap and O-ring, No cap version is also available

Tube									
Tube capacity (mL)	2.0 ~ 4 mL VT	4 ~ 7 mL VT	14 mL	8 ~ 10 mL VT	15	5 mL conical	5 mL conical	15 mL conical	50
Tube Dimension (Φ x L, mm)	13 x 75	13 x 100	15.7 x 96	16 x 100	16 x 120	16 x 59	16 x 67	17 x 120	29 x 108
Adapter									
Cat. No.	GAM-5-24(750)	GAM-5-24(750)	GAM-10-21(750)	GAM-10-21(750)	GAM-15-19(750)	GAM-c15-14(750)	GAM-c15-14(750)	GAM-c15-14(750)	GAM-50-7(750)
Rack capacity (ea / 4)	24 / 96	24 / 96	7 / 28	21 / 84	19 / 76	10 / 40	10 / 40	14 / 56	7 / 28
Rack hole dimension (Φ x L, mm)	13.2 x 58	13.2 x 85	17.2 x 59	16 x 85	17.2 x 85	17 x 37	17 x 37	17 x 85	29.2 x 87
Rack hole bottom type	Round	Round	Round	Round	Round	Conical	Conical	Conical	Round
Max. height tube fit (mm)	129	129	129	129	129	133	133	133	129
Max. radius (mm)*	201	201	201	201	201	205	205	205	201
Max. RCF (g-force)*	4,755	4,755	4,755	4,755	4,755	4,850	4,850	4,850	4,755

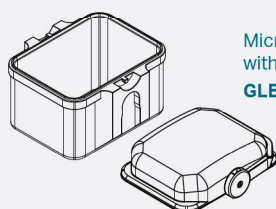
Tube							
Tube capacity (mL)	50 mL conical	50 mL conical skirted	250	250 mL conical	500 mL conical	500	750
Tube Dimension (Φ x L, mm)	29.5 x 118	29.5 x 118	61.5 x 128	60 x 163	96.2 x 147	73.5 x 142	97 x 152
Adapter							None
Cat. No.	GAM-c50-5(750)	GAM-c50-5(750)	GAS-250(750)	GAS-c250(750)	GAS-c500(750)	GAS-500(750)	-
Rack capacity (ea / 4)	5 / 20	5 / 20	1 / 4	1 / 4	1 / 4	1 / 4	1 / 4
Rack hole dimension (Φ x L, mm)	29.2 x 88	29.2 x 70	62.3 x 87	60.5 x 125	95.6 x 58	75.5 x 98.7	-
Rack hole bottom type	Conical	Flat	Flat	Conical	Conical	Flat	-
Max. height tube fit (mm)	133	122	136	165	165	155	165
Max. radius (mm)*	205	190.7	201	205	205	201.5	205
Max. RCF (g-force)*	4,850	4,511	4,755	4,850	4,850	4,767	4,850



500 mL Round Bucket
GLB-500-750

Max. RPM / RCF : 4,600 / 5,157
Max. Radius (mm) : 218
Hole dimension (Ø x L, mm) : 70 x 135
Max. height for tube fit (mm) : 172
Hole bottom type : Flat

Tube	
Tube capacity (mL)	500
Tube Dimension (Φ x L,mm)	69,5 x 170,2



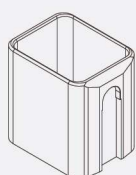
Microplate Holder Bucket
with a Click seal cap
GLB-mw-750B

Max. RPM / RCF : 4,600 / 4,033
Max. Radius (mm) : 170.5
Hole dimension (w x d x h, mm) : 86.5 x 128.5 x 63
Max. height for tube fit (mm) : 63(w / cap), 110(w / o cap)
Hole bottom type : Flat
Supplied with a cap and an O-ring, No cap version is also available

		
Tube		
Tube capacity (mL)	MTP	DWP
Tube Dimension (Φ x L,mm)	86 x 128 x 15	86 x 128 x 60
		
Plate Holder		
Cat. No.	GLP-mw-r750B	GLP-mw-r750B
Holder capacity (ea / 4)	4 / 16	1 / 4
Holder dimension (w x d x h, mm)	86.5 x 128.5	86.5 x 128.5
Rack hole bottom type	Flat	Flat
Max. height tube fit (mm)	63 w/cap(100 w/o cap)	63 w/cap(100 w/o cap)
Max. radius (mm)*	170.5	170.5
Max. RCF (g force)*	4,033	4,033

Swing Rotor, GRS-B-r250-4

- 4 loadings
- Max. RPM : 4,000
- Angle from axis during rotation: $\angle 90^\circ$
- Supplied with a lubricant

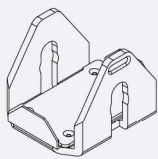


250 mL Rectangular Bucket
GLB-r250-r250

Max. RPM / RCF : 4,000 / 3,134
Max. Radius (mm) : 175.2
Hole dimension (w x d x h, mm) : 86 x 70.3 x 98.5
Max. height for tube fit (mm) : 130
Hole bottom type : Flat

Tube								
Tube capacity (mL)	1.5/2.0	2.0 ~ 4 mL VT	4 ~ 7 mL VT	14 mL	8 ~ 10 mL VT	15	15 mL conical	50
Tube Dimension (Φ x L, mm)	11 x 38	13 x 75	13 x 100	15.7 x 96	16 x 100	16 x 120	17 x 120	29 x 108
Adapter								
Cat. No.	GAM-m2.0-20(r250)	GAM-5-12(r250)	GAM-5-12(r250)	GAM-15-12(r250)	GAM-15-12(r250)	GAM-15-12(r250)	GAM-c15-9(r250)	GAM-50-4(r250)
Rack capacity (ea / 4)	20 / 80	12 / 48	12 / 48	6 / 24	12 / 48	12 / 48	9 / 36	4 / 16
Rack hole dimension (Φ x L, mm)	11.3 x 39	13.5 x 58	13.5 x 80	17.5 x 59	17.5 x 90	17.5 x 90	17.5 x 90	30.2 x 90
Rack hole bottom type	Round	Round	Round	Round	Round	Round	Conical	Round
Max. height tube fit (mm)	115	120	120	120	120	120	120	120
Max. radius (mm)	170	173.2	173.2	173.2	173.2	173.2	175.2	173.2
Max. RCF (g-force)	3,041	3,095	3,095	3,095	3,095	3,095	3,134	3,095

Tube							
Tube capacity (mL)	25mL conical	25mL conical	50 mL conical	50 mL conical (skirted)	15	85	250 mL
Tube Dimension (Φ x L, mm)	28.5 x 83	28.5 x 78.5	29.5 x 118	29.5 x 118	16 x 120	38 x 106	61.5 x 128
Adapter							
Cat. No.	GAM-c50-3(r250)	GAM-c50-3(r250)	GAM-c50-3(r250)	GAM-sc50(r250)	GAM-85-2(r250)	GAM-85-2(r250)	GAS-250(r250)
Rack capacity (ea / 4)	3 / 12	3 / 12	3 / 12	4/16	2 / 8	2 / 8	1 / 4
Rack hole dimension (Φ x L, mm)	30.5 x 60	30.5 x 60	30.5 x 90	29.8 x 93.5	17 x 86.5	38.5 x 86.5	62.5 x 87
Rack hole bottom type	Conical	Conical	Conical	Flat	Round	Round	Flat
Max. height tube fit (mm)	120	120	120	126	120	120	130
Max. radius (mm)	175.2	175.2	175.2	172	172.5	172.5	173
Max. RCF (g-force)	3,134	3,134	3,134	3,077	3,086	3,086	3,095



Microplate Holder Bucket
GLP-mw-r250

Max. RPM / RCF : 4,000 / 2,737
Max. Radius (mm) : 153
Hole dimension (w x d x h, mm) : 86.5 x 128.5 x 80
Max. height for tube fit (mm) : 80
Hole bottom type : Flat bottom with Stainless steel & ABS pad

		
Tube		
Tube capacity (mL)	MTP	DWP
Tube Dimension (Φ x L,mm)	86 x 128 x 15	86 x 128 x 60
Bucket capacity(ea / 4)	4 / 16	1 / 4

Swing Rotor, GRS-B-250-4

- 4 loadings
- Max. RPM : 5,000
- Angle from axis during rotation : $\angle 90^\circ$
- Supplied with a lubricant



250 mL Round Bucket
GLB-250-250

Max. RPM / RCF : 5,000 / 5,394
Max. Radius (mm) : 193
Hole dimension ($\Phi \times L$, mm) : 62 x 109
Max. height for tube fit (mm) : 153
Hole bottom type : Flat

Tube									
Tube capacity (mL)	1.5 ~ 2.0	2.0 mL screw cap	5 mL conical	5 mL conical	4 ~ 7 mL VT	8 ~ 10 mL VT	15	15 mL conical	25 mL conical
Tube Dimension ($\Phi \times L$, mm)	11 x 38	10.1x46	16 x 59	16 x 67	13 x 75	16 x 100	16 x 120	17 x 120	28.5 x 83
Adapter									
Cat. No.	GAM-m2.0-9(250)	GAM-m2.0-9(250)	GAM-c5-4(250)	GAM-c5-4(250)	GAM-7-8(250)	GAM-10-7(250)	GAM-15-4(250)	GAM-c15-4(250)	GAS-c25(250)
Rack capacity (ea / 4)	9 / 36	9 / 36	4/16	4/16	8 / 32	7 / 28	4 / 16	4 / 16	1 / 4
Rack hole dimension ($\Phi \times L$,mm)	11 x 39	11 x 39	17.2 x 52	17.2 x 52	13.5 x 60	16 x 80	17.5 x 103.5	17.2 x 106.5	29.5 x 61.5
Rack hole bottom type	Round	Round	Conical	Conical	Round	Round	Round	Conical	Conical
Max. height tube fit (mm)	150	150	153	153	150	150	150	153	153
Max. radius (mm)*	190	190	193	193	190	190	190	193	193
Max. RCF (g-force)*	5,311	5,311	5,394	5,394	5,311	5,311	5,311	5,394	5,394

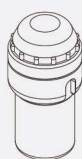
Tube									
Tube capacity (mL)	25mL conical	30	50	50 mL conical	50 mL conical (Skirted)	85	100	250 mL conical	250
Tube Dimension ($\Phi \times L$, mm)	28.5 x 78.5	25.7 x 101.4	29 x 108	29.5 x 118	29.5 x 118	38 x 106	44 x 115	60 x 163	61.5 x 128
Adapter									None
Cat. No.	GAS-c25(250)	GAM-30-3(250)	GAM-50-2(250)	GAS-c50(250)	GAS-sc50(250)	GAS-85(250)	GAS-100(250)	GAS-c250(250)	-
Rack capacity (ea / 4)	1 / 4	3 / 12	2 / 8	1 / 4	1 / 4	1 / 4	1 / 4	1 / 4	1 / 4
Rack hole dimension ($\Phi \times L$,mm)	29.5 x 61.5	26 x 85	29.5 x 90	29.8 x 98	29.8 x 93	38.5 x 96	44.2 x 93	61.5 x 44.5	-
Rack hole bottom type	Conical	Round	Round	Conical	Flat	Round	Round	Conical	-
Max. height tube fit (mm)	153	148	148	153	148	148	148	153	153
Max. radius (mm)*	193	188	188	193	188	188	188	193	193
Max. RCF (g-force)*	5,394	5,255	5,255	5,394	5,255	5,255	5,255	5,394	5,394

Swing Rotor, GRS-B-100-6

- 6 loadings
- Max. RPM : 4,000
- Angle from axis during rotation: $\angle 90^\circ$
- Supplied with a lubricant


Bio-Safe

Porton Down Certified



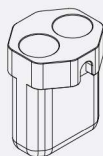
100 mL Bucket with a Cap
GLBB-b100-100

Max. RPM / RCF : 4,200 / 3,424
 Max. Radius (mm) : 173.6
 Hole dimension ($\Phi \times L$, mm) : 47 x 99
 Max. height for tube fit (mm) : 120 (w/ cap) / 130 (w/o cap)
 Hole bottom type : Flat
 Supplied with a cap and O-ring, No cap version is also available

Tube									
Tube capacity (mL)	1.5 ~ 2.0	2.0 mL screw cap	5 mL conical	5 mL conical	2.6 ~ 7	4 ~ 10	15	15 mL conical	15 mL conical
Tube Dimension ($\Phi \times L$, mm)	11 x 38	10.1x46	16 x 59	16 x 67	13 x 75	16 x 100	16 x 120	17 x 120	17 x 120
Adapter									
Cat. No.	GAM-m2.0-6 (b100)	GAM-m2.0-6 (b100)	GAM-c5-3 (b100)	GAM-c5-3 (b100)	GAM-7-5 (b100)	GAM-10-5 (b100)	GAM-15-3 (b100)	GAM-c15-3 (b100)	GAS-c15 (b100)
Rack capacity (ea / 4)	6 / 36	6 / 36	3 / 18	3 / 18	5 / 30	5 / 30	3 / 18	3 / 18	1 / 6
Rack hole dimension ($\Phi \times L$, mm)	11 x 39	11 x 39	17.2 x 52	17.2 x 52	13.5 x 60	16 x 60	17.5 x 105	17.2 x 106.5	17.2 x 106.5
Rack hole bottom type	Round	Round	Conical	Conical	Round	Flat	Flat	Conical	Conical
Max. height tube fit (mm)	115	115	75	75	115	115	120	120	120
Max. radius (mm)*	168.6	168.6	110.1	110.1	168.6	168.6	170.6	173.6	173.6
Max. RCF (g-force)*	3,325	3,325	2,171	2,171	3,325	3,325	3,364	3,424	3,424

Tube								
Tube capacity (mL)	25 mL conical	25 mL conical	30	50	50 mL conical	50 mL conical (Skirted)	85	100
Tube Dimension ($\Phi \times L$, mm)	28.8 x 83	28.8 x 78.5	25.7 x 101.4	29 x 108	29.5 x 118	29.5 x 118	38 x 106	44 x 115
Adapter								
Cat. No.	GAS-c25(b100)	GAS-c25(b100)	GAS-30(b100)	GAS-50(b100)	GAS-c50(b100)	GAS-sc50(b100)	GAS-85(b100)	GAS-100(b100)
Rack capacity (ea / 4)	1 / 6	1 / 6	1 / 6	1 / 6	1 / 6	1 / 6	1 / 6	1 / 6
Rack hole dimension ($\Phi \times L$, mm)	17.2 x 52	17.2 x 52	26 x 86	29.5 x 95.9	30 x 100	29.8x100	38.5 x 96.4	44.2 x 93
Rack hole bottom type	Conical	Conical	Round	Round	Conical	Flat	Round	Round
Max. height tube fit (mm)	118	118	118	118	120	120	118	118
Max. radius (mm)*	172.1	172.1	172.1	171.6	171.6	171.6	172.1	168.6
Max. RCF (g-force)*	3,394	3,394	3,394	3,384	3,384	3,384	3,394	3,325

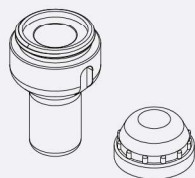
Table-top High-speed Centrifuge



50 mL Conical Bucket
GLB-dc50-100

Max. RPM / RCF : 4,200 / 3,424
Max. Radius (mm) : 173.6
Hole dimension (Ø x L, mm) : 30 x 89
Max. height for tube fit (mm) : 125
Hole bottom type : Conical

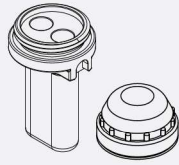
Tube						
Tube capacity (mL)	15 mL conical	25 mL conical	25 mL conical	30	50	50 mL conical
Tube Dimension (Φ x L, mm)	17 x 120	28.8 x 83	28.8 x 78.5	25.7 x 101.4	29 x 108	29.5 x 118
Adapter						None
Cat No.	GAS-c15(50)	GAS-c25(c50)	GAS-c25(c50)	GAS-30(c50)	GAS-50(c50)	-
Bucket capacity (ea / 6)	2/12	2/12	2/12	2/12	2/12	2/12
Adaptor hole dimension (Φ x L, mm)	17 x 105	27.1 x 14.1	27.1 x 14.1	26 x 83.8	27.9 x 11	-
Adaptor hole bottom type	Conical	Conical	Conical	Round	Round	-
Max. radius (mm)	171	137	137	162.4	162.6	173.6
Max. RCF (g-force)	3,372	2,702	2,702	3,203	3,207	3,424



50 mL Bucket with a Cap
GLB-b50-100

Max. RPM / RCF : 4,200 / 3,343
Max. Radius (mm) : 169.5
Hole dimension (Ø x L, mm) : 30.5 x 87
Max. height for tube fit (mm) : 120 (w/ cap) / 125 (w/o cap)
Hole bottom type : Flat bottom with rubber pad
Supplied with a cap and O-ring, No cap version is also available

Tube									
Tube capacity (mL)	14 mL	15	15 mL conical	25 mL conical	25 mL conical	30	50 mL conical	50 mL conical (Skirt)	50
Tube Dimension (Φ x L, mm)	15.7 x 96	16 x 120	17 x 120	28.8 x 83	28.8 x 78.5	25.7 x 101.4	29.5 x 118	29.5 x 118	29 x 108
Adapter								None	None
Cat No.	GAS-u14(f50)	GAS-u15(f50)	GAS-u15(f50)	GAS-c25(f50)	GAS-c25(f50)	GAS-30(f50)	GAS-c50(f50)	-	-
Adaptor hole dimension (Φ x L, mm)	17.2 x 75	17.2 x 87	17.2 x 87	27.1 x 14.1	27.1 x 14.1	26 x 86.5	29.5 x 17.5	-	-
Adaptor hole bottom type	Open	Open	Open	Conical	Conical	Round	Conical	-	-
Max. radius (mm)	169.5	169.5	169.5	135.7	135.7	160.7	169.5	169.5	169.5
Max. RCF (g-force)	3,343	3,343	3,343	2,676	2,676	3,169	3,343	3,343	3,343

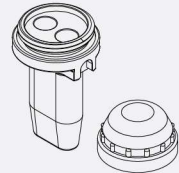


15 mL Dual Round Bucket
with a Cap
GLB-bd15-100

Max. RPM / RCF : 4,200 / 3,343
Max. Radius (mm) : 169.5
Hole dimension (Ø x L,mm) : 17 x 87
Max. height for tube fit (mm) : 123 (w/ cap) / 127 (w/o cap)
Hole bottom type : Round
Supplied with a cap and O-ring

Tube			
Tube capacity (mL)	15 mL glass	15 mL open top	15
Tube Dimension (Φ x L,mm)	16 x 100	16 x 114	16 x 120
Bucket capacity (ea / 6)	2 / 12	2 / 12	2 / 12
Max. height tube fit (mm)	123	123	123
Max. radius (mm)	169.5	169.5	169.5
Max. RCF (g-force)	3,343	3,343	3,343

Bio-Safe Porton Down Certified

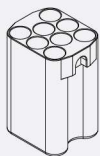


15 mL Dual Conical Bucket
with a Cap
GLBB-bdc15-100

Max. RPM / RCF : 4,200 / 3,424
Max. Radius (mm) : 173.6
Hole dimension (Ø x L,mm) : 17 x 97.5
Max. height for tube fit (mm) : 120 (w/ cap) / 125 (w/o cap)
Hole bottom type : Conical
Supplied with a cap and O-ring, No cap version is also available

Tube				
Tube capacity (mL)	5 mL conical	5 mL conical	14 mL	15 mL conical
Tube Dimension (Φ x L, mm)	16 x 59	16 x 67	15.7 x 96	17 x 120
Adapter				None
Cat No.	GAS-c5(c15)	GAS-c5(c15)	GAS-14(c15)	-
Bucket capacity (ea / 6)	2 / 12	2 / 12	2 / 12	2 / 12
Adaptor hole dimension (Φ x L,mm)	14.8 x 20	14.8 x 20	16 x 7.8	-
Adaptor hole bottom type	Conical	Conical	Round	-
Max. radius (mm)*	120.5	120.5	156.5	173.6
Max. RCF (g-force)*	2,376	2,376	3,086	3,424

Table-top High-speed Centrifuge



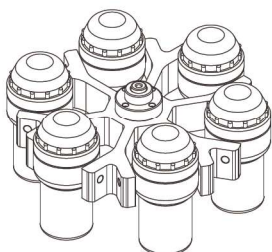
Vacutainer 10 mL Bucket
GLB-15-8-100

Max. RPM / RCF : 4,200 / 3,372
Max. Radius (mm) : 171
Hole dimension (Ø x L, mm) : 17 x 86
Hole bottom type : Flat with rubber pad
Max. height for tube fit (mm) : 115
Supplied with 3.0 mm thick NBR rubber pad

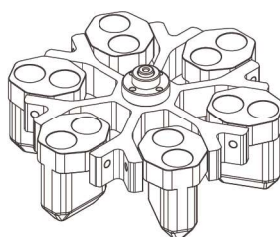
									
Tube									
Tube capacity (mL)	2.0 ~ 4 mL VT	4 ~ 7 mL VT	5 mL conical	5 mL conical	14 mL	8 ~ 10 mL VT	15 mL glass	15 mL open top	15
Tube Dimension (Φ x L, mm)	13 x 75	13 x 100	16 x 59	16 x 67	15.7 x 96	16 x 100	16 x 100	16 x 114	16 x 120
Adapter						None	None	None	None
Cat No.	GAS-3(f15)	GAS-5(f15)	GAS-c5(f15)	GAS-c5(f15)	GAS-14(f15)	-	-	-	-
Bucket capacity (ea / 6)	8 / 48	8 / 48	4 / 24	4 / 24	4 / 24	8 / 48	8 / 48	8 / 48	2 / 12
Adaptor hole dimension (Φ x L, mm)	13.5 x 61	13.5 x 85	14 x 20	14 x 20	16.5 x 7	-	-	-	-
Adaptor hole bottom type	Round	Open	Conical	Conical	Round	-	-	-	-
Max. height tube fit (mm)	88	115	75	75	103.5	115	115	115	125(center)
Max. radius (mm)*	144	171	130	130	159.5	171	171	171	171
Max. RCF (g-force)*	2,840	3,372	2,546	2,546	3,146	3,372	3,372	3,372	3,372

* Depending on the size of cap, there is a possibility of not fit-in.

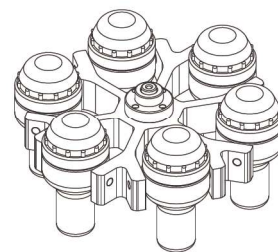
Adaptable Buckets of Rotor, GRS-B-100-6



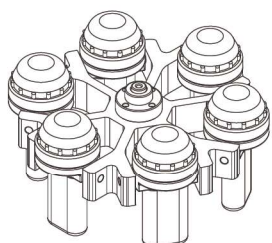
GLBB-b100-100



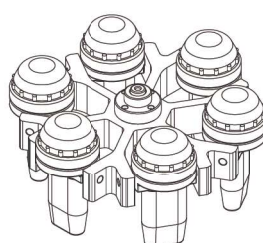
GLB-dc50-100



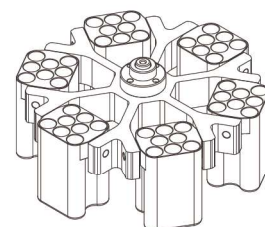
GLB-b50-100



GLB-bd15-100



GLBB-bdc15-100



GLB-15-8-100



Floor Standing, High-speed Centrifuges



1236R
p. 90

Max. RPM / Fixed angle	12,000 rpm
Max. RPM / Swing-out	5,000 rpm
Max. RCF / Fixed angle	16,582 xg
Max. RCF / Swing-out	5,394 xg
Max. capacity / Fixed angle	6 x 85 mL, 8 x c50 mL, 30 x 1.5/2.0 mL
Max. capacity / Swing-out	4 x 250 mL, 48 x 15 mL, 16 MTPs
RCF/RPM conversion	Yes
Temperature range	-20°C to 40°C
FAST cool button	Yes
Time control	Pulse, Timed < 10 hr, or Continuous
CE mark	Yes
Cat. No.	GZ-1236R

Function Features

GRF-L-50-6

READY

MENU

SAVE PROG

CALL PROG

DEL PROG

HISTORY

MULTI STEP

Multi-step Function

Enables operation up to 5 protocols per run combined for complex experiments.



User-friendly Height

Floor standing wheel's height enables user operation comfort, safety, space saving and practical lid opening and closure.



High Capacity Rotor for 2236R

Fixed angle rotor up to 4 x 1,000 mL (8,000 RPM), 6 x 1,000 mL (7,000 RPM)



Four Lockable and Leveling Casters

The wheels allow a better positioning and movement of the centrifuge to fit in the laboratory space.

	
1730R p. 90	2236R p. 90
22,000 rpm	22,000 rpm
5,000 rpm	5,000 rpm
32,310 xg	54,111 xg
5,394 xg	5,394 xg
6 x 500 mL, 8 x c50 mL, 30 x 1.5/2.0 mL	6 x 1,000 mL, 8 x c50 mL, 30 x 1.5/2.0 mL
4 x 250 mL, 4 x 3 x c50 mL, 4 x 12 x 15 mL, 4 x 4 MTPs	4 x 250 mL, 4 x 3 x c50 mL, 4 x 12 x 15 mL, 4 x 4 MTPs
Yes	Yes
-20°C to 40°C	-20°C to 40°C
Yes	Yes
Pulse, Timed < 10 hr, or Continuous	Timed < 100 hr, or Continuous
Yes	Yes
GZ-1736R	GZ-2236R

1236R, 1736R, 2236R

Floor Standing, High-speed Centrifuges



Bio
(1236R)

Bio
(2236R)

Features

- For up to 22,000 rpm (54,111 xg) with 6 x 50 mL tubes and 7,000 rpm (10,825 xg) with 6 x 1 L bottles (2236R)
- Instrument lock/unlock by password control and protocol management by user ID is ideal for core lab facility or multi-user environment (2236R)
- A large assortment of rotors, buckets and adaptors support diverse applications doable with one instrument.
- Fast cooling function to 4°C in 5 minutes for fast startup of cooled samples
- The compressor-off function when lid is open minimizes unnecessary cooling and frosting
- 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
- Intuitive control interface with numeric input buttons and graphic pictograms for easy setting and editing of running conditions

Technical Specifications

	1236R	1736R	2236R
Max. RPM/PCF for Fixed Angle	12,000 rpm / 16,582 xg	17,000 rpm / 32,310 xg	22,000 rpm / 54,111 xg
Max. RPM/PCF for Swing-out	5,000 rpm / 5,394 xg	5,000 rpm / 5,394 xg	5,000 rpm / 5,394 xg
Max. Capacity for Fixed Angle	6 x 85 mL, 30 x 1.5/2.0 mL	6 x 500 mL, 30 x 1.5/2.0 mL	6 x 1,000 mL, 30 x 1.5/2.0 mL
Max. Capacity for Swing-out	4 x 250 mL, 4 x 12 x 15 mL, 4 x 4 MTPs	4 x 250 mL, 4 x 12 x 15 mL, 4 x 4 MTPs	4 x 250 mL, 4 x 12 x 15 mL, 4 x 4 MTPs
Temp. range (°C)	-20°C to 40°C		
FAST cool button	Yes	Yes	Yes
Time control	Pulse, timed <10 hr or continuous	Pulse, timed <10 hr or continuous	Pulse, timed <100 hr or continuous
Time counting range	Selectable, at set speed or from starting		
Noise level (dependent on rotor)	≤60 dB	≤56 dB	≤56 dB
RCF/RPM conversion	Yes		
ACC/DEC Ramps	9/10		
Program Memory	100		
Power Supply	AC 230V, 50Hz (AC 220-230V, 60/50Hz; 110V optional)		
Power Requirement	2.5 kVA	2.5 kVA	2.5 kVA
Dimension (W x D x H)	473 x 620 x 830 mm	473 x 620 x 830 mm	824 x 634 x 1,049 mm
Net Weight	110 kg	110 kg	240 kg
CE MARK	Yes	Yes	Yes
Cat No.	GZ-1236R	GZ-1736R	GZ-2236R

Fixed Angle Rotor, GRF-L-1000-6

- Capacity : 6 x 1,000 mL
- Max. RPM / RCF : 7,000 / 10,825
- Hole angle from axis during rotation : $\angle 25^\circ$
- Hole dimension ($\varnothing \times L$, mm) : 98 x 144
- Max. height for tube fit (mm) : 175
- Hole bottom type : Flat
- Supplied with a lid



* Only for 2236R

Tube			
Tube capacity (mL)	250	500	1000
Tube Dimension ($\varnothing \times L$, mm)	61.5 x 128	69 x 168	97 x 168
Adapter			None
Cat No.	GAS-250(1000)	GAS-500(1000)	-
Adaptor hole dimension ($\varnothing \times L$, mm)	62 x 109	69 x 149	-
Adaptor hole bottom type	Flat	Flat	-
Max. radius (mm)	164.1	183.4	197.6
Max. RCF (g-force)	8,990	10,047	10,825

Fixed Angle Rotor, GRF-L-1000-4

- Capacity : 4 x 1,000 mL
- Max. RPM / RCF : 8,000 / 12,071
- Hole angle from axis during rotation : $\angle 25^\circ$
- Hole dimension ($\varnothing \times L$, mm) : 98 x 144
- Max. height for tube fit (mm) : 175
- Hole bottom type : Flat
- Supplied with a lid



* Only for 2236R

Tube			
Tube capacity (mL)	250	500	1000
Tube Dimension ($\varnothing \times L$, mm)	61.5 x 128	69 x 168	97 x 168
Adapter			None
Cat No.	GAS-250(1000)	GAS-500(1000)	-
Adaptor hole dimension ($\varnothing \times L$, mm)	62 x 109	69 x 149	-
Adaptor hole bottom type	Flat	Flat	-
Max. radius (mm)	135.2	154.5	168.7
Max. RCF (g-force)	9,674	11,055	12,071

Fixed Angle Rotor, GRF-L-500-6

- Capacity : 6 x 500 mL
- Max. RPM / RCF (1736R) : 8,000 / 11,305; (2236R) : 10,000 / 17,664
- Hole angle from axis during rotation : $\angle 25^\circ$
- Hole dimension ($\varnothing \times L$, mm) : 70 x 137
- Max. height for tube fit (mm) : 170
- Hole bottom type : Flat
- Supplied with a lid



* Applicable 1736R / 2236R

		
Tube		
Tube capacity (mL)	250	500
Tube Dimension ($\Phi \times L$, mm)	61.5 x 128	69 x 168
		None
Adapter		
Cat No.	GAS-250(500)	-
Adaptor hole dimension ($\Phi \times L$, mm)	62 x 100	-
Adaptor hole bottom type	Flat	-
Max. radius (mm)	138.3	158
Max. RCF (g-force)(1736R/2236R)	9,869/15,462	11,305/17,664

Fixed Angle Rotor, GRF-L-250-6

- Capacity : 6 x 250 mL + 6 x 15 mL
- Max. RPM / RCF (1736R) : 10,000 / 14,981; (2236R) : 13,000 / 25,318
- Hole angle from axis during rotation : $\angle 25^\circ$
- Hole dimension ($\varnothing \times L$, mm) : 62 x 100 (250 mL) / 17.1 x 94 (15 mL)
- Hole bottom type : Flat (250 mL) / Round (15 mL)
- Max. height for tube fit (mm) : 130 (250 mL) / 120 (15 mL)
- Supplied with a lid



* Applicable 1736R / 2236R

		
Tube		
Tube capacity (mL)	15	250
Tube Dimension ($\Phi \times L$, mm)	16 x 120	61.5 x 128
Max. radius (mm)	131.3	134
Max. RCF (g-force)(1736R/2236R)	14,679/24,808	14,981/25,318

Fixed Angle Rotor, GRF-L-85-6

- Capacity : 6 x 85 mL
- Max. RPM / RCF (1736R) : 15,000 / 25,029; (2236R) : 20,000 / 44,496
- Hole angle from axis during rotation : $\angle 25^\circ$
- Hole dimension ($\varnothing \times L, \text{mm}$) : 38.5 x 100
- Hole bottom type : Round | Max. height for tube fit (mm) : 125
- Supplied with a lid and O-ring inserted



* Applicable 1736R / 2236R

Tube								
Tube capacity (mL)	15	15 mL conical	25 mL conical	25 mL conical	30	50	50 mL conical	85 mL
Tube Dimension ($\varnothing \times L, \text{mm}$)	16 x 120	17 x 120	28.8 x 83	28.8 x 78.5	25.7 x 101.4	29 x 108	29.5 x 118	38 x 106
Adapter								None
Cat No.	GAS-15(85)	GAS-c15(85)	GAS-c25(85)	GAS-c25(85)	GAS-30(85)	GAS-50(85)	GAS-c50(85)	-
Adaptor hole dimension ($\varnothing \times L, \text{mm}$)	17 x 94	17 x 98	29.5 x 62.5	29.5 x 62.5	26 x 85.4	29 x 95	29.5 x 98	-
Adaptor hole bottom type	Round	Conical	Conical	Conical	Round	Round	Conical	-
Max. radius (mm)	92.5	90.5	80.9	80.9	92.2	93.5	91.5	99.5
Max. RCF (g-force) (1736R/2236R)	23,268/ 41,366	22,765/ 40,472	20,350/ 36,178	20,350/ 36,178	21,193/ 41,232	23,520/ 41,813	23,017/ 40,919	25,029/ 44,496

Fixed Angle Rotor, GRF-G-85-6

- Capacity : 6 x 85 mL
- Max. RPM / RCF : 10,000 / 12,298
- Hole angle from axis during rotation : $\angle 34^\circ$
- Hole dimension ($\varnothing \times L, \text{mm}$) : 38.5 x 100
- Hole bottom type : Round | Max. height for tube fit (mm) : 122
- Supplied with a lid and O-ring inserted



* Only for 1236R

Tube								
Tube capacity (mL)	15	15 mL conical	25 mL conical	25 mL conical	30	50	50 mL conical	85 mL
Tube Dimension ($\varnothing \times L, \text{mm}$)	16 x 120	17 x 120	28.8 x 83	28.8 x 78.5	25.7 x 101.4	29 x 108	29.5 x 118	38 x 106
Adapter								None
Cat No.	GAS-15(85)	GAS-c15(85)	GAS-c25(85)	GAS-c25(85)	GAS-30(85)	GAS-50(85)	GAS-c50(85)	-
Adaptor hole dimension ($\varnothing \times L, \text{mm}$)	17 x 94	17 x 98	29.5 x 62.5	29.5 x 62.5	26 x 85.4	29 x 95	29.5 x 98	-
Adaptor hole bottom type	Round	Conical	Conical	Conical	Round	Round	Conical	-
Max. radius (mm)*	103	101	87	87	102.5	104	102	110
Max. RCF (g-force)*	11,515	11,292	9,727	9,727	11,460	11,627	11,404	12,298

Fixed Angle Rotor, GRF-L-50-8

- Capacity : 8 x 50 mL
- Max. RPM / RCF (1736R) : 15,000 / 25,910; (2236R) : 20,000 / 46,062
- Hole angle from axis during rotation : $\angle 30^\circ$
- Hole dimension ($\varnothing \times L$, mm) : 29.5 x 93.2
- Hole bottom type : Round | Max. height for tube fit (mm) : 120
- Supplied with a lid with protruding screw for coupling into motor shaft
- Two rubber O-rings inserted



* Applicable 1736R / 2236R

Tube						
Tube capacity (mL)	15	15 mL conical	25 mL conical	25 mL conical	30	50
Tube Dimension ($\Phi \times L$, mm)	16 x 120	17 x 120	28.8 x 83	28.8 x 78.5	25.7 x 101.4	29 x 108
Adapter						None
Cat No.	GAS-15(50)	GAS-c15(50)	GAS-c25(50)	GAS-c25(50)	GAS-30(50)	-
Adaptor hole dimension ($\Phi \times L$, mm)	17 x 94	17 x 105	27.1 x 14.1	27.1 x 14.1	26 x 83.8	-
Adaptor hole bottom type	Round	Conical	Conical	Conical	Round	-
Max. radius (mm)	93.5	96	81	81	96.5	103
Max. RCF (g-force)(1736R/2236R)	23,520/41,813	24,149/42,931	20,376/36,223	20,376/36,223	24,275/43,155	25,910/46,062

Fixed Angle Rotor, GRF-G-50-8

- Capacity : 8 x 50 mL
- Max. RPM / RCF : 12,000 / 16,582
- Hole angle from axis during rotation : $\angle 30^\circ$
- Hole dimension ($\varnothing \times L$, mm) : 29.5 x 93.2
- Hole bottom type : Round | Max. height for tube fit (mm) : 120
- Supplied with a lid and O-ring inserted



* Only for 1236R

Tube				
Tube capacity (mL)	15	15 mL conical	30	50
Tube Dimension ($\Phi \times L$, mm)	16 x 120	17 x 120	25.7 x 101.4	29 x 108
Adapter				None
Cat No.	GAS-15(50)	GAS-c15(50)	GAS-30(50)	-
Adaptor hole dimension ($\Phi \times L$, mm)	17 x 94	17 x 105	26 x 83.8	-
Adaptor hole bottom type	Round	Conical	Round	-
Max. radius (mm)	93.5	96	96.4	103
Max. RCF (g-force)	15,053	15,455	15,520	16,582

Fixed Angle Rotor, GRF-L-c50-8

- Capacity : 8 x 50 mL Conical
- Max. RPM / RCF (1736R) : 15,000 / 27,671; (2236R) : 17,000 / 35,541
- Hole angle from axis during rotation : $\angle 25^\circ$
- Hole dimension ($\varnothing \times L, \text{mm}$) : 29.8 x 108.6
- Hole bottom type : Conical
- Max. height for tube fit (mm) : 130
- Supplied with a lid with protruding screw for coupling into motor shaft
- Two rubber O-rings inserted



* Applicable 1736R / 2236R

Tube						
Tube capacity (mL)	15 mL conical	25 mL conical	25 mL conical	30	50	50 mL conical
Tube Dimension ($\varnothing \times L, \text{mm}$)	17 x 120	28.8 x 83	28.8 x 78.5	25.7 x 101.4	29 x 108	29.5 x 118
Adapter						None
Cat No.	GAS-c15(c50)	GAS-c25(c50)	GAS-c25(c50)	GAS-30(c50)	GAS-50(c50)	-
Adaptor hole dimension ($\varnothing \times L, \text{mm}$)	17 x 105	27.1 x 14.1	27.1 x 14.1	26 x 83.8	27.9 x 11	-
Adaptor hole bottom type	Conical	Conical	Conical	Round	Round	-
Max. radius (mm)	105.2	94.1	94.1	106.4	107.3	110
Max. RCF (g-force)(1736R/2236R)	26,463/33,990	23,671/30,404	23,671/30,404	26,765/34,378	26,991/34,669	27,671/35,541

Fixed Angle Rotor, GRF-G-c50-8

- Capacity : 8 x 50 mL Conical
- Max. RPM / RCF : 10,000 / 12,298
- Hole angle from axis during rotation : $\angle 25^\circ$
- Hole dimension ($\varnothing \times L, \text{mm}$) : 29.8 x 108.6
- Hole bottom type : Conical
- Max. height for tube fit (mm) : 130
- Supplied with a lid and O-ring inserted



* Only for 1236R

Tube						
Tube capacity (mL)	15 mL conical	25 mL conical	25 mL conical	30	50	50 mL conical
Tube Dimension ($\varnothing \times L, \text{mm}$)	17 x 120	28.8 x 83	28.8 x 78.5	25.7 x 101.4	29 x 108	29.5 x 118
Adapter						None
Cat No.	GAS-c15(c50)	GAS-c25(c50)	GAS-c25(c50)	GAS-30(c50)	GAS-50(c50)	-
Adaptor hole dimension ($\varnothing \times L, \text{mm}$)	17 x 105	27.1 x 14.1	27.1 x 14.1	26 x 83.8	27.9 x 11	-
Adaptor hole bottom type	Conical	Conical	Conical	Round	Round	-
Max. radius (mm)	105.2	94.1	94.1	106.4	107.3	110
Max. RPM	10,000	10,000	10,000	10,000	10,000	10,000
Max. RCF (g-force)	11,761	10,520	10,520	11,896	11,996	12,298

Fixed Angle Rotor, GRF-L-50-6

- Capacity : 6 x 50 mL
- Max. RPM / RCF : (1736R) : 17,000 / 32,310; (2236R) : 22,000 / 54,111
- Hole angle from axis during rotation : $\angle 30^\circ$
- Hole dimension ($\varnothing \times L$, mm) : 29.5 x 92.2
- Hole bottom type : Round
- Supplied with a lid and O-ring inserted



* Applicable 1736R / 2236R

Tube		
Tube capacity (mL)	30	50
Tube Dimension ($\varnothing \times L$, mm)	25.7 x 101.4	29 x 108
Adapter		None
Cat No.	GAS-30(50)	-
Adaptor hole dimension ($\varnothing \times L$, mm)	26 x 83.8	-
Adaptor hole bottom type	Round	-
Max. radius (mm)	96.7	100
Max. RCF (g-force) (1736R/2236R)	31,244/52,326	32,310/54,111

Fixed Angle Rotor, GRF-G-15-24

- Capacity : 24 x 15 mL
- Max. RPM / RCF : 8,000 / 8,872
- Hole angle from axis during rotation : $\angle 30^\circ$
- Hole dimension ($\varnothing \times L$, mm) : 17.1 x 94
- Hole bottom type : Round
- Max. height for tube fit (mm) : 120
- Supplied with a lid and O-ring inserted



* Only for 1236R

Tube	
Tube capacity (mL)	15
Tube Dimension ($\varnothing \times L$, mm)	16 x 120
Max. radius (mm)	Inner 103 / Outer 124
Max. RCF (g-force)	Inner 7,370 / Outer 8,872

Fixed Angle Rotor, GRF-L-c15-12

- Capacity : 12 x 15 mL Conical
- Max. RPM / RCF (1736R) : 15,000 / 25,910; (2236R) : 20,000 / 46,062
- Hole angle from axis during rotation : $\angle 25^\circ$
- Hole dimension ($\varnothing \times L$, mm) : 17.2 x 107.2
- Hole bottom type : Conical
- Max. height for tube fit (mm) : 125
- Supplied with a lid and O-ring inserted



* Applicable 1736R / 2236R

Tube			
Tube capacity (mL)	5 mL conical	5 mL conical	15 mL conical
Tube Dimension ($\varnothing \times L$, mm)	16 x 59	16 x 67	17 x 120
Adapter			None
Cat No.	GAS-c5(c15)	GAS-c5(c15)	-
Adaptor hole dimension ($\varnothing \times L$, mm)	14.8 x 20	14.8 x 20	-
Adaptor hole bottom type	Conical	Conical	-
Max. radius (mm)	75.8	75.8	103
Max. RCF (g-force) (1736R/2236R)	19,067/33,898	19,067/33,898	25,910/46,062

Fixed Angle Rotor, GRF-G-c15-12

- Capacity : 12 x 15 mL Conical
- Max. RPM / RCF : 12,000 / 16,582
- Hole angle from axis during rotation : $\angle 25^\circ$
- Hole dimension ($\varnothing \times L$, mm) : 17.2 x 107.2
- Hole bottom type : Conical
- Max. height for tube fit (mm) : 125
- Supplied with a lid and O-ring inserted



* Only for 1236R

Tube			
Tube capacity (mL)	5 mL conical	5 mL conical	15 mL conical
Tube Dimension ($\varnothing \times L$, mm)	16 x 59	16 x 67	17 x 120
Adapter			None
Cat No.	GAS-c5(c15)	GAS-c5(c15)	-
Adaptor hole dimension ($\varnothing \times L$, mm)	14.8 x 20	14.8 x 20	-
Adaptor hole bottom type	Conical	Conical	-
Max. radius (mm)	75.8	75.8	103
Max. RCF (g-force)	12,203	12,203	16,582

Fixed Angle Rotor, GRF-L-m2.0-30

- Capacity : 30 x 1.5/2.0 mL
- Max. RPM / RCF(1736R) : 17,000 / 31,147; (2236R) : 22,000 / 52,163
- Hole angle from axis during rotation : $\angle 45^\circ$
- Hole dimension ($\varnothing \times L$, mm) : 11.1 x 39
- Hole bottom type : Round I Max. height for tube fit (mm) : 52
- Supplied with a lid



* Applicable 1736R / 2236R

				
Tube				
Tube capacity (mL)	0.2	0.5	1.5/2.0	2.0 mL screw cap
Tube Dimension ($\Phi \times L$, mm)	6 x 8	8 x 30	11 x 38	10.1 x 46
			None	None
Adaptor				
Cat No.	GAS-m0.2(2)	GAS-m0.5(2)	-	-
Adaptor hole dimension ($\Phi \times L$, mm)	6.5 x 23	8 x 31	-	-
Adaptor hole bottom type	Open	Open	-	-
Max. radius (mm)	79	86	96.4	96.4
Max. RCF (g-force) (1736R/2236R)	25,525/42,748	27,787/46,536	31,147/52,163	31,147/52,163

Fixed Angle Rotor, GRF-G-m2.0-30

- Capacity : 30 x 1.5/2.0 mL
- Max. RPM / RCF : 12,000 / 15,520
- Hole angle from axis during rotation : $\angle 45^\circ$
- Hole dimension ($\varnothing \times L$, mm) : 11.1 x 39
- Hole bottom type : Round I Max. height for tube fit (mm) : 52
- Supplied with a lid



* Only for 1236R

				
Tube				
Tube capacity (mL)	0.2	0.5	1.5/2.0	2.0 mL screw cap
Tube Dimension ($\Phi \times L$, mm)	6 x 8	8 x 30	11 x 38	10.1 x 46
			None	None
Adaptor				
Cat No.	GAS-m0.2(2)	GAS-m0.5(2)	-	-
Adaptor hole dimension ($\Phi \times L$, mm)	6.5 x 23	8 x 31	-	-
Adaptor hole bottom type	Open	Open	-	-
Max. radius (mm)	79	86	96.4	96.4
Max. RCF (g-force)	12,718	13,835	15,520	15,520

Fixed Angle Rotor, GRF-L-s0.2-64 / GRF-G-s0.2-64

- Capacity : 8x8-Tube PCR strips, 64 x 0.2 mL
- Max. RPM / RCF : 12,000 / 10,803
- Hole angle from axis during rotation : $\angle 45^\circ$
- Hole dimension ($\varnothing \times L$, mm) : 6.5 x 16
- Hole bottom type : Round
- Max. height for tube fit (mm) : 25
- Supplied with a lid



Tube		
Tube capacity (mL)	0.2	8-Strip tube
Tube dimension ($\Phi \times L$, mm)	6 x 8	6 x 8
Max. radius (mm)	Inner 58.6 Outer 67.1	Inner 58.6 Outer 67.1
Max. RCF (g-force)	Inner 9,434 Outer 10,803	Inner 9,434 Outer 10,803

Angle Rotor, GRA-G-15-24

- Capacity : 24 x 15 mL
- Max. RPM / RCF : 4,000 / 3,134
- Hole angle rotation : $\angle 45^\circ$
- Hole dimension ($\varnothing \times L$, mm) : 20.4 x 14
- Supplied with 24 sleeves



* Only for 1236R



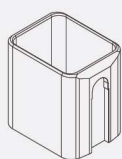
15 mL Sleeve
GLB-15/10A

Hole dimension ($\varnothing \times L$, mm) : 18 x 87
 Max. height for tube fit (mm) : 125 (120 for conical / wider cap)
 Hole bottom type : Flat bottom with rubber pad
 Supplied with 3.0 mm thick NBR pad

Tube								
Tube capacity (mL)	2.0 ~ 4 mL VT	4 ~ 7 mL VT	5 mL conical	5 mL conical	14 mL	8 ~ 10 mL VT	15	15 mL conical
Tube Dimension ($\Phi \times L$, mm)	13 x 75	13 x 100	16 x 59	16 x 67	15.7 x 96	16 x 100	16 x 120	17 x 120
Adapter						None	None	None
Cat No.	GAS-3(f15)	GAS-5(f15)	GAS-c5(f15)	GAS-c5(f15)	GAS-10(f15)	-	-	-
Adaptor hole dimension ($\Phi \times L$, mm)	13.5 x 61	13.5 x 85	14 x 20	14 x 20	16.5 x 7	-	-	-
Adaptor hole bottom type	Round	Open	Conical	Conical	Round	-	-	-
Max. radius (mm)*	155.2	167.2	139.9	139.9	161.1	175.2	175.2	175.2
Max. RCF (g-force)*	2,776	2,990	2,503	2,503	2,882	3,134	3,134	3,134

Swing Rotor, GRS-L-r250-4 / GRS-G-r250-4

- 4 loadings
- Max. RPM : 4,000
- Angle from axis during rotation : $\angle 90^\circ$
- Supplied with lubricant

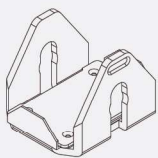


250 mL Rectangular Bucket
GLB-r250-r250

Max. RPM / RCF : 4,000 / 3,134
Max. Radius (mm) : 175.2
Hole dimension (w x d x h, mm) : 86 x 70.3 x 98.5
Max. height for tube fit (mm) : 130
Hole bottom type : Flat

Tube								
Tube capacity (mL)	1.5/2.0	2.0 ~ 4 mL VT	4 ~ 7 mL VT	14 mL	8 ~ 10 mL VT	15	15 mL conical	50
Tube Dimension (Φ x L, mm)	11 x 38	13 x 75	13 x 100	15.7 x 96	16 x 100	16 x 120	17 x 120	29 x 108
Adapter								
Cat. No.	GAM-m2.0-20(r250)	GAM-5-12(r250)	GAM-5-12(r250)	GAM-15-12(r250)	GAM-15-12(r250)	GAM-15-12(r250)	GAM-c15-9(r250)	GAM-50-4(r250)
Rack capacity (ea / 4)	20 / 80	12 / 48	12 / 48	6 / 24	12 / 48	12 / 48	9 / 36	4 / 16
Rack hole dimension (Φ x L, mm)	11.3 x 39	13.5 x 58	13.5 x 80	17.5 x 59	17.5 x 90	17.5 x 90	17.5 x 90	30.2 x 90
Rack hole bottom type	Round	Round	Round	Round	Round	Round	Conical	Round
Max. height tube fit (mm)	115	120	120	120	120	120	120	120
Max. radius (mm)*	170	173.2	173.2	173.2	173.2	173.2	175.2	173.2
Max. RCF (g-force)*	3,041	3,095	3,095	3,095	3,095	3,095	3,134	3,095

Tube							
Tube capacity (mL)	25mL conical	25mL conical	50 mL conical	50 mL conical (skirted)	15	85	250 mL
Tube Dimension (Φ x L, mm)	28.5 x 83	28.5 x 78.5	29.5 x 118	29.5 x 118	16 x 120	38 x 106	61.5 x 128
Adapter							
Cat. No.	GAM-c50-3(r250)	GAM-c50-3(r250)	GAM-c50-3(r250)	GAM-sc50(r250)	GAM-85-2(r250)	GAM-85-2(r250)	GAS-250(r250)
Rack capacity (ea / 4)	3 / 12	3 / 12	3 / 12	4/16	2 / 8	2 / 8	1 / 4
Rack hole dimension (Φ x L, mm)	30.5 x 60	30.5 x 60	30.5 x 90	29.8 x 93.5	17 x 86.5	38.5 x 86.5	62.5 x 87
Rack hole bottom type	Conical	Conical	Conical	Flat	Round	Round	Flat
Max. height tube fit (mm)	120	120	120	126	120	120	130
Max. radius (mm)*	175.2	175.2	175.2	172	172.5	172.5	173
Max. RCF (g-force)*	3,134	3,134	3,134	3,077	3,086	3,086	3,095



Microplate Holder Bucket
GLP-mw-r250

Max. RPM / RCF : 4,000 / 2,737
Max. Radius (mm) : 153
Hole dimension (w x d x h, mm) : 86.5 x 128.5 x 80
Max. height for tube fit (mm) : 80
Hole bottom type : Flat bottom with Stainless steel & ABS pad

Tube		
Tube capacity (mL)	MTP	DWP
Tube Dimension (Φ x L,mm)	86 x 128 x 15	86 x 128 x 60
Bucket capacity(ea / 4)	4 / 16	1 / 4



Swing Rotor, GRS-L-250-4 / GRS-G-250-4

- 4 loadings
- Max. RPM : 5,000
- Angle from axis during rotation : $\angle 90^\circ$
- Supplied with a lubricant



250 mL Round Bucket
GLB-250-250

Max. RPM / RCF : 5,000 / 5,394
Max. Radius (mm) : 193
Hole dimension (Ø x L, mm) : 62 x 109
Max. height for tube fit (mm) : 153
Hole bottom type : Flat

Tube									
Tube capacity (mL)	1.5 ~ 2.0	2.0 mL screw cap	5 mL conical	5 mL conical	4 ~ 7 mL VT	8 ~ 10 mL VT	15	15 mL conical	25 mL conical
Tube Dimension (Φ x L, mm)	11 x 38	10.1x46	16 x 59	16 x 67	13 x 75	16 x 100	16 x 120	17 x 120	28.5 x 83
Adapter									
Cat. No.	GAM-m2.0-9(250)	GAM-m2.0-9(250)	GAM-c5-4(250)	GAM-c5-4(250)	GAM-7-8(250)	GAM-10-7(250)	GAM-15-4(250)	GAM-c15-4(250)	GAS-c25(250)
Rack capacity (ea / 4)	9 / 36	9 / 36	4/16	4/16	8 / 32	7 / 28	4 / 16	4 / 16	1 / 4
Rack hole dimension (Φ x L,mm)	11 x 39	11 x 39	17.2 x 52	17.2 x 52	13.5 x 60	16 x 80	17.5 x 103.5	17.2 x 106.5	29.5 x 61
Rack hole bottom type	Round	Round	Conical	Conical	Round	Round	Round	Conical	Conical
Max. height tube fit (mm)	150	150	153	153	150	150	150	153	153
Max. radius (mm)*	190	190	193	193	190	190	190	193	193
Max. RCF (g-force)*	5,311	5,311	5,394	5,394	5,311	5,311	5,311	5,394	5,394
Tube									
Tube capacity (mL)	25mL conical	30	50	50 mL conical	50 mL conical (Skirted)	85	100	250 mL conical	250
Tube Dimension (Φ x L, mm)	28.5 x 78.5	25.7 x 101.4	29 x 108	29.5 x 118	29.5 x 118	38 x 106	44 x 115	60 x 163	61.5 x 128
Adapter									None
Cat. No.	GAS-c25(250)	GAM-30-3(250)	GAM-50-2(250)	GAS-c50(250)	GAS-sc50(250)	GAS-85(250)	GAS-100(250)	GAS-c250(250)	-
Rack capacity (ea / 4)	1 / 4	3 / 12	2 / 8	1 / 4	1 / 4	1 / 4	1 / 4	1 / 4	1 / 4
Rack hole dimension (Φ x L,mm)	29.5 x 61	26 x 85	29.5 x 90	29.8 x 98	29.8 x 93	38.5 x 96	44.2 x 93	61.5 x 44.5	-
Rack hole bottom type	Conical	Round	Round	Conical	Flat	Round	Round	Conical	-
Max. height tube fit (mm)	153	148	148	153	148	148	148	153	153
Max. radius (mm)*	193	188	188	193	188	188	188	193	193
Max. RCF (g-force)*	5,394	5,255	5,255	5,394	5,255	5,255	5,255	5,394	5,394

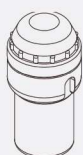
Swing Rotor, GRS-G-100-6

- 6 loadings
- Max. RPM : 4,000
- Angle from axis during rotation: $\angle 90^\circ$
- Supplied with a lubricant



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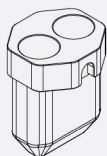
* Only for 1236R



100 mL Bucket with a Cap
GLB-b100-100

Max. RPM / RCF : 4,000 / 3,105
Max. Radius (mm) : 173.6
Hole dimension ($\varnothing \times L$, mm) : 47 x 99
Max. height for tube fit (mm) : 120 (w/ cap) / 130 (w/o cap)
Hole bottom type : Flat
Supplied with a cap and O-ring, No cap version is available

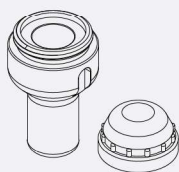
Tube									
Tube capacity (mL)	1.5 ~ 2.0	2.0 mL screw cap	5 mL conical	5 mL conical	2.6 ~ 7	4 ~ 10	15	15 mL conical	15 mL conical
Tube Dimension ($\varnothing \times L$, mm)	11 x 38	10.1x46	16 x 59	16 x 67	13 x 75	16 x 100	16 x 120	17 x 120	17 x 120
Adapter									
Cat. No.	GAM-m2.0-6 (b100)	GAM-m2.0-6 (b100)	GAM-c5-3(b100)	GAM-c5-3(b100)	GAM-7-5(b100)	GAM-10-5(b100)	GAM-15-9(b100)	GAM-c15-3 (b100)	GAS-c15(b100)
Rack capacity (ea / 4)	6 / 36	6 / 36	3 / 18	3 / 18	5 / 30	5 / 30	3 / 18	3 / 18	1 / 6
Rack hole dimension ($\varnothing \times L$,mm)	11 x 39	11 x 39	17.2 x 52	17.2 x 52	13.5 x 60	16 x 60	17.5 x 105	17.2 x 106.5	17.2 x 106.5
Rack hole bottom type	Round	Round	Conical	Conical	Flat	Flat	Flat	Conical	Conical
Max. height tube fit (mm)	115	115	75	75	115	115	120	120	120
Max. radius (mm)*	168.6	168.6	110.1	110.1	168.6	168.6	170.6	173.6	173.6
Max. RCF (g-force)*	3,016	3,016	1,969	1,969	3,016	3,016	3,052	3,105	3,105
Tube									
Tube capacity (mL)	25 mL conical	25 mL conical	30	50	50 mL conical	50 mL conical (Skirted)	85	100	
Tube Dimension ($\varnothing \times L$, mm)	28.8 x 83	28.8 x 78.5	25.7 x 101.4	29 x 108	29.5 x 118	29.5 x 118	38 x 106	44 x 115	
Adapter									
Cat. No.	GAS-c25(b100)	GAS-c25(b100)	GAS-30(b100)	GAS-50(b100)	GAS-c50(b100)	GAS-sc50(b100)	GAS-85(b100)	GAS-100(b100)	
Rack capacity (ea / 4)	1 / 6	1 / 6	1 / 6	1 / 6	1 / 6	1 / 6	1 / 6	1 / 6	
Rack hole dimension ($\varnothing \times L$,mm)	17.2x52	17.2x52	26x86	29.5 x 95.9	30 x 100	29.8x100	38.5 x 96.4	44.2 x 93	
Rack hole bottom type	Conical	Conical	Round	Round	Conical	Flat	Round	Round	
Max. height tube fit (mm)	118	118	118	118	120	120	118	118	
Max. radius (mm)*	172.1	172.1	172.1	171.6	171.6	171.6	172.1	168.6	
Max. RCF (g-force)*	3,079	3,079	3,079	2,737	2,737	2,737	3,079	3,016	



50 mL Conical Bucket
GLB-dc50-100

Max. RPM / RCF : 4,000 / 3,105
 Max. Radius (mm) : 173.6
 Hole dimension (Ø x L, mm) : 30 x 89
 Max. height for tube fit (mm) : 125
 Hole bottom type : Conical

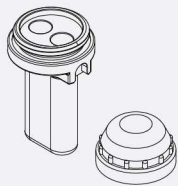
Tube						
Tube capacity (mL)	15 mL conical	25 mL conical	25 mL conical	30	50	50 mL conical
Tube Dimension (Φ x L, mm)	17 x 120	28.8 x 83	28.8 x 78.5	25.7 x 101.4	29 x 108	29.5 x 118
Adapter						None
Cat No.	GAS-c15(50)	GAS-c25(c50)	GAS-c25(c50)	GAS-30(c50)	GAS-50(c50)	-
Bucket capacity(ea / 6)	2/12	2/12	2/12	2/12	2/12	2/12
Adaptor hole dimension (Φ x L,mm)	17 x 105	27.1 x 14.1	27.1 x 14.1	26 x 83.8	27.9 x 11	-
Adaptor hole bottom type	Conical	Conical	Conical	Round	Round	-
Max. radius (mm)	171	137	137	162.4	162.6	173.6
Max. RCF (g-force)	3,059	2,451	2,451	2,905	2,909	3,105



50 mL Bucket with a Cap
GLB-b50-100

Max. RPM / RCF with : 4,000 / 3,032
 Max. Radius (mm) : 169.5
 Hole dimension (Ø x L, mm) : 30.5 x 97
 Max. height for tube fit (mm) : 120 (w/ cap) / 125 (w/o cap)
 Hole bottom type : Flat bottom with rubber pad
 Supplied with a cap and O-ring, No cap version is available

Tube									
Tube capacity (mL)	14 mL	15	15 mL conical	25 mL conical	25 mL conical	30	50 mL conical	50 mL conical (Skirt)	50
Tube Dimension (Φ x L, mm)	15.7 x 96	16 x 120	17 x 120	28.8 x 83	28.8 x 78.5	25.7 x 101.4	29.5 x 118	29.5 x 118	29 x 108
Adapter								None	None
Cat No.	GAS-u14(f50)	GAS-u15(f50)	GAS-u15(f50)	GAS-c25(f50)	GAS-c25(f50)	GAS-30(f50)	GAS-c50(f50)	-	-
Adaptor hole dimension (Φ x L,mm)	17.2 x 75	17.2 x 87	17.2 x 87	27.1 x 14.1	27.1 x 14.1	26 x 86.5	29.5 x 17.5	-	-
Adaptor hole bottom type	Open	Open	Open	Conical	Conical	Round	Conical	-	-
Max. radius (mm)*	169.5	169.5	169.5	135.7	135.7	160.7	169.5	169.5	169.5
Max. RCF (g-force)*	3,032	3,032	3,032	2,427	2,427	2,875	3,032	3,032	3,032



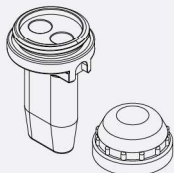
15 mL Dual Round Bucket
with a Cap
GLB-bd15-100

Max. RPM / RCF : 4,000 / 3,032
Max. Radius (mm) : 169.5
Hole dimension (Ø x L, mm) : 17 x 87
Max. height for tube fit (mm) : 123 (w/ cap) / 127 (w/o cap)
Hole bottom type : Round
Supplied with a cap and O-ring

Tube			
Tube capacity (mL)	15 mL glass	15 mL open top	15
Tube Dimension (Φ x L,mm)	16 x 100	16 x 114	16 x 120
Bucket capacity (ea / 6)	2 / 12	2 / 12	2 / 12
Max. height tube fit (mm)	123	123	123
Max. radius (mm)	169.5	169.5	169.5
Max. RCF (g-force)	3,032	3,032	3,032

Bio-Safe

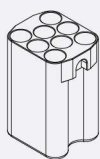
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15 mL Dual Conical Bucket
with a Cap
GLBB-bdc15-100

Max. RPM / RCF : 4,000 / 3,105
Max. Radius (mm) : 173.6
Hole dimension (Ø x L, mm) : 17 x 97.5
Max. height for tube fit (mm) : 120 (w/ cap) / 125 (w/o cap)
Hole bottom type : Conical
Supplied with a cap and O-ring, No cap version is available

Tube				
Tube capacity (mL)	5 mL conical	5 mL conical	14 mL	15 mL conical
Tube Dimension (Φ x L, mm)	16 x 59	16 x 67	15.7 x 96	17 x 120
Adapter				None
Cat No.	GAS-c5(c15)	GAS-c5(c15)	GAS-14(c15)	-
Bucket capacity (ea / 6)	2 / 12	2 / 12	2 / 12	2 / 12
Adaptor hole dimension (Φ x L,mm)	14.8 x 20	14.8 x 20	16 x 7.8	-
Adaptor hole bottom type	Conical	Conical	Round	-
Max. radius (mm)	120.5	120.5	156.5	173.6
Max. RCF (g-force)	2,156	2,156	2,799	3,105



Vacutainer 10 mL Bucket,
GLB-15-8-100

Max. RPM / RCF : 4,000 / 3,059 | Max. Radius (mm) : 171
 Hole dimension (Ø x L, mm) : 17 x 86
 Hole bottom type : Flat with rubber pad
 Max. height for tube fit (mm) : 115
 Supplied with 3.0 mm thick NBR rubber pad

									
Tube									
Tube capacity (mL)	2.0 ~ 4 mL VT	4 ~ 7 mL VT	5 mL conical	5 mL conical	14 mL	8 ~ 10 mL VT	15 mL glass	15 mL open top	15
Tube Dimension (Φ x L, mm)	13 x 75	13 x 100	16 x 59	16 x 67	15.7 x 96	16 x 100	16 x 100	16 x 114	16 x 120
Adapter						None	None	None	None
Cat No.	GAS-3(f15)	GAS-5(f15)	GAS-c5(f15)	GAS-c5(f15)	GAS-14(f15)	-	-	-	-
Bucket capacity (ea / 6)	8 / 48	8 / 48	4 / 24	4 / 24	4 / 24	8 / 48	8 / 48	8 / 48	2 / 12
Adaptor hole dimension (Φ x L, mm)	13.5 x 61	13.5 x 85	14 x 20	14 x 20	16.5 x 7	-	-	-	-
Adaptor hole bottom type	Round	Open	Conical	Conical	Round	-	-	-	-
Max. height tube fit (mm)	88	115	75	75	103.5	115	115	115	125(center)
Max. radius (mm)*	144	171	130	130	159.5	171	171	171	171
Max. RCF (g-force)*	2,576	3,059	2,325	2,325	2,853	3,059	3,059	3,059	3,059