

# 416 Low-speed Centrifuge



## Features

- Speed : 4,000 rpm (2,549 xg) ; 4,000 rpm (2,700 xg)
- Capacity : 10 x 50 mL /c50 mL ; 16 x 15 mL
- Very quiet operation at less than 56 dB allowing a comfortable laboratory environment
- Lid drop protection allows easiness and safety when loading or unloading samples
- Automatic lid release and vivid end alarm allows easy retrieval of sample
- Unique vacutainer buckets for separation of 32 vacutainer samples
- Large assortment of accessories for micro tubes and all sizes of tubes up to 100 mL

## Technical Specifications


<b>Max. RPM/PCF for Fixed Angle</b>	4,000 rpm / 2,700 xg
<b>Max. RPM/PCF for Swing-out</b>	4,000 rpm / 2,826 xg
<b>Max. Capacity for Fixed Angle</b>	16 x 15 mL, 10 x 50 mL
<b>Max. Capacity for Swing-out</b>	4 x 100 mL, 4 x 8 vacutainer tube, 2 x 2 MTPs
<b>Time control</b>	Timed <100 min or continuous
<b>Acc. time to Max. Speed</b>	≤20 sec
<b>Dec. time from Max. Speed</b>	≤25 sec
<b>RCF/RPM conversion</b>	Yes
<b>Noise level (dependent on rotor)</b>	≤52 dB

















<b>RCF/RPM conversion</b>	Yes
<b>Program Memory</b>	10
<b>Power Supply</b>	AC 230V, 50Hz (AC 220-230V, 60/50Hz; 110V optional)
<b>Power Requirement</b>	340 VA
<b>Dimension (W x D x H)</b>	375 x 480 x 260 mm
<b>Net Weight</b>	19.5 kg
<b>CE MARK</b>	Yes
<b>Cat No.</b>	GZ-0416

## Angle Rotor, GRA-S-50-10

- Capacity : 10 x 50 mL or 50 mL Conical | Max. RPM / RCF : 4,000 / 2,549
- Hole angle rotation :  $\angle 45^\circ$  | Hole dimension ( $\varnothing \times L$ , mm) : 32.2 x 13.5
- Supplied with 10 sleeves, No ID ring



	<b>50 mL Sleeve GLB-50s-50A</b>	Max. RMP / RCF : 4,000 / 2,549 Hole dimension ( $\varnothing \times L$ , mm) : 30 x 99 Hole bottom type : Flat bottom with rubber pad Max. height for tube fit (mm) : 130 Supplied with 3.5 mm thick NBR pad
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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 ( $\varnothing \times L$ , 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 ( $\varnothing \times L$ , 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)	141.9	141.9	141.9	115	115	135	135.5	142.5	142.5
Max. RCF (g-force)	2,538	2,538	2,538	2,057	2,057	2,415	2,424	2,549	2,549

## Fixed Angle Rotor, GRA-S-c50-10

- Capacity : 10 x 50 mL or 50 mL Conical | Max. RPM / RCF : 4,000 / 2,508
- Hole angle rotation :  $\angle 45^\circ$  | Hole dimension ( $\varnothing \times L$ , mm) : 32.2 x 13.5
- Supplied with 10 sleeves, No ID ring



	<b>50 mL Sleeve GLB-c50s-50A</b>	Max. RPM / RCF : 4,000 / 2,508 Hole dimension ( $\varnothing \times L$ , mm) : 31 x 99 Hole bottom type : Conical Max. height for tube fit (mm) : 130
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Tube						
Tube capacity (mL)	15 mL conical	25 mL conical	25 mL conical	30	50	50 mL conical
Tube Dimension ( $\varnothing \times L$ , mm)	17 x 120	28.8x83	28.8x78.5	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 ( $\varnothing \times L$ , 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	-
Max. radius (mm)	139.6	115	115	135.5	136.1	140
Max. RCF (g-force)	2,497	2,057	2,057	2,424	2,435	2,508














## Angle Rotor, GRA-S-15-16A

- Capacity : 16 x 15 mL
- Max. RPM / RCF : 4,000 / 2,700
- Hole angle rotation :  $\angle 45^\circ$
- Hole dimension ( $\varnothing \times L$ , mm) : 20.4 x 10.5
- Supplied with 16 sleeves, No ID ring



15 mL Sleeve  
**GLB-15/10A**

Max. RPM / RCF : 4,000 / 2,700  
 Hole dimension ( $\varnothing \times L$ , mm) : 18 x 87  
 Hole bottom type : Flat bottom with rubber pad  
 Max. height for tube fit (mm) : 125 (120 for conical / wider cap)  
 Supplied with 4.0 mm thick NBR pad

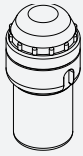
Tube								
Tube capacity (mL)	2.0 ~ 4 mL VT	4 ~ 7 mL VT	5 mL conical	5 mL conical	14 mL	8 ~ 10 mL VT	15	15 mL conical
Tube Dimension ( $\varnothing \times L$ , mm)	13 x 75	13 x 100	16 x 59	16 x 67	15.7 x 96	16 x 100	16 x 120	17 x 120
Adapter						None	None	None
Cat No.	GAS-3(f15)	GAS-5(f15)	GAS-c5(f15)	GAS-c5(f15)	GAS-14(f15)	-	-	-
Adaptor hole dimension ( $\varnothing \times L$ , 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)*	134	146	118.5	118.5	139.4	150.9	150.9	150.9
Max. RCF (g-force)*	2,397	2,612	2,120	2,120	2,494	2,700	2,700	2,700

# Swing Rotor, GRS-S-100-4

- 4 loadings
- Max. RPM : 4,000
- Angle from axis during rotation :  $\angle 90^\circ$
- Supplied with a lubricant, No ID ring



**Bio-Safe** Porton Down Certified

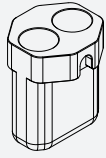


100 mL Bucket with a Cap  
**GLBB-b100-100**

Max. RPM / RCF : 4,000 / 2,774  
 Max. Radius (mm) : 155.1  
 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 an 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
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-15-3(b100)	GAS-c15(b100)
Rack capacity (ea / 4)	6 / 24	6 / 24	3/12	3/12	5 / 20	5 / 20	3 / 12	3 / 12	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 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)*	150.1	150.1	110.1	110.1	150.1	150.1	152.1	155.1	155.1
Max. RCF (g-force)*	2,685	2,685	1,969	1,969	2,685	2,685	2,721	2,774	2,774

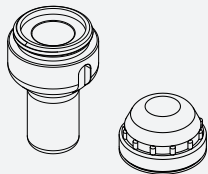
Tube								
Tube capacity (mL)	25 mL conical	25 mL conical	30	50	50 mL conical	50 mL conical (Skirted)	85	100
Tube Dimension (Φ x L, mm)	28.8 x 83	28.8 x 78.5	25.7 x 101.4	29 x 108	29.5 x 118	29.5 x 118	38 x 106	44 x 115
Adapter								
Cat. No.	GAS-c25(b100)	GAS-c25(b100)	GAS-30(b100)	GAS-50(b100)	GAS-c50(b100)	GAS-sc50(b100)	GAS-85(b100)	GAS-100(b100)
Rack capacity (ea / 4)	1 / 4	1 / 4	1 / 4	1 / 4	1 / 4	1 / 4	1 / 4	1 / 4
Rack hole dimension (Φ x L,mm)	17.2 x 52	17.2 x 52	26 x 86	29.5 x 95.9	30 x 100	29.8 x 100	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)*	153.5	153.5	153.5	153	153	153	153.5	150.1
Max. RCF (g-force)*	2,746	2,746	2,746	2,737	2,737	2,737	2,746	2,685



**50 mL Conical Bucket**  
**GLB-dc50-100**

Max. RPM / RCF : 4,000 / 2,774  
 Max. Radius (mm) : 155.1  
 Hole dimension (Ø x L, mm) : 30 x 89  
 Max. height for tube fit (mm) : 125  
 Hole bottom type : Conical

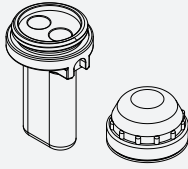
Tube						
Tube capacity (mL)	15 mL conical	25 mL conical	25 mL conical	30	50	50 mL conical
Tube Dimension (Φ x L, mm)	17 x 120	28.8 x 83	28.8 x 78.5	25.7 x 101.4	29 x 108	29.5 x 118
Adapter						None
Cat No.	GAS-c15(50)	GAS-c25(c50)	GAS-c25(c50)	GAS-30(c50)	GAS-50(c50)	-
Bucket capacity(ea / 6)	2 / 8	2 / 8	2 / 8	2 / 8	2 / 8	2 / 8
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)	152.5	118.5	118.5	143.9	144.1	155.1
Max. RCF (g-force)	2,728	2,120	2,120	2,574	2,578	2,774



**50 mL Bucket with a Cap**  
**GLB-b50-100**




Max. RPM / RCF : 4,000 / 2,700  
 Max. Radius (mm) : 150.9  
 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)	150.9	150.9	150.9	117.1	117.1	142.1	142	150.9	150.9
Max. RCF (g-force)	2,700	2,700	2,700	2,095	2,095	2,542	2,540	2,700	2,700

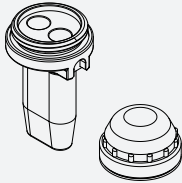


15 mL Dual Round Bucket  
with a Cap  
**GLB-bd15-100**

Max. RPM / RCF : 4,000 / 2,700  
Max. Radius (mm) : 150.9  
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 / 8	2 / 8	2 / 8
Max. height tube fit (mm)	123	123	123
Max. radius (mm)	150.9	150.9	150.9
Max. RCF (g-force)	2,700	2,700	2,700

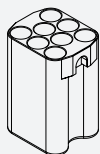
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15 mL Dual Conical Bucket  
with a Cap  
**GLBB-bdc15-100**

Max. RPM / RCF : 4,000 / 2,774  
Max. Radius (mm) : 155.1  
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 / 8	2 / 8	2 / 8	2 / 8
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)	102	102	115.1	155.1
Max. RCF (g-force)	1,826	1,826	2,059	2,774



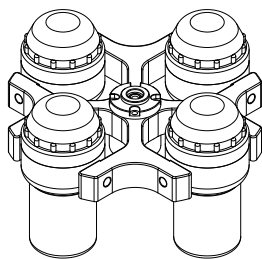
Vacutainer 10 mL Bucket  
**GLB-15-8-100**

Max. RPM / RCF : 4,000 / 2,719  
 Max. Radius (mm) : 152  
 Hole dimension (Ø x L, mm) : 17 x 86  
 Hole bottom type : Flat  
 Max. height for tube fit (mm) : 115  
 Supplied with 3.0 mm thick NBR rubber pad

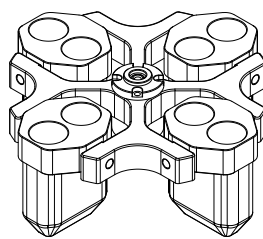
Tube									
Tube capacity (mL)	2.0 ~ 4 mL VT	4 ~ 7 mL VT	5 mL conical	5 mL conical	14 mL	8 ~ 10 mL VT	15 mL glass	15 mL open top	15
Tube Dimension (Φ x L, mm)	13 x 75	13 x 100	16 x 59	16 x 67	15.7 x 96	16 x 100	16 x 100	16 x 114	16 x 120
Adapter						None	None	None	None
Cat No.	GAS-3(f15)	GAS-5(f15)	GAS-c5(f15)	GAS-c5(f15)	GAS-14(f15)	-	-	-	-
Bucket capacity (ea / 6)	8 / 32	8 / 32	4 / 16	4 / 16	4 / 16	8 / 32	8 / 32	8 / 32	2 / 8
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)*	125	156.6	112	112	140.5	152	152	152	152
Max. RCF (g-force)*	2,236	2,719	2,003	2,003	2,513	2,719	2,719	2,719	2,719

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

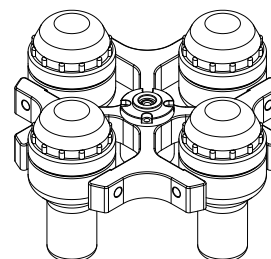
### Adaptable Buckets of Rotor, GRS-S-100-4



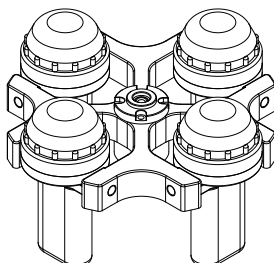
GLBB-b100-100



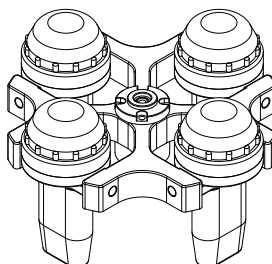
GLB-dc50-100



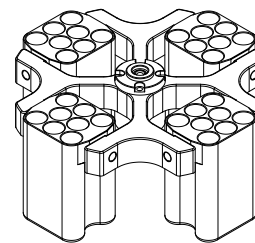
GLB-b50-100



GLB-bd15-100



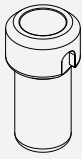
GLBB-bdc15-100



GLB-15-8-100

















## Swing Rotor, GRS-S-50-4

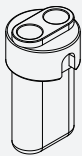
- 4 loadings
- Max. RPM : 4,000
- Angle from axis during rotation:  $\angle 90^\circ$
- Supplied with a lubricant
- No ID ring



50 mL Bucket  
**GLB-50-50**




Max. RPM / RCF : 4,000 / 2,700  
 Max. Radius (mm) : 150.9  
 Hole dimension ( $\varnothing \times L$ , mm) : 30.5 x 91  
 Max. height for tube fit (mm) : 125  
 Hole bottom type : Flat  
 Supplied with 4.0 mm thick NBR pad

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 ( $\varnothing \times L$ , 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 ( $\varnothing \times L$ , 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)	150.9	150.9	150.9	117.1	117.1	142.1	142	150.9	150.9
Max. RCF (g-force)	2,700	2,700	2,700	2,095	2,095	2,542	2,540	2,700	2,700

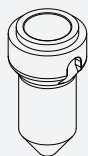


15 mL Dual Round Bucket  
**GLB-d15-50**

Max. RPM / RCF : 4,000 / 2,700  
 Max. Radius (mm) : 150.9  
 Hole dimension ( $\varnothing \times L$ , mm) : 17 x 91.5  
 Max. height for tube fit (mm) : 125  
 Hole bottom type : Round

Tube			
Tube capacity (mL)	15 mL glass	15 mL open top	15
Tube Dimension ( $\varnothing \times L$ , mm)	16 x 100	16 x 114	16 x 120
Max. height tube fit (mm)	125	125	125
Max. radius (mm)	150.9	150.9	150.9
Max. RCF (g-force)	2,700	2,700	2,700

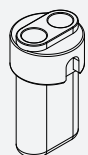




50 mL Bucket  
**GLB-c50-50**

Max. RPM / RCF : 4,000 / 2,700  
 Max. Radius (mm) : 150.9  
 Hole dimension (Ø x L,mm) : 29.5 x 91.5  
 Max. height for tube fit (mm) : 125  
 Hole bottom type : Conical

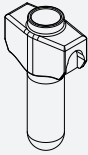
Tube						
Tube capacity (mL)	15 mL conical	25 mL conical	25 mL conical	30	50	50 mL conical
Tube Dimension (Φ x L, mm)	17 x 120	28.8 x 83	28.8 x 78.5	25.7 x 101.4	29 x 108	29.5 x 118
Adapter						None
Cat. No.	GAS-c15(c50)	GAS-c25(c50)	GAS-c25(c50)	GAS-30(c50)	GAS-50(c50)	-
Rack hole dimension (Φ x L,mm)	17 x 105	27.1 x 14.1	27.1 x 14.1	26 x 83.8	27.9 x 11	-
Rack hole bottom type	Conical	Conical	Conical	Round	Round	-
Max. radius (mm)	150.9	119.9	119.9	145.3	145.5	150.9
Max. RCF (g-force)	2,700	2,145	2,145	2,599	2,578	2,700



15 mL Dual Conical Bucket  
**GLB-dc15-50**




Max. RPM / RCF : 4,000 / 2,700  
 Max. Radius (mm) : 150.9  
 Hole dimension (Ø x L,mm) : 17 x 91.5  
 Max. height for tube fit (mm) : 120  
 Hole bottom type : Conical

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)	-
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)	98.6	98.6	131.6	150.9
Max. RCF (g-force)	1,826	1,826	2,354	2,700



**15 mL Round Bucket  
GLB-15-50**








Max. RPM / RCF : 4,000 / 2,700  
 Max. Radius (mm) : 150.9  
 Hole dimension (Ø x L, mm) : 17 x 93  
 Max. height for tube fit (mm) : 125  
 Hole bottom type : Round

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
Max. height tube fit (mm)	125	125	125
Max. radius (mm)	150.9	150.9	150.9
Max. RCF (g-force)	2,700	2,700	2,700



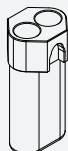
**15 mL Conical Bucket  
GLB-c15-50**

Max. RPM / RCF : 4,000 / 2,700  
 Max. Radius (mm) : 150.9  
 Hole dimension (Ø x L, mm) : 17 x 92.5  
 Max. height for tube fit (mm) : 125  
 Hole bottom type : Conical

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)	-
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)	99.8	99.8	132.8	150.9
Max. RCF (g-force)	1,785	1,785	2,376	2,700






## Swing Rotor, GRS-S-15-6

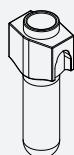
- 6 loadings
- Max. RPM : 4,000
- Angle from axis during rotation:  $\angle 90^\circ$
- Rotor dimension / weight ( $\varnothing \times L$ , mm / g) : 198.2 x 44 / 573
- Supplied with a lubricant, No ID ring



15 mL Dual Round Bucket  
**GLB-d15-15**




Max. RPM / RCF : 4,000 / 2,737  
 Max. Radius (mm) : 153  
 Hole dimension ( $\varnothing \times L$ , mm) : 17 x 88  
 Max. height for tube fit (mm) : 122  
 Hole bottom type : Flat with rubber pad  
 Supplied with 3.0 mm thick NBR rubber pad

Tube			
Tube capacity (mL)	2.0 ~ 4 mL VT	4 ~ 7 mL VT	8 ~ 10 mL VT
Tube Dimension ( $\varnothing \times L$ , mm)	13 x 75	13 x 100	16 x 100
Adapter			None
Cat No.	GAS-3(f15)	GAS-5(f15)	-
Bucket capacity (ea / 4)	2 / 12	2 / 12	2 / 12
Adaptor hole dimension ( $\varnothing \times L$ , mm)	13.5 x 61	13.5 x 85	-
Adaptor hole bottom type	Round	Open	-
Max. height tube fit (mm)	95	123	123
Max. radius (mm)	126	153	153
Max. RCF (g-force)	2,164	2,737	2,737



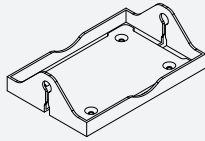
15 mL Round Bucket  
**GLB-15-15**

Max. RPM / RCF : 4,000 / 2,826  
 Max. Radius (mm) : 158  
 Hole dimension ( $\varnothing \times L$ , mm) : 17 x 93  
 Max. height for tube fit (mm) : 125  
 Hole bottom type : Round

Tube			
Tube capacity (mL)	15 mL glass	15 mL open top	15
Tube Dimension ( $\varnothing \times L$ , mm)	16 x 100	16 x 114	16 x 120
Max. height tube fit (mm)	120	120	120
Max. radius (mm)	158	158	158
Max. RCF (g-force)	2,826	2,826	2,826

## Swing Rotor, GRS-S-mw-2

- 2 loadings
- Max. RPM : 4,000
- Angle from axis during rotation:  $\angle 90^\circ$
- Supplied with microplate holder, No ID ring



Microplate Bucket  
**GLP-mw**

Max. RPM / RCF : 4,000 / 2,000  
 Max. Radius (mm) : 111.8  
 Hole dimension (w x d, mm) : 86.5 x 128.5  
 Max. height for tube fit (mm) : 35  
 Supplied with 3.0 mm thick ABS pad



Tube

Tube capacity (mL)	MTP
Tube Dimension (Φ x L,mm)	86 x 128 x15
Bucket capacity (ea / 2)	2 / 4