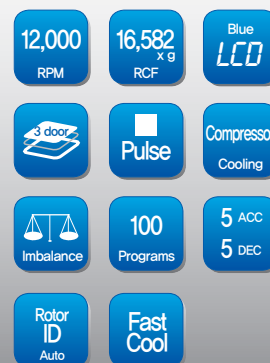


❄️ Refrigerated

# 1236R

**Multi-Purpose Refrigerated Centrifuge for up to 12,000 rpm**

Ideal for multi-purpose centrifugation at refrigerated condition



- Floor type, compact, multi-purpose centrifuge
- Max. 12,000 rpm/ 16,582 g, Time setting to 9 hr 59 min or continuous, Temp setting to -20°C
- Useful for a wide range of tubes from microtubes to 250 ml bottles and microplates
- Fast Cool function (reach 4°C within 5 min)
- "Pulse" key for quick runs
- Automatic conversion of RPM/RCF value
- 5 acceleration ramps and 5 deceleration ramps
- LCD display of speed, remaining time, and temperature
- Program memory for up to 100
- Automatic rotor identification when spinning starts to avoid unacceptable operation
- Automatic recognition and alarms for imbalance, over-speed and over-heat
- Three layered safe door with auto-lock function
- Compressor-off when the door is open to minimize frosting and rust
- Environment friendly R404a refrigerant
- Mounted on four-wheel canister for easy movement and lock-up
- Many fixed angle rotors, swing rotors and buckets, and adaptors available

## Display and Control Interface



## Technical Specifications

	Fixed Angle Rotor	Swing Rotor		
Max. capacity	30 x 1.5/2.0 ml	4 x 12 x 15 ml	Program memory	100
	24 x 15 ml	4 x 4 x 50 ml	Rotor Identification	Automatic
	8 x 50 ml	4 x 2 x 85 ml	Imbalance cutout	Yes
	6 x 85 ml	4 x 250 ml	Display	Blue LCD
		4 x 4 x MTP	Safety lid lock	Yes
Max. RPM/RCF	12,000/16,582	5,000/5,394	Lid drop protection	Yes
Control (?)	Microprocessor controlled		Power supply	220V/50~60Hz (110V optional)
Temp. range	-20°C to 40°C		Power requirement	2.5 KVA
FAST cool button	Yes		Dimension (W x D x H)	473 x 600 x 840 mm
Time control	Pulse, timed < 10 hr, or continuous		Weight without rotor	110 kg
RCF/RPM conversion	Yes		CE mark	Yes
Noise level (dependent on rotor)	≤60 dB		Cat. No.	7,638,515,301
Acceleration ramp	5			
Deceleration ramp	5			

SCANSPEED

























Rotors & Accessories




Swing rotor, **7,638,111,050**  
 4 loadings  
 Angle : 90°  
 Area dimension (mm) : 86 x 70.3  
 Max height for tube fit (mm) : 125

	Rectangular bucket, <b>7,603,111,120</b> Bucket bore(wxdxh)mm : 86 x 70.3 x 125		Microplate holder, <b>7,604,111,060</b> Bucket bore(wxdxh)mm : 88 x 128.5 x 80
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Tube													
Tube capacity(ml)	5	3	15	10	15 ml conical	50	50 ml conical	250	85	15	MTP	DWP	
Tube rack											None	None	
Cat. No.	7,603,111,110		7,603,111,140		7,603,111,170	7,603,111,200	7,603,111,230	7,603,111,260		7,604,111,852			
Rack Φ x L(mm)	13.5 x 80	13.5 x 58	17.5 x 90		17.5 x 90	30.2 x 90	30.5 x 90	62.5 x 90		38.5 x 90	17 x 90	-	-
Rack capacity(ea/4)	12/48	12/48	12/48		9/36	4/16	3/12		1/4	2/8		4/16	1/4
Max.rpm	4,000												
Max.rcf(g-force)	3,134										2,737		
Radius(mm)	175.2										153		



Swing rotor, **7,603,111,720**  
 4 loadings  
 Angle : 90°  
 Hole diameter (Φ, mm) : 60.5  
 Max height for tube fit (mm) : 130

Tube	
Tube capacity(ml)	250 ml conical
Max.rpm	5,000
Max.rcf(g-force)	5,394
Radius(mm)	193












Conical bucket,  
**7,800,500,082**  
 Bucket Bore(ΦxL)mm : 60.5 x 130



Angle rotor, **7,638,111,754**  
 24 x 15 ml/15 ml conical  
 Angle : 45°  
 Hole diameter (Φ, mm) : 18  
 Max height for tube fit (mm) : 135 (125 for conical)



Steel sleeves, **7,601,111,040**  
 Sleeve bore (Φx h)mm : 18 x 135  
 Sleeve bore (Φx h)mm : 18 x 125(Conical)

Tube						
Tube capacity(ml)	15	3	4	5	10	15 ml conical
Adaptor	None				None	None
Cat. No.	-	7,601,113,030	7,601,113,035	7,601,113,040	-	-
Adaptor Φ x L(mm)	-	13 x 63	13 x 65	13 x 85	-	-
Max.rpm	4,000					
Max.rcf(g-force)	3,134	2,776	2,830	2,990	3,121	3,068
Radius(mm)	175.5	155.2	158.2	167.2	174.5	171.5



Fixed angle rotor, **7,638,111,550**  
 6 x 85 mL  
 Angle : 34°  
 Hole diameter (Φ, mm) : 38.5  
 Max height for tube fit (mm) : 125

Tube						
Tube capacity(mL)	15	10	15 mL conical	50	50 mL conical	85
Adaptor						None
Cat. No.	7,604,113,010		7,604,113,020	7,604,113,030	7,604,113,040	-
Adaptor Φ x L(mm)	16.2 x 97		17 x 105	29 x 90	29.5 x 100	-
Max.rpm	10,000					
Max.rcf(g-force)	11,515	11,404	11,292	11,627	11,404	12,298
Radius(mm)	103	102	101	104	102	110



Fixed angle rotor,  
**7,638,111,090**  
 24 x 15 mL  
 Angle : 34°  
 Hole diameter (Φ, mm) : 17.5  
 Max height for tube fit (mm) : 113

Tube	
Tube capacity(mL)	15
Max.rpm	8,000
Max.rcf(g-force)	8,872
Radius(mm)	124



Fixed angle rotor,  
**7,638,111,095**  
 8 x 50 mL  
 Angle : 34°  
 Hole diameter (Φ, mm) : 29.5  
 Max height for tube fit (mm) : 120

Tube				
Tube capacity(mL)	50	15	10	15 mL conical
Adaptor	None			
Cat. No.	-	7,601,113,041		7,601,113,042
Adaptor Φ x L(mm)	-	17 x 97		17 x 105
Max. RPM	12,000			
Max. RCF(g-force)	16,582	10,453	10,342	10,733
Radius(mm)	103	93.5	92.5	96



Fixed angle rotor,  
**7,638,111,010**  
 24 x 1.5/2.0 mL  
 Angle : 45°  
 Hole diameter (Φ, mm) : 11.1  
 Max height for tube fit (mm) : 56

Tube			
Tube capacity(mL)	1.5/2.0	0.2	0.5
Adaptor	None		
Cat. No.	-	7,600,113,010	7,600,113,020
Adaptor Φ x L(mm)	-	6.5 x 23	8 x 31
Max.rpm	12,000		
Max.rcf(g-force) of (24/30)	13,572/15,520	10,786/12,718	11,752/13,845
Radius(mm)of (24/30)	84.3/96.4	67/79	73/86



Fixed angle rotor,  
**7,638,111,500**  
 30 x 1.5/2.0 mL  
 Angle : 45°  
 Hole diameter (Φ, mm) : 11.1  
 Max height for tube fit (mm) : 56