

KUBOTA

High Capacity Centrifuge



High Capacity Refrigerated Centrifuge

8730

High Capacity Centrifuge

8620

Handles 4 x 1,000mL / 130 x 15mL Compact size: 64cm x 78cm x 86cm (WxDxH)

Features and Convenient Functions

Auto interlock lid

Lid can be opened or closed with one hand.

To close lid

Push closed gently. Electrical interlock system automatically locks lid closed.

To open lid

Press lid open key. Lid opens automatically after interlock is released.

Optional foot switch enables hands-free lid opening.

Acceleration and Deceleration characteristics

- Acceleration and deceleration curves can be varied in 9 steps to accommodate various samples and experimental conditions. Acceleration and deceleration speeds can be customized for reliable centrifugation of resuspension-prone samples.
- Density gradient methods can be used.

10 channel memory

10 memory settings are available, with one-touch saving, recall and operation.

Integrator function

Identical applications of total centrifugal force are easily reproducible using the g-sec (integrated RCF) function.

Sample temperature maintained at 4°C with ambient temperature of 25°C (Model 8730 only)

Rotor Temperature Compensation

(Model 8730 only)

- After setting rotor temperature, the rotor temperature control function identifies the type and speed of the rotor, and adjusts the sample temperature to the desired value.
- "Internal chamber temperature" or "Rotor temperature" can be selected when setting desired temperature.

Complies with GMP requirements

Tachometer port is useful for actual rotor speed measurements.

Safety comes first

The 8730 and 8620 models conform to International Safety Standard IEC 61010-2-020

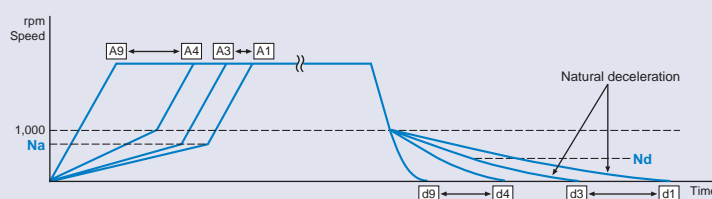
4 x 400mL MAP blood bags can be centrifuged when using the RS-4000 swinging bucket rotor.



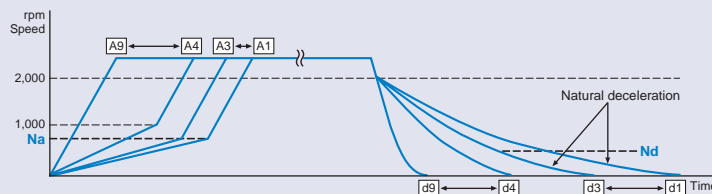
Foot switch (Optional)

Lid opens automatically when the switch is depressed. A newly designed gas spring provides smooth and quick lid opening. Hands-free operation facilitates experiments.

Acceleration and deceleration profiles for RS-1950 & RS-2200.



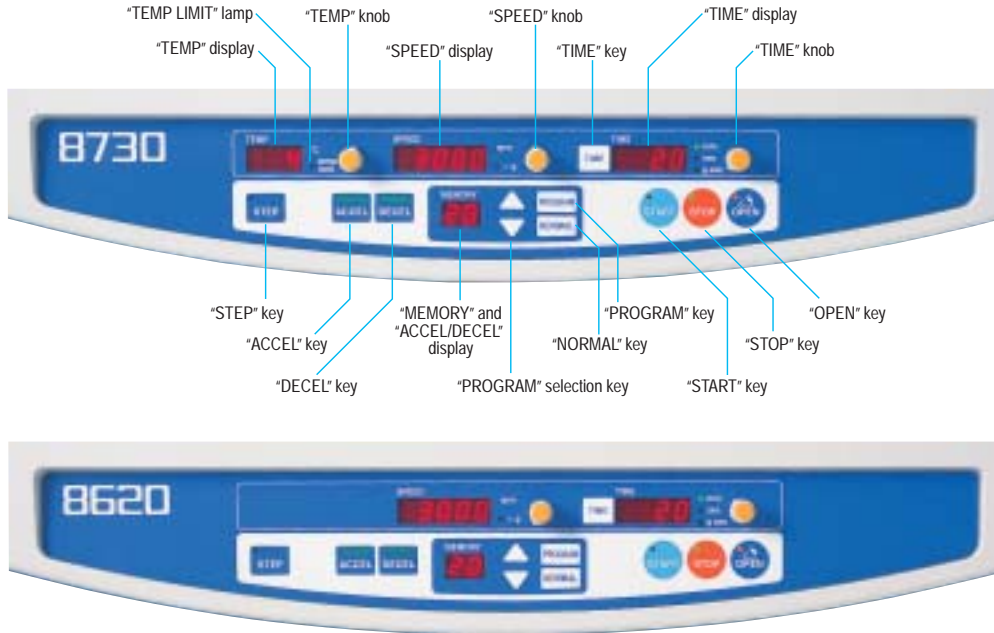
Acceleration and deceleration profiles for RS-4000.



9 acceleration and deceleration profiles

- A9 represents the most rapid acceleration, A1 the slowest acceleration.
- d9 represents the most rapid deceleration, d1 the slowest deceleration.
- For A8 to A4 settings, the acceleration rate changes at 1,000rpm.
- For d8 to d1 settings, the deceleration rate changes at 1,000rpm (RS-1950 & RS-2200) and 2000rpm (RS-4000).
- For A1 to A3 settings, the point Na where the acceleration rate is changed can be set from 0rpm to the maximum speed of rotor.
- For d1 to d3 settings, the point Nd where natural deceleration starts can be set from 0 rpm to maximum speed of rotor.

Operation Panel



Rotor, Bucket and Tube Rack Table for Model 8730/8620

Simultaneous use of two or more different types of rotor is not possible.

Rotor Name	Nominal Capacity	Tube size (mm) diam. x length	8730		8620		Bucket Code No. *2	Tube Rack Adaptor Code No.
			Maximum Speed rpm	Maximum RCF xg	Maximum Speed rpm	Maximum RCF xg		
High capacity swinging bucket rotor								
RS-4000	4x1,000mL	97 ~ 98x135 ~ 176	4,000	4,150	3,000	2,330	053-5980 • 053-0010	
	4x500mL Conical Bottle *1	96x147	4,000	4,150	3,000	2,330	053-5980 • 053-0010	431124 *1
	20x50mL Conical Tube	30x117	4,000	4,130	3,000	2,320	053-5980 • 053-0010	055-0310
	16x50mL	27 ~ 35.8x93 ~ 117	4,000	4,080	3,000	2,290	053-5980 • 053-0010	055-0330
	48x15mL Conical Tube	17x121	4,000	4,110	3,000	2,310	053-5980 • 053-0010	055-0300
	76x15mL	15 ~ 17.2x110 ~ 116	4,000	4,020	3,000	2,260	053-5980 • 053-0010	055-0340
	4x400mL MAP blood bag		4,000	4,110	3,000	2,310	053-5980 • 053-0010	055-6170L *3
	4x200mL MAP blood bag		4,000	4,110	3,000	2,310	053-5980 • 053-0010	055-6170L *3
4x200mL blood bag		4,000	4,110	3,000	2,310	053-5980 • 053-0010	055-6170L *3	
Multi-purpose swinging bucket rotor								
RS-1950	182xRIA Tube	9 ~ 11x75 ~ 110	3,000	1,760	3,000	1,760	attached to rotor	055-0020
	182x6mL	10 ~ 13x75 ~ 110	3,000	1,760	3,000	1,760	attached to rotor	055-0010
	182x10mL	12 ~ 13.5x75 ~ 110	3,000	1,760	3,000	1,760	attached to rotor	055-0030
	168x10mL *4	12 ~ 13.5x75 ~ 110	3,000	1,760	3,000	1,760	attached to rotor	055-0040
	130x15mL	15 ~ 17.2x70 ~ 110	3,000	1,760	3,000	1,760	attached to rotor	055-0050
	120x15mL *4	15 ~ 17.2x70 ~ 110	3,000	1,760	3,000	1,760	attached to rotor	055-0060
	28x50mL	27 ~ 36x75 ~ 110	3,000	1,760	3,000	1,760	attached to rotor	055-0070
	36x50mL Conical Tube	30x117	3,000	1,760	3,000	1,760	attached to rotor	055-0080
	6x175/200/225mL Conical Tube *5	61x118/61x130/61x137	3,000	1,760	3,000	1,760	attached to rotor	055-0090
6x250mL	60 ~ 62x80 ~ 136	3,000	1,760	3,000	1,760	attached to rotor	055-0090	
RS-2200	102x10mL Blood collecting tube/15mL	15 ~ 17.2x52 ~ 110	3,000	2,060	3,000	2,060	053-5370	
	6x250mL Conical Tube *6	60x161 ~ 173	3,000	2,270	3,000	2,270	053-5360	055-6160
	6x350mL Glass Tube	70x130	3,000	2,180	3,000	2,180	053-5360	

*1 Conical bottles made by Corning (No. 431123) require cushions (No. 431124)
 *2 RS-4000 requires either bucket Code No. 053-5980 (sealing cap not available) or bucket 053-0010 (sealing cap available).
 *3 Inner cup 055-6170L protects blood bags during rotation and facilitates their placement and removal.
 *4 Tube rack has two compartments, designed for easy handling.
 *5 175/225mL conical tubes made by BD Falcon (No. 352076/352075) require cushions (No. 352090).
 200mL conical tubes by Nunc (No. 376813) require cushion adaptors (No. 377585).
 *6 250mL conical tubes are made by Corning (No.430776)



RS-4000 swinging bucket rotor
(with bucket Code No.053-0010)



Bucket
Code No.053-5980 (sealing cap not available)
Code No.053-0010 (sealing cap available)



RS-1950 Swinging Bucket Rotor



RS-2200 Swinging Bucket Rotor

Specifications

Model 8730 (Refrigerated Type)

- Maximum Speed ● 4,000 rpm
- Maximum RCF ● 4,150 xg
- Maximum Capacity ● 4,000 mL
- Control System ● Microprocessor control (brushless motor)
Speed, RCF(g), Time, g-sec, Temperature, Acceleration and Deceleration, 10 memory banks
- Alarm display ● Lid open, Imbalance, Over speed, Abnormally high temperature,
Detected electrical abnormality in motor, inverter, lid interlock, speed sensor and temperature sensor
- Acceleration/Deceleration ● 9 selectable rates
- Speed setting ● Digital display, from 200 to 4,000 rpm, 10 or 100 rpm increments
- Speed indication ● Digital display, from 0 to 4,300 rpm, 10 rpm increments
- RCF setting ● Digital display, from 10 to 4,150 xg, 10 or 100 xg increments
- RCF indication ● Digital display, from 0 to 4,800 xg, 10 xg increments
- Integrator setting and indication ● Digital display, from 1.00 to 9.99x10³ g-sec
- Timer setting and indication ● Digital display, with HOLD function (continuous operation) and electric buzzer
1 second to 100 seconds, 1 sec increments
100 seconds to 990 seconds, 10 sec increments
1 minute to 100 minutes, 1 min increments
100 minutes to 990 minutes, 10 min increments
- Temperature setting and indication ● Digital display, -20°C to +40°C, 1°C increments
- Refrigerant ● R404A
- Power requirements ● Single phase 50/60Hz 220V±10% 20A, 230V±10% 20A
- Rated voltage and rated current ● 220V 10A, 230V 9.5A
- Power consumption and heat output ● 1.8kW 6.5MJ/h
- Dimensions, weight ● 64cm x 78cm x 86cm (WxDxH)^(*), 217kg
- Certificates of conformity ● IEC 61010-2-020
CE Marking (AC220V and 230V versions)
- Operating environment ● Temperature 10°C to 40°C, atmospheric pressure 70 to 106kpa, humidity 30 to 85%

Model 8620 (Non-Refrigerated Type)

- Maximum Speed ● 3,000 rpm
- Maximum RCF ● 2,330 xg
- Maximum Capacity ● 4,000 mL
- Control System ● Micro processor control (brushless motor)
Speed, RCF(g), Time, g-sec, Acceleration and Deceleration, 10 memory banks
- Alarm display ● Lid open, Imbalance, Over speed, Detected electrical abnormality in motor, inverter, lid interlock, speed sensor
- Acceleration/Deceleration ● 9 selectable rates
- Speed setting ● Digital display, from 200 to 3,000 rpm, 10 or 100 rpm increments
- Speed indication ● Digital display, from 0 to 3,300 rpm, 10 rpm increments
- RCF setting ● Digital display, from 10 to 2,330 xg, 10 or 100 xg increments
- RCF indication ● Digital display, from 0 to 2,820 xg, 10 xg increments
- Integrator setting and indication ● Digital display, from 1.00 to 9.99x10³ g-sec
- Timer setting and indication ● Digital display, with HOLD function (continuous operation) and electric buzzer
1 second to 100 seconds, 1 sec increments
100 seconds to 990 seconds, 10 sec increments
1 minute to 100 minutes, 1 min increments
100 minutes to 990 minutes, 10 min increments
- Power requirements ● Single phase 110V±10% 20A, 220V±10% 15A, 230V±10% 15A
- Rated voltage and rated current ● 110V 13A, 220V 4.5A, 230V 4.5A
- Power consumption and heat output ● 750W 2.7MJ/h
- Dimensions, weight ● 64cm x 78cm x 86cm (WxDxH)^(*), 179kg
- Certificates of conformity ● IEC 61010-2-020
CE Marking (AC220V and 230V versions)
- Operating environment ● Temperature 10°C to 40°C, atmospheric pressure 70 to 106kpa, humidity 30 to 85%




(*1) Not including projections

All specifications and external appearance are subject to change without notice.

* Use only rotors, adaptors and tube racks made by KUBOTA. Do not attempt to use rotors, adaptors or tube racks made by other manufacturers.

* Follow all instructions in the relevant Instruction & Service Manual when operating centrifuges.

Kubota has acquired ISO 9001 and ISO 13485 certification.

 Safety Precautions	<p>For your safe use of the equipments, be sure to read the instruction manual carefully before you start its operation.</p>	<p>Parts may be adversely affected by heat, humidity and specimens or deteriorated by aging resulting in functional failures or may even lose their safety characteristic to cause accidents.</p>
 DISCONTINUE USE Always discontinue use when phenomena listed at right appear.	<ul style="list-style-type: none"> •The rotor or bucket has been found to be damaged or corroded. •A burnt smell comes out of the equipment. •You receive a minor electrification when you touch the equipment body by a naked hand. •Some other abnormality or failure has been found occurring. 	 IMPORTANT To prevent occurrences of functional failures or accidents, turn off the power switch, pull out the power cable plug from the plug socket and be sure to contact your nearest Kubota Dealer, or an office of Kubota Corporation when there is no Kubota Dealer in your neighbourhood.

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