

High Capacity Centrifuge



High Capacity Refrigerated Centrifuge

8730

High Capacity Centrifuge

8622

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

Features and Convenient Functions

■ Motorized lid lock

Lid can be opened or closed with one hand.

To close the lid

Push the lid gently. Electrical interlock system will automatically locks the lid.

To open the lid

Press the open key.

The lid will open automatically after interlock is released.

Optional foot switch is available.

■ 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 samples that easily get stirred up.
- Density gradient method is available.

■ 10 channel memories

10 memory settings are available, with direct keys to store, recall and operate.

■ 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's thermal correction

(Model 8730 only)

- By setting the temperature of rotor, thermal control will identify the type and speed of rotor and correct the temperature of sample to the desired value.
- "Internal chamber temperature" or "Rotor temperature" can be selected when setting desired temperature.

■ Complies with GMP requirements

Tachometer port can be used to measure the actual speed of rotor.

■ Safety comes first

Model 8730 and 8622 conform to International Safety Standard IEC 61010-2-020

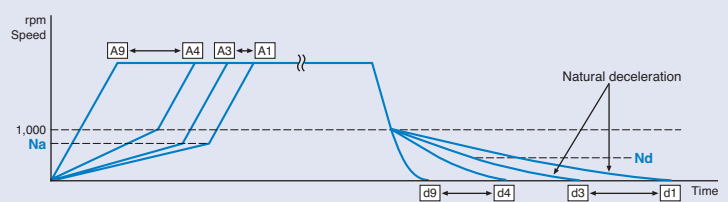
■ 4 x 400mL MAP blood bags can be centrifuged when using the RS-4000 swinging bucket rotor.



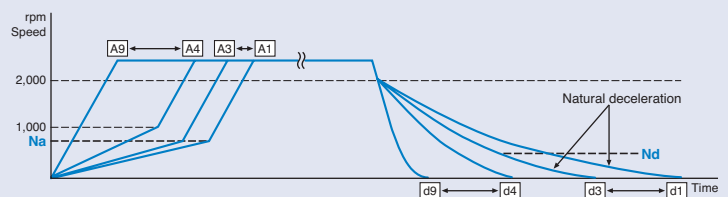
Foot switch (Optional)

Lid opens automatically when the switch is pressed. The newly designed shock absorber provides smooth and quick lid opening. Hands-free operation facilitates experiments.

Acceleration and deceleration profiles for RS-1950.



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) 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.

Control panel

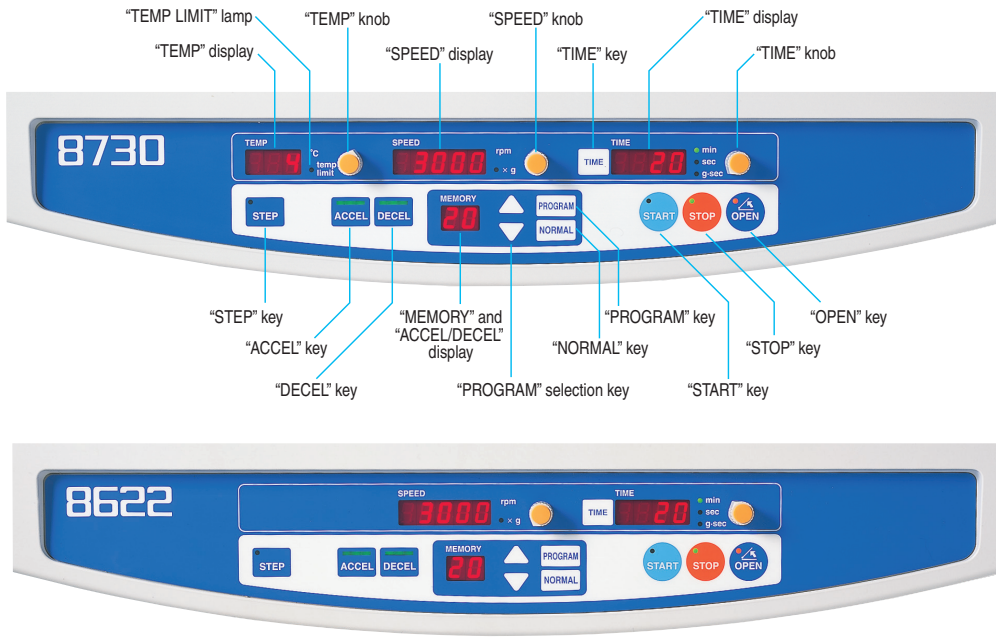


Table of rotors, buckets and tube racks for Model 8730/8622

Only 1 type of rotor is applicable per unit.

Rotor Name	Nominal Capacity	Tube size (mm) diam. x length	8730		8622		Bucket Code No. *2	Tube Rack Adaptor Code No.
			Maximum Speed	Maximum RCF	Maximum Speed	Maximum RCF		
			rpm	xg	rpm	xg		
High capacity swinging bucket rotor								
RS-4000	4x1,000mL	97~98x135~196 (176)	4,000	4,150	3,400	3,000	053-5980 · 053-0010	—
	4x700mL stainless steel	97x138	4,000	4,150	3,400	3,000		—
	4x500mL conical bottle *1	96x147	4,000	4,150	3,400	3,000		431124 *1
	20x50mL conical tube	30x117	4,000	4,130	3,400	2,990		055-0310
	16x50mL glass tube	27~35.8x93~117	4,000	4,020	3,400	2,910		055-0330
	48x15mL conical tube	17x121	4,000	4,110	3,400	2,970		055-0300
4x400mL MAP blood bag	—	4,000	4,080	3,400	2,950	055-6170L *3		
Multi-purpose swinging bucket rotor								
RS-1950	130x15mL glass tube	15~17.2x70~110	3,000	1,760	3,000	1,760	equipped with rotor	055-0050
	120x15mL glass tube *4	15~17.2x70~110	3,000	1,760	3,000	1,760		055-0060
	36x50mL conical tube	30x117	3,000	1,760	3,000	1,760		055-0080
	6x175/200/225mL conical tube *5	61x118/61x130/61x137	3,000	1,760	3,000	1,760		055-0090
	6x250mL	60~62x80~136	3,000	1,760	3,000	1,760		055-0090

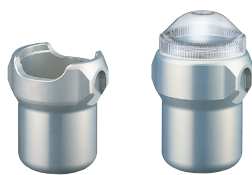
⚠ Rotor has prescribed operating life cycle, after that the rotor must be replaced. For more details, please contact us.

* The number of times allowed for autoclaving is limited. For more details, please contact us.

- *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 replacement and removal.
- *4 Tube rack has two compartments, well-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).

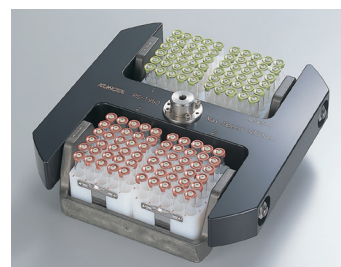


RS-4000 swinging bucket rotor
(with bucket Code No.053-0010)



Bucket

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



RS-1950 Swinging bucket rotor
(with bucket Code No.055-0060)

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, speed sensor and temperature sensor
- Acceleration/Deceleration ● 9 selectable rates
- Speed setting and indication ● Digital display, 10 or 100 rpm increments
- RCF setting and indication ● Digital display, 10 or 100 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 990 seconds, 1 sec increments
1 minute to 990 minutes, 1 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, height when lid is open 151cm^{*1}
- 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 8622 (Non-Refrigerated Type)

- Maximum Speed ● 3,400 rpm
- Maximum RCF ● 3,000 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, speed sensor
- Acceleration/Deceleration ● 9 selectable rates
- Speed setting and indication ● Digital display, 10 or 100 rpm increments
- RCF setting and indication ● Digital display, 10 or 100 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 990 seconds, 1 sec increments
1 minute to 990 minutes, 1 min increments
- Power requirements ● Single phase 110V±10% 20A, 220V±10% 15A, 230V±10% 15A
- Rated voltage and rated current ● 110V 13.7A, 220V 8.3A, 230V 7.8A
- Power consumption and heat output ● 110V 1.05kW 3.8MJ/h, 220/230V 1kW 3.6MJ/h
- Dimensions, weight ● 64cm x 78cm x 86cm (WxDxH), 179kg, height when lid is open 151cm^{*1}
- 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.

Precautions for use

Products in this catalogue are designed for use only by people who have the requisite technical knowledge, and must always be used with considerable care and only for their intended purpose. People who do not have adequate technical knowledge or training should only use the products under appropriate supervision by someone with expert knowledge, or else accidents are likely to occur.



Prohibited

Please immediately stop using the products in any of the cases listed on the right.

- The rotor or buckets appear to be damaged or corroded.
- When the replacement period (years of operation, operating lifetime) of a rotor has passed.
- The equipment emits a burning smell or becomes abnormally hot.
- You receive a weak electric shock when you touch the equipment with your bare hands.
- When any other abnormality or indication of failure is noticed.

IMPORTANT

If any of the cases listed at the left occurs, immediately turn off the power, disconnect the power cable plug or connecting terminals from the main power outlet, place a "Do not use" sign on the unit, and contact the nearest branch of Kubota Corporation.



Safety Precautions

To use the equipment safely, be sure to read the instruction manual carefully before you start operations.

Do not misplace the instruction manual. Keep the instruction manual nearby so that you can refer to it whenever necessary.

- The term of supplying spare parts for repair is 7 years after discontinuation of production (except spare parts which we are unable to procure).
- This catalogue is not for distribution in the USA, Canada and Mexico as products shown are not for sale in these countries.

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