

KUBOTA

Table Top Centrifuge



8420

**This table-top centrifuge can hold 80 x 10mL blood collecting tubes /15mL, or 4 x 750mL bottles.
Turn the knob for quick setting.
A shield cover is available for safe centrifuging of biohazardous materials.**

A clip-on shield cover, effective for biohazardous materials, is available for the RS-3012 and RS-730 swinging bucket rotors.

Sample balance can be measured by eye.

(for rotors used at 4,000rpm or less)

Complies with GMP requirements

Equipped with a tachometer port, in compliance with GMP requirements.

Actual rotor speed is easy to check.

Less sample temperature increase during centrifuging

Our special one-way cooling system for intake and evacuation of air minimises sample temperature increases during centrifuging.

Numerous detectors ensure safe, reliable operations. If trouble is detected, operation stops immediately.

- Sensors for imbalance, open lid and circuit breaker are incorporated.

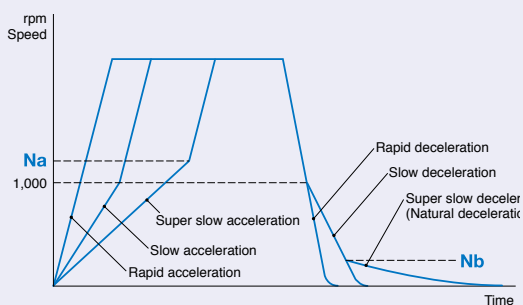
Easy-to-use functions maximise convenience

- 5 available memory settings, with one-key save and recall operation.
- Operation according to centrifugal force (xg), stepped centrifuging and integral centrifuging (g · sec) are all easy to select and set.
- Acceleration and deceleration curve can be varied in 3 steps to best meet sample and experimental requirements.
- Acceleration and deceleration speeds can be customised for reliable centrifugation of resuspension-prone samples.



Acceleration and deceleration characteristics

Acceleration and deceleration curves can be varied in three steps according to the type of sample and experimental conditions. Acceleration and/or deceleration commencement speed can be selected for the sample easy to stir.



- For the super slow acceleration and the super slow deceleration, a characteristic change-over speed Na and Nb can be set from 0 to 6,000 rpm.
- Natural deceleration starts at the change-over speed Nb.



**Table with casters, for mounting model 8420
Code No.047-3810**

Includes convenient storage space, and can be locked in position.
55(W) x 60(D) x 46(H) cm

* Autoclave parameters should not be exceeded. Refer to the Operation and Service Manual.



* Autoclavable (121°C)

RS-3012 Swinging bucket rotor

Bucket (Code No.053-5310, optional)
Shield cover (Code No.027-9210, optional)

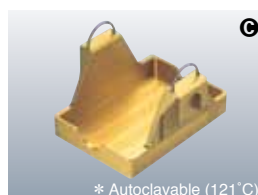
A secure clip system lets you easily attach and remove the shield covers.



* Autoclavable (121°C)

Bucket Code No.053-5180 (Optional)

Maximum capacity is 4 x 750mL bottles.
Various tube racks can be used.



* Autoclavable (121°C)

Bucket Code No.053-5220 (Optional)

Accepts 8 micro-plates and 4 deep-well plates. This bucket has no center bar so plates can be easily removed.



* Autoclavable (121°C)

Bucket Code No.053-5170 (Optional)

Accepts 8 micro-plates and 8 tissue culture plates.

Rotor, Bucket, Tube Rack for Model 8420

Rotor Name	Nominal Capacity	Tube size (mm) diam. x length *1	Maximum Speed rpm	Maximum RCF xg	Bucket Code No.	Tube Rack Adaptor Code No.			
Swinging Bucket Rotor									
RS-3012	140 x 6mL/RIA tube	10~12.3 x 65~100 (95)	3,300	2,150 *2	053-5310	055-5830			
	80 x 5~7mL blood collecting tube *3	12~13.3 x 63~110 (105)		2,280		055-5000			
	100 x 10mL	12~14.2 x 76~110 (105)		2,280		055-5840			
	80 (64) x 15mL	15~17.2 x 76~110 (105)		2,280		055-5850			
	80 (64) x 5~10mL blood collecting tube/15mL *4	12~17.2 x 72~110 (105)		2,280		055-0900			
	16 x 15/50mL (glass)	15mL 15~17.2 x 75~135(125)		3,300		2,280	053-5180	055-5860	
		50mL 27~36 x 79~115(110)						055-4660	
	48 x 15mL Conical tube	17 x 121 (121)				2,280		055-4610 *5	
	24 x 50mL Conical tube	30 x 117 (117)				2,280		055-5870	
	8 x 100mL	38~46.5 x 75~120 (116)				2,280		055-6880	
	4 x 250mL *6,7	60~61.8 x 100~141 (136)				2,280		055-6890	
	4 x 350mL	65~71 x 100~130 (122)				2,280		—	
	12x/16x/20x Self-Standing sputum tube *8	cap diam. ϕ 42/ ϕ 39/ ϕ 31				*8		*8	
	72 x 10mL blood collecting tube/15mL	15~17.2 x 75~110				3,300		2,280	053-5180
		16 x 50mL (glass)	27~36.8 x 79~114		2,280			055-0240	
		48 x 15mL Conical tube	17 x 121		2,280			055-0220	
		16 x 50mL Conical tube	30 x 117		2,280			055-0230 *5	
		4 x 250mL *6,7	60~61.8 x 100~141		2,280			055-4490	
		4 x 350mL	65~71 x 100~130		2,280			055-5880	
		4 x 500mL Conical tube *9	96 x 147	2,280	431124 *9				
		4 x 500mL bottle/650mL stainless bottle *10	84~86 x 100~125	2,280	055-5890				
	4 x 650/750mL *11	95~98 x 100~136	3,300	2,340 *2	053-5220	—			
		8 x Micro-plates *12		88(W) x 134(D) x 50(H)		2,020 *2	—		
	4 x Deep-well plates *12	8 x Micro-plates *12	92(W) x 133(D) x 36(H)	2,000	770 *2	053-5170	055-5900		
							8 x Culture plates *12	—	
	RS-730 *13	80 x RIA tube	12 x 75~110	4,000	3,260	K13215	K18005		
		48 x 5~7mL blood collecting tube	12.5~13 x 75~106		3,260		K18012		
		48 x 15mL *14	15.5~17 x 96~115		3,260		K18015		
16 x 15mL Conical tube *15		16.5 x 120.6	3,260		K18016				
8 x 50mL Conical tube *16		29.5 x 117	3,260		K18052				
28 x 50mL Conical tube		29.5 x 117	3,400 *2		K13235		—		
12 x Micro-plates *12		86(W) x 130(D) x 49(H)	4,000	2,880 *2	K13220	—			
				4 x Deep-well plates *12		—			
PT-89	8 x Micro-plates *12	86(W) x 130(D) x 89(H)	2,400	1,080	Equipped with rotor	055-6370 *17			
	4 x Deep-well plates *12								
Fixed-angle Rotor									
RA-410M3	8 x 12mL (Plastic) *18	15.8~16.5 x 97~120	6,000	4,670 *2	—	055-1120			
	8 x 14mL *19	17 x 100		4,550 *2		055-0550			
	8 x 15mL Conical tube	17 x 121		4,750 *2		055-1280			
	8 x 50mL (Plastic) *20	26.4~28.7 x 98~115		4,630 *2		055-1110			
	8 x 50mL Conical tube	30 x 117		4,830		—			
	Sartorius	Vivaspin 2		16.7 x 129		4,750 *2	—	055-1280	
		Vivaspin 6						—	
		Vivaspin 20						30 x 117	—
	Millipore	Amicon Ultra Free-CL		16.3 x 77		3,980 *2	—	055-1330	
		Amicon Ultra-4		17 x 129		4,750 *2	—	055-1280	
		Amicon Ultra-15		30 x 121		4,830	—	—	

*1 Figures in parentheses indicate speeds when using optional shield covers (No.027-9210).

*2 For centrifugal force indications, please refer to the instruction manual.

*3 5-7mL blood collecting tubes made by SEKISUI (Insepack II), Termo (Venoject II), Nipro (Neotube) or Beckton Dickinson (Vacutainer) can be used. Tubes for flow cytometry can also be used.

*4 5-10mL blood collecting tubes made by SEKISUI (Insepack II), Termo (Venoject II), Nipro (Neotube) or Beckton Dickinson (Vacutainer) can be used. Tubes for flow cytometry can also be used.

*5 15mL conical tubes can be centrifuged if adaptors are used (Code No.055-1280).

*6 175mL, 200mL and 225mL conical tubes can be centrifuged if cushions are used.

Cushions (Catalogue No.352090) must be used with 175 & 225mL conical tubes made by BD Falcon (Catalogue No.352076 & No.352075).

Cushions (Catalogue No.377585) must be used with Nunc 200mL bottles (No.376813).

*7 Nalgene and Herolab 250mL flat bottom bottles can be used.

*8 Various sputum tube capacities can be used. Contact our distributor for details.

*9 Conical tubes made by Corning (Catalogue No.431123) require Cushions (Catalogue No.431124).

*10 500mL bottles (Code No.K15501C/PPCO) can be used.

*11 Herolab bottles, 650mL (Catalogue No.253591, PP) and Beckman bottles, 750mL (Catalogue No.356855).

*12 Verify plate strength before centrifuging. Plates in lower position may fracture.

*13 Contact our distributor when the RS-730 rotor is to be used at 4,000rpm because a special type is required. In such cases, be sure to contact our distributor before attempting to use swinging rotors and plate rotors.

*14 When using shield covers, tubes cannot be positioned in the bucket corners, which reduces the maximum number of tubes that can be used for each bucket. For example, when using 15mL glass tubes with the K13215 bucket, the max number of tubes will be 32, not 36.

*15 15mL conical tubes made by Greiner, Corning, Sarstedt, BD Falcon, Thermo Fisher and Nalgene can be used with shield covers.

*16 50mL conical tubes made by Greiner, Sarstedt, Labcon can be used with shield covers.

*17 Facilitates removing plates from buckets.

*18 Nalgene tubes, No.3110-0120 and No.3117-0120.

*19 BD Falcon tubes, No.352006, No.352018 and No.352059.

*20 Nalgene tubes, No.3110-0500, No.3110-9500 and No.3117-9500.

* Autoclave parameters should not be exceeded. Refer to the Operation and Service Manual.



RS-730
Swinging bucket rotor
Bucket (Code No.K13215, optional)



Shield cover (Code No.K17112)
(Optional)
Shield cover for K13215
A secure clip system lets you easily attach and remove the shield covers.



Bucket Code No.K13220
(Optional)
Accepts 12 micro-plates and 4 deep-well plates.



PT-89
Plate rotor
(Optional)
Accepts 8 micro-plates or 4 deep-well plates.



RA-410M3
Fixed-angle rotor
8 x 50/15mL conical tubes
This multipurpose fixed-angle rotor accepts 12mL or 50mL tubes.
Lid (Code No.028-1260) is optional.

Specifications

Model 8420

Maximum Speed	• 6,000 rpm
Maximum RCF	• 4,830 xg
Maximum capacity	• 3,000 mL
Control system	• Micro-processor control (brushless motor) Speed, RCF(g), Time, g·sec, Acceleration and Deceleration, 5 memory banks
Alarm display	• Lid open, Imbalance, Over speed, Detected electrical abnormality in motor, inverter, lid interlock, speed sensor
Acceleration/Deceleration	• Three selectable rates; Rapid, Slow and Super Slow
Speed setting and indication	• Digital display, 10 rpm increments
RCF setting and indication	• Digital display, 10 xg increments
Integrator setting and indication	• Digital display, from 1.00 - 9.99 x 10 ⁹ g·sec
Stepped centrifugal	• speed, RCF(g), time, acceleration and deceleration, 1 memory bank
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 50/60 Hz, 110V±10%, 115V±10% 15A Single phase 50/60 Hz, 220V±10%, 230V±10% 8A
Rated voltage and rated current	• 110/115V 9.1A, 220/230V 4.7A
Power consumption and heat output	• 560W 2.0 MJ/h
Dimensions, weight	• 53(W) x 62(D) x 37(H) cm ^(*) , 62kg
Certificates of conformity	• IEC 61010-2-020 CE Marking (220/230V)



(*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.

NOTE	Products in this catalogue are designed for use by people having the requisite technical knowledge, and must always be used with care. People who do not have adequate technical knowledge or training should use our products only under appropriate supervision, or else hazards are likely to occur.	
 DISCONTINUE USE INDICATIONS	Always discontinue use if any of the conditions listed at right are evident.	<ul style="list-style-type: none"> • The rotor or bucket appears to be damaged or corroded. • The defined lifetime of the rotor expires. • The equipment emits a burnt smell. • You receive a minor electric shock when you touch the equipment with your bare hand. • Any other abnormality or indication of failure is noticed.
IMPORTANT	In the event of any observed abnormality in the equipment or its parts, to prevent occurrence of functional failure or accidents, immediately turn off the power switch, disconnect the power cable plug from the mains socket and contact your local distributor or Kubota Corporation if there is no local distributor in your neighbourhood.	
 Safety Precautions	For your safe use of the equipment, be sure to read the instruction manual carefully before you start operations.	Do not misplace the instruction manual. Keep the instruction manual nearby so you can refer to it whenever necessary.

- Spare parts for repair are typically available for a period of 10 years after production is discontinued (except when spare parts cannot be procured).
- This catalogue is not for distribution in the USA, Canada or Mexico, as the products shown are not for sale in these countries.

KUBOTA CORPORATION

<http://www.centrifuge.jp>

29-9 Hongo 3-chome, Bunkyo-ku, Tokyo 113-0033, Japan

Tel +81 3 3815 1331 Fax +81 3 3814 2574

E-mail: f-trade@kubotacorp.co.jp