

Compact Tabletop Centrifuge

2420



Compact Tabletop Refrigerated Centrifuge

2800



Model 2420

Small-footprint, and loaded with features Two types of swinging bucket rotor at 4,000rpm

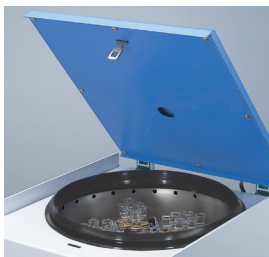
- Multiple swinging bucket rotors for 24 x 15mL tube
- Plate rotor for 2 x PCR plate / 6 x MTP / 2 x DWP

The small footprint Model 2420 can centrifuge 24 x 15mL tube at 4,000rpm.

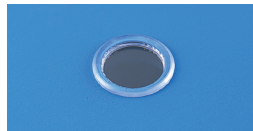
Compact size, only 35cm (W) x 42cm (D) x 32cm (H)

Rotor for PCR plates / MTP / DWP can be used.

2 x PCR plates, 6 x MTP or 2 x DWP can be centrifuged at a maximum RCF of 1,790 x g with the RMP-206 rotor.



Interlocking parts are protected against mechanical impact and employ a two-stage electrical protection circuit.



There is no vent that takes in the air through the top of lid. To prevent the entry of foreign material, the air intake vent is made inside the lid. Plastic tachometer port on the top of the lid enables easy measurement of actual rotor speed, and complies with GMP requirements.



Image of bucket
Bucket is equipped with sealing cap (one set).

Adaptor for 15mL conical tubes
Code No.055-1280

Autoclavable* (121°C)

4 x 50mL conical tubes
Code No.053-0040

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

Useful functions for easy operation

Three available memory settings, with one key save and recall operation

The memory functions make repetitive operations using the same speed and time becomes easy. Numerous detectors ensure safe and reliable operation. If trouble is detected, the operation will stop immediately.

Buzzer sounds at the end of operation

Five different buzzer sounds allow easy discrimination when any centrifugation ends among more than one centrifuge.

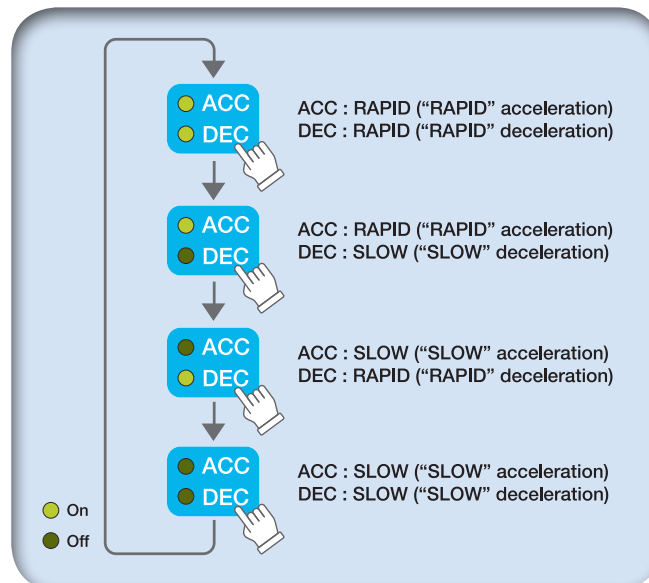
Complies with GMP requirements

Equipped with tachometer port to comply with GMP requirements. Actual rotor speed is easy to check.

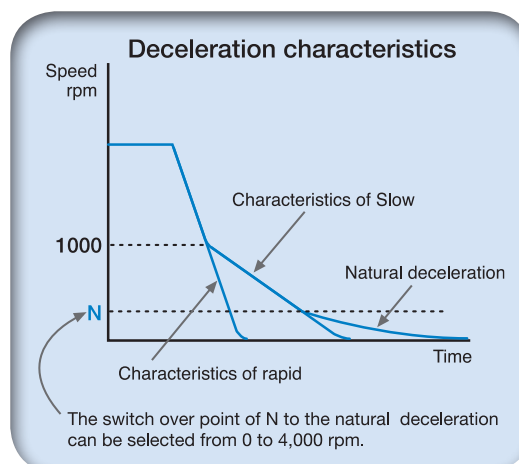
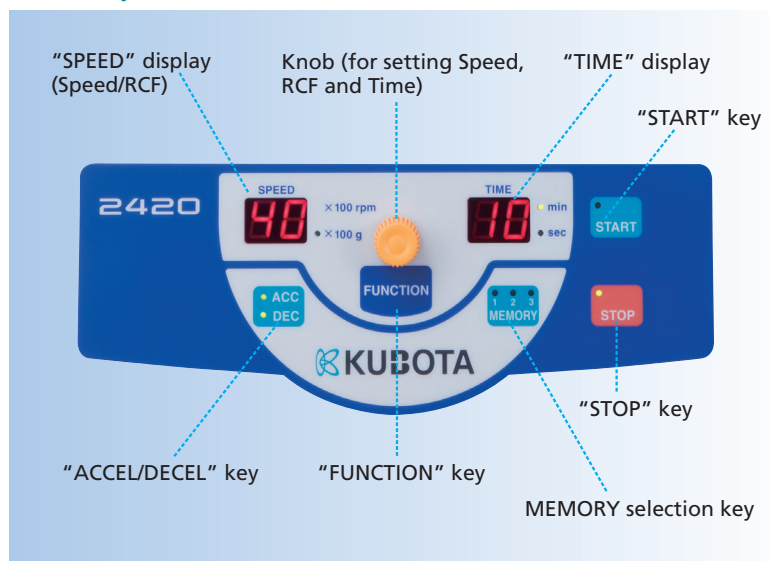
Actual rotor radius can be set, which allows displaying accurate RCF values.

Acceleration/Deceleration Function

Rapid/slow acceleration and rapid/slow deceleration can be selected to suit sample type and experimental conditions. The button operations are shown below.

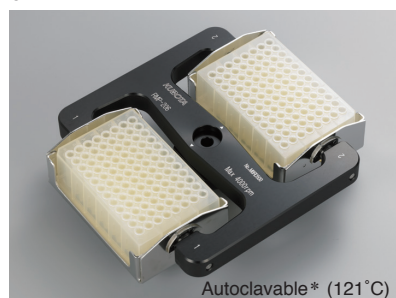


Control panel



RMP-206 Plate Rotor

6 x MTP



Many researchers want to use MTP so that the large number of samples can be easily centrifuged using less energy and less time. The 2420 can be used with the RMP-206 rotor for centrifuging 6 x MTP at 1,790 x g.

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

Model 2800

Tabletop refrigerated centrifuge with a small footprint Two types of swinging bucket rotor at 4,000rpm

- Multiple swinging bucket rotors for 24 x 15mL tubes
- Plate rotor for 2 x PCR plate / 6 x MTP / 2 x DWP

The small footprint Model 2800 can centrifuge 24 x 15mL tubes at 4,000rpm.

Compact size, only 37cm (W) x 64cm (D) x 37cm (H), with refrigerator.

Rotor for PCR plates / MTP / DWP can be used.

2 x PCR plates, 6 x MTP or 2 x DWP can be centrifuged at a maximum RCF of 1,790 x g with the RMP-206 rotor.

Sample temperature is maintained at 4°C at maximum speed (25°C. ambient temperature)



Interlocking parts are protected against mechanical impact and employ a two-stage electrical protection circuit.



Equipped with tachometer port to comply with GMP requirements. Actual rotor speed is easy to check.



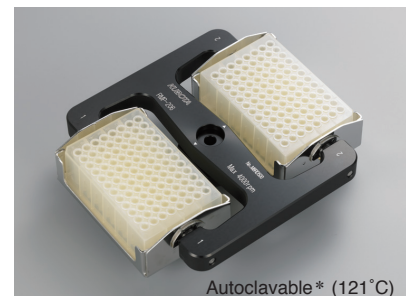
Table for centrifuge, with casters and adjusters (Optional)
(Code No.047-3840)
Size: 41cm (w) x 64cm (d) x 46cm (h)



Autoclavable* (121°C)

4 x 50mL conical tubes
Code No.053-0040

Image of bucket
Bucket is equipped with sealing cap (one set).
Adaptor for 15mL conical tubes
Code No.055-1280



Autoclavable* (121°C)

RMP-206 Plate Rotor
6 x MTP

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

Useful functions for easy operation

Three available memory settings, with one key save and recall operation.

Numerous detectors ensure safe and reliable operation. If trouble is detected, the operation will stop immediately.

Five different buzzer sounds allow easy discrimination when any centrifugation ends among more than one centrifuge.

Complies with GMP requirements

Equipped with tachometer port to comply with GMP requirements. Actual rotor speed is easy to check.

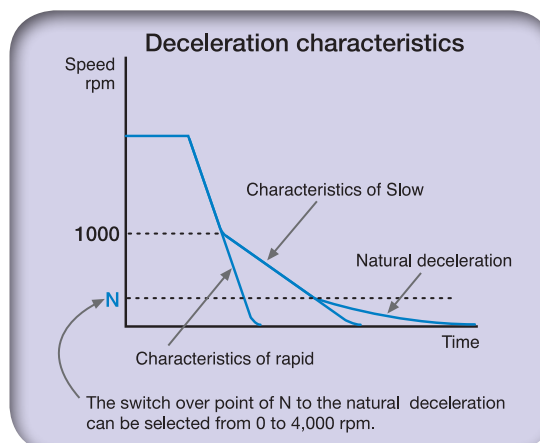
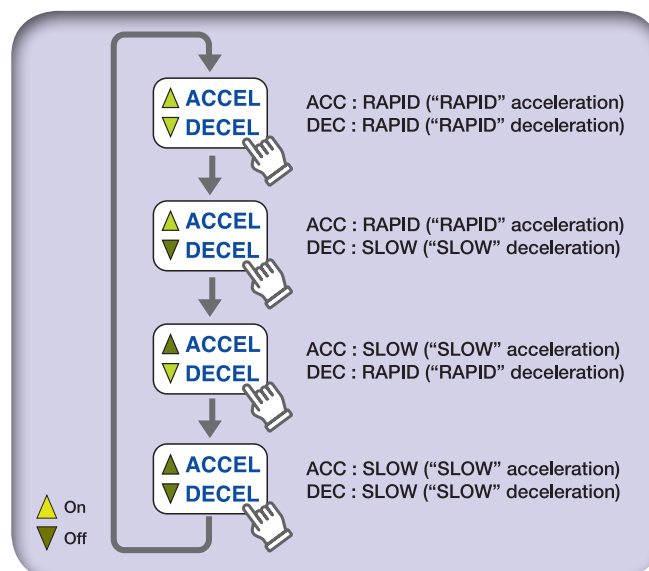
Actual rotor radius can be set, enabling accurate display of RCF values.

Pre-cooling function allows rotors to reach low temperature before experiments.

Memory flashing enables easy spin down. (Patented)

Acceleration/Deceleration Function

Rapid/slow acceleration and rapid/slow deceleration can be selected to suit sample type and experimental conditions. The button operations are shown below. RMP-206 rotor is available.



Control panel

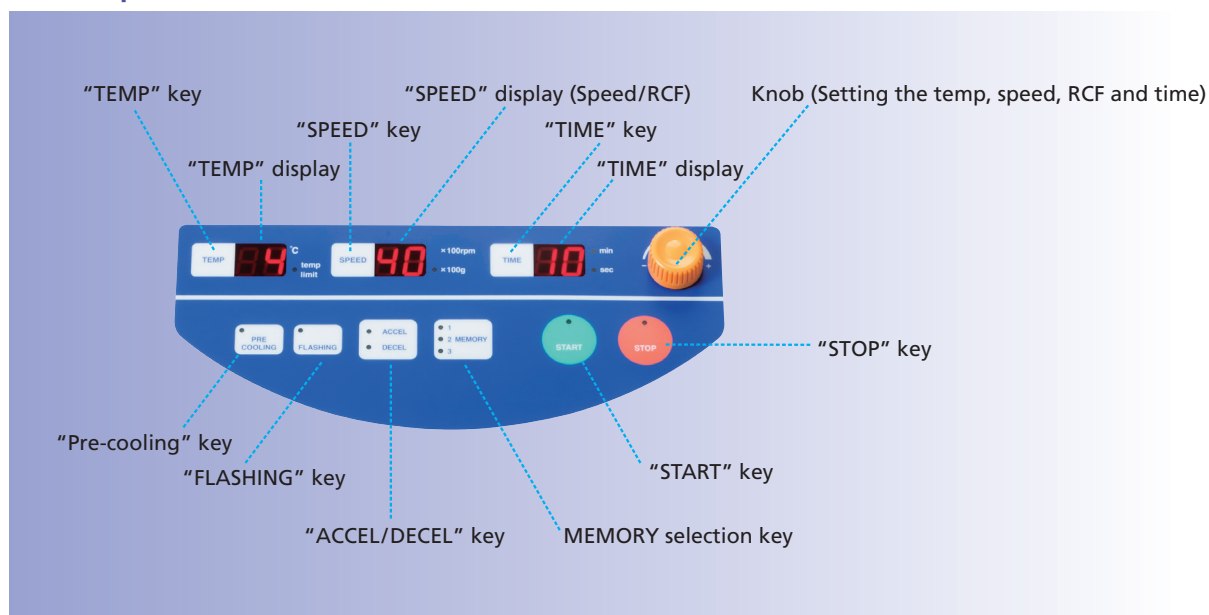


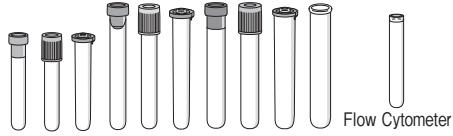

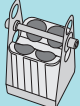








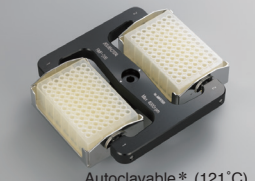
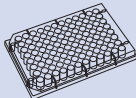
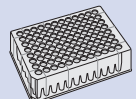


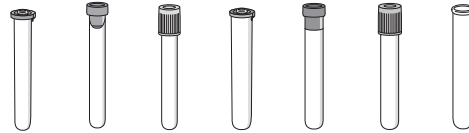
Table of Rotors, Buckets and Tube Racks for Model 2420/2800








Swinging bucket rotor RS-240A Buckets and adaptors are optional.  Autoclavable* (121°C) Max 4,000rpm Max 2,610×g	Tube		
	Nominal Capacity	48 x 1.5/2mL *2	16 x 5-10mL blood collection tube/15mL *3
	Tube size (mm) diam. x length	9.5~11 x 36~60	12~17 x 65~105
	Maximum Speed rpm	4,000	4,000
	Maximum RCF x g *1	1,950	2,400
Bucket Code No.	053-5040 	053-4930 	
Tube Rack, Adaptor Code No.	—	—	

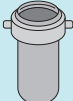
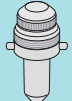

Swinging bucket rotor RS-240A Buckets and adaptors are optional.  Autoclavable* (121°C) Max 4,000rpm Max 2,610×g	Tube				
	Nominal Capacity	4 x 15mL conical tube	4 x 15mL conical tube	4 x 15mL conical tube	8 x 15mL conical tube
	Tube size (mm) diam. x length	17 x 121	17 x 121	17 x 121	17 x 121
	Maximum Speed rpm	4,000	4,000	4,000	4,000
	Maximum RCF x g *1	2,580	2,590	2,590	2,580
Bucket Code No.	053-4910 	053-5010 	053-0040  *7	053-4900 	
Tube Rack, Adaptor Code No.	—	055-1280 	055-1280 	—	

↑
Equipped with sealing caps

Plate rotor RMP-206  Autoclavable* (121°C)	Test plates	Nominal Capacity	Plate size (mm)	Maximum Speed rpm	Maximum RCF x g	Bucket Code No.
		6 x MTP 2 x PCR plate *8	86(W) x 128(D) x 52(H)	4,000	1,790	Equipped with rotor
		2 x DWP				



4 x 7-10mL blood collection tube/15mL *4	4 x 7-10mL blood collection tube/15mL *4	8 x 7-10mL blood collection tube/15mL *4	16 x 7-10mL blood collection tube/15mL *4	24 x 7-10mL blood collection tube/15mL *4
12~17.2 x 86~110	12~17.8 x 87~110	12~17.2 x 86~110	12~17.2 x 86~110	12~17.2 x 89~105
4,000	4,000	4,000	4,000	4,000 *5
2,470	2,430	2,470	2,450	2,470
053-4910 	053-4990 	053-4900 	053-4980 	053-7340 
—	 055-7400 *6  024-1400 Rubber cushion	—	—	—

4 x 50mL (glass)	4 x 50mL conical tube	4 x 50mL conical tube
27~37 x 95~110	30 x 117	30 x 117
4,000	4,000	4,000
2,520	2,610	2,610
053-4990 	053-0040 *7 	053-5010 
—	—	—

↑
Equipped with sealing caps

⚠ Rotor has prescribed operating life cycle and years of operation, 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 To show the RCF exactly, input the rotation radius. At the factory, the rotation radius is pre-set at 14.6cm. The above Maximum RCF is the calculated value at the maximum speed at each rotation radius.

*2 Tube support can be produced for special tube sizes. Please Contact our distributor.

*3 5-10mL blood collection tubes made by SEKISUI (Insepack II), Termo (Venoject II), Nipro (Neotube) or Beckton Dickinson (Vacutainer) can be used. The tubes for flow cyte can be used.

*4 7-10mL blood collection tubes made by SEKISUI (Insepack II), Termo (Venoject II), Nipro (Neotube) or Beckton Dickinson (Vacutainer) can be used.

*5 In the case of 15mL taper tubes, please operate at 3,000rpm or less. Bucket 053-7340 is exclusively used with 2420/2800.

*6 In case of using glass tube, rubber cushion 024-1400 is necessary.

*7 This is sealing-bucket and it is equipped with sealing cap and O-ring (silicon). Autoclavable at 121°C

*8 Test the strength of plates before centrifuging. The bottom and lower plate might be damaged.

Specifications

Model 2420

- Maximum Speed ● 4,000 rpm
- Maximum RCF ● 2,610 xg
- Maximum Capacity ● 360 mL
- Control system ● Microprocessor control (brushless motor)
Speed, RCF(g), Time, Acceleration and Deceleration, 3 memory banks
- Alarm display ● Lid open, Imbalance, Over speed, Detected electrical abnormality in motor, inverter, lid interlock and speed sensor
- Acceleration/Deceleration ● Two selectable rates: Rapid, Slow, 4ways of setting
- Speed setting and indication ● Digital display
100 rpm increments
- RCF setting and indication ● Digital display
100 xg increments
- Timer setting and indication ● Digital display, with Hold
1 second to 99 seconds, 1 sec increment
1 minute to 99 minutes, 1 min increment
- Sounds for informing centrifuging stop ● 5 types and no sounding
- Power requirements ● Single phase 50/60Hz, 110~115V±10%, 8A
Single phase 50/60Hz, 220~230V±10%, 5A
- Rated voltage and rated current ● 110V/115V 2.5A, 220V/230V 1.3A
- Power consumption and Heat output ● 180W 0.65MJ/h
- Dimensions, weight ● 35cm x 42cm x 32cm (WxDxH), 24kg, height when the lid is open 71cm^{*1}
- Certificates of conformity ● IEC 61010-2-020
CE Marking (220V/230V)

Model 2800

- Maximum Speed ● 4,000 rpm
- Maximum RCF ● 2,610 xg
- Maximum Capacity ● 360 mL
- Control system ● Microprocessor control (brushless motor)
Speed, RCF(g), Time, Temperature, Acceleration and Deceleration, 3 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 ● Two selectable rates: Rapid, Slow, 4 ways of setting
- Speed setting and indication ● Digital display
100 rpm increments
- RCF setting and indication ● Digital display
100 xg increments
- Timer setting and indication ● Digital display, with HOLD and flashing
1 second to 99 seconds, 1 sec increment
1 minute to 99 minutes, 1 min increment
- Sounds for informing centrifuging stop ● 5 types and no sounding
- Temperature setting/indication ● Digital display, -9°C to +40°C, 1°C increment, Pre-cooling
- Refrigerant ● R134a
- Power requirements ● Single phase 50/60Hz, 110V±10%, 115V±10%, 15A
Single phase 50/60Hz, 220V±10%, 230V±10%, 10A
- Rated voltage and Rated current ● 110V 4.5A, 115V 4.4A, 220V 2.4A, 230V 2.3A
- Power consumption and Heat output ● 380W 1.4MJ/h
- Dimensions, weight ● 37cm x 64cm x 37cm (WxDxH), 110V/115V 48kg, 220V/230V 51kg, height when the lid is open 80cm^{*1}
- Certificates of conformity ● IEC 61010-2-020
CE Marking (220V/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.

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.

KUBOTA CORPORATION

29-9 Hongo 3-chome, Bunkyo-ku, Tokyo 113-0033, Japan
Tel +81 3 3815 1331 Fax +81 3 3814 2574