

Compact Table Top Centrifuge

2420



Compact Table Top Refrigerated Centrifuge

2800



Model 2420

Small-footprint, and loaded with features Two Types of Swinging Bucket 4,000rpm Rotor

- Multiple swinging bucket rotors for 24 x 15mL tubes
- Plate rotor for 2 x PCR plates / 6 x Micro-plates / 2 x Deep-well plates

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

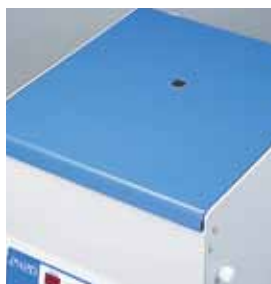
Compact size, only 35cm (W) x 42cm (D)

Rotor for PCR plates / Micro-plates / Deep-well plates can be used.

2 x PCR plates, 6 x Micro-plates or 2 x Deep-well plates can be centrifuged at a maximum of 1,790 x g with the RMP-23 rotor.



In the event of breakage, all fragments will be safely retained inside the centrifuge unit. Interlocking parts are protected against mechanical impact and employ a two-stage electrical protection circuit.



No air intake vent on top of lid. To prevent inspiration of foreign material, the air intake vent is built into the lid. Plastic tachometer port on the top of the lid enables easy checking of actual rotor speed, and complies with GMP requirements.



* Autoclavable (121°C)

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

Image of bucket. Comes with sealing cap (included with bucket).

Adaptor for 15mL Conical tubes
Code No.055-1280
(Patent pending)

* Autoclave parameters should not be exceeded.
Refer to operation and service manual.

Useful functions for easy operation

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

The memory function makes repetitive operations using the same speed and time values easy. Numerous detectors ensure safe, reliable operation. If trouble is detected, operation stops immediately.

Buzzer sounds at the end of operation

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

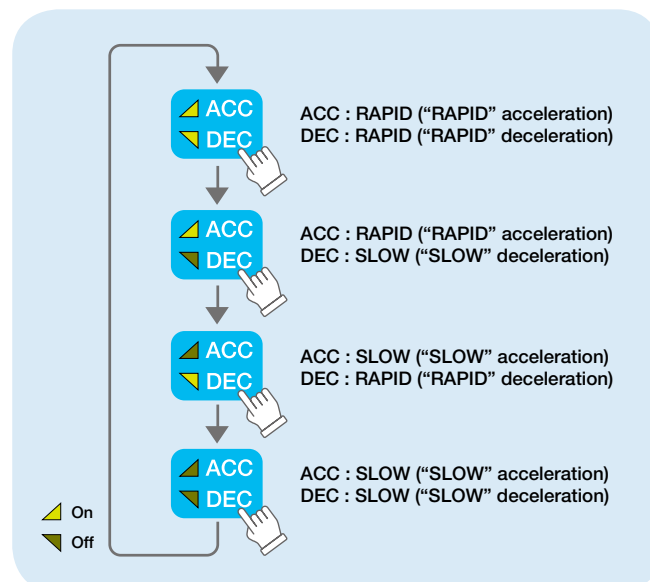
Complies with GMP requirements

The tachometer port on the top of the lid enables easy checking of actual rotor speed, and complies with GMP requirements.

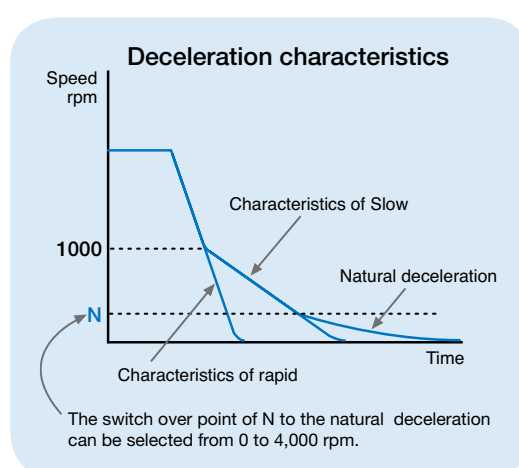
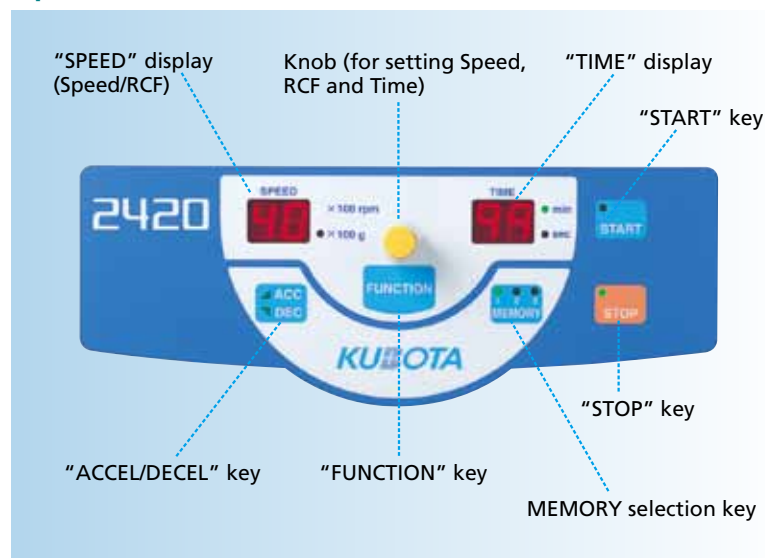
Actual rotor radius can be set, allowing accurate display of RCF values.

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.



Operational Panel



RMP-23 Plate Rotor

6 x Micro-plates



Many researchers want to use microplates so that large numbers of samples can be easily centrifuged using less energy and less time. The 2420 can use the RMP-23 rotor for centrifuging 6 x Micro-plates at 1,790 x g.

*Model 2800 can also use the RMP-23 rotor.

* Autoclave parameters should not be exceeded. Refer to operation and service manual.

Model 2800

Table-top refrigerated centrifuge with a small footprint Two Types of Swinging Bucket 4,000rpm Rotor

- Multiple swinging bucket rotors for 24 x 15mL tubes
- Plate rotor for 2 x PCR plates / 6 x Micro-plates / 2 x Deep-well plates

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), and refrigerated

Rotor for PCR plates / Micro-plates / Deep-well plates can be used.

2 x PCR plates, 6 x Micro-plates or 2 x Deep-well plates can be centrifuged at a maximum of 1,790 x g with the RMP-23 rotor.

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



In the event of breakage, all fragments will be safely retained inside the centrifuge unit. Interlocking parts are protected against mechanical impact and employ a two-stage electrical protection circuit.



Plastic tachometer port on the top of the lid enables easy checking of actual rotor speed, and complies with GMP requirements.



Table for centrifuge, with casters and adjuster (Optional)

(Code No.047-3820)

Size: 41cm (w) x 64cm (d) x 46cm (h)



* Autoclavable (121°C)

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

Image of bucket. Comes with sealing cap (included with bucket).

Adaptor for 15mL Conical tubes

Code No.055-1280

(Patent pending)



* Autoclavable (121°C)

RMP-23 Plate Rotor

6 x Micro-plates

* Autoclave parameters should not be exceeded. Refer to operation and service manual.

Useful functions for easy operation

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

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

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

Complies with GMP requirements

Actual rotor speed can be measured using the tachometer port on the top of the lid.

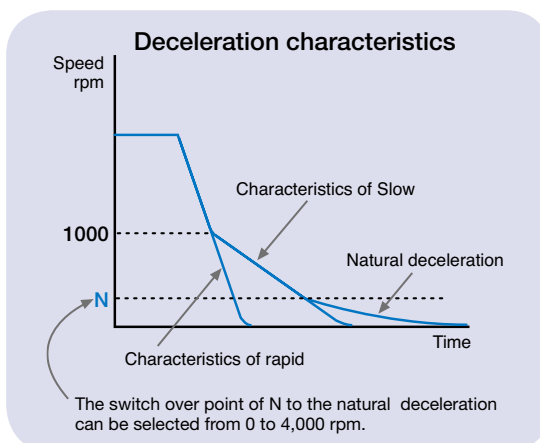
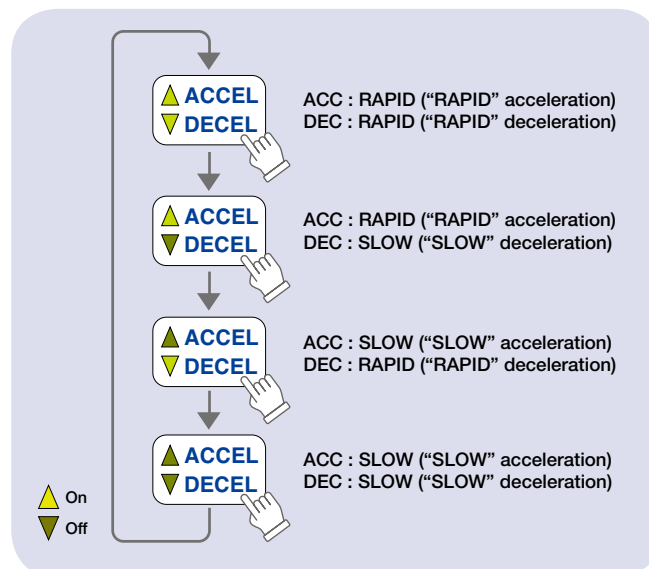
Actual rotor radius can be set, enabling accurate display of RCF values.

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

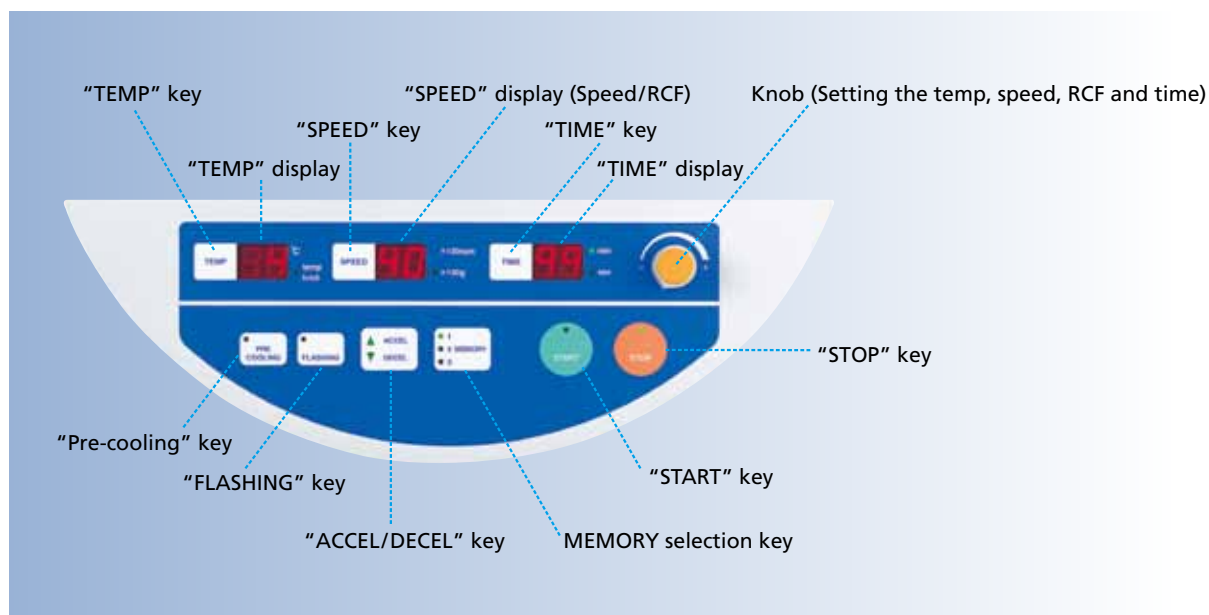
Memory flashing enables easy spin down. (Patented)

Acceleration/Deceleration Function




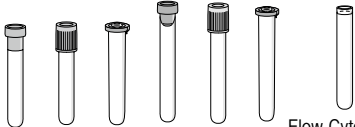
Rapid/slow acceleration and rapid/slow deceleration can be selected to suit sample type and experimental conditions. The button operations are shown below. RMP-23 rotor is available.





Operational Panel


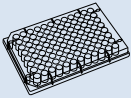
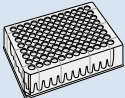


Rotor, Bucket, Tube Rack Table for Model 2420/2800

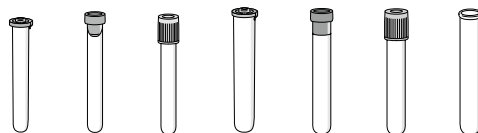
Swinging bucket rotor RS-240 *2 	Tube			 Flow Cytometer
	Nominal Capacity	48 x 1.5/2mL *3	40 x 6mL RIA tube *3	24 x 5-7mL Blood collecting tube/10mL *4,5
	Tube size (mm) diam. x length	9.5~11 x 36~60	12.5~13.3 x 36~75	12.5~13.3 x 46~105
	Maximum Speed rpm	4,000	4,000	4,000
	Maximum RCF x g *1	1,950	1,970	2,430
Bucket Code No.	053-5040	053-5030	053-5850	
Tube Rack, Adaptor Code No.	—	—	—	
Max 4,000rpm Max 2,610×g				

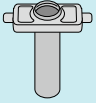
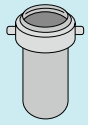
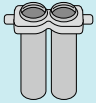
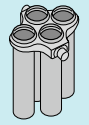
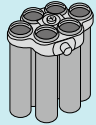

Swinging bucket rotor RS-240 *2 	Tube				
	Nominal Capacity	4 x 15mL Conical tube	4 x 15mL Conical tube	4 x 15mL Conical tube	8 x 15mL Conical tube
	Tube size (mm) diam. x length	17 x 121	17 x 121	17 x 121	17 x 121
	Maximum Speed rpm	4,000	4,000	4,000	4,000
	Maximum RCF x g *1	2,580	2,590	2,590	2,580
Bucket Code No.	053-4910	053-5010	053-0040 NEW *9	053-4900	
Tube Rack, Adaptor Code No.	—	055-1280	055-1280	—	
Max 4,000rpm Max 2,610×g					

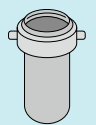
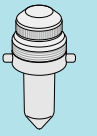
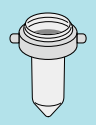
↑
Equipped with sealing caps (patent pending)

Micro-plate rotor RMP-23 	Test plates	Nominal Capacity	Plate size (mm)	Maximum Speed rpm	Maximum RCF x g	Bucket Code No.
		6 x Micro-plates *10 2 x PCR plates	86(W) x 128(D) x 52(H)	4,000	1,790	Equipped with rotor
		2 x Deep-well plates				
* Autoclavable (121°C)						

* The number of times allowed for autoclaving are limited. Please refer an instruction manual.



4 x 7-10mL Blood collecting tube/15mL*6	4 x 7-10mL Blood collecting tube/15mL*6	8 x 7-10mL Blood collecting tube/15mL*6	16 x 7-10mL Blood collecting tube/15mL*6	24 x 7-10mL Blood collecting tube/15mL*6
15~17.2 x 86~110	15~17.8 x 87~110	15~17.2 x 86~110	15~17.2 x 86~110	15~17.2 x 89~105
4,000	4,000	4,000	4,000	4,000 *7
2,540	2,500	2,520	2,500	2,490
053-4910 	053-4990 	053-4900 	053-4980 	053-7340 
—	055-7400  *8	—	—	—

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
2,540	2,610	2,610
053-4990 	NEW 053-0040  *9	053-5010 
—	—	—

↑
Equipped with sealing caps (patent pending)

- *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 Buckets and adaptors are optional.
- *3 Tube support can be produced for special tube sizes. Contact our distributor.
- *4 5-7mL Blood collecting tubes made by SEKISUI (Insepack II), Termo (Venoject II), Nipro (Neotube) or Beckton Dickinson (Vacutena) can be used.
- *5 Upto 16tubes of 5-7mL Termo (Venoject II) tubes can be used.
- *6 7-10mL Blood collecting tubes made by SEKISUI (Insepack II), Termo (Venoject II), Nipro (Neotube) or Beckton Dickinson (Vacutena) can be used.
- *7 In the case of 15mL taper tubes, please operate at 3,000rpm or less. Bucket 053-7340 is exclusively used with 2420/2800.
- *8 In case of using glass tube, rubber cushion 024-1400 is necessary.
- *9 This is sealing-bucket and it is equipped with sealing cap and O-ring (silicon). Autoclavable at 121°C
- *10 Verify plate strength before centrifuging. Plates in lower position may fracture.

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, 4 ways of setting
- Speed setting ● From 200 to 4,000 rpm, 100 rpm increments
- Speed indication ● Digital display, from 0 to 4,300 rpm, 100 rpm increments
- RCF setting ● From 100 to 2,600 xg, 100 xg increments
- RCF indication ● Digital display, from 0 to 3,000 xg, 100 xg increments
- Timer setting and indication ● Digital display, with Hold
1 second to 99 seconds, 1 sec increments
1 minute to 99 minutes, 1 min increments
- 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) *1, 24kg
- 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 ● From 300 to 4,000 rpm, 100 rpm increments
- Speed indication ● Digital display, from 0 to 4,300 rpm, 100 rpm increments
- RCF setting ● From 100 to 2,600 xg, 100 xg increments
- RCF indication ● Digital display, from 0 to 3,000 xg, 100 xg increments
- Timer setting and indication ● Digital display, with HOLD function (continuous operation) and flashing
1 second to 99 seconds, 1 sec increments
1 minute to 99 minutes, 1 min increments
- Sounds for informing centrifuging stop ● 5 types and no sounding
- Temperature setting/indication ● Digital display, -9°C to +40°C, 1°C increments, Pre-cooling
- Refrigerant ● R134a (CFC free)
- 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) *1, 110V/115V 48kg, 220V/230V 51kg
- 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.

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.

- The rotor or bucket appears to be damaged or corroded.
- 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.

- The term of supplying spare parts for repair is 10 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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