

**KUBOTA**

## Compact Table Top Centrifuge



**2420**

# Compact size: 35cm x 42cm x 32cm (WxDxH) Two Types of Swinging Bucket Rotors with 4,000rpm

## Features

A wide variety of tubes, from micro-tubes upto 24 x 15mL tubes.

6x Micro-plates or 2x deep-well plates can be centrifuged at RCF 1,790xg.

Easy-to-use functions maximize convenience

- **3 available memory settings, with one-touch save and recall operation**

A memory function is available for repetitive operation using the same set values of operation, i.e. speed and time. Once the set values are stored in the memory, simply pressing the "MEMORY" key enables repetition of operation after samples are loaded.

- **Buzzer at the end of operation**

5 different buzzer sounds allow recognition of the end of a centrifugal operation from across the room.

- **Compliance with GMP requirements**

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



Actual rotation radius can be set and the indication of correct RCF is realized.

## Safety comes first

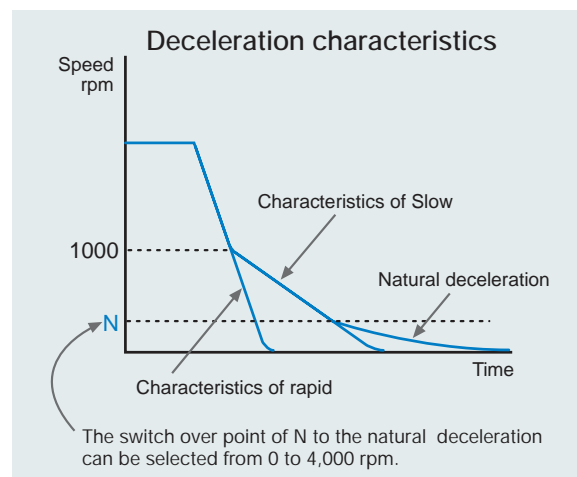
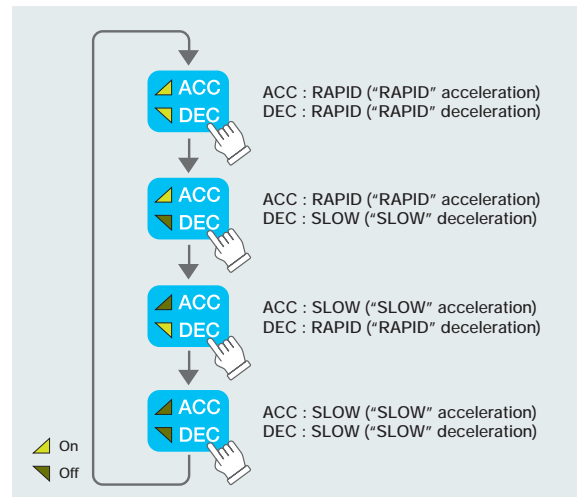
- Numerous detectors ensure safe, reliable operation. If trouble is detected, operation stops immediately.
- The 2420 model conforms to International Safety Standard IEC 61010-2-020.



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.

## Acceleration/Deceleration Function

Rapid/slow acceleration and rapid/slow deceleration can be switched according to the type of sample and experimental conditions. The switch pattern is shown as below.



## Rotor, Bucket, Tube Rack Table for Model 2420

Rotor Name	Nominal Capacity	Tube size (mm) diam. x length	Rotation Radius cm	Maximum Speed rpm	Maximum RCF <sup>*1</sup> xg	Bucket Code No.	Tube Rack Adaptor Code No.
RS-240 <sup>*2</sup>	48 x 1.5/2mL <sup>*3</sup>	9.5 ~ 11 x 36 ~ 60	10.9	4,000	1,950	053-5040	
	40 x 6mL RIA tube <sup>*3</sup>	12.5 ~ 13.3 x 36 ~ 75	11.0	4,000	1,970	053-5030	
	24 x 5-7mL Blood collecting tube/10mL <sup>*4,5</sup>	12.5 ~ 13.3 x 46 ~ 105	13.6	4,000	2,430	053-5850	
	4 x 7-10mL Blood collecting tube/15mL <sup>*6</sup>	15 ~ 17.2 x 86 ~ 110	14.2	4,000	2,540	053-4910	
	4 x 15mL Conical tube	17 x 121	14.4	4,000	2,580	053-4910	
	8 x 7-10mL Blood collecting tube/15mL <sup>*6</sup>	15 ~ 17.2 x 86 ~ 110	14.1	4,000	2,520	053-4900	
	8 x 15mL Conical tube	17 x 121	14.4	4,000	2,580	053-4900	
	16 x 7-10mL Blood collecting tube/15mL <sup>*6</sup>	15 ~ 17.2 x 86 ~ 110	14.0	4,000	2,500	053-4980	
	24 x 7-10mL Blood collecting tube/15mL <sup>*6</sup>	15 ~ 17.2 x 89 ~ 105	13.9	4,000 <sup>*7</sup>	2,490	053-7340	
	4 x 7-10mL Blood collecting tube/15mL <sup>*6</sup>	15 ~ 17.8 x 87 ~ 110	14.0	4,000	2,500	053-4990	055-7400 <sup>*8</sup>
	4 x 50mL	27 ~ 37 x 95 ~ 110	14.2	4,000	2,540	053-4990	
	4 x 50mL Conical tube	30 x 117	14.3	4,000	2,560	053-5010	
4 x 15/50mL Conical tube	17 x 121/30 x 117	14.6/14.0	4,000	2,610/2,500	053-5010	055-6010 <sup>*9</sup>	
RMP-23	6 x Micro-plates	86(W) x 128(D) x 52(H)	10.0	4,000	1,790	Equipped with rotor	
	2 x Deep-well plates						

\*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 Blood collecting tubes made by SEKISUI (Insepack II), Termo (Venoject II), Nipro (Neotube) or Beckton Dickinson (Vacutener) can be used.

\*5 Upto 16 tubes of 5/7mL Termo (Venoject II) tubes can be used.

\*6 Blood collecting tubes made by SEKISUI (Insepack II), Termo (Venoject II), Nipro (Neotube) or Beckton Dickinson (Vacutener) 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.

\*8 In case of using glass tube, rubber cushion 024-1400 is necessary.

\*9 This adaptor is used commonly for both 15mL and 50mL conical tubes.

## RS-240 Swinging Bucket Rotor



Bucket	
	
48 x 1.5/2mL Code No.053-5040	40 x 6mL RIA tube Code No.053-5030
	
24 x 5-7mL Blood collecting tube/10mL Code No.053-5850	4 x 7-10mL Blood collecting tube/ 15mL glass tube/ 15mL conical tube Code No.053-4910
	
8 x 7-10mL Blood collecting tube/ 15mL glass tube/ 15mL conical tube Code No.053-4900	16 x 7-10mL Blood collecting tube/ 15mL glass tube Code No.053-4980
	
24 x 7-10mL Blood collecting tube/ 15mL glass tube Code No.053-7340	4 x 7-10mL Blood collecting tube/ 15mL glass tube/50mL glass tube Code No.053-4990 Adaptor for 7-10mL Blood collecting tube/ 15mL glass tube Code No.055-7400
	
4 x 50mL Conical tube Code No.053-5010 Adaptor applicable for 15mL/50mL Conical tube Code No.055-6010	

## RMP-23 Plate Rotor

6 x Micro-plates



\* Autoclavable (121°C)

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

## 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	● 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 10 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 3A, 220/230V 1.5A
Power consumption and Heat output	● 180W 0.6MJ/h
Dimensions, weight	● 35cm x 42cm x 32cm (WxDxH) *1, 24kg
Certificates of conformity	● IEC 61010-2-020 CE Marking



(\*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.

 <b>Safety Precautions</b>	<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>
 <b>DISCONTINUE USE</b> Always discontinue use when phenomena listed at right appear.	<ul style="list-style-type: none"> <li>•The rotor or bucket has been found to be damaged or corroded.</li> <li>•A burnt smell comes out of the equipment.</li> <li>•You receive a minor electrification when you touch the equipment body by a naked hand.</li> <li>•Some other abnormality or failure has been found occurring.</li> </ul>	<div style="background-color: yellow; padding: 5px; text-align: center;"><b>IMPORTANT</b></div> <p>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.</p>

## KUBOTA CORPORATION

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