

# Compact Table Top Centrifuge

# 2420







## Compact Space Requirement of 35(W) x 42(D)cm Three Types of Swing Bucket Rotors with 4,000rpm



Available for a wide range of tubes from micro-tubes upto 24x15mL or 4x100mL tubes.

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

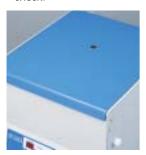
Sealing cap for biohazard proof operating condition is available.

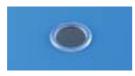
### Easy-to-operate and convenient functions

Program memories (3 channels) for repeated routine 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. Actual rotor speed is easy to check.





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

#### Safety pursued

- The various alarm detector sensors secure operation.
- 2420 conforms to the International Safety Standard IEC 61010-2-020.



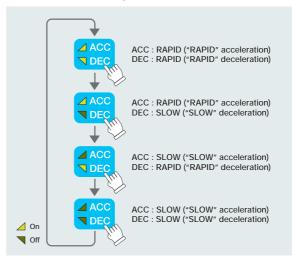
Center lock mechanism ensures that the lid will keep the rotor inside the centrifuge if it is damaged during the centrifugal operation.

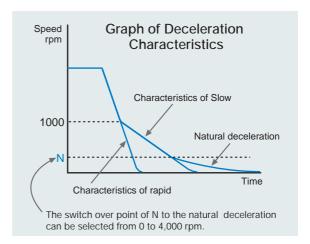
The interlock part is protected from mechanical shock and is provided with a double protected electrical circuit.



#### **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 *1 xg	Bucket Code No.	Tube Rack Adaptor Code No.
RS-240	48x2mL *2	9.5 ~ 11x36 ~ 60	10.9	4,000	1,950	053-5040	
	40x6mL *2	12.5 ~ 13.3x36 ~ 80	11.0	4,000	1,970	053-5030	
	24x5mL blood collecting tube/10mL *4	12.5 ~ 13.3x46 ~ 105	13.6	4,000	2,430	053-5850	
	4x10mL blood collecting tube/15mL	15 ~ 17.2x85 ~ 110	14.2	4,000	2,540	053-4910	
	4x15mL Conical tube	17x121	14.4	4,000	2,580	053-4910	
	8x10mL blood collecting tube/15mL	15 ~ 17.2 × 85 ~ 110	14.1	4,000	2,520	053-4900	
	8x15mL Conical tube	17x121	14.4	4,000	2,580	053-4900	
	16x10mL blood collecting tube/15mL	15 ~ 17.2x85 ~ 110	14.0	4,000	2,500	053-4980	
	24x10mL blood collecting tube/15mL	15 ~ 17.2x85 ~ 105	13.9	4,000 *8	2,490	053-7340	
	4x10mL blood collecting tube/15mL	15 ~ 17.2x85 ~ 110	14.0	4,000	2,500	053-4990	055-7400 *9
	4x50mL	27 ~ 36.5x85 ~ 110	14.2	4,000	2,540	053-4990	
	4x50mL Conical tube	30x117	14.3	4,000	2,560	053-5010	
	4x15/50mL Conical tube	17x121/30x117	14.6/14.0	4,000	2,610/2,500	053-5010	055-6010 *3
RS-1004	20xRIA tube	12x75	11.3	4,000	2,020	S13009	
	20x7mL	12.5x105	13.4	4,000	2,400	S13004	
	16x5mL blood collecting tube *4	12.5x80	13.8	4,000	2,470	S13040 *6	S17205
	4x15mL Conical tube	16.5x120.6	14.3	4,000	2,560	S13150 *6	S13060
	16x15mL	17x105	13.4	4,000	2,400	S13012	
	12x15mL	17x100	13.8	4,000	2,470	S13040 *6	S17215
	4x25mL	24x105	13.6	4,000	2,430	S13022	
	4x25mL *5	24x110	14.0	4,000	2,500	S13040 *6	S17225
	4x50mL Conical tube *7	29.5x117	14.5	4,000	2,590	S13150 *6	
	4x50mL	34x105	13.5	4,000	2,410	S13047	
	4x50mL *5	34x105	13.8	4,000	2,470	S13040 *6	S17250
	4x100mL *5	44x105	13.4	4,000	2,400	S13097	with S16051 Cushion Rubber
RMP-23	6x Microplate	86(W)x128(D)x52(H)	10.0	4,000	1,790	attached to rotor	
	2x Deepwell plate						

- 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. Tube support can be produced for special tube sizes. Please contact your local dealer.

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

  The blood collecting tube is the Hemolyse tube made by Becton & Dickinson.

  25mL (Code No.S15025), 50mL (Code No.S15050), and 100mL (Code No.S15100) glass tubes only are acceptable.

  Sealing cap is attached to buckets S13040 and S13165 as standard.

  4 x 15mL conical tube can be accommodated if adaptor S13060 is used.

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

  Rubber cushion 024-1400 is necessary.

#### **RS-240 Swinging Bucket Rotor**



#### Bucket



48x2mL Code No.053-5040



40x6ml Code No.053-5030



24x5mL blood collecting tube/10mL Code No.053-5850



4x10mL blood collecting tube/ 15mL glass tube/ 15mL conical tube Code No.053-4910



8x10mL blood collecting tube/ 15mL glass tube/ 15mL conical tube Code No.053-4900

#### RMP-23 Plate Rotor



16x10mL blood collecting tube/ 15mL glass tube Code No.053-4980



24x10mL blood collecting tube/ 15mL glass tube Code No.053-7340



4x10mL blood collecting tube/ 15mL glass tube/50mL glass tube Code No.053-4990 Adaptor for 10mL blood collecting tube/ 15mL glass tube Code No.055-7400



4x50mL conical tube Code No.053-5010 Adaptor common to 15mL/50mL Code No.055-6010

#### **RS-1004 Swinging Bucket Rotor**



#### S13040 Bucket/Tube Rack



Bucket with sealing cap Code No.S13040 Bucket/Adaptor



16x5mL blood collecting tube Code No.S17205



12x15mL Code No.S17215



4x25mL Code No.S17225



4x50mL Code No.S17250















4x50mL conical tube Adaptor 16x15mL 4x15mL conical tube Code No.S13004 Code No.S13012 Code No.S13022 Code No.S13047 Code No.S13097 with sealing cap Code No.S13150 Code No.S13060

#### **Specifications**

#### **Model 2420**

Maximum Speed ● 4,000rpm

Maximum RCF ● 2,610xg

Maximum Capacity • 400mL

Control system • Micro-processor control (Brushless motor)

Speed, RCF, Time, Acceleration & Deceleration, 3 channel memories

Alarm display • Lid open, Imbalance, Over speed

Function for detecting an occurrence of electrical abnormality in speed sensor, Inverter, lid lock, motor

Acceleration / Deceleration . Rapid, Slow, 4 ways of switching

Speed setting • From 200 to 4,000rpm in 100rpm increments

Speed indication ● Digital display, From 0 to 4,300rpm in 100rpm increments

RCF setting • From 10 to 2,600xg in 100xg increments (Actual rotation radius can be set.)

RCF indication • Digital display, From 0 to 3,000xg in 100xg increments (Actual rotation radius can be set.)

Timer setting and indication . Digital display, with Hold

from 1 sec to 99 sec, in 1 sec increment setting from 1 min to 99 min, in 1 min increment setting

Setting the sound that informs the end of the operation • 5 kinds + Sound none

Power requirements • Single phase AC115V±10%, 50/60Hz, 8A

Single phase AC220V±10%, 230V±10%, 50/60Hz, 5A

Rated voltage and Rated current • 115V, 3A, 220/230V, 1.5A

Power consumption and Heat output • 180W 0.6MJ/h

Dimensions, weight ● 35(W) x 42(D) x 32(H)cm\*1, 24kg

Test standard • Manufactured and tested in accordance with IEC 61010-2-020

(\*1) Those of projections are not included.

All specifications and external appearance subject to change without notice.

- \* On Model 2420 only use KUBOTA made rotor, adapter and tube rack. Do not attempt use rotors, adapters or tube racks made by other manufacturers.

  \* The rotor mentioned in the catalogue is usable on other KUBOTA centrifuge models. For details, refer to the catalogues relevant to each model.

  \* Follow instructions given in the relevant Instruction & Service Manual for operating centrifuges.



For your safe use of the equipments, be sure to read the instruction manual carefully before you start its operation.

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.



- •The rotor or bucket has been found to be damaged or corroded.
- •A burnt smell comes out of the equipment.
- •You receive a minor electrification when you touch the equipment body by a naked hand.
- •Some other abnormality or failure has been found occurring.

**IMPORTANT** 

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.

#### KUBOTA CORPORATION

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