

BENCHTOP CENTRIFUGES

# — ROTINA 420 | 420 R

## MANY SOLUTIONS - ONE ROTOR

This compact benchtop centrifuge has been developed for large sample volumes. It has a maximum capacity of 4 x 600 ml bottles, 140 blood tubes, 16 microtiter plates or 52 x 15 ml conical tubes, all on a single cost-effective rotor.

This unit is available with refrigeration and a temperature range from -20 °C to +40 °C (ROTINA 420 R).



## — HIGHLIGHTS

- RPM: 50 - 15,000 min<sup>-1</sup>  
Adjustable in increments of 10
- RCF: 50 - 24,400  
Adjustable in steps of 1
- max. capacity: 4 x 600 ml
- High-performance with first-class equipment
- choice of 5 rotors
- IVDR-conform according to regulation (EU) 2017/746
- max. noise level of 51 dB(A) with rotor 4790-A
- easy operation with keypad and control knob
- 98 program memories for more individuality
- 9 individual acceleration and deceleration stages
- model 420 R coolable from -20 to +40 °C with pre-cooling function

## — FEATURES

- metal housing and lid
- viewing port in the lid
- powered one-hand lid lock
- lid dropping protection
- emergency lid lock release
- stainless steel chamber
- automatic rotor recognition
- brushless drive
- error display
- display in °C and °F possible
- imbalance monitoring and switch-off
- backlit panel with actual values of all parameters
- Auditory message after completion of the centrifugation run

## TECHNICAL DATA

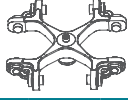
	<b>ROTINA 420</b> non-refrigerated	<b>ROTINA 420 R</b> refrigerated
voltage *)	200–240 V 1 ~	200–240 V 1 ~
frequency	50–60 Hz	50 Hz
consumption	870 VA	1,600 VA
emission, immunity	EN/IEC 61326-1, class B	EN/IEC 61326-1, class B
max. capacity	4 x 600 ml	4 x 600 ml
max. RPM	15,000 min <sup>-1</sup>	15,000 min <sup>-1</sup>
max. RCF	24,400	24,400
running time	1 – 99 h: 59 min: 59 s, ∞ continuous run, short cycle mode	1 – 99 h: 59 min: 59 s, ∞ continuous run, short cycle mode
dimensions (WxDxH)	506 x 650 x 423 mm	713 x 654 x 423 mm
weight	approx. 75 kg	approx. 108 kg
noise level	51 dB (A) with rotor 4790-A	50 dB (A) with rotor 4790-A
temperature control, infinitely variable	-	from -20 to +40 °C
<b>Cat. No.</b>	<b>4701</b>	<b>4706</b>
100–127 V 1 ~ / 50–60 Hz *)	4701-01	4706-01
consumption	900 VA	1,850 VA
emission, immunity	FCC class B	FCC class B
weight	approx. 84 kg	approx. 117 kg

\*) Other voltages on request.


## AVAILABLE ROTORS

<b>SWING-OUT ROTORS</b>		angle	max. RPM	max. capacity	Cat. No.	page
	swing-out rotor, 4-place	90°	4,800 min <sup>-1</sup>	4x600 ml	<b>4784-A</b>	3
	swing-out rotor, 4-place	90°	4,000 min <sup>-1</sup>	4x290 ml	<b>4753</b>	6
<b>ANGLE ROTORS</b>						
	angle rotor, 4-place	25°	9,500 min <sup>-1</sup>	4x250 ml	<b>4795</b>	8
	angle rotor, 6-place	45°	11,000 min <sup>-1</sup>	6x94 ml	<b>4794</b>	8
	angle rotor, 30-place	45°	15,000 min <sup>-1</sup>	30x2 ml	<b>4790-A</b>	9


## — SWING-OUT ROTOR, 4-PLACE | 4784-A



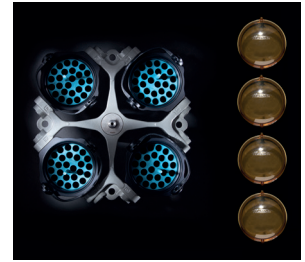

<b>Rotor</b>	
max. RPM   max. RCF	4,800 min <sup>-1</sup>   4,740
max. capacity	4x600 ml
run-up   run-down, braked in sec	54   38
angle   max. noise level	90°   56 dB (A)
temperature in °C <sup>1)</sup>	+4
<b>Cat. No.</b>	<b>4784-A</b>




<b>Bucket with clamp lock</b>	
lid bioseal <sup>5)</sup>	4783
<b>Cat. No.</b>	<b>4780</b>


<b>Bucket without clamp lock <sup>14)</sup></b>	
<b>Cat. No.</b>	<b>4785</b>


<b>Vessels</b>																
capacity in ml	1.5	2.0	3	4	4	5	6	7	15	25	50	94	100	100	250	
Ø x L in mm	11 x 38	11 x 38	10 x 60	10 x 88	12 x 60	12 x 75	12 x 82	12 x 100	17 x 100	24 x 100	34 x 100	38 x 102	40 x 115	44 x 100	65 x 115	
max. RCF <sup>2)</sup>	4,585	4,585	4,585	4,585	4,585	4,585	4,585	4,585	4,585	4,585	4,559	4,559	4,559	4,534	4,534	
radius in mm	178	178	178	178	178	178	178	178	178	178	177	177	177	176	176	
<b>Cat. No.</b>	<b>microliter tubes</b>			<b>tubes <sup>2)</sup></b>												



<b>Adapter</b>																
boring Ø x L in mm	11.2x38	11.2x38	11.2x54	11.2x54	13.4x55	13.4x55	13.4x55	13.4x55	17.5x62	26.5x69	36x77	42x76.5	42x76.5	46x76.5	66x97	
vessels per rotor	96	96	140	140	104	104	104	104	72	28	16	12	12	8	4	
<b>Cat. No.</b>	<b>4773</b>	<b>4773</b>	<b>4761</b>	<b>4761</b>	<b>4762A</b>	<b>4762A</b>	<b>4762A</b>	<b>4762A</b>	<b>4763A</b>	<b>4764</b>	<b>4765</b>	<b>4766</b>	<b>4766</b>	<b>4767</b>	<b>4768</b>	



<b>Vessels</b>															
capacity in ml	1.1–1.4	2.6–3.4	2.7–3	4–5.5	4.5–5	4.9	7.5–8.5	9–10	1.6–7	1.6–7	4–7	8	8.5–10	5	15
Ø x L in mm	8 x 66	13 x 65	11 x 66	15 x 75	11 x 92	13 x 90	15 x 92	16 x 92	13 x 75	13 x 100	16 x 75	16 x 125	16 x 100	17 x 59	17 x 120
max. RCF <sup>2)</sup>	4,585	4,585	4,585	4,585	4,585	4,585	4,585	4,585	4,585	4,585	4,585	4,585	4,585	4,740	4,740
radius in mm	178	178	178	178	178	178	178	178	178	178	178	178	178	184	184
<b>Cat. No.</b>	<b>blood collection / urine vessels</b>													<b>-</b>	<b>-</b>



<b>Adapter</b>															
boring Ø x L in mm	11.2x54	13.4x55	11.2x54	17.5x62	11.2x54	13.4x55	17.5x62	17.5x62	13.7x55	13.7x55	17.5x62	17.5x62	17.5x62	17x52	17x84
vessels per rotor	140	104	140	72	140	104	72	72	84	84	72	24	72	48	52
<b>Cat. No.</b>	<b>4761</b>	<b>4762A</b>	<b>4761</b>	<b>4763A</b>	<b>4761</b>	<b>4762A</b>	<b>4763A</b>	<b>4763A</b>	<b>4775A</b>	<b>4775A</b>	<b>4763A</b>	<b>4763A</b>	<b>4763A</b>	<b>4778</b>	<b>4769A</b>

1) Lowest attainable temperature in precooled refrigerated centrifuges at max. speed. Lower temperatures can be attained by reducing the speed.  
 2) Please note that the RCF values indicated refer only to rotor performance. The max. permissible RCF of tubes used should be verified with the individual manufacturers. The max. RCF for glass tubes annotated with footnote 2) is 4,000.  
 3.6) When using these tubes, bucket 4780 cannot be closed with lid 4783.  
 5) Tested by the TÜV in conformity with DIN EN 61010, section 2 - 020.  
 14) With the E3905 add-on kit and the 4783 lid, the 4785 carrier can be converted at a later time to a 4780 carrier with single-hand clamp lock.  
 21) Adapter must be loaded as illustrated.  
 29) Suitable for blood collection systems with a lid larger than 17 mm in diameter.