



**ROTINA 420/420 R**  
**Benchtop Centrifuges**  
**classic/cooled**

# ROTINA 420/420 R

Developed for large volumes, yet not overly large in size. High performance when it counts, yet cost-effective and fair to your budget. The ROTINA 420 centrifuges offer these benefits and more.

The new, compact benchtop centrifuges are conceived for high sample throughput as well as for high sample volumes. With a maximum capacity of 4 x 600 ml, 140 blood collection tubes or 16 microtitre plates they are ideal for applications in clinical chemistry, in biotechnology and in life science research facilities.



ROTINA 420 classic

**Cat. No. 4701**

## PERFORMANCE

- High capacity
  - max. 4 x 600 ml
- High RCF
  - up to 16,504 for 94 ml tubes
  - up to 12,007 for 250 ml bottles
  - up to 24,400 for reaction tubes

## DESIGN

- Metal housing
- Stainless steel centrifuging chamber
- Viewing port in the lid

## USER-FRIENDLINESS

- Automatic lid locking
- Ergonomic control and information panel
- Easy rotor changing
- 99 program storage spaces

## COOLING (ROTINA 420 R)

- Infinitely variable adjustment
  - from -20 °C to +40 °C (or -4 °F to +104 °F)
- Stand-by cooling

## SAFETY

- Lid locking and holding
- Emergency lid lock release
- Lid dropping protection
- Automatic rotor recognition
- Imbalance switch-off
- Motor overheating protection
- Chamber overheating protection (ROTINA 420 R)

## OPTIONS

The following are available as options, the ROTINA 420 R

- with connection for nitrogen flushing
  - Cat. No. **4706-20**
  - for centrifugation of reactive substances or substances which are unstable in aerial oxygen. As required, a monitoring control system should be available to measure oxygen concentration.
- as heating/cooling version up to +90 °C (or +194 °F)
  - Cat. No. **4706-50**
  - for applications calling for temperatures over +40 °C.

## OPERATION AND CONTROL

The advanced C control panel significantly facilitates the daily laboratory routine.

Parameter selection is done via the use of symbol keys. Values are set with the control knob, and recorded by pressing the Start key.

9 braking and acceleration ramps, unbraked run-down, or a cut-off speed can be selected. Ramp 9 represents the shortest braking and acceleration time.

98 program memory positions are available. Additional program position "PREC" (PRECOOLING) is reserved for the pre-cooling program.

The temperature in the ROTINA 420 R refrigerated centrifuge can be set in either Celsius (°C) or Fahrenheit (°F) degrees.




ROTINA 420 R cooled


Cat. No. 4706

## DIGITAL DISPLAY AND CONTROL PANEL

### KEYBOARD

START	Start centrifugation run / short centrifuging runs / save entries and changes
	Start pre-cooling program <b>PREC</b>
STOP OPEN	Manually end centrifugation run / Open lid

### PARAMETER INPUT

PROG	Input / recall program number 98 programs can be stored
T/°C	Input temperature in increments of 1 from - 20 °C to + 40 °C or - 4 °F to + 104 °F (ROTINA 420 R)
	Input of acceleration levels 1 – 9 or in min : sec Input of braking levels 1 – 9 or in min : sec Input brake force cut-off speed
RCF	Input relative centrifugal force (RCF) in increments of 1 Enter centrifuging radius (RAD) in mm
RPM	Input speed in increments of 10
TIME	Input length of centrifugation (max. 99 h : 59 min : 59 sec) or continuous operation



ROTINA 420 R keypad (C control panel)

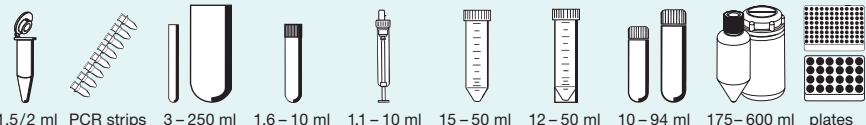


# ROTORS AND ACCESSORIES

Some accessories with bio-containment<sup>4)</sup>




**Swing-out rotor 4-place**  
 $\curvearrowright$  90°  
 n = 4,800 min<sup>-1</sup>  
 max. RCF 4,740  
**Cat. No. 4784-A**



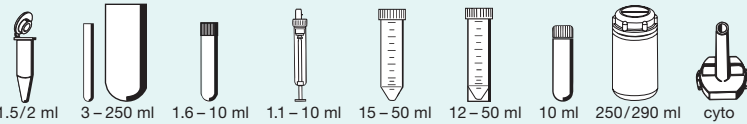
1.5/2 ml PCR strips 3-250 ml 1.6-10 ml 1.1-10 ml 15-50 ml 12-50 ml 10-94 ml 175-600 ml plates

→ P.5-6

Some accessories with bio-containment<sup>4)</sup>




**Swing-out rotor 4-place**  
 $\curvearrowright$  90°  
 n = 4,000 min<sup>-1</sup>  
 max. RCF 3,095  
**Cat. No. 4753**



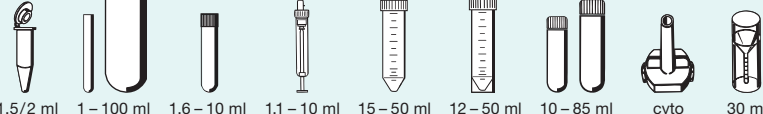
1.5/2 ml 3-250 ml 1.6-10 ml 1.1-10 ml 15-50 ml 12-50 ml 10 ml 250/290 ml cyto

→ P.8-10

Some accessories with bio-containment<sup>4)</sup>




**Swing-out rotor 4-place**  
 $\curvearrowright$  90°  
 n = 4,600 min<sup>-1</sup>  
 max. RCF 3,832  
**Cat. No. 4754**



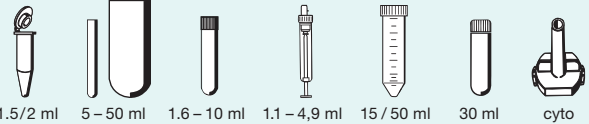
1.5/2 ml 1-100 ml 1.6-10 ml 1.1-10 ml 15-50 ml 12-50 ml 10-85 ml cyto 30 ml

→ P.11-14

Some accessories with bio-containment<sup>4)</sup>




**Swing-out rotor 8-place**  
 $\curvearrowright$  90°  
 n = 3,800 min<sup>-1</sup>  
 max. RCF 2,906  
**Cat. No. 4758**



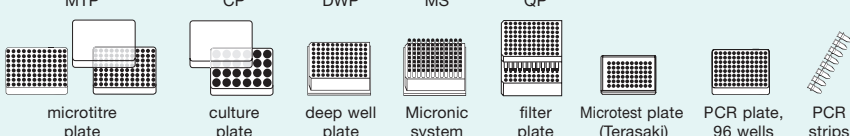
1.5/2 ml 5-50 ml 1.6-10 ml 1.1-4,9 ml 15/50 ml 30 ml cyto

→ P.15-16

accessories with bio-containment<sup>4)</sup>



**Swing-out rotor 2-place**  
 $\curvearrowright$  90°  
 n = 5,100 min<sup>-1</sup>  
 max. RCF 3,926  
**Cat. No. 4728**



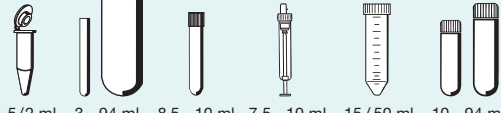
MTP CP DWP MS QP  
 microtitre plate culture plate deep well plate Micronic system filter plate  
 Microtest plate (Terasaki) PCR plate, 96 wells PCR strips

→ P.16

auto-clavable with bio-containment<sup>4)</sup>




**Angle rotor 6-place**  
 $\curvearrowright$  45°  
 n = 11,000 min<sup>-1</sup>  
 max. RCF 16,504  
**Cat. No. 4794**

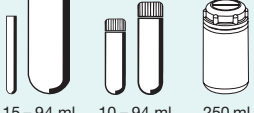


1.5/2 ml 3-94 ml 8.5-10 ml 7.5-10 ml 15/50 ml 10-94 ml

→ P.17



**Angle rotor 4-place**  
 $\curvearrowright$  25°  
 n = 9,500 min<sup>-1</sup>  
 max. RCF 12,007  
**Cat. No. 4795**




15-94 ml 10-94 ml 250 ml

→ P.18

auto-clavable with bio-containment<sup>4)</sup>




**Angle rotor 30-place**  
 $\curvearrowright$  45°  
 n = 15,000 min<sup>-1</sup>  
 max. RCF 24,400  
**Cat. No. 4790-A**

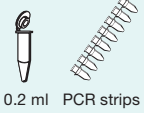


0.2-2 ml

→ P.18



**Angle rotor 6-place**  
 $\curvearrowright$  45°  
 n = 14,000 min<sup>-1</sup>  
 max. RCF 18,845  
**Cat. No. 4760**



0.2 ml PCR strips

→ P.18

Additional tubes e.g. stool tubes or spin columns on request.

# ROTORS AND ACCESSORIES

## Swing-out rotor, 4-place

±90°

n = 4,800 min<sup>-1</sup>  
max. RCF 4,740



illustrated with carriers 4780  
with single-hand clamp lock  
and lids 4783  
with bio-containment <sup>4)</sup>

**Cat. No.** (without carriers) **4784-A**

capacity in ml	1.5	2.0	3	4	4	5	6	7	10	15	25	50	75	94	100	100	250		
Ø x L in mm	11 x 38		10 x 60	10 x 88	12 x 60	12 x 75	12 x 82	12 x 100	17 x 70	17 x 100	24 x 100	34 x 100	35 x 105	38 x 102	40 x 115	44 x 100	65 x 115		
<b>Cat. No.</b>	<b>2078</b>	<b>0536</b>	-			<b>0553<sup>2)</sup></b>	<b>0501<sup>2)</sup></b>	<b>0578<sup>2)</sup></b>	<b>2079</b>	<b>0518<sup>2)</sup></b>	<b>0519<sup>2)</sup></b>	<b>0521<sup>2)</sup></b>	<b>0548</b>	<b>0549</b>	<b>0523<sup>2)</sup></b>	<b>0526<sup>2)</sup></b>	<b>0530<sup>2)</sup></b>		
lid with bio-containment <sup>4)</sup> Cat. No. 4783																			
carrier Cat. No. 4780																			
<b>Cat. No.</b>	<b>4773</b>		<b>4761</b>			<b>4762</b>			<b>4763</b>		<b>4764</b>		<b>4765</b>		<b>4766</b>		<b>4767</b>		<b>4768</b>
boring Ø x L in mm	11.2 x 38		11.2 x 54			13.4 x 55			17.5 x 62		26.5 x 69		36 x 77		42 x 76.5		46 x 76.5		66 x 103
tubes per rotor	96		140			104			72		28		16		12		8		4
max. RCF <sup>2)</sup>	4,585											4,559				4,534			
radius in mm	178											177				176			
run-up in sec	54																		
run-down in sec, braked	38																		
temperature in °C <sup>1)</sup>	+4																		

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	15	50	12
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 75/100	13 x 75/100	16 x 75	16 x 125	16 x 100	17 x 120	29 x 115	17 x 100
<b>Cat. No.</b>	<b>blood collection / urine tubes</b>													<b>0509</b>	<b>0513</b>	-
lid with bio-containment <sup>4)</sup> Cat. No. 4783																
carrier Cat. No. 4780																
<b>Cat. No.</b>	<b>4761</b>	<b>4762</b>	<b>4761</b>	<b>4763</b>	<b>4761</b>	<b>4762</b>	<b>4763</b>	<b>4762</b>	<b>4775</b>	<b>4763</b>	<b>4763</b>	<b>4763</b>	<b>4769</b>	<b>4770</b>	<b>4774</b>	
boring Ø x L in mm	11.2 x 54	13.4 x 55	11.2 x 54	17.5 x 62	11.2 x 54	13.4 x 55	17.5 x 62	13.4 x 55	13.7 x 54	17.5 x 62			17 x 84	30 x 82.5	172 x 82.5	
tubes per rotor	140	104	140	72	140	104	72	104	84	72	24	72	52	20	60	
max. RCF <sup>2)</sup>	4,585													4,740	4,688	
radius in mm	178													184	182	
run-up in sec	54															
run-down in sec, braked	38															
temperature in °C <sup>1)</sup>	+4															

- 1) Lowest attainable temperature in precooled refrigerated centrifuges at max. speed. Lower temperatures can be reached 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 <sup>2)</sup> is 4,000.
- 3) When using these tubes, carrier 4780 cannot be closed with lid 4783.
- 4) Tested by the TÜV in conformity with DIN EN 61010, section 2-020.
- 6) Carrier must be loaded as illustrated.
- 7) For blood collection tubes with a cap of a diameter greater than 17 mm.

# ROTORS AND ACCESSORIES



**Carrier 4785**

The 4780 carrier is also available without a lid and clamp lock. The catalogue number is 4785.#)



illustrated with carriers 4782

## Swing-out rotor Cat. No. (without carriers) 4784-A

capacity in ml	25	30	50	10	30	50	85	94	175	175	200	225	250	290	400	400	600
Ø x L in mm	25x90	25x110	29x115	16x80	26x95	29x107	38x106	38x102	61x118	62x144	60x130	61x137	61x122	62x137	81x136	84x134	93x134
Cat. No.	-			<b>0545</b>		<b>0546</b>	<b>0547</b>	<b>0538<sup>5)</sup></b>	<b>Falcon®</b>	<b>Nalgene®</b>	<b>Nunc®</b>	<b>Falcon®</b>	<b>5127<sup>11)</sup></b>	<b>-<sup>11)</sup></b>	<b>-<sup>11)</sup></b>	<b>-<sup>11)</sup></b>	<b>0551<sup>11)</sup></b>
lid with bio-containment <sup>4)</sup> Cat. No. 4783																	
carrier Cat. No. 4780																	
Cat. No.	<b>4764</b>	<b>4770<sup>5)</sup></b>	<b>4763</b>	<b>4764</b>	<b>4770<sup>5)</sup></b>	<b>4766</b>	<b>4776</b>	<b>4777</b>	<b>4776</b>	<b>4771</b>	<b>4772</b>	-					
boring Ø x L in mm	26.5x69	30x82.5	17.5x62	26.5x69	30x82.5	42x76.5	61x105	61.5x110	61x105	62x100	85x100	94x99					
tubes per rotor	28	20	72	28	20	12	4										
max. RCF <sup>2)</sup>	4,585	4,688	4,585	4,688	4,534	4,740											
radius in mm	178	182	178	182	176	184											
run-up in sec	54																
run-down in sec, braked	38																
temperature in °C <sup>1)</sup>	+4																

D x W x H in mm	86 x 128 x 15	86 x 128 x 17.5	86 x 128 x 22	86 x 128 x 44.5	86 x 128 x 46	59 x 84 x 11	82 x 124 x 20	-
capacity in ml	-							0.2
Cat. No.	<b>MTP</b>		<b>CP</b>	<b>DWP</b>	<b>MS</b>	<b>Microtest plate (Terasaki)</b>	<b>PCR plate, 96-place</b>	<b>PCR strips</b>
carrier Cat. No. 4782								
Cat. No.	-							<b>1485</b>
boring Ø x L in mm	-							
plates/strips per rotor	16	16	12	4	4	8	4	48 x 8
max. RCF <sup>2)</sup>	4,096							
radius in mm	159							
run-up in sec	54							
run-down in sec, braked	38							
temperature in °C <sup>1)</sup>	+4							

<sup>1)</sup> Lowest attainable temperature in precooled refrigerated centrifuges at max. speed. Lower temperatures can be reached by reducing the speed.

<sup>2)</sup> 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 <sup>2)</sup> is 4,000.

<sup>3)</sup> When using these tubes, carrier 4780 resp. 5051 cannot be closed with lid 4783 resp. 5053.

## CARRIERS WITH SINGLE-HAND CLAMP LOCK



Carrier 4780 with lid 4783 (ROTINA 420/420R)



Carrier 4880 with lid 4883 (ROTANTA 460/460R)

### OPENING AND CLOSING OF THE CARRIER WITH ONE HAND



- 1 With the clamp in the “open” position the lid can be easily fitted and removed.
- 2 With the clamp in the central position the carrier is sealed to prevent aerosol formation and can be safely carried to the centrifuge, workbench or another working space.
- 3 With the clamp in the “close” position the carrier can be centrifuged without aerosol formation. The absence of aerosols has been verified by the TÜV in accordance with DIN EN 61010, Part 2-020.

### SAFE AND CONVENIENT SAMPLE PROCESSING

- Easy operation of the clamp lock with a single hand
- Safe transport of the carriers with the clamp
- No generation of aerosols upon centrifugation of closed carriers
- TÜV certification in accordance with DIN EN 61010, Part 2-020

<sup>4)</sup> Tested by the TÜV in conformity with DIN EN 61010, section 2-020.

<sup>5)</sup> Please remove the inserts.

<sup>11)</sup> At temperatures of over + 40 °C and / or when not filled to capacity, bottles may warp during centrifugation.

<sup>#)</sup> 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.

# ROTORS AND ACCESSORIES

## Swing-out rotor, 4-place

±90°

n = 4,000 min<sup>-1</sup>  
max. RCF 3,095



illustrated with carriers 5051  
and lids 5053

**Cat. No.** (without carriers) **4753**

capacity in ml	1.5	2.0	1.5	2.0	3	5	6	7	9	15	25	50	100	100
Ø x L in mm	11 x 38		11 x 38		10 x 60	12 x 75	12 x 82	12 x 100	14 x 100	17 x 100	24 x 100	34 x 100	44 x 100	40 x 115
<b>Cat. No.</b>	-	-	<b>2078</b>	<b>0536</b>	-	<b>0553<sup>2)</sup></b>	<b>0501<sup>2)</sup></b>	<b>0578<sup>2)</sup></b>	<b>0500<sup>2)</sup></b>	<b>0518<sup>2)</sup></b>	<b>0519<sup>2)</sup></b>	<b>0521<sup>2)</sup></b>	<b>0526<sup>2)</sup></b>	<b>0523<sup>2)</sup></b>
lid Cat. No. 5053														
carrier Cat. No. 5051														
<b>Cat. No.</b>	<b>5257</b>		<b>5281</b>		<b>5267</b>	<b>5227</b>	<b>5247<sup>10)</sup></b>	<b>5264</b>	<b>5248<sup>10)</sup></b>	<b>5242</b>	<b>5243</b>	<b>5262</b>	<b>5249</b>	
boring Ø x L in mm	12.5 x 42		11.5 x 50		11 x 44	12.5 x 42	12.5 x 86	16 x 50	17.5 x 86	26 x 86	36 x 86	45.5 x 86	42 x 86	
tubes per rotor	160		64		80	80	80	48	48	20	8	4		
max. RCF <sup>2)</sup> upper/lower	1,950/2,826		2,826		2,737	2,773	2,755	2,773	2,755					
radius in mm upper/lower	109/158		158		153	155	154	155	154					
run-up in sec	18													
run-down in sec, braked	16													
temperature in °C <sup>1)</sup>	- 1													

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	10	1.6–5	4–7	4–7	8.5–10
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	15 x 102	13 x 75	16 x 75	13 x 100	16 x 100
<b>Cat. No.</b>	<b>blood collection / urine tubes</b>												
lid Cat. No. 5053													
carrier Cat. No. 5051													
<b>Cat. No.</b>	<b>5267</b>	<b>5268</b>	<b>5227</b>	<b>5264</b>	<b>5227</b>	<b>5268</b>	<b>5264</b>	<b>5258</b>	<b>5268</b>	<b>5264</b>	<b>6301</b>	<b>5248</b>	
boring Ø x L in mm	11 x 44	13.5 x 52	12.5 x 42	16 x 50	12.5 x 42	13.5 x 52	16 x 50	17.6 x 86	13.5 x 52	16 x 50	13.5 x 86	17.5 x 86	
tubes per rotor	80	48	80	48	80	48	48	44	48				
max. RCF <sup>2)</sup>	2,737	2,808	2,773		2,808	2,773	2,755	2,808	2,773	2,755	2,755		
radius in mm	153	157	155		157	155	154	157	155	154	154		
run-up in sec	18												
run-down in sec, braked	16												
temperature in °C <sup>1)</sup>	- 1												

<sup>1)</sup> Lowest attainable temperature in precooled refrigerated centrifuges at max. speed. Lower temperatures can be reached by reducing the speed.

<sup>2)</sup> 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 <sup>2)</sup> is 4,000.

<sup>3)</sup> When using these tubes, carrier 5051 resp. 5092 cannot be closed with lid 5053 resp. 5093.

<sup>4)</sup> Tested by the TÜV in conformity with DIN EN 61010, section 2-020.



# ROTORS AND ACCESSORIES

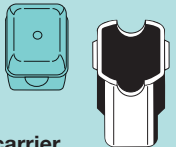


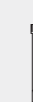










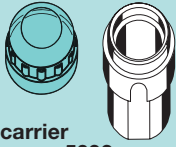







illustrated with carriers 5051



illustrated with carriers 5092

## Swing-out rotor 4753

capacity in ml	15	50	12	30	50	two-tier frame for cyto accessories
Ø x L in mm	17x120	29x115	17x100	25x110	29x115	
<b>Cat. No.</b>	<b>0509</b>	<b>0513</b>	-			<b>cyto chambers<sup>12)</sup></b>
lid Cat. No. 5053						
<b>carrier</b> Cat. No. 5051						
<b>Cat. No.</b>	<b>6306</b>	<b>5259</b>	<b>6306</b>	<b>5266</b>	<b>5243</b>	<b>5280</b>
boring Ø x L in mm	17x90	30x86	17x90	26x86	36x86	-
tubes per rotor	28	8	28	20	8	8
max. RCF <sup>2)</sup> upper/lower	2,898	2,826	2,898	2,755		1,735 / 2,737
radius in mm upper/lower	162	158	162	154		97 / 153
run-up in sec	18					
run-down in sec, braked	16					
temperature in °C <sup>1)</sup>	- 1					

capacity in ml	5	6	7	10	15
Ø x L in mm	12 x 75	12 x 82	12 x 100	17 x 70	17 x 100
<b>Cat. No.</b>	<b>0553<sup>2)</sup></b>	<b>0501<sup>2)</sup></b>	<b>0578<sup>2)</sup></b>	<b>2079</b>	<b>0518<sup>2)</sup></b>
lid with bio-containment <sup>4)</sup> Cat. No. 5093					
<b>carrier</b> Cat. No. 5092					
<b>Cat. No.</b>	<b>5128</b>	<b>5120</b>	<b>5136</b>		
boring Ø x L in mm	12.8 x 45	12.8 x 82	17.5 x 60.7		
tubes per rotor	48			32	
max. RCF <sup>2)</sup>	3,005			2,952	
radius in mm	168			165	
run-up in sec	18				
run-down in sec, braked	16				
temperature in °C <sup>1)</sup>	- 1				

<sup>10)</sup> With Cat. No. 5247-91 or 5248-91 these adapters can also be ordered with a decanting aid.

<sup>12)</sup> Please ask for our detailed cyto brochure.

# ROTORS AND ACCESSORIES



illustrated with carriers 5092

## Swing-out rotor 4753

capacity in ml	25	50	100	100	250	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	10	1.6–5	4–7
Ø x L in mm	24 x 100	34 x 100	44 x 100	40 x 115	65 x 115	8 x 66	13 x 65	11 x 66	15 x 75	11 x 92	13 x 90	15 x 92	16 x 92	15 x 102	13 x 75	13 x 100
<b>Cat. No.</b>	<b>0519<sup>2)</sup></b>	<b>0521<sup>2)</sup></b>	<b>0526<sup>2)</sup></b>	<b>0523<sup>2)</sup></b>	<b>0530<sup>2)</sup></b>	<b>blood collection/urine tubes</b>										
lid with bio-containment <sup>4)</sup> Cat. No. 5093																
carrier Cat. No. 5092																
<b>Cat. No.</b>	<b>5122</b>	<b>5124</b>	<b>5125</b>	<b>5126</b>	<b>1791</b>	<b>5138</b>		<b>5136</b>	<b>5120</b>	<b>5137</b>	<b>5136</b>			<b>5138</b>	<b>5120</b>	
boring Ø x L in mm	25.5 x 82	35.5 x 82.5	45.5 x 85	42 x 85	66 x 103	12.8 x 54.5		17.5 x 60.7	12.8 x 82	13.5 x 60.7	17.5 x 60.7			12.8 x 54.5	12.8 x 82	
tubes per rotor	16	4				48		32	48	32			48	48		
max. RCF <sup>2)</sup>	2,898	2,952		3,095		2,540		2,952	3,005	2,952			2,540	3,005		
radius in mm	162	165		173		142		165	168	165			142	168		
run-up in sec	18															
run-down in sec, braked	16															
temperature in °C <sup>1)</sup>	- 1															

capacity in ml	4–7	8.5–10	8	15	50	12	25	30	50	10	250	290
Ø x L in mm	16 x 75	16 x 100	16 x 125	17 x 120	29 x 115	17 x 100	25 x 90	25 x 110	29 x 115	16 x 80	61 x 122	62 x 137
<b>Cat. No.</b>	<b>blood/urine tubes</b>			<b>0509</b>	<b>0513</b>	<b>-</b>					<b>5127<sup>1)</sup></b>	<b>-<sup>1)</sup></b>
lid with bio-containment <sup>4)</sup> Cat. No. 5093												
carrier Cat. No. 5092												
<b>Cat. No.</b>	<b>5136</b>	<b>5121<sup>5)</sup></b>	<b>5129</b>	<b>5123</b>	<b>5121</b>	<b>5134</b>	<b>5122</b>	<b>5135</b>	<b>5136</b>	<b>6319</b>		
boring Ø x L in mm	17.5 x 60.7	17.5 x 82	17 x 85	30 x 85	17.5 x 82	26 x 73	25.5 x 82	30 x 99	17.5 x 60.7	66 x 103		
tubes per rotor	32	28	28	8	28	12	16	8	32	4		
max. RCF <sup>2)</sup>	2,952	3,059	3,095		3,005	2,826	2,898	3,023	2,952	3,095		
radius in mm	165	171	173		168	158	162	169	165	173		
run-up in sec	18											
run-down in sec, braked	16											
temperature in °C <sup>1)</sup>	- 1											

<sup>1)</sup> Lowest attainable temperature in precooled refrigerated centrifuges at max. speed. Lower temperatures can be reached by reducing the speed.

<sup>2)</sup> 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 <sup>2)</sup> is 4,000.

<sup>3)</sup> When using these tubes, carrier 5051 resp. 5092 cannot be closed with lid 5053 resp. 5093.

<sup>4)</sup> Tested by the TÜV in conformity with DIN EN 61010, section 2-020.

# ROTORS AND ACCESSORIES

## Swing-out rotor, 4-place



±90°

n = 4,600 min<sup>-1</sup>  
max. RCF 3,832

illustrated with carriers 1495 and lids 1492  
with bio-containment<sup>4)</sup>

**Cat. No.** (without carriers) **4754**

capacity in ml	1.5	2.0	1	3	4	5	6	7	8	9	15	25	50	94	100
Ø x L in mm	11x38	11x38	6x45	10x60	10x88	12x75	12x82	12x100	16x81	14x100	17x100	24x100	34x100	38x102	44x100
<b>Cat. No.</b>	<b>2078</b>	<b>0536</b>	<b>Rhesus</b>	-		<b>0553<sup>2)</sup></b>	<b>0501<sup>2)</sup></b>	<b>0578<sup>2)</sup></b>	-	<b>0500<sup>2)</sup></b>	<b>0518<sup>2)</sup></b>	<b>0519<sup>2)</sup></b>	<b>0521<sup>2)</sup></b>	<b>0549</b>	<b>0526<sup>2)</sup></b>
lid with bio-containment <sup>4)</sup> Cat. No. 1492 															
<b>carrier</b> Cat. No. 1495	<b>1351</b>	<b>1339</b>	<b>1343</b>	-		<b>1383</b>	<b>1348</b>	<b>1329</b>	<b>1330</b>	<b>1331</b>	<b>1396</b>	<b>0761</b>			
boring Ø x L in mm	11.2x38	6.5x34	10.5x43	-		13.4x48	16.5x56	17.6x91	25.2x87	35.2x87	38.5x92	45.9x98			
tubes per rotor	20	108	36	-		20	16	16	4						
max. RCF <sup>2)</sup>	3,549	3,738	3,785	-		3,690	3,690	3,667	3,525	3,501	3,761	3,690			
radius in mm	150	158	160	-		156	156	155	149	148	159	156			
run-up in sec	14														
run-down in sec, braked	14														
temperature in °C <sup>1)</sup>	0														

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	10	1.6–5	4–7	4–7	8.5–10
Ø x L in mm	8x66	13x65	11x66	15x75	11x92	13x90	15x92	16x92	15x102	13x75	13x100	16x75	16x100
<b>Cat. No.</b>	<b>blood collection/urine tubes</b>												
lid with bio-containment <sup>4)</sup> Cat. No. 1492 													
<b>carrier</b> Cat. No. 1495	<b>1457</b>	<b>1383</b>	<b>1459</b>	<b>1383</b>	<b>1459</b>	<b>1329</b>	<b>1329<sup>5)</sup></b>	<b>1383</b>	<b>1348</b>				
boring Ø x L in mm	9x47	13.4x48	15.6x47	13.4x48	15.6x47	17.6x91	13.4x48	16.5x56					
tubes per rotor	28	20	16	20	16	16	20	16					
max. RCF <sup>2)</sup>	3,714	3,690	3,714	3,690	3,714	3,667	3,832	3,690					
radius in mm	157	156	157	156	157	155	162	156					
run-up in sec	14												
run-down in sec, braked	14												
temperature in °C <sup>1)</sup>	0												

<sup>5)</sup> Please remove the inserts.

























<sup>1)</sup> At temperatures of over + 40 °C and / or when not filled to capacity, bottles may warp during centrifugation.

# ROTORS AND ACCESSORIES



illustrated with carriers 1495

## Swing-out rotor Cat. No. (without carriers) **4754**

capacity in ml	15	15	50	12	25	30	50	10	30	50	85	30
Ø x L in mm	17 x 120	17 x 120	29 x 115	17 x 100	25 x 90	25 x 110	29 x 115	16 x 80	26 x 95	29 x 107	38 x 106	44 x 105
<b>Cat. No.</b>	<b>0509</b>	<b>0509</b>	<b>0513</b>	-					<b>0545</b>	<b>0546</b>	<b>0547</b>	<b>0534</b> <sup>13)</sup>
lid with bio-containment <sup>4)</sup> Cat. No. <b>1492</b>												
<b>carrier</b> Cat. No. <b>1495</b>												
<b>Cat. No.</b>	<b>1347</b>	<b>1356</b>	<b>1384</b>	<b>6311</b>	<b>1363</b>	<b>1365</b>	<b>6318</b>	<b>1348</b>	<b>4417</b>	<b>4416</b>	<b>1396</b>	<b>0765</b>
boring Ø x L in mm	17 x 90	17 x 107	30 x 90	17 x 80	26 x 72	26 x 80	29.5 x 80	16.5 x 56	26 x 83	29 x 93	38.5 x 92	45.9 x 98
tubes per rotor	4	12	4	4	4	4	16			4		
max. RCF <sup>2)</sup>	3,832			3,407	3,832		3,690	3,549	3,785	3,761	3,667	
radius in mm	162			144	162		156	150	160	159	155	
run-up in sec	14											
run-down in sec, braked	14											
temperature in °C <sup>1)</sup>	0											

<sup>1)</sup> Lowest attainable temperature in precooled refrigerated centrifuges at max. speed. Lower temperatures can be reached by reducing the speed.

<sup>2)</sup> 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 <sup>2)</sup> is 4,000.

<sup>3)</sup> When using these tubes, carrier 1495 cannot be closed with lid 1492.



























































# ROTORS AND ACCESSORIES



illustrated with carriers 1425

## Swing-out rotor Cat. No. (without carriers) 4754

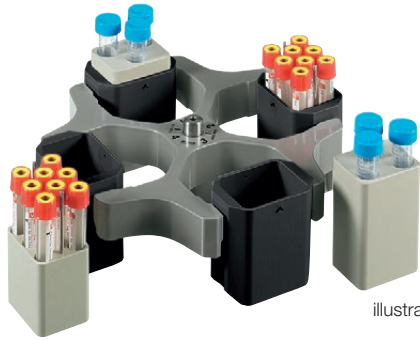
capacity in ml	1.5	2.0	1	3	4	5	6	7	9	15	25	50	100
Ø x L in mm	11 x 38	11 x 38	6 x 45	10 x 60	12 x 60	12 x 75	12 x 82	12 x 100	14 x 100	17 x 100	24 x 100	34 x 100	44 x 100
Cat. No.	<b>2078</b>	<b>0536</b>	<b>Rhesus</b>	-		<b>0553<sup>2)</sup></b>	<b>0501<sup>2)</sup></b>	<b>0578<sup>2)</sup></b>	<b>0500<sup>2)</sup></b>	<b>0518<sup>2)</sup></b>	<b>0519<sup>2)</sup></b>	<b>0521<sup>2)</sup></b>	<b>0526<sup>2)</sup></b>
 <b>carrier</b> Cat. No. <b>1425</b>													
													
Cat. No.	<b>1444</b>	<b>1432</b>	<b>1433</b>	<b>1438</b>		<b>1434</b>		<b>1431</b>		<b>1435</b>	<b>1436</b>	<b>1437</b>	
boring Ø x L in mm	11.5 x 38	6.5 x 34	10.5 x 40	13.4 x 50		12.7 x 60		17.5 x 84		25.5 x 84	35.5 x 84	45.5 x 86	
tubes per rotor	36	144	56	28		48		28		8	4	4	
max. RCF <sup>2)</sup>	3,572	3,643	3,596					3,596					3,501
radius in mm	151	154	152					152					148
run-up in sec	14												
run-down in sec, braked	14												
temperature in °C <sup>1)</sup>	0												

capacity in ml	2.6–3.4	2.7–3	4–5.5	4.5–5	4.9	7.5–8.5	9–10	1.6–5	4–7	4–7	8.5–10	15	50	50	
Ø x L in mm	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 100	17 x 120	29 x 115	29 x 115	
Cat. No.	<b>blood collection/urine tubes</b>											<b>0509</b>	<b>0513</b>	-	
 <b>carrier</b> Cat. No. <b>1425</b>															
															
Cat. No.	<b>1438</b>	<b>1441</b>	<b>1438</b>	<b>1431</b>	<b>1439</b>	<b>1438</b>		<b>1441</b>		<b>1736</b>	<b>1443</b>	<b>1737</b>			
boring Ø x L in mm	13.4 x 50	16.5 x 50	13.4 x 50	17.5 x 84	17 x 45	13.4 x 50		16.5 x 50		17 x 90	30 x 90				
tubes per rotor	28				16		28		16		4	4			
max. RCF <sup>2)</sup>	3,596				3,596		3,596		3,596		3,738	3,738			
radius in mm	152				152		152		152		158	158			
run-up in sec	14														
run-down in sec, braked	14														
temperature in °C <sup>1)</sup>	0														

<sup>4)</sup> Tested by the TÜV in conformity with DIN EN 61010, section 2-020.

<sup>13)</sup> A rubber stopper for closing the tube is available under Cat. No. 0535. The tube may not be centrifuged with the stopper. The stopper only serves to close the tube for agitating or mixing.

# ROTORS AND ACCESSORIES



illustrated with carriers 1427



illustrated with carriers 1427 and lids 1421

## Swing-out rotor Cat. No. (without carriers) 4754

capacity in ml	1.5/2.0	1	3	4	5	6	7	9	15	25	50	15	50	50	
Ø x L in mm	11 x 38	6 x 45	10 x 60	12 x 60	12 x 75	12 x 82	12 x 100	14 x 100	17 x 100	24 x 100	34 x 100	17 x 120	29 x 115	29 x 115	
<b>Cat. No.</b>	<b>2078/0536</b>	<b>Rhesus</b>	<b>-</b>		<b>0553<sup>2)</sup></b>	<b>0501<sup>2)</sup></b>	<b>0578<sup>2)</sup></b>	<b>0500<sup>2)</sup></b>	<b>0518<sup>2)</sup></b>	<b>0519<sup>2)</sup></b>	<b>0521<sup>2)</sup></b>	<b>0509</b>	<b>0513</b>	<b>-</b>	
lid Cat. No. 1421															
<b>carrier</b> Cat. No. 1427															
<b>Cat. No.</b>	<b>5277</b>	<b>5273</b>	<b>1357</b>	<b>1327</b>	<b>1326</b>	<b>1732</b>	<b>5229</b>	<b>5230</b>	<b>5237</b>	<b>5231</b>	<b>5232</b>	<b>5233</b>	<b>1733</b>	<b>5276</b>	<b>5233<sup>5)</sup></b>
boring Ø x L in mm	11.5 x 38	11.2 x 38	6.5 x 23	10.5 x 23	12.5 x 44	13.4 x 58	12.5 x 44	12.4 x 87	15 x 73	17.8 x 87	25.5 x 87	35.5 x 87	17 x 90	30 x 90	35.5 x 87
tubes per rotor	36	48	120	48		32	48	48	24	24	8	4	12	4	
max. RCF <sup>2)</sup>	3,761	3,714	3,738	3,714		3,690	3,714	3,620				3,809	3,714		
radius in mm	159	157	158	157		156	157	153				161	157		
run-up in sec	14														
run-down in sec, braked	14														
temperature in °C <sup>1)</sup>	0														

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	1.6–5	4–7	4–7	8.5–10
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 100
<b>Cat. No.</b>	<b>blood collection/urine tubes</b>											
lid Cat. No. 1421												
<b>carrier</b> Cat. No. 1427												
<b>Cat. No.</b>	<b>5278</b>	<b>1732</b>	<b>5229</b>	<b>5279</b>	<b>5230</b>	<b>1732</b>	<b>5279</b>	<b>5271<sup>5)</sup></b>	<b>1732</b>	<b>5271</b>	<b>5231</b>	
boring Ø x L in mm	9 x 41	13.4 x 58	12.5 x 44	15.6 x 41	12.4 x 87	13.4 x 58	15.6 x 41	17 x 66	13.4 x 58	17 x 66	17.8 x 87	
tubes per rotor	48	32	48	20	48	32	20		32	20	24	
max. RCF <sup>2)</sup>	3,761	3,690	3,714	3,761	3,620	3,690	3,761	3,643	3,690	3,643	3,620	
radius in mm	159	156	157	159	153	156	159	154	156	154	153	
run-up in sec	14											
run-down in sec, braked	14											
temperature in °C <sup>1)</sup>	0											

suspension for cyto accessories	
<b>cyto chambers<sup>12)</sup></b>	
	<b>1452</b>
	-
	4
	2,721
	115
	14
	14
	0

1) Lowest attainable temperature in precooled refrigerated centrifuges at max. speed. Lower temperatures can be reached 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 <sup>2)</sup> is 4,000.  
 3) When using these tubes, carrier 1427 cannot be closed with lid 1421.

# ROTORS AND ACCESSORIES

## Swing-out rotor, 8-place






























±90°


























n = 3,800 min<sup>-1</sup>  
max. RCF 2,906



illustrated with carriers 1746

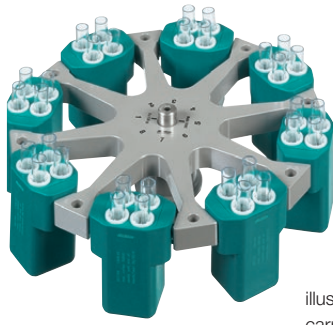
**Cat. No.** (without carriers) **4758**

capacity in ml	5	6	7	9	15	20	45	50	1.1–1.4	2.6–3.4	4–5.5	4.5–5	4.9	7.5–8.5
Ø x L in mm	12 x 75	12 x 82	12 x 100	14 x 100	17 x 100	21 x 100	31 x 100	34 x 100	8 x 66	13 x 65	15 x 75	11 x 92	13 x 90	15 x 92
Cat. No.	<b>0553<sup>2)</sup></b>	<b>0501<sup>2)</sup></b>	<b>0578<sup>2)</sup></b>	<b>0500<sup>2)</sup></b>	<b>0518<sup>2)</sup></b>	-	-	<b>0521<sup>2)</sup></b>	<b>blood collection/urine tubes</b>					
 <b>rotor</b> Cat. No. <b>4758</b>														
														
Cat. No.	<b>1369-91</b>	<b>1372</b>	<b>1369-92</b>	<b>1741</b>	<b>1742</b>	<b>1346</b>	<b>1345</b>	<b>1746</b>	<b>1741</b>	<b>1742</b>	<b>1741</b>	<b>1742</b>	<b>1741</b>	<b>1742</b>
boring Ø x L in mm	11.5 x 64.4	13.5 x 65	11.5 x 71.5	14.6 x 78	17.6 x 78	21.5 x 74	32 x 74	35 x 78	14.6 x 78	17.6 x 78	14.6 x 78	14.6 x 78	14.6 x 78	17.6 x 78
tubes per rotor	32	136	32	80	56	16	8	8	80	56	80	80	80	56
max. RCF <sup>2)</sup>	2,551	2,648	2,777	2,874	2,906	2,825	2,825	2,906	2,874	2,793	2,906	2,906	2,906	2,906
radius in mm	158	164	172	178	180	175	175	180	178	173	180	180	180	180
run-up in sec	19													
run-down in sec, braked	16													
temperature in °C <sup>1)</sup>	0													

capacity in ml	9–10	10	1.6–5	1.6–5 / 4–7	4–7	8.5–10	15	50	30	suspension for cyto accessories		
Ø x L in mm	16 x 92	15 x 102	13 x 75	13 x 75 / 16 x 75	13 x 100	16 x 100	17 x 120	29 x 115	26 x 95			
Cat. No.	<b>blood collection/urine tubes</b>						<b>0509</b>	<b>0513</b>	<b>0545</b>	<b>cyto chambers<sup>12)</sup></b>		
 <b>rotor</b> Cat. No. <b>4758</b>												
												
Cat. No.	<b>1742</b>	<b>1742<sup>14)</sup></b>	<b>1741</b>	<b>1742</b>	<b>1741<sup>14)</sup></b>	<b>1742</b>	<b>1742<sup>14)</sup></b>	<b>1746</b>	<b>1746</b>	<b>1745</b>	<b>1660</b>	
boring Ø x L in mm	17.6 x 78	17.6 x 78	14.6 x 78	17.6 x 78	14.6 x 78	17.6 x 78	17.6 x 78	30 x 98	30 x 98	26 x 78	-	
tubes per rotor	56	24	80	56	32	56	24	8	8	16	8	
max. RCF <sup>2)</sup>	2,906	2,906	2,615	2,793	2,906	2,906	2,906	2,906	2,906	2,906	2,179	
radius in mm	180	180	162	173	180	180	180	180	180	180	135	
run-up in sec	19											
run-down in sec, braked	16											
temperature in °C <sup>1)</sup>	0											

5) Please remove the inserts.  
 12) Please ask for our detailed cyto brochure.  
 14) Please load only the middle row.  
 16) Packed in units of 10 pieces.

# ROTORS AND ACCESSORIES



illustrated with carriers 1369-92

## Swing-out rotor 4758

## Swing-out rotor, 2-place

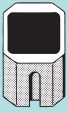











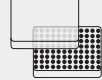
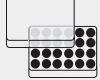






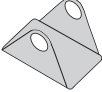

±90°

n = 5,100 min<sup>-1</sup>  
max. RCF 3,926

illustrated with carriers 4745 and lids 4627 with bio-containment<sup>4)</sup> and removal frame 4626

**Cat. No. (without carriers) 4728**

capacity in ml	1.5/2.0	1	3	4
Ø x L in mm	11 x 38	6 x 45	10 x 60	12 x 60
<b>Cat. No.</b>	<b>2078/0536</b>	<b>Rhesus</b>	-	-
 <b>carrier</b> Cat. No. <b>1366</b>				
				
<b>Cat. No.</b>	<b>5277</b>	<b>1357</b>	<b>1327</b>	<b>1326</b>
boring Ø x L in mm	11.5 x 38	6.5 x 23	10.5 x 23	12.5 x 44
tubes per rotor	72	240	96	
max. RCF <sup>2)</sup>	2,470	2,454	2,438	
radius in mm	153	152	151	
run-up in sec	19			
run-down in sec, braked	16			
temperature in °C <sup>1)</sup>	0			

D x W x H in mm	86 x 128 x 15	86 x 128 x 17.5	86 x 128 x 22	86 x 128 x 44.5	86 x 128 x 46	86 x 128 x 83	59 x 84 x 11	82 x 124 x 20	-
capacity in ml	-								
<b>Cat. No.</b>	<b>MTP</b>		<b>CP</b>	<b>DWP</b>	<b>MS</b>	<b>QP</b>	<b>Microtest Plate (Terasaki)</b>	<b>PCR Plate, 96 wells</b>	<b>PCR strips</b>
lid with bio-containment <sup>4)</sup> Cat. No. <b>4627</b>									
<b>carrier</b> Cat. No. <b>4745</b>									
<b>Cat. No.</b>	<b>4626</b>							<b>4626 + 1485</b>	
boring Ø x L in mm	-								
plates/Strips pro rotor	12	10	8	2		4	2	24 x 8	
max. RCF <sup>2)</sup>	3,926								
radius in mm	135								
run-up in sec	67								
run-down in sec, braked	41								
temperature in °C <sup>1)</sup>	+4								

<sup>1)</sup> Lowest attainable temperature in precooled refrigerated centrifuges at max. speed. Lower temperatures can be reached by reducing the speed.

<sup>2)</sup> 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 <sup>2)</sup> is 4,000.

<sup>4)</sup> Tested by the TÜV in conformity with DIN EN 61010, section 2-020.

<sup>8)</sup> The screw cap for tube No. 0538 is available with Cat. No. 0539. Dimensions with cap 38 x 110 mm.



# ROTORS AND ACCESSORIES

## Angle rotor, 6-place



45°

n = 11,000 min<sup>-1</sup>  
max. RCF 16,504




with bio-containment<sup>4)</sup>



















**Cat. No. 4794**

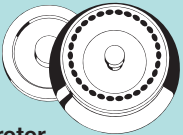









capacity in ml	1.5	2.0	3	15	25	50	75	94	7.5–8.5	9–10	10	8.5–10
Ø x L in mm	11 x 38		10 x 60	17 x 100	24 x 100	34 x 100	35 x 105	38 x 102	15 x 92	16 x 92	15 x 102	16 x 100
<b>Cat. No.</b>	<b>2078</b>	<b>0536</b>	-	<b>0518<sup>2)</sup></b>	<b>0519<sup>2)</sup></b>	<b>0521<sup>2)</sup></b>	<b>0548</b>	<b>0549</b>	<b>blood collection/urine tubes</b>			
lid with bio-containment <sup>4)</sup> incl.												
<b>rotor</b> Cat. No. <b>4794</b>												
<b>Cat. No.</b>	<b>1449</b>			<b>1451</b>	<b>1447</b>	<b>1463</b>	-		<b>1451</b>			
boring Ø x L in mm	11.4 x 39			17.5 x 92	26 x 85	35 x 89		38.2 x 89.6	17.5 x 92			
tubes per rotor	24			6				6	6			
max. RCF <sup>2)</sup>	15,828			15,557	15,151	16,233		16,504	15,557			
radius in mm	117			115	112	120		122	115			
run-up in sec	40											
run-down in sec, braked	63											
temperature in °C <sup>1)</sup>	+4											




capacity in ml	15	50	10	30	50	85	94
Ø x L in mm	17 x 120	29 x 115	16 x 80	26 x 95	29 x 107	38 x 106	38 x 102
<b>Cat. No.</b>	<b>0509</b>	<b>0513</b>	-	<b>0545</b>	<b>0546</b>	<b>0547</b>	<b>0538<sup>2)</sup></b>
lid with bio-containment <sup>4)</sup> incl.							
<b>rotor</b> Cat. No. <b>4794</b>							
<b>Cat. No.</b>	<b>1466</b>	<b>1454</b>	<b>1448</b>	<b>1447</b>	<b>1446</b>	-	
boring Ø x L in mm	17 x 106	29.8 x 97	16.5 x 74	26 x 85	29 x 92	38.2 x 89.6	
tubes per rotor	6	6	12	6			
max. RCF <sup>2)</sup>	15,828	16,098	15,557	15,151	15,828	16,504	
radius in mm	117	119	115	112	117	122	
run-up in sec	40						
run-down in sec, braked	63						
temperature in °C <sup>1)</sup>	+4						

# ROTORS AND ACCESSORIES

Angle rotor, 4-place	Angle rotor, 30-place	Angle rotor, 6-place, for PCR strips
		
↘ 25°	↘ 45°	↘ 45°
n = 9,500 min <sup>-1</sup> max. RCF 12,007	n = 15,000 min <sup>-1</sup> max. RCF 24,400	n = 14,000 min <sup>-1</sup> max. RCF 18,845
<b>Cat. No. 4795</b>	<b>Cat. No. 4790-A</b> <small>with bio-containment<sup>4)</sup></small>	<b>Cat. No. (without lid) 4760</b> lid (optional) Cat. No. <b>1162</b>

capacity in ml	15	25	94	10	30	50	85	94	250
Ø x L in mm	17x100	24x100	38x102	16x80	26x95	29x107	38x106	38x102	61x122
Cat. No.	<b>0518<sup>2)</sup></b>	<b>0519<sup>2)</sup></b>	<b>0549</b>	-	<b>0545</b>	<b>0546</b>	<b>0547</b>	<b>0538<sup>8)</sup></b>	<b>5127<sup>11)</sup></b>
 <b>rotor</b> Cat. No. <b>4795</b>									
									
Cat. No.	<b>5646</b>	<b>5642</b>	<b>5644</b>	<b>5641</b>	<b>5642</b>	<b>5643</b>	<b>5644</b>		-
boring Ø x L in mm	17.6 x 83	26 x 80	38.6 x 88	16.6 x 70	26 x 80	29 x 90	38.6 x 88		61.5 x 109
tubes per rotor	28	12	4	32	12	4	4		4
max. RCF <sup>2)</sup>	11,301	10,897	10,292	11,402	10,897	10,090	10,292		12,007
radius in mm	112	108	102	113	108	100	102		119
run-up in sec	45								
run-down in sec, braked	55								
temperature in °C <sup>1)</sup>	+2								

capacity in ml	0.2	0.4	0.5	0.8	1.5	2.0	0,5
Ø x L in mm	6x18	6x45	8x30	8x45	11x38		10,7x36
Cat. No.	-				<b>2078</b>	<b>0536</b>	<b>Pediatric</b>
 <b>rotor</b> Cat. No. <b>4790-A</b>							
							
Cat. No.	<b>2024</b>	<b>2023</b>	<b>2031<sup>15)</sup></b>	-	<b>0788</b>		
boring Ø x L in mm	6 x 40	8 x 40	10.2 x 19	11.2 x 40.9	11.2 x 40.9		
tubes per rotor	30						15
max. RCF <sup>2)</sup>	24,400						23,394
radius in mm	97						93
run-up in sec	19						
run-down in sec, braked	24						
temperature in °C <sup>1)</sup>	+4						

capacity in ml	0.2	0.2
Ø x L in mm	6 x 18	-
Cat. No.	-	<b>PCR strips</b>
 <b>rotor</b> Cat. No. <b>4760</b>		
Cat. No.	-	
boring Ø x L in mm	6.5 x 15.5	
tubes per rotor	48	6 x 8
max. RCF <sup>2)</sup>	18,845	
radius in mm	86	
run-up in sec	15	
run-down in sec, braked	15	
temperature in °C <sup>1)</sup>	+1	

1) Lowest attainable temperature in precooled refrigerated centrifuges at max. speed. Lower temperatures can be reached 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.  
 4) Tested by the TÜV in conformity with DIN EN 61010, section 2-020.  
 8) The screw cap for tube No. 0538 is available with Cat. No. 0539. Dimensions with cap 38 x 110 mm.

## ROLLING CABINETS

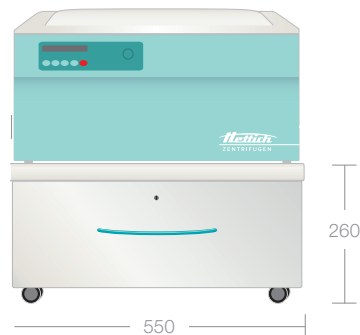
All rolling cabinets are of sturdy design and feature castors and two locks. Any vibrations of the centrifuge are safely compensated for.

Rolling cabinets with Cat. No. 4612-A and 4613-A are suited for the models:

- ROTOFIX 32 A
- UNIVERSAL 320/320 R
- ROTINA 380/380 R
- ROTINA 420
- ROTANTA 460
- ROTOFIX 46/46 H

Rolling cabinets with Cat. No. 4614-K and 4615-A are suited for the models:

- ROTINA 420 R
- ROTANTA 460 R



Low and narrow,  
with one drawer.  
Depth 650 mm

**Cat. No. 4612-A**



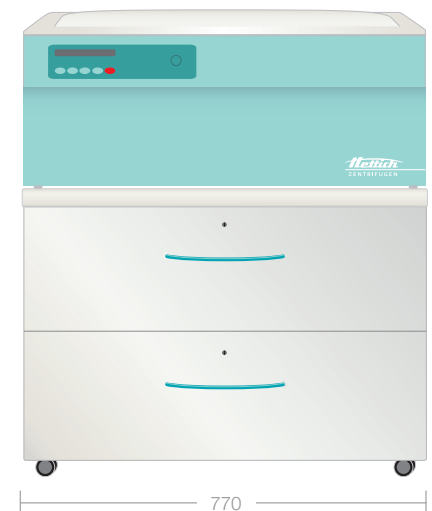
Low and wide,  
with one drawer.  
Depth 650 mm

**Cat. No. 4614-K**



High and narrow,  
with two drawers.  
Depth 650 mm

**Cat. No. 4613-A**





High and wide,  
with two drawers.  
Depth 650 mm

**Cat. No. 4615-A**

<sup>11)</sup> At temperatures of over + 40 °C and / or when not filled to capacity, bottles may warp during centrifugation.  
<sup>15)</sup> For centrifugation at high speeds, we recommend to use form-fitting, phenol-resistant adapters 2031.

# ROTINA 420/420 R

TECHNOLOGY	ROTINA 420		ROTINA 420 R	
<b>Benchtop centrifuge, without rotor</b>	<b>classic</b>		<b>cooled</b>	
Power supply*)	200 – 240 V 1 ~	100 – 127 V 1 ~	200 – 240 V 1 ~	100 – 127 V 1 ~ / 100 V 1 ~
Frequency	50 – 60 Hz		50 Hz	60 Hz / 50 Hz
Consumption	870 VA	900 VA	1,600 VA	1,850 VA
Emission, Immunity	EN / IEC 61326-1, class B	FCC class B	EN / IEC 61326-1, class B	FCC class B
 Max. capacity	4 x 600 ml			
 Max. RPM (speed)	15,000 min <sup>-1</sup>			
Max. RCF	24,400			
Running time	1 sec – 99 h : 59 min : 59 sec, ∞ continuous run, short cycle mode			
Dimensions (HxWxD)	423x 506x 650 mm		423x 713x 654 mm	
Weight	approx. 75 kg	approx. 84 kg	approx. 108 kg	approx. 117 kg
<b>Refrigeration</b>				
Temperature control, infinitely variable	-		from -20 to +40 °C	
<b>Cat. No.</b>	<b>4701</b>	<b>4701-01</b>	<b>4706</b>	<b>4706-01</b>

\*) Other voltages on request.



Hettich centrifuges comply with all relevant EU standards in effect and conform to the European level of quality and safety for medical devices. Evidence is provided by national and international test marks such as IEC 61010 or the CE conformity. The ISO 9001, ISO 13485 and ISO 14001 certificates accredited to the company bear witness to the extreme care and responsibility Hettich puts into the manufacturing of centrifuges and their accessories.



Our certification as an “Authorized Economic Operator” enables accelerated customs clearance.



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**National Service: -12 02**  
**International Service: -12 03**



LAB TECHNOLOGY