



ROTINA 420/420 R
Benchtop Centrifuges
classic/cooled

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.

DIGITAL DISPLAY AND CONTROL PANEL

KEYBOARD

START	Start centrifugation run / short centrifuging runs / save entries and changes
	Start pre-cooling program PREC
<u>STOP</u> 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 Input of braking levels 1 – 9 Input brake force cut-off
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 cooled
Cat. No. 4706



ROTINA 420 R keypad (C control panel)

ROTORS AND ACCESSORIES

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

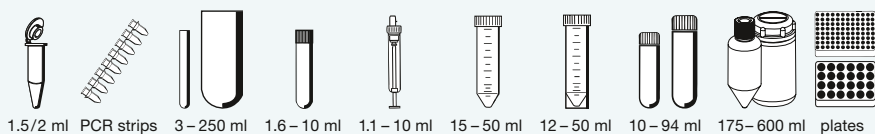
Some accessories with bio-containment⁴⁾



Swing-out rotor 4-place

↗ 90°
n = 4,800 min⁻¹
max. RCF 4,740

Cat. No. 4784-A



→
P.5-6

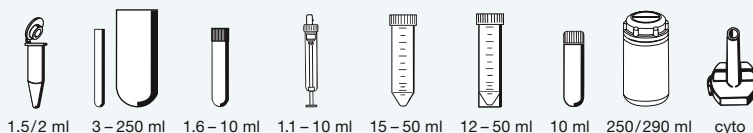
Some accessories with bio-containment⁴⁾



Swing-out rotor 4-place

↗ 90°
n = 4,000 min⁻¹
max. RCF 3,095

Cat. No. 4753



→
P.7-9

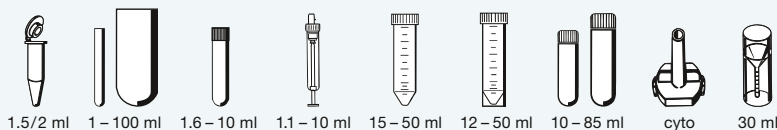
Some accessories with bio-containment⁴⁾



Swing-out rotor 4-place

↗ 90°
n = 4,600 min⁻¹
max. RCF 3,832

Cat. No. 4754



→
P.9-12

auto-clavable with bio-containment⁴⁾



Angle rotor 30-place

↘ 45°
n = 15,000 min⁻¹
max. RCF 24,400

Cat. No. 4790-A

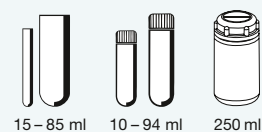


→
P.14

Angle rotor 4-place

↘ 25°
n = 9,500 min⁻¹
max. RCF 12,007

Cat. No. 4795

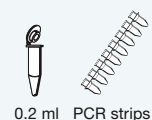


→
P.14

Angle rotor 6-place

↘ 45°
n = 14,000 min⁻¹
max. RCF 18,845

Cat. No. 4760



→
P.15

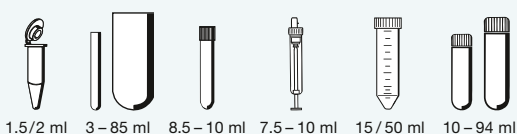
auto-clavable with bio-containment⁴⁾



Angle rotor 6-place

↘ 45°
n = 11,000 min⁻¹
max. RCF 16,504

Cat. No. 4794



→
P.15

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

ROTORS AND ACCESSORIES

Swing-out rotor, 4-place

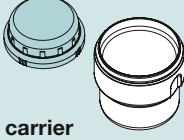


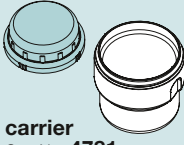
90°

$n = 4,800 \text{ min}^{-1}$
max. RCF 4,740

illustrated with carriers 4781 and lids 4751
with bio-containment⁴⁾

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

capacity in ml	1.5	2.0	3	4	4	5	6	7	10	15	25	50	75	85	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 101	40 x 115	44 x 100	65 x 115	
Cat. No.	2078	0536	-			0553 ²⁾	0501 ²⁾	0578 ²⁾	2079	0518 ²⁾	0519 ²⁾	0521 ²⁾	0548	0549	0523 ²⁾	0526 ²⁾	0530 ²⁾	
lid with bio-containment ⁴⁾ Cat. No. 4751 																		
																		
Cat. No.	4773	4761		4762				4763		4764	4765	4766		4767	4768			
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 ²⁾	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 ¹⁾	+ 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	8x66	13x65	11x66	15x75	11x92	13x90	15x92	16x92	13x75/100	13x75/100	16x75	16x125	16x100	17x120	29x115	17x100
Cat. No.	blood collection /urine tubes													0509	0513	-
lid with bio-containment⁴⁾ Cat. No. 4751  carrier Cat. No. 4781																
																
Cat. No.	4761	4762	4761	4763	4761	4762	4763	4762	4775	4763	4763	4763	4769	4770	4774	
boring Ø x L in mm	11.2x54	13.4x55	11.2x54	17.5x62	11.2x54	13.4x55	17.5x62	13.4x55	13.7x54	17.5x62			17x84	30x82.5	172x82.5	
tubes per rotor	140	104	140	72	140	104	72	104	84	72	24	72	52	20	60	
max. RCF ²⁾	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 ¹⁾	+ 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 ²⁾ is 4,000.

³⁾ When using these tubes, carrier 4781 cannot be closed with lid 4751.

⁴⁾ Carrier must be loaded as illustrated.

⁷⁾ For blood collection tubes with a cap, of diameter greater than 17 mm.

ROTORS AND ACCESSORIES



illustrated with carriers 4781
and lids 4751
with bio-containment⁴⁾



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.	-				0545	0546	0547	0538 ⁵⁾	Falcon®	Nalgene®	Nunc®	Falcon®	5127 ¹⁾	- ¹⁾	- ¹⁾	- ¹⁾	0551 ¹⁾
lid with bio-containment ⁴⁾ Cat. No. 4751																	
carrier Cat. No. 4781																	
Cat. No.	4764		4770 ⁵⁾	4763	4764	4770 ⁵⁾	4766		4776	4777		4776	4771		4772		-
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 ²⁾	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 ¹⁾	+ 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.	MTP		CP	DWP	MS	Microtest plate (Terasaki)	PCR plate, 96-place	PCR strips
carrier Cat. No. 4782								
Cat. No.	-							1485
boring Ø x L in mm	-							
plates/strips per rotor	16	16	12	4	4	8	4	48 x 8
max. RCF ²⁾	4,096							
radius in mm	159							
run-up in sec	54							
run-down in sec, braked	38							
temperature in °C ¹⁾	+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 ²⁾ is 4,000.

³⁾ When using these tubes, carrier 4781 resp. 5051 cannot be closed with lid 4751 resp. 5053.

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

ROTORS AND ACCESSORIES

Swing-out rotor, 4-place

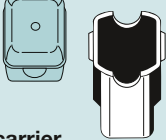
±90°

n = 4,000 min⁻¹
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	
Cat. No.	-	-	2078	0536	-	0553 ²⁾	0501 ²⁾	0578 ²⁾	0500 ²⁾	0518 ²⁾	0519 ²⁾	0521 ²⁾	0526 ²⁾	0523 ²⁾	
lid Cat. No. 5053  carrier Cat. No. 5051															
															
Cat. No.	5257		5281		5267	5227		5247 ¹⁰⁾		5264	5248 ¹⁰⁾	5242	5243	5262	5249
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 ²⁾ 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 ¹⁾	- 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	8x66	13x65	11 x66	15x75	11 x92	13x90	15x92	16x92	15x102	13x75	16x75	13x100	16x100
Cat. No.	blood collection / urine tubes												
lid Cat. No. 5053   carrier Cat. No. 5051													
													
Cat. No.	5267	5268	5227	5264	5227	5268	5264	5258		5268	5264	5268	5248
boring Ø x L in mm	11 x44	13.5x52	12.5x42	16x50	12.5x42	13.5x52	16x50	17.6x86		13.5x52	16x50	13.5x52	17.5x86
tubes per rotor	80	48	80	48	80	48	48	44		48			
max. RCF ²⁾	2,737	2,808	2,773		2,773	2,808	2,773	2,755		2,808	2,773	2,808	2,755
radius in mm	153	157	155		155	157	155	154		157	155	157	154
run-up in sec	18												
run-down in sec, braked	16												
temperature in °C ¹⁾	- 1												

⁵⁾ Please remove the inserts.

⁸⁾ The screw cap for tube No. 0538 is available with Cat. No. 0539. Dimensions with cap 38 x 106 mm.

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

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

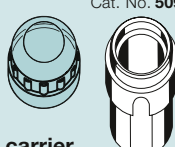
ROTORS AND ACCESSORIES

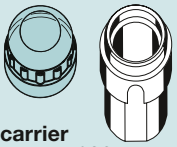
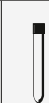


illustrated with
carriers 5051

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	
Cat. No.	0509	0513	-			cyto chambers ¹²⁾
lid Cat. No. 5053  carrier Cat. No. 5051						
						
Cat. No.	6306	5259	6306	5266	5243	5280
boring Ø x L in mm	17x90	30x86	17x90	26x86	36x86	-
tubes per rotor	28	8	28	20	8	8
max. RCF ²⁾ 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 ¹⁾	- 1					

capacity in ml	5	6	7	10	15
Ø x L in mm	12x75	12x82	12x100	17x70	17x100
Cat. No.	0553 ²⁾	0501 ²⁾	0578 ²⁾	2079	0518 ²⁾
lid with bio-containment ⁴⁾ Cat. No. 5093  carrier Cat. No. 5092					
					
Cat. No.	5128		5120	5136	
boring Ø x L in mm	12.8x45		12.8x82	17.5x60.7	
tubes per rotor	48			32	
max. RCF ²⁾	3,005			2,952	
radius in mm	168			165	
run-up in sec	18				
run-down in sec, braked	16				
temperature in °C ¹⁾	- 1				

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
Cat. No.	0519 ²⁾	0521 ²⁾	0526 ²⁾	0523 ²⁾	0530 ²⁾	blood collection/urine tubes										
lid with bio-containment⁴⁾ Cat. No. 5093  carrier Cat. No. 5092																
																
Cat. No.	5122	5124	5125	5126	1791	5138		5136	5120	5137	5136			5138	5120	
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 ²⁾	2,898	2,952	2,952		3,095	2,540		2,952	3,005	2,952			2,540			3,005
radius in mm	162	165	165		173	142		165	168	165			142			168
run-up in sec	18															
run-down in sec, braked	16															
temperature in °C ¹⁾	- 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.

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

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

ROTORS AND ACCESSORIES

Swing-out rotor, 4-place



✂ 90°

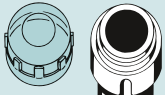
n = 4,600 min⁻¹
max. RCF 3,832

illustrated with carriers 1495 and lids 1492
with bio-containment⁴⁾

Swing-out rotor 4753

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

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	16x 100	16x 125	17x 120	29x 115	17x 100	25x 90	25x 110	29x 115	16x 80	61 x 122	62 x 137
Cat. No.	blood/urine tubes			0509	0513	-					5127 ¹⁾	- ¹⁾
lid with bio-containment⁴⁾ Cat. No. 5093  rotor 4753 carrier Cat. No. 5092 												
												
Cat. No.	5136		5121 ⁵⁾	5129	5123	5121	5134	5122	5135	5136	6319	
boring Ø x L in mm	17.5x60.7		17.5x82	17x85	30x85	17.5x82	26x73	25.5x82	30x99	17.5x60.7	66 x 103	
tubes per rotor	32		28	28	8	28	12	16	8	32	4	
max. RCF ²⁾	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 ¹⁾	- 1											

capacity in ml	1.5	2.0	1	3	4	5	6	7	8	9	15	25	50	85	100
Ø x L in mm	11 x 38	11 x 38	6 x 45	10 x 60	10 x 88	12 x 75	12 x 82	12 x 100	16 x 81	14 x 100	17 x 100	24 x 100	34 x 100	38 x 101	44 x 100
Cat. No.	2078	0536	Rhesus	-		0553 ²⁾	0501 ²⁾	0578 ²⁾	-	0500 ²⁾	0518 ²⁾	0519 ²⁾	0521 ²⁾	0549	0526 ²⁾
lid with bio-containment⁴⁾ Cat. No. 1492  rotor 4754 carrier Cat. No. 1495															
															
Cat. No.	1351		1339	1343		1383			1348	1329		1330	1331	1396	0761
boring Ø x L in mm	11.2 x 38		6.5 x 34	10.5 x 43		13.4 x 48			16.5 x 56	17.6 x 91		25.2 x 87	35.2 x 87	38.5 x 92	45.9 x 98
tubes per rotor	20		108	36		20			16	16		4			
max. RCF ²⁾	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 ¹⁾	0														

⁵⁾ Please remove the inserts.

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

¹²⁾ Please ask for our detailed cyto brochure.

ROTORS AND ACCESSORIES

illustrated with carriers 1495 and lids 1492
with bio-containment⁴⁾

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

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	11 x 66	15 x 75	11 x 92	13x90	15x92	16x92	15x102	13x75	13x100	16x75	16x100
Cat. No.	blood collection/urine tubes												
lid with bio-containment ⁴⁾ Cat. No. 1492  carrier Cat. No. 1495 													
													
Cat. No.	1457	1383	1459	1383	1459	1329	1329 ⁵⁾	1383			1348		
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 ²⁾	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 ¹⁾	0												

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
Cat. No.	0509	0509	0513	-					0545	0546	0547	0534¹³⁾
lid with bio-containment ⁴⁾ Cat. No. 1492  carrier Cat. No. 1495 												
Cat. No.	1347	1356	1384	6311	1363	1365	6318	1348	4417	4416	1396	0765
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	4	4	4	4
max. RCF ²⁾	3,832	3,832	3,832	3,407	3,407	3,832	3,690	3,549	3,785	3,761	3,667	3,667
radius in mm	162	162	162	144	144	162	156	150	160	159	155	155
run-up in sec	14											
run-down in sec, braked	14											
temperature in °C ¹⁾	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 ²⁾ is 4,000.

³⁾ 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.	2078	0536	Rhesus	-		0553 ²⁾	0501 ²⁾	0578 ²⁾	0500 ²⁾	0518 ²⁾	0519 ²⁾	0521 ²⁾	0526 ²⁾
 carrier Cat. No. 1425													
													
Cat. No.	1444	1432	1433	1438		1434		1431		1435	1436	1437	
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 ²⁾	3,572	3,643	3,596										3,501
radius in mm	151	154	152										148
run-up in sec	14												
run-down in sec, braked	14												
temperature in °C ¹⁾	0												

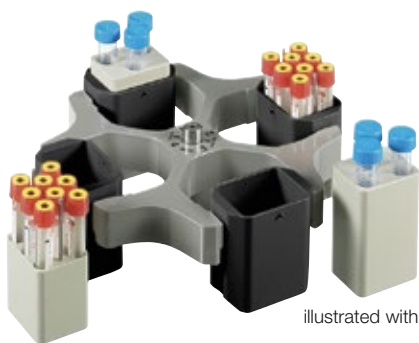
capacity in ml	2.6–3.4	2.7–3	4–5.5	4.5–5	4.9	7.5–8.5	9–10	1.6–5	4–7	4–7	8.5–10	15	50	50
Ø x L in mm	13x65	11x66	15x75	11x92	13x90	15x92	16x92	13x75	13x100	16x75	16x100	17x120	29x115	29x115
Cat. No.	blood collection/urine tubes											0509	0513	-
 carrier Cat. No. 1425														
														
Cat. No.	1438	1441	1438	1431	1439	1438	1441	1736	1443	1737				
boring Ø x L in mm	13.4x50	16.5x50	13.4x50	17.5x84	17x45	13.4x50	16.5x50	17x90	30x90					
tubes per rotor	28					16	28			16	4			
max. RCF ²⁾	3,596					3,596	3,596			3,738	3,738			
radius in mm	152					152	152			158	158			
run-up in sec	14													
run-down in sec, braked	14													
temperature in °C ¹⁾	0													

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

⁵⁾ Please remove the inserts.

¹³⁾ 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

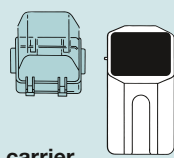


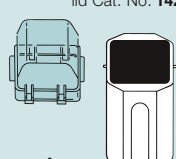
illustrated with carriers 1427



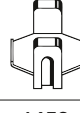
illustrated with carriers 1427 and lids 1421

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	11x38		6x45	10x60	12x60	12x75	12x82	12x100	14x100	17x100	24x100	34x100	17x120	29x115	29x115	
Cat. No.	2078/0536		Rhesus	-		0553 ²⁾	0501 ²⁾	0578 ²⁾	0500 ²⁾	0518 ²⁾	0519 ²⁾	0521 ²⁾	0509	0513	-	
lid Cat. No. 1421  carrier Cat. No. 1427													 ³⁾	 ³⁾	 ³⁾	
															 ⁵⁾	+ 6316
Cat. No.	5277	5273	1357	1327	1326	1732	5229	5230	5237	5231	5232	5233	1733	5276	5233 ⁵⁾	
boring Ø x L in mm	11.5x38	11.2x38	6.5x23	10.5x23	12.5x44	13.4x58	12.5x44	12.4x87	15x73	17.8x87	25.5x87	35.5x87	17x90	30x90	35.5x87	
tubes per rotor	36	48	120	48		32	48	48	24	24	8	4	12	4		
max. RCF ²⁾	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 ¹⁾	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
Cat. No.	blood collection/urine tubes											
lid Cat. No. 1421  carrier Cat. No. 1427												
												
Cat. No.	5278	1732	5229	5279	5230	1732	5279	5271 ⁵⁾	1732	5271	5231	5231
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	17.8 x 87
tubes per rotor	48	32	48	20	48	32	20	20	32	20	24	24
max. RCF ²⁾	3,761	3,690	3,714	3,761	3,620	3,690	3,761	3,643	3,690	3,643	3,620	3,620
radius in mm	159	156	157	159	153	156	159	154	156	154	153	153
run-up in sec	14											
run-down in sec, braked	14											
temperature in °C ¹⁾	0											

suspension for cyto accessories
cyto chambers ¹²⁾


1452
-
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 ²⁾ is 4,000.

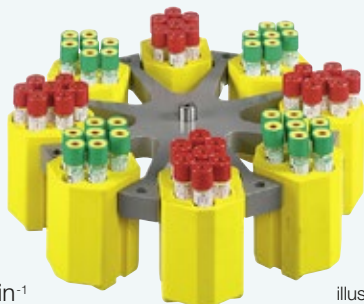
³⁾ When using these tubes, carrier 1427 cannot be closed with lid 1421.

ROTORS AND ACCESSORIES

Swing-out rotor, 8-place

✱ 90°

n = 3,800 min⁻¹
max. RCF 2,906



illustrated with carriers 1742

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.	0553²⁾	0501²⁾	0578²⁾	0500²⁾	0518²⁾	-	-	0521²⁾	blood collection/urine tubes					
 rotor Cat. No. 4758														
Cat. No.	1369-91	1372	1369-92	1741	1742	1346	1345	1746	1741	1742	1741	1742	1741	1742
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	17.6 x 78	14.6 x 78	17.6 x 78
tubes per rotor	32	136	32	80	56	16	8	8	80	56	80	56	80	56
max. RCF ²⁾	2,551	2,648	2,777	2,874	2,906	2,825	2,825	2,906	2,874	2,793	2,906	2,793	2,906	2,906
radius in mm	158	164	172	178	180	175	175	180	178	173	180	173	180	180
run-up in sec	19													
run-down in sec, braked	16													
temperature in °C ¹⁾	0													

capacity in ml	9–10	10	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 / 16 x 75	13 x 100	16 x 100	17 x 120	29 x 115	26 x 95		
Cat. No.	blood collection/urine tubes					0509	0513	0545	cyto chambers¹²⁾	
 rotor Cat. No. 4758										
Cat. No.	1742	1742¹⁴⁾	1742	1741¹⁴⁾	1742	1742¹⁴⁾	1746	1746	1745	1660
boring Ø x L in mm	17.6 x 78	17.6 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	56	32	56	24	8	8	16	8
max. RCF ²⁾	2,906	2,906	2,793	2,906	2,906	2,906	2,906	2,906	2,906	2,179
radius in mm	180	180	173	180	180	180	180	180	180	135
run-up in sec	19									
run-down in sec, braked	16									
temperature in °C ¹⁾	0									

⁵⁾ Please remove the inserts.

¹²⁾ Please ask for our detailed cyto brochure.

¹⁴⁾ Please load only the middle row.

ROTORS AND ACCESSORIES

Angle rotor, 30-place



±45°

n = 15,000 min⁻¹
max. RCF 24,400

with bio-containment⁴⁾

Cat. No. 4790-A

Angle rotor, 4-place

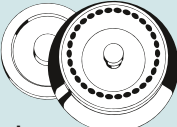


±25°

n = 9,500 min⁻¹
max. RCF 12,007

Cat. No. 4795

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
Cat. No.	2078/0536	Rhesus	-	-
 carrier Cat. No. 1366				
Cat. No.	5277	1357	1327	1326
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 ²⁾	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 ¹⁾		0		

capacity in ml	0.2	0.4	0.5	0.8	1.5	2.0
Ø x L in mm	6 x 18	6 x 45	8 x 30	8 x 45	11 x 38	
Cat. No.	-				2078	0536
lid with bio-containment⁴⁾ incl.  rotor Cat. No. 4790-A						
						
Cat. No.	2024		2023		2031 ¹³⁾	-
boring Ø x L in mm	6 x 40		8 x 40		10.2 x 19	11.2 x 40.9
tubes per rotor	30					
max. RCF ²⁾	24,400					
radius in mm	97					
run-up in sec	19					
run-down in sec, braked	24					
temperature in °C ¹⁾	+4					

capacity in ml	15	25	85	10	30	50	85	94	250
Ø x L in mm	17x100	24x100	38 x 101	16x80	26x95	29x107	38x106	38x102	61x122
Cat. No.	0518 ²⁾	0519 ²⁾	0549	-	0545	0546	0547	0538 ⁸⁾	5127 ¹¹⁾
 rotor Cat. No. 4795									
									
Cat. No.	5646	5642	5644	5641	5642	5643	5644		-
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 ²⁾	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 ¹⁾	+2								

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.

ROTORS AND ACCESSORIES

Angle rotor, 6-place



45°

n = 11,000 min⁻¹
max. RCF 16,504

with bio-containment⁴⁾

Cat. No. 4794

Angle rotor, 6-place, for PCR strips

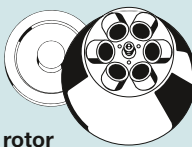


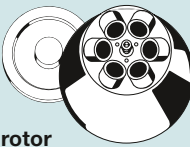
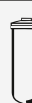
45°

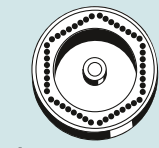
n = 14,000 min⁻¹
max. RCF 18,845

lid (optional)
Cat. No. **1162**

Cat. No. (without lid) 4760

capacity in ml	1.5	2.0	3	15	25	50	75	85	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 101	15 x 92	16 x 92	15 x 102	16 x 100
Cat. No.	2078	0536	-	0518 ²⁾	0519 ²⁾	0521 ²⁾	0548	0549	blood collection/urine tubes			
lid with bio-containment⁴⁾ incl.  rotor Cat. No. 4794												
												
Cat. No.	1449			1451	1447	1463		-	1451			
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 ²⁾	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 ¹⁾	+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
Cat. No.	0509	0513	-	0545	0546	0547	0538 ⁸⁾
lid with bio-containment⁴⁾ incl.  rotor Cat. No. 4794							
							
Cat. No.	1466	1454	1448	1447	1446	-	
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 ²⁾	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 ¹⁾	+4						

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

⁸⁾ The screw cap for tube No. 0538 is available with Cat. No. 0539. Dimensions with cap 38 x 106 mm.

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

¹³⁾ 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	
Benchtop centrifuge, without rotor	classic		cooled	
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	800 VA	1,500 VA	1,750 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 ⁻¹			
Max. RCF	24,400			
Running time	1 sec – 99 h : 59 min : 59 sec, ∞ continuous run, short cycle mode			
Dimensions (H x W x D)	423 x 506 x 650 mm		423 x 713 x 654 mm	
Weight	approx. 75 kg	approx. 84 kg	approx. 108 kg	approx. 117 kg
Refrigeration				
Temperature control, infinitely variable	-		from -20 to +40 °C	
Cat. No.	4701	4701-01	4706	4706-01

^{*)} 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.



LAB TECHNOLOGY

Andreas Hettich GmbH & Co. KG

Föhrenstr. 12
D-78532 Tuttlingen
Germany
www.hettichlab.com
info@hettichlab.com
service@hettichlab.com

Phone +49 (0)7461 / 705 -0
Fax +49 (0)7461 / 705 -1122

National Sales: -12 00
International Sales: -12 01
National Service: -12 02
International Service: -12 03