



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.

DIGITAL DISPLAY AND CONTROL PANEL

KEYBOARD

START	Start centrifugation run / short centrifuging runs / save entries and changes
	Start pre-cooling program PREC
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 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

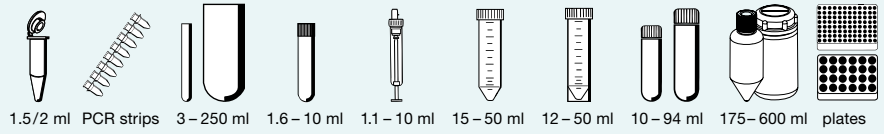
Some accessories with bio-containment⁴⁾



Swing-out rotor 4-place

↘ 90°
n = 4,500 min⁻¹
max. RCF 4,166

Cat. No. 4723



→
P.5-6

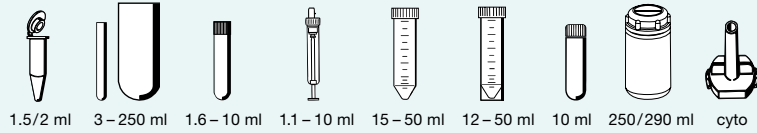
Some accessories with bio-containment⁴⁾



Swing-out rotor 4-place

↘ 90°
n = 4,000 min⁻¹
max. RCF 3,095

Cat. No. 4753



→
P.7-9

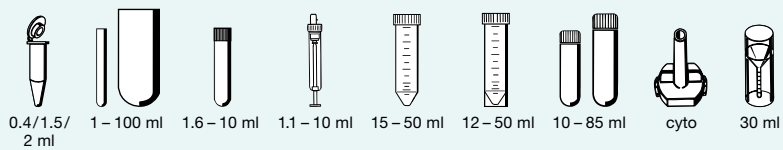
Some accessories with bio-containment⁴⁾



Swing-out rotor 4-place

↘ 90°
n = 4,600 min⁻¹
max. RCF 3,832

Cat. No. 4754



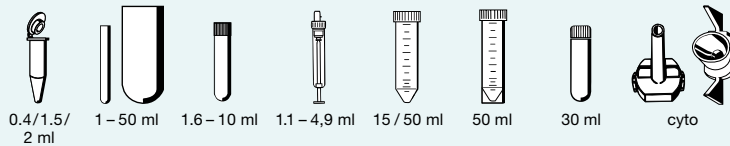
→
P.9-12



Swing-out rotor 8-place

↘ 90°
n = 3,800 min⁻¹
max. RCF 2,906

Cat. No. 4758



→
P.13

auto-clavable with bio-containment⁴⁾



Angle rotor 30-place

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

Cat. No. 4790-A



0.2 – 2 ml

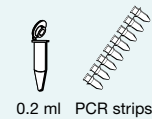
→
P.14



Angle rotor 6-place

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

Cat. No. 4760



0.2 ml PCR strips

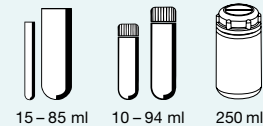
→
P.14



Angle rotor 4-place

↘ 25°
n = 9,500 min⁻¹
max. RCF 12,007

Cat. No. 4795



15 – 85 ml 10 – 94 ml 250 ml

→
P.14

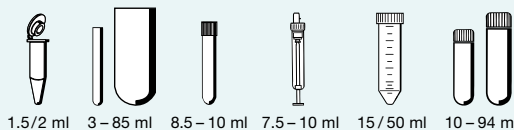
auto-clavable with bio-containment⁴⁾



Angle rotor 6-place

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

Cat. No. 4794



1.5/2 ml 3 – 85 ml 8.5 – 10 ml 7.5 – 10 ml 15 / 50 ml 10 – 94 ml

→
P.15

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

ROTORS AND ACCESSORIES

Swing-out rotor, 4-place



↻ 90°

n = 4,500 min⁻¹
max. RCF 4,166

illustrated with carriers 4750 and lids 4751
with bio-containment⁴⁾

Cat. No. (without carriers) **4723**

capacity in ml	1.5	2.0	3	4	4	5	6	7	10	15	25	50	75	85	100	100	
Ø x L in mm	11x38		10x60	10x88	12x60	12x75	12x82	12x100	17x70	17x100	24x100	34x100	35x105	38x106	40x115	44x100	
Cat. No.	2078	0536	-			0553²⁾	0501²⁾	0578²⁾	2079	0518²⁾	0519²⁾	0521²⁾	0548	0549	0523²⁾	0526²⁾	
lid with bio-containment ⁴⁾ Cat. No. 4751																	
carrier Cat. No. 4750																	
Cat. No.	4773	4761	4762			4763			4764	4765	4766		4767				
boring Ø x L in mm	11.2x38		11.2x54			13.4x55			17.5x62		26.5x69		36x77		42x76.5		46x76.5
tubes per rotor	96		140			104			72		28		16		12		8
max. RCF ²⁾	4,030										4,007						
radius in mm	178										177						
run-up in sec	40																
run-down in sec	☐ 40 ☐ 550																
temperature in °C ¹⁾	+2																

capacity in ml	250	1.1–1.4	2.6–2.9	2.7–3	4–5.5	4.5–5	4.9	7.5–8.2	9–10	1.6–5	4–7	4–7	8	8.5–10	15	50
Ø x L in mm	65x115	8x66	13x65	11x66	15x75	11x92	13x90	15x92	16x92	13x75	13x100	16x75	16x125	16x100	17x120	29x115
Cat. No.	0530²⁾	blood collection / urine tubes													0509	0513
lid with bio-containment ⁴⁾ Cat. No. 4751																
carrier Cat. No. 4750																
Cat. No.	4768	4761	4775	4763	4761	4762	4763	4775	4762	4763			4769	4770		
boring Ø x L in mm	66x103	11.2x54	13.7x54	17.5x62	11.2x54	13.4x55	17.5x62	13.7x54	13.4x55	17.5x62			17x84	30x82.5		
tubes per rotor	4	140	84	72	140	104	72	84	104	72	24	72	52	20		
max. RCF ²⁾	3,985	4,030										4,166	4,143			
radius in mm	176	178										184	183			
run-up in sec	40															
run-down in sec	☐ 40 ☐ 550															
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.

3) When using these tubes, carrier 4750 cannot be closed with lid 4751.

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

ROTORS AND ACCESSORIES



illustrated with carriers 4750 and lids 4751
with bio-containment⁴⁾

Swing-out rotor Cat. No. (without carriers) **4723**

capacity in ml	12	25	30	50	10	30	50	85	94	175	175	200	225	250	400	400	600	
Ø x L in mm	17 x 100	25 x 90	25 x 110	29 x 115	16 x 80	26 x 95	29 x 107	38 x 106	38 x 102	61 x 118	62 x 144	60 x 130	61 x 137	61 x 122	81 x 136	84 x 134	93 x 134	
Cat. No.	-						0545	0546	0547	0538⁶⁾	Falcon®	Nalgene®	Nunc®	Falcon®	5127⁷⁾	-⁷⁾	-⁷⁾	0551⁷⁾
lid with bio-containment ⁴⁾ Cat. No. 4751																		
carrier Cat. No. 4750																		
Cat. No.	4774	4764	4770⁵⁾	4763	4764	4770⁵⁾	4766	4776	4777	4776	4771	4772	-					
boring Ø x L in mm	172 x 82.5	26.5 x 69	30 x 82.5	17.5 x 62	26.5 x 69	30 x 82.5	42 x 76.5	61 x 105	61.5 x 110	61 x 105	62 x 100	85 x 100	94 x 99					
tubes per rotor	60	28	20	72	28	20	12	4										
max. RCF ²⁾	4,143	4,030	4,143	4,030	4,143	4,007	4,166											
radius in mm	183	178	183	178	183	177	184											
run-up in sec	40																	
run-down in sec																		
temperature in °C ¹⁾	+2																	

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. 4752									
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⁾	3,600								
radius in mm	159								
run-up in sec	40								
run-down in sec									
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.

³⁾ When using these tubes, carrier 4750 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	11x38		11x38		10x60	12x75	12x82	12x100	14x100	17x100	24x100	34x100	44x100	40x115
Cat. No.	-	-	2078	0536	-	0553²⁾	0501²⁾	0578²⁾	0500²⁾	0518²⁾	0519²⁾	0521²⁾	0526²⁾	0523²⁾
lid Cat. No. 5053														
carrier Cat. No. 5051														
Cat. No.	5257	5281	5267	5227	5247⁵⁾	5264	5248⁶⁾	5242	5243	5262	5249			
boring Ø x L in mm	12.5x42	11.5x50	11x44	12.5x42	12.5x86	16x50	17.5x86	26x86	36x86	45.5x86	42x86			
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		2,755					
radius in mm upper/lower	109/158	158	153	155	154	155	154		154					
run-up in sec	18													
run-down in sec	☐ 16 ○ 260													
temperature in °C ¹⁾	- 1													

capacity in ml	1.1-1.4	2.6-2.9	2.7-3	4-5.5	4.5-5	4.9	7.5-8.2	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	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	11x44	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	☐ 16 ○ 260												
temperature in °C ¹⁾	- 1												

⁵⁾ Please remove the inserts.













⁶⁾ The screw cap for tube No. 0538 is available with Cat. No. 0539. Dimensions with cap 38 x 106 mm.











⁷⁾ At temperatures of over + 40 °C and / or when not filled to capacity, bottles may warp during centrifugation.

































⁸⁾ With Cat. No. 5247-91 or 5248-91 these adapters can also be ordered with a decanting aid.

ROTORS AND ACCESSORIES

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 chambers⁹⁾
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	☐ 16 ○ 260					
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.	0553²⁾	0501²⁾	0578²⁾	2079	0518²⁾
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	☐ 16 ○ 260				
temperature in °C ¹⁾	-1				

capacity in ml	25	50	100	100	250	1.1-1.4	2.6-2.9	2.7-3	4-5.5	4.5-5	4.9	7.5-8.2	9-10	10	1.6-5	4-7
Ø x L in mm	24x100	34x100	44x100	40x115	65x115	8x66	13x65	11x66	15x75	11x92	13x90	15x92	16x92	15x102	13x75	13x100
Cat. No.	0519²⁾	0521²⁾	0526²⁾	0523²⁾	0530²⁾	blood collection/urine tubes										
lid with bio-containment ⁴⁾ 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	25.5x82	35.5x85	45.5x85	42x85	66x103	12.8x54.5		17.5x60.7	12.8x82	13.5x60.7	17.5x60.7		12.8x54.5	12.8x82		
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	☐ 16 ○ 260															
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.

ROTORS AND ACCESSORIES

Swing-out rotor, 4-place



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	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
Cat. No.	blood/urine tubes			0509	0513	-					5127 ⁷⁾	- ⁷⁾
lid with bio-containment ⁴⁾ Cat. No. 5093												
Rotor 4753 carrier Cat. No. 5092												
Cat. No.	5136	5121 ⁵⁾	5129 ⁵⁾	5123	5121	5134	5122	5135	5136	6319		
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 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												
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 106	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-containment ⁴⁾ Cat. No. 1382															
Rotor 4754 carrier Cat. No. 1430															
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	45.6 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															
temperature in °C ¹⁾	0														

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

⁵⁾ Please remove the inserts.

⁷⁾ At temperatures of over + 40 °C and / or when not filled to capacity, bottles may warp during centrifugation.

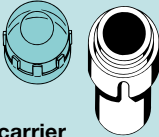


























⁹⁾ Please ask for our detailed cyto brochure.

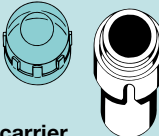



























ROTORS AND ACCESSORIES



illustrated with carriers 1430 and lids 1382
with bio-containment⁴⁾

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

capacity in ml	1.1–1.4	2.6–2.9	2.7–3	4–5.5	4.5–5	4.9	7.5–8.2	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
Cat. No.	blood collection/urine tubes												
lid with bio-containment ⁴⁾ Cat. No. 1382 													
carrier Cat. No. 1430 													
Cat. No.	1457	1383	1459	1383	1459	1329	1329⁵⁾	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	☐ 14 ○ 200												
temperature in °C ¹⁾	0												

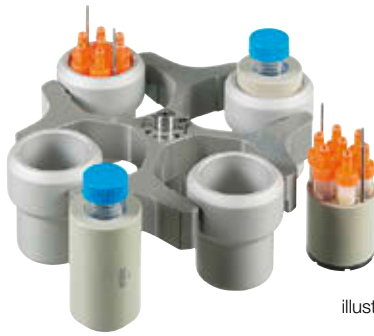
capacity in ml	15	15	30	50	12	25	30	50	10	30	50	85	30
Ø x L in mm	17x120	17x120	25x110	29x115	17x100	25x90	25x110	29x115	16x80	26x95	29x107	38x106	44x105
Cat. No.	0509	0509	-	0513	-				0545	0546	0547	0534¹⁰⁾	
lid with bio-containment ⁴⁾ Cat. No. 1382 		 ³⁾											
carrier Cat. No. 1430 													
Cat. No.	1347	1356	1365	1384	6311	1363	1365	6318	1348	4417	4416	1396	0765
boring Ø x L in mm	17x90	17x107	26x80	30x90	17x80	26x72	26x80	29.5x80	16.5x56	26x83	29x93	38.5x92	45.6x98
tubes per rotor	4	12	4		4	4		16	4				
max. RCF ²⁾	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	☐ 14 ○ 200												
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 1430 cannot be closed with lid 1382.






























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	11x38	11x38	6x45	10x60	12x60	12x75	12x82	12x100	14x100	17x100	24x100	34x100	44x100
Cat. No.	2078	0536	Rhesus	-		0553²⁾	0501²⁾	0578²⁾	0500²⁾	0518²⁾	0519²⁾	0521²⁾	0526²⁾
 carrier Cat. No. 1425													
													
Cat. No.	1444	1432	1433	1438		1434		1431		1435		1436	1437
boring Ø x L in mm	11.5x38	6.5x34	10.5x40	13.4x50		12.7x60		17.5x84		25.5x84		35.5x84	45.5x86
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	☐ 14 ☉ 200												
temperature in °C ¹⁾	0												

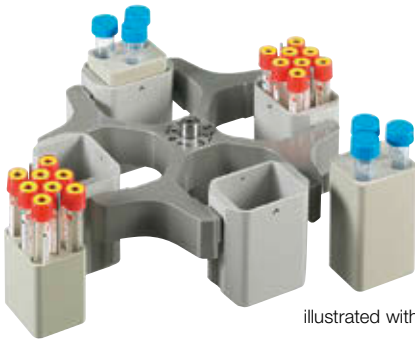
capacity in ml	2.6–2.9	2.7–3	4–5.5	4.5–5	4.9	7.5–8.2	9–10	1.6–5	4–7	4–7	8.5–10	15	50	50
Ø x L in mm	13x65	11x66	15x75	11x92	13x90	15x92	16x92	13x75	13x100	16x75	16x100	17x120	29x115	29x115
Cat. No.	blood collection/urine tubes											0509	0513	-
 carrier Cat. No. 1425														
														
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		28		16		28		16		4			
max. RCF ²⁾	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	☐ 14 ☉ 200													
temperature in °C ¹⁾	0													

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

⁵⁾ Please remove the inserts.

¹⁰⁾ 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


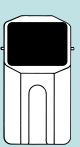
































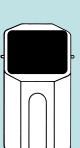




























illustrated with carriers 1427



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 															
															
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	13.7x38	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	48	24	24	8	4	12	4	4
max. RCF ²⁾	3,761	3,714	3,738	3,714	3,690	3,714	3,714	3,620	3,620	3,620	3,620	3,620	3,809	3,714	3,714
radius in mm	159	157	158	157	156	157	157	153	153	153	153	153	161	157	157
run-up in sec	14														
run-down in sec	☐ 14 ☉ 200														
temperature in °C ¹⁾	0														

capacity in ml	1.1-1.4	2.6-2.9	2.7-3	4-5.5	4.5-5	4.9	7.5-8.2	9-10	1.6-5	4-7	4-7	8.5-10	suspension for cyto accessories	
Ø x L in mm	8x66	13x65	11x66	15x75	11x92	13x90	15x92	16x92	13x75	13x100	16x75	16x100		
Cat. No.	blood collection/urine tubes												cyto chambers ⁹⁾	
lid Cat. No. 1421  carrier Cat. No. 1427 														
														
Cat. No.	5278	1732	5229	5279	5230	1732	5279	5271 ⁵⁾	1732	5271	5231		1452	
boring Ø x L in mm	9x41	13.4x58	12.5x44	15.6x41	12.4x87	13.4x58	15.6x41	17x66	13.4x58	17x66	17.8x87		-	
tubes per rotor	48	32	48	20	48	32	20	20	32	20	24		4	
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		2,721	
radius in mm	159	156	157	159	153	156	159	154	156	154	153		115	
run-up in sec	14													
run-down in sec	☐ 14 ☉ 200													
temperature in °C ¹⁾	0													

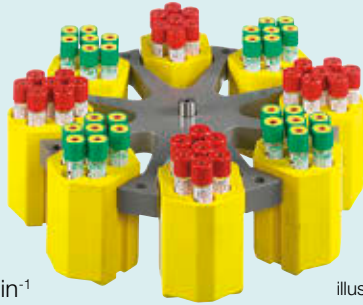
¹⁾ Lowest attainable temperature in precooled refrigerated centrifuges at max. speed. Lower temperatures can be reached by reducing the speed.

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 1427 cannot be closed with lid 1421.

ROTORS AND ACCESSORIES

Swing-out rotor, 8-place















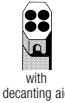
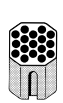
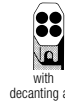
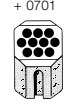
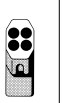

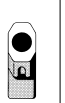
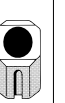

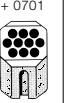
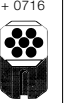
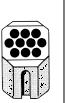











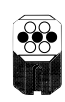
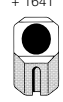
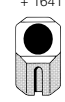

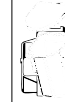

↻ 90°










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	4–5.5	4.9	1.6–5/4–7	8.5–10	
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	15 x 75	13 x 90	13 x 75/16 x 75	16 x 100	
Cat. No.	0553²⁾	0501²⁾	0578²⁾	0500²⁾	0518²⁾	-	-	0521²⁾	blood collection/urine tubes					
 rotor Cat. No. 4758														
														
Cat. No.	1369-91	1372	1369-92	1741	1369	1346	1345	1746	1308	1741¹¹⁾	1742¹¹⁾	1741¹¹⁾	1742¹¹⁾	1369
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 74	21.5 x 74	32 x 74	35 x 78	35.7 x 88.2	14.6 x 78	17.6 x 78	14.6 x 78	17.6 x 78	17.6 x 74
tubes per rotor	32	136	32	80	32	16	8		80	56	80	56	32	
max. RCF ²⁾	2,551	2,648	2,777	2,874	2,825	2,825	2,825	2,906	2,761	2,874	2,793	2,906	2,793	2,825
radius in mm	158	164	172	178	175	175	175	180	171	178	173	180	173	175
run-up in sec	19													
run-down in sec	☐ 16 ⬤ 270													
temperature in °C ¹⁾	0													

capacity in ml	15	50	50	30	suspensions for cyto accessories	
Ø x L in mm	17 x 120	29 x 115	29 x 115	26 x 95		
Cat. No.	0509	0513	-	0545	cyto chambers⁹⁾	
 rotor Cat. No. 4758						
						
Cat. No.	1742^{11, 12)}	1746	1746	1308	1745	1660
boring Ø x L in mm	17.6 x 78	30 x 98	30 x 98	35.7 x 88.2	26 x 78	-
tubes per rotor	24	8	8	8	16	8
max. RCF ²⁾	2,906		2,761	2,906	2,179	
radius in mm	180		171	180	135	
run-up in sec	19					
run-down in sec	☐ 16 ⬤ 270					
temperature in °C ¹⁾	0					

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	☐ 16 ⬤ 270			
temperature in °C ¹⁾	0			

⁵⁾ Please remove the inserts.

⁹⁾ Please ask for our detailed cyto brochure.

¹¹⁾ For an overview of further tubes accommodated by adapters 1741 and 1742, please refer to our centrifuges product catalogue.

¹²⁾ Carrier must be loaded as illustrated.

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, 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

Angle rotor, 4-place



∠ 25°

n = 9,500 min⁻¹
max. RCF 12,007

Cat. No. 4795

capacity in ml	0.2	0.4	0.5	0.8	1.5	2.0
∅ x L in mm	6x18	6x45	8x30	8x45	11x38	
Cat. No.	-			2078	0536	
lid with bio-containment ⁴⁾ incl.						
rotor Cat. No. 4790-A						
Cat. No.	2024	2023	2031 ¹³⁾	-		
boring ∅ x L in mm	6x40		8x40	10.2x19	11.2x40.9	
tubes per rotor	30					
max. RCF ²⁾	24,400					
radius in mm	97					
run-up in sec	19					
run-down in sec	24 520					
temperature in °C ¹⁾	+4					

capacity in ml	0.2	0.2
∅ x L in mm	6 x 18	-
Cat. No.	-	PCR strips
rotor Cat. No. 4760		
Cat. No.	-	
boring ∅ 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	15 285	
temperature in °C ¹⁾	+1	

capacity in ml	15	25	85	10	30	50	85	94	250	
∅ x L in mm	17x100	24x100	38 x 106	16x80	26x95	29x107	38x106	38x102	61x122	
Cat. No.	0518 ²⁾	0519 ²⁾	0549	-	0545	0546	0547	0538 ⁶⁾	5127 ⁷⁾	
rotor Cat. No. 4795										
Cat. No.	5646	5642	5644	5641	5642	5643	5644		-	
boring ∅ x L in mm	17.6x83	26 x 80	38.6x88	16.6x70	26x80	29x90	38.6x88		61.5x109	
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	55 740									
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

capacity in ml	1.5	2.0	3	15	25	50	75	85	7.5–8.2	9–10	10	8.5–10
∅ x L in mm	11 x 38		10 x 60	17 x 100	24 x 100	34 x 100	35 x 105	38 x 106	15 x 92	16 x 92	15 x 102	16 x 100
Cat. No.	2078	0536	-	0518²⁾	0519²⁾	0521²⁾	0548	0549	blood collection/urine tubes			
lid with bio-containment ⁴⁾ incl.												
rotor Cat. No. 4794												
Cat. No.	1449			1451	1447	1463	-		1451			
boring ∅ 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	☐ 63 ○ 665											
temperature in °C ¹⁾	+4											



capacity in ml	15	50	10	30	50	85	94
∅ 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	0538⁶⁾
lid with bio-containment ⁴⁾ incl.							
rotor Cat. No. 4794							
Cat. No.	1466	1454	1448	1447	1446	-	
boring ∅ 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	☐ 63 ○ 665						
temperature in °C ¹⁾	+4						

⁶⁾ The screw cap for tube No. 0538 is available with Cat. No. 0539. Dimensions with cap 38 x 106 mm.

⁷⁾ 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	750 VA	800 VA	1,500 VA	1,750 VA
Emission	EN 55011 group 1, class B, EN 61000-3-2, EN 61000-3-3	FCC class B	EN 55011 group 1, class B, EN 61000-3-2, EN 61000-3-3	FCC class B
Immunity	EN 61000-6-2	–	EN 61000-6-2	–
 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 (HxWxD)	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 9001:2000 and ISO 13485:2003 certificates accredited to the company bear witness to the extreme care and responsibility Hettich puts into the manufacturing of centrifuges and their accessories.

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 -122

National Sales: -200
International Sales: -201
National Service: -202
International Service: -203

