

HEPES



ROTANTA 460/460 R
Benchtop, Underbench and Floorstanding Centrifuges
classic/cooled

ROTANTA 460/460 R

Efficient, results-oriented working processes are top priority in both research and routine laboratories. Advanced laboratory technology makes a significant contribution to shortening processing times.

For decades, ROTANTA centrifuges from Hettich have been distinguished by the highest quality. Excellent performance and an extensive range of accessories guarantee fast, trouble-free operation in daily laboratory use.

With a maximum capacity of 3 litres per run, they are proving themselves in clinics and laboratory centres, as well as in Life Science R & D departments.

For sample processing in clinical chemistry, a wide selection of adapters are available to accommodate the most varied types of tubes. Biotechnology, molecular biology and the pharmaceutical industry value the ROTANTA 460 especially for its autoclavable and aerosoltight accessories.

These versatile benchtop centrifuges feature a filter plate rotor with an RCF of 6,446 for purifying DNA/RNA.

Model variants of the refrigerated ROTANTA 460 R

- with connection for nitrogen flushing (Cat. No. **5660-20**),
- heating/cooling version up to 90 °C (Cat. No. **5660-50**), or
- heating/cooling version with connection for nitrogen flushing (Cat. No. **5660-70**), on request.



PERFORMANCE

- High speed with angle rotors:
 - 24,400 RCF with a max. capacity of 30 x 1.5/2.0 ml
 - 18,038 RCF with a max. capacity of 6 x 94 ml
 - 14,025 RCF with a max. capacity of 6 x 250 ml
- High capacity with swing-out rotors:
 - 4 x 750 ml at max. 4,779 RCF
 - 24 microtitre plates / 4 filter plates at max. 4,211 RCF or
 - 12 microtitre plates / 2 filter plates at max. 6,446 RCF
 - 196 blood collection tubes at max. 2,906 RCF

USER-FRIENDLINESS

- Powered lid locking
- Ergonomic control and information panel
- Easy rotor changing
- 98 program storage spaces
- Protection against unauthorized operation / modification of stored programs
- Switch of centrifuge run time from “at start” (commencement at start) to “at speed” (start when nominal speed is attained)
- Special braking ramps for centrifuging blood bags in the refrigerated models
- Program interlocking to combine several centrifugation runs (**optional**)

COOLING (ROTANTA 460 R, 460 RC and 460 RF)

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

SAFETY

- Imbalance switch-off
- Automatic rotor recognition
- Emergency lid lock release
- Lid dropping protection
- Lid locking and holding during rotor run
- Motor overheating protection
- Chamber overheating protection (ROTANTA 460 R, 460 RC and 460 RF centrifuges)



ROTANTA 460 R
benchtop centrifuge,
cooled,

Cat. No. 5660



ROTANTA 460
benchtop centrifuge

Cat. No. 5650

OPERATION AND CONTROL

With the convenient C control panel, even the most challenging centrifugation programs can easily be keyed in, stored and accessed as required.




ROTANTA 460 R, 460 RC and 460 RF control panel (C control panel)

DIGITAL DISPLAY AND CONTROL PANEL

KEYBOARD

START Start centrifugation run /
short centrifuging runs /
save entries, changes and programs


 Start pre-cooling program **PREC**

STOP Manually end centrifugation run /
OPEN 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 (with cooled centrifuges)

 Input of the run-up time in ramps 1 – 9 or in min : sec
Input of the run-down time in ramps R 1 – 9
or B 1 – 9 or in min : sec
Input of a brake force cut-off speed
Also unbraked run-down (ramp 0) can be selected.

RCF Input relative centrifugal force
(RCF) in increments of 1
Enter centrifuging radius (RAD) in mm first.

RPM Input speed in increments of 10

TIME Input length of centrifugation
(max. 99 h : 59 min : 59 sec)
or continuous operation



ROTANTA 460 RC
underbench centrifuge,
cooled

Cat. No. 5670


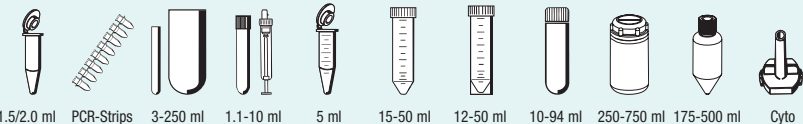
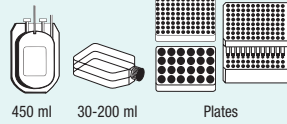

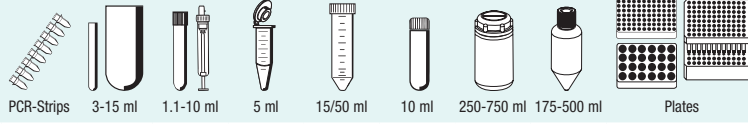

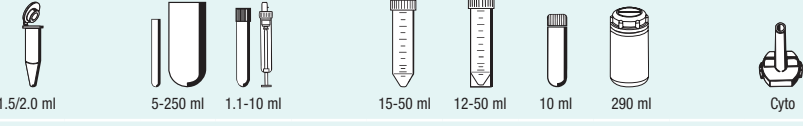

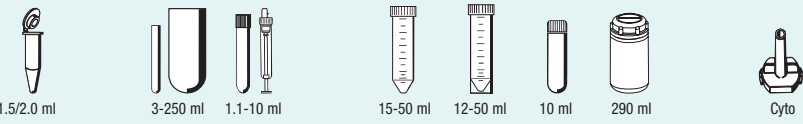

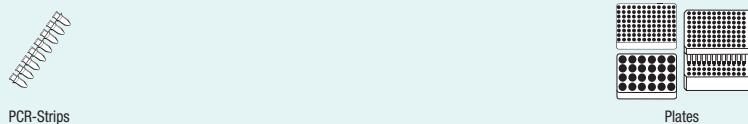



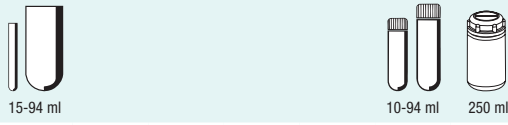





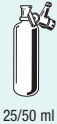

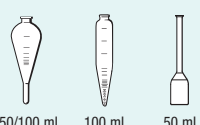




ROTANTA 460 RF
floorstanding centrifuge,
cooled

Cat. No. 5675

ROTORS AND ACCESSORIES

Quick overview of rotors and suitable accessories. The figures highlighted under the arrows refer to the pages where technical and ordering details are listed.

<p>some accessories with bio-containment⁵⁾</p>  <p>Swing-out rotor, 4-place $\nabla 90^\circ$ $n = 4,600 \text{ min}^{-1}$ max. RCF 5,063 Cat. No. 5699</p>	 <p>1.5/2.0 ml PCR-Strips 3-250 ml 1.1-10 ml 5 ml 15-50 ml 12-50 ml 10-94 ml 250-750 ml 175-500 ml Cyto</p>  <p>450 ml 30-200 ml Plates</p> <p>→ Page 5-14</p>
<p>accessories with bio-containment⁵⁾</p>  <p>Swing-out rotor, 4-place $\nabla 90^\circ$ $n = 3,800 \text{ min}^{-1}$ max. RCF 3,196 Cat. No. 5654</p>	 <p>PCR-Strips 3-15 ml 1.1-10 ml 5 ml 15/50 ml 10 ml 250-750 ml 175-500 ml Plates</p> <p>→ Page 15-16</p>
<p>some accessories with bio-containment⁵⁾</p>  <p>Swing-out rotor, 4-place $\nabla 90^\circ$ $n = 4,000 \text{ min}^{-1}$ max. RCF 3,095 Bestell-Nr. 5694</p>	 <p>1.5/2.0 ml 5-250 ml 1.1-10 ml 15-50 ml 12-50 ml 10 ml 290 ml Cyto</p> <p>→ Page 17-19</p>
<p>some accessories with bio-containment⁵⁾</p>  <p>Swing-out rotor, 6-place $\nabla 90^\circ$ $n = 4,000 \text{ min}^{-1}$ max. RCF 3,631 Bestell-Nr. 4446</p>	 <p>1.5/2.0 ml 3-250 ml 1.1-10 ml 15-50 ml 12-50 ml 10 ml 290 ml Cyto</p> <p>→ Page 20-22</p>
<p>accessories with bio-containment⁵⁾</p>  <p>Swing-out rotor, 2-place $\nabla 90^\circ$ $n = 5,900/6,200 \text{ min}^{-1}$ max. RCF 5,838/6,446 Cat. No. 5622</p>	 <p>PCR-Strips Plates</p> <p>→ Page 23</p>
<p>lid with bio-containment⁵⁾</p>  <p>Angle rotor, 30-place $\nabla 45^\circ$ $n = 15,000 \text{ min}^{-1}$ max. RCF 24,400 Cat. No. 4489-A</p>	 <p>0.2-2.0 ml</p> <p>→ Page 24</p>
<p>lid with bio-containment⁵⁾</p>  <p>Angle rotor, 6-place $\nabla 25^\circ$ $n = 8,500/9,500 \text{ min}^{-1}$ max. RCF 11,228/14,025 Cat. No. 5645</p>	 <p>15-94 ml 10-94 ml 250 ml</p> <p>→ Page 24</p>
<p>lid with bio-containment⁵⁾</p>  <p>Angle rotor, 6-place $\nabla 45^\circ$ $n = 11,500 \text{ min}^{-1}$ max. RCF 18,038 Cat. No. 5615</p>	 <p>1.5/2.0 ml 15-94 ml 7.5-10 ml 5 ml 15/50 ml 10-94 ml</p> <p>→ Page 25</p>
<p>lid with bio-containment⁵⁾</p>  <p>Angle rotor, 14-place $\nabla 36^\circ$ $n = 10,000 \text{ min}^{-1}$ max. RCF 17,441 Cat. No. 5655</p>	 <p>15/25 ml 7.5-10 ml 15/50 ml 30 ml</p> <p>→ Page 26</p>
 <p>Angle rotor, 6-place, for Schlenk tubes $\nabla 45^\circ$ $n = 2,000 \text{ min}^{-1}$ max. RCF 805 Cat. No. 5616</p>	 <p>25/50 ml</p> <p>→ Page 26</p>
 <p>Swing-out rotor, 4-place, for ASTM tubes $\nabla 90^\circ$ $n = 2,000 \text{ min}^{-1}$ max. RCF 984 Cat. No. 4474</p>	 <p>50/100 ml 100 ml 50 ml</p> <p>→ Page 27</p>
 <p>Swing-out rotor, 6-place, for chrome bath tubes $\nabla 90^\circ$ $n = 2,000 \text{ min}^{-1}$ max. RCF 917 Cat. No. 4619</p>	 <p>30 ml</p> <p>→ Page 27</p>

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

ROTORS AND ACCESSORIES

Swing-out rotor, 4-place



±90°

n = 4,600 min⁻¹
max. RCF 5,063

illustrated with carriers 5625-A
and lids 5627
with bio-containment⁵⁾

Cat. No. (without carriers) **5699**

capacity in ml	1.5	2.0	3	4	4	5	6	7	10	15	25	50	75	94
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
Cat. No.	2078	0536	-			0553²⁾	0501²⁾	0578²⁾	2079	0518²⁾	0519²⁾	0521²⁾	0548	0549
lid with bio-containment ⁵⁾ Cat. No. 5627														
carrier Cat. No. 5625-A														
Cat. No.	4730			4732			4733		4734	4735	4736			
boring Ø x L in mm	11 x 84			13.5 x 84			17.5 x 84		26.5 x 84	36 x 80	42 x 80			
tubes per rotor	224		120		80			68		24	12			
max. RCF ²⁾ upper/lower	3,572 / 4,637			4,637			4,637		4,637		4,495			
radius in mm upper/lower	151 / 196			196			196		196		190			
run-up in sec	90													
run-down in sec, braked	95													
temperature in °C ¹⁾	+ 4													

capacity in ml	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
Ø x L in mm	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
Cat. No.	0526²⁾	0523²⁾	0530²⁾	blood collection/urine tubes								
lid with bio-containment ⁵⁾ Cat. No. 5627												
carrier Cat. No. 5625-A												
Cat. No.	4737	4736	4738	4730	4732	4733	4732	4733				
boring Ø x L in mm	46 x 84	42 x 80	66 x 80	11 x 84	13.5 x 84	17.5 x 84	13.5 x 84	17.5 x 84				
tubes per rotor	8	12	4	120	80	68	80	68				
max. RCF ²⁾	4,637	4,495	4,637			4,637						
radius in mm	196	190	196			196						
run-up in sec	90											
run-down in sec, braked	95											
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.

⁵⁾ Tested by the TÜV in conformity with DIN EN 61010, section 2-020.

ROTORS AND ACCESSORIES



Most of the adapters for carriers 5625-A and 4880 are built in layers. For shorter tubes, 1 to 2 layers should be removed. In the tables, the required layers are marked in grey.

Swing-out rotor 5699

capacity in ml	1.6-5	4-7	4-7	8.5-10	14	15	50	12	25	30	50	10	30	50	85	94	
Ø x L in mm	13x75	13x100	16x75	16x100	16.5x106	17x120	29x115	17x100	25x90	25x110	29x115	16x80	26x95	29x107	38x106	38x102	
Cat. No.	blood collection/urine tubes				-	0509	0513	-					-	0545	0546	0547	0538⁶⁾
lid with bio-containment ⁵⁾ Cat. No. 5627																	
carrier Cat. No. 5625-A																	
Cat. No.	4732		4733		4739⁴⁾	4739	4740	4739⁴⁾		4734		4740⁴⁾	4733	4734	4740⁴⁾	4736	
boring Ø x L in mm	13.5x84		17.5x84		17x80		30x80	17x80		26.5x84		30x80	17.5x84	26.5x84	30x80	42x80	
tubes per rotor	80		68		48		20	48		24		20	68	24	20	12	
max. RCF ²⁾	4,637															4,495	
radius in mm	196															190	
run-up in sec	90																
run-down in sec, braked	95																
temperature in °C ¹⁾	+4																

capacity in ml	1.5	2.0	3	4	4	5	6	7	10	15	25	45	50	75	94	100	
Ø x L in mm	11x38		10x60	10x88	12x60	12x75	12x82	12x100	17x70	17x100	24x100	31x100	34x100	35x105	38x102	40x115	
Cat. No.	2078	0536	-			0553²⁾	0501²⁾	0578²⁾	2079	0518²⁾	0519²⁾	-	0521²⁾	0548	0549	0523²⁾	
lid with bio-containment ⁵⁾ Cat. No. 4883																	
carrier Cat. No. 4880																	
Cat. No.	4830		4832				4833			4834	4835		4836				
boring Ø x L in mm	11x84		13.5x84				17.5x84			26.5x84	36x80		42x80				
tubes per rotor	192		96		76			28		16		12					
max. RCF ²⁾ upper/lower	3,572/4,637		4,637				4,637			4,495		4,495					
radius in mm upper/lower	151/196		196				196			190		190					
run-up in sec	90																
run-down in sec, braked	95																
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.

4) Please remove the inserts.

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

6) The screw cap for tube No. 0538 is available with Cat. No. 0539. Dimensions with cap 38 x 110 mm.

ROTORS AND ACCESSORIES



illustrated with carriers 4880
and lids 4883
with bio-containment⁵⁾

Swing-out rotor 5699

capacity in ml	100	250	1.1–1.4	2.6–3.4	2.6–3.4	2.7–3	4–5.5	4.5–5	4.9	4.9	7.5–8.5	9–10	9–10	10	1.6–5	1.6–5
Ø x L in mm	44 x 100	65 x 115	8 x 66	13 x 65	13 x 65	11 x 66	15 x 75	11 x 92	13 x 90	13 x 90	15 x 92	16 x 92	16 x 92	15 x 102	13 x 75	13 x 75
Cat. No.	0526²⁾	0530²⁾	blood collection / urine tubes													
lid with bio-containment ⁵⁾ Cat. No. 4883																
carrier Cat. No. 4880																
Cat. No.	4837	4838	4830	4847	4832	4833	4832	4847⁴⁾	4833	4848	4833	4847	4832			
boring Ø x L in mm	46x84	66x80	11x84	13.2x61	13.5x84	17.5x84	13.5x84	13.2x61	17.5x84	17.5x61	17.5x84	13.2x61	13.5x84			
tubes per rotor	8	4	96	108		76		108	76	88	76	108	76			
max. RCF ²⁾	4,637	4,495	4,637	4,116		4,637		4,684	4,637	4,684	4,637	4,116	4,637			
radius in mm	196	190	196	174		196		198	196	198	196	174	196			
run-up in sec	90															
run-down in sec, braked	95															
temperature in °C ¹⁾	+4															

capacity in ml	4–7	4–7	4–7	4–7	8	8.5–10	8.5–10	5	14	15	50	50	12	25	30	
Ø x L in mm	13x100	13x100	16x75	16x75	16x125	16x100	16x100	17x59	16.5x106	17x120	29x115	29x115	17x100	25x90	25x110	
Cat. No.	blood collection / urine tubes							-	0509	0513	0513	-	-	-	-	-
lid with bio-containment ⁵⁾ Cat. No. 4883																
carrier Cat. No. 4880																
Cat. No.	4847⁴⁾	4832	4833	4848	4833	4848	4839	4839⁴⁾	4839	5647	4840	4839⁴⁾	4834			
boring Ø x L in mm	13.2x61	13.5x84	17.5x84	17.5x61	17.5x84	17.5x61		17x80		30x96.5	30x80	17x80	26.5x84			
tubes per rotor	108	76	76	88	76	88		56		28	20	56	28			
max. RCF ²⁾	4,684	4,637	4,637	4,684	4,637	4,684		4,637		4,708		4,637				
radius in mm	198	196	196	198	196	198		196		199		196				
run-up in sec	90															
run-down in sec, braked	95															
temperature in °C ¹⁾	+4															



ROTORS AND ACCESSORIES



Carrier 4885

The 4880 carrier is also available without a lid and clamp lock. The catalogue number is 4885.#)

Swing-out rotor 5699

capacity in ml	50	50	10	10	30	50	50	85	94	250	290	500	600	650	750
Ø x L in mm	29 x 115	29 x 115	16 x 80	16 x 80	26 x 95	29 x 107	29 x 107	38 x 106	38 x 102	61 x 122	62 x 137	96 x 147	93 x 134	97 x 139	97 x 152
Cat. No.	-	-	-	-	0545	0546	0546	0547	0538 ⁶⁾	5127 ⁷⁾	- ⁷⁾	Corning	0551 ⁷⁾	0554 ⁷⁾	0512 ⁷⁾
lid with bio-containment ⁵⁾ Cat. No. 4883															
carrier Cat. No. 4880															
Cat. No.	5647 ⁴⁾	4840 ⁴⁾	4833	4848	4834	4840 ⁴⁾	5647 ⁴⁾	4836		4841	4845	4846	4845		
boring Ø x L in mm	30 x 96.5	30 x 80	17.5 x 84	17.5 x 61	26.5 x 84	30 x 80	30 x 96.5	42 x 80		62 x 100	98 x 100	94 x 95	98 x 100		
tubes per rotor	28	20	76	88	28	20	28	12				4			
max. RCF ²⁾	4,708	4,637	4,637	4,684	4,637	4,708	4,495					4,779			
radius in mm	199	196	196	198	196	199	190					202			
run-up in sec	90														
run-down in sec, braked	95														
temperature in °C ¹⁾	+4														

capacity in ml	450	750	30/50		40	160	200		
Ø x L in mm	97 x 113	96 x 135	-						
Cat. No.	4447	4234-A	Falcon®	Corning	Nunc®	Nunc®	Falcon®	Greiner	Nunc®
lid with bio-containment ⁵⁾ Cat. No. 4883									
carrier Cat. No. 4880									
Cat. No.	4845		4849		4852	4851		4831	
boring Ø x L in mm	98 x 100								
tubes per rotor	4					4			
max. RCF ²⁾	4,779					4,613 ¹⁴⁾			
radius in mm	202					195			
run-up in sec	90								
run-down in sec, braked	95								
temperature in °C ¹⁾	+4								

Accommodated cell culture flasks:

30/50 ml
from Becton Dickinson, No. 353014
from Corning, No. 430168

40 ml
from Nunc, No. 156340

160 ml
from Nunc, No. 156472

200 ml
from Becton Dickinson, No. 353024
from Greiner, No. 658170
from Nunc, No. 153732 or 147589

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 4880 resp. 4890 cannot be closed with lid 4883.

4) Please remove the inserts.

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

ROTORS AND ACCESSORIES



illustrated with carriers 4890
and lids 4883
with bio-containment⁵⁾



illustrated with carriers 4890

Swing-out rotor 5699

capacity in ml	1.5	2.0	5	7	8	9	10	15	25	50	100	2.6–3.4	2.7–3	4–5.5	4.5–5	
Ø x L in mm	11 x 38		12 x 75	12 x 100	16 x 81	14 x 100	17 x 70	17 x 100	24 x 100	34 x 100	44 x 100	13 x 65	11 x 66	15 x 75	11 x 92	
Cat. No.	2078	0536	0553²⁾	0578²⁾	-	0500²⁾	2079	0518²⁾	0519²⁾	0521²⁾	0526²⁾	blood collection tubes				
lid with bio-containment ⁵⁾ Cat. No. 4883																
carrier Cat. No. 4890																
Cat. No.	4432	4433					4434		4438	4439	4442	4435	4433	4434	4433	
boring Ø x L in mm	11.5 x 38		13 x 58		17.5 x 53			26 x 72		36 x 79	45 x 78	13.5 x 58	13 x 58	17.5 x 53	13 x 58	
tubes per rotor	168		120		76			28		16	8	84	120	76	120	
max. RCF ²⁾ upper/lower	3,407 / 4,542		4,471		4,637			4,353		4,424	4,400	4,471		4,637	4,471	
radius in mm upper/lower	144 / 192		189		196			184		187	186	189		196	189	
run-up in sec	90															
run-down in sec, braked	95															
temperature in °C ¹⁾	+4															

capacity in ml	4.9	7.5–8.5	9–10	10	1.6–5	4–7	4–7	8	8.5–10	10	15	50	25	30	50	50		
Ø x L in mm	13 x 90	15 x 92	16 x 92	15 x 102	13 x 75	13 x 100	16 x 75	16 x 125	16 x 100	16 x 80	17 x 120	29 x 115	25 x 90	25 x 110	29 x 115	29 x 107		
Cat. No.	blood collection/urine tubes											-	0509	0513	-	-	-	0546
lid with bio-containment ⁵⁾ Cat. No. 4883																		
carrier Cat. No. 4890																		
Cat. No.	4435	4434	4435	4434	4435	4434	4435	4434	4435	4434	4435	4434	4435	4434	4435	4434	4435	
boring Ø x L in mm	13.5 x 58		17.5 x 53		13.5 x 58			17.5 x 53		17 x 93.1		31 x 96	26 x 72		31 x 96			
tubes per rotor	84		76		84			76		56		28	28		28			
max. RCF ²⁾	4,471		4,637		4,471			4,637		4,755		4,613	4,566		4,613			
radius in mm	189		196		189			196		201		195	193		195			
run-up in sec	90																	
run-down in sec, braked	95																	
temperature in °C ¹⁾	+4																	

⁶⁾ The screw cap for tube No. 0538 is available with Cat. No. 0539. Dimensions with cap 38 x 110 mm.

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

¹⁴⁾ Please note that the RCF values indicated refer only to rotor performance.

The max. RCF for the accommodated cell culture flasks is 2,300.

^{#)} With the E3906 add-on kit and the 4883 lid, the 4885 carrier can be converted at a later time to a 4880 carrier with single-hand clamp lock.

ROTORS AND ACCESSORIES



Carrier 4895

The 4890 carrier is also available without a lid and clamp lock. The catalogue number is 4895.#)

Swing-out rotor 5699

capacity in ml	250	290	650	750	175	175	200	225	250	500
Ø x L in mm	61 x 122	62 x 137	97 x 139	97 x 152	61 x 118	62 x 144	60 x 130	61 x 137	60 x 162	96 x 147
Cat. No.	5127 ⁷⁾	- ⁷⁾	0554 ⁷⁾	0512 ⁷⁾	Falcon®	Nalgene®	Nunc®	Falcon®	Corning	Corning
lid with bio-containment ⁵⁾ Cat. No. 4883										
carrier Cat. No. 4890										
Cat. No.	4443		4451		4440	4430	4440	4430	4449	
boring Ø x L in mm	62 x 92		98.4 x 116		-					
tubes per rotor	4				4					
max. RCF ²⁾	4,873				5,063					
radius in mm	206				214					
run-up in sec	90									
run-down in sec, braked	95									
temperature in °C ¹⁾	+4									

capacity in ml	450	750	450
Ø x L in mm	97 x 113	96 x 135	triplicate system without filter
Cat. No.	4447	4234-A	blood bags ¹⁵⁾
lid with bio-containment ⁵⁾ Cat. No. 4883			
carrier Cat. No. 4890			
Cat. No.	4451	-	
boring Ø x L in mm	98.4 x 116		
tubes per rotor	4		
max. RCF ²⁾	5,063		
radius in mm	214		
run-up in sec	90		
run-down in sec, braked	95		
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 4890 cannot be closed with lid 4883.

⁵⁾ Tested by the TÜV in conformity with DIN EN 61010, section 2-020.

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

ROTORS AND ACCESSORIES





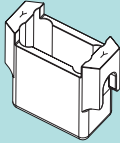

carrier 5691-A, insert 5692
and holders 5693 and 5695

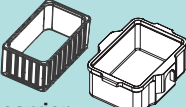























illustrated with carriers 5628
and adapters 6338-B

Swing-out rotor 5699

capacity in ml	450	
blood bags ¹⁵⁾	triplicate system	quadruplicate system
Cat. No.	5693	5695
 carrier Cat. No. 5691-A	holder for systems without filter	holder for systems with or without filter
		
Cat. No.	5692	
boring Ø x L in mm	-	
blood bag systems per rotor	4	
max. RCF ²⁾	4,637	
radius in mm	196	
run-up in sec	90	
run-down in sec, braked	95	
temperature in °C ¹⁾	+11	

capacity in ml	-
L x W x H in mm	152.5 x 85.5 x 12
Cat. No.	-
 carrier Cat. No. 5636	TaqMan array
	
Cat. No.	5648
boring Ø x L in mm	-
arrays per rotor	12
max. RCF ²⁾	4,921
radius in mm	208
run-up in sec	90
run-down in sec, braked	95
temperature in °C ¹⁾	+4

capacity in ml	1.5	2.0	3	5	6	7	9	25	50	100	100	250
Ø x L in mm	11 x 38		10 x 60	12 x 75	12 x 82	12 x 100	14 x 100	24 x 100	34 x 100	44 x 100	40 x 115	65 x 115
Cat. No.	2078	0536	-	0553 ²⁾	0501 ²⁾	0578 ²⁾	0500 ²⁾	0519 ²⁾	0521 ²⁾	0526 ²⁾	0523 ²⁾	0530 ²⁾
 carrier Cat. No. 5628 ³⁾												
												
Cat. No. ³⁾	5281	5267		5268		5264	5242	5243	5262	5249	5263-A	
boring Ø x L in mm	11.5 x 50	11 x 44		13.5 x 52		16 x 50	26 x 86	36 x 86	45.5 x 86	42 x 86	66 x 87	
tubes per rotor	128	160		96		96	40	16	8		4	
max. RCF ²⁾	4,164	4,069		4,164		4,116	4,093	4,069	4,045			
radius in mm	176	172		176		174	173	172	171			
run-up in sec	90											
run-down in sec, braked	95											
temperature in °C ¹⁾	+4											

⁸⁾ Please make sure not to exceed the max. permissible loading weight of 800g of carrier 5628. The loading weight is the sum of the weight of the respective adapters, of frame 5220-A (where required), the tubes, and their contents.

⁹⁾ With the exception of adapters 5263-A, 6337-B, 6338-B and 6339-A, two of these adapters need to be placed into carrier 5628.

¹⁵⁾ We recommend the use of the refrigerated ROTANTA 460 R, 460 RC and 460 RF to ensure that the temperature of the blood is maintained during centrifugation.

^{#)} With the E3906 add-on kit and the 4883 lid, the 4895 carrier can be converted at a later time to a 4890 carrier with single-hand clamp lock.

ROTORS AND ACCESSORIES



illustrated with carriers 5628,
adapting frame 5220-A and
adapters 5258

Swing-out rotor 5699

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	8x66	13x65	11x66	15x75	11x92	13x90	15x92	16x92	13x75	16x75	13x100	16x100
Cat. No.	blood collection/urine tubes											
(without lid 5629) adapting frame Cat. No. 5220-A												
carrier Cat. No. 5628 ⁸⁾	+ 5220-A	+ 5220-A	+ 5220-A	+ 5220-A	+ 5220-A	+ 5220-A	+ 5220-A	+ 5220-A	+ 5220-A	+ 5220-A	+ 5220-A	+ 5220-A
Cat. No.⁹⁾	5267	5268	5227	5264	5227	5268	5264	5258	5268	5264	5268	5258
boring Ø x L in mm	11x44	13.5x52	12.5x42	16x50	12.5x42	13.5x52	16x50	17.6x86	13.5x52	16x50	13.5x52	17.6x86
tubes per rotor	160	96	160	96	160	96	96	88	96		88	
max. RCF ²⁾	4,069	4,164	4,116		4,164		4,116	4,093	4,164	4,116	4,164	4,093
radius in mm	172	176	174		176		174	173	176	174	176	173
run-up in sec	90											
run-down in sec, braked	95											
temperature in °C ¹⁾	+4											

capacity in ml	15	30	50	50	250	two-tier frame for cyto accessories
Ø x L in mm	17x120	25x110	29x115	29x115	61x122	
Cat. No.	0509	-	0513	-	5127⁷⁾	cyto chambers¹⁰⁾
(without lid 5629) adapting frame Cat. No. 5220-A						
carrier Cat. No. 5628 ⁸⁾	+ 5220-A	+ 5220-A	+ 5220-A	+ 5220-A	+ 5220-A + 6319	+ 5220-A
Cat. No.⁹⁾	6337-B	5266⁴⁾	6338-B	6339-A	5263-A⁴⁾	5280
boring Ø x L in mm	17x90	26x86	30x90	30x87	66x87	-
tubes per rotor	56	40	24	24	4	16
max. RCF ²⁾ upper/lower	4,258	4,187	4,258	4,187		2,744 / 4,069
radius in mm upper/lower	180	177	180	177		116 / 172
run-up in sec	90					
run-down in sec, braked	95					
temperature in °C ¹⁾	+4					



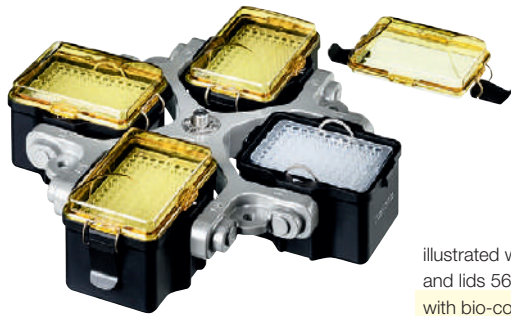
Carrier 5628, adapting frame 5220-A and adapters 5258



Carrier 5628 and adapter 6338-B

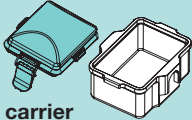

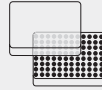
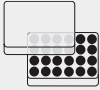









1) Lowest attainable temperature in precooled refrigerated centrifuges at max. speed. Lower temperatures can be reached by reducing the speed.
2) Please note that the RCF values indicated refer only to rotor performance. The max. permissible RCF of tubes used should be verified with the individual manufacturers. The max. RCF for glass tubes annotated with footnote ²⁾ is 4,000.
4) Please remove the inserts.
5) Tested by the TÜV in conformity with DIN EN 61010, section 2-020.

ROTORS AND ACCESSORIES



illustrated with carriers 5628
and lids 5629
with bio-containment⁵⁾
and removal frame 4626

Swing-out rotor 5699

D x W x H in mm	86x128x15	86x128x17.5	86x128x22	86x128x44.5	86x128x46	86x128x83	59x84x11	82x124x20	-	
capacity in ml	-									0.2
Cat. No.	MTP		CP	DWP	MS	QP	Microtest plate (Terasaki)	PCR plate, 96 wells	PCR strips	
lid with bio-containment ⁵⁾ Cat. No. 5629  carrier Cat. No. 5628 ⁹⁾										
										
Cat. No.	4626							4626 + 1485		
boring Ø x L in mm	-									
plates/strips per rotor	24	20	16	4	4	4	8	4	48x8	
max. RCF ²⁾	4,211									
radius in mm	max. 178									
run-up in sec	90									
run-down in sec, braked	95									
temperature in °C ¹⁾	+ 4									

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

⁸⁾ Please make sure not to exceed the max. permissible loading weight of 800g of carrier 5628. The loading weight is the sum of the weight of the respective adapters, of frame 5220-A (where required), the tubes, and their contents.

⁹⁾ With the exception of adapters 5263-A, 6337-B, 6338-B and 6339-A, two of these adapters need to be placed into carrier 5628.










¹⁰⁾ Please ask for our detailed cyto brochure.

ROTORS AND ACCESSORIES



illustrated with carriers 5630-B
and removal frame 4626

Swing-out rotor 5699

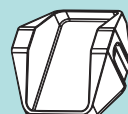

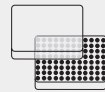
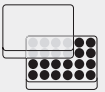






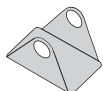
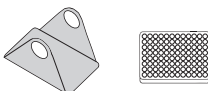
capacity in ml	40	160	200		
L x W x H in mm	-				
Cat. No.	Nunc®	Nunc®	Falcon®	Greiner	Nunc®
 carrier Cat. No. 5630-B					
					
Cat. No.	5672	5673	5671		
boring Ø x L in mm	-				
flasks per rotor	4				
max. RCF ²⁾	3,785 ¹⁴⁾				
radius in mm	160				
run-up in sec	90				
run-down in sec, braked	95				
temperature in °C ¹⁾	+4				

Accommodated cell culture flasks:

40 ml
from Nunc, No. 156340 or 156367

160 ml
from Nunc, No. 156472 or 156499

200 ml
from Becton Dickinson, No. 353024
from Greiner, No. 658170
from Nunc, No. 153732 or 147589

L 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	-									
Cat. No.	MTP		CP	DWP	MS	QP	Microtest plate (Terasaki)	PCR plate, 96 wells	PCR strips	
 carrier Cat. No. 5630-B										
										
Cat. No.	4626							4626 + 1485		
boring Ø x L in mm	-									
flasks per rotor	20	16	12	4	4	4	8	4	48 x 8	
max. RCF ²⁾	3,832									
radius in mm	max. 162									
run-up in sec	90									
run-down in sec, braked	95									
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 5651-A cannot be closed with lid 5652.

ROTORS AND ACCESSORIES

Swing-out rotor, 4-place

±90°

n = 3,800 min⁻¹
max. RCF 3,196



illustrated with carriers 5651-A
and lids 5652
with bio-containment⁵⁾

Cat. No. (without carriers) **5654**

capacity in ml	3	4	4	5	6	7	10	10	15	1.1–1.4	2.6–3.4	2.7–3	4.5–5
Ø x L in mm	10x60	10x88	12x60	12x75	12x82	12x100	17x70	13x100	17x100	8x66	13x65	11x66	11x92
Cat. No.	-	-	-	0553 ²⁾	0501 ²⁾	0578 ²⁾	2079	-	0518 ²⁾	blood collection tubes			
lid with bio-containment ⁵⁾ Cat. No. 5652													
carrier Cat. No. 5651-A													
Cat. No.	5684			5684	5682	5674	5685	5682	5684	5674	5684		
boring Ø x L in mm	12.5x40			12.5x40	17.2x46.5	13.2x42.4	17.2x46.5	12.5x40	13.2x42.4	12.5x40	12.5x40		
tubes per rotor	292			292	148	196	188	148	292	196	292		
max. RCF	2,874			2,874	2,970	2,906		2,970	2,874	2,906	2,874		
radius in mm	178			178	184	180		184	178	180	178		
run-up in sec	61												
run-down in sec, braked	57												
temperature in °C ¹⁾	0												

capacity in ml	4–5.5	4.9	7.5–8.5	9–10	10	1.6–5	4–7	4–7	8.5–10	10	5	15	50	
Ø x L in mm	15x75	13x90	15x92	16x92	15x102	13x75	16x75	13x100	16x100	16x80	17x59	17x120	29x115	
Cat. No.	blood collection/urine tubes											-	0509 ²⁾	0513 ²⁾
lid with bio-containment ⁵⁾ Cat. No. 5652														
carrier Cat. No. 5651-A														
Cat. No.	5682	5674	5682	5674	5682	5674	5685	5682	5688	5683	5686			
boring Ø x L in mm	17.2x46.5	13.2x42.4	17.2x46.5	13.2x42.4	17.2x46.5	13.2x42.4	13.2x42.4	17.2x46.5	17x42	17x60	30x60			
tubes per rotor	148	196	148	196	148	196	188	148	80	96	40			
max. RCF	2,970	2,906	2,970	2,906	2,970	2,906	2,906	2,970	3,196	3,196	3,196			
radius in mm	184	180	184	180	184	180	180	184	198	198	198			
run-up in sec	61													
run-down in sec, braked	57													
temperature in °C ¹⁾	0													

⁵⁾ Tested by the TÜV in conformity with DIN EN 61010, section 2-020.

¹⁴⁾ Please note that the RCF values indicated refer only to rotor performance. The max. RCF for the accommodated cell culture flasks is 2,300.

ROTORS AND ACCESSORIES



illustrated with carriers 5651-A
and lids 5652
with bio-containment⁵⁾

Swing-out rotor 5654

capacity in ml	175	175	200	225	250	290	450	500	600	650	750
Ø x L in mm	61x118	62x144	60x130	61x137	61x122	62 x 137	97x113	96 x 147	93x134	97 x 139	97x152
Cat. No.	Falcon®	Nalgene®	Nunc®	Falcon®	5127⁷⁾	-⁷⁾	4447	Corning	0551⁷⁾	0554⁷⁾	0512⁷⁾
lid with bio-containment ⁵⁾ Cat. No. 5652											
carrier Cat. No. 5651-A	+ 5677 	+ 5676 	+ 5677 				+ 4449 				
Cat. No.	5681						5687				
boring Ø x L in mm	62x100						98x100				
tubes per rotor	8						4				
max. RCF	3,196						3,196				
radius in mm	198						198				
run-up in sec							61				
run-down in sec, braked							57				
temperature in °C ¹⁾							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	-									0.2
Cat. No.	MTP		CP	DWP	MS	QP	Microtest plate (Terasaki)	PCR plate, 96 wells	PCR strips	
lid with bio-containment ⁵⁾ Cat. No. 5629										
carrier Cat. No. 5653										
Cat. No.	4626						4626 + 1485			
boring Ø x L in mm	-									
plates/strips per rotor	24	20	16	4	4	4	8	4	48 x 8	
max. RCF ²⁾	2,890									
radius in mm	max. 179									
run-up in sec	61									
run-down in sec, braked	57									
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.

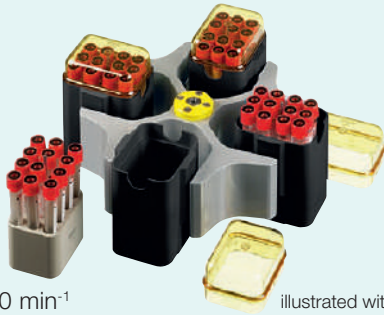
³⁾ When using these tubes, carrier 5651-A resp. 5051 cannot be closed with lid 5652 resp. 5053.

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) **5694**

capacity in ml	1.5	2.0	1.5	2.0	5	6	7	9	15	25	50	100	100	1.1-1.4	2.6-3.4	2.7-3	4-5.5
Ø x L in mm	11 x 38		11 x 38		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	8 x 66	13 x 65	11 x 66	15 x 75
Cat. No.	-	-	2078	0536	0553²⁾	0501²⁾	0578²⁾	0500²⁾	0518²⁾	0519²⁾	0521²⁾	0526²⁾	0523²⁾	blood collection tubes			
lid Cat. No. 5053 																	
Cat. No.	5257	5281	5227	5247¹⁾	5264	5248¹⁾	5242	5243	5262	5249	5267	5268	5227	5264			
boring Ø x L in mm	12.5 x 42	11.5 x 50	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	11 x 44	13.5 x 52	12.5 x 42	16 x 50			
tubes per rotor	160	64	80	80	48	48	20	8	4	80	48	80	48				
max. RCF ²⁾ upper/lower	1,950/2,826	2,826	2,773	2,755	2,773	2,755	2,755	2,755	2,737	2,808	2,773						
radius in mm upper/lower	109/158	158	155	154	155	154	154	154	153	157	155						
run-up in sec	42																
run-down in sec, braked	51																
temperature in °C ¹⁾	-3																

capacity in ml	4.5-5	4.9	7.5-8.5	9-10	10	1.6-5	4-7	4-7	8.5-10	15	50	12	30	50	two-tier frame for cyto accessories		
Ø x L in mm	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	17 x 120	29 x 115	17 x 100	25 x 110	29 x 115			
Cat. No.	blood collection/urine tubes										0509	0513	-	-	cyto chambers¹⁰⁾		
lid Cat. No. 5053 																	
Cat. No.	5227	5268	5264	5258	5268	5264	5268	5248	6306	5259	6306	5266	5243	5280			
boring Ø x L in mm	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 52	17.5 x 86	17 x 90	30 x 86	17 x 90	26 x 86	36 x 86	-			
tubes per rotor	80	48	48	44	48				28	8	28	20	8	8			
max. RCF ²⁾ upper/lower	2,773	2,808	2,773	2,755	2,808	2,773	2,808	2,755	2,898	2,826	2,898	2,755	1,735/2,737				
radius in mm upper/lower	155	157	155	154	157	155	157	154	162	158	162	154	97/153				
run-up in sec	42																
run-down in sec, braked	51																
temperature in °C ¹⁾	-3																

⁵⁾ Tested by the TÜV in conformity with DIN EN 61010, section 2-020.

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

¹⁰⁾ Please ask for our detailed cyto brochure.

¹¹⁾ With Cat. No. 5247-91 or 5248-91 these adapters can also be ordered with a decanting aid.

ROTORS AND ACCESSORIES



illustrated with carriers 5051 and lids 5053



illustrated with carriers 5092

Swing-out rotor 5694

capacity in ml	5	6	7	10	15	25	50	100	100	250	1.1–1.4	1.1–1.4	2.6–3.4	2.6–3.4
Ø x L in mm	12 x 75	12 x 82	12 x 100	17 x 70	17 x 100	24 x 100	34 x 100	44 x 100	40 x 115	65 x 115	8 x 66	8 x 66	13 x 65	13 x 65
Cat. No.	0553²⁾	0501²⁾	0578²⁾	2079	0518²⁾	0519²⁾	0521²⁾	0526²⁾	0523²⁾	0530²⁾	blood collection tubes			
lid with bio-containment ⁵⁾ Cat. No. 5093														
carrier Cat. No. 5092														
Cat. No.	5128	5120	5136	5122	5124	5125	5126	1791	5137	5138	5137	5138	5138	5138
boring Ø x L in mm	12.8 x 45	12.8 x 82	17.5 x 60.7	25.5 x 82	35.5 x 82.5	45.5 x 85	42 x 85	66 x 103	13.5 x 60.7	12.8 x 54.5	13.5 x 60.7	12.8 x 54.5	13.5 x 60.7	12.8 x 54.5
tubes per rotor	48		32		16		4		32		48		32	
max. RCF ²⁾	3,005		2,952		2,898		2,952		3,095		2,952		2,540	
radius in mm	168		165		162		165		173		165		142	
run-up in sec	42													
run-down in sec, braked	51													
temperature in °C ¹⁾	-3													

capacity in ml	2.7–3	2.7–3	4–5.5	4.5–5	4.9	7.5–8.5	9–10	10	1.6–5	1.6–5	4–7	4–7	8	8.5–10
Ø x L in mm	11 x 66	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 75	13 x 100	16 x 75	16 x 125	16 x 100
Cat. No.	blood collection/urine tubes													
lid with bio-containment ⁵⁾ Cat. No. 5093														
carrier Cat. No. 5092														
Cat. No.	5137	5138	5136	5120	5137	5136	5137	5138	5120	5136	5121⁴⁾	5136	5136	5136
boring Ø x L in mm	13.5 x 60.7	12.8 x 54.5	17.5 x 60.7	12.8 x 82	13.5 x 60.7	17.5 x 60.7	17.5 x 60.7	13.5 x 60.7	12.8 x 54.5	12.8 x 82	17.5 x 60.7	17.5 x 82	17.5 x 60.7	17.5 x 60.7
tubes per rotor	32	48	32	48	32	32	32	32	48	48	32	28	32	32
max. RCF ²⁾	2,952	2,540	2,952	3,005	2,952	2,952	2,952	2,952	2,540	3,005	2,952	3,059	2,952	2,952
radius in mm	165	142	165	168	165	165	165	165	142	168	165	171	165	165
run-up in sec	42													
run-down in sec, braked	51													
temperature in °C ¹⁾	-3													

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⁾ Please remove the inserts.

ROTORS AND ACCESSORIES



illustrated with carriers 5092

Swing-out rotor 5694

capacity in ml	15	50	12	25	30	50	10	250	290
Ø x L in mm	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.	0509	0513	-				5127⁷⁾		-⁷⁾
lid with bio-containment ⁵⁾ Cat. No. 5093									
carrier Cat. No. 5092									
Cat. No.	5129	5123	5121	5134	5122	5135	5136	6319	
boring Ø x L in mm	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	28	8	28	12	16	8	32	4	
max. RCF ²⁾	3,095		3,005	2,826	2,898	3,023	2,952	3,095	
radius in mm	173		168	158	162	169	165	173	
run-up in sec	42								
run-down in sec, braked	51								
temperature in °C ¹⁾	-3								

⁵⁾ Tested by the TÜV in conformity with DIN EN 61010, section 2-020.

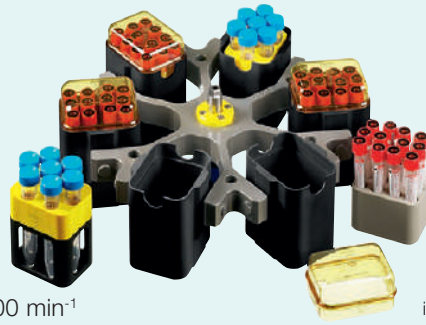
⁷⁾ At temperatures of over + 40 °C and / or when not filled to capacity, bottles may warp during centrifugation.

ROTORS AND ACCESSORIES

Swing-out rotor, 6-place

±90°

n = 4,000 min⁻¹
max. RCF 3,631



illustrated with carriers 5051

Cat. No. (without carriers) **4446**

capacity in ml	1.5	2.0	1.5	2.0	3	5	6	7	9	15	25	50	100	100	1.1–1.4	2.6–3.4	2.7–3
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	8 x 66	13 x 65	11 x 66
Cat. No.	-	-	2078	0536	-	0553²⁾	0501²⁾	0578²⁾	0500²⁾	0518²⁾	0519²⁾	0521²⁾	0526²⁾	0523²⁾	blood collection tubes		
lid Cat. No. 5053 carrier Cat. No. 5051 																	
Cat. No.	5257	5281	5267	5227	5247¹⁾	5264	5248¹⁾	5242	5243	5262	5249	5267	5268	5227			
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	11 x 44	13.5 x 52	12.5 x 42			
tubes per rotor	240	96	120	120	120	72	72	30	12	6	6	120	72	120			
max. RCF ²⁾ upper/lower	2,486/3,363	3,363	3,274	3,309	3,291	3,309			3,291			3,274	3,345	3,309			
radius in mm upper/lower	139/188	188	183	185	184	185			184			183	187	185			
run-up in sec	45																
run-down in sec, braked	55																
temperature in °C ¹⁾	0																

capacity in ml	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	15	50	12	30	50	two-tier frame for cyto accessories	
Ø x L in mm	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	17 x 120	29 x 115	17 x 100	25 x 110	29 x 115		
Cat. No.	blood collection/urine tubes											0509	0513	-	-	cyto chambers¹⁰⁾	
lid Cat. No. 5053 carrier Cat. No. 5051 																	
Cat. No.	5264	5227	5268	5264	5258	5268	5264	5268	5248	6306	5259	6306	5266	5243	5280		
boring Ø x L in mm	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 52	17.5 x 86	17 x 90	30 x 86	17 x 90	26 x 86	36 x 86	-		
tubes per rotor	72	120	72	72	66			72		42	12	42	30	12	12		
max. RCF ²⁾	3,309	3,309	3,345	3,309	3,291	3,345	3,309	3,345	3,291	3,434	3,363	3,434	3,291	3,291	2,290/3,291		
radius in mm	185	185	187	185	184	187	185	187	184	192	188	192	184	184	128/184		
run-up in sec	45																
run-down in sec, braked	55																
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 5092 resp. 5051 cannot be closed with lid 5093 resp. 5053.

ROTORS AND ACCESSORIES



illustrated with carriers 5092
and lids 5093
with bio-containment⁵⁾

Swing-out rotor 4446

capacity in ml	5	6	7	10	15	25	50	100	100	250	1.1–1.4	1.1–1.4	2.6–3.4	2.6–3.4
Ø x L in mm	12x75	12x82	12x100	17x70	17x100	24x100	34x100	44x100	40x115	65x115	8x66	8x66	13x65	13x65
Cat. No.	0553²⁾	0501²⁾	0578²⁾	2079	0518²⁾	0519²⁾	0521²⁾	0526²⁾	0523²⁾	0530²⁾	blood collection tubes			
lid with bio-containment ⁵⁾ Cat. No. 5093														
carrier Cat. No. 5092														
Cat. No.	5128	5120	5136	5122	5124	5125	5126	1791	5137	5138	5137	5138	5137	5138
boring Ø x L in mm	12.8x45	12.8x82	17.5x60.7	25.5x82	35.5x82.5	45.5x85	42x85	66x103	13.5x60.7	12.8x54.5	13.5x60.7	12.8x54.5	13.5x60.7	12.8x54.5
tubes per rotor	72	72	48	24	6		6	6	48	72	48	72	48	72
max. RCF ²⁾	3,542	3,542	3,488	3,434	3,488		3,631	3,488	3,077	3,488	3,077	3,488	3,077	3,488
radius in mm	198	198	195	192	195		203	195	172	195	172	195	172	195
run-up in sec	45													
run-down in sec, braked	55													
temperature in °C ¹⁾	0													

capacity in ml	2.7–3	2.7–3	4.9	4–5.5	4.5–5	7.5–8.5	9–10	10	1.6–5	1.6–5	4–7	4–7	8	8.5–10
Ø x L in mm	11x66	11x66	13x90	15x75	11x92	15x92	16x92	15x102	13x75	13x75	13x100	16x75	16x125	16x100
Cat. No.	blood collection/urine tubes													
lid with bio-containment ⁵⁾ Cat. No. 5093														
carrier Cat. No. 5092														
Cat. No.	5137	5138	5137	5136	5120	5136	5136	5137	5138	5120	5136	5121	5136	5136
boring Ø x L in mm	13.5x60.7	12.8x54.5	13.5x60.7	17.5x60.7	12.8x82	17.5x60.7	17.5x60.7	13.5x60.7	12.8x54.5	12.8x82	17.5x60.7	17.5x82	17.5x60.7	17.5x60.7
tubes per rotor	48	72	48	48	72	48	48	48	72	72	48	42	48	48
max. RCF ²⁾	3,488	3,077	3,488	3,488	3,542	3,488	3,488	3,488	3,077	3,542	3,488	3,542	3,488	3,488
radius in mm	195	172	195	195	198	195	195	195	172	198	195	198	195	195
run-up in sec	45													
run-down in sec, braked	55													
temperature in °C ¹⁾	0													

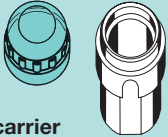









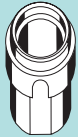









⁵⁾ Tested by the TÜV in conformity with DIN EN 61010, section 2-020.

¹⁰⁾ Please ask for our detailed cyto brochure.

¹¹⁾ With Cat. No. 5247-91 or 5248-91 these adapters can also be ordered with a decanting aid.

ROTORS AND ACCESSORIES

Swing-out rotor 4446

capacity in ml	15	50	12	25	30	50	10	250	290
Ø x L in mm	17x120	29x115	17x100	25x90	25x110	29x115	16x80	61x122	62x137
Cat. No.	0509	0513	-	-	-	-	-	5127⁷⁾	- ⁷⁾
lid with bio-containment ⁵⁾ Cat. No. 5093 									
carrier Cat. No. 5092 									
Cat. No.	5129	5123	5121	5134	5122	5135	5136	6319	
boring Ø x L in mm	17x85	30x85	17.5x82	26x73	25.5x82	30x99	17.5x60.7	66x103	
tubes per rotor	42	12	42	18	24	12	48	6	
max. RCF ²⁾	3,631		3,542	3,363	3,434	3,560	3,488	3,631	
radius in mm	203		198	188	192	199	195	203	
run-up in sec	45								
run-down in sec, braked	55								
temperature in °C ¹⁾	0								

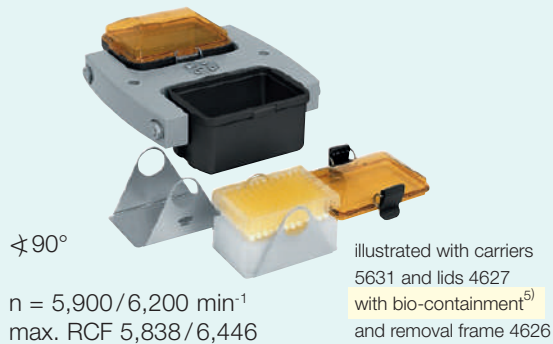
¹⁾ Lowest attainable temperature in precooled refrigerated centrifuges at max. speed. Lower temperatures can be reached by reducing the speed.

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.

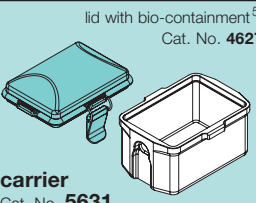









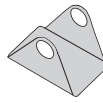
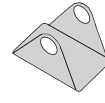
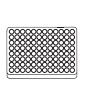
³⁾ When using these tubes, carrier 5092 cannot be closed with lid 5093.

ROTORS AND ACCESSORIES

Swing-out rotor, 2-place



Cat. No. (without carriers) **5622**

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	-								0.2
Cat. No.	MTP		CP	DWP	MS	QP	Microtest plate (Terasaki)	PCR plate, 96 wells	PCR strips
 <p>lid with bio-containment⁵⁾ Cat. No. 4627</p> <p>carrier Cat. No. 5631</p>									
									
Cat. No.	4626							4626 + 1485	
boring Ø x L in mm	-								-
plates/Strips pro rotor	12	10	8	2		4	2	24 x 8	
max. RCF ²⁾ classic/cooled	5,838/6,446								
radius in mm	max. 150								
run-up in sec classic/cooled	50/52								
run-down in sec, braked classic/cooled	32/39								
temperature in °C ¹⁾	+12								

⁵⁾ Tested by the TÜV in conformity with DIN EN 61010, section 2-020.

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

ROTORS AND ACCESSORIES

Angle rotor, 30-place

Angle rotor, 6-place



↘ 45°

n = 15,000 min⁻¹
max. RCF 24,400

with bio-containment⁵⁾

Cat. No. 4489-A



↘ 25°

n = 8,500/9,500 min⁻¹
max. RCF 11,228 / 14,025

with bio-containment⁵⁾

Cat. No. 5645

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.	-				2078	0536	Pediatric
lid with bio-containment ⁵⁾ incl.							
rotor Cat. No. 4489-A							
Cat. No.	2024	2023			2031 ¹²⁾	-	0788
boring Ø x L in mm	6x40	8x40			10.2x19	11.2x40.1	11.2x40.1
tubes per rotor	30						15
max. RCF ²⁾	24,400						23,394
radius in mm	97						93
run-up in sec	73						
run-down in sec, braked	77						
temperature in °C ¹⁾	+7						

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.	0518 ²⁾	0519 ²⁾	0549	-	0545	0546	0547	0538 ⁶⁾	5127 ⁷⁾
lid with bio-containment ⁵⁾ incl.									
rotor Cat. No. 5645									
Cat. No.	5646	5642	5644	5641	5642	5643	5644	-	
boring Ø x L in mm	17.6x83	26x80	38.6x88	16.6x70	26x80	29x90	38.6x88		61.5x109
tubes per rotor	42	18	6	48	18	6	6		6
max. RCF ²⁾ classic/cooled	10,662/ 13,319	10,339/ 12,915	9,855/ 12,310	10,743/ 13,420	10,339/ 12,915	9,693/ 12,108	9,855/ 12,310		11,228/ 14,025
radius in mm	132	128	122	133	128	120	122		139
run-up in sec classic/cooled	98/ 115								
run-down in sec, braked classic/cooled	105/ 120								
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.

⁵⁾ Tested by the TÜV in conformity with DIN EN 61010, section 2-020.

ROTORS AND ACCESSORIES

Angle rotor, 6-place



±45°

n = 11.500 min⁻¹
max. RCF 18.038

with bio-containment⁵⁾

Cat. No. 5615

capacity in ml	1.5	2.0	3	15	25	50	75	94	7.5–8.5	9–10	10	8.5–10	5	15	50	
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	17 x 59	17 x 120	29 x 115	
Cat. No.	2078	0536	-	0518²⁾	0519²⁾	0521²⁾	0548	0549	blood/urine tubes				-	0509	0513	
lid with bio-containment ⁵⁾ incl.																
rotor Cat. No. 5615																
Cat. No.	1449			1451	1447	1463	1463	-	1451				1476	1466	1454	
boring Ø x L in mm	11.4 x 39		17.5 x 92	26 x 85	35 x 89	35 x 89	38.2 x 89.6		17.5 x 92				17 x 51	17 x 106	29.8 x 97	
tubes per rotor	24			6				6	6				6			
max. RCF ²⁾	17,299			17,003	16,560	17,743	17,743	18,038	17,003				16,856	17,299	17,595	
radius in mm	117			115	112	120	120	122	115				114	117	119	
run-up in sec	66															
run-down in sec. braked	68															
temperature in °C ¹⁾	+4															

capacity in ml	10	30	50	85	94
Ø x L in mm	16 x 80	26 x 95	29 x 107	38 x 106	38 x 102
Cat. No.	-	0545	0546	0547	0538⁶⁾
lid with bio-containment ⁵⁾ incl.					
rotor Cat. No. 5615					
Cat. No.	1448	1447	1446	-	
boring Ø x L in mm	16.5 x 74	26 x 85	29 x 92	38.2 x 89.6	
tubes per rotor	12	6			
max. RCF ²⁾	17,003	16,560	17,299	18,038	
radius in mm	115	112	117	122	
run-up in sec	66				
run-down in sec. braked	68				
temperature in °C ¹⁾	+4				

⁶⁾ The screw cap for tube No. 0538 is available with Cat. No. 0539. Dimensions with cap 38 x 110 mm.

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

¹²⁾ For centrifugation at high speeds, we recommend to use form-fitting, phenol-resistant adapters 2031.

ROTORS AND ACCESSORIES

Angle rotor, 14-place



↙ 36°

n = 9,000/10,000 min⁻¹
max. RCF 14,127/17,441

with bio-containment⁵⁾

Cat. No. 5655

Angle rotor, 6-place, for Schlenk tubes



↙ 45°

n = 2.000 min⁻¹
max. RCF 805

Cat. No. 5616¹⁶⁾

capacity in ml	15	25	7.5–8.5	9–10	10	8.5–10	15	50	30
Ø x L in mm	17 x 100	24 x 100	15 x 92	16 x 92	15 x 102	16 x 100	17 x 120	29 x 115	26 x 95
Cat. No.	0518²⁾	0519²⁾	blood/urine tubes				0509	0513	0545
lid with bio-containment ⁵⁾ incl.									
rotor Cat. No. 5655									
Cat. No.	1473	1472	1473				1474	-	1472
boring Ø x L in mm	17.5 x 91.5	26 x 85	17.5 x 91.5				17 x 107	30 x 100	26 x 85
tubes per rotor	14								
max. RCF ²⁾ classic/cooled	13,493/ 16,658	13,131/ 16,211	13,493/ 16,658				13,765/ 16,994	14,127/ 17,441	13,131/ 16,211
radius in mm	149	145	149				152	156	145
run-up in sec classic/cooled	124/ 145								
run-down in sec, braked classic/cooled	94/ 108								
temperature in °C ¹⁾	+16								

capacity in ml	25	50
Ø x L in mm	24 x 146.5	38 x 148.5
Cat. No.	0532	0533
 rotor Cat. No. 5616¹⁶⁾		
Cat. No.	4317	-
boring Ø x L in mm	25 x 86	38.5 x 89.9
tubes per rotor	6	
max. RCF	783	805
radius in mm	175	180
run-up in sec	17	
run-down in sec, braked	21	
temperature in °C ¹⁾	-14	

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

²⁾ Please be aware that sample material will warm to + 40 °C when centrifuging it for 20 minutes at max. speed in rotor 5655 in the air-cooled ROTANTA 460.

¹⁶⁾ 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, for ASTM tubes it is 700.

ROTORS AND ACCESSORIES

Swing-out rotor, 4-place, for ASTM tubes + 1 Babcock bottle



$n = 2,000 \text{ min}^{-1}$
max. RCF 984

Cat. No. (without carriers) **4474**

Swing-out rotor, 6-place, for chrome bath tubes



$n = 2,000 \text{ min}^{-1}$
max. RCF 917

Cat. No. **4619**¹⁶⁾

capacity in ml	50	100	100	100	50
Ø x L in mm	45 x 130	58 x 161	44 x 168	37 x 200	36,5 x 185
Cat. No.	- ²⁾	0528 ²⁾	- ²⁾	0531 ²⁾	-
carrier Cat. No. 4275					
rotor Cat. No. 4474					
Cat. No.	4278-A	0771	4277	4276	0703
boring Ø x L in mm	-				
tubes per rotor	4				
max. RCF ²⁾	984		961		912
radius in mm	220		215		204
run-up in sec	17				
run-down in sec, braked	20				
temperature in °C ¹⁾	-8				




capacity in ml	30
Ø x L in mm	24 x 151
Cat. No.	0529/0508 ¹³⁾
rotor Cat. No. 4619 ¹⁶⁾	
Cat. No.	-
boring Ø x L in mm	-
tubes per rotor	6
max. RCF	917
radius in mm	205
run-up in sec	17
run-down in sec, braked	21
temperature in °C ¹⁾	-11

⁵⁾ Tested by the TÜV in conformity with DIN EN 61010, section 2-020.

¹³⁾ The tube may not be centrifuged with the stopper. The stopper only serves to close the tube for agitating or mixing.

¹⁶⁾ In the heatable models 5660-50, 5660-51, 5660-70, 5670-50 and 5675-50, rotors 4619 and 5616 may only be used up to a maximum of + 40 °C.

ROTANTA 460/460 R

TECHNOLOGY	ROTANTA 460		ROTANTA 460 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	1,000 VA	1,100 VA	1,800 VA	2,000 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 750 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)	456 x 554 x 706 mm	456 x 554 x 715 mm	456 x 770 x 706 mm	456 x 770 x 715 mm	
Weight	approx. 101 kg	approx. 111 kg	approx. 141 kg	approx. 151 kg	
Refrigeration					
Temperature control, infinitely variable	-		from -20 to +40 °C		
Cat. No.	5650	5650-01	5660	5660-01	

TECHNOLOGY	ROTANTA 460 RC ^{*)}	ROTANTA 460 RF ^{*)}
	Underbench centrifuge, cooled, without rotor	Floorstanding centrifuge, cooled, without rotor
Power supply ^{*)}	200 – 240 V 1 ~	
Frequency	50 Hz	
Consumption	1,800 VA	
Emission, Immunity	EN / IEC 61326-1, class B	
Dimensions (HxWxD)	683 x 554 x 697 mm	961 x 554 x 697 mm
Weight	approx. 140 kg	approx. 164 kg
Temperature control, infinitely variable	from -20 to +40 °C	
The other values are identical with those of the ROTANTA 460 R		
Cat. No.	5670	5675

^{*)} Other voltages on request.
^{*)} Additional model variants 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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