

ALL AROUND
TALENT



Hettich HT1402 / HT1403
Benchtop Centrifuges
classic/cooled

There are good reasons why we have called these centrifuges UNIVERSAL. Their excellent performance and comprehensive range of accessories enable them to carry out virtually any centrifuging task. In the low speed range, the **Hettich HT1402 / HT1403** process standard tubes up to a volume of 100 ml, microtitre plates, conical tubes with screw cap, blood collection tubes and cyto accessories.

Microlitre tubes can be accelerated to an RCF of 21,382. Centrifuge tubes taking higher volumes (up to 85 ml) also profit from the extraordinary motor power of the **Hettich HT1402 / HT1403**.

At an RCF of 9,418, bacteria and yeast sediment quickly and easily.



Hettich HT1402
Cat. No. 1401

PERFORMANCE

- High RCF
 - 85 ml tubes up to 9,418
 - 15 ml tubes up to 16,582
 - Microlitre tubes up to 21,382
- Extremely short run-up and run-down times

DESIGN

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

USER-FRIENDLINESS

- Automatic lid-locking
- Quick-entry foil keypad
- Easily exchangeable rotors
- 10 programmable memories

REFRIGERATION (**Hettich HT1403**)

- Infinitely variable setting from – 20 °C to + 40 °C
- Fast cool function

SAFETY

- Lid locking and holding during rotor run
- Emergency lid-lock release
- Motor-overheating protection
- Chamber-overheating protection (with the **Hettich HT1403**)
- Imbalance switch-off
- Automatic rotor recognition
- Lid dropping protection

OPTIONS

As an option, the **Hettich HT1403** is also available

- with connection to an external refrigerated/heating circulator (provided by the customer) – **Cat. No. 1406-50** (without internal cooling unit). Depending on circulator performance, the centrifuge can heat or cool within a range of 0 °C to 90 °C,
- with connection for flushing with nitrogen – **Cat. No. 1406-20** (without monitoring and controlling system).

OPERATION AND CONTROL

The display panel and all controls on the **Hettich HT1402 / HT1403** centrifuges have been designed ergonomically. Information on the display is clearly positioned and perfectly legible. During centrifugation, the actual parameter values are indicated. Nine acceleration and braking ramps, or unbraked run-down, can be pre-selected. Ramp 9 always corresponds to the shortest possible run-up or run-down time. The stored parameter combination remains in the memory even after the centrifuge has been switched off. By entering the rotor radius r/mm, the centrifuge calculates and indicates the rotational speed RPM or the relative centrifugal force RCF. The twist knob allows quick and easy entry or changing of the parameters.



Hettich HT1403 cooled
Cat No. 1406

DIGITAL DISPLAY AND CONTROL PANEL

KEYPAD

	Precooling (Hettich HT1403)
RCF	Change-over from RPM to RCF indication
SELECT	Selection of parameters
START IMPULS	Starts centrifugation / Short cycle mode
STOP OPEN	Stops centrifugation manually / Opens the lid

ENTRY OF THE PARAMETERS

P	Entry of the program number, 10 programmable memories
T/°C	Entry of the temperature in increments of 1 °C within a range of – 20 °C to + 40 °C (Hettich HT1403)
RCF	Entry in increments of 10
RPM	Entry in increments of 10
r/mm	Entry of the radius in mm
t/min	Entry of the centrifuging time in minutes and seconds (max. 99 min : 59 sec)
	Entry of the acceleration ramp 1 – 9 Entry of the braking ramp 1 - 9



Hettich HT1403 control panel

ROTORS AND ACCESSORIES

Hettich HT1402 / HT1403 centrifuges accommodate rotors and accessories for virtually every centrifuging task required in industrial, research and clinical laboratories.

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

Tubes / plates

Max. capacity

standard tubes	28 x 15 ml or 4 x 100 ml
hematocrit capillaries	24
conical tubes with screw cap	32 x 15 ml or 8 x 50 ml
microtitre plates	10
culture plates	8
cyto suspensions	8
blood collection tubes	48
round-bottom tubes with screw cap	6 x 85 ml
microlitre tubes	30 x 1.5 / 2.0 ml

Rotors

Max. RCF

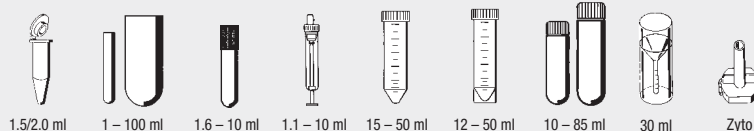
swing-out rotor with bio-containment carriers	4,193
rotor for conical tubes with screw cap	3,875
rotor for microtitre and culture plates	2,218
rotor for 8 cyto suspensions	2,218
angle rotor for round-bottom tubes with screw cap (6 x 85 ml)	9,418
angle rotors (12-, 24- or 30-place) for microlitre tubes (0.2 – 2.0 ml)	21,382

some accessories with bio-containment



Swing-out rotor 4-place

n = 5,000 min⁻¹
max. RCF 4,193
Cat. No. 1494



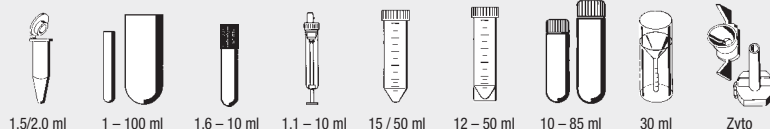
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Page 6-8

some accessories with bio-containment



Swing-out rotor 4-place

n = 4,000 min⁻¹
max. RCF 2,665
Cat. No. 1624



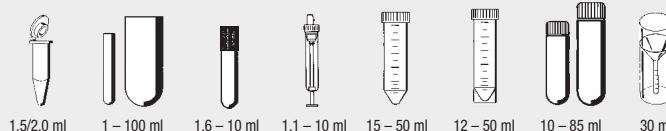
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Page 9-10

some accessories with bio-containment



Swing-out rotor 4-place

n = 4,500 min⁻¹
max. RCF 3,328
Cat. No. 1324

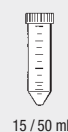


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Page 11-12



Swing-out rotor 8-place

n = 5,000 min⁻¹
max. RCF 3,875
Cat. No. 1617



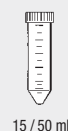
15 / 50 ml

→
Page 13



Swing-out rotor 6-place

n = 4,000 min⁻¹
max. RCF 2,701
Cat. No. 1619



15 / 50 ml

→
Page 13



Swing-out rotor 12-place

n = 5,000 min⁻¹
max. RCF 4,187
Cat. No. 1628



5 – 15 ml

1.6 – 10 ml

2.6 – 8.2 ml

→
Page 13



Swing-out rotor 8-place

n = 4,000 min⁻¹
max. RCF 2,415
Cat. No. 1611



5 – 15 ml

1.6 – 10 ml

2.6 – 8.2 ml

→
Page 14

ROTORS AND ACCESSORIES

 Swing-out rotor 2-place $n = 4,000 \text{ min}^{-1}$ max. RCF 2,218 Cat. No. 1460	 MTP microtitre plate  CP culture plate  DWP deep well plate  MS Micromic system  QP filter plate	 → Page 14
 Swing-out rotor 4-place $n = 4,000 \text{ min}^{-1}$ max. RCF 1,896 Cat. No. 1645	 MTP microtitre plate  CP culture plate	 → Page 14
auto-clavable with bio-containment  Angle rotor 30-place $n = 14,000 \text{ min}^{-1}$ RCF 21,255 Cat. No. 1689	 0.2 – 2.0 ml	 → Page 15
 Angle rotor 12-place $n = 15,000 \text{ min}^{-1}$ max. RCF 16,602 Cat. No. 1612	 0.2 – 2.0 ml	 → Page 15
auto-clavable with bio-containment  Angle rotor 24-place $n = 15,000 \text{ min}^{-1}$ max. RCF 21,382 Cat. No. 1420	 0.2 – 2.0 ml	 → Page 15
 Angle rotor 12-place $n = 6,000 \text{ min}^{-1}$ max. RCF 4,146 Cat. No. 1613	 4 – 15 ml  1.6 – 10 ml  1.1 – 10 ml  15 ml	 → Page 16
 Angle rotor 12-place $n = 12,000 \text{ min}^{-1}$ max. RCF 16,582 Cat. No. 1615	 4 – 15 ml  1.6 – 10 ml  1.1 – 10 ml  15 ml	 → Page 16
 Angle rotor 6-place $n = 9,000 \text{ min}^{-1}$ max. RCF 9,418 Cat. No. 1620 A	 1.5/2.0 ml  15 – 75 ml  8.5 – 10 ml  7.5 – 10 ml  15 / 50 ml  10 – 85 ml	 → Page 16
 Angle rotor 8-place $n = 4,500 \text{ min}^{-1}$ max. RCF 3,283 Cat. No. 1418	 15 ml  15 / 50 ml  12 / 50 ml  50 ml	 → Page 17
 Hematocrit rotor 24-place $n = 15,000 \text{ min}^{-1}$ max. RCF 21,382 Cat. No. 1650	 capillary	 → Page 18
 Cyto rotor 6-place $n = 4,000 \text{ min}^{-1}$ max. RCF 2,039 Cat. No. 1626	 cyto	 → Page 18
 Cyto rotor 8-place $n = 4,000 \text{ min}^{-1}$ max. RCF 2,218 Cat. No. 1648	 cyto	 → Page 18

ROTORS AND ACCESSORIES

Swing-out rotor, 4-place



±90°
n = 5,000 min⁻¹
max. RCF 4,193

illustrated with carriers No. 1427

Cat. No. (without carriers) 1494

capacity ml	1.5/2.0		1	3	5	6	7	9	15	25	50	15	50	25	30
dimensions Ø x L mm	11 x 38		6 x 45	10 x 60	12 x 75	12 x 82	12 x 100	14 x 100	17 x 100	24 x 100	34 x 100	17 x 120	29 x 115	25 x 90	25 x 110
Cat. No.	2078/0536		Rhesus	–	0553 ²⁾	0501 ²⁾	0578 ²⁾	0500 ²⁾	0518 ²⁾	0519 ²⁾	0521 ²⁾	0509	0513	-	-
 lid No. 1421  carrier Cat. No. 1427															
															
Cat. No.	5277	5273	1357	1327	1732	5229	5230	5237	5231	5232	5233	5275	5276	1731	5272
boring Ø x L mm	11.5 x 38	13.7 x 38	6.5 x 23	10.5 x 23	13.4 x 58	12.5 x 44	12.4 x 87	15 x 73	17.8 x 87	25.5 x 87	35.5 x 87	17 x 90	30 x 90	25.5 x 72	25.5 x 85
tubes per rotor	36	48	120	48	32	48	48	24		8	4	4	4	8	4
max. RCF	4,109	4,053	4,081	4,053	4,025	4,053	3,941					4,165	4,053	3,969	4,025
radius in mm	147	145	146	145	144	145	141					149	145	142	144
run-up in sec	30														
run-down in sec	 32  600														
temperature °C ¹⁾	-7														

capacity ml	50	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		8.5-10
dimensions Ø x L mm	29 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	13 x 75	13 x 100	16 x 75	16 x 100
Cat. No.	blood collection/urine tubes												
 lid No. 1421  carrier Cat. No. 1427	 ³⁾					 ³⁾	 ³⁾				 ³⁾		 ³⁾
	+ 6316 												
Cat. No.	5233	5278	1732	5229	5279	5230	1732	5279	5271 ⁴⁾	1732	5271	5231	
boring Ø x L mm	35.5 x 87	9 x 41	13.4 x 58	12.5 x 4	15.6 x 41	12.4 x 87	13.4 x 58	15.6 x 41	17 x 66	13.4 x 58		17 x 66	17.8 x 87
tubes per rotor	4	48	32	48	20	48	32	20		32		20	24
max. RCF	4,053	4,109	4,025	4,053	4,109	3,941	4,025	4,109	3,969	4,025		3,969	3,941
radius in mm	145	147	144	145	147	141	144	147	142	144		142	141
run-up in sec	30												
run-down in sec	 32  600												
temperature °C ¹⁾	-7												

1) Lowest attainable temperature in precooled refrigerated centrifuges at max. speed

2) Please make sure not to exceed the tubes' max. permissible RCF. For glass tubes the max. RCF is 4,000.

3) When using these tubes, bucket No. 1427 cannot be closed with lid No. 1421.

4) Please remove the inserts.

ROTORS AND ACCESSORIES

adapter No. 1441
for blood collection
tubes



carrier No. 1425

capacity ml	1.5	2.0	1	3	5	6	7	9	15	25	50	100	50	50	
dimensions Ø x L mm	11 x 38		6 x 45	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	29 x 115	29 x 115	
Cat. No.	2078	0536	Rhesus	-	0553 ²⁾	0501 ²⁾	0578 ²⁾	0500 ²⁾	0518 ²⁾	0519 ²⁾	0521 ²⁾	0526 ²⁾	0513	-	
 carrier Cat. No. 1425															
															
Cat. No.	1444		1432	1433	1438	1434			1431		1435	1436	1437	1443	1737
boring Ø x L mm	11.5 x 38		6.5 x 34	10.5 x 40	13.4 x 50	12.7 x 60			17.5 x 84		25.5 x 84	35.5 x 84	45.5 x 86	30 x 90	30 x 90
tubes per rotor	36		144	56	28	48			28		8	4	4	4	4
max. RCF	3,885		3,969	3,913								3,801		4,081	4,081
radius in mm	139		142	140								136		146	146
run-up in sec	30														
run-down in sec	 32  600														
temperature °C ¹⁾	-10														

capacity 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 - 7		4 - 10	
dimensions Ø x L mm	8 x 66	13 x 65	11 x 66	15 x 75	11 x 92	13 x 90	15 x 92	16 x 92	13 x 75	13 x 100	16 x 75	16 x 100
Cat. No.	blood collection/urine tubes											
 carrier Cat. No. 1425												
												
Cat. No.	1458	1438	1441	1438	1441	1439	1438	1441				
boring Ø x L mm	9 x 50	13.4 x 50		16.5 x 50	13.4 x 50		16.5 x 50	17 x 45	13.4 x 50		16.5 x 50	
tubes per rotor	36	28						16	28			
max. RCF	4,025	3,913										
radius in mm	144	140										
run-up in sec	30											
run-down in sec	 32  600											
temperature °C ¹⁾	-10											

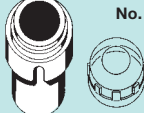
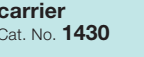
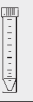
 braked run-down at level 9
 unbraked run-down

ROTORS AND ACCESSORIES

rotor No. 1494
with carriers
No. 1425



capacity ml	1.5	2.0	1	3	5/6/7	9	15	25	50	100	10	30	50	85
dimensions Ø x L mm	11 x 38		6 x 45	10 x 60	12 x 75/82/100	14 x 100	17 x 100	24 x 100	34 x 100	44 x 100	16 x 80	26 x 95	29 x 107	38 x 106
Cat. No.	2078	0536	Rhesus	-	0553²⁾/0501²⁾/0578²⁾	0500²⁾	0518²⁾	0519²⁾	0521²⁾	0526²⁾	-	0545	0546	0547
 lid with bio-containment ⁵⁾ No. 1382  carrier Cat. No. 1430														
														
Cat. No.	1351	1339	1343	1383	1329	1330	1331	0761⁶⁾	1348	4417	4416	1396		
boring Ø x L mm	11.2 x 38	6.5 x 34	10.5 x 43	13.4 x 48	17.6 x 91	25.2 x 87	35.2 x 87	45.6 x 98	16.5 x 56	26 x 83	29 x 93	38.5 x 92		
tubes per rotor	20	108	36	20	16	4				16	4			
max. RCF	3,857	4,081	4,137	4,025	3,997	3,829	3,801	4,025	4,025	3,857	4,137	4,109		
radius in mm	138	146	148	144	143	137	136	144	144	138	148	147		
run-up in sec	30													
run-down in sec	☐ 32 ○ 600													
temperature °C ¹⁾	-10													

capacity ml	15	50	12	25	30	50	1.6 - 7	4 - 10	1.1 - 1.4	2.7 - 5	2.6 - 4,9	4 - 8.2	9 - 10	10	30
dimensions Ø x L mm	17 x 120	29 x 115	17 x 100	25 x 90	25 x 110	29 x 115	13x75/100	16x75/100	8 x 66	11x66/92	13 x 65/90	15 x 75/92	16 x 92	15 x 102	44 x 105
Cat. No.	0509	0513	-	-	-	-	blood collection/urine tubes								0534 ⁶⁾
 lid with bio-containment⁵⁾ No. 1382  carrier Cat. No. 1430															 chrome bath tube
															 rubber insert
Cat. No.	1347	1384	6311	1363	1365	6318	1383	1348	1457	1383	1459	1329	1329 ⁴⁾	0765	
boring Ø x L mm	17 x 90	30 x 90	17 x 80	26 x 72	26 x 80	29.5 x 80	13.4 x 48	16.5 x 56	9 x 47	13.4 x 48	15.6 x 47	17.6 x 91		45.6 x 98	
tubes per rotor	4						20	16	28	20	16			4	
max. RCF	4,193			3,689	4,193		4,025		4,053	4,025	4,053	3,997	4,193	3,997	
radius in mm	150			132	150		144		145	144	145	143	150	143	
run-up in sec	30														
run-down in sec	 32  600														
temperature °C ¹⁾	-10														

1) Lowest attainable temperature in precooled refrigerated centrifuges at max. speed

2) Please make sure not to exceed the tubes' max. permissible RCF. For glass tubes the max. RCF is 4,000.

4) Please remove the rubber insert.

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

6) A rubber stopper for closing the tube is available with 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

Swing-out rotor, 4-place



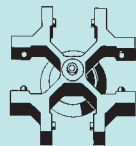
±90°

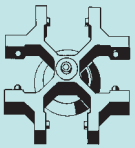
n = 4,000 min⁻¹
max. RCF 2,665

illustrated with carriers No. 1369

Cat. No. (without carriers) **1624**

capacity ml	1.5	2.0	1	3	4
dimensions Ø x L 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 mm	11.5 x 38	6.5 x 23	10.5 x 23	12.5 x 44	
tubes per rotor	36	120	48		
max. RCF	1,968	1,950	1,932		
radius in mm	110	109	108		
run-up in sec	20				
run-down in sec	 25  390				
temperature °C ¹⁾	-17				

capacity ml	1.6 - 5	4 - 7	8.5-10	1.1 - 1.4	4-5.5	4.9
dimensions Ø x L mm	13 x 75	16 x 75	16 x 100	8 x 66	15 x 75	13 x 90
Cat. No.	blood collection tubes					
 rotor Cat. No. 1624						
Cat. No.	1742	1369	1741	1742	1741	1741
boring Ø x L mm	17.6 x 78	17.6 x 74	14.6 x 78	17.6 x 78	14.6 x 78	
tubes per rotor	28	16	40	28	40	
max. RCF	2,325	2,308	2,415	2,325	2,451	
radius in mm	130	129	135	130	137	
run-up in sec	20					
run-down in sec	 25  390					
temperature °C ¹⁾	-15	-17	-15	-17	-15	

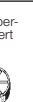
capacity ml	5	6	7	9	9	15	15	20	25	45	50	50	30
dimensions Ø x L mm	12 x 75	12 x 82	12 x 100	14 x 100	14 x 100	17 x 100	17 x 100	21 x 100	24 x 100	31 x 100	34 x 100	34 x 100	26 x 95
Cat. No.	0553²⁾	0501²⁾	0578²⁾	0500²⁾	0500²⁾	0518²⁾	0518²⁾	-	0519²⁾	-	0521²⁾	0521²⁾	0545
 carrier Cat. No. 1366													
Cat. No.	1369-91	1372	1369-92	1370	1741	1369	1742	1346	1745	1345	1308	1746	1745
boring Ø x L mm	11.5 x 64.4	13.5 x 65	11.5 x 71.5	14.6 x 74	14.6 x 78	17.6 x 74	17.6 x 78	21.5 x 74	26 x 78	32 x 74	35.7 x 88.2	35 x 78	26 x 78
tubes per rotor	16	68	16	20	40	16	28	8	8	4	4	4	8
max. RCF	2,057	2,164	2,308	2,415	2,308	2,451	2,361	2,451	2,361	2,290	2,451	2,451	
radius in mm	115	121	129	135	129	137	132	137	132	128	137	137	
run-up in sec	20												
run-down in sec	 25  390												
temperature °C ¹⁾	-17	-17	-17	-17	-17	-17	-17	-17	-17	-17	-17	-17	-17

 braked run-down at level 9
 unbraked run-down

ROTORS AND ACCESSORIES



rotor No. 1624
with carriers No. 1381
and lids No. 1382 with bio-containment ⁵⁾

capacity ml	1.5	2.0	1	3	5/6/7	9	15	25	50	100	10	30	50	85
dimensions Ø x L mm	11 x 38		6 x 45	10 x 60	13 x 75/82/100	14 x 100	17 x 100	24 x 100	34 x 100	44 x 100	16 x 80	26 x 95	29 x 107	38 x 106
Cat. No.	2078	0536	Rhesus	-	0553 ²⁾ /0501 ²⁾ /0578 ²⁾	0500 ²⁾	0518 ²⁾	0519 ²⁾	0521 ²⁾	0526 ²⁾	-	0545	0546	0547
 lid with bio-containment ⁵⁾ No. 1382  carrier Cat. No. 1381														
														
Cat. No.	1351	1339	1343	1383	1329	1330	1331	0761	1348	4417	4416	1396		
boring Ø x L mm	11.2 x 38	6.5 x 34	10.5 x 43	13.4 x 48	17.6 x 91	25.2 x 87	35.2 x 87	45.6 x 98	16.5 x 56	26 x 83	29 x 93	38.5 x 92		
tubes per rotor	20	108	36	20	16	4	4	4	16	4	4	4		
max. RCF	2,451	2,594	2,630	2,558	2,540	2,433	2,415	2,558	2,522	2,451	2,630	2,612		
radius in mm	137	145	147	143	142	136	135	143	141	137	147	146		
run-up in sec	20													
run-down in sec	☐ 25 ☐ 390													
temperature °C ¹⁾	-15													

capacity ml	15	50	12	25	30	50	1.6 - 7	4 - 10	1.1 - 1.4	2.7 - 5	2.6 - 4.9	4 - 8.2	9 - 10	10	30
dimensions Ø x L mm	17 x 120	29 x 115	17 x 100	25 x 90	25 x 110	29 x 115	13x75/100	16x75/100	8 x 66	11x66/92	13x65/100	15x75/92	16 x 92	15 x 102	44 x 105
Cat. No.	0509	0513	-	-	-	-	blood collection/urine tubes								0534 ⁶⁾
lid with bio-containment⁵⁾ No. 1382 carrier Cat. No. 1381															
															
Cat. No.	1347	1384	6311	1363	1365	6318	1383	1348	1457	1383	1459	1329	1329 ⁴⁾	0765	
boring Ø x L mm	17 x 90	30 x 90	17 x 80	26 x 72	26 x 80	29.5x80	13.4x48	16.5x56	9 x 47	13.4 x 48	15.6 x 47	17.6 x 91	17.6 x 91	45.6 x 98	
tubes per rotor	4						20	16	28	20	16			4	
max. RCF	2,665			2,343	2,655		2,558	2,522	2,576	2,558	2,576	2,540	2,665	2,540	
radius in mm	149			131	149		143	141	144	143	144	142	149	142	
run-up in sec	20														
run-down in sec	 25  390														
temperature °C ¹⁾	-15														

¹⁾ Lowest attainable temperature in precooled refrigerated centrifuges at max. speed

²⁾ Please make sure not to exceed the tubes' max. permissible RCF. For glass tubes the max. RCF is 4,000.

³⁾ When using these tubes, bucket No. 1390 cannot be closed with lid No. 1382.

⁴⁾ Please remove the inserts.

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

⁶⁾ A rubber stopper for closing the tube is available with 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

Swing-out-rotor, 4-place



±90°

n = 4,500 min⁻¹
max. RCF 3,328

illustrated with carriers No. 1398

Cat.-No. (without carriers) **1324**

capacity ml	1,5	2,0	1	3	4	5	6	7	9	15	25	50	100
dimensions Ø x L mm	11x38		6x45	10x60	10x88	12x75	12x 82	12x100	14x100	17x100	24x100	34x100	44x100
Cat. No.	2078	0536	Rhesus	-	-	0553 ²⁾	0501 ²⁾	0578 ²⁾	0500 ²⁾	0518 ²⁾	0519 ²⁾	0521 ²⁾	0526 ²⁾
lid with bio-containment⁵⁾ No. 1382  carrier Cat. No. 1390													
													
Cat. No	1351	1339	1343	1383	1329	1330	1331	0761	1351	1339	1343	1383	1329
boring Ø x L mm	11.2x38		6.5x34	10.5x43		13.4x48			17.6x91		25.2x87	35.2x87	45.6x100.5
tubes per rotor	20		108	36		20			16		4		
max. RCF	3,056		3,237	3,283		3,192			3,170		3,034	3,011	3,192
radius in mm	135		143	145		141			140		134	133	141
run-up in sec	30												
run-down in sec	 30  220												
temperature °C ¹⁾	- 6												

capacity ml	1.1–1.4	2.6–2.9	4.9	2.7–3	4.5–5	4–5.5	7.5–8.2	9–10	10	1.6–5	4–7	4–7	8.5–10
dimensions Ø x L mm	8x66	13x65	13x90	11x66	11x92	15x75	15x92	16x92	15x102	13x75	13x100	16x75	16x100
Cat. No.	blood collection/urine tubes												
lid with bio-containment⁵⁾ No. 1382 carrier Cat. No. 1390													
Cat. No	1457	1383		1459		1329		1329 ⁴⁾		1383	1348		
boring Ø x L mm	9x47	13.4x48		15.6x47		17.6x91		13.4x48		16.5x56			
tubes per rotor	28	20		16		20		16					
max. RCF	3,215	3,192		3,215		3,170		3,328		3,192		3,147	
radius in mm	142	141		142		140		147		141		139	
run-up in sec	30												
run-down in sec	30 220												
temperature °C ¹⁾	- 6												

 braked run-down at level 9
 unbraked run-down

ROTORS AND ACCESSORIES



Carrier No. 1398 with insert No. 1483
and 15 ml tubes with screw cap 0509

Swing-out-rotor 1324

capacity ml	15		30	50	12	25	30	50	10	30	50	85	30
dimensions Ø x L mm	17 x 120		25x110	29x115	17x100	25x90	25x110	29x115	16x80	26x95	29x107	38x106	44x105
Cat No.	0509			0513	-	-	-	-	-	0545	0546	0547	0534 ⁶⁾
 													 chrome bath tube
													 rubber insert
Cat. No.	1347	1356	1365	1384	6311	1363	1365	6318	1348	4417	4416	1396	0765
boring Ø x L mm	17x90	17x107	26x80	30x90	17x80	26x72	26x80	29.5x80	16.5x56	26x83	29x93	38.5x92	45.6x100.5
tubes per rotor	4	12	4						16		4		
max. RCF	3,328					2,920	3,328		3,147	3,056	3,283	3,260	3,170
radius in mm	147					129	147		139	135	145	144	140
run-up in sec	30												
run-down in sec	 30  220												
temperature °C ¹⁾	- 6												

capacity ml	9	15	2.6-2.9	4-5.5	9-10	10	4-7	15	50	12	50
dimension Ø x L mm	14 x 100	17 x 100	13 x 65	15 x 75	16 x 92	15 x 102	16 x 75	17 x 120	29 x 115	17 x 100	29 x 115
Cat. No.	0500 ²⁾	0518 ²⁾	blood collection/urine tubes					0509	0513	-	-
 carrier Cat. No. 1398											
			+ 2 x 0716 				+ 0716 				
Cat. No.	1482							1483	1484	1482	1484 ⁴⁾
boring Ø x L mm	17.5 x 81							17 x 100	30 x 98	17.5 x 81	30 x 98
tubes per rotor	16							16	4	16	4
max. RCF	3,192							3,305	3,260	3,192	3,260
radius in mm	141							146	144	141	144
run-up in sec	30										
run-down in sec	 30  220										
temperature °C ¹⁾	- 6										

¹⁾ Lowest attainable temperature in precooled refrigerated centrifuges at max. speed

²⁾ Please make sure not to exceed the tubes' max. permissible RCF. For glass tubes the max. RCF is 4,000.

³⁾ When using these tubes, bucket No. 1390 cannot be closed with lid No. 1382.

⁴⁾ Please remove the inserts.

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

ROTORS AND ACCESSORIES

Swing-out rotor, 8-place



↗45°

n = 5,000 min⁻¹
max. RCF 3,875

Swing-out rotor, 6-place



↗90°

n = 4,000 min⁻¹
max. RCF 2,701

Swing-out rotor, 12-place



↗55°
(with carriers 1127)
↗60°
(with carriers 1122)
↗80°
(with carriers 1621)

n = 5,000 min⁻¹
max. RCF 4,187

Cat. No. (with carriers) **1617**

Cat. No. (with carriers) **1619**

Cat. No. (without carriers) **1628**

capacity ml	15	50
dimensions Ø x L mm	17 x 120	29 x 115
Cat. No.	0509	0513
		
rotor Cat. No. 1617		
Cat. No.	1462-A	-
boring Ø x L mm	17 x 84	30 x 94.5
tubes per rotor	8	
max. RCF	3,875	
radius in mm	138	
run-up in sec	20	
run-down in sec	 19  380	
temperature °C ¹⁾	-10	

capacity ml	15	50
dimensions Ø x L mm	17 x 120	29 x 115
Cat. No.	0509	0513
		
rotor Cat. No. 1619		
Cat. No.	1462-A	-
boring Ø x L mm	17 x 84	30 x 87.5
tubes per rotor	6	
max. RCF	2,701	
radius in mm	151	
run-up in sec	20	
run-down in sec	 22  265	
temperature °C ¹⁾	-15	

capacity ml	5	10	15	2.6 - 2.9	2.7 - 3	4 - 5.5	7.5 - 8.2	1.6 - 5	4 - 7	8.5 - 10
dimensions Ø x L mm	12 x 75	17 x 70	17 x 100	13 x 65	11 x 66	15 x 75	15 x 92	13 x 75	16 x 75	16 x 100
Cat. No.	0553²⁾	2079	0518²⁾	blood collection / urine tubes						
										
rotor Cat. No. 1628										
Cat. No.	1127	1122	1621	1127	1122	1621	1127	1122	1621	1621
boring Ø x L mm	13.2 x 53	17.5 x 53	17.5 x 79	13.2 x 53	17.5 x 53	17.5 x 79	13.2 x 53	17.5 x 53	17.5 x 79	17.5 x 79
tubes per rotor	12									
max. RCF	3,488	3,530	4,187	3,488	3,530	4,187	3,488	3,530	4,187	4,187
radius in mm	125	126	150	125	126	150	125	126	150	150
run-up in sec	16									
run-down in sec	 16  360									
temperature °C ¹⁾	-15	-10	-10	-15	-10	-10	-15	-10	-15	-10

 braked run-down at level 9
 unbraked run-down

⁶⁾ A rubber stopper for closing the tube is available with 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

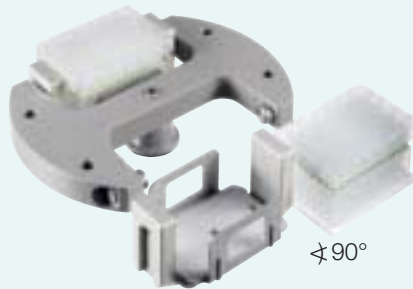
Swing-out rotor, 8-place



±90°

n = 4,000 min⁻¹
max. RCF 2,415

Swing-out rotor, 2-place



±90°

n = 4,000 min⁻¹
max. RCF 2,218

Swing-out rotor, 4-place



±90°

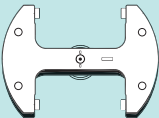
n = 4,000 min⁻¹
max. RCF 1,896

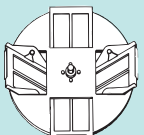
Cat. No. (without carriers) **1611**

Cat. No. (without carriers) **1460**

Cat. No. (without carriers) **1645**

capacity ml	5	6	7	10		15	2.6–2.9		2.7–3		4–5.5		4.5–5		7.5–8.2		1.6–5		4–7		4–7		8.5–10			
dimensions Ø x L mm	12 x 75	12 x 82	12 x 100	17 x 70	13 x 100	17 x 100	13 x 65	11 x 66		15 x 75		11 x 92		15 x 92		13 x 75		13 x 100		16 x 75		16 x 100				
Cat. No.	0553 ²⁾	0501 ²⁾	0578 ²⁾	2079	-		0518 ²⁾	blood collection/urine tubes																		
 rotor Cat. No. 1611																										
																										
Cat. No.	1131		1643	1132	1643	1644	1131		1132	1643	1644	1131	1643	1132	1644											
boring Ø x L mm	13 x 53		13.2 x 81	17.5 x 53	13.2 x 81	17.5 x 81	13 x 53		17.5 x 53	13.2 x 81	17.5 x 81	13 x 53	13.2 x 81	17.5 x 53	17.5 x 81											
tubes per rotor	8																									
max. RCF	1,914		2,415	2,914	2,415		1,914		2,415		2,415		1,914	2,415	1,914	2,415										
radius in mm	107		135	107	135		107		135		135		107	135	107	135										
run-up in sec	20																									
run-down in sec	☐ 20 ○ 155																									
temperature °C ¹⁾	-16																									

D x W x H in mm	86 x 128 x 15/17.5		86 x 128 x 22	86 x 128 x 44.5	86 x 128 x 46	86 x 128 x 83
Cat. No.	MTP		CP	DWP	MS	QP
 rotor Cat. No. 1622						
						
Cat. No.	1453					
boring Ø x L mm	-					
tubes per rotor	10	8	8	2	2	2
max. RCF	2,218					
radius in mm	124					
run-up in sec	40					
run-down in sec	☐ 45 ○ 1,130					
temperature °C ¹⁾	- 6					

D x W x H in mm	86 x 128 x 15/17.5	86 x 128 x 22
Cat. No.	MTP	CP
 rotor Cat. No. 1645		
		
Cat. No.	4345	
boring Ø x L mm	-	
plates per rotor	4	
max. RCF	1,896	
radius in mm	106	
run-up in sec	20	
run-down in sec	☐ 19 ○ 800	
temperature °C ¹⁾	-16	

ROTORS AND ACCESSORIES

Angle rotor, 30-place



with bio-containment⁵⁾

45°

n = 14,000 min⁻¹
max. RCF 21,255

Cat. No. 1689

Angle rotor, 12-place



45°

n = 15,000 min⁻¹
max. RCF 16,602

Cat. No. 1612

Angle rotor, 24-place



40°

n = 15,000 min⁻¹
max. RCF 21,382

Cat. No. 1420

capacity ml	0.2	0.4	0.5	0.8	1.5	2.0
dimensions Ø x L mm	6 x 18	6 x 45	8 x 30	8 x 45	11 x 38	
Cat. No.	-	-	-	-	2078	0536
lid with bio-containment ⁵⁾ incl.						
rotor Cat. No. 1689						
Bestell-Nr.	2024	2023	2031 ⁷⁾	-	-	-
boring Ø x L mm	6 x 40	8 x 40	10.2 x 19	11.2 x 40.9	-	-
tubes per rotor	30					
max. RCF	21,255					
radius in mm	97					
run-up in sec	35					
run-down in sec	31 770					
temperature °C ¹⁾	0					

capacity ml	0.2	0.4	0.5	0.8	1.5	2.0
dimensions Ø x L mm	6 x 18	6 x 45	8 x 30	8 x 45	11 x 38	
Cat. No.	-	-	-	-	2078	0536
rotor Cat. No. 1612						
Cat. No.	2024	2023	2031 ⁷⁾	-	-	-
boring Ø x L mm	6 x 40	8 x 40	10.2 x 19	11.4 x 39	-	-
tubes per rotor	12					
max. RCF	16,602					
radius in mm	66					
run-up in sec	25					
run-down in sec	23 240					
temperature °C ¹⁾	-10					

capacity ml	0.2	0.4	0.5	0.8	1.5	2.0
dimensions Ø x L mm	6 x 18	6 x 45	8 x 30	8 x 45	11 x 38	
Cat. No.	-	-	-	-	2078	0536
lid incl.						
rotor Cat. No. 1420						
Cat. No.	2024	2023	2031 ⁷⁾	-	-	-
boring Ø x L mm	6 x 40	8 x 40	10.2 x 19	11.2 x 42.6	-	-
tubes per rotor	24					
max. RCF	21,382					
radius in mm	85					
run-up in sec	25					
run-down in sec	24 550					
temperature °C ¹⁾	- 4					

Optional lids for rotor No. 1420

Cat. No. 2423

- phenol-resistant
- with bio-containment⁵⁾
- autoclavable



Cat. No. 2425

- with bio-containment⁵⁾
- autoclavable



- braked run-down at level 9
- unbraked run-down

- 1) Lowest attainable temperature in precooled refrigerated centrifuges at max. speed
- 2) Please make sure not to exceed the tubes' max. permissible RCF. For glass tubes the max. RCF is 4,000.
- 5) Tested by the TÜV in conformity with DIN EN 61010, part 2-020.
- 7) For centrifugation at high speeds we recommend the use of form-fitting phenol-resistant adapter No. 2031.

ROTORS AND ACCESSORIES

Angle rotor, 6-place



↗35°

n = 9,000 min⁻¹
max. RCF 9,418

Cat. No. 1620 A

Angle rotor, 12-place



↗35°

n = 6,000 min⁻¹
max. RCF 4,146

Cat. No. 1613

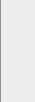
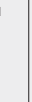
Angle rotor, 12-place

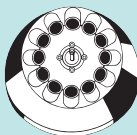


↗35°

n = 12,000 min⁻¹
max. RCF 16,582

Cat. No. 1615

capacity ml	1.5	2.0	15	50	75	7.5–8.2	9–10	10	8.5–10	15	50	10	30	50	85	
dimensions Ø x L mm	11 x 38		17 x 100	34 x 100	35 x 105	15 x 92	16 x 92	15 x 102	16 x 100	17 x 120	29 x 115	16 x 80	26 x 95	29 x 107	38 x 106	
Cat. No.	2078	0536	0518 ²⁾	0521 ²⁾	0548	bloodcollection/urine tubes				0509	0513		-	0545	0546	0547
 rotor Cat. No. 1620 A																
																
Cat. No.	1449	1451	1463			1451				1466	1454	1646 ⁸⁾	1448	1447	1446	-
boring Ø x L mm	11.4 x 39	17.5 x 92	35 x 89			17.5 x 92				17 x 106	29.8 x 97	-	16.5 x 74	26 x 95	29 x 92	38.6 x 90.2
tubes per rotor	24	6	6			6				6	3	6	12	6		
max. RCF	9,146	8,784	9,327	8,784				8,965				8,784	8,603	9,056	9,418	
radius in mm	101	97	103	97				99				97	95	100	104	
run-up in sec	30															
run-down in sec	☐ 30 ☉ 970															
temperature °C ¹⁾	-11															

capacity ml	4	5	6	15	1.1–1.4	2.6–2.9	2.7–3	4.5–5	4.9	7.5–10	10	1.6–5	4–7	8–10	15	
dimensions Ø x L mm	10x88	12x75	12x82	17x100	8x66	13x65	11x66	11x92	13x90	15/16x92	15x102	13x75	13x100	16x100/125	17x120	
Cat. No.	-	0553 ²⁾	0501 ²⁾	0518 ²⁾	blood collection/urine tubes										0509	
 rotor Cat. No. 1613																
																
Cat. No.	6305	1054-A	-		1054-A				-			1054-A	-			
boring Ø x L mm	11.5x67.5	13.5x60		17.7x88	13.5x60				17.7x88			13.5x60	17.7x88			
tubes per rotor	12											12	12	12	6	6
max. RCF	3,502	3,300	4,146	3,300				4,146			3,300	4,146				
radius in mm	87	82	103	82				103			82	103				
run-up in sec	15															
run-down in sec	 15  570															
temperature °C ¹⁾	-16															

¹⁾ Lowest attainable temperature in precooled refrigerated centrifuges at max. speed

²⁾ Please make sure not to exceed the tubes' max. permissible RCF. For glass tubes the max. RCF is 4,000.

⁸⁾ Adapter set, 6-place, for conical 50 ml tubes with screw cap.

ROTORS AND ACCESSORIES

capacity ml	4	5	6	15	1.1–1.4	2.6–2.9	2.7–3	4.5–5	4.9	7.5–10	10	1.6–5	4–7	8–10	15
dimensions Ø x L mm	10x88	12x75	12x82	17x100	8x66	13x65	11x66	11x92	13x90	15/16x92	15x102	13x75	13x100	16x100/125	17x120
Cat. No.	-	0553²⁾	0501²⁾	0518²⁾	blood collection/urine tubes										0509
 rotor Cat. No. 1615															
															
Cat. No.	6305	1054-A	-	1054-A				-				1054-A		-	
boring Ø x L mm	11.5x67.5	13.5x60	18x88	13.5x60				18x88				13.5x60		18x88	
tubes per rotor				12								12	12	12	6
max. RCF	14,006	13,201	16,582	13,201				16,582				13,201		16,582	
radius in mm	87	82	103	82				103				82		103	
run-up in sec				40											
run-down in sec				40				840							
temperature in °C ¹⁾				- 2											

Angle rotor, 8-place



↗ 45°

n = 4,500 min⁻¹,
max. RCF 3,283

Cat No. (without inserts) **1418**

capacity ml	15	15	50	12	50	50
dimensions Ø x L mm	17x100	17x120	29 x 115	17x100	29 x 115	29 x 107
Cat-No.	0518²⁾	0509	0513	-	-	0546
 rotor Cat. No. 1418						
	+ 0716 	+ E 2109 	+ E 2110 	+ 0716 		
Cat. No.	1467	1467	1468	1467	1468	
boring Ø x L mm	17.4 x 91	17.4 x 91	30.2x92	17.4 x 91	30.2 x 92	
tubes per rotor	32	32	8	32	8	
max. RCF	3,215	3,238	3,147	3,215	3,147	
radius in mm	142	145	139	142	139	
run-up in sec			30			
run-down in sec			31		640	
temperature in °C ¹⁾			- 11			

ROTORS AND ACCESSORIES

Hematocrit rotor

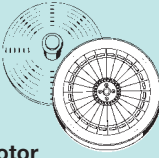
The hematocrit rotor enables centrifuging the capillaries in separate chambers. Each capillary is secured within its own chamber and supported by a holding tray. This holding tray serves to contain glass shards and any leakage, should a tube break. It is easy to clean and disposable in the case of glass breakage. Other capillaries will not be affected. The rotor lid is cover and evaluation disk in one. This ensures fast and easy determination of the hematocrit value.

Hematocrit rotor, 24-place



$n = 15,000 \text{ min}^{-1}$,
max. RCF 21,382

Cat. No. 1650

capillaries, heparinised	basic	mylar-coated	self-sealing and mylar-coated
Cat. No.	2074	1072	1071
 rotor Cat No. 1650			
	sealing putty		
Cat. No.	2077		-
boring $\varnothing \times L$ mm	-	-	-
capillaries per rotor	24		
RCF	21,382		
radius in mm	85		
run-up in sec	13		
run-down in sec	 9  180		
temperature in $^{\circ}\text{C}^{-1}$	- 1		

Rotors for cytology

Detailed information on our comprehensive range of cyto accessories is provided in a separate brochure. We will be pleased to send one to you on request.

Application notes from our R&D department on the preparation of slides for the cytological examination of various body fluids can be obtained free of charge or downloaded from our homepage **www.hettichlab.com**.

Cyto rotor, 6-place



illustrated with suspensions No. 1660
for cyto chambers
 $n = 4,000 \text{ min}^{-1}$, max. RCF 2,039

Cat. No. (without suspensions) 1626

Cyto rotor, 8-place



illustrated with suspensions No. 1680
for angle chambers
 $n = 4,000 \text{ min}^{-1}$, max. RCF 2,218

Cat. No. (with suspensions) 1648

ROLLING CABINETS

Rolling cabinets for Hettich centrifuges save space on the laboratory bench while ensuring enhanced flexibility.

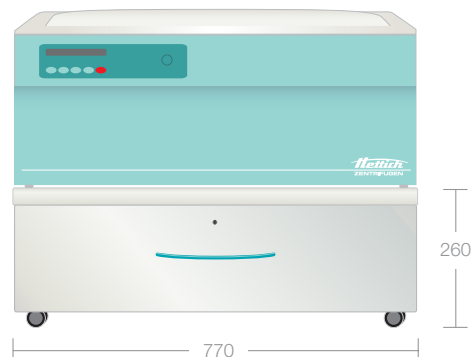
All rolling cabinets are of sturdy design and feature castors and two locks.

Any vibrations of the centrifuge are safely compensated for.



Low and narrow,
with one drawer.
Depth 650 mm

Cat. No. 4612-K



Low and wide,
with one drawer.
Depth 650 mm

Cat. No. 4614-K



High and narrow,
with two drawers.
Depth 650 mm

Cat. No. 4613-K



High and wide,
with two drawers.
Depth 650 mm

Cat. No. 4615-K

TECHNOLOGY

TECHNOLOGY	HT1402		HT1403	
Benchtop centrifuge, without rotor	classic		cooled	
Power supply*	200 – 240 V 1~	100 – 127 V 1~	200 - 240 V1 ~ / 240 V1 ~	115 – 127 V 1~
Frequency	50 – 60 Hz	50 – 60 Hz	50 Hz / 60 Hz	60 Hz
Consumption	400 VA		800 VA	950 VA
Radio interference	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 100 ml			
Max. RPM (speed)	15,000 min ⁻¹			
Max. RCF	21,382			
Running time	1 s – 99 min:59 sec, ∞ continuous run, impulse key (short cycle mode)			
Dimensions (H x W x D) in mm	346 x 395 x 520		346 x 401 x 695	
Weight	approx. 29 kg		approx. 52 kg	
Refrigeration				
Temperature control, infinitely variable	-		from –20 to +40 °C	
Cat. No.	1401	1401–01	1406	1406–01

* other voltages on request

Hettich centrifuges conform to all relevant EC standards in effect. All stages from design to end-product are continuously subjected to the strictest controls. Evidence is provided by national and international test marks such as IEC 61010 or the CE conformity. The ISO 9001:2000 certificate accredited to the entire company bears witness to the extreme care and responsibility Hettich puts into the manufacturing of centrifuges and their accessories. This is why Hettich centrifuges are known for safety and reliability all over the world.

