

EBA 21 Small Centrifuge





Maximum performance in microlitre centrifugation coupled with reliability in daily laboratory tasks.

The EBA 21 is powerful and versatile not only in microlitre centrifugation. Equipped with a variable, maintenance-free frequency drive, this centrifuge generates a max. RCF of 25,718 at a speed of 18,000 min<sup>-1</sup>.

With its wide range of rotors, the EBA 21 easily meets all demands placed on a small, high-performance centrifuge.

### **PERFORMANCE**



- High RCF
  - · up to 3,904 with 50 ml tubes
  - · up to 25,718 with microlitre tubes
- Extremely short run-up and run-down times
- Wide range of accessories
  - · angle and swing-out rotors
  - · adapters for many different centrifuge tubes

## **TECHNOLOGY**

- Twist lock for effortless opening and closing of the lid
- Ergonomically arranged controls and displays
- Viewing port in the lid
- 3 complete running programmes can be stored and recalled

## **SAFETY**

- Metal housing and lid
- Centrifuging chamber of stainless steel
- Lid locking and holding
- Lid dropping protection
- Emergency lid lock release
- Imbalance switch-off
- Automatic rotor recognition



Cat. No. 1004

#### **OPERATION AND CONTROL**

The fully developed up to date N control panel meets the requirements of the users and is extremely easy to operate.



Keypad of the EBA 21 (N control panel)

## DIGITAL DISPLAY AND CONTROL PANEL

#### **KEYPAD**

Guides the user through the menu options.

Increases the relevant value.

Decreases the relevant value.

IMPULS For short centrifugation steps.

START Starts centrifugation.

STOP Stops centrifugation manually.

PROG Stores the program.

RCF Switches from RPM to RCF display.

Entry of the RCF in increments of 10. Input of rotor radius in mm in RCF mode.

Entry of the run-up time in ramps 1-9
Entry of the run-down time in ramps 1-9

An LED lights up:

· in the event of imbalance,

 $\cdot$  as long as the rotor is rotating,

· when the lid can be opened on completion of the program.

### **ENTRY OF THE PARAMETERS**

PROG Program number. Three programmable

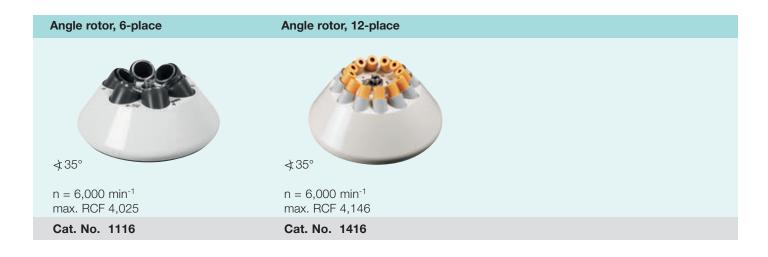
memories are available.

>RCF< Relative centrifugal force.

RPM Speed indication. Entry in increments of 10.

t/min:s Centrifugation time (max. 99 min: 59 sec).





capacity in ml	7	15	25	50	9-10	10	1.6-5 ml	4-7 ml	15	50	30	50
Ø x L in mm	12×100	17×100	24×100	34×100	16x92	15×102	13 x 75	13 x 100	17x120	29x115	26×95	29×107
Cat. No.	0578 <sup>2)</sup>	0518 <sup>2)</sup>	0519 <sup>2)</sup>	<b>0521</b> <sup>2)</sup>	blood	collectio	n / urine	tubes	0509	0513	0545	0546
							J					
rotor Cat. No. 1116		•					+ 1054-A		•			
Cat. No.	1632	1635	1633	-		16	35		1631	1641	1633	1634
boring Ø x L in mm	13x92	17.5×95	26 x 88	35×96		17.5	x95		17×98	30×98	26×88	29×95
tubes per rotor	18		6			(	3		6	3	(	3
max. RCF <sup>2)</sup>	3,944	3,783	3,703	4,025	3,7	783	2,978	3,783	3,824	3,824	3,703	3,904
radius in mm	98	94	92	100	9	4	74	94	95	95	92	97
run-up in sec	23											
run-down in sec						<b>1</b> 27	<b>(</b> ) 624					

capacity in ml	5	15	1.1-1.4	2.6-3.4	2.7-3	4.5-5	4.9	7.5-8.5	9-10	10	1.6-5	4-7	8	8.5-10	15
Ø x L in mm	12x75	17×100	8x66	13×65	11×66	11 x 92	13×90	15×92	16×92	15×102	13x75	13×100	16 x 125	16×100	17 x 120
Cat. No.	0553 <sup>2)</sup>	0518 <sup>2)</sup>					blood	collection	n/urine	tubes					0509
												J		J	
rotor Cat. No. 1416	•						•								
Cat. No.	1054-A	-		1054-A				-			1054-A			-	
boring Ø x L in mm	13.5×60	17.7x88		13.5×60		17.7×88				13.5 x 60		17.7	′x88		
tubes per rotor	12	12		12		12				12	12	6	12	6	
max. RCF <sup>2)</sup>	3,300	4,146		3,300				4,146			3,300	0 4,146			
radius in mm	82	103	82 103					82		1(	03				
run-up in sec			18												
run-down in sec		<b>©</b> 23 <b>(○)</b> 391													

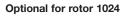
Please note that the RCF values indicated refer only to rotor performance. The max, permissible RCF of tubes used should be verified with the individual manufacturers. The max. RCF for glass tubes annotated with footnote <sup>2)</sup> is 4,000.



capacity in ml	0.2	0.4	0.5	0.8	1.5	2.0		
Ø x L in mm	6x18	6x45	11>	<38				
Cat. No.			-		2078	0536		
lid incl.								
rotor Cat. No. 1022								
Cat. No.	20	24	20	23	<b>2031</b> <sup>7)</sup>	-		
boring Ø x L in mm	6x	40	8x40		10.2 x 19	11.2x39.5		
tubes per rotor			1	2				
max. RCF <sup>2)</sup>			25,	718				
radius in mm	71							
run-up in sec	16							
run-down in sec	<b>()</b> 19 <b>()</b> 359							

capacity in ml	0.2	0.4	0.5	0.8	1.5	2.0		
Ø x L in mm	6x18 6x45 8x30 8x45				11>	(38		
Cat. No.			•		2078	0536		
lid incl.		&						
rotor Cat. No. 1024	•							
Cat. No.	20	24	2023		<b>2031</b> <sup>7)</sup>	-		
boring Ø x L in mm	6x	40	8x	40	10.2×19	11.2x41.1		
tubes per rotor			2	14				
max. RCF <sup>2)</sup>			21,	382				
radius in mm	85							
run-up in sec	30							
run-down in sec	<b>(</b> ) 31 <b>(</b> ) 419							

capacity in ml	0.2	0.4	0.5	0.8	1.5	2.0
Ø x L in mm	6x18 6x45 8x30			8x45	11>	<b>&lt;</b> 38
Cat. No.		,	-		2078	0536
lid with bio-containment <sup>5)</sup> incl.				03		
rotor Cat. No. 1089-A	9					
Cat. No.	20	24	2023		<b>2031</b> <sup>7)</sup>	-
boring Ø x L in mm	6x	40	8x	40	10.2 x 19	11.2x40.9
tubes per rotor			3	0		
max. RCF <sup>2)</sup>			21,	255		
radius in mm	97					
run-up in sec	40					
run-down in sec	<b>(</b> ) 40 <b>(</b> ) 800					





lid **Cat. No. 2425**with bio-containment<sup>5)</sup>,
autoclavable



lid **Cat. No. 2423**with bio-containment <sup>5)</sup>,
autoclavable,
phenol-resistant

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

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

 $<sup>^{7)}</sup>$  For centrifugation at high speeds, we recommend to use form-fitting, phenol-resistant adapters 2031.



capacity in ml	5	6	7
Ø x L in mm	12×75	12 x 82	12×100
Cat. No.	<b>0553</b> <sup>2)</sup>	<b>0501</b> <sup>2)</sup>	<b>0578</b> <sup>2)</sup>
000			
rotor Cat. No. 1118			
Cat. No.		-	
boring Ø x L in mm		12×66	
tubes per rotor		12	
max. RCF <sup>2)</sup>		2,879	
radius in mm		103	
run-up in sec		10	
run-down in sec	O	13 [0]	133

capacity in ml	5	10	2.6-3.4	2.7-3	4-5.5	1.6-5	4-7	
Ø x L in mm	12x75	17×70	13×65	11×66	15×75	13×75	16x75	
Cat. No.	0553 <sup>2)</sup>	2079		blood c	ollectio	n tubes		
						J		
rotor Cat. No. 1114								
Cat. No.	1127	1122	11	27	1122	1127	1122	
boring Ø x L in mm	13.2×53	17.5×53	13.2	x53	17.5×53	13.2×53	17.5×53	
tubes per rotor				8				
max. RCF <sup>2)</sup>	2,963	2,991	2,9	163	2,991	2,963	2,991	
radius in mm	106	107	106		107	106	107	
run-up in sec	9							
run-down in sec	O 14 O 122							

capacity in ml	5	6	10	15	1.1-1.4	2.6-3.4	2.7-3	4-5.5	4.9	7.5-8.5	9-10	1.6-5	4-7	8.5-10
Ø x L in mm	12x75	12 x 82	17×70	17 x 100	8x66	13×65	11×66	15 x 75	13×90	15×92	16x92	13×75	16x75	16x100
Cat. No.	<b>0553</b> <sup>2)</sup>	<b>0501</b> <sup>2)</sup>	2079	<b>0518</b> <sup>2)</sup>		blood collection/urine tubes								
carrier Cat. No. 1123												J		
rotor Cat. No. 1115			•					•	•					
Cat. No.	105	4-A	2x <b>0716</b>	-		1054-A		-				1054-A	0716	-
boring Ø x L in mm	13.5	x60	17.5	x79		13.5 x 60		17.5×79				13.5×60	17.5	5x79
tubes per rotor							6	6						
max. RCF <sup>2)</sup>	2,0	)68	2,376	2,711		2,068			2,7	711		2,068	2,543	2,711
radius in mm	7	4	85	97	74 97					74	91	97		
run-up in sec	8													
run-down in sec	<b>○</b> 12 <b>○</b> 172													

Please note that the RCF values indicated refer only to rotor performance. The max. permissible RCF of tubes used should be verified with the individual manufacturers. The max. RCF for glass tubes annotated with footnote <sup>2)</sup> is 4,000.



capacity in ml	5	6	10	2.6-3.4	2.7-3	4-5.5	1.6-5	4-7	
Сарасну ІІТ ІІІІ	J	0	10	2.0-3.4	2.1-3	4-5.5	1.0-3	4-7	
Ø x L in mm	12×75	12 x 82	17x70	13×65	11×66	15 x 75	13x75	16x75	
Cat. No.	<b>0553</b> <sup>2)</sup>	<b>0501</b> <sup>2)</sup>	2079		blood o	ollectio	n tubes		
rotor Cat. No. 1120		D.							
Cat. No.	11	31	1132	11	31	1132	1131	1132	
boring Ø x L in mm	13:	×53	17.5×53	133	×53	17.5 x 53	13 x 53	17.5×53	
tubes per rotor					3				
max. RCF <sup>2)</sup>		2,879							
radius in mm	103								
run-up in sec	8								
run-down in sec		<b>◯</b> 12 <b>◯</b> 36							

	_					
capacity in ml	5	2.6-3.4	2.7-3	1.6-5		
Ø x L in mm	12×75	13×65	11×66	13×75		
Cat. No.	0553 <sup>2)</sup>	blood c	ollectio	n tubes		
rotor Cat. No. 1126						
Cat. No.		11	27			
boring Ø x L in mm		13.2	x53			
tubes per rotor		1	2			
max. RCF <sup>2)</sup>		2,9	163			
radius in mm	106					
run-up in sec	10					
run-down in sec		<b>1</b> 5	<b>[</b> ] 165			

standard capillaries, heparinised	basic	mylar-coated	self-sealing and mylar-coated			
Cat. No.	2074	1072	1071			
lid as evaluation disk incl.						
rotor Cat. No. 1450	se					
Cat. No.		2077	-			
boring Ø x L in mm		-				
capillaries per rotor		24				
max. RCF <sup>2)</sup>		21,382				
radius in mm	85					
run-up in sec	8					
run-down in sec	12 (0) 117					

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

TECHNOLOGY	EB	A 21				
Small centrifuge, without rotor						
Power supply*)	220-240 V 1 ~	110-127 V 1 ~				
Frequency	50-	60 Hz				
Consumption	500 VA	550 VA				
Emission	EN 55011 group 1, class B EN 61000-3-2, EN 61000-3-3	FCC class B				
Immunity	EN 61000-6-2	-				
Max. capacity	6x	50 ml				
Max. RPM (speed)	18,00	00 min <sup>-1</sup>				
Max. RCF	25,718					
Running time	1 sec - 99 min: 59 sec, ∞ continuous run, short cycle mode (impulse key)					

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Dimensions (H x W x D)

Weight

Cat. No.







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 9001:2008 and ISO 13485:2003 certificates accredited to the company bear witness to the extreme care and responsibility Hettich puts into the manufacturing of centrifuges and their accessories.

247 x 275 x 330 mm

approx. 11 kg

1004-01

















<sup>\*)</sup> Other voltages on request.