

# EBA 280/280 S Small centrifuges

Practical: The rotor can be quickly changed to offer maximum adaptability



### EBA 280/280S





View into the centrifuging chamber showing the rotor 1146 with blood collection tubes

# THESE SMALL CENTRIFUGES OFFER MAXIMUM USER COMFORT

The EBA 280 and EBA 280 S offer exceptional user comfort for small centrifuges and a choice between six rotors. Thanks to a newly-developed rapid changeover system it is possible to quickly switch from one rotor to another, without the need to use any tools and with just one hand. The rotor locks automatically in place and sits securely without the need for screws or tightening.

With the 1146 swing-out rotor the EBA 280 achieves an RCF of 3,112 with up to six 15-ml tubes. The higher-performance EBA 280 S can achieve a maximum RCF of 5,071 with the same tubes. This corresponds to 6,000 RPM. With run-up and run-down times of 11 resp. 13 seconds, emergency samples can be processed within a few minutes.

Both models are suitable for use in medical diagnostics, environmental analysis and research labs, for example for the sedimentation of cells and yeasts or to clarify water and soil samples.





### EBA 280/280S



#### **COMPREHENSIVE RANGE OF ACCESSORIES**

Both the EBA 280 and the EBA 280 S can be used with three angle rotors and three swing-out rotors. The swing-out rotors have an integrated base on which they can stand. They can thus be loaded in comfort outside the centrifuge. All of the common blood collection tubes, urine tubes, screw-top tubes and glass tubes up to 50 ml can be used with adapters. Cells may also be washed in the 1133 decanting rotor.

#### SOPHISTICATED CONTROL SYSTEM

In addition to the innovative rotor changeover system, the EBA 280 and EBA 280 S also feature versatile control systems. The systems are programmable, with 10 memory slots. The parameters time, RPM and RCF can easily be entered via arrow keys. A choice of nine resp. ten ramps is available for the run-up and run-down times.



### AT A GLANCE









### **FIELDS OF APPLICATION**

- Medical diagnostics
   Centrifugation of blood and urine samples

**SAFETY** 

· Lid locking and holding

Environmental analyses

Clarification of water

and soil samples

- Lid dropping protection
- Imbalance switch-off
- Emergency lid lock release

• Research

Sedimentation of cells, yeast cells, bacteria, etc.

### **EASE OF OPERATION**

- Rapid and easy change of rotors through the rapid rotor change system
- Control system with
   programmable memories
- Swing-out rotors with integrated stand
- Rapid and precise setting of centrifugation time, RPM and RCF via arrow keys
- Entry of run-up and run-down times in ramps of 1 (0) to 9

### **DESIGN**

- · Compact design, saving space
- Smooth plastic housing, easy to clean
- Centrifuging chamber of stainless steel
- Metal lid
- Backlit LCD display

#### MAX. RCF

- 4,146 (EBA 280)
- 5,071 (EBA 280S)

### MAX. CAPACITY

• 6 x 50 ml

#### **OUR SERVICE**

You will find information on Hettich partners in your country at www.hettichlab.com



### Swing-out rotor, 6-place



 $$\ne 90^{\circ}$$   $n = 4,700 \text{ min}^{-1}/6,000 \text{ min}^{-1}$  max. RCF 3,112/5,071

### Cat. No. 1146

capacity in ml	0.5	4	5	6	15	1.1-1.4	2.6-3.4	2.7-3	4-5.5	4.5-5
Ø x L in mm	10.7 x 36	10 x 88	12x75	12x82	17 x 100	8x66	13x65	11 x 66	15 x 75	11 x 92
Cat. No.	Pediatric	-	0553 <sup>1)</sup>	0501 <sup>1)</sup>	0518 <sup>1)</sup>	blood co	llection/uri	ne tubes		·
carrier Cat. No. 1147	0									
	U	IJ	IJ	IJ						
rotor Cat. No. 1146										
Cat. No.	1063	-	1053	0767	-	1053			-	
boring Ø x L in mm	11 x 35	17.5 x 80	13.5 x 59	17.5 x 80	17.5 x 80	13.5 x 59			17.5 x 80	
tubes per rotor	6		'	'	•				'	
max. RCF 1) EBA 280	1,877	3,112	2,618	2,865	3,112	2,618			3,112	
max. RCF 1) EBA 280 S	3,059	5,071	4,266	4,669	5,071	4,266			5,071	
radius in mm	76	126	106	116	126	106			126	
run-up in sec	9 (EBA 280) / 11	(EBA 280 S)								
run-down in sec, braked	11 (EBA 280) / 13	3 (EBA 280 S)								

capacity in ml	4.9	7.5-10	1.6-5	4-7	4-7	8.5-10	12
Ø x L in mm	13 x 90	15/16x92	13x75	16x75	13 x 100	16 x 100	17 x 102
Cat. No.	blood colle	ection/urine	tubes	1			
carrier Cat. No. 1147					1		
			IJ	IJ	IJ	IJ	$\bigcup$
		I	P				
rotor Cat. No. 1146							
Cat. No.	-		1053	0767	-		
boring Ø x L in mm	17.5 x 80		13.5 x 59	17.5 x 80	17.5 x 80		
tubes per rotor	6						
max. RCF 1) EBA 280	3,112		2,618	2,865	3,112		
max. RCF 1) EBA 280 S	5,071		4,266	4,669	5,071		
radius in mm	126		106	116	126		
run-up in sec	9 (EBA 280)/11 (	EBA 280 S)					
run-down in sec, braked	11 (EBA 280) / 13	(EBA 280 S)					

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>1)</sup> is 4,000.



### Swing-out rotor, 8-place



 $$\stackrel{$<}{$}90^{\circ}$$   $n = 5,000 \text{ min}^{-1}$ max. RCF 2,991

### Cat. No. (without carriers) 1148

### Swing-out rotor, 12-place



### Cat. No. (without carriers) 1142

capacity in ml	5	6	10	2.6-3.4	2.7-3	4-5.5	1.6-5	4-7
Ø x L in mm	12x75	12 x 82	17x70	13x65	11 x 66	15 x 75	13x75	16x75
Cat. No.	0553 <sup>1)</sup>	0501 <sup>1)</sup>	2079	blood col	llection/uri	ne tubes		
rotor Cat. No. 1148								
Cat. No.	1131-A		1132-A	1131-A		1132-A	1131-A	1132-A
boring Ø x L in mm	13 x 53		17.5 x 53	13x53	13x53		13 x 53	17.5 x 53
tubes per rotor	8							
max. RCF <sup>1)</sup>	2,991							
radius in mm	107							
run-up in sec	8							
run-down in sec, braked	10							

capacity in ml	5	2,6-3,4	2,7-3	1,6-5
Ø x L in mm	12 x 75	13 x 65	11 x 66	13x75
Cat. No.	0553 <sup>1)</sup>	blood colle	ection/urine	tubes
rotor Cat. No. 1142				
Cat. No.	1127-A			
boring Ø x L in mm	13.2x53			
tubes per rotor	12			
max. RCF <sup>1)</sup>	2.963			
radius in mm	106			
run-up in sec	10			
run-down in sec. braked	12			



### Angle rotor, 12-place



 $₹35^{\circ}$ n = 5,000 min<sup>-1</sup> max. RCF 2,879

### Cat. No. 1133

### Angle rotor, 6-place



 $₹35^{\circ}$ n = 6,000 min<sup>-1</sup> max. RCF 4,025

### Cat. No. 1137

capacity in ml	5	6	7
Ø x L in mm	12x75	12 x 82	12x100
Cat. No.	0553 <sup>1)</sup>	0501 <sup>1)</sup>	0578 <sup>1)</sup>
rotor Cat. No. 1133			
Cat. No.	-		
boring Ø x L in mm	12.5 x 66		
tubes per rotor	12		
max. RCF 1)	2,879		
radius in mm	103		
run-up in sec	8		
run-down in sec, braked	10		

capacity in ml	7	15	25	50	9-10	10	1.6-5	4-7	15	50	30	50
Ø x L in mm	12x100	17x100	24 x 100	34 x 100	16 x 92	15 x 102	13 x 75	13x100	17 x 120	29x115	26 x 95	29x107
Cat. No.	0578 <sup>1)</sup>	0518 <sup>1)</sup>	0519 <sup>1)</sup>	0521 <sup>1)</sup>	blood c	ollection/u	rine tube	s	0509	0513	0545	0546
							J					
rotor Cat. No. 1137							+ 1054-A					
Cat. No.	1632	1635	1633	-	1635				1631	1641	1633	1634
boring Ø x L in mm	13x92	17.5 x 95	26 x 88	35 x 96	17.5 x 95				17 x 98	30 x 98	26 x 88	29 x 95
tubes per rotor	18	6		<u>'</u>	6				6	3	6	
max. RCF <sup>1)</sup>	3,944	3,783	3,703	4,025	3,783		2,978	3,783	3,824	3,824	3,703	3,904
radius in mm	98	94	92	100	94		74	94	95	95	92	97
run-up in sec	20			,			'		'		'	
run-down in sec, braked	17											

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>1)</sup> is 4,000.



### Angle rotor, 12-place



 $35^{\circ}$  n = 6,000 min<sup>-1</sup> max. RCF 4,146

### Cat. No. 1139

capacity in ml	0.5	5	15	1.1-1.4	2.6-3.4	2.7-3	4.5-5	4.9	7.5-10	10
Ø x L in mm	10.7 x 36	12x75	17 x 100	8 x 66	13x65	11 x 66	11 x 92	13x90	15/16x92	15 x 102
Cat. No.	Pediatric	0553 <sup>1)</sup>	0518 <sup>1)</sup>	blood col	lection/urine	tubes				
rotor Cat. No. 1139		•								
Cat. No.	1063	1054-A	-	1054-A			-			
boring Ø x L in mm	11 x 35	13.5 x 60	17.7 x 88	13.5 x 60			17.7 x 88			
tubes per rotor	12	12	12	12			12			
max. RCF <sup>1)</sup>	2,777	3,300	4,146	3,300			4,146			
radius in mm	69	82	103	82			103			
run-up in sec	16									
run-down in sec, braked	16									

capacity in ml	1.6-5	4-7	8	8.5-10	12	15
Ø x L in mm	13 x 75	13x100	16 x 125	16x100	17 x 102	17 x 120
Cat. No.	blood colle	ction/urine	tubes			0509
	J	J			Ī	
rotor Cat. No. 1139						
Cat. No.	1054-A	1058	-			
boring Ø x L in mm	13.5 x 60	13.5 x 79	17.7 x 88			
tubes per rotor	12	12	6	12	6	6
max. RCF 1)	3,300	4,146				
radius in mm	82	103				
run-up in sec	16					
run-down in sec, braked	16					

### TECHNICAL DATA



TECHNOLOGY		EBA 280		EBA 280 S				
Small	centrifuge, without rotor							
Power	supply*)	200-240 V 1 ~	100-127 V 1 ~	200-240 V 1 ~	100-127 V 1 ~			
Freque	ncy	50-60 Hz	50-60 Hz	50-60 Hz	50-60 Hz			
Consun	nption	185 VA	185 VA	330 VA	330 VA			
Emissic	on, Immunity	EN/IEC 61326-1, class B	FCC class B	EN/IEC 61326-1, class B	FCC class B			
0	Max. capacity	6 x 50 ml	6x50 ml	6x50 ml	6 x 50 ml			
<b>(</b> )/	Max. RPM (speed)	6,000 min <sup>-1</sup>	6,000 min <sup>-1</sup>	6,000 min <sup>-1</sup>	6,000 min <sup>-1</sup>			
Ž.	Max. RCF	4,146	4,146	5,071	5,071			
Runnin	g time	1 s-99 min:59 s, ∞ continuo	us run, short cycle mode (impulse	key)				
Dimens	sions (HxWxD)	242 x 326 x 389 mm	242 x 326 x 389 mm	242 x 326 x 389 mm	242 x 326 x 389 mm			
Weight		approx. 11 kg	approx. 11 kg	approx. 11 kg	approx. 11 kg			
Cat. N	No.	1101	1101-01	1102	1102-01			

<sup>&</sup>quot;) Other voltages on request.



Hettich centrifuges comply with all relevant EU standards in effect and conform to the European level of quality and safety for medical devices. Evidence is provided by national and international test marks such as IEC 61010 or the CE conformity. The ISO 9001, ISO 13485 and ISO 14001 certificates accredited to the company bear witness to the extreme care and responsibility Hettich puts into the manufacturing of centrifuges and their accessories.



Our certification as an "Authorised Economic Operator" enables accelerated customs clearance.





