



# CENTRIFUGES



**BOECO HAEMATOCRIT  
CENTRIFUGE HC-240**



Haematocrit rotor with lid as evaluation disc included.

capacity	75 µl
Capillaries	1,5 x 75 mm
	
Rotor and Lid as evaluation disc incl.	
Cat.-No.	—
capillaries per rotor	24
RCF	16,060
radius in mm	85
run-up in sec	9
run-down in sec <sup>2)</sup>	16

## BOECO HAEMATOCRIT CENTRIFUGE HC-240

High-speed bench-top centrifuge for haematocrit determinations with brushless frequency drive. At 16.060 g sedimentation is completed in just a little over 6 minutes.

The HC-240 centrifuge includes a segmented haematocrit rotor for 24 capillaries. With the segmented haematocrit rotor every capillary has its own chamber. If a capillary breaks, the fragments stay in this chamber or segment without affecting other capillaries.

The lid of the rotor is evaluation disc and cover in one. The haematocrit value can be read off the lid/evaluation disc right after centrifugation.

### Controls and displays

- ▶ During centrifugation the actual values of the parameters are indicated
- ▶ The centrifuge's speed and running time can be variably adjusted for different applications.
- ▶ Speed display in RPM or RCF  
RPM input from 200 to 10.000 in steps of 10, starting from 10.000 to the maximum speed in steps of 100  
RCF input from 200 to 10.000 in steps of 1, starting from 10.000 to the maximum speed in steps of 10
- ▶ Time t/min: 1 - 99 min. in steps of 1 min.,  
Time t/sec: 1 - 59 sec. in steps of 1 sec.,  
Continuous operation
- ▶ Brake stage, selectable between fast and slow
- ▶ Pulse key: For short centrifugation operations
- ▶ Open lid key

### Safety

- ▶ Lid locking and holding device
- ▶ Emergency lid lock release
- ▶ Lid closure of metal
- ▶ Imbalance switch-off
- ▶ Flexible motor bearings
- ▶ Deep metal rotor chamber (die-cast-aluminium) to securely accommodate the rotor

### Design

- ▶ Smooth plastic housing, easy to clean
- ▶ Metal lid
- ▶ Deep metal rotor chamber

### Technical details

Max. RPM (speed) / RCF:	13,000 rpm / 16,060 RCF
Noise level:	≤ 57 dB(A)
Dimensions in mm (HxWxD):	228 x 262 x 352
Net weight:	approx. 10 kg
Emission / Immunity :	EN / IEC 61326-1, class B / FCC class B

The HC-240 conforms to safety regulations such as IEC 61010, or the CE mark and all relevant EC standards and DIN norms and has been manufactured under ISO 9001:2008

### Code

### Description

BOE 01801-13	BOECO centrifuge HC-240, 208-240V, 50/60 Hz, with haematocrit rotor and lid as evaluation disc
BOE 01801-12	BOECO centrifuge HC-240, 100-127V, 50/60 Hz, with haematocrit rotor and lid as evaluation disc

## BOECO CENTRIFUGE SC-8

Practical and handy the SC-8 is the ideal centrifuge for small sample volumens. It is supplied with a 8-place angle steel rotor, which accomodates various tube systems as well as 15 ml glass tubes without adapters. The centrifuge is microprocessor controlled.

### Controls and displays

- ▶ During centrifugation the actual values of the parameters are indicated
- ▶ The centrifuge's speed and running time can be variably adjusted for different applications:
- ▶ Speed display in RPM or RCF
  - RPM input from 200 to the maximum speed in steps of 10
  - RCF input from 200 to the maximum speed in steps of 1
- ▶ Time t/min: 1 - 99 min. in steps of 1 min.,  
Time t/sec: 1 - 59 sec. in steps of 1 sec.,  
Continuous operation
- ▶ Brake stage, selectable between fast and slow
- ▶ Pulse key: For short centrifugation operations
- ▶ Open lid key

### Safety

- ▶ Lid locking and holding device
- ▶ Emergency lid lock release
- ▶ Lid closure of metal
- ▶ Imbalance switch-off
- ▶ Flexible motor bearings
- ▶ Deep metal rotor chamber (die-cast-aluminium) to securely accomodate the rotor

### Design














- ▶ Smooth plastic housing, easy to clean
- ▶ Metal lid
- ▶ Deep metal rotor chamber

The SC-8 conforms to safety regulations such as IEC 61010, or the CE mark and all relevant EC standards and DIN norms and has been manufactured under ISO 9001:2008

### Technical details

Max RPM (speed) / RCF:	6,000 rpm / 3,421 RCF
Noise level:	≤ 50 dB(A)
Dimensions in mm (HxWxD):	228 x 262 x 352
Net weight:	approx. 9 kg
Emission / Immunity:	EN / IEC 61326-1, class B / FCC class B

Code	Description
BOE 01800-13	BOECO centrifuge SC-8, 208-240 V, 50/60 Hz, complete with 8-place angle rotor
BOE 01800-12	BOECO centrifuge SC-8, 100-127 V, 50/60 Hz, complete with 8-place angle rotor

capacity in ml	4	5	7	15	15	blood collection / urine tubes			
dimensions Ø x L mm	10 x 88	12/13 x 75	13 x 100	17 x 100	17 x 120	max 17 x 100			
									
n=6,000 min <sup>-1</sup> Rotor included									
Cat.-No.	06305	01054-A	01058	-	-	-			
tubes per rotor	8	8	8	8	4	8			
RCF	2,817	2,697	3,461	3,461	3,461	3,461			
radius in mm	70	67	86	86	86	99			
run-up in sec						17			
run-down in sec <sup>2)</sup>						37			



BOECO CENTRIFUGE SC-8



BOECO CENTRIFUGE SC-6



## BOECO CENTRIFUGE SC-6

The BOECO SC-6 is a small centrifuge with a swing-out rotor especially designed for use in clinical laboratories and medical practices. It accepts common blood or urine tubes up to a volume of 15 ml and accelerates them to a maximum speed of 4,000 rpm<sup>-1</sup>

The BOECO SC-6 delivers optimal separation results and a horizontal layer of the separating gel that is identical to that achieved with a large centrifuge. Samples are therefore optimally prepared for analysis.

### Controls and displays

- ▶ During centrifugation the actual values of the parameters are indicated
- ▶ The centrifuge's speed and running time can be variably adjusted for different applications.
- ▶ Speed display in RPM x 100, input in steps of 100
- ▶ Time t/min: 1 - 99 min, continuous operation
- ▶ Pulse key: For short centrifugation operations
- ▶ Open lid key

### Safety

- ▶ Lid locking and holding device
- ▶ Centrifuge chamber of stainless steel
- ▶ Emergency lid lock release
- ▶ Lid closure of metal
- ▶ Imbalance switch-off
- ▶ Flexible motor bearings

### Design

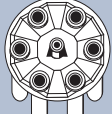







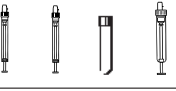








- ▶ Smooth plastic housing, easy to clean
- ▶ Metal lid
- ▶ Stainless steel centrifugation chamber, deep-drawn and seamless

The SC-6 conforms to safety regulations such as IEC 61010, or the CE mark and all relevant EC standards and DIN norms and has been manufactured under ISO 9001:2008

### Technical details

Max RPM (speed) / RCF:	4,000 rpm / 2,254 RCF
Noise level:	≤ 50 dB(A)
Dimensions in mm (HxWxD):	239 x 326 x 389
Net weight:	approx. 13 kg
Emission / Immunity:	EN / IEC 61326-1, class B / FCC class B

Code	Description
BOE 02300-13	BOECO centrifuge SC-6, 200-240V, 50/60 Hz, complete with 6-place swing-out rotor and carriers 02331 and 02333 (6 of each)
BOE 02300-12	BOECO centrifuge SC-6, 100-127V, 50/60 Hz, complete with 6-place swing-out rotor and carriers 02331 and 02333 (6 of each)

capacity in ml	4	5	6	1,6-7	4-7	8,5-10	15	blood collection / urine tubes
dimensions Ø x L mm	10 x 88	12x75	12x82	13/16x75	13x100	16x100	17x100	max 17 x 100
 n=4,000 min <sup>-1</sup> Rotor and carriers included								
								
Cat.-No.	02331	02333	02333	02333	02331	02331	02331	02331
tubes per rotor	6	6	6	6	6	6	6	6
RCF	2,254	1,807	1,807	1,807	2,254	2,254	2,254	2,254
radius in mm	126	101	101	101	126	126	126	126
run-up in sec	10							
run-down in sec <sup>2)</sup>	22							

## BOECO CENTRIFUGE C-28A

The non-refrigerated microprocessor-controlled C-28A is the ideal bench-top centrifuge for performing daily routine tasks in doctors' laboratories and small hospitals. But because of the wide range of accessories the C-28A can also be used for sample preparation in research and industrial laboratories.

The centrifuge has a brushless frequency drive (no carbon brushes). A special locking device allows effortless opening and closing of the lid with just one hand.

### Controls and displays

- ▶ During centrifugation the actual values of the parameters are indicated
- ▶ Entry of the running parameters via foil keypad
- ▶ Speed display in RPM x 100, input in steps of 100
- ▶ Time t/min: 1 - 99 min, continuous operation
- ▶ Impulse key: For short centrifugation operations

### Safety


















- ▶ Housing and lid of metal finished in a scratch and impact resistant coating
- ▶ Centrifuge chamber of stainless steel
- ▶ Lid locking and holding device
- ▶ See-through glass in the lid
- ▶ Emergency lid lock release
- ▶ Imbalance switch-off
- ▶ Easily exchangeable rotors
- ▶ Automatic rotor recognition

The C-28A conforms to safety regulations such as IEC 61010 or the CE mark and all relevant EC standards and DIN norms and has been manufactured under ISO 9001:2008

### Technical details

Max. RPM (speed) / RCF: 6,000 rpm / 4,226 RCF  
 Noise level: < 58 dB(A) (dependent on rotor)  
 Dimensions in mm: 257 (H) x 366 (W) x 430 (D)  
 Net weight: approx. 23 kg  
 Emission / Immunity: EN / IEC 61326-1 class B, FCC class B

Code	Description
BOE 01206-13	BOECO centrifuge C-28A, 208-240 V, 50-60 Hz, without rotor
BOE 01206-12	BOECO centrifuge C-28A, 100-127 V, 50-60 Hz, without rotor

capacity in ml	5	4-7	15	15	50	12	50	50
dimensions Ø x L mm	12 x 75	13 x 100	17 x 100	17 x 120	29 x 115	17 x 100	29 x 115	29 x 107
 n=4,000 min <sup>-1</sup> Cat.-No. 01418								
	+ 01054A 	+ 00716 	+ 00716 	+ E2109 	+ E2110 	+ 00716 	+ 00716 	+ 00716 
Cat.-No.	01467	01467	01467	01467	01468	01467	01468	01468
tubes per rotor	32	32	32	32	8	32	8	8
RCF	2,182	2,612	2,540	2,594	2,486	2,540	2,486	2,486
radius in mm	122	146	142	145	139	142	139	139
run-up in sec	36							
run-down in sec. <sup>2)</sup>	43							

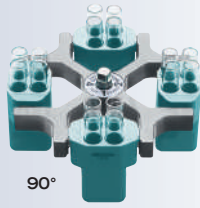


BOECO CENTRIFUGE C-28A



ROTOR 01418 WITH 01467


Swing-out rotor 01624,  
4-place, illustrated with  
carriers 01369  
n= 4,000 min<sup>-1</sup>,  
max RCF 2,665,  
max. cap. 4 x 100 ml.



90°

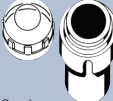


Swing-out rotor, 4-place,  
01624 illustrated with  
carriers 01481 and lids  
01492 with bio-  
containment

capacity in ml	5	4-7	9	9	15	15	1,6 - 7	20	25	45	50
dimensions Ø x L mm	12/13x75	13x100	14x100	14x100	17x100	17x100	12/13x75 16 x 75	21x100	24x100	31x100	34x100
 n=4,000 min <sup>-1</sup> rotor Cat.-No. 01624											
Cat.-No.	01372	01739	01370	01741	01369	01742	01742	01346	01745	01345	01746
tubes per rotor	68	28	20	40	16	28	28	8	8	4	4
RCF	2,164	2,451	2,308	2,415	2,308	2,415	2,325	2,361	2,451	2,361	2,451
radius in mm	121	137	129	135	129	137	130	132	137	132	137
run-up in sec	22										
run-down in sec. <sup>2)</sup>	25										

Please take care  
not to exceed the  
tubes' max.  
permissible RCF!

2) braked  
run-down

capacity in ml	1	3	5/6/7	4-10	9/15	25	30	50	50	85	100	15	50	1,6 - 7	4 - 10
dimensions Ø x L mm	6x45 rhesus	10 x 60	12 x 75-100	16x75/100	14/17 x 100	24 x 100	26 x 95	29 x 107	34 x 100	38 x 106	44 x 100	17 x 120	29 x 115	13x75/100	16x75/100
lid with bio- containment 01492    Carrier Cat.-No. 01481															
Cat.-No.	01339	01343	01383	01348	01329	01330	04417	04416	01331	01396	00761	01347	01384	01383	01348
tubes per rotor	108	36	20	16	16	4	4	4	4	4	4	4	4	20	16
RCF	2,594	2,630	2,558	2,522	2,540	2,433	2,451	2,630	2,415	2,612	2,558	2,665		2,558	2,522
radius in mm	145	147	143	141	142	136	137	147	135	146	143	149		143	141
run-up in sec	22														
run-down in sec. <sup>2)</sup>	25														




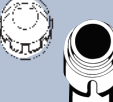
90°

Swing-out rotor, 4-place 01324,  
illustrated with carrier 01398 and  
adapter 01483A  
n= 4,000 min<sup>-1</sup>, max RCF 2,522



Swing-out rotor, 4-place 01324,  
illustrated with carrier 01490 and  
lids 01492  
n= 4,000 min<sup>-1</sup>, max RCF 2,630  
for max. 4 x 100 ml










capacity ml	5-7	9	15	2,6-3,4	4-5,5	9-10	10	4-7	15	50	12	50
dimensions Ø x L mm	12x75/82/100	14x100	17x100	13x65	15x75	16x92	15x102	16 x 75	17x120	29x115	17x100	29x115
 Carrier Cat.-No. 01398												
Cat.-No.	01486	01482A	01486	01482A	01482A	01482A	01482A	01482A	01483A	01484	01482A	01484
tubes per rotor	20	16	20	16	16	16	16	16	16	4	16	4
RCF	2,486	2,522	2,486	2,272	2,522	2,397	2,612	2,576	2,522	2,576	2,522	2,576
radius in mm	139	141	139	127	141	134	146	144	141	144	141	144
run-up in sec	27											
run-down in sec. <sup>2)</sup>	30											

capacity ml	1,5/2,0	1	3/4	5	6/7	9/15	25	50	100	10	30	50	85	15	50	12	25	30	50	
dimensions Ø x L mm	11 x 38	6 x 45 Rhesus	10x60/88	12x75	12x82/100	14/17x100	24 x 100	34 x 100	44 x 100	16x80/100	26x95	29x107	38x106	17x120	29x115	17x100	25 x 90	25x110	29x115	
lid No. 01492 biocontainment <sup>2)</sup>    Carrier Cat.-No. 01490																				
Cat.-No.	01351	01339	01343	01383	01383	01329	01330	01331	00761	01348	04417	04416	01396	01356	01347	01384	06311	01363	01365	06318
tubes per rotor	20	108	36	20	20	16	4	4	4	16	4	4	4	12	4					
RCF	2,415	2,558	2,594	2,522	2,522	2,504	2,397	2,379	2,522	2,486	2,415	2,594	2,576	2,630			2,308	2,630		
radius in mm	135	143	145	141	141	140	134	133	141	139	135	145	144	147			129	147		
run-up in sec	27																			
run-down in sec. <sup>2)</sup>	30																			

90°










**Swing-out rotor, 8-place, for 8 x 15 ml, n= 4,000 min<sup>-1</sup>, RCF 2,415**  
Stainless steel, with suspensions No. 01644, PA, fibreglass reinforced.

capacity in ml	5	4-7	10	15
dimensions Ø x L mm	12/13x75	17 x 70	13 x 100	17 x 100
				
n=4,000 min <sup>-1</sup> Cat.-No. 01611				
Cat.-No.	01131-A	01132-A	01643	01644
tubes per rotor	8	8	8	8
RCF	1,914		2,415	
radius in mm	107		135	
run-up in sec	22			
run-down in sec. <sup>2)</sup>	25			







**Swing-out rotor, 12-place, for 12 x 15 ml n= 4,000 min<sup>-1</sup>, RCF 2,680,**  
Stainless steel, with suspensions No. 01621, PA, fibreglass reinforced.

capacity in ml	5	4-7	15
dimensions Ø x L mm	12/13 x 75	15/16 x 75	17 x 100
			
n=5,000 min <sup>-1</sup> Cat.-No. 01628			
Cat.-No.	01127-A	01122	01621
tubes per rotor	12	12	12
RCF	2,236	2,254	2,683
radius in mm	125	126	150
run-up in sec	22		
run-down in sec. <sup>2)</sup>	25		

45°







**Swing-out rotor, 8-place, for 8 x 50/15 ml Falcon tubes n= 4,000 min<sup>-1</sup>, RCF 2,469**  
stainless steel, with suspensions, aluminium.

capacity in ml	15	50
dimensions Ø x L mm	17 x 120	29 x 115
		
n=4,000 min <sup>-1</sup> Cat.-No. 01617		
Cat.-No.	01462A	-
tubes per rotor	8	
RCF	2,469	
radius in mm	138	
run-up in sec	22	
run-down in sec. <sup>2)</sup>	25	

90°



















**Swing-out rotor, 6-place, for 6 x 50/15 ml Falcon tubes n= 4,000 min<sup>-1</sup>, RCF 2,701,**  
Stainless steel, with suspensions, PA, fibreglass reinforced.

capacity in ml	15	50
dimensions Ø x L mm	17 x 120	29 x 115
		
n=4,000 min <sup>-1</sup> Cat.-No. 01619		
Cat.-No.	01462-A	-
tubes per rotor	6	
RCF	2,701	
radius in mm	151	
run-up in sec	22	
run-down in sec. <sup>2)</sup>	25	

35°



**Angle rotor, 6-place, Cat. No. 01620A n= 6,000 min<sup>-1</sup>, max. RCF 4,226**  
illustrated with adapter set 01646









capacity in ml	10	15	30	50	50	85	15	50
dimensions Ø x L mm	16 x 80	17 x 100	26 x 95	29 x 107	34 x 100	38 x 106	17 x 120	29 x 115
								
n=6,000 min <sup>-1</sup> Cat.-No. 01620A								
Cat.-No.	01448	01451	01447	01446	01463	-	01466	01646
tubes per rotor	12	6	6	6	6	6	6	6
RCF	3,904	3,904	3,824	4,025	4,146	4,226	3,985	
radius in mm	97	97	95	100	103	105	99	
run-up in sec	19							
run-down in sec. <sup>2)</sup>	22							

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

35°



**Angle rotor, 12-place, Cat. No. 01613 n= 6,000 min<sup>-1</sup>, max. RCF 4,146**

capacity in ml	1,6-5	4-7	8,5-10	15	15
dimensions Ø x L mm	12/13 x 75	13 x 100	16 x 100	17 x 100	17 x 120
					
n=6,000 min <sup>-1</sup> Cat.-No. 01613					
Cat.-No.	01054-A	01058	-	-	-
tubes per rotor	12	12	12	12	6
RCF	3,300	4,146			
radius in mm	86	103			
run-up in sec	13				
run-down in sec. <sup>2)</sup>	15				



Cyto rotors, 4-place and 6-place suitable for C-28A more information is available in a detailed cyto brochure.

**2) Braked run down in sec.**

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



**BOECO MINI  
CENTRIFUGE M-6**

## BOECO MINI CENTRIFUGE M-6

This Mini-centrifuge is ideal for quick spin downs for Micro and PCR tubes and PCR strip. The M-6 is supplied with a 6 x 1,5/2,0ml angle rotor, a 2 x 8 x 0,2ml strip rotor and a slide rotor.

Operation of the centrifuge begins when the lid is closed. When opening the lid the rotor automatically decelerates and comes to a stop.

A rubber footplate keeps the unit stable and avoids vibration.

The M-6 is CE marked and has been manufactured under ISO 9001

### Technical details

Max. RPM (speed) / RCF:	6,000 rpm / 2,000 x g
Noise level:	50 dB(A)
Power:	120V to 240V, 50/60Hz
Dimensions in mm:	175 (D) x 148 (W) x 118 (H)
Net weight:	approx 1,1 kg

Code	Description
BOE 8074000	BOECO Mini Centrifuge M-6, EU Plug
BOE 8074100	BOECO Mini Centrifuge M-6, US Plug
BOE 8074200	BOECO Mini Centrifuge M-6, UK Plug

## BOECO CENTRIFUGE MICROSPIN 12

is a compact bench-top microliter centrifuge for medical and biological research, molecular diagnostics, biochemistry, immunology and cell technologies. It can be used for extracting RNA/DNA samples, separation of cell suspensions and other micro quantitative analysis.

The microprocessor control provides precise control of the set parameters and a user-friendly interface allows a easy entry of parameters.

The brushless motor provides quite, vibration free performance, even at high speeds and a long product service life.

The angle rotor is made out of aluminium.

Due to the low voltage external power supply, the Microspin 12 can be used in cold rooms.

### Controls and displays

- ▶ During centrifugation the actual values of the parameters are indicated
- ▶ Entry of the running parameters via foil keypad
- ▶ Speed display in RPM x 100, increment 100 rpm
- ▶ Time t/min: 1 - 30 min, increment 1 min
- ▶ Open lid key

### Safety

- ▶ Lid locking and holding device
- ▶ Emergency lid lock release
- ▶ Metal protective inserts and enclosures inside the body
- ▶ See-through glass in the lid
- ▶ Imbalance switch-off

The Microspin 12 conforms to safety regulations such as EN 61326, EN 61010 or the CE mark and all relevant EC standards and DIN norms and has been manufactured under ISO 9001:2000

### Technical details

Max. RPM (speed) / RCF:	14,500 rpm / 12,400 x g
Noise level:	≤ 62 dB(A)
Power (external):	AC 100-240V, 60W/DC24V, 2.5A
Dimensions in mm:	200 (D) x 240 (W) x 125 (H)
Net weight:	approx. 3,5 kg

Code	Description
BOE 8075000	BOECO Micro centrifuge Microspin 12, 100-240V, 50/60 Hz, with angle rotor for 12 x 1,5 / 2,0 ml microtubes and spin columns. And each 12 adapters for 0,2 and 0,5 ml microtubes



**BOECO CENTRIFUGE MICROSPIN 12**

## BOECO CENTRIFUGE MC-24

Powerful, space-saving, low-noise, reliable and microprocessor-controlled microlitre centrifuge with brushless frequency drive.

### Controls and displays

- ▶ During centrifugation the actual values of the parameters are indicated
- ▶ Entry of the running parameters via foil keypad
- ▶ Speed display in RPM or RCF
  - RPM input from 200 to 10.000 in steps of 10, starting from 10.000 to the maximum speed in steps of 100
  - RCF input from 200 to 10.000 in steps of 1, starting from 10.000 to the maximum speed in steps of 10
- ▶ Time t/min: 1 - 99 min. in steps of 1min.,  
Time t/sec: 1-59 sec. in steps of 1 sec.,  
Continuous operation
- ▶ Brake stage, selectable between fast and slow
- ▶ Pulse key: For short centrifugation operations    ▶ Open lid key

### Safety

- ▶ Lid locking and holding device    ▶ Emergency lid lock release
- ▶ Motor overheating protection    ▶ Imbalance switch-off
- ▶ Deep metal rotor chamber (die-cast-zinc) to securely accommodate the rotor

The MC-24 conforms to safety regulations such as IEC 61010 or the CE mark and all relevant EC standards and DIN norms and has been manufactured under ISO 9001:2008

### Technical details

Max. RPM (speed) / RCF: 14,000 rpm / 18,845 RCF  
 Noise level: 59 dB(A)  
 Emission / Immunity: EN / IEC 61326-1 class B / FCC class B  
 Dimensions in mm: 228 (H) x 262 (W) x 352 (D)  
 Net weight: approx. 11 kg



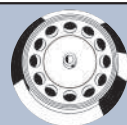

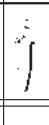


BOECO CENTRIFUGE MC-24

NEW VERSION WITH 14.000 RPM  
 AVAILABALE IN Q3 / 2018

Code	Description
BOE 01203-13	BOECO centrifuge MC-24, 200-240 V, 50-60 Hz, without rotor
BOE 01203-12	BOECO centrifuge MC-24, 100-127 V, 50-60 Hz, without rotor




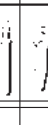



Angle rotor,  
 12-place  
 Cat. No. 01252-A  
 12-place,  
 n= 14,000 min<sup>-1</sup>,  
 max RCF 15,558

capacity in ml	1.5	0.5/0.8	0.2 /0.4	2.0
dimensions Ø x L mm	11x38	8x30/45	6x18/45	11x38
				
n=14,000 min <sup>-1</sup> Cat.-No. 01252-A	with high speeds we recommend to use adapter No. 02031			
Cat.-No.	-	02023	02024	-
tubes per rotor	12			
RCF	15,558			
radius in mm	71			
run-up in sec.	15			
run-down in sec. <sup>2)</sup>	15			

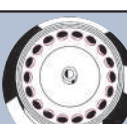



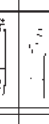


Angle rotor,  
 24-place,  
 Cat. No. 01226-A  
 n= 14,000 min<sup>-1</sup>,  
 max RCF 18,845

capacity in ml	1.5	0.5/0.8	0.2 /0.4	2.0
dimensions Ø x L mm	11x38	8x30/45	6x18/45	11x38
				
n=14,000 min <sup>-1</sup> Cat.-No. 01226-A	with high speeds we recommend to use adapter No. 02031			
Cat.-No.	-	02023	02024	-
tubes per rotor	24			
RCF	18,845			
radius in mm	86			
run-up in sec.	15			
run-down in sec. <sup>2)</sup>	15			

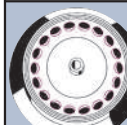

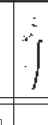






Angle rotor,  
 18-place,  
 Cat. No. 01258-A  
 n= 14,000 min<sup>-1</sup>,  
 max RCF 16,654

capacity in ml	1.5	0.5/0.8	0.2 /0.4	2.0
dimensions Ø x L mm	11x38	8x30/45	6x18/45	11x38
				
n=14,000 min <sup>-1</sup> Cat.-No. 01258-A	with high speeds we recommend to use adapter No. 02031			
Cat.-No.	-	02023	02024	-
tubes per rotor	18			
RCF	16,654			
radius in mm	76			
run-up in sec.	15			
run-down in sec. <sup>2)</sup>	15			



Angle rotor,  
 18-place,  
 Cat. No. 01213-A  
 n= 14,000 min<sup>-1</sup>,  
 max RCF 16,654

capacity in ml	1.5	0.5/0.8	0.2 /0.4	2.0	1.5	2.0
dimensions Ø x L mm	11x38	8x30/45	6x18/45	11x38	micro spin columns 11x38	
						
n=14,000 min <sup>-1</sup> Cat.-No. 01213-A	with high speeds we recommend to use adapter No. 02031				with high speeds we recommend to use adapter No. 02031	
Cat.-No.	-	02023	02024	-	-	-
tubes per rotor	18					
RCF	16,654					
radius in mm	76					
run-up in sec.	16					
run-down in sec. <sup>2)</sup>	15					

The special raised rim of the rotor 01213-A enables centrifugation with open tube lids.





BOECO CENTRIFUGE M-240



BOECO CENTRIFUGE M-240R

## BOECO CENTRIFUGES M-240 / M-240R

The M-240 and M-240R rank among the fastest centrifuges in their class – With a maximum speed of 15,000 rpm and an RCF of 21,382 they are not only fast, the M-240R also refrigerates quickly: to +4°C with the Fast Cool function in 10 to 15 minutes..

Even thermosensitive samples can be gently centrifuged thanks to highly reliable refrigeration. Best separation results are guaranteed with the smooth-running, high-performance motor featuring a maintenance-free frequency drive. With the optional autoclavable and aerosol-tight accessories, even infectious materials can be processed safely for both the user and the environment.

### User-Friendliness

- ▶ Automatic lid locking
- ▶ Quick-entry foil keypad
- ▶ Easy-to-read, digital display
- ▶ Display of current parameter values
- ▶ Select key for parameter selection
- ▶ Impulse key for short centrifuging
- ▶ Open lid key
- ▶ RCF key
- ▶ Twist knob to enter values
- ▶ RPM in increments of 10
- ▶ Running time in minutes, max. 99 min
- ▶ Temperature in increments of 1°C (M-240R)
- ▶ 4 programmable memories

### Refrigeration (M-240R)

- ▶ Infinitely variable setting from –10 °C to +40 °C
- ▶ Fast Cool function in 10 - 15 min to +4 °C
- ▶ Stand-by mode maintains the set temperature
- ▶ Automatic refrigeration switch-off when the lid is opened

### Safety

- ▶ Lid dropping protection
- ▶ Lid locking and holding
- ▶ Emergency lid lock release
- ▶ Motor overheating protection
- ▶ Chamber overheating protection
- ▶ Imbalance switch-off
- ▶ Standstill indication

with the refrigerated model M-240R the LED in the Open key lights up with the M-240 the lid opens automatically after the rotor has come to a standstill

The M-240 / M-240R conform to safety regulations such as IEC 61010, all relevant EC standards and DIN norms and have been manufactured under ISO 9001:2008

### Technical details

	M-240	M-240R
Max. RPM (speed) / RCF:	15,000 RPM / 21,382 RCF	
Noise level: (dependent on rotor)	≤ 59 dB (A)	≤ 52 dB(A)
Dimensions in mm (HxWxD):	260 x 275 x 344	260 x 281 x 533
Net weight:	approx 11,5 kg	28 kg
Emission / Immunity:	EN / IEC 61326-1 / class B / FCC class B	








Code	Description
BOE 02400-13	BOECO centrifuge M-240, 200-240 V, 50-60 Hz, without rotor
BOE 02400-12	BOECO centrifuge M-240, 100-127 V, 50-60 Hz, without rotor
BOE 02405-13	BOECO refrigerated centrifuge M-240R, 200-240 V, 50 Hz, without rotor
BOE 02405-12	BOECO refrigerated centrifuge M-240R, 100-127 V, 50-60 Hz, without rotor

## Rotors for M-240 and M-240 R

40°





**Angle rotor, 24-place**  
**Cat. No. 02424B**  
 n= 15,000 min<sup>-1</sup>,  
 max RCF 21.382  
 Lid OE3243 incl.

capacity in ml	1.5	0.5/0.8	0,2 /0.4	2.0
dimensions Ø x L mm	11x38	8x30/45	6x18/45	11x38
 n=15,000 min <sup>-1</sup> Cat.-No. 02424B with high speeds we recommend to use adapter No. 02031				
				
Cat.-No.	—	02023	02024	—
tubes per rotor	24			
RCF	21,382			
radius in mm	85			
run-up in sec.	20			
run-down in sec. <sup>2)</sup>	28			
temperature °C <sup>1)</sup>	+4			

45°














**Angle rotor, 30-place,**  
**Cat. No. 02430B**  
 n= 15,000 min<sup>-1</sup>  
 max RCF 20.376  
 Lid OE3243 incl.

capacity in ml	0,5
dimensions Ø x L mm	8 x 30
 n=15,000 min <sup>-1</sup> Cat.-No. 02430B	
Cat.-No.	—
tubes per rotor	30
RCF	20,376
radius in mm	81
run-up in sec.	19
run-down in sec. <sup>2)</sup>	28
temperature °C <sup>1)</sup>	+4

45°



**Angle rotor, 24-place**  
**Cat. No. 02428**  
 n= 15,000 min<sup>-1</sup>,  
 max RCF 21,382  
 Lid with bio-containment,  
 autoclavable, phenol-resistant incl.








capacity in ml	1.5	0.5/0.8	0,2 /0.4	2.0	1.5	2.0
dimensions Ø x L mm	11x38	8x30/45	6x18/45	11x38	micro spin columns 11x38	
 n=15,000 min <sup>-1</sup> Cat.-No. 02428 with high speeds we recommend to use adapter No. 02031						
						
Cat.-No.	—	02023	02024	—	—	—
tubes per rotor	24					
RCF	21,382					
radius in mm	85					
run-up in sec.	20					
run-down in sec. <sup>2)</sup>	28					
temperature °C <sup>1)</sup>	+4					

The special raised rim of the rotor 02428 enables centrifugation of tubes with open lids. The rim supports the lids so they will not rip off during centrifugation. Centrifugation with open tube lids is performed for example when spinning tubes with filter elements, so called „spin columns“

52,5° inner /  
40° outer



**Angle rotor, 30-place,**  
**Cat. No. 02427A**  
 n= 15,000 min<sup>-1</sup>,  
 max RCF 20.627  
 Lid OE3243 incl.

capacity in ml	1.5	0.5/0.8	0,2 /0.4	2.0
dimensions Ø x L mm	11x38	8x30/45	6x18/45	11x38
 n=15,000 min <sup>-1</sup> Cat.-No. 02427A with high speeds we recommend to use adapter No. 02031				
				
Cat.-No.	—	02023	02024	—
tubes per rotor	30			
RCF	20,627			
radius in mm	82			
run-up in sec.	22			
run-down in sec. <sup>2)</sup>	30			
temperature °C <sup>1)</sup>	+4			

Optional for rotor 02424B, 02430B, 02426B and 02427A



Lid (Cat. No. 02425)  
 with bio-containment  
 autoclavable






Lid (Cat. No. 02423)  
 with bio-containment  
 autoclavable,  
 phenol-resistant

45°





**Angle rotor, 32-place, 4x 8**  
**for PCR tubes and strips**  
**Cat. No. 02418A**  
 n= 15,000 min<sup>-1</sup>  
 max RCF 14,338  
 Optional Lid OE3423

capacity in ml	0,2	
dimensions Ø x L mm	6 x 18	PCR strips
 n=15,000 min <sup>-1</sup> Cat.-No. 02418A		
Cat.-No.	—	
tubes per rotor	32	4 x 8
RCF	14,338	
radius in mm	57	
run-up in sec.	19	
run-down in sec. <sup>2)</sup>	28	
temperature °C <sup>1)</sup>	+4	

40°



**Angle rotor, 20-place**  
**for cryo tubes**  
**Cat. No. 02426B**  
 n= 15,000 min<sup>-1</sup>  
 max RCF 21,130  
 Lid OE3243 incl.

capacity in ml	1,8
dimensions Ø x L mm	cryo tubes
 n=15,000 min <sup>-1</sup> Cat.-No. 02426B	
Cat.-No.	—
tubes per rotor	20
RCF	21,130
radius in mm	84
run-up in sec.	19
run-down in sec. <sup>2)</sup>	28
temperature °C <sup>1)</sup>	+4

## BOECO CENTRIFUGES U-320 / U-320R

Because of their comprehensive range of accessories, the U-320 and U-320R centrifuges are the perfect universal centrifuges for routines in basic research and R&D laboratories of the pharmaceutical and biotechnical industry. The microprocessor controlled centrifuges have a brushless frequency drive (no carbon brushes) and a motorized lid locking.

### Performance

- ▶ High RCF
- ▶ Extremely short run-up and run-down times

### Design

- ▶ Metal housing, metal lid
- ▶ Stainless steel centrifugation chamber
- ▶ Viewing port in the lid

### Refrigeration (U-320R)

- ▶ Infinitely variable setting from  $-20\text{ }^{\circ}\text{C}$  to  $+40\text{ }^{\circ}\text{C}$
- ▶ Fast cool function

### User-Friendliness

- ▶ Automatic lid locking
- ▶ Easily exchangeable rotors
- ▶ 10 programmable memories
- ▶ 9 acceleration and braking ramps, or unbroken run down time

### Safety

- ▶ Lid locking and holding during rotor run
- ▶ Emergency lid lock release
- ▶ Motor overheating protection
- ▶ Chamber overheating protection (with U-320R)
- ▶ Imbalance switch-off
- ▶ Automatic rotor recognition
- ▶ Lid dropping protection

### Controls and displays

- ▶ During centrifugation the actual values of the parameters are indicated
- ▶ Change-over RPM/RCF: by entering the rotor radius  $r/\text{mm}$  the Centrifuge will calculate/indicate speed or RCF.
- ▶ Time preselection in steps of minutes and seconds / continuous operation
- ▶ Temperature  $T/^{\circ}\text{C}$ : Input in increments of  $1^{\circ}\text{C}$
- ▶ Impulse key: For short centrifugation operations

The U-320 / U-320R conform to safety regulations such as IEC 61010 or the CE mark and all relevant EC standards and DIN norms and have been manufactured under ISO 9001:2008

### Technical details

	U-320	U-320 R
Max. Capacity:	4 x 200 ml, 6 x 94 ml	
Max. RPM (speed) / RCF:	15,000 RPM / 21,382 RCF	
Noise level: (dependent on rotor)	$\leq 68\text{ dB (A)}$	$\leq 58\text{ dB(A)}$
Dimensions in mm (HxWxD):	346 x 395 x 520	346 x 401 x 695
Net weight:	approx 31 kg	53 kg
Emission / Immunity:	EN IEC 61326-1, class B / FCC Class B	

Code	Description
BOE 01401-13	BOECO centrifuge U-320, 200-240 V, 50-60 Hz, without rotor
BOE 01401-12	BOECO centrifuge U-320, 100-127 V, 50-60 Hz, without rotor
BOE 01406-13	BOECO refrigerated centrifuge U-320R, 200-240 V, 50 Hz / 240 V, 60 Hz, without rotor
BOE 01406-12	BOECO refrigerated centrifuge U-320R, 115-127 V, 60 Hz, without rotor



BOECO CENTRIFUGE U-320






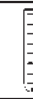

























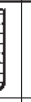







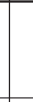
















BOECO CENTRIFUGE U-320R

Swing-out rotor 01624,  
4-place, illustrated with  
carriers 01369  
n= 4,000 min<sup>-1</sup>,  
max. RCF 2,665  
max. cap. 4 x 100 ml.



Swing-out rotor,  
No. 01624, 4-place,  
n= 4,000 min<sup>-1</sup>,  
max. RCF 2,665  
for max. 4 x 100 ml

capacity in ml	5	4-7	9	9	15	1,6 - 7	15	20	25	45	50
dimensions Ø x L mm	12/13x75	13 x 100	14 x 100	14 x 100	17 x 100	12/13x75 16 x 75	17 x 100	21 x 100	24 x 100	31 x 100	34 x 100
											
n=4,000 min <sup>-1</sup> Cat.-No. 01624											
Cat.-No.	01372	01739	01370	01741	01369	01742	01742	01346	01745	01345	01746
tubes per rotor	68	28	20	40	16	28	28	8	8	4	4
RCF	2,164	2,451	2,308	2,415	2,308	2,325	2,415	2,361	2,451	2,361	2,451
radius in mm	121	137	129	135	129	130	137	132	137	132	137
run-up in sec.	20	22		20		22		20			
run-down in sec. <sup>2)</sup>	25										
temperature °C <sup>1)</sup>		- 17		- 15	- 17	- 15	- 15	- 15	- 15	- 17	- 15

capacity in ml	1	3	1,6-7	4-10	9/15	25	30	50	50	85	100	15	50	1,6 - 7	4 - 10
dimensions Ø x L mm	6x45 Rhesus	10 x 60	13 x 75/100	16x75/100	14/17 x 100	24 x 100	26 x 95	29 x 107	34 x 100	38 x 106	44 x 100	17 x 120	29 x 115	13x75/100	16x75/100
 lid 01492															
Cat.-No. 01481															
Cat.-No.	01339	01343	01383	01348	01329	01330	04417	04416	01331	01396	00761	01347	01384	01383	01348
tubes per rotor	108	36	20	16	16	4	4	4	4	4	4	4	4	20	16
RCF	2,594	2,630	2,558	2,522	2,540	2,433	2,451	2,630	2,415	2,612	2,558	2,665	2,558	2,558	2,522
radius in mm	145	147	143	141	142	136	137	147	135	146	143	149	149	143	141
run-up in sec	20														
run-down in sec. <sup>2)</sup>	25														
temperature °C <sup>1)</sup>	- 15														

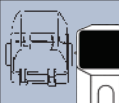














1) Lowest attainable temperature in the U-320 R at max. speed.

2) braked run-down

Please take care not to exceed the tubes' max. permissible RCF!















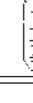

Swing-out rotor, No. 01494  
4-place,  
n= 5,000 min<sup>-1</sup>,  
max. RCF 4,193  
illustrated with buckets  
01427

capacity ml	1.5/2.0	1	3	5	6	7	9	15	25	50	15	25	30	50
dimensions Ø x L mm	11 x 38	6 x 45 Rhesus	10 x 60	13 x 75	12 x 82	12 x 100	14 x 100	17 x 100	24 x 100	34 x 100	17 x 120	25 x 90	25 x 110	29 x 115
 lid Cat.-No. 01421 Cat.-No. 01427														
Cat.-No.	05277	01357	01327	01732	05229	05230	05237	05231	05232	05233	05275	01731	05272	05276
tubes per rotor	36	120	48	32	48	48	24	24	8	4	4	8	4	4
RCF	4,109	4,081	4,053	4,025	4,053			3,941			4,165	3,969	4,025	4,053
radius in mm	147	146	145	144	145			141			149	142	144	145
run-up in sec	30													
run-down in sec. <sup>2)</sup>	32													
temperature °C <sup>1)</sup>	- 7													

3) When using these tubes, bucket 01427 cannot be closed with lid 01421



Swing-out rotor, No. 01494  
4-place,  
n= 5,000 min<sup>-1</sup>,  
max. RCF 4,193  
illustrated with buckets 01425

capacity ml	1.5/2.0	1	3	2,6-7	5/6/7	9/15	25	50	100	15	50	50	4 - 10
dimensions Ø x L mm	11 x 38	6 x 45 Rhesus	10 x 60	11x100	12x75-100	14/17x100	24 x 100	34 x 100	44 x 100	17 x 120	29 x 115	29 x 115	16x75/100
 Cat.-No. 01425													
Cat.-No.	01444	01432	01433	01438	01434	01431	01435	01436	01437	01442	01443	01737	01441
tubes per rotor	36	144	56	28	48	28	8	4	4		4		28
RCF		3,969			3,913					3,801		4,081	3,913
radius in mm	139	142			140					136		146	140
run-up in sec	30												
run-down in sec. <sup>2)</sup>	32												
temperature °C <sup>1)</sup>	- 10												

capacity ml	1.5/2.0	1	3	5	6/7	9/15	25	50	100	10	30	50	85	15	50	12	25	30	50
dimensions Ø x L mm	11 x 38	6 x 45 Rhesus	10x60	13x75	13x82/100	14/17x100	24 x 100	34 x 100	44 x 100	16x80/100	26x95	29x107	38x106	17x120	29x115	17x100	25 x90	25x110	29x115
lid No. 01492 biocontainment <sup>9)</sup>																			
Carrier Cat.-No. 01495																			
Cat.-No.	01351	01339	01343	01383	01383	01329	01330	01331	00761	01348	04417	04416	01396	01347	01384	06311	01363	01365	06318
tubes per rotor	20	108	36	20	20	16	4	4	4	16	4	4	4			4			
RCF	3,857	4,081	4,137	4,025	4,025	3,997	3,829	3,801	4,025	4,025	3,857	4,137	4,109		4,193		3,689		4,193
radius in mm	138	146	148	144	144	143	137	136	144	144	138	148	147		150		132		150
run-up in sec	30																		
run-down in sec. <sup>2)</sup>	32																		
temperature °C <sup>3)</sup>	-10																		



**Swing-out rotor 01324,**  
4-place, illustrated with  
suspension 01398 and  
adapter 01483  
n= 4,500 min<sup>-1</sup>,  
max. RCF 3,260



**Swing-out rotor 01324,**  
4-place, illustrated with  
carrier 01490 and lids  
01492  
n= 4,500 min<sup>-1</sup>,  
max. RCF 3,328  
for max. 4 x 100 ml

capacity ml	9	15	2,6-3,4	4-5,5	9-10	10	4-7	15	50	12	50
dimensions Ø x L mm	14x100	17x100	13x65	15x75	16x92	15x102	16 x 75	17x120	29x115	17x100	29x115
Carrier Cat.-No. 01398											
Cat.-No.	01482-A	01486	01482-A	01482-A	01482-A	01483-A	01484	01482-A	01484	01482-A	01484
tubes per rotor	16	20	16	16	16	16	16	16	4	16	4
RCF	3,192	3,147	2,875	3,192	3,034	3,305	3,260	3,192	3,260	3,192	3,260
radius in mm	141	139	127	141	134	146	144	141	144	141	144
run-up in sec	27										
run-down in sec. <sup>2)</sup>	30										
temperature °C <sup>3)</sup>	-6										

capacity ml	1.5/2.0	1	3/4	5	6/7	9/15	25	50	100	4-10	30	50	85	15	50	12	25	30	50	
dimensions Ø x L mm	11 x 38	6 x 45 Rhesus	10x60/88	12/13x75	13x82/100	14/17x100	24 x 100	34 x 100	44 x 100	16x75/100	26x95	29x107	38x106	17x120	29x115	17x100	25 x90	25x110	29x115	
lid No. 01492 biocontainment <sup>9)</sup>																				
Carrier Cat.-No. 01490																				
Cat.-No.	01351	01339	01343	01383	01383	01329	01330	01331	00761	01348	04417	04416	01396	01356	01347	01384	06311	01363	01365	06318
tubes per rotor	20	108	36	20	20	16	4	4	4	16	4	4	4	12			4			
RCF	3,056	3,237	3,283	3,192	3,192	3,170	3,034	3,011	3,192	3,147	3,056	3,283	3,260		3,328		2,920		3,328	
radius in mm	135	143	145	141	141	140	134	133	141	139	135	145	144		147		129		147	
run-up in sec	27																			
run-down in sec. <sup>2)</sup>	30																			
temperature °C <sup>3)</sup>	-6																			



**Swing-out rotor, 8-place,**  
n= 4,000 min<sup>-1</sup>,  
max. RCF 2,415,  
for 8 x 15 ml,  
stainless steel,  
with suspensions No.  
01644, PA, fibreglass  
reinforced.

capacity in ml	5	10	10	15
dimensions Ø x L mm	12/13x75	17 x 70	13 x 100	17 x 100
n=4,000 min <sup>-1</sup> Cat.-No. 01611				
Cat.-No.	01131-A	01132-A	01643	01644
tubes per rotor	8	8	8	8
RCF	1,914		2,415	
radius in mm	107		135	
run-up in sec	20			
run-down in sec. <sup>2)</sup>	20			
temperature °C <sup>3)</sup>	-16			



**Swing-out rotor, 12-place,**  
n= 5,000 min<sup>-1</sup>,  
max. RCF 4,193,  
for 12 x 15 ml, stainless  
steel, with suspensions  
No. 01621, PA, fibreglass  
reinforced.

capacity in ml	5	10	15
dimensions Ø x L mm	12/13 x 75	17 x 70	17 x 100
n=5,000 min <sup>-1</sup> Cat.-No. 01628			
Cat.-No.	01127-A	01122	01621
tubes per rotor	12	12	12
RCF	3,494	3,522	4,193
radius in mm	125	126	150
run-up in sec	16		
run-down in sec. <sup>2)</sup>	16		
temperature °C <sup>3)</sup>	-15		-10

capacity ml	1.5/2.0	5	5-7	1,6-7	9/15	25	50	85	100	125/150	200	30	50	15	50	12	25/30	50	
dimensions Ø x L mm	11 x 38	17x59	12x75/100	13x75/100	14/17x100	24 x 100	34 x 100	38x101/6	44 x 100	51x100/116	56 x 112	26 x 95	29 x 107	17 x 120	29 x 115	17 x 100	25x90/110	29x115	
lid No. 01561 biocontainment <sup>3)</sup>																			
Carrier Cat.-No 01560																			
Cat.-No.	01571	01593	01589	01589	01588	01573	01574	01575	01576	01594	-	01585	01586	01577	01595	01579	01582	01582	01583
tubes per rotor	56	16	28	28	20	4	4	4	4	4	4	4	4	8	12	4	16	16	4
max. RCF	$\frac{3,328}{2,332}$	3,328	3,215	3,215	3,215	3,056	3,147	3,260	3,147	3,328	3,328	3,260	3,260	3,328	3,328	3,260	3,260	3,328	3,328
radius in mm	147/103	147	142	142	142	135	139	144	139	147	147	144	144	147	147	144	144	147	147
run-up in sec	28																		
run-down in sec. <sup>2)</sup>	31																		
temperature °C <sup>1)</sup>	-8																		

90°



**Swing-out rotor, 01554, 4-place, 4-place, illustrated with carrier 01560 and lids 01561**  
n= 4,500 min<sup>-1</sup>,  
max. RCF 3,328  
for max. 4 x 200 ml

**Swing-out rotor, 01554, 4-place, illustrated with carrier 01563**

capacity in ml	12	15	50	50
dimensions Ø x L mm	17 x 100	17 x 120	29 x 115	29 x 115
Carrier Cat.-No. 01563				
Cat.-No.	01592	01592	-	-
tubes per rotor	8			
RCF	3,260			
radius in mm	144			
run-up in sec	28			
run-down in sec. <sup>2)</sup>	31			
temperature °C <sup>1)</sup>	-8			

90°



**Swing-out rotor, 6-place, n= 4,000 min<sup>-1</sup>, RCF 2,701, for 6 x 50/15ml Falcon tubes, stainless steel, with suspensions, PA, fiberglass reinforced.**

capacity in ml	15	50
dimensions Ø x L mm	17 x 120	29 x 115
n=4,000 min <sup>-1</sup> Cat.-No 01619		
Cat.-No.	01462-A	-
tubes per rotor	6	
RCF	2,701	
radius in mm	151	
run-up in sec	20	
run-down in sec. <sup>2)</sup>	22	
temperature °C <sup>1)</sup>	-15	

45°



**Swing-out rotor, 8-place, n= 5,000 min<sup>-1</sup>, RCF 3,857, for 8 x 50/15 ml, stainless steel, with suspensions, aluminium.**

capacity in ml	15	50
dimensions Ø x L mm	17 x 120	29 x 115
n=5,000 min <sup>-1</sup> Cat.-No. 01617		
Cat.-No.	01462-A	-
tubes per rotor	8	
RCF	3,857	
radius in mm	138	
run-up in sec	20	
run-down in sec. <sup>2)</sup>	19	
temperature °C <sup>1)</sup>	-10	

90°



**Swing-out rotor, 4-place, n= 4,000 min<sup>-1</sup>, RCF 1,896, for microtitre plates, rotor and carriers No. 04345 of stainless steel.**

	microtitre plate	culture plate
n=4,000 min <sup>-1</sup> Rotor Cat.-No. 01645		
Cat.-No.	04345	
plates per rotor	4	
RCF	1,896	
radius in mm	106	
run-up in sec	20	
run-down in sec. <sup>2)</sup>	19	
temperature °C <sup>1)</sup>	-16	

90°



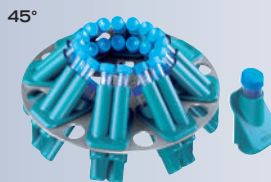
**Swing-out rotor, 2-place, n=4,000 min<sup>-1</sup>, RCF 2,218 for microtitre plates, aluminium, coated, with suspensions No. 01453-A, stainless steel.**

	microtitre plate	culture plate	deep well plate	MS	QP	Microtest plate (Terasaki)	PCR plate 96 wells	PCR strips 0,2
n=4,000 min <sup>-1</sup> Rotor Cat.-No. 01460								
Cat.-No.	01453-A						01453-A + 01485	
plates per rotor	10	8	6	2	2	4	2	24 x 8
RCF	2,218							
radius in mm	124							
run-up in sec	40							
run-down in sec. <sup>2)</sup>	45							
temperature °C <sup>1)</sup>	-6							

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

**2) Rnd down in sec. braked**

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



**Angle rotor,**  
**Cat. No. 01418**  
**8-place**  
**N = 4.500 min<sup>-1</sup>**  
**max. RCF 3,305**  
 illustrated with adapters  
**01467**

capacity in ml	4-7	15	15	50	12	50	50
dimensions Ø x L mm	13 x 100	17 x 100	17 x 120	29 x 115	17 x 100	29 x 115	29 x 107
 n=4,500 min <sup>-1</sup> Cat.-No. 01418							
		+ 00716 	+ E2109 	+ E2110 	+ 00716 		
Cat.-No.	01467	01467	01467	01468	01467		01468
tubes per rotor	32	32	32	8	32		8
RCF	3,305	3,215	3,283	3,147	3,215		3,147
radius in mm	146	142	145	139	142		139
run-up in sec	30						
run-down in sec. <sup>2)</sup>	31						
temperature °C <sup>1)</sup>	-11						



**4 Cyto rotors, suitable for U-320 and U-320R are available.**  
**More informations are available in a detailed cyto brochure.**



**Angle rotor,**  
**Cat. No. 01620A**  
**6-place,**  
**n= 9,000 min<sup>-1</sup>,**  
**max. RCF 9,418.**  
 illustrated with adapter set  
**01646**

capacity in ml	10	15	30	50	50/75	85	15	50
dimensions Ø x L mm	16 x 80	17 x 100	26 x 95	29 x 107	34 x 100 35 x 105	38 x 106	17 x 120	29 x 115
 n=9,000 min <sup>-1</sup> Cat.-No. 01620A								
								4) 
Cat.-No.	01448	01451	01447	01446	01463	-	01466	01646
tubes per rotor	12	6	6	6	6	6	6	6
RCF	8,784	8,784	8,603	9,056	9,327	9,509	8,965	
radius in mm	97	97	95	100	103	105	99	
run-up in sec	30							
run-down in sec. <sup>2)</sup>	30							
temperature °C <sup>1)</sup>	- 11							

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

**2) Rund down in sec. braked**

**Please make sure not to exceed the tubes max. permissible RCF. for glass tubes the max. RCF is 4,000**

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



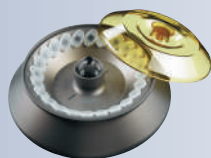
**Angle rotor,**  
**Cat. No. 01613**  
**12-place,**  
**n= 6,000 min<sup>-1</sup>,**  
**max. RCF 4,146**

capacity in ml	5	15	15
dimensions Ø x L mm	12/13 x 75	17 x 100	17 x 120
 n=6,000 min <sup>-1</sup> Cat.-No. 01613			
Cat.-No.	01054A	-	-
tubes per rotor	12	12	6
RCF	3,300	4,146	
radius in mm	82	103	
run-up in sec	15		
run-down in sec. <sup>2)</sup>	15		
temperature °C <sup>1)</sup>	- 16		



**Angle rotor,**  
**Cat. No. 01615**  
**12-place,**  
**n= 12,000 min<sup>-1</sup>,**  
**max. RCF 16,582**

capacity in ml	5	15	15
dimensions Ø x L mm	12/13x75	17 x 100	17 x 120
 n=12,000 min <sup>-1</sup> Cat.-No. 01615			
			5) 
Cat.-No.	01054A	-	01647
tubes per rotor	12	12	6
RCF	13,201	16,582	15,455
radius in mm	82	103	93
run-up in sec	40		
run-down in sec. <sup>2)</sup>	40		
temperature °C <sup>1)</sup>	-2		



**Angle rotor,**  
**Cat. No. 01420-B**  
**24-place,**  
**n= 15,000 min<sup>-1</sup>,**  
**max. RCF 21,382**

capacity in ml	1.5	0.5/0.8	0.2/0.4	2.0
dimensions Ø x L mm	11x38	8x30/45	6x18/45	11x38
 Lid OE2040 incl. n=15,000 min <sup>-1</sup> Cat.-No. 01420-B				
Cat.-No.	-	02023	02024	-
tubes per rotor	24			
RCF	21,382			
radius in mm	85			
run-up in sec	25			
run-down in sec. <sup>2)</sup>	23			
temperature °C <sup>1)</sup>	-4			



**Angle rotor,**  
**Cat. No. 01689-A**  
**30-place,**  
**n= 14,000 min<sup>-1</sup>**  
**max RCF 21,255**

capacity in ml	1.5	0.5/0.8	0,2/0,4	2.0
dimensions Ø x L mm	11x38	8x30/45	6x18/45	11x38
 lid with bio-containment incl. n= 14,000 min <sup>-1</sup> Cat.-No. 01689-A				
Cat.-No.	-	02023	02024	-
tubes per rotor	30			
RCF	21,255			
radius in mm	97			
run-up in sec	35			
run-down in sec. <sup>2)</sup>	31			
temperature °C <sup>1)</sup>	0			

Optional lids for rotor 01420B



Lid (Cat. No. 02423 with bio-containment autoclavable, phenol-resistant



Lid Cat. No. 02425 with bio-containment autoclavable

5) Adapter set, 6-place, for conical 15 ml tubes with screw cap. Remove 6 opposite carriers from rotor 01615 and replace them with adapters 01647.