



MIKRO 200/200 R
Microlitre Centrifuges
classic/cooled

The MIKRO 200 and 200 R rank among the fastest centrifuges in their class – with a maximum speed of 15,000 RPM and an RCF of 21,382. Not only are they fast, the MIKRO 200 R also refrigerates quickly.

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 autoclavable and aerosol-tight accessories, even infectious materials can be processed safely for both the user and the environment.

USER-FRIENDLINESS

- Powered 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 (MIKRO 200 R)
- 4 programmable memories

REFRIGERATION (MIKRO 200 R)

- Infinitely variable setting from –10 °C to +40 °C
- Fast Cool function
- 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 MIKRO 200 R the LED in the Open key lights up
 - with the MIKRO 200 the lid opens automatically after the rotor has come to a standstill



MIKRO 200 classic
Cat. No. 2400

OPERATION AND CONTROL

The display panel and all controls on the MIKRO 200 and 200 R 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 preselected. 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.

KEYPAD

	Precooling (MIKRO 200 R)
RCF	Change-over from RPM to RCF indication
SELECT	Selection of parameters
START	Starts centrifugation /
IMPULS	Short cycle mode
STOP	Stops centrifugation manually /
OPEN	Opens the lid

ENTRY OF THE PARAMETERS

P	Entry of the program number, 4 programmable memories
T/°C	Entry of the temperature in increments of 1 °C within a range of – 10 °C to + 40 °C (MIKRO 200 R)
RCF	Entry in increments of 10
RPM	Entry in increments of 10
r/mm	Entry of the rotor 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



Keypad of the MIKRO 200 R
(N Plus control panel)



MIKRO 200 R cooled
Cat. No. 2405

ROTORS AND ACCESSORIES

Angle rotor, 24-place



✂ 40°

n = 15,000 min⁻¹
max. RCF 21,382

Cat. No. 2424-B

Angle rotor, 24-place



✂ 45°

n = 15,000 min⁻¹
max. RCF 21,382

Cat. No. 2428

with bio-containment³⁾,
autoclavable,
phenol-resistant

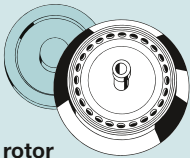








Angle rotor, 30-place

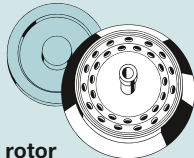










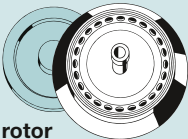










✂ 52,5°
(inner row)
✂ 40°
(outer row)

n = 15,000 min⁻¹
max. RCF 20,627

Cat. No. 2427-A

capacity in ml	0.2	0.4	0.5	0.8	1.5	2.0
Ø x L in mm	6 x 18	6 x 45	8 x 30	8 x 45	11 x 38	
Cat. No.	-	-	-	-	2078	0536
<div>lid E3243 incl.</div> <div></div> <div>rotor Cat. No. 2424-B</div>						
						
Cat. No.	2024		2023		2031 ²⁾	-
boring Ø x L in mm	6 x 40		8 x 40		10.2 x 19	11.2x42.6
tubes per rotor	24					
max. RCF	21,382					
radius in mm	85					
run-up in sec	20					
run-down in sec, braked	28					
temperature in °C ¹⁾	+ 4					

capacity in ml	0.2	0.4	0.5	0.8	1.5	2.0
Ø x L in mm	6x18	6x45	8x30	8x45	11x38	
Cat. No.	-				2078	0536
<div>lid E3243 incl.</div> <div></div> <div>rotor</div> <div>Cat. No. 2427-A</div>						
						
Cat. No.	2024		2023		2031 ²⁾	-
boring Ø x L in mm	6x40		8x40		10.2 x 19	11.2 x 41.3
tubes per rotor	30					
max. RCF	20,627					
radius in mm	82					
run-up in sec	22					
run-down in sec, braked	30					
temperature in °C ¹⁾	+ 4					


capacity in ml	0.2	0.4	0.5	0.8	1.5	2.0	1.5	2.0
Ø x L in mm	6 x 18	6 x 45	8 x 30	8 x 45	11 x 38		11 x 38	
Cat. No.	-	-	-	-	2078	0536	micro spin columns	
<div>lid with bio-containment³⁾ incl.</div> <div> rotor Cat. No. 2428</div>								
								
Cat. No.	2024		2023		2031 ²⁾	-	2031 ²⁾	-
boring Ø x L in mm	6 x 40		8 x 40		10.2 x 19	11.2 x 42.6	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	20							
run-down in sec, braked	28							
temperature in °C ¹⁾	+ 4							

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

²⁾ For centrifugation at high speeds, we recommend to use form-fitting, phenol-resistant adapters 2031.

ROTORS AND ACCESSORIES

Angle rotor, 30-place




✂ 45°

n = 15,000 min⁻¹
max. RCF 20,376

Cat. No. 2430-B

Angle rotor, 20-place, for cryo tubes




✂ 40°

n = 15,000 min⁻¹
max. RCF 21,130

Cat. No. 2426-B

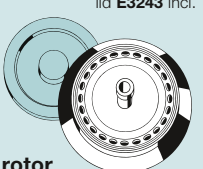

Angle rotor, 4-place, for PCR strips








✂ 45°

n = 15,000 min⁻¹
max. RCF 14,338

Cat. No. 2418-A

capacity in ml	0.5
Ø x L in mm	8 x 30
Cat. No.	-
lid E3243 incl.  rotor Cat. No. 2430-B	
lid E3243 incl. 	
Cat. No.	-
boring Ø x L in mm	8.1 x 30.3
tubes per rotor	30
max. RCF	20,376
radius in mm	81
run-up in sec	19
run-down in sec, braked	28
temperature in °C ¹⁾	+ 4

capacity in ml	1.8
Ø x L in mm	-
Cat. No.	cryo tubes
lid E3243 incl.  rotor Cat. No. 2426-B	
	
Cat. No.	-
boring Ø x L in mm	12.5 x 36
tubes per rotor	20
max. RCF	21,130
radius in mm	84
run-up in sec	19
run-down in sec, braked	28
temperature in °C ¹⁾	+ 4

capacity in ml	0.2	0.2
Ø x L in mm	6 x 18	-
Cat. No.	-	PCR strips
rotor Cat. No. 2418-A		
  		
Cat. No.	-	
boring Ø x L in mm	6.5 x 15.5	
tubes per rotor	32	4 x 8
max. RCF	14,338	
radius in mm	57	
run-up in sec	19	
run-down in sec, braked	28	
temperature in °C ¹⁾	+ 4	

Optional for rotor 2424-B, 2426-B, 2427-A and 2430-B



lid Cat. No. 2425
with bio-containment³⁾,
autoclavable



lid Cat. No. 2423
with bio-containment³⁾,
autoclavable,
phenol-resistant


Optional for rotor 2418-A



lid Cat. No. E3243

³⁾ Tested by the TÜV in conformity with DIN EN 61010, section 2-020.

TECHNOLOGY

TECHNOLOGY	MIKRO 200		MIKRO 200 R	
Microlitre centrifuge, without rotor	classic		cooled	
Power supply ^{*)}	200 – 240 V 1 ~	100 – 127 V 1 ~	200 – 240 V 1 ~	100 – 127 V 1 ~
Frequency	50 – 60 Hz		50 Hz	50 – 60 Hz
Consumption	240 VA	270 VA	450 VA	630 VA
Emission, Immunity	EN / IEC 61326-1, class B	FCC class B	EN / IEC 61326-1, class B	FCC class B
 Max. capacity	30 x 1.5 / 2.0 ml			
Max. RPM (speed)	15,000 min ⁻¹			
Max. RCF	21,382			
Running time	1 sec – 99 min : 59 sec, ∞ continuous run, short cycle mode (impulse key)			
Dimensions (H x W x D)	260 x 275 x 344 mm		260 x 281 x 553 mm	
Weight	approx. 11.5 kg		approx. 28 kg	
Refrigeration				
Temperature control, infinitely variable	-		from - 10 to + 40 °C	
Cat. No.	2400	2400-01	2405	2405-01

^{*)} 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.



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