

MIKRO 200/200R

Microlitre Centrifuges

classic/cooled





MIKRO 200/200R

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 aerosoltight 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 200R)
- 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



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.

DIGITAL DISPLAY AND CONTROL PANEL

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 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 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



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
lid E2040 incl.	Q					
rotor Cat. No. 2424-A	•		•			
Cat. No.	2024		2023		2031 ²⁾	-
boring Ø x L in mm	6 x	6 x 40 8 x 40		40	10.2×19	11.2x42.6
tubes per rotor	24					
max. RCF	21,382					
radius in mm	85					
run-up in sec	20					
run-down in sec	28 () 505					
temperature in °C1)	+4					

capacity in ml	0.5
Ø x L in mm	8 x 30
Cat. No.	-
rotor Cat. No. 2430-A	
Cat. No.	-
boring Ø x L in mm	
boiling & X L III IIIIII	8.1 x 30.3
tubes per rotor	8.1 x 30.3 30
tubes per rotor	30
tubes per rotor max. RCF	30 20,376
tubes per rotor max. RCF radius in mm	30 20,376 81

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	
lid E2040 incl.						
rotor Cat. No. 2427						
Cat. No.	20	24	20	23	2031 ²⁾	-
boring Ø x L in mm	6x40 8x40		10.2×19	11.2 x 39		
tubes per rotor	30					
max. RCF	20,627					
radius in mm	82					
run-up in sec	22					
run-down in sec	[] 30 [] 552					
temperature in °C 1)	+4					

Angle rotor, 20-place, for cryo tubes

Angle rotor, 4-place, for PCR strips



 $n = 15,000 \text{ min}^{-1}$ max. RCF 21,130

Cat. No. 2426-A



 $n = 15,000 \text{ min}^{-1}$ max. RCF 14,338

Cat. No. 2418

	1.0		
capacity in ml	1.8		
Ø x L in mm	-		
Cat. No.	cryo tubes		
lid E2040 incl.			
rotor Cat. No. 2426-A			
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	28 () 433		
temperature in °C1)	+4		

capacity in ml	0.2	0.2	
Ø x L in mm	6 x 18	-	
Cat. No.	-	PCR strips	
rotor Cat. No. 2418			
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	28 [] 330		
temperature in °C1)		+4	

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



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



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

Optional for rotor 2418



lid Cat. No. E2040

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

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.

MIKRO 200/200R

TECHNOLOGY		MIKR	0 200	MIKRO 200 R		
Micro	litre centrifuge, without rotor	classic		cooled		
Power	supply*)	200 – 240 V 1 ~ 100 – 127 V 1 ~		200 – 240 V 1 ~	100 – 127 V 1 ~	
Freque	ency	50 – 6	50 – 60 Hz		50 – 60 Hz	
Consu	ımption	240 VA	270 VA	400 VA	630 VA	
Emiss	ion	EN 55011 group 1, class B, EN 61000-6-3	FCC class B	EN 55011 group 1, class B, EN 61000-6-3	FCC class B	
Immur	nity	EN 61000-6-2	-	EN 61000-6-2	-	
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)				
Dimer	sions (HxWxD)	260 x 275	x 344 mm	260 x 281 x 547 mm		
Weigh	t	approx.	11.5 kg	approx. 28 kg		
Refrig	geration					
Temperature control, infinitely variable		-		from -10 to +40 °C		

2400-01

Cat. No.



2405



2405-01

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 9001:2000 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.

Connect With Us







2400











^{*)} Other voltages on request.