

## AUTOMATED CENTRIFUGES

# — MIKRO 220 ROBOTIC

### FAST AND COMPACT

The MIKRO 220 Robotic is an air-cooled, robotically operated microlitre centrifuge with PC activation. It centrifuges tubes up to 2.0 ml (e.g. microlitre tubes or HPLC tubes) quickly and safely. This qualifies it for sample preparation in research laboratories of the life sciences as well as for daily routine tasks in medical diagnostics or industrial quality control.

Wherever processes can be automated, MIKRO 220 Robotic centrifuges will optimize the workflow. Samples are centrifuged automatically while the laboratory personnel are able to concentrate on other tasks. As loading and unloading is carried out by means of a robot arm, the samples are made available for further processing right after centrifugation.



### — HIGHLIGHTS

- max RPM: 13,000 min<sup>-1</sup>
- max. RCF: 18.327
- max. capacity: 24 x 1.5/2.0 ml
- Compact industry design
- Loading and unloading hatch in the lid
- Hatch opening time < 5 seconds
- IVDR-conform according to regulation (EU) 2017/746
- Fast + Slow positioning mode
- Positioning time of 3 seconds
- Positioning accuracy 3 encoder steps (out of a total of 4096)
- 9 individual acceleration and deceleration stages

### — FEATURES


- Metal housing and lid
- Viewing port in the lid (for speed measurement or maintenance)
- Powered lid lock
- Lid dropping protection
- Emergency lid lock release
- Stainless steel inner chamber
- Automatic rotor recognition
- Error display
- Imbalance switch-off
- Overtemperature fuse
- Interface via RS 232
- Overcurrent limitation when closing the hatch
- Manual operation via key switch possible (backup)

TECHNICAL DATA

**MIKRO 220 ROBOTIC**  
non-refrigerated


automated opening	front
frequency	50 – 60 Hz
consumption	460 VA
max. capacity	24 x 1.5 / 2.0 ml
max. RPM	13,000 min <sup>-1</sup>
max. RCF	18,327
Permissible density of the centrifuged material	1.2 kg/dm <sup>3</sup>
dimensions (WxDxH)	490x380x345 mm
weight	approx. 27 kg
<b>Cat. No.</b>	<b>2350</b>
100-127 V / 50 - 60 Hz	2350-01

SWING-OUT ROTOR, 24-PLACE, 90° | 2394



**Rotor**

max. RPM   max. RCF <sup>2)</sup>	13,000 min <sup>-1</sup>   18,327
max. capacity	24 x 2.0 ml
run-up   run-down, braked in sec	25   26
angle	90°
<b>Cat. No.</b>	<b>2394</b>

**Vessels**

capacity in ml	0.8	1.5	2.0
Ø x L in mm	8 x 45	11 x 38	11 x 38
max. RCF <sup>2)</sup>	18,327	18,327	18,327
radius in mm	98	98	98
<b>Cat. No.</b>	<b>microliter tubes</b>		

+

**Adapter**

boring Ø x L in mm	8 x 40	10.2x19.3	11.5x38.5
vessels per rotor	24	24	24
<b>Cat. No.</b>	<b>2023</b>	<b>2031<sup>7)</sup></b>	<b>-</b>

2) 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 2) is 4,000.  
7) For centrifugation at high speeds, we recommend to use conical, phenolresistant adapters. Cat. No. 2031.

— SWING-OUT ROTOR, 24-PLACE, 45° | 2334



Rotor	
max. RPM   max. RCF <sup>2)</sup>	13.000 min <sup>-1</sup>   18,327
max. capacity	24 x 2.0 ml
run-up   run-down, braked in sec	25   26
angle	45°
<b>Cat. No.</b>	<b>2334</b>

Vessels		microliter tubes		
capacity in ml	0.8	1.5	2.0	
Ø x L in mm	8x45	11x38	11 x 38	
max. RCF <sup>2)</sup>	18,327	18,327	18,327	
radius in mm	84	84	84	
<b>Cat. No.</b>	<b>2023</b>	<b>2031<sup>7)</sup></b>	<b>-</b>	

Adapter		+		
boring Ø x L in mm	8 x 40	10.2x19.3	11.5x38.5	
vessels per rotor	24	24	24	
<b>Cat. No.</b>	<b>2023</b>	<b>2031<sup>7)</sup></b>	<b>-</b>	

2) 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 2) is 4,000.  
 7) For centrifugation at high speeds, we recommend to use conical, phenolresistant adapters. Cat. No. 2031.

— CERTIFICATIONS / REGISTRATIONS

Product certification:



Product registration:



Company certifications:





**LABORATORY EQUIPMENT MAINTENANCE, REPAIR, CALIBRATION AND SALES**

Established in 1987, Henderson Biomedical is the UK's leading laboratory equipment sales and service provider. Our knowledgeable team can provide you with excellent sales advice on a range of different types of laboratory equipment including centrifuges, refrigerators, freezers and heat sealers.

Henderson Biomedical is also able to provide you with first class after-sales service and calibration of your laboratory equipment. We are an **ISO 17025 (UKAS) accredited calibration test laboratory** and our team of Field Service Engineers cover the whole of the United Kingdom.

Please contact us for more information on the types of equipment we supply and the different after-sales services we can offer.

**Henderson Biomedical**

Unit 3, Swan Close  
Croydon CR0 2DZ  
United Kingdom

**Tel: 020 8663 4610**

For sales enquiries: [sales@henderson-biomedical.co.uk](mailto:sales@henderson-biomedical.co.uk)  
For all other enquiries: [info@henderson-biomedical.co.uk](mailto:info@henderson-biomedical.co.uk)  
[www.henderson-biomedical.co.uk](http://www.henderson-biomedical.co.uk)

