

Automated centrifuges

ROTANTA 460 Robotic

Proven and powerful

Our ROTANTA 460 Robotic model is a cooled, floorstanding centrifuge. Robotic centrifuges from the ROTANTA range have been an integral part of numerous laboratory automation systems for several decades.

Today automated sample preparation is indispensable in medical diagnostics. Robotically operated ROTANTA models have long been successfully deployed in biotechnology research laboratories and in the pharmaceutical industry, for example for high throughput screening. In pharmaceutical research, active ingredients are more and more frequently tested on cells in order to minimise experiments with animals. This too makes the use of automated centrifuges increasingly necessary.



— Highlights

- Max. RPM: 6,200 min⁻¹
- Max. RCF: 6,446
- Max. capacity: 80 x 10 ml or 12 microtiter plates
- Refrigerant: R290
- Loading and unloading hatch in the lid
- Hatch opening time < 6 seconds
- IVDR-conform according to regulation (EU) 2017/746
- Fast + Slow positioning mode
- Positioning time of 5 seconds
- Positioning accuracy 3 encoder steps (out of a total of 4096)
- Additional light barriers in the hatch area (optional)

— Features

- Metal housing and lid
- Emergency lid lock release
- Powered lid lock
- Lid dropping protection
- Stainless steel inner chamber
- Automatic rotor recognition
- Error display
- Transformer for different voltage variants
- imbalance switch-off
- Overtemperature fuse
- Interface via RS232
- Overcurrent limitation when closing the hatch
- Manual operation via key switch possible (backup)

— Technical data

	ROTANTA 460 ROBOTIC refrigerated	ROTANTA 460 ROBOTIC refrigerated
Automated opening	front in lid	back in the lid
Voltage *)	operable at different voltages, devices are equipped with a transformer	operable at different voltages, devices are equipped with a transformer
Frequency	50 - 60 Hz	50 - 60 Hz
Consumption	1,800 VA	1,800 VA
Max. capacity	24 x 50 ml	24 x 50 ml
Max. RPM	6,200 min ⁻¹	6,200 min ⁻¹
Max. RCF	6,446	6,446
Permissible density of the centrifuged material	1.2 kg/dm ³	1.2 kg/dm ³
Dimensions (WxDxH)	554x697x654 mm	554x697x654 mm
Weight	approx. 154 kg	approx. 154 kg
Cat. No.	5680-10-RS232	5680-RS232
110-120 V 1~	5680-11-RS232	5680-01-RS232

*) Other voltages on request.

— Swing-out, 4-place | | 4444

Rotor		Bucket																
max. RPM max. RCF ²⁾	4.500 min ⁻¹ 4.392	Cat. No.	4486-R/4															
max. capacity	24 x 50 ml																	
run-up run-down, braked in sec	69 68																	
angle temperature in °C ¹⁾	90° 6 °C																	
Cat. No.	4444																	
Vessels																		
capacity in ml	1.1-1.4	2.6-3.4	2.7-3	4-5.5	4.5-5	4.9	7.5-8.5	9-10	10	1.6-5	4-7	4-7	8.5-10	50				
Ø x L in mm	8x66	13x65	11x66	15x75	11x92	13x90	15x92	16x92	15x102	13x75	13x100	16x75	16x100	29x115				
max. RCF ²⁾	4,392	4,392	4,392	4,392	4,392	4,392	4,392	4,392	4,392	4,392	4,392	4,392	4,392	4,392				
radius in mm	194	194	194	194	194	194	194	194	194	194	194	194	194	194	194			
Cat. No.	4473	4473	4473	4473	4473	4473	4473	4473	4473	4473	4473	4473	4473	4473	4473	4473	SK19.14	
Adapter																		
boring Ø x L in mm	15.1x43	15.1x43	15.1x43	15.1x43	15.1x43	15.1x43	15.1x43	15.1x43	15.1x43	15.1x43	15.1x43	15.1x43	15.1x43	15.1x43	15.1x43	15.1x43		
vessels per rotor	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80		
Cat. No.	4473	4473	4473	4473	4473	4473	4473	4473	4473	4473	4473	4473	4473	4473	4473	4473	SK19.14	

1) For cooled versions: Lowest temperature achievable with precooling and max. speed.

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.

— Swing-out, 4-place | 4444

Rotor	
max. RPM max. RCF ²⁾	4,500 min ⁻¹ 4,188
max. capacity	24 x 50 ml
run-up run-down, braked in sec	69 68
angle temperature in °C ¹⁾	90° 6 °C
Cat. No.	4444

+ **Bucket** **Cat. No.** **4490-R/4**



Vessels		
capacity in ml	15	50
Ø x L in mm	17 x 120	29 x 115
max. RCF ²⁾	4,188	4,188
radius in mm	185	185
Cat. No.	tubes with screw cap	

Plates			
W x D x H in mm	128 x 86 x 44.5	128 x 86 x 46	128 x 86 x 83
capacity in ml	-	-	-
max. RCF ²⁾	4,188	4,188	4,188
radius in mm	185	185	185
plates per rotor	4	4	4
Cat. No.	DWP	MS	QP

Adapter		
boring Ø x L in mm	17 x 79	30 x 79
vessels per rotor	48	24
Cat. No.	4492	4491

— Swing-out, 2-place | 5622

Rotor	
max. RPM max. RCF ²⁾	6,200 min ⁻¹ 6,446
max. capacity	12 plates
run-up run-down, braked in sec	52 / 38
angle temperature in °C ¹⁾	90° 9 °C
Cat. No.	5622

+ **Bucket** **Cat. No.** **5636-R/2**



Plates										
W x D x H in mm	128 x 86 x 15	128 x 86 x 17.5	128 x 86 x 22	128 x 86 x 44.5	128 x 86 x 46	128 x 86 x 83	84 x 59 x 11	124 x 82 x 20	-	0.2
capacity in ml	-	-	-	-	-	-	-	-	-	0.2
max. RCF ²⁾	6,446	6,446	6,446	6,446	6,446	6,446	6,446	6,446	6,446	6,446
radius in mm	150	150	150	150	150	150	150	150	150	150
plates per rotor	12	10	8	2	2	2	4	2	24 x 8	
Cat. No.	MTP	MTP	CP	DWP	MS	QP	Microtest plate	PCR plates	PCR strips	

1) For cooled versions: Lowest temperature achievable with precooling and max. speed.
 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.

— Certifications / Registrations

Product certification:



Product registration:



according to regulation (EU) 2017/746

Company certifications:

