

ROTIKA 50 S ---



ROTIXA 50 S/50 RS

Among experts “ROTIXA” has become a household word for high sample throughput. This is why ROTIXA models are the centrifuges of choice in development and quality control laboratories of the life science industry and in medical routine laboratories.

With generating a maximum RCF of 5,503 ROTIXA centrifuges are suited for separating a wide range of sample materials such as samples of food, cell suspensions, sediments of chemical reactions, soil and, of course, blood and blood components.

In addition to all commonly used blood collection systems the ROTIXA 50 S and 50 RS centrifuges accommodate conical tubes with screw cap, microtitre plates and centrifuge bottles up to a volume of 1,000 ml.

With the growing use of clinical chemistry analysers in mind, the ROTIXA 50S and 50RS centrifuges are also designed to spin racks of well-known manufacturers like Olympus, Hitachi, LKB, and Behring.

It goes without saying that they also accept the time-tested round-bottom tubes up to a max. volume of 250 ml.

Features of the ROTIXA 50 S / 50 RS centrifuges

Performance

4,900 min⁻¹ in a swing-out rotor corresponding to an RCF of 5,503, max. capacity of 4 x 1,000 ml.

Extremely short run-up and run-down times.

Technical details

Smooth and quiet running.

Exceptional speed stability.

Frequency-controlled drive, maintenance only required according to UVV regulations.

See-through glass in the lid for additional speed control.

Cooling

Temperature in the ROTIXA 50RS is controllable within a range of -20°C to +40°C (with model No. 4910-50 up to +60°C).

Safety

Lid locking and holding

Lid dropping protection

Emergency lid lock release

Centrifuging chamber of stainless steel

Key-operated switch for locking and protecting programmes

Motor overheating protection

Chamber overheating protection in the ROTIXA 50 RS

Imbalance switch-off

Automatic rotor recognition

Conformity with the latest national and international safety standards such as IEC 1010-2-2, EN 61010-1 and all relevant EC regulations

CE marked

Having to cope with high sample throughput? No problem!

With a capacity of e.g.

- 120 x 15 ml
- 32 x 50 ml conical tubes with screw cap,
- 16 standard size microtitre plates,
- 20 HITACHI racks,
- 4 x 1,000 ml bottles or
- 4 blood bags in a swing-out rotor.



ROTIXA 50 S
floorstanding
centrifuge
Cat.-No. **4905**



ROTIXA 50 RS
floorstanding
centrifuge, refrigerated
Cat.-No. **4910**



**Floorstanding
Centrifuges,
non-refrigerated
and refrigerated**

"S"-CONTROL PANEL

The controls and displays

of the ROTIXA 50 S and 50 RS centrifuges are arranged according to ergonomic aspects.

The large display

is clearly arranged and well readable. During centrifugation the actual values of all parameters are indicated.

ROTIXA 50 S / 50 RS
Programming
with effortless ease



Entry of the parameters

is exact, fast and easy with selector keys on the water-protected foil keypad and an adjusting knob.

Speed n, RPM

input in increments of 10

Relative centrifugal force RCF

input in increments of 1

Radius r/mm

needs to be entered when speed or RCF have to be determined

Running time t

input in minutes and seconds, max. 999 min.

Run-up/run-down time

input of acceleration and braking ramps in levels 1 - 9, or time-controlled in minutes and seconds, 0=unbraked run-down.

Deceleration with brake-force cut-off

input of the cut-off speed in RPM

Integral of the centrifugal acceleration

provides continuous information on the accumulated RCF the centrifuged material is exposed to during centrifugation

Temperature T/°C

with the ROTIXA 50 RS input in increments of 1 °C within a range of - 20 °C to + 40 °C

Memory

Since saving a lot of time the storing of programmes is indispensable in laboratories with many different and complicated centrifuging tasks.

Up to 89 complete running programmes can be memorized and recalled with their storing number. They remain in the memory even after the centrifuge has been switched off.

For special routine or scientific applications the ROTIXA 50 S and 50 RS centrifuges can be fitted with the following optional equipment:

Centrifuging data report

With the Hettich data report system up to 29 centrifuges can be controlled by a single PC. An optical cable connects the centrifuge to a BUS system. Protocols of selected centrifuging data and barcode readers can be produced via a PC with an RS 232 interface.

Visual indication when rotor is stationary

for additional information on the

Whether entering single parameters or chaining complete running programmes, the clearly arranged display with its selector knob and adjusting knob provides for extreme user-friendliness.

completion of a centrifuging cycle.

Chaining of programmes

allows to programme the centrifuge to run different programmes in succession.

Second independent tachometer system

for calibrating the speed measuring instrument as required by quality management systems.

Please take care not to exceed the tubes' max. permissible RCF. ²⁾ For glass tubes the max. RCF is 4,000.



Swing-out rotor, 4-place,
n = 4,500 min⁻¹,
RCF 4,958,
max. 4 x 750 ml,
 illustrated with buckets
 No. 4295 and lid No. 4229.

∠90° **Cat.-No. 4294** without buckets

braked run-down
 at level 9

1) Lowest attainable temperature in
 the ROTIXA 50 RS at max. speed.

capacity in ml	0.8	1.5/2.0	4	6/7	12	15	25	50	100	100	250	250	100	750
dimensions Ø x L mm	8 x 45	11 x 38	10 x 88	12x82/100	16 x 101	17 x 100	24 x 100	34 x 100	44 x 100	40 x 115	65 x 115	62 x 122	58 x 161	93 x 137
Cat.-No.	-	2078/0536	-	0501/0578	-	0518	0519	0521	0526	0523	0530	5127	0528	4234
lid 4229														
Cat.-No. 4295														
Cat.-No.	4226	4225	4224	4213	4223	4214	4215	4216	4217	4218	4219	4238	4227	4233
tubes per rotor	312	336	252	192	100	120	44	24	16	16	4	4	4	4
RCF	4,777	3,622/4,664	4,777								4,958			
radius in mm	211	160/206	211								219			
run-up in sec	112													
run-down in sec	<input type="checkbox"/> 105													
temperature °C ¹⁾	7													

3) The max. permissible RCF for ASTM tubes is 700.

capacity in ml	2.7 - 3	2.6 - 2.9	4 - 5.5	4.5 - 5	7.5 - 8.2	9 - 10	1.6 - 5	4 - 7	4 - 7	8	8.5 - 10	15	50	50
dimensions Ø x L mm	11 x 66	13 x 65	15 x 75	11 x 92	15 x 92	16 x 92	13 x 75	13 x 100	16 x 75	16 x 125	16 x 100	17 x 120	29 x 115	29 x 115
Cat.-No.	blood collection tubes											0509	0513	-
lid 4229														
Cat.-No. 4295														
Cat.-No.	4213-93	4222-93	4214-93	4213	4214	4220	4222-93	4222	4223-93	4223	4223	4232	4245	4249
tubes per rotor	192	120	120	192	120	64	120	120	100	100	100	92	32	24
RCF	4,777											4,958		
radius in mm	211											219		
run-up in sec	112													
run-down in sec	<input type="checkbox"/> 105											<input type="checkbox"/> 105		
temperature °C ¹⁾	7											7		

Please take care not to exceed the tubes' max. permissible RCF. ²⁾ For glass tubes the max. RCF is 4,000.

ACCESSORIES



Swing-out rotor, 4-place,
 $n = 4,500 \text{ min}^{-1}$, RCF 5,252,
 max. 4 x 1,000 ml,
 illustrated with buckets No. 4293
 for triple blood bag systems.

Cat.-No. **4294** without buckets



Swing-out rotor, 6-place,
 $n = 4,900 \text{ min}^{-1}$, RCF 5,503,
 max. 6 x 100 ml,
 illustrated with
 buckets No. 4396.

Cat.-No. **4256** without buckets

capacity in ml	Blood bag system, triple	Blood bag system, quadruple	1000	-	1x Deepwell 2x Culture plate 4x Microtitre-plate 1x Micronic system	5 x Hitachi-Racks
dimensions Ø x L mm			98 x 138			
Cat.-No.	4244	4237	4255	-	4236	-
 Cat.-No. 4294				1 x Deepwell 2 x Culture plate 4 x Microtitre plate		
					4 x LKB Rack (without 4236)	
Cat.-No.	4293	4298	4254	4292	4299	4257
qty. per rotor	4	4	4	4/8/12	4/8/16/4/16	20
RCF	5,252	5,003	5,184	3,985	4,120	4,822
radius in mm	232	221	229	176	182	213
run-up in sec	108					
run-down in sec	103					
temperature °C ¹⁾	6				4	6

Hettich manufactures high quality centrifuges. All stages from design to end product are continually subjected to strictest controls.

Evidence is provided by corresponding certificates of conformity.

The ISO 9001 certificate accredited to the entire company proves the extreme care and responsibility Hettich puts into the manufacture of centrifuges and their accessories.

Therefore, Hettich centrifuges are known for safety and reliability all over the world.
































capacity in ml	1.5/2.0	1.5/2.0	6	7	15	25	50	100	100	Two stage frame for cyto centrifugation
dimensions Ø x L mm	11 x 38	11 x 38	12 x 82	12 x 100	17 x 100	24 x 100	34 x 100	40 x 115	44 x 100	
Cat.-No.	2078/0536	2078/0536	0501	0578	0518	0519	0521	0523	0526	
 Cat.-No. 4396										Please ask for our detailed cyto brochure
Cat.-No.	5281	5257	5227	5247	5248	5242	5243	5249	5262	5280
tubes per rotor	96	240	120	120	72	30	12	6	6	12
RCF	5,047	4,080/5,395	5,342	5,315			5,261		5,261	3,758 upper 5,208 lower
radius in mm	188	152/201	199	198			196		196	140 upper 194 lower
run-up in sec	30									
run-down in sec	34									
temperature °C ¹⁾	7									

braked run-down at level 9

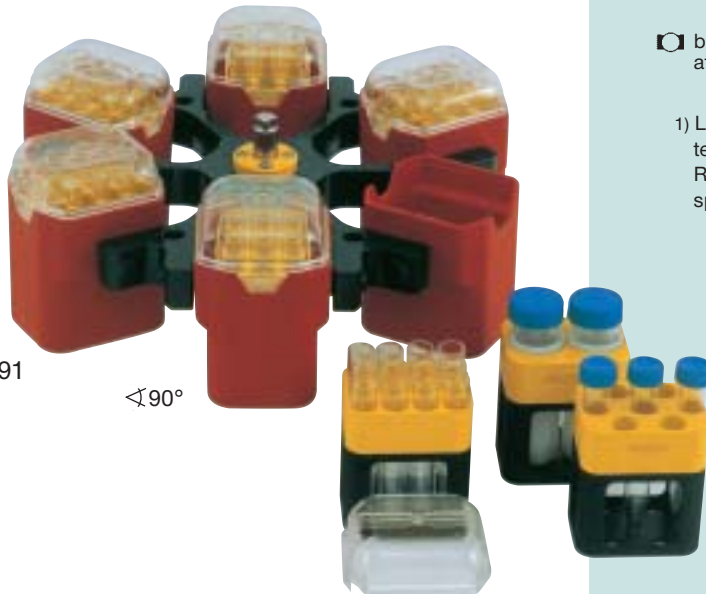
1) Lowest attainable temperature in the ROTIXA 50 RS at max. speed


Please take care not to exceed the tubes' max. permissible RCF. ²⁾ For glass tubes the max. RCF is 4,000.

capacity in ml	1.1 - 1.4	2.7 - 3	2.6 - 2.9	4 - 5.5	4.5 - 5	4.9	7.5 - 8.2	9 - 10	1.6 - 5	4 - 7	4 - 7	8.5 - 10	15	50
dimensions Ø x L mm	8 x 66	11 x 66	13 x 65	15 x 75	11 x 92	13 x 90	15 x 92	16 x 92	13 x 75	13 x 100	16 x 75	16 x 100	17 x 120	29 x 115
Cat.-No.	blood collection tubes												0509	0513
 Cat.-No. 4396														
														
Cat.-No.	5267	5227	5268	5264	5247	5268	5248	5258	5268	6301	5264	5248	6306	5259
tubes per rotor	120	120	72	72	120	72	72	66	72	72	72	72	42	12
RCF	5,288	5,342	5,395	5,342	5,315	5,395	5,315	5,315	5,395	5,315	5,342	5,315	5,503	5,422
radius in mm	197	199	201	199	198	201	198	198	201	198	199	198	205	202
run-up in sec	30													
run-down in sec	34													
temperature °C ¹⁾	7													
























Swing-out rotor, 6-place, n = 4,000 min⁻¹, RCF 3,452, max. 6 x 100 ml, illustrated with buckets No. 5091 and lid No. 5095.

Cat.-No. **4296** without buckets
































 braked run-down at level 9

1) Lowest attainable temperature in the ROTIXA 50 RS at max. speed

capacity in ml	1.5/2.0	1.5/2.0	6	7	7	15	15	25	50	100	100	Two stage frame for cyto centrifugation
dimensions Ø x L mm	11 x 38	11 x 38	12 x 82	12 x 100	12 x 100	17 x 100	17 x 100	24 x 100	34 x 100	40 x 115	44 x 100	
Cat.-No.	2078/0536	2078/0536	0501	0578	0578	0518	0518	0519	0521	0523	0526	
lid 5095  Cat.-No. 5091												Please ask for our detailed cyto brochure
												
Cat.-No.	5281	5257	5227	5247	5247-91	5248-91	5248	5242	5243	5249	5262	5280
tubes per rotor	96	240	120	120	120	72	72	30	12	6	6	12
RCF	3,148	2,504/3,381	3,327	3,309				3,291				2,272 upper 3,238 lower
radius in mm	176	140/189	186	185				184				127 upper 181 lower
run-up in sec	33											
run-down in sec	38											
temperature °C ¹⁾	- 4											

Please take care not to exceed the tubes' max. permissible RCF. ²⁾ For glass tubes the max. RCF is 4,000.

capacity in ml	1.6 - 5	4 - 7	4 - 7	8.5 - 10	1.1 - 1.4	2.7 - 3	2.6 - 2.9	4 - 5.5	4.5 - 5	4.9	7.5 - 8.2	9 - 10	15	50
dimensions Ø x L mm	13 x 75	13 x 100	16 x 75	16 x 100	8 x 66	11 x 66	13 x 65	15 x 75	11 x 92	13 x 90	15 x 92	16 x 92	17 x 120	29 x 115
Cat.-No.	blood collection tubes												0509	0513
lid 5095														
Cat.-No. 5091														
Cat.-No.	5268	6301	5264	5248	5267	5227	5268	5264	5247	5268	5248	5258	6306	5259
tubes per rotor	72	72	72	72	120	120	72	72	120	72	72	66	42	12
RCF	3,363	3,309	3,327	3,309	3,291	3,327	3,363	3,327	3,309	3,363	3,309	3,309	3,452	3,381
radius in mm	188	185	186	185	184	186	188	186	185	188	185	185	193	189
run-up in sec	33													
run-down in sec	 38													
temperature °C ¹⁾	- 4													





























∠90°

Swing-out rotor, 6-place,
n = 4,000 min⁻¹, RCF 3,631,
max. 6 x 250 ml,
 illustrated with buckets No. 5092
 and lid No. 5093, aerosol-tight.

Cat.-No. **4296** without buckets

Hettich representatives
 all over the world offer
 advice and support.
 If you wish to have one of
 our representatives
 visit you, please call the
 nearest local office
 or our International Sales
 and Service Department
 in Tuttlingen,
 + 49 (0) 74 61/705201

capacity in ml	6	7	15	25	50	100	100	250	250	15	50	
dimensions Ø x L mm	12 x 82	12 x 100	17 x 100	24 x 100	34 x 100	44 x 100	40 x 115	65 x 115	62 x 122	17 x 120	29 x 115	
Cat.-No.	0501	0578	0518	0519	0521	0526	0523	0530	5127	0509	0513	
lid, aerosol tight 5093												
Cat.-No. 5092												
Cat.-No.	5128	5120	5121	5122	5124	5125	5126	1057	6319	5129	5123	
tubes per rotor	72	72	42	24	6	6	6	6	6	42	12	
RCF	3,542	3,542	3,542	3,434	3,506	3,488	3,488	3,488	3,631	3,631	3,631	
radius in mm	198	198	198	192	196	195			203	203	203	
run-up in sec	33											
run-down in sec	 38											
temperature °C ¹⁾				- 6				- 4		- 6		

 braked run-down
 at level 9

1) Lowest attainable
 temperature in the
 ROTIXA 50 RS at max.
 speed

Please take care not to exceed the tubes' max. permissible RCF. ²⁾ For glass tubes the max. RCF is 4,000.



Disc rotor, 6-place,
for Schlenk tubes,
 $n = 2,000 \text{ min}^{-1}$, RCF 805,
max. 6 x 50 ml.

Cat.-No. **4316**

∠45°



Swing-out rotor, 4-place,
for ASTM tubes,
 $n = 2,000 \text{ min}^{-1}$, RCF 984,
max. 4 x 100 ml,
illustrated with buckets No. 4275.

Cat.-No. **4274** without buckets






∠90°




Swing-out rotor, 2-place,
for plates and racks,
 $n = 3,600 \text{ min}^{-1}$, RCF 2,695,
max. 20 racks.

Cat.-No. **4282** without buckets











∠90°

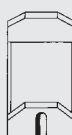



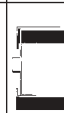



capacity in ml	25	50
Cat.-No.	0532	0533
		
		
Cat.-No.	4316	
Cat.-No.	4317	-
tubes per rotor	6	6
RCF	783	805
radius in mm	175	180
run-up in sec	48	
run-down in sec	 48	
temperature °C ¹⁾	- 12	

 braked run-down
at level 9

1) Lowest attainable
temperature in the
ROTIXA 50 RS at max.
speed

3) The max. permissible
RCF for ASTM tubes
is 700.

capacity in ml	50	100	100	100
dimensions Ø x L mm	45 x 130	58 x 161	44 x 168	37 x 200
Cat.-No.	-	0528	-	0531
				
				
Cat.-No.	4275			
Cat.-No.	4278	0771	4277	4276
tubes per rotor	4	4	4	4
RCF	984	984	966	966
radius in mm	220	220	216	216
run-up in sec	18			
run-down in sec	 23			
temperature °C ¹⁾	- 8			

H x W x D in mm	86x128x44,5 86x128x22 86x128x15	-	-	-	-	90x132x52 86x128x22 86x128x15
	4 x Deep Well plate 4 x Culture plate 6 x Micro- titre plate	6 x Olympus rack	7 x LKB rack	10 x Hitachi rack	5 x Behring rack	1 x Micronic system 2 x Culture plate 2 x Microtitre plate
						
Cat.-No.	4285					
Cat.-No.	4281	4283-N	4286	4287	4288	4289
qty. per rotor	8/12	12	14	20	10	2/4/4
RCF	2,492	2,695				2,550
radius in mm	172	186				176
run-up in sec	87					
run-down in sec	 87					
temperature °C ¹⁾	- 8					

Please take care not to exceed the tubes' max. permissible RCF. ²⁾ For glass tubes the max. RCF is 4,000.

ROTIXA 50 S/50 RS



Technical details	ROTIXA 50 S Floorstanding centrifuge, without rotor Cat.-No. 4905	ROTIXA 50 RS Floorstanding centrifuge, refrigerated, without rotor Cat.-No. 4910
	* Power supply:	208 - 240 V 1~
Frequency:	50 - 60 Hz	50-60 Hz
Consumption:	2.7 kVA	3.68 kVA
Radio interference: Immunity:	EN 55011 ISM class B EN 61000-6-1	
Capacity:	4 x 1,000 ml (swing-out rotor)	
Speed/RCF:	n = 4,900 min ⁻¹ / RCF 5,503	
Centrifuging chamber temperature:	-	controllable from: -20°C to +40°C
Running Time:	1-999 min, ∞ (continuous run)	
Dimensions:	(HxWxD) 1030 x 650 x 720 mm	(HxWxD) 1030 x 650 x 720 mm
Weight:	approx. 115 kg	approx. 172 kg

* other voltages on request

ROTIXA 50 RS centrifuges are available in the following versions:

- for flushing with nitrogen
- for heating/cooling (-20°C to +60°C)
- for connection with an external cooling unit
- with integrated cooling unit (water-cooled condenser)

Cat. No. 4910-20
Cat. No. 4910-50
Cat. No. 4910-90
Cat. No. 4910-96

Please ask for details.

Hettich
ZENTRIFUGEN

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