

FLOORSTANDING CENTRIFUGES

— ROTO SILENTA 630 RS

YOUR FIRST CHOICE UP TO 12 LITERS

The ROTO SILENTA 630 RS is highly rated in the rapid and efficient centrifugation of blood bags. It is able to spin up to 12 liters of sample or 12 blood bags per run. Four and six-place rotor options are also available to offer the best possible fit.

In industrial or R&D settings the ROTO SILENTA accommodates six vessels up to 2,000 ml each.

This unit includes refrigeration with a temperature range from -20°C to +40°C.



— HIGHLIGHTS

- RPM: 50 - 6,000 min⁻¹
Adjustable in increments of 10
- RCF: 50 - 6,520
Adjustable in increments of 1
- max. Capacity: 6 x 2,000 ml
- the first choice in blood banking centrifuges
- Choice of 3 rotors
- Registered Medical Device
- easy operation with keypad and control knob
- 89 program memories for more individuality
- 9 acceleration + 19 deceleration stages
- coolable from -20 bis +40 °C with pre-cooling function
- data reporting system (optional)

— FEATURES

- metal housing and lid
- large viewing port in the lid
- powered lid lock
- lid dropping protection
- emergency lid lock release
- stainless steel chamber
- automatic rotor recognition
- brushless drive
- error display
- display in °C and °F possible
- imbalance detection and switch-off

TECHNICAL DATA

ROTO SILENTA 630 RS [>] cooled

voltage ^{*)}	400 V 3 ~ + N
frequency	50 – 60 Hz
consumption	9,700 VA
emission, immunity	EN/IEC 61326-1, class B
max. capacity	6 x 2,000 ml
max. RPM	6,000 min ⁻¹
max. RCF	6,520
running time	1 – 999 min: 59 s, ∞ continuous run
dimensions (WxDxH)	813 x 1,015 x 973 mm
weight	approx. 355 kg
temperature control, infinitely variable	from -20 to +40 °C



Cat. No.	5005
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208 – 220 V +6 / -10 % 3- (+N) + PE, with internal transformer	5005-08
consumption	9,000 VA
weight	approx. 401 kg


^{*)} Other voltages on request.
[>] Other models models on request.

AVAILABLE ROTORS

SWING-OUT ROTORS

	angle	max. RPM	max. capacity	Cat. No.	page
 swing-out rotor, 6-place	90°	4,500 min ⁻¹	6 x 2,000 ml	4176	3
 swing-out rotor, 4-place	90°	4,500 min ⁻¹	4 x 2,000 ml	4174	3

ANGLE ROTORS

 angle rotor, 6-place	25°	6,000 min ⁻¹	6 x 250 ml	4570	10
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— SWING-OUT ROTOR, 6- / 4-PLACE | 4176 / 4174



Rotor

max. RPM	4,500 min ⁻¹
max. RCF	Rotor 4176 / 4174 6,498 / 5,683
max. capacity	12 / 8 blood bag
run-up run-down, braked in sec	125 197
angle temperature in °C ¹⁾	90° +16 / +10
Cat. No.	4176 / 4174

Bucket

Cat. No.	4524-A
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Blood bag

capacity in ml	500	500	500	750
blood bag per system	4-place	4-place	4-place	1-place
max. RCF ²⁾	Rotor 4176 / 4174 6,498 / 5,683	6,498 / 5,683	6,498 / 5,683	6,498 / 5,683
radius in mm	287 / 251	287 / 251	287 / 251	287 / 251
Cat. No.	-	-	-	-

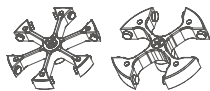


Insert

boring Ø x L in mm	-	-	-	-
blood bag systems per rotor	12 / 8	12 / 8	12 / 8	12 / 8
Cat. No.	4529²⁾-AO,-AM,-AU	4525-A	4592-B	4592-B

+ Additional blood bank accessories can be found on page 10

— SWING-OUT ROTOR, 6- / 4-PLACE | 4176 / 4174



Rotor

max. RPM	4,500 min ⁻¹
max. RCF	Rotor 4176 / 4174 6,271 / 5,479
max. capacity	12 / 8 blood bag
run-up run-down, braked in sec	125 197
angle temperature in °C ¹⁾	90° +10 / 0
Cat. No.	4176 / 4174

Bucket

Cat. No.	4546-A
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Blood bag

capacity in ml	450
blood bag per system	4-place
max. RCF	Rotor 4176 / 4174 6,271 / 5,479
radius in mm	277 / 242
Cat. No.	-



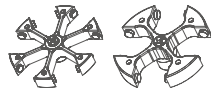
Insert

boring Ø x L in mm	-
blood bag systems per rotor	12 / 8
Cat. No.	4559-A

+ Additional blood bank accessories can be found on page 10

1) For cooled versions: Lowest temperature achievable with precooling and max. speed.
 31) Adapter for accommodating sample tubes and blood collection tubes in carrier 4595-C on request.
 35) Depending on the sample.

— SWING-OUT ROTOR, 6- / 4-PLACE | 4176 / 4174



Rotor		+	Bucket	
max. RPM	4,500 min ⁻¹		Cat. No.	4591-A
max. RCF	Rotor 4176 / 4174 6,498 / 5,705			
max. capacity	12 / 8 blood bag			
run-up run-down, braked in sec	125 197			
angle temperature in °C ¹⁾	90° +16 / +10			
Cat. No.	4176 / 4174			

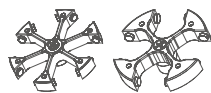


Blood bags				
capacity in ml		450	500	750
blood bag per system		3-place	4-place	1-place
max. RCF	Rotor 4176 / 4174	6,498 / 5,705	6,498 / 5,705	6,498 / 5,705
radius in mm		287 / 252	287 / 252	287 / 252
Cat. No.		-	-	-

Insert				
boring Ø x L in mm		-	-	-
blood bag systems per rotor		12 / 8	12 / 8	12 / 8
Cat. No.		4598-A	4592-B	4592-B

+ Additional blood bank accessories can be found on page 10

— SWING-OUT ROTOR, 6- / 4-PLACE | 4176 / 4174



Rotor		+	Bucket	
max. RPM	3,500 min ⁻¹		Cat. No.	4595-C ³⁾
max. RCF	Rotor 4176 / 4174 3,848 / 3,369			
max. capacity	6 x 2,000 ml			
angle temperature in °C ¹⁾	90° +16 / -12			
Cat. No.	4176 / 4174			



Vessels			
capacity in ml		max. 1,600 ³⁵⁾	2,000
W x D x H in mm		-	150 x 100 x 180
max. RCF	Rotor 4176 / 4174	3,821 / 3,328	3,848 / 3,369
radius in mm		279 / 243	281 / 246
run-up, in sec		95 / 131	29 / 95
run-down, braked in sec		197 / 197	41 / 131
Cat. No.		-	0550²⁴⁾

Insert			-
W x D x H in mm		145 x 91 x 146	-
vessels per rotor		6 / 4	6 / 4
Cat. No.		4596-A	-

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

— SWING-OUT ROTOR, 6- / 4-PLACE | 4176 / 4174



Rotor	
max. RPM	4,500 min ⁻¹
max. RCF Rotor 4176 / 4174	6,520 / 5,705
max. capacity	6 / 4 blood bag
run-up run-down, braked in sec	125 197
angle temperature in °C ¹⁾	90° +9 / +3
Cat. No.	4176 / 4174

Bucket	
Cat. No.	4523-A

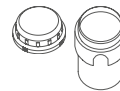
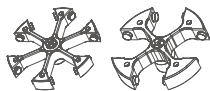


Blood bags			
capacity in ml	500	750	1,000
blood bag per system	4-place	1-place	1-place
max. RCF Rotor 4176 / 4174	6,475 / 6,475	5,660 / 5,660	6,520 / 5,705
radius in mm	285 / 250	285 / 250	288 / 252
Cat. No.	-	-	-

Insert			
boring Ø x L in mm	-	-	-
blood bag systems per rotor	6 / 4	6 / 4	6 / 4
Cat. No.	4516-A	4516-A	-

+ Additional blood bank accessories can be found on page 10

— SWING-OUT ROTOR, 6- / 4-PLACE | 4176 / 4174



Rotor	
max. RPM	4,500 min ⁻¹
max. RCF Rotor 4176 / 4174	6,316 / 5,524
max. capacity	6 / 4 blood bag
run-up run-down, braked in sec	125 197
angle temperature in °C ¹⁾	90° +9 / -9
Cat. No.	4176 / 4174

Bucket	
lid	5621
Cat. No.	4547-B

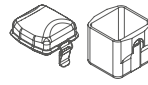


Blood bags			
capacity in ml	500	450	
blood bag per system	4-place	3-place	
max. RCF Rotor 4176 / 4174	6,316 / 5,524	6,316 / 5,524	
radius in mm	279 / 244	279 / 244	
Cat. No.	-	-	

Insert			
boring Ø x L in mm	-	-	
blood bag systems per rotor	6 / 4	6 / 4	
Cat. No.	4548	4548	

+ Additional blood bank accessories can be found on page 10

SWING-OUT ROTOR, 6- / 4-PLACE | 4176 / 4174



Rotor	
max. RPM	4,500 min ⁻¹
max. RCF	Rotor 4176 / 4174 5,999 / 5,184
max. capacity	6x750 ml
run-up run-down, braked in sec	125 197
angle temperature in °C ¹⁾	90° +14 / -1
Cat. No.	4176 / 4174

Bucket	
Lid bioseal ⁵⁾	5057
Cat. No.	4522-A

Vessels	4	5	6	7	12	15	25	50	100	2.6-3.4	2.7-3	4-5.5	4.5-5	7.5-8.5	9-10
capacity in ml															
Ø x L in mm	10x88	12x75	12x82	12x100	16x101	17x100	24x100	34x100	44x115	13x65	11x66	15x75	11x92	15x92	16x92
max. RCF	Rotor 4176 / 4174 5,818 / 5,003	5,818 / 5,003	5,818 / 5,003	5,818 / 5,003	5,818 / 5,003	5,818 / 5,003	5,818 / 5,003	5,818 / 5,003	5,818 / 5,003	5,818 / 5,003	5,818 / 5,003	5,818 / 5,003	5,818 / 5,003	5,818 / 5,003	5,818 / 5,003
radius in mm	257 / 221	257 / 221	257 / 221	257 / 221	257 / 221	257 / 221	257 / 221	257 / 221	257 / 221	257 / 221	257 / 221	257 / 221	257 / 221	257 / 221	257 / 221
Cat. No.	tubes²⁾									blood collection / urine tubes					

Adapter	11 x 74	12.5 x 36	12.5 x 74	12.5 x 74	16 x 74	17.5 x 74	26 x 74	35 x 74	41.5 x 74	13.2 x 36	12.5 x 36	17.5 x 36	12.5 x 74	17.5 x 74	17.5 x 74
boring Ø x L in mm															
vessels per rotor	378 / 252	288 / 192	288 / 192	288 / 192	150 / 100	180 / 120	66 / 44	36 / 24	24 / 16	180 / 120	288 / 192	180 / 120	288 / 192	180 / 120	96 / 64
Cat. No.	4224	4213-93	4213	4213	4223	4214	4215	4216	4218	4222-93	4213-93	4214-93	4213	4214	4220

Vessels	10	1.6-5	4-7	4-7	8	8.5-10	15	50	12	25	30	50	250	290	600
capacity in ml															
Ø x L in mm	15x102	13x75	16x75	13x100	16x125	16x100	17x120	29x115	17x100	62x137	25x110	261x122	62x122	62x137	93x134
max. RCF	Rotor 4176 / 4174 5,818 / 5,003	5,818 / 5,003	5,818 / 5,003	5,818 / 5,003	5,818 / 5,003	5,818 / 5,003	5,999 / 5,184	5,999 / 5,184	5,818 / 5,003	5,818 / 5,003	5,818 / 5,003	5,909 / 5,094	5,818 / 5,003	5,818 / 5,003	5,999 / 5,184
radius in mm	257 / 221	257 / 221	257 / 221	257 / 221	257 / 221	257 / 221	265 / 229	265 / 229	257 / 221	257 / 221	257 / 221	261 / 225	257 / 221	257 / 221	265 / 229
Cat. No.	blood collection / urine tubes						tubes with screw cap						5127²⁴⁾	-²⁴⁾	0551²⁴⁾

Adapter	17.5x74	13.2x36	17.5x36	13.2x74	16x74	17.5x74	17x70	30x70	17.5x74	26x73	26x74	30x96	62x90	62x90	94x105
boring Ø x L in mm															
vessels per rotor	180 / 120	180 / 120	180 / 120	180 / 120	150 / 100	180 / 120	138 / 92	48 / 32	96 / 64	48 / 32	36 / 24	30 / 20	6 / 4	6 / 4	6 / 4
Cat. No.	4214	4222-93	4214-93	4222	4223	4214	4232	4245-A	4220	4241	4215	4249	4238	4238	4233

Vessels	650	750	750	250	500
capacity in ml					
Ø x L in mm	97 x 139	97 x 152	93 x 137	60 x 162	96 x 147
max. RCF	Rotor 4176 / 4174 5,999 / 5,184	5,999 / 5,184	5,999 / 5,184	5,818 / 5,003	5,999 / 5,184
radius in mm	265 / 229	265 / 229	265 / 229	257 / 221	265 / 229
Cat. No.	0554²⁴⁾	0512²⁴⁾	4234-A	Corning®	Corning® +4449

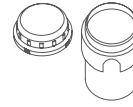
Adapter	97.5x105	97.5x105	97.5x105	61x125	97.5x105
boring Ø x L in mm					
vessels per rotor	6 / 4	6 / 4	6 / 4	6 / 4	6 / 4
Cat. No.	4258	4258	4258	6322	4258

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.

24) At temperatures of over +40 °C and / or when not filled to capacity, bottles may warp during centrifugation.

SWING-OUT ROTOR, 6- / 4-PLACE | 4176 / 4174



Rotor	
max. RPM	4,500 min ⁻¹
max. RCF	Rotor 4176 / 4174 6,384 / 5,592
max. capacity	6 x 1,000 ml
run-up run-down, braked in sec	125 197
angle temperature in °C ¹⁾	90° +9 / -9
Cat. No.	4176 / 4174

Bucket	
lid	5621
Cat. No.	4547-B

Vessels		tubes ²⁾														blood collection / urine tubes					
capacity in ml		5	7	9	15	25	50	100	2.6-3.4	2.7-3	4-5.5	4.5-5	4.9	7.5-8.2	9-10	10					
Ø x L in mm		12x75	12x100	14x100	17x100	24x100	34x100	44x100	13 x 65	11x66	15x75	11x92	13x90	15x92	16x92	15x102					
max. RCF ²⁾	Rotor 4176 / 4174	5,841 / 5,026	5,841 / 5,026	5,977 / 5,164	5,977 / 5,164	5,728 / 4,913	5,773 / 4,981	5,750 / 4,958	5,841 / 5,026	5,841 / 5,026	5,977 / 5,164	5,841 / 5,026	5,841 / 5,026	5,977 / 5,164	5,977 / 5,164	5,977 / 5,164	5,977 / 5,164				
radius in mm		258 / 222	258 / 222	264 / 229	264 / 229	253 / 217	255 / 220	254 / 219	258 / 222	258 / 222	264 / 229	264 / 229	258 / 222	258 / 222	264 / 229	264 / 229	264 / 229				
Cat. No.																					

Adapter		+ 0726																			
boring Ø x L in mm		13 x 58	13 x 58	17.5 x 53	17.5 x 53	26 x 72	36 x 79	45 x 78	13.5 x 58	13 x 58	17.5 x 53	13 x 58	13.5 x 58	17.5 x 53	17.5 x 53	17.5 x 53	17.5 x 53				
vessels per rotor		180 / 120	180 / 120	114 / 76	114 / 76	42 / 28	24 / 16	12 / 8	126 / 84	180 / 120	114 / 76	180 / 120	126 / 84	114 / 76	114 / 76	114 / 76	114 / 76				
Cat. No.		4433	4433	4434	4434	4438	4439	4442	4435	4433	4434	4433	4435	4434	4434	4434	4434				

Vessels		blood collection / urine tubes										tubes with screw cap			5127 ²⁴⁾		- ²⁴⁾		0554 ²⁴⁾		0512 ²⁴⁾		4239 ²⁴⁾	
capacity in ml		1.6-5	4-7	4-7	8	8.5-10	15	50	25	30	10	250	290	650	750	1,000								
Ø x L in mm		13x75	13x100	16x75	16 x 125	16x100	17x120	29x115	25x90	25x110	16 x 80	62 x 122	62 x 137	97 x 139	97 x 152	96 x 176								
max. RCF ²⁾	Rotor 4176 / 4174	5,841 / 5,026	5,841 / 5,026	5,977 / 5,164	5,977 / 5,164	5,977 / 5,184	6,090 / 5,298	6,090 / 5,298	5,909 / 5,117	5,909 / 5,117	5,977 / 5,164	6,203 / 5,411	6,203 / 5,411	6,384 / 5,592	6,384 / 5,592	6,384 / 5,592								
radius in mm		258 / 222	258 / 222	264 / 229	264 / 229	264 / 229	269 / 234	261 / 226	261 / 226	264 / 229	264 / 229	274 / 239	274 / 239	282 / 247	282 / 247	282 / 247								
Cat. No.																								

Adapter																					
boring Ø x L in mm		13.5 x 58	13.5 x 58	17.5 x 53	17.5 x 53	17.5 x 53	17 x 88	30 x 87	26 x 72	26 x 72	17.5 x 53	62x92	62x92	98 x 141	98 x 141	98 x 141					
vessels per rotor		126 / 84	126 / 84	114 / 76	114 / 76	114 / 76	72 / 48	30 / 20	42 / 28	42 / 28	114 / 76	6 / 4	6 / 4	6 / 4	6 / 4	6 / 4					
Cat. No.		4435	4435	4434	4434	4434	4437	4441	4438	4438	4434	4443	4443	-	-	-					

Vessels							
capacity in ml		175	175	200	225	250	500
Ø x L in mm		61 x 118	61 x 144	60 x 130	61 x 137	60 x 162	96 x 147
max. RCF ²⁾	Rotor 4176 / 4174	6,384 / 5,592	6,384 / 5,592	6,384 / 5,592	6,384 / 5,592	6,384 / 5,592	6,384 / 5,592
radius in mm		282 / 247	282 / 247	282 / 247	282 / 247	282 / 247	282 / 247
Cat. No.		Falcon®	Nalgene®	Nunc®	Falcon®	Corning®	Corning®

Adapter							
boring Ø x L in mm		-	-	-	-	-	-
vessels per rotor		6 / 4	6 / 4	6 / 4	6 / 4	6 / 4	6 / 4
Cat. No.		4440	4430	4430	4440	4430	4449

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.
 24) At temperatures of over +40 °C and / or when not filled to capacity, bottles may warp during centrifugation.

ANGLE ROTOR, 6-PLACE | 4570



Rotor

max. RPM max. RCF	6,000 min ⁻¹ 5,594
max. capacity	6 x 250 ml
run-up run-down, braked in sec	64 69
angle max. noise level	25° 54 dB(A)
temperature in °C ¹⁾	-16
Cat. No.	4570

Lid bioseal⁵⁾ and phenol-resistant

Cat. No.

INCLUSIVE



Vessels

capacity in ml	15	25	94	15	50	10	30	50	85	94	250
Ø x L in mm	17x100	24x100	38x102	17x120	29x115	16x80	26x95	29x107	38 x 106	38 x 102	61x122
max. RCF ²⁾	5,315	5,152	4,910	5,152	4,830	5,353	5,152	4,830	4,910	4,910	5,594
radius in mm	132	128	122	128	120	133	128	120	122	122	139
Cat. No.	tubes²⁾			tubes with screw cap							5127²⁴⁾



Adapter

boring Ø x L in mm	17.6 x 83	26x80	38.6x88	17x106	30x100	16.6x70	26x80	29x90	38.6 x 88	38.6 x 88	61.5x109
vessels per rotor	42	18	6	30	6	48	18	6	6	6	6
Cat. No.	5646	5642	5644	5637	5638	5641	5642	5643	5644	5644	-

- 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.
- 5) Tested by the TÜV in conformity with DIN EN 61010, section 2 - 020.
- 13) Tube No. 0538 also available with screwing cap. Dimensions with cap 38 x 110 mm. Cat. No. 0539.
- 24) At temperatures of over +40 °C and / or when not filled to capacity, bottles may warp during centrifugation.

ACCESSORIES FOR CENTRIFUGING BLOOD BAG SYSTEMS



Hettliner

Blood bags can be secured in adapters using Hettliners. After centrifuging, they can be removed by their loops without disturbing the delicate separation of blood components.

Cat. No. 4564



Set of compensatory weights

If blood bag carriers are not filled to the same weight, then compensatory weights can be used to make up the difference. One set includes:
 40 balancing weights, 2 g each;
 20 balancing weights, 5 g each;
 10 balancing weights, 10 g each;
 5 balancing weights, 20 g each;
 5 balancing weights, 40 g each

Cat. No. 4566



Balancing inserts

In case there are not enough blood bag systems to occupy every carrier of the rotor, empty carriers can be filled with balancing inserts. Taring weights supplied with the inserts may be used for fine balancing.

4584-A for insert 4559-A

4587-A for insert 4592-B

4589-A for insert 4516-A



Loading station

Secure your samples and avoid accidental spillage with the convenient Loading Station for centrifuge inserts. The Hettich Loading Station allows users to confidently hold and manage their samples without the risk of the inserts toppling over.

Cat. No. 4509

CERTIFICATES / REGISTRATIONS



DOWNLOADS

[↓ Operating Manual – ROTO SILENTA 630 RS](#)

[↓ Complete Range Catalogue](#)

DIMENSIONS

