

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 liter 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 applications 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.

— FEATURES

- RPM: 50 - 6,000 min⁻¹ – adjustable in increments of 10
- RCF: 1 - 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
- Medical device according to regulation (EU) 2017/745
- Easy operation with keypad and control knob
- 89 program memories for more individuality
- 9 individual acceleration and 19 deceleration stages
- Temperature adjustable from -20 to +40 °C with pre-cooling function
- Data reporting system (optional)

— FIELDS OF APPLICATION

- Hospitals
- Blood banks and transfusion medicine laboratories
- Cell culture laboratories



Documentation system for blood banks.
More information on [page 162](#)



More information about the control panel
can be found on [page 202](#)



TECHNICAL DATA

ROTO SILENTA 630 RS ^{>)} refrigerated



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

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 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	152
 swing-out rotor, 4-place	90°	4,500 min ⁻¹	4 x 2,000 ml	4174	152

ANGLE ROTORS

 angle rotor, 6-place	25°	6,000 min ⁻¹	6 x 250 ml	4570	158
--	-----	-------------------------	------------	-------------	-----




— 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



Blood bag				
capacity in ml		500	500	750
blood bag per system		4-place	4-place	1-place
max. RCF ²⁶⁾	Rotor 4176 / 4174	6,498 / 5,683	6,498 / 5,683	6,498 / 5,683
radius in mm		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
Cat. No.		4529²⁶⁾-AO,-AM,-AU	4592-B	4592-B

+ Additional blood bank accessories can be found on [page 185](#)


— 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



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 185](#)

- 1) For cooled versions: Lowest temperature achievable with precooling and max. speed.
- 26) Includes blood bag hanging to prevent erythrocyte accumulation at low speeds. Different hanging heights allow customer-specific adjustments. (4529-AO top, 4529-AM center, 4529-AU bottom). Hanging blood bags may be centrifuged with a maximum RCF of 1,000.

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



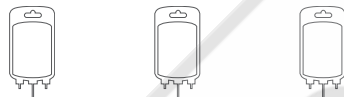
Rotor	
max. RPM	4,500 min ⁻¹
max. RCF	Rotor 4176 / 4174 6,498 / 5,705
max. capacity	12 / 8 blood bag
run-up run-down, braked in sec	125 197
angle temperature in °C ¹⁾	90° +16 / +10
Cat. No.	4176 / 4174



Bucket	
Cat. No.	4591-A



Blood bags



	450	500	750
capacity in ml	450	500	750
blood bag per system	3-place	4-place	1-place
max. RCF	Rotor 4176 / 4174 6,271 / 5,705	6,498 / 5,705	6,498 / 5,705
radius in mm	287 / 252	287 / 251	287 / 251
Cat. No.	-	-	-

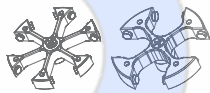


Insert	
boring Ø x L in mm	-
blood bag systems per rotor	12 / 8
Cat. No.	4598-A



Additional blood bank accessories can be found on [page 185](#)

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



Rotor	
max. RPM	3,500 min ⁻¹
max. RCF	Rotor 4176 / 4174 3,848 / 3,328
max. capacity	6 x 2,000 ml
angle temperature in °C ¹⁾	90° +16 / -12
Cat. No.	4176 / 4174



Bucket	
Cat. No.	4595-C³¹⁾



Vessels



	max. 1,600 ³⁵⁾	2,000
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 / -
radius in mm	279 / 243	281 / -
run-up, in sec	95 / 131	95 / -
run-down, braked in sec	131 / 131	41 / -
Cat. No.	-	0550²⁴⁾



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

- 1) For cooled versions: Lowest temperature achievable with precooling and max. speed.
- 24) At temperatures of over +40 °C and / or when not filled to capacity, bottles may warp during centrifugation.
- 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	
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



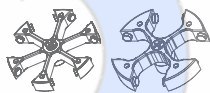
Blood bags				
capacity in ml		500	750	1,000
blood bag per system		4-place	1-place	1-place
max. RCF	Rotor 4176 / 4174	6,475 / 5,660	6,475 / 5,660	6,520 / 5,705
radius in mm		285 / 250	285 / 250	288 / 252
Cat. No.		-	-	-



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 185](#)

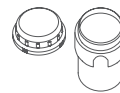
— SWING-OUT ROTOR, 6- / 4-PLACE | 4176 / 4174





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 185](#)

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

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

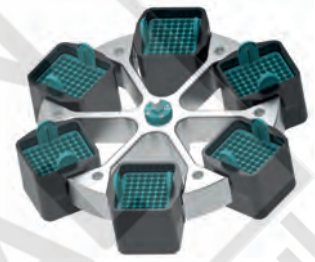


Rotor

max. RPM	4,500 min ⁻¹
max. RCF Rotor 4176 / 4174	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

Cat. No.	4522-A
-----------------	---------------



Vessels

capacity in ml	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
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

boring Ø x L in mm	11 x 70	12.5 x 32	12.5 x 70	12.5 x 70	16 x 70	17.5 x 70	26 x 70	35 x 70	41.5 x 70	13.2 x 32	12.5 x 32	17.5 x 32	12.5 x 70	17.5 x 70	17.5 x 70
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

capacity in ml	10	1.6-5	4-7	4-7	8	8.5-10	15	50	12	30	50	250	290	600	650
Ø x L in mm	15x102	13x75	16x75	13x100	16x125	16x100	17x120	29x115	17x100	25x110	29x115	61x122	62x137	93x134	97x139
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	5,909 / 5,094	5,818 / 5,003	5,818 / 5,003	5,999 / 5,184	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	261 / 225	257 / 221	257 / 221	265 / 229	265 / 229
Cat. No.	blood collection / urine tubes						tubes with screw cap				5127²⁴⁾	-²⁴⁾	0551²⁴⁾	0554²⁴⁾	

Adapter

boring Ø x L in mm	17.5x70	13.2x32	17.5x32	13.2x70	16x70	17.5x70	17x70	30x70	17.5x70	26x70	30x96	62x90	62x90	94x105	97.5x105
vessels per rotor	180 / 120	180 / 120	180 / 120	180 / 120	150 / 100	180 / 120	138 / 92	48 / 32	96 / 64	66 / 44	36 / 24	6 / 4	6 / 4	6 / 4	6 / 4
Cat. No.	4214	4222-93	4214-93	4222	4223	4214	4232	4245-A	4220	4215	4249	4238	4238	4233	4258

Vessels

capacity in ml	750	750	250	500
Ø x L in mm	97 x 152	96 x 135	60 x 162	96 x 147
max. RCF Rotor 4176 / 4174	5,999 / 5,184	5,999 / 5,184	5,818 / 5,003	5,999 / 5,184
radius in mm	265 / 229	265 / 229	257 / 221	265 / 229
Cat. No.	0512²⁴⁾	4234-A	Corning®	Corning®

Adapter

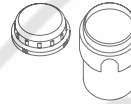
boring Ø x L in mm	97.5x105	97.5x105	60x125	97.5x105
vessels per rotor	6 / 4	6 / 4	6 / 4	6 / 4
Cat. No.	4258	4258	6322	4258

- 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.
- 5) Tested by the TÜV in conformity with DIN EN 61010, section 2 - 020.
- 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															
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 / 5,184	5,977 / 5,184	5,728 / 4,913	5,773 / 4,981	5,750 / 4,958	5,841 / 5,026	5,841 / 5,026	5,977 / 5,184	5,841 / 5,026	5,841 / 5,026	5,977 / 5,184	5,977 / 5,184	5,977 / 5,184
radius in mm	258 / 222	258 / 222	264 / 229	264 / 229	253 / 217	255 / 220	254 / 219	258 / 222	258 / 222	264 / 229	258 / 222	258 / 222	264 / 229	264 / 229	264 / 229
Cat. No.	tubes ²⁾							blood collection / urine tubes							

Adapter															
boring Ø x L in mm	13 x 58	13 x 58	17,5 x 60	17,5 x 60	26 x 72	36 x 79	45 x 78	13,5 x 58	13 x 58	17,5 x 60	13 x 58	13,5 x 58	17,5 x 60	17,5 x 60	17,5 x 60
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
Cat. No.	4433	4433	4434	4434	4438	4439	4442	4435	4433	4434	4433	4435	4434	4434	4434

Vessels															
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 / 5,184	5,977 / 5,184	5,977 / 5,184	6,090 / 5,298	6,090 / 4,958	5,909 / 5,117	5,909 / 5,117	5,977 / 5,184	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	269 / 219	261 / 226	261 / 226	264 / 229	274 / 239	274 / 239	282 / 247	282 / 247	282 / 247
Cat. No.	blood collection / urine tubes					tubes with screw cap					5127²⁴⁾	-²⁴⁾	0554²⁴⁾	0512²⁴⁾	4239²⁴⁾

Adapter															
boring Ø x L in mm	13,5 x 58	13,5 x 58	17,5 x 60	17,5 x 60	17,5 x 60	17 x 86	30 x 87	26 x 72	26 x 72	17,5 x 60	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	61.5x144.3	60x130	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.
- 3.17) When using these tubes, bucket 4547-B cannot be closed with lid 5621.
- 24) At temperatures of over +40 °C and / or when not filled to capacity, bottles may warp during centrifugation.

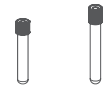
— SWING-OUT ROTOR, 6- / 4-PLACE | 4176 / 4174



Rotor	
max. RPM	4,500 min ⁻¹
max. RCF Rotor 4176 / 4174	5,999 / 5,184
max. capacity	6 x 750 ml
run-up run-down, braked in sec	125 197
angle temperature in °C ¹⁾	90° +14 / -1
Cat. No.	4176 / 4174



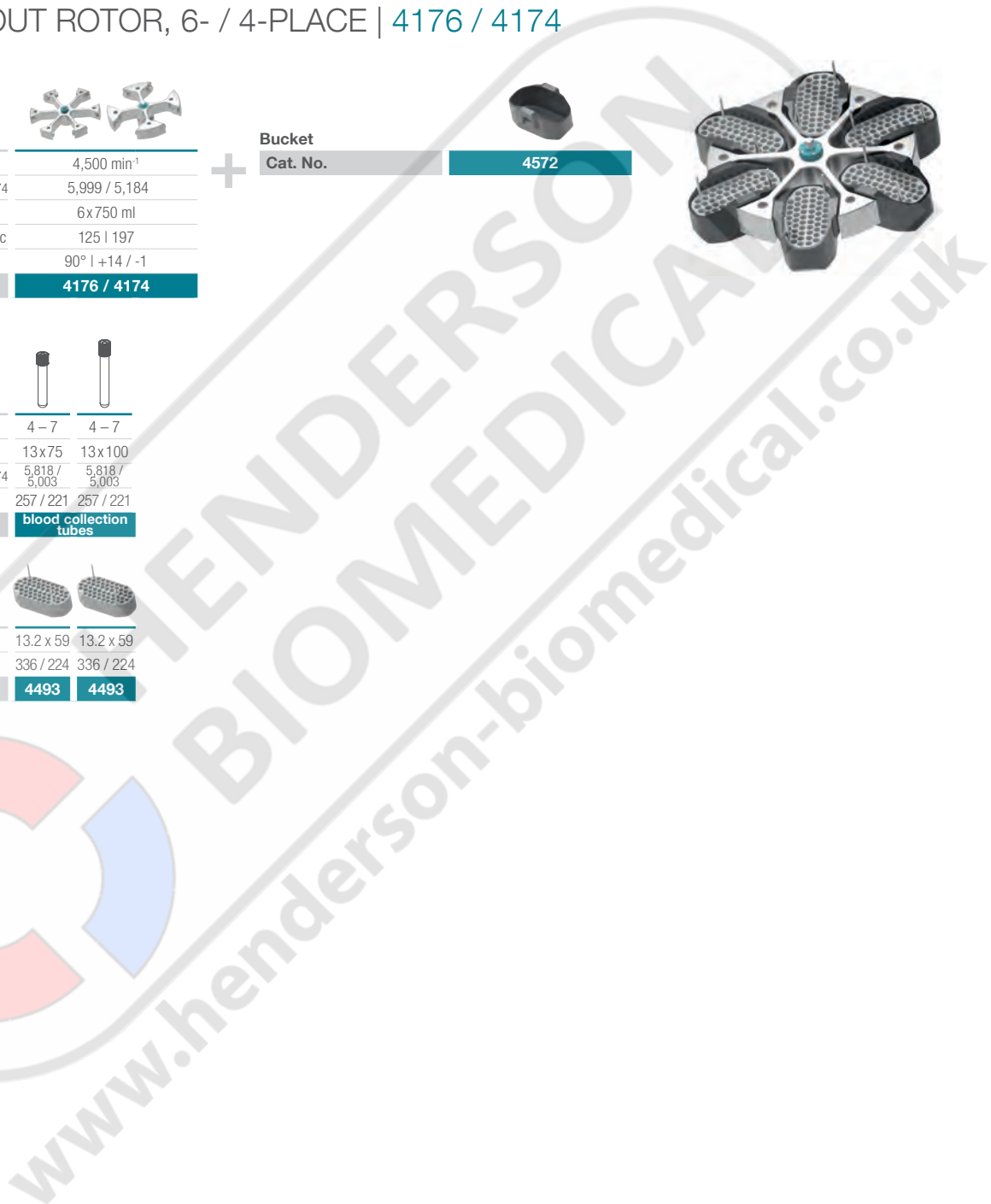
Bucket	
Cat. No.	4572



Vessels	
capacity in ml	4 – 7 4 – 7
Ø x L in mm	13 x 75 13 x 100
max. RCF Rotor 4176 / 4174	5,818 / 5,003 5,818 / 5,003
radius in mm	257 / 221 257 / 221
Cat. No.	blood collection tubes



Adapter	
boring Ø x L in mm	13.2 x 59 13.2 x 59
vessels per rotor	336 / 224 336 / 224
Cat. No.	4493 4493



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.

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 bioseal[®] 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	61.5x122
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	26 x 80	38.6 x 88	17 x 106	30 x 100	16.6 x 70	26 x 80	29 x 90	38.6 x 88	38.6 x 88	61.5 x 109
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.
- 24) At temperatures of over +40 °C and / or when not filled to capacity, bottles may warp during centrifugation.



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
For all other enquiries: info@henderson-biomedical.co.uk
www.henderson-biomedical.co.uk**

