



IEC CL31 Multispeed Centrifuge Series

***Featuring Fast Rotor
Exchanges with AUTO-LOCK®***

Maximum Versatility, Exceptional Capacity and Performance

Thermo's IEC CL31 Multispeed Series offers unsurpassed versatility and exceptional performance in a quiet, compact, 1.2 liter benchtop centrifuge. With its broad selection of rotors and accessories and high-speed centrifugation capabilities, the IEC CL31 Multispeed offers virtually everything you need to meet a variety of sample preparation needs—both today and in the future.

Maximum Versatility, Exceptional Capacity and Performance

Thermo's IEC CL31 Multispeed centrifuge series combines unsurpassed versatility with exceptional speed, capacity and safety, making it a complete solution for all of your sample preparation needs.

Unparalleled Flexibility

- The IEC CL31 Series' extensive set of rotors, buckets and adapters addresses every protocol of the routine biology, cell culturing and research lab.
- The IEC CL31 Series delivers high capacity in a compact footprint. You can run 16 x 50 mL, 60 x 5/7 mL, 30 x 15 mL or 60 x 1.5 mL tubes, cell culture bottles or microplates—without giving up precious bench space.
- With its fast acceleration and a PULSE key for short runs, the IEC CL31 Series is also ideally suited for micro-volume applications.
- With the IEC CL31 Series, the radius can be precisely specified for every insert, resulting in a precise set and display of the RCF.

Advanced Design

- The AUTO-LOCK® rotor exchange system lets you change rotors in seconds, allowing you to change protocols quickly and perform cleaning tasks with ease.
- The IEC CL31 Series' brushless induction motor is designed to provide years of service with minimal maintenance.

Protection

- The IEC CL31 supports a protected laboratory environment with a full set of sealed accessories, tested by CAMR* in Porton Down, England, the gold-standard in biological safety testing.
- Quiet operation minimizes distractions.
- The CL31R centrifuge uses an ozone-friendly, CFC-free refrigerant for compliance with environmental protection regulations.

Ease of Use

- A simple, intuitive control panel gives you single keystroke access to your frequently-used programs.
- G-force run control ensures transferability of your protocols from other centrifuges, without cross-referencing to RPM.

History of Quality and Value

- Building upon 105 years of experience, the IEC CL31 centrifuge leverages Thermo's expertise in laboratory equipment to provide a high-quality, user-friendly centrifuge that addresses the everyday needs of today's demanding laboratories.

*CAMR is now incorporated within the UK Health Protection Agency (HPA.)



The IEC CL31 Multispeed Series provides a user-friendly control panel, including a unique interface that gives you single-keystroke access to your most frequently-used programs.



High Capacity, Advanced Technology

The IEC CL31 Multispeed Series offers a high-capacity, 48 x 2 mL carbon fiber rotor. This advanced material is easier to manage and offers a safer alternative to conventional metallic rotors, which can crack with age. Capable of supporting higher capacities and higher G-forces, the 48-place carbon fiber rotor also provides a high level of chemical resistance against corrosive agents, making it a truly cost-effective investment for your lab.



11210435

IEC CL31 Multispeed Centrifuge Series Rotors and Accessories

T41 Swing-Out Rotor

Description	Rotor Capacity	Max Tube ø (mm)	Radius (mm)	Max Speed (rpm)	Max RCF (xg)	Cat. No.
T41 Swing-Out Rotor	4 x 280 mL					11210435
Standard buckets, 280 mL (set of 4)		77	164	4100	3082	11210436
Buckets, 4 x 50 mL conical (set of 4)*	16	33	169	4100	3176	11175752
Buckets, 3 x 50 mL con skirted (set of 4)*	12	33	169	4100	3176	11175759
Buckets, 15 x 5/7 mL (set of 4)	60	13.5	165	4100	3101	11175763
Sealing lids for 11210436 (set of 4)						11175712
Adapters for 11210435 (set of 4)						
1 x 280 mL	4	64	161	4100	3026	11175713
1 x 250 mL	4	61.7	163	4100	3063	11210575
1 x 250 mL flat	4	61	161	4100	3026	11175714
1 x 200 mL flat	4	55	156	4100	2932	11175715
1 x 190 mL	4	56	163	4100	3063	11210598
1 x 175 mL con	4	60	166	4100	3120	11175716
1 x 135 mL	4	43	161	4100	3026	11175717
1 x 110 mL	4	40	158	4100	2969	11175718
1 x 100 mL	4	38	161	4100	3026	11175719
2 x 65 mL	8	34	156	4100	2932	11175720
4 x 50 mL	16	28.5	132	4100	2481	11175721
1 x 50 mL con skt	4	29	163	4100	3063	85540175
2 x 50 mL con	8	29	134	4100	2518	11175722
3 x 50 mL con*	12	29	134	4100	2518	11210348
1 x Centriprep	4	28	160	4100	3007	11175742
5 x 30 mL	20	25.5	157	4100	2951	11175723
5 x 25 mL	20	24	155	4100	2913	11175724
4 x 25 mL cor	16	24	155	4100	2913	11175725
9 x 16 mL	36	18	160	4100	3007	11175726
12 x 10-15 mL	48	17	160	4100	3007	11175727
4 x 15 mL Corning	16	17	163	4100	3063	11210476
4 x 15 mL vac	16	16	163	4100	3063	11175738
7 x 15 mL urine	28	17	161	4100	3026	11175729
4 x 15 mL con	16	17	163	4100	3063	11175730
5 x 15 mL con	20	17	163	4100	3063	11175731
4 x 14 mL	16	15.5	163	4100	3063	11175747
12 x 13 mL	48	16	160	4100	3007	11175732
9 x 10 mL	36	16	160	4100	3007	11175728
19 x 8 mL	76	12	161	4100	3026	11175733
12 x 5/7 mL	48	12.5	160	4100	3007	11175740
19 x 5 mL	76	13	161	4100	3026	11175734
19 x 3 mL	76	11	161	4100	3026	11175735
13 x 2 mL	52	10	159	4100	2988	11175736

*Unsealed



11210246

Inserts

11175611



11175612

S41 Swing-Out Rotor

Description	Rotor Capacity	Max Tube ø (mm)	Radius (mm)	Max Speed (rpm)	Max RCF (xg)	Cat. No.
S41 Swing-Out Rotor	4 x 200 mL					11210246
Standard buckets (set of 4)	200 mL	57	161	4100	3026	11175611
Sealing lids for 11175611 (set of 4)						11175612
Adapters for 11175611 (set of 4)						
1 x 100 mL	4	45	161	4100	3026	11174181
1 x 50 mL round	4	35	161	4100	3026	11174501
1 x 50 mL con skirted	4	30.5	161	4100	3026	11174528
1 x 50 mL con	4	29	161	4100	3026	11174526
1 x 25 mL univers	4	25	161	4100	3026	11174527
3 x 20 mL	12	22	161	4100	3026	11174502
3 x 15 mL con	12	17.5	161	4100	3026	11174537
7 x 15 mL	28	17	161	4100	3026	11174183
3 x 12 mL flat	12	17.5	161	4100	3026	11174509
5 x 10 mL	20	16	161	4100	3026	11174503
5 x 5/10 mL flat	20	17	161	4100	3026	11174534
5 x 5/7 mL	20	13	161	4100	3026	11174504
9 x 5/6 mL	36	13.5	161	4100	3026	11174505
12 x 5 mL open	48	12.5	161	4100	3026	11174577
5 x 5 mL flat	20	17	161	4100	3026	11174533
12 x 3-5 mL	48	12	161	4100	3026	11174506
6 x 2 mL	24	11	161	4100	3026	11174508



Indicates that the centrifuge accessory has been successfully tested for biological containment by C.A.M.R. (HPA) Porton Down, UK.



11175750

11175631

T20 Microplate Rotor

Description	Rotor Capacity	Radius (mm)	Max Speed (rpm)	Max RCF (xg)	Cat. No.
T20 Microplate Rotor	2x3 Microplates / 2x1 Block	115	4100	2160	11175750
Sealed plate carriers	2x3 Microplates / 2x1 block (set of 2)				11175631
Rubber cushion for microplates					11174207
Microplate adapters (set of 2)					11175758
Adapters: T -25, T-75 Falcon®-type flasks	2x1 flask (set of 2)				11210762
Spare cap for plate carrier					11178216



11175755

AC15.4 Fixed Angle Rotor

Description	Rotor Capacity	Max Tube ø (mm)	Radius (mm)	Max Speed (rpm)	Max RCF (xg)	Cat. No.
AC15.4 Fixed Angle Rotor 37°	30 x 15 mL	17.5	135	4100	2537	11175755
Adapters (each)						
1 x 13.5 mL	30	16				11203666
1 x 8/7 mL vac	30	13				11172596
1 x 5 mL Hemogard	30	13				11172595
1 x 5 mL	30	13				11172402
1 x 3 mL	30	11				11172287
1 x 2/1.5 mL	30	10				11172288



11210437

AC100.10A Fixed Angle Rotor

Description	Rotor Capacity	Max Tube ø (mm)	Radius (mm)	Max Speed (rpm)	Max RCF (xg)	Cat. No.
AC100.10A Fixed Angle Rotor 25°	6 x 100 mL	38	99	10000	11066	11210437
Adapters (set of 6)						
1 x 50 mL round	6	29				11174713
1 x 50 mL conical	6	30				11174714
1 x 38 mL round	6	25.5				11174715
1 x 15 mL conical	6	17				11174716
2 x 10 mL round	12	16				11174717



11175754

AC50.10 Fixed Angle Rotor

Description	Rotor Capacity	Max Tube ø (mm)	Radius (mm)	Max Speed (rpm)	Max RCF (xg)	Cat. No.
AC50.10 Fixed Angle Rotor 40°	6 x 50 mL con	29.5	112	10000	12500	11175754
Adapters						
1 x 50 mL conical	6	30				direct
1 x 50 mL rnd (set of 6)	6	28.5				11210577
1 x 30/38 mL (set of 8)	6	26				11174599
1 x 15 mL conical (set of 4)	6	17.5				11174606
1 x 10 mL (set of 4)	6	17				11177378



11175741

AC2.14 Sealed Microtube Rotor

Description	Rotor Capacity	Max Tube ø (mm)	Radius (mm)	Max Speed (rpm)	Max RCF (xg)	Cat. No.
AC2.14 Sealed Rotor 45°	24 x 2 mL	11	84	14600	20016	11175741
Spare lid for AB/AC2.14 Rotor						11175642



11210351

FIBERLite® High Throughput Rotor

Description	Rotor Capacity	Max Tube ø (mm)	Radius (mm)	Max Speed (rpm)	Max RCF (xg)	Cat. No.
FIBERLite Microtube Rotor 45°	48 x 2 mL	11	97	14600	23113	11210351
Adapters (set of 20)						
1 x 2/1.5 ml	24 / 48	10				direct
1 x 0.5 / 0.8 ml	24 / 48	8				41174928
1 x 0.5 ml	24 / 48	6				41174938
1 x 0.2 ml PCR	24 / 48	6				11174631



11175743

DC6.11 Drum Rotor

Description	Rotor Capacity	Max Tube ø (mm)	Radius (mm)	Max Speed (rpm)	Max RCF (xg)	Cat. No.
DC6.11 Drum Rotor 90°		N/A	72	14600	17158	11175743
Adapters (one rack)						
10 x 1.5-2 mL	60	11				11174561
20 x 0.5-0.8 mL Microt	120	8				11174573
20 x 0.7 mL Rhesus	120	6				11174574
21 x 0.6 mL Viatron	126	6				11174563
32 x 0.25-0.4 mL Beckm	192	6				11174562

Fast Rotor Exchanges with AUTO-LOCK®

The IEC CL31 Series provides a convenient AUTO-LOCK feature that allows you to swap rotors in 5 seconds, without having to search for tools, or remove and tighten lug nuts. With this unique feature, you can conduct your separations in complete confidence, knowing that your rotor is fully locked in place. It also makes your routine cleaning operations faster and easier, offering additional time-savings.



Snap in your conical tube rotor and lock it in place.



Instantly unfasten and remove it.



Snap in a new rotor and you're ready to spin your microtubes—in less than 5 seconds!



IEC CL31 Multispeed Centrifuge Series Specifications



Specifications	CL31	CL31R
Max Capacity		
Swing-out	4 x 280 mL	4 x 280 mL
Fixed Angle	6 x 100 mL	6 x 100 mL
Max Density	1.2	1.2
Max Load	1.34 kg	1.34 kg
Max Speed		
Swing-out	4100 rpm	4100 rpm
Fixed Angle	14600 rpm	14600 rpm
Max RCF		
Swing-out	3176 x g	3176 x g
Fixed Angle	23113 x g	23113 x g
Control System	Microprocessor	Microprocessor
Programs	5 (direct recall)	5 (direct recall)
Speed Set/Display		
Range	500 - 14600 rpm	500 - 14600 rpm
Step	10 rpm at less than 1000 rpm 100 rpm at above 1000 rpm	10 rpm at less than 1000 rpm 100 rpm at above 1000 rpm
Accuracy	±20 rpm (display)	±20 rpm (display)
RCF Set/Display		
Range	10 - 23100	10 - 23100
Step	10 x g at less than 1000 x g 100 x g at above 1000 x g	10 x g at less than 1000 x g 100 x g at above 1000 x g
Accuracy	±20 x g (display)	±20 x g (display)
Radius Control Definition	1 mm	1 mm
Timer Set/Display	30 s - 99 min + continuous	30 s - 99 min + continuous
Temperature Set/Display	N.A.	-9°C to 40°C
Acceleration Rates	5	5
Braking Rates	5	5
Drive System	Direct	Direct
Motor Type	Brushless induction	Brushless induction
Power (average / max)	350 / 500W	550 / 800 W
Standards	IEC 1010-1, IEC 1010-2-020, CE marked	IEC 1010-1, IEC 1010-2-020, CE marked

Ordering Information	CL31	CL31R
Catalog Numbers		
230V - 50/60 Hz	11210913	11210917
120 V - 60 Hz	11210914	11210918
Product Dimensions		
Height / lid closed [cm / in]	37 / 14.6	37 / 14.6
Width [cm / in]	40 / 15.7	57 / 22.4
Depth [cm / in]	50 / 19.7	60 / 23.6
Weight unpacked [kg / lb]	40 / 88.1	72 / 158.7
Packing Dimensions		
Height [cm / in]	60 / 23.6	61 / 24.0
Width [cm / in]	61 / 24.0	76 / 29.9
Depth [cm / in]	54 / 21.2	74 / 29.1
Weight packed [kg / lb]	52 / 114.6	85 / 187.3

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