

POWERFUL BENCH TOP CENTRIFUGES C/CR/CT 4.12-22



 **Jouan**

MAXIMUM PERFORMANCE IN THE MINIMUM SPACE.



Jouan now offers the widest range of bench top centrifuges to meet your needs. Each of the 5 bench-top models is dedicated to specific applications.

The range includes a choice of classical or programmable electronic control and 3 types of temperature control.

The same wide choice is offered as in the G series of compact floor-standing models.

Precise response to specific needs. From the wide range of Jouan models you can choose the centrifuge which is specific to your needs and budget. Choose from: classical electronics or microprocessor control; ventilated, refrigerated or thermostated variants; bench-top (C series) or floor (G series) models. The C series offers both classical electronics for routine use with the 4.12 models and microprocessor control with the 4.22 models: the 4.22 units give you the advantage of programmed centrifugation parameters for very accurate control and reproducibility of centrifuge runs.





Ventilated (C) and refrigerated (CR) versions are available in both 4.12 and 4.22 units with thermostated (CT) versions only in 4.22 format.

Total control of temperature. The range of temperature control is very wide on the refrigerated models: - 8°C to + 40°C and easily achieving 4°C at maximum speed.

An exceptionally wide temperature range of - 8°C to + 60°C is offered on the thermostated version (CT 4.22). The unique combination of heating and refrigeration ensures very precise control of temperatures above ambient - especially important when it is necessary to centrifuge samples at physiological temperatures.

The CR/CT 4.22 models also offer temperature compensation to ensure that samples (not just the centrifuge bowl) reach the required protocol temperatures.



Unequaled choice of accessories.

The C series centrifuges allow a wide range of sample tubes, vials, bottles, plates and microscope slides to be centrifuged. Blood collection tubes, blood bags, microtitre plates, culture tubes and bottles - even the 250 ml conical base tissue culture bottle - can all be centrifuged in the C series centrifuges using one rotor simply by changing buckets, carriers and inserts. M4 Swing-out rotor: 4 x 750 ml (3,400 to 4,300 x g). T4 Swing-out rotor: 4 x 250 ml (2,490 g). 6 angle rotors for 40 x 15 ml, 10 x 50 ml and 8 x 100 ml tubes are available for applications requiring high RCF (max 9,320 x g), plus EPPENDORF tubes (30 x 1,5/2 ml).

Absolute priority to biological safety. M4 and T4 sealed buckets with their transparent caps and "O" rings provide absolute containment of pathogenic or hazardous samples in the case of tube breakage. (Certified by the Centre for Applied Microbiological Research, Porton Down, UK). The sealed bucket system can be easily removed from the rotor and opened under a hood or autoclaved. User safety is completed with dual lid interlock, guard barrier ring and JOUAN patented imbalance detector with shutdown. A bowl drain is fitted to enable hazardous spillages to be removed safely.



T4: 4 x 250 ml at 2,550 g

7 x 15 ml
11175348



1 x 250 ml
11175396



12 x 10 ml
11175346



4 x 50 ml
11175353



4 x 15 ml
11175350



5 x 25 ml
11175352



3 x 50 ml
11175354



12 x 10 ml
11175347



1 x 100 ml
11175355



18 x 7 ml
11175345



30 x 3/5 ml
11175342



26 x 5 ml
11175343



20 x 6 ml
11175344



8 x 20 ml
11175351



7 x 15 ml
11175349



20 x 1.5 ml
Eppendorf
11175341



Insert
11175369



Cytobucket
11174197

42 x Microtainer
11178340



Buckets
microtitration
on T4.
11175377
2000 g



M4: 3,000 ml at 4,300 g or 800 ml at 9,320 g (angle)



CD2 10 x 50 ml
11175183



CD1 8 x 100 ml
11175181



CD4 40 x 15 ml
11175180



CD3 40 x 15 ml
11175186

M4
11175338

9 x 15 ml
11174162



12 x 15 ml
11174190



20 x 7 ml
11174159



4 x 50 ml
11174165



600 ml
11174203



37 x 5 ml
11174193



Cytobucket
11174197

Insert
11174202



1 x 250 ml
11174167



37 x 5 ml
11174157



7 x 15 ml
11174161



Microtitration
11174168



1 x 450 ml
11174192



30 x 1.5 ml
11174201



19 x 7 / 10 ml
11174160



4 x 50 ml
11174191



11175370



11174169



12 x 4 ml
11174206



9 x 4 ml
11174205



2 x 100 ml
11174166



11175371



7 x 50 ml
11174164



30 x 6 ml
11174158



12 x 20 ml
11174163

T4 SWING-OUT ROTOR. 11175366

Bucket or carrier (Set of 4)	Rack or insert (Set of 4)	Rack or insert colour	Rack or insert capacity	Max. tube dia (mm)	Min / Max. tube ht	Tube volume (ml)	Max. radius (mm)	C		CR-CT		
								Max. RPM	Max. RCF (g)	Max. RPM	Max. RCF (g)	
Standard buckets 11175367 — 1 Lid 11175368	11175340	Black	42	8.5	35/-	0.5-0.8	174	3,500	2,380	3,600	2,520	
	11175341	Salmon	20	11	35/-	1.5-2.2	174	3,500	2,380	3,600	2,520	
	11175342	Grey	30	11	65/107	3/5	174	3,500	2,380	3,600	2,520	
	11175343	Beige	26	12.7	67/107	5	174	3,500	2,380	3,600	2,520	
	11175357	White	7	18	35/-	5 flat bottom	174	3,500	2,380	3,600	2,520	
	11175344	Light blue	20	13.5	65/107	6	174	3,500	2,380	3,600	2,520	
	11175345	Yellow	18	13.5	65/108	7 vac.	174	3,500	2,380	3,600	2,520	
	11175346	Red	12	16.5	65/112	10 vac.	174	3,500	2,380	3,600	2,520	
	11175347	Cream	12	17.5	35/112	10 flat bottom	174	3,500	2,380	3,600	2,520	
	11175358	White	7	18	65/122	12 flat bottom	174	3,500	2,380	3,600	2,520	
The lid converts a standard bucket to a sealed bucket	11175348	White	7	18	90/122	15 conical	176	3,500	2,410	3,600	2,550	
	11175349	Orange	7	16.5	90/127	15 vac.	174	3,500	2,380	3,600	2,520	
	11175350	Brown	4	16.5	90/133	15 vac.	176	3,500	2,410	3,600	2,550	
	11175351	Coral	8	22.2	90/116	20	176	3,500	2,410	3,600	2,550	
	11175352	Light yellow	5	25	90/120	25	176	3,500	2,410	3,600	2,550	
	11175375	Light yellow	5	25	90/120	25 flat bottom	176	3,500	2,410	3,600	2,550	
	11175353	Dark red	4	30.5	90/122	50	176	3,500	2,410	3,600	2,550	
	11175354	Light blue	3	30	90/117	50 conical	176	3,500	2,410	3,600	2,550	
	11175376	Light blue	3	30	90/117	50 flat bottom	176	3,500	2,410	3,600	2,550	
	11175361	Dark blue	2	35	90/122	50	176	3,500	2,410	3,600	2,550	
Spare seal 25439074	11175355	Green	1	45	90/132	100	176	3,500	2,410	3,600	2,550	
	11175356	Turquoise	1	63	65/125	250 flat bottom	172	3,500	2,350	3,600	2,490	
	11175359 (2)	Black	1 cytobucket (11174197 set of 2 buckets)					181	1,570	500	1,570	500
	11175360	4 sets of 4 decanting rubber pads (Ø 10.5 - 11 - 11.5 - 11.9 mm) for 11175343										
Microtitration			2 plates			96 wells	158	3,400	2,045	3,400	2,045	

M4 SWING-OUT ROTOR. 11175338

Standard buckets 11174154 — Sealed buckets 11174218	11174204	Black/light blue	30	8.5	40	0.5-0.8	165	4,000	2,950	4,500	3,740
	11174201	Black/light blue	30	11.5	40	1.5-2.2	160	4,000	2,860	4,500	3,600
	11174206	Black/coral	12	16.5	40	4 flat bottom	184	4,000	3,290	4,500	4,160
	11174205	Black/beige	9	18	40	4 flat bottom	184	4,000	3,290	4,500	4,160
	11174157	Black/grey	37	12.7	100	5	172	4,000	3,070	4,500	3,900
	11174193		For decanting : Ø 11.7 to 12.5								
	11174158	Black/light blue	30	13.5	100	6	172	4,000	3,070	4,500	3,900
	11174159	Black/yellow	20	13.5	107	7 vac.	172	4,000	3,070	4,500	3,900
	11174160	Black/red	19	16.5	107	10 vac.	172	4,000	3,070	4,500	3,900
	11174216	White	16	17	60/120	5/10 flat	180	4,000	3,220	4,500	4,075
11174208	Black/orange	12	16.5	125	10 flat bottom	184	4,000	3,290	4,500	4,160	
11174188	Beige	9	18	120	10 flat bottom	172	4,000	3,070	4,500	3,900	
Standard buckets PTFE coated 62813600 — Sealed buckets PTFE coated 62814801 — Spare lid 25144058 — Spare seal 26436062	11174161	Brown	7	17.7	134	15 vac.	185	4,000	3,310	4,500	4,190
	11174162	Beige	9	18	122	15 conical	184	4,000	3,290	4,500	4,160
	11174190	Orange	12	16.5	125	15	184	4,000	3,290	4,500	4,160
	11174163	Coral	12	22.2	108	20	177	4,000	3,170	4,500	4,010
	11174186	Dark red	7	30	115	25 flat bottom	172	4,000	3,070	4,500	3,900
	11174164	Dark red	7	30	115	50	182	4,000	3,260	4,500	4,120
	11174191	Light blue	4	30	120	50 conical	185	4,000	3,310	4,500	4,190
	11174199	Light blue	4	30	120	50 flat bottom	172	4,000	3,070	4,500	3,900
	11174165	Dark blue	4	35	120	50	185	4,000	3,310	4,500	4,190
	11174166	Dark green	2	45	118	100	185	4,000	3,310	4,500	4,190
11174167	Turquoise	1	63	134	250 flat bottom	185	4,000	3,310	4,500	4,190	
11174192	Navy blue	1	80.5	125	450	185	4,000	3,310	4,500	4,190	
11174202 (2)	Black	1 cytobucket (11174197 set of 2 buckets)				180	1,570	500	1,570	500	
11174203	600 ml stainless steel flat bottom bottle						190	4,000	3,400	4,500	4,300
11174169	Adaptor for blood bag						190	4,000	3,400	4,500	4,300
Microtitration 11174168	2 plates					96 wells	158	3,600	2,290	4,000	2,830
	11174207	Rubber pad for flexible microtitration plate									
11175370	1					500	208	3,500	2,850	4,200	4,100
	11175371	250 ml conical bottle liner									
11175372	Buckets for 250 ml conical bottle						213	2,000	1,000	2,000	1,000
11175378	Sealed buckets for 250 ml conical bottle										

ANGLE ROTORS	Rotor	Catalogue number	Capacity	HOLES		Min./max tube ht	Max. Radius	C		CR-CT	
				Diameter	Depth			Max. RPM	Max. RCF	Max. RPM	Max. RCF
	CD 1	11175181	8 x 100 ml	44,5	101	106/115	134	7,500	8,430	7,700	8,890
	CD 2	11175183	10 x 50 ml	35	92	97/115	130	7,800	8,840	8,000	9,320
	CD 3	11175186	20 x 15 ml	18,5	93	96/110	132	7,300	7,860	7,500	8,320
			20 x 15 ml			96/110			145		
	CD 4	11175180	20 x 15 ml	16,5	93	96/131	131	7,300	7,800	7,500	8,300
			20 x 15 ml			96/131			144		
	CD5	11175187	20 x 15 ml	16,5	110	115/130	136	7,000	7,450	7,200	7,880
			20 x 15 ml		107	112/127			151		8,270
Eppendorf	11174217	30x1.5/2 ml	11	open	40	115	7,500	7,230	7,700	7,620	

SPECIFICATIONS

	C 4.12	C 4.22	CR 4.12	CR 4.22	CT 4.22
• Maximum speed (rpm)					
- Swing out	4,000	4,000	4,500	4,500	4,500
- Angle	7,800	7,800	8,000	8,000	8,000
• Maximum RCF (g)					
- Swing out	3,400	3,400	4,300	4,300	4,300
- Angle	8,840	8,840	9,320	9,320	9,320
• Maximum capacity	4 x 750 ml / 8 x 100 ml				
- Swing out / angle					
• Electronics	regular	μ P	regular	μ P	μ P
• Timer	30 min	1 sec to 99 min 59 s	30 min	1 sec to 99 min 59 s	1 sec to 99 min 59 s
• Timer Hold position	yes	yes	yes	yes	yes
• Braking	2 rates	10 rates	2 rates	10 rates	10 rates
• Acceleration	fixed	10 rates	fixed	10 rates	10 rates
• Temperature range	—	—	0 to 40°C	-8 to +40°C	-8 to +60°C
			4°C at maximum speed		
• Memory	—	50 prog.	—	50 prog.	50 prog.
• Max power (VA)	900	1,000	1,300	1,500	1,700
• Dimensions H x W x D	420 x 534 x 600 mm 16.5 x 21.8 x 23.6 in			420 x 820 x 600 mm 16.5 x 32.3 x 23.6 in	
• Weight uncrated/crated	76/90 kg 168/198 lbs			98/115 kg 216/253 lbs	