

Jouan B4i Multifunction Centrifuge Series



Flexibility, compactness, simplicity

Analyze • Detect • Measure • Control™

Thermo
ELECTRON CORPORATION

The Jouan B4i Multifunction Centrifuge – Simplicity and Convenience for Multiple Applications

The Jouan B4i/BR4i series from Thermo Electron is a true multifunction centrifuge, combining the capabilities of several machines in a single, compact unit. Whether you need to spin blood tubes or cytology slides; microtiter plates or conical tubes, the Jouan B4i/BR4i series can get the job done quickly and accurately—saving you time, money and bench space.

The Jouan B4i series provides a number of advantages that make it a valuable and practical resource for every research lab:

Flexibility

- The B4i series' extensive set of rotors addresses a wide variety of research applications.
- A wide range of speeds—up to 14000 rpm—supports low-speed and high-speed protocols.
- A variety of container capacities and shapes—from microvolumes (including microplates) to large bottles (up to 4x200 mL)—accommodates many different types of samples.

Convenience

- A simple, intuitive control panel gives you single keystroke access to your most frequently used programs.
- A compact footprint optimizes the use of your bench space without compromising on capacity. You can run 4x50mL, 20x5/7mL, 30x15mL, or 60x1.5mL tubes at the same time.

Safety

- Supports a safe laboratory environment with a full set of sealed accessories, tested by CAMR in Porton Down, England, the gold-standard in biological safety testing.
- The BR4i series uses an ozone-friendly, CFC-free refrigerant for compliance with environmental protection regulations.

Time Saving

- The B4i's unique AUTO-LOCK® rotor exchange feature lets you change rotors in seconds.
- With its fast acceleration and a PULSE key for short runs, the B4i series is ideally suited for micro volumes applications.

Accuracy

- With 5 acceleration and 5 braking rates, the B4i series lets you protect fragile samples and avoid resuspension, while still allowing for rapid run times.

- The microprocessor-based KeyWrite-D interface provides precise and repeatable control of your parameters.

Reliability

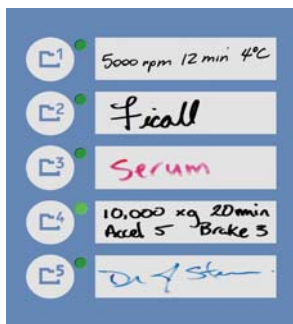
- The B4i series uses a brushless induction motor that is designed and manufactured by Thermo Electron and is virtually maintenance free.
- G-force run control ensures consistency across your research protocols without cross-referencing to RPM.



The Jouan B4i multifunction centrifuge series offers a broad array of rotors and accessories to meet a variety of centrifugation applications. Choose from Thermo's broad selection, shown here, or inquire about our custom rotor program.

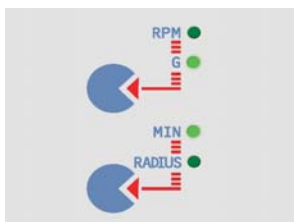
The Jouan B4i Series - Designed for Accuracy and Simplicity

With its user-friendly controls and flexible design, the Jouan B4i/BR4i multifunction centrifuge series makes it easy to quickly prepare samples for a variety of applications. Operating the B4i series is simple and intuitive. The unique KeyWrite-D™ interface allows you to save, protect and recall your programs with a single keystroke.



Simple to Operate

- For daily operations, you can record your protocols on hand-written tags (shown left) and recall them instantly
- Direct rpm / RCF set and control lets you set your protocols without having to look up or calculate the appropriate centrifuge speed
- A pulse keys allows instant short runs using lightweight rotors



Precise Settings for Maximum Control

- For protocol adjustment, you can either modify the set values during the run, or tune the 5 acceleration and 5 braking profiles.
- Precise tuning gives you the flexibility to perform spin-ups and spin-downs, or to run gentle spins in order to avoid resuspension of the pellet or damage to precious samples.



Sample Protection (4°C at full speed)

- The refrigeration system in the BR4i is designed for intensive use, even in a warm laboratory.
- Powerful and accurate, CFC-free refrigeration system (ozone-friendly) and insulation protects your labile samples down to 4°C at full speed.
- The BR4i can be re-cooled to 4°C in less than 10 minutes with a dedicated program.

High Performance Ventilated Centrifuge

- The specially-designed airflow in the B4i ventilated centrifuge enables high performance with minimum increase in sample temperature.

The Jouan B4i series' advanced technology includes comfortable, user-friendly controls and a practical, waterproof control panel.



S40 High Throughput Swing-Out Rotor

Cat. No.	Description	Capacity	Max Tube ø (mm)	Min/Max Tube Ht. (mm)	Radius (mm)	Max Speed (rpm)	Max RCF (xg)	Angle (deg.)
11175610	Swing-out rotor	4 x 200 mL			161	B4i : 4000 BR4i : 4100	B4i : 2880 BR4i : 3026	0-90
11175611	Set of 4 buckets	200 mL	57		161	4100	3026	
11175612	4 sealing lids							
41193271	6 PP bottles with cap	200 mL	56.5	90/111	161	4100	3026	
11174181	Set of 4 inserts	1 x 100 mL	45	80/121	161	4100	3026	
11174501	Set of 4 inserts	1 x 50 mL flat bottom	35	86/123	161	4100	3026	
11174528	Set of 4 inserts	1 x 50 mL conical	30.5	87/123	161	4100	3026	
11174526	Set of 4 inserts	1 x 25 mL glass universal	29	87/124	161	4100	3026	
11174527	Set of 4 inserts	1 x 25 mL plastic universal	25	86/125	161	4100	3026	
11174502	Set of 4 inserts	3 x 20 mL	22	80/120	161	4100	3026	
11174537	Set of 4 inserts	3 x 15 mL conical	17.5	89/124	161	4100	3026	
11174183	Set of 4 inserts	7 x 15 mL	17	60/117	161	4100	3026	
11174509	Set of 4 inserts	3 x 15 mL Vac	17.5	79/126	161	4100	3026	
11174503	Set of 4 inserts	5 x 10 mL Vac	16	58/121	161	4100	3026	
11174534	Set of 4 inserts	5 x Z5/Z10 (5/10 mL)	17	42/118	161	4100	3026	
11174533	Set of 4 inserts	5 x Z5 (5 mL)	17	42	161	4100	3026	
11210764	Set of 4 inserts	7 x 5/7 mL Vac w/Hemogard	13	58/121	161	4100	3026	
11174505	Set of 4 inserts	9 x 5/6 mL Vac	13.5	60/118	161	4100	3026	
11174577	Set of 4 inserts	12 x 5 mL open	12.5	72/115	161	4100	3026	
11174506	Set of 4 inserts	12 x 3/5 mL round bottom	12	42/116	161	4100	3026	
11174508	Set of 4 inserts	6 x 1.5/2 mL	11	45/120	161	4100	3026	
11175613	Set of 2 cytobuckets	3 cyto samples per bucket			118	4100	2218	

S20 High Throughput Rotor

Cat. No.	Description	Capacity	Max Tube ø (mm)	Min/Max Tube Ht. (mm)	Radius (mm)	Max Speed (rpm)	Max RCF (xg)	Angle (deg.)
11175630	Swing-out rotor with carriers	6 x microplates or 2 x blocks			115	4000 (B4i) 4100 (BR4i)	2057 (B4i) 2160 (BR4i)	90
11175631	2 sealed carriers	3 plates / 1 block each						
11174207	Rubber cushion for flexible microtiter plates							
11210762	2 adapters for Cell Culture Flasks	T-25 and T-75 Falcon® type						

AB 15.4 High Throughput Blood Tube Rotor

Cat. No.	Description	Capacity	Max Tube ø (mm)	Min/Max Tube Ht. (mm)	Radius (mm)	Max Speed (rpm)	Max RCF (xg)	Angle (deg.)
11175635	Angle rotor	30 x 15 mL	17.5	100/120	135	B4i : 4000 BR4i : 4100	B4i : 2415 BR4i : 2537	37

All-Inclusive Safety

The Jouan B4i multifunction series helps you eliminate biological risks when handling your samples. You can spin tubes, bottles, and even microplates in total security using accessories successfully tested¹ by the Center for Applied Microbiology and Research (CAMR) in Porton Down, England, the gold standard in biocontainment safety. Other safety features include an imbalance detector, lid interlock, and automatic overspeed protection, helping to ensure that you and your samples are protected from harm.

¹Tested for microbial integrity according to the G.J. Harper test cited in the IEC 1010-2-020 standard.

AB 50.10A High Speed Rotor



11175634

Cat. No.	Description	Capacity	Max Tube ø (mm)	Radius (mm)	Max Speed (rpm)	Max RCF (xg)	Angle (deg.)
11175634	Angle rotor	6 x 50 mL con./ round	29.5 x 118	112	10000	12520	40
11174606	Set of 4 adapters	1 x 15 mL conical	17.5 x 111	112	10000	12520	
11177378	Set of 4 adapters	1 x 10 mL	17 x 75	91	10000	10174	
11174599	Set of 8 adapters	1 x 30/32 mL	26	105	10000	11738	

AB 10.12 High Speed Rotor



11175637

Cat. No.	Description	Capacity	Max Tube ø (mm)	Radius (mm)	Max Speed (rpm)	Max RCF (xg)	Angle (deg.)
11175637	Sealed angle rotor	10 x 10 mL	16 x 80	85	12000	13684	40
11175638	Spare sealing lid						
11174607	Set of 10 adapters	1 x 6 mL	13 x 100	80	12000	12879	
11174603	Set of 10 adapters	1 x 1.5/2 mL	11 x 37	64	12000	10303	

AB 1.114 and AB 2.14 Microvolume Rotors



11175639

Cat. No.	Description	Capacity	Max Tube Ø (mm)	Radius (mm)	Max Speed (rpm)	Max RCF (xg)	Angle (deg.)
AB 1.14							
11175639	Angle rotor + lid	20 x 1.5 mL	11 x 39	78	14000	17092	45
11175640	Spare lid						



11175641

AB 2.14							
11175641	Sealed angle rotor	24 x 1.5 mL	1 x 39	84	14000	18407	45
11175642	Spare sealing lid						
41174928*	Set of 20 adapters	1 x 500/800 µL	8				
11174631*	Set of 20 adapters	1 x 200 µL PCR	6.5				
41174938*	Set of 20 adapters	1 x 250 / 400 / 700 µL	6				

* Suitable for the AB 1.14 and the AB 2.14

DB 6.11 Microvolume Drum Rotor



11175643

Cat. No.	Description	Capacity	Max Tube Ø (mm)	Radius (mm)	Max Speed (rpm)	Max RCF (xg)	Angle (deg.)
11175643	Drum rotor	6 racks		72	11000	9740	90
11174561	1 rack	10 x 1.5/2 mL	11				
11174573	1 rack	20 x 500/800 µL	8				
11174574	1 rack	20 x 700 µL	6				
11174563	1 rack	21 x 600 µL	6				
11174562	1 rack	32 x 250/400 µL	6				



Time Saving

The Jouan B4i series provides a convenient AUTO-LOCK feature that allows you to swap rotors in 5 seconds, without having to remove or tighten lug nuts. In addition, your runs are shorter due to the B4i series' rapid acceleration and braking times, higher speeds (18,400 xg for microtubes), and a pulse key for very short runs. With the B4i series, centrifugation becomes a pleasure.

Jouan B4i and BR4i Multifunction Centrifuge Specifications



Specifications	B4i (ventilated)	BR4i (refrigerated)
Max Capacity		
Swing-out	4 x 200 mL	4 x 200 mL
Fixed Angle	6 x 50 mL	6 x 50 mL
Max Density	1.2	1.2
Max Load	0.96 kg	0.96 kg
Max Speed		
Swing-out	4000	4100
Fixed Angle	14000	14000
Max RCF		
Swing-out	2880	3026
Fixed Angle	18407	18407
Control System	Microprocessor	Microprocessor
Programs	5 (direct recall)	5 (direct recall)
Speed Set/Display		
Range	500 - 14000 rpm	500 - 14000 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 - 18400	10 - 18400
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)
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	B4i (ventilated)	BR4i (refrigerated)
Catalog Numbers		
230V - 50/60 Hz	11175670	11175674
120 V - 60 Hz	11175671	11175675
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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