

Avanti - a name you can trust for dependability and value.

Your choice in our comprehensive library of Avanti J Series rotors, to enhance and streamline your sample separations, is backed by Beckman Coulter's legacy of continuous excellence in centrifugation.

Avanti J-301

Ultracentrifuge power from a high-performance system



Avanti J-26 XP/XPI

The most versatile high-performance centrifuge your lab may ever need



Avanti J-E

The economical performer that fits right in your lab



The better choice of rotors in high-performance centrifugation

Avanti® J Series Rotors

- Genomics
- Proteomics
- Cell Analysis
- Centrifugation**
- Lab Tools
- Bioseparation
- Lab Automation
- Particle Characterization



For more information about our full line of centrifugation products, visit www.beckmancoulter.com/SpinningExperts

Better choices. Better performance.

The Avanti Advantage

For over sixty years, Beckman Coulter's innovations in centrifugation have paved the road to discovery. The Avanti J Series offers you better choices with a comprehensive library of rotors for maximum application versatility and better performance.

High-Performing Rotors

Beckman Coulter's high-performing rotors are consistently designed to be the most efficient rotors – for reduced run times and high g-force.

■ Designed for More Efficient Runs

Avanti J Series High-Performing Rotors move beyond high-speed into high-performance. The difference is in the design—Avanti J High-Performing Rotors are specially designed to provide a shorter pathlength, which combined with high speeds, produces a lower k factor. Lower k factors shorten run times, allowing you to reach your goals faster.

■ Biocertified* Rotors

Avanti J Series' offers a selection of biocertified fixed-angle rotors and swinging bucket rotors, ranging in capacity from 360 mL to 6 L—all independently certified to contain liquids and aerosols. An added measure of safety in any protocol, biocertification is especially beneficial when working with viruses and other pathogenic samples.

Capacity	Name/Features	Part Number	Max Speed (rpm)	Max Force (g)	k Factor	No. Tubes x Volume	Max Tube Size (mm)
	Exclusive! JS-5.3 AllSpin™ Supports all popular labware, highest capacity and versatility. Holds up to 24 microplates, 28 50 mL conical tubes and 72 15 mL conical tubes. BIOCERTIFIED* (when used with AeroSeal Covers p/n 368417)	368690	5,300	6,870	various	4 x 500 mL	various
6 liters	JLA-8.1000 General purpose, large-volume processing of bacteria cell organelles, viruses and precipitates. Use exclusive HarvestLine™ System Liners for easy bottle loading and retrieval. BIOCERTIFIED*	363688	8,000	15,970	2,482	6 x 1,000 mL	95 x 191
4 liters	JLA-9.1000 General purpose, large-volume processing of bacteria cell organelles, viruses and precipitates. Use exclusive HarvestLine System Liners for easy bottle loading and retrieval.	366754	9,000	16,800	2,540	4 x 1,000 mL	95 x 191

*Biocertified rotors have been validated for microbiological containment at an independent third party testing facility, Health Protection Agency, Porton Down, UK or USAMRIID, Ft. Detrick, MD, USA

Capacity	Name/Features	Part Number	Max Speed (rpm)	Max Force (g)	k Factor	No. Tubes x Volume	Max Tube Size (mm)
3 liters	JLA-10.500 High-volume, fixed-angle rotor for initial processing of tissue homogenate and other large particles. BIOCERTIFIED*	369681	10,000	18,600	2,850	6 x 500 mL	69 x 160
1.5 liters	JLA-16.250 Biosafety lid. Harvesting bacteria and cell membranes, processing tissue homogenates and separating cell particulates. BIOCERTIFIED*	363930	16,000	38,400	1,090	6 x 250 mL	62 x 120
400 mL	JA- 25.50 Biosafety lid. High g-force for efficient pelleting of cell particulates and phase separation. BIOCERTIFIED*	363058	25,000	75,600	418	8 x 50 mL	29 x 105

Lightweight Rotors

Beckman Coulter's lightweight rotors have been specifically tested for 100% compatibility with our Avanti J Series centrifuges. The FIBERLite** carbon composite rotors offer a full complement of adapters to meet specific application requirements.

Capacity	Name/Features	Part Number	Max Speed (rpm)	Max Force (g)	k Factor	No. Tubes x Volume	Max Tube Size (mm)
3 liters	F10BCI-6x500y 13.2 kg/29 lbs. Large volume for initial processing of bacteria or other cells from fermentors and cleaning debris from homogenates.	393033	10,000	17,700	3,417	6 x 500 mL	69 x 160
1.5 liters	F14BCI-6x250y† 9.1 kg/20 lbs. Large volume for clarifying lysates and pelleting particles from homogenates, pelleting cells and phase separation.	A39751	14,000	30,000	1690	6 x 250 mL	62 x 120
700 mL	F14BCI-14x50cy† 7.7 kg/17 lbs. Pelleting cells, bacteria or subcellular fractions, phase separations and binding studies.	A39754	14,000	33,500	789	14 x 50 mL conical	29 x 104








** FIBERLITE is a registered trademark of Piramoon Technologies, Inc.

† Not recognized by Spin Trace II Laboratory Information Network System.

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Traditional Rotors

Beckman Coulter's aluminum rotors offer traditional speed and force to meet your application needs.

Capacity	Name/Features	Part Number	Max Speed (rpm)	Max Force (g)	k Factor	No. Tubes x Volume	Max Tube Size (mm)	
3 liters	JA-10 Large volume for initial processing of tissue homogenates and other large particles.	369687	10,000	17,700	3,610	6 x 500 mL	69 x 160	
1.5 liters	JA-14 General purpose, large volume and multi-tube processing.  BIOCERTIFIED*	339247	14,000	30,100	1,764	6 x 250 mL	62 x 120	
700 mL	JA-17 High g-force and volume for pelleting bacteria, cell membranes and subcellular organelles.  BIOCERTIFIED*	369691	17,000	39,800	690	14 x 50 mL	29 x 104	
600 mL	JA-12 Dual-locking lid for pelleting cells, bacteria or other subcellular organelle phase separations and binding studies.  BIOCERTIFIED*	360992	12,000	23,200	1,244	12 x 50 mL conical	30 x 103	

Enhance and Streamline Your Separations










Beckman Coulter's Avanti J Series Centrifuge Systems offer a better selection of rotors for your high-performance protocols, with capacities and features to meet any separation challenge.

Explore the difference the Avanti advantage can make in your protocols at




www.beckmancoulter.com/rotorcalculator.

Avanti J Centrifuge Rotors[†]

Fixed-Angle Rotors

Max Rotor Type	Part No.	Max Speed (rpm)	Force At r max. (g)	k Factor	No. Tubes x Volume	Max Tube Size mm	Rotor Capacity	J-26 XP/XPI	J-E	J-30I
JA-30.50 Ti Dual-Locking Lid	363421 363420	30,000	108,860	280	8 x 50 mL	29 x 104	400 mL	■		■
 JA-25.50 Dual-locking lid	363055 363058	25,000	75,600	418	8 x 50 mL	29 x 105	400 mL	■	■	■
 JA-25.15 Dual-Locking Lid	363054 363050	25,000	74,200/60,200	265/380	24 x 15 mL	18 x 100	360 mL	■		■
JA-21	334845	21,000	50,400	470	18 x 10 mL	16 x 80	180 mL	■	■	■
 JA-20.1	342095	20,000	51,500/43,900	371/465	32 x 15 mL	18 x 99	480 mL	■	■	■
 JA-20	334831	20,000	48,400	769	8 x 50 mL	29 x 104	400 mL	■	■	■
JA-18.1	347824	18,000	42,100	156 [†]	24 x 1.8 mL	11 x 38	43.2 mL	■		■
 JA-18	369679	18,000	47,900	566	10 x 100 mL	38 x 102	1 L	■	■	■
 JA-17	369691	17,000	39,800	690	14 x 50 mL	29 x 104	700 mL	■	■	■
JLA-16.250 Dual-locking lid	363394 363930	16,000	38,400	1,090	6 x 250 mL	62 x 120	1.5 L	■	■	■
 JA -14	339247	14,000	30,100	1,764	6 x 250 mL	62 x 120	1.5 L	■	■	■
F14BCI-14x50cy	A39754	14,000	33,500	789	14 x 50 mL	29 x 104	700 mL	■	■	■
F14BCI-6x250y	A39751	14,000	30,000	1,690	6 x 250 mL	62 x 120	1.5 L	■	■	■
JA-12 Dual-locking lid	360993 360992	12,000	23,200	1,244	12 x 50 mL	30 x 103	600 mL	■	■	■
 JLA-10.500	369681	10,000	18,600	2,850	6 x 500 mL	69 x 160	3 L	■	■	■
F10BCI-6x500y	393033	10,000	17,700	3,417	6 x 500 mL	69 x 160	3 L	■	■	■
JA-10	369687	10,000	17,700	3,610	6 x 500 mL	69 x 160	3 L	■	■	■
JLA-9.1000	366754	9,000	16,800	2,540	4 x 1,000 mL	95 x 191	4 L	■	■	■
 JLA-8.1000	363688	8,000	15,970	2,482	6 x 1,000 mL	95 x 191	6 L	■		

Swinging Bucket Rotors

Max Rotor Type	Part No.	Max Speed (rpm)	Force At r max. (g)	k Factor	No. Tubes x Volume	Max Tube Size mm	Rotor Capacity	J-26 XP/XPI	J-E	J-30I
JS-24.38	360743	24,000	103,900	334	6 x 38.5	25 x 89	231 mL	■		■
JS-24.15	362396	24,000	110,500	376	6 x 15	16 x 96	90 mL	■		■
JS-13.1	346963	13,000	26,500	1,841	6 x 50 mL	29 x 104	300 mL	■	■	■
JS-7.5	336380	7,500	10,400	5,287	4 x 250	62 x 136	1 L	■		■
JS-5.9	369331	5,900	6,570	—	10 microplates	—	—			■
 JS 5.3	368690	5,300	6,870	various	24 microplates	various	2 L	■	■	
 JS-4.3	362734	4,300	4,220	11,800	4 x 750 mL	96 x 130	3 L	■		
 JS-4.0	339086	4,000	4,050	15,300	4 x 1,000 mL	97 x 167	4 L	■		

Elutriation, Continuous Flow and Zonal Rotors

Max Rotor Type	Part No.	Max Speed (rpm)	Force At r max. (g)	k Factor	Max Volume	Elutriation boundary	J-26 XP/XPI	J-E	J-30I
JCF-Z LC	357521	20,000	39,900	293	1,250 mL	—	■		■
JCF-Z SC	335140	20,000	39,900	100	660 mL	—	■		■
JCF-Z SmC	357544	20,000	36,300	281	240 mL	—	■		■
JCF-Z RC	354005	20,000	39,000	779	1,750 mL	—	■		■
JCF-Z ZC	354006	20,000	39,900	710	1,900 mL	—	■		■
JE-6B	347514	6,000	5,080	—	5 mL	86 mm (3,470 g)			■
JE-5.0	356900	5,000	4,700	—	40 mL	86 mm (2,410 g)	■		

[†] Maximum rotor speeds may differ between instrument models. For complete rotor specifications, available tubes, bottles and accessories and required parts, refer to our High Performance and High Capacity Centrifuge Catalog (BR-8102M) available at <http://www.beckman.com/hypercatalog>. Biocertified rotors have been validated for microbiological containment at an independent third party testing facility, Health Protection Agency, Porton Down, UK or USAMRIID, Ft. Detrick, MD, USA

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Avanti J Series Rotors by Volume

Fixed-Angle	Number Tubes x Volume	Rotor Capacity	Max Force (g)
JLA-8.1000	6 x 1000 mL	6 L	15,970
JLA-9.1000	4 x 1000 mL	4 L	16,800
JLA-10.500	6 x 500 mL	3 L	18,600
JA-10	6 x 500 mL	3 L	17,700
F10BCI-6x500y	6 x 500 mL	3 L	17,700
JA-14	6 x 250 mL	1.5 L	30,100
JLA-16.250	6 x 250 mL	1.5 L	38,400
F14BCI-6x250y	6 x 250 mL	1.5 L	30,000
JA-18	10 x 100 mL	1 L	47,900
F14BCI-14x50cy	14 x 50 mL conical	700 mL	33,500
JA-17	14 x 50 mL	700 mL	39,800
JA-12	12 x 50 mL conical	600 mL	23,200
JA-20.1	32 x 15 mL	480 mL	51,500
JA-20	8 x 50 mL	400 mL	48,400
JA-30.50 Ti	8 x 50 mL	400 mL	108,860
JA-25.50	8 x 50 mL	400 mL	75,600
JA-25.15	24 x 15 mL	360 mL	74,200
JA-21	18 x 10 mL	180 mL	50,400
JA-18.1	24 x 1.8 mL	43.2 mL	42,100

Swinging Bucket	Number Tubes x Volume	Rotor Capacity	Max Force (g)
JS-4.0	4 x 1000 mL	4 L	4,050
JS-4.3	4 x 750 mL	3 L	4,220
JS-5.3 AllSpin	4 x 500 mL	2 L	6,870
JS-7.5	4 x 250 mL	1 L	10,400
JS-13.1	6 x 50 mL	300 mL	26,500
JS-24.38	6 x 38.5 mL	231 mL	103,900
JS-24.15	6 x 15 mL	90 mL	110,500
JS-5.9	10 Microplates	N/A	6,570

Rotor Selection by Application^{††}

Applications for Selected Rotors
for use in Avanti® J Series Centrifuges

Bioseparation	Specific Application	JS-5.3	JS-13.1	JS-24.38	JLA-8.1000	JLA-9.1000	JA-10	F10BCI-6x500y	JLA 10.500	JA-12	JA-14	F14BCI-14x50cy	F14BCI-6x250y	JLA-16.250	JA-17	JA-18	JA-20	JA-21	JA-25.15	JA-25.50	JA-30.50 Ti	
Proteins	Pelleting ammonium sulfate precipitation		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	Sucrose/glycerol gradient		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	Centrifugal filtration 1-50 mL	■		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	Centrifugal filtration < 10 mL	■	■		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Subcellular Fractions	Chromatin/Nucleosomes			■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	Sucrose gradient isolation			■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Microsomes	Pelleting			■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	Microsomal membrane fraction			■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Mitochondria	Pelleting			■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	Sucrose gradient isolation			■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Nucleic	Pelleting			■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	Pelleting			■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Cell membranes	Pelleting			■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	Sucrose gradient isolation			■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Ribosomes/Polysomes	Binding studies	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	Pelleting			■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Cytosol	Sucrose gradient isolation			■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	Clarification			■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Lysate/ Tissue Homogenates	Clearing debris and large particles	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	Clearing Media	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Nucleic Acids	Pelleting alcohol precipitation		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	Phenol/chloroform extraction	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	Minipreps in 96-well plates	■		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	Spin columns	■		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Cells	Pelleting bacteria	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	Pelleting mammalian cells	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	Density gradient separation	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Viruses	Pelleting			■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	PEG precipitates	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Blood	Density gradient isolation	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	Pelleting	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	Plasma protein precipitation	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Blood	Blood component separation	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	Ficoll-Hypaque and other commercial reagents to isolate blood cells	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

^{††}Selected rotor has the capability (x g, volume, labware) to accommodate the application, but may not be the most optimal/efficient choice for the specific application.