Avanti High Performance Centrifuges
JXN Series & JE Series

Versatility. Performance. Reliability.

BRILLIANCE
at every turn.

fB fisher biotec australia

(Products for sale to **WA customers** only)
Fisher Biotec Australia
free call: 1800 066 077
email: info@fisherbiotec.com
web: www.fisherbiotec.com

BECKMAN COULTER
Life Sciences

ADDRESS EVERY POINT OF YOUR WORKFLOW, OPTIMIZATION AND PREPARATION

SPECIALTY LABWARE

Disposable Harvest Liners simplify the processing of large samples

- Convenient sample recovery and long term sample storage
- Enhances operator safety and efficiency.
- Easy-to-use, low-cost sample containment

1 liter wide mouth polypropylene bottle features that maximize your workflow

- Achieve 9,000 rpm in the **JLA-9.1000** rotor
- AutoVent plug and polyphenylene sulfide cap provide greater chemical resistance

JLA-9.1000 rotor support 4 x 1 Liter polypropylene bottle fit with the harvest liners system

Eliminate steps, maximize time and minimize cross contamination with less hands-on sample handling.

WORKFLOW OPTIMIZATION FROM BEGINNING TO END OF SAMPLE PREPARATION

Cell Harvesting/ Pelleting

CELL HARVESTING

Maximize cell harvest volume. Large-volume processing rotor gives you efficiency and high throughput by processing up to 6 liters.

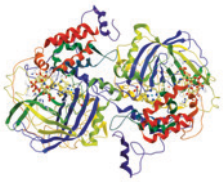
Supernatant Retention

EXOSOME PREPARATION (COMBINATION)

Isolate microparticles with the gold standard of exosome preparation. Efficient and fast sample preparation solutions customized for each step in your specific exosome research workflow, including small volume rotors **JS-24.38** and **JA-25.50**.

Cell Lysis

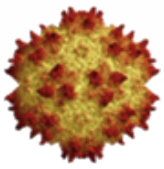
Debris Clearing



CELL HARVESTING

Exceptional high-throughout performance for scaling up protein production workflow. Save time and increase efficiency of cell pelleting with the **JCF-Z** continuous. Our rotor system processes large sample volumes capable of reaching up to 800 mL pellet size.

Product Processing



VIRAL VECTOR PREPARATION

Achieve greater than 100,000 x *g* and purify your exosome by density gradient centrifugation using our **Avanti JXN 30** in combination with the **JS-24.15** or **JA-14.50** rotors.

INCREASE PERFORMANCE AND RELIABILITY

BROAD FUNCTIONALITY AND APPLICATIONS

- Beckman Coulter rotor range adds versatility and complements ultra speed range
- We offer three titanium rotors rotors (JA-30.50Ti, JS-24.38, JS-24.15) that are capable of reaching speeds greater than 100,000 x *g*
- Easy loading with lower height and ergonomic rotor design

SAMPLE PROTECTIONS WITH EXCEPTIONAL TEMPERATURE CONTROL

- Extensive profile of rotors that are made of a single piece of aluminum, which is better conductive of temperature.
- Our JXN-30 runs all rotors at the ideal 4° C
- Sample loading and unloading while rotor is integrated to the centrifuge system makes for a more efficient and less cumbersome and labor intensive process

PROTECT YOUR SAMPLE AND STANDARDIZE METHODS

- We have been manufacturing High Performance centrifuges for nearly 50 years with a consistent rotor library to fit retrocompatibility

MAXIMIZE LAB SAFETY

- Our centrifuges are equipped with pharmaceutical-grade sterilizing filters and easy toolless replacement
- Rotor biocontainment protects lab personnel from labware failure

INCREASE PERFORMANCE AND RELIABILITY, FASTEST HIGH PERFORMANCE IN THE MARKET

Avanti JXN Series

BUILT FOR VERSATILITY AND PERFORMANCE

To overcome the everyday challenges of a shared laboratory facility, choose one of the two Avanti high performance centrifuges.

- Widespread use in biologics production.
- Compatible with an extensive rotor library – Choose from a wide variety of high performance rotors to cover application from large-volume pelleting to high speed subcellular fractionation to cell separation.
- Large touchscreen interface and additional multi user support enhances control and usability.

	Avanti JXN 30	Avanti JXN 26
Working Capacity	4.0 Liter	6.0 Liter
Speed	Up to 110,500 x *g* RCF	Up to 81,200 x *g* RCF

Avanti JE

HIGH VALUE IN A TRUE HYBRID

Make the most out of your workspace and workflow.

- Achieve high performance and up to 4.0 Liter processing capacity in a compact foot print
- Speeds up to 53,300 xg RCF with efficient acceleration and deceleration profiles
- The Avanti JE offers an intuitive, user-friendly interface, as well as lower energy costs.

AVANTI JXN USER-FRIENDLY SOFTWARE

LARGE INTUITIVE TOUCHSCREEN

- Very clear and visible for users
- Makes setting and viewing parameters very easy
- Rotor code identification gives the option of setting rcf or rpm
- Independent overspeed control (windage & inertia check) ensures safe rotor operation
- 10 levels of acceleration and deceleration control

INTUITIVE INTERFACE

- **Personalized user profile** with user login and admin control
- **Experiment Diagnostics** shows real-time run display of time, speed, and chamber temperature in graph
- **Visual color status** gives early warning of any protocol variations
- **Run History** records all run details, error messages, and it can be exported in Excel format

REMOTE MONITORING

- Network the Avanti JXN to set up, monitor and control your centrifuge remotely
- Receive alerts and diagnostics remotely via email or SMS

MOBILE CONTROL

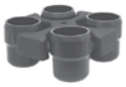
- **Mobilefuge mobile application** controls, schedules and monitors runs remotely

BUILT-IN SAFETY AND EFFICIENCY WITH ROTOR INNOVATIONS

- **DRIC Dynamic Rotor Inertia Check** makes sure that rotors are not run beyond their maximum speed.
- **Lightweight 6 x 1 L JLA-8.1000 rotor** offers the most efficient pelleting for large volumes and easy handling and cleaning because of its modular design.
- **Foot pedal for hands-free door opening** and an integrated surface work space optimize everday use.
- **Proven reliability** with robust design for consistent results and maximum uptime, year after year.
- **Exceptional performance** meeting evolving application needs, from academic research to production facilities, with up to 110,500 x *g* with the JXN 30 and up to 6 liters capacity with the JXN 26.
- **Versatile, high-throughput sample processing** from 6 x 1 L bottles, to 28 x 50 mL conical tubes, to 24 microplates per run. Save time and ensure sample integrity with fast acceleration and deceleration rates, combined with smooth runs at all speeds.

ROTOR SPECIFICATIONS

Rotor	Capacity	Speed (RPM/RCF)	Application							
			P	SF	LH	CM	NA	C	V	B
 JA-30.50 Ti	400 mL (8 x 50 mL)	30,000 108,860	✔	✔	✔	✔	✔	✔	✔	✔
 JA-25.50	400 mL (8 x 50 mL)	25,000 75,600	✔	✔	✔	✔	✔	✔	✔	✔
 JA-25.15	360 mL (24 x 15 mL)	25,000 74,200	✔	✔	✔		✔	✔	✔	✔
 JA-21	180 mL (18 x 10 mL)	21,000 50,400	✔	✔	✔		✔	✔	✔	✔
 JA-20.1	480 mL (32 x 15 mL)	20,000 51,500	✔	✔	✔		✔	✔	✔	✔
 JA-20	400 mL (8 x 50 mL)	20,000 48,400	✔	✔	✔		✔	✔	✔	✔
 JA-18.1	43.2 mL (24 x 18 mL)	18,000 42,100	✔	✔	✔		✔	✔	✔	✔
 JA-18	1,000 mL (10 x 100 mL)	18,000 47,900	✔	✔	✔		✔	✔	✔	✔
 JA-17	700 mL (14 x 50 mL)	17,000 39,800	✔	✔	✔		✔	✔	✔	✔
 JLA-16.250	1,500 mL (6 x 250 mL)	16,000 38,400	✔	✔	✔	✔	✔	✔		✔
 JA-14.50	800 mL (16 x 50 mL)	14,000 35,000	✔	✔	✔	✔	✔	✔	✔	✔
 JA-14	1,500 mL (6 x 250 mL)	14,000 30,100	✔	✔	✔	✔	✔	✔	✔	✔
 JA-12	600 mL (12 x 50 mL)	12,000 23,200	✔		✔		✔	✔	✔	✔
 JLA-10.500	3,000 mL (6 x 500 mL)	10,000 18,500	✔	✔	✔	✔	✔	✔		✔
 JA-10	3,000 mL (6 x 500 mL)	10,000 17,700	✔	✔	✔	✔	✔	✔		✔

Rotor		Capacity	Speed (RPM/RCF)	Application							
				P	SF	LH	CM	NA	C	V	B
	**JLA-9.1000**	4,000 mL (4 x 1000 mL)	9,000 16 800	✔		✔	✔	✔	✔	✔	✔
	**JLA-8.1000**	6,000 mL (6 x 1000 mL)	8,000 15 970	✔		✔	✔	✔	✔	✔	✔
	**JS-24.38**	231 mL (6 x 38.5 mL)	24,000 103 900	✔	✔	✔	✔	✔	✔	✔	✔
	**JS-13.1**	300 mL (6 x 50 mL)	13,000 26 500	✔	✔	✔		✔	✔	✔	✔
	**JS-5.3**	2,000 mL (4 x 500 mL)	5,300 6130	✔	✔	✔	✔	✔	✔	✔	✔
	**JS-4.0**	4,000 mL (4 x 1000 mL)	4,000 4,050	✔	✔	✔		✔	✔	✔	✔

WORKFLOW APPLICATIONS KEY

P (Protein) **SF** (Subcellular Fractions) **LH** (Lysate/Tissue Homogenates)
CM (Clearing Media) **NA** (Nucleic Acid) **C** (Cells) **V** (Viruses) **B** (Blood)

JCF-Z		Workflow application	Capacity	Avanti JXN-30	Avanti JXN-26
	**Std. Core**	Debris cleaning, large particle separation and cell pelleting	400 mL	20,000 39,900	
	**Large Core**		800 mL	20,000 39,900	
	**Small Core**		200 mL	20,000 39,900	
	**Regrad Core**		1,500 mL	20,000 39,900	
	**Zonal Core**		1,650 mL	20,000 39,900	

COMPLIANCE AND TECHNICAL SUPPORT

- At Beckman Coulter, engineering , sales, support, training and service work together to offer comprehensive and extensive customer focused products.
- Expert service engineering team strives for “Fix It Right the First Time.”
- Certifications of Compliance.

Specifications	Avanti JXN-26	Avanti JXN-30	Avanti J-E
Max. Speed/g-Force	26,000 rpm/81,770 x *g*	30,000 rpm/110,500 x *g*	21,000 rpm/53,300 x *g*
Max. Capacity	6 Liters	4 Liters	4 Liters
Speed Control	1,000 to 10,000:± 10 rpm 10,001 to max: ±0.1%	1,000 to 10,000:± 10 rpm 10,001 to max: ±0.1%	±50 rpm of set speed
Set Temperature	-10° C to 40° C in 1° increments	-20° C to 40° C in 1° increments	-10° C to 40° C in 1° increments
Temperature Accuracy	±2° C of chamber temperature (after equilibration)	±2° C of chamber temperature (after equilibration)	
Ambient Operating Range	16° C to 38° C	16° C to 38° C	15° C to 35° C
Accel/Decel Profiles	11/12	11/12	2/3
Heat Output	5,120 BTU/hr (1.5 kW)	5,120 BTU/hr (1.5 kW)	≤6,900 BTU/hr (2.0 kW)
Drive Type/Cooling	SR* drive/Air-Cooled	SR* drive/Air-Cooled	SR* drive/Air-Cooled
Refrigeration	Non-CFC, non-ozone depleting refrigerant	Non-CFC, non-ozone depleting refrigerant	Non-CFC, non-ozone depleting refrigerant
Sound Level	<62 dBa (1 m in front of the instrument, 1.5 m above the floor)	<62 dBa (1 m in front of the instrument, 1.5 m above the floor)	<64 dBa (0.91 m/3 ft from instrument at max. speed)
Dimensions	71 W x 86 D x 86 H cm (28 W x 34 D x 34 H in)	71 W x 86 D x 86 H cm (28 W x 34 D x 34 H in)	63.5 W x 80 D x 91.4 H cm (25 W x 31.5 D x 36 H in)
Weight	290 kg (640 lb)	310 kg (680 lb)	267.4 kg (589 lb)

Providing 70 years of global leadership in centrifugation, Beckman Coulter Life Sciences designs, manufactures, sells, and services a complete line of centrifuge systems. By offering unique rotors and innovative bottles, tubes and accessories, coupled with advanced centrifugation software, Beckman Coulter delivers intelligent centrifugation solutions to laboratory science.

BECKMAN COULTER
Life Sciences

CENT-2787SB06.17