

LIFE SCIENCES GENERAL PURPOSE RESEARCH CATALOG



RESEARCH FLOW CYTOMETRY



CENTRIFUGATION



AUTOMATED LIQUID HANDLING



CELL COUNTING & VIABILITY



WHY BECKMAN COULTER?

Advancing research and discovery is our foundation, built on an 80-year legacy of innovation.



At Beckman Coulter, we are dedicated to advancing and optimizing the laboratory. For more than 80 years, we have been a trusted partner for laboratory professionals, helping to advance scientific research and patient care. We have a vital role: our focus on innovation, reliability and efficiency has led us to become the partner of choice for clinical, research and industrial customers around the globe.

In the life sciences, researchers use Beckman Coulter precision instruments to study complex biological problems, including causes of disease and potential new treatments. Our team of experts dedicates the time and energy to understand the complexity of research for laboratory customers in a wide variety of settings: universities, government, biotechnology and pharmaceutical companies, hospitals and commercial laboratories. By innovating new processes and technologies, we're challenging conventional wisdom; our goal is to develop the best, most widely trusted laboratory solutions available on the market today.

More than 275,000 Beckman Coulter systems operate in both Diagnostics and Life Sciences laboratories around the world.



AUTOMATED INTUITIVE
 IN-DEPTH ANALYSIS RELIABILITY
 REPEATABILITY ACCURACY
 INDUSTRY-LEADING TECHNOLOGY
 LOCAL SERVICE DIRECT SUPPORT
 FROM THE ORIGINAL INNOVATORS

TABLE OF CONTENTS

 **RESEARCH FLOW CYTOMETRY**

CytoFLEX Flow Cytometer.....3

 **CENTRIFUGATION**

Most Popular Centrifuge Packages 6

Benchtop Centrifuge.....7

Avanti J-15/R.....7

Allegra X-30/R.....15

Allegra X-5.....19

Allegra 64R High-speed Centrifuge.....20

Airfuge Benchtop Ultracentrifuge.....22

Accessories for Discontinued

Benchtop Centrifuges..... 23

Microcentrifuges..... 27

Microfuge 1627

Microfuge 20.....27

High Performance & High Capacity

Floor Centrifuges..... 29

Avanti JXN..... 29

Avanti J-E.....32

Avanti J6 Rotors & Adapters..... 34

Centrifuge Rotor Accessories..... 35

Centrifuge Bottle Liners & Tubes..... 35

HarvestLine Bottle Liners..... 35

Certified Free Ultracentrifuge Tubes..... 38

Sterile Ultracentrifuge Tubes..... 38

Centrifuge & Rotor Selection Guide 42

 **CELL COUNTING & VIABILITY**

Vi-CELL XR Reagents & Consumables46

 **AUTOMATED LIQUID HANDLING**

Biomek 4000 Automated Workstation..... 47

Industry-Leading Features.....49

Software 51

Consumables..... 53

Biomek Tips & Labware.....54

Biomek i-Series Pipette Tips.....55

Biomek NX^P/FX^P Pipette Tips..... 58

Biomek 4000 & 3000 Pipette Tips..... 63

Biomek Micro- & Deep-Well Plates64

Biomek Modular Reservoir System..... 65

Biomek Labware & Accessories.....66



RESEARCH FLOW CYTOMETRY



CytoFLEX Flow Cytometer

The CytoFLEX platform provides the performance you need in a compact system. It can be fully configured with up to three lasers and 13 fluorescent channels for 15 analysis parameters. It also comes with a plate loader option and is easily upgradeable to address your future research needs.

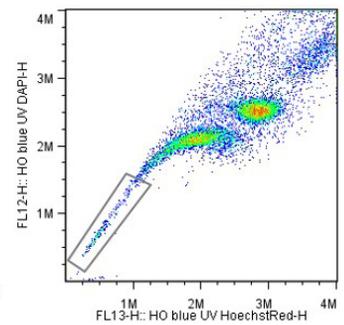
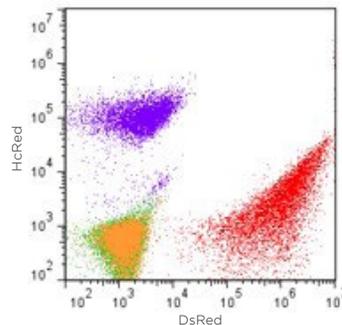
The CytoFLEX Platform is a revolutionary system presenting optimal excitation and emission, minimizing light loss and maximizing sensitivity. Since its initial unveiling, the compact system with innovative technology borrowed from the telecommunications industry has garnered attention from the flow cytometry community. Go ahead - see what you have been missing.

The CytoFLEX Flow Cytometer, the first introduction to the CytoFLEX Platform, provides the performance you need allowing you to focus on the science, not the instrumentation.

- Violet-Blue-Red (V-B-R) Series, fully activated with 13 colors or as few as four, activate additional channels in the future
- Includes 13 band pass filters: 450/45, 525/40 (2), 585/42, 610/20 (2), 660/10 (2), 690/50, 712/25, 780/60 (3)
- For higher throughput applications select from three plate loader options
- For use in regulated environments, rely on the tools for 21 CFR Part 11 in CytExpert software

KEY ADVANTAGES

- ➔ Sensitivity
- ➔ Nanoparticle analysis in a benchtop analyzer
- ➔ Extensive set of repositionable band pass filters
- ➔ Flexibility to upgrade by adding additional parameters
- ➔ Intuitive software to facilitate multicolor analysis



SPECIFICATIONS

DIMENSIONS

| | | |
|---|---|---------------------------|
| Instrument Dimensions (Length x Width x Height) | Cytometer [With or Without Plate Loader] | 42.5 cm x 42.5 cm x 34 cm |
| | Fluid Containers and Fluid Container holder | 14 cm x 35.6 cm x 35.6 cm |
| Weight | Cytometer [Without Plate Loader] | 23.4 kg |
| | Cytometer [With Standard Plate Loader] | 28 kg |
| | Cytometer [With Plate Loader DW] | 28.4 kg |

ACOUSTIC NOISE LEVEL

Measure Level: <65 dBA

ELECTRICAL RATINGS

Voltage: 100-240 VAC, 50/60 Hz, 250 VA

FLUIDICS SYSTEM

| | | |
|-------------------------------------|---|---|
| Sample loading speed | Fixed Flow Rate | Slow 10 L/min Medium 30 L/min Fast 60 L/min |
| Fluid capacity | CytoFLEX: Standard 4-L sheath fluid and waste containers; Optional 10 L sheath fluid and waste cubitainers CytoFLEX LX: Standard 10-L sheath fluid and waste cubitainers | |
| Automated maintenance cycles | Initialize, system startup program, sample mix, backflush, prime, Daily Clean, Deep Clean | |
| Single tube loading options | Manual or Semi-automatic | 5 ml (12 x 75 mm) polystyrene and polypropylene sample tubes 1.5 ml and 2 ml micro-centrifuge sample tubes |

OPTICS

| | | |
|---|--|--|
| Laser devices | Standard wavelengths | Blue laser • Wavelength: 488 nm, 50 mW • Beam spot size: 5 m x 80 m Red laser • Wavelength: 638 nm, 50 mW • Beam spot size: 5 m x 80 m Violet laser • Wavelength: 405 nm, 80 mW • Beam spot size: 5 m x 80 m |
| | Additional standard wavelengths [CytoFLEX S or CytoFLEX LX] | Yellow laser • Wavelength: 561 nm, 30 mW • Beam spot size: 5 m x 80 m Near Ultraviolet (NUV) laser • Wavelength: 375 nm, 60 mW • Beam spot size: 5 m x 80 m Infrared (IR) laser • Wavelength: 808 nm, 60 mW • Beam spot size: 5 m x 80 m |
| Forward scatter detection | Silicon photodiode with built-in 488/8 band-pass filter. | |
| Fluorescence and side scatter detection | Fluorescence and side scatter light collected by the objective lens is delivered by fiber optics to a patent-pending design with high performance, solid-state, high efficiency, low-noise detector array. Reflective optics with a single transmission band-pass filter in front of each detector. | |
| Violet side scatter configuration (VSSC) | The system offers the ability to configure the violet laser detector to collect side scatter to better resolve nanoparticles from noise. | |



VIOLET-BLUE-RED (V-B-R) SERIES

The fully activated instrument includes five from the 405 nm (Violet) laser, five fluorescent channels from the 488 nm (Blue) laser, and three from the 638 nm (Red) laser. The instrument includes 13 band pass filters which can be repositioned as needed. You can activate the number of channels that you need now and add channels later as your research needs grow. See the Configuration Table for a current list of available pre-set configurations.

| Band Pass Filters | | | |
|-------------------|------------|------------|------------|
| 450/45 | 585/42 | 660/10 (2) | 712/25 |
| 525/40 (2) | 610/20 (2) | 690/50 | 780/60 (3) |

| Available Configurations | | | | | |
|--------------------------|--------|-----------------------|-----------------|---------------|--------------|
| VWR CAT. NO. | LASERS | FLUORESCENCE CHANNELS | 405 NM (VIOLET) | 488 NM (BLUE) | 638 NM (RED) |
| 76330-530 | 1 | 4 | | 4 | |
| 76330-090 | 2 | 4 | | 3 | 1 |
| 76330-094 | 2 | 4 | | 2 | 2 |
| 76330-092 | 2 | 4 | 2 | 2 | |

ACCESSORIES AND CONSUMABLES

Start up kits are available to ensure that when your unit arrives you will be ready to start your experiments. We also offer kits and consumables for the routine use and maintenance. Each instrument contains standard band pass filters. We also offer a variety of non-standard filters for specialized applications.

| Replacement Parts | |
|-------------------|-----------------------------------|
| VWR Cat. No. | Description |
| 76183-332 | Peristaltic Sample Tubing |
| 76183-334 | Sheath Filter |
| 76183-336 | CytoFLEX Sample Probe (Tube) |
| 76183-338 | CytoFLEX Sample Probe (Plate) |
| 76183-340 | CytoFLEX Sheath Sensor |
| 76183-342 | CytoFLEX Waste Sensor |
| 76183-434 | Peek Tubing With Flow Cell Needle |
| 76183-436 | Sheath Bottle Only |
| 76183-438 | Waste Bottle Only |
| 76183-432 | Cleaning Bottle |

| Consumables | |
|--------------|---------------------------------|
| VWR Cat. No. | Description |
| 76183-430 | CytoFLEX Contrad 70 |
| 76183-426 | CytoFLEX Flowclean |
| 76183-428 | CytoFLEX Sheath Fluid |
| 76183-330 | CytoFLEX Daily QC Fluorospheres |
| 76183-432 | Cleaning Bottle |

MOST POPULAR CENTRIFUGE PACKAGES

Cell Culture Centrifuge Packages

(15 ml & 50 ml conical tube adapters)*

| VWR Cat. No. | Model | Description |
|-----------------|--|--|
| BKC19416 | Avanti J-15R , IVD, 120 V, 60 Hz Cell Culture Package (3 Liter System) | Includes REFRIGERATED benchtop centrifuge and Swinging-bucket Rotor with 4 aluminum buckets JS-4.750 (4 x 750 ml), 15 ml conical tube adapters (qty 4) and 50 ml conical tube adapters (qty 4) |
| BKB08540 | Allegra X-30R , IVD, 120 V, 60 Hz Cell Culture Package (Smaller Footprint 1.6 Liter System) | Includes REFRIGERATED instrument, SX4400 Swinging-bucket Rotor, 15 ml Conical Adapters (2 sets of 2), 50 ml Conical Adapters (2 sets of 2) |
| BKB08536 | Allegra X-30 , IVD, 120 V, 60 Hz Cell Culture Package | Includes NON-Refrigerated instrument, SX4400 Swinging-bucket Rotor, 15 ml Conical Adapters (2 sets of 2), 50 ml Conical Adapters (2 sets of 2) |

Blood Sample Centrifuge Packages

(Clinical Packages are popular for blood, urine, flow cytometry etc.)

| VWR Cat. No. | Model | Description |
|------------------|---|---|
| BKB05796 | Allegra X-30 , IVD, 120 V, 60 Hz Clinical Applications Package | Includes NON-Refrigerated instrument, SX4400 Swinging-bucket Rotor, Vacutainer / RIA Adapters / Hemolyse for 10 ml, 16 mm Tubes (2 sets of 2), Vacutainer / Hemolyse / RIA Adapters for 5 ml, 13 mm Tubes (2 sets of 2) |
| BKB05802 | Allegra X-30R , IVD, 120 V, 60 Hz Clinical Applications Package | Includes REFRIGERATED instrument, SX4400 Swinging-bucket Rotor, Vacutainer / RIA Adapters / Hemolyse for 10 ml, 16 mm Tubes (2 sets of 2), Vacutainer / Hemolyse / RIA Adapters for 5 ml, 13 mm Tubes (2 sets of 2) |
| 89429-568 | Allegra X-5 , IVD, 120 V, 60Hz Clinical Sample Prep Package Non-Refrigerated | Includes Allegra X-5 NON-Refrigerated centrifuge Swinging-bucket Rotor, Adapters for 13mm Tubes (Set of 4), Adapters for 17mm Tubes (Set of 4) |

Microcentrifuge Packages

(Will only spin 1.5/2 ml tubes; can do PCR tubes in adapters)

| VWR Cat. No. | Model | Description |
|--------------------|--|---|
| 89429-550** | Microfuge 20R , IVD, 120 V, 60 Hz, with 36 place BioCertified rotor | Includes REFRIGERATED microcentrifuge with 36 place BioCertified aluminum rotor with aerosol tight lid + 2-year Warranty (reaches 20,627 x g) |
| 89429-548 | Microfuge 20R , IVD, 120 V, 60 Hz, with 24 place aluminum rotor | Includes REFRIGERATED microcentrifuge with 24 place aluminum rotor + 2-year Warranty (reaches 20,627 x g) |
| 89429-540 | Non-refrigerated Microfuge 20 , IVD, 120 V, 60 Hz, with 24 place polypropylene rotor | Includes NON-Refrigerated microcentrifuge with 24 place polypropylene rotor + 2-year Warranty (reaches 20,627 x g) |
| BJA46472 | NON-refrigerated Microfuge 16 , Non-IVD, 100-120 V, 50/60 Hz, with 24 place polypropylene rotor | Includes NON-Refrigerated microcentrifuge with 24 place polypropylene rotor + 2-year Warranty (cold room compatible & reaches 16,163 x g) |

IVD: In Vitro Diagnostics

* 96 well plate adapters can be added separately under VWR Cat. No. BK392806

** BioCertified is a term used to describe our products which have been tested and validated to demonstrate containment of microbiological aerosols by an independent, third-party facility. Improper use or maintenance may affect seal integrity and, thus, containment

BENCHTOP CENTRIFUGES

Avanti J-15 Centrifuge Series

From general cell culture preparations to purified end project applications

The Avanti J-15 series is part of a new family of life science equipment that provides the exceptional performance you expect from Beckman Coulter Life Sciences.

Enhanced control of sample, time and workflow

The Ultra Harmonic Technology optimizes sample separation by reducing the net changes of forces to the sample, maximizing the amount of specimen presence in the pellet, and reducing the presence of contaminants or unpelleted materials in the supernatant.

KEY ADVANTAGES

- ➔ Increase Pellet Yield by 12.4%*
- ➔ Decrease Spin Time by 10%**
- ➔ Detect Imbalance in less than 30 seconds

It also optimizes time by implementing faster acceleration and deceleration profiles without compromising on sample quality.

Speed Efficiency and Minimum Sample Disturbances with Ultra Harmonic Technology

Intelligent acceleration and deceleration profiles

ULTRA Harmonic
Technology

Durable and Easy-to-Clean, Innovative Design

A hallmark of Beckman Coulter life science equipment

Fast and Accurate Imbalance Detection

Early diagnostic eliminates false positives with hardware and software improvements

Efficiency

Easy one-touch access to 6 programs and store up to 99 programs

Optimize Bench Space

With our truly ventilated unit while processing protocols in blood separation or microbiology

Ease of Use and Faster Accessibility

Icon usability and intuitive display on high contrast color LCD screen



*Avanti J-15R versus Allegra X-14R

**Compared to the Allegra X-14R, the Avanti J-15R completes a 10 cycle experiment 12 minutes faster. Overall there is an improvement in time efficiencies over 10%.

MODELS AND SPECIFICATIONS



| VWR Cat. No. | Centrifuge Model |
|------------------|-------------------------------------|
| IVD | |
| 76102-920 | AVANTI J-15 100-120 VAC, 50/60Hz |
| 76102-924 | AVANTI J-15R 120 VAC, 60Hz |
| 76332-090 | AVANTI J-15R 208-230 VAC, 60Hz |
| Non-IVD | |
| 76102-922 | AVANTI J-15 100-120 VAC, 50/60Hz |
| 76102-904 | AVANTI J-15R 120 VAC, 60Hz |
| 76332-088 | AVANTI J-15R 208-230 VAC, 60Hz |

| | DESCRIPTION | AVANTI J-15 | AVANTI J-15R |
|-------------------------------|---|---|--|
| Speed | Set Speed | 200 to 10,200 RPM in 10 RPM increments | 200 to 10,200 RPM in 10 RPM increments |
| | Set RCF | 10 to 11,420 x g in 10 x g increments | 10 to 11,420 x g in 10 x g increments |
| | Speed Display | Actual rotor speed in 10 RPM increments or actual RCF in 10 x g increments | |
| | Speed Accuracy | ±25 RPM of Set Speed from 200 to 10,200 RPM | |
| Time | Set Time | 1 minute to 99 hours and 59 minutes or continuous (Hold) | |
| | Time Display | Timed run: indicates run time remaining (HH:MM:SS) Hold run: indicates elapsed time (HH:MM:SS) Pulse run: indicates elapsed time (HH:MM:SS) | |
| Temperature | Set Temperature ¹ | N/A | -10 to +40° C in 1° C increments |
| | Temperature Display | | Chamber temperature in 1° C increments |
| | Temperature Accuracy | | ±2° C of Chamber temperature (after equilibration); applies to 4 to 25C temp range |
| | Over Temperature Shutdown ² | | > 55° C |
| Acceleration | Acceleration Profiles | 10 acceleration rates, including maximum torque | |
| Deceleration | Deceleration Profiles | 11 deceleration rates, including maximum torque and no braking | |
| Dimensions | Width | 55.6 cm (21.9 in) | 75.6 cm (29.8 in) |
| | Depth | 74.9 cm (29.5 in) | 70.3 cm (27.7 in) |
| | Height | 36.8 cm (14.5 in) | 36.8 cm (14.5 in) |
| Weight | Weight, not including rotor | 93 kg (205 lbs) | 120 kg (265 lbs) |
| Ventilation Clearances | Sides | 30 cm (12.0 in) | 7.6 cm (3.0 in) |
| | Rear | 30 cm (12.0 in) | 7.6 cm (3.0 in) |
| Finishes | Top Surface | Painted steel | |
| | Front Surface | Uncoated plastic | |
| | Door | Painted aluminum and plastic | |
| Electrical | Electrical Requirements | 100V, 12A, 50/60Hz 120V, 10A, 50/60Hz | 120V, 12A, 60Hz |
| | | 200-230V, 6A, 50/60Hz | 200-230V, 8A, 50Hz 208-230V, 9A, 60Hz |
| | Electrical Supply | Class 1 | |
| | Installation (overvoltage) Category | II | |
| Environmental | Noise output (1 m in front of instrument, 1.5 m above the floor with JA-10.100 rotor at 10,200 RPM) | 61 dBA | 58 dBA |
| | Ambient Temperature Range | 10 to 31° C | 10 to 35° C |
| | Humidity | 80%, noncondensing | 80%, noncondensing |
| | Refrigerant | N/A | R452A |
| | Maximum Heat Dissipation under steady state conditions | 4095 Btu/h (1.2 kW) | 120V: 4913 Btu/h (1.44 kW) 200-230V: 6551 Btu/h (1.92 kW) |
| | Pollution Degree ³ | 2 | |
| | Altitude | Up to 2,000 meters | |
| Technology | Ultra Harmonic Technology | ✓ | ✓ |

IVD: In Vitro Diagnostics

¹ To reach temperatures above ambient, the centrifuge is dependent on the frictional heat generated inside the chamber during operation. At low run speeds or low ambient temperatures, the centrifuge may not be able to achieve some higher temperatures.

² If the system reaches this temperature, it will issue a diagnostic and shut down using max brake.

³ Normally, only nonconductive pollution occurs. Occasionally, however, a temporary conductivity caused by condensation must be expected.

APPLICATION PACKAGES

| Avanti J-15 Application Package Description | VWR Cat. No. (Ventilated) 100-120V, 50/60HZ | VWR Cat. No. (Refrigerated) 120V, 60HZ | |
|---|---|---|---|
| <p>Cell Culture Application Package</p> <p>Includes benchtop centrifuge and JS-4.750 (4 x 750 ml) swinging-bucket rotor, 15 ml conical tube adapters (qty 4) and 50 ml conical tube adapters (qty 4).[§]</p> | <p>BKC19417 (IVD centrifuge)*</p> | <p>BKC19416 (IVD centrifuge)*</p> |  <ul style="list-style-type: none"> • 4,750 RPM/5,250 x g (J-15R 200-230V) • 4,550 RPM/4,820 x g (J-15/R 120V) • Adapters: <ul style="list-style-type: none"> • Holds 56 of 15 ml tubes • Holds 28 of 50 ml Tubes |
| <p>Blood Sample Packages</p> <p>Includes benchtop centrifuge and JS-4.750 (4 x 750 ml) swinging-bucket rotor, 13 mm diameter tube adapters (qty 4) and 16 mm diameter tube adapters (qty 4).[§]</p> | <p>BKC19423 (IVD ventilated centrifuge)*</p> | <p>BKC19422 (IVD refrigerated centrifuge)*</p> |  <ul style="list-style-type: none"> • Holds 120 - 13mm Blood Tubes • Holds 76 - 16mm Blood Tubes |
| <p>BioSafe Aerosolve Packages</p> <p>Includes benchtop centrifuge and BioCertified** JS-4.750 (4 x 750 ml) swinging-bucket rotor, BioCertified** aerosolve canisters (qty 4), 15 ml conical BioSafe aerosolve canister tube racks (qty 4) and 50 ml conical BioSafe aerosolve canister tube racks (qty 4). (Rotor is BioCertified** when used with aerosolve canisters.)</p> | <p>BKC19411 (IVD ventilated)*</p> | <p>BKC19410 (IVD refrigerated)*</p> |  <ul style="list-style-type: none"> • 4,750 RPM/5,250 x g RCF (J-15R 200-230V) • 4,550 RPM/4820 x g (J-15/R 120V) |
| <p>Microplate Application Package</p> <p>Includes Avanti J-15 benchtop centrifuge and JS-4.750µ microplate rotor (yoke with microplate carriers), 4 microplate carriers</p> | <p>BKC19405 (IVD ventilated)*</p> | <p>BKC19404 (IVD refrigerated)*</p> |  <ul style="list-style-type: none"> • 4,450RPM/4,060 x g (J-15R) • 4,350RPM/3,880 x g (J-15) |
| <p>Fixed Angle Rotor Package</p> <p>Includes benchtop centrifuge and BioCertified* JA-10.100 (6 x 100 ml) fixed angle rotor.</p> | <p>BKC19393 (IVD ventilated)*</p> | <p>BKC19392 (IVD refrigerated)*</p> |  <ul style="list-style-type: none"> • 600 ml Maximum Capacity • 10,200 RPM 11,420 x g Biosafety Lid |

[§] Bucket covers and tubes/bottles are NOT included and can be ordered separately

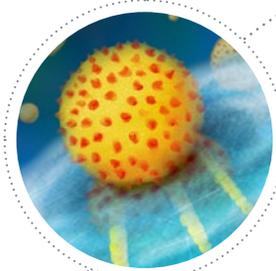
* IVD: In Vitro Diagnostics

** BioCertified is a term used to describe our products which have been tested and validated to demonstrate containment of microbiological aerosols by an independent, third-party facility. Improper use or maintenance may affect seal integrity and, thus, containment.

The Avanti J-15 is an all around solution for everyday scientific needs.

Transfection/Transduction

Centrifugal boosts, or spinfection, increases transduction and transfection rate up to 10 fold[§]



Tissue Culture

Routine cell culture procedures are made easy and safe with the use of aerosolve canister. The BioCertified* enhancement is made of a clear shell to allow sample visibility even before the canister is opened.

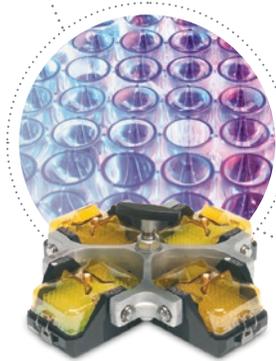


Nucleic Acid Purification

Achieve high quality plasmid DNA purification using low speed centrifugation and swinging-bucket

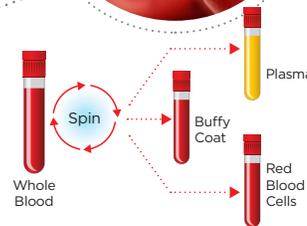
Assay Setup

The microplate carriers add the versatility to perform assays or grow cells in a plate format



Blood Component Separation

Optimize blood sample separations with new technology that avoids sample interface disturbances[¶] or grow cells in a plate format



[§] Berggren, W. Travis, Margaret Lutz, and Veronica Modesto. General spinfection protocol. StemBook (2012).

[¶] Fuss, Ivan J., et al. Isolation of whole mononuclear cells from peripheral blood and cord blood. John Wiley & Sons, Inc., 2009.

* BioCertified has been tested and validated to demonstrate containment of microbial aerosols by an independent third party facility (Health Protection Agency, Porton Down, UK or USAMRIID, Ft. Detrick, MD, USA).

MULTI-DIMENSIONAL DIFFERENTIATION & FEATURES



Early Imbalance Detection Within 30 seconds

Increases confidence on experimental runs

We've optimized our sensitivity to detect rotor imbalance as close to the beginning of the run as possible. That means the user can set the experiment and walk away with confidence. This saves time and protects the sample.



True Imbalance Detection

Reduces false diagnostics

Our improved hardware and software accurately respond to true imbalance without triggering nuisance imbalance diagnostics. This feature reduces the hassle and downtime during the workflow. System allows up to 12 gram imbalance tolerance*.



Lower Lift Over Height

Easy rotor swapping

Designed with the end-user in mind, the J-15 has a 13% lower lift over height when compared to the Allegra X-series centrifuges. This allows for easier rotor swapping for all user types.

SWINGING-BUCKET ROTORS



JS-4.750

VWR Cat. No. 76102-916

- Max RPM: 4,750 RPM
- Max RCF: 5,250 x g
- 3 liter Maximum Capacity
- BioSafe options
- Sample containers supported
 - Flasks
 - Tube range: 3 - 50 ml
 - Bottles: 230 conical, 250, 500, 750 ml
 - Aerosolve Canisters
- Includes rotor and 4 aluminum buckets



JS-4.750µ

VWR Cat. No. 76102-918

- Max RPM: 4,450 RPM
- Max RCF: 4,060 x g
- BioSafe options
- Plate Capacity
 - 16 single plates
 - 4 deep well
- Includes rotor and 4 aluminum microplate carriers (buckets not included)

FIXED-ANGLE ROTOR



JA-10.100

VWR Cat. No. 76102-914

- Max RPM: 10,200 RPM
- Max RCF: 11,420 x g
- 600 ml Maximum Capacity
- BioSafe Certification
- Sample containers supported
 - 1.5, 10, 15, 50, 100 ml tubes

* Using the JS-4.750 rotor

BIOC BioCertified is a term used to describe our products which have been tested and validated to demonstrate containment of microbiological aerosols by an independent, third-party facility. Improper use or maintenance may affect seal integrity and, thus, containment.

SWINGING-BUCKET ROTOR ACCESSORIES



Swinging-bucket rotor accessories can be used in the following rotors:
JS-4.750 , GH-3.8, SX4750, SX4750A*

Additional Biosafety accessories for personal protection and sample protection

| VWR Cat. No. | Description |
|--------------|--|
| BK392805 | JS-4.750 Tube-Bottle Bucket Covers (set of 2) |
| BK393070 | JS-4.750 Multi-well Plate Carrier Cover (set of 2) |
| BK392806 | JS-4.750 Multi-well Plate Carrier (set of 2) |
| BK359481 | JS-4.750 Aerosolve Canister (Set of 2) |



VWR Cat. No. BK392805
SX4570 Rotor

*Tubes and covers
not included*



VWR Cat. No. BK392806
Microplate Carrier
Assembly Adapter (set of 2)

VWR Cat. No. BK393070
BioCertified** Microplate
Covers (set of 2)

Microplate not included



BK359481

Modular Disk Adapters for round bottom tubes (polypropylene)

| Adapter VWR Cat. No. | | Nom. Tube Vol. (ml) | Nom. Tube Dia. (mm) | Max. No. of Tubes per Adapter | Max. No. Tubes in Rotor | Color Code |
|----------------------|----------|---------------------|---------------------|-------------------------------|-------------------------|-------------------|
| Set of 2 | Set of 4 | | | | | |
| BK359469 | BK359148 | 3 5 | 10 12 | 37 | 148 | blue |
| BK359478 | BK359157 | 3 & 5 | 13 | 30 | 120 | tan |
| BK359470 | BK359149 | 7 & 10 | 14 | 24 | 96 | orange |
| BK359471 | BK359150 | 12 | 16 | 19 | 76 | purple |
| BK359472 | BK359151 | 15 | 18 | 14 | 56 | green conical |
| BK359473 | BK359152 | 15 & 20 | 18 | 14 | 56 | green |
| BK359475 | BK359154 | 30 & 50 | 30 | 4 | 16 | lt. green conical |
| BK359474 | BK359153 | 50 | 29 | 7 | 28 | yellow |
| BK359476 | BK359155 | 50 | 35 | 4 | 16 | dk. blue |
| BK359477 | BK359156 | 100 | 44 | 2 | 8 | brown |

* Always check the rotor manual for the list of compatible accessories, tubes and adapters.

** BioCertified has been tested and validated to demonstrate containment of microbial aerosols by an independent third party facility (Health Protection Agency, Porton Down, UK or USAMRIID, Ft. Detrick, MD, USA).

Conical-Bottom Tubes

| VWR Cat. No. (Qty 2) | VWR Cat. No. (Qty 4) | Volume, ml | Diameter, mm | Capacity | Color |
|---------------------------|-------------------------|-------------------|--|---------------|-------------------|
| BK359472 | BK359151 | 15 | 18 | 14 Tubes | Green |
| BK393266 | BK393267 | 50 | 30 | 7 Tubes | Grey |
| BK359475 | BK359154 | 50 | 30 | 4 Tubes | Lt. Green |
| ACCESSORIES | | | | | |
| BK354511** | | 1.5 | Adapter Plate | 26 Microtubes | Blue |
| BK343108** | | -- | Tube Decanter for 12 mm Modular Adapter | -- | -- |
| VWR Cat. No. | | Volume, ml | SIZE, mm | Capacity | Color |
| BOTTLE ADAPTERS (PK OF 1) | | | | | |
| BK356983* (Set of 4) | | 230 (Conical) | 62 | 1 Bottle | Orange Cushion |
| BK349849 | | 250 (Conical) | 62 | 1 Bottle | Red |
| BK349946 | | 250 (Flat Bottom) | 62 | 1 Bottle | Yellow |
| BK349945 | | 500 (Flat Bottom) | 70 | 1 Bottle | Lt. Purple |
| BK349846 | | 750 (Flat Bottom) | 96 | 1 Bottle | Blue |

Cell Culture Flask Adapters

| VWR Cat. No. | Description | Color | Pack Of | Max Speed (RPM) | Max RCF g |
|-----------------|--|--------|------------|--------------------|-------------------|
| BK369292 | Corning®+ T-75 cm ² Canted Neck Cell Culture flasks Adapters | Orange | 2 | 3,024 at 50 ml | 2,000 at 50 ml |
| BK369295 | Corning®+ T-25 cm ² Canted Neck Cell Culture flasks Adapters | Green | 2 | 3,200 at 25 ml | 2,000 at 25 ml |



The cell culture flask adapters are single-piece elastomeric (EPDM) adapters designed to allow centrifugation of T-75 (75 cm² area) or T-25 (25 cm² area) cell culture flasks. The adapters stand up to the rigors of use: centrifugal force, cleaning and sterilization.

BioCertified Aerosolve Canisters*

| VWR Cat. No. | Description | Pack Of |
|--|--|---------|
| CANISTERS | | |
| BK359232  | Aerosolve Canister | 4 |
| BK359481  | Aerosolve Canister | 2 |
| REPLACEMENT PARTS | | |
| BK345366 | Replacement O-Ring for Aerosolve Canisters | 1 |
| BK361269 | Pad | 1 |



To help minimize contamination from broken or leaking tubes. Clear plastic allows for viewing from top to bottom. Each canister seals with an O-ring and is autoclavable up to 121°C.

Ordering Information: Each Aerosolve canister is supplied with base, cap, O-ring and pad (also available separately). Tube racks sold separately.

* use with BK349946 for Beckman Coulter 230 ml conical bottles only

** fits over 12 mm blue adapters BK359148 and BK359469

+ All other trademarks are the property of their respective owners.

 BioCertified is a term used to describe our products which have been tested and validated to demonstrate containment of microbiological aerosols by an independent, third-party facility. Improper use or maintenance may affect seal integrity and, thus, containment.

Aerosolve Canister Tube Racks (must be used in Aerosolve Canisters)

| VWR Cat. No. (Qty 2) | VWR Cat. No. (Qty 4) | Tube Volume, ml | Tube Diameter, mm | Capacity | Adapter Color |
|---------------------------------|-------------------------|--------------------|-------------------------|----------|------------------|
| FOR ROUND-BOTTOM TUBES | | | | | |
| BK359482 | BK359160 | 3 & 5 | 12 | 24 Tubes | Blue |
| BK359489 | BK358993 | 5 | 13 | 24 Tubes | Tan |
| BK359483 | BK359161 | 10 | 14 | 18 Tubes | Orange |
| BK359484 | BK359162 | 12 | 16 | 12 Tubes | Purple |
| BK359485 | BK359163 | 15 & 20 | 18 | 12 Tubes | Green |
| BK359486 | BK359164 | 50 | 29 | 4 Tubes | Yellow |
| FOR CONICAL-BOTTOM TUBES | | | | | |
| BK354495 (pack of 1) | -- | 1.5 | 11 | 24 Tubes | White |
| BK359487 | BK358991 | 15 | 17 | 6 Tubes | Lt. Green |
| BK359488 | BK358992 | 50 | 30 | 4 Tubes | Lime Green |
| -- | BK356985 | 230 | 62 | 1 Bottle | Orange |



Molded plastic racks support tubes in Aerosolve canisters (BK359232). Open-rack design permits quick inspection for possible broken or leaking tubes.

FIXED-ANGLE ROTOR ACCESSORIES

Bottle and Tube Adapters for the JA-10.100 Rotor^a

| Adapter VWR Cat. No. (Set of 6) | Tube or Bottle Type ^b | Tube Dimensions (mm) | Nominal Tube Volume (ml) |
|------------------------------------|----------------------------------|----------------------|--------------------------|
| BK392830 | round-bottom tube or bottle | 29 x 108 | 50 |
| BK392268 | conical tube | 30 x 115 | 50 |
| BK392823 | bottle | 18 x 107 | 15 |
| BK-392270 | conical tube | 17 x 120 | 15 |
| BK392824 | round-bottom bottle | 16 x 82 | 10 |
| BK344497 ^c | microfuge tube | 11 x 39 | 1.5 |

a. Unless otherwise indicated, adapters are polypropylene.

b. Observe manufacturer's recommendations for RCF and temperature limitations.

c. BK344497 fits in BK392830.

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.

Allegra X-30 Centrifuge Series



Excellent performance and versatility in a small footprint

- Offers the highest speed and *g*-force in its class*
 - 29,756 x *g* (18,000 RPM) maximum in fixed-angle rotor (refrigerated model)
 - 4,255 x *g* (4,700 RPM) maximum in 4x400 ml swinging- bucket rotor (refrigerated model)
- Space-saving footprint — only 18.1" wide
- BioCertified^{††} swinging-bucket and fixed-angle rotors enhance safety for lab personnel
- Accepts samples from 0.25 ml to 400 ml
- Capacity up to 1.6 liters
- Offered in ambient and refrigerated models
- Four application packages available for streamlined centrifuge solutions

The Allegra X-30 (ambient) and Allegra X-30R (refrigerated) general purpose centrifuges offer high performance and versatility in a compact design. Multiple rotor and adapter options are offered to support a wide variety of applications. Both accommodate samples from 0.25 ml up to 400 ml tubes/bottles (depending on the rotor), and standard 96-well microplates and deep-well plates.

Each features a brushless induction drive motor, which provides quiet, maintenance-free operation. Digital display indicates actual speed, set speed, temperature (on refrigerated model) and rotor imbalance. The Allegra X-30 Series also features ten different acceleration and deceleration rates.

An automatic sensor blocks centrifuge operation until the door is locked. Once in operation, the sensor releases the door lock only when the rotor has stopped. Refrigerated model features CFC-free refrigerant. Set temperature is maintained when centrifuge is at rest.

* When compared to similar models. Allegra X-30R achieves maximum speed with rotor F2402H.

KEY ADVANTAGES

- ➔ Versatile table top centrifuge capable of reaching a maximum RCF of 29,756 x *g*
- ➔ 13 rotor options
- ➔ Compact (18.1" width)
- ➔ Capacity 1.6 liters

PACKAGES

Convenient application packages for quick start-up and bundled savings. Contact your VWR Sales Representative for more information.

| Application Package Description | VWR Cat. No. (Ambient) | VWR Cat. No. (Refrigerated) |
|--|--------------------------|-----------------------------|
| Cell Culture Application Package Includes instrument, SX4400 Swinging-bucket Rotor, 15 ml Conical Adapters (2 sets of 2), 50 ml Conical Adapters (2 sets of 2) <i>Tubes sold separately</i> | BKB08536 | BKB08540 |
| | BKB08705 (High Capacity) | BKB08708 (High Capacity) |
| Microplate Application Package Includes instrument, S6096 Microplate Rotor (Holds 6 standard or 2 deep-well plates). <i>Microplates sold separately</i> | BKB08538 | BKB08542 |
| Molecular Performance Application Package Includes instrument, F2402H Fixed-angle Rotor <i>Tubes sold separately</i> | BKB08545 | BKB08547 |
| Clinical Applications Package Includes instrument, SX4400 Swinging-bucket Rotor, Vacutainer/RIA Adapters/Hemolyse for 10 ml, 16 mm Tubes (2 sets of 2), Vacutainer/Hemolyse/ RIA Adapters for 5 ml, 13 mm Tubes (2 sets of 2) <i>Tubes sold separately</i> | BKB05796 | BKB05802 |

MODELS & SPECIFICATIONS



Ordering Information: Rotors and accessories are sold separately. Additional adapters are available.

| VWR Cat. No. | Description |
|--------------|--|
| BKB06314 | Allegra X-30, Ambient Model, IVD, 120 V, 60 Hz |
| BKB06320 | Allegra X-30R, Refrigerated Model, IVD, 120 V, 60 Hz |

| | ALLEGRA X-30 | ALLEGRA X-30R |
|-----------------------------|--|--|
| Max. Speed | 23,511 x g/16,000 RPM | 29,756 x g/18,000 RPM |
| Max. Capacity | 4 x 400 ml | 4 x 400 ml |
| Set Temp. Range | N/A | -20°C to +40°C |
| Operating Temp. | Ambient | +2°C to +40°C |
| Drive | Brushless induction | Brushless induction |
| Accel/Decel Rates | 10/10 | 10/10 |
| Run Time | Up to 9 hrs., 59 min., hold; pulse (short run) | Up to 9 hrs., 59 min., hold; pulse (short run) |
| Refrigeration | No | Yes, CFC-Free |
| Dim. with lid closed | 46w x 55d x 35.5h cm (18.1 x 21.7 x 14 in) | 46w x 70.7d x 37h cm (18.1 x 27.8 x 14.6 in) |
| Weight without Rotor | 48 kg (106 lbs.) | 78 kg (172 lbs.) |
| Electrical | 120 V, 60 Hz | 120 V, 60 Hz |

SWINGING-BUCKET ROTORS & ADAPTERS

These rugged rotors are constructed from heavy-duty aluminum and are engineered to provide quiet, dependable service. They accommodate tubes and bottles from 0.25 ml to 400 ml or up to 6 microplates. Rotors can be autoclaved or chemically sterilized.

Ordering Information: Rotors are supplied complete, ready to use. Bottles, wrenches and accessory parts are available separately.

4 x 400 ml BioCertified^{††} Swinging-bucket Rotor (SX4400)

- Spins from 64 x 1.5 ml tubes up to 4 x 400 ml bottles

| VWR Cat. No. | Description | Allegra X-30 Max RPM/RCF, x g | Allegra X-30R Max RPM/RCF, x g |
|---------------------------|---|-------------------------------|--------------------------------|
| BKB01425 [†] | Model SX4400 BioCertified [†] Swinging-bucket Rotor 4 x 400 ml Buckets | 4,200/3,398 | 4,700/4,255 |
| BK392266 | Bucket Covers for SX4400 Rotor (set of 4) | -- | -- |
| BKB01435 | 400 ml Polypropylene bottle, 85 x 118 mm, each | -- | -- |



Tubes Not Included

4 x 250 ml Swinging-bucket Rotor (SX4250)

- Spin from 64 x 1.5 ml tubes up to 4 x 250 ml bottles

| VWR Cat. No. | Description | Allegra X-30 Max RPM/RCF, x g | Allegra X-30R Max RPM/RCF, x g |
|--------------|---|-------------------------------|--------------------------------|
| BK392243 | Model SX4250 Swinging-bucket Rotor 4 x 250 ml Buckets | 4,200/3,398 | 4,500/3,901 |
| BK392266 | Bucket Covers for SX4250 and SX4400 Rotors (Set of 4) | -- | -- |



Tubes Not Included

[†] Rotor is BioCertified when used in conjunction with bucket covers.

^{††} BioCertified is a term used to describe our products which have been tested and validated to demonstrate containment of microbiological aerosols by an independent, third-party facility. Improper use or maintenance may affect seal integrity and, thus, containment.



Adapters for the 4 x 400 ml and 4 x 250 ml Swinging-bucket Rotors

For use with the BKBO1425 and BK392243 Swinging-bucket rotors for the Allegra X-30 ambient and Allegra X-30R refrigerated units. These molded plastic adapters help maximize the efficiency of runs by providing proper support for specified tube sizes.

Each adapter also functions as a convenient free-standing rack for quick loading and unloading. Adapters can be autoclaved.

| VWR CAT. NO. | TUBE VOL. | TUBE SIZE (MM) | BUCKET/ ROTOR CAPACITY | PACK OF |
|-----------------------|-------------------------|----------------|------------------------|---------|
| BK392256 | 250 ml (Flat) | 61.8x125 | 1/4 | 2 |
| BK368457 | 180 ml | 56.5x113 | 1/4 | 2 |
| BK368458 | 125 ml | 50.5 x 99 | 1/4 | 2 |
| BK368459 | 80/100 ml (Glass) | 44 x 100 | 1/4 | 2 |
| BK392261 | 85 ml (Oak Ridge)/94 ml | 38 x 112 | 1/4 | 2 |
| BK368477 | 50 ml (Oak Ridge) | 28.5 x 107 | 4/16 | 2 |
| BK392265 | 50 ml (Glass) | 34 x 100 | 3/12 | 2 |
| BK392258 | 50 ml (Conical) | 28.5 x 100 | 3/12 | 2 |
| BK368461 ^o | 50 ml (Conical) | 30 x 120 | 4/16 | 2 |
| BK368462 | 30 ml (w/Screw Cap) | 26 x 100 | 5/20 | 2 |
| BK368463 | 25 ml (Glass) | 24 x 100 | 5/20 | 2 |
| BK392257 | 15 ml (Conical) | 17 x 120 | 5/20 | 2 |
| BK368464 ^o | 15 ml (Conical) | 17 x 120 | 9/36 | 2 |
| BK368468 | 10 ml (Oak Ridge) | 16.1 x 81.1 | 12/48 | 2 |
| BK368465 | 10/15 ml (Round) | 17 x 110 | 12/48 | 2 |
| BK368467 | 5 ml (Round) | 13 x 75 | 16/64 | 2 |
| 10252-968 | RIA Tubes | 12 x 75 | 25/100 | 2 |
| BK368469 | 7 ml (Glass) | 12 x 100 | 16/64 | 2 |
| BK368470 | 1.5/2.2 ml | 11 x 38 | 16/64 | 2 |
| BK368471 | 0.5 ml (PCR) | 7 x 19 | 24/96 | 2 |

^oAdapter cannot be used with bucket covers.

Microplate Rotor (S6096)

- Spins 2 x 3 microplates or 2 x 1 deep-well plates



Microplates Not Included

| VWR CAT. NO. | DESCRIPTION | ALLEGRA X-30 MAX RPM/RCF, x g | ALLEGRA X-30R MAX RPM/RCF, x g |
|--------------|---|-------------------------------|--------------------------------|
| BKBO1430 | Model S6096, Microplate Rotor 2 to 6 Plates | 4,700/2,721 | 4,700/2,721 |

Microplate Rotor (S2096)

- Spins 2 x 3 microplates or 2 x 1 deep-well plates



Microplates Not Included

| VWR CAT. NO. | DESCRIPTION | ALLEGRA X-30 MAX RPM/RCF, x g | ALLEGRA X-30R MAX RPM/RCF, x g |
|--------------|---|-------------------------------|--------------------------------|
| BK361111 | Model S2096, Microplate Rotor 2 to 6 Plates | 3,000/1,107 | 3,000/1,107 |

96 Deep- and Square-well Polypropylene Titer Plates

| VWR CAT. NO. | STERILE | WELL SHAPE | WELL VOL. | PACKAGING |
|--------------|---------|------------|-----------|-----------|
| BK267006 | No | Round | 1 ml | 24/Case |
| BK267007 | Yes | Round | 1 ml | 24/Case |
| BK140504 | No | Square | 2 ml | 24/Case |
| BK609681 | Yes | Square | 2 ml | 24/Case |

Note: Rotors and adapters are also compatible with the Allegra X-22 / X-22R instruments, except SX4400 and S6096 rotors.

24 x 1.5 ml/2.0 ml Swinging-bucket Rotor (SX241.5)

- Provides flat pelletization for DNA precipitations and immunoprecipitations



| VWR CAT. NO. | DESCRIPTION | ALLEGRA X-30 MAX RPM/RCF, x g | ALLEGRA X-30R MAX RPM/RCF, x g |
|--------------|---|-------------------------------|--------------------------------|
| BK392271 | Model SX241.5, Swinging-bucket Rotor 24 x 1.5 ml/2.0 ml Microcentrifuge Tubes | 12,500/12,950 | 14,000/16,244 |

FIXED-ANGLE ROTORS & ADAPTERS

Fixed-Angle Rotors

- Spins 250 µL (with adapter) to 85 ml tubes up to 22,065 x g (15,500 RPM)



| VWR CAT. NO. | DESCRIPTION | ALLEGRA X-30 MAX RPM/ RCF, x g | ALLEGRA X-30R MAX RPM/ RCF, x g |
|---|---|--------------------------------------|---------------------------------------|
| BK361171  | F2402H - Fixed-angle Rotor 24 x 1.5/ 2.0 ml Tubes  | 16,000/ 23,511 | 18,000/ 29,756 |
| BK392274 | FX301.5 - Fixed-angle Rotor 30 x 1.5/ 2.0 ml Tubes  | 13,200/ 19,515 | 16,000/ 28,672 |
| BK361221 | F1010 - Fixed-angle Rotor 10 x 10 ml Tubes  | 16,000/ 21,791 | 18,000/ 27,579 |
| BK361231 | F0630 - Fixed-angle Rotor 6 x 30 ml Tubes  | 16,000/ 22,364 | 18,000/ 28,305 |
| BK364640 | F0850 - Fixed-angle Rotor 8 x 50 ml Tubes  | 9,000/ 8,528 | 11,400/ 13,682 |
| BK364650 | F0685 - Fixed-angle Rotor 6 x 85 ml Tubes  | 8,000/ 6,953 | 10,000/ 10,864 |
| BK364680 | C1015 - Conical Fixed-angle Rotor  | 9,000/ 8,437 | 10,000/ 10,416 |
| BK364670 | C0650 - Conical Fixed-angle Rotor 6 x 50 ml Conical Tubes  | 9,000/ 8,346 | 10,000/ 10,304 |

Adapters for FX301.5, F2402H, SX241.5 Rotors

| VWR CAT. NO. | TUBE VOL. | TUBE SIZE (MM) | ROTOR CAPACITY | PACK OF |
|--------------|---------------------|------------------|----------------|---------|
| BK361247 | 0.25 ml/ 0.40 ml | 5 x 45/7 x 40 | 30 | 24 |
| BK364690 | 0.50 ml/ 0.75 ml | 18 x 28 | 30 | 12 |
| BK364701* | 1.5 ml/ 2.2 ml | 11 x 38 | 4/30 | 12 |

* For runs at 20,000 x g and greater

Adapter for F0685 Rotor

| VWR CAT. NO. | TUBE VOL. | TUBE SIZE (MM) | ROTOR CAPACITY | PACK OF |
|--------------|-----------------|----------------|----------------|---------|
| BK392617 | 15 ml (Round) | 18 x 106 | 6 | 6 |
| BK347539 | 50 ml (Round) | 29 x 104 | 6 | 1 |
| BK-392270** | 15 ml (Conical) | 17 x 100 | 6 | 6 |
| BK392268** | 50 ml (Conical) | 28.5 x 120 | 6 | 6 |

** Without rotor lid.

Adapter for C0650 Rotor

| VWR CAT. NO. | TUBE VOL. | TUBE SIZE (MM) | ROTOR CAPACITY | PACK OF |
|--------------|-----------------|----------------|----------------|---------|
| BK393088 | 15 ml (Conical) | 17 x 120 | 6 | 1 |

Adapter for F0850 Rotor

| VWR CAT. NO. | TUBE VOL. | TUBE SIZE (MM) | ROTOR CAPACITY | PACK OF |
|--------------|-----------|----------------|----------------|---------|
| BK870329 | 15 ml | 17 x 120 | 8 | 1 |

Rubber Pad for F1010 Rotor

| VWR CAT. NO. | TUBE VOL. | TUBE SIZE (MM) | BUCKET/ ROTOR CAPACITY | PACK OF |
|--------------|-----------|-----------------------------------|---------------------------|---------|
| 10769-308 | 6.5 ml | Rubber Pad for Tube Removal | 10 | 24 |

BioC. BioCertified is a term used to describe our products which have been tested and validated to demonstrate containment of microbiological aerosols by an independent, third-party facility. Improper use or maintenance may affect seal integrity and, thus, containment.

Allegra X-5 Clinical Benchtop Centrifuge



Maximum Speed and Capacity for High-throughput Labs

The Allegra X-5 clinical air-cooled benchtop centrifuge was designed specifically for the clinical laboratory.

- Maximize Throughput ~ process up to 140 blood tubes in one run
- Shorten Run Times ~ with centrifugal forces up to 4,470 x g
- Eliminate Transfer Steps ~ by spinning Beckman Coulter DxC (600/800)/DxI(600/800) tube racks directly in the centrifuge
- Run specialized Allegra X-5 adapters ~ directly in the AutoMate 2500 Family Processing Systems
- Robust Drive System
- Motorized Lid-locking System ~ eases loading and unloading
- Small Footprint ~ saves valuable lab space
- Backed by Beckman Coulter world-class service and support

The Allegra X-5 Clinical Benchtop Centrifuge, at 120V, offers high throughput for 13 and 16mm blood tubes and additional adapters that are paired up with Beckman Coulter DxC (600/800)/DxI (600/800) and AutoMate instruments.

* Tube fit was checked using Beckton Dickinson CPT Heparin Tube PN 362753. Only the tube fit with bucket covers and the clearance for the bucket to fully swing-out were checked, the tubes were not actually run in the centrifuge.

 This label indicates recognition by a Nationally Recognized Test Laboratory (NRTL) that the instrument has met the relevant product safety standards

 This label indicates an In Vitro diagnostic medical device.

KEY ADVANTAGES

- ➔ Routine clinical sample processing of serum, plasma, whole blood and other body fluids
- ➔ Rapid sedimentation of protein precipitates particulates and cells from clinical samples
- ➔ Processing of samples for in-vitro cytotoxicity studies, receptor binding studies and other specialized tests

MODEL & SAMPLE PREP PACKAGE

| VWR CAT. NO. | DESCRIPTION |
|--------------|---|
| 89429-566 | Allegra X-5 Clinical Benchtop Centrifuge, IVD, 120V, 60 Hz |
| 89429-568 | Allegra X-5 Clinical Sample Prep Package includes: Allegra X-5 centrifuge, IVD, 120V, 60Hz, SX4700 Swinging-bucket Rotor Adapters for 13mm Tubes (Set of 4), Adapters for 17mm Tubes (Set of 4) |

SPECIFICATIONS



ALLEGRA X-5

| | |
|---|---|
| Swinging-bucket Rotor Max Capacity | 100 x 10 ml, 140 x 5/7 ml |
| Swinging-bucket Rotor g-Force and Speed | 4,470 x g; 4,700 RPM |
| Refrigeration | NA |
| Ambient Temperature Range | +5°C to +40°C |
| Set Time/Time Display | 1 min. to 9hr 59min, (in 1 min increments), time remaining in run (timed run ± 1 minute) or ∞ and elapsed time (continuous run) |
| Drive | Brushless Three-phased System |
| Accel/Decel Profiles | 10/10 |
| Weight | 177 kg (169 lb.) |
| Dimensions | Width: 49.6 cm (19.5 in.) Depth: 63.4 cm (25.0 in.) Height, door closed: 39.0 cm (15.3 in.) |
| Electrical | 120 VAC, 12A, 60 Hz |

ROTORS & ADAPTERS

SX4700 Rotor

The Allegra X-5 requires only one rotor to perform all applications. The SX4700 swinging-bucket rotor yoke and buckets are made of aluminum and black anodized for corrosion protection. Supplied with a seven (7) year warranty period.



- Spins up to 140 (5/7 ml) or 100 (10 ml) blood tubes

| VWR CAT. NO. | DESCRIPTION | MAX RPM | MAX RCF, x g |
|--------------|--|---------|--------------|
| 89429-570 | Model SX4700 Swinging-bucket Rotor with 4 buckets included | 4,700 | 4,470 |
| 89429-582 | Replacement Buckets for SX4700 (Set of 2) | -- | -- |
| 10205-132 | Bucket Covers for SX4700 (Set of 2) | -- | -- |

SX4700 Swinging-bucket Rotor Adapters

| VWR CAT. NO. | DESCRIPTION | TUBE SIZE (MM) | BUCKET/ ROTOR CAPACITY | SET OF |
|--------------|--|----------------------|---|--------|
| 89429-572 | 13 mm Blood Tube Adapter | 13 x 100 | 35/140 | 2 |
| 89429-574 | 16 mm Blood Tube Adapter | 16 x 100 | 25/100 | 2 |
| 89429-576 | DxC/DxI Tube Rack Adapter for 13/16 mm Blood Tubes | 13 x 100 16 x 100 | 4 Racks (16 tubes) 16 Racks (64 tubes) | 2 |
| 89429-578 | AutoMate 2500 Adapter for 13 mm Blood Tube | 13 x 100 | 25/100 | 2 |
| 89429-580 | AutoMate 2500 Adapter for 16 mm Blood Tube | 16 x 100 | 16/64 | 2 |



89429-572

89429-574

89429-578

89429-580

89429-576
(Does not include DxC/DxI tube racks and tubes)

Allegra 64R High-speed Centrifuge



Optimal for Subcellular Fractionation, Proteins and Viruses

This brushless, induction drive refrigerated centrifuge brings high g-force (64,400 x g) to the lab bench. Ideal for high-speed separations, including subcellular fractionation, protein isolation and purification, viruses and phase extractions.

KEY ADVANTAGES

- ➔ 64,400 x g (30,000 RPM) with fixed-angle rotor
- ➔ Spin tubes from 0.25 up to 85 ml
- ➔ Operating temperature from +2° C to +40° C
- ➔ Rotors marked **BIOC** are certified for biocontainment^{††}
- ➔ Compact, quiet and easy-to-use

Easy-to-use control panel displays actual speed (RCF or RPM) or time, temperature and acceleration/deceleration rates. It can be customized for routine runs with up to ten different acceleration/deceleration profiles. Safety features include a door interlock that prevents contact with spinning rotor and over-temperature/over-speed diagnostics that protect samples.

The quiet (65 dBA), brushless induction drive motor can be set in 100 RPM increments and is accurate to ± 50 RPM. A flexible drive shaft helps compensate for drive imbalances. Accommodates a selection of 13 rotors, sold separately. The BioSafe+ fixed-horizontal rotor contains hazardous spills and aerosols if breakage occurs. It accommodates from 84 x 250 μ L to 60 x 1.8 ml microcentrifuge tubes and can be carried from the centrifuge to a fume hood without breaking the seal.

MODEL

Ordering Information: Supplied with a one-year parts and labor warranty. Rotors and accessories are sold separately. Additional adapters are available. For more information, contact 1-800-932-5000.

| VWR CAT. NO. | DESCRIPTION |
|--------------|--|
| BK367586 | Allegra 64R High-speed Benchtop Centrifuge, Refrigerated, 208 V, 60 Hz |

SPECIFICATIONS



ALLEGRA 64R

| | |
|-----------------------|---|
| Max. Speed | 64,400 x g/30,000 RPM |
| Run Time | 9 hrs., 59 min. Hold, pulse (short run) |
| Max. Capacity | 6 x 85 ml |
| Dim. w/lid closed | 61w x 66d x 38h cm (24 x 26 x 15 in) |
| Set Temperature Range | -20 to 40°C |
| Weight without Rotor | 102.1 kg (225 lbs.) |
| Operating Temperature | +2 to +40°C |
| Electrical | 208 V, 60 Hz, 12 A |
| Drive | Brushless induction |
| Accel/Decel | 10/10 |

* Can spin 250/400 μ L using adapter catalog number BK361247 / For 1.5/1.8 ml tubes at runs greater than 20,000 x g use adapter Cat. No. BK364701

** Works with 1.5/1.8 ml with slide Cat. No. BK345524 and 250/400 μ L with slide Cat. No. BK345521

+ BioSafe and BioSafety are terms intended to describe the enhanced biocontainment features of our products.

†† **BioC** BioCertified is a term used to describe our products which have been tested and validated to demonstrate containment of microbiological aerosols by an independent, third-party facility. Improper use or maintenance may affect seal integrity and, thus, containment.

ROTORS

These rugged rotors are constructed from heavy-duty aluminum and are engineered to provide quiet, dependable service. Rotors can be autoclaved or chemically sterilized.

Swinging-bucket Rotor (S0410)

- 4 x 10 ml tubes
- Up to 10,730 x g (10,000 RPM)



Fixed-angle Rotors

- Spin: 250 μ L (with adapter) to 85 ml tubes
- Up to 64,400 x g (30,000 RPM)

| VWR CAT. NO. | DESCRIPTION | MAX RPM/RCF, x g | MAX. RPM/RCF, x g AT 4°C |
|---------------------------|---|-------------------|--------------------------|
| BK364630* | F1202 - 45° Fixed-angle Rotor, 12 x 1.5/2.0 ml Microcentrifuge Tubes | 30,000/ 64,400 | 28,500/ 58,120 |
| BK361171* BioC | F2402H - 45° Fixed-angle Rotor, 24 x 1.5 ml/2.0 ml Microcentrifuge | 26,000/ 61,970 | 21,000/ 40,430 |
| BK364600* | F3602 - 45° Fixed-angle Rotor, 36 x 1.5 ml/2.0 ml Microcentrifuge Tubes | 22,000/ 47,620 | 19,500/ 37,410 |
| BK361221 | F1010 - 35° Fixed-angle Rotor, 10 x 10 ml Tubes | 26,000/ 57,440 | 22,500/ 43,020 |
| BK361231 | F0630 - 30° Fixed-angle Rotor, 6 x 38.5 ml Tubes | 26,200/ 59,860 | 21,500/ 40,310 |
| BK364610 | F0650 - 25° Fixed-angle Rotor, 6 x 50 ml Tubes | 21,000/ 41,420 | 18,500/ 32,140 |
| BK364640 | F0850 - 25° Fixed-angle Rotor, 8 x 50 ml Tubes | 16,500/ 29,220 | 16,500/ 29,220 |
| BK364620 | F0485 - 30° Fixed-angle Rotor, 4 x 85 ml Tubes | 20,000/ 40,700 | 17,500/ 31,160 |
| BK364650 | F0685 - 25° Fixed-angle Rotor, 6 x 85 ml Tubes | 15,500/ 26,320 | 15,000/ 24,650 |
| BK364680 | C1015 - 25° Fixed-angle Rotor, 10 x 15 ml Conical Tubes | 10,000/ 10,400 | 10,000/ 10,400 |
| BK364670 | C0650 - 25° Fixed-angle Rotor, 6 x 50 ml Conical Tubes | 10,000/ 10,400 | 10,000/ 10,400 |
| BK363000** BioC | H6002 - Fixed-horizontal Rotor | 12,200/ 12,400 | 12,200/ 12,400 |
| BK364660 | Swinging-bucket Rotor, 4 x 10 ml Tubes | 10,000/ 10,730 | 10,000/ 10,730 |

Airfuge Benchtop Ultracentrifuge



Ultracentrifuge Power for Small Volume Samples

This compact ultracentrifuge is a versatile and convenient benchtop unit. It pellets nearly any material that can be sedimented in a full-size centrifuge or ultracentrifuge.

The Airfuge is air turbine-driven and delivers results in a fraction of the time of larger units. The combination of high g-force and short path length results in remarkably short run times to produce results. Run time is shortened even further by rotor acceleration to full speed—110,000 RPM at 199,000 x g—as quickly as 30 seconds. An optional digital speed readout accessory is available for advanced speed readout. Runs can be timed from 0-300 minutes in 5 minute increments; a HOLD button can be used for longer runs.

The speed is air-pressure regulated and braking is achieved by coasting, then friction braking by engagement of brake pin. The rotor operates at a temperature a few degrees above ambient.

MODELS

Ordering Information: Airfuge air-driven ultracentrifuge includes connecting hose and air filter. Order rotors and accessories separately. For more information, contact 1-800-932-5000. Air source not supplied by Beckman Coulter.

| VWR CAT. NO. | DESCRIPTION |
|--------------|---|
| BK340400 | Airfuge Ultracentrifuge, 120 V, 60 Hz |
| BK347854 | Airfuge Ultracentrifuge, 120 V, 60 Hz with Digital Tachometer |

KEY ADVANTAGES

- Binding studies right on your workbench
- Lipoproteins
- Clarification of lipemic samples
- Proteomics
- Sample preparation for electron microscopy
- Soluble solid/total solids ratios for tomato canning applications

SPECIFICATIONS



AIRFUGE ULTRACENTRIFUGE

| | |
|---|---|
| Max. Speed | 110,000 ± 5,000 RPM |
| Max. Force | 199,000 x g |
| Max. Capacity | 4 x 450 L |
| Drive | Air turbine drive |
| Air pressure at ultracentrifuge for routine operation | 30 psi (210 kPa) |
| Accel. Time | 30-60 seconds |
| Decel. Time | 2.5-5.5 minutes |
| Speed Control | Air-pressure regulation |
| Speed Readout | By conversion of air pressure reading from instrument gauge. An optional Digital Speed Readout Accessory (BK347592) is available. |
| Braking System | Coasting, then frictional braking by engagement of brake pin. |
| Temperature Range | Rotor temperature is a few degrees above ambient. |
| Timer | 0-300 minutes in five-minute increments, HOLD for longer runs. |
| Dim | 28w x 38d x 20h cm (11 x 15 x 8 in) |
| Weight | 10.4 kg (23 lbs) |

Air and power requirements: To perform to specifications, an air source with an air flow rate of 3.5 cubic feet per minute (0.0016 m³/s) at 42 psi (290 kPa) is required. The unit is equipped with six feet (1.83m) of flexible air hose and attaches to a standard 1/4 in. (6.35 mm) male hose connector. A filter is supplied to avoid contamination by removing oil and water from compressed air. Power requirements are 120 V, 60 Hz, or 220 V, 50 Hz.

ROTORS

| VWR CAT. NO. | DESCRIPTION | MAX RPM | MAX. RCF, x g AT 4°C |
|-----------------|---|---------|----------------------|
| BK347596 | A-110 Fixed-angle Rotor - 6 x 180µL, 18° Fixed-angle, Aluminum, Anodized Red, Includes 1 Box of BK342630 Polyallomer Tubes | 110,000 | 199,000 |
| BK347594 | A-100/30 Fixed-angle Rotor - 6 x 240µL, 30° Fixed-angle, Aluminum, Anodized Blue, Includes 1 Box of BK342630 Polyallomer Tubes | 92,000 | 167,000 |
| BK347593 | A-100/18 Fixed-angle Rotor - 6 x 175µL, 18° Fixed-angle, Aluminum, Anodized Silver, Includes 1 Box of BK342630 Polyallomer Tubes | 95,000 | 148,000 |
| BK347595 | A-95 Fixed-angle Rotor - 4 x 450µL, 30° Fixed-angle, Aluminum, Anodized Black, Includes Box of BK345843 Ultra-Clear™ Tubes | 95,000 | 178,000 |
| BK347833 | Batch Rotor-Min. Fill Vol. 2 ml; Max. Fill Vol. 7 ml, Includes Rotor Stand/Vise and 1 Each BK853156 O-ring, BK343197 Bushing | 90,000 | 132,000 |
| BK347844 | Electron Microscopy Rotor (EM-90) - Max. Vol. 6 x 100µL Includes 5mm Core w/600 µL Capacity (100µL Per Cell): 3 mm Core w/360µL Capacity (60µL Per Cell): Rotor Stand/Vise: Gaskets: Sector Core Removal Bolt: Template: 1 Each BK853156 O-ring, BK343197 Bushing | 90,000 | 118,000 |
| BK341260 | ACR-90 Chylomicron Rotor for Lipemic Specimens - Yield 2.6 ml. Includes Rotor Stand/Vise, and 1 Package of BK341251 Liners (3.5 ml) and Adapter for BK342634 Liner (2.4 ml) | 90,000 | 122,000 |



ACCESSORIES FOR DISCONTINUED BENCHTOP CENTRIFUGES

ALLEGRA X-12, X-14 & X-15 ROTORS

4 x 750 ml Rotors

- For use with the Allegra X-12 Series, Allegra X-14 Series and Allegra X-15R centrifuges
- Accepts T-25 cm² and T-75 cm² cell culture flasks (adapters required)
- Accepts tubes from 1.5 ml to 750 ml
- 3,270 x g (3,750 RPM) - Allegra X-12/X-12R
- 4,303 x g (4,300 RPM) - Allegra X-14/X-14R
- 5,250 x g (4,750 RPM) - Allegra X-15R



4 x 750 ml Rotor (SX4750)

Sturdy stainless steel yoke construction with free-swinging aluminum buckets. Individual BioCertified bucket covers minimize contamination from broken or leaking tubes.



Tubes Not Included

Ordering Information: Rotor supplied with 4 buckets. The rotor bucket covers, sold separately, are supplied with gaskets and cover clips (BK392805).

| VWR CAT. NO. | DESCRIPTION |
|------------------|---|
| BK369702† | 4 x 750 ml Swinging-bucket Rotor (SX4750) |
| BK392805 | BioCertified Bucket Covers (Set of 2) |

6 x 100 ml Rotor (FX6100)

To help further isolate biomolecules; clarify media, cell debris, lysate, tissue homogenate; variety of adapters available for 1.5 ml to 100 ml tubes. For the Allegra X-12 Series, Allegra X-14 Series and Allegra X-15R centrifuges, this 6 x 100 ml fixed-angle rotor (FX6100) has a 25° angle and achieves 11,400 x g (10,200 RPM).



Tubes Not Included

| VWR CAT. NO. | DESCRIPTION |
|-----------------|--|
| BK369735 | BioCertified 6 x 100 ml Fixed Angle Rotor (FX6100), 11,400 x g (10,200 RPM) Allegra X-12/X-12R, Allegra X-14 and Allegra X-15R |

| VWR CAT. NO. | TUBE VOLUME, ml | TUBE DIAMETER, mm | CAPACITY | PACK OF |
|---|-----------------|-------------------|----------|---------|
| ADAPTERS FOR 6 x 100 ml ROTOR (FX6100) | | | | |
| BK344497* | 1.5/2.0 ml | 11 | 36 | Each |
| BK392824 | 10 ml (Round) | 16 | 6 | 6 |
| BK392823 | 15 ml (Round) | 18 | 6 | 6 |
| BK-392270 | 15 ml (Conical) | 17 | 6 | 6 |
| BK392822 | 30 ml (Round) | 25.7/25 | 6 | 6 |
| BK392821 | 35 ml (Round) | 29 | 6 | 6 |
| BK392830 | 50 ml (Round) | 29 | 6 | 6 |
| BK392268 | 50 ml (Conical) | 30 | 6 | 6 |

*Must be inserted into BK392830

| VWR CAT. NO. | TUBE SIZE (MM) | ROTOR CAPACITY | PACK OF |
|-----------------|----------------|----------------|---------|
| BK356975 | 13 x 100 | 18 | Each |
| BK356969 | 12 x 75 | 18 | Each |

ARIES 4 x 750 ml Rotor (SX4750A)

Ordering Information: Rotor supplied with four buckets. The rotor bucket covers, sold separately, are supplied with gaskets and cover clips. Aerosolve canisters are available for both SX4750 and SX4750A

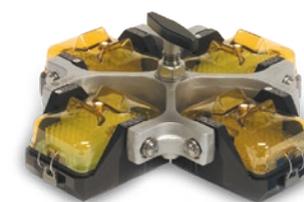


Tubes Not Included

| VWR CAT. NO. | DESCRIPTION |
|------------------|--|
| BK369704† | ARIES 4 x 750 ml Smart Balance Swinging-bucket Rotor (SX4750A) |
| BK392805 | BioCertified Bucket Covers (Set of 2) |

Microplate Carriers for 4 x 750 ml Rotor (SX4750 and SX4750A)

Each carrier accommodates up to four standard microplates, one Beckman Coulter deep-well plate or one square -well plate. Provides the following g-forces for cellular assays and quick microplate spins: Allegra 6 Series / 2,885 x g (3,750 RPM); Allegra X-12 Series / 2,885 x g (3,750 RPM); Allegra X-14 Series / 3,283 x g (4,000 RPM); and Allegra X-15R / 4,060 x g (4,450 RPM). For use with the SX4750 and SX4750A.



Microplate Not Included

Ordering Information: Each Microplate Carrier Assembly includes carriages and rubber pads (Set of 2).

| VWR CAT. NO. | DESCRIPTION |
|-----------------|--|
| BK392806 | Microplate Carrier Assembly (Set of 2) |
| BK393070 | BioCertified Covers for SX4750 or SX4750A Microplate Carriers (Set of 2) |

REPLACEMENT PARTS

| VWR CAT. NO. | DESCRIPTION |
|-----------------|---|
| BK392873 | Carriages (Set of 2 Includes Rubber Pads) |
| BK392872 | Rubber Pads (Set of 4) |

BioCertified is a term used to describe our products which have been tested and validated to demonstrate containment of microbiological aerosols by an independent, third-party facility. Improper use or maintenance may affect seal integrity and, thus, containment.

† Rotor is BioCertified when used in conjunction with Bucket Covers.

ALLEGRA 6 SERIES ROTORS

6 x 250 ml Rotor (GA-6)

- 1.5 L total capacity
- 5,710 x g (6,100 RPM)



| VWR CAT. NO. | DESCRIPTION |
|--------------|--|
| BK367054 | GA-6 35° Fixed-angle rotor, 6 x 250 ml |

| VWR CAT. NO. | TUBE SIZE, mm | TUBE VOLUME, ml | ADAPTER CAPACITY |
|--------------------------|---------------|-----------------|------------------|
| FOR ROUND-BOTTOM TUBES | | | |
| BK356997 | 29 | 50 | 1 Tube |
| BK356995 | 17 | 15 | 5 Tubes |
| FOR CONICAL-BOTTOM TUBES | | | |
| BK356964 | 17 | 15 | 4 Tubes |
| BK356966 | 30 | 50 | 1 Bottle |
| FOR BIO-VIALS TUBES | | | |
| BK342098 | 14 | 4 | 9 Tubes |

4 x 750 ml Rotor (GH-3.8)

- Accepts tubes from 1.5 ml to 750 ml
- 3,210 x g (3,750 RPM)



Tubes Not Included

Sturdy stainless steel yoke construction with free-swinging aluminum buckets. Individual clear ultem bucket covers minimize contamination from broken or leaking tubes. **Ordering Information:** Rotor supplied with 4 buckets. The rotor bucket covers, sold separately, are supplied with gaskets and cover clips.

| VWR CAT. NO. | DESCRIPTION |
|--------------|--|
| BK360581† | GH-3.8 Swinging-bucket Rotor |
| BK360585 | Bucket Covers for GH-3.8 rotor only, set of 2 |
| BK392806 | Microplate Carriers, 2,890 x g/3,750 RPM, set of 2 |
| BK393070 | Microplate Covers, set of 2 |

Aerosolve Canisters for 4 x 750 ml Rotor (GH-3.8) listed on pages 20-21. Modular Disk Adapters and Bottle Sleeves for 4 x 750 ml Rotor (GH-3.8) listed on pages 12-13.

† Rotor is BioCertified when used in conjunction with Bucket Covers.

ALLEGRA 25R SERIES ROTORS

Microplate Rotor with Transparent Bucket Covers (SX5700)

- Up to 5,021 x g (5,700 RPM)
- Includes 2 buckets, 2 plates/ carriers and 2 lid covers



Microplates Not Included

| VWR CAT. NO. | DESCRIPTION |
|--------------|-------------------------------------|
| BKA49595 | Swinging-bucket Rotor, 2 x 6 plates |

8 x 50 ml Fixed-angle Rotor (TA-14-50)

- 8 x 50 ml at 21,100 x g (14,000 RPM)
- Includes rotor, lid and O-ring



| VWR CAT. NO. | DESCRIPTION |
|--------------|------------------------------|
| BK368303 | Fixed-angle Rotor, 8 x 50 ml |

30 x 1.5 ml Fixed-angle Rotor (TA-15-1.5)

Manual Mini-preps, Spin Columns from QIAGEN,[®] Amicon,[®] and Promega[®]

- 30 x 1.5 ml at 25,160 x g (15,000 RPM)
- Manual pelleting of DNA or proteins
- Spin columns
- Diltration kits
- Adapters to accommodate 250, 400 and 750 µL



Tubes Not Included

| VWR CAT. NO. | DESCRIPTION |
|--------------|-------------------------------|
| BK368298 | Fixed-angle Rotor, 1.5/2.0 ml |

Adapters for the TA-15-1.5 Fixed-angle Rotor

| VWR CAT. NO. | DESCRIPTION |
|--------------|--|
| BK364701 | 1.5/1.8 ml Microcentrifuge Tubes Package (Set of 12) |
| BK361247 | 250/400µL Microcentrifuge Tubes (Package of 24) |
| BK364690 | 500/750µL Vial (Package of 12) |

All other trademarks are the properties of their respective owners.

4 x 500 ml Swinging-bucket Rotor (TS-5.1-500)

Cell Separation

- Up to 2 liters (4 x 500 ml)*
- 5,530 x g (5,100 RPM)
- Spin tubes and bottles – 0.40 to 500 ml
- Microplates at 3,010 x g (4,100 RPM)
- Bucket covers are certified for biocontainment
- Includes 4 removable buckets



Bottles Not Included

* Only Beckman Coulter 500 ml bottles BK368453 and BK368454 can be used in BK368308 rotor

| VWR CAT. NO. | DESCRIPTION |
|------------------|--|
| BK368308† | Swinging-bucket Rotor 4 x 500 ml, Includes 4 Removable Buckets |

Adapters and Bottles for the TS-5.1-500 Swinging-bucket Rotor (all come in pack of 2)

| VWR CAT. NO. | DESCRIPTION | CAPACITY | TUBE SIZE (MM) |
|--|--|----------|----------------|
| BK368453 | 500 ml Polypropylene Bottle with Screw Cap | 1 | 85 x 135 |
| BK368454 | 500 ml Polycarbonate Bottle with Screw Cap | 1 | 85 x 135 |
| <i>500 ml bottles fit directly into the rotor; no adapter required</i> | | | |
| BK368454 | 500 ml Polycarbonate Bottle with Screw Cap | 1 | 85 x 135 |
| BK392256 | Adapter for 250 ml Bottle | 1 | 62 x 122 |
| BK368457 | Adapter for 180/200 ml Bottle | 1 | 56 x 122 |
| BK368458 | Adapter for 125 ml Bottle | 1 | 50 x 102 |
| BK368459 | Adapter for 100 ml Bottle | 1 | 45 x 102 |
| BK368477 | Adapter for 50 ml Round Bottom Tube | 4 | 29 x 104 |
| BK368460 | Adapter for 50 ml Conical Tube with Standing Rim | 4 | 28.5 x 100 |
| BK368461 | Adapter for 50 ml Conical Tube | 4 | 30 x 120 |
| BK368462 | Adapter for 30 ml Tube | 5 | 26 x 100 |
| BK368463 | Adapter for 25 ml Glass Tube | 5 | 24 x 100 |
| BK368464 | Adapter for 15 ml Conical Tube | 9 | 17 x 120 |
| BK368465 | Adapter for 10-15 ml Tube | 12 | 17 x 115 |
| BK368467 | Adapter for Vacutainer/Hemolyse/RIA Tubes | 16 | 13 x 75 |
| BK368468 | Adapter for 10 ml Tube | 12 | 16 x 80 |
| BK368469 | Adapter for 7 ml Glass Tubes | 16 | 13 x 100 |
| BK368470 <small>BIOc</small> | Adapter for 1.5-2.2 ml Microcentrifuge Tubes | 16 | 11 x 38 |

Microplate Carrier Assembly for TS-5.1-500 Swinging-bucket Rotor

| VWR CAT. NO. | DESCRIPTION | MAX SPEED/RPM | MAX RCF, x g |
|-----------------|---|---------------|--------------|
| BK368451 | Microplate Carriers – Two Standard Plates or One Deep-well Plate Per Carrier (Set of 2) | 4,100 | 3,010 |

6 x 250 ml Fixed-angle Rotor (TA-10-250)

Cell Lysing, Crude DNA Pelleting, Midi and Maxi Kits

- 1.5 L capacity (6 x 250 ml)
- 15,300 x g (10,000 RPM)
- 6 x 250 ml flat-bottom bottles
- 24 x 15 ml and 6 x 50 ml conical tubes
- 6 x 230 ml conical bottles



| VWR CAT. NO. | DESCRIPTION |
|-----------------|-------------------------------|
| BK368293 | Fixed-angle Rotor, 6 x 250 ml |

Adapters for the TA-10-250 Fixed-angle Rotor

| VWR CAT. NO. | DESCRIPTION |
|-----------------|---|
| BK356995 | 15 ml Round-bottom Tube, 18 mm Max. Tube Diameter, 5 Place (Qty. 1) |
| BK356964 | 15 ml Conical Tubes, 17 mm Max. Tube Diameter, 4 Place (Qty. 1) |
| BK356997 | 50 ml Round-bottom Tube, 29 mm Max. Tube Diameter, 1 Place (Qty. 1) |
| BK356966 | 50 ml Conical Tube, 29 mm Max. Tube Diameter, 1 Place (Qty. 1) |
| BK356983 | 230 ml Conical Bottle (Cushions), 60 mm Max. Tube Diameter (Set of 4) |

Microplate/Filtration Kit Swinging-bucket Rotor (S5700)

Isolation with DNA Filtration Kits, Post-reaction clean up

- Up to 6,130 x g
- 10 standard microplates
- 4 deep-well or 2 square-well plates
- 2 filtration kits
- 2 PCR plates
- Includes microplate carriers with support pads (Set of 2)



Microplates Not Included

| VWR CAT. NO. | DESCRIPTION |
|-----------------|--|
| BK368954 | Swinging-bucket Rotor, 2 x 96-well Kit, 2 x 5 Microplates, 2 x 2 Deep-well Plates, Includes Microplate Carriers (Set of 2) |

S5700 Supplies

| VWR CAT. NO. | DESCRIPTION |
|-----------------|-----------------------------------|
| BK368920 | Microplate Carrier Kit (Set of 2) |
| BK369382 | Support Pad (Set of 4) |
| BK267002 | 96-well Cap Mat (Non-sterile) |
| BK267005 | 96-well Cap Mat (Sterile) |

BIOc BioCertified is a term used to describe our products which have been tested and validated to demonstrate containment of microbiological aerosols by an independent, third-party facility. Improper use or maintenance may affect seal integrity and, thus, containment.

MICROCENTRIFUGES

Microfuge 16 Microcentrifuge



Entry-level instrument for maximum productivity

- Spins quietly at 16,163 x g for fast pelleting or isolation of DNA, RNA, proteins and viruses
- Autoclavable 24-place rotor rated at 14,800 RPM
- Large, bright push button display and automatic lid release
- Cold room compatible with a compact footprint measuring 8.9 by 10.5 inches
- Fast accel/decel with optional pulse, timed, or continuous runs
- 2-year warranty included

| VWR CAT. NO. | DESCRIPTION |
|-----------------|---|
| BKA46472 | Microfuge 16 w/FX241.5P Rotor; 100-120 V, 50/60 Hz |
| BKA46475 | 24 x 2.2 ml (FX241.5P) Microfuge Fixed-angle Polypropylene Rotor w/Snap-on Lid |
| BKA46476 | 12 x 1.5/2.0 ml (FX121.5P) Microfuge Fixed-angle Polypropylene Rotor /Snap-on Lid |
| BKA46474 | Microfuge Only, 100-120V, 50/6Hz |

SPECIFICATIONS

| | Microfuge 16 | Microfuge 20 | Microfuge 20R |
|--|--|--|--|
| Max. Speed: | 14,800 RPM adjustable in 100 RPM increments | 15,000 RPM adjustable in 100 RPM increments | 15,000 RPM adjustable in 100 RPM increments |
| Max. g-force: | 16,163 x g | 20,627 x g | 20,627 x g |
| Max. Capacity: | 24 x 1.5/2.0 ml | 36 x 1.5/2.0 ml | 36 x 1.5/2.0 ml |
| Run Time: | 99 mins., 59 sec., continuous run, short run | 99 mins., 59 sec., continuous run, short run | 99 mins., 59 sec., continuous run, short run |
| User Defined Programs: | None | 10 | 10 |
| Noise Level at Max. Speed: | < 60 dBa | < 59 dBa | < 58 dBa |
| Accel/Decel Profiles: | - | Fast, soft | Fast, soft |
| Temperature Range: | - | - | -10°C to +40°C (in 1C increments) |
| Temperature Control: | - | - | ±2.5°C |
| Ambient Temperature Range: | +4°C to +40°C | +5°C to +40°C | +5°C to +35°C |
| Maximum Heat Dissipation into Room: | 324 Btu/h (90 W) | 580 Btu/h (170 W) | 1433 Btu/h (420 W) |
| Dimensions (in) | 8.9w x 10.5d x 6.9h | 12.2w x 16.5d x 10.7h | 12.2w x 26.0d x 11.5h |
| Dimensions (cm) | 22.6w x 26.6d x 17.6h | 31.0w x 42.0d x 27.0h | 31.0w x 66.0d x 29.1h |
| Weight: | 6.4 kg (14 lbs.) | 13 kg (28.6 lbs.) | 32 kg (70.5 lbs.) |
| Electrical Requirements: | 100-120 VAC, 50/60 Hz | 120 VAC, 60 Hz | 120 VAC, 60 Hz |

Microfuge 20 Series



Our top-of-the-line high performance microcentrifuges

- Refrigerated (Microfuge 20R) and Non-refrigerated (Microfuge 20) models
- Quickly process samples at maximum speeds of up to 15,000 RPM (20,627 x g)
- Spin more samples per run with a maximum capacity of 36 x 1.5/2.0 ml tubes
- Save setup time with an easy-to-use interface and up to 10 user-defined programs for common protocols
- Safely process samples with optional BioCertified* FA361.5 fixed angle rotor
- Lower utility costs with increased energy efficiency
- 2-year warranty included



| VWR CAT. NO. | DESCRIPTION |
|------------------|--|
| 89429-540 | Microfuge 20, IVD, w/FA241.5P Rotor, 120V/60 Hz |
| 89429-542 | Microfuge 20, IVD, w/FA241.5 Rotor, 120V/60 Hz |
| 89429-544 | Microfuge 20, IVD, w/ BioC FA361.5 Rotor, 120V/60 Hz |
| 89429-546 | Microfuge 20R, IVD, w/FA241.5P Rotor, 120V/60 Hz |
| 89429-548 | Microfuge 20R, IVD, w/FA241.5 Rotor, 120V/60 Hz |
| 89429-550 | Microfuge 20R, IVD, w/ BioC FA361.5 Rotor, 120V/60 Hz |

** BioSafe and BioSafety are terms intended to describe the enhanced biocontainment features of our products
 * **BioC** BioCertified is a term used to describe our products which have been tested and validated to demonstrate containment of microbiological aerosols by an independent, third-party facility. Improper use or maintenance may affect seal integrity and, thus, containment.
 This label indicates recognition by a Nationally Recognized Test Laboratory (NRTL) that the instrument has met the relevant product safety standards

MICROFUGE 16 ROTORS

Ideal for fast pelleting or isolation of DNA, RNA, proteins and viruses.

24 x 1.5/2.0 ml (FX241.5P) fixed-angle polypropylene rotor with snap-on lid

- 14,800 RPM (16,163 x g)
- Two concentric rows delivering same max. g-force to samples placed in both rows



Tubes Not Included

| VWR CAT. NO. | DESCRIPTION |
|--------------|---|
| BKA46475 | 24 x 1.5/2.0 ml (FX241.5P) fixed-angle polypropylene rotor with snap-on lid |

12 x 1.5/2.0 ml (FX121.5P) fixed-angle polypropylene rotor with snap-on lid

- 14,800 RPM, (15,183 x g)



Tubes Not Included

| VWR CAT. NO. | DESCRIPTION |
|--------------|---|
| BKA46476 | 12 x 1.5/2.0 ml (FX121.5P) fixed-angle polypropylene rotor with snap-on lid |

ADAPTERS & ACCESSORIES

Adapters for Microfuge Rotors FX241.5P, FX121.5P, FA241.5, FA241.5P, and FA361.5

| VWR CAT. NO. | DESCRIPTION |
|--------------|--|
| BK361247 | 0.25/0.4 ml PCR microcentrifuge tube adapter (pkg. of 24) |
| BK364690 | 0.5/0.6/0.75 ml PCR microcentrifuge tube adapters (pkg. of 12) |
| BK392294 | 0.2 ml PCR microcentrifuge tube adapter (pkg. of 12) |

Replacement Lid for Microfuge 16 Rotors

| VWR CAT. NO. | DESCRIPTION |
|--------------|--|
| BKA46477 | Snap-on lid for FX241.5P and FX121.5P Rotors |

Replacement Lids for Microfuge 20 Series Rotors

| VWR CAT. NO. | DESCRIPTION |
|--------------|--|
| 89429-560 | Snap-on lid for FA241.5, FA241.5P and FA4X8.2P Rotors |
| 89429-562 | Screw-on lid for FA241.5, FA241.5P and FA4X8.2P Rotors |
| 89429-564 | BioSafe** Screw-on lid for FA361.5 Rotor |

MICROFUGE 20 ROTORS

Ideal for nucleic and protein preparation; pelleting, extractions, purifications, concentrations, phase separations and receptor binding; and rapid sedimentation of protein precipitates, particulates and cell debris

24 x 1.5/2.0 ml (FA241.5P) fixed-angle polypropylene rotor with snap-on lid

- 15,000 RPM, (20,627 x g)



Tubes Not Included

| VWR CAT. NO. | DESCRIPTION |
|--------------|---|
| 89429-554 | 24 x 1.5/2.0 ml (FA241.5P) fixed-angle polypropylene rotor with snap-on lid |

24 x 1.5/2.0 ml (FA241.5) fixed-angle aluminum rotor with snap-on lid

- 15,000 RPM, (20,627 x g)



Tubes Not Included

| VWR CAT. NO. | DESCRIPTION |
|--------------|---|
| 89429-552 | 24 x 1.5/2.0 ml (FA241.5) fixed-angle aluminum rotor with snap-on lid |

36 x 1.5/2.0 ml (FA361.5) BioCertified* fixed-angle aluminum rotor with aerosol-tight lid

- 15,000 RPM, (20,124 x g)



| VWR CAT. NO. | DESCRIPTION |
|------------------------------|---|
| 89429-556 <small>BIO</small> | 36 x 1.5/2.0 ml (FA361.5) BioCertified* fixed-angle aluminum rotor with aerosol-tight lid |

4 x 8 (0.2 ml) (FA4x8.2P) PCR tube strip fixed-angle polypropylene rotor with snap-on lid

- 15,000 RPM, (16,602 x g)



| VWR CAT. NO. | DESCRIPTION |
|--------------|---|
| 89429-558 | 4 x 8 (0.2 ml) (FA4x8.2P) PCR tube strip fixed-angle polypropylene rotor with snap-on lid |

HIGH PERFORMANCE & HIGH CAPACITY

Avanti JXN Centrifuge Series

The versatility you need. The performance you expect.

The Avanti JXN series is comprised by two top-of-the line, high performance/high capacity refrigerated centrifuges which generate centrifugal forces required for a wide variety of applications. The Avanti JXN-30 (4L) centrifuge achieves a maximum g -Force of 108,860 $\times g$ with the JA-30.50 Ti fixed angle rotor. In addition, the Avanti JXN-30 also achieves a maximum g -Force of 103,860 $\times g$ with the JS-24.38 and of 110,510 $\times g$ with the JS-24.15 swinging-bucket rotors. The Avanti JXN-26 (6L) can reach up to 81,770 $\times g$ with the JA-30.50 Ti fixed angle rotor and offers an efficient (6L) high capacity fixed angle rotor, the JLA-8.1000. Both centrifuges provide backward compatibility with the existing Avanti rotor library.

(Please refer to the Avanti User Guide for the list of compatible rotors.)

Works Remotely

- Easily monitor and control the Avanti JXN-26 or the Avanti JXN-30 centrifuge functions remotely via computer, using Virtual Network Computing (VNC) software, or with a mobile device (Apple® iOS and Android™) with the custom MobileFuge application
- Set and monitor run parameters remotely and receive alerts and diagnostic results via e-mail

Perfect to Support Shared Labs and GMP Environment

- Provides on-screen text sensitive “help” screen and real-time run graphing
- Allows up to 1000 user-defined programs. Set up and store numerous protocols
- Allows to enable password protection for up to 50 unique user profiles
- Allows to network multiple instruments

Intuitive Interface

- With large, user-friendly LCD screen
- Select rotor by name, not by arcane number code
- View set and actual run conditions simultaneously
- Delay start
- Run times to 99.59, Hold, and ω t2 integrator for applications that require exquisite reproducibility



Versatile Across Rotors and Applications

- Compatible with an extensive library of fixed angle and swinging-bucket rotors including the lightweight J-Lite rotors

Safe and Sustainable

- Dynamic Rotor Inertia Check (DRIC) and rotor recognition provide redundant safety checks to assure no rotor can be run above its rated speed
- Temperature control is optimized ensuring sample quality and avoiding unwanted artifacts
- Friction Reduction System (FRS) allows quicker, quieter, and cooler runs
- High-torque, Switched Reluctance (SR)* drive cycle shortens cycle times
- BioSafe** options for the centrifuge and rotors

Ergonomic Design

- Low work surface height for easier installation and unloading of rotors
- Large digital readouts make operation simpler
- Foot pedal for hands-free door operation



SPECIFICATIONS



| | Avanti JXN-30 | Avanti JXN-26 |
|---|--|--|
| Max. Speed/g-Force (Depending on the rotor): | 30,000 RPM/ 110,510 x g | 26,000 RPM/ 81,770 x g |
| Accel/Decel Rates: | 11/12 | 11/12 |
| Maximum Capacity: | 4 Liters | 6 Liters |
| Set Temp Range: (1° increments) | -20 to 40°C | -10 to 40°C |
| Temp. Accuracy: | ± 2°C of chamber temp after equilibration | ± 2°C of chamber temp equilibration |
| Speed Control (2 Levels): | Low speed = +/- 10 RPM High speed = +/- 0.15% | Low speed = +/- 10 RPM High speed = +/- 0.1% |
| Ambient Temp Range: | 16° to 38°C | 16° to 38°C |
| Drive Type: | Brushless, High Torque SR* Drive | Brushless, High Torque SR* Drive |
| Refrigeration System: | Non-CFC-based refrigerant | Non-CFC-based refrigerant |
| Maximum Heat Dissipation (under steady state conditions) | 1.5 kW / 5120 Btu/hr | 1.5 kW / 5120 Btu/hr |
| Noise Output: | 62dBa (1.0 m in ft from instrument, 1.5 m above floor) | 62dBa (1.0 m in ft from instrument, 1.5 m above floor) |
| Dim. w/ Door Closed: | 71w x 86d x 86h cm | 71w x 86d x 86h cm |
| Weight: | 310 kg (680 lb) | 290 kg (640 lb) |
| HEPA Filter: | Optional | Optional |

JA-14.50 FIXED-ANGLE ROTOR

Tubes not Included

- Highest g-Force and most efficient 50 ml fixed angle rotor in its class
- 16 cavities for maximum throughput
- Can spin 50 ml (conical), 15 ml (conical and round) and 5 ml (conical). (Please refer to the rotor manual for the list of compatible tubes and adapters.)



MODELS

| VWR CAT. NO. | DESCRIPTION |
|--------------|--|
| 10210-212 | Avanti JXN-30, IVD, 200-240V, 50/60Hz, 24A |
| 10119-926 | Avanti JXN-26, IVD, 200-240V, 50/60Hz, 24A |
| 10119-922 | HEPA Filter Kit for Avanti JXN Series |

ROTORS

| VWR CAT. NO. | DESCRIPTION | MAX CAPACITY | MAX. SPEED RPM JXN-26/JXN-30 | MAX. RCF, X G JXN-26/JXN-30 |
|---|---|--------------|---------------------------------|--------------------------------|
| FIXED-ANGLE | | | | |
| BK363421 | Fixed-angle, JA-30.50 Ti | 8 x 50 ml | 26,000/30,000 | 81,770/108,860 |
| BK363420 | Fixed-angle, JA-30.50 Ti Dual-Locking Lid | 8 x 50 ml | 26,000/30,000 | 81,770/108,860 |
| BK363055 | Fixed-angle, JA-25.50 | 8 x 50 ml | 25,000/25,000 | 75,600/75,600 |
| BK363058  | Fixed-angle, JA-25.50 Dual-Locking Lid | 8 x 50 ml | 25,000/25,000 | 75,600/75,600 |
| BK363054 | Fixed-angle, JA-25.15 | 24 x 15 ml | 25,000/25,000 | 74,200/74,200 |
| BK363050  | Fixed-angle, JA-25.15 Dual-Locking Lid | 24 x 15 ml | 25,000/25,000 | 74,200/74,200 |
| BK334845 | Fixed-angle, JA-21 | 18 x 10 ml | 21,000/21,000 | 50,380/50,380 |
| BK342095  | Fixed-angle, JA-20.1 | 32 x 15 ml | 20,000/20,000 | 51,520/51,520 |
| BK334831  | Fixed-angle, JA-20 | 8 x 50 ml | 20,000/20,000 | 48,380/48,380 |
| BK347824 | Fixed-angle, JA-18.1 | 24 x 1.8 ml | 18,000/18,000 | 42,090/42,090 |
| BK369679  | Fixed-angle, JA-18 | 10 x 100 ml | 18,000/18,000 | 47,900/47,900 |
| BK369691  | Fixed-angle, JA-17 | 14 x 50 ml | 17,000/17,000 | 39,810/39,810 |
| BK363934 | Fixed-angle, JLA-16.250 | 6 x 250 ml | 16,000/16,000 | 38,420/38,420 |
| BK363930  | Fixed-angle, JLA-16.250 Dual-Locking Lid | 6 x 250 ml | 16,000/16,000 | 38,420/38,420 |
| BKB88555 | Fixed-angle, JA-14.50 | 16 x 50 ml c | 14,000/14,000 | 35,000/35,000 |
| BKB88554  | Fixed-angle, JA-14.50 Dual-Locking Lid | 16 x 50 ml c | 14,000/14,000 | 35,000/35,000 |
| BK339247  | Fixed-angle, JA-14 | 6 x 250 ml | 14,000/14,000 | 30,070/30,070 |
| BK360993 | Fixed-angle, JA-12 | 12 x 50 ml c | 12,000/12,000 | 23,220/23,220 |
| BK360992  | Fixed-angle, JA-12 Dual-Locking Lid | 12 x 50 ml c | 12,000/12,000 | 23,220/23,220 |
| BK369687 | Fixed-angle, JA-10 | 6 x 500 ml | 10,000/10,000 | 17,700/17,700 |
| BK369681  | Fixed-angle, JLA-10.500 ^{††} | 6 x 500 ml | 10,000/NA | 18,590/NA |
| BK366754 | Fixed-angle, JLA-9.1000 | 4 x 1 liter | 9,000/9,000 | 16,780/16,780 |
| BK363688  | Fixed-angle, JLA-8.1000 ^{††} | 6 x 1 liter | 8,000/NA | 15,970/NA |
| SWINGING BUCKET | | | | |
| BK360743 | Swinging-bucket, JS-24.38 | 6 x 38.5 ml | 10,000/24,000 | 18,030/103,860 |
| BK362396 | Swinging-bucket, JS-24.15 | 6 x 15 ml | 10,000/24,000 | 19,190/110,510 |
| BK346963 | Swinging-bucket, JS-13.1 | 6 x 50 ml | 13,000/13,000 | 26,500/26,500 |
| BK336380 | Swinging-bucket, JS-7.5 | 4 x 250 ml | 7,500/7,500 | 10,400/10,400 |
| BK368690  | Swinging-bucket, JS-5.3 AllSpin ^{††} | 4 x 500 ml c | 5,300/NA | 6,870/NA |
| BK362734  | Swinging-bucket, JS-4.3 ^{†††} | 4 x 750 ml | 4,300/NA | 4,220/NA |
| BK339086  | Swinging-bucket, JS-4.0 ^{††} | 4 x 1 liter | 4,000/NA | 4,050/NA |

^{†††} "c" = Conical

* SR Drives are manufactured by Beckman Coulter with technology licensed from Switched Reluctance Drives Limited.

** BioSafe and BioSafety are terms intended to describe the enhanced biocontainment features of our products.

[†]  BioCertified when used in conjunction with associated BioSafe Aerosol Covers, Bucket Covers, or Bottle Assembly.

^{††} Rotor is BioCertified when used in conjunction with Bucket Covers or Aerosol Covers.

^{†††} Rotor is BioCertified when used with Aerosol Canisters.

^{††††} BioCertified is a term used to describe our products which have been tested and validated to demonstrate containment of microbiological aerosols by an independent, third-party facility. Improper use or maintenance may affect seal integrity and, thus, containment.

Apple is a registered trademark of Apple, Inc. iOS is a trademark or registered trademark of Cisco in the U.S. and other countries and is used under license. Android is a trademark of Google, Inc.

Avanti J-E Centrifuge

The economical performer that fits right in your lab

Space Conscious

Knowing space is at a premium, we gave the Avanti J-E a small footprint, allowing you the freedom to place it right in your lab, so it's where you need it, when you need it.

Safety Minded

Each rotor is automatically identified at low speed to ensure that each run is 100% safe. Even if the operator inputs incorrect run parameters, the Avanti J-E will check and reset itself to a speed that is safe for the detected rotor and complete the run without shutting down.

Quick Worker

Avanti J-E's low height and contoured front panel help ease the burden of rotor installation and retrieval. And with exclusive high-torque, switched reluctance (SR)* drive technology, fast acceleration and deceleration mean quicker separations and less waiting.

Keeps Its Cool

Avanti J-E uses a Friction Reduction System (FRS) to reduce heat generation, which means better sample cooling, a cooler lab, quieter operation, and greatly reduced energy usage. FRS uses a zero-maintenance partial vacuum system that increases overall reliability and saves you money.

Ready For Anything

Avanti J-E's extensive rotor library maximizes capacity and optimizes g-Force for efficient, fast separations. The library includes: The AllSpin rotor for microplates and general purpose separations; lightweight, high-capacity 4-liter capability, and a complete range of BioCertified rotors.

Smart

The Avanti J-E can save up to nine user programs for recall.



SPECIFICATIONS



| | Avanti J-E |
|---------------------------------|--|
| Maximum Speed (RPM): | 21,000 |
| Maximum Force (x g): | 53,300 |
| Accel/Decel Rates: | 2/3 |
| Set Temp Range (1° increments): | -10 to 40°C |
| Temp Control: | ± 2° of set temperature |
| Speed Control: | ± 50 RPM of set speed |
| Ambient Temp Range: | 15° to 35°C |
| Drive Type / Cooling: | SR Drive / Air Cooled |
| Refrigeration System: | Non-CFC, non-ozone depleting refrigerant |
| Dim. w/door closed: | 63.5w x 80d x 91.4h cm (25 x 31.5 x 36 in) |
| Weight: | 267.5 kg (589 lb) |
| Programs: | 9 |
| Maximum Capacity | 4 Liters |

MODELS

| VWR CAT. NO. | DESCRIPTION |
|---------------------------------|--------------------------------------|
| BK369001 | Avanti J-E, 60Hz, 208/240V |
| BK969352 <small>BIOE</small> | Avanti J-E BioSafe**, 60Hz, 208/240V |

ROTORS

| VWR CAT. NO. | DESCRIPTION | MAX CAPACITY | MAX. SPEED RPM | MAX. RCF, X G |
|------------------------|-----------------------------|--------------|----------------|---------------|
| FIXED-ANGLE | | | | |
| BK363055 | JA-25.50 | 8 x 50 ml | 21,000 | 53,300 |
| BK363058 BIOE | JA-25.50 Dual-Locking Lid | 8 x 50 ml | 21,000 | 53,300 |
| BK334845 | JA-21 | 18 x 10 ml | 21,000 | 50,400 |
| BK342095 BIOE | JA-20.1 | 32 x 15 ml | 20,000 | 51,500 |
| BK334831 BIOE | JA-20 | 8 x 50 ml | 20,000 | 48,400 |
| BK369679 BIOE | JA-18 | 10 x 100 ml | 16,000 | 37,800 |
| BK369691 BIOE | JA-17 | 14 x 50 ml | 17,000 | 39,800 |
| BK363934 | JLA-16.250 | 6 x 250 ml | 16,000 | 38,400 |
| BK363930 BIOE | JLA-16.250 Dual-Locking Lid | 6 x 250 ml | 16,000 | 38,400 |
| BKB88555 | JA-14.50 | 16 x 50 c | 14,000 | 35,000 |
| BKB88554 BIOE | JA-14.50 Dual-Locking Lid | 16 x 50 c | 14,000 | 35,000 |
| BK339247 BIOE | JA-14 | 6 x 250 ml | 14,000 | 30,100 |
| BK360993 | JA-12 | 12 x 50 ml c | 12,000 | 23,200 |
| BK360992 BIOE | JA-12 Dual-Locking Lid | 12 x 50 ml c | 12,000 | 23,200 |
| BK369687 | JA-10 | 6 x 500 ml | 10,000 | 17,700 |
| BK369681 BIOE | JLA-10.500 [†] | 6 x 500 ml | 10,000 | 18,600 |
| BK366754 | JLA-9.1000 | 4 x 1 liter | 6,300 | 8,224 |
| SWINGING BUCKET | | | | |
| BK346963 | JS-13.1 | 6 x 50 ml | 13,000 | 26,500 |
| BK368690 BIOE | JS-5.3 AllSpin [†] | 4 x 500 ml c | 5,300 | 6,870 |

c Conical

* SR Drives are manufactured by Beckman Coulter with technology licensed from Switched Reluctance Drives Limited.

** BioSafe and BioSafety are terms intended to describe the enhanced biocontainment features of our products.

† Rotor is BioCertified when used in conjunction with Bucket Covers or AeroSeal Covers.

BIOE BioEnhanced is a term intended to describe our products' enhanced level of biocontainment by design.

BIOE BioCertified is a term used to describe our products which have been tested and validated to demonstrate containment of microbiological aerosols by an independent, third-party facility. Improper use or maintenance may affect seal integrity and, thus, containment.



J6 ROTORS FOR MAXIMUM APPLICATIONS VERSATILITY

Beckman Coulter rotors are designed to help you get the most from your J6 Series instrument. Workhorse swinging-bucket rotors were designed with versatility in mind. By choosing the necessary adapter(s), these rotors can spin everything from tissue culture in 1-liter bottles to blood bags. Special carriers for microtiter plates slip right into the rotor yokes that hold swinging-buckets, quickly converting the rotor to a special-purpose separation tool.

| VWR CAT. NO. | ROTOR TYPE | ROTOR CAPACITY | MAX. SPEED RPM | MAX FORCE AT R MAX (G) | APPROX. ACCEL./ DECEL. TIME |
|--|-------------------------------|---|----------------|------------------------|-----------------------------|
| SWINGING BUCKET | | | | | |
| BK339087  | JS-5.2* (windshielded) | 4 Liters, 4 blood bags, 12 microplates, 148 RIA tubes | 5,200 | 6,840 (226 mm) | 2.5 / 3.0 min. |
| BK366695  | JS-4.2A ARIES* (windshielded) | 6 Liters, 6 blood bags, 18 microplates, 336 RIA tubes | 4,200 | 5,020 (254 mm) | 2.5 / 3.0 min. |
| BK339080  | JS-4.2* (windshielded) | 6 Liters, 6 blood bags, 18 microplates, 336 RIA tubes | 4,200 | 5,020 (254 mm) | 2.5 / 3.0 min. |
| BK339086  | JS-4.0 (unshielded) | 4 Liters, 4 blood bags, 12 microplates, 148 RIA tubes | 4,000 | 4,050 (226 mm) | 2.0 / 1.5 min. |
| BK339081  | JS-3.0* (unshielded) | 6 Liters, 6 blood bags, 18 microplates, 336 RIA tubes | 3,000 | 2,560 (254 mm) | 2.0 / 1.5 min. |

+ BioCertified when used in conjunction with Aeroseal Covers Cat. No. BK343650.

| ACCESSORIES | | | | | |
|--|--|---------------------------------|-------|----------------|----|
| BK343686  | Aeroseal Covers^ for all J6 Rotors except for JS-4.2SM | -- | -- | -- | -- |
| BK358680 | Microplate Carriers | 12 microplates, 4-bucket Rotors | 2,600 | 1,450 (192 mm) | -- |

^ Must use Multi-disk Bracket Adapter Assembly Cat. No. BK343369 when Aeroseal Covers are used in round buckets.

| SWINGING-BUCKET ROTORS FOR BLOOD BAGS | | | | | |
|--|--------------------------------|--------------|-------|----------------|----------------|
| BK366670 | JS-4.2SMA ARIES (windshielded) | 6 blood bags | 4,200 | 4,900 (116 mm) | 2.5 / 3.0 min. |
| BK348394 | JS-4.2SM (windshielded) | 6 blood bags | 4,200 | 4,900 (248 mm) | 2.5 / 3.0 min. |

MODULAR DISK ADAPTERS

| VWR CAT. NO. | COLOR CODE | TYPICAL TUBE/BOTTLE SIZES USED | MAX TUBE DIAMETER | DISKS PER ADAPTER | TUBES PER ADAPTER | TUBE CAPACITY FOR JS-5.2 OR JS-4.0 ROTOR | TUBE CAPACITY FOR JS-4.2 OR JS-3.0 ROTOR |
|------------------|------------|--------------------------------|-------------------|-------------------|-------------------|--|--|
| BK339100 | Blue | 3 ml and 5 ml | 12 mm | 5 | 37 | 148 | 222 |
| BK339101 | Orange | 10 ml | 14 mm | 6 | 24 | 96 | 144 |
| BK341977 | Purple | 12 ml | 16 mm | 8 | 19 | 76 | 114 |
| BK339102* | Green | 20 ml | 18 mm | 8 | 14 | 56 | 84 |
| BK339103 | Yellow | 50 ml | 28 mm | 7 | 7 | 28 | 42 |
| 10769-310 | Lt. Green | 50 ml (Conical) | 29 mm | 5 | 4 | 16 | 24 |
| BK341794 | Dark Blue | 50 ml | 35 mm | 7 | 4 | 16 | 24 |
| BK339104 | Brown | 100 ml | 44 mm | 4 | 2 | 8 | 12 |
| BK339108 | Red | 250 ml | 62 mm | 8 | 1 | 4 | 6 |
| BK339109 | Yellow | 500 ml | 70 mm | 9 | 1 | 4 | 6 |

*Can also run 15 ml conical tubes in this adapter.

| BOTTLE SLEEVE | | | | | | | |
|----------------------|------|--------------------|-------|---|---|---|---|
| BK356096 | Blue | 1 liter and 750 ml | 98 mm | — | 1 | 4 | 6 |

ROTOR ACCESSORIES

Beckman Coulter adapters, AeroSeal covers and other accessories bring added utility and safety to the J6 rotor line. Eleven color-coded Multi-Disc adapters fit inside the J6's swinging-buckets, accommodating tube and bottle diameters ranging from 10 mm to 98 mm. The adapters are autoclavable and can serve as handy storage racks. Special rubber bases are shaped to support individual tubes/bottles, and can be obtained for both conical and round-bottom shapes. Special AeroSeal covers work with swinging-buckets, using an o-ring seal designed to protect against biohazardous aerosol emission. Blood bag cups support blood bags of all sizes and shapes.



CENTRIFUGE BOTTLE LINERS & TUBES

HarvestLine Bottle Liners

Safe, efficient workflows are as critical to your study as quality samples. Now you can harvest high-quality samples in fewer steps from prep to cleanup. With new HarvestLine sterile bottle liners, optimized speed, safety and pelleting efficiency are in the bag.

Accelerate workflows

- Achieve maximum sample yield
- Minimize non-value-added tasks e.g., bottle cleaning, autoclaving, scraping
- Expedite freeze/thaw lysing

Optimize lab safety and efficiency

- Prevent contamination
- Reduce exposure to potentially hazardous biologics
- Reduce repetitive motions
- Prevent liquid spillage
- Reduce needed storage space



1 L HARVESTLINE LINERS

| VWR CAT. NO. | DESCRIPTION | MATERIAL |
|--------------------------|---|------------------------------------|
| LINERS | | |
| 76292-060 | 1 L HarvestLine System Liner, qty 6 (non-sterile) | Polyetherurethane, USP 23 Class VI |
| 76292-062 | 1 L HarvestLine System Liner, qty 6 (sterile w/peel pack) | Polyetherurethane, USP 23 Class VI |
| BK369256 | 1 L HarvestLine System Liner, qty 120 (non-sterile) | Polyetherurethane, USP 23 Class VI |
| BOTTLES | | |
| 76294-186 | 1 L Polypropylene Wide-mouth Bottle Assembly (set of 2) | -- |
| 76294-184 | 1 L Polycarbonate Wide-mouth Bottle Assembly (set of 2) | -- |
| COMPATIBLE ROTORS | | |
| BK363688 | JLA-8.1000 Rotor - 6 x 1 L; 8,000 RPM; 15,970 x g | -- |
| BK366754 | JLA-9.1000 Rotor - 4 x 1 L; 9,000 RPM; 16,800 x g | -- |
| ACCESSORIES | | |
| 76292-132 | 1 L HarvestLiner Kit (includes rack and funnel) | -- |



750 ml HARVESTLINE LINERS

| VWR CAT. NO. | DESCRIPTION | REQUIRED ADAPTER |
|--------------------------|---|------------------|
| LINERS | | |
| 76292-064 | 750 ml HarvestLine System Liner, qty 6 (non-sterile) Material: Polyetherurethane, USP 23 Class VI | -- |
| 76292-066 | 750 ml HarvestLine System Liner, qty 6 (sterile w/peel pack) Material: Polyetherurethane, USP 23 Class VI | -- |
| BOTTLES | | |
| BK356855 | 750 ml Polypropylene Bottle Assembly (set of 6) | -- |
| BK358299 | 750 ml Polycarbonate Bottle Assembly (set of 6) | -- |
| COMPATIBLE ROTORS | | |
| BK339087 | JS-5.2 Swinging-Bucket Rotor; 5,200 RPM; 6,840 x <i>g</i> | BK356096 |
| 76102-916 | JS-4.750 Swinging-Bucket Rotor; 4,750 RPM; 5,250 x <i>g</i> | BK349846 |
| BK362734 | JS-4.3 Swinging-Bucket Rotor; 4,300 RPM; 4,220 x <i>g</i> | BK349846 |
| BK339080 | JS-4.2 Swinging-Bucket Rotor; 4,200 RPM; 5,020 x <i>g</i> | BK356096 |
| BK366695 | JS-4.2A Swinging-Bucket Rotor; 4,200 RPM; 5,020 x <i>g</i> | BK356096 |
| BK339086 | JS-4.0 Swinging-Bucket Rotor; 4,000 RPM; 4,050 x <i>g</i> | BK356096 |
| BK339081 | JS-3.0 Swinging-Bucket Rotor; 3,000 RPM; 2,560 x <i>g</i> | BK356096 |
| BK360581 | GH-3.8 Swinging-Bucket Rotor; 3,750 RPM; 3,210 x <i>g</i> | BK349846 |
| BK369702 | SX-4750 Swinging-Bucket Rotor; 4,750 RPM; 5,250 x <i>g</i> | BK349846 |
| BK369704 | SX-4750A Swinging-Bucket Rotor; 4,750 RPM; 5,250 x <i>g</i> | BK349846 |
| ACCESSORIES | | |
| 76292-134 | Kit, Liner, 750 ml HarvestLine | -- |
| 76294-190 | — Base Spacer, HarvestLine 500/750 mL (qty 2) | -- |
| 76294-198 | — Filling Rack (stainless steel) | -- |
| 76294-200 | — Funnel (polyethylene) | -- |



500 ml HARVESTLINE LINERS

| VWR CAT. NO. | DESCRIPTION | REQUIRED ADAPTER |
|--|---|------------------|
| LINERS | | |
| 76292-128 | 500 ml HarvestLine System Liner, qty 6 (non-sterile) Material: Polyetherurethane, USP 23 Class VI | -- |
| 76292-130 | 500 ml HarvestLine System Liner, qty 6 (sterile w/peel pack) Material: Polyetherurethane, USP 23 Class VI | -- |
| BOTTLES | | |
| BK361691 | Assembly, Polypropylene, 500 ml, 69 x 160 mm (qty. 6) | -- |
| BK361690 | Assembly, Polycarbonate, 500 ml, 69 x 160 mm (qty. 6) | -- |
| COMPATIBLE FIXED ANGLE ROTORS | | |
| BK369687 | JA-10 Rotor; 10,000 RPM; 17,700 x <i>g</i> | -- |
| BK369681 | JLA-10.500 - Biosafety | -- |
| BK366754 | JLA-9.1000 Rotor; 9,000 RPM; 16,800 x <i>g</i> | BK363683 |
| BK363688 | JLA-8.1000 Rotor; 8,000 RPM; 15,970 x <i>g</i> | BK363683 |
| COMPATIBLE SWINGING-BUCKET ROTORS | | |
| BK339087 | JS-5.2 Swinging-Bucket Rotor; 5,200 RPM; 6,840 x <i>g</i> | BK339109 |
| 76102-916 | JS-4.750 Swinging-Bucket Rotor; 4,750 RPM; 5,250 x <i>g</i> | BK349945 |
| BK362734 | JS-4.3 Swinging-Bucket Rotor; 4,300 RPM; 4,220 x <i>g</i> | BK349945 |
| BK339080 | JS-4.2 Swinging-Bucket Rotor; 4,200 RPM; 5,020 x <i>g</i> | BK339109 |
| BK366695 | JS-4.2A Swinging-Bucket Rotor; 4,200 RPM; 5,020 x <i>g</i> | BK339109 |
| BK339086 | JS-4.0 Swinging-Bucket Rotor; 4,000 RPM; 4,050 x <i>g</i> | BK339109 |
| BK339081 | JS-3.0 Swinging-Bucket Rotor; 3,000 RPM; 2,560 x <i>g</i> | BK339109 |
| BK360581 | GH-3.8 Swinging-Bucket Rotor; 3,750 RPM; 3,210 x <i>g</i> | BK349945 |
| BK369702 | SX-4750 Swinging-Bucket Rotor; 4,750 RPM; 5,250 x <i>g</i> | BK349945 |
| BK369704 | SX-4750A Swinging-Bucket Rotor; 4,750 RPM; 5,250 x <i>g</i> | BK349945 |
| ACCESSORIES | | |
| 76292-136 | Kit, Liner, 500 ml HarvestLine | -- |
| 76294-188 | — Adapters, HarvestLine 500 ml (qty 6) | -- |
| 76294-190 | — Base Spacers, HarvestLine 500/750 ml (qty 2) | -- |
| 76294-198 | — Filling Rack (stainless steel) | -- |
| 76294-200 | — Funnel (polyethylene) | -- |

Certified Free and Sterile Ultracentrifuge Tubes

Whether you are helping to solve complex biological problems, investigating the causes of diseases or finding potential new cures, protecting your sample from degradation and contamination during your study is paramount. Sample protection when it matters most.



CERTIFIED FREE

Certified Free tubes exhibit no detectable DNA, DNase, RNase, PCR inhibitors, or endotoxins.*

Ideal for Genomics, Exosomes, and Proteomics workflows

- Prevents sample degradation and contamination
- Double-bagged to prevent contamination during cleanroom transfer
- Improve QC data quality

**Based on sample results below detectable limits.*

CERTIFIED FREE + STERILE

Beckman sterile ultracentrifuge tubes are sterilized via ethylene oxide.

Ideal for Protein Prep and Virus Purification workflows

- Includes all advantages of being certified free
- Pre-sterilized **ready-to-use** for improved workflow efficiency
- Eliminate need for developing sterilization protocol
- Packaged in workflow based quantities
- Sterilized and packaged compliant with ISO 11135 and 11607

**Maximize Consistency.
Prevent Yield loss.
Ready-to-go, right out of the bag.**



ORDERING INFORMATION

| TUBE TYPE | NOMINAL CAPACITY (ML) | NOMINAL SIZE (MM) | VWR CAT. NO. BECKMAN STANDARD | VWR CAT. NO. CERTIFIED FREE | VWR CAT. NO. CERTIFIED FREE + STERILE | COMPATIBLE ROTORS |
|---------------------------------------|-----------------------|-------------------|-------------------------------|-----------------------------|---------------------------------------|--|
| Ultra-clear Open-top Round Bottom | 38.5 | 25x89 | 76335-350 | 76335-606 | 76335-702 | Type 70 Ti, Type 50.2 Ti, SW 32 Ti, SW 28, JS-24.38 |
| | 17 | 16x102 | 76335-418 | 76335-616 | 76335-712 | SW 32.1 Ti, SW 28.1 |
| | 14 | 14x95 | 76335-374 | 76335-610 | 76335-706 | SW 40 Ti |
| | 13.2 | 14x89 | 76335-814 | 76335-608 | 76335-704 | SW 41 Ti |
| | 6.5 | 13x64 | 76335-390 | 76335-614 | 76335-710 | Type 90 Ti, Type 70.1 Ti, Type 70 Ti, Type 50.4 Ti, Type 50.2 Ti, Type 45 Ti, MLA-55 |
| | 5 | 13x51 | 76335-384 | 76335-612 | 76335-708 | SW 55 Ti |
| | 4 | 11x60 | 76335-426 | 76335-618 | 76335-714 | SW 60 Ti |
| Ultra-clear Quick Seal Round Bottom | 39 | 25x89 | 76335-428 | 76335-634 | 76335-730 | Type 70 Ti, Type 50.2 Ti, VTi 50 |
| Polypropylene Open-top Round Bottom | 38.5 | 25x89 | 76335-358 | 76335-620 | 76335-716 | Type 70 Ti, 50.2 Ti, SW 32 Ti, SW 28, JS-24.38 |
| | 14 | 14x95 | 76335-392 | 76335-624 | 76335-720 | SW 40 Ti |
| | 13.2 | 14x89 | 76335-816 | 76335-622 | 76335-718 | SW 41 Ti |
| | 4 | 11x60 | 76335-422 | 76335-626 | 76335-722 | SW 60 Ti |
| Polypropylene Quick Seal Round Bottom | 100 | 38x102 | 76335-404 | 76335-630 | 76335-726 | Type 45 Ti, JA-18 |
| | 39 | 25x89 | 76335-360 | 76335-628 | 76335-724 | Type 70 Ti, Type 50.2 Ti, VTi 50 |
| | 13.5 | 16x76 | 76335-406 | 76335-632 | 76335-728 | Type 90 Ti, Type 70.1 Ti, NVT 65, VTi 65.1, MLA-55 |
| Polypropylene Open-top konical | 30 | 25x89 | 76335-386 | 76335-700 | 76335-732 | SW 32 Ti, SW 28, JS-24.38 |



Ultra-clear Open-top Round Bottom



Ultra-clear Quick Seal Round Bottom



Polypropylene Open-top Round Bottom



Polypropylene Quick Seal Round Bottom



Polypropylene Open-top konical

ULTRACENTRIFUGE TUBES

Whether you are helping to solve complex biological problems, investigating the causes of diseases or finding potential new cures, you need consumables that meet your workflow needs.

Consumables from Beckman Coulter are available in a variety of sizes and materials.

A number of factors go into selecting the right tube or bottles for an application, including:

- Separation technique
- Sample type
- Solvent or gradient media
- Disposable or reusable format
- Transparent, translucent or opaque
- Diaphanous tubes designed to be sliced or punctured
- Autoclavable tubes that can be sterilized and reused
- Tubes resistant to a variety of chemical compounds

Always refer to Beckman Coulter ultracentrifuge rotor instruction manual for the list of compatible rotors.



| VWR CAT. NO. | DESCRIPTION |
|--------------|--|
| 76335-362 | BOTTLE AY PC 1 X 3-1/2 (BOX-6) |
| 76335-364 | TUBES 1 X 3-1/4 OPTISEAL (BELL) BOX 56 |
| 76335-366 | LINERS PE 2.4ML (BOX-100) |
| 76335-368 | TUBES PC TK WALL 11X34MM (BOX-100) |
| 76335-370 | BOTTLE AY PC 1-1/2 X 4 (BOX-6) |
| 76335-372 | BOTTLE AY PP 2-3/8 X 4-3/4 |
| 76335-376 | TUBES PC TK WALL 8X34MM (BOX-100) |
| 76335-378 | TUBES PC TK WALL 7X20MM (BOX-100) |
| 76335-380 | TUBES PC 1 X 3-1/2 (BOX-25) |
| 76335-382 | TUBES 1/2X2-1/4 (13X56) PC TW BOX50 |
| 76335-388 | LINERS PE 3.5ML (BOX-100) |
| 76335-818 | TUBES PC TK WALL 13X51MM (BOX-25) |
| 76335-392 | TUBES PP 9/16 X 3-3/4 (BOX-50) |
| 76335-394 | TUBES PP 5X20MM (BOX-100) |
| 76335-396 | BOTTLE & CAP AY PC 5/8 X 3 (BOX 6) |
| 76335-398 | TUBES PP OT 1/2 X 2 (BOX-50) |
| 76335-400 | TUBES UC PK100 |
| 76335-402 | TUBES PP TK WALL 7X20MM (BOX-100) |
| 76335-404 | TUBES QS PP 1-1/2 X 4 (BOX-25) |
| 76335-406 | TUBES QS PP 5/8 X 3 (BOX-50) |
| 76335-408 | TUBES PC 5/8 X 3 (BOX-25) |
| 76335-410 | BOTTLES PC 1-1/2 X 4 70 ML BX6 |
| 76335-412 | TUBE OPTISEAL PP 4.7ML 13X48MM BX56 |
| 76335-414 | TUBES PC 1/2 X 2-1/2 (BOX-25) |
| 76335-416 | BOTTLES PC 1 X 3-1/2 (BOX-6) |
| 76335-420 | OPTISEAL TUBES 1/2X2 (BOX56) |

| VWR CAT. NO. | DESCRIPTION |
|--------------|--|
| 76335-422 | TUBES PP 7/16 X 2-3/8 (BOX-50) |
| 76335-424 | TUBES PC 5/16 X 2 (BOX-25) |
| 76335-430 | TUBES QS PP 11X32MM (BOX-50) |
| 76335-432 | TUBES PP 1 X 3-1/2 (BOX-25) |
| 76335-434 | TUBES UC TN WALL 11X34MM (BOX-50) |
| 76335-436 | TUBES QS PP 1/2 X 2 (BOX-50) |
| 76335-438 | TUBES 5/8X2-3/8 BELL OPTISEAL(BOX-56) |
| 76335-440 | OPTISEAL TUBES 1X3-1/2 (BOX56) |
| 76335-442 | TUBES PP TK WALL 13X51MM (BX25) |
| 76335-444 | TUBES CP TK WALL 7X20MM (BOX-100) |
| 76335-636 | TUBE KIT ROTOR QS 1 X 3-1/2 (KIT) |
| 76335-638 | TUBES QS PP BELL 1/2X2-1/2 BOX-50 |
| 76335-640 | TUBES PP 5/8 X 4 (BOX-50) |
| 76335-642 | TUBES 1/2 INCH OPTISEAL (TLN100) BOX56 |
| 76335-644 | KIT 1 INCH OPTISEAL TUBES (KIT) |
| 76335-646 | TUBES UC 3/16 X 1-5/8 (BOX-50) |
| 76335-648 | OPTISEAL TUBES 5/8X2-3/4 BX56 |
| 76335-650 | BOTTLES PC 5/8 X 3 (BOX-25) |
| 76335-652 | TUBES PP TK WALL 11X34MM (BOX-100) |
| 76335-654 | TUBES QS PP BELL 5/8X2-1/4 BOX-50 |
| 76335-656 | QS TUBES 5.1ML (13X51) PP BT BOX 50 |
| 76335-658 | TUBES PE 5 X 20MM (BOX-100) |
| 76335-446 | TUBES QS PP BELL 1 X 3-1/4 BOX-50 |
| 76335-448 | TUBES PC 7/16 X 2-3/8 (BOX-25) |
| 76335-450 | TUBES QS UC 5/8 X 3 (BOX-50) |
| 76335-452 | TUBES PP TN WALL 11X34MM (BOX-50) |

| VWR CAT. NO. | DESCRIPTION | VWR CAT. NO. | DESCRIPTION |
|--------------|---|--------------|--|
| 76335-454 | BOTTLES PP 2-3/8 X 4-3/4 (BOX-6) | 76335-496 | TUBES QS PP 1/2 X 1-1/2 (PKG-50) |
| 76335-456 | TUBES PP 1/2 X 2-1/2 (BOX-25) | 76335-498 | TUBES PP KONICAL 1 X 3 (PKG-50) |
| 76335-458 | TUBE KIT QUICK SEAL 6.5 ML/13X64M (KIT) | 76335-500 | TUBES QS UC 1/2 X 2-1/2 (BOX-50) |
| 76335-460 | TUBE KIT ROTOR QS 5/8 X 3 (KIT) | 76335-502 | TUBES QS UC 1 X 2-1/2 (BOX-50) |
| 76335-462 | TUBES PP 5/8 X 3 (BOX-25) | 76335-504 | TUBES UC 1/2 X 1-5/8 (BOX-50) |
| 76335-464 | TUBES QS PP BELL 1X1-1/2 (BOX-50) | 76335-506 | TUBE KIT ROTOR QS 5/16 X 2(KIT) |
| 76335-466 | TUBES QS PP BELL 1/2 X 1 (BOX-50) | 76335-508 | QS G-MAX KT 3.5ML QTY 50 |
| 76335-468 | TUBE KIT ROTOR QS 1-1/2 X 4 (KIT) | 76335-510 | TUBES QS UC 1/2 X 2 (BOX-50) |
| 76335-470 | TUBES PP 1 X 3-1/4 (BOX-50) | 76335-512 | G-MAX KIT 4.2ML 5/8" QTY 50 |
| 76335-472 | TUBES QS UC 1-1/2 X 4 (BOX-25) | 76335-514 | TUBES QS PP 9/16 X 1 (BOX-50) |
| 76335-474 | KIT 5/8 INCH OPTISEAL TUBES (KIT) | 76335-516 | TUBE KIT ROTOR OPEN TOP 1 X 3-1/4(KIT) |
| 76335-476 | TUBES QS PP 5/8 X 1-1/2 (BOX-50) | 76335-518 | TUBES QS PP 11X25MM (BOX-50) |
| 76335-478 | TUBES PP 5/8 X 3 (BOX-50) | 76335-520 | TUBES PP KON 7/16 X 1-3/8 (BOX-50) |
| 76335-480 | TUBES UC 5/16X 1-15/16 (BOX-50) | 76335-522 | TUBE KIT QUICKSEAL (KIT) 2 |
| 76335-482 | TUBE KIT QUICKSEAL (KIT) | 76335-524 | TUBES PP KONICAL 5/8 X 4 (BOX-50) |
| 76335-484 | TUBES UC 5/8 X 3 (BOX-50) | 76335-526 | TUBES QS KON 9/16 X 3-1/2 (BOX-50) |
| 76335-660 | TUBES PC 1-1/2 X 4 (BOX-25) | 76335-528 | TUBES PP KONICAL 1/2 X 2 (BOX-50) |
| 76335-662 | TUBES 1/2X2-1/4 (13X56) PP TW BX50 | 76335-530 | TUBES PC 1/2 X 3-1/2 (BOX-25) |
| 76335-664 | TUBE KIT ROTOR OPEN TOP 5/8 X 3(KIT) | 76335-532 | TUBE KIT OPEN-TOP 5/16 X 2(KIT) |
| 76335-666 | TUBES QS PP BELL 5/8X2-5/8 BOX-50 | 76335-534 | TUBES QS KON 1 X 1-1/2 (PKG-50) |
| 76335-668 | TUBES QS PP 13 X 32MM (BOX-50) | 76335-536 | TUBE KIT QUICKSEAL (KIT) 3 |
| 76335-670 | TUBES PP KON 9/16 X 3-1/2 (PKG-50) | 76335-538 | G-MAX KIT 2ML 1/2 BX50 |
| 76335-672 | BOTTLE/CAP AY PC 70ML (BOX-6) | 76335-540 | TUBES QS KON 7/16 X 1-3/8 (BOX-50) |
| 76335-674 | TUBES PP 5/8 X 3 3/4 (PKG OF 50) | 76335-542 | TUBES QS UC 1 X 1-1/2 (BOX-50) |
| 76335-676 | BOTTLE/CAP AY PC 1 X 3 1/2 (BOX6) | 76335-544 | KIT TLN-100 OPTISEAL TUBES (KIT) |
| 76335-678 | TUBES PP 7/16 X 2-3/8 (BOX-25) | 76335-546 | TUBES PP 1 X 3 34 ML (BOX-50) |
| 76335-680 | TUBE KIT OPTISEAL (KIT) | 76335-548 | TUBES QS KON 9/16 X 1-7/8 (BOX-50) |
| 76335-682 | TUBES QS PP BELL 5/8X1-3/4 BOX-50 | 76335-550 | G-MAX KIT 15ML 1 BX50 |
| 76335-684 | TUBE KIT OPTISEAL (KIT) 2 | 76335-574 | TUBES QS PP 5/8 X 4 (BOX-50) |
| 76335-552 | G-MAX KIT 15ML 1 QTY BX50 | 76335-576 | QS G-MAX KIT 5.1ML 100TI QTY 50 |
| 76335-554 | TUBE KIT OPTISEAL (KIT) | 76335-578 | G-MAX KIT 6.3ML 5/8" QTY 50 |
| 76335-556 | LINERS 3.5ML (BOX-50) | 76335-580 | G-MAX KIT 2ML 1/2" QTY 50 |
| 76335-558 | TUBE KIT ROTOR OPEN TOP 1-1/2 X 4 (KIT) | 76335-582 | TUBES UC 5/8 X 2-1/2 (BOX-50) |
| 76335-560 | TUBE KIT OPTISEAL (KIT) 3 | 76335-584 | TUBE SS 1-1/2 X 4 |
| 76335-562 | KIT 1/2 INCH BELL OPTISEAL TUBES(KIT) | 76335-586 | G-MAX KIT 27ML 1" QTY 50 |
| 76335-564 | TUBES PP 5/8 X 2-1/2 (BOX-25) | 76335-692 | TUBES QS KON 7/16 X 2-3/8 (BOX-50) |
| 76335-566 | TUBES UC 1-1/2 X 4 (BOX-25) | 76335-694 | G-MAX KIT 2ML 1/2" QTY 50. |
| 76335-802 | TUBE KIT QS TY-50.4TI (KIT) | 76335-696 | G-MAX KIT 6.3ML 5/8" QTY 50. |
| 76335-804 | QS G-MAX TUBES 2.0 ML BX50 | 76335-698 | G-MAX KIT 8ML 5/8" QTY 50 |
| 76335-806 | TUBE KIT OPEN TOP 1 X 3-1/2 (KIT) | 76335-588 | LINERS PE 7ML LARGE OPEN (BOX-100) |
| 76335-808 | TUBES PP TK WALL 8X34MM (BOX-100) | 76335-590 | TUBES QS KONICAL 5/8 X 4 (PKG-50) |
| 76335-686 | TUBES PP 1/2 X 2-1/2 (BOX-50) | 76335-592 | TUBES PP 1/2 X 3-1/2 (BOX-25) |
| 76335-688 | TUBES QS PP 9/16 X 1-7/8 (BOX-50) | 76335-594 | G-MAX KIT 2ML 7/16" QTY 50 |
| 76335-690 | TUBES QS KON 1 X 3-1/4 (BOX-50) | 76335-596 | TUBES QS KON 1/2 X 2 (BOX-50) |
| 76335-486 | TUBES PP 1-1/2 X 4 (BOX-25) | 76335-598 | G-MAX KIT 2ML 1/2"QTY 50 |
| 76335-488 | TUBES QS PP BELL 1X2-1/2 (BOX-50) | 76335-600 | TUBES UC 1/2 X 3-1/2 (BOX-50) |
| 76335-490 | TUBE SS 1 X 3-1/2 | 76335-602 | STARTER KIT QS 1 (KIT) |
| 76335-492 | TUBES QS PP BELL 5/16 X 2 (BOX-50) | 76335-604 | TUBES PP 1/2 X 3-1/2 (BOX-50) |
| 76335-494 | TUBES PP 1-1/2 X 4 (BOX-25) 2 | | |

CENTRIFUGE & ROTOR SELECTION GUIDE

| CENTRIFUGE AND ROTOR OPTIONS | VWR CAT. NO. | MAXIMUM CAPACITY | MAXIMUM SPEED, RPM | MAXIMUM RCF, x g |
|--|------------------|---------------------------|--------------------|------------------|
| Microfuge 16 Microcentrifuge | | | | |
| Fixed-angle FX241.5P | BKA46475 | 24 x 1.5/2.0 ml | 14,800 | 16,163 |
| Fixed-angle FX121.5P | BKA46476 | 12 x 1.5/2.0 ml | 14,800 | 15,183 |
| Microfuge 20 Microcentrifuge Series | | | | |
|  Fixed-angle, FA361.5 | 89429-556 | 36 x 1.5/2.0 ml | 15,000 | 20,124 |
| Fixed-angle, FA241.5 | 89429-552 | 24 x 1.5/2.0 ml | 15,000 | 20,627 |
| Fixed-angle, FA241.5P | 89429-554 | 24 x 1.5/2.0 ml | 15,000 | 20,627 |
| PCR* Tube Strip, FA4x8.2P | 89429-558 | 4 x 8 (0.2 ml) | 15,000 | 16,602 |
| Allegra X-5 Clinical Benchtop Centrifuge | | | | |
| Swinging-bucket, SX4700 | 89429-570 | 140 x 7 ml or 100 x 10 ml | 4,700 | 4,470 |
| Allegra X-12 Series, X-14 Series and X-15R Benchtop Centrifuge | | | | |
|  Swinging-bucket, SX4750* [†] | BK369702 | 4 x 750 ml | 4,750 | 5,250 |
|  ARIES Swinging-bucket, SX4750A* [†] | BK369704 | 4 x 750 ml | 4,750 | 5,250 |
|  Fixed-angle, FX6100 | BK369735 | 6 x 100 ml | 10,200 | 11,400 |
| Allegra 6 Benchtop Centrifuge Series | | | | |
| Fixed-angle, GA-6 | BK367054 | 6 x 250 ml | 6,100 | 5,710 |
|  Swinging-bucket, GH-3.8 [†] | BK360581 | 4 x 750 ml | 3,750 | 3,210 |
| Allegra X-30 Benchtop Centrifuge Series** | | | | |
| Swinging-bucket, SX4400 [†] | BKB01425 | 4 x 400 ml | 4,700 | 4,255 |
| Swinging-bucket, SX4250 | BK392243 | 4 x 250 ml | 4,500 | 3,901 |
| Swinging-bucket, SX241.5 | BK392271 | 24 x 1.5/2.0 ml | 14,000 | 16,244 |
| Microplate S6096 | BKB01430 | 2 x 1 Deep-well Plates | 4,700 | 2,721 |
| Microplate S2096 | BK361111 | 2 x 1 Deep-well Plates | 3,000 | 1,107 |
|  Fixed-angle F2402H | BK361171 | 24 x 1.5/2.0 ml | 18,000 | 29,756 |
| Fixed-angle FX301.5 | BK392274 | 30 x 1.5/2.0 ml | 16,000 | 28,672 |
| Fixed-angle F1010 | BK361221 | 10 x 10 ml | 18,000 | 27,579 |
| Fixed-angle F0630 | BK361231 | 6 x 30 ml | 18,000 | 28,305 |
| Fixed-angle F0850 | BK364640 | 8 x 50 ml | 11,400 | 13,682 |
| Fixed-angle F0685 | BK364650 | 6 x 85 ml | 10,000 | 10,864 |
| Fixed-angle C1015 | BK364680 | 10 x 15 ml conical | 10,000 | 10,416 |
| Fixed-angle C0650 | BK364670 | 6 x 50 ml conical | 10,000 | 10,304 |

| CENTRIFUGE AND ROTOR OPTIONS | VWR CAT. NO. | MAXIMUM CAPACITY | MAXIMUM SPEED, RPM | MAXIMUM RCF, x g |
|---|-----------------|--------------------|--------------------|------------------|
| Allegra 25R Benchtop Centrifuge | | | | |
|  Swinging-bucket TS-5.1-500 ¹ | BK368308 | 4 x 500 ml | 5,100 | 5,530 |
| Swinging-bucket S5700 | BK368954 | 2 x 5 plates | 5,700 | 6,130 |
| Swinging-bucket SX5700 | BKA49595 | 2 x 6 plates | 5,700 | 5,021 |
| Fixed-angle TA-10-250 | BK368293 | 6 x 250 ml | 10,000 | 15,300 |
| Fixed-angle TA-14-50 | BK368303 | 8 x 50 ml | 14,000 | 21,100 |
|  Fixed-angle TA-15-1.5 | BK368298 | 30 x 1.5/2.0 ml | 15,000 | 25,160 |
| Allegra 64R Benchtop Centrifuge | | | | |
| Fixed-angle F1202 | BK364630 | 12 x 1.5/2.0 ml | 30,000 | 64,400 |
|  Fixed-angle F2402H | BK361171 | 24 x 1.5/2.0 ml | 26,000 | 61,970 |
| Fixed-angle F3602 | BK364600 | 36 x 1.5/2.0 ml | 22,000 | 47,620 |
| Fixed-angle F1010 | BK361221 | 10 x 10 ml | 26,000 | 57,440 |
| Fixed-angle F0630 | BK361231 | 6 x 38.5 ml | 26,200 | 59,860 |
| Fixed-angle F0650 | BK364610 | 6 x 50 ml round | 21,000 | 41,400 |
| Fixed-angle F0850 | BK364640 | 8 x 50 ml round | 16,500 | 29,220 |
| Fixed-angle F0485 | BK364620 | 4 x 85 ml | 20,000 | 40,700 |
| Fixed-angle F0685 | BK364650 | 6 x 85 ml | 15,500 | 26,320 |
| Fixed-angle C1015 | BK364680 | 10 x 15 ml conical | 10,000 | 10,400 |
| Fixed-angle C0650 | BK364670 | 6 x 50 ml conical | 10,000 | 10,400 |
|  Fixed-horizontal H6002 | BK363000 | 60 x 1.5/2.0 ml | 12,200 | 12,400 |
| Swinging-bucket S0410 | BK364660 | 4 x 10 ml | 10,000 | 10,730 |
| Airfuge Benchtop Ultracentrifuge | | | | |
| Fixed-angle A-110 | BK347596 | 6 x 180 µL | 110,000 | 199,000 |
| Fixed-angle A-100/30 | BK347594 | 6 x 240 µL | 92,000 | 167,000 |
| Fixed-angle A-100/18 | BK347593 | 6 x 175 µL | 95,000 | 149,000 |
| Fixed-angle A-95 | BK347595 | 4 x 450 µL | 95,000 | 178,000 |
| Batch Rotor | BK347833 | 7 ml | 90,000 | 132,000 |
| Electron Microscopy Rotor | BK347844 | 6 x 100 µL | 90,000 | 118,000 |
| ACR-90 Chylomicron Rotor | BK341260 | 2.6 ml | 90,000 | 122,000 |

| CENTRIFUGE AND ROTOR OPTIONS | VWR CAT. NO. | MAXIMUM CAPACITY | MAXIMUM SPEED, RPM | MAXIMUM RCF, x g |
|---|-----------------|------------------|-----------------------------------|----------------------------------|
| Avanti JXN High Performance & High Capacity Centrifuge Series | | | Max. Speed RPM JXN-26 / JXN-30 | Max. RCF, x g JXN-26 / JXN-30 |
| Fixed-angle JA-30.50 Ti | BK363421 | 400 ml | 26,000 / 30,000 | 81,770 / 108,860 |
| Fixed-angle JA-30.50 Ti Dual-Locking Lid | BK363420 | 400 ml | 26,000 / 30,000 | 81,770 / 108,860 |
| Fixed-angle JA-25.50 | BK363055 | 400 ml | 25,000 / 25,000 | 75,600 / 75,600 |
|  Fixed-angle JA-25.50 Dual-Locking Lid | BK363058 | 400 ml | 25,000 / 25,000 | 75,600 / 75,600 |
| Fixed-angle JA-25.15 | BK363054 | 360 ml | 25,000 / 25,000 | 74,200 / 74,200 |
|  Fixed-angle JA-25.15 Dual-Locking Lid | BK363050 | 360 ml | 25,000 / 25,000 | 74,200 / 74,200 |
| Fixed-angle JA-21 | BK334845 | 180 ml | 21,000 / 21,000 | 50,380 / 50,380 |
|  Fixed-angle JA-20.1 | BK342095 | 480 ml | 20,000 / 20,000 | 51,520 / 51,520 |
|  Fixed-angle JA-20 | BK334831 | 400 ml | 20,000 / 20,000 | 48,380 / 48,380 |
| Fixed-angle JA-18.1 | BK347824 | 43.2 ml | 18,000 / 18,000 | 42,090 / 42,090 |
|  Fixed-angle JA-18 | BK369679 | 1 liter | 18,000 / 18,000 | 47,900 / 47,900 |
|  Fixed-angle JA-17 | BK369691 | 700 ml | 17,000 / 17,000 | 39,810 / 39,810 |
| Fixed-angle JLA-16.250 | BK363934 | 1.5 liters | 16,000 / 16,000 | 38,420 / 38,420 |
|  Fixed-angle JLA-16.250 Dual-Locking Lid | BK363930 | 1.5 liters | 16,000 / 16,000 | 38,420 / 38,420 |
| JA-14.50 | BKB88555 | 800 ml | 14,000 / 14,000 | 35,050 / 35,050 |
|  JA-14.50 Dual-Locking Lid | BKB88554 | 800 ml | 14,000 / 14,000 | 35,050 / 35,050 |
|  Fixed-angle JA-14 | BK339247 | 1.5 liters | 14,000 / 14,000 | 30,070 / 30,070 |
| Fixed-angle JA-12 | BK360993 | 600 ml | 12,000 / 12,000 | 23,220 / 23,220 |
|  Fixed-angle JA-12 Dual-Locking Lid | BK360992 | 600 ml | 12,000 / 12,000 | 23,220 / 23,220 |
| Fixed-angle JA-10 | BK369687 | 3 liters | 10,000 / 10,000 | 17,700 / 17,700 |
|  Fixed-angle JLA-10.500 [†] | BK369681 | 3 liters | 10,000 / NA | 18,590 / NA |
| Fixed-angle JLA-9.1000 | BK366754 | 4 liters | 9,000 / 9,000 | 16,780 / 16,780 |
|  Fixed-angle JLA-8.1000 [†] | BK363688 | 6 liters | 8,000 / NA | 15,970 / NA |
| Swinging-bucket JS-24.38 | BK360743 | 231 ml | 10,000 / 24,000 | 18,030 / 103,860 |
| Swinging-bucket JS-24.15 | BK362396 | 90 ml | 10,000 / 24,000 | 19,190 / 110,510 |
| Swinging-bucket JS-13.1 | BK346963 | 300 ml | 13,000 / 13,000 | 26,500 / 26,500 |
| Swinging-bucket JS-7.5 | BK336380 | 1 liter | 7,500 / 7,500 | 10,400 / 10,400 |
|  Swinging-bucket JS-5.3 AllSpin [†] | BK368690 | 2 liters | 5,300 / NA | 6,870 / NA |
|  Swinging-bucket JS-4.3 ^{††} | BK362734 | 3 liters | 4,300 / NA | 4,220 / NA |
|  Swinging-bucket JS-4.0 [†] | BK339086 | 4 x 1 liter | 4,000 / NA | 4,050 / NA |

| CENTRIFUGE AND ROTOR OPTIONS | VWR CAT. NO. | MAXIMUM CAPACITY | MAXIMUM SPEED, RPM | MAXIMUM RCF, x g |
|---|------------------|----------------------------|--------------------|------------------|
| Avanti J-E High Performance & High Capacity Centrifuge | | | | |
| Fixed-angle JA-25.50 | BK363055 | 400 ml | 21,000 | 53,300 |
| BiO C Fixed-angle JA-25.50 Dual-Locking Lid | BK363058 | 400 ml | 21,000 | 53,300 |
| Fixed-angle JA-21 | BK334845 | 180 ml | 21,000 | 50,400 |
| BiO C Fixed-angle JA-20.1 | BK342095 | 480 ml | 20,000 | 51,500 |
| BiO C Fixed-angle JA-20 | BK334831 | 400 ml | 20,000 | 48,400 |
| BiO C Fixed-angle JA-18 | BK369679 | 1 liter | 16,000 | 37,800 |
| BiO C Fixed-angle JA-17 | BK369691 | 700 ml | 17,000 | 39,800 |
| Fixed-angle JLA-16.250 | BK363934 | 1.5 liters | 16,000 | 38,400 |
| BiO C Fixed-angle JLA-16.250 Dual-Locking Lid | BK363930 | 1.5 liters | 16,000 | 38,400 |
| JA-14.50 | BKB88555 | 800 ml | 14,000 | 35,000 |
| BiO C JA-14.50 Dual-Locking Lid | BKB88554 | 800 ml | 14,000 | 35,000 |
| BiO C Fixed-angle JA-14 | BK339247 | 1.5 liters | 14,000 | 30,100 |
| Fixed-angle JA-12 | BK360993 | 600 ml | 12,000 | 23,200 |
| BiO C Fixed-angle JA-12 Dual-Locking Lid | BK360992 | 600 ml | 12,000 | 23,200 |
| Fixed-angle JA-10 | BK369687 | 3 liters | 10,000 | 17,700 |
| BiO C Fixed-angle JLA-10.500 [†] | BK369681 | 3 liters | 10,000 | 18,600 |
| Fixed-angle JLA-9.1000 | BK366754 | 4 liters | 6,300 | 8,230 |
| Swinging-bucket JS-13.1 | BK346963 | 300 ml | 13,000 | 26,500 |
| BiO C Swinging-bucket JS-5.3 AllSpin [‡] | BK368690 | 2 liters | 5,300 | 6,130 |
| Avanti J-15 Benchtop Centrifuge Series | | | | |
| BiO C JS-4.750 | 76102-916 | 4 x 750 ml | 4,550 | 4,820 |
| JS-4.750 μ | 76102-918 | 4 x 4 Standard-well Plates | 4,450*** | 4,060*** |
| BiO C JA-10.100 | 76102-914 | 6 x 100 ml | 10,200 | 11,420 |
| J6-MI High Capacity Centrifuge | | | | |
| BiO C Swinging-bucket JS-5.2 [†] | BK339087 | 4 x 1 liter | 5,200 | 6,840 |
| BiO C Swinging-bucket JS-4.2A ARIES [†] | BK366695 | 6 x 1 liter | 4,200 | 5,020 |
| BiO C Swinging-bucket JS-4.2 [†] | BK339080 | 6 x 1 liter | 4,200 | 5,020 |
| BiO C Swinging-bucket JS-4.0 [†] | BK339086 | 4 x 1 liter | 4,000 | 4,050 |
| BiO C Swinging-bucket JS-3.0 [†] | BK339081 | 6 x 1 liter | 3,000 | 2,560 |
| Swinging-bucket JS-4.2SMA ARIES | BK366670 | 6 x blood bags | 4,200 | 4,900 |
| Swinging-bucket JS-4.2SM | BK348394 | 6 x blood bags | 4,200 | 4,900 |

• All other trademarks are the property of their respective owners.

* Maximum RCF shown are for the Allegra X-15R.

** Maximum RCF and speeds shown on Allegra X-30 Series rotors are obtained with the refrigerated Allegra X-30R.

*** Maximum speed and g-force are achieved when using this rotor (1 to 3 stacked plates) in the Avanti J-15R.

† Rotor is BioCertified when used in conjunction with Bucket Covers or Aeroseal Covers

‡ Rotor is BioCertified when used with Aerosolve Canisters.

BiO C BioCertified is a term used to describe our products which have been tested and validated to demonstrate containment of microbiological aerosols by an independent, third-party facility. Improper use or maintenance may affect seal integrity and, thus, containment.



CELL COUNTING & VIABILITY



KEY ADVANTAGES

- ➔ **Concentration Control** to run daily to ensure proper instrument performance
- ➔ **Focus Control** to perform auto-focus routine
- ➔ **Sample vials** designed to properly fit in the Vi-CELL XR sample carousel
- ➔ **Reagent Paks** designed to fit in the Vi-CELL XR with color-coded tubing for error-free installation

Vi-CELL XR Reagents and Consumables

Your Vi-CELL XR is manufactured by Beckman Coulter; your reagents and consumables should too.

The Vi-CELL Reagent Pak Offers:

- Color-coded reagents for easy installation
- Certificate of Analysis for each lot

The **Vi-CELL Concentration Control** should be run daily to ensure proper instrument performance and results.

The **Vi-CELL Focus Control** should be used with the Focusing Wizard to automatically check and if necessary, adjust the focus; especially after the instrument has been physically moved to ensure optimum results.

The **Vi-CELL sample vials**, which hold up to 2 ml, should be used exclusively with the Vi-CELL XR, as they have been designed specifically for the carousel.

The **Vi-CELL Quad Paks** are the key to the Vi-CELL XR automated sample preparation for the Trypan Blue cell viability analysis. Each reagent pak is color coded to match the reagent lines to make replacing the pak easy.



VALUE AND PEACE OF MIND

Trust is an integral component of any relationship. So let us illustrate the value and peace of mind that you will receive when you purchase Vi-CELL XR reagents from Beckman Coulter, an ISO 13485:2016-registered company.

ORDERING INFORMATION

| VWR CAT. NO. | DESCRIPTION |
|--------------|--|
| 76176-644 | Vi-CELL Sample Vials - 120 Vials/Bag - Includes 4 bags of sample Vials (EA) |
| 76176-646 | Vi-CELL Focus Control - 15 ml/bottle (EA) |
| 76176-648 | Vi-CELL Concentration Control (Beads) - 20 ml/bottle (EA) |
| 76176-666 | Vi-CELL Reagent Single Pak - one pack of reagents and one bag of sample vials (120 vials/bag) (EA) |
| 76176-664 | Vi-CELL XR Quad Pak - four pack of reagents and 8 bags of sample vials (120 vials/bag) (EA) |

Product is not verified or validated for use in diagnostic procedures.



AUTOMATED LIQUID HANDLING



Biomek 4000 Automated Workstation

Designed to help you move

From manual workflows to your
first automation...and beyond.

KEY ADVANTAGES

- ➔ **Simplification**, so you can focus more on science and less on managing your system
- ➔ **Efficiency**, to help you optimize productivity, increase walkaway time and learn more—faster
- ➔ **Adaptability**, so the technology you invest in can grow with you, not grow obsolete
- ➔ **Reliability and support**, to maximize instrument uptime so your research is always moving forward

Moving to most automation from a manual method can be challenging and a difficult decision to make. Your input and our experience led to the engineering of a liquid handling system that you can use to easily and effectively automate your manual methods. From your input, some recurring themes appeared. And from those themes emerged a common foundation—for hardware, software, accessories, consumables and support. On this customer-driven foundation, we built the Biomek 4000.

SYSTEM CONFIGURATIONS

| VWR CAT. NO. | PRODUCT DESCRIPTION |
|--------------|---|
| 75816-480 | Biomek 4000 Workstation for PCR Set-up |
| 75816-482 | Biomek 4000 Workstation for PCR Clean-up |
| 75816-484 | Biomek 4000 Workstation for PCR Cell Staining |
| 75816-486 | Biomek 4000 Workstation for PCR Genomics |
| 75816-488 | Biomek 4000 Workstation for PCR Liquid Handling |
| 75816-490 | Biomek 4000 Workstation for CE Workstation for CE SDS Sample Prep |

APPLICATIONS

Moving to automation does not mean you have to limit your choice of applications.

As one of the first companies to automate liquid handling, Beckman Coulter Life Sciences has 30+ years of experience developing automated applications for a wide variety of laboratory methods. Virtually any lab focused on genomics, drug discovery, cell biology, proteomics, forensics and related research can run their methods on the Biomek 4000.

A sample of genomics application areas that can benefit from Biomek 4000 automation:*

- Next-generation sequencing sample prep
 - Whole genome sequencing
 - Transcriptome sequencing
 - Target/exome capture
 - Amplicon sequencing
 - Cancer panels
 - HLA typing
- Microarray sample prep
 - Genotyping
 - Gene expression
- Nucleic acid sample prep
 - DNA/RNA isolation
 - DNA/RNA clean-up
 - DNA size selection
 - Plasmid prep
- Sanger sequencing
 - Big dye clean-up
- qPCR/PCR setup

A sample of other application areas that can benefit from Biomek 4000 automation:*

- Drug Discovery
 - Analytical sample prep
 - ELISA methods
 - Transfection
 - Cell culture
 - Protein Characterization
 - Biological bioanalysis
 - Proteomics, lipidomics metabolics
 - Low throughput Screening
- Forensics
 - Sample prep
 - ELISA methods
- Agriculture
 - Sample prep
 - ELISA methods
 - Cell culture
- Environmental
 - Sample prep
 - ELISA methods



Our commitment is to provide the innovative technology you need to automate your lab—by simplifying your workflows, improving efficiency, increasing walk-away time and decreasing manually induced errors.

* Not intended or validated for use in the diagnosis of disease or other conditions.

BIOMEK 4000 INDUSTRY-LEADING FEATURES

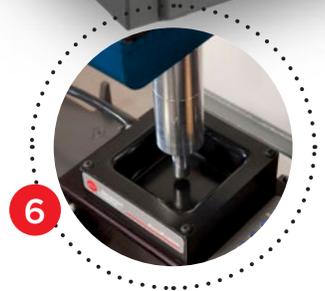
Representing the best of what has made Biomek workstations an industry leader—combined with enhancements suggested by customers like you—the Biomek 4000 Automated Workstation has been designed to optimize dependability and walkaway time for low- to medium-throughput labs.

Simplicity so you can focus more on science

- 1 A bright, multi-color status light alerts you to the instrument's current mode, even from across the room.
- 2 The Biomek 4000's small footprint (122.5 cm (W) x 50.5 cm (D) x 67.5 cm (H)) fits comfortably into a laminar flow hood or smartly on your benchtop with its available enclosure.*

Efficiency to help deliver higher productivity

- 3 Biomek 4000 has a dynamic volume pipetting range of 1 to 1000 μL for precise and robust pipetting, available in both single- and 8-channel.
- 4 Unique gripper tool design optimizes access to deck space, enabling more efficient workflows.
- 5 Improved wash tool performance allows for dispensing against the wall of a well, tip touches, bulk dispense and per liquid volume calibration to maximize the efficiency of your assay.
- 6 Fully automated deck framing tool (AccuFrame) provides increased accuracy using three-dimensional positioning without the hassles of traditional software programming.



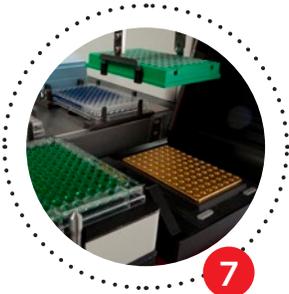
* Fits in laminar flow hood without optional enclosure.

Adaptable to extend scale and reach

- 7 Twelve deck positions with four off-deck mounts that allow for the integration of thermal cycling, shaking, tool rack and waste disposal to maximize deck positions for critical labware while providing for a more efficient workflow and less hands-on time.
- 8 System can be customized for larger integrated applications by Beckman Coulter's Integrated Solutions team of experts.
- 9 Storage provided beneath the deck frees up even more precious lab space and keeps all your tools close at hand.

Trusted reliability and support

- 10 The BeckmanConnect remote connectivity platform offers a secure remote connection linking you to our team of hardware and application experts who, side-by-side, help to troubleshoot and resolve your instrument issue with direct access to your workstation.
- 11 Field service team with a strong reputation in the industry is ISO 9001 certified and trained by our experienced technical support team.



BIOMEK 4000 SOFTWARE

At the heart of every Biomek is its software.

Biomek software provides users with the confidence to know their samples are being treated consistently every run, and with every liquid transfer the data from your samples is being stored. The latest version of our Biomek 4000 software **maximizes ROI** by giving you unprecedented control over your liquid handler.

- Define new deck layouts and labware placement for fast and easy method creation.
- Import/export methods.
- Toggle between applications such as plate replication, genomic DNA purification, and mass spec sample prep with ease.
- Vary runs without programming.
- Quickly select pipetting techniques, liquid types and deck layouts from drop-down menus.
- Validate new method setup and search for logic errors with the Method Validation feature.
- Achieve more with accurate run time, deck optimization, and accelerated method design features.
- Scan plates and import sample IDs based on plate barcodes.
- Track sample IDs throughout the run for maximum accuracy.
- “Lock down” software access to protect validated methods from being altered through the use of electronic signatures.
- Enable 21 CFR Part 11 compliance in regulated environments.

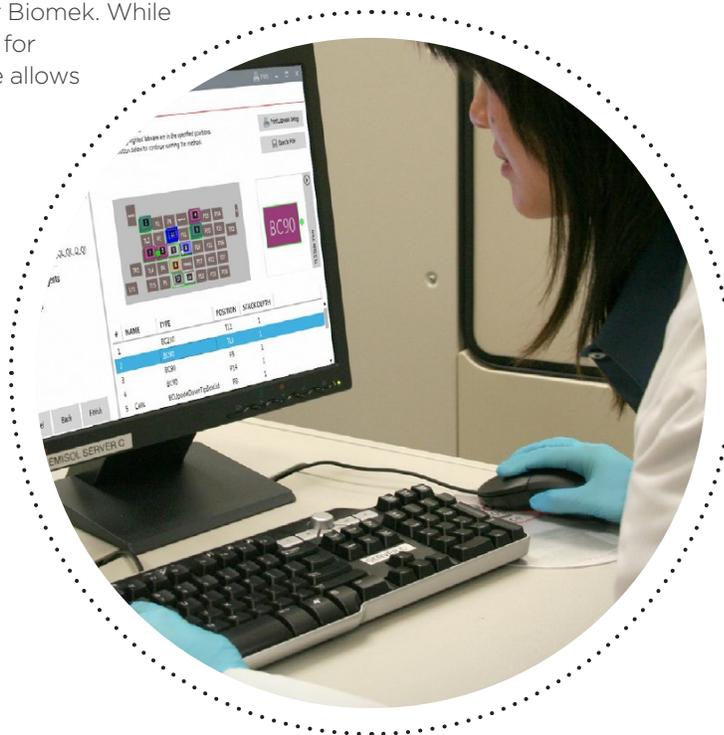
Focus on the analysis, not on being an IT expert.

In a recent survey,** **73% of current Biomek users indicated they never have to consult their IT department** to pull reports from their Biomek. While the software is sophisticated and robust, pulling reports for analysis is quite simple. A simple graphical user interface allows you to obtain first-rate results without the need to learn automation language.

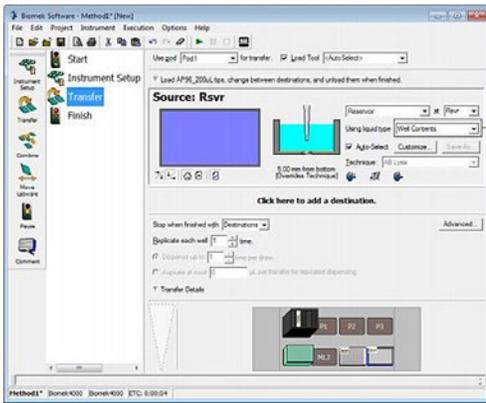
Whether you are a first-time automation user or a seasoned professional, the intuitive simplicity and power of Biomek software make it easy to set up, edit and run even the most demanding applications.

Pre-written methods for common tasks, such as NGS sample prep, HLA sample prep, PCR setup, cell staining and LC-MS/MS sample prep ensure successful operation from the beginning.

Biomek software enables laboratory compliance. Access to the system can be controlled and monitored to allow multiple user accounts, grant permission, track revisions and system usage, and enable electronic signatures.

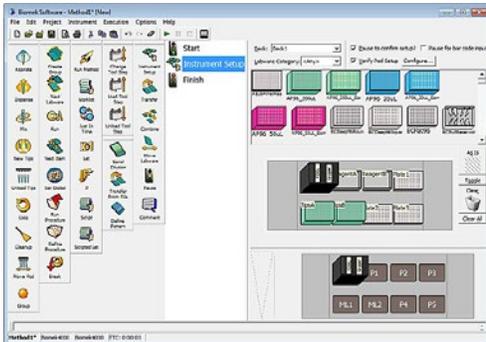


** TechValidate survey of Biomek customers.



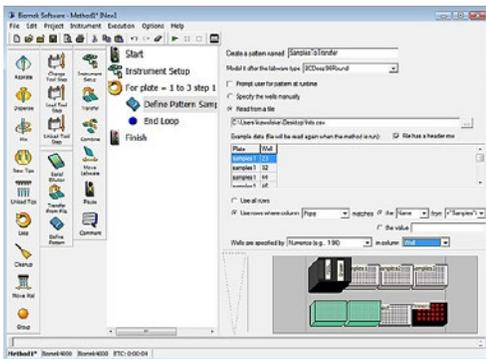
Method Authoring

- Sets the standard for method authoring with a point-and-click Interface; no advanced software expertise required.
- Biomek 3D simulator saves time and consumables through its visual editor, which demonstrates your method in real time as you create it.
- Provides full control over movement of the tip in the well to match even the most complex manual pipetting motions.



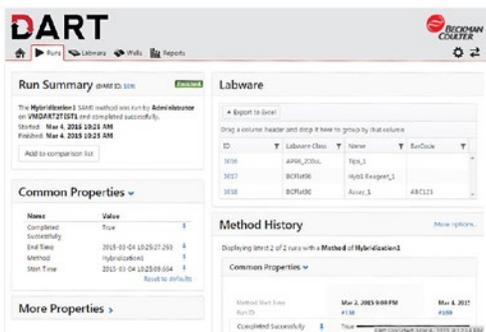
Biomek Method Launcher

- Improves accuracy and reduces errors by giving operators step-by-step guidance for placing labware on the deck.
- Makes it easy for lab technicians to launch/monitor methods by providing a simple point-and-click user interface.
- Enables remote instrument monitoring using any device with Google Chrome browser.



Data Management

- Captures the data you need to validate your process and help ensure reproducible results.
- Integrates with LIMS systems to import work orders and export data.
- Seamlessly transfers data between methods so you can easily generate run, labware and sample reports at any time.
- Data-driven methods select appropriate actions during execution based on sample data generated in real time.



Additional software solutions include:

DART Software

DART*** (Data Acquisition and Reporting Tool) is a software package that gathers data and synthesizes runtime information from Biomek log files to capture each manipulation of the sample during the course of the method. DART allows you to:

- Browse live and historical run data from any device using a networked internet browser.
- Reduce manual data integration.
- Leverage historical data on labware for enhanced method programming.
- Seamlessly port data between Biomek methods and individual liquid handlers.
- Generate data reports via MS Excel table and pivot views, and SQL views.
- Integrate with your Laboratory Information Management System.

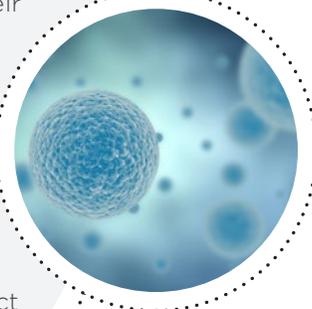
*** DART software does not support 21 CFR Part 11 compliance



Designed for the demands of today. And tomorrow.

As our world becomes a faster-paced environment, businesses from banking to manufacturing have turned to automation to **reduce costs** and **create efficiencies** in their daily operations. Life Sciences is no exception—the pressure to **streamline workflow** and automate laboratories is greater than ever.

The Biomek 4000 Laboratory Automated Workstation is truly intelligent automation. From its enhanced work surface with interchangeable tools to its flexible, icon-driven software, the Biomek 4000 system adapts to your ever-changing research needs. It revolutionizes everything, from the speed at which you can conduct your research to the ease with which you can complete it—all to move your discovery process forward at an incredible pace.



BIOMEK 4000 CONSUMABLES



Biomek Pipette Tips: The Most Critical Point of Contact

All Biomek workstations are optimized to perform as complete systems. That's why only Biomek pipette tips from Beckman Coulter Life Sciences are validated and approved for use with our systems.

To make setup, method writing, and operations easy and efficient, Biomek software already includes **point-and-click options** for Biomek tip definition, pipetting techniques and templates, and color-coded Biomek tip racks. Biomek pipette tips from Beckman Coulter are certified to be:[†]

- **RNase- and DNase-free**
Ensures high-quality nucleic acid purification and reliable testing results.
- **DNA-free (human & mouse)/PCR inhibition**
Confirms the absence of both human and mouse DNA contaminants that contribute to erroneous results and interfere with PCR.
- **Pyrogen-free**
Addresses pyrogen-sensitive applications, such as cell transformations and preparative protocols that use extracted biological material for in vivo experimentation.
- **Trace metal-free**
Testing of the base, polypropylene tip resin reduces interferences due to chelation and denaturation.



[†] Bio-certification "free of" claims are defined as the lower limit of detection based on the sensitivity of the test method or instrumentation used. Products and methods above are not intended or validated for use in the diagnosis of disease or other conditions

BIOMEK TIPS & LABWARE

Excellence for the critical point of contact

From disposable pipette tips to microplates and everything in between, we provide a full suite of accurate, precise performance you can depend on.

Biomek disposable tips from Beckman Coulter are the only tips designed, validated and approved for Biomek Liquid Handlers. Manufactured under stringent manufacturing processes, we guarantee proper fit and performance of Biomek tips on your Biomek liquid handler. Tip definitions, pipetting techniques, templates and color-coded tip racks are integrated into Biomek software to facilitate method development.

Tip definitions, pipetting techniques, templates, and color-coded tip racks are built into Biomek software to make setup, method writing and operation even more efficient. As a crucial component to the most advanced liquid handling systems, Biomek tips from Beckman Coulter ensure the highest performance and quality control for the most exacting applications such as genetic analysis, protein research, cellular analysis and drug discovery.



BIOMEK i-SERIES PIPETTE TIPS

Non-conductive tips for use with 60 μ L Multichannel-384 Head



30 μ L PIPETTE TIPS

Comparable to P30 Tips for Biomek NX^P/FX^P instruments

| VWR Cat. No. | Description | Capacity | Packaging |
|--------------|------------------|------------|-------------------------------------|
| 76111-658 | Non-sterile | 30 μ L | 384 tips/tip box, 10 tip boxes/case |
| 76111-660 | Sterile | 30 μ L | 384 tips/tip box, 10 tip boxes/case |
| 76111-666 | Sterile filtered | 25 μ L | 384 tips/tip box, 10 tip boxes/case |



50 μ L PIPETTE TIPS

Comparable to P30XL Tips for Biomek NX^P/FX^P instruments

| VWR Cat. No. | Description | Capacity | Packaging |
|--------------|------------------|------------|-------------------------------------|
| 76111-662 | Non-sterile | 50 μ L | 384 tips/tip box, 10 tip boxes/case |
| 76111-664 | Sterile | 50 μ L | 384 tips/tip box, 10 tip boxes/case |
| 76111-668 | Sterile filtered | 40 μ L | 384 tips/tip box, 10 tip boxes/case |



BIOMEK i-SERIES PIPETTE TIPS

Non-conductive tips for use with 300 & 1200 μL Multichannel-96 Heads & Span-8 Pod



80 μL PIPETTE TIPS

Comparable to P20 Tips for Biomek NX^P/FX^P instruments

| VWR Cat. No. | Description | Capacity | Packaging |
|--------------|------------------|------------------|------------------------------------|
| 76112-012 | Non-sterile | 80 μL | 96 tips/tip box, 10 tip boxes/case |
| 76112-016 | Sterile | 80 μL | 96 tips/tip box, 10 tip boxes/case |
| 76112-024 | Sterile filtered | 40 μL | 96 tips/tip box, 10 tip boxes/case |



90 μL PIPETTE TIPS

Comparable to P50 Tips for Biomek NX^P/FX^P instruments

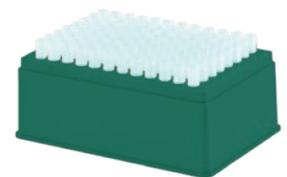
| VWR Cat. No. | Description | Capacity | Packaging |
|--------------|------------------|------------------|------------------------------------|
| 76112-010 | Non-sterile | 90 μL | 96 tips/tip box, 10 tip boxes/case |
| 76112-014 | Sterile | 90 μL | 96 tips/tip box, 10 tip boxes/case |
| 76112-026 | Sterile filtered | 50 μL | 96 tips/tip box, 10 tip boxes/case |



230 μL PIPETTE TIPS

Comparable to P250 Tips for Biomek NX^P/FX^P instruments

| VWR Cat. No. | Description | Capacity | Packaging |
|--------------|------------------|-------------------|------------------------------------|
| 76111-882 | Non-sterile | 230 μL | 96 tips/tip box, 10 tip boxes/case |
| 76112-018 | Sterile | 230 μL | 96 tips/tip box, 10 tip boxes/case |
| 76112-028 | Sterile filtered | 190 μL | 96 tips/tip box, 10 tip boxes/case |



230 μL WIDE BORE PIPETTE TIPS

Comparable to P250 Wide Bore Tips for Biomek NX^P/FX^P instruments

| VWR Cat. No. | Description | Capacity | Packaging |
|--------------|-----------------------------|-------------------|------------------------------------|
| 76112-020 | Wide bore, Non-sterile | 230 μL | 96 tips/tip box, 10 tip boxes/case |
| 76112-022 | Wide bore, Sterile | 230 μL | 96 tips/tip box, 10 tip boxes/case |
| 76111-896 | Wide bore, Sterile filtered | 190 μL | 96 tips/tip box, 10 tip boxes/case |





1070µL PIPETTE TIPS

Comparable to P1000 Tips for Biomek NX^P/FX^P instruments

| VWR Cat. No. | Description | Capacity | Packaging |
|--------------|------------------|----------|-----------------------------------|
| 76112-042 | Non-sterile | 1070 µL | 96 tips/tip box, 5 tip boxes/case |
| 76111-890 | Sterile | 1070 µL | 96 tips/tip box, 5 tip boxes/case |
| 76111-652 | Sterile filtered | 1025 µL | 96 tips/tip box, 5 tip boxes/case |



1070µL WIDE BORE PIPETTE TIPS

Comparable to P1000 Wide Bore Tips for Biomek NX^P/FX^P instruments

| VWR Cat. No. | Description | Capacity | Packaging |
|--------------|-----------------------------|----------|-----------------------------------|
| 76112-046 | Wide bore, non-sterile | 1070 µL | 96 tips/tip box, 5 tip boxes/case |
| 76111-894 | Wide bore, sterile | 1070 µL | 96 tips/tip box, 5 tip boxes/case |
| 76111-656 | Wide bore, sterile filtered | 1025 µL | 96 tips/tip box, 5 tip boxes/case |



BIOMEK i-SERIES PIPETTE TIPS

Conductive tips for use with Span-8 Pod to enable Liquid Level Sensing



80µL CONDUCTIVE PIPETTE TIPS

Comparable to P20 Conductive Tips for Biomek NX^P/FX^P instruments

| VWR Cat. No. | Description | Capacity | Packaging |
|--------------|------------------------------|----------|---------------------------------------|
| 76112-030 | Conductive, Non-sterile | 80 µL | 96 tips/tip box, 10 tip boxes/case |
| 76112-036 | Conductive, Sterile | 80 µL | 96 tips/tip box, 10 tip boxes/case |
| 76111-864 | Conductive, Sterile filtered | 40 µL | 96 tips/tip box, 10 tip boxes/case |



90µL CONDUCTIVE PIPETTE TIPS

Comparable to P50 Conductive Tips for Biomek NX^P/FX^P instruments

| VWR Cat. No. | Description | Capacity | Packaging |
|--------------|------------------------------|----------|---------------------------------------|
| 76112-034 | Conductive, Non-sterile | 90 µL | 96 tips/tip box, 10 tip boxes/case |
| 76112-040 | Conductive, Sterile | 90 µL | 96 tips/tip box, 10 tip boxes/case |
| 76112-050 | Conductive, Sterile filtered | 50 µL | 96 tips/tip box, 10 tip boxes/case |



230µL CONDUCTIVE PIPETTE TIPS

Comparable to P250 Conductive Tips for Biomek NX^P/FX^P instruments

| VWR Cat. No. | Description | Capacity | Packaging |
|--------------|------------------------------|----------|---------------------------------------|
| 76112-032 | Conductive, Non-sterile | 230 µL | 96 tips/tip box, 10 tip boxes/case |
| 76112-038 | Conductive, Sterile | 230 µL | 96 tips/tip box, 10 tip boxes/case |
| 76112-048 | Conductive, Sterile filtered | 190 µL | 96 tips/tip box, 10 tip boxes/case |



1070µL CONDUCTIVE PIPETTE TIPS

Comparable to P1000 Conductive Tips for Biomek NX^P/FX^P instruments

| VWR Cat. No. | Description | Capacity | Packaging |
|--------------|------------------------------|----------|--------------------------------------|
| 76112-044 | Conductive, Non-sterile | 1070 µL | 96 tips/tip box, 5 tip boxes/case |
| 76111-892 | Conductive, Sterile | 1070 µL | 96 tips/tip box, 5 tip boxes/case |
| 76111-654 | Conductive, Sterile filtered | 1025 µL | 96 tips/tip box, 5 tip boxes/case |



BIOMEK NX^P/FX^P PIPETTE TIPS

Non-conductive tips for use with Biomek AP384 Multichannel Head



P30 PIPETTE TIPS

| VWR Cat. No. | Description | Capacity | Packaging |
|--------------|------------------|----------|--|
| BK719222 | Non-sterile | 30 µL | 384 tips/tip box, 10 tip boxes/case |
| BK719223 | Sterile | 30 µL | 384 tips/tip box, 10 tip boxes/case |
| BK394263 | Sterile filtered | 15 µL | 384 tips/tip box, 10 tip boxes/case |



P30XL PIPETTE TIPS

| VWR Cat. No. | Description | Capacity | Packaging |
|--------------|------------------|----------|--|
| BKA22287 | Non-sterile | 50 µL | 384 tips/tip box, 10 tip boxes/case |
| BKA22288 | Sterile | 50 µL | 384 tips/tip box, 10 tip boxes/case |
| BKB98224 | Sterile filtered | 40 µL | 384 tips/tip box, 10 tip boxes/case |



BIOMEK NX^P/FX^P PIPETTE TIPS

Non-conductive tips for use with Biomek AP96 Multichannel Heads



P20 PIPETTE TIPS

| VWR Cat. No. | Description | Capacity | Packaging |
|--------------|------------------|----------|---------------------------------------|
| BK717254 | Non-sterile | 100 µL | 96 tips/tip box, 10 tip boxes/case |
| BK717255 | Sterile | 100 µL | 96 tips/tip box, 10 tip boxes/case |
| BK717256 | Sterile filtered | 20 µL | 96 tips/tip box, 10 tip boxes/case |



P50 PIPETTE TIPS

| VWR Cat. No. | Description | Capacity | Packaging |
|--------------|------------------|----------|---------------------------------------|
| BKA21578 | Non-sterile | 90 µL | 96 tips/tip box, 10 tip boxes/case |
| BKA21582 | Sterile | 90 µL | 96 tips/tip box, 10 tip boxes/case |
| BKA21586 | Sterile filtered | 50 µL | 96 tips/tip box, 10 tip boxes/case |



P250 PIPETTE TIPS

| VWR Cat. No. | Description | Capacity | Packaging |
|--------------|------------------|----------|---------------------------------------|
| BK717251 | Non-sterile | 220 µL | 96 tips/tip box, 10 tip boxes/case |
| BK717252 | Sterile | 220 µL | 96 tips/tip box, 10 tip boxes/case |
| BK717253 | Sterile filtered | 125 µL | 96 tips/tip box, 10 tip boxes/case |



P250 WIDE BORE PIPETTE TIPS

| VWR Cat. No. | Description | Capacity | Packaging |
|--------------|-----------------------------|----------|---------------------------------------|
| BKB01101 | Wide bore, Non-sterile | 220 µL | 96 tips/tip box, 10 tip boxes/case |
| BKB01102 | Wide bore, Sterile | 220 µL | 96 tips/tip box, 10 tip boxes/case |
| BKB01103 | Wide bore, Sterile filtered | 170 µL | 96 tips/tip box, 10 tip boxes/case |



BIOMEK NX^P/FX^P PIPETTE TIPS

Non-conductive tips for use with Biomek Span-8 Pod



P20 PIPETTE TIPS

| VWR Cat. No. | Description | Capacity | Packaging |
|--------------|------------------|----------|------------------------------------|
| BK379504 | Non-sterile | 100 µL | 96 tips/tip box, 10 tip boxes/case |
| BK379505 | Sterile | 100 µL | 96 tips/tip box, 10 tip boxes/case |
| BK379506 | Sterile filtered | 20 µL | 96 tips/tip box, 10 tip boxes/case |



P50 PIPETTE TIPS

| VWR Cat. No. | Description | Capacity | Packaging |
|--------------|------------------|----------|------------------------------------|
| BKA21578 | Non-sterile | 90 µL | 96 tips/tip box, 10 tip boxes/case |
| BKA21582 | Sterile | 90 µL | 96 tips/tip box, 10 tip boxes/case |
| BKA21586 | Sterile filtered | 50 µL | 96 tips/tip box, 10 tip boxes/case |



P250 PIPETTE TIPS

| VWR Cat. No. | Description | Capacity | Packaging |
|--------------|------------------|----------|------------------------------------|
| BK379501 | Non-sterile | 220 µL | 96 tips/tip box, 10 tip boxes/case |
| BK379502 | Sterile | 220 µL | 96 tips/tip box, 10 tip boxes/case |
| BK379503 | Sterile filtered | 125 µL | 96 tips/tip box, 10 tip boxes/case |



P250 WIDE BORE PIPETTE TIPS

| VWR Cat. No. | Description | Capacity | Packaging |
|--------------|-----------------------------|----------|------------------------------------|
| BKB01101 | Wide bore, Non-sterile | 220 µL | 96 tips/tip box, 10 tip boxes/case |
| BKB01102 | Wide bore, Sterile | 220 µL | 96 tips/tip box, 10 tip boxes/case |
| BKB01103 | Wide bore, Sterile filtered | 170 µL | 96 tips/tip box, 10 tip boxes/case |



BIOMEK NX^P/FX^P PIPETTE TIPS

Non-conductive tips for use with Biomek Span-8 Pod



P1000 PIPETTE TIPS

| VWR Cat. No. | Description | Capacity | Packaging |
|--------------|------------------|----------|-----------------------------------|
| BKB01122 | Non-sterile | 1050 µL | 96 tips/tip box, 5 tip boxes/case |
| BKB01123 | Sterile | 1050 µL | 96 tips/tip box, 5 tip boxes/case |
| BKB01124 | Sterile filtered | 1025 µL | 96 tips/tip box, 5 tip boxes/case |



P1000 WIDE BORE PIPETTE TIPS

| VWR Cat. No. | Description | Capacity | Packaging |
|--------------|-----------------------------|----------|-----------------------------------|
| BKB01112 | Wide bore, Non-sterile | 1050 µL | 96 tips/tip box, 5 tip boxes/case |
| BKB01113 | Wide bore, Sterile | 1050 µL | 96 tips/tip box, 5 tip boxes/case |
| BKB01114 | Wide bore, Sterile filtered | 1025 µL | 96 tips/tip box, 5 tip boxes/case |



BIOMEK NX^P/FX^P PIPETTE TIPS

Conductive tips for use with Biomek Span-8 Pod to enable Liquid Level Sensing



P20 CONDUCTIVE PIPETTE TIPS

| VWR Cat. No. | Description | Capacity | Packaging |
|--------------|------------------|----------|------------------------------------|
| BK719012 | Non-sterile | 100 µL | 96 tips/tip box, 10 tip boxes/case |
| BK719013 | Sterile | 100 µL | 96 tips/tip box, 10 tip boxes/case |
| BK394622 | Sterile filtered | 20 µL | 96 tips/tip box, 10 tip boxes/case |



P50 CONDUCTIVE PIPETTE TIPS

| VWR Cat. No. | Description | Capacity | Packaging |
|--------------|------------------|----------|------------------------------------|
| BKB01089 | Non-sterile | 90 µL | 96 tips/tip box, 10 tip boxes/case |
| BKB01090 | Sterile | 90 µL | 96 tips/tip box, 10 tip boxes/case |
| BKB01091 | Sterile filtered | 50 µL | 96 tips/tip box, 10 tip boxes/case |



P250 CONDUCTIVE PIPETTE TIPS

| VWR Cat. No. | Description | Capacity | Packaging |
|--------------|------------------|----------|------------------------------------|
| BK719010 | Non-sterile | 220 µL | 96 tips/tip box, 10 tip boxes/case |
| BK719011 | Sterile | 220 µL | 96 tips/tip box, 10 tip boxes/case |
| BK394627 | Sterile filtered | 125 µL | 96 tips/tip box, 10 tip boxes/case |



P1000 CONDUCTIVE PIPETTE TIPS

| VWR Cat. No. | Description | Capacity | Packaging |
|--------------|------------------|----------|-----------------------------------|
| BK987935 | Non-sterile | 1050 µL | 96 tips/tip box, 5 tip boxes/case |
| BK987936 | Sterile | 1050 µL | 96 tips/tip box, 5 tip boxes/case |
| BK987925 | Sterile filtered | 1025 µL | 96 tips/tip box, 5 tip boxes/case |



BIOMEK 4000 & 3000 PIPETTE TIPS

Non-conductive tips for use with the Biomek 4000 and 3000 workstations

FOR USE WITH P20 AND MP20 PIPETTE TOOLS

| VWR Cat. No. | Description | Capacity | Packaging |
|--------------|----------------------------|----------|------------------------------------|
| BK717254 | P20 tips, Non-sterile | 100 µL | 96 tips/tip box, 10 tip boxes/case |
| BK717255 | P20 tips, Sterile | 100 µL | 96 tips/tip box, 10 tip boxes/case |
| BK717256 | P20 tips, Sterile filtered | 20 µL | 96 tips/tip box, 10 tip boxes/case |
| BKA21578 | P50 tips, Non-sterile | 90 µL | 96 tips/tip box, 10 tip boxes/case |
| BKA21582 | P50 tips, Sterile | 90 µL | 96 tips/tip box, 10 tip boxes/case |
| BKA21586 | P50 tips, Sterile filtered | 50 µL | 96 tips/tip box, 10 tip boxes/case |



FOR USE WITH P200L AND MP200 PIPETTE TOOLS

| VWR Cat. No. | Description | Capacity | Packaging |
|--------------|---------------------------------------|----------|------------------------------------|
| BKA21578 | P50 tips, Non-sterile | 90 µL | 96 tips/tip box, 10 tip boxes/case |
| BKA21582 | P50 tips, Sterile | 90 µL | 96 tips/tip box, 10 tip boxes/case |
| BKA21586 | P50 tips, Sterile filtered | 50 µL | 96 tips/tip box, 10 tip boxes/case |
| BK717251 | P250 tips, Non-sterile | 220 µL | 96 tips/tip box, 10 tip boxes/case |
| BK717252 | P250 tips, Sterile | 220 µL | 96 tips/tip box, 10 tip boxes/case |
| BK717253 | P250 tips, Sterile filtered | 125 µL | 96 tips/tip box, 10 tip boxes/case |
| BKB01101 | P250 wide bore tips, Non-sterile | 220 µL | 96 tips/tip box, 10 tip boxes/case |
| BKB01102 | P250 wide bore tips, Sterile | 220 µL | 96 tips/tip box, 10 tip boxes/case |
| BKB01103 | P250 wide bore tips, Sterile filtered | 170 µL | 96 tips/tip box, 10 tip boxes/case |



FOR USE WITH P1000SL AND MP1000 PIPETTE TOOLS (BIOMEK 4000)

| VWR Cat. No. | Description | Capacity | Packaging |
|--------------|--|----------|-----------------------------------|
| BKB01122 | P1000 tips, Non-sterile | 1050 µL | 96 tips/tip box, 5 tip boxes/case |
| BKB01123 | P1000 tips, Sterile | 1050 µL | 96 tips/tip box, 5 tip boxes/case |
| BKB01124 | P1000 tips, Sterile filtered | 1025 µL | 96 tips/tip box, 5 tip boxes/case |
| BKB01112 | P1000 wide bore tips, Non-sterile | 1050 µL | 96 tips/tip box, 5 tip boxes/case |
| BKB01113 | P1000 wide bore tips, Sterile | 1050 µL | 96 tips/tip box, 5 tip boxes/case |
| BKB01114 | P1000 wide bore tips, Sterile filtered | 1025 µL | 96 tips/tip box, 5 tip boxes/case |



Filtered tips are not compatible with tip and liquid-level sensing on the Biomek 3000 and 4000 workstations.

BIOMEK MICRO- & DEEP-WELL PLATES

For use with Biomek Automated Workstations

BIOMEK 96 ROUND DEEP-WELL PLATES

| VWR Cat. No. | Description | Color | Well Bottom | Well Volume | Packaging |
|--------------|----------------------------|---------|-------------|-------------|-----------|
| BK267001 | Non-sterile, Polystyrene | Clear | Round | 1 ml | 24/case |
| BK267004 | Sterile, Polystyrene | Clear | Round | 1 ml | 24/case |
| BK267006 | Non-sterile, Polypropylene | Natural | Round | 1 ml | 24/case |
| BK267007 | Sterile, Polypropylene | Natural | Round | 1 ml | 24/case |



BIOMEK 96 SQUARE DEEP-WELL PLATES

| VWR Cat. No. | Description | Color | Well Bottom | Well Volume | Packaging |
|--------------|----------------------------|---------|-------------|-------------|-----------|
| BK140504 | Non-sterile, Polypropylene | Natural | Round | 2 ml | 24/case |
| BK609681 | Sterile, Polypropylene | Natural | Round | 2 ml | 24/case |



BIOMEK 96-WELL MICROPLATE

| VWR Cat. No. | Description | Color | Well Bottom | Well Volume | Packaging |
|--------------|--------------------------|-------|-------------|-------------|-----------|
| BK609844 | Non-sterile, Polystyrene | Clear | Flat | 300 µL | 100/case |



For optimum sealing, use Biomek Aluminum Foil Seals (VWR Cat. No. BK538619).

For Biomek 96 Round Deep-Well Plates, you can also use Biomek Cap Mats (VWR Cat. No. BK267002 or BK267005).

BIOMEK MODULAR RESERVOIR SYSTEM

For use with Biomek Automated Workstations

FULL RESERVOIRS

| VWR Cat. No. | Description | Capacity | Packaging |
|--------------|--------------------------------------|----------|-----------|
| BK372784 | Sterile, Polypropylene | 150 ml | 12/case |
| BK534678 | Sterile, Polypropylene, Nonpyrogenic | 150 ml | 12/case |



HALF RESERVOIRS

| VWR Cat. No. | Description | Capacity | Packaging |
|--------------|--|---------------|-----------|
| BK372786 | Sterile, Polypropylene | 75 ml | 24/case |
| BK534681 | Sterile, Polypropylene, Nonpyrogenic | 75 ml | 24/case |
| BK372794 | Sterile, Polypropylene, Divided by Width | 37 ml/section | 24/case |



QUARTER RESERVOIRS

| VWR Cat. No. | Description | Capacity | Packaging |
|--------------|---|---------------|-----------|
| BK372790 | Sterile, Polypropylene | 40 ml | 48/case |
| BK534680 | Sterile, Polypropylene, Nonpyrogenic | 40 ml | 48/case |
| BK372792 | Sterile, Polypropylene, Divided by Width | 19 ml/section | 48/case |
| BK-372788 | Sterile, Polypropylene, Divided by Length | 19 ml/section | 48/case |



FRAME FOR RESERVOIRS

| VWR Cat. No. | Description | Capacity | Packaging |
|--------------|-------------|----------|-----------|
| BK372795 | — | — | 1 each |



Each frame can accommodate up to two (2) half reservoirs or four (4) quarter reservoirs. Full reservoirs do not require a reservoir frame.

BIOMEK LABWARE & ACCESSORIES

For use with Biomek Automated Workstations

BIOMEK TUBE RACK

| VWR Cat. No. | Description | Color | Packaging |
|--------------|-------------|-------|-----------|
| BK373661 | 24-Position | Black | 1 each |



This 24-Position Tube Rack holds various sizes of glass, polystyrene, and polypropylene tubes, Microfuge tubes, and cryovials. Use inserts to ensure proper tube fit.

BIOMEK TUBE RACK INSERTS

| VWR Cat. No. | Description | Color | Packaging |
|--------------|---|-------|-----------|
| BK373699 | 10 mm Diameter | Black | 25/case |
| BK373696 | 11 mm Diameter (Securely holds 1.5 ml Microfuge tube flip cap in place) | White | 25/case |
| BK373698 | 12 mm Diameter | Red | 25/case |
| BK373697 | 13 mm Diameter | Blue | 25/case |



1.5 mL MICROCENTRIFUGE TUBES

| VWR Cat. No. | Description | Color | Packaging |
|--------------|---------------|---------|-----------|
| BK356090 | Polypropylene | Clear | 500/case |
| BK356091 | Polypropylene | Blue | 500/case |
| BK356093 | Polypropylene | Yellow | 500/case |
| BK356094 | Polypropylene | Orange | 500/case |
| BK357448 | Polypropylene | Natural | 500/case |



Microcentrifuge Tubes, with 11 mm inserts (VWR Cat. No. BK373696), fit into the Biomek 24-Position Tube Rack (VWR Cat. No. BK373661).

BIOMEK CAP MATS

| VWR Cat. No. | Description | Color | Packaging |
|--------------|-------------|---------|-----------|
| BK267002 | Non-sterile | Natural | 12/case |
| BK267005 | Sterile | Natural | 12/case |



Tightly seal 96 Round Deep-Well Microplates (1 ml). Research-grade silicone creates a barrier to minimize moisture exchange. Mats are alphanumerically labeled.

BIOMEK ALUMINUM FOIL SEALS

| VWR Cat. No. | Description | Packaging |
|--------------|--------------------------------|-----------|
| BK538619 | Aluminum Foil Seals | 100/case |
| BK538618 | Roller for Aluminum Foil Seals | 1 each |



Use roller (VWR Cat. No. BK538618) to ensure complete plate sealing.



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IVD: In Vitro Diagnostics

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