

**Centurion  
Scientific Ltd**

**Benchtop Centrifuges**

***K Series***  
*K241/K241R*

*1 litre max*



## The K Series

The powerful K series are capable of high speeds and offer larger capacities including 1, 2 and 3 litre machines. Add to the mix our superb refrigeration centrifuges and you will find the K series offers you complete flexibility.

Quiet operation, LCD display with touch screen control, and a space saving design add to the desirable features. Our Centrifuges deliver optimum performance in compact units, designed for ease of use. Quiet (below 60Db, rotor dependant) with low heat operation noise levels have been reduced while maintaining sample integrity with good airflow on our ambient models and fantastic temperature control on our refrigerated models.

Performance and safety are top of our agenda, tight operational control is maintained by the microprocessor. An imbalance sensor is incorporated into the control loop to bring to a controlled stop of the centrifuge in the case of a tube rupture or incorrect loading.

Centurion centrifuges have been an industry standard for quality and reliability for over 23 years. Whether at work in a clinical laboratory, a blood bank, clinical research lab, a winery, a university or an industrial setting, Centurion centrifuges can be relied upon to deliver safe, reproducible and trouble-free results for many years.

Centurion brand centrifugation products are part of a dedicated range of products and services designed to provide you with quality equipment and support.

## Choosing The Right Centrifuge

A centrifuge is a critical piece of equipment. Therefore, when the time comes to add new centrifuges or replace old models, it is important to make an informed decision. Bringing together technological and design excellence, Centurion have paved the way for a new generation of centrifuges.

# Centurion Scientific Ltd

## K Series - K241/K241R Centrifuges



Welcome to our latest range, we trust you will find the following pages informative. With time comes experience and in our 24 years we have learnt that development is an ongoing sequence that is led by materials and analytical changes in the world. To this end, our development has improved user use, sample integrity and access. By working with all our suppliers, our reliability has been retained and improved to give all our range a **2 year warranty** as standard.



CE marked and ISO 9001 regulated and now IVD certified too

User features to K3 series	Advantages
Large LCD display with touch control	Clarity & ease of use
Rotor recognition	Safe selection of rotors
10 acceleration rates 10 deceleration rates	Sample assistance
108 memory (12 pages of 9)	Multi department & users
Timer 0-9999 minutes & Hold in 1 second increments	Total flexibility
Pulse short run	Fast pelleting
Run in Speed (Rpm) or Rcf (G) in 1 Rpm increments	Accuracy
W2t Plots Time, Accel, Rpm and Decel	True sample repeatability
Sound <60Db (rotor dependant)	Quiet
Orientation acceleration rate	Prevents initial sample side deposits

Standard to K3 series	Advantages
Extra thick Stainless steel bowl	Easy clean & rust free
Port to lid	Tachometer speed certification
Alloy & steel frame with composite's	Strong light & quiet
World leading Industrial grade Inverter	Reliability & strength
Best Quality European Brushless motor	Quiet, cool & reliable
High technology airflow (ambient models)	Cooler running
All centrifuges have user accessible service sections to access all safety parameters	

Safety features to K3 series	Advantages
Multi point lid locking	Lid safety
Emergency lid release	Power failure release
Lid gas struts	Lid dropping safety
Lid lock detection	To run Lid must be shut
Imbalance detection	Easy "eye" volume loading
Overspeed Sensor	Safe detection of speed
Set inverter values	Electronic safety of speed
Barrier ring	Extra metal protection of chamber
Motor overheat sensor	Safe motor protection

Refrigerated K3 series	Advantages
Variable from -9 to +40°C with stand by cooling	Flexibility (see rotors)
CFC free R404A gas	Ozone friendly
Valve control of Gas	Efficient temperature control
PID control of valve	Supreme temperature accuracy

Centurion Scientific Ltd centrifuges comply to all relevant EU standards for Quality and medical Devices IEC 61010 and CE conformity test marks Emission, immunity to EN/IEC 61326-1, Class B

## K241 Ambient Centrifuge



**Speed** .....500-15000 Rpm  
(1 Rpm steps)

**Rcf max** .....22,000 G

**Timer**.....0-9999 Mins & hold  
(1 sec steps)

**Dimensions** ...HWD 310 x 400 x 500mm

**Weight**.....31.6 Kg (without rotor)

**Power**.....309 watts

**Memory**.....108 programs

**Accel rates** ...10

**Decel rates** ...10

## K241R Refrigerated Centrifuge



**Speed** .....500-15000 Rpm  
(1 Rpm steps)

**Rcf max** .....22,000 G

**Timer**.....0-9999 Mins & hold  
(1 sec steps)

**Dimensions** ...HWD 315 x 450 x 635mm

**Weight**.....62.2 Kg (without rotor)

**Power**.....448 watts

**Memory**.....108 programs

**Accel rates** ...10

**Decel rates** ...10

**Temp** .....-9 to +40°C PID  
controlled to +/- 1°C

# Index

## Page 6 Microtube Rotors 15,000 Rpm

Rotors	<b>BRK5424</b>	<b>BRK5436</b>	<b>BRK5448</b>	<b>BRK5494</b>
Rotor type	24 x 2ml	36 x 0.5ml	48 x 0.2ml	4 x Pcr strips
Tube size max	11 x 50mm	8 x 30mm	6 x 40mm	8 per strip

## Page 6 Haematocrit Rotor 12,000 Rpm

Rotor	<b>BRK5401</b>
Rotor type	24 x 2ml & 12 x 2ml
Tube size max	75 x 2mm Capillary & 11 x 40mm

## Page 7 High Speed Rotors 10,000 Rpm

Rotors	<b>BRK5212</b>	<b>BRK5206</b>
Rotor type	12 x 15ml	6 x 50ml
Tube size max	17 x 120mm	30 x 120mm

## Page 8 Medium Speed Rotors 6000 Rpm

Rotors	<b>BRK5324</b>	<b>BRK5308</b>	<b>BRK5100</b>
Rotor type	24 x 15ml	8 x 50ml	6 x 100ml
Tube size max	17 x 120mm	30 x 120mm	45 x 125mm

## Page 9 Cytology Rotor 2000 Rpm

Rotor	<b>4430</b>
Rotor type	8 x 0.2ml to 6.0ml
Holders	Single or Double holder

## Page 10 Swing Out Rotors 4,000 Rpm - 3,000 Rpm

Rotors	<b>BRK5510</b> (4000 Rpm)	<b>BRK5508L</b> (4000 Rpm)	<b>BRK5530</b> (3000 Rpm)
Buckets	B5250 (Required)	Included	Included
Rotor type	4 x 250ml	8 x 15ml	4 x Microtitor plates
Tube size max	45 x 115mm	17 x 120mm	85 x 128mm

# Microtube Rotors 15,000 Rpm

## NEW

High dome sealed Polycarbonate lid included



### Rotors

	<b>BRK5424</b>	<b>BRK5436</b>	<b>BRK5448</b>	<b>BRK5494</b>
Rotor type	24 x 2ml	36 x 0.5ml	48 x 0.2ml	4 x Pcr strips
Tube size max	11 x 50mm	8 x 30mm	6 x 40mm	8 per strip
Minimum speed	500 Rpm	500 Rpm	500 Rpm	500 Rpm
Maximum speed	15,000 Rpm	15,000 Rpm	15,000 Rpm	15,000 Rpm
Maximum Rcf (G)	22000	22000	22000	22000
Radius max cms	8.75cms	8.75cms	8.75cms	8.75cms
Sample tube angle (°)	45	45	45	45
Acceleration time (secs)	20	20	20	20
Deceleration time (secs)	20	20	20	20
Autoclaveable (frequency)	121°C (20)	121°C (20)	121°C (20)	121°C (20)

## Refrigerated Centrifuges only

Minimum Temperature	4°C	4°C	4°C	4°C
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At maximum speed (relative to room temperature at 23°C)

## Reducers



Rotor	BRK5424
Part number - Pack 24	<b>RS04 (0.2 - 0.4ml)</b>
Tube size max	6 x 30mm
Part number - Pack 24	<b>RS05 (0.5ml)</b>
Tube size max	8 x 30mm

## Haematocrit Rotor 12,000 Rpm



Rotor	<b>BRK5401</b>
Rotor type	24 x 2ml & 12 x 2ml
Tube size max	75 x 2mm Capillary & 11 x 40mm
Minimum speed	500 Rpm
Maximum speed	12,000 Rpm
Maximum Rcf (G)	13500
Radius max cms	8.4cms
Sample tube angle (°)	0 & 60
Acceleration time (secs)	30
Deceleration time (secs)	30
Autoclaveable (frequency)	121°C (20)

# Rotors 10,000 Rpm

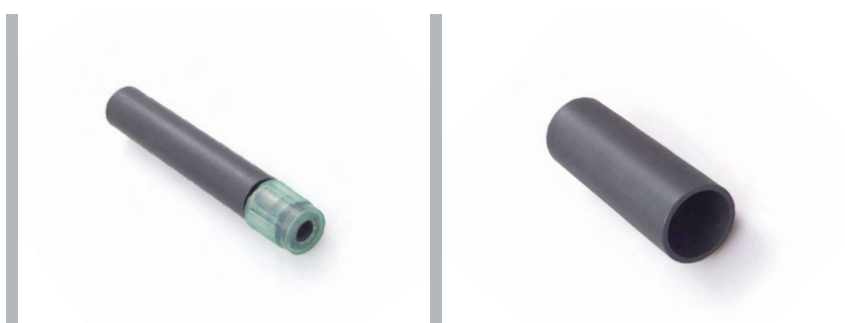


Rotors	<b>BRK5212</b>	<b>BRK5206</b>
Rotor type	12 x 15ml	6 x 50ml
Tube size max	17 x 120mm	30 x 120mm
Minimum speed	500 Rpm	500 Rpm
Maximum speed	10,000 Rpm	10,000 Rpm
Maximum Rcf (G)	10600	10600
Radius max cms	9.5	9.5
Sample tube angle (°)	30	30
Acceleration time (secs)	35	35
Deceleration time (secs)	35	35
Autoclaveable (frequency)	121°C (30)	121°C (30)

## Refrigerated Centrifuges only

Minimum Temperature	4°C	4°C
At maximum speed (relative to room temperature at 23°C )		

# Reducers



Rotor	BRK5212	BRK5206
Part number	<b>RM05</b> (5ml)	<b>RM15</b> (15ml)
Tube size max	13 x 80mm	17 x 120mm
Part number	<b>RM10</b> (10ml)	<b>RM25</b> (25ml)
Tube size max	16 x 100mm	25 x 100mm

# Rotors 6000 Rpm



Rotors	BRK5324	BRK5308	BRK5100
Rotor type	24 x 15ml	8 x 50ml	6 x 100ml
Tube size max	17 x 120mm	30 x 120mm	45 x 125mm
Minimum speed	500 Rpm	500 Rpm	500 Rpm
Maximum speed	6,000 Rpm	6,000 Rpm	6,000 Rpm
Maximum Rcf (G)	4800	4800	4800
Radius max cms	12	12	12
Sample tube angle (°)	30	30	30
Acceleration time (secs)	35	35	35
Deceleration time (secs)	35	35	35
Autoclaveable (frequency)	121°C (20)	121°C (20)	121°C (20)

## Refrigerated Centrifuges only

Minimum Temperature	4°C	4°C	4°C
At maximum speed (relative to room temperature at 23°C )			

# Reducers



Rotor	BRK5324	BRK5308	BRK5100
Part number	<b>RM05</b> (5ml)	<b>RM15</b> (15ml)	<b>RL10</b> (10ml)
Tube size max	13 x 80mm	17 x 120mm	16 x 100mm
Part number	<b>RM10</b> (10ml)	<b>RM25</b> (25ml)	<b>RL25</b> (25ml)
Tube size max	16 x 100mm	25 x 100mm	25 x 100mm
Part number			<b>RL50</b> (50ml)
Tube size max			35 x 115mm
Part number			<b>RL85</b> (85ml)
Tube size max			39 x 115mm



# Rotor Cytology

Using centrifugal force to separate and deposit a monolayer of cells onto slides whilst maintaining cellular integrity within a clearly defined area FROM ANY FLUID MATRIX. Cyto centrifugation also constructively flattens cells for excellent nuclear presentation.

Applications include Cytology, Histology, Haematology, Oncology, Immunochemistry, Virology, Serology and Microbiology.

Offering samples from 0.1ml to 6ml and an extensive range of accessories we have your Cytology needs covered.

Rotor	<b>4430</b>
Rotor type	8 x 0.2ml to 6ml
Holders	Single or double
Minimum speed	200 Rpm
Maximum speed	2,000 Rpm
Maximum Rcf (G)	550
Radius max cms	12
Sample tube angle (°)	0
Acceleration time (secs)	25
Deceleration time (secs)	25
Autoclaveable (frequency)	121°C (10)

**Cytology rotor includes Rotor, sealed lid, Clips, 24 x holders with filter card & 100 slides**

## Refrigerated Centrifuges only

Minimum Temperature	0°C
At maximum speed (relative to room temperature at 23°C )	



## Accessories



**4446**

Double sample holder with card (up to 1ml)



**4444**

Single sample holder with card (up to 1ml)



**4600**

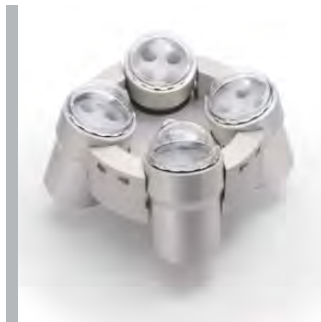
Single sample holder with card (up to 6ml)



**4462**

Stainless steel clips

# Swing out rotors



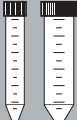



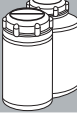




Rotors	<b>BRK5510</b>	<b>BRK5508L</b>	<b>BRK5530</b>
Buckets	B5250 (set 4)	Complete with buckets	Complete with buckets
Sealed Lids	B5419	N/A	N/A
Rotor type	4 x 250ml	8 x 15ml	4 x microtiter plate
Tube size max	62 x 110mm	17 x 125mm	85 x 130mm
Minimum speed	500 Rpm	500 Rpm	500 Rpm
Maximum speed	4,000 Rpm	4,000 Rpm	3,000 Rpm
Maximum Rcf (G)	2600	2600	1250
Radius max cms	14.6	14.6	12.5
Sample tube angle (°)	0	0	0
Acceleration time (secs)	25	20	25
Deceleration time (secs)	25	20	25
Autoclaveable (frequency)	121°C (20)	121°C (20)	121°C (20)

## *Refrigerated Centrifuges only*

Minimum Temperature	4°C	4°C	4°C
At maximum speed (relative to room temperature at 23°C )			

*Adaptors available - see opposite page.*

Adaptors for Swing out rotors				Adaptors		
Tube type	Shape	Capacity	Size	To fit rotor BRK5510		
			WxH (mm)	Need buckets	Nos of tubes	
				Part nos	per rotor	
	Micro with cap	<b>point</b>	<b>0.5ml</b>	<b>8x20</b>	<b>AM605</b>	<b>40</b>
	Micro with cap	<b>point</b>	<b>1.5ml</b>	<b>11x38</b>	<b>AM620</b>	<b>28</b>
	Micro with cap	<b>point</b>	<b>2.0ml</b>	<b>11x38</b>	<b>AM620</b>	<b>28</b>
	Micro with cap	<b>point</b>	<b>0.2ml</b>	<b>6x20</b>	<b>AM602</b>	<b>48</b>
	Micro with cap	<b>point</b>	<b>0.4ml</b>	<b>6x30</b>	<b>AM604</b>	<b>48</b>
	Plain No cap	<b>round</b>	<b>1ml</b>	<b>6x45</b>	<b>AR601</b>	<b>48</b>
	Plain No cap	<b>round</b>	<b>3ml</b>	<b>10x60</b>	<b>AR603</b>	<b>32</b>
	Plain No cap	<b>round</b>	<b>5ml</b>	<b>12x75</b>	<b>AR605</b>	<b>32</b>
	Plain No cap	<b>round</b>	<b>6ml</b>	<b>12x82</b>	<b>AR605</b>	<b>32</b>
	Plain No cap	<b>round</b>	<b>7ml</b>	<b>12x100</b>	<b>AR607*</b>	<b>32</b>
	Plain No cap	<b>round</b>	<b>9/10ml</b>	<b>14x100</b>	<b>AR609*</b>	<b>28</b>
	Plain No cap	<b>round</b>	<b>15ml</b>	<b>17x100</b>	<b>AR615*</b>	<b>28</b>
	Plain No cap	<b>round</b>	<b>25ml</b>	<b>24x100</b>	<b>AR625</b>	<b>12</b>
	Plain No cap	<b>round</b>	<b>50ml</b>	<b>34x100</b>	<b>AR650</b>	<b>4</b>
	Plain No cap	<b>round</b>	<b>100ml</b>	<b>45x100</b>	<b>AR6100</b>	<b>4</b>
	Plain No cap	<b>round</b>	<b>150ml</b>	<b>52x100</b>	<b>AR6150</b>	<b>4</b>
Plain No cap	<b>round</b>	<b>250ml</b>	<b>62x100</b>	<b>BUCKET</b>	<b>4</b>	
	Falcon with cap	<b>Point</b>	<b>15ml</b>	<b>17x120</b>	<b>AF615*</b>	<b>16</b>
	Falcon with cap	<b>Point</b>	<b>50ml</b>	<b>29x115</b>	<b>AF650*</b>	<b>4</b>
	Falcon with cap	<b>Point</b>	<b>175ml</b>	<b>61x118</b>	<b>AF6175*</b>	<b>4</b>
	Falcon with cap	<b>Point</b>	<b>15ml</b>	<b>17x120</b>	<b>AF614</b>	<b>4</b>
	Corning with cap*	<b>Point</b>	<b>250ml</b>	<b>60x172</b>	See K242/R	
	Corning with cap*	<b>Point</b>	<b>500ml</b>	<b>98x148</b>	See K242/R	
	Falcon with cap	<b>Square</b>	<b>12ml</b>	<b>17x100</b>	<b>AFS612*</b>	<b>16</b>
	Falcon with cap	<b>Square</b>	<b>25ml</b>	<b>25x90</b>	<b>AFS625*</b>	<b>8</b>
	Falcon with cap	<b>Square</b>	<b>30ml</b>	<b>25x110</b>	<b>AFS630</b>	<b>8</b>
	Falcon with cap	<b>Square</b>	<b>50ml</b>	<b>29x115</b>	<b>AFS650</b>	<b>4</b>
	Falcon with cap	<b>Square</b>	<b>50ml</b>	<b>17x120</b>	<b>AFS614</b>	<b>4</b>
	Nalgene/Oakridge	<b>Round</b>	<b>10ml</b>	<b>16x80</b>	<b>ANO610</b>	<b>16</b>
	Nalgene/Oakridge	<b>Round</b>	<b>30ml</b>	<b>26x95</b>	<b>ANO630</b>	<b>4</b>
	Nalgene/Oakridge	<b>Round</b>	<b>50ml</b>	<b>29x107</b>	<b>ANO650</b>	<b>4</b>
	Nalgene/Oakridge	<b>Round</b>	<b>85ml</b>	<b>38x106</b>	<b>ANO685</b>	<b>4</b>
	Nalgene/Oakridge*	<b>Flat</b>	<b>250ml</b>	<b>62x130</b>	Buckets 5250	<b>4</b>
	Nalgene/Oakridge*	<b>Flat</b>	<b>750ml</b>	<b>98x153</b>	See K243/R	
	Monovette	<b>Square</b>	<b>1.1-1.4ml</b>	<b>8x82</b>	<b>AM6014</b>	<b>40</b>
	Monovette	<b>Square</b>	<b>2.7-3ml</b>	<b>11x82</b>	<b>AM603</b>	<b>40</b>
	Monovette	<b>Square</b>	<b>2.6-2.9ml</b>	<b>13x81</b>	<b>AM629</b>	<b>40</b>
	Monovette	<b>Square</b>	<b>4.5-5ml</b>	<b>11x108</b>	<b>AM603*</b>	<b>40</b>
	Monovette	<b>Square</b>	<b>7.5-8.2ml</b>	<b>13x106</b>	<b>AM679*</b>	<b>40</b>
	Monovette	<b>Square</b>	<b>4-5.5ml</b>	<b>15x92</b>	<b>AM650</b>	<b>28</b>
	Monovette	<b>Square</b>	<b>7.5-8.2ml</b>	<b>15x108</b>	<b>AM650*</b>	<b>28</b>
	Monovette	<b>Square</b>	<b>9-10.0ml</b>	<b>16x108</b>	<b>AM690*</b>	<b>28</b>
	Vacutainer	<b>Round</b>	<b>1.6-5.0ml</b>	<b>13x75</b>	<b>AV616</b>	<b>40</b>
	Vacutainer	<b>Round</b>	<b>4-7.0ml</b>	<b>13x100</b>	<b>AV650</b>	<b>40</b>
	Vacutainer	<b>Round</b>	<b>8.5-10.0ml</b>	<b>16x100</b>	<b>AV680</b>	<b>28</b>

Note:- We cannot be held responsible if the tube manufacturers change design and/or size of the tube.

\* Limited capacity with sealed bucket lids (B5419 and B5319).

Other ranges available - *please ask for details*



K2015/K2015R



K242/K242R



K243/K243R



C2 Series



Cytology



Cell Washer



Pro-Sep



Pro-Vet

**Manufactured by:**

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[www.centurionscientific.co.uk](http://www.centurionscientific.co.uk)

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