

**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

Large LCD display with touch control
Rotor recognition
10 acceleration rates 10 deceleration rates
108 memory (12 pages of 9)
Timer 0-9999 minutes & Hold in 1 second increments
Pulse short run
Run in Speed (Rpm) or Rcf (G) in 1 Rpm increments
W2t Plots Time, Accel, Rpm and Decel
Sound <60Db (rotor dependant)
Orientation acceleration rate

Advantages

Clarity & ease of use
Safe selection of rotors
Sample assistance
Multi department & users
Total flexibility
Fast pelleting
Accuracy
True sample repeatability
Quiet
Prevents initial sample side deposits

Standard to K3 series

Extra thick Stainless steel bowl
Port to lid
Alloy & steel frame with composite's
World leading Industrial grade Inverter
Best Quality European Brushless motor
High technology airflow (ambient models)
All centrifuges have user accessible service sections to access all safety parameters

Advantages

Easy clean & rust free
Tachometer speed certification
Strong light & quiet
Reliability & strength
Quiet, cool & reliable
Cooler running

Safety features to K3 series

Multi point lid locking
Emergency lid release
Lid gas struts
Lid lock detection
Imbalance detection
Overspeed Sensor
Set inverter values
Built in
Motor overheat sensor

Advantages

Lid safety
Power failure release
Lid dropping safety
To run Lid must be shut
Easy "eye" volume loading
Safe detection of speed
Electronic safety of speed
Extra metal protection of chamber
Safe motor protection

Refrigerated K3 series

Variable from -5 to +40°C with stand by cooling
CFC free R404A gas
Valve control of Gas
PID control of valve

Advantages

Flexibility (see rotors)
Ozone friendly
Efficient temperature control
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



Speed500-15000 Rpm
(1 Rpm steps)
Rcf max22,000 G
Timer0-9999 Mins & hold
(1 sec steps)
Dimensions ...HWD 310 x 400 x 500mm
Weight31.6 Kg (without rotor)
Power309 watts
Memory108 programs
Accel rates ...10
Decel rates ...10

K241R Refrigerated Centrifuge



Speed500-15000 Rpm
(1 Rpm steps)
Rcf max22,000 G
Timer0-9999 Mins & hold
(1 sec steps)
Dimensions ...HWD 315 x 450 x 635mm
Weight62.2 Kg (without rotor)
Power448 watts
Memory108 programs
Accel rates ...10
Decel rates ...10
Temp-9 to +40°C PID
controlled to $\pm 1^{\circ}\text{C}$



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Page 6 Microtube Rotors 15,000 Rpm

Rotors	BRK5424	BRK5436	BRK5448	BRK5494
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	BRK5401
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	BRK5212	BRK5206
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	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

Page 9 Cytology Rotor 2000 Rpm

Rotor	4430
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	BRK5510 (4000 Rpm)	BRK5508L (4000 Rpm)	BRK5530 (3000 Rpm)
Buckets	B5250 (Required)	Included	Included
Rotor type	4 x 250ml	8 x 15ml	4 x Microtiter 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

	BRK5424	BRK5436	BRK5448	BRK5494
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

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

4°C 4°C

Reducers



Rotor

BRK5424

Part number - Pack 24

RS04 (0.2 - 0.4ml)

Tube size max

6 x 30mm

Part number - Pack 24

RS05 (0.5ml)

Tube size max

8 x 30mm

Haematocrit Rotor 12,000 Rpm



Rotor

BRK5401

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

8.4 cms

Sample tube angle (°)

0 - 90

Acceleration time (secs)

30

Deceleration time (secs)

30

Autoclaveable (frequency)

121°C (20)



Rotors 10,000 Rpm



Rotors

Rotor type

Tube size max

Minimum speed

Maximum speed

Maximum Rcf (G)

Radius max cms

Sample tube angle (°)

Acceleration time (secs)

Deceleration time (secs)

Autoclaveable (frequency)

BRK5212

12 x 15ml

17 x 120mm

500 Rpm

10,000 Rpm

10600

9.5

30

35

35

121°C (30)

BRK5206

6 x 50ml

30 x 120mm

500 Rpm

10,000 Rpm

10600

9.5

30

35

35

121°C (30)

Refrigerated Centrifuges only

Minimum Temperature

4°C

4°C

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

Reducers



Rotor

Part number

Tube size max

Part number

Tube size max

BRK5212

RM05 (5ml)

13 x 80mm

RM10 (10ml)

16 x 100mm

BRK5206

RM15 (15ml)

17 x 120mm

RM25 (25ml)

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	RM05 (5ml)	RM15 (15ml)	RL10 (10ml)
Tube size max	13 x 80mm	17 x 120mm	16 x 100mm
Part number	RM10 (10ml)	RM25 (25ml)	RL25 (25ml)
Tube size max	16 x 100mm	25 x 100mm	25 x 100mm
Part number			RL50 (50ml)
Tube size max			35 x 115mm
Part number			RL95 (95ml)
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	4430
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	BRK5510	BRK5508L	BRK5530
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 microtitor plate
Tube size max	45 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 (o)	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 Need buckets Nos of tubes	
				WxH (mm)	Part nos	per rotor
	Micro with cap	point	0.5ml	8x20	AM605	40
	Micro with cap	point	1.5ml	11x38	AM620	28
	Micro with cap	point	2.0ml	11x38	AM620	28
	Micro with cap	point	0.2ml	6x20	AM602	48
	Micro with cap	point	0.4ml	6x30	AM604	48
	Plain No cap	round	1ml	6x45	AR601	48
	Plain No cap	round	3ml	10x60	AR603	32
	Plain No cap	round	5ml	12x75	AR605	32
	Plain No cap	round	6ml	12x82	AR605	32
	Plain No cap	round	7ml	12x100	AR607 *	32
	Plain No cap	round	9/10ml	14x100	AR609 *	28
	Plain No cap	round	15ml	17x100	AR615 *	28
	Plain No cap	round	25ml	24x100	AR625	12
	Plain No cap	round	50ml	34x100	AR650	4
	Plain No cap	round	100ml	45x100	AR6100	4
	Plain No cap	round	150ml	52x100	AR6150	4
	Plain No cap	round	250ml	62x100	BUCKET	4
	Falcon with cap	Point	15ml	17x120	AF615 *	16
	Falcon with cap	Point	50ml	29x115	AF650 *	4
	Falcon with cap	Point	175ml	61x118	AF6175 *	4
	Falcon with cap	Point	15ml	17x120	AF614	4
	Corning with cap *	Point	250ml	60x172	See K242/R	
	Corning with cap *	Point	500ml	98x148	See K242/R	
	Falcon with cap	Square	12ml	17x100	AFS612 *	16
	Falcon with cap	Square	25ml	25x90	AFS625 *	8
	Falcon with cap	Square	30ml	25x110	AFS630	8
	Falcon with cap	Square	50ml	29x115	AFS650	4
	Falcon with cap	Square	50ml	17x120	AFS614	4
	Nalgene/Oakridge	Round	10ml	16x80	ANO610	16
	Nalgene/Oakridge	Round	30ml	26x95	ANO630	4
	Nalgene/Oakridge	Round	50ml	29x107	ANO650	4
	Nalgene/Oakridge	Round	85ml	38x106	ANO685	4
	Nalgene/Oakridge *	Flat	250ml	62x130	Buckets 5250	4
	Nalgene/Oakridge *	Flat	750ml	98x153	See K243/R	
	Monovette	Square	1.1-1.4ml	8x82	AM6014	40
	Monovette	Square	2.7-3ml	11x82	AM603	40
	Monovette	Square	2.6-2.9ml	13x81	AM629	40
	Monovette	Square	4.5-5ml	11x108	AM603 *	40
	Monovette	Square	7.5-8.2ml	13x106	AM679 *	40
	Monovette	Square	4-5.5ml	15x92	AM650	28
	Monovette	Square	7.5-8.2ml	15x108	AM650 *	28
	Monovette	Square	9-10.0ml	16x108	AM690 *	28
	Vacutainer	Round	1.6-5.0ml	13x75	AV616	40
	Vacutainer	Round	4-7.0ml	13x100	AV650	40
	Vacutainer	Round	8.5-10.0ml	16x100	AV680	28

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).