# **PrO-Hospital Centrifuges**

Hospital. Clinical. GP. Laboratories

& cell washer centrifuges

Now including our cytology





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# **PrO-Hospital Centrifuges**

Built to last, these Centrifuges have strong construction yet offer a sleek modern design that will fit into any modern laboratory.

No compromises on quality, only the best components are used in the manufacturing process. By working with all of our suppliers, our reliability has been retained and improved to give all of our range a 3 year warranty as standard.

CE 🔮 🚻

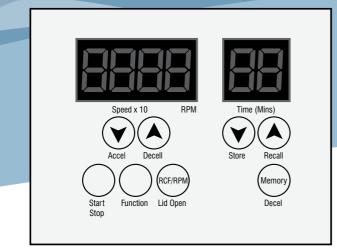
CE marked and ISO 9001 regulated and now IVD certified too

User features to PrO-Hospital series	Advantages
Bright blue LED display	Clarity & ease of use
Rotor recognition	Safe selection of rotors
10 acceleration rates &10 deceleration rates	Sample assistance
10 program memory	Multi department & Users
Timer 0-99 minutes & Hold in 30 second increments	Total flexibility
Pulse short run	Fast pelleting
Run in speed (rpm) or rcf (G) in 10 rpm increments	Accuracy
Orientation acceleration rate	Prevents initial sample side deposits
Sound <60db (rotor dependent)	Quiet
Standard to PrO-Hospital series	Advantages
Extra thick stainless steel bowl	Easy clean & rust free
Port to lid	Tachometer speed certification
Alloy & steel frame (zinc coated)	Strong light & quiet
World leading industrial grade inverter	Reliability & strength
Best quality European brushless motor	Quiet, cool & reliable
High technology airflow (ambient mode)	Cooler running

Safety features to PrO- <b>Hospital</b> series	Advantages
Multi point lid locking	Lid safety
Emergency lid release	Power failure release
Lid Spring Strut	Lid dropping safety
Lid lock detection	To run, lid must be shut
Imbalance detection	Eradicates user loading errors
Overspeed sensor	Safe detection of speed
Set inverter values	Electronic safety of speed
Barrier ring	Safety protection of chamber
Motor overheat sensor	Safe motor protection

Centurion Scientific Ltd Centrifuges comply to all relevant EU standards of quality and medical devices  $\mathsf{IEC}$ 

61010 and CE conformity test marks emission, immunity to EN/IEC 61326-1, Class B



# New Ranges

#### New Dual Centrifuges All available with dual rotors

Micro Centrifuges Small Centrifuges

#### New Prime Centrifuges All available with multiple rotors

Micro Centrifuges Small Centrifuges Medium Centrifuges Large Centrifuges Large Centrifuges with Trolley Floor Standing Centrifuges

## New Large Centrifuges (available with trolley)

Bench top, or with the addition of a Centurion trolley, can be converted to a free standing unit and will also sit under a bench as only 71cm high.

### **New Floor Standing Centrifuges**

Complete floor standing units – free standing or will fit under a bench as only 71cm high.

4

# Ranges Available

Micro: Capacity to 120ml max	Pages: 6 to 11
Dual: Simple 2 rotor Centrifuge Prime: Multiple rotors Centrifuge	Micros, Haematocrit, Fixed angle Swing out
Small: Capacity to 400ml max	Pages: 12 to 19
Dual: Simple 2 rotor Centrifuge Prime: Multiple rotors Centrifuge	Micros, Haematocrit, Fixed angle Swing out, Cytology
Medium: Capacity to 1000ml max	<b>Pages: 20 to 28</b> (Ambient & Refrigerated)
Dual: Simple 2 rotor Centrifuge Prime: Multiple rotors Centrifuge	Micros, Haematocrit, Fixed angle Swing out, Cytology
Large & Large with Trolley Capacity 2-3000ml max	<b>Pages: 29 to 40</b> (Ambient & Refrigerated)
Prime: Multiple rotor Centrifuge	Micros, Haematocrit, Fixed angle Swing out
Floor Standing Capacity 3-4000ml max	<b>Pages: 41 to 59</b> (Ambient & Refrigerated)
Prime: Multiple rotors Centrifuge	Micros, Haematocrit, Fixed angle Swing out, Blood bags (Coming soon
Cytology	Pages: 60 to 67



## Serum Micro Dual Centrifuge

Serum. (230V 50/60Hz). 1.Serum (110V 60Hz)

Speed max	500-8,000 Rpm (10 Rpm steps)
Rcf max	6100 G
Timer	0-99 Mins & Hold (30 sec steps)
Dims HWD	235 x 235 x 350mm
Weight	12.8Kg (without rotor)
Power	140 watts
Memory	10 programs
Accel Rates	10 programs
Decel Rates	10 programs

Display indicative only

## Fixed Angle Rotor to 15ml



Swing Out Including 8 buckets



Rotor         BRK5407         BRK5408         BRK5508S           Rotor type         4 x 15ml & 4 x 10ml         8 x 15ml tube         8 x 5ml Swing Out           Tube size max         17 x 120mm & 13 x 100mm         17 x 120mm         13 x75mm max           Minimum speed Rpm         500         500         500 Rpm           Maximum Rcf (G)         6,100         3,500         1500           Radius max cms         8.6         8.5         8.5           Sample tube angle °         30         30         0           Acceleration time (secs)         30         30         20				
Tube size max         17 x 120mm & 13 x 100mm         17 x 120mm Maximum speed Rpm         13 x75mm max           Minimum speed Rpm         500         500         500 Rpm           Maximum speed Rpm         8,000         6,000         4000 Rpm           Maximum Rcf (G)         6,100         3,500         1500           Radius max cms         8.6         8.5         8.5           Sample tube angle °         30         30         0	Rotor	BRK5407	BRK5408	BRK5508S
13 x 100mm           Minimum speed Rpm         500         500 Rpm           Maximum speed Rpm         8,000         6,000         4000 Rpm           Maximum Rcf (G)         6,100         3,500         1500           Radius max cms         8.6         8.5         8.5           Sample tube angle °         30         30         0	Rotor type	4 x 15ml & 4 x 10ml	8 x 15ml tube	8 x 5ml Swing Out
Maximum speed Rpm         8,000         6,000         4000 Rpm           Maximum Rcf (G)         6,100         3,500         1500           Radius max cms         8.6         8.5         8.5           Sample tube angle °         30         30         0	Tube size max		17 x 120mm	13 x75mm max
Maximum Rcf (G)         6,100         3,500         1500           Radius max cms         8.6         8.5         8.5           Sample tube angle °         30         30         0	Minimum speed Rpm	500	500	500 Rpm
Radius max cms8.68.58.5Sample tube angle °30300	Maximum speed Rpm	8,000	6,000	4000 Rpm
Sample tube angle ° 30 30 0	Maximum Rcf (G)	6,100	3,500	1500
······	Radius max cms	8.6	8.5	8.5
Acceleration time (secs) 30 30 20	Sample tube angle °	30	30	0
	Acceleration time (secs)	30	30	20
Deceleration time (secs) 30 30 20	Deceleration time (secs)	30	30	20
Autoclavable (frequency)         121°C (20)         121°C (20)         121°C (20)	Autoclavable (frequency)	121°C (20)	121°C (20)	121°C (20)

### Reducers (Pack of 4)

BRK5408
RM05 (5ml)
13 x 80mm
RM10 (10ml)
13 x 100mm

# Welcome to the Future of Micro Prime Centrifuges

In the past, manufacturers have offered limited rotor availability to Micro Centrifuges.

#### Not anymore.

Centurion Scientific Ltd are evolving the marketplace and have introduced *Micro Centrifuge Prime*.

## A Micro that offers:

1	Micro rotors. 0.2, 0.4, 0.5, 1.5, 2.0, 2.2ml & PCR 15,000Rpm and 22,000 Rcf (G) max	Capacity
2	Haematocrit rotor Capillary and 2.0ml tubes 12,000Rpm and 13,500 Rcf(G) max	Capacity
3	Fixed angle rotors 5, 7.5, 10, 12 & 15ml tube 8,000Rpm and 6,100 Rcf (G) max	Capacity
4	Swing out rotor 2, 3, 4 & 5ml tube 4,000Rpm and 1,500 Rcf (G) max	Capacity



Display indicative only

The following pages show available rotors.

#### PCV's Micro Prime Centrifuge PCV's.(230V 50/60Hz). 1.PCV's.(110V 60Hz)

Speed	500-15,000 Rpm (10 Rpm steps)
Rcf Max	22,000 G
Timer	0-99 Mins & Hold (30 sec steps)
Dims HWD	235 x 235 x 350mm
Weight	12.8 Kg (without rotor)
Power	140 Watts
Memory	10 programs
Accel rates	10 programs
Decel rates	10 programs

## Microtube Rotors 15,000 Rpm

With NEW high Domed polycarbonate lid	0	0	0	0
Rotor	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	6 x 40mm
Minimum Speed Rpm	500	500	500	500
Maximum Speed Rpm	15,000	15,000	15,000	15,000
Maximum Rcf (G)	22,000	22,000	22,000	22,000
Radius max cms	8.5	8.5	8.5	8.5
Sample tube angle (°)	45	45	45	45
Acceleration time (secs)	25	25	25	25
Deceleration time (secs)	25	25	25	25
Autoclavable (frequency)	121°C (10)	121°C (10)	121°C (10)	121°C (10)

### Refrigerated Centrifuges Only

Minimum Temperature	4°C	4°C	4°C	4°C	
			•••••	••••••	•••••

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

## Reducers

(Pack of 24)

1
0
BRK5424

ROLOI	DKKJ424
Part number	RS04 (0.2 -0.4ml)
Tube size max	6 x 30mm
Part number	RS05 (0.5ml)
Tube size max	8 x 30mm
•••••••••••••••••••••••••••••••••••••••	•••••••••••••••••••••••••••••••••••••••

## Haematocrit Rotor 12,000 Rpm



Rotor	BRK5401
Rotor type	24 x capillary & 12 x 2ml
Tube size max	2 x 75mm & 11 x 40mm
Minimum Speed Rpm	500
Maximum Speed Rpm	12,000
Maximum Rcf (G)	13,500
Radius max cms	8.5
Sample tube angle (°)	0 &60
Acceleration time (secs)	30
Deceleration time (secs)	30
Autoclavable (frequency)	121°C (10)

## Small Fixed Angle Rotors 6,000 & 8,000 Rpm



Rotor	BRK5407	BRK5408
Rotor type	4 x 15ml & 4 x 10ml	8 x 15ml
Tube Size max	17 x 120mm / 13 x 100mm	17 x 120mm
Minimum speed Rpm	500	500
Maximum speed Rpm	8,000	6,000
Maximum Rcf (G)	6,100	3,400
Radius max cms	8.6	8.5
Sample tube angle (°)	30	30
Acceleration time (secs)	25	25
Deceleration time (secs)	25	25
Autoclavable (frequency)	121°C (10)	121°C (10)



9

# Swing out Rotor - 8 x 5ml Max



Rotor	BRK5508S
Rotor type	8 x 5ml Swing Out
Tube size max	13 x 75mm max
Minimum Speed Rpm	500 Rpm
Maximum Speed Rpm	4,000 Rpm
Maximum Rcf (G)	1500
Radius max cms	8.5
Sample tube angle (°)	0
Acceleration time (secs)	20
Deceleration time (secs)	20
Autoclavable (frequency)	121°C (20)



5ml

## Haematocrit (Pvc) accessories



Haematocrit reader Part Number : 8003



## Sealant Clay

(Pack of 10) Part Number : 8014



## Plain Capillary Tubes

(Pack of 1000) Part Number : 8012



## Heperanised Capillary Tubes

(Pack of 1000) Part Number : 8013



Display indicative only

Rotors 4000 Rpm

## GP Small Dual Centrifuge

GP.(230V 50/60Hz). 1.GP.(110V 60Hz)

Speed max	500-4,000 Rpm (10 Rpm steps)
Rcf max	2,200 G
Timer	0-99 Mins & Hold (30 sec steps)
Dims HWD	275 x 325 x 470mm
Weight	21.8Kg (without rotor)
Power	160 watts
Memory	10 programs
Accel Rates	10 programs
Decel Rates	10 programs
••••••	

# Swing Out Rotor Adaptors required see page 17



(Requires 4 buckets B5010)

Rotor	BRK5324	BRK5308	BRK1000
Rotor type	24 x 15ml	8 x 50ml	4 x 100ml
Tube size max	17 x 120mm	30 x 120mm	45 x 100mm
Minimum speed Rpm	500	500	500
Maximum speed Rpm	4,000	4,000	4,000
Maximum rcf (G)	2,200	2,200	2,200
Radius max cms	12.3	12.3	12.3
Sample tube angle °	30	30	0
Acceleration time (secs)	35	35	25
Deceleration time (secs)	35	35	25
Autoclavable (frequency)	121°C (20)	121°C (20)	121°C (20)

### Reducers (Pack of 4)



Rotor	BRK5324	BRK5308
Part number	RM05 (5ml)	RM15 (15ml)
Tube size max	13 x 80mm	17 x 120mm
Part number	RM10 (10ml)	RM25 (25ml)
Tube size max	13 x 100mm	25 x 100mm



Display indicative only

## GP6 Small Dual Centrifuge

GP6.(230V 50/60Hz). 1.GP6.(110V 60Hz)

Speed max	500-6,000 Rpm (10 Rpm steps)
Rcf max	3,800 G
Timer	0-99 Mins & Hold (30 sec steps)
Dims HWD	275 x 325 x 470mm
Weight	21.8Kg (without rotor)
Power	160 watts
Memory	10 programs
Accel Rates	10 programs
Decel Rates	10 programs

## Rotors 6000 Rpm





Rotor	BRK5412	BRK5406
Rotor type	12 x 15ml	6 x 50ml
Tube size max	17 x 120mm	30 x 120mm
Minimum speed Rpm	500	500
Maximum speed Rpm	6,000	6,000
Maximum rcf (G)	3,800	3,800
Radius max cms	9.5	9.5
Sample tube angle °	30	30
Acceleration time (secs)	25	25
Deceleration time (secs)	25	25
Autoclavable (frequency)	121°C (20)	121°C (20)

## Reducers (Pack of 4)



Rotor	BRK5412	BRK5406
Part number	RM05 (5ml)	RM15 (15ml)
Tube size max	13 x 80mm	17 x 120mm
Part number	RM10 (10ml)	RM25 (25ml)
Tube size max	13 x 100mm	25 x 100mm

# Welcome to the Future of Small Prime Centrifuges

In the past, manufacturers have offered limited rotor availability to Small Centrifuges.

#### Not anymore.

Centurion Scientific Ltd are evolving the marketplace and have introduced **Small Centrifuge Prime**.

## A Small Centrifuge that offers:

1	Micro rotors. 0.2, 0.4, 0.5, 1.5, 2.0, 2.2ml & PCR 15,000Rpm and 22,000 Rcf (G) max	Capacity
2	Haematocrit rotor Capillary and 2.0ml tubes 12,000Rpm and 13,500 Rcf(G) max	Capacity
3	Fixed angle rotors 15 & 50ml tube (reducers available) 6,000Rpm and 4,800 Rcf (G) max	Capacity
4	Swing out rotor 0.5 to 100ml tube (adaptors available) 4,000Rpm and 2,200 Rcf (G) max	Capacity
5	Cytology rotor. 3 types 4, 8 or 12 place (Double holder) 2,000Rpm and 550 Rcf (G) max	Capacity



Display indicative only

The following pages show available rotors.

### LC Small Prime Centrifuge

LC. (230V 50/60Hz). 1.LC. (110V 60Hz)

Speed	500-15,000 Rpm (10 Rpm steps)
Rcf Max	22,000 G
Timer	0-99 Mins & Hold (30 sec steps)
Dims HWD	275 x 325 x 470mm
Weight	21.8 Kg (without rotor)
Power	175 Watts
Memory	10 programs
Accel rates	10 programs
Decel rates	10 programs

## Microtube Rotors 15,000 Rpm

With NEW high Domed polycarbonate lid	0	0	0	0
Rotor	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	6 x 40mm
Minimum Speed Rpm	500	500	500	500
Maximum Speed Rpm	15,000	15,000	15,000	15,000
Maximum Rcf (G)	22,000	22,000	22,000	22,000
Radius max cms	8.5	8.5	8.5	8.5
Sample tube angle (°)	45	45	45	45
Acceleration time (secs)	25	25	25	25
Deceleration time (secs)	25	25	25	25
Autoclavable (frequency)	121°C (10)	121°C (10)	121°C (10)	121°C (10)

### Refrigerated Centrifuges Only

Minimum Temperature	4°C	4°C	4°C	4°C	
•••••••••••••••••••••••••••••••••••••••					• ••
At maximum speed (relative to room temperature at $23^{\circ}$ C)					

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

## Reducers

(Pack of 24)

-	
1	
1	
0	e -

Rotor	BRK5424
Part number	RS04 (0.2 -0.4ml)
Tube size max	6 x 30mm
Part number	RS05 (0.5ml)
Tube size max	8 x 30mm

## Haematocrit Rotor 12,000 Rpm



Rotor	BRK5401
Rotor type	24 x capillary & 12 x 2ml
Tube size max	2 x 75mm & 11 x 40mm
Minimum Speed Rpm	500
Maximum Speed Rpm	12,000
Maximum Rcf (G)	13,500
Radius max cms	8.5
Sample tube angle (°)	0 &60
Acceleration time (secs)	30
Deceleration time (secs)	30
Autoclavable (frequency)	121°C (10)

## Large Fixed Angle Rotors 6,000 Rpm



Rotor	BRK5324	BRK5308
Rotor type	24 x 15ml	8 x 50ml
Size max	17 x 120mm	30 x 120mm
Minimum speed Rpm	500	500
Maximum speed Rpm	6,000	6,000
Maximum Rcf (G)	4,800	4,800
Radius max cms	12	12
Sample tube angle °	30	30
Acceleration time (secs)	35	35
Deceleration time (secs)	35	35
Autoclavable (frequency)	121°C (20)	121°C (20)

#### Refrigerated Centrifuges Only

Minimum Temperature	4°C	4°C
••••••••••••••••••••••••		
		8C)

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



## Swing Out Rotor - 400ml max



BRK1000 Swing out Rotor

Shown with B5010 Buckets and sealed lids B5419

Rotor / buckets	BRK1010
Tube size max	45 x 100mm
Minimum speed	500Rpm
Maximum speed	4000Rpm
Maximum Rcf(G)	2200
Radius max	12.5cm
Tube angle	0 degree
Acceleration time	25 seconds
Deceleration time	25 seconds
Autoclavable (times)	121C (20)
Minimum Temperature	4C (at 23C ambient)

B5010 bucket (set 4) REQUIRED 100ml max per bucket



#### Adaptors for Swing out rotors

naupt		e.	<b>T</b> (	<b>DF4</b> 00
	Capacity	Size	To fit buckets Part No.	Tubes per
			Tarcino.	rotor
8	Tube type: I	Micro with	cap Shape:p	oint
	0.5m	8x20	AM405	36
V	1.5ml	11x38	AM420	24
	2.0ml 0.2ml	11x38 6x20	AM420 AM402	24 36
	0.2ml	6x20	AM402 AM404	36
n			<b>p</b> Shape: <b>rou</b>	
	1ml 3ml	6x45 10x60	AR401 AR403	36 28
0.0	5ml	12x75	AR405*	28
	6ml	12x82	AR405*	28
	7ml	12x100	AR407*	28
	9/10ml	14x100	AR409*	24
	15ml	17x100	AR415*	8
	25ml 50ml	24x100 34x100	AR425* AR450*	8 4
	100ml	45x100	AR430 AR4100*	4
	150ml	52x100	N/A	
	250ml	62x100	N/A	
10.000	Tube typ <u>e:</u>	alcon wit	h cap Shape:	point
	15ml	17x120	AF415*	8
9.9	50ml	29x115	AF450*	4
	175ml	61x118	N/A	
	15ml	17x120	N/A	
9	Tube type: <b>(</b>	Corning wi	<b>ith cap*</b> Shap	e: <b>point</b>
	250ml	60x172	See K242/R	
227	500ml	98x148	See K242/R	
100	Tube type: <b>F</b>	alcon wit	<b>h cap</b> Shape: s	square
1	12ml	17x100	AFS412	8
2	25ml	25x90	AFS425	4 4
	30ml 50ml	25x110 29x115	AFS430 AFS450*	4
	15ml	17x120	N/A	4 N/A
-			<b>Jakridge</b> Shap	
Tel	10ml	16x80	ANO410*	8
UD.	30ml	26x95	ANO410 ANO430*	° 4
	50ml	29x107	ANO450	4
	100ml	38x106	ANO485	4
65	Tube type: <b>I</b>	Nalgene/C	<b>)akridge</b> * Sha	pe: <b>flat</b>
-	250ml	62x130	See K241/R	
S.	750ml	98x153	See K243/R	
8	Tube type: I			
	1.1-1.4ml	8x82	AM4014	24
X	2.7-3ml 2.6-2.9ml	11x82 13x81	AM403 AM429	24 24
	2.0-2.9mi 4.5-5ml	13x81 11x108	AM429 AM403*	24 24
	7.5-8.2ml	13x106	AM479*	24
	4.5-5ml	15x92	AM450*	20
	9-10ml	16x108	AM490*	20
	/1	/acutainer		
U	1.6-5ml	13x75	AV416*	24
	4-7ml 8.5-10ml	13x100 16x100	AV450* AV480*	16 12
	0.3-10111	102100	AV40U	12

# Swing out Rotor - 8 x 10ml Max



Rotor	BRK5508M
Rotor type	8 x 10ml
Tube size max	15 x 115mm
Minimum Speed Rpm	500 Rpm
Maximum Speed Rpm	4,000 Rpm
Maximum Rcf (G)	2200
Radius max cms	12.3
Sample tube angle (°)	0
Acceleration time (secs)	20
Deceleration time (secs)	20
Autoclavable (frequency)	121°C (20)



10ml

## Cytology Rotors available

Using centrifugal force to seperate and deposit a monolayer of cells onto slides, whilst maintaining integrity within a clearly defined area FROM ANY FLUID MATRIX. Cyto centrifugation also constructively flattens cells for excellent nuclear presentation. Applications include Cytology, Histolgy, Haematology, Oncology, Immunochemistry, Serology and Microbiology.

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



Rotor	4420	4430	4460
Rotor type	4 x 0.2 to 6ml	8 x 0.2 to 6ml	12 x 0.2 to 6ml
Tube size max	Single or double	Single or double	Single or double
Minimum speed Rpm	200	200	200
Maximum speed Rpm	2,000	2,000	2,000
Maximum Rcf (G)	550	550	550
Radius max cms	12	12	12
Sample tube angle °	0	0	0
Acceleration time (secs)	25	25	25
Deceleration time (secs)	25	25	25
Autoclavable (frequency)	121°C (20)	121°C (20)	121°C (20)

Cytology rotor includes Rotor, Sealed Lid, Clips, 24 holders with filter card & 100 slides





Pack of 24





#### 4446

Double sample holder with card (up to 1ml)

#### 4444

Single sample holder with card (up to 1ml)

#### 4600

Double sample holder with card (up to 6ml)

Stainless steel clips

# Welcome to the Future of Medium Prime Centrifuges

In the past, manufacturers have offered limited rotor availability to Medium Centrifuges.

#### Not anymore.

Centurion Scientific Ltd are evolving the marketplace and have introduced *Medium Centrifuge Prime*.

## A medium Centrifuge that offers.

1	Micro rotors. 0.2, 0.4, 0.5, 1.5, 2.0, 2.2ml & PCR 15,000Rpm and 22,000 Rcf (G) max	Capacity
2	Haematocrit rotor Capillary and 2.0ml tubes 12,000Rpm and 13,500 Rcf(G) max	Capacity
3	Fixed angle rotors 15 & 50ml tube (reducers available) 6,000Rpm and 4,800 Rcf (G) max	Capacity
4	Swing out rotor 0.5 to 250ml tube (adaptors available) 4,000Rpm and 2,200 Rcf (G) max	Capacity
5	Cytology rotor. 3 types 4, 8 or 12 place (Double holder) 2.000Rpm and 550 Rcf (G) max	Capacity



Display indicative only

## LL Medium Prime Centrifuge (1L)

LL.(230V 50/60Hz). 1.LL (110V 60Hz)

Speed	500-15,000 Rpm (10 Rpm steps)
Rcf Max	22,000 G
Timer	0-99 Mins & Hold (30 sec steps)
Dims HWD.	310 x 400 x 500mm
Weight	32 Kg (without rotor)
Power	310 Watts
Memory	10 programs
Accel rates	10 programs
Decel rates	10 programs

# Welcome to the Future of Medium Prime Refrigerated Centrifuges

In the past, manufacturers have offered limited rotor availability to Medium Centrifuges.

### Not anymore.

Centurion Scientific Ltd are evolving the marketplace and have introduced *Medium Centrifuge Prime*.

## A medium Centrifuge that offers.

1	Micro rotors. 0.2, 0.4, 0.5, 1.5, 2.0, 2.2ml & PCR 15,000Rpm and 22,000 Rcf (G) max	Capacity
2	Haematocrit rotor Capillary and 2.0ml tubes 12,000Rpm and 13,500 Rcf(G) max	Capacity
3	Fixed angle rotors 15 & 50ml tube (reducers available) 6,000Rpm and 4,800 Rcf (G) max	Capacity
4	Swing out rotor 0.5 to 250ml tube (adaptors available) 4,000Rpm and 2,200 Rcf (G) max	Capacity
5	Cytology rotor. 3 types 4, 8 or 12 place (Double holder) 2.000Rpm and 550 Rcf (G) max	Capacity

### LLR Medium Prime Centrifuge (1L) Refrigerated LLR.(230V 50Hz). 1.LLR.(110V 60Hz). 2.LLR.(230V 60Hz)



Speed	500-15,000 Rpm (10 Rpm steps)
Rcf Max	22,000 G
Timer	0-99 Mins & Hold (30 sec steps)
Dims HWD	315 x 450 x 635mm
Weight	62 Kg (without rotor)
Power	690 Watts
Memory	10 programs
Accel rates	10 programs
Decel rates	10 programs
Temp	-9C to +40C PID controlled +/- 1C
TL CILL	

The following pages show available rotors.

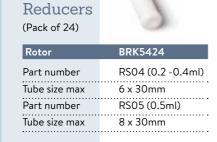
## Microtube Rotors 15,000 Rpm

With NEW high Domed polycarbonate lid	0		0	0
Rotor	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	6 x 40mm
Minimum Speed Rpm	500	500	500	500
Maximum Speed Rpm	15,000	15,000	15,000	15,000
Maximum Rcf (G)	22,000	22,000	22,000	22,000
Radius max cms	8.5	8.5	8.5	8.5
Sample tube angle (°)	45	45	45	45
Acceleration time (secs)	25	25	25	25
Deceleration time (secs)	25	25	25	25
Autoclavable (frequency)	121°C (10)	121°C (10)	121°C (10)	121°C (10)

#### Refrigerated Centrifuges Only

Minir	num Temper	atur	е		4°C		4°C	4°C	4°C	
	•									

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



## Haematocrit Rotor 12,000 Rpm



Rotor	BRK5401
Rotor type	24 x capillary & 12 x 2ml
Tube size max	2 x 75mm & 11 x 40mm
Minimum Speed Rpm	500
Maximum Speed Rpm	12,000
Maximum Rcf (G)	13,500
Radius max cms	8.5
Sample tube angle (°)	0 &60
Acceleration time (secs)	30
Deceleration time (secs)	30
Autoclavable (frequency)	121°C (10)
•••••••••••••••••••••••••••••••••••••••	•••••••••••••••••••••••••••••••••••••••

## High Speed Fixed Angle Rotors 10,000 Rpm





Rotor	BRK5212	BRK5206
Rotor type	12 x 15ml	6 x 50ml
Tube size max	17 x 120mm	30 x 120mm
Minimum speed Rpm	500	500
Maximum speed Rpm	10,000	10,000
Maximum Rcf (G)	10,600	10,600
Radius max cms	9.5	9.5
Sample tube angle °	30	30
Acceleration time (secs)	35	35
Deceleration time (secs)	35	35
Autoclavable (frequency)	121°C (20)	121°C (20)
Acceleration time (secs) Deceleration time (secs)	35 35	35 35

### Refrigerated Centrifuges Only

Minimum Temperature	4°C	4°C
At an ender one and for lation to a		-ture -t 22°C)

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

Reducers		
(Pack of 4)		
Rotor	BRK5212	BRK5206
Part number	RM05 (5ml)	RM15(15ml)
Tube size max	13 x 80mm	17 x 120mm
Part number	RM10 (10ml)	RM25 (25ml)
Tube size max	13 x 100mm	25 x 100mm

# Large Fixed Angle Rotors 6,000 Rpm

	SE.	2	0
Rotor	BRK5324	BRK5308	BRK5100
Rotor type	24 x 15ml	8 x 50ml	6 x 100ml
Size max	17 x 120mm	30 x 120mm	45 x 125mm
Minimum speed Rpm	500	500	500
Maximum speed Rpm	6,000	6,000	6,000
Maximum Rcf (G)	4,800	4,800	4,800
Radius max cms	12	12	12
Sample tube angle °	30	30	30
Acceleration time (secs)	35	35	35
Deceleration time (secs)	35	35	35
Autoclavable (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 $23^{\circ}$ C)					

Reducers	Pack of 4	Pack of 4	Pack of
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	13 x 100mm	25 x 100mm	25 x 100mm
•••••••••••••••••••••••••••••••••••••••			RL50 (50ml)
••••••••••••••••••••••••••••••			35 x 110mm
••••••			RL85 (85ml)
••••••			39 x 110mm
••••••	• • • • • • • • • • • • • • • • • • • •		••••••

## Swing Out Rotor 1 Litre Max



BRK1000 Swing out Rotor

Shown with B5250 Buckets and sealed lids B5419

Rotor / buckets	BRK1025
Tube size max	62 x 100mm
Minimum speed	500Rpm
Maximum speed	4000Rpm
Maximum Rcf(G)	2650
Radius max	14cm
Tube angle	0 degree
Acceleration time	25 seconds
Deceleration time	25 seconds
Autoclavable (times)	121C (20)
Minimum Temperature	4C (at 23C ambient)

B5250 bucket (set 4) REQUIRED 250ml max per Bucket



#### Adaptors for Swing out rotors

1	Capacity	Size	<b>To fit buckets</b> Part No.	<b>B5250</b> Tubes per
			Part No.	rotor
8	Tube type: I	Micro with	cap Shape: p	oint
	0.5m	8x20	AM605	40
V	1.5ml	11x38	AM620	28
	2.0ml	11x38	AM620	28
	0.2ml 0.4ml	6x20 6x30	AM602 AM604	48 48
n			p Shape: roui	
	1ml 2l	6x45	AR601	36
0.0	3ml 5ml	10x60 12x75	AR603 AR605	28 28
	6ml	12x73	AR605	28
	7ml	12x100	AR607	28
	9/10ml	14x100	AR609*	24
	15ml	17x100	AR615*	28
	25ml	24x100	AR625	8
	50ml 100ml	34x100 45x100	AR650 AR6100	4 4
	150ml	52x100	AR601	4
	250ml	62x100	BUCKET 4	
10,000	Tube type:	alcon wit	h cap Shape:	point
	15ml	17x120	AF615*	16
4.8	50ml	29x115	AF650*	4
	175ml	61x118	AF6175*	4
	15ml	17x120	N/A	4
9	Tube type: (	Corning w	i <b>th cap*</b> Shap	e: point
	250ml	60x172	See K242/R	
tot	500ml	98x148	See K242/R	
100	Tube type: I	alcon wit	h cap Shape: s	square
	12ml	17x100	AFS612*	16
	25ml	25x90	AFS625*	8
	30ml	25x110	AFS630	8
	50ml 15ml	29x115 17x120	AFS650 AFS614	4 4
T-			akridge Shap	
UU.	10ml 30ml	16x80 26x95	ANO610 ANO630	16 4
10	50ml	29x107	ANO650	4
	100ml	38x106	ANO685	4
6.	Tube type: I		akridge* Sha	pe: <b>flat</b>
5	250ml	62x130	Buckets 5250	4
U.	750ml	98x153	See K243/R	
A.	Tube type: I	Monovette	Shape: <b>squa</b> i	re
M	1.1-1.4ml	8x82	AM6014	40
X	2.7-3ml	11x82	AM603	40
	2.6-2.9ml 4.5-5ml	13x81 11x108	AM629 AM603*	40 40
	4.5-5mi 7.5-8.2ml	13x108	AM603* AM679*	40 40
	4.5-5ml	15x92	AM650	28
	9-10ml	16x108	AM690*	28
<b>II</b>	Tube type: <b>\</b>	/acutainer	Shape: round	ł
	1.6-5ml	13x75	AV616	40
0	4-7ml	13x100	AV650	40
	8.5-10ml	16x100	AV680	28

Set of 4

# Microtitor Plate Rotor 4 x Standard or $2 \times High$ Plates



BRK5540
Complete with buckets
Available with
4 x STD Plates
85mm x 128mm
500 Rpm
3500 Rpm
2500
14
0 °C (10)
30
30
121°C (20)

# Swing out Rotor - 8 x 15ml Max



Rotor	BRK5508L
Buckets	Complete with buckets
Sealed Lids	N/A
Rotor type	8 x 15ml
Tube size max	17 x 125mm
Minimum Speed Rpm	500 Rpm
Maximum Speed Rpm	4,000 Rpm
Maximum Rcf (G)	2,600
Radius max cms	14.6
Sample tube angle (°)	0
Acceleration time (secs)	20
Deceleration time (secs)	20
Autoclavable (frequency)	121°C (20)



## Cytology Rotors available

Using centrifugal force to seperate and deposit a monolayer of cells onto slides, whilst maintaining integrity within a clearly defined area FROM ANY FLUID MATRIX. Cyto centrifugation also constructively flattens cells for excellent nuclear presentation. Applications include Cytology, Histolgy, Haematology, Oncology, Immunochemistry, Serology and Microbiology.

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



Rotor	4420	4430	4460
Rotor type	4 x 0.2 to 6ml	8 x 0.2 to 6ml	12 x 0.2 to 6ml
Tube size max	Single or double	Single or double	Single or double
Minimum speed Rpm	200	200	200
Maximum speed Rpm	2,000	2,000	2,000
Maximum Rcf (G)	550	550	550
Radius max cms	12	12	12
Sample tube angle °	0	0	0
Acceleration time (secs)	25	25	25
Deceleration time (secs)	25	25	25
Autoclavable (frequency)	121°C (20)	121°C (20)	121°C (20)

Cytology rotor includes Rotor, Sealed Lid, Clips, 24 holders with filter card & 100 slides





Pack of 24





#### 4446

Double sample holder with card (up to 1ml)

#### 4444

Single sample holder with card (up to 1ml)

#### 4600

Double sample holder with card (up to 6ml)

Stainless steel clips

4462

# 2016 Refrigerated Centrifuge temperature control

At Centurion, we have taken temperature control seriously. We keep the refrigeration unit and the refrigerated centrifuge running constantly, as this not only gives the compressor a longer and more reliable life, but stops the constant surges of start up power. Due to the fact that the refrigeration unit is running constantly, it is quite usual to see ice in the chamber even at above freezing temperatures.

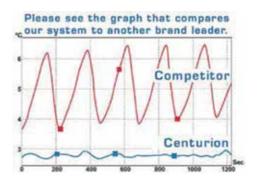
For 2016, a new larger, yet more efficient CFC free compressor has been used which gives lower power needs. To maintain the temperature, we have a highly efficient compressor gas bypass solenoid valve, where we pulse heat via a highly accurate controller system (PID controller, which calculates and manages the temperature).

By running both in conjunction, you get better overall temperature control, achieving the desired set temperature. Imagine using a shower; you turn on both cold and hot water, adjusting to suit your desired temperature. You would not want to use one where you had to stand under the cold water, then the hot, then the cold in order to regulate the temperature.

Centurion has a set temperature of 3°C, and the competitor of 4°C  $\,$ 

This allows us to separate the target areas, to show how each machine regulates the temperature. Both refrigeration units use the same air probes, temperature units, and have the probes set at the same distance from the rotor, and finally, the correct vertical distance to the optimum tube area. But as you can see, we control to  $0.5^{\circ}$ C, whereas our competitor controls it to  $3.5^{\circ}$ C, the control of our centrifuge is unsurpassed, and our competitors', which all use the same method of turning the compressor on and off, is shown to have very poor control. Having the temperature being so controlled means that the Centurion's power usage is less, and the compressor lasts longer.

This system has been in use for over 20 years, so we do know the longevity of our products. Require complete accuracy with your samples? Purchase a Centurion Centrifuge for total peace of mind. Tried, tested and proven as one of the most accurate systems in the market place.



# Bench Centrifuge or Bench Centrifuge with Trolley

## True Flexibility

User features to Floor Standing Centrifuge	Advantages
Floor standing Yet under bench fit, only 71cm high	Saves precious bench space, Flexible area use
Gives an easy loading height	Ease of Ergonomics For tube and rotor variances
Secure locking castors	Portable, easily moved around for safety
Strong design, with safe retention lip	Gives safe & quiet use



#### HL Large Prime Centrifuge (2/3L) HL.(230V 50/60Hz). 1.HL.(110V 60Hz)



Speed	500-15,000 Rpm (10 Rpm steps)
Rcf Max	22,000 G
Timer	0-99 Mins & Hold (30 sec steps)
Dimensions	HWD 375 x 600 x 630mm
Weight	63.5 Kg (without rotor)
Power	750 Watts
Memory	10 programs
Accel rates	10 programs
Decel rates	10 programs

Display indicative only

## HL with Trolley

Trolley available Part number. XMFS Total height 71 cm



The following pages show available rotors.

# Bench Centrifuge or Bench Centrifuge with Trolley

## True Flexibility

User features to Floor Standing Centrifuge	Advantages
Floor standing Yet under bench fit, only 71cm high	Saves precious bench space, Flexible area use
Gives an easy loading height	Ease of Ergonomics For tube and rotor variances
Secure locking castors	Portable, easily moved around for safety
Strong design, with safe retention lip	Gives safe & quiet use



#### HLR Large Prime Centrifuge (2/3L) Refrigerated HLR.(230V 50Hz). 1.HLR.(110V 60Hz). 2.HLR.(230V 60Hz)



Speed	500-15,000 Rpm (10 Rpm steps)
Rcf Max	22,000 G
Timer	0-99 Mins & Hold (30 sec steps)
Dimensions	HWD 410 x 998 x 630mm
Weight	110 Kg (without rotor)
Power	1200 Watts
Memory	10 programs
Accel rates	10 programs
Decel rates	10 programs
Temp	-9°C to + 40°C PID Controlled to + / - 1°C

## HLR with Trolley

Trolley available Part number. XMRFS Total height 71 cm



## Swing Out Rotor - 2 Litre max



#### BRK3000 Swing out rotor

Shown with B2000 buckets and sealed lids B5319

Rotor / buckets	BRK3020
Tube size max	98 x 160mm
Minimum speed	500Rpm
Maximum speed	4000Rpm
Maximum Rcf(G)	3600
Radius max	20.5cm
Tube angle	0 degree
Acceleration time	45 seconds
Deceleration time	45 seconds
Autoclavable (times)	121C (20)
Minimum Temperature	4C (at 23C ambient)

#### B2000 bucket (set 4) REQUIRED 500ml max per bucket



#### Adaptors for Swing out rotors

naapt		5		<b>B</b> 2000
	Capacity	Size	To fit buckets Part No.	Tubes per
				rotor
8	Tube type: I	Micro with	<b>cap</b> Shape: <b>p</b>	oint
	0.5m	8x20	AM805	120
V	1.5ml	11x38	AM820	84
	2.0ml 0.2ml	11x38	AM820	84 168
	0.2ml 0.4ml	6x20 6x30	AM802 AM804	168
_				
n			<b>p</b> Shape: <b>rou</b>	
	1ml 3ml	6x45 10x60	AR801 AR803	168 96
0.0	5ml	10x60 12x75	AR803 AR805	96 96
	6ml	12x73	AR805	96
	7ml	12x100	AR807	96
	9/10ml	14x100	AR809	84
	15ml	17x100	AR815	48
	25ml	24x100	AR825	28
	50ml 100ml	34x100 45x100	AR850 AR8100	16 8
	150ml	43x100 52x100	AR8100 AR8150	o 4
	250ml	62x100	AR8250	4
10 100	Tubo typo:	alcon wit	h cap Shape:	ooint
	15ml	17x120	AF815	48
4.4	50ml	29x115	AF850	40
	175ml	61x118	AF8175	4
	15ml	17x120		
0.	Tube type: <b>Corning with cap*</b> Shape: <b>point</b>			
9	250ml	60x172	AF8250	4
St.	500ml	98x148	AF8500	4
100	Tube type:	- alcon wit	h cap Shape: :	square
1	12ml	17x100	AFS812	48
÷	25ml	25x90	AF\$825	28
Cal.	30ml	25x110	AFS830	28
	50ml	29x115	AF\$850	20
	15ml	17x120	AFS850	48
n.Î	Tube type: N	Nalgene/C	<b>Jakridge</b> Shap	e: round
	10ml	16x80	ANO810	48
ų <b>μ</b>	30ml	26x95	ANO830	28
	50ml	29x107	ANO850	24
	100ml	38x106	ANO885	12
29	/1		Dakridge* Sha	
	250ml 750ml	62x130 98x153	ANO8250 See K243/R	4
- P.	Tube type: <b>I</b>			<b>7</b> 0
A	1.1-1.4ml	8x82	AM8014	96
U	2.7-3ml	11x82	AM8014 AM803	76
T.	2.6-2.9ml	13x81	AM829	76
	4.5-5ml	11x108	AM803	76
	7.5-8.2ml	13x106	AM879	76
	4.5-5ml	15x92	AM850	64
_	9-10ml	16x108	AM890	64
		/acutainer		
	1.6-5ml	13x75	AV816	76 76
0	4-7ml 8.5-10ml	13x100 16x100	AV850 AV880	76 64
	0.0 10111	10,100	AV000	04

Note: - We can not be held responsible if the tube manufacturers change the design and/or size of the tube.\* Limited capacity with sealed bucket lids (B5419 and B5319)

Set of 4

## Swing Out Rotor - 3 Litre max



#### BRK3000 Swing out rotor

Shown with B3000 buckets and sealed lids B5319

Rotor / buckets	BRK3030
Tube size max	98 x 170mm
Minimum speed	500Rpm
Maximum speed	4000Rpm
Maximum Rcf(G)	4000
Radius max	22.5cm
Tube angle	0 degree
Acceleration time	45 seconds
Deceleration time	45 seconds
Autoclavable (times)	121C (20)
Minimum Temperature	4C (at 23C ambient)

#### B3000 bucket (set 4) REQUIRED 750ml max per bucket



Set of 4

#### Adaptors for Swing out rotors

Iuupu	Capacity	Size	To fit buckets	<b>B</b> 2000
	Capacity	Size	Part No.	Tubes per
0				rotor
8			cap Shape: p	
	0.5m	8x20	AM805	120
V	1.5ml 2.0ml	11x38 11x38	AM820 AM820	84 84
	0.2ml	6x20	AM820 AM802	168
	0.4ml	6x30	AM804	168
			p Shape: rour	
n	1ml	6x45	AR801	168
UU	3ml	10x60	AR803	96
	5ml	12x75	AR805	96
	6ml	12x82	AR805	96
	7ml	12x100	AR807	96
	9/10ml	14x100	AR809	84
	15ml 25ml	17x100 24x100	AR815 AR825	48 28
	50ml	34x100	AR825 AR850	20 16
	100ml	45x100	AR8100	8
	150ml	52x100	AR8150	4
	250ml	62x100	AR8250	4
10.000	Tube type:	alcon wit	<b>h cap</b> Shape:	point
	15ml	17x120	AF815	48
9.9	50ml	29x115	AF850	16
	175ml	61x118	AF8175	4
	15ml	17x120		
	Tube type: Corning with cap* Shape: point			
	250ml	60x172	AF8250	4
N:27	500ml	98x148	AF8500	4
	Tube type: Falcon with cap Shape: square			
	12ml	17x100	AFS812	48
2	25ml	25x90	AFS825	28
	30ml 50ml	25x110	AFS830 AFS850	28 20
	15ml	29x115 17x120	AF\$850 AF\$850	20 48
-				-
T-			akridge Shap	
UU	10ml 30ml	16x80 26x95	ANO810 ANO830	48 28
10	50ml	29x107	ANO850	28
	100ml	38x106	ANO885	12
6		Nalgene/C	akridge* Sha	pe: <b>flat</b>
54	250ml	62x130	ANO8250	4
9	750ml	98x153	See K243/R	
A	Tube type: I			
M	1.1-1.4ml	8x82	AM8014	96
X	2.7-3ml	11x82	AM803	76
	2.6-2.9ml 4.5-5ml	13x81 11x108	AM829 AM803	76 76
	4.5-5mi 7.5-8.2ml	13x108	AM803 AM879	76 76
	4.5-5ml	15x92	AM850	64
	9-10ml	16x108	AM890	64
	Tube type: <b>\</b>	/acutainer	Shape: round	ł
1	1.6-5ml	13x75	AV816	76
0	4-7ml	13x100	AV850	76
	8.5-10ml	16x100	AV880	64

Note: - We can not be held responsible if the tube manufacturers change the design and/or size of the tube.\* Limited capacity with sealed bucket lids (B5419 and B5319)

# **R&D** Team

Watch this space for our Blood Bag Rotor. Release date: mid/late 2016!





# Microtitor Plate Rotor $4 \ge 3$ Standard or $2 \ge 4$ High Plates



BRK5540
Complete with buckets
Available with
4 x STD Plates
85mm x 128mm
500 Rpm
3500 Rpm
2500
14
0 °C (10)
30
30
121°C (20)

# Large Fixed Angle Rotors 6,000 Rpm

	SE.	2	0
Rotor	BRK5324	BRK5308	BRK5100
Rotor type	24 x 15ml	8 x 50ml	6 x 100ml
Size max	17 x 120mm	30 x 120mm	45 x 125mm
Minimum speed Rpm	500	500	500
Maximum speed Rpm	6,000	6,000	6,000
Maximum Rcf (G)	4,800	4,800	4,800
Radius max cms	12	12	12
Sample tube angle °	30	30	30
Acceleration time (secs)	35	35	35
Deceleration time (secs)	35	35	35
Autoclavable (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 roc	m temperature at 23°C)		

Reducers	Pack of 4	Pack of 4	Pack of
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	13 x 100mm	25 x 100mm	25 x 100mm
•••••••••••••••••••••••••••••••••••••••			RL50 (50ml)
••••••••••••••••••••••••••••••			35 x 110mm
••••••			RL85 (85ml)
••••••			39 x 110mm
••••••	• • • • • • • • • • • • • • • • • • • •		••••••

# High Speed Fixed Angle Rotors 10,000 Rpm

		Ÿ	1
Rotor	BRK5224	BRK5208	BRK5210
Rotor type	24 x 15ml	8 x 50ml	6 x 100ml
Size max	17 x 120mm	30 x 120mm	45 x 125mm
Minimum speed Rpm	500	500	500
Maximum speed Rpm	10,000	10,000	10,000
Maximum Rcf (G)	13,400	13,400	13,400
Radius max cms	12	12	12
Sample tube angle °	30	30	30
Acceleration time (sec	s) 35	35	35
Deceleration time (sec	s) 35	35	35
Autoclavable (frequen	cy) 121°C (20)	121°C (20)	121°C (20)
Refrigerated Cer	ntrifuges Only		
Minimum Temperature	4°C	4°C	4°C
At maximum speed (re	lative to room temperatur	re at 23°C)	
Reducers	Pack of 4	Pack of 4	Pack of 6
Rotor	BRK5224	BRK5208	BRK5210
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	13 x 100mm	25 x 100mm	25 x 100mm

 Part number
 RMI0 (10ml)
 RM25 (25ml)
 RL25 (25ml)

 Tube size max
 13 x 100mm
 25 x 100mm
 25 x 100mm

 RL50 (50ml)
 35 x 110mm
 35 x 110mm

 RL85 (85ml)
 39 x 110mm

# Microtube Rotors 15,000 Rpm

With NEW high Domed polycarbonate lid	0	0	0	0
Rotor	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	6 x 40mm
Minimum Speed Rpm	500	500	500	500
Maximum Speed Rpm	15,000	15,000	15,000	15,000
Maximum Rcf (G)	22,000	22,000	22,000	22,000
Radius max cms	8.5	8.5	8.5	8.5
Sample tube angle (°)	45	45	45	45
Acceleration time (secs)	25	25	25	25
Deceleration time (secs)	25	25	25	25
Autoclavable (frequency)	121°C (10)	121°C (10)	121°C (10)	121°C (10)

### Refrigerated Centrifuges Only

Minimum Temperature	4°C	4°C	4°C	4°C	
·····			•••••	•••••••••••••••••••••••••••••••••••••••	••••
At many improvement of (relative to					

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

### Reducers

(Pack of 24)

Rotor	BRK5424
Part number	RS04 (0.2 -0.4ml)
Tube size max	6 x 30mm
Part number	RS05 (0.5ml)
Tube size max	8 x 30mm
••••••••••••••••••••••••••••••	•••••••••••••••••••••••••••••••••••••••

# Haematocrit Rotor 12,000 Rpm



Rotor	BRK5401
Rotor type	24 x capillary & 12 x 2ml
Tube size max	2 x 75mm & 11 x 40mm
Minimum Speed Rpm	500
Maximum Speed Rpm	12,000
Maximum Rcf (G)	13,500
Radius max cms	8.5
Sample tube angle (°)	0 &60
Acceleration time (secs)	30
Deceleration time (secs)	30
Autoclavable (frequency)	121°C (10)

# HLFS/R Floor Standing Centrifuge (3L)

## True Flexibility

User features to Floor Standing Centrifuge	Advantages
Floor standing Yet under bench fit, only 71cm high	Saves precious bench space, Flexible area use
Smaller footprint than Bench model	Space saving R models 30% smaller footprint
Gives an easy loading height	Ease of Ergonomics For tube and rotor variances
Secure locking castors	Portable, easily moved around for safety

## Available in both Ambient and Refrigerated models



### HLFS/R Floor Standing Centrifuge (3L Max)



#### **HLFS** Ambient

HLFS.(230V 50/60Hz). 1.HLFS.(110V 60Hz)

Speed	500-15,000 Rpm (10 Rpm steps)
Rcf Max	22,000 G
Timer	0-99 Mins & Hold (30 sec steps)
Dimensions	HWD 710 x 650 x 630mm
Weight	80 Kg (without rotor)
Power	750 Watts
Memory	10 programs
Accel rates	10 programs
Decel rates	10 programs

#### The following pages show available rotors.

#### HLFSR Refrigerated

HLFSR.(230V 50Hz). 1.HLFSR.(110V 60Hz). 2.HLFSR.(230V 60Hz)

Speed	500-15,000 Rpm (10 Rpm steps)
Rcf Max	22,000 G
Timer	0-99 Mins & Hold (30 sec steps)
Dimensions	HWD 710 x 650 x 630mm
Weight	125 Kg (without rotor)
Power	1200 Watts
Memory	10 programs
Accel rates	10 programs
Decel rates	10 programs
Temp	-9°C to + 40°C PID
<b>.</b>	Controlled to + / - 1°C

### Swing Out Rotor - 2 Litre max



#### BRK3000 Swing out rotor

Shown with B2000 Buckets and sealed lids B5319

Rotor / buckets	BRK3020
Tube size max	98 x 155mm
Minimum speed	500Rpm
Maximum speed	4000Rpm
Maximum Rcf(G)	3600
Radius max	20.5cm
Tube angle	0 degree
Acceleration time	45 seconds
Deceleration time	45 seconds
Autoclavable (times)	121C (20)
Minimum Temperature	4C (at 23C
	ambient)

B2000 bucket (set 4) REQUIRED 500ml max per bucket B5319 Sealed Lids (4)



#### Adaptors for Swing out rotors

mapa		Size	T. G. Lucius	2000
	Capacity	Size	To fit bucket E Part No.	Tubes per
-				rotor
Ĵ	Tube type: <i>I</i> 0.5m 1.5ml 2.0ml 0.2ml 0.4ml	Vicro with 8x20 11x38 11x38 6x20 6x30	AM805 AM820 AM820 AM820 AM802 AM802 AM804	120 84 84 168 168
	1ml 3ml 5ml 6ml 7ml 9/10ml 15ml 25ml 50ml 100ml 150ml 250ml	6x45 10x60 12x75 12x82 12x100 14x100 14x100 24x100 34x100 45x100 52x100 62x100	P Shape: rour AR801 AR803 AR805 AR805 AR807 AR807 AR807 AR850 AR850 AR850 AR850 AR8100 AR8150 AR850	168 96 96 96 84 48 28 16 8 4 4
IJ	Tube type: F 15ml 50ml 175ml 15ml	alcon wit 17x120 29x115 61x118 17x120	h cap Shape: 1 AF815 AF850 AF8175	point 48 16 4
9	Tube type: (	Corning w	<b>ith cap</b> * Shap	e: <b>point</b>
Ę,	250ml 500ml	60x172 98x148	AF8250 AF8500	4 4
	Tube type: F 12ml 25ml 30ml 50ml 15ml	alcon wit 17x100 25x90 25x110 29x115 17x120	h cap Shape: s AFS812 AFS825 AFS830 AFS850 AFS850	square 48 28 28 20 48
πÊ	Tube type: I	Nalgene/C	<b>Jakridge</b> Shap	e: round
Ţ	10ml 30ml 50ml 100ml	16x80 26x95 29x107 38x106	ANO810 ANO830 ANO850 ANO885 Dakridge* Sha	48 28 24 12
Ð	250ml 750ml	62x130 98x153	ANO8250 See K243/R	4
A	Tube type: I			
<u> </u>	1.1-1.4ml 2.7-3ml 2.6-2.9ml 4.5-5ml 7.5-8.2ml 4.5-5ml 9-10ml	8x82 11x82 13x81 11x108 13x106 15x92 16x108	AM8014 AM803 AM829 AM803 AM879 AM850 AM850 AM890	96 76 76 76 76 64 64
	Tube type: 1.6-5ml	/acutainer 13x75	Shape: round AV816	76
U	4-7ml 8.5-10ml	13x100 16x100	AV810 AV850 AV880	76 76 64

Note: - We can not be held responsible if the tube manufacturers change the design and/or size of the tube.\* Limited capacity with sealed bucket lids (B5419 and B5319)

### Swing Out Rotor - 3 Litre max



#### BRK3000 Swing out rotor

Shown with B3000 buckets and sealed lids B5319

Rotor / buckets	BRK3030
Tube size max	98 x 170mm
Minimum speed	500Rpm
Maximum speed	4000Rpm
Maximum Rcf(G)	4000
Radius max	22.5cm
Tube angle	0 degree
Acceleration time	45 seconds
Deceleration time	45 seconds
Autoclavable (times)	121C (20)
Minimum Temperature	4C (at 23C ambient)

B3000 bucket (set 4) REQUIRED 750ml max per bucket

B5319 Sealed Lids (4)



#### Adaptors for Swing out rotors

mapa	515 101 57	0	101015	
	Capacity	Size	To fit buckets Part No.	
			Part No.	Tubes per rotor
g	Tube type: I	Micro with	cap Shape: p	oint
	0.5m	8x20	AM805	120
V	1.5ml	11x38	AM820	84
	2.0ml	11x38	AM820	84
	0.2ml 0.4ml	6x20 6x30	AM802 AM804	168 168
_				
n			<b>p</b> Shape: <b>rou</b>	
	1ml	6x45	AR801	168
0.0	3ml 5ml	10x60 12x75	AR803 AR805	96 96
	6ml	12x73	AR805	96
	7ml	12x100	AR807	96
	9/10ml	14x100	AR809	84
	15ml	17x100	AR815	48
	25ml 50ml	24x100 34x100	AR825 AR850	28 16
	100ml	45x100	AR830 AR8100	8
	150ml	52x100	AR8150	4
	250ml	62x100	AR8250	4
10.000	Tube type:	- alcon wit	h cap Shape:	point
	15ml	17x120	AF815	48
0.0	50ml	29x115	AF850	16
	175ml	61x118	AF8175	4
	15ml	17x120		
	Tube type: (	Corning w	<b>ith cap*</b> Shap	e: <b>point</b>
	250ml	60x172	AF8250	4
100	500ml	98x148	AF8500	4
			<b>h cap</b> Shape: s	
1	12ml	17x100	AFS812	48
22	25ml 30ml	25x90 25x110	AFS825 AFS830	28 28
	50ml	29x115	AF\$850 AF\$850	20
	15ml	17x120	AF\$850	48
- 17	Tube type:	Nalgene/C	<b>)akridge</b> Shap	e: round
The last	10ml	16x80	ANO810	48
up.	30ml	26x95	ANO830	28
	50ml	29x107	ANO850	24
	100ml	38x106	ANO885	12
ea.	,,		<b>)akridge</b> * Sha	
	250ml	62x130	ANO8250	4
L.Y.	750ml	98x153	ANO8750	4
A	Tube type: <i>I</i> 1.1-1.4ml	8x82	Shape: squai AM8014	re 96
	2.7-3ml	0x02 11x82	AM8014 AM803	90 76
T	2.6-2.9ml	13x81	AM829	76
	4.5-5ml	11x108	AM803	76
	7.5-8.2ml	13x106	AM879	76
	4.5-5ml 9-10ml	15x92 16x108	AM850 AM890	64 64
			Shape: round	
	1.6-5ml	13x75	AV816	76
U	4-7ml	13x73 13x100	AV810 AV850	76
	8.5-10ml	16x100	AV880	64

Note: - We can not be held responsible if the tube manufacturers change the design and/or size of the tube.\* Limited capacity with sealed bucket lids (B5419 and B5319)

# Microtitor Plate Rotor $4 \ge 3$ Standard or $2 \ge 4$ High Plates



Rotor	BRK5540
Buckets	Complete with buckets
Sealed Lids	Available with
Rotor type	4 x STD Plates
Tube size max	85mm x 128mm
Minimum Speed Rpm	500 Rpm
Maximum Speed Rpm	3500 Rpm
Maximum Rcf (G)	2500
Radius max cms	14
Sample tube angle (°)	0 °C (10)
Acceleration time (secs)	30
Deceleration time (secs)	30
Autoclavable (frequency)	121°C (20)

# Large Fixed Angle Rotors 6,000 Rpm

	1. S.	200	60
Rotor	BRK5324	BRK5308	BRK5100
Rotor type	24 x 15ml	8 x 50ml	6 x 100ml
Size max	17 x 120mm	30 x 120mm	45 x 125mm
Minimum speed Rpm	500	500	500
Maximum speed Rpm	6,000	6,000	6,000
Maximum Rcf (G)	4,800	4,800	4,800
Radius max cms	12	12	12
Sample tube angle °	30	30	30
Acceleration time (secs)	35	35	35
Deceleration time (secs)	35	35	35
Autoclavable (frequency)	121°C (20)	121°C (20)	121°C (20)

### Refrigerated Centrifuges Only

Minimum Temperature	4°C	4°C	4°C	
•••••••••••••••••••••••••••••••••••••••				
At maximum an and (relative to r	a a ma ta ma a a rat	11		

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

Reducers	Pack of 4	Pack of 4	Pack of 6
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	13 x 100mm	25 x 100mm	25 x 100mm
••••••			RL50 (50ml)
••••••			35 x 110mm
••••••			RL85 (85ml)
			39 x 110mm

# High Speed Fixed Angle Rotors 10,000 Rpm

					25	1000
Rotor		BRK5224	BRK5208	BR	K5210	BRK5210
Rotor type		24 x 15ml	8 x 50ml	6 x	100ml	6 x 250ml
Size max	1	17 x 120mm	30 x 120mr	n 45	x 125mm	62 x 130mm
Minimum speed Rpm	า เ	500	500	50	0	500
Maximum speed Rpn	n 1	10,000	10,000	10,	000	10,000
Maximum Rcf (G)		13,400	13,400	13,	400	15,650
Radius max cms	1	12	12	12	• • • • • • • • • • • • • • • • • • • •	14
Sample tube angle °		30	30	30	• • • • • • • • • • • • • • • • • • • •	30
Acceleration time (se	ecs) 4	40	45	45	• • • • • • • • • • • • • • • • • • • •	60
Deceleration time (s	ecs) 4	40	45	45		85
Autoclavable (freque	ency) 1	121°C (20)	121°C (20)	121	°C (20)	121°C (20)
Refrigerated Co Minimum Temperatu At maximum speed ( Reducers	ire 4	4°C	4°C e at 23°C) Pack of 4	4°(	Pack of 6	4°C
Rotor	BRK5224	BRK52	08			
				BRK521	0	BRK5210
Part number Tube size max Part number	RM05 (5ml 13 x 80mm RM10 (10m	l) RM15 (1 17 x 120	15ml) )mm	BRK521 RL10 (10 16 x 100 RL25 (2	)ml) mm	BRK5210 RX10 (10ml) 16 x 100mm RX25 (25ml)

# Microtube Rotors 15,000 Rpm

With NEW high Domed polycarbonate lid	0		0	0
Rotor	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	6 x 40mm
Minimum Speed Rpm	500	500	500	500
Maximum Speed Rpm	15,000	15,000	15,000	15,000
Maximum Rcf (G)	22,000	22,000	22,000	22,000
Radius max cms	8.5	8.5	8.5	8.5
Sample tube angle (°)	45	45	45	45
Acceleration time (secs)	25	25	25	25
Deceleration time (secs)	25	25	25	25
Autoclavable (frequency)	121°C (10)	121°C (10)	121°C (10)	121°C (10)

### Refrigerated Centrifuges Only

Minimum Temperature	4°C	4°C	4°C	4°C	
••••••••••••••••••••••••					• • • • • • •
		1 2200			

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

Reducers (Pack of 24)	2
Rotor	BRK5424
Part number	RS04 (0.2 -0.4ml)
Tube size max	6 x 30mm
Part number	RS05 (0.5ml)
Tube size max	8 x 30mm
••••••	

# Haematocrit Rotor 12,000 Rpm

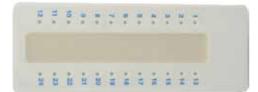


Rotor	BRK5401
Rotor type	24 x capillary & 12 x 2ml
Tube size max	2 x 75mm & 11 x 40mm
Minimum Speed Rpm	500
Maximum Speed Rpm	12,000
Maximum Rcf (G)	13,500
Radius max cms	8.5
Sample tube angle (°)	0 &60
Acceleration time (secs)	30
Deceleration time (secs)	30
Autoclavable (frequency)	121°C (10)
•••••••••••••••••••••••••••••••••••••••	•••••••••••••••••••••••••••••••••••••••

## Haematocrit (Pvc) accessories



Haematocrit reader Part Number : 8003



### Sealant Clay

(Pack of 10) Part Number : 8014



### Plain Capillary Tubes

(Pack of 1000) Part Number : 8012



### Heperanised Capillary Tubes

(Pack of 1000) Part Number : 8013

# Floor Standing Centrifuge

# True Flexibility

User features to Floor Standing Centrifuge	Advantages
Floor standing Yet under bench fit, only 71cm high	Saves precious bench space, Flexible area use
Smaller footprint than Bench model	Space saving R models 30% smaller footprint
Gives an easy loading height	Ease of Ergonomics For tube and rotor variances
Secure locking castors	Portable, easily moved around for safety

## Available in both Ambient and Refrigerated models



## BBFS/R Floor Standing Centrifuge (4L Max)



#### **BBFS** Ambient

BBFS.(230V 50/60Hz). 1.BBFS.(110V 60Hz)

Speed	500-15,000 Rpm (10 Rpm steps)
Rcf Max	22,000 G
Timer	0-99 Mins & Hold (30 sec steps)
Dimensions	HWD 710 x 650 x 630mm
Weight	80 Kg (without rotor)
Power	750 Watts
Memory	10 programs
Accel rates	10 programs
Decel rates	10 programs

The following pages show available rotors.

Display indicative only

#### **BBFSR Refrigerated**

BBFSR.(230V 50Hz). 1.BBFSR.(110V 60Hz). 2.BBFSR.(230V 60Hz)

Speed	500-15,000 Rpm (10 Rpm steps)
Rcf Max	22,000 G
Timer	0-99 Mins & Hold (30 sec steps)
Dimensions	HWD 710 x 650 x 630mm
Weight	125 Kg (without rotor)
Power	1200 Watts
Memory	10 programs
Accel rates	10 programs
Decel rates	10 programs
Temp	-9°C to + 40°C PID
•••••	Controlled to + / - 1°C

### Swing Out Rotor - 2 Litre max



BRK3000 Swing out rotor

Shown with B2000 Buckets and sealed lids B5319

Rotor / buckets	BRK3020
Tube size max	98 x 160mm
Minimum speed	500Rpm
Maximum speed	4000Rpm
Maximum Rcf(G)	3600
Radius max	20.5cm
Tube angle	0 degree
Acceleration time	45 seconds
Deceleration time	45 seconds
Autoclavable (times)	121C (20)
Minimum Temperature	4C (at 23C ambient)

B2000 bucket (set 4) REQUIRED 500ml max per bucket B5319 Sealed Lids (4)



#### Adaptors for Swing out rotors

naupt		Size	To fit bucket I	2000
	Capacity	Size	Part No.	Tubes per
0				rotor
8			cap Shape: p	
	0.5m 1.5ml	8x20 11x38	AM805 AM820	120 84
	2.0ml	11x38	AM820	84
	0.2ml	6x20	AM802	168
	0.4ml	6x30	AM804	168
	Tube type:	Plain no ca	<b>p</b> Shape: <b>rou</b>	nd
	1ml	6x45	AR801	168
0.0	3ml	10x60	AR803	96
	5ml 6ml	12x75 12x82	AR805 AR805	96 96
	7ml	12x100	AR807	96
	9/10ml	14x100	AR809	84
	15ml	17x100	AR815	48
	25ml 50ml	24x100 34x100	AR825 AR850	28 16
	100ml	45x100	AR8100	8
	150ml	52x100	AR8150	4
	250ml	62x100	AR8250	4
10.000	Tube type:	alcon wit	<b>h cap</b> Shape: <sub>I</sub>	point
1.1	15ml	17x120	AF815	48
00	50ml 175ml	29x115 61x118	AF850 AF8175	16 4
	175ml	17x120	AFOITS	4
-	Tube type: (		<b>ith cap*</b> Shap	e: noint
3	250ml	60x172	AF8250	4
Set 1	500ml	98x148	AF8500	4
100	Tube type:	alcon wit	h cap Shape: s	square
	12ml	17x100	AFS812	48
52	25ml	25x90	AFS825	28
	30ml 50ml	25x110 29x115	AFS830 AFS850	28 20
	15ml	17x120	AF\$850	48
- 17	Tube type:	Nalgene/C	<b>)akridge</b> Shap	e: round
PH I	10ml	16x80	ANO810	48
up.	30ml	26x95	ANO830	28
	50ml	29x107	ANO850	24
	100ml	38x106	ANO885	12
29	//		Dakridge* Sha	
- U	250ml 750ml	62x130 98x153	ANO8250 See K243/R	4
-	Tube type: I			re
PH	1.1-1.4ml	8x82	AM8014	96
¥	2.7-3ml	11x82	AM803	76
-	2.6-2.9ml	13x81	AM829	76
	4.5-5ml 7.5-8.2ml	11x108 13x106	AM803 AM879	76 76
	4.5-5ml	15x92	AM879 AM850	76 64
	9-10ml	16x108	AM890	64
- U	Tube type: <b>\</b>	/acutainer	Shape: round	d
	1.6-5ml	13x75	AV816	76
0	4-7ml 8.5-10ml	13x100 16x100	AV850 AV880	76 64
	0.3-10MI	10x100	AVOOU	04

Note: - We can not be held responsible if the tube manufacturers change the design and/or size of the tube.\* Limited capacity with sealed bucket lids (B5419 and B5319)

### Swing Out Rotor - 3 Litre max



#### BRK3000 Swing out rotor

Shown with B3000 buckets and sealed lids B5319

Rotor / buckets	BRK3030
Tube size max	98 x 170mm
Minimum speed	500Rpm
Maximum speed	4000Rpm
Maximum Rcf(G)	4000
Radius max	22.5cm
Tube angle	0 degree
Acceleration time	45 seconds
Deceleration time	45 seconds
Autoclavable (times)	121C (20)
Minimum Temperature	4C (at 23C
	ambient)

B3000bucket (set 4) REQUIRED 750ml max per bucket

B5319 Sealed Lids (4)



#### Adaptors for Swing out rotors

nuapu	515 101 01	vilig ou	101015	
	Capacity	Size	To fit buckets	
			Part No.	Tubes per rotor
0	Tube type:	Micro with	cap Shape:p	
11	0.5m	8x20	AM805	120
V	1.5ml	11x38	AM820	84
	2.0ml	11x38	AM820	84
	0.2ml	6x20	AM802	168
	0.4ml	6x30	AM804	168
- 🗆	Tube type:	Plain no ca	<b>p</b> Shape: <b>rou</b>	nd
	1ml	6x45	AR801	168
UU	3ml	10x60	AR803	96
	5ml	12x75	AR805	96
	6ml	12x82	AR805	96
	7ml	12x100	AR807	96
	9/10ml	14x100	AR809	84
	15ml	17x100	AR815	48 28
	25ml 50ml	24x100 34x100	AR825 AR850	28 16
	100ml	45x100	AR8100	8
	150ml	52x100	AR8150	4
	250ml	62x100	AR8250	4
10 100	Tube type:	alcon wit	<b>h cap</b> Shape:	point
	15ml	17x120	AF815	48
	50ml	29x115	AF850	16
	175ml	61x118	AF8175	4
	15ml	17x120		
9	Tube type: (	Corning w	ith cap* Shap	e: <b>point</b>
	250ml	60x172	AF8250	4
the	500ml	98x148	AF8500	4
	Tube type:	alcon wit	<b>h cap</b> Shape: s	square
1	12ml	17x100	AFS812	48
-	25ml	25x90	AFS825	28
000	30ml	25x110	AF\$830	28
	50ml	29x115	AF\$850	20
	15ml	17x120	AFS850	48
n 🗍 🗋			<b>Jakridge</b> Shap	
	10ml	16x80	ANO810	48
"YP"	30ml 50ml	26x95	ANO830	28 24
	100ml	29x107 38x106	ANO850 ANO885	12
			Dakridge* Sha	
89	250ml	62x130	ANO8250	4
	750ml	98x153	See K243/R	4
0	Tube type: I	Monovette	Shape: squar	re
1	1.1-1.4ml	8x82	AM8014	96
¥	2.7-3ml	11x82	AM803	76
	2.6-2.9ml	13x81	AM829	76
	4.5-5ml	11x108	AM803	76
	7.5-8.2ml	13x106	AM879	76
	4.5-5ml 9-10ml	15x92 16x108	AM850 AM890	64 64
	Tube type: \			• ·
1	1.6-5ml	13x75	AV816	76
0	4-7ml	13x100	AV850	76
	8.5-10ml	16x100	AV880	64

Note: - We can not be held responsible if the tube manufacturers change the design and/or size of the tube.\* Limited capacity with sealed bucket lids (B5419 and B5319)

### Swing Out Rotor - 4 Litre max



#### BRK3000 Swing out rotor

Shown with B4000 buckets and sealed lids B5319

Rotor / buckets	BRK3040
Tube size max	98 x 180mm
Minimum speed	500Rpm
Maximum speed	4000Rpm
Maximum Rcf(G)	4500
Radius max	25.5cm
Tube angle	0 degree
Acceleration time	45 seconds
Deceleration time	45 seconds
Autoclavable (times)	121C (20)
Minimum Temperature	4C (at 23C
	ambient)

B4000 bucket (set 4 ) REQUIRED 1000ml max per bucket

B5319 Sealed Lids (4)



#### Adaptors for Swing out rotors

	Capacity	Size	<b>To fit buckets</b> Part No.	<b>B4000</b> Tubes per
0				rotor
8		Micro with	<b>cap</b> Shape: <b>p</b>	oint
U	0.5m	8x20	AM805	120
V	1.5ml	11x38	AM820	84 84
	2.0ml 0.2ml	11x38 6x20	AM820 AM802	84 168
	0.4ml	6x30	AM805	168
			<b>p</b> Shape: <b>rou</b>	
	1ml	6x45	AR801	168
- U.J.	3ml	10x60	AR803	96
	5ml	12x75	AR805	96
	6ml	12x82	AR805	96
	7ml	12x100	AR807	96
	9/10ml 15ml	14x100 17x100	AR809 AR815	84 48
	25ml	24x100	AR825	28
	50ml	34x100	AR850	16
	100ml	45x100	AR8100	8
	150ml	52x100	AR8150	4
	250ml	62x100	AR8250	4
10.000	Tube type:	alcon wit	<b>h cap</b> Shape:	point
	15ml	17x120	AF815	48
00	50ml	29x115	AF850	16
	175ml 15ml	61x118 17x120	AF8175	4
	-	-		
			i <b>th cap</b> * Shap	
1.1.1	250ml 500ml	60x172 98x148	AF8250 AF8500	4 4
			h cap Shape:	
	12ml 25ml	17x100 25x90	AFS812 AFS825	48 28
200	30ml	25x110	AF\$830	28
	50ml	29x115	AF\$850	20
	15ml	17x120	AF\$850	48
n Â	Tube type: I	Nalgene/C	<b>Jakridge</b> Shap	e: round
	10ml	16x80	ANO810	48
ЧP	30ml	26x95	ANO830	28
	50ml	29x107	ANO850	24
1.53	100ml	38x106	ANO885 Dakridge* Sha	12
87	250ml	62x130	ANO8250	4
	750ml	98x153	ANO8230 ANO8750	4
0	Tube type: I			re
1	1.1-1.4ml	8x82	AM8014	96
¥	2.7-3ml	11x82	AM803	76
_	2.6-2.9ml	13x81	AM829	76
	4.5-5ml	11x108	AM803	76 76
	7.5-8.2ml 4.5-5ml	13x106 15x92	AM879 AM850	76 64
	9-10ml	16x108	AM830 AM890	64
	Tube type: \	/acutainer		
	1.6-5ml	13x75	AV816	76
0	4-7ml	13x100	AV850	76
	8.5-10ml	16x100	AV880	64

54 Note: - We can not be held responsible if the tube manufacturers change the design and/or size of the tube.\* Limited capacity with sealed bucket lids (B5419 and B5319)

# **R&D** Team

Watch this space for our Blood Bag Rotor. Release date: mid/late 2016!

CENTURION

# Microtitor Plate Rotor 4 x Standard or $2 \times High$ Plates



Rotor	BRK5540
Buckets	Complete with buckets
Sealed Lids	Available with
Rotor type	4 x STD Plates
Tube size max	85mm x 128mm
Minimum Speed Rpm	500 Rpm
Maximum Speed Rpm	3500 Rpm
Maximum Rcf (G)	2500
Radius max cms	14
Sample tube angle (°)	0 °C (10)
Acceleration time (secs)	30
Deceleration time (secs)	30
Autoclavable (frequency)	121°C (20)

# Large Fixed Angle Rotors 6,000 Rpm

	S.E.	62	CO_
Rotor	BRK5324	BRK5308	BRK5100
Rotor type	24 x 15ml	8 x 50ml	6 x 100ml
Size max	17 x 120mm	30 x 120mm	45 x 125mm
Minimum speed Rpm	500	500	500
Maximum speed Rpm	6,000	6,000	6,000
Maximum Rcf (G)	4,800	4,800	4,800
Radius max cms	12	12	12
Sample tube angle °	30	30	30
Acceleration time (secs)	35	35	35
Deceleration time (secs)	35	35	35
Autoclavable (frequency)	121°C (20)	121°C (20)	121°C (20)
Refrigerated Centrifuc	rec Only		

#### Refrigerated Centrifuges Only

Minimum Temperature	4°C	4°C	4°C
•••••••••••••••••••••••••••••••••••••••			• • • • • • • • • • • • • • • • • • • •
A		1 22002	

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

Reducers	Pack of 4	Pack of	4 Pack of 6
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	13 x 100mm	25 x 100mm	25 x 100mm
••••••			RL50 (50ml)
••••••			35 x 110mm
••••••			RL85 (85ml)
••••••			39 x 110mm
••••••		•••••••••••••••••••••••••••••••••••••••	•••••••••••••••••••••••

# High Speed Fixed Angle Rotors 10,000 Rpm

			P	120	1000
Rotor	_	BRK5224	BRK5208	BRK5210	BRK5256
Rotor type		24 x 15ml	8 x 50ml	6 x 100ml	6 x 250ml
Size max		17 x 120mm	30 x 120m	m 45 x 125mm	62 x 130mm
Minimum speed Rp	m	500	500	500	500
Maximum speed Rp	m	10,000	10,000	10,000	10,000
Maximum Rcf (G)		13,400	13,400	13,400	15,650
Radius max cms	·····	12	12	12	14
Sample tube angle '	>	30	30	30	30
Acceleration time (		40	45	45	60
Deceleration time (	secs)	40	45	45	
Autoclavable (frequ	iency)	121°C (20)	121°C (20)	121°C (20)	121°C (20)
Refrigerated C Minimum Temperat At maximum speed Reducers	ure	4°C	4°C ure at 23°C) Pack of 4	4°C	4°C
Rotor	BRK5224	BRK5	5208	BRK5210	BRK5256
Part number	RM05 (5m		(15ml)	RL10 (10ml)	RX10 (10ml)
Tube size max Part number	13 x 80mm RM10 (10m		20mm 5 (25ml)	16 x 100mm RL25 (25ml)	16 x 100mm RX25 (25ml)
Tube size max	13 x 100mr		00mm	25 x 100mm	25 x 100mm
				RL50 (50ml)	RX50 (50ml)
•••••				35 x 110mm	35 x 110mm
				RL85 (85ml)	RX85 (85ml)
				39 x 110mm	39 x 110mm
					RX100 (100ml)
·····					48 x 110mm RX175 (175ml)
					62 x 121mm
					52 A 12111111

# Microtube Rotors 15,000 Rpm

With NEW high Domed polycarbonate lid	0	0	0	0
Rotor	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	6 x 40mm
Minimum Speed Rpm	500	500	500	500
Maximum Speed Rpm	15,000	15,000	15,000	15,000
Maximum Rcf (G)	22,000	22,000	22,000	22,000
Radius max cms	8.5	8.5	8.5	8.5
Sample tube angle (°)	45	45	45	45
Acceleration time (secs)	25	25	25	25
Deceleration time (secs)	25	25	25	25
Autoclavable (frequency)	121°C (10)	121°C (10)	121°C (10)	121°C (10)

### Refrigerated Centrifuges Only

Minimum Temperature	4°C	4°C	4°C	4°C
•••••••••••••••••••••••••••••••••••••••			• • • • • • • • • • • • • • • • • • • •	••••••
At maximum croad (relative to	room tom	norature at 22°C)		

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

## Reducers

(Pack of 24)

100		
	1	
	1	
	1	
	- 1	
	C.P	

Rotor	BRK5424
Part number	RS04 (0.2 -0.4ml)
Tube size max	6 x 30mm
Part number	RS05 (0.5ml)
Tube size max	8 x 30mm

# Haematocrit Rotor 12,000 Rpm



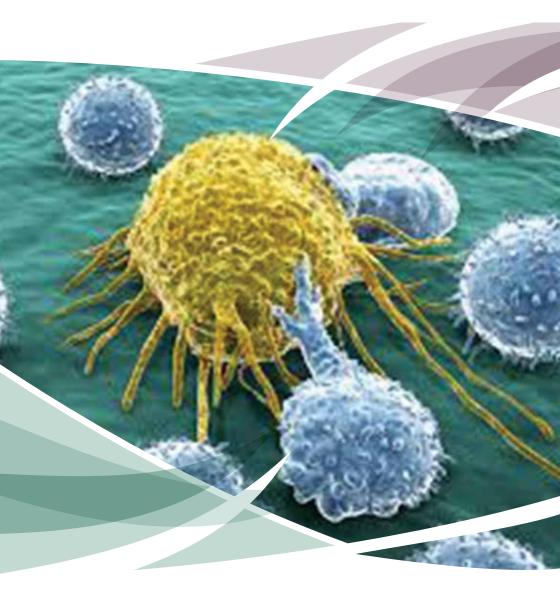
Rotor	BRK5401
Rotor type	24 x capillary & 12 x 2ml
Tube size max	2 x 75mm & 11 x 40mm
Minimum Speed Rpm	500
Maximum Speed Rpm	12,000
Maximum Rcf (G)	13,500
Radius max cms	8.5
Sample tube angle (°)	0 &60
Acceleration time (secs)	30
Deceleration time (secs)	30
Autoclavable (frequency)	121°C (10)

Incorporated into the hospital arena please see our cytology & cell washer ranges in the following sections.

For information on our full range please visit:

www.centurionscientificglobal.com

# PrO-Cyt Centrifuges Cytology Histology







Our PrO-Cyt range are compact and practical centrifuges for small, medium and large sample volumes. Unlike others we offer you a choice of two Centrifuges and each can use one of three rotors, from 4, 8 and 12 places, thus meeting your needs exactly.

They are both cost effective, yet still benefiting from the superb build quality and engineering of our research series.

Centurion centrifuges, with their applications-oriented accessories, are proven favourites in clinical, cytology, histology and small medical laboratories Our compact, ergonomic design: smaller dimensions, ergonomic height and curved features ensure a comfortable and efficient workspace. Our Centrifuges deliver optimum performance in compact units, designed for ease of use. Quiet (below 50Db, rotor dependant) with low heat operation noise levels have been reduced while maintaining sample integrity with good airflow.

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 27 years, our centrifuges can be relied upon to deliver safe, reproducible and trouble-free results for many years.

#### Warranty 3 years for all models

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.

We reserve the right to make changes with ongoing research and development.

# PrO-Cyt Centrifuges

User features to PrO-CYT series	Advantages	
Large LCD display with touch control or LED	Clarity & ease of use	
10 accelerations rates &10 deceleration rates	Sample assistance	
108 memory (12 pages of 9) or LED (10)	Multi department & Users	
Timer 0-99 minutes & Hold in 1/30 second increments	Total flexibility	
Pulse short run	Fast pelleting	
Run in speed (rpm) or rcf (G) in 1/10 rpm increments	Accuracy	
Sound <55db (rotor dependent)	Quiet	
Orientation acceleration rate	Prevents initial sample side deposits	
Standard to PrO-CYT series	Advantages	
Extra thick stainless steel bowl	Easy clean & rust free	
Port to lid	Tachometer speed certification	
Alloy & steel frame (zinc coated)	Strong light & quiet	
World leading industrial grade inverter	Reliability & strength	
Best quality European brushless motor	Quiet, cool & reliable	
High technology airflow (ambient mode)	Cooler running	
All centrifuges have user accessible service sections to access all safety parameters		

Safety features to PrO-CYT series	Advantages
Multi point lid locking	Lid safety
Emergency lid release	Power failure release
Lid Spring Strut	Lid dropping safety
Lid lock detection	To run, lid must be shut
Imbalance detection	Eradicates user loading errors
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

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

Page 62	PrO-Cyt LED and PrO-Cyt LCD Centrifuges
Page 63	Rotors available. 4 place, 8 place and 12 place
Page 64	Sample holders available, single, double or single large.
Page 64	Package supplied and other available items

### PrO Cyt LED (230V 50/60Hz)



Display indicative only

# 1.PrO Cyt LED

110V 60Hz)

(Rotor required)

Speed	200-2000 Rpm (10 Rpm steps)
Rcf Max	550 G
Timer	0-99 Mins & Hold (30 sec steps)
Dims HWD	275 x 325 x 470mm
Weight	21.8 Kg (without rotor)
Power	175 Watts
Memory	10 programs
Accel rates	10 programs
Decel rates	10 programs

#### PrO Cyt LCD (230V 50/60Hz)



Display indicative only

# 1.PrO Cyt LCD

(110V 60Hz)

#### (Rotor required)

Speed	200-2000 Rpm (1 Rpm steps)
Rcf Max	550 G
Timer	0-9999 Mins & Hold (1 sec steps)
Dims HWD	275 x 325 x 470mm
Weight	21.8 Kg (without rotor)
Power	175 Watts
Memory	108 programs
Accel rates	10 programs
Decel rates	10 programs

# Available Cytology Rotors

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.

Rotor	4420
Rotor type (ml)	4 x double
Tube size max (mm)	STD slide
Minimum speed (Rpm)	200
Maximum speed (Rpm)	2,000
Maximum RCF (G)	550
Radius max (mm)	123
Sample tube angle (°)	vertical
Acceleration time (secs)	15-90
Deceleration time (secs)	15-90
Autoclavable (frequency)	121°c (20)
	•••••••••••••••••••••••••••••••••••••••

#### Rotor

Rotor type (ml)	8 x double
Tube size max (mm)	STD slide
Minimum speed (Rpm)	200
Maximum speed (Rpm)	2,000
Maximum RCF (G)	550
Radius max (mm)	123
Sample tube angle (°)	Vertical
Acceleration time (secs)	15-90
Acceleration time (secs) Deceleration time (secs)	15-90 15-90

4430

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

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





#### 4460

4460
12 x double
STD slide
200
2,000
550
123
Vertical
15-90
15-90
121°c (20)

# Accessories



Pack of 24

#### 4444

Single sample holder with card (up to 1ml)



#### 4446

Double sample holder with card (up to 1ml)



#### 4600

Single sample holder with card (up to 6ml)



To review all of our ranges please visit:

www.centurionscientificglobal.com

4462

Stainless steel clips

# Accessories included

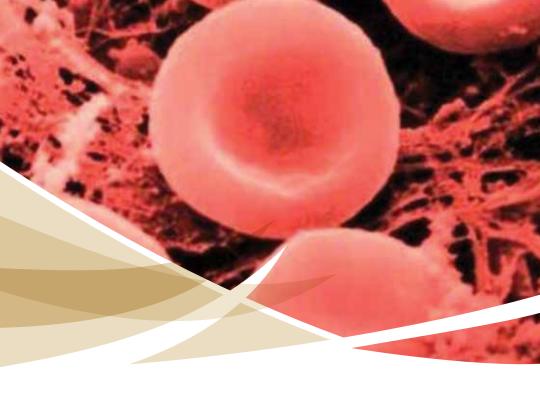
All PrO-Cyt centrifuges are complete with a starter pack this includes. 100 microscope slides and a pack of 24 double sample holders including fixed blotters. Rotors are complete with lid , swing plate and stainless steel holders to match.



We trust that the details contained within these pages allows you to make a informative decision on our PrO-Cyt range.

If however you need more information or assistance, please do not hesitate to call.

# PrO-CW Cell washing. Coombs test







# PrO-Hospital CW Cell Washing Centrifuge

### Complete with 12 place rotor and accessories

The Centurion Cell Washing System can simplify work & save time in the washing of blood cells for antiglobulin reagent tests.

The instrument's 12 place rotor accepts both 10 x 75mm & 12 x 75mm tubes.

Being a manual cell washing system means our users can be precise and sure of exact saline amounts administered by themselves.

These machines are perfect for perfoming blood groupings, blood typing, cross matching, ABO compatibility, RH testing and the Coombs test procedure.

A manual cell washing cycle includes the following steps:

- Filling with saline solution
- Centrifuging at (usually) 3,500rpm for 1 minute
- Decanting the supernatant adaptors
- Resuspending the sediment between cycles

We reserve the right to make changes with ongoing research and development.

# PrO-Hospital CW with bright blue LED display CW. (230V 50/60Hz). 1.CW. (110V 60Hz)



Speed Max 500 - 3500 Rpm	
Rcf Max 1,250G	
Timer 0 - 99 minutes Pulse 0 -90 Secs	
Dims 275 x 325 x 470mm	
Weight 22 Kg (without rotor)	
Power 180 Watts	

#### Features

- LED Display
- 10 acceleration rates
- 10 deceleration rates
- 10 program memory
- Run in speed or Rcf (G force)

Standard features	Advantages
Stainless steel bowl	Easy clean & rust free
Alloy & steel frame (zinc coated)	Strong light & quiet
World leading industrial grade inverter	Reliability & Strength
High quality European brushless motor	Quiet, cool & reliable
Full service access via coded system	Easy Servicing
Safety features	Advantages
Multi-point lid locking system containment	Best safety for lid
Imbalance vibration detector with auto reset	Eradicates user loading errors
Lid lock detector	Unable to run with an open lid
Overspeed sensor	Safe selection of speed
Set inverter values	Electronic safety of speed
Barrier ring	Metal protection chamber
Motor overheat sensor	Motor & samples protection

# Cell Washer Accessories

Please Note our Cell washing machine is supplied complete with rotor and 12 holders for each size (2)



### Rotor for PrO-Hospital CW

# High quality Polypropylene Autoclavable

The rotor in this device can be detached and efficiently function as a holder in which test tubes can be fitted, centrifuges, transported, incubated and emptied with the necessity for individual handling.

## Adaptors for PrO-Hospital CW 2 sets supplied, 12 of each size

Our adaptors enable the rotor to handle both 10 x 75mm and 12 x 75mm tubes.

This included rotor carries 12 tubes but can operate with any balanced load of fewer tubes and any combination of sizes as long as these are properly balanced.

This offers comlete flexibility for the user.





# To review all of our ranges please visit:

# www.centurionscientificglobal.com

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Manufactured by:

Centurion Scientific Ltd Email: info@centurionscientific.co.uk

