

PrO-Analytical

a division of

CENTURION
SCIENTIFIC LIMITED

Prime-multi rotor centrifuge range

Centrifuges offering multiple rotors for varying applications



**General Analytical
Laboratories**

Welcome to our latest Centrifuge range

Centrifuges focused on the future

Micro, small, medium, large & floor ambient with additional refrigerated versions.

Improved angled front panel for ease of use.

Improved rotors for safer sample use

Additional rotors, fixed angles, high speed fixed angles, swing out and micro.

Fixed angle rotors are now supplied with sealed lids, for ultimate safety.

Swing out rotors also have new sealed lids to increase their capacity.

Next generation components

- Inverter
- Efficient with added power, improved acceleration/deceleration
- **Tachometer/Imbalance**
- Third generation offering improved user flexibility
- **Lid Lock system**
- Superior lid locks for safety and reliability
- **Control Board**
- Easier rotor selection with additional display
- Bluetooth addition allowing latest software updates
- Timer now. 0-99mins, 2, 3, 4, 5, 6, 7, 8, 9, hours & constant

Ambient model



Refrigerated model



PrO-Analytical Centrifuge Features

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 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 & 13485

User features to PrO-Analytical series	Advantages
Bright blue LED display	Clarity & ease of use
Rotor recognition	Safe selection of rotors
10 acceleration rates & 10 deceleration rates	Sample assistance
99 program memory	Multi department & Users
Timer 0-9 Hours & 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 features to PrO-Analytical 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-Analytical 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 IEC 61010 and CE conformity test marks emission, immunity to EN/IEC 61326-1, Class B

4

Refrigerated Centrifuges

Dynamics rooted in innovation

Accuracy and control using less power.

How?

Centurion Scientific Ltd keep the compressor running constantly, sounds odd but this method increases compressor life and reduces power dramatically.

Constantly turning a compressor on and off means a huge surge of power on each action, plus poor temperature control. See graph below, to control the accuracy to an unprecedented level we balance and control with a heater. This is controlled by a PID system offering top level control.

Why?

Imagine using a shower, you turn on both hot water and cold to reach your desired temperature.

You would not stand in cold water, then hot to regulate temperature.

By using both cold and hot we “balance” the set temperature

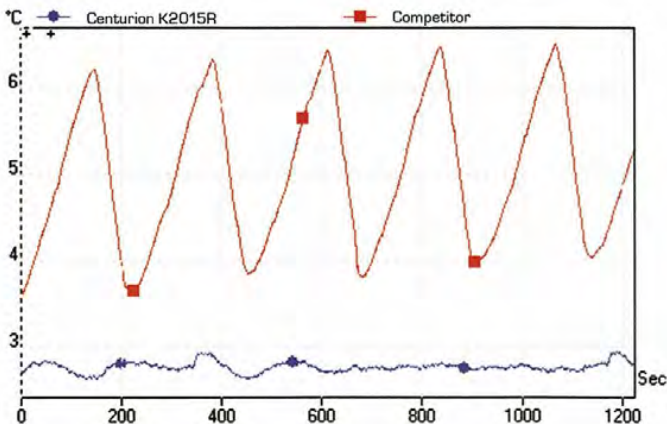
As we have been using this method for over 27 years it is a proven technology.

Proof

See the graph below.

Centurion is set at 3C and a well known competitor at 4C to differentiate.

As you can clearly see our system has control and repeatability beyond our competition.



Contents

Micro Centrifuges to 0.2L

C1015 Ambient & C1015R. Refrigerated	Selection of rotors available	6
--------------------------------------	-------------------------------	---

Micro centrifuges with a small footprint. Speeds up to 15,000 rpm. Micro rotors, PCR Strip rotors, Haematocrit rotors, Fixed angle rotors (with sealed lid) samples up to 50ml, a 8x5ml swing out rotor and a 4 place cytology rotor.

Small Centrifuges to 0.5L

C2000 Ambient & C2000R. Refrigerated	Selection of rotors available	11
--------------------------------------	-------------------------------	----

Small centrifuge with sample capacity from 0.2ml - 125ml and everything in between. Offering microtitor, fixed angle and swing out rotor in this small centrifuge + 12 place cytology rotor.

Medium Centrifuges to 1L

C4000 Ambient & C4000R. Refrigerated	Selection of rotors available	20
--------------------------------------	-------------------------------	----

Medium centrifuges with speeds up to 15,000rpm offering larger capacity rotors up to 1.0 Litre in a swing out rotor with sealed lids. and fixed angle rotors with sealed lids

Large Centrifuges to 2L

C5000 Ambient & C5000R. Refrigerated	Selection of rotors available	30
--------------------------------------	-------------------------------	----

Our 2 litre large capacity centrifuges ideal for those wishing to spin much larger samples offering a refrigerated and non refrigerated version and a trolley to make it portable.

Large Centrifuges to 3L

C7000 Ambient & C7000R. Refrigerated	Selection of rotors available	38
--------------------------------------	-------------------------------	----

Large capacity 3 litre centrifuges with trolley in either ambient or refrigerated offering a multitude of rotors including high speed and microtitor.

Floor Centrifuges to 4L

CFS4 Ambient & CFS4R. Refrigerated	Selection of rotors available	47
------------------------------------	-------------------------------	----

Floor standing centrifuges which can be in situ or moved around the laboratory offering superior capacity in swing out rotor up to 4 litre and fixed angle rotors from 0.2 litre to 250ml, and microtitor

C1015 & C1015R

6

Micro Centrifuges to 0.2Litre max Prime multi rotor Centrifuge

Display indicative only



PART NUMBERS

C1015 (230V/50/60Hz)

1.C1015 (110V 60Hz)

(Rotor required) see the following pages

Display indicative only



PART NUMBERS

C1015R (230V 50/60Hz)

1.C1015R (110V 60 Hz)

(Rotor required)

see the following pages

Ambient Centrifuge

Speed	15,000 Rpm max (10Rpm steps)
Rcf Max	10 - 22,000G
Timer	0-9 hours & Hold (30 sec steps)
Dims HWD	280 x 240 x 360mm
Weight	12.8 Kg (without rotor)
Power	125 Watts
Memory	99 programs
Accel rates	10 programs
Decel rates	10 programs

Refrigerated Centrifuge

Speed	15,000 Rpm max (10Rpm steps)
Rcf Max	10 - 22,000G
Timer	0-9 hours & Hold (30 sec steps)
Dims HWD	320 x 280 x 575mm
Weight	41.8 Kg (without rotor)
Power	575 Watts
Memory	99 programs
Accel rates	10 programs
Decel rates	10 programs
Temp range	-20C to 40C PID controlled to +/- 1C

Micro rotors to 22,000 Rcf (G)



Sealed lid included

Reducers pack of 4

Rotor	BRK5424, BRK5463, BRK5464
Part number	RS04 (0.2- 0.4ml)
Tube size max	6 x 30mm
Part number	RS05 (0.5ml)
Tube size max	8 x 30mm

Rotor	BRK5424	BRK5436	BRK5448	BRK5494
Rotor type	24 x 2.2ml	36 x 0.5ml	48 x 0.2 to 0.4ml	4 x Pcr Strips
Tube size max	11 x 50mm	8 x 30mm	6 x 40mm	6 x 40mm
Minimum Rcf (G)	10	10	10	10
Maximum Rcf (G)	22,000	22,000	22,000	22,000
Maximum Rpm	15,000	15,000	15,000	15,000
Radius max cms	8.75cms	8.75cms	8.75cms	8.75cms
Sample tube angle °	45	45	45	45
Acceleration time (secs)	15	15	15	15
Deceleration time (secs)	15	15	15	15
Autoclavable (frequency)	121°C (10)	121°C (10)	121°C (10)	121°C (10)
Minimum Temperature @ 23°C	4°C	4°C	4°C	4°C

Rotor	BRK5463	BRK5464
Rotor type	36 x 2.2ml	118 x 2.2 & 18 x 0.5ml
Tube size max	11 x 50mm	11 x 50 & 8 x 30mm
Minimum Rcf (G)	10	10
Maximum Rcf (G)	22,000	22,000
Maximum Rpm	15,000	15,000
Radius max cms	8.75cms	8.75cms
Sample tube angle °	45	45
Acceleration time (secs)	15	15
Deceleration time (secs)	15	15
Autoclavable (frequency)	121°C (10)	121°C (10)
Minimum Temperature @ 23°C	4°C	4°C

Small Fixed angle rotors. 3,500 & 6,100 Rcf (G)



Reducers pack of 4

Rotor	BRK5407 / BRK5408 / 5404
Part number	RM05 (5ml)
Tube size max	13 x 80mm
Part number	RM10 (10ml)
Tube size max	16 x 100mm

Sealed lid included

Reducers pack of 4

Rotor	BRK5404
Part number	RM25 (25ml)
Tube size max	24 x 100mm
Part number	RM15 (15ml)
Tube size max	17 x 100mm

Rotor	BRK5407	BRK5408	BRK5404
Rotor type	4 x 15ml & 4 x 10ml	8 x 15ml tube	4 x 50ml tube
Tube size max	17 x 120mm & 13 x 110mm	17 x 120mm	30 x 115mm
Minimum Rcf (G)	10	10	10
Maximum Rcf (G)	6,100	3,500	3,500
Maximum Speed	8,000	6,000	6,000
Radius max cms	8.5	8.5	8.5
Sample tube angle °	30	30	30
Acceleration time (secs)	25	25	25
Deceleration time (secs)	25	25	25
Autoclavable (frequency)	121°C (10)	121°C (10)	121°C (10)
Minimum Temperature @ 23°C	4°C	4°C	4°C

Small Swing out Rotor 1520 Rcf (G)

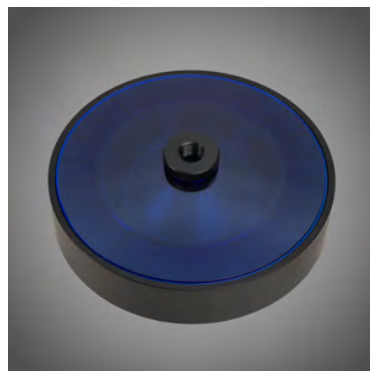


BRK5508S Rotor Buckets supplied (set of 8)

Capacity	8 x 5ml
Tube size	13 x 82mm max
Minimum Rcf (G)	10
Maximum Rcf (G)	1,520
Maximum Speed	4,000
Radius max cms	8.5
Sample tube angle °	0
Acceleration time (secs)	15
Deceleration time (secs)	15
Autoclavable (frequency)	121°C (10)
Minimum Temperature @ 23°C	4°C

Haematocrit & Micro rotor to 15,800 Rcf (G)

Rotor	
	BRK5401
Rotor type Tube size max	24 x capillary & 12 x 2ml
Tube size	2 x 75mm & 11 x 40mm
Minimum Rcf (G)	10
Maximum Rcf (G)	15,800
Maximum Rpm	13,000
Radius max cms	8.4
Sample tube angle °	0 & 60
Acceleration time (secs)	25
Deceleration time (secs)	25
Autoclavable (frequency)	121°C (10)
Minimum Temperature @ 23°C	4°C



Consumables

Part Number	Description
8012	Plain capillary tubes pack 10 x 100
8013	Heparanised capillary tubes pack 10 x 100
8014	Sealing clay Pk 10
8011	Rim seal gasket Pk 10 Replace regularly every 2 months

Accessories

Part Number	Description
8003	PCV reader

Cytology rotor to 550Rcf (G)



Lid is in blue

Rotor	4940 (4 Place)
Rotor type	4 x 0.2 to 6ml
Tube size max	Single or double
Minimum Rcf (G)	10
Maximum Rcf (G)	550
Maximum Speed	2,500
Radius max cms	7.9
Sample tube angle °	0
Acceleration time (secs)	20
Deceleration time (secs)	20
Autoclavable (frequency)	121°C (10)
Minimum Temperature @ 23°C	4°C

Cytology rotor includes rotor, sealed lid, clips, 24 holders with filter card & 100 slides

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



WolfLabs

Pricing on any accessories shown can be found by keying the part number into the search box on our website.

The specifications listed in this brochure are subject to change by the manufacturer and therefore cannot be guaranteed to be correct. If there are aspects of the specification that must be guaranteed, please provide these to our sales team so that details can be confirmed.

www.wolflabs.co.uk

Tel : 01759 301142

Fax : 01759 301143

sales@wolflabs.co.uk

Please contact us if this literature doesn't answer all your questions.