

## 2020 Products for Covid-19 Research



### Centrifuges



### Shakers/Mixers



### Sterilizers



### Temperature Control Equipment



### Readers & Reagents







## Centrifuges ..... Pg. 3

Eight Position Mini Centrifuge  
Twelve Position Mini Centrifuge  
Specialty Mini Centrifuges  
Mini Plate Centrifuge

High Speed Microcentrifuges  
Refrigerated Microcentrifuge  
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# Centrifugation



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Also from Hermle...

# myFuge™ Mini Microcentrifuge

## myFUGE™ Mini



CE

The myFuge™ Mini Microcentrifuge is a personal centrifuge that virtually fits in the palm of your hand. Ideal for quick spin downs of microtubes and PCR tubes, the myFuge is extremely easy to use. Simply close the lid and the rotor instantly reaches 6,000 rpm. Open the lid, and the improved braking system quickly and smoothly decelerates the rotor to a complete stop in just one second.

An eight-position microtube rotor is included and comes installed. Also included is a second rotor with increased capacity for four 0.2ml PCR strips (or 32 x 0.2ml tubes) which is stored in a convenient compartment on the bottom of the centrifuge. This compartment is also used for securing the included tube adapters for 0.5ml tubes.

A new **Clik-n-Lok™** rotor attachment system eliminates the requirement for set screws and tools during rotor exchange. Simply remove and attach rotors by hand, pulling or pressing the rotor onto the motor shaft.

### Technical Data:

Speed:	6,000 rpm / 2,000 xg
Capacity:	8 x 1.5/2.0ml tubes 32 x 0.2ml PCR tubes 4 x PCR strips (8 x 0.2ml)
Dimensions: (W x D x H)	5.7 x 6.9 x 4.5 in. 14.5 x 17.8 x 11.4 cm
Weight:	2.2 lbs. / 1 kg
Electrical:	Universal Voltage 100-240V, 50-60 Hz, 50W
Warranty:	2 Year

- + Clik-n-Lok™ instant rotor attachment
- + Eight position microtube rotor
- + Storage compartment for PCR rotor and 0.5ml adapters
- + Decelerates in just 1 second
- + Rotor for 4 PCR strips



Storage compartment



Includes both rotors



Available in 5 colors

### Ordering Information:

Item No.	Description:
C1008-C*	MyFuge Mini Microcentrifuge, clear lid
C1008-B*	MyFuge Mini Microcentrifuge, blue lid
C1008-G*	MyFuge Mini Microcentrifuge, green lid
C1008-P*	MyFuge Mini Microcentrifuge, purple lid
C1008-R*	MyFuge Mini Microcentrifuge, red lid
C1008-A5-8	Replacement adapter pack, 0.5ml 8/pk.
C1008-A2-8	Replacement adapter pack, 0.2ml 8/pk.

\*Includes US plug. For EU plug, please add (-E).

All models include microtube rotor, PCR rotor and 0.5ml adapters.



## MyFuge™ 12 Microcentrifuge



# myFUGE™ 12

- + COMBI-Rotor™ for tubes and strips
- + Twice the capacity of most mini centrifuges
- + Near silent operation
- + Starts & stops with closing/opening of the lid



Unique COMBI-Rotor



Compact, low profile design

Unlike traditional mini centrifuges, the new myFuge™ 12 eliminates the need to change rotors when switching between microtubes and PCR strips. The included, unique COMBI-Rotor™ is all that is required for running 12 microtubes and/or 4 (eight position) PCR strips.

With a fixed speed that produces 2,000 xg, this centrifuge is perfect for quick spin downs. Simply close the lid and the unit accelerates to 5,500 rpm. Open the lid, and the rotor quickly decelerates for removal of samples.

At just 5.5 inches wide and less than 4.5 inches tall, the myFuge 12 truly is a personal centrifuge with unmatched capacity and flexibility.

### Technical Data:

Speed:	<b>5,500 rpm / 2,000 xg</b>
Capacity:	<b>12 x 1.5/2.0ml tubes 32 x 0.2ml PCR tubes 4 x PCR strips (8 x 0.2ml)</b>
Dimensions: (W x D x H)	<b>5.5 x 7.9 x 4.4 in. 14 x 20 x 11.2 cm</b>
Weight:	<b>2.2 lbs. / 1 kg</b>
Electrical:	<b>Universal Voltage 100-240V, 50-60 Hz, 50W</b>
Warranty:	<b>2 Year</b>

### Ordering Information:

Item No.	Description:
C1012*	myFuge 12 Microcentrifuge with Combi-Rotor
C1008-A5-6	Adapter pack, 0.5ml 6/pk.
C1008-A2-6	Adapter pack, 0.2ml 6/pk.

\*Includes US plug. For EU plug, please add (-E).



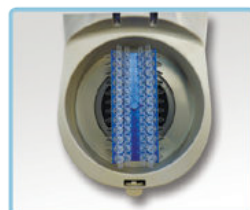
## StripSpin™ 12 Microcentrifuge



CE

For technical data, please see model C1012

Rotor holds 12 position PCR strips



Holds up to 4 x PCR strips  
or 48 x 0.2ml tubes

For labs using 12 position PCR strips

### Ordering Information:

Item No.	Description:
C1248*	StripSpin 12 Mini Microcentrifuge with 4 x 12 strip rotor
C1008-ROT	Optional rotor, 8 x 1.5/2.0ml
C1008-A5-8	Optional adapter pack for C1008-ROT, 0.5ml, 8/pk.

\*Includes US plug. For EU plug, please add (-E).

## myFuge™ 5 Microcentrifuge



Rotor for 5ml microtubes

CE

# myFUGE 5™

- + For quick spin downs of 5ml centrifuge tubes
- + Includes adapters for 5ml blood tubes
- + Starts and stops with closing/opening of the lid
- + Optional adapters for centrifuging cryovials

The myFuge™ 5 microcentrifuge includes a four position rotor for compatibility with a variety of 5ml test tubes, including 5ml snap cap centrifuge tubes. In addition, this combination rotor has four additional slots for centrifuging standard microtubes (1.5/2.0ml). Simply close the lid and the centrifuge quickly accelerates to the fixed speed of 5,500 rpm. Open the lid, and the rotor decelerates to a stop for removing samples.

The 5ml rotor positions accept 5ml centrifuge tubes directly, while 5ml blood and culture tubes (12x75mm) are accepted with the included adapters. The microtube positions are designed to accept 0.5 and 0.2ml tubes with the use of optional adapters.

### Technical Data:

Speed:	5,500 rpm / 2,000 xg
Capacity:	4 x 5ml tubes & 4 x 1.5/2.0ml
Dimensions: (W x D x H)	5.5 x 7.9 x 5.5 in. 14 x 20 x 14cm
Weight:	2.2 lbs. / 1 kg
Electrical:	Universal Voltage 100-240V, 50-60 Hz, 50W
Warranty:	2 Year

### Ordering Information:

Item No.	Description:
C1005*	myFuge 5 Mini Centrifuge with combination rotor , 4 x 5ml & 4 x 1.5/2.0ml
C1005-AC2	Adapter pack, for cryovials (0.5 to 2.0ml) and 1.5/2.0ml HPLC vials, 4/pk.
C1008-A5-6	Adapter pack, 0.5ml, 6/pk.
C1008-A2-6	Adapter pack, 0.2ml, 6/pk.

\*Includes US plug. For EU plug, please add (-E).



## PlateFuge™ Microplate Centrifuge



**PLATEFUGE™**  
MICROPLATE MICROCENTRIFUGE

- + Quickly spins down droplets in PCR plates
- + Unique, patented rotor design prevents sample spillage
- + Accepts all popular PCR plates (skirted, semi and non) and most microtiter plates
- + Less than half the size of traditional centrifuges

CE

Benchmark's PlateFuge™ is the first "mini" sized centrifuge with a swing out rotor for microplates. Centrifugation of plates before PCR ensures all reactants are in the bottom of the wells for optimized concentrations and improved yields.

In spite of its remarkably small footprint (9 x 10 in.), the PlateFuge™ includes a uniquely designed, patented swing out rotor capable of securing two microplates. The easily accessible rotor chamber includes two plate carriers that rest at a 75° angle. This allows plates to be inserted confidently without sealing tapes or caps. Upon closing the lid of the centrifuge, the rotor accelerates and the centrifugal force "swings" the plates into a vertical position. Any droplets on the walls of the plate, quickly concentrate into the well bottoms.

With a g-force of 600 xg, most samples can be spun down in less than 20 seconds. To end a run, simply open the lid and the automatic, electronic brake brings the rotor to a quick, smooth stop in about 4 seconds. Plates can then be easily removed from the rotor.



Before & after centrifugation  
(angled position)



During centrifugation  
(horizontal position)

### Technical Data:

Speed:	<b>2550 rpm / 600 xg</b>
Capacity:	<b>2 x 2 PCR plates* 2 x microtiter plates (up to 25mm) 24 x 0.2ml PCR strips</b>
Deceleration:	<b>4 seconds</b>
Dimensions: (W x D x H)	<b>9.2 x 10.2 x 7.75 in. 23 x 26 x 19.7 cm</b>
Weight:	<b>9 lbs. / 4.1 kg</b>
Electrical:	<b>115 or 230V, 50-60 Hz, 250W</b>
Warranty:	<b>2 Years</b>

\*When stacking skirted PCR plates, max. capacity is 4 plates.

### Ordering Information:

Item No.	Description:
C2000*	PlateFuge Microplate Centrifuge with rotor and plate carriers
C2000-A02	Tube adapter, holds 96 x 0.2ml or 8 and 12 position PCR strips, 2/pk.
C2000-DWMP	Optional rotor with carriers for deep well plates up to 35mm tall (speed: 1500rpm)

\*115V with US plug. For 230V (EU plug), please add (-E).



## MC-12™ High Speed Microcentrifuge



CE



- + Less than 9 inches wide
- + Large LCD with rcf conversion
- + Whisper quiet operation
- + Decelerates in just 10 seconds
- + 12 tube capacity (1.5/2.0ml)

Benchmark's MC-12 is the first and only compact microcentrifuge capable of achieving centrifugal speeds up to the critical threshold of 16,000 xg, often held as the standard for many molecular biology/DNA protocols. A brushless, maintenance free drive system makes it powerful, yet compact enough to allow each work station to be fully equipped with a personal centrifuge.



High speed range



Large LCD controls

The MC-12 defines a new class of microcentrifuge: compact, quick, powerful and affordable. All aspects of microcentrifuge performance were taken into consideration and no compromises were made. In addition to its unsurpassed speed, the MC-12 also delivers shortened acceleration/deceleration times, whisper quiet operation and a computer-designed airflow pattern to minimize sample temperature increases during longer runs at high speeds.

All operating parameters are set using a single, conveniently located control knob. The large, bright LCD provides a clear indication of time and rpm or g-force. A separate momentary spin button permits instant spin downs, without setting or disturbing any preset parameters. The aircraft grade aluminum rotor accepts 1.5 to 2.0ml tubes directly, as well as 0.5 and 0.2ml tubes with optional adapters. For applications requiring sub-ambient temperatures, the MC-12 is cold room safe.

### Technical Data:

Speed Range:	500 to 15,500 rpm (up to 16,100xg)
Capacity:	12 x 1.5/2.0ml
Deceleration:	10 seconds
Acceleration:	12 seconds
Speed Increment:	100 rpm or 100 rcf
Timer:	20 sec. to 99 min. / cont.
Momentary:	Yes
Dimensions: (W x D x H)	8.7 x 10.6 x 5.9 in. 22 x 27 x 15cm
Weight:	10.5 lbs / 4.8 kg
Electrical:	115 or 230V, 50-60 Hz, 100W
Warranty:	2 years

### Ordering Information:

Item No.	Description:
C1612*	MC-12 High Speed Microcentrifuge with 12 position rotor
C1008-A5-6	Optional adapter pack, 0.5ml 6/pk.
C1008-A2-6	Optional adapter pack, 0.2ml 6/pk.

\*115V with US plug. For 230V (EU plug), please add (-E).

## MC-24 Touch™ High Speed Microcentrifuge



CE



**Touch Control**



**Quiet Operation**



**High Speed**

## MC-24™ Touch High Speed Microcentrifuge

- + Full color touch screen
- + mySpin™ 1 button program recall
- + COMBI-Rotor™ accepts tubes and strips
- + Compact design, 9 x 12 x 7.75 in.
- + Unique air-flow system, keeps samples cool



**Unique COMBI-Rotor™**  
Accepts tubes and strips



**Full-color Touch Screen**

Benchmark's MC-24 Touch is the first microcentrifuge in its class with the convenience of touch pad control. In addition, this model comes complete with a unique COMBI-Rotor™ that accepts both standard microtubes and PCR strips, making this the ideal microcentrifuge for any microbiology laboratory.

The large, color touch screen shows actual speed (in rpm or rcf) along with set and remaining time. Up to 9 speed/time profiles can be stored in memory and the home screen displays a "mySpin" icon for instant recall of a designated favorite profile.

Supplied with Benchmark's unique COMBI-Rotor™, the MC-24 Touch will accept 24x1.5/2.0ml tubes and 2 strips of 0.2ml tubes (16x0.2ml) without requiring separate adapters. Samples are kept cool, even during extended runs at the maximum speed setting by a proprietary air flow system that moves air evenly and quietly throughout the chamber.

The MC-24 Touch is cold room safe and carries a 2 year warranty.

### Technical Data:

Speed Range:	<b>200 to 13,500 rpm (up to 16,800xg)</b>
Capacity:	<b>24 x 1.5/2.0ml 2 x PCR Strips (16 x 0.2ml)</b>
Speed Increment:	<b>100 rpm or 100 rcf</b>
Timer:	<b>20 sec. to 99 min. / cont.</b>
Momentary:	<b>Yes</b>
Dimensions: (W x D x H)	<b>9 x 12 x 7.75 in. 23 x 30.5 x 19.7cm</b>
Weight:	<b>14 lbs / 6.4 kg</b>
Electrical:	<b>115 or 230V, 50-60 Hz, 100W</b>
Warranty:	<b>2 years</b>

### Ordering Information:

Item No.	Description:
C2417*	MC-24 Touch Microcentrifuge with 24 place COMBI-Rotor
C1008-A5-6	Optional adapters for 0.5ml tubes in standard rotor, 6/pk
C2417-ROT5	Optional rotor, 8x 5ml (13,500rpm)
C2417-5-ADP	Optional adapters for 2ml cryovials in 8x5ml rotor, 8/pk

\*115V with US plug. For 230V (EU plug), please add (-E).



## LC-8™ Series Centrifuges



CE

- + Digital speed control with rcf conversion
- + Safety lid-lock prevents opening the lid until the rotor stops
- + Unique air flow design limits increase in sample temperature
- + Eight position rotor accepts tubes ranging from 5ml to 15ml
- + Ideal for PPP and PRP blood separations



15ml Conical  
Centrifuge Tubes



15ml Blood  
Collection Tubes



10ml Blood  
Collection Tubes



5-7ml Blood Collection  
Tubes (requires adapter)

Benchmark's LC-8 Series of laboratory centrifuges is uniquely designed to meet a wide range of applications in both the clinical and research laboratory. An eight position rotor is included and designed to directly accept 10ml and 15ml test-tubes (conical or round bottom), while optional adapters are also available for use with all popular sizes of blood collection and culture tubes. Unlike most compact centrifuges in this class, the rotor can be easily removed from the chamber for cleaning.

The back-lit, liquid crystal display provides full control over the set run time and rotational speed. The rotational speed can be set/viewed in rpm or rcf and acceleration/deceleration levels can be easily adjusted in the advanced settings mode.

To ensure safety, the digital microprocessor ensures that the lid has been closed and that the safety lid lock is engaged prior to starting a centrifugation cycle. In addition, an advanced imbalance detection system constantly monitors the balance and vibration, automatically bringing the rotor to a stop if an imbalance is detected.

### Technical Data:

	LC-8	LC-8 Plus
Speed Range:	400 - 3,500rpm (1500xg)	400 - 5,000rpm (3070xg)
Capacity:	8 x 15ml	8 x 15ml
Accel/Decel:	9 sec. / 25 sec.	19 sec. / 39 sec.
Increment:	100 rpm increments	
Timer:	20 sec. to 99 min.	
Momentary:	Yes	
Dimensions: (W x D x H)	11.6 x 14.4 x 8.3 in. 29.5 x 36.5 x 21 cm	
Weight:	15 lbs / 6.8 kg	
Electrical:	115 or 230V, 50-60 Hz, 150W	
Warranty:	2 years	

### Ordering Information:

Item No.	Description:
C3100*	LC-8 Centrifuge with 8 x 15ml rotor (maximum speed: 3,500rpm / 1,500xg)
C3200	LC-8 Plus Centrifuge with 8 x 15ml rotor (maximum speed: 5,000rpm / 3,070xg)
C3100-ADP	Optional adapters for 5ml & 7ml blood collection/culture tubes, 8/pk
C2570	Optional adapters for 5ml centrifuge tubes, 4/pk

\*115V with US plug. For 230V (EU plug), please add (-E).

# HERMLE™ Z216-M Series High Speed Microcentrifuges

**HERMLE**  
**Benchmark**

- + Unique 44 place micro rotor
- + High speed, up to 21,379 x g
- + Available with refrigeration
- + Multiple rotor options for microtubes, PCR strips and 5ml tubes



CE



44 X 1.5/2.0ml  
Z216-4420



12 X 1.5/2.0ml Swing out  
Z216-1220H



COMBI-Rotor™  
24 x 1.5/2.0ml and 4 x PCR  
Z216-2420S



Compact, quiet, and powerful are just a few of the features found on the Z216 Series Microcentrifuges. Add to this, the versatility of eight available rotor options, and the result is the ideal microcentrifuge for the modern molecular biology laboratory.

All common microtubes (0.2ml, 0.5ml, 1.5ml, 2.0ml) can be accepted as well as PCR strips, hematocrit tubes, and even 5.0ml centrifuge tubes. Advanced microprocessor controls allow for setting/displaying of the rotational speed in either rpm or rcf. In addition to retrieving saved programs, the easy to use front panel can adjust accel/decel rates, and change the end of run alarm tone.

Despite a remarkably small footprint, the Z216 series offers high output with a uniquely designed 44 x 1.5ml dual row rotor, nearly doubling the capacity when compared to traditional microcentrifuges. A unique COMBI-Rotor™ for 24 x 1.5/2.0ml and 4 x PCR strips is also available, featuring our new Quick-Seal™ biocontainment lid that opens and locks with only a quarter turn.

In the Z216-MK model, a powerful, compressor driven cooling system maintains temperatures as low as -20°C and is designed to reach 4°C (from room temperature) in less than 10 minutes.

## Technical Data:

Speed Range:	200 to 15,000 rpm (up to 21,631xg)
Max. Capacity:	44 x 1.5/2.0ml 4 x PCR Strips (32 x 0.2ml)
Speed Increment:	10 rpm or 10 rcf
Timer:	10 sec. to 99h 99 min. / cont.
Temp. Range	-20°C to 40°C (Z216-MK)
Momentary:	Yes
Dimensions: (W x D x H)	11 x 15.3 x 11.4 in. 11 x 21.6 x 11.4 in. (Z216-MK)
Weight:	37.4 lbs / 17 kg 77 lbs / 35 kg (Z216-MK)
Electrical:	115 or 230V, 50-60 Hz, 280W (Z216-MK: 560W)
Warranty:	5 years

## Ordering Information:

Item No.	Description:
Z216-M*	Z216-M High Speed Microcentrifuge
Z216-MK*	Z216-MK Refrigerated High Speed Microcentrifuge
Z216-2420	Rotor, 24 x 1.5/2.0ml
Z216-2420S	NEW! COMBI-rotor with Quick-Seal biocontainment lid for 24 x 1.5/2.0ml and 4 x PCR Strips
Z216-4420	Rotor, 44 x 1.5/2.0ml
Z216-3020H	Rotor, 30 x 1.5/2.0ml with hermetically sealed lid
Z216-1220H	Swing out rotor, 12 x 1.5/2.0ml, 1ml HLA tube compatible
Z216-6405	Rotor, 64 x 0.5ml
Z216-1205	Rotor, 12 x 5ml centrifuge tubes
Z216-3202	Rotor, 4 x PCR Strips (32 x 0.2ml tubes)
Z216-24HEM	Rotor, hematocrit, 24 x capillary
More rotors available	Visit <a href="http://www.hermleusa.com">www.hermleusa.com</a> for a complete listing

\*115V with US plug. For 230V (EU plug), please add (-E).



# HERMLE™ Z446 Series High Capacity Universal Centrifuges



**HERMLE**  
**Benchmark**

- + High capacity, 4 x 750ml accepts 28 x 50ml or 68 x 15ml
- + Advanced programming with auto rotor recognition
- + Available with refrigeration
- + Ideal for tissue culture laboratories

CE



**Z446-750**  
Swing out rotor with round buckets



**Z446-750-MP**  
Microplate carriers for swing out rotor



**Z446-MP-BUK**  
Sealable microplate bucket for swing out rotor

Inserts: (for round buckets)	Tube/Bottle	qty./insert	qty./rotor
Z446-750-A500	500ml conical	1	4
Z446-750-A250	250ml bottle	1	4
Z446-750-A225	225ml conical	1	4
Z446-750-A50	50ml conical	7	<b>28</b>
Z446-750-A15	15ml conical	17	<b>68</b>
Z446-750-A10	10ml	18	72
Z446-750-A57	5/7ml	21	84

The Z446 Universal Centrifuge Series offers the highest capacity of any benchtop Hermle-Benchmark model. With aircraft grade, premium alloy construction, the 4 x 750ml swing out rotor can withstand centrifugal forces upwards of 4,000 xg with full loads of up to 28 x 50ml or 68 x 15ml tubes.

Advanced microprocessor controls allow for instant rotor identification, which automatically converts the rotational speed to the relevant g-force (rcf), preventing the user from setting a speed above the capabilities of the installed rotor. In addition to retrieving saved programs, the easy to use front panel can adjust accel/decel rates, and change the end of run alarm tone.

Rotor exchange is simple and requires less than one minute. An included rotor wrench can be used to loosen and install all rotors. As soon as the rotor is placed on the motor shaft, the identification process activates and the installed rotor code is displayed on the backlit LCD display.

## Technical Data:

Speed Range:	200 to 16,000 rpm (up to 24,325xg)
Capacity:	4 x 750ml 28 x 50ml 68 x 15ml
Speed Increment:	10 rpm or 10 rcf
Timer:	10 sec. to 99h 99 min. / cont.
Temp. Range	-20°C to 40°C (Z446-K)
Momentary:	Yes
Dimensions: (W x D x H)	21.3 x 26.4 x 15.4 in. 28.7 x 26.4 x 15.4 in. (Z446-K)
Weight:	174 lbs / 79 kg 244 lbs / 111 kg (Z446-K)
Electrical:	115 or 230V, 50-60 Hz, 640W (Z446-K: 1630W)
Warranty:	5 years

## Ordering Information:

Item No.	Description:
Z446*	Z446 Large Capacity Universal Centrifuge
Z446-K*	Z446-K Refrigerated Large Capacity Universal centrifuge
Z446-750	4 x 750ml swing out rotor with round buckets
Z446-750-MP	Microplate carriers for Z446-750-AC rotor, 2/pk
Z446-MP-BUK	Rectangular microplate buckets for Z446-750-AC rotor, 2/pk
Z446-04500	Rotor, 4 x 500ml bottle
Z366-06250	Rotor, 6 x 250ml bottle
Z326-0685	Rotor, 6 x 85ml
Z326-1050	Rotor, 10 x 50ml conical
Z326-2010	Rotor, 20 x 10ml
More rotors available	Visit <a href="http://www.hermleusa.com">www.hermleusa.com</a> for a complete listing

\*115V with US plug. For 230V (EU plug), please add (-E).

# Also from Hermle...

## HERMLE Benchmark



**Z206-A**  
Compact Centrifuge

Max. Speed: 6,000 rpm  
Max. g-Force: 4,427 xg  
Max. Capacity: 

Swing out	Fixed angle
6 x 5ml	6 x 50ml
4 x 7ml	12 x 15ml
	18 x 1.5/2.0ml



**Z326-K**  
Refrigerated Universal Centrifuge

Max. Speed: 18,000 rpm  
Max. g-Force: 17,317 xg  
Max. Capacity: 

Swing out	Fixed angle
4 x 145ml	10 x 50ml
8 x 50ml	30 x 15ml
12 x 15ml	44 x 1.5/2.0ml
6 x microplates	

  
Temp Range: -20° to 40°C



**Z496-K**  
Floor Standing High Capacity Centrifuge

Max. Speed: 10,500 rpm  
Max. g-Force: 16,022 xg  
Max. Capacity: 

Swing out	Fixed angle
4 x 1000ml	4 x 500ml
40 x 50ml	6 x 250ml
96 x 15ml	10 x 50ml
24 x microplates	

  
Temp Range: -20° to 40°C

### Unique Accessories \*For Z446-750-MP only

#### PCR Stacking Adapter

Stacks PCR plates for unmatched capacity! \*

Z446-MP-STK



#### Universal Chamber Slide and Dish Carrier

Fits ANY microplate carrier!

Z326-MPCA



Z446-04500  
4 x 500ml  
8,000 rpm/ 10,374 xg



Z326-1050  
10 x 50ml  
10,500 rpm/ 16,022 xg



Z326-02MP  
2 x 3 microplate  
4,500 rpm/ 2,716 xg



Z326-1220-36  
12 x 1.5/2.0ml  
30,000 rpm/ 65,395 xg



Z366-06250  
6 x 250ml  
8,000 rpm/ 10,016 xg



Z326-3015  
30 x 15ml  
4,500 rpm/ 2,830 xg



Z326-100H  
4 x 100ml  
Swing out rotor with buckets  
4,500 rpm/ 2,716 xg



Z496-750-BLD  
750ml Blood bag bucket  
4,600 rpm/ 5,274 xg

### Find the right centrifuge, **FAST**

With Benchmark's myFuge app, choosing the right centrifuge is now easier than ever.

By answering a few questions, the myFuge app helps you select the best centrifuge for your specific needs.

Access the app by scanning the QR code above.  
Visit [HermleUSA.com](http://HermleUSA.com) for a full listing and promotional literature.



**my**  
**FUGE**  
Mobile App



Compatible with:





# Shakers, Mixers and Rockers

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Vornado™ Mini Vortexer

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BenchMixer™ Vortex Mixers

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Mortexer™ Vortex Mixer

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BenchMixer™ XL Vortex Mixer

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TubeRocker and BenchBlotter™  
Fixed Speed Rocker

Pg. 21



BenchRocker™ 2D Variable Rocker

**NEW!** [www.BenchMotion.com](http://www.BenchMotion.com)

Visit [BenchMotion.com](http://BenchMotion.com) for a video representation of all of Benchmark's available shaking motions.



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Everlast™ 247 **Variable Rocker**

Pg. 22



BenchWaver™ 3D (**Undulating**) **Rocker**

Pg. 23



Orbi-Shaker™ **Orbital Shaker XL**

Pg. 23



Orbi-Shaker™ MP **Microplate Shaker**

Pg. 24



Roto-Mini™ **Rotator Series**





## Vornado™ Miniature Vortex Mixer



**VORNADO™**  
MINIATURE VORTEX MIXER

- + Powerful vortexing, for tubes up to 50ml
- + Insta-Touch™ pressure activated operation
- + "Mini" sized, less than 4" wide



Insta-Touch™ pressure activation



Extremely compact

**Powerful** is the best word to describe this *mini* vortexer. With a 4mm orbit and fixed speed of 2,800rpm, the Vornado instantly vortexes even the largest samples, including nearly full 50 ml tubes. Despite its powerful motor, the Vornado has a footprint of less than 4x4 inches, allowing it to fit on the most crowded bench.

Insta-Touch operation means that the motor is automatically activated with slight pressure on the center of the cup head. Operation is smooth, quiet and efficient. When pressure is removed, operation of the motor ceases.

The Vornado's unique head design prevents liquids from entering the housing, prolonging motor life. The unit is available with five different color cup heads.

### Technical Data:

Speed:	2,800rpm (fixed)
Motor Activation:	Touch
Orbit:	4mm
Dimensions: (W x D x H)	3.7 x 3.9 x 2.6 in. 9.4 x 9.9 x 6.6 cm
Operating Temp. Range:	+4°C to +45°C
Weight:	1 lb (0.4kg)
Electrical:	Universal Voltage 100 to 240V, 50-60Hz, 50W
Warranty:	2 Years

### Ordering Information:

Item No.	Description:
BV101*	Vornado Miniature Vortex Mixer, gray cup head
BV101-B*	Vornado Miniature Vortex Mixer, blue cup head
BV101-G*	Vornado Miniature Vortex Mixer, green cup head
BV101-P*	Vornado Miniature Vortex Mixer, purple cup head
BV101-R*	Vornado Miniature Vortex Mixer, red cup head



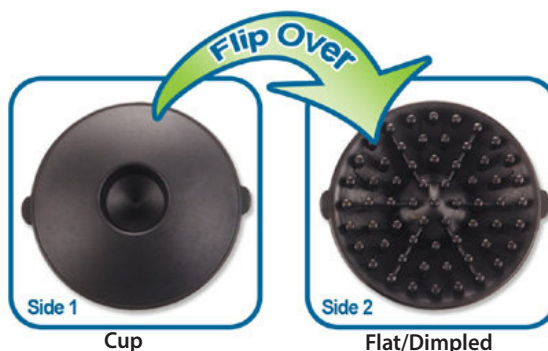
\*Includes US plug. For EU plug, please add (-E).

## BenchMixer™ V2

- + Reversible top: Use "Cup" or "Flat/Dimpled" Surface
- + Powerful motor for INSTANT vortexing
- + Q-Drive™ dynamic balancing system
- + Variable speed with touch or continuous operation



Reversible Top



The BenchMixer™ V2 utilizes a smooth and powerful mixing technology similar to the original BenchMixer, with the advantage of a uniquely designed reversible rubber head that can be attached to the mixer in two orientations. For the vortexing of single tubes, the cupped surface would generally be preferred. However, for applications requiring a flat/dimpled surface for mixing uniquely shaped vessels (or a handful of multiple test-tubes), the head can easily be flipped over and reattached in reverse orientation.

Like the original BenchMixer, the drive system is balanced with Q-Drive™ technology, providing a smooth vortexing action, while minimizing noise and excessive vibration. This results in quieter, more efficient and longer lasting operation. With a maximum speed up to 3,200 rpm, the mixer provides an instant vortex of even the largest sample sizes, including full 50ml tubes.

### Available Accessories:



### Technical Data:

Speed Range:	200 to 3,200 rpm
Operating Modes:	Touch or continuous
Orbit:	3mm
Operating Temp. Range:	+4° C to +45°C
Dimensions: (W x D x H):	5 x 6.3 x 6.7 in.* 13 x 16 x 17 cm
Weight:	8.4 lbs (3.8kg)
Electrical:	115V, 60Hz or 230V, 50Hz/60Hz, 180W
Warranty:	2 Years

\*Dimensions of BV1000 model: 5.2 x 6.7 x 6.7 in. / 13 x 17 x 17 cm

### Ordering Information:

Item No.	Description:
BV1003*	BenchMixer V2 Vortexer (with reversible head)
BV1000*	BenchMixer Vortexer (original) with standard cup head
BV1000-FLAT	Optional 3 in. flat head attachment (for BV1000 only)
BV1000-COMBO	Optional combination head for tubes and microplates (38x1.5/2.0ml & 28 x 0.5ml or one microplate)
BV1003-T150	Optional head for 12 x 15ml tubes (BV1003 only)
BV1003-T500	Optional head for 5 x 50ml tubes (BV1003 only)
BV1000-H15	Optional head for 12 x 1.5/2.0ml, horizontal
BV1000-H150	Optional head for 4 x 15ml tubes, horizontal
BV1000-H500	Optional head for 2 x 50ml tubes, horizontal



\*115V with US plug. For 230V/50Hz with EU plug, please add (-E). For 230V/60Hz with EU plug, please add (-E2).



# Mortexer™ Vortex Mixer



- ✚ The only vortexer available with **Multi-Head™**
- ✚ Powerful motor for **INSTANT** vortexing
- ✚ **Q-Drive™** dynamic balancing system
- ✚ Variable speed from 200 to 3,200 rpm



Unique Multi-Head allows for standard vortexing, **PLUS** holds up to 8 microtubes

## Available Accessories:



BV1000-FLAT



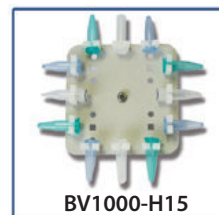
BV1000-COMBO



BV1000-H500



BV1000-H150



BV1000-H15

The Mortexer™ is MORE than your standard vortex mixer. The unique design of the Multi-Head™ (included) features a traditional cup head for general purpose mixing, plus holds up to eight microcentrifuge tubes. The drive system is balanced with Q-Drive™ technology, providing a smooth vortexing action, while minimizing noise and excessive vibration. This results in quieter, more efficient and longer lasting operation.

Other features include: "no-walk" suction feet, cold room/incubator compatibility and spill-proof electronic controls.

## Technical Data:

Speed Range:	200 to 3,200 rpm
Operating Modes:	Touch or continuous
Orbit:	3mm
Operating Temp. Range:	+4° C to +45°C
Dimensions: (W x D x H)	5 x 6.3 x 6.7 in. 13 x 16 x 17 cm
Weight:	8.4 lbs (3.8kg)
Electrical:	115V, 60Hz or 230V, 50Hz*, 180W
Warranty:	2 Years

\*230V, 60Hz available upon request

## Ordering Information:

Item No.	Description:
BV1005*	Mortexer Vortex Mixer (with Multi-Head)
BV1000-FLAT	Optional 3 inch flat head attachment
BV1000-COMBO	Optional combination head for tubes and microplates (38x1.5/2.0ml & 28 x 0.5ml or one microplate)
BV1000-H15	Optional head for 12 x 1.5/2.0ml, horizontal
BV1000-H150	Optional head for 4 x 15ml tubes, horizontal
BV1000-H500	Optional head for 2 x 50ml tubes, horizontal

\*115V with US plug. For 230V/50Hz with EU plug, please add (-E). For 230V/60Hz with EU plug, please add (-E2).

## BenchMixer™ XL Multi-Tube Vortex Mixer



### BENCHMIXER™ XL MULTI-TUBE VORTEXER

- + Hands free, high capacity vortexing
- + Up to 2500rpm, a true vortex in every tube
- + Pulsing function for interval vortexing
- + Wide assortment of accessories for a variety of tubes and plates
- + Suitable for use with QuEChERS

#### Available Accessories:



50 x 1.5/2.0ml



15 x 50ml



50 x 5 or 7ml



3 x microplates



9 x 50ml Horizontal  
QuEChERS

The BenchMixer™ XL is a heavy duty vortex mixer designed for hands-free mixing in tubes, flasks, vials or cylinders. It is ideal for the QuEChERS pesticide analysis method and is instantly adaptable to an exceptionally broad range of vessels, racks and applications (horizontal or vertical). The precisely balanced drive system includes an oversized motor that delivers accurate, reproducible speeds up to 2,500rpm with rattle-free operation and minimal vibration. The programmable pulsing function allows for time specific interval mixing, increasing agitation.

The 7x12 inch platform accommodates a wide variety of standard, pre-drilled tube racks (a complete listing can be found in the ordering information section below). Additionally, BenchMixer XL can easily be adapted to almost any type of vessel commonly found in the laboratory.

Using BenchMixer XL is easy; after loading the sample rack and tightening the locking knobs, select the desired speed and run time on the large digital control panel. Then, simply press "Start" and the BenchMixer XL will perform unattended mixing for up to 100 hours.

BenchMixer XL's large capacity and adaptability make it an ideal choice for the medium to high throughput laboratory.

#### Technical Data:

Speed Range:	<b>500 to 2500 rpm</b>
Orbit:	<b>3.6mm</b>
Timer	<b>1 min. to 99hr 59 min.</b>
Platform Dimensions:	<b>12 x 7 in. / 30 x 17.8 cm</b>
Dimensions: (W x D x H)	<b>15 x 9.2 x 16.5 in. 38.5 x 23.5 x 42 cm</b>
Weight:	<b>29 lbs (13kg)</b>
Electrical:	<b>Universal Voltage 100 to 240V, 50-60Hz, 60W</b>
Warranty:	<b>2 Years</b>

#### Ordering Information:

Item No.	Description:
BV1010**	BenchMixer XL Multi-Tube Vortexer, includes 50 x 12mm tube rack
BV1010-TST**	BenchMixer XLQ QuEChERS Shaker/Vortexer with racks for 7 x 50ml tubes held horizontally, 50 x 15ml and 50 x 1.5/2.0ml tubes (vertical)
BV1010-05	Tube Rack (PP*), 96 x 0.5ml (Ø8mm)
BV1010-1520	Tube Rack (EVA*), 50 x 1.5/2.0ml (Ø10mm)
BV1010-12	Tube Rack (EVA*), 50 x 12mm (included)
BV1010-13	Tube Rack (EVA*), 50 x 13mm
BV1010-150	Tube Rack (EVA*), 50 x 15ml (Ø16.5mm)
BV1010-500	Tube Rack (EVA*), 15 x 50ml (Ø29mm)
BV1010-25	Tube Rack (EVA*), 15 x 25mm
BV1010-50H	Tube Rack (EVA*), 9 x 50ml Horizontal (QuEChERS)
BV1010-MP	Rack (PP*) for up to 3 plates or 96 well microtube racks
BV1010-MP02	Carrier for above, 96 x 0.2ml tubes or strips (3pk.)

\*EVA: Ethyl Vinyl Acetate / PP: Polypropylene  
\*\*Includes US plug. For EU plug, please add (-E).

## TubeRocker™ Fixed Speed Rocker (2D)



CE

- ✚ Ideal for tube sizes 1.5ml to 50ml
- ✚ Grooved mat properly secures tubes without the need for any tools, clamps or hardware

### Technical Data:

Speed Range:	Fixed, 24 rpm (230V: 20 rpm)
Tilt Angle:	±30°
Platform Size:	12 x 4.5 in. / 30 x 11.4 cm
Load Capacity:	5 lbs (2.3kg)
Operating Temp. Range:	+4° C to +45° C
Dimensions: (W x D x H)	13.3 x 5.5 x 4 in. / 33.6 x 13.5 x 10 cm
Weight:	4 lbs (1.8kg)
Electrical:	115 or 230V, 50-60Hz, 50W
Warranty:	2 Years

### Ordering Information:

Item No.	Description:
M2100*	TubeRocker with grooved mat

\*115V with US plug. For 230V (EU plug), please add (-E).



8x50ml



15x15ml



15x Blood Collection Tubes  
(5ml, 7ml, 10ml or 15ml)



30x1.5/2.0ml

## BenchBlotter™ Fixed Speed Rocker (2D)



CE

BR1000 with BR1000-STACK

- ✚ Gentle mixing for blot washing and gel staining
- ✚ Optional dual platform doubles work surface

### Technical Data:

Speed Range:	Fixed, 12 rpm Fixed, 10 rpm (230V)
Tilt Angle:	±8°
Platform Size:	12 x 12 in. / 30 x 30 cm
Load Capacity:	5 lbs (2.3kg)
Operating Temp. Range:	+4° C to +45° C
Dimensions: (W x D x H)	13.5 x 12 x 4.7 in. 34 x 30 x 12 cm
Stacking Clearance:	3 in. / 7.6 cm
Weight:	6.5 lbs (3kg)
Electrical:	115 or 230V, 50-60Hz, 50W
Warranty:	2 Years

### Ordering Information:

Item No.	Description:
BR1000*	BenchBlotter Platform Rocker with flat mat
BR1000-STACK	Optional stacking platform with flat mat
BR1000-DIMPLED	Optional dimpled mat
B0718	Bungee cord, used for securing vessels, pack of 4

\*115V with US plug. For 230V (EU plug), please add (-E).



## BenchRocker™ 2D Variable Speed Rocker (2D)



- Adjustable tilt & speed for a wide range of applications
- Large 14x12" work surface
- Safe for incubator or cold room use

The BenchRocker 2D is designed to provide the precise speeds and tilt angles required for a broad range of molecular and biological mixing applications. The user can adjust both parameters to match the vessel size and the volume of liquid being mixed, yielding optimum results.

### Technical Data:

Speed Range:	Variable, 2 to 30 rpm
Tilt Angle:	Variable, 0° to ± 30°
Platform Size:	14 x 12 in. / 35 x 30 cm
Load Capacity:	8 lbs (3.6kg)
Operating Temp. Range:	+4° C to +45° C
Dimensions: (W x D x H)	14 x 12 x 8 in. 35 x 30 x 20 cm
Stacking Clearance:	3 in. / 7.6 cm
Weight:	7.5 lbs (3.4kg)
Electrical:	115 or 230V, 50-60Hz, 50W
Warranty:	2 Years

### Ordering Information:

Item No.	Description:
BR2000*	BenchRocker™ 2D Rocker with flat mat
BR2000-STACK	Optional stacking platform (3") with flat mat
BR1000-DIMPLED	Optional dimpled mat
B0718	Bungee cord, used for securing vessels, pack of 4
BR2000-SP	STACK-PLUS Extender set, adds 1.25" clearance to stacking platform

\*115V with US plug. For 230V (EU plug), please add (-E).

## Everlast™ 247 Heavy Duty - Variable Speed Rocker (2D)



Pictured with Stacking Platform (BR5000-STACK)

- Everlast™ 5 year warranty
- Extra-large, stainless steel 16x12" surface
- 12 lb load capacity
- Safe for incubator or cold room use

With an unprecedented 5 year limited warranty, Benchmark's Everlast 247 Rocker is built to last. Twenty four hours a day, seven days a week . . . No problem! The powerful motor and heavy duty drive system remain reliable and consistent, even under constant usage in a cold room (min. 0°C) or incubator (max. 65°C).

### Technical Data:

Speed Range:	Variable, 3 to 80 rpm
Tilt Angle:	Variable, 0° to ± 20°
Platform Size:	16 x 12 in. / 40.5 x 30 cm
Load Capacity:	12 lbs (5.45kg)
Operating Temp. Range:	+0° C to +65° C
Dimensions: (W x D x H)	16 x 13 x 6 in. 40.5 x 33 x 15.25 cm
Stacking Clearance:	3.5 in. / 8.9cm
Weight:	20 lbs (9kg)
Electrical:	115 or 230V, 50-60Hz, 50W
Warranty:	5 Years

### Ordering Information:

Item No.	Description:
BR5000*	Everlast™ 247 Rocker with flat mat
BR5000-STACK	Optional stacking platform with flat mat with 3.5" clearance
B0718	Bungee cord, used for securing vessels, pack of 4

\*115V with US plug. For 230V (EU plug), please add (-E).

# BenchWaver™ Undulating Rocker (3D)



**BENCHWAVER™**

- ✚ Undulating, 3-dimensional motion
- ✚ Adjustable speed and tilt
- ✚ Large, 13 inch platform
- ✚ Ideal for staining, washing and general mixing



B3D5000 with B3D5000-STK



B3D5000 with B3D5000-DIMP

The BenchWaver™ combines the basic rocking motion of traditional platform rockers with the circular motion of an orbital shaker. This combination is ideal for generating the optimum 3-dimensional “undulating” motion commonly preferred for molecular biology applications.

The tilt angle is instantly adjustable (no tools or disassembly required) from 0 to 10° and the mixing speed can be adjusted from 5 to 105 rpm, using the large, user-friendly LCD control panel. Combined control of both parameters (tilt and speed) makes the BenchWaver a versatile workhorse that can provide anything from gentle, slow moving waves to a rapid, more vigorous motion. Additionally, time of operation can be selected from 1 minute up to 99 hours or for continuous operation.

The large 13.5 x 13 inch platform is supplied complete with a non-slip, rubber mat. An optional stacking platform is available for users requiring additional mixing capacity. BenchWaver is a reliable and versatile instrument and can be used in refrigerated or incubated environments from 2° to 60°C.

## Technical Data:

Speed Range:	Variable, 5 to 105 rpm
Tilt Angle:	Variable, 0 to ± 10°
Platform Size:	13.5 x 13 in. / 34 x 33 cm
Load Capacity:	20 lbs (9kg)
Operating Temp. Range:	+4°C to +60°C
Dimensions: (W x D x H)	13 x 13.5 x 9.75 in. 33 x 34 x 24.75 cm
Stacking Clearance:	4.5 in. / 7.6 cm
Weight:	12 lbs (5.5kg)
Electrical:	Universal Voltage: 100 to 240V, 50-60Hz, 50W
Warranty:	2 Years

## Ordering Information:

Item No.	Description:
B3D5000*	BenchWaver with platform and flat mat
B3D5000-STK	Optional stacking platform (4.5" clearance) with flat mat (13.5x13")
B3D5000-DIMP	Optional dimpled mat (13.5x13")

\*Includes US plug. For EU plug, please add (-E).

## Orbi-Shaker™ XL High Capacity Orbital Shaker



CE

with  
**MAGic CLAMP**  
PATENTED

- + High capacity, benchtop model
- + Circular 19mm orbit for aeration and mixing
- + Instantly exchange flask clamps with MAGic Clamp™ accessories

### Technical Data:

Speed Range:	Variable, 30 to 300 rpm
Speed Increment:	1 rpm
Motion / Orbit:	Orbital / 19mm
Load Capacity:	5 x 2L or 9 x 1L / 65 lbs (30kg)
Platform Size:	18 x 18 in. / 45 x 45 cm
Timer:	1 min. to 99 hr / Continuous
Operating Temp. Range:	+4°C to +65°C
Dimensions (W x D x H):	18.5 x 21.25 x 5 in. / 47 x 54 x 12.5 cm
Weight:	64 lbs (29kg)
Electrical:	120 or 230V, 50-60Hz
Warranty:	2 Years

### Ordering Information:

Item No.	Description:
BT1011*	Orbi-Shaker XL with flat mat platform (18 x 18 in.)
H1010-MR**	MAGic Clamp™ platform for flasks & tubes (18 x 18 in.)
H1010-P-SP	Universal spring platform for unique vessel types
H1010-P-MP	Dedicated platform for 6 x microplates

\*115V with US plug. For 230v (EU plug), please add (-E).

\*\*Flask clamps and tube racks sold separately, see page 29 for a complete listing.

## Orbi-Shaker™ MP Microplate Shaker



CE

- + Digital speed control up to 1,500rpm
- + 3mm orbit for thorough mixing in microplates
- + Includes platform for up to four microplates
- + Mix up to 80 microtubes with optional adapter

### Technical Data:

Speed Range:	200 to 1,500 rpm
Orbit:	3mm
Max. Capacity:	Up to 4 microplates
Operating Temp. Range:	+4 °C to +65° C
Dimensions: (W x D x H):	13.1 x 11.7 x 4.7 in. 33.3 x 29.8 x 12 cm
Timer:	1 min. to 99 hour / cont.
Weight:	12 lbs (5.5kg)
Electrical:	Universal Voltage 100-240V, 50-60Hz, 250W
Warranty:	2 Years

### Ordering Information:

Item No.	Description:
BT1502*	Orbi-Shaker™ MP microplate shaker, includes platform for 4 microplates
BT1500-A1520	Optional adapter, 20 x 1.5/2.0ml for microplate shakers
BT1500-A05	Optional adapter, 20 x 0.5ml for microplate shakers

\*Includes US plug. For EU plug, please add (-E).



## Roto-Mini™ Rotating Mixers

# Roto-Mini™



Roto-Mini™

CE



Roto-Mini™ PLUS

Benchmark's new Roto-Mini series of rotating mixers provides a wide range of mixing capabilities, suitable for an array of laboratory applications including resuspension, protein binding, nucleic acid purification, histochemistry, hybridization etc. The mixers include interchangeable tube holders for accomodating all common tube sizes from 0.5ml to 50ml, and the motion can be adjusted from vertical (end over end) mixing, to horizontal (rolling or hybridization style) mixing.

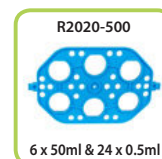
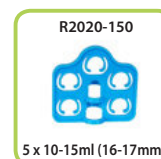
Roto-Mini rotators are available in the "Plus" configuration. The Plus models provide the following additional features:

Variable speed:	5 to 70rpm
"Mix" function:	Rotating in combination w/ oscillations (increased mixing)
"Pause" function:	Rotating with intermittent "stops" during rotation
"Rock" function:	Back and forth, gentle rocking motion (see-saw)

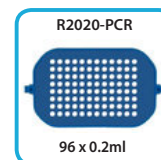
The Plus models also offer an additional rocking platform (4.5 x 3 in.), as well as a 96 x 0.2ml tube/strip/plate holder for mixing PCR vessels in the "Mix" (oscillating) mode

- + Includes tube holders for common tube sizes
- + Available with variable speed control and advanced shaking/mixing modes:
  - + Mix (Oscillating)
  - + Pause
  - + Rock
- + Also offered with incubation (See Page 57)

Included Tube Holders:



Optional Tube Holders:



### Technical Data:

Speed Range: R2020:	24rpm
R2024:	5 to 70rpm
Mixing Modes: R2020:	N/A
R2024:	Mix, Pause & Rock
Max Capacity: (R2020/R2024)	1.5/2.0ml: 44 15ml: 20 50ml: 6
Dimensions (R2020/R2024)	10.8 x 6 x 6.5 in / 41 x 13.7 x 19.9cm
Weight:	3 lbs/1.4 kg
Electrical: R2020 R2024	115 or 230V, 50-60Hz, 0.5A Universal Voltage 100 to 240V, 50-60Hz, 0.5A
Warranty:	2 Years

### Ordering Information:

Item No.	Description:
R2020*	Roto-Mini Rotator with tube holders
R2024*	Roto-Mini Plus, Variable Speed Rotator with tube holders
<b>Tube Holder Accessories</b>	
R2020-1520	Tube holder, 11 x 1.5/2.0ml, 2/pk (1 pack included)
R2020-0507	Tube holder, 5 x 5-7ml, 2/pk (1 pack included)
R2020-150	Tube holder, 5 x 10-15ml, 2/pk (1 pack included)
R2020-500	Tube holder, 6 x 50ml, 1 each (included)
R2020-PCR	Tube holder, 96 x 0.2ml, 12 x PCR strips or one PCR plate**
R2020-RP	Mini rocking platform with rubber mat, 4.5 x 3 in. **

\*115V with US plug. For 230v (EU plug), please add (-E).

\*\*Accessories are recommended for "Plus" models (R2024) only

# Autoclaves



Pg. 26



BioClave™ 8 **Benchtop Autoclave**

Pg. 26



BioClave™ 16 **Benchtop Autoclave**

Pg. 27



BioClave™ 28 **Benchtop Autoclave**

# BioCLAVE™



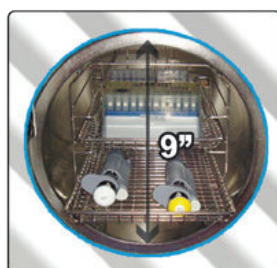
B4000-16



B4000-M



BioClave Mini



BioClave 16

Bottle/Flask Capacity	B4000-M	B4000-16
100ml Media Bottle	8	15
250ml Media Bottle	4	8
500ml Media Bottle	N/A	3
125ml Erlenmeyer Flask	4	8
250ml Erlenmeyer Flask	2	6
500ml Erlenmeyer Flask	N/A	3

## Ordering Information:

Item No.	Description:
B4000-M*	BioClave Mini Autoclave (8L)
B4000-16*	BioClave Autoclave (16L)
B4000-P*	Printer for BioClave series
B4000-PA	Extra roll of paper for B4000-P

- + Fully automatic, just press start
- + Rapid, complete sterilization
- + Extremely compact
- + Built in water tank, does not require connection to an external water supply

Despite the space-saving exterior dimensions of the BioClaves, the stainless steel sterilization chambers are surprisingly large, accommodating a variety of liquids, media, instruments, glassware, plasticware and other common laboratory items. Both of these benchtop models include a mechanical and electrical safety interlock that prevents the door from being opened until the pressure has been released.

With large digital displays and fully automatic operation, all segments of the sterilization cycle (fill, sterilize, exhaust and dry) commence and run to completion by simply pressing the start button. An optional thermal mini-printer is also available for providing a record of sterilization parameters. In addition, a built in USB port allows for transfer of these parameters to a computer for printing or storage of cycle data.

Both BioClaves offer three cycle options (standard programs), which are preset for the sterilization of liquids, wrapped instruments or unwrapped instruments/plasticware. A fourth option "Dry Only" is also available for additional drying time to be added to the end of a cycle. For special applications, requiring variations in cycle parameters, all settings on the BioClaves are fully adjustable.

## Technical Data:

B4000-M (BioClave Mini)	
Chamber Volume:	8L
Max. Pressure:	29 PSI / 2 Bar
Chamber Dimensions:	6.7 x 12.5 in. / 17 x 31 cm
Tray Dimensions:	4.75 x 9.75 in. / 12 x 24.8 cm
Exterior Dimensions: (W x D x H)	20 x 13.5 x 12.9 in. 51 x 34 x 33 cm
Weight:	74 lbs (33 kg)
Electrical:	115 or 230V, 50-60Hz, 950W
Warranty:	1 Year
B4000-16 (BioClave 16)	
Chamber Volume:	16L
Max. Pressure:	29 PSI / 2 Bar
Chamber Dimensions:	9 x 13.75 in. / 23 x 35 cm
Tray Dimensions:	6.5 x 10.75 in. / 16.5 x 27 cm
Exterior Dimensions: (W x D x H)	22 x 17.5 x 15.7 in. 56 x 44.5 x 40 cm
Weight:	89 lbs (40 kg)
Electrical:	115 or 230V, 50-60Hz, 1600W
Warranty:	1 Year

\*115V with US plug. For 230V (EU plug), please add (-E).  
This product is intended for research use only.



## BioClave™ 28 Research Autoclave

**BioCLAVE™ 28**  
RESEARCH AUTOCLAVE



- + Accepts bottles/flasks up to 2L
- + Fully automatic, just press start
- + Adjustable sterilization times
- + USB port for digital documentation of records
- + Built in water tank, does not require connection to an external water supply

With similar operation to the BioClave Mini and BioClave 16, the new 28 liter model features an increased chamber size with a diameter of 32cm. With this larger internal chamber, the BioClave 28 is our only model capable of sterilizing 1 and 2 liter flasks and bottles.

Despite the increased chamber size, the unit is still relatively compact, suitable for benchtop use. Operation is fully automatic, meaning all segments of operation (fill, sterilize, exhaust and dry) commence and run to completion by simply pressing "Start". An optional thermal mini-printer is also available for providing a record of sterilization parameters. In addition, a built in USB port allows for transfer of these parameters to a computer for printing or storage of cycle data.

All BioClaves offer three cycle options (standard programs), which are preset for the sterilization of liquids, wrapped instruments or unwrapped instruments/plasticware. A "Dry Only" option is also available for additional drying time to be added to the end of a cycle. For special applications, requiring variations in cycle parameters, the cycle times are fully adjustable.



Bottle/Flask Capacity	B4000-28
100ml Media Bottle	42
250ml Media Bottle	11
500ml Media Bottle	8
1L Media Bottle	6
2L Media Bottle	2
125ml Erlenmeyer Flask	30
250ml Erlenmeyer Flask	8
500ml Erlenmeyer Flask	6
1L Erlenmeyer Flask	3
2L Erlenmeyer Flask	2

### Ordering Information:

Item No.	Description:
B4000-28*	BioClave Autoclave (28L)
B4000-P*	Printer for BioClave series
B4000-PA	Extra roll of paper for B4000-P

This product is intended for research use only.

### Technical Data:

B4000-28 (BioClave)	
Chamber Volume:	28L
Max. Pressure:	30.5 PSI / 2 Bar
Chamber Dimensions:	12.6 x 16.4 in. 32 x 41.7 cm
Exterior Dimensions: (W x D x H)	25 x 25 x 22 in. 63.5 x 63.5 x 55.9
Weight:	209 lbs (95kg)
Electrical:	230V ONLY (accepts 208 to 240V) 50-60Hz, 2300W
Warranty:	1 Year

# Temperature Control Equipment

Pg. 30



myBlock™ Dry Baths

Pg. 31



isoBlock™ 247 Dry Baths

Pg. 32



myBlock™ Mini  
Heating/Cooling Dry Baths

Pg. 33



myBath™ Water Baths

Pg. 34



SB-12L Shaking Water Bath





**Pg. 35**

Roto-Therm™ Incubated Rotators



**Pg. 36**

Incu-Shaker™ Mini Shaking Incubator



**Pg. 37**

IncuShaker™ 10L Shaking Incubators



**Pg. 38**

MultiTherm™ Heating/Cooling Vortexers



**Pg. 39**

CoolCube™  
Microtube/PCR Plate Cooler



**Pg. 39**

Hybex™ Media Storage Bottles





## myBlock™ Series Digital Dry Baths



**myBLOCK™**

- + Hinged cover improves uniformity and conserves energy
- + Optional external temperature probe for control of actual sample temperature
- + Unique Quick-Flip™ universal micro-block

Benchmark's myBlock™ series are the first digital dry baths to include advanced microprocessor controls, timed operation and a removable, hinged lid. In addition, an optional external temperature feedback probe can be positioned directly inside a sample tube, providing real-time control and monitoring of **actual** sample temperature.

Both the single and dual block models can be ordered in a configuration that includes our unique Quick-Flip™ blocks. These universal blocks accept tubes from 0.5 to 2.0ml and with just a quick flip to the other side, accommodate 0.2ml tubes, PCR strips or (in the dual block model only) a PCR plate. In addition, a wide variety of blocks are available for tubes up to 50ml.

### Ordering Information:

Item No.	Description:
BSH5001-1B*	myBlock I single chamber with 1 x BSWCMB
BSH5002-2B*	myBlock II dual chamber with 2 x BSWCMB
BSH5001*	myBlock I single chamber, without blocks
BSH5002*	myBlock II dual chamber, without blocks
BSH-TP1	Optional External temperature sensor
BSWCMB	Block, Quick-Flip, 24 x 1.5/2.0ml, 14 x 0.5ml, 6 x PCR strips / 48 x 0.2ml (& in dual model only) one PCR plate
BSW1500	Block, 24 x 1.5ml
BSW1520	Block, 24 x 1.5/2.0ml
BSW05	Block, 24 x 0.5ml
BSW5MT	Block, 12 x 5.0ml snap cap centrifuge tubes
BSW15	Block, 12 x 15ml**
BSW50	Block, 5 x 50ml**
BSW10	Block, 20 x 10mm (or 20 x 2.0ml)
BSW13	Block, 20 x 13mm (Blood Collection Tubes)**
BSWBCT	Block, 12 x 13mm & 8 x 16mm (Blood Collection Combi-Block)**
BSW1516	Block, 12 x 15-16mm (or 12 x 10ml)
BSW02	Block, 48 x 0.2ml tubes or 6 PCR tube strips
BSWPCR2	Block, 1 x 96-well PCR Plate (2 block model only)
BSWPCR1	Block, 1 x 96-well PCR Plate (1 block model)
BSWMT	Block, 1 x Micro Plate (2 block model only)
BSWHEM	Block, 48 x Hematocrit tubes (1.9mm)
BSW01	Block, solid - for slides or custom machining

\*115V with US plug. For 230V (EU plug), please add (-E).

\*\*Tube height may prevent the transparent lid from closing.

Available with: **Quick-Flip™** universal micro-block Patent Pending

*Flip Over*

All purpose blocks for:

- ✓ 0.5ml tubes
- ✓ 1.5ml tubes
- ✓ 2.0ml tubes
- ✓ 0.2ml tubes
- ✓ 0.2ml strips
- ✓ PCR Plate

Item: BSH5002-2B

Three possible block configurations in dual model:

Side 1 & Side 1	Side 1 & Side 2	Side 2 & Side 2
48 x 1.5/2.0ml 28 x 0.5ml	24 x 1.5/2.0ml 14 x 0.5ml 48 x 0.2ml	96 x 0.2ml or One PCR Plate*

\*Single block chamber in myBlock I prevents compatibility with PCR plates.



Video  
Demonstration

### Technical Data:

Temp. Range:	Ambient +5° to 105°C
Temp. Accuracy:	± 0.25°C
Temp. Increments:	0.1°C
Temp. Uniformity:	± 0.2°C
Timer:	1min. to 99 hr & 59 min.
Dimensions (W x D x H):	
Single:	7 x 10 x 5 in. / 18 x 25.5 x 13 cm
Dual:	6.3 x 14.5 x 5 in. / 16 x 36.5 x 13 cm
Electrical:	115V or 230V, 50-60 Hz, 120W (single) / 240W (dual)
Warranty:	2 Years

## isoBlock™ Digital Dry Bath



**isoBLOCK™**  
Two independent block chambers

- + Two isolated chambers
- + Independent time & temperature control
- + Hinged cover improves uniformity and conserves energy
- + Unique Quick-Flip™ Universal Micro-Block



Video  
Demonstration

The unique IsoBlock™ contains two isolated block chambers. Each chamber is controlled independently, allowing the dry bath to serve as two dry baths in one. The hinged (and removable) lid is designed with a dividing wall. When the lid is closed this dividing wall acts as a barrier, preventing air transfer between chambers.

The control panel features large digital displays of both time and temperature. At any point, either setting of a block can be adjusted, without affecting the settings of the other block.

A wide variety of blocks are available for accommodating nearly all popular tubes sizes. In addition, the unique Quick-Flip™ universal blocks accept tubes from 0.5 to 2.0ml and, with just a quick flip to the other side, accommodates 0.2ml tubes or PCR strips.



IsoBlock shown with lid open

### Technical Data:

Temp. Range:	<b>Ambient +5° to 105°C</b>
Temp. Accuracy:	<b>+/- 0.25°C</b>
Temp. Increments:	<b>0.1°C</b>
Temp. Uniformity:	<b>+/- 0.2°C</b>
Timer:	<b>1min. to 99 hr &amp; 59 min.</b>
Dimensions (W x D x H):	<b>6.3 x 14.5 x 5 in. 16 x 37 x 12.7 cm</b>
Electrical:	<b>115V or 230V, 50-60 Hz, 240W</b>
Warranty:	<b>2 Years</b>

### Ordering Information:

Item No.	Description:
<b>BSH6000*</b>	<b>IsoBlock Dry Bath with two independent chambers</b>
BSWCMB	Block, Quick-Flip, 24 x 1.5/2.0ml, 14 x 0.5ml and 6 x PCR strips / 48 x 0.2ml
BSW1500	Block, 24 x 1.5ml
BSW1520	Block, 24 x 1.5/2.0ml
BSW05	Block, 24 x 0.5ml
BSW5MT	Block, 12 x 5.0ml centrifuge tubes
BSW15	Block, 12 x 15ml **
BSW50	Block, 5 x 50ml**
BSW10	Block, 20 x 10mm (or 20 x 2.0ml)
BSW13	Block, 20 x 13mm (Blood Collection Tubes)**
BSWBCT	Block, 12 x 13mm & 8 x 16mm (Blood Collection Combi-Block)**
BSW1516	Block, 12 x 15-16mm (or 12 x 10ml)
BSW02	Block, 48 x 0.2ml tubes or 6 PCR tube strips
BSWPCR1	Block, 1 x 96-well PCR Plate
BSWHEM	Block, 48 x Hematocrit tubes (1.9mm)
BSW01	Block, solid - for slides or custom machining

\* 115V with US plug. For 230V (EU plug), please add (-E).

\*\* Tube height may prevent lid from closing, temperature accuracy may be affected.

## myBlock™ Heating / Cooling Mini Dry Baths



CE

With its compact construction, broad temperature range, and multiple block options, the myBlock Mini is the perfect tool for laboratory incubations. The simple touch pad controls and a digital display provide for "set and walk away" temperature selection and unrivaled accuracy.

While perfect for bench use, the optional 12V adapter expands the utility of the myBlock Mini to field use. At less than 4.3 inches wide, myBlock Mini is truly the first personal heat block.

### Technical Data:

Model:	BSH200	BSH300
Temp. Range:	Amb. +5° to 100°C	Amb. -25° to 100°C
Min. Programmable Temperature:	20°C	0°C
Temp. Accuracy:	± 0.5°C	± 0.5°C
Temp. Increments:	0.1°C	0.1°C
Temp. Uniformity:	+/- 0.2°C	+/- 0.2°C
Dimensions: (W x D x H)	4 x 6 x 4.5 in. 10.2 x 15 x 11.5 cm	4.3 x 6.4 x 5.5 in. 11 x 16.2 x 14 cm
Weight:	2lbs (1kg)	2lbs (1kg)
Electrical:	100-240V 50-60 Hz, 50W	100-240V 50-60 Hz, 50W
Warranty:	2 Years	2 Years

**myBLOCK™ Mini**

- + Compact, fits on any crowded benchtop
- + Available in heat only, or heat & cool versions
- + Exchangeable blocks for 0.2 to 50ml tubes
- + Clear cover improves temperature uniformity
- + Link 2 consecutive temperature steps (cooling model only)



### Ordering Information:

Item No.	Description:
BSH200*	myBlock Mini Digital Dry Bath
BSH300*	myBlock Mini Digital Dry Bath with cooling
BSH100-02	Block, 40 x 0.2ml or 5 PCR strips
BSH100-05	Block, 24 x 0.5ml
BSH100-15	Block, 15 x 1.5ml
BSH100-1520	Block, 15 x 1.5 or 2.0ml
BSH100-5MT	Block, 6 x 5ml conical (17mm diameter)**
BSH100-150	Block, 4 x 15ml**
BSH100-500	Block, 2 x 50ml**
BSH100-1232	Block, 15 x 2ml autosampler vials (12 x 32mm)
BSH100-1213	Block, 15 x 12-13mm diameter tubes & vacutainers**
BSH100-CV	Block, 8 x cuvettes
BSH100-CU	Block, solid (for custom machining)
BSH100-A12	12V vehicle power adapter

\*Includes US plug. For EU plug, please add (-E)

\*\*Block height may prevent lid from closing.



CE

For technical data, please see above (myBlock Mini).

Temp Accuracy: ± 0.3°C

**myBLOCK™ HL**  
With Heated Lid

**Prevents evaporation  
and condensation**

### Ordering Information:

Item No.	Description:
BSH200-HL*	myBlock HL Mini Digital Dry Bath with heated lid
BSH100-02	Block, 40 x 0.2ml or 5 PCR strips
BSH100-05	Block, 24 x 0.5ml
BSH100-15HL	Block, 15 x 1.5ml

\*Includes US plug. For EU plug, please add (-E).

The new myBlock™ HL is the first and only mini heat block featuring a heated lid for protecting samples against unwanted condensation and evaporation. Both the block and lid temperature can be selected independently, making this myBlock the ideal choice for the most temperature sensitive applications, including LAMP assays, immunoassays, enzyme reactions - anywhere reactant concentration is critical.



## myBath™ Digital Water Baths



**myBATH™ SERIES**  
The complete family of water baths

- + Digital accuracy and convenience
- + Seamless, stainless steel chamber
- + Quik-CAL™ user calibration function
- + Hinged lid is also removable



The myBath series water baths are designed to guarantee superior accuracy and performance in a compact footprint. Easy to use controls allow the user to digitally select and monitor settings. Adjustable in 0.1 degree increments, the temperature is shown on a large, 3-digit display. The proprietary Quik-CAL™ feature allows for simple, in-lab calibration. High efficiency insulation maintains temperature stability and uniformity within the bath, while keeping the housing cool to the touch.

All myBath models feature seamless, stainless steel chambers for easy cleaning and long life. The chambers resist rust and have no corners to collect dirt or contamination. The larger 8L and 12L units have drains for hassle-free water changes.

The 4L, 8L, and 12L models include a see-through cover that can be removed, or flipped back on a rear hinge to conserve bench space. The lid's gabled design\*\* will divert condensation to the front and back of the bath, away from samples. Racks are available to accommodate 1.5/2.0ml, 15ml and 50 ml tubes within the 4L, 8L and 12L baths. The myBath 4L is supplied with all three racks.

\*\*The 2L model includes a flat, removable lid and adjustable temperature in increments of 1°C.

### Ordering Information:

Item No.	Description:
B2000-2*	myBath 2L Digital Water Bath
B2000-4*	myBath 4L Digital Water Bath, includes tube racks for 1.5/2.0, 15 and 50ml tubes
B2000-8*	myBath 8L Digital Water Bath
B2000-12*	myBath 12 L Digital Water Bath

\*115V with US plug. For 230V (EU plug), please add (-E).

### Accessory Tube Racks:

#### Tube racks *included* with myBath 4L!



Item Number	Description:	Rack Capacity	
		4 Liter	8/12 Liter
B2000-4-T5	Tube rack for 40 x 0.5ml tubes	1	2
B2000-4-T1520	Tube rack for 48 x 1.5/2.0ml tubes	1 (Included)	2
B2000-4-T150	Tube rack for 41 x 15ml tubes	1 (Included)	0
B2000-4-T500	Tube rack for 15 x 50ml tubes	1 (Included)	0
B2000-8-T150	Tube rack for 76 x 15ml tubes	0	1
B2000-8-T500	Tube rack for 30 x 50ml tubes	0	1

### Technical Data:

	2 Liter	4 Liter	8 Liter	12 Liter
Temperature Range:	Ambient +5° to 100°C			
Temp. Accuracy:	± 0.2°C at 37°C		±0.5°C at 37°C	
Temp. Uniformity:	± 0.2°C at 37°C			
Exterior (W x D x H):	6.5 x 8 x 6 in.	7.7 x 13.9 x 9 in.	10.5 x 17.5 x 12.4 in.	10.7 x 17.5 x 16.2 in.
Interior (W x D x H):	5.5 x 6 x 4 in.	5.3 x 9.4 x 5.5 in.	10.4 x 12.8 x 5.9 in.	10.4 x 12.8 x 7.9 in.
Weight:	4.5 lbs (2.4 kg)	15 lbs (6.8 kg)	17 lbs (7.7 kg)	17 lbs (7.7 kg)
Electrical:	115 or 230V, 50-60Hz, 250W-700W			
Warranty:	2 Years			

# SB-12L Shaking Water Bath



CE

- + Orbital shaking motion
- + Included spring platform accepts tubes, bottles and flasks
- + Compact design, conserves bench space
- + Digital control and display of time, temperature, and speed

This compact shaking water bath utilizes the well proven, beltless motor drive system from the Benchmark Orbi-Shaker™ Series, with the addition of precision temperature control up to 80°C.

The seamless, stainless steel chamber has a 12 liter capacity. The unit is supplied complete with a universal spring platform for securing 15 & 50ml test tubes, as well as Erlenmeyer flasks and media bottles up to 1 liter. A hinged and removable lid is also included to reduce energy waste, prevent splashing and divert condensation away from samples.

## Capacity Chart:

	Bottles/Tubes	Flasks
0.5ml	40	N/A
1.5/2.0ml	40	N/A
15ml	63	N/A
50ml	15/30	12
125ml	8	8
250ml	4	3
500ml*	2	2
1000ml*	2	1

\*Height of vessel may limit ability to close included lid.

Easy to use controls allow the user to digitally select and monitor time, temperature and shaking speed, while a constant feedback system ensures accuracy over each parameter.

Optional test tube racks are available for microtubes, and custom-designed racks can also be made available by request.



SB-12L with 15mL conical tubes



SB-12L with 50mL conical tubes

## Technical Data:

Temperature Range:	Ambient +5° to 80°C
Temperature Increments:	0.1°C
Temperature Uniformity	± 0.2°C (at 37°C)
Temperature Accuracy:	±0.3°C (at 37°C)
Shaking Speed Range:	30 to 200rpm
Speed Increments:	1rpm
Shaking Orbit:	25mm (1")
Platform Dimensions:	6.5 x 8 in. / 16.5 x 20.5cm
Exterior Dimensions: (W x D x H)	12.2 x 13.25 x 12 in. / 32 x 34 x 30 cm
Capacity:	12 Liter
Timer:	1 min. to 48 hours / continuous
Weight:	31 lbs. (14 kg)
Electrical:	115 or 230V, 50-60Hz, 300W
Warranty:	2 Years

## Ordering Information:

Item No.	Description:
SB0012*	SB-12L Shaking Water Bath with universal spring platform for tubes, bottles and flasks
SB0012-T1520	Optional rack for 1.5/2.0ml microtubes
SB0012-T5	Optional rack for 0.5ml microtubes

\*115V with US plug. For 230V (EU plug), please add (-E).



## Roto-Therm™ Incubated Rotator



- + Rotated mixing with temperature control
- + Includes tube holders for common tube sizes
- + Available with variable speed control and advanced shaking/mixing modes:
  - + Mix (oscillating)
  - + Pause
  - + Rock

Benchmark's new Roto-Therm series of rotating mixers provide a wide range of mixing capabilities. Suitable for an array of laboratory applications including resuspension, protein binding, nucleic acid purification, histochemistry, hybridization, etc, the mixers include interchangeable tube holders for accomodating all common tube sizes from 0.5ml to 50ml. The motion can be adjusted from vertical (end over end) mixing, to horizontal (rolling or hybridization style) mixing.

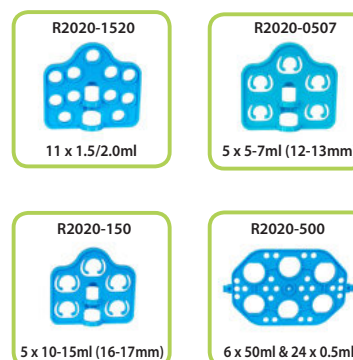
For applications requiring temperature control, the Roto-Therm series can be digitally programmed to maintain chamber temperatures of ambient +5°C to 60°C and include an "in-lab" calibration function for ensuring accurate temperature control. For applications where temperature control is not required, the economical Roto-Mini models are available (pg. 30).

Roto-Therm rotators are available in the "Plus" configuration. The Plus models provide the following additional features:

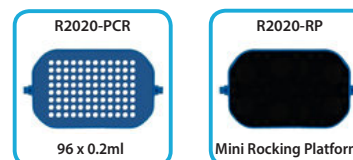
Variable speed: 5 to 70rpm  
"Mix" function: Rotating in combination w/ oscillations (increased mixing)  
"Pause" function: Rotating with intermittent "stops" during rotation  
"Rock" function: Back and forth, gentle rocking motion (see-saw)

The Plus models also offer an additional rocking platform (4.5 x 3 in.), as well as a 96 x 0.2ml tube/strip/plate holder for mixing PCR vessels in the "Mix" (oscillating) mode

### Included Tube Holders:



### Optional Tube Holders:



### Technical Data:

Speed Range: H2020:	<b>24rpm</b>
H2024:	<b>5 to 70rpm</b>
Mixing Modes: H2020:	<b>N/A</b>
H2024:	<b>Mix, Pause &amp; Rock</b>
Temperature:	<b>Ambient +5° to 60°C</b>
Max Capacity:	<b>1.5ml/2.0ml: 44 15ml:16 50ml: 6</b>
Dimensions:	<b>11.6 x 8.5 x 9 in / 29.5 x 21.6 x 22.9 cm</b>
Weight:	<b>9 lbs / 4 kg (H2020) / 10 lbs / 4.5kg (H2024)</b>
Electrical: H2020 H2024	<b>115 or 230V, 50-60Hz, 0.5A Universal Voltage 100 to 240V, 50-60Hz, 0.5A</b>
Warranty:	<b>2 Years</b>

### Ordering Information:

Item No.	Description:
H2020*	Roto-Therm Incubated Rotator with tube holders
H2024*	Roto-Therm Plus Incubated Rotator (variable speed) with tube holders
<b>Tube Holder Accessories</b>	
R2020-1520	Tube holder, 11 x 1.5/2.0ml, 2/pk (1 pack included)
R2020-0507	Tube holder, 5 x 5-7ml, 2/pk (1 pack included)
R2020-150	Tube holder, 4 x 10-15ml, 2/pk (1 pack included)
R2020-500	Tube holder, 6 x 50ml, 1 each (included)
R2020-PCR	Tube holder, 96 x 0.2ml, 12 x PCR strips or one PCR plate**
R2020-RP	Mini rocking platform with rubber mat, 4.5 x 3 in. **

\*115V with US plug. For 230V (EU plug), please add (-E).

\*\*Accessories are recommended for "Plus" models (H2024) only



# Incu-Shaker™ Mini Shaking Incubator



## INCUSHAKER™ Mini

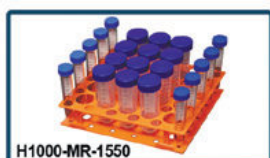
- + Domed lid accepts flasks up to 1L
- + Touch screen control panel
- + Extremely compact: just 11" wide
- + Exchange flask clamps in one second with MAGIC Clamp™ magnetic system

The Incu-Shaker™ Mini is the most compact shaking incubator in its class. While this shaking incubator has a remarkably small footprint, the interior is spacious enough to accept a 9.5 x 11" platform as well as clamps for a variety of flasks, tubes and other common vessels. The standard platform (included) features a non-slip, rubber coated surface, ideal for tissue culture flasks, Petri dishes and staining trays.

The convenient MAGIC Clamp™ platform is also available for use with Erlenmeyer flasks and test tube racks. This unique, magnetic attachment method is the easiest way to instantly change between flask clamps of different sizes.



The *INSTANT* flask attachment system



H1000-MR-1550



H1000-P-SP



Video Demonstration



### Technical Data:

Temperature Range:	Ambient +5° to 70°C
Temperature Increments:	0.1°C
Temperature Uniformity	± 0.25 °C
Temperature Accuracy:	±0.1 °C
Shaking Speed Range:	30 to 300rpm
Speed Increments:	1rpm
Shaking Orbit:	19mm (3/4")
Platform Dimensions:	9.5 x 11.5 in. / 23.5 x 29 cm
Exterior Dimensions (W x D x H):	11 x 16.2 x 13 in. / 28 x 41 x 33 cm
Height with Lid Open:	25 in. / 63 cm
Timer:	1 min. to 48 hours / continuous
Weight:	25 lbs. (11.5 kg)
Electrical:	115 or 230V, 50-60Hz, 300W
Warranty:	2 Years

### Ordering Information:

Item No.	Description:
H1001-M*	Incu-Shaker Mini with non-slip rubber mat
H1000-MR	MAGic Clamp universal platform (for flasks/tubes)
H1000-P-MP	4 x microplate platform (standard or deepwell)
H1000-P-SP	Spring rack platform, for uncommon vessels
<b>Accessories for H1000-MR MAGic Clamp Platform</b>	
H1000-MR-CMB	NEW! Adjustable flask clamp for MAGic clamp platform, accepts 125ml (max. 12), 250ml (max. 8) or 500ml (max. 5)
H1000-MR-1000	Flask clamp for MAGic clamp platform, 1000ml (max. 2)
H1000-MR-500	Flask clamp for MAGic clamp platform, 500ml (max. 5)
H1000-MR-250	Flask clamp for MAGic Clamp platform, 250ml (max. 8)
H1000-MR-125	Flask clamp for MAGic Clamp platform, 125ml (max. 12)
H1000-MR-50	Flask clamp for MAGic Clamp platform, 50ml (max. 20)
H1000-MR-MP	MAGic clamp for 1 x microplate (max. 4)
H1000-MR-1550	Tube Rack, 30x15 & 20x50ml (max. 1)
H1000-MR-T15	Tube Rack, 32 x 15ml (max. 2)
H1000-MR-T50	Tube Rack, 15 x 50ml (max. 2)
H1000-MR-TSR	Angled tube rack holder, adjustable tilt (max. 1)

\*115V with US plug. For 230V (EU plug), please add (-E).



## Incu-Shaker™ 10L Shaking Incubators

# INCUSHAKER™ 10L



- + Two models, heat only & heat/cool
- + Exceptional temperature uniformity
- + High capacity, up to 5 x 2L
- + Exchange flask clamps in one second with MAGic Clamp™ magnetic system
- + Optional shelf for Petri dishes, microplates, etc.

MAGIC CLAMP™



Video Demonstration



Incu-Shaker™ 10L is a heavy-duty performer, designed for high capacity loads and continuous use. Its outstanding temperature accuracy and uniformity are supported by proprietary heat distribution technology that ensures precisely maintained temperatures throughout the chamber. Inconsistencies due to stratification are reduced to negligible levels and the selected temperature is precisely maintained within 0.25%, even in the corners. In the Incu-Shaker 10LR model, a powerful compressor provides cooling as low as 15 degrees below ambient.

The powerful brushless induction drive is designed for years of trouble-free service, even under continuous use conditions with heavy loads. Noise and vibration are minimized by an advanced motor isolation system. Like other Incu-Shaker models, the 10L is built to last. A standard, rubber mat platform is included and is ideal for use with tissue culture flasks, Petri dishes, staining trays and other flat vessels. The convenient MAGic Clamp™ platform is also available for use with Erlenmeyer flasks and test tube racks. The unique, magnetic attachment method is the easiest way to instantly change between flask clamps of different sizes.

### Technical Data:

Temperature Range:	
H1010:	Ambient +5° to 60°C
H1012:	Ambient -15° to 60°C
Temperature Increments:	0.1°C
Temperature Uniformity:	± 0.25%
Temperature Accuracy:	±0.1°C
Shaking Speed Range:	30 to 300rpm
Speed Increments:	1rpm
Shaking Orbit:	19mm (3/4")
Platform Dimensions:	17.8 x 17.8 in. / 45 x 45 cm
Exterior Dimensions:	
H1010 (W x D x H):	20 x 26 x 19 in. / 51 x 65 x 47 cm
H1012 (W x D x H):	20 x 31 x 22 in. / 51 x 79 x 56 cm
Height (lid open):	38 in. / 96.5 cm
Timer	1 min. to 48 hours or continuous
Weight (H2010):	120 lbs (55 kg)
Weight (H1012):	170 lbs (78 kg)
Electrical (H2010):	120 or 230V, 50-60Hz, 450W
Electrical (H1012):	120 or 230V, 50-60Hz, 950W
Warranty:	2 Years

### Ordering Information:

Item No.	Description:
H2010*	Incu-Shaker 10L with non-slip rubber mat
H2012*	Incu-Shaker 10LR (refrigerated) w/ non-slip rubber mat
H1010-MR	MAGic Clamp Universal platform (for flasks/tubes)
H1010-P-SP	Spring rack platform, for uncommon vessels
H1010-SH	Shelf, 14 x 5.5" for Petri dishes, microplates, etc.
Accessories for H1010-MR MAGic Clamp Platform	
H1000-MR-CMB	<b>NEW!</b> Adjustable flask clamp for MAGic clamp platform, accepts 125ml (max. 36), 250ml (max. 25) or 500ml (max. 16)
H1000-MR-3000	Flask clamp for MAGic clamp platform, 3L (max. 4)
H1000-MR-2000	Flask clamp for MAGic clamp platform, 2L (max. 5)
H1000-MR-1000	Flask clamp for MAGic clamp platform, 1L (max. 9)
H1000-MR-500	Flask clamp for MAGic clamp platform, 500ml (max. 16)
H1000-MR-250	Flask clamp for MAGic Clamp platform, 250ml (max. 25)
H1000-MR-125	Flask clamp for MAGic Clamp platform, 125ml (max. 36)
H1000-MR-50	Flask clamp for MAGic clamp platform, 50ml (max. 49)
H1000-MR-MP	Clamp, 1 x microplate, for MAGic Clamp platform (max.. 8)
H1000-MR-1550	Tube Rack, 30x15 & 20x50ml (max. 4)
H1000-MR-T15	Tube Rack, 32 x 15ml (max. 8)
H1000-MR-T50	Tube Rack, 15 x 50ml (max. 8)
H1000-MR-T600	Tube/Bottle Rack, 4 x 500/600ml conical bottle (max. 4)
H1000-MR-TSR	Angled tube rack holder, adjustable tilt (max. 1)

\*115V with US plug. For 230V (EU plug), please add (-E).

# MultiTherm™ Heating/Cooling Vortexer



The MultiTherm™ shaker is a temperature controlled vortexer, useful for a variety of molecular biology applications, including:

- Denaturation of DNA, RNA & proteins
- Lipid extractions
- Yeast and bacteria cultivation
- Restriction digests
- Reverse transcription
- DNA/plasmid isolation
- Gentle thawing of biological materials

## Technical Data:

Temp. Range (HC):	Ambient -20° to 100°C
Temp. Range (H):	Ambient +5° to 100°C
Heating Ramp Rate:	5.0°C / min.
Cooling Ramp Rate:	2.5°C / min. (HC only)
Temp. Accuracy:	± 1.0°C
Speed Range:	200 to 1500 rpm, or "off"
Motion / Orbit:	Orbital / 3mm
Capacity:	Per selected block
Dimensions: (W x D x H)	8.25 x 11.5 x 8.25 in. 21 x 29 x 21 cm
Weight:	18lb. (8kg)
Electrical:	115V or 230V, 50-60Hz, 500W
Warranty:	2 Years

**MULTI-THERM™**  
COOL - HEAT - SHAKE

- + Temperature control from 0° to 100°C
- + Exchangeable blocks, for tube sizes 0.2ml to 50ml
- + Precision contoured wells for uniform thermal transfer
- + Two models: Heat/Cool or Heat only
- + Sequence link function for linking or repeating programs (HC model only)

Despite its modest footprint, the MultiTherm accommodates all common laboratory tubes and plates, including as many as 6x50ml tubes. Speed, temperature and time are set digitally and current as well as set values are continuously shown on the LCD. A heat only model, as well as a heat and cool model are available. The HC model includes a sequence link function for linking together temperature profiles. An integral over-temperature control ensures long life, safety and sample integrity. Blocks are sold separately.

## Ordering Information:

Item No.	Description:
H5000-HC*	MultiTherm Shaker with heating and cooling
H5000-H*	MultiTherm Shaker with heating only
H5000-02	Block, 96 x 0.2ml or 1 PCR plate
H5000-05	Block, 54 x 0.5ml
H5000-CMB	Block, combination, 15x0.5ml & 20x1.5ml
H5000-15	Block, 35 x 1.5ml
H5000-20	Block, 35 x 2.0ml
H5000-12	Block 24 x 12mm (200-1200rpm / Amb.-10° to 100°C)
H5000-150	Block, 12 x 15ml (200-750rpm / Amb.-10° to 100°C)
H5000-500	Block, 6 x 50ml (200-750rpm / Amb.-10° to 100°C)
H5000-MP	Block, 1 x microplate (Amb. -10 to 60°C)
H5000-1232	Block, 24 x 2ml HPLC / Autosampler vials (12x32mm)
H5000-5MT	Block, 12 x 5ml centrifuge tubes (conical)
H5000-DWMP	Block, 1 x deep well microplate (max. height, 54mm)
H5000-CU	Block, custom drilled, for tubes/vials up to 40mm tall
H5000-WB	Block, for liquids, beads, etc. (chamber: 4 x 2.6 x 1")

\*115V with US plug. For 230V (EU plug), please add (-E).

**INCU-MIXER™ MP**  
HEATED MICROPLATE VORTEXER



- + Heated lid prevents condensation
- + Accepts a variety of microplates
- + Available in two-plate or four-plate format
- + Temperature control up to 70°C

**Vortex mixing motion, up to 1200rpm**

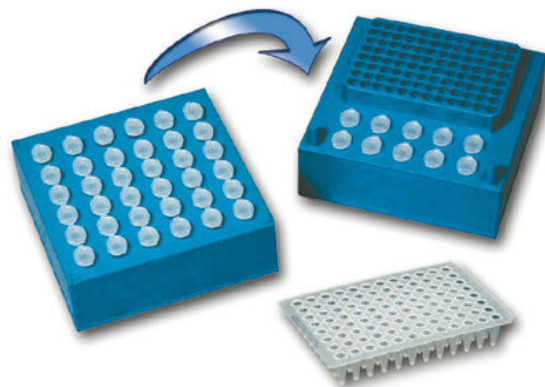
## Ordering Information:

Item No.	Description:
H6002*	Incu-Mixer MP2, 2 position incubated plate vortexer
H6004*	Incu-Mixer MP4, 4 position incubated plate vortexer
BT1500-A1520	Optional adapter, 20 x 1.5/2.0ml for microplate shakers
BT1500-A05	Optional adapter, 20 x 0.5ml for microplate shakers

\*115V with US plug. For 230V (EU plug), please add (-E).



## CoolCube™ Microtube and PCR Plate Cooler



**CoolCube™**

- + Maintains 0°C for 4 hours
- + Ideal for:  
1.5ml & 2.0ml microtubes  
0.2ml PCR tubes & strips  
96 well PCR plates
- + Also for use as a PCR workstation

The CoolCube™ is designed to keep samples cold on the lab bench without the mess of a melting ice bucket. Simply place the CoolCube in a freezer overnight and it's ready for use, keeping samples cold, but not frozen. Maintains temperature at approximately 0° C for up to four hours.

### Ordering Information:

Item No.	Description:
R1000	CoolCube Microtube and PCR Plate Cooler

### Technical Data:

Temperature:	0°C for up to 4 hours
Capacity:	
Top Side:	36 x 1.5/2.0ml tubes
Bottom Side:	96 x 0.2ml tubes 12 x 0.2ml strips 1 x 96 well PCR plate 10x 1.5/2.0ml
Dimensions: (W x D x H)	5.6x5.6x2.5 in. 14.3 x 14.3x 6.4 cm
Weight:	2 lbs (1 kg)
Warranty:	2 Years

## hybex™ Media Storage Bottles



**hybex™**

- + Borosilicate 3.3 hybex™ glass
- + Autoclavable caps (GL45) & drip rings
- + Permanent enamel graduation markings
- + Large area for bottle marking/identification
- + Autoclavable, reuseable & breakage resistant
- + Five cap colors

### Ordering Information:

Item No.	Description:
B3000-50-B	Bottle, 50ml with GL32 blue cap, 10/pk.
B3000-100-B*	Bottle, 100ml with standard (GL45) blue cap, 10/pk.
B3000-250-B*	Bottle, 250ml with standard (GL45) blue cap, 10/pk.
B3000-500-B*	Bottle, 500ml with standard (GL45) blue cap, 10/pk.
B3000-1000-B*	Bottle, 1L with standard (GL45) blue cap, 10/pk.
B3000-2000-B*	Bottle, 2L with standard (GL45) blue cap, 10/pk.
B3000-SP-B*	Bottle, Starter Pack with standard (GL45) blue cap, includes, 2x100ml, 3x250ml, 3x500ml and 2x1 L
B3000-CAP-B*	Replacement cap, standard blue (GL45), 10/pk.
B3000-CAP2	Replacement cap, standard blue (GL32), 10/pk.
B3000-CAP-HTC	High temperature caps, red (GL45), up to 180°, 10/pk.

### Technical Data:

Material:	hybex borosilicate glass (3.3)
Cap Thread Size:	GL45
Temperature Range:	-70° to 500°C
Sterilization:	Autoclave
Cap Material:	Polypropylene (140°C)
Cap Colors:	Standard blue, green, purple, yellow, white or assorted

\*Please replace (-B) with (-G) for green caps, (-P) for purple caps, (-Y) for yellow caps, (-W) for white caps or (-AS) for assorted caps (2 of each color).

# Accuris™ Instruments

Pg. 41



Accuris™ Microplate Reader

Pg. 42



Accuris™ PCR Reagents





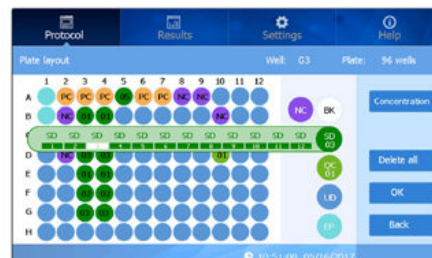
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## Technical Data:

Control and Display:	7" touch screen, 800x480 pixels
Light Source:	Quartz halogen lamp, 6V/10W
Wavelength Range:	340-750nm
Read-out Range:	0-4.000 Abs
Linearity (405nm)	0-2.00 Abs <+1% 2-4.000 Abs <+2%
Resolution:	0.001 Abs
Accuracy (405nm)	+1% (0-3 Abs) +2% (3-4 Abs)
Precision (405nm)	CV≤0.2% (0-3 Abs) CV≤1.0% (3-4 Abs)
Test Speed:	<6 seconds for a 96 well plate
Shaking:	Slow, medium or fast mode
User Interface:	Menu driven software, touch screen
Storage:	200 programs, 100,000 test records
Ports:	USB for printer, mouse, PC and flash drive
Dimensions: (W x D x H)	11.6 x 17 x 8.75 in. 29.5 x 44 22.5 cm
Weight:	22 lbs (10kg)
Electrical:	115V or 230V, 50Hz to 60Hz
Warranty:	2 years

- + Intuitive, 7 inch color touch screen control panel
- + Filter based system, wavelength range from 340 to 750nm
- + Stand alone system, with USB flash drive for data transfer
- + Absorbance range: 0.0 to 4.000 Abs
- + Integrated, multispeed plate shaker

## Plate Layout Menu



SmartReader™ 96 is a welcome addition to laboratories routinely measuring concentration or absorbance in 96 well plates. A stand alone system, the reader features a seven inch color touch screen, multispeed shaker, intuitive software and graphical interface - no computer connections or additional software are needed.

Four popular filters are preinstalled: 405, 450, 492 and 630nm. Twenty six additional filters are available to cover the range from 340 to 750nm. Eight filters can be loaded at one time in the integrated filter wheel and selected during programming. Operation and programming are intuitive and achieved using the touch screen or optional mouse. Menus allow the user to choose the filter, set shaking parameters and enter details of the plate layout and choose details for the reading protocol and data calculations. Immediately after reading a plate, the measured data is available on the screen, as are calculations, curve fitting and data interpretation.

The USB port can be used for firmware updates as well as data transfer and printing.

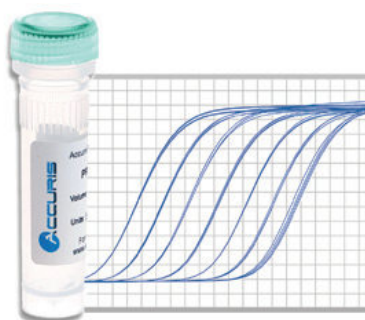
## Ordering Information:

Item No.*	Description:
MR9600	SmartReader™ 96 Microplate Absorbance Reader for 96 well plates, 115V
Accessories	
MR9600-TP	Thermal Printer for SmartReader 96
MR9600-PA	Extra paper rolls for MR9600-TP printer, pk/4
MR9600-340	Filter for SmartReader 96 Microplate Reader, 340 nm
MR9600-380	Filter for SmartReader 96 Microplate Reader, 380 nm
MR9600-405	Filter for SmartReader 96 Microplate Reader, 405 nm
MR9600-415	Filter for SmartReader 96 Microplate Reader, 415 nm
MR9600-420	Filter for SmartReader 96 Microplate Reader, 420 nm
MR9600-450	Filter for SmartReader 96 Microplate Reader, 450 nm
MR9600-470	Filter for SmartReader 96 Microplate Reader, 470 nm
MR9600-490	Filter for SmartReader 96 Microplate Reader, 490 nm
MR9600-492	Filter for SmartReader 96 Microplate Reader, 492 nm
MR9600-510	Filter for SmartReader 96 Microplate Reader, 510 nm
MR9600-520	Filter for SmartReader 96 Microplate Reader, 520 nm
MR9600-532	Filter for SmartReader 96 Microplate Reader, 532 nm
MR9600-540	Filter for SmartReader 96 Microplate Reader, 540 nm
MR9600-546	Filter for SmartReader 96 Microplate Reader, 546 nm
MR9600-560	Filter for SmartReader 96 Microplate Reader, 560 nm
MR9600-562	Filter for SmartReader 96 Microplate Reader, 562 nm
MR9600-570	Filter for SmartReader 96 Microplate Reader, 570 nm
MR9600-578	Filter for SmartReader 96 Microplate Reader, 578 nm
MR9600-590	Filter for SmartReader 96 Microplate Reader, 590 nm
MR9600-595	Filter for SmartReader 96 Microplate Reader, 595 nm
MR9600-600	Filter for SmartReader 96 Microplate Reader, 600 nm
MR9600-620	Filter for SmartReader 96 Microplate Reader, 620 nm
MR9600-630	Filter for SmartReader 96 Microplate Reader, 630 nm
MR9600-646	Filter for SmartReader 96 Microplate Reader, 646 nm
MR9600-650	Filter for SmartReader 96 Microplate Reader, 650 nm
MR9600-663	Filter for SmartReader 96 Microplate Reader, 663 nm
MR9600-680	Filter for SmartReader 96 Microplate Reader, 680 nm
MR9600-690	Filter for SmartReader 96 Microplate Reader, 690 nm
MR9600-700	Filter for SmartReader 96 Microplate Reader, 700 nm
MR9600-750	Filter for SmartReader 96 Microplate Reader, 750 nm

\*115V with US plug. For 230V (EU plug), add (-E).



## qMAX™ Green Real Time PCR Mix



- Superior sensitivity and fast cycling with exceptional results
- Includes Accuris Hot Start Taq for greater specificity & accuracy
- Early  $C_t$  values and detection across a broad dynamic range
- Ideal for low copy number templates

Item No.	Description	Reactions (20µl volume)
PR2000-L-100	qMAX Green, Low ROX qPCR Mix	100
PR2000-L-500	qMAX Green, Low ROX qPCR Mix	500
PR2000-L-1000	qMAX Green, Low ROX qPCR Mix	1000
PR2000-H-100	qMAX Green, High ROX qPCR Mix	100
PR2000-H-500	qMAX Green, High ROX qPCR Mix	500
PR2000-H-1000	qMAX Green, High ROX qPCR Mix	1000
PR2000-N-100	qMAX Green, No ROX qPCR Mix	100
PR2000-N-500	qMAX Green, No ROX qPCR Mix	500
PR2000-N-1000	qMAX Green, No ROX qPCR Mix	1000

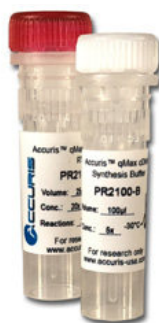
## qMAX™ Probe Real Time PCR Mix



- Same high efficiency for multiplex and singleplex reactions
- Includes Accuris Hot Start Taq Polymerase for greater specificity and accuracy
- Compatible with popular hydrolysis and beacon probes
- Early  $C_t$  values and detection across a broad dynamic range

Item No.	Description	Reactions (20µl volume)
PR2001-L-100	qMAX Probe, Low ROX qPCR Mix	100
PR2001-L-500	qMAX Probe, Low ROX qPCR Mix	500
PR2001-L-1000	qMAX Probe, Low ROX qPCR Mix	1000
PR2001-H-100	qMAX Probe, High ROX qPCR Mix	100
PR2001-H-500	qMAX Probe, High ROX qPCR Mix	500
PR2001-H-1000	qMAX Probe, High ROX qPCR Mix	1000
PR2001-N-100	qMAX Probe, No ROX qPCR Mix	100
PR2001-N-500	qMAX Probe, No ROX qPCR Mix	500
PR2001-N-1000	qMAX Probe, No ROX qPCR Mix	1000

## qMAX™ cDNA Synthesis Kit



- Rapidly generate high quality qPCR ready cDNA
- Thermostable qMax RT with RNase inhibitor
- Optimized for use across a wide dynamic range
- Two tube format for easy reaction set up
- Blend of oligo (dT) and hexamer primers for unbiased, complete sequence representation

Item No.	Description	Reactions (20µl volume)
PR2100-C-25	qMAX cDNA Synthesis Kit	25
PR2100-C-100	qMAX cDNA Synthesis Kit	100
PR2100-C-250	qMAX cDNA Synthesis Kit	250

## qMAX™ First Strand cDNA Synthesis Flex Kit



- Rapidly generate high quality qPCR ready cDNA
- Thermostable qMax RT with RNase inhibitor
- Optimized for use across a wide dynamic range
- Separate tubes of oligo (dT) and hexamer primers for greater flexibility in assay design

Item No.	Description	Reactions (20µl volume)
PR2110-C-50	qMAX cDNA Synthesis Flex Kit	50
PR2110-C-200	qMAX cDNA Synthesis Flex Kit	200

**Benchmark**  
*Scientific* 

19-20



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PO Box 709  
Edison, NJ 08818  
Phone: 908-769-5555  
Fax: 732-313-7007  
Email: [Info@BenchmarkScientific.com](mailto:Info@BenchmarkScientific.com)  
[www.BenchmarkScientific.com](http://www.BenchmarkScientific.com)