Laboratory Equipment Catalogue

Do More With OHAUS

From stirrers to shakers, lifts to clamps, the newly expanded OHAUS portfolio is filled with products perfect for life science laboratories, giving you countless opportunities to maximize your reach in your customer's laboratories. Don't limit yourself to just measurement—Do More!

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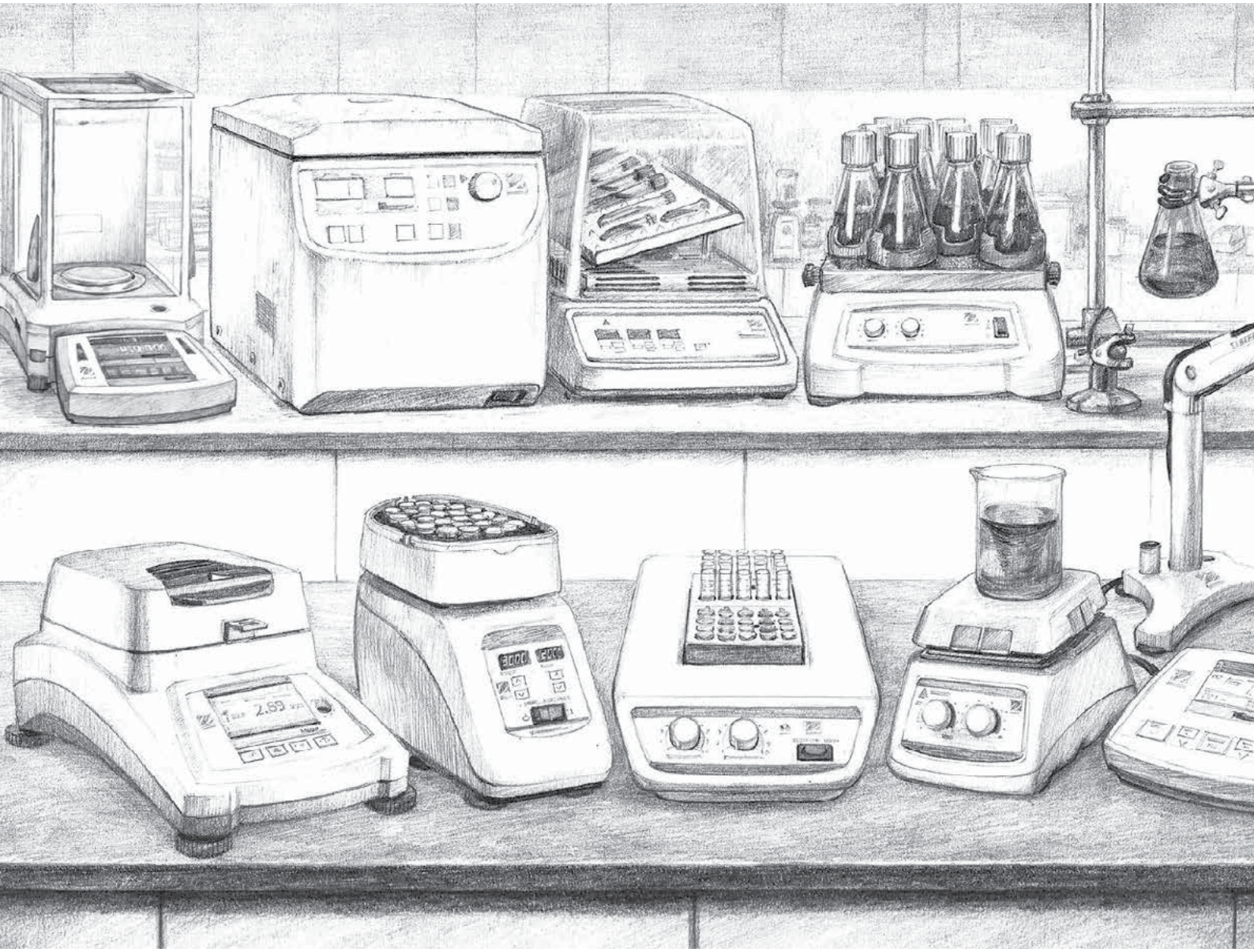

Do More With OHAUS

As a company that's focused on meeting the demands of our growing customer base, we have made a natural progression to extend our expertise to every corner of the laboratory with the introduction of our laboratory equipment and analytical instruments. We now offer a complete portfolio manufactured to deliver efficiency and precision in the laboratory. Our expanded portfolio of laboratory essentials now includes centrifuges, shakers, vortex mixers, hotplate-stirrers, dry block heaters, clamps, lab supports and electrochemistry products.

From idea generation and conception, through engineering design and manufacture, to service and ultimate disposal—we manage the entire lifecycle of our products. As a valued dealer, you can ***Do More With OHAUS***—order all your weighing products, laboratory equipment and analytical instruments from one trusted supplier, and have access to one source for product design, sales and marketing support, procurement and service, and product disposal.

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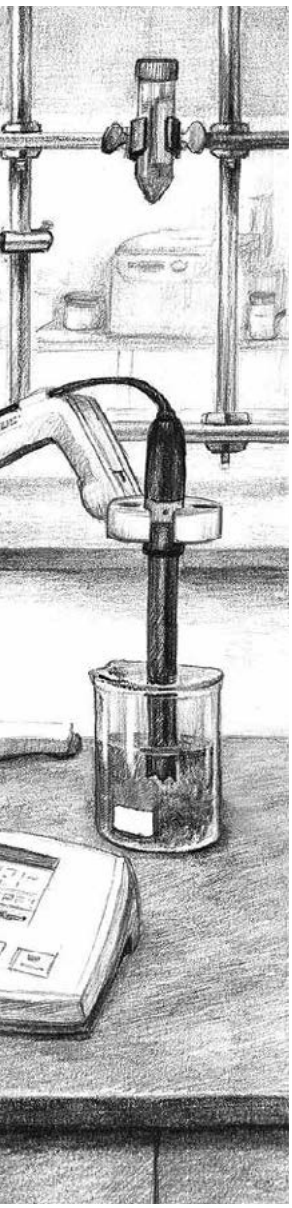

Lab Equipment & Analytical Instruments

- Increasing Efficiency in the Laboratory

  Efficiency is at the heart of every product that we design. Our products are designed for intuitive operation with Man-Machine Interfaces (MMI) which allow for minimal setup and training.

- Ensuring Operator Safety

  While streamlining laboratory work, we're also committed to ensuring operator safety. All our products are regulatory-listed for safety with a nationally recognized testing lab, and electrical laboratory equipment is tested 100% prior to shipping.

- Emphasis on Quality Control

  Our products are designed and developed in accordance with ISO 9001 Quality System—a Failure Mode & Effects Design (FMEA) process for design and process control, and computer modeling for design provides advanced simulation and analysis.

- High-Quality at an Affordable Price

  Similar to our weighing portfolio, our laboratory equipment and analytical instruments offer durability and reliability at an affordable price point. Our products undergo the Highly Accelerated Life Test (HALT) during the engineering development process to ensure that they meet reliability standards.

- Flexibility to Accommodate a Range of Applications

  Our products feature multiple levels of functionality within each category, and are available in various capacities to suit your application and budget.

Why Partner with Our Lab Equipment Portfolio?

- A Trusted Brand in the Lab

  OHAUS is among the most trusted brands in laboratories and is synonymous with quality, reliability and durability at an affordable price point. We are an established supplier of weighing products, laboratory equipment and analytical instruments with American roots.

- The OHAUS Business Model

  OHAUS is committed to the business model of selling through distribution rather than directly to end users. We actively market OHAUS products to generate thousands of leads that we deliver to our dealers every year. Working with OHAUS means more than representing an outstanding portfolio; it's also about being supported by a strong brand and team—every step of the way.

- Grow Your Revenues with Cross-Selling Opportunities

  One of the greatest benefits of partnering with our new portfolio is that you already have an established laboratory customer base that's looking to purchase additional laboratory essentials (similar to what our new portfolio offers.) The new products would also help you to attract new customers who are looking for laboratory equipment, and offer more cross-selling opportunities.

- Global Customer Service & Technical Support Expertise

  No matter where in the world you are located, you can rely on our expert customer service and technical support teams to provide quick solutions to any product or service-related questions.

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Reciprocating Shakers

Open Air Shakers Selection Guide




Product Family	Light Duty Orbital Shakers	Light Duty Orbital Shakers	Light Duty Orbital Shakers	Light Duty Orbital Shakers
Model	SHLD0415AL	SHLD0403DG	SHLD0415DG	SHLDMP03DG
Speed Range	40 to 300 rpm	100 to 1200 rpm	40 to 300 rpm	100 to 1200 rpm
Timer	N/A	1 second to 160 hours	1 second to 160 hours	1 second to 160 hours
Motion	Orbital	Orbital	Orbital	Orbital
Orbit	15 mm	3 mm	15 mm	3 mm
Max Weight Capacity	8 lbs	8 lbs	8 lbs	4 microplates / 2 micro-tube racks
Audible Alarm	—	●	●	●
Load Sensor	—	—	—	—
Motor Type	Brushless DC Motor	Brushless DC Motor	Brushless DC Motor	Brushless DC Motor
CO_2 Environment	●	●	●	●
Overload Protection	—	●	●	●
User Calibration (Speed)	—	—	—	—
RS232 Interface	—	—	—	—
Included Tray (L × W)	11.75 × 8.75"	11.75 × 8.75"	11.75 × 8.75"	11 × 7.75"
Tray / Platform Options (L × W)	N/A	Adjustable Platform	Adjustable Platform	N/A




Product Family	Extreme Environment Shakers	Heavy Duty Shaker	Heavy Duty Shaker	Heavy Duty Shaker
Model	SHEX1619DG	SHHD1619AL	SHHD1619DG	SHHD2325AL
Speed Range	15 to 500 rpm	25 to 500 rpm	15 to 500 rpm	25 to 500 rpm
Timer	1 second to 160 hours	1 to 120 minutes	1 second to 160 hours	1 to 120 minutes
Motion	Orbital	Orbital	Orbital	Orbital
Orbit	19 mm	19 mm	19 mm	25 mm
Max Weight Capacity	35 lbs	35 lbs	35 lbs	50 lbs
Audible Alarm	●	—	●	—
Load Sensor	●	—	●	—
Motor Type	Brushless DC Motor	Brushless DC Motor	Brushless DC Motor	Brushless DC Motor
CO_2 Environment	●	●	●	●
Overload Protection	●	—	●	—
User Calibration (Speed)	●	—	●	—
RS232 Interface	●	—	●	—
Included Tray (L × W)	11 × 13"	11 × 13"	11 × 13"	18 × 24"
Tray / Platform Options (L × W)	11 × 13", 13 × 13", 18 × 18", 18 × 24" Adjustable Platform Separatory Funnel Platform	11 × 13", 13 × 13", 18 × 18", 18 × 24" Adjustable Platform Separatory Funnel Platform	11 × 13", 13 × 13", 18 × 18", 18 × 24" Adjustable Platform Separatory Funnel Platform	18 × 24", 18 × 30" Adjustable Platform Large Vessel Carrier Platform

● Yes

Open Air Shakers

Product Family	Heavy Duty Orbital Shaker	Heavy Duty Orbital Shaker	Heavy Duty Orbital Shaker	Heavy Duty Orbital Shaker	Heavy Duty Orbital Shaker
Model	SHHD2325DG	SHHD4525DG	SHHD4550DG	SHHD6825DG	SHHD6850DG
Speed Range	20 to 500 rpm	15 to 500 rpm	15 to 300 rpm	15 to 500 rpm	15 to 300 rpm
Timer	1 second to 160 hours	1 second to 160 hours	1 second to 160 hours	1 second to 160 hours	1 second to 160 hours
Motion	Orbital	Orbital	Orbital	Orbital	Orbital
Orbit	25 mm	25 mm	51 mm	25 mm	51 mm
Max Weight Capacity	50 lbs	100 lbs	100 lbs	150 lbs	150 lbs
Audible Alarm	●	●	●	●	●
Load Sensor	●	●	●	●	●
Motor Type	Brushless DC Motor	Brushless DC Motor	Brushless DC Motor	Brushless DC Motor	Brushless DC Motor
CO_2 Environment	●	●	●	●	●
Overload Protection	●	●	●	●	●
User Calibration (Speed)	●	●	●	●	●
RS232 Interface	●	●	●	●	●
Included Tray (L × W)	18 × 24"	24 × 24"	24 × 24"	24 × 36"	24 × 36"
Tray / Platform Options (L × W)	18 × 24", 18 × 30" Adjustable Platform Large Vessel Carrier Platform	24 × 24" Large Vessel Carrier Platform	24 × 24" Large Vessel Carrier Platform	24 × 36" Large Vessel Carrier Platform	24 × 36" Large Vessel Carrier Platform

Product Family	Rocking Shaker	Rocking Shaker	Waving Shaker	Waving Shaker	Reciprocating Shaker
Model	SHRK04DG	SHRK07AL1	SHWV02DG	SHWV02AL	SHRC0719DG
Speed Range	1 to 50 rpm*	1 to 75 rpm*	1 to 30 rpm*	1 to 75 rpm*	20 to 300 rpm
Timer	1 second to 160 hours	1 minute to 120 minutes	1 second to 160 hours	1 minute to 120 minutes	1 second to 160 hours
Motion	Rocking	Rocking	Waving	Waving	Reciprocating
Orbit	Tilt Angle: 0 to 15°	Tilt Angle: 0 to 15°	Tilt Angle: 0 to 20° *	Tilt Angle: 0 to 16°	Stroke: 19 mm
Max Weight Capacity	10 lbs**	16 lbs**	5 lbs**	5 lbs**	15 lbs
Audible Alarm	●	—	●	—	●
Load Sensor	—	—	—	—	●
Motor Type	Stepper Motor	Stepper Motor	Stepper Motor	Stepper Motor	Brushless DC Motor
CO_2 Environment	●	—	●	—	●
Overload Protection	●	—	●	—	●
User Calibration (Speed)	—	—	—	—	●
RS232 Interface	—	—	—	—	●
Included Tray (L × W)	12.75 × 10"	14 × 11"	11.75 × 8.75"	14 × 11"	11 × 13"
Tray / Platform Options (L × W)	Stacking Tray	Stacking Tray	Stacking Tray	—	11 × 13", 13 × 13", 18 × 18", 18 × 24" Separatory Funnel Platform

● Yes * Maximum speed/tilt angle may vary with heavy or unbalanced loads. ** Centered on tray.

Light Duty Orbital Shakers

Light Duty Shakers are designed for applications with loads under 8 lb. Choose from two orbits and speed ranges to optimize your sample mix. Microprocessor-controlled and available as an analog model with basic speed control, two digital models which include a non-slip mat that can be removed to mount flask clamps and tube racks directly onto the tray, and a digital Microplate Shaker model which can hold up to 4 microplates or 2 microtube racks.

- Microprocessor-Controlled for Consistent Shaking Action
- Triple Eccentric Drive Provides Reliable Service and Continuous Duty Operation
- Safety Features Include Speed Ramping and Overload Protection

Light Duty Orbital Shakers

- Variable speed microprocessor control
- Low profile design
- 15 mm orbit

The OHAUS Light Duty Analog Shaker is an economical shaker designed for educational labs or basic shaking applications.

Operating Features:

Low Profile Design: Takes up less space and easily fits into most hoods and incubators.
Microprocessor Control: The variable speed microprocessor control provides consistent uniform shaking action.
Triple Eccentric Drive: Permanently lubricated ball bearings and maintenance free, brushless DC motor provide reliable service and continuous duty operation.
Adjustment Knob: Basic speed knob with dial settings from 1 to 10.

Safety Features:

Speed Ramping Feature: Slowly increases speed to desired set-point to avoid splashing.
Spill-Resistant Design: Channels fluids away from internal components.

Operating Conditions:

Unit can be run in cold rooms, incubators, and CO_2 environments from 0 to 40°C (32 to 104°F), maximum 80% relative humidity, non-condensing.

Applications:

Blotting techniques, staining/destaining, and general shaking procedures.

Ordering Information:

Units include a detachable, 3-wire cord and plug. Units are also supplied with an 11.75 × 8.75" (29.9 × 22.2 cm) non-skid rubber mat.

Specifications	
Speed Range	40 to 30 rpm
Orbit	15 mm (0.6“)
Maximum Weight Capacity	8 lbs (3.6 kg)
Tray Material	Aluminum
Tray Dimensions (L × W)	11.75 × 8.75" (29.9 × 22.2 cm)
Overall Dimensions (L × W × H)	16.3 × 10.0 × 4.0” (41.3 × 254 × 10.2 cm)
Ship Weight	25 lbs (11.3 kg)

Description	Model	Item Number	County Code
Analog Light Duty Orbital Shaker	SHLD0415AL	30391893	VN, MY, SG, ID, IN
Analog Light Duty Orbital Shaker	SHLD0415AL	30391894	AU, NZ

Open Air Shakers

Light Duty Orbital Shakers

- General purpose shaker
- LED displays for speed and time
- 3 mm or 15 mm orbit

The OHAUS Digital Light Duty Orbital Shaker is ideal for a wide variety of shaking applications. Tray includes a non-skid rubber mat. Remove the mat to mount a variety of optional flask clamps or test tube racks directly onto the tray.

Operating Features:

Low Profile Design: Takes up less space and easily fits into most hoods and incubators.
Microprocessor Control: The variable speed microprocessor control provides consistent uniform shaking action. Microprocessor will display last set-point and will restart if power is interrupted.
Triple Eccentric Drive: Permanently lubricated ball bearings and maintenance free, brushless DC motor provide reliable service and continuous duty operation.
LED Display: Touch pad controls with easy-to-read, independent LED displays for speed and time allow operator to view both settings at once. Provides repeatable and accurate results every time and is easily visible across lab benches. Timer will display elapsed time or, when programmed to user defined limit, will shut off unit when time reaches zero. Display will show last used settings, even after power has been turned off.

Safety Features:

Overload Protection: Audible and visual signals will activate when system detects an obstruction or overload of the tray.
Speed Ramping Feature: Slowly increases speed to desired set-point to avoid splashing.
Audible Alarm: In timed mode, alarm will sound when the time reaches zero.
Spill-Resistant Design: Channels fluids away from internal components.

Operating Conditions:

Units can be run in cold rooms, incubators, and CO_2 environments.
SHLD0403DG: -10 to 60°C (14 to 140°F)
SHLD0415DG: -10 to 40°C (14 to 104°F)
Maximum 80% relative humidity, non-condensing.

Applications:

Cell cultures, immunoassays, and protein studies.

Ordering Information:

Units include a detachable, 3-wire cord and plug. Units are also supplied with an 11.75 × 8.75" (29.9 × 22.2 cm) non-skid rubber mat.

Specifications	
Speed Range SHLD0403DG SHLD0415DG	 100 to 1200 rpm 40 to 300 rpm
Speed Accuracy	+/-2% above 100 rpm +/-2 rpm below 100 rpm
Timer	1 second to 160 hours
Orbit SHLD0403DG SHLD0415DG	 3 mm (0.12") 15 mm (0.6")
Maximum Weight Capacity	8 lbs (3.6 kg)
Tray Material	Aluminum
Tray Dimensions (L × W)	11.75 × 8.75" (29.9 × 22.2 cm)
Overall Dimensions (L × W × H)	16.3 × 10.0 × 4.0" (41.3 × 25.4 × 10.2 cm)
Ship Weight	25 lbs (11.3 kg)

Description	Model	Item Number	Country Code
Digital Light Duty Orbital Shaker 3 mm Orbit	SHLD0403DG	30391900	VN, MY, SG, ID, IN
Digital Light Duty Orbital Shaker 3 mm Orbit	SHLD0403DG	30391901	AU, NZ
Digital Light Duty Orbital Shaker 3 mm Orbit	SHLD0403DG	30391903	TH, PH
Digital Light Duty Orbital Shaker 15 mm Orbit	SHLD0415DG	30391914	VN, MY, SG, ID, IN
Digital Light Duty Orbital Shaker 15 mm Orbit	SHLD0415DG	30391915	AU, NZ

Light Duty Orbital Shakers

- Holds up to 4 microplates or 2 micro-tube racks
- Accepts deep well plates
- Timer with audible alarm

The OHAUS Microplate Shaker is ideal for immunoassays and general microplate shaking, and is designed to be used in a variety of environmental conditions.

Operating Features:

Low Profile Design: Takes up less space and easily fits into most hoods and incubators. Base offers durability and added stability.
Microprocessor Control: The variable speed microprocessor control provides consistent uniform shaking action. Microprocessor will display last set-point and will restart if power is interrupted.
Triple Eccentric Drive: Permanently lubricated ball bearings and maintenance free, brushless DC motor provide reliable service and continuous duty operation.
LED Display: Touch pad controls with easy-to-read, independent LED displays for speed and time allow operator to view all settings at once. Provides repeatable and accurate results every time and is easily visible across lab benches. Timer will display elapsed time or, when programmed to user defined limit, will shut off unit when time reaches zero. Display will show last used settings, even after power has been turned off.

Safety Features:

Overload Protection: Audible and visual signals will activate when system detects an obstruction or overload of the tray.
Speed Ramping Feature: Slowly increases speed to desired set-point to avoid splashing.
Audible Alarm: In timed mode, alarm will sound when the time reaches zero.
Spill-Resistant Design: Channels fluids away from internal components.

Operating Conditions:

Unit can be run in cold rooms, incubators, and CO_2 environments from -10 to 60°C (14 to 140°F), maximum 80% relative humidity, non-condensing.

Applications:

ELISA assays and DNA studies.

Ordering Information:

Units include a detachable, 3-wire cord and plug.

Specifications	
Speed Range	100 to 1200 rpm
Speed Accuracy	± 2%
Timer	1 second to 160 hours
Orbit	3 mm (0.12")
Maximum Weight Capacity	4 microplates or 2 micro-tube racks
Tray Material	Aluminum
Tray Dimensions (L × W)	11 × 7.75" (27.9 × 19.7 cm)
Overall Dimensions (L × W × H)	16.3 × 10.0 × 4.0" (41.3 × 25.4 × 10.2 cm)
Ship Weight	25 lbs (11.3 kg)

Description	Model	Item Number	Country Code
Light Duty Microplate Shaker	SHLDMP03DG	30391907	VN, MY, SG, ID, IN
Light Duty Microplate Shaker	SHLDMP03DG	30391908	AU, NZ

Extreme Environment Shakers

Ideal for applications that require CO_2 and humidity for optimal cell growth, our Extreme Environment Shakers are designed for use in extreme environments such as CO_2 incubators. A remote controller (that magnetically attaches to the outside of most incubators) allows for external control of settings, and the shaker base is placed inside of the incubator. Microprocessor control ensures consistent shaking while safely ramping to the set speed.

- Patented Accu-Drive Shaking System Ensures Accuracy and Speed Control
- Control Settings Externally without Disturbing the Incubator Atmosphere
- Touchpad Control With Independent LED Displays for Speed and Time

Extreme Environment Shakers

- Designed for use in CO_2 Incubators
- Can withstand extreme environments up to 100% humidity
- Remote controller magnetically attaches to most incubators

The OHAUS Extreme Environment Orbital Shaker is designed for a wide range of applications including cell cultures that require CO_2 and humidity for optimal cell growth. The microprocessor control provides consistent uniform shaking while safely ramping to the set speed.

Operating Features:

Accu-Drive Shaking System: The exclusive patented Accu-Drive Shaking System delivers exceptional speed control, accuracy, and durability. The shaking system continuously monitors shaking speed and maintains set-point, even under changing loads. When unit is set to a speed above 100 rpm, the speed accuracy is ± 1% of set speed. When set under 100 rpm, speed accuracy is ± 1 rpm.
Microprocessor Control: The variable speed microprocessor control provides consistent uniform shaking action. Microprocessor will display last set-point and will restart if power is interrupted.
Triple Eccentric Drive: Permanently lubricated ball bearings and maintenance free, brushless DC motor provide reliable service and continuous duty operation.
Remote Controller: The control module is designed to sit outside of the incubator. Settings can be easily viewed or changed from outside of the incubator without disturbing the incubator's atmosphere. The thin ribbon cable is 5.5 feet long and easily passes underneath an incubator door via incubator's utility port. Controller magnetically attaches to most incubator doors or can sit on a lab bench.
LED Display: Touch pad controls with easy-to-read, independent LED displays for speed and time allow operator to view both settings at once. Provides repeatable and accurate results every time and is easily visible across lab benches. Timer will display elapsed time or, when programmed to user defined limit, will shut off unit when time reaches zero. Display will show last used settings, even after power has been turned off.
RS232 Interface: Provides two-way communication for data logging and unit control.
Speed Calibration Mode: Allows user to automatically recalibrate speed display.

Safety Features:

Overload Protection: Audible and visual signals will activate when system detects an obstruction.
Speed Ramping Feature: Slowly increases speed to desired set-point to avoid splashing.
Audible Alarm: In timed mode, alarm will sound when the time reaches zero. Alarm has optional mute function which can be set from the touch pad control.
Spill-Resistant Design: Channels fluids away from internal components.

Operating Conditions:

Unit can be run in cold rooms, incubators, and CO_2 environments from -10 to 60°C (14 to 140°F), up to 100% humidity.

Applications:

Cell cultures, solubility studies, and extraction procedures.

Ordering Information:

Unit includes a detachable, 3-wire cord and plug. Unit is also supplied with an 11 × 13" (27.9 × 33 cm) non-skid rubber mat.

Description	Model	Item Number	Country Code
Extreme Environment Shaker	SHEX1619DG	30391816	VN, MY, SG, ID, IN
Extreme Environment Shaker	SHEX1619DG	30391817	AU, NZ

Specifications		
Speed Range	15 to 500 rpm	
Speed Accuracy	above 100 rpm ± 1% of set speed below 100 rpm ± 1 rpm	
Timer	1 second to 160 hours	
Orbit	0.75" (19 mm)	
Maximum Weight Capacity	35 lbs (16 kg)	
Tray Material	Aluminum	
Tray Dimensions (L × W)	11 × 13" (27.9 × 33 cm)	
Overall Dimensions (L × W × H)	Shaker	11.6 × 14.0 × 5.9" (29.4 × 35.5 × 14.9 cm)
	Remote	5.5 × 14.0 × 4.4" (15.0 × 35.6 × 11.2 cm)
Ship Weight	49 lbs (22.2 kg)	

Heavy Duty Orbital Shakers

With load capacities from 35 to 150 lb and over 70 accessory options, OHAUS Heavy Duty Shakers are designed to handle a range of applications. Available as analog or digital models with microprocessor control to provide variable speed and consistent shaking, while ramping to the set speed. Microprocessor displays the last set-point and will restart if power is interrupted. Built-in tray and non-slip rubber mat included with all models.

- Patented Accu-Drive Shaking System Ensures Accuracy and Speed Control
- Touchpad Control With Independent LED Displays for Speed/Time on Digital Models
- Safety Features Include Speed Ramping and Load Sensor

Heavy Duty Orbital Shaker

- Microprocessor controls
- Continuous or timed operation
- 35 lb weight capacity

The OHAUS 16 kg Capacity Analog Heavy Duty Orbital Shaker is designed for a wide range of applications that require basic shaking control. Shaker provides reproducible motion that is evenly distributed throughout the entire surface of the tray.

Operating Features:

Microprocessor Control: The variable speed microprocessor control provides consistent uniform shaking action. The shaker will automatically restart after a power interruption.
Triple Eccentric Drive: Permanently lubricated ball bearings and maintenance free, brushless DC motor provide reliable service and continuous duty operation.
Adjustment Knobs: Basic speed and time knobs with dial settings from 1 to 10.

Safety Features:

Speed Ramping Feature: Slowly increases speed to desired set-point to avoid splashing.
Spill-Resistant Design: Channels fluids away from internal components.

Operating Conditions:

Unit can be run in cold rooms, incubators, and CO_2 environments from 0 to 40°C (32 to 104°F), maximum 80% relative humidity, non-condensing.

Applications:

Bacterial suspensions, staining/destaining, and general mixing.

Ordering Information:

Unit includes a detachable, 3-wire cord and plug. Unit is also supplied with an 11 × 13" (27.9 × 33 cm) non-skid rubber mat.

Specifications	
Speed Range	25 to 500 rpm
Timer	1 minute to 120 minutes
Orbit	19 mm (0.75")
Maximum Weight Capacity	35 lbs (16 kg)
Tray Material	Aluminum
Tray Dimensions (L × W)	11 × 13" (27.9 × 33 cm)
Overall Dimensions (L × W × H)	16.3 × 14.0 × 5.9" (41.3 × 35.5 × 14.9 cm)
Ship Weight	49 lbs (22.2 kg)

Description	Model	Item Number	Country Code
16 kg Capacity Analog Heavy Duty Orbital Shaker	SHHD1619AL	30391802	VN, MY, SG, ID, IN
16 kg Capacity Analog Heavy Duty Orbital Shaker	SHHD1619AL	30391803	AU, NZ

Open Air Shakers

Heavy Duty Orbital Shaker

- Exceptional speed control, accuracy and durability
- LED displays for speed and time
- Calibration mode for speed

The OHAUS 16 kg Capacity Digital Heavy Duty Orbital Shaker is designed for a wide range of applications, including cell cultures, that require accurate and repeatable results. The microprocessor control provides consistent uniform shaking while safely ramping to the set speed.

Operating Features:

Accu-Drive Shaking System: The exclusive patented Accu-Drive Shaking System delivers exceptional speed control, accuracy, and durability. The shaking system continuously monitors shaking speed and maintains set-point, even under changing loads. When unit is set to a speed above 100 rpm, the speed accuracy is ± 1% of set speed. When set under 100 rpm, speed accuracy is ± 1 rpm.
Microprocessor Control: The variable speed microprocessor control provides consistent uniform shaking action. Microprocessor will display last set-point and will restart if power is interrupted.
Triple Eccentric Drive: Permanently lubricated ball bearings and maintenance free, brushless DC motor provide reliable service and continuous duty operation.
LED Display: Touch pad controls with easy-to-read, independent LED displays for speed and time allow operator to view both settings at once. Provides repeatable and accurate results every time and is easily visible across lab benches. Timer will display elapsed time or, when programmed to user defined limit, will shut off unit when time reaches zero. Display will show last used settings, even after power has been turned off.
RS232 Interface: Provides two-way communication for data logging and unit control.
Speed Calibration Mode: Allows user to automatically recalibrate speed display.

Safety Features:

Load Sensor: A built-in load sensor detects unbalanced conditions and automatically reduces rpm to a safe speed to protect samples.
Overload Protection: Audible and visual signals will activate when system detects an obstruction or overload of the tray.
Speed Ramping Feature: Slowly increases speed to desired set-point to avoid splashing.
Audible Alarm: In timed mode, alarm will sound when the time reaches zero. Alarm has optional mute function which can be set from the touch pad control.
Spill-Resistant Design: Channels fluids away from internal components.

Operating Conditions:

Unit can be run in cold rooms, incubators, and CO_2 environments from -10 to 60°C (14 to 140°F), maximum 80% relative humidity, non-condensing.

Applications:

Cell cultures, solubility studies, and extraction procedures.

Ordering Information:

Unit includes a detachable, 3-wire cord and plug. Unit is also supplied with an 11 × 13" (27.9 × 33 cm) non-skid rubber mat.

Specifications	
Speed Range	15 to 500 rpm
Speed Accuracy	above 100 rpm ± 1% of set speed below 100 rpm ± 1 rpm
Timer	1 second to 160 hours
Orbit	19 mm (0.75") orbit
Maximum Weight Capacity	35 lbs (16 kg)
Tray Material	Aluminum
Tray Dimensions (L × W)	11 × 13" (27.9 × 33 cm)
Overall Dimensions (L × W × H)	16.3 × 14.0 × 5.9" (41.3 × 35.5 × 14.9 cm)
Ship Weight	49 lbs (22.2 kg)

Description	Model	Item Number	Country Code
16 kg Capacity Digital Heavy Duty Orbital	SHHD1619DG	30391811	VN, MY, SG, ID, IN
16 kg Capacity Digital Heavy Duty Orbital	SHHD1619DG	30391812	AU, NZ

Heavy Duty Orbital Shaker

- Microprocessor controls
- Continuous or timed operation
- 50 lb weight capacity

The OHAUS Analog 23 kg Capacity Heavy Duty Orbital Shaker is designed for applications with heavy duty loads. Shaker provides reproducible motion that is evenly distributed throughout the entire surface of the tray.

Operating Features:

Microprocessor Control: The variable speed microprocessor control provides consistent uniform shaking action. The shaker will automatically restart after a power interruption.
Triple Eccentric Drive: Permanently lubricated ball bearings and maintenance free, brushless DC motor provide reliable service and continuous duty operation.
Adjustment Knobs: Basic speed and time knobs with dial settings from 1 to 10.

Safety Features:

Speed Ramping Feature: Slowly increases speed to desired set-point to avoid splashing.
Spill-Resistant Design: Channels fluids away from internal components.

Operating Conditions:

Unit can be run in cold rooms, incubators, and CO_2 environments from 0 to 40°C (32 to 104°F), maximum 80% relative humidity, non-condensing.

Applications:

Bacterial suspensions, staining/destaining, and general mixing.

Ordering Information:

Units include a 3-wire cord and plug. Units are also supplied with an 18 × 24" (45.7 × 61 cm) non-skid rubber mat.

Specifications	
Speed Range	25 to 500 rpm
Timer	1 minute to 120 minutes
Orbit	25 mm (1")
Maximum Weight Capacity	50 lbs (22.7 kg)
Tray Material	Aluminum
Tray Dimensions	18 × 24" (45.7 × 61 cm)
Overall Dimensions (L × W × H)	24.0 × 26.7 × 5.9" (61.0 × 67.8 × 14.9 cm)
Ship Weight	109 lbs (49.5 kg)

Description	Model	Item Number	Country Code
Analog 23 kg Capacity Heavy Duty Orbital Shaker	SHHD2325AL	30391837	VN, MY, SG, ID, IN
Analog 23 kg Capacity Heavy Duty Orbital Shaker	SHHD2325AL	30391838	AU, NZ

Open Air Shakers

Heavy Duty Orbital Shaker

- Patented Accu-Drive Shaking System
- LED displays for speed and time
- 50 lb weight capacity

The OHAUS Digital 23 kg Capacity Heavy Duty Orbital Shaker is designed for a wide range of applications with larger or heavier loads that require accurate and repeatable results.

Operating Features:

Accu-Drive Shaking System: The exclusive patented Accu-Drive Shaking System delivers exceptional speed control, accuracy, and durability. The shaking system continuously monitors shaking speed and maintains set-point, even under changing loads. When unit is set to a speed above 100 rpm, the speed accuracy is ± 1% of set speed. When set under 100 rpm, speed accuracy is ± 1 rpm.
Microprocessor Control: The variable speed microprocessor control provides consistent uniform shaking action. Microprocessor will display last set-point and will restart if power is interrupted.
Triple Eccentric Drive: Permanently lubricated ball bearings and maintenance free, brushless DC motor provide reliable service and continuous duty operation.
LED Display: Touch pad controls with easy-to-read, independent LED displays for speed and time allow operator to view both settings at once. Provides repeatable and accurate results every time and is easily visible across lab benches. Timer will display elapsed time or, when programmed to user defined limit, will shut off unit when time reaches zero. Display will show last used settings, even after power has been turned off.
RS232 Interface: Provides two-way communication for data logging and unit control.
Speed Calibration Mode: Allows user to automatically recalibrate speed display.

Safety Features:

Load Sensor: A built-in load sensor detects unbalanced conditions and automatically reduces rpm to a safe speed to protect samples.
Overload Protection: Audible and visual signals will activate when system detects an obstruction or overload of the tray.
Speed Ramping Feature: Slowly increases speed to desired set-point to avoid splashing.
Audible Alarm: In timed mode, alarm will sound when the time reaches zero. Alarm has optional mute function which can be set from the touch pad control.
Spill-Resistant Design: Channels fluids away from internal components.

Operating Conditions:

Unit can be run in cold rooms, incubators, and CO_2 environments from -10 to 60°C (14 to 140°F), maximum 80% relative humidity, non-condensing.

Applications:

Cell cultures, solubility studies, and extraction procedures.

Ordering Information:

Units include a detachable, 3-wire cord and plug. Units are also supplied with an 18 × 24" (45.7 × 61 cm) non-skid rubber mat.

Specifications	
Speed Range	20 to 500 rpm
Speed Accuracy	above 100 rpm ± 1% of set speed below 100 rpm ± 1 rpm
Timer	1 second to 160 hours
Orbit	25 mm (1")
Maximum Weight Capacity	50 lbs (22.7 kg)
Tray Material	Aluminum
Tray Dimensions	18 × 24" (45.7 × 61 cm)
Overall Dimensions (L × W × H)	24.0 × 26.7 × 5.9" (61.0 × 67.8 × 14.9 cm)
Ship Weight	109 lbs (49.5 kg)

Description	Model	Item Number	Country Code
Digital 23 kg Capacity Heavy Duty Orbital Shaker	SHHD2325DG	30391844	VN, MY, SG, ID, IN
Digital 23 kg Capacity Heavy Duty Orbital Shaker	SHHD2325DG	30391845	AU, NZ

Heavy Duty Orbital Shaker

- Patented Accu-Drive Shaking System
- 100 lb weight capacity
- Available with either 1" or 2" orbit

The OHAUS Digital 45 kg Capacity Orbital Shaker is a large capacity shaker. They have a more powerful drive mechanism and larger orbits for optimal shaking of large vessels.

Operating Features:

Accu-Drive Shaking System: The exclusive patented Shaking System delivers exceptional speed control, accuracy, and durability. The shaking system continuously monitors shaking speed and maintains set-point, even under changing loads. When unit is set to a speed above 100 rpm, the speed accuracy is ± 1% of set speed. When set under 100 rpm, speed accuracy is ± 1 rpm.
Microprocessor Control: The variable speed microprocessor control provides consistent uniform shaking action. Microprocessor will display last set-point and will restart if power is interrupted.
Triple Eccentric Drive: Permanently lubricated ball bearings and maintenance free, brushless DC motor provide reliable service and continuous duty operation.
LED Display: Touch pad controls with easy-to-read, independent LED displays for speed and time allow operator to view both settings at once. Provides repeatable and accurate results every time and is easily visible across lab benches. Timer will display elapsed time or, when programmed to user defined limit, will shut off unit when time reaches zero. Display will show last used settings, even after power has been turned off.
RS232 Interface: Provides two-way communication for data logging and unit control.
Speed Calibration Mode: Allows user to automatically recalibrate speed display.

Safety Features:

Load Sensor: A built-in load sensor detects unbalanced conditions and automatically reduces rpm to a safe speed to protect samples.
Overload Protection: Audible and visual signals will activate when system detects an obstruction or overload of the tray.
Speed Ramping Feature: Slowly increases speed to desired set-point to avoid splashing.
Audible Alarm: In timed mode, alarm will sound when the time reaches zero. Alarm has optional mute function which can be set from the touch pad control.
Spill-Resistant Design: Channels fluids away from internal components.

Operating Conditions:

Units can be run in cold rooms, incubators, and CO_2 environments from -10 to 60°C (14 to 140°F), maximum 80% relative humidity, non-condensing.

Applications:

Cell cultures, solubility studies, and extraction procedures.

Ordering Information:

Units include a detachable, 3-wire cord and plug. Units are also supplied with a 24 × 24" (61 × 61 cm) non-skid rubber mat.

Specifications	
Speed Range SHHD4525DG SHHD4550DG	 15 to 500 rpm 15 to 300 rpm
Speed Accuracy	above 100 rpm ± 1% of set speed below 100 rpm ± 1 rpm
Timer	1 second to 160 hours
Orbit SHHD4525DG SHHD4550DG	 25 mm (1") 51 mm (2")
Maximum Weight Capacity	100 lbs (45.4 kg)
Tray Material	Aluminum
Tray Dimensions (L × W)	24 × 24" (61 × 61 cm)
Overall Dimensions (L × W × H)	28.7 × 26.7 × 6.7" (72.9 × 67.8 × 17.0 cm)
Ship Weight	200 lbs (90.8 kg)

Description	Model	Item Number	Country Code
Digital 45 kg Capacity Heavy Duty Orbital Shaker 1" Orbit	SHHD4525DG	30391865	VN, MY, SG, ID, IN
Digital 45 kg Capacity Heavy Duty Orbital Shaker 1" Orbit	SHHD4525DG	30391866	AU, NZ
Digital 45 kg Capacity Heavy Duty Orbital Shaker 1" Orbit	SHHD4525DG	30391868	TH, PH
Digital 45 kg Capacity Heavy Duty Orbital Shaker 2" Orbit	SHHD4550DG	30391872	VN, MY, SG, ID, IN
Digital 45 kg Capacity Heavy Duty Orbital Shaker 2" Orbit	SHHD4550DG	30391873	AU, NZ

Open Air Shakers

Heavy Duty Orbital Shaker

- Patented Accu-Drive Shaking System
- Available with either 1" or 2" orbit
- Calibration mode for speed

The OHAUS Digital 68 kg Capacity Orbital Shakers is the largest capacity shakers designed for the heaviest of loads. They have the most powerful drive mechanism of all the shakers and large orbits for optimal shaking of larger vessels.

Operating Features:

Accu-Drive Shaking System: The exclusive patented Accu-Drive Shaking System delivers exceptional speed control, accuracy, and durability. The system continuously monitors shaking speed and maintains set-point, even under changing loads. When unit is set to a speed above 100 rpm, the speed accuracy is ± 1% of set speed. When set under 100 rpm, speed accuracy is ± 1 rpm.
Microprocessor Control: The variable speed microprocessor control provides consistent uniform shaking action. Microprocessor will display last set-point and will restart if power is interrupted.
Triple Eccentric Drive: Permanently lubricated ball bearings and maintenance free, brushless DC motor provide reliable service and continuous duty operation.
LED Display: Touch pad controls with easy-to-read, independent LED displays for speed and time allow operator to view both settings at once. Provides repeatable and accurate results every time and is easily visible across lab benches. Timer will display elapsed time or, when programmed to user defined limit, will shut off unit when time reaches zero. Display will show last used settings, even after power has been turned off.
RS232 Interface: Provides two-way communication for data logging and unit control.
Speed Calibration Mode: Allows user to automatically recalibrate speed display.

Safety Features:

Load Sensor: A built-in load sensor detects unbalanced conditions and automatically reduces rpm to a safe speed to protect samples.
Overload Protection: Audible and visual signals will activate when system detects an obstruction or overload of the tray.
Speed Ramping Feature: Slowly increases speed to desired set-point to avoid splashing.
Audible Alarm: In timed mode, alarm will sound when the time reaches zero. Alarm has optional mute function which can be set from the touch pad control.
Spill-Resistant Design: Channels fluids away from internal components.

Operating Conditions:

Units can be run in cold rooms, incubators, and CO_2 environments from -10 to 60°C (14 to 140°F), maximum 80% relative humidity, non-condensing.

Applications:

Cell cultures, solubility studies, and extraction procedures.

Ordering Information:

Units include a detachable, 3-wire cord and plug. Units are also supplied with a 24 × 36" (61 × 91 cm) non-skid rubber mat.

Specifications	
Speed Range SHHD6825DG SHHD6850DG	 15 to 500 rpm 15 to 300 rpm
Speed Accuracy	above 100 rpm ± 1% of set speed below 100 rpm ± 1 rpm
Timer	1 second to 160 hours
Orbit SHHD6825DG SHHD6850DG	 25 mm (1") 51 mm (2")
Maximum Weight Capacity	150 lbs (68 kg)
Tray Material	Aluminum
Tray Dimensions (L × W)	24 × 36" (61 × 91 cm)
Overall Dimensions (L × W × H)	29.3 × 36.0 × 6.7" (74.4 × 91.4 × 17.0 cm)
Ship Weight	230 lbs (104.4 kg)

Description	Model	Item Number	Country Code
Digital 68 kg Capacity Heavy Duty Orbital Shaker 1" Orbit	SHHD6825DG	30391879	VN, MY, SG, ID, IN
Digital 68 kg Capacity Heavy Duty Orbital Shaker 1" Orbit	SHHD6825DG	30391880	AU, NZ
Digital 68 kg Capacity Heavy Duty Orbital Shaker 1" Orbit	SHHD6825DG	30391882	TH, PH
Digital 68 kg Capacity Heavy Duty Orbital Shaker 2" Orbit	SHHD6850DG	30391886	VN, MY, SG, ID, IN
Digital 68 kg Capacity Heavy Duty Orbital Shaker 2" Orbit	SHHD6850DG	30391887	AU, NZ

Rocking & Waving Shakers

OHAUS Rocking and Waving Shakers are designed for use in a range of lab applications in a variety of environmental conditions. Rocking Shakers provide a seesaw-like motion, while Waving Shakers offer a smooth, low-foaming, 3D wave motion for precise speed control. Available in microprocessor-controlled digital models and more economical analog models. All models include a non-slip mat, and most models are available with a stacking tray option.

- Microprocessor Control Provides Precise Control
- Tilt angle and speed adjustments can be made while unit is running
- Safety Features Include Speed Ramping and Overload Protection

Open Air Shakers

Rocking & Waving Shakers

- Variable control for speed, tilt and time
- 16 lb capacity
- Two-tier model doubles workable capacity

The OHAUS Analog Rocking Shaker is an easy and economical option for all of your rocking needs. The Rocking Shaker is ideal for cell culture and blotting applications and is designed to be used in a variety of environmental conditions. Rocker is supplied with an 14 × 11" (35.6 × 27.9 cm) non-skid rubber mat.

Operating Features:

Low Profile Design: Takes up less bench space and fits into most hoods and incubators. Two-tier option increases the capacity with the same footprint and provides a 3.5" (8.9 cm) clearance between platforms. Cast aluminum base offers durability and added stability

Microprocessor Control: The microprocessor control provides tilt adjustment which allows user to easily adjust rocking angle from 0 to 15° while unit is operating. Smooth speed control with low speed rocking motion.

Independent Control Knobs: Independent control knobs for speed, tilt, and time, allow for easy adjustments.

Safety Features:

Overload Protection: Audible signal will activate when system detects an obstruction or overload of the tray.

Speed Ramping Feature: Slowly increases speed to desired set-point to avoid splashing.

Timer: Timer will automatically stop rocking motion when timer reaches zero.

Spill-Resistant Design: Channels fluids away from internal components.

Operating Conditions:

Unit can be run in cold rooms, incubators, and CO_2 environments from -10 to 60°C (14 to 140°F), maximum 80% relative humidity, non-condensing.

Applications:

Staining and destaining gels, hybridization procedures, hematology, and blotting techniques.

Ordering Information:

Units include a detachable, 3-wire cord and plug. Units are also supplied with a 14 × 11" (35.6 × 27.9 cm) non-skid rubber mat. Two-tier models include a 2nd tray, non-skid mat and hardware.

Specifications		
Speed Range		1 to 75 rpm*
Tilt Angle		0 to 15°*
Timer		1 minute to 120 minutes
Maximum Weight Capacity		16 lbs (7.3 kg)**
Tray Material		Aluminum
Tray Dimensions (L × W)		14 × 11" (35.6 × 27.9 cm)
Overall Dimensions (L × W × H)	1 Tier	16.8 × 11.0 × 5.5" (42.5 27.9 14.0 cm)
	2 Tier	16.8 × 11.0 × 9.5" (42.5 × 27.9 × 24.1 cm)
Ship Weight		15.5 lbs (7 kg)

* Maximum speed/tilt angle may vary with heavy or unbalanced loads.
** Centered on tray.

Description	Model	Item Number	Country Code
Analog Rocking Shaker 1 Tier	SHRK07AL1	30391954	VN, MY, SG, ID, IN
Analog Rocking Shaker 1 Tier	SHRK07AL1	30391955	AU, NZ
Analog Rocking Shaker 1 Tier	SHRK07AL1	30391957	TH, PH
Analog Rocking Shaker 2 Tier	SHRK07AL2	30391961	VN, MY, SG, ID, IN
Analog Rocking Shaker 2 Tier	SHRK07AL2	30391962	AU, NZ

Rocking & Waving Shakers

- Electronic tilt adjustment from 0 to 15° while unit is operating
- Displays for speed, tilt angle and time
- Timer with audible alarm

The OHAUS Digital Rocking Shaker is ideal for cell culture work and is designed to be used in a variety of environmental conditions.

Operating Features:

Low Profile Design: Takes up less space and easily fits into most hoods and incubators. Cast aluminum base offers durability and added stability.
Microprocessor Control: The microprocessor control provides electronic tilt angle adjustment which allows user to easily adjust rocking angle from 0 to 15° while unit is operating. Precise speed control provides smooth, low-speed rocking motion down to 1 rpm.
LED Display: Touch pad controls with easy-to-read, independent LED displays for speed and tilt angle, and time allow operator to view all settings at once. Provides repeatable and accurate results every time and is easily visible across lab benches. Timer will display elapsed time or, when programmed to user defined limit, will shut off unit when time reaches zero. Display will show last used settings, even after power has been turned off.

Safety Features:

Overload Protection: Audible and visual signals will activate when system detects an obstruction or overload of the tray.
Speed Ramping Feature: Slowly increases speed to desired set-point to avoid splashing.
Audible Alarm: In timed mode, alarm will sound when the time reaches zero.
Spill-Resistant Design: Channels fluids away from internal components.

Operating Conditions:

Unit can be run in cold rooms, incubators, and CO_2 environments from -10 to 60°C (14 to 140°F), maximum 80% relative humidity, non-condensing.

Applications:

Staining and destaining gels, hybridization procedures, hematology, and blotting techniques.

Ordering Information:

Units include a detachable, 3-wire cord and plug. Units are also supplied with a 12.75 × 10" (32.4 × 25.4 cm) non-skid rubber mat.

Rocking Motion

Specifications	
Speed Range	1 to 50 rpm*
Speed Accuracy	± 1 rpm
Tilt Angle	0 to 15°*
Timer	1 second to 160 hours
Maximum Weight Capacity	10 lbs (4.5 kg)**
Tray Material	Aluminum
Tray Dimensions (L × W)	12.75 × 10" (32.4 × 25.4 cm)
Overall Dimensions (L × W × H)	16.8 × 10.0 × 5.5" (42.5 × 25.4 × 14.0 cm)
Ship Weight	15.5 lbs (7 kg)

* Maximum speed/tilt angle may vary with heavy or unbalanced loads.
** Centered on tray.

Description	Model	Item Number	Country Code
Digital Rocking Shaker 1 Tier	SHRK04DGUS	30391989	VN, MY, SG, ID, IN
Digital Rocking Shaker 1 Tier	SHRK04DGUS	30391990	AU, NZ

Open Air Shakers

Rocking & Waving Shakers

- Variable control for speed, tilt and time
- 5 lb capacity
- Large 14 × 11" Tray

The OHAUS Analog Waving Shakers are an easy and economical option for all of your waving needs. Ideal for cell culture and blotting applications, and is designed to be used in a variety of environmental conditions.

Operating Features:

Low Profile Design: Takes up less space and easily fits into most hoods and incubators. Cast aluminum base offers durability and added stability.
Microprocessor Control: Provides tilt adjustment which allows user to easily adjust waving angle from 0 to 16° while unit is operating. Smooth speed control with low speed waving motion.
Independent Control Knobs: Independent control knobs for speed, tilt and time allow for easy adjustments.

Safety Features:

Overload Protection: Audible and visual signals will activate when system detects an obstruction or overload of the tray.
Speed Ramping Feature: Slowly increases speed to desired set-point to avoid splashing.
Timer: Timer, if engaged, will automatically stop waving motion when timer reaches zero.
Spill-Resistant Design: Channels fluids away from internal components.

Operating Conditions:

Unit can be run in cold rooms, incubators, and environments from -10 to 60°C (14 to 140°F), maximum 80% relative humidity, non-condensing.

Applications:

Staining and destaining gels, hybridization procedures, hematology, and blotting techniques.

Ordering Information:

Units include a detachable, 3-wire cord and plug. Units are also supplied with a 14 × 11" (35.6 × 27.9 cm) non-skid rubber mat.

Specifications	
Speed Range	1 to 75 rpm*
Tilt Angle	0 to 16°*
Timer	1 minute to 120 minutes
Maximum Weight Capacity	5 lbs (2.3 kg)**
Tray Material	Aluminum
Tray Dimensions (L × W)	14 × 11" (35.6 × 27.9 cm)
Overall Dimensions (L × W × H)	16.8 × 11 × 6.5" (42.5 × 27.9 × 16.5 cm)
Ship Weight	15.5 lbs (7 kg)

* Maximum speed/tilt angle may vary with heavy or unbalanced loads.
** Centered on tray.

Description	Model	Item Number	Country Code
Analog Waving Shaker	SHWV02AL	30391968	VN, MY, SG, ID, IN
Analog Waving Shaker	SHWV02AL	30391969	AU, NZ

Rocking & Waving Shakers

- Electronic tilt adjustment from 0 to 20° while unit is operating
- Displays for speed and tilt angle, and time
- Timer with audible alarm

The OHAUS Digital Waving Shaker provides precise speed control and a smooth, low foaming, three dimensional, "wave" motion. Ideal for use in a wide range of laboratory applications and designed to be used in a variety of environmental conditions. Tray includes a non-skid rubber mat that is suitable for holding Petri dishes.

Operating Features:

Low Profile Design: Takes up less space and easily fits into most hoods and incubators. Cast aluminum base offers durability and added stability.
Microprocessor Control: The microprocessor control provides electronic tilt angle adjustment which allows user to easily adjust waving angle from 0 to 20° while unit is operating. Precise speed control provides smooth, low-speed waving motion down to 1 rpm.
LED Display: Touch pad controls with easy-to-read, independent LED displays for speed and tilt angle, and time allow operator to view all settings at once. Provides repeatable and accurate results every time and is easily visible across lab benches. Timer will display elapsed time or, when programmed to user defined limit, will shut off unit when time reaches zero. Display will show last settings, even after power has been turned off.

Safety Features:

Overload Protection: Audible and visual signals will activate when system detects an obstruction or overload of the tray.
Speed Ramping Feature: Slowly increases speed to desired set-point to avoid splashing.
Audible Alarm: In timed mode, alarm will sound when the time reaches zero.
Spill-Resistant Design: Channels fluids away from internal components.

Operating Conditions:

Unit can be run in cold rooms, incubators, and CO_2 environments from -10 to 60°C (14 to 140°F), maximum 80% relative humidity, non-condensing.

Applications:

Blood samples, DNA extractions, blotting techniques, and general mixing of various size tubes.

Ordering Information:

Units include a detachable, 3-wire cord and plug. Units are also supplied with an 11.75 × 8.75" (29.9 × 22.2 cm) non-skid rubber mat.

Specifications	
Speed Range	1 to 30 rpm*
Speed Accuracy	± 1 rpm
Tilt Angle	0 to 20°*
Timer	1 second to 160 hours
Maximum Weight Capacity	5 lbs (2.3 kg)**
Tray Material	Aluminum
Tray Dimensions (L × W)	11.75 × 8.75" (29.9 × 22.2 cm)
Overall Dimensions (L × W × H)	16.3 × 10.0 × 6.5" (41.3 × 25.4 × 16.5 cm)
Ship Weight	16 lbs (7.3 kg)

* Maximum speed/tilt angle may vary with heavy or unbalanced loads.
** Centered on tray.

Description	Model	Item Number	Country Code
Digital Waving Shaker	SHWV02DG	30391949	VN, MY, SG, ID, IN
Digital Waving Shaker	SHWV02DG	30391950	AU, NZ

Reciprocating

OHAUS Reciprocating Shakers are designed for a range of applications including cell cultures and extraction procedures that require accurate, repeatable results. Our shakers are microprocessor-controlled to provide consistent, uniform shaking action. The back-and-forth reciprocating motion has a 19 mm stroke length. Permanently lubricated ball bearings & maintenance-free, brushless DC motor provide reliable service and continuous duty operation.

- Touchpad Control With Independent LED Displays for Speed and Time
- Safety Features Include Speed Ramping and Load Sensor
- Overload Protection System Detects Obstructions and Tray Overloading

Reciprocating Shakers

- Exceptional speed control, accuracy and durability
- LED displays for speed and time
- Calibration mode for speed

The OHAUS Digital Reciprocating Shakers are designed for a wide range of applications, including cell cultures, that require accurate and repeatable results. The microprocessor control provides consistent uniform shaking while safely ramping to the set speed.

Operating Features:

The shaking system in both models continuously monitors shaking speed and maintains set-point, even under changing loads. When unit is set to a speed above 100 rpm, the speed accuracy is ± 1% of set speed. When set under 100 rpm, speed accuracy is ± 1 rpm.

Microprocessor Control: The variable speed microprocessor control provides consistent uniform shaking action. Microprocessor will display last set-point and will restart if power is interrupted.

Single Eccentric Drive: Permanently lubricated ball bearings and maintenance free, brushless DC motor provide reliable service and continuous duty operation.

LED Display: Touch pad controls with easy-to-read, independent LED displays for speed and time allow operator to view both settings at once. Provides repeatable and accurate results every time and is easily visible across lab benches. Timer will display elapsed time or, when programmed to user defined limit, will shut off unit when time reaches zero. Display will show last used settings, even after power has been turned off.

RS232 Interface: Provides two-way communication for data logging and unit control.

Speed Calibration Mode: Allows user to automatically recalibrate speed display.

Safety Features:

Load Sensor: A built-in load sensor detects unbalanced conditions and automatically reduces rpm to a safe speed to protect samples.

Overload Protection: Audible and visual signals will activate when system detects an obstruction or overload of the tray.

Speed Ramping Feature: Slowly increases speed to desired set-point to avoid splashing.

Audible Alarm: In timed mode, alarm will sound when the time reaches zero. Alarm has optional mute function which can be set from the touch pad control.

Spill-Resistant Design: Channels fluids away from internal components.

Operating Conditions:

Unit can be run in cold rooms, incubators, and CO_2 environments from -10 to 60°C (14 to 140°F), maximum 80% relative humidity, non-condensing.

Applications:

Cell cultures, solubility studies, and extraction procedures.

Ordering Information:

Unit includes a detachable, 3-wire cord and plug. Unit is also supplied with an 11 × 13" (27.9 × 33 cm) non-skid rubber mat.

Specifications	
Speed Range	20 to 300 rpm
Speed Accuracy	above 100 rpm ± 1% of set speed below 100 rpm ± 1 rpm
Timer	1 second to 160 hours
Stroke	19 mm (0.75")
Maximum Weight Capacity	15 lbs (6.8 kg)
Tray Material	Aluminum
Tray Dimensions (L × W)	11 × 13" (27.9 × 33 cm)
Overall Dimensions (L × W × H)	16.3 × 14.0 × 5.8" (41.3 × 35.5 × 14.6 cm)
Ship Weight	49 lbs (22.2 kg)

Description	Model	Item Number	Country Code
Digital Reciprocating Shaker	SHRC0719DG	30391830	VN, MY, SG, ID, IN
Digital Reciprocating Shaker	SHRC0719DG	30391831	AU, NZ

Incubating & Incubating Cooling Shakers

Incubating Cooling Thermal Shakers
Incubating Light Duty Orbital Shakers
Incubating Rocking & Waving Shakers

Free Call: 1800 723 405 - sales@pacificlab.com.au

Incubating & Incubating Cooling Selection Guide

Product Family	Incubating Cooling Thermal Shakers	Incubating Light Duty Orbital Shakers	Incubating Light Duty Orbital Shakers
Model	ISTHBLCTS ISTHBLHTS	ISLD04HDG	ISL, ISLDMPHDG, ISLDMPHDGL
Temperature Range	17 below ambient to 100°C / ambient +4 to 100°C	Ambient +5° to 65°C	Ambient +5° to 65°C
Speed Range	300 to 3000 rpm	100 to 1200 rpm	100 to 1200 rpm
Timer	1 minute to 99 hours, 59 min	1 second to 160 hours	1 second to 160 hours
Motion	Orbital	Orbital	Orbital
Orbit	3 mm	3 mm	3 mm
Max Weight Capacity	1 Block	8 lbs	4 Microplates / 2 Micro-Tube Racks
Audible Alarm	●	●	●
Load Sensor	●	—	—
Drive System	—	Triple Eccentric	Triple Eccentric
Motor Type	Brushless DC Motor	Brushless DC Motor	Brushless DC Motor
Set-Point Retention	● Displays Last Setting	● Displays Last Setting	● Displays Last Setting
Restart/Power Out	●	●	●
Ramp to Speed	●	●	●
Temperature Overshoot Protection	●	—	—
Overload Protection	●	●	●
User Calibration (Temperature)	●	●	●
User Calibration (Speed)	●	—	—
Interface	USB	—	—
Overall Dimensions (L × W ×H)	10.25 × 9.75 × 5.2"	17 × 11 × 10.5"	17 × 11 × 7.75"
Included Tray (L × W)	N/A	11 × 7.75"	11 × 7.75"
Platform Options (L × W)	N/A	N/A	N/A

● Yes

* Maximum speed/tilt angle may vary with heavy or unbalanced loads.
** Centered on tray.

Incubating & Incubating Cooling Selection Guide

Product Family	Incubating Cooling Light Duty Orbital Shakers	Incubating Rocking & Waving Shakers	Incubating Rocking & Waving Shakers
Model	ISICMBCDG	ISRK04HDG	ISWV02HDG
Temperature Range	10°C Below Ambient to 65°C	Ambient +5° to 65°C	Ambient +5° to 65°C
Speed Range	100 to 1200 rpm	1 to 50 rpm	1 to 30 rpm
Timer	1 second to 160 hours	1 second to 160 hours	1 second to 160 hours
Motion	Orbital	Rocking	Waving
Orbit	3 mm	Tilt Angle: 0 to 15° *	Tilt Angle: 0 to 20° *
Max Weight Capacity	2 Microplates 2 Modular Blocks	10 lbs**	5 lbs**
Audible Alarm	●	●	—
Load Sensor	—	—	—
Drive System	Triple Eccentric	Cable	Cable
Motor Type	Brushless DC Motor	Stepper Motor	Stepper Motor
Set-Point Retention	● Displays Last Setting	● Displays Last Setting	● Displays Last Setting
Restart/Power Out	●	●	—
Ramp to Speed	●	●	—
Temperature Overshoot Protection	—	—	—
Overload Protection	●	●	—
User Calibration (Temperature)	—	—	—
User Calibration (Speed)	—	—	—
Interface	—	—	—
Overall Dimensions (L × W × H)	17.9 × 11 × 10.5"	17 × 11 × 10.5"	17 × 11 × 10.5"
Included Tray (L × W)	N/A	10 × 7.5"	9.25 × 7.25"
Platform Options (L × W)	N/A	N/A	N/A

● Yes

* Maximum speed/tilt angle may vary with heavy or unbalanced loads.
** Centered on tray.

Incubating Cooling Thermal Shakers

Thermal Shakers are designed for applications that require consistent and precise high-speed shaking with temp. control to 100°C. With heating & shaking capabilities, our shakers use interchangeable blocks to accommodate tubes & microplates. Intuitive LCD touchscreen allows the user to save & track progress of 5 user-defined programs, each with 5 individual steps. Enhanced electronics provide dependable temp. settings across the operating range.

- Program Control for Five, 5-Step Programs
- Enhanced Electronics Provide Accurate Temperatures Across the Range
- Store and Transfer Data Easily With the Multi-Functional USB

Incubating Cooling Thermal Shakers

- 4.3" color LCD touch screen display provides an intuitive interface
- Rapid heating, cooling and high speed shaking ability
- Internal memory stores five separate 5-step programs, unlimited with USB

The OHAUS Thermal Shakers and Cooling Thermal Shakers are designed for applications that require consistent and precise results. With heating, cooling and shaking capabilities. The Thermal Shake Touch and Cooling Thermal Shake Touch uses interchangeable blocks to accommodate a wide variety of tubes and microplates. The easy-to-use, 4.3", color, LCD touch screen allows the user to save and visibly track progress through the live status bar for five user defined programs, each with five individual steps. The unit's enhanced electronics and dual temperature sensors provide accurate, dependable temperature settings across the operating range.

Operating Features:

Low Profile Design: The low profile design minimizes the unit's footprint on the bench.
LCD Touch Screen: Enables faster setting of temperature, speed, and time which can all be viewed at once. Display features on-screen help topics with operational tips available in six languages. Touch screen is compatible with rubber gloves used in labs. USB port can transfer information to a flash drive for data logging, program storage and software updates.
Program Control: Program control capabilities allow user programmable operation for automated use and memory. Storage for five separate 5-step programs, or unlimited number of programs with the use of the USB.
Temperature ramp rate: Adjustable temperature ramp rate feature separately defines the heating and cooling rate in increments of 0.5°C/min.
Single Point Calibration Mode: For maximum temperature accuracy, the single point calibration procedure allows the user to calibrate up to 6 different user defined temperatures.
Pulse Mode Feature: The unit is equipped with a pulse mode feature for quick vortex applications.

Safety Features:

Cool Touch Housing: Constructed from a high-quality, heat and chemical resistant polymer. The unit's housing remains cool to the touch throughout normal operating temperatures.
Maximum Temperature Limiting Function: Ensures the temperature will not exceed preset limits, allowing the user control of temperature sensitive samples.
Hot Top Indicator: A hot top warning light will illuminate when the temperature reaches 40°C, and will remain lit until the unit is sufficiently cooled.
Audible Alarm: In timed mode, an alarm will sound when the time reaches zero or set-point temperature is reached. Additionally, the heat function will automatically shut off if the unit recognizes an internal issue.

Operating Conditions:

Unit can operate in conditions from 5 to 35°C (41 to 95°F), maximum 80% relative humidity, non-condensing.

Applications:

Cell cultures, DNA, RNA, and protein studies.

Ordering Information

Unit includes a detachable, 3-wire cord and plug . Unit is also supplied with a 1.5 mL block, clear rack, and cover.

Specifications	
Temperature Range Thermal Shaker Cooling Thermal Shaker	 4°C above ambient to 100°C 17°C below ambient to 100°C
Temperature Accuracy Thermal Shaker Cooling Thermal Shaker	 ± 1°C between 20°C and 45°C ± 2°C above 45°C ± 0.5°C between 20°C and 45°C ± 2°C below 20°C and above 45°C
Speed Range	300 to 3000 rpm
Speed Accuracy	± 2%
Timer	1 minute to 99 hours, 59 minutes
Orbit	3 mm (0.12")
Cooling Rate	above ambient 2-3°C/min below ambient 0.5-1.0°C/min
Heating Rate	5°C/min
Overall Dimensions (L × W × H)	10.25 × 9.75 × 5.2" (26 × 24.8 × 13.2 cm)
Ship Weight	11.9 lbs (5.4 kg)

Description	Model	Item Number	Country Code
Thermal Shaker	ISTHBLHTS	30392005	VN, MY, SG, ID, IN
Thermal Shaker	ISTHBLHTS	30392006	AU, NZ
Thermal Shaker	ISTHBLHTS	30392008	TH, PH
Cooling Thermal Shaker	ISTHBLCTS	30391998	VN, MY, SG, ID, IN
Cooling Thermal Shaker	ISTHBLCTS	30391999	AU, NZ

Incubating Cooling Thermal Shakers Modular Blocks

Microplate Block

Sample Type	Well Size	Well Depth	Dimensions (L × W × H)	Item Number
Microplate Thermal Block with Lid	4.21 × 2.81 × 0.1" (10.7 × 7.1 × 0.25 cm)	0.9" (2.3 cm)	4.7 × 6.4 × 3.0" (11.9 × 16.3 × 7.6 cm)	30400126
Sample Type	**Well Diameter**	**Well Depth**	**Dimensions (L × W × H)**	**Item Number**
384 Well Plate Thermal Block with Lid	0.16" (0.4 cm)	0.32" (0.81 cm)	4.7 × 6.4 × 3.0" (11.9 × 16.3 × 7.6 cm)	30400127
0.2 mL PCR Plate Thermal Block with Lid	0.25" (0.64 cm)	0.50" (1.27 cm)	4.7 × 6.4 × 3.0" (11.9 × 16.3 × 7.6 cm)	30400128

Tube Blocks

Sample Type	No. of Wells	Well Diameter	Well Depth	Dimensions (L × W × H)	Item Number
0.5 mL Microtubes*	30	0.31" (0.79 cm)	0.97" (2.46 cm)	4.0 × 5.6 × 1.8" (10.2 × 14.2 × 4.6 cm)	30400129
1.5 mL Microtubes*	24	0.44" (1.11 cm)	1.39" (3.53 cm)	4.0 × 5.6 × 2.1" (10.2 × 14.2 × 5.3 cm)	30400130
2.0 mL Microtubes*	24	0.45" (1.15 cm)	1.39" (3.53 cm)	4.0 × 5.6 × 2.1" (10.2 × 14.2 × 5.3 cm)	30400131
5-7 mL Tubes	24	0.47" (1.20 cm)	1.42" (3.61 cm)	4.0 × 5.6 × 2.2" (10.2 × 14.2 × 5.6 cm)	30400132

* Supplied with clear rack and cover

Cryo Tube Block

Sample Type	No. of Wells	Well Diameter	Well Depth	Dimensions (L × W × H)	Item Number
2.0 mL Cryo Tubes	24	0.50" (1.26 cm)	1.42" (3.6 cm)	4.0 × 5.6 × 2.2" (10.2 × 14.2 × 5.6 cm)	30400133

Conical Tube Blocks

Sample Type	No. of Wells	Well Diameter	Well Depth	Dimensions (L × W × H)	Item Number
5 mL Eppendorf Tube Block	9	0.66" (1.68 cm)	1.93" (4.9 cm)	4.1 × 5.7 × 2.8" (10.4 × 14.5 × 7.1 cm)	30400134
15 mL Conical Tubes	9	0.68" (1.73 cm)	4.11" (10.44 cm)	4.2 × 5.7 × 5.0" (10.7 × 14.7 × 12.7 cm)	30400135
50 mL Conical Tubes	4	1.18" (3.0 cm)	3.97" (10.09 cm)	4.0 × 5.7 × 4.8" (10.2 × 14.5 × 12.2 cm)	30400136

Incubating Light Duty Orbital Shakers

OHAUS Incubating Light Duty Shakers are designed to incubate samples from 10° below ambient to 65°C depending on the model. The Incubating Mini Shaker has an 8 lb (3.6 kg) capacity while the Incubating Microplate Shaker can hold up to four standard or deep well plates. Incubating-Cooling Mini Shaker is designed to hold two microplates or two optional modular tube blocks. All models feature LED displays with touchpad controls.

- Microprocessor-Controlled for Consistent Shaking Action
- Triple Eccentric Drive Provides Reliable Service and Continuous Duty
- Safety Features Include Speed Ramping and Overload Protection

Incubating Light Duty Orbital Shakers

- LED displays for temperature, speed and time
- Timer with audible alarm
- Calibration mode for temperature

The OHAUS Incubating Light Duty Orbital Shakers are designed to heat and shake a variety of samples.

Operating Features:

Microprocessor Control: The variable speed microprocessor control provides consistent uniform shaking action. Microprocessor will display last set-point and will restart if power is interrupted.
PID Temperature Controller: Maintains precise temperature control from ambient +5°C to 65°C. Easy-to-use controls allow users to adjust temperature in 1°C increments.
Triple Eccentric Drive: Permanently lubricated ball bearings and maintenance free, brushless DC motor provide reliable service and continuous duty operation.
LED Display: Touch pad controls with easy-to-read, independent LED displays for temperature, speed and time allow operator to view all settings at once. Provides repeatable and accurate results every time and is easily visible across lab benches. Timer will display elapsed time or, when programmed to user defined limit, will shut off unit when time reaches zero. Display will show last used settings, even after power has been turned off.
Temperature Calibration Mode: Allows user to calibrate unit to an external temperature device.

Safety Features:

Overload Protection: Audible and visual signals will activate when system detects an obstruction or overload of the tray.
Speed Ramping Feature: Slowly increases speed to desired set-point to avoid splashing.
Audible Alarm: In timed mode, alarm will sound when the time reaches zero.
Caution Hot Indicator: Symbol illuminates when the temperature of the air in the chamber reaches 40°C and remains lit until temperature cools down.
Spill-Resistant Design: Channels fluids away from internal components.
Polycarbonate Lid: Permits viewing of samples without disturbing internal temperature.

Operating Conditions:

Unit can be run in conditions from 5 to 40°C (41 to 104°F), maximum 80% relative humidity, non-condensing.

Applications:

Cell cultures, bacterial suspensions, and hybridizations.

Ordering Information:

Unit includes a detachable, 3-wire cord and plug.

Specifications	
Temperature Range	Ambient +5°C to 65°C
Temperature Uniformity	± 0.5°C at 37°C
Speed Range	100 to 1200 rpm
Speed Accuracy	± 2% of set speed
Timer	1 second to 160 hours
Orbit	3 mm (0.12")
Maximum Weight Capacity	8 lbs (3.6 kg)
Tray Material	Aluminum
Tray Dimensions (L × W)	11 × 7.75" (27.9 × 19.7 cm)
Interior Dimensions (L × W × H)	11.3 × 8.3 × 5.7" (28.7 × 21.1 × 14.5 cm)
Overall Dimensions (L × W × H)	17 × 11 × 10.7" (43.2 × 27.9 × 27 cm)
Ship Weight	30 lbs (13.6 kg)

Description	Model	Item Number
Incubating Light Duty Orbital Shaker	ISLD04HDGUS	30391924

Incubating Light Duty Orbital Shakers

- LED displays for temperature, speed and time
- Timer with audible alarm
- Available with opaque lid for light sensitive samples

The OHAUS Incubating Microplate Shakers are optimized for shaking microplates, deep-well plates, or micro-tubes.

Operating Features:

Microprocessor Control: The variable speed microprocessor control provides consistent uniform shaking action. Microprocessor will display last set-point and will restart if power is interrupted.
PID Temperature Controller: Maintains precise temperature control from ambient +5°C to 65°C. Easy-to-use controls allow users to adjust temperature in 1°C increments.
Triple Eccentric Drive: Permanently lubricated ball bearings and maintenance free, brushless DC motor provide reliable service and continuous duty operation.
LED Display: Touch pad controls with easy-to-read, independent LED displays for temperature, speed, and time allow operator to view all settings at once. Provides repeatable and accurate results every time and is easily visible across lab benches. Timer will display elapsed time or, when programmed to user defined limit, will shut off unit when time reaches zero. Display will show last used settings, even after power has been turned off.
Temperature Calibration Mode: Allows user to calibrate unit to an external temperature device.

Safety Features:

Overload Protection: Audible and visual signals will activate when system detects an obstruction or overload of the tray.
Speed Ramping Feature: Slowly increases speed to desired set-point to avoid splashing.
Audible Alarm: In timed mode, alarm will sound when the time reaches zero.
Caution Hot Indicator: Symbol illuminates when the temperature of the air in the chamber reaches 40°C and remains lit until temperature cools down.
Spill-Resistant Design: Channels fluids away from internal components.
Polycarbonate Lid: Clear lid permits viewing of samples without disturbing internal temperature. Opaque lid prohibits light exposure to light sensitive samples.

Operating Conditions:

Unit can be run in conditions from 5 to 40°C (41 to 104°F), maximum 80% relative humidity, non-condensing.

Applications:

Immunoassays and hybridizations.

Ordering Information:

Units include a detachable, 3-wire cord and plug.

Specifications	
Temperature Range	Ambient +5°C to 65°C
Temperature Uniformity	± 0.5°C at 37°C
Speed Range	100 to 1200 rpm
Speed Accuracy	± 2%
Timer	1 second to 160 hours
Orbit	3 mm (0.12")
Maximum Weight Capacity	4 microplates or 2 micro-tube racks
Tray Material	Aluminum
Tray Dimensions (L × W)	11 × 7.75" (27.9 × 19.7 cm)
Overall Dimensions (L × W × H)	17 × 11 × 7.75" (43.2 × 27.9 × 19.7 cm)
Ship Weight	30 lbs (13.6 kg)

Description	Model	Item Number	Country Code
Incubating Microplate Shaker	ISLDMPHDG	30391933	VN, MY, SG, ID, IN
Incubating Microplate Shaker	ISLDMPHDG	30391934	AU, NZ
Incubating Microplate Shaker	ISLDMPHDG	30391936	TH, PH
Incubating Microplate Shaker with Opaque Lid	ISLDMPHDGL	30391926	VN, MY, SG, ID, IN
Incubating Microplate Shaker with Opaque Lid	ISLDMPHDGL	30391927	AU, NZ

Incubating Cooling Orbital Shakers

OHAUS Incubating Cooling Orbital Shakers are designed to incubate samples from 10° below ambient to 65°C. Incubating Cooling Mini Shaker is designed to hold two microplates or two optional modular tube blocks in a variety of configurations. All models feature touchpad controls with easy-to-read, independent LED displays for temperature, speed and time. Microprocessor control provides consistent uniform shaking action..

- Microprocessor-Controlled for Consistent Shaking Action
- Triple Eccentric Drive Provides Reliable Service and Continuous Duty
- Safety Features Include Speed Ramping and Overload Protection

Incubating Cooling Orbital Shakers

- Heats to 65°C and cools to 10°C below ambient
- LED displays for temperature, speed and time
- Calibration mode for temperature

The OHAUS Incubating/Cooling Orbital Shaker is microplate ready without the need for any additional accessories. Optional modular blocks can accommodate micro-tubes, centrifuge tubes, vials, or culture tubes. Unit holds microplates or modular blocks with a 5" (12.7 cm) tall interior capacity. Ideal for analyses that require a stable, controlled temperature.

Operating Features:

Microprocessor Control: The variable speed microprocessor control provides consistent uniform shaking action. Microprocessor will display last set-point and will restart if power is interrupted.
PID Temperature Controller: Maintains precise temperature control from 10°C below ambient to 65°C. Easy-to-use controls allow users to adjust temperature in 1°C increments.
Triple Eccentric Drive: Permanently lubricated ball bearings and maintenance free, brushless DC motor provide reliable service and continuous duty operation.
LED Display: Touch pad controls with easy-to-read, independent LED displays for temperature, speed, and time allow operator to view all settings at once. Provides repeatable and accurate results every time and is easily visible across lab benches. Timer will display elapsed time or, when programmed to user defined limit, will shut off unit when time reaches zero. Display will show last used settings, even after power has been turned off.
Temperature Calibration Mode: Allows user to calibrate unit to an external temperature device.

Safety Features:

Overload Protection: Audible and visual signals will activate when system detects an obstruction or overload of the tray.
Speed Ramping Feature: Slowly increases speed to desired set-point to avoid splashing.
Audible Alarm: In timed mode, alarm will sound when the time reaches zero. Alarm has optional mute function which can be set from the touch pad control.
Caution Hot Indicator: Symbol illuminates when the temperature of the air in the chamber reaches 40°C and remains lit until temperature cools down.
Spill-Resistant Design: Channels fluids away from internal components.
Polycarbonate Lid: Permits viewing of samples without disturbing internal temperature.

Operating Conditions:

Unit can be run in conditions from 5 to 40°C (41 to 104°F), maximum 80% relative humidity, non-condensing.

Applications:

Cell and bacterial cultures, hybridizations, and enzyme reactions.

Ordering Information:

Unit includes a detachable, 3-wire cord and plug . Units are also supplied with an adapter bracket to hold optional modular blocks. See page 35-36 for block options.

Specifications	
Temperature Range	10°C below ambient to 65°C
Temperature Uniformity	± 0.5°C at 37°C
Speed Range using Microplates	100 to 1200 rpm
Speed Range using Modular Blocks	100 to 600 rpm
Speed Accuracy	± 2%
Timer	1 second to 160 hours
Orbit	3 mm (0.12")
Maximum Weight Capacity	2 microplates or 2 modular blocks
Overall Dimensions (L × W × H)	17.9 × 11 × 10.5" (45.5 × 27.9 × 26.7 cm)
Ship Weight	34 lbs (15.4 kg)

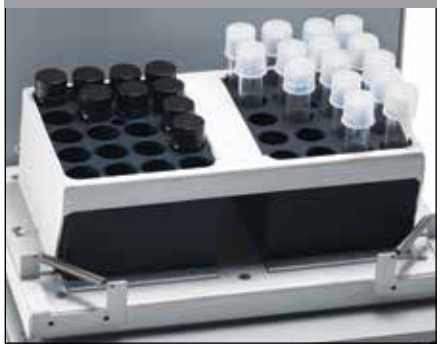
Description	Model	Item Number	Item Number
Incubating Cooling Light Duty Shaker	ISICMBCDG	30391940	VN, MY, SG, ID, IN
Incubating Cooling Light Duty Shaker	ISICMBCDG	30391941	AU, NZ

Incubating Light Duty Orbital Shakers Modular Blocks

Plates

Tubes

Vials



Modular Blocks

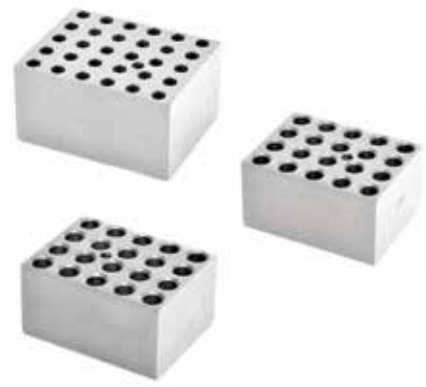
Modular Blocks are constructed from a solid anodized aluminum block. The close contact of tubes to block walls allow for maximum temperature transfer.
Block dimensions (L × W × H): 3.75 × 3 × 2" (9.5 × 7.6 × 5.1 cm)
Applications: Cell cultures, hybridizations, and extraction procedures

OHAUS modular blocks also fit in the OHAUS Dry Block Heaters.
Constructed of anodized aluminum, this material is ideal for its temperature conducting and corrosion resistant properties.

Microcentrifuge Tube Blocks

Single block

Sample Type	No. of Wells	Well Diameter	Well Depth	Item Number
0.5 mL tube	30	7.9 mm	27.6 mm	30400157
1.5 mL tube	20	11.1 mm	39.1 mm	30400159
2 mL tube	20	11.5 mm	38.1 mm	30400191



Conical-Bottom Centrifuge Tube Blocks

Single block

Sample Type	No. of Wells	Well Diameter	Well Depth	Item Number
15 mL tube	12	17.1 mm	44.5 mm	30400172
50 mL tube	5	29.0 mm	47.6 mm	30400168

Incubating Light Duty Orbital Shakers Modular Blocks

Standard Test Tube Blocks

Single block

Sample Type	No. of Wells	Well Diameter	Well Depth	Item Number
6 mm tube	30	8.3 mm	48.4 mm	30400158
10 mm tube	24	10.7 mm	48.4 mm	30400151
12/13 mm tube	20	13.9 mm	48.4 mm	30400152

Centrifuge Tube Combination Block

Single block

These blocks have been designed for variable sized samples.

Sample Type	No. of Wells	Well Diameter	Well Depth	Item Number
Test Tube Combination				
6 mm	6	8.3 mm	48.4 mm	30400156
12/13 mm	5	13.8 mm	48.4 mm	
25 mm	3	26.2 mm	48.4 mm	
Centrifuge Tube Combination				
1.5 mL	4	11.1 mm	39.1 mm	30400193
15 mL	3	17.1 mm	44.5 mm	
50 mL	2	29.0 mm	47.6 mm	
Micro-Tube Combination				
0.5 mL	6	7.9 mm	27.6 mm	30400194
1.5 mL	10	11.1 mm	39.1 mm	
2 mL	5	11.5 mm	38.1 mm	

Vial Blocks

Single block

Designed for sample/serum and scintillation vials.

Sample Type	No. of Wells	Well Diameter	Well Depth	Item Number
12 mm vial	20	12.7 mm	30 mm	30400182
15 mm vial	20	15.8 mm	35 mm	30400183
16 mm vial	15	16.4 mm	45 mm	30400190
17 mm vial	12	17.8 mm	45 mm	30400184
19 mm vial	12	19.7 mm	45 mm	30400185
21 mm vial	9	21.7 mm	45 mm	30400186
23 mm vial	8	23.8 mm	45 mm	30400187
25 mm vial	8	25.8 mm	45 mm	30400188
28 mm vial	6	28.8 mm	45 mm	30400189

Incubating Rocking & Waving Shakers

OHAUS Incubating Rocking and Waving Shakers are designed to incubate samples from 5° above ambient to 65°C to provide accurate and repeatable results. Rocking shakers provide a see-saw like motion, while waving shakers offer a smooth, low-foaming three-dimensional "wave" motion. All models feature LED displays with touchpad controls. Both models include safety features that protect both the user and samples.

- Independent LEDs and Touchpad Control for Temperature, Speed/Tilt Angle and Time
- Microprocessor Control with PID Temperature Control for Precise Control
- Electronic tilt adjustment while unit is operating

Incubating Rocking & Waving Shakers

- Electronic tilt adjustment from 0 to 15° while unit is operating
- LED displays for temperature, speed and tilt angle, and time
- Timer with audible alarm

The OHAUS Incubating Rocking Shaker combines smooth rocking motion and general purpose incubation in one compact bench top unit.

Operating Features:

Microprocessor Control: The microprocessor control provides electronic tilt angle adjustment which allows user to easily adjust rocking angle from 0 to 15° while unit is operating. Precise speed control provides smooth, low-speed rocking motion down to 1 rpm.
PID Temperature Controller: Maintains precise temperature control from ambient +5°C to 65°C. Easy-to-use controls allow users to adjust temperature in 1°C increments.
LED Display: Touch pad controls with easy-to-read, independent LED displays for temperature, speed and tilt angle, and time allow operator to view all settings at once. Provides repeatable and accurate results every time and is easily visible across lab benches. Timer will display elapsed time or, when programmed to user defined limit, will shut off unit when time reaches zero. Display will show last used settings, even after power has been turned off.

Safety Features:

Overload Protection: Audible and visual signals will activate when system detects an obstruction or overload of the tray.
Speed Ramping Feature: Slowly increases speed to desired set-point to avoid splashing.
Audible Alarm: In timed mode, alarm will sound when the time reaches zero.
Caution Hot Indicator: Symbol illuminates when the temperature of the air in the chamber reaches 40°C and remains lit until temperature cools down.
Spill-Resistant Design: Channels fluids away from internal components.
Polycarbonate Lid: Permits viewing of samples without disturbing internal temperature.

Operating Conditions:

Unit can be run in conditions from 5 to 40°C (41 to 104°F), maximum 80% relative humidity, non-condensing.

Applications:

Cell cultures, staining and destaining gels, hybridization procedures, and blotting techniques.

Ordering Information:

Unit includes a detachable, 3-wire cord and plug.

Specifications	
Temperature Range	Ambient +5°C to 65°C
Temperature Uniformity	± 0.5°C at 37°C
Speed Range	1 to 50 rpm *
Speed Accuracy	± 1 rpm
Tilt Angle	0 to 15° *
Timer	1 second to 160 hours
Maximum Weight Capacity	10 lbs (4.5 kg) **
Tray Material	Aluminum
Tray Dimensions (L × W)	10 × 7.5" (25.4 × 19.1 cm)
Interior Dimensions (L × W × H)	10.75 × 7.75 × 3.8" (27.3 × 19.7 × 9.7 cm)
Overall Dimensions (L × W × H)	17 × 11 × 10.5" (43.2 × 27.9 × 26.7 cm)
Ship Weight	22 lbs (10 kg)

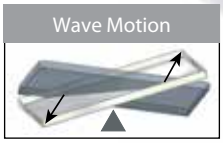
* Maximum speed/tilt angle may vary with heavy or unbalanced loads.
** Centered on tray.

Description	Model	Item Number	Country Code
Incubating Rocking Shaker	ISRK04HDG	30391975	VN, MY, SG, ID, IN
Incubating Rocking Shaker	ISRK04HDG	30391976	AU, NZ

Incubating Rocking & Waving Shakers

- Electronic tilt adjustment from 0 to 20° while unit is operating
- LED displays for temperature, speed and tilt angle, and time
- Timer with audible alarm

The OHAUS Incubating Waving Shaker combines the unique vertical and horizontal "wave" motion with general purpose incubation in one compact bench top unit.



Operating Features:

Microprocessor Control: The microprocessor control provides electronic tilt angle adjustment which allows user to easily adjust waving angle from 0 to 20° while unit is operating. Precise speed control provides smooth, low-speed waving motion down to 1 rpm.
PID Temperature Controller: Maintains precise temperature control from ambient +5°C to 65°C. Easy-to-use controls allow users to adjust temperature in 1°C increments..
LED Display: Touch pad controls with easy-to-read, independent LED displays for temperature, speed and tilt angle, and time allow operator to view all settings at once. Provides repeatable and accurate results every time and is easily visible across lab benches. Timer will display elapsed time or, when programmed to user defined limit, will shut off unit when time reaches zero. Display will show last used settings, even after power has been turned off.

Safety Features:

Overload Protection: Audible and visual signals will activate when system detects an obstruction or overload of the tray.
Speed Ramping Feature: Slowly increases speed to desired set-point to avoid splashing.
Audible Alarm: In timed mode, alarm will sound when the time reaches zero.
Caution Hot Indicator: Symbol illuminates when the temperature of the air in the chamber reaches 40°C and remains lit until temperature cools down.
Spill-Resistant Design: Channels fluids away from internal components.
Polycarbonate Lid: Permits viewing of samples without disturbing internal temperature.

Operating Conditions:

Unit can be run in conditions from 5 to 40°C (41 to 104°F), maximum 80% relative humidity, non-condensing.

Applications:

Cell cultures, hybridization procedures, and blotting techniques.

Ordering Information:

Unit includes a detachable, 3-wire cord and plug.

Specifications	
Temperature Range	Ambient +5°C to 65°C
Temperature Uniformity	± 0.5°C at 37°C
Speed Range	1 to 30 rpm *
Speed Accuracy	± 1 rpm
Tilt Angle	0 to 20° *
Timer	1 second to 160 hours
Maximum Weight Capacity	5 lbs (2.3 kg) **
Tray Material	Aluminum
Tray Dimensions (L × W)	9.25 × 7.25" (23.5 × 18.4 cm)
Interior Dimensions (L × W × H)	10.75 × 7.75 × 3.4" (27.3 × 19.7 × 8.6 cm)
Overall Dimensions (L × W × H)	17 × 11 × 10.5" (43.2 × 27.9 × 26.7 cm)
Ship Weight	22 lbs (10 kg)

* Maximum speed/tilt angle may vary with heavy or unbalanced loads.
** Centered on tray.

Description	Model	Item Number	Country Code
Incubating Waving Shaker	ISWV02HDG	30391982	VN, MY, SG, ID, IN
Incubating Waving Shaker	ISWV02HDG	30391983	AU, NZ

Open Air and Incubating & Incubating Cooling Shakers Accessories

Universal Platforms

Allows for mounting of flask clamps, test tube racks, and bottle clamps. Platform slides over top of included tray and is tightened with adjustment screws. Optional accessories screw directly into mounting point openings. The two-tier braces allow stacking of platforms with a 10" clearance (available for select sizes). An optional non-skid rubber mat can be placed on the platform for an added non-slip surface. The platform is constructed of type 304 stainless steel.

Universal Platforms

Description	Used on Shakers	Item Number
11 × 13" (27.9 × 33 cm) Universal Platform	Analog/ Digital 16 kg shakers and Reciprocating Shakers	30400052
13 × 13" (33 × 33 cm) Universal Platform	Analog/ Digital 16 kg shakers and Reciprocating Shakers	30400053
18 × 18" (45.7 × 45.7 cm) Universal Platform*	Analog/ Digital 16 kg shakers and Reciprocating Shakers	30400054
18 × 24" (45.7 × 61 cm) Universal Platform*	Analog/ Digital 16 kg & 23 kg shakers and Reciprocating Shakers	30400056
24 × 24" (61 × 61 cm) Universal Platform	Digital 45 kg shakers	30400057
18 × 30" (45.7 × 76.2 cm) Universal Platform*	Analog/Digital 23 kg Shakers	30400058
24 × 36" (61 × 91.4 cm) Universal Platform	Digital 68 kg Shakers	30400059
Two-Tier Braces (set of 4)	Analog/ Digital 16 kg & 23 kg shakers	30400051

Rubber Mats

Description	Used on Shakers	Item Number
13 × 13" (33 × 33 cm) Rubber Mat	Analog/ Digital 16 kg shakers and Reciprocating Shakers	30400061
18 × 18" (45.7 × 45.7 cm) Rubber Mat	Analog/ Digital 16 kg shakers and Reciprocating Shakers	30400062
24 × 24" (61 × 61 cm) Rubber Mat	Digital 45 kg shakers	30400064
24 × 36" (61 × 91.4 cm) Rubber Mat	Digital 68 kg shakers	30400065

Culture Platforms

Ideal for slow speed applications; Petri dishes, culture flasks, and other flat bottom, low profile vessels. The two-tier braces (available for both sizes) allow stacking of platforms with a 10" clearance. The platform is constructed of type 304 stainless steel. The platform has a non-skid rubber surface.

Culture Platforms

Description	Used on Shakers	Item Number
18 × 18" (45.7 × 45.7 cm) Culture Platform*	Analog/ Digital 16 kg shakers and Reciprocating Shakers	30400066
18 × 24" (45.7 × 61 cm) Culture Platform*	Analog/ Digital 16 kg & 23 kg shakers and Reciprocating Shakers	30400067
Two-Tier Braces (set of 4)	Analog/ Digital 16 kg & 23 kg shakers	30400051

Open Air and Incubating & Incubating Cooling Shakers Accessories

Dedicated Platforms

Pre-mounted flask clamps for maximum utilization of platform space for flasks of all one size. The two-tier braces allow stacking of platforms with a clearance (available for select sizes). Platform is constructed of type 304 stainless steel. Flask clamps are constructed of PVC. Ideal for polycarbonate flasks.

Dedicated Platforms

Description	Flask Capacity	Used on Shakers	Item Number
13 × 13" (33 × 33 cm) Dedicated Platform / 125 mL Flask Clamp	16	Analog/ Digital 16 kg shakers and Reciprocating Shakers	30400075
13 × 13" (33 × 33 cm) Dedicated Platform / 250 mL Flask Clamp	12	Analog/ Digital 16 kg shakers and Reciprocating Shakers	30400076
13 × 13" (33 × 33 cm) Dedicated Platform / 500 mL Flask Clamp	8	Analog/ Digital 16 kg shakers and Reciprocating Shakers	30400077
13 × 13" (33 × 33 cm) Dedicated Platform / 1 L Flask Clamp	4	Analog/ Digital 16 kg shakers and Reciprocating Shakers	30400078
18 × 18" (45.7 × 45.7 cm) Dedicated Platform / 125 mL Flask Clamp*	27	Analog/ Digital 16 kg shakers and Reciprocating Shakers	30400079
18 × 18" (45.7 × 45.7 cm) Dedicated Platform / 250 mL Flask Clamp*	20	Analog/ Digital 16 kg shakers and Reciprocating Shakers	30400080
18 × 18" (45.7 × 45.7 cm) Dedicated Platform / 500 mL Flask Clamp*	13	Analog/ Digital 16 kg shakers and Reciprocating Shakers	30400081
18 × 18" (45.7 × 45.7 cm) Dedicated Platform / 1 L Flask Clamp	9	Analog/ Digital 16 kg shakers and Reciprocating Shakers	30400081
Two-Tier Braces (set of 4)		Analog/ Digital 16 kg shakers	30400082

Adjustable Platforms

Adjustable clamping bars accommodate various vessel types. Constructed of stainless steel. The base tray has a non-skid rubber surface.

Adjustable Platforms

Description	Bar Size	Overall Dimensions	Used on Shakers	Item Number
2-bar Adjustable Platform	8.6" (21.8 cm)	8.6 × 11.7" (21.8 × 29.7 cm)	Digital 4 kg Shakers	30400121
4-bar Adjustable Platform	18" (45.7 cm)	18 × 18" (45.7 × 45.7 cm)	Analog/ Digital 16 kg shakers	30400068
4-bar Adjustable Platform	18" (45.7 cm)	18 × 24" (45.7 × 61 cm)	Analog/ Digital 23 kg shakers	30400069

Replacement Parts

Description	Used with Platforms	Item Number
8.6" (21.8 cm) adjustable bar (with mounting hardware)	30400121	30400122
18" (45.7 cm) adjustable bar (with mounting hardware)	30400068 & 3040069	30400073

* Two tier ready

Open Air and Incubating & Incubating Cooling Shakers Accessories

Large Vessel Carrier Platforms

Ideal for large sample containers like carboys, jugs, and bottles. The platforms' high side walls secure samples, has a heavy-duty design and is constructed of stainless steel. The base tray has a non-skid rubber surface.

Large Vessel Carrier Platforms

Description	Bar Size	Overall Dimensions (L × W × H)	Used on Shakers	Item Number
4-bar Large Vessel Carrier Platform	18" (45.7 cm)	30.1 × 18.1 × 13.9" (76.4 × 45.9 × 35.3 cm)	Analog/Digital 23 kg Shakers	30400070
4-bar Large Vessel Carrier Platform	24" (61 cm)	24.4 × 24.3 × 14.2" (61.9 × 61.7 × 36.0 cm)	Digital 45 kg Shakers	30400071
5-bar Large Vessel Carrier Platform	24" (61 cm)	36.9 × 24.3 × 14.2" (93.7 × 61.7 × 36.0 cm)	Digital 68 kg Shakers	30400072

Replacement Part	Used with Carrier	Item Number
18" (45.7 cm) adjustable bar (with mounting hardware)	30400070	30400073
24" (61 cm) adjustable bar (with mounting hardware)	30400071 & 30400072	30400074

Separatory Funnel Platform

Holds 3 funnels at once on an 18 × 18" (45.7 × 45.7 cm) platform. Platform can accommodate 500 mL to 2 L separatory funnels and is constructed of stainless steel. Includes platform, clamps and hardware to secure 3 funnels.

Separatory Funnel Platform

Description	Used on Shakers	Item Number
18" (45.7 cm) adjustable bar (with mounting hardware)	Analog/Digital 16 kg shakers and Reciprocating Shakers	30400083

Microplate Clamp

Can hold one standard microplate or deep-well plate. Constructed of type 304 stainless steel.

Platform Capacities for Microplate Clamps		
Platform Size	Platform Item Number	Microplate Clamps
11 × 13	30400052	4
13 × 13	30400053	6
18 × 18	30400054	12
18 × 24	30400056	18
18 × 30	30400057	21
24 × 24	30400058	24
24 × 36	30400059	36

Microplate Clamp

Description	Used on Shakers	Item Number
Microplate Clamp	Analog/Digital 16 kg, 23 kg, 45 kg, & 68 kg Shakers	30400104

Open Air and Incubating & Incubating Cooling Shakers Accessories

Universal Harness

Attaches to tray to secure low profile plates.

Description	Used on Shakers	Item Number
Universal Harness	Digital 4 kg Open Air Orbital Shakers	30400123

Universal Harness

Dimpled Mat

Designed to hold centrifuge tubes, vials, culture tubes, and micro-tubes securely in place.
Mat can easily be removed for cleaning and transporting of tubes from bench to tray.

Description	Used on Shakers	Item Number
Dimpled Mat, 12.75 × 10" (32.4 × 25.4 cm)	Digital Rocking Shaker	30400140
Dimpled Mat, 11.75 × 8.75" (29.9 × 22.2 cm)	Digital waving Shaker	30400142
Dimpled Mat, 10 × 7.5" (25.4 × 19.1 cm)	Incubating Rocking Shaker	30400141
Dimpled Mat, 9.25 × 7.25" (23.5 × 18.4 cm)	Incubating Waving Shaker	30400143
Dimpled Mat, 11.75 × 8.75" (29.9 × 22.2 cm)	Open Air 4 kg Orbital Shaker	30400124
Dimpled Mat, 14 × 11" (35.6 × 27.9 cm)	Analog Rocking & Waving Shaker	30400144

Dimpled Mat

Stacking Tray

Easily attaches to the units' included tray to add a second tier for higher capacity applications.
Second tier tray mounts 3.5" (8.9 cm) above lower tray. The tray includes hardware and a rubber mat.

Description	Used on Shakers	Item Number
Stacking Tray, 12.75 × 10" (32.4 × 25.4 cm)	Digital Rocking Shaker	30400137
Stacking Tray, 11.75 × 8.75" (29.9 × 22.2 cm)	Digital Waving Shaker	30400138
Stacking Tray, 14 × 11" (35.6 × 27.9 cm)	Analog Rocking Shaker	30400139

Stacking Tray

Dilution Cup Tray

Constructed of type 304 stainless steel. Holds 24 × 28 mm dilution vials.

Description	Used on Unit	Item Number
1.5 to 2 mL Micro-Tube Rack	Digital 4 kg Open Air Orbital Shakers	30400125

Dilution Cup Tray

Micro-Tube Rack

Optional 1.5 to 2 mL Micro-Tube Rack attaches to tray to hold up to 70 × 1.5 mL or 2 mL micro-tubes.
Tray can accommodate up to 2 micro-tube racks.

Description	Used on Unit	Item Number
Stacking Tray, 12.75 × 10" (32.4 × 25.4 cm)	Digital Open Air and Incubating Microplate Shaker	30400114

Micro-Tube Rack

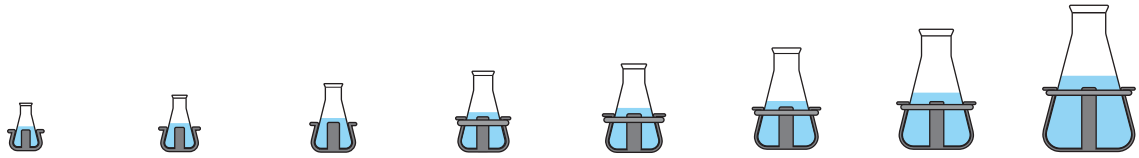
Open Air and Incubating & Incubating Cooling Shakers Accessories

Stainless Steel Flask Clamps

Designed to hold Erlenmeyer flasks from 10 mL to 6 L. Constructed of type 302 and 304 stainless steel. Includes hardware for easy attachment to platforms. Flask clamps 50 mL and higher are supplied with a spring to hold the flask in place. The 2.8 L clamp is designed to hold a Fernbach flask. Media bottle clamps feature the same details as flask clamps.

Media Bottle Flask Clamps

Erlenmeyer Flask Clamps



Clamp Style	10 mL Erlenmeyer Flask Clamp	25 mL Erlenmeyer Flask Clamp	50 mL Erlenmeyer Flask Clamp	125 mL Erlenmeyer Flask Clamp	250 mL Erlenmeyer Flask Clamp	500 mL Erlenmeyer Flask Clamp	1 L Erlenmeyer Flask Clamp	2 L Erlenmeyer Flask Clamp
Material	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel
Item Number	30400084	30400085	30400086	30400087	30400088	30400089	30400090	30400091
Tray or Platform	Number of Flask Clamps per Tray or Platform							
11.75 × 8.75" (29.9 × 22.2 cm)								
Open Air Digital 4 kg Shakers	35	20	15	12	6	4	N/A	N/A
11 × 7.75" (27.9 × 19.7 cm)								
Incubating 4 kg Shakers	35	20	12	8	5	N/A	N/A	N/A
11 × 13" (27.9 × 33 cm)								
Analog/Digital 16 kg Shakers	60	25	13	10	9	7	4	N/A
Digital Reciprocating Shakers	60	25	13	10	9	7	4	N/A
13 × 13" (33 × 33 cm)								
Analog/Digital 16 kg Shakers	60	30	15	12	12	8	4	3
Digital Reciprocating Shakers	60	30	15	12	12	8	4	3
18 × 18" (45.7 × 45. 7 cm)								
Analog/Digital 16 kg Shakers	113	64	32	20	20	13	8	5
Digital Reciprocating Shakers	113	64	32	20	20	13	8	5
18 × 24" (45.7 × 61 cm)								
Analog/Digital 16 kg Shakers	158	88	44	28	28	20	12	6
Digital Reciprocating Shakers	158	88	44	28	28	20	12	6
Analog/Digital 23 kg Shakers	158	88	44	28	28	20	12	6
18 × 30" (45.7 × 76.2 cm)								
Analog/Digital 23 kg Shakers	203	112	56	36	36	26	15	8
24 × 24" (61 × 61 cm)								
Digital 45 kg Shakers	221	121	61	41	41	25	16	9
24 × 36" (61 × 91.4 cm)								
Digital 63 kg Shakers	336	160	94	61	64	40	24	14

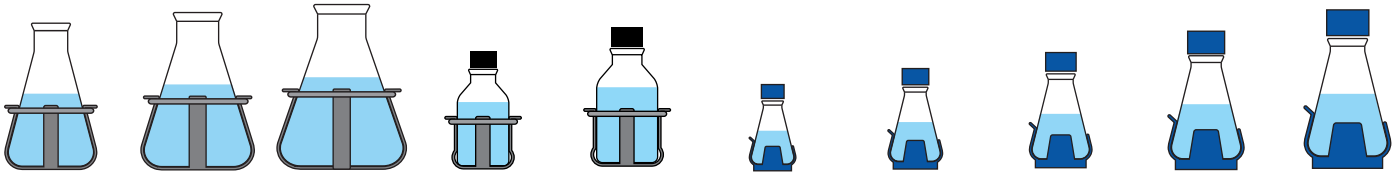
*All units require a universal platform for mounting flask clamps or test tube racks with the exception of the Digital open air and incubating 4 kg shakers

Open Air and Incubating & Incubating Cooling Shakers Accessories

PVC Flask Clamps

Constructed of one piece, molded PVC. Autoclavable. Will not scratch or mark flask like other clamps. Includes hardware for easy attachment to universal platforms. The attachment and removal of flasks is quick and easy. Ideal for polycarbonate flasks.

PVC Flask Clamps



2.8 L & 3 L Fernbach Flask Clamp	4 L Erlenmeyer Flask Clamp	6 L Erlenmeyer Flask Clamp	500 mL Media Bottle Clamp	1 L Media Bottle Clamp	125 mL Erlenmeyer Flask Clamp	250 mL Erlenmeyer Flask Clamp	500 mL Erlenmeyer Flask Clamp	1 L Erlenmeyer Flask Clamp	2 L Erlenmeyer Flask Clamp
Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	PVC	PVC	PVC	PVC	PVC
2.8L-30400092 3L-30400093	30400094	30400096	30400097	30400098	30400099	30400100	30400101	30400102	30400103
Number of Flask Clamps per Tray or Platform									
N/A	N/A	N/A	3	N/A	12	6	4	N/A	N/A
N/A	N/A	N/A	N/A	N/A	8	4	N/A	N/A	N/A
N/A N/A	N/A N/A	N/A N/A	5 5	2 2	10 10	8 8	5 5	2 2	N/A N/A
1 1	1 1	1 1	6 6	5 5	12 12	10 10	6 6	4 4	3 3
2 2	4 4	2 2	16 16	10 10	20 20	18 18	12 12	8 8	4 4
3 3 3	4 4 4	3 3 3	20 20 20	13 13 13	28 28 28	25 25 25	16 16 16	10 10 10	6 6 6
3	6	4	28	18	36	33	20	14	8
5	5	5	25	18	41	35	24	13	9
7	9	7	40	30	61	55	38	22	13

Open Air and Incubating & Incubating Cooling Shakers Accessories

Test Tube Racks

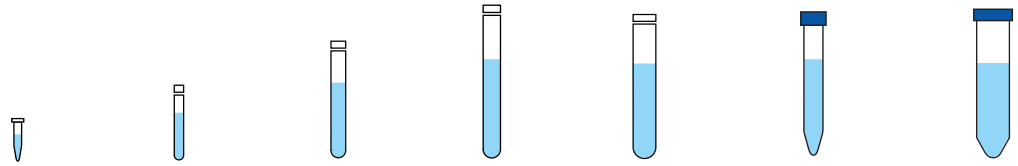
Half Size, Stationary

Racks constructed of PVC coated steel. Includes hardware for easy attachment to platforms.

Dimensions:

5 L × 7 W × 4" H (12.7 × 17.8 × 10.2 cm) / Micro-Tube Rack: 1.7" H (4.3 cm).

Test Tube Racks
Half-Size, Stationary



Test Tube Style	1.5 to 2 mL Micro-Tube Rack Half Size, Stationary	10 to 13 mm Test Tube Rack Half Size, Stationary	14 to 16 mm Test Tube Rack Half Size, Stationary	18 to 20 mm Test Tube Rack Half Size, Stationary	22 to 25 mm Test Tube Rack Half Size, Stationary	15 mL Centrifuge Tube Rack Half Size, Stationary	50 mL Centrifuge Tube Rack Half Size, Stationary
Tube Capacity	70	63	48	35	24	35	12
Item Number	30400114	30400115	30400116	30400117	30400118	30400119	30400120
Tray or Platform	Number of Test Tube Racks per Tray or Platform						
11.75 × 8.75" (29.9 × 22.2 cm)							
Digital Open Air 4 kg Shakers	2	2	2	2	2	2	2
11 × 7.75" (27.9 × 19.7 cm)							
Incubating 4 kg Shakers	2	1	1	N/A	N/A	1	1
Digital Open Air 4 kg Shakers	2	N/A	N/A	N/A	N/A	N/A	N/A
Incubating Microplate Shakers	2	N/A	N/A	N/A	N/A	N/A	N/A
11 × 13" (27.9 × 33 cm)							
Analog/Digital 16 kg Shakers	2	2	2	2	2	2	2
Digital Reciprocating Shakers	2	2	2	2	2	2	2
13 × 13" (33 cm × 33 cm)							
Analog/Digital 16 kg Shakers	2	2	2	2	2	2	2
Digital Reciprocating Shakers	2	2	2	2	2	2	2
18 × 18" (45.7 × 45.7 cm)							
Analog/Digital 16 kg Shaker	4	4	4	4	4	4	4
Digital Reciprocating Shakers	4	4	4	4	4	4	4
18 × 24" (45.7 × 61 cm)							
Analog/Digital 16 kg Shakers	6	6	6	6	6	6	6
Digital Reciprocating Shakers	6	6	6	6	6	6	6
Analog/Digital 23 kg Shakers	6	6	6	6	6	6	6
18 × 30" (45.7 × 76.2 cm)							
Analog/Digital 23 kg Shakers	8	8	8	8	8	8	8
24 × 24" (61 × 61 cm)							
Digital 45 kg Shakers	8	8	8	8	8	8	8
24 × 36" (61 × 91.4 cm)							
Digital 63 kg Shakers	7	7	7	7	7	7	7

* All units require a universal platform for mounting flask clamps or test tube racks with the exception of the Digital open air and incubating 4 kg shakers

Open Air and Incubating & Incubating Cooling Shakers Accessories

Test Tube Racks

Full Size, Stationary

Racks constructed of PVC coated steel. Includes hardware for easy attachment to platforms.

Dimensions

3.75 L × 16.5 W × 4" H (9.5 × 41.9 × 10.2 cm)

Full Size, Pivoting

Has adjustable angle, custom tilt. Stainless steel holder includes removable plastic rack. Rack is easily removed to transport from work area to shaker.

Inside pivoting rack dimensions:

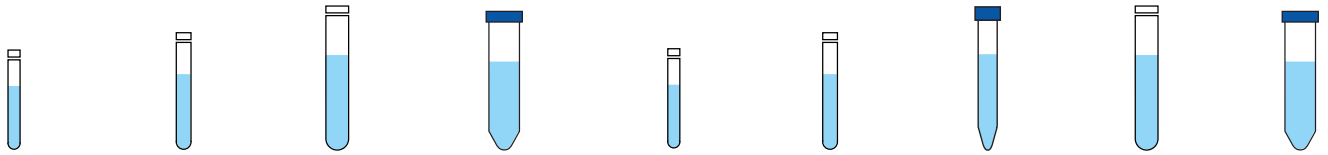
5.1 × 10.8 × 3.9" (12.9 × 27.4 × 9.9 cm)

Outside stationary rack dimensions:

5.0 × 10.9 × 5" (12.7 × 27.6 × 12.7 cm)

Test Tube Racks
Full-Size, Stationary

Test Tube Racks
Full-Size, Pivoting



10 to 14 mm Test Tube Rack Full Size, Stationary	16 to 20 mm Test Tube Rack Full Size, Stationary	21 to 25 mm Test Tube Rack Full Size Stationary	50 mL Centrifuge Tube Rack Full Size, Stationary	13 mm Test Tube Rack Full Size, Pivoting	16 mm Test Tube Rack Full Size, Pivoting	20 mm Test Tube Rack Full Size, Pivoting	25 mm Tube Rack Full Size, Pivoting	30 mm Tube Rack Full Size, Pivoting
48	33	21	17	90	60	40	24	21
30400110	30400111	30400112	30400113	30400105	30400106	30400107	30400108	30400109
Number of Test Tube Racks per Tray or Platform								
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A N/A N/A	N/A N/A N/A	N/A N/A N/A	N/A N/A N/A	N/A N/A N/A	N/A N/A N/A	N/A N/A N/A	N/A N/A N/A	N/A N/A N/A
N/A N/A	N/A N/A	N/A N/A	N/A N/A	1 1	1 1	1 1	1 1	1 1
N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A
N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A
5 5 5	5 5 5	5 5 5	5 5 5	3 3 3	3 3 3	3 3 3	3 3 3	3 3 3
6	6	6	6	4	4	4	4	4
7	7	7	7	4	4	4	4	4
5	5	5	5	6	6	6	6	6

Vortex Mixers

Mini Vortex Mixers
Heavy-Duty Vortex Mixers
Microplate Vortex Mixers
Multi-Tube Vortex Mixers

Mini Vortex Mixers

Four Mini Vortex Mixer models for gentle to high-speed mixing are available. Analog model offers variable speed control, and digital model allows input of the exact speed and time to achieve reproducible results. Pulsing model features a unique pulse action that reduces heat generation, while providing more effective mixing and cell disruption. Fixed speed model offers one-touch, high-speed mixing.

- Select from Two Modes of Operation—Touch or Continuous
- Variable Speed Models Offer Low RPM Start Up to High-Speed Mixing
- Fixed Speed Models Provide Full RPM for Vigorous Mixing

Vortex Mixers

Mini Vortex Mixers

- Sturdy design
- Fixed high speed mixing
- Touch mode operation

Built sturdy to provide stable and reliable vortexing action. Starts mixing when the cup head is pressed down. Speed is fixed at full rpm to provide vigorous vortexing of samples.

Operating Conditions:

Unit can be run in conditions from 4 to 40°C (39 to 104°F), 20% to 85% relative humidity, non-condensing.

Ordering Information:

Units include a 3-wire cord and plug . Includes both cup head and 3" head with cover.

This product includes:

Description	Item Number
Cup Head	30400235
3" (7.6 cm) Head	30400236
3" (7.6 cm) Rubber Head Cover	30400237

Description	Model	Item Number	Country Code
Fixed Speed Vortex Mixer	VXMNFS	30392110	VN, MY, SG, ID, IN
Fixed Speed Vortex Mixer	VXMNFS	30392111	AU, NZ
Fixed Speed Vortex Mixer	VXMNFS	30392113	TH, PH

Specifications	
Speed Range 120V 230V	3200 rpm 2500 rpm
Orbit	4.9 mm (0.19")
Controls	None
Duty Rating	Intermittent duty
Dimensions (L × W × H)	8.3" × 4.8" × 6.5" (21.1 × 12.2 × 16.5 cm)
Ship Weight	10 lbs (4.5 kg)

- Sturdy design
- Variable, analog speed control
- Continuous or touch mode operation

Built sturdy to provide stable and reliable vortexing action. Control allows low rpm startup for gentle shaking or high speed mixing for vigorous vortexing of samples. Two modes of operation; continuous mode when using accessory attachments or touch mode which activates mixing when depressing the cup head.

Operating Conditions:

Unit can be run in conditions from 4 to 40°C (39 to 104°F), 20% to 85% relative humidity, non-condensing.

Ordering Information:

Units include a 3-wire cord and plug . Includes both cup head and 3" head with cover. Additional accessories can be found on pages 52-53.

This product includes:

Description	Item Number
Cup Head	30400235
3" (7.6 cm) Head	30400236
3" (7.6 cm) Rubber Head Cover	30400237

Description	Model	Item Number	Country Code
Analog Vortex Mixer	VXMNAL	30392117	VN, MY, SG, ID, IN
Analog Vortex Mixer	VXMNAL	30392118	AU, NZ
Analog Vortex Mixer	VXMNAL	30392120	TH, PH

Specifications	
Speed Range* 120V 230V	300 to 3200 rpm 300 to 2500 rpm
Orbit	4.9 mm (0.19")
Controls	Auto/Off/On Rocker Switch, Speed Knob: Variable 1 to 10 Dial Marks
Duty Rating	Intermittent duty
Dimensions (L × W × H)	8.3" × 4.8" × 6.5" (21.1 × 12.2 × 16.5 cm)
Ship Weight	10 lbs (4.5 kg)

* Maximum speed will vary depending on accessory used.

Mini Vortex Mixers

- Sturdy design
- LED displays for speed and time
- Continuous or touch mode operation

Built sturdy to provide stable and reliable vortexing action. Ideal for applications that demand repeatable results. Microprocessor control maintains set speed for strong, consistent mixing action. Timer will display elapsed time or, when programmed to user defined time limit, the unit will shut off when time reaches zero. Two modes of operation; continuous mode when using accessory attachments or touch mode which activates mixing when depressing the cup head.

Operating Conditions:

Unit can be run in conditions from 4 to 40°C (39 to 104°F), 20% to 85% relative humidity, non-condensing.

Ordering Information:

Units include a 3-wire cord and plug. Includes both cup head and 3" head with cover. Additional accessories can be found on pages 52-53.

This product includes:

Description	Item Number
Cup Head	30400235
3" (7.6 cm) Head	30400236
3" (7.6 cm) Rubber Head Cover	30400237

Description	Model	Item Number	Country Code
Digital Vortex Mixer	VXMNDG	30392124	VN, MY, SG, ID, IN
Digital Vortex Mixer	VXMNDG	30392125	AU, NZ
Digital Vortex Mixer	VXMNDG	30392127	TH, PH

Specifications	
Speed Range* 120V 230V	500 to 3000 rpm 500 to 2500 rpm
Timer	1 second to 160 hours
Orbit	4.9 mm (0.19")
Controls	Auto/Standby/On Rocker Switch, LED Displays for Speed/Time, Up/Down Buttons for Set-Point Control
Duty Rating	Intermittent duty
Dimensions (L × W × H)	8.3" × 4.8" × 6.5" (21.1 × 12.2 × 16.5 cm)
Ship Weight	10 lbs (4.5 kg)

* Maximum speed will vary depending on accessory used.

- Sturdy design
- LED displays for time and speed
- Glass bead cell disruption/homogenization

Built sturdy to provide stable and reliable vortexing action. Powerful pulsing vortex action produces excellent cell disruption for glass bead procedures. Capable of complete cell disruption of samples in only minutes. Unique pulsing action reduces heat generation while providing more effective mixing and disruption. Displayed time counts up during continuous operation and counts down during timed runs.

Operating Conditions:

Unit can be run in conditions from 4 to 40°C (39 to 104°F), 20% to 85% relative humidity, non-condensing.

Ordering Information:

Units include a 3-wire cord and plug . Includes cup head, 3" head with cover, and an easy-to-load 1.5 mL to 2 mL Micro-Tube Holder. Holder has a built-in cup head. Additional accessories can be found on pages 52-53.

This product includes:

Description	Item Number
Cup Head	30400235
3" (7.6 cm) Head	30400236
3" (7.6 cm) Rubber Head Cover	30400237
Stainless Steel Tube Holder	30400206

Description	Model	Item Number	Country Code
Pulsing Vortex Mixer	VXMNPS	30392131	VN, MY, SG, ID, IN
Pulsing Vortex Mixer	VXMNPS	30392132	AU, NZ
Pulsing Vortex Mixer	VXMNPS	30392134	TH, PH

Specifications	
Speed Range* 120V 230V	500 to 3000 rpm 500 to 2500 rpm
Timer	1 second to 160 hours
Orbit	2.5 mm (0.098")
Controls	Auto/Standby/On Rocker Switch, LED Displays for Speed/Time, Up/Down Buttons for Set-Point Control Pulse Button
Duty Rating	Intermittent duty
Dimensions (L × W × H)	8.3" × 4.8" × 6.5" (21.1 × 12.2 × 16.5 cm)
Ship Weight	10 lbs (4.5 kg)

* Maximum speed will vary depending on accessory used.

Accessories

Mini Vortex Mixer Accessories

Micro-Tube Holder

Mixes (48) 0.25 to 2 mL micro-tubes.
Requires Insert Retainer.

Description	Item Number
Micro-Tube Holder (2 pack)	30400232
Insert Retainer	30400227

9 to 13 mm Tube Holder

Ideal for mixing 5 mL culture tubes and micro-vials.
Requires Insert Retainer.

Description	Item Number
9 to 13 mm Tube Holder (2 pack)	30400230
Insert Retainer	30400227

14 to 19 mm Tube Holder

Ideal for mixing up to (8) 15 mL centrifuge tubes.
Requires Insert Retainer.

Description	Item Number
14 to 19 mm Tube Holder (2 pack)	30400231
Insert Retainer	30400227

20 to 25 mm Tube Holder

Ideal for mixing up to (8) 50 mL centrifuge tubes.
Requires Insert Retainer

Description	Item Number
20 to 25 mm Tube Holder (2 pack)	30400228
Insert Retainer	30400227

Vessel Harness

Mixes Erlenmeyer flasks and media bottles.
Requires Insert Retainer.

Description	Item Number
Vessel Harness (2 pack)	30400235
Insert Retainer	30400227

Cup Head

Designed for mixing 1 tube at a time.

Description	Item Number
Cup Head	30400237

3" Rubber Head Cover and 3" Head

Designed for mixing irregular shaped objects.

Description	Item Number
3" (7.6 cm) Rubber Head Cover	30400236
3" (7.6 cm) Head	30400196
3" (7.6 cm) Head with Rubber Cover	30400196

Microplate Holder

Ideal for mixing 96-well plates or deep well blocks.
Requires Insert Retainer.

Description	Item Number
Microplate Holder (2 pack)	30400233
Insert Retainer	30400227

Flat Foam Insert

Ideal for custom applications. Can be cut or drilled to fit your specifications. Requires Insert Retainer.

Description	Item Number
Flat Foam Insert (2 pack)	30400234
Insert Retainer	30400227

Ampule Tube Holder

Mixes up to 4 storage vials and test tubes.

Description	Item Number
15 to 17 mm Ampule Tube Holder	30400207
10 to 17 mm Ampule Tube Holder	30400208

Stainless Steel Microtube Holder

Mixes up to (12) 1.5 to 5 mL tubes.
Stainless steel construction.

Description	Item Number
Microtube Holder	30400206

Micro-Tube and Microplate Holder Kit

Includes:

- 1 Micro-Tube Holder
- 1 Microplate Holder
- 1 Insert Retainer

Description	Item Number
Micro-Tube & Microplate Holder Kit	30400198

Tube Holder Kit

Includes:

- (1) 9 to 13 mm Tube Holder
- (1) 14 to 19 mm Tube Holder
- (1) 20 to 25 mm Tube Holder
- 1 Flat Foam Insert
- 2 Vessel Harnesses
- 1 Insert Retainer

Description	Item Number
Tube Holder Kit	30400197

OHAUS Vortex Mixer accessories are interchangeable with other manufacturers' models. Call 1-800-672-7722 for assistance.

Mini Vortex Mixer Accessories

Single Tube Holder

Single tube, hands free mixing. Easily attaches to the top of any Vortex Mixer with the use of a strong magnetic base. Accepts tubes from 2.5 to 4.5" (6.4 to 11.4 cm) in length. Minimum tube diameter of 0.75" (19 mm).

Description	Item Number
Single Tube Holder	30400202

Adapter for Vortex-Genie® Mixer*

Adapter plate easily adheres to the Vortex-Genie® Mixer housing so Single Tube Holder (sold separately) can be attached.

Description	Item Number
Adapter plate	30400203

* The Vortex-Genie® Mixer is a registered trademark of Scientific Industries, Inc.

Single Tube Holder Accessories

(Requires Single Tube Holder)

0.5 mL Micro-Tube Holder

Mixes (24) 0.5 mL micro-tubes.
For use with Single Tube Holder.

Description	Item Number
Micro-Tube Holder (0.5 mL)	30400204

1.5 mL to 2.0 mL Micro-Tube Holder

Mixes (18) 1.5 to 2 mL micro-tubes.
For use with Single Tube Holder.

Description	Item Number
Microtube Holder (1.5 mL to 2.0 mL)	30400205

Heavy-Duty Vortex Mixers

Heavy-Duty Vortex Mixers feature a heavy-duty design and efficient motor to permit continuous duty operation, and the ability to handle accessory components over the entire speed range. Analog variable speed models or microprocessor-controlled digital models offer exact speed control when applications demand repeatable results. A wide range of accessories are available for microtubes, microplates and a variety of tube sizes from 0.5 to 50 ml.

- Accessory Adapter's Unique Mode of Attachment Allows for Secure Mixing
- Touchpad Control & Independent LED Displays for Speed/Time on Digital Models
- Variable Speed Analog Model Offers an Economical Alternative to Digital Model

Heavy-Duty Vortex Mixers

- Designed for continuous duty
- LED displays for speed and time
- Includes foam insert for 1.5 mL to 2.0 mL microtubes

The OHAUS Digital Heavy-Duty Vortex Mixer is ideal for applications that demand repeatable results. Mixer features touchpad controls and LED displays for accurate speed (rpm) and time (minutes and seconds) results. The heavy-duty design and efficient motor allow this mixer to operate in continuous duty and handle all accessories over the entire speed range. Choose from two modes of operation: "Touch" mode for mixing tubes when cup head or Universal Holder with cover is depressed, or "On" mode when using any of the accessory attachments for continuous operation. Microprocessor control maintains set speed for strong, consistent mixing action. Timer will display elapsed time or, when programmed to user defined time limits, the unit will shut off when time reaches zero.

Operating Features:

Microprocessor Control: The variable speed microprocessor control provides consistent uniform mixing action.
LED Display: Touch pad controls with easy-to-read, independent LED displays for speed and time allow operator to view both settings at once. Provides repeatable and accurate results every time and is easily visible across lab benches. Timer will display elapsed time or, when programmed to user defined limit, will shut off unit when time reaches zero. Display will show last used settings, even after power has been turned off.

Operating Conditions:

Unit can be run in conditions from 4 to 40°C (39 to 104°F), 20% to 85% relative humidity, non-condensing.

Ordering Information:

Mixer includes a cup head, universal holder with cover, foam microtube insert for (38) 1.5 to 2.0 mL microtubes, and a detachable, 3-wire cord and specified plug. Additional accessories can be found on page 60.

Specifications	
Speed Range On Mode Touch Mode	 300 to 2500 rpm 300 to 3500 rpm
Timer	1 second to 160 hours
Orbit	4.9 mm (0.19")
Controls	Touch/Standby/On Rocker Switch, LED Displays for Speed/Time, Up/Down Buttons for Set-Point Control
Capacity	2.5 lbs (1.1 kg)
Duty Rating	Continuous duty
Dimensions (L × W × H)	9.5 × 6.6 × 6.3" (24.1 × 16.8 × 16 cm)
Ship Weight	15 lbs (6.8 kg)

This product includes:

Description	Item Number
Cup Head	30400210
Universal Holder	30400226
Universal Holder Cover	30400225
Foam Insert (1.5 to 2.0 microtubes)	30400217

Description	Model	Item Number	Country Code
Digital Heavy Duty Vortex Mixer	VXHDDG	30392136	VN, MY, SG, ID, IN
Digital Heavy Duty Vortex Mixer	VXHDDG	30392137	AU, NZ

Heavy-Duty Vortex Mixers

- Designed for continuous duty
- Includes foam insert for 1.5 mL to 2.0 mL microtubes
- Heavy-duty design

The OHAUS Analog Heavy-Duty Vortex Mixer is a variable speed analog mixer that is designed for continuous duty. The heavy-duty design and efficient motor allow this mixer to operate in continuous duty and handle all accessories over the entire speed range. Choose from two modes of operation: "Touch" mode for mixing tubes when cup head or Universal Holder with cover is depressed, or "On" mode when using any of the accessory attachments for continuous operation.

Operating Conditions:

Unit can be run in conditions from 4 to 40°C (39 to 104°F), 20% to 85% relative humidity, non-condensing.

Ordering Information:

Mixer includes a cup head, universal holder with cover, foam microtube insert for (38) 1.5 to 2.0 mL microtubes, and a detachable, 3-wire cord and specified plug. Additional accessories can be found on page 60.

This product includes:

Description	Item Number
Cup Head	30400210
Universal Holder	30400226
Universal Holder Cover	30400225
Foam Insert (1.5 to 2.0 microtubes)	30400217

Specifications	
Speed Range On Mode Touch Mode	 300 to 2500 rpm 300 to 3500 rpm
Orbit	4.9 mm (0.19")
Controls	Analog
Capacity	2.5 lbs (1.1 kg)
Duty Rating	Continuous duty
Dimensions (L × W × H)	9.5 × 6.6 × 6.3" (24.1 × 16.8 × 16 cm)
Ship Weight	15 lbs (6.8 kg)

Description	Model	Item Number	Country Code
Analog Heavy Duty Vortex Mixer	VXHDAL	30392141	VN, MY, SG, ID, IN
Analog Heavy Duty Vortex Mixer	VXHDAL	30392142	AU, NZ

Microplate Vortex Mixers

Microplate Vortex Mixers are designed specifically for continuous duty throughout the speed range. Analog variable speed models or microprocessor-controlled digital models offer exact speed control for applications that demand repeatable results. The high-speed and small orbit of these mixers make them optimal for effectively mixing microplates. Cup head for mixing single tubes is also included.

- Microplate Adapter's Unique Mode of Attachment Allows for Secure Mixing
- Touchpad Control & Independent LED Displays for Speed/Time on Digital Models
- Variable Speed Analog Model Offers an Economical Alternative to Digital Model

Microplate Vortex Mixers

- Designed for continuous duty
- Designed for shaking microplates or tubes
- LED displays for speed and time

The OHAUS Digital Microplate Vortex Mixer is ideal for applications that demand repeatable results. Mixer features touchpad controls and LED displays for accurate speed (rpm) and time (minutes and seconds) results. Microprocessor control maintains set speed for strong, consistent mixing action. Timer will display elapsed time or, when programmed to a user defined time limit, the unit will shut off when time reaches zero. Choose from two modes of operation: "Touch" mode which activates mixing when cup head is depressed, or "On" mode when using the microplate attachments for continuous operation.

Operating Features:

Microprocessor Control: The variable speed microprocessor control provides consistent uniform mixing action.
LED Display: Touch pad controls with easy-to-read, independent LED displays for speed and time allow operator to view both settings at once. Provides repeatable and accurate results every time and is easily visible across lab benches. Timer will display elapsed time or, when programmed to user defined limit, will shut off unit when time reaches zero. Display will show last used settings, even after power has been turned off.

Operating Conditions:

Unit can be run in conditions from 4 to 40°C (39 to 104°F), 20% to 85% relative humidity, non-condensing.

Ordering Information:

Mixer includes a cup head, single microplate holder, and a detachable, 3-wire cord and specified plug. Accessories that can be used on the Microplate Vortex Mixer are cup head, single microplate holder and double microplate holder. Additional accessories can be found on page 60.

Specifications	
Speed Range On Mode Touch Mode	 300 to 2500 rpm 300 to 3500 rpm
Timer	1 second to 160 hours
Orbit	3.5 mm (0.13")
Controls	Touch/Standby/On Rocker Switch, LED Displays for Speed/Time, Up/Down Buttons for Set-Point Control
Capacity	2 microplates
Duty Rating	Continuous duty
Dimensions (L × W × H)	10.5 × 5.4 × 4.5" (26.7 × 13.7 × 11.4 cm)
Ship Weight	12 lbs (5.4 kg)

This product includes:

Description	Item Number
Cup Head	30400210
Microplate Holder (Single)	30400215

Description	Model	Item Number	Country Code
Digital Microplate Vortex Mixer	VXMPDG	30392150	VN, MY, SG, ID, IN
Digital Microplate Vortex Mixer	VXMPDG	30392151	AU, NZ

Microplate Vortex Mixers

- Designed for continuous duty
- Designed for shaking microplates or tubes
- Optional double microplate holder available

The OHAUS Analog Microplate Vortex Mixer is a variable speed analog mixer that is designed for continuous duty. The high speed and small orbit is optimal for effectively mixing microplates. Choose from two modes of operation: "Touch" mode which activates mixing when cup head is depressed, or "On" mode when using the microplate attachments for continuous operation.

Operating Conditions:

Unit can be run in conditions from 4 to 40°C (39 to 104°F), 20% to 85% relative humidity, non-condensing.

Ordering Information:

Mixer includes a cup head, single microplate holder, and a detachable, 3-wire cord and specified plug. Accessories that can be used on the Microplate Vortex Mixer are cup head, single microplate holder and double microplate holder. Additional accessories can be found on page 60.

This product includes:

Description	Item Number
Cup Head	30400210
Microplate Holder (Single)	30400215

Specifications	
Speed Range On Mode Touch Mode	 300 to 2500 rpm 300 to 3500 rpm
Orbit	3.5 mm (0.13")
Controls	Analog
Capacity	2 microplates
Duty Rating	Continuous duty
Dimensions L × W × H)	10.5 × 5.4 × 4.5" (26.7 × 13.7 × 11.4 cm)
Ship Weight	12 lbs (5.4 kg)

Description	Model	Item Number	Country Code
Analog Microplate Vortex Mixer	VXMPAL	30392155	VN, MY, SG, ID, IN
Analog Microplate Vortex Mixer	VXMPAL	30392156	AU, NZ

Microplate Vortex Mixer Accessories

Foam Insert for 0.5 mL Microtubes

Foam insert holds (52) 0.5 mL microtubes.
Requires Universal Holder.

Description	Item Number
0.5 mL microtubes	30400216
Universal Holder	30400226

Foam Insert for 1.5 to 2.0 mL Microtubes

Foam insert holds (38) 1.5 to 2.0 mL microtubes.
Requires Universal Holder.

Description	Item Number
1.5 to 2.0 mL microtubes	30400217
Universal Holder	30400226

Foam Insert for 12-13 mm Test Tubes

Foam insert holds (34) 12-13 mm diameter test tubes.
Requires Universal Holder.

Description	Item Number
12-13 mm test tubes	30400220
Universal Holder	30400226

Foam Insert for 15-18 mm Test Tubes

Foam insert holds (20) 15-18 mm diameter test tubes. Ideal for 15 mL centrifuge tubes.
Requires Universal Holder.

Description	Item Number
15-18 mm test tubes	30400221
Universal Holder	30400226

Foam Insert for 19-21 mm Test Tubes

Foam insert holds (18) 19-21 mm diameter test tubes.
Requires Universal Holder.

Description	Item Number
19-21 mm test tubes	30400222
Universal Holder	30400226

Foam Insert for 22-25 mm Test Tubes

Foam insert holds (13) 22-25 mm diameter test tubes.
Requires Universal Holder.

Description	Item Number
22-25 mm test tubes	30400223
Universal Holder	30400226

Foam Insert for 26-29 mm Test Tubes

Foam insert holds (4) 26-29 mm diameter test tubes. Ideal for 50 mL centrifuge tubes. Requires Universal Holder.

Description	Item Number
26-29 mm test tubes	30400224
Universal Holder	30400226

Single Tube Holder

Single tube, hands free mixing designed to fit on the Heavy-Duty Vortex Mixer. Easily attached to the top of mixer and is magnetically secured.
Accepts tubes from 2.5 to 4.5" (6.4-11.4 cm).
Minimum tube diameter is 0.75" (19 mm)

Description	Item Number
Single Holder	30400219

*Unless noted with an asterisk (*), for use on Heavy-Duty Vortex only.

Cup Head*

Designed for mixing 1 tube at a time.

Description	Item Number
Cup Head	30400210

Small Vessel Holder

Rubber holder secures 125 and 250 mL Erlenmeyer flasks. Vessel holder also includes a grip mat.
Requires Universal Holder.

Description	Item Number
Small Vessel Holder	30400218
Universal Holder	30400226

Large Vessel Holder

Rubber holder secures 500 and 1000 mL Erlenmeyer flasks. Vessel holder also includes a grip mat.
Requires Universal Holder.

Description	Item Number
Large Vessel Holder	30400211
Universal Holder	30400226

Microplate Holder (Single)*

Designed to hold one standard microplate.

Description	Item Number
Single Holder	30400215

Microplate Holder (Double)*

Designed to hold two standard microplates.

Description	Item Number
Double Holder	30400213

Microplate Holder (Quad)

Designed to hold four standard microplates.

Description	Item Number
Quad Holder	30400214

Stackable Microplate Holder Four

Designed to maximize the capacity of the Heavy-Duty Vortex Mixer to eight microplates by stacking the tray on top of the four plate holder.

Description	Item Number
Stackable Holder	30400212

Flat Foam Insert

Ideal for custom applications. Can be cut or drilled to fit your specifications. Requires Universal Holder.

Description	Item Number
Flat Foam Insert	30400209
Universal Holder	30400226

Universal Holder & Cover

Replacement for items supplied with Heavy-Duty Vortex Mixer. Cover allows for mixing irregularly shaped objects.

Description	Item Number
Universal Holder	30400226
Universal Holder Cover	30400225

Multi-Tube Vortex Mixers

Multi-Tube Vortexers are ideal for high throughput sample processing. Interchangeable foam racks for vortexing tubes from 10 to 29 mm in diameter available. Vortexing action is created by securing the top of the sample in place while allowing the bottom to rotate freely in a 3.6 mm orbit. Suction cup feet reduce motion and prevent sliding on work surface. Analog & digital models, both microprocessor-controlled and run in continuous or timed mode.

- Digital Models Ideal for Applications that Require Accuracy and Repeatability
- Pulsing Mode on Digital Models to Enhance Vortexing Action
- Analog Model Offers an Economical Alternative When Exact Speed/Time Not Required

Vortex Mixers

Multi-Tube Vortex Mixers

- Process up to 50 samples at a time
- Continuous or timed operation
- Includes foam rack for 12 mm tubes

Conveniently angled front panel features rocker switch for run, time and standby modes.

Operating Features:

One piece, stainless steel housing design optimizes clean-ups. Ideal for applications requiring accuracy and repeatability. The stainless steel one piece housing design is conducive to keeping your vortexer clean and free from contaminants.

Microprocessor Control: The variable speed microprocessor control provides consistent uniform mixing action.

Adjustment Knobs: Basic speed and time knobs with 1 to 10 dial markings.

Operating Conditions:

Unit can be run in conditions from 4 to 40°C (39 to 104°F), 20% to 85% relative humidity, non-condensing.

Applications:

Suspensions, high throughput testing in clinical, environmental, and chemistry labs.

Ordering Information:

Unit includes a detachable, 3-wire cord and plug. Unit is also supplied with a Tray Pad Set for support and one 12 mm Test Tube Foam Rack (30400239). Additional accessories can be found on page 64.

Specifications	
Speed Range*	1200 to 2400 rpm
Timer	0 to 60 seconds
Orbit	3.6 mm (0.14")
Maximum Weight Capacity	10 lbs (4.5 kg)
Duty Rating	Continuous duty
Tray Dimensions (L × W)	7.25 × 12.25" (18.4 × 31.1 cm)
Overall Dimensions (L × W × H)	9.5 × 15.1 × 16" (24.1 × 38.4 × 40.6 cm)
Ship Weight	42 lbs (19.1 kg)

* Maximum speed will vary depending on load.

Description	Model	Item Number	Country Code
Analog Multi-Tube Vortexer	VXMTAL	30392166	VN, MY, SG, ID, IN
Analog Multi-Tube Vortexer	VXMTAL	30392167	AU, NZ

Multi-Tube Vortex Mixers

- Process up to 50 samples at a time
- LED displays for speed and time
- Pulsing mode

Ideal for applications requiring accuracy and repeatability.

Operating Features:

One piece, stainless steel housing design optimizes clean-ups. Ideal for applications requiring accuracy and repeatability. The stainless steel one piece housing design is conducive to keeping your vortexer clean and free from contaminants.

Microprocessor Control: The variable speed microprocessor control provides consistent uniform mixing action.

LED Display: Touch pad controls with easy-to-read, independent LED displays for speed and time allow operator to view both settings at once. Provides repeatable and accurate results every time and is easily visible across lab benches. Timer will display elapsed time or, when programmed to user defined limit, will shut off unit when time reaches zero. Display will show last used settings, even after power has been turned off.

Pulsing Mode: Programmable pulsing mode allows user to adjust the pulse-on and pulse-off times between 1 and 59 seconds in 1 second intervals. This feature enhances the vortex action by creating a more vigorous mix.

Operating Conditions:

Unit can be run in conditions from 4 to 40°C (39 to 104°F), 20% to 85% relative humidity, non-condensing.

Applications:

Suspensions, high throughput testing in clinical, environmental, and chemistry labs.

Ordering Information:

Unit includes a detachable, 3-wire cord and plug. Unit is also supplied with a Tray Pad Set for support and one 12 mm Test Tube Foam Rack (30400239). Additional accessories can be found on page 64.

Specifications	
Speed Range*	500 to 2500 rpm
Speed Accuracy	± 25 rpm
Timer	1 second to 160 hours
Orbit	3.6 mm (0.14")
Maximum Weight Capacity	10 lbs (4.5 kg)
Duty Rating	Continuous duty
Tray Dimensions (L × W)	7.25 × 12.25" (18.4 × 31.1 cm)
Overall Dimensions (L × W × H)	9.5 × 15.1 × 16" (24.1 × 38.4 × 40.6 cm)
Ship Weight	42 lbs (19.1 kg)

* Maximum speed will vary depending on load.

Description	Model	Item Number	Country Code
Digital Multi-Tube Vortexer	VXMTDG	30392173	VN, MY, SG, ID, IN
Digital Multi-Tube Vortexer	VXMTDG	30392174	AU, NZ

Multi-Tube Vortexer Accessories

Foam Test Tube Racks

Description	Tube Capacity	Color	Dimensions (L × W × H)	Item Number
10 mm Test Tube Foam Rack	50	Gray	5.5 × 9.5 × 2" (14 × 24.1 × 5.1 cm)	30400238
12 mm Test Tube Foam Rack	50	Blue	5.5 × 9.5 × 2" (14 × 24.1 × 5.1 cm)	30400239
13 mm Test Tube Foam Rack	50	Yellow	5.5 × 9.5 × 2" (14 × 24.1 × 5.1 cm)	30400240
16 mm Test Tube Foam Rack (for 15 mL centrifuge tubes)	50	Green	5.5 × 9.5 × 2" (14 × 24.1 × 5.1 cm)	30400241
25 mm Test Tube Foam Rack	28	White	5.5 × 9.5 × 2" (14 × 24.1 × 5.1 cm)	30400243
29 mm Test Tube Foam Rack (for 50 mL centrifuge tubes)	15	Red	5.5 × 9.5 × 2" (14 × 24.1 × 5.1 cm)	30400242
Replacement Tray Pad Set (upper & lower)	N/A	Gray	7 × 12 × 1" (17.8 × 30.5 × 2.5 cm)	30400245

Post Extension Kit

Adds 6" (15.2 cm) to the post of the Multi-Tube Vortex Mixer to accommodate tubes up to 10" (25.4 cm) tall.

Description	Item Number
Post Extension Kit	30400244

Dry Block Heaters

Dry Block Heaters
2 Block Dry Block Heaters with Lid

Dry Block Heaters

Multi-purpose Dry Block Heaters are ideal for applications that require temperature stability. The close tube-to-block contact enables maximum heat retention, resulting in efficient heating. High-wattage, constant-temp. analog models are an economical option, while digital models offer exceptional temp. uniformity & stability for applications that require repeatable results. Units hold optional interchangeable modular blocks with over 40 options.

- Delivering Exceptional Temperature Stability and Uniformity
- Accurate and Fast Sample Heating with PID Microprocessor Temperature Control (Digital models)
- Digital Models can be Calibrated to an External Temperature Device

Dry Block Heaters

- Exceptional temperature uniformity and stability
- Optional external temperature probe
- Holds interchangeable modular blocks

Designed for applications that require repeatable results and superior temperature stability. These multi-purpose units are ideal for incubation and activation of cultures, enzyme reactions, immunoassays, melting/boiling points, and a wide variety of other laboratory procedures. Integral support rod holder with locking knob accepts optional External Temperature Probe Kit. Optional External Temperature Probe Kit monitors actual block or sample temperature. Each of the five models accepts separate interchangeable modular blocks, accommodating various tube sizes from 0.2 mL micro-tubes to 50 mL centrifuge tubes. Each block has a thermometer well for measuring block temperature. Efficient heating due to close tube-and-block contact for maximum heat retention. Heaters require OHAUS modular heating blocks for operation. Modular blocks are sold separately (see pages 73–75).

Operating Features:

Microprocessor Control: PID temperature control, with optional external RTD probe, offers a temperature stability as low as ± 0.1°C with a temperature uniformity as low as ± 0.1°C. Samples are heated to temperature quickly and accurately. Temperature is adjusted in ± 0.1°C increments.
LED Display: Touch pad controls with easy-to-read, independent LED displays for temperature, and time. Provides repeatable and accurate results every time and is easily visible across lab benches. Shows set-point and actual temperature. Timer will display elapsed time or, when programmed to user defined limit, will shut off unit when time reaches zero. Display will show last used settings, even after power has been turned off.
Temperature Calibration Mode: Allows user to calibrate unit to an external temperature device.

Safety Features:

Caution Hot Indicator: Hot warning symbol light is illuminated when the temperature is above 40°C.
Overshoot Protection: If the unit exceeds the set temperature by 10°C the unit will automatically stop heating.
Audible Alarm: In timed mode, alarm will sound when time reaches zero and when unit reaches set-point temperature.
CAUTION! To avoid possible electrical hazard, do not fill well or block opening with water or other fluids. Unit is designed as a dry bath/incubator.

Operating Conditions:

Units can be run in conditions from 18 to 33°C (64 to 91°F), 20% to 80% relative humidity, non-condensing.

Applications:

Denaturing proteins, DNA applications, ELISA and other immunoassay studies.

Ordering Information:

Units include a detachable, 3-wire cord and plug. Modular blocks are sold separately (see pages 73-75).

Size	Temperature Range	Temperature Stability @ 37°C	Uniformity Within the Block @ 37°C	Uniformity Across Similar Blocks @ 37°C	Heat-Up Time to 100°C
1 block	Ambient +5°C to 120°C	120 volt units: ± 0.1°C 230 volt units: ± 0.2°C	120 volt units: ± 0.1°C 230 volt units: ± 0.2°C	N/A	45 minutes
2 block				± 0.1°C	50 minutes
4 block				± 0.2°C	60 minutes
6 block				± 0.3°C	65 minutes

Dry Block Heaters

Advanced Dry Block Heaters

Block Capacity	Dimensions (L × W × H)	Model	Item Number	Item Number
1	12.4 × 8 × 3.5" (31.5 × 20.3 × 8.9 cm)	HB1DG	30392061	VN, MY, SG, ID, IN
1	12.4 × 8 × 3.5" (31.5 × 20.3 × 8.9 cm)	HB1DG	30392062	AU, NZ
1	12.4 × 8 × 3.5" (31.5 × 20.3 × 8.9 cm)	HB1DG	30392064	TH, PH
2	15.4 × 8 × 3.5" (39.1 × 20.3 × 8.9 cm)	HB2DG	30392082	VN, MY, SG, ID, IN
2	15.4 × 8 × 3.5" (39.1 × 20.3 × 8.9 cm)	HB2DG	30392083	AU, NZ
2	15.4 × 8 × 3.5" (39.1 × 20.3 × 8.9 cm)	HB2DG	30392085	TH, PH
4	16.9 × 8 × 3.5" (42.9 × 20.3 × 8.9 cm)	HB4DG	30392089	VN, MY, SG, ID, IN
4	16.9 × 8 × 3.5" (42.9 × 20.3 × 8.9 cm)	HB4DG	30392090	AU, NZ
4	16.9 × 8 × 3.5" (42.9 × 20.3 × 8.9 cm)	HB4DG	30392092	TH, PH
6	20.9 × 8 × 3.5" (53.1 × 20.3 × 8.9 cm)	HB6DG	30392096	VN, MY, SG, ID, IN
6	20.9 × 8 × 3.5" (53.1 × 20.3 × 8.9 cm)	HB6DG	30392097	AU, NZ
6	20.9 × 8 × 3.5" (53.1 × 20.3 × 8.9 cm)	HB6DG	30392099	TH, PH

External Temperature Probe Kit

Enables the unit to read actual block or sample temperature and display that temperature on the control panel. The optional External Temperature Probe Kit includes a stainless steel RTD PT100 probe, 18" (45.7 cm) stainless steel support rod, thermometer/temperature probe extension clamp and hook connector. The PT100 RTD probe is designed to fit perfectly in to the thermometer well of each modular block.

Description	Item Number
Optional External Temperature Probe Kit	30400246

Dry Block Heaters

- Multi-purpose use
- Holds interchangeable modular blocks
- Analog controls

High wattage, constant-temperature Dry Block Heaters are economical, versatile and compact. These multi-purpose units are ideal for incubation and activation of cultures, enzyme reactions, immunoassays, melting/boiling points and a wide variety of other laboratory procedures. Each of the five models accept separate interchangeable modular blocks, accommodating various sample enclosures such as micro-tubes, centrifuge tubes, vials, microplates, and PCR strips or tubes. Each block has a thermometer well for measuring block temperature. Anodized aluminum modular blocks provide superior temperature stability and heat transfer. Heaters require OHAUS modular heating blocks for operation. Modular blocks are sold separately (see pages 73-75).

Operating Features:

High wattage, constant-temperature Dry Block Heaters are economical, versatile and compact.
Microprocessor Control: PID temperature controller maintains precise temperature control. Samples are heated to temperature quickly and accurately.
Adjustment Knobs: Dual temperature control knobs with dial markings from 1 to 10 for low temperature and high temperature adjustments. Low range knob adjusts from ambient to 100°C and high range knob adjusts from 75°C to 150°C.
CAUTION! To avoid possible electrical hazard, do not fill well or block opening with water or other fluids. Unit is designed as a dry bath/incubator.

Operating Conditions:

Units can be run in conditions from 18 to 33°C (64 to 91°F), 20% to 80% relative humidity, non-condensing.

Applications:

Coagulation and RH Studies.

Ordering Information:

Units include a detachable, 3-wire cord and plug``. Modular blocks are sold separately (see pages 73-75).

Size	Temperature Range	Uniformity Within the Block @ 37°C	Temperature Stability @ 37°C	Uniformity Across Similar Blocks @ 37°C	Heat-Up Time to 100°C
1 block	Low Range: Ambient +5°C to 100°C High Range: 75°C to 150°C	120 volt units: ± 0.1°C 230 volt units: ± 0.2°C	120 volt units: ± 1.0°C 230 volt units: ± 1.5°C	N/A	45 minutes
2 block			120 volt units: ± 1.5°C 230 volt units: ± 2.0°C	± 0.1°C	50 minutes
4 block			120 volt units: ± 2.0°C	± 0.2°C	70 minutes
6 block			230 volt units: ± 2.5°C	± 0.3°C	75 minutes

Dry Block Heaters

Standard Dry Block Heaters

Block Capacity	Dimensions (L × W × H)	Model	Item Number	Country Code
1	12.4 × 8 × 3.5" (31.5 × 20.3 × 8.9 cm)	HB1AL	30392047	VN, MY, SG, ID, IN
1	12.4 × 8 × 3.5" (31.5 × 20.3 × 8.9 cm)	HB1AL	30392048	AU, NZ
1	12.4 × 8 × 3.5" (31.5 × 20.3 × 8.9 cm)	HB1AL	30392050	TH, PH
2	15.4 × 8 × 3.5" (39.1 × 20.3 × 8.9 cm)	HB2AL	30392054	VN, MY, SG, ID, IN
2	15.4 × 8 × 3.5" (39.1 × 20.3 × 8.9 cm)	HB2AL	30392055	AU, NZ
2	15.4 × 8 × 3.5" (39.1 × 20.3 × 8.9 cm)	HB2AL	30392057	TH, PH
4	16.9 × 8 × 3.5" (42.9 × 20.3 × 8.9 cm)	HB4AL	30392068	VN, MY, SG, ID, IN
4	16.9 × 8 × 3.5" (42.9 × 20.3 × 8.9 cm)	HB4AL	30392069	AU, NZ
4	16.9 × 8 × 3.5" (42.9 × 20.3 × 8.9 cm)	HB4AL	30392071	TH, PH
6	20.9 × 8 × 3.5" (53.1 × 20.3 × 8.9 cm)	HB6AL	30392075	VN, MY, SG, ID, IN
6	20.9 × 8 × 3.5" (53.1 × 20.3 × 8.9 cm)	HB6AL	30392076	AU, NZ

2 Block Dry Block Heaters with Lid

Multi-purpose Dry Block Heaters are ideal for applications that require temperature stability. The close tube-to-block contact enables maximum heat retention, resulting in efficient heating. High-wattage, constant-temp. Analog models are an economical option, while digital models offer exceptional temp. uniformity & stability for applications that require repeatable results. Units hold optional interchangeable modular blocks with over 40 options.

- Delivering Exceptional Temperature Stability and Uniformity
- Heated Lid Model Reduces Condensation on Lids to Maintain Sample Integrity
- Calibrate to an External Temperature Device with Temperature Calibration Mode

Dry Block Heaters

2 Block Dry Block Heaters with Lid

- Exceptional uniformity, stability, and regulation of temperature
- Heated lid reduces condensation on sample lids
- Optional external temperature probe

OHAUS Digital Dry Block Heaters with Heated Lid are designed for applications that require repeatable results and superior temperature stability. These multi-purpose units are ideal for isothermal incubation, enzyme reactions, immunoassays, nucleic acid denaturation and a wide variety of other laboratory procedures. Integral support rod holder with locking knob accepts optional External Temperature Probe Kit. Optional External Temperature Probe Kit monitors actual block or sample temperature. Block heater accepts one microplate block or two separate interchangeable modular blocks, accommodating various tube sizes from 0.2 mL micro-tubes to test tubes or vials up to 85 mm in height. Each block has a thermometer well for measuring block temperature. Efficient heating due to close tube-and-block contact with a low density design for exceptional temperature uniformity. The heated lid helps to regulate the temperature and reduce the amount of condensation on sample lids. Heaters require OHAUS modular heating blocks for operation. Modular blocks are sold separately (see pages 73-75).

Operating Features:

Microprocessor Control: PID temperature control, with optional external RTD probe, offers a temperature stability as low as ± 0.1°C with a temperature uniformity as low as ± 0.1°C. Samples are heated to temperature quickly and accurately. Temperature is adjusted in ± 0.1°C increments.

LED Display: Touch pad controls with easy-to-read, independent LED displays for temperature, and time. Provides repeatable and accurate results every time and is easily visible across lab benches. Shows set-point and actual temperature. Timer will display elapsed time or, when programmed to user defined limit, will shut off unit when time reaches zero. Display will show last used settings, even after power has been turned off.

Temperature Calibration Mode: Allows user to calibrate unit to an external temperature device.

Safety Features:

Caution Hot Indicator: Hot warning symbol light is illuminated when the temperature is above 40°C.

Overshoot Protection: If the unit exceeds the set temperature by 10°C the unit will automatically stop heating.

Audible Alarm: In timed mode, alarm will sound when time reaches zero and when unit reaches set-point temperature.

CAUTION! To avoid possible electrical hazard, do not fill well or block opening with water or other fluids. Unit is designed as a dry bath/incubator.

Operating Conditions:

Units can be run in environments from 18 to 33°C (64 to 91°F), 20% to 80% relative humidity, non-condensing.

Applications:

Isothermal incubation, enzyme reactions, immunoassays and nucleic acid denaturation and a wide variety of other laboratory procedures.

Ordering Information:

Units include a detachable, 3-wire cord and plug. For optional temperature probe kits see page 68. Modular blocks sold separately (see pages 73–75).

Size	Temperature Range	Temperature Stability @ 37°C	Uniformity Within the Block @ 37°C	Uniformity Across Similar Blocks @ 37°C	Heat-Up Time to 100°C
2 block	Ambient +5°C to 100°C	120 volt units: ± 0.1°C 230 volt units: ± 0.2°C	120 volt units: ± 1.0°C 230 volt units: ± 0.2°C	± 0.1°C ± 0.2°C	50 minutes

Block Capacity	Dimensions (L × W × H)	Model	Item Number	Country Code
2	15.4 × 8 × 7" (39.1 × 20.3 × 17.8 cm)	HB2DGHL	30392103	VN, MY, SG, ID, IN
2	15.4 × 8 × 7" (39.1 × 20.3 × 17.8 cm)	HB2DGHL	30392104	AU, NZ

Modular Blocks & Accessories

Modular blocks are constructed from a solid anodized aluminum block*. The close contact of tubes-to-block walls allow for maximum heat retention. Each block has a thermometer well for measuring block temperature.

CAUTION! To avoid possible electrical hazard, do not fill well or block with water or other fluids. Units are designed as a dry bath/incubator.

Single block dimensions (L × W × H): 3.75 × 3 × 2" (9.5 × 7.6 × 5.1 cm)
Double block dimensions (L × W × H): 6 × 3.75 × 2.25" (15.2 × 9.5 × 5.7 cm)

Microcentrifuge Tube Blocks

Single block

Brand/Sample Type	No. of Wells	Well Dia.	Well Depth	Item Number
0.5 mL Tube	30	7.9 mm	27.6 mm	30400157
1.5 mL Tube	20	11.1 mm	39.1 mm	30400159
1.5 mL Eppendorf™ Tube	20	11.5 mm	36.9 mm	30400162
2 mL Eppendorf™ Tube	20	11.5 mm	38.1 mm	30400191
2 mL Corning™ Tube	20	10.9 mm	38.1 mm	30400192

Titer Plate Block

Double block
Fits 2/4/6 block Dry Block Heaters. Ideal for 96-well or 384-well titer plates. Recessed well for better stability, flat surface good for flat and round bottom plates.

Sample Type	Well Depth	Item Number
Titer Plate	13.5 mm	30400164

Conical-Bottom Centrifuge Tube Blocks

Single/Sample Type	No. of Wells	Well Dia.	Well Depth	Item Number
15 mL Tube	12	17.1 mm	44.5 mm	30400172
50 mL Tube	5	29.0 mm	47.6 mm	30400168

Standard Test Tube Blocks

Single/Sample Type	No. of Wells	Well Dia.	Well Depth	Item Number
6 mm Tube	30	8.3 mm	48.4 mm	30400158
10 mm Tube	24	10.7 mm	48.4 mm	30400151
12/13 mm Tube	20	13.9 mm	48.4 mm	30400152
12/13 mm Tube	16	13.9 mm	48.4 mm	30400165
15/16 mm Tube	12	17.5 mm	48.4 mm	30400153
17/18 mm Tube	12	19.1 mm	48.4 mm	30400195
20 mm Tube	8	21.0 mm	48.4 mm	30400154
25 mm Tube	6	26.2 mm	48.4 mm	30400155
35 mm Tube	4	35.0 mm	47.6 mm	30400167

* Block color subject to change

Modular Blocks* & Accessories

Combination Blocks

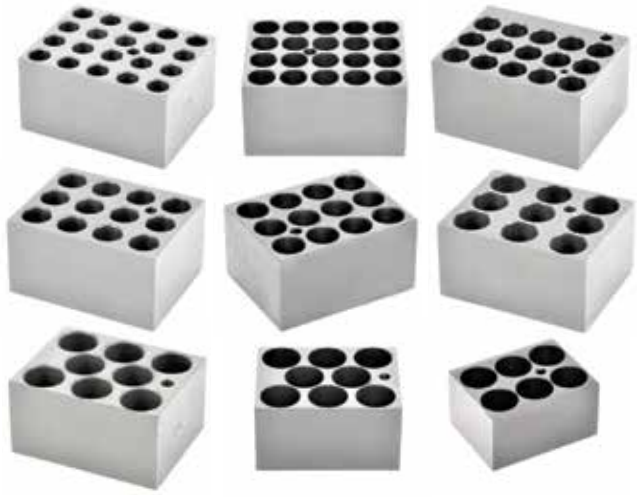
Single block
These blocks have been designed for variable sized samples.

Sample Type		No. of Wells	Well Dia.	Well Depth	Item Number
Test Tube Combination	6 mm	6	8.3 mm	48.4 mm	30400156
	12/13 mm	5	13.8 mm	48.4 mm	
	25 mm	3	26.2 mm	48.4 mm	
Centrifuge Tube Combination	1.5 mL	4	11.1 mm	39.1 mm	30400193
	15 mL	3	17.1 mm	44.5 mm	
	50 mL	2	29.0 mm	47.6 mm	
Micro-Tube Combination	0.5 mL	6	7.9 mm	27.6 mm	30400194
	1.5 mL	10	11.1 mm	39.1 mm	
	2 mL	5	11.5 mm	38.1 mm	

Vial Blocks

Single block
Designed for sample/serum and scintillation vials.

Sample Type	No. of Wells	Well Dia.	Well Depth	Item Number
12 mm Vial	20	12.7 mm	30 mm	30400182
15 mm Vial	20	15.8 mm	35 mm	30400183
16 mm Vial	15	16.4 mm	45 mm	30400190
17 mm Vial	12	17.8 mm	45 mm	30400184
19 mm Vial	12	19.7 mm	45 mm	30400185
21 mm Vial	9	21.7 mm	45 mm	30400186
23 mm Vial	8	23.8 mm	45 mm	30400187
25 mm Vial	8	25.8 mm	45 mm	30400188
28 mm Vial	6	28.8 mm	45 mm	30400189



PCR—Plate, Tube, Strip Blocks

Single and double block
Tapered tube wells for 0.2 mL tubes. Spaced for easy access and removal.

Sample Type	Block Size	No. of Wells	Well Dia.	Well Depth	Item Number
96-well PCR Plate	Double	96	6.4 mm	15.5 mm	30400171
10 × 8 Tube Strips	Single	80	6.4 mm	15.5 mm	30400169
Individual Tubes	Single	64	6.4 mm	20.2 mm	30400170

Cuvette Block

Single block
Two parallel slots fit 6 cuvettes in each slot, side-by-side.

Sample Type	No. of Wells	Well Depth	Item Number
(12) 12.5 mm Cuvettes	2	25.4 mm	30400161

* Block color subject to change

Modular Blocks* & Accessories

Solid Blocks

Single and double block

For use as a low-temperature hotplate, slide drying, or for custom drilling to make a custom block.

Block Size	Dimensions (L × W × H)	Item Number
Single	3.75 × 3 × 2" (9.5 × 7.6 × 5.1 cm)	30400160
Double	6 × 3.75 × 2.25" (15.2 × 9.5 × 5.7 cm)	30400166

Stainless Steel Sand Baths

Ideal for irregular vessels. Stainless steel construction for superior corrosion resistance. Designed to hold sand, stainless steel shot or non-volatile fluids.

For Unit	Dimensions (L × W × H)	Item Number
1 Block Dry Block Heater	3.8 × 3.0 × 2.5" (9.5 × 7.6 × 6.4 cm)	30400173
2 Block Dry Block Heater	3.8 × 5.9 × 2.5" (9.5 × 14.9 × 6.4 cm)	30400174
4 Block Dry Block Heater	5.8 × 7.5 × 2.5" (14.7 × 19.1 × 6.4 cm)	30400175
6 Block Dry Block Heater	5.8 × 11.3 × 2.5" (14.7 × 28.7 × 6.4 cm)	30400176

Accessories	Item Number
Sand, 1 lb (0.45 kg)	30400177
Stainless Steel Shot, 1 lb (0.45 kg)	30400178

Low Temperature Covers

Plexiglass cover reduces air flow for additional temperature stability in low-temperature applications. Two sides are open 0.25" (6.4 mm).

Block Size	Dimensions (L × W × H)	Item Number
2 Block Cover	6.5 × 6.5 × 1.6" (16.5 × 16.5 × 4.1 cm)	30400179
4 Block Cover	8.5 × 8.5 × 1.6" (21.6 × 21.6 × 4.1 cm)	30400180
6 Block Cover	12.5 × 8.5 × 1.6" (31.8 × 21.6 × 4.1 cm)	30400181

* Block color subject to change

LabJaws Clamps & Supports

Lab-Lifts

Free Call: 1800 723 405 - sales@pacificlab.com.au

Lab-Lifts

LabJaws offers the largest selection of Lab-Frame Kits, Lab-Lifts, Rods and Support Stands in the industry to hold glassware safely. Whether you're looking for a standard lab-frame or a customizable set-up, we have options to fit any space or application. Select from 14 pre-configured lab-frame kits (connectors and feet included) to rods which can be purchased individually and combined with LabJaws accessories to build a customized frame.

- Choose from Stainless Steel and Aluminum Options to Best Suit Your Application
- Range of Pre-Configured Lab-Frame Kits and Customizable Rods for Your Lab Space
- Lab-Lifts Provide Exceptional Stability to Hold Items at Varying Heights

LabJaws Clamps & Supports

Lab-Lifts

OHAUS Aluminum Lab-Lifts

- Exceptional stability and durability
- Aluminum construction
- Three convenient sizes

Aluminum Lab-Lifts provide stable height adjustment for various items in the lab such as flasks, baths, and small equipment. Top and bottom decks are constructed of anodized aluminum. Internal supports and drive screws are constructed of stainless steel. Oversized sure-grip adjustment knobs provide smooth and accurate height adjustment. Lab-Lifts accept optional Support Rod Kit which mounts to the upper deck.

Deck Size	Min. to Max. Height	Max. Load*	Item Number
4 × 4" (102 × 102 mm)	2.5 to 5" (64 to 127 mm)	66 lbs (29.94 kg)	30400007
6 × 6" (152 × 152 mm)	3 to 9.75" (76 to 248 mm)	132 lbs (59.87 kg)	30400008
8 × 8" (203 × 203 mm)	3 to 9.75" (76 to 248 mm)	176 lbs (79.83 kg)	30400009
10 × 10" (254 × 254 mm)	3.5 to 13" (89 to 330 mm)	186 lbs (84.37 kg)	30400010

*NOTE: Maximum load rating represents static weight only. Static weight is the amount a unit can hold, not lift.

OPTIONAL ACCESSORIES

17" Support Rod Kit

Ideal for creating an adjustable support stand for mounting various items such as thermometer clamps, temperature probes, flask and column clamps. This kit allows you to mount a 17" (432 mm) threaded vertical support rod to the upper deck of a 6 × 6", 8 × 8", 10 × 10", 12 × 12" or 16 × 16" Lab-Lift by screwing the rod into the pre-drilled hole.

17" Support Rod Kit includes:

- 1 - 17" (432 mm) Stainless Steel Rod
- 1 - Jam Nut
- 1 - Flat Washer

Description	Rod Diameter	Item Number
17" Support Rod Kit	0.51" (13 mm)	30400050

Lab-Lifts

OHAUS Heavy-Duty Lab-Lifts

- Stainless steel construction
- Seven convenient sizes to choose from
- Autoclavable and chemical resistant

These Heavy-Duty, Stainless Steel Lab-Lifts are ultra-stable lifting platforms with exceptional strength and durability. Constructed of stainless steel, Lab-Lifts are designed for use in extreme environments and high load applications. Equipped with oversized, sure-grip adjustment knobs that provide extra leverage for easy height adjustments. Durable construction allows lifts to be autoclaved or chemically cleaned. Ideal for use in fume hoods or bench tops and holds a variety of items such as glassware, hotplates, baths, and magnetic stirrers.

Deck Size	Min. to Max. Height	Max. Load*	Item Number
3 × 3" (76 × 76 mm)	2.5 to 5" (64 to 127 mm)	100 lbs (45.36 kg)	30400000
4 × 4" (102 × 102 mm)	2.5 to 5" (64 to 127 mm)	100 lbs (45.36 kg)	30400001
6 × 6" (152 × 152 mm)	3 to 9.75" (76 to 248 mm)	133 lbs (60.33 kg)	30400002
8 × 8" (203 × 203 mm)	3 to 9.75" (76 to 248 mm)	227 lbs (102.97 kg)	30400003
10 × 10" (254 × 254 mm)	3.5 to 13" (89 to 330 mm)	247 lbs (112.04 kg)	30400004
12 × 12" (305 × 305 mm)	4 to 19.5" (102 to 495 mm)	100 lbs (45.36 kg)	30400005
16 × 16" (406 × 406 mm)	4 to 19.5" (102 to 495 mm)	100 lbs (45.36 kg)	30400006

*NOTE: Maximum load rating represents static weight only. Static weight is the amount a unit can hold, not lift.

OPTIONAL ACCESSORIES

17" Support Rod Kit

Ideal for creating an adjustable support stand for mounting various items such as thermometer clamps, temperature probes, flask and column clamps. This kit allows you to mount a 17" (432 mm) threaded vertical support rod to the upper deck of a 6 × 6", 8 × 8", 10 × 10", 12 × 12" or 16 × 16" Lab-Lift by screwing the rod into the pre-drilled hole.

17" Support Rod Kit includes:

- 1 - 17" (432 mm) Stainless Steel Rod
- 1 - Jam Nut
- 1 - Flat Washer

Description	Rod Diameter	Item Number
17" Support Rod Kit	0.51" (13 mm)	30400050

Ratchet Tool

Designed to add extra leverage to your 12 × 12" or 16 × 16" Lab-Lift. This recommended Ratchet Tool easily attaches to the actuating rod to allow easy, accurate adjustments.

Description	Item Number
Ratchet Tool	30400049

OHAUS Corporation

Headquartered in Parsippany, NJ, OHAUS Corporation manufactures an extensive line of high-precision electronic and mechanical balances and scales that meet the weighing needs of virtually every industry. OHAUS is a global leader in the laboratory, industrial, and education channels as well as a host of specialty markets, including the food preparation, pharmacy and jewelry industries. An ISO 9001:2008 manufacturer, OHAUS products are precise, reliable and affordable, and are backed by industry-leading customer support.

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