

# Reliability. Simplicity. Flexibility.



# Thermo Scientific MaxQ Shaker Product

Model		Benchtop (B), Floor (F) or Stackable (S)	Motion	Platform Size Inches (cm)	250 ml Flask Capacity Dedicated* Platform	250 ml Flask Capacity Universal* Platform	
MaxQ 2000	AsA			13 x 11 (33 x 28)	12	9	
Increased capacity.		В	Orbital	18 x 18 (45.7 x 45.7)	25	16	
small footprint				24 x 18 (60.9 x 45.7) <sup>1</sup>	N/A	24	
MaxQ 3000		F	Orbital	30 x 18 (76 x 45.7)	40	24	
Increased capacity, small footprint		'	Orbital	36 x 24 (91 x 60.9)	70	40	
May0 0506/0500			2508: orbital/	13 x 11 (33 x 28)	10	9	
MaxQ 2506/2508 Flexibility and choice		В	reciprocating = 2506: -	18 x 18 (45.7 x 45.7)	25	16	
Troubinty and onoice			reciprocating	24 x 18 (60.9 x 45.7)	24	24	-
MaxQ 4450 Flexible, affordable		В	Orbital	13 x 11 (33 x 28)	10	9	
MaxQ 4000 Spacious chamber, small footprint		В	Orbital	18 x 18 (45.7 x 45.7)	25	16	
MaxQ 5000 Large capacity applications		F	Orbital	30 x 18 (76 x 45.7)	40	24	
MaxQ 6000 Stackable, space-savings		S	Orbital	18 x 18 (45.7 x 45.7)	25	16	
MaxQ 8000 Maximum flexbility, stackable design	PENN PANN PERNON	S	Orbital	29.5 x 18 (74.9 x 45.7)	30	30	
MaxQ 7000 Excellent temp. uniformity		В	Orbital	13 x 11 (33 x 28)	9	9	

"See following pages 6–7 for a complete description of platform types. "Universal platform only," "Fixed reciprocating stroke length and orbital motion;" "Adjustable reciprocating stroke length."

Model		Benchtop (B), Floor (F)	Motion	Platform Size Inches (cm)	250 ml Flask Capacity Dedicated* Platform	250 ml Flask Capacity Universal* Platform
MaxQ 416 HP		В	Orbital	18 x 18 (45.7 x 45.7)	25	18
Maximum capacity with platform options	The state of the s	D	Orbital -	24 x 18 (60.9 x 45.7)	35	25
MaxQ 430 HP		F	Orbital	29.5 x 18 (74.9 x 45.7)	40	30
Maximum capacity with platform options		Г	Orbital -	36 x 24 (91.4 x 60.9)	70	55
MaxQ 420 HP Large benchtop, optimum growth	MARKES .	В	Orbital	18 x 18 (45.7 x 45.7)	25	3011/801 <sup>45</sup>
MaxQ 435 (436) HP High capacity  MaxQ 480R (481R) HP High capacity		F	Orbital	29.5 x 18 (74.9 x 45.7)	40	ptel non pt of as to lit

# Selector Guide

La	mum Capacity argest Flask a a Platform	Orbit Diameter Reciprocating Motion Inches (cm)	RPM Range	Temperature Range °C (T <sub>A</sub> =Ambient Temperature)	Maximum Load Lb. (kg)	Refrigeration	Gassing Manifold	Page
	1 x 6L		Analog: 40-400					
	2 x 6L	0.75 (1.9)	B	N/A	35 (15.9)			9–11
	3 x 6L		Digital: 15–500		1			
	3 x 6L	1.0 (2.54)	Analog: 40-400	N/A	50 (22.7)			9–11
4	6 x 6L	1.0 (2.04)	Digital: 15–500	IVA	JU (ZZ.I)			5 11
	1 x 6L	2508: 0.4 (1.2) <sup>2</sup>	2508 Analog: 40–400	8 800	15 (0.0)			0
	2 x 6L 3 x 6L	2506: 0.5 to 1.5 (1.2 to 3.8) <sup>3</sup>	2506 Analog: 10-250	N/A	15 (6.8)			12–13
			Analog: 40-400		05 (45.0)	a Car		O
	4 x 1L 0.75 (1.9)	0.75 (1.9)	Digital: 15-500	T <sub>A</sub> +5°C to 80°C	35 (15.9)			14–15
		5 3 3	Analog: 40-400	T <sub>A</sub> +10°C to 60°C	The BILL			N B
	6 x 2L	0.75 (1.9)		$T_A + 10^{\circ}$ C to 80°C	50 (22.7)			16–17
1 1 2 - W			Digital: 15–500	T <sub>A</sub> -15°C to 60°C		100		201
	4 x 6L	1.0 (2.54)	Analog: 40-400	T <sub>A</sub> +10°C to 60°C	75 (34)			18–19
	4 X OL	1.0 (2.04)	Digital: 15–500	T <sub>A</sub> -15°C to 60°C	73 (34)			10-19
	2 x 6L	0.75 (1.9)	Digital: 15–500	T <sub>A</sub> +10°C to 80°C	35 (15.9)			20–21
	Z X OL	0.75 (1.9)	Digital: 15-500	T <sub>A</sub> -15°C to 80°C	33 (13.9)			20–21
	100	1.0 (0.54)	District 05, 400	T <sub>A</sub> +10°C to 60°C	05 5 (40.4)			00.05
	12 x 2L	1.0 (2.54)	Digital: 25–400	T <sub>A</sub> -15°C to 60°C	35.5 (16.1)			22–25
	1 v Cl	0 E (4 07)	Analog: 40-400	T <sub>A</sub> +5°C to 65°C	0E (4E 0)			06.07
	1 x 6L	0.5 (1.27)	Digital: 15–500	T <sub>A</sub> -5°C to 65°C	35 (15.9)			26–27

Maximum Capacity Largest Flask on a Platform	Orbit Diameter Inches (cm)	RPM Range	Temperature Range °C (T <sub>A</sub> =Ambient Temperature)	Maximum Load Lb. (kg)	Refrigeration	Incubation	Page
2 x 6L	1.0 (2.54)	25–525	N/A	71 (22)			30–31
4 x 6L	1.0 (2.54)	20–020	IVA	71 (32)			30–31
4 x 6L	1.0 (0.54)	05 505	NI/A	71 (00)			00.01
8 x 6L	1.0 (2.54)	25–525	N/A	71 (32)			30–31
6 x 2L	1.0 (2.54)	25–525	5°C above ambient to 80°C	71 (32)		•	32-33 31118-34 31118-31
4 x 6L	1.0 (2.54)	25–525	5°C above ambient to 60°C 4°C to 60°C	71 (32)	•	et jus	13. 18. 18. 18. 18. 18. 18. 18. 18. 18. 18

# Trust your samples to a proven, reliable product

You invest a lot into the preparation of your samples from growing cultures that express proteins to staining your gels for visualization and much more. Only Thermo Scientific MaxQ shakers deliver outstanding performance, accuracy and reproducible results year after year.



#### Reliability

Our outstanding drive mechanisms provide continuous 24-hour operation and allow you to shake and stir large and uneven loads, smoothly and uniformly. These innovative designs are available on all Thermo Scientific orbital shakers and both designs come with a lifetime guarantee on drive mechanisms.



#### **Simplicity**

Easy-to-use controls let you precisely adjust individual displays for temperature, speed and time. View all parameters simultaneously to prevent risk of error while establishing running conditions.



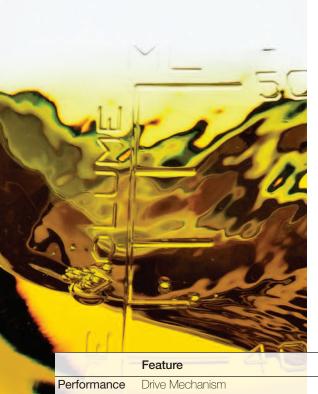
#### **Flexibility**

Benchtop, floor and stackable models are available fully equipped with incubation, refrigeration and water bath options to accommodate any application and budget. Customizable solutions allow you to choose your platform for maximum flexibility and capacity. Platforms allow the addition and interchangeability of clamps that hold various sizes of Thermo Scientific Nalgene Erlenmeyer flasks, beakers, test tube racks and separatory funnels and Thermo Scientific Nunc microwell plates.





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With a wide range of shaker options including analog or digital, incubated or refrigerated and benchtop or floor model, we make it easy to choose the right shaker solution for your laboratory.

### Thermo Scientific MaxQ Analog Shakers

If your lab is analog and you intend you keep it that way, our MaxQ analog shakers are offered at an economical price and include a triple eccentric drive mechanism providing 24-hour operation and allowing shaking of large and uneven loads.

- 40 to 400 rpm speed range; monitored by analog tachometer

			Easy to read LED temperature display					
	[ [ ]		• 1 to 60 minute timer or continuous operation					
Pe		Feature	MaxQ Analog Shakers					
-	Performance	Drive Mechanism	Triple Eccentric					
		Motor	Brushed					
		Temperature Controller	PID Controller, ±0.1°C over entire temperature range					
		Speed, Display and Range	Analog Tachometer, 40 to 400 rpm					
	X	Temperature, Display and Range	Push Button LED, 10°C to 80°C					
	<u> </u>	Time Display	Analog Timer, 1-60 min timer or continuous operation					
	7	Temperature User Calibration	Standard					
		Speed User Calibration	No					
	-	Soft Start	No					
		Set Point Retention	Standard					
	Alarms	Speed	No					
		Temperature	User adjustable over/under temperature thermostat controls the heat/refrigeration					
		Temperature Set Point	Audible/Visual, over/under temperature tracking adjustable within ±1°C					
		Temperature Limits	Audible/Visual, over/under temperature tracking adjustable within ±1°C					
-		Unbalanced Load	No					
		Lid Open	Auto Platform Stop					
-	Data Management	RS232 Interface	No Solition of the state of the					
4		Recorder Output	No ** ** ** ** ** ** ** ** ** ** ** ** **					
	Other	Certifications	UL, cUL, CE					
4		Warranty	One year labor, five year parts, lifetime drive mechanism					

### Thermo Scientific MaxQ Digital Shakers

Our MaxQ digital shakers contain a triple eccentric drive mechanism When you require a reliable solution for sensitive cell cultures needing to accommodate heavier loads, provide uniform shaking, ensure 24/7 operation and feature a maintenance-free brushless DC motor.

- 15 to 500 rpm speed range
- View temperature, speed and time simultaneously on three individual LED displays
- Continuous timed operation from 0.1 hour to 999 hours or
   Continuous operation or timed operation from 1 minute up to 199 hours 0.1 minute to 999 minutes
- speed deviations

#### Thermo Scientific

## MaxQ Digital HP Shakers

protection from contamination, choose from our MaxQ High Performance line of shakers.

- 25 to 525 rpm speed range
- Backlit display contains run points and set points of temperature, speed and time that can be viewed simultaneously
- and 59 minutes
- Audible/Visual alarms protect cultures from temperature and
   Audible/Visual alarms protect cultures from temperature and speed deviations
  - HEPA filter for maximum protection from contamination
  - Directed airflow system for optimum temperature uniformity and ideal growth conditions even when the units are full

	MaxQ Digital Shakers	MaxQ Digital High Performance Shakers
	Triple eccentric	Triple counter-balanced
	Brushless	Brushless, low-heat 24V DC with moisture resistant electronics
	PID Controller, ±0.1°C over entire temperature range	PID Controller, ±0.1°C over entire temperature range
	Push Button LED, 15 to 500 rpm	Push Button LED, 25 to 525 rpm
	Push Button LED, 10°C to 80°C	Push Button LED,4°C to 80°C
	Push Button LED, 0.1 min – 999 hours or continuous operation	Push Button LED, 1 min – 199 hours and 59 min or continuous operation
	Standard	Standard
	Audible/Visual, ±10% of set speed	Audible/Visual, ±5 rpm
	User adjustable over/under temperature thermostat controls the heat/refrigeration	User adjustable over/under temp thermostat with independent probe controls heat/refrigeration
	Audible/Visual, over/under temperature tracking adjustable within $\pm 1^{\circ}\text{C}$	Audible/Visual, over/under temperature tracking adjustable within ±1°C
1	Audible/Visual, over/under temperature tracking adjustable within $\pm 1^{\circ}\text{C}$	Audible/Visual, over/under temperature tracking adjustable within ±1°C
	Auto Platform Stop	Auto Platform Stop
	Auto Platform Stop	Auto Platform Stop
	Standard	Standard
	Standard	Standard LEB LINI 201 LEB
	UL, cUL, CE	UL, cUL, CE
	One year labor, five years parts, lifetime drive mechanism	One year labor, five years parts, lifetime drive mechanism

# Customize your shaker solution

On the following pages, you'll find selection guides to help you build the optimal shaker for your lab and application. No matter which solution you choose, you'll find that our ordering process allows you to customize your platform for maximum flexibility and capacity.

# Select the shaker for your application:

- A Select a temperature range\*
- B Check the exterior dimensions to fit your space
- C Determine the vessel type and capacity on the platform
- D Choose analog or digital system

\*temperature range not applicable on open air models

# Choose your platform based on your needs:

**Universal platforms** – Choose the size platform you need appropriate to your selected shaker. With a universal platform you can maximize flexibility by selecting a mixture of different size clamps from the **Universal Clamp Guide**.

**Dedicated platforms** – Select the platform with pre-installed shaker clamps appropriate to your selected shaker. If using a single-vessel size only, such as a flask, these platforms provide maximum capacity.

Customize your platform with universal clamps (available only with universal platforms)

Select the clamps you need from a wide selection available as seen in the Universal Clamp Guide.

#### Thermo Scientific MaxQ 4450





Shaker Options	Speed Range (rpm)	Orbit Diameter	Max. Load Lb. (kg)	Temperature Range and Accuracy	Temperature Uniformity		erall Dimensio Dimensions In		Shipping Weight	Model. No. 120V. 50/60 Hz	Model No. 240V, 50/60 H
	(ipili)	III. (GIII)	LU. (Kg)	Accuracy Uniteritity —		L	W	Н	Lb. (kg)	1204, 30/00 112	2400, 30/0011
MaxQ 4450 - Inc	cubated Shaker										
Analog	40-400	0.75 (1.9)	35 (15.9)	5°C above ambient to 80°C ±0.1°C at 37°C in flask	±0.5°C at 37°C in flask	27.2 (69.1)/ 17.3 (43.9)	14.1 (35.8)/ 13.3 (33.8)	15.8 (40.1)/ 9 (22.9)	77 (35)	SHKA4450	SHKA4450-10
Digital	15-500 ±1	0.75 (1.9)	35 (15.9)	5°C above ambient to 80°C ±0.1°C at 37°C in flask	±0.5°C at 37°C in flask	27.2 (69.1)/ 17.3 (43.9)	14.1 (35.8)/ 13.3 (33.8)	15.8 (40.1)/ 9 (22.9)	77 (35)	SHKE4450	SHKE4450-1
MaxQ 4450 - Inc	cubated Shaker	with Cooling Coil (	Requires Chille	er)							
Analog	40-400	0.75 (1.9)	35 (15.9)	5°C below ambient to 80°C ±0.1°C at 37°C in flask	±0.5°C at 37°C in flask	27.2 (69.1)/ 17.3 (43.9)	14.1 (35.8)/ 13.3 (33.8)	15.8 (40.1)/ 9 (22.9)	77 (35)	SHKA4450CC	SHKA4450CC-1
Digital	15-500 ±1	0.75 (1.9)	35 (15.9)	5°C below ambient to	±0.5°C at 37°C	27.2 (69.1)/	14.1 (35.8)/	15.8 (40.1)/	77 (35)	SHKE4450CC	SHKE4450CC-

#### **Platforms**

choosing your platform and selecting a mixture of clamps

WIGAIITHZC HCAIDHII	ly by choosing your platform and selecting a mix	ture or clamps.		
MaxQ 2000				Model No.
Platforms	Universal Platforms	11 x 13" (28 x 33 cm)	Platform without Clamps	30100 <sup>1</sup>
Choose the platform that best	Maximum flexibility for using a mix of different size labware on a single platform.	11 x 13" (28 x 33 cm)	Dual Stacked Platform without Clamps	30125
fits your needs.	See Universal Clamp Guide for clamp capacities. Purchase clamps separately.	18 x 18" (45.7 x 45.7 cm)	Platform without Clamps	30110 <sup>1</sup>
		18 x 18" (45.7 x 45.7 cm)	Dual Stacked Platform without Clamps	30128
		18 x 24" (45.7 x 60.9 cm)	Platform without Clamps	30106
	Dedicated Platforms	11 x 13" (28 x 33 cm)	Platform with Clamps	See Dedicated Platforms on p. 11
	Clamps come installed to provide maximum capacity.	18 x 18" (45.7 x 45.7 cm)	Platform with Clamps	See Dedicated Platforms on p. 11
Clamps	Mix and match clamps for your Universal Platform.			See Universal Clamp Guide below
Misc. Accessories	Adapter set for stacking two platforms (Models 30100 and 30110 only)			3522-3
MaxQ 3000				Model No.
Platforms	Universal Platforms	30 x 18" (76 x 45.7 cm)	Platform without Clamps	30115BI
Choose the platform that best	Maximum flexibility for using a mix of different size labware on a single platform.	30 x 18" (76 x 45.7 cm)	Dual Stacked Platform without Clamps	30124
fits your needs.	See Universal Clamp Guide for clamp capacities. Purchase clamps separately.	36 x 24" (91 x 61 cm)	Platform without Clamps	30120BI





#### Platforms

Maximize flexibility by choosing your platform and selecting a mixture of clamps.

MaxQ 2000				Model No.
Platforms	Universal Platforms	11 x 13" (28 x 33 cm)	Platform without Clamps	301001
	Maximum flexibility for using a mix of different size labware on a single platform.	11 x 13" (28 x 33 cm)	Dual Stacked Platform without Clamps	30125
fits your needs.	See Universal Clamp Guide for clamp capacities. Purchase clamps separately.	18 x 18" (45.7 x 45.7 cm)	Platform without Clamps	301101
		18 x 18" (45.7 x 45.7 cm)	Dual Stacked Platform without Clamps	30128
		18 x 24" (45.7 x 60.9 cm)	Platform without Clamps	30106
	Dedicated Platforms	11 x 13" (28 x 33 cm)	Platform with Clamps	See Dedicated Platforms on p. 11
	Clamps come installed to provide maximum capacity.	18 x 18" (45.7 x 45.7 cm)	Platform with Clamps	See Dedicated Platforms on p. 11
Clamps	Mix and match clamps for your Universal Platform.			See Universal Clamp Guide belov
Misc. Accessories	Adapter set for stacking two platforms (Models 30100 and 30110 only)			3522-3
MaxQ 3000				Model No.
Platforms	Universal Platforms	30 x 18" (76 x 45.7 cm)	Platform without Clamps	30115BI
Choose the platform that best	Maximum flexibility for using a mix of different size labware on a single platform.	30 x 18" (76 x 45.7 cm)	Dual Stacked Platform without Clamps	30124
fits your needs.	See Universal Clamp Guide for clamp capacities. Purchase clamps separately.	36 x 24" (91 x 61 cm)		30120BI





Clamp

# Universal Clamp Guide Mix and match to customize the Universal Platform for your unique needs. Clamps sold as individual units.

Model No.



Capacity Guide	Clamps come ins	Clamps come installed to provide maximum capacity						
amp capacity of vessels for the	Platform Size	Description	Capacity	Model No.				
al Platform	11 x 13"	10 ml Erlenmeyer Flask	60	3523-1				
MaxQ 4450	(28 x 33 cm)	25 ml Erlenmeyer Flask	30	3523-2				
11 x 13" (28 x 33 cm)		50 ml Erlenmeyer Flask	30	3523-3				
		125 ml Erlenmeyer Flask	15	3523-4				
		250 ml Erlenmeyer Flask	10	3523-5				
		500 ml Erlenmeyer Flask	6	3523-7				
				3523-8				





#### Universal Clamp Guide

Flask Clamp Starter Kit, includes (1) microplate clamp, (2) 125 ml flask clamps, (4) 250 ml flask clamps, (4) 500 ml flask clamps, (2) 1L flask clamps, (2) 2L flask clamps

Mix and match to customize the Universal Platform for your unique needs. Clamps sold as individual units.

Clamp C Max. cla Universa

Clamp	Model No.	Clamp Capacity Guide  Max. clamp capacity of vessels for the Universal Platform
Flask Clamp Starter Kit, includes (1) microplate clamp, (2) 25 ml flask clamps, (2) 50 ml flask clamps, (2) 125 ml flask clamps, (4) 250/300 ml flask clamps, (4) 500 ml flask clamps, (2) 1L flask clamps, (2) 2L flask clamps and replacement screws	236099	-
Microplate	236025	18
25 ml Erlenmeyer Flask	236010	91
50 ml Erlenmeyer Flask	236011	91
125 ml Erlenmeyer Flask	236012	39
250/300 ml Erlenmeyer Flask	236013	30
500 ml Erlenmeyer Flask	236014	24
1L Erlenmeyer Flask	236015	12
2L Erlenmeyer Flask	236016	11
2800 ml Fernback Flask	236019	6
Adhesive Flask Mat, 9 x 9" (23 x 23 cm)	300349 <sup>3</sup>	-
Replacement Screws: (60) #10-24 x 5/16" countersink Phillips head screws for clamps and (6) 1/4-20 x 3/4" countersink flat head socket for platforms and (2) 1/4"-20 x 1-1/2" hex socket set screws	194046	





# MaxQ 2000 & 3000 Open Air Platform Shakers

### Increase shaking capacity in a small footprint

Choose from several platform sizes to increase capacity by simply changing the platform

- Small shaker footprint saves valuable bench space
- $\bullet$  Units operate in temperature range of 0°C to +40°C and humidity conditions from 20 to 80% non-condensing enabling them to be used in a variety of environments
- Triple eccentric drives handle heavy platform loads (MaxQ 2000: 35 lbs, MaxQ 3000: 50 lbs)

#### Digital CO<sub>2</sub> resistant option

- Electrical and mechanical components have been treated to protect from up to 10% CO<sub>2</sub> and 90% humidity conditions non-condensing
- Prevents humidity and CO<sub>2</sub> from reacting with electrical components and forming carbolic acid in a CO<sub>2</sub>\* environment

\*Some CO<sub>2</sub> incubators may require cooling. Please consult your manufacturer.

- Cell culture
- Solubility studies
- Extraction procedures
- Diagnostic tests
- General mixing

- Bacterial suspensions
- Staining and destaining
- Washing procedures
- Hybridization





Ordering Information
Select the right shaker for your needs and customize by selecting either a Universal Platform or a Dedicated Platform.

#### MaxQ 2000 and MaxQ 3000 Shaker

Shaker Options	Speed Range	Orbit Diameter	Max. Load	Overall D	imensions Inc	hes (cm)	Shipping Weight	Model No.	Model No.
Shaker Options	(rpm)	In. (cm)	Lb. (kg)	L	W	Н	Lb. (kg)	120V, 50/60 Hz	240V, 50/60 Hz
MaxQ 2000 - Small Open A	MaxQ 2000 – Small Open Air Shakers								
Analog	40-400	0.75 (1.9)	35 (15.9)	17.4 (44.2)	13.5 (34.3)	6.4 (16.3)	47 (21.3)	SHKA2000	SHKA2000-1CE
Digital	15-500 ±1	0.75 (1.9)	35 (15.9)	17.4 (44.2)	13.5 (34.3)	6.4 (16.3)	47 (21.3)	SHKE2000	SHKE2000-1CE
Digital, CO <sub>2</sub> Resistant	15-500 ±1	0.75 (1.9)	35 (15.9)	17.4 (44.2)	13.5 (34.3)	6.4 (16.3)	47 (21.3)	SHKE2000C02	SHKE2000C02-1CE
MaxQ 3000 - Large Open /	Air Shakers								
Analog	40-400	1.0 (2.54)	50 (22.7)	25.8 (65.5)	29.4 (74.4)	9.7 (24.6)	207 (93.9)	SHKA3000	SHKA3000-1CE
Digital	15-500 ±1	1.0 (2.54)	50 (22.7)	25.8 (65.5)	29.4 (74.4)	9.7 (24.6)	207 (93.9)	SHKE3000	SHKE3000-1CE

#### **Platforms**

Maximize flexibility by choosing your platform and selecting a mixture of clamps.

MaxQ 2000				Model No.
Platforms	Universal Platforms	11 x 13" (28 x 33 cm)	Platform without Clamps	30100 <sup>1</sup>
	Maximum flexibility for using a mix of different size labware on a single platform.	11 x 13" (28 x 33 cm)	Dual Stacked Platform without Clamps	30125
fits your needs.	See Universal Clamp Guide for clamp capacities. Purchase clamps separately.	18 x 18" (45.7 x 45.7 cm)	Platform without Clamps	30110 <sup>1</sup>
		18 x 18" (45.7 x 45.7 cm)	Dual Stacked Platform without Clamps	30128
		18 x 24" (45.7 x 60.9 cm)	Platform without Clamps	30106
	Dedicated Platforms	11 x 13" (28 x 33 cm)	Platform with Clamps	See Dedicated Platforms on p. 11
	Clamps come installed to provide maximum capacity.	18 x 18" (45.7 x 45.7 cm)	Platform with Clamps	See Dedicated Platforms on p. 11
Clamps	Mix and match clamps for your Universal Platform.			See Universal Clamp Guide below
Misc. Accessories	Adapter set for stacking two platforms (Models 30100 and 30110 only)			3522-3
MaxQ 3000				Model No.
Platforms	Universal Platforms	30 x 18" (76 x 45.7 cm)	Platform without Clamps	30115BI
	Maximum flexibility for using a mix of different size labware on a single platform.	30 x 18" (76 x 45.7 cm)	Dual Stacked Platform without Clamps	30124
fits your needs.	See Universal Clamp Guide for clamp capacities. Purchase clamps separately.	36 x 24" (91 x 60.9 cm)	Platform without Clamps	30120BI
	Dedicated Platforms	30 x 18" (76 x 45.7 cm)	Platform with Clamps	See Dedicated Platforms on p. 11
	Clamps come installed to provide maximum capacity.	36 x 24" (91 x 60.9 cm)	Platform with Clamps	See Dedicated Platforms on p. 11
Clamps	Mix and match clamps for your Universal Platform.			See Universal Clamp Guide below

<sup>&</sup>lt;sup>1</sup>Stackable, purchase of two platforms and adapter set required for stacking

#### Universal Clamp Guide

Mix and match to customize the Universal Platform for your unique needs. Clamps sold as individual units.

Clamp	Model No.	Clamp Capacity Go Maximum clamp ca	ide pacity of vessels for the Universal Platform			
		MaxQ 2000			MaxQ 3000	
		11 x 13" (28 x 33 cm)	18 x 18" (45.7 x 45.7 cm)	18 x 24" (45.7 x 60.9 cm)	30 x 18" (76 x 45.7 cm)	36 x 24" (91 x 60.9 cm)
Flask Clamp Starter Kit, includes (1) microplate clamp, (2) 125 ml flask clamps, (4) 250 ml flask clamps, (4) 500 ml flask clamps, (2) 1L flask clamps, (2) 2L flask clamps	30129					
Microplate/Deep-well plate	30175	5	10	15	18	29
10 ml Erlenmeyer Flask	30150BI	60	113	157	112	160
25 ml Erlenmeyer Flask	30151	60	64	80	112	160
50 ml Erlenmeyer Flask	30152BI	30	32	40	112	160
125 ml Erlenmeyer Flask	30153	13	32	40	44	80
250 ml Erlenmeyer Flask	30154BI	9	16	24	24	40
300 ml Erlenmeyer Flask	30155	7	16	20	20	40
500 ml Erlenmeyer Flask	30156BI	6	16	20	18	40
1L Erlenmeyer Flask	30157BI	4	9	10	12	21
2L Erlenmeyer Flask	30158	1	6	5	6	11
4L Erlenmeyer Flask	30159	1	4	4	6	11
6L Erlenmeyer Flask	30160	1	2	3	3	6
2500 ml Low Form Culture Flask	30161	1	1	2	3	6
2800 ml Fernbach Flask	30162	1	4	4	5	8
Adhesive Flask Mat, 9 x 9" (23 x 23 cm)	3003493	-	_	_	_	_
Test Tube Racks – Full Size						
10–13 mm, red, 6 x 12 array	30180BI	3	6	8	13	16
14–16 mm, orange, 6 x 12 array	301821	2	4	6	7	10
17–20 mm, white, 4 x 10 array	30184	3	5	6	9	14
21–25 mm, blue, 4 x 10 array	30186	2	3	4	7	57
26–30 mm, green, 3 x 8 array	30188 <sup>2</sup>	2	4	6	7	7
Microcentrifuge, 1.5 ml, blue, 8 x 12 array	30190	2	5	6	8	S 40
Test Tube Racks – Half Size						1,60.
10–13 mm, red, 6 x 6 array	30181	6	12	15	21	pt 125 ot
14–16 mm, orange, 6 x 6 array	301831	4	6	8	1670 111	6 128
17–20 mm, white, 4 x 5 array	30185	4	8	13	F18.7	20
21–25 mm, blue, 4 x 4 array	30187	4	6	9	10 📈	15
26–30 mm, green, 3 x 3 array	30189 <sup>2</sup>	6	9	12	15	15
Microcentrifuge, 1.5 ml, blue, 4 x 6 array	30191	4	8	10	14	20

#### **Dedicated Platforms with Clamps**

Maximize capacity by choosing your platform with pre-installed clamps.

#### MaxQ 2000 / MaxQ 2508 / MaxQ 2506 Shakers

Clamps come instal	lled to provide maximum capacity		
Platform Size		Capacity	Model No.
11 x 13"			
(28 x 33 cm)	25 ml Erlenmeyer Flask	30	3523-2
	50 ml Erlenmeyer Flask	30	3523-3
	125 ml Erlenmeyer Flask	15	3523-4
	250 ml Erlenmeyer Flask	10	3523-5
	500 ml Erlenmeyer Flask	6	3523-7
	1L Erlenmeyer Flask	4	3523-8
	2L Erlenmeyer Flask	4	3523-9
	Separatory Funnel (500 ml to 2L)	2	3523-39
	Utility Tray	-	3523-46
	11 x 13" Adjustable Vessel Platform	-	3523-49
	5 Tier, holds platelet bags (10 x 10")	5 bags	3523-51
18 x 18"	10 ml Erlenmeyer Flask	113	3524-1
(45.7 x 45.7 cm)	25 ml Erlenmeyer Flask	64	3524-2
	50 ml Erlenmeyer Flask	64	3524-3
	125 ml Erlenmeyer Flask	32	3524-4
	250 ml Erlenmeyer Flask	25	3524-5
	300 ml Erlenmeyer Flask	16	3524-6
	500 ml Erlenmeyer Flask	16	3524-7
	1L Erlenmeyer Flask	9	3524-8
	2L Erlenmeyer Flask	5	3524-9
	Separatory Funnel (500 ml to 2L)	3	3524-49
	Utility Tray	_	3524-46
	18 x 18" adjustable vessel platform without bottom for MaxQ 4000 and 6000 series shakers	-	3524-60
	18 x 18" adjustable vessel platform with bottom for MaxQ 2000 shaker	-	3523-52
	10 ml beaker	152	3524-35
	20 ml beaker	104	3524-36
	30 ml beaker	104	3524-37
	100 ml beaker	44	3524-38
	250 ml beaker	25	3524-39
	400 ml beaker	25	3524-40
	600 ml beaker	16	3524-41



Clamps come insta	lled to provide maximum capacity		
Platform Size		Capacity	Model No.
30 x 18"	10 ml Erlenmeyer Flask	112	3599-1
(76 x 45.7 cm)	25 ml Erlenmeyer Flask	112	3599-2
	50 ml Erlenmeyer Flask	112	3599-3
	125 ml Erlenmeyer Flask	56	3599-4
	250 ml Erlenmeyer Flask	40	3599-5
	300 ml Erlenmeyer Flask	24	3599-6
	500 ml Erlenmeyer Flask	24	3599-7
	1L Erlenmeyer Flask	12	3599-8
	2L Erlenmeyer Flask	12	3599-9
	4L Erlenmeyer Flask	6	3599-10
	6L Erlenmeyer Flask	4	3599-11
	Separatory Funnel (500 ml to 2L)	10	3599-49
	Utility Tray	-	3599-46
	18 x 30" Adjustable Vessel Platform	-	3599-63
	2500 ml Low Form Culture Flask	5	3599-12
	2800 ml Fernbach Flask	6	3599-13
36 x 24"	50 ml Erlenmeyer Flask	160	3599-52
(91 x 60.9 cm)	125 ml Erlenmeyer Flask	80	3599-53
	250 ml Erlenmeyer Flask	70	3599-54
	500 ml Erlenmeyer Flask	40	3599-56
	1L Erlenmeyer Flask	18	3599-57
	2L Erlenmeyer Flask	15	3599-58
	4L Erlenmeyer Flask	8	3599-59
	6L Erlenmeyer Flask	6	3599-60
	Separatory Funnel (500 ml to 2L)	16	3599-96
	2500 ml Low Form Culture Flask	6	3599-61
	2800 ml Fernbach Flask	8	3599-62



Utility Tray Model No. 3523-46



11 x 13" Adjustable Vessel Platform Model No. 3523-49



18 x 18", 50 ml Erlenmeyer Flask Platform Model No. 3524-3



Dedicated Separatory Funnel Platform Model No. 3524-49



30 x 18" Dual Tiered Platforms, Model No. 30124 (See Accessories table on page 10)



## Dual Action Orbital and Reciprocating Open Air Platform Shakers

# Increased flexibility with choice of reciprocating or orbital shakers

- Analog operating system is affordably priced
- Interchangeable 11 x 13", 18 x 18" and 18 x 24" platforms are available to accommodate a variety of labware
- On dual action models, control lever changes shaking motion while unit is stationary or in operation
- Provides back-and-forth motion or circular orbital motion for a variety of applications
- Operates in temperature ranges of 4 to 40° and humidity conditions of 20–80% non-condensing for use in incubators, warm rooms, environmental chambers and refrigerators.

- Extractions
- Mixing blood samples
- Silver staining of polyacrylamide gels
- Growth of bacteria
- Dissolution studies
- Staining of electrophoresis gels



### **Ordering Information**

Select the right shaker for your needs and customize by selecting either a Universal Platform or a Dedicated Platform.

#### Thermo Scientific Dual-Action Orbital and Reciprocating Shakers

Shaker Options	Speed Range (rpm)	Orbit Diameter Inch (cm)	Max. Load Lb. (kg)	Overall Dimensions Inches (cm)		Shipping Weight Lb. (kg)	Model No. 120V, 50/60 Hz	Model No. 240V, 50/60 Hz	
				L	W	Н			
MaxQ 2508 - Dua	MaxQ 2508 – Dual Action Orbital and Reciprocating Shakers								
Analog	40-400	0.4 (1.2)	15 (6.8)	17.4 (44.2)	13.5 (34.3)	7 (17.8)	38 (17.2)	SHKA2508	SHKA2508-1CE
MaxQ 2506 – Reciprocating Shakers									
Analog	10-250	Adjustable from 0.5 to 1.5 (1.2 to 3.8)	15 (6.8)	17.4 (44.2)	13.5 (34.3)	7 (17.8)	27 (12.3)	SHKA2506	SHKA2506-1

#### **Platforms**

Maximize flexibility by choosing your platform and selecting a mixture of clamps.

MaxQ 2508 and 2506 Series	Model No.			
Platforms	Universal Platforms	11 x 13" (28 x 33 cm)	Platform without Clamps	30100¹
Choose the platform that best fits	Maximum flexibility for using a mix of different size labware on a	11 x 13" (28 x 33 cm)	Dual Stacked Platform without Clamps	30125
your needs.	single platform. See Universal Clamp Guide for clamp capacities.	18 x 18" (45.7 x 45.7 cm)	Platform without Clamps	30110 <sup>1</sup>
	Purchase clamps separately.	18 x 18" (45.7 x 45.7 cm)	Dual Stacked Platform without Clamps	30128
		18 x 24" (45.7 x 60.9 cm)	Platform without Clamps	30106
	Dedicated Platforms	11 x 13" (28 x 33 cm)	Platform with Clamps	See Dedicated Platforms on p. 11
	Clamps come installed to provide maximum capacity	18 x 18" (45.7 x 45.7 cm)	Platform with Clamps	See Dedicated Platforms on p. 11
Clamps	Mix and match clamps for your Universal Platform.			See Universal Clamp Guide below

<sup>1</sup>Stackable, purchase of two platforms and adapter set required for stacking

#### Universal Clamp Guide

Mix and match to customize the Universal Platform for your unique needs. Clamps sold as individual units.

Clamp	Model No.	Clamp Capacity Guide  Max. clamp capacity of vessels for the Universal Platform			
		MaxQ 2508 and 2506			
		11 x 13"	18 x 18"	18 x 24"	
		(28 x 33 cm)	(45.7 x 45.7 cm)	(45.7 x 60.9 cm	
Flask Clamp Starter Kit, includes (1) microplate	30129				
clamp, (2) 125 ml flask clamps, (4) 250 ml flask					
clamps, (4) 500 ml flask clamps, (2) 1L flask					
clamps, (2) 2L flask clamps					
Microplate/Deep-well plate	30175	5	10	15	
10 ml Erlenmeyer Flask	30150BI	60	113	157	
25 ml Erlenmeyer Flask	30151	60	64	80	
50 ml Erlenmeyer Flask	30152BI	30	32	40	
125 ml Erlenmeyer Flask	30153	13	32	40	
250 ml Erlenmeyer Flask	30154BI	9	16	24	
300 ml Erlenmeyer Flask	30155	7	16	20	
500 ml Erlenmeyer Flask	30156BI	6	16	20	
1L Erlenmeyer Flask	30157BI	4	9	10	
2L Erlenmeyer Flask	30158	1	6	5	
4L Erlenmeyer Flask	30159	1	4	4	
6L Erlenmeyer Flask	30160	1	2	3	
2500 ml Low Form Culture Flask	30161	1	1	2	
2800 ml Fernbach Flask	30162	1	4	4	
Adhesive Flask Mat, 9 x 9" (23 x 23 cm)	300349 <sup>3</sup>	-	-	-	
Test Tube Racks – Full Size					
10–13 mm, red, 6 x 12 array	30180BI	3	6	8	
14–16 mm, orange, 6 x 12 array	301821	2	4	6	
17–20 mm, white, 4 x 10 array	30184	3	5	6	
21–25 mm, blue, 4 x 10 array	30186	2	3	4	
26–30 mm, green, 3 x 8 array	30188 <sup>2</sup>	2	4	6	
Microcentrifuge, 1.5 ml, blue, 8 x 12 array	30190	2	5	6	
Test Tube Racks – Half Size					
10–13 mm, red, 6 x 6 array	30181	6	12	15	
14-16 mm, orange, 6 x 6 array	301831	4	6	8	
17–20 mm, white, 4 x 5 array	30185	4	8	13	
21–25 mm, blue, 4 x 4 array	30187	4	6	9	
26-30 mm, green, 3 x 3 array	30189 <sup>2</sup>	6	9	12	
Microcentrifuge, 1.5 ml, blue, 4 x 6 array	30191	4	8	10	

 $^{1}\mbox{Fits}$  15 ml centrifuge tubes  $^{2}\mbox{Fits}$  50 ml centrifuges tubes  $^{3}\mbox{Can}$  be cut to fit, reusable

#### Miscellaneous Accessories

MaxQ 2508 and 2506 Series	Model No.
Adapter Set for stacking two platforms	3522-3
(Models 30100 and 30110 only)	



Five-Tier Blood Bag Platform Model No. 3523-51

- $\bullet$  5 tier aluminum platform measures 13L x 11W x 14H in. (33 x 27.9 x 35.6 cm)
- Distance between platforms is 3.25" (8.26 cm)
- Each of the five platforms is equipped with a white vinyl ribbed mat
- Mix contents of 10 x 10 in (25.4 x 25.4 cm) bags of platlets used in platlet phoresis applications

PEB TO SOLITIONS OF SEBURY



# MaxQ 4450 Compact Benchtop Incubated Shakers

### Flexible shaking option for your applications at an affordable price

Combine incubated and refrigerated temperatures in an orbital shaker in a small footprint

- Holds up to four one liter flasks
- Requires minimal bench space
- Clear lid lets you view samples without disturbing chamber atmosphere
- Achieve temperature ranges from 20°C to 30°C when connected to a

Models available with cooling coil providing refrigerated atmosphere for plasmid purification and protein expression in bacteria

- Cell culture
- Extraction procedures
- General mixing
- Staining and destaining
- Hybridizations
- Solubility studies
- Plasmid purification
- Bacterial suspensions
- Washing procedures
- Protein expression in bacteria

Ordering Information
Select the right shaker for your needs and customize by selecting either a Universal Platform or a Dedicated Platform.

#### Thermo Scientific MaxQ 4450 Shaker

Shaker Options	Speed Range (rpm)	Orbit Diameter In. (cm)	Max. Load Lb. (kg)	Temperature Range and Accuracy	Temperature Uniformity		erall Dimensio Dimensions In		Shipping Weight	Model. No. 120V. 50/60 Hz	Model No. 240V. 50/60 Hz
	(ipili)	III. (CIII)	LD. (Kg)	Accuracy	Officiality	L	W	Н	Lb. (kg)	1207, 30/00 112	2400, 30/00 112
MaxQ 4450 - Inc	cubated Shaker										
Analog	40-400	0.75 (1.9)	35 (15.9)	5°C above ambient to	±0.5°C at 37°C	27.2 (69.1)/	14.1 (35.8)/	15.8 (40.1)/	77 (35)	SHKA4450	SHKA4450-1CE
				$80^{\circ}\text{C} \pm 0.1^{\circ}\text{C}$ at $37^{\circ}\text{C}$ in flask	in flask	17.3 (43.9)	13.3 (33.8)	9 (22.9)			
Digital	15-500 ±1	0.75 (1.9)	35 (15.9)	5°C above ambient to	±0.5°C at 37°C	27.2 (69.1)/	14.1 (35.8)/	15.8 (40.1)/	77 (35)	SHKE4450	SHKE4450-1CE
				$80^{\circ}\text{C} \pm 0.1^{\circ}\text{C}$ at $37^{\circ}\text{C}$ in flask	in flask	17.3 (43.9)	13.3 (33.8)	9 (22.9)			
MaxQ 4450 - Inc	cubated Shaker	with Cooling Coil (	Requires Chille	er)							
Analog	40-400	0.75 (1.9)	35 (15.9)	5°C below ambient to	±0.5°C at 37°C	27.2 (69.1)/	14.1 (35.8)/	15.8 (40.1)/	77 (35)	SHKA4450CC	SHKA4450CC-1CE
				$80^{\circ}\text{C} \pm 0.1^{\circ}\text{C}$ at $37^{\circ}\text{C}$ in flask	in flask	17.3 (43.9)	13.3 (33.8)	9 (22.9)			
Digital	15-500 ±1	0.75 (1.9)	35 (15.9)	5°C below ambient to	±0.5°C at 37°C	27.2 (69.1)/	14.1 (35.8)/	15.8 (40.1)/	77 (35)	SHKE4450CC	SHKE4450CC-1CE
		,	. ,	$80^{\circ}\text{C} \pm 0.1^{\circ}\text{C}$ at $37^{\circ}\text{C}$ in flask	in flask	17.3 (43.9)	13.3 (33.8)	9 (22.9)	. ,		

#### **Platforms**

Maximize flexibility by choosing your platform and selecting a mixture of clamps.

MaxQ 4450				Model. No.
Platforms Choose the platform that best fits your needs.	Universal Platforms  Maximum flexibility for using a mix of different size labware on a single platform.  See Universal Clamp Guide for clamp capacities. Purchase clamps separately.	11 x 13" (28 x 33 cm)	Platform without Clamps	30100
	Dedicated Platforms Clamps come installed to provide maximum capacity.	11 x 13" (28 x 33 cm)	Platform with Clamps	See Dedicated Platforms below
Clamps	Mix and match clamps for your Universal Platform.			See Universal Clamp Guide below

#### Universal Clamp Guide

Mix and match to customize the Universal Platform for your unique needs. Clamps sold as individual units.

Clamp	Model No.	Clamp Capacity Guide Max. clamp capacity of vessels for the Universal Platform
		MaxQ 4450
		11 x 13" (28 x 33 cm)
Flask Clamp Starter Kit, includes (1) microplate clamp, (2) 125 ml flask clamps, (4) 250 ml flask clamps, (4) 500 ml flask clamps, (2) 1L flask clamps, (2) 2L flask clamps	30129	
Microplate/Deep-well plate	30175	5
10 ml Erlenmeyer Flask	30150BI	60
25 ml Erlenmeyer Flask	30151	60
50 ml Erlenmeyer Flask	30152BI	30
125 ml Erlenmeyer Flask	30153	13
250 ml Erlenmeyer Flask	30154BI	9
300 ml Erlenmeyer Flask	30155	7
500 ml Erlenmeyer Flask	30156BI	6
1L Erlenmeyer Flask	30157BI	4
2500 ml Low Form Culture Flask	30161	1
Adhesive Flask Mat, 9 x 9" (23 x 23 cm)	300349 <sup>3</sup>	<del>-</del>
Test Tube Racks – Full Size		
10-13 mm, red, 6 x 12 array	30180BI	3
14-16 mm, orange, 6 x 12 array	30182 <sup>1</sup>	2
17-20 mm, white, 4 x 10 array	30184	3
21-25 mm, blue, 4 x 10 array	30186	2
26-30 mm, green, 3 x 8 array	30188 <sup>2</sup>	2
Microcentrifuge, 1.5 ml, blue, 8 x 12 array	30190	2
Test Tube Racks – Half Size		
10-13 mm, red, 6 x 6 array	30181	6
14-16 mm, orange, 6 x 6 array	30183¹	4
17-20 mm, white, 4 x 5 array	30185	4
21-25 mm, blue, 4 x 4 array	30187	4
26-30 mm, green, 3 x 3 array	30189 <sup>2</sup>	6
Microcentrifuge, 1.5 ml, blue, 4 x 6 array	30191	4

 $^{1}\text{Fits}$  15 ml centrifuge tubes  $^{2}\text{Fits}$  50 ml centrifuges tubes  $^{3}\text{Can}$  be cut to fit, reusable

### Dedicated Platforms with Clamps Maximize capacity by choosing your platform with pre-installed clamps.

Clamps come installed to provide maximum capacity					
Platform Size Description		Capacity	Model No.		
11 x 13"	10 ml Erlenmeyer Flask	60	3523-1		
(28 x 33 cm)	25 ml Erlenmeyer Flask	30	3523-2		
	50 ml Erlenmeyer Flask	30	3523-3		
	125 ml Erlenmeyer Flask	15	3523-4		
	250 ml Erlenmeyer Flask	10	3523-5		
	500 ml Erlenmeyer Flask	6	3523-7		
	1L Erlenmeyer Flask	4	3523-8		

#### Miscellaneous Accessories

MaxQ 4450	Model No.
Upright chiller, 6L reservoir, required to achieve	SHK4450CH
temperatures from 20°C to 30°C, 120V	
Upright chiller, 6L reservoir, required to achieve	SHK4450CH-1CE
temperatures from 20°C to 30°C, 240V	





# MaxQ 4000 Large Benchtop Incubated and Refrigerated Shakers

### Spacious chamber in a footprint designed for the benchtop

Combines incubated and refrigerated temperatures in an orbital shaker with a spacious chamber

- Large Chamber holds six 2L flasks
- · Clear acrylic lid provides high visibility for sample harvesting
- Safety interlock protects operator by stopping platform motion when

- Cell culture
- Extraction procedures
- General mixing
- Staining and destaining
- Hybridizations
- Solubility studies
- Plasmid purification
- Bacterial suspensions
- Washing procedures
- Protein expression

Ordering Information
Select the right shaker for your needs and customize by selecting either a Universal Platform or a Dedicated Platform.

#### MaxQ 4000 Shaker

Shaker Options	Speed Range (rpm)	Orbit Diameter In. (cm)	Max. Load Lb. (kg)	Temperature Range and Accuracy	Temperature Uniformity		verall Dimension Dimensions Inc		Shipping Weight	Model. No. 120V. 50/60 Hz	Model No. 240V. 50/60 Hz
	(ipili)	III. (CIII)	LD. (Kg)	Accuracy	Officiality	L	W	Н	Lb. (kg)	1200, 30/00 112	240V, 30/00 HZ
MaxQ 4000 - La	rge Incubated B	enchtop Shaker									
Analog	40-400	0.75 (1.9)	50 (22.7)	10°C above ambient to	±0.5°C at 37°C	32 (81.3)/	22.5 (57.2)/	22 (55.9)/	167 (75.8)	SHKA4000	SHKA4000-1CE
				$60^{\circ}\text{C} \pm 0.1^{\circ}\text{C}$ at $37^{\circ}\text{C}$ in flask	in flask	20 (50.8)	21 (53.3)	13 (33)			
Digital	15-500 ±1	0.75 (1.9)	50 (22.7)	10°C above ambient to	±0.5°C at 37°C	32 (81.3)/	22.5 (57.2)/	22 (55.9)/	167 (75.8)	SHKE4000	SHKE4000-1CE
				$60^{\circ}\text{C} \pm 0.1^{\circ}\text{C}$ at $37^{\circ}\text{C}$ in flask	in flask	20 (50.8)	21 (53.3)	13 (33)			
MaxQ 4000 - La	rge Incubated H	igh Temperature E	Benchtop Shak	er							
Analog	40-400	0.75 (1.9)	50 (22.7)	10°C above ambient to	±0.5°C at 37°C	32 (81.3)/	22.5 (57.2)/	22 (55.9)/	167 (75.8)	SHKA4000-5	SHKA4000-6CE
				$80^{\circ}\text{C} \pm 0.1^{\circ}\text{C}$ at $37^{\circ}\text{C}$ in flask	in flask	20 (50.8)	21 (53.3)	13 (33)			
Digital	15-500 ±1	0.75 (1.9)	50 (22.7)	10°C above ambient to	±0.5°C at 37°C	32 (81.3)/	22.5 (57.2)/	22 (55.9)/	167 (75.8)	SHKE4000-5	SHKE4000-6CE
				$80^{\circ}\text{C} \pm 0.1^{\circ}\text{C}$ at $37^{\circ}\text{C}$ in flask	in flask	20 (50.8)	21 (53.3)	13 (33)			
MaxQ 4000 - La	rge Incubated a	nd Refrigerated Be	enchtop Shake	r							
Analog	40-400	0.75 (1.9)	50 (22.7)	15°C below ambient to	±0.5°C at 37°C	34 (86.4)/	22.5 (57.2)/	22 (55.9)/	212 (96.2)	SHKA4000-7	SHKA4000-8CE
				$60^{\circ}\text{C} \pm 0.1^{\circ}\text{C}$ at $37^{\circ}\text{C}$ in flask	in flask	20 (50.8)	21 (53.3)	13 (33)			
Digital	15-500 ±1	0.75 (1.9)	50 (22.7)	15°C below ambient to	±0.5°C at 37°C	34 (86.4)/	22.5 (57.2)/	22 (55.9)/	212 (96.2)	SHKE4000-7	SHKE4000-8CE
		,		$60^{\circ}\text{C} \pm 0.1^{\circ}\text{C}$ at $37^{\circ}\text{C}$ in flask	in flask	20 (50.8)	21 (53.3)	13 (33)	, ,		

#### **Platforms**

Maximize flexibility by choosing your platform and selecting a mixture of clamps.

MaxQ 4000				Model No.
Platforms Choose the platform that best fits	Universal Platforms  Maximum flexibility for using a mix of different size labware on a single platform.  See Universal Clamp Guide for clamp capacities. Purchase clamps separately.	18 x 18" (45.7 x 45.7 cm)	Platform without Clamps	30110
your needs.	Dedicated Platforms Clamps come installed to provide maximum capacity.	18 x 18" (45.7 x 45.7 cm)	Platform with Clamps	See Dedicated Platforms below
Clamps	Mix and match clamps for your Universal Platform.			See Universal Clamp Guide below

#### Universal Clamp Guide

Mix and match to customize the Universal Platform for your unique needs. Clamps sold as individual units.

Clamp	Model No.	Clamp Capacity Guide Max. clamp capacity of vessels for the Universal Platform
		MaxQ 4000
		18 x 18" (45.7 x 45.7 cm)
Flask Clamp Starter Kit, includes (1) microplate clamp, (2) 125 ml flask clamps, (4) 250 ml flask clamps, (4) 500 ml flask clamps, (2) 1L flask clamps, (2) 2L flask clamps	30129	
Microplate/Deep-well plate	30175	10
10 ml Erlenmeyer Flask	30150BI	113
25 ml Erlenmeyer Flask	30151	64
50 ml Erlenmeyer Flask	30152BI	32
125 ml Erlenmeyer Flask	30153	32
250 ml Erlenmeyer Flask	30154BI	16
300 ml Erlenmeyer Flask	30155	16
500 ml Erlenmeyer Flask	30156BI	16
1L Erlenmeyer Flask	30157BI	9
2L Erlenmeyer Flask	30158	6
2500 ml Low Form Culture Flask	30161	1
2800 ml Fernbach Flask	30162	4
Adhesive Flask Mat, 9 x 9" (23 x 23cm)	300349 <sup>3</sup>	_
Test Tube Racks – Full Size		
10-13 mm, red, 6 x 12 array	30180BI	6
14-16 mm, orange, 6 x 12 array	30182 <sup>1</sup>	4
17-20 mm, white, 4 x 10 array	30184	5
21-25 mm, blue, 4 x 10 array	30186	3
26-30 mm, green, 3 x 8 array	30188 <sup>2</sup>	4
Microcentrifuge, 1.5 ml, blue, 8 x 12 array	30190	5
Test Tube Racks – Half Size		
10-13 mm, red, 6 x 6 array	30181	12
14-16 mm, orange, 6 x 6 array	30183 <sup>1</sup>	6
17-20 mm, white, 4 x 5 array	30185	8
21-25 mm, blue, 4 x 4 array	30187	6
26-30 mm, green, 3 x 3 array	30189 <sup>2</sup>	9
Microcentrifuge, 1.5 ml, blue, 4 x 6 array	30191	8

#### Dedicated Platforms with Clamps Maximize capacity by choosing your platform with pre-installed clamps.

mar pro m	otalica olarripoi						
Clamps come installed to provide maximum capacity							
Platform Size	Description	Capacity	Model No.				
18 x 18"	10 ml Erlenmeyer Flask	113	3524-1				
(45.7 x 45.7 cm)	25 ml Erlenmeyer Flask	64	3524-2				
	50 ml Erlenmeyer Flask	64	3524-3				
	125 ml Erlenmeyer Flask	32	3524-4				
	250 ml Erlenmeyer Flask	25	3524-5				
	300 ml Erlenmeyer Flask	16	3524-6				
	500 ml Erlenmeyer Flask	16	3524-7				
	1L Erlenmeyer Flask	9	3524-8				
	2L Erlenmeyer Flask	5	3524-9				
	10 ml Beaker	152	3524-35				
	20 ml Beaker	104	3524-36				
	30 ml Beaker	104	3524-37				
	100 ml Beaker	44	3524-38				
	250 ml Beaker	25	3524-39				
	400 ml Beaker	25	3524-40				
	600 ml Beaker	16	3524-41				
	Utility Tray	-	3524-46				
	18" x 18" Adjustable Vessel Platform without bottom	-	3524-60				

#### Miscellaneous Accessories

MaxQ 4000	Model No.
Gassing manifold with 8 outlets (customer in	stalled) SHK4000-8GM
Note: Optional gassing manifold enables direct gassing	ng into flasks for anaeroble cuttores.



# MaxQ 5000 Incubated and Refrigerated Floor Shakers

# Complete large capacity applications with ease

Combines incubated and refrigerated temperatures with an orbital shaker for large capacity applications

- Large chamber holds four 6L flasks
- Easy-access drain system with quick disconnect fitting permits easy clean up of spills
- Foot pedal opens lid for hands free operation
- Retractable foot casters allow easy positioning in the lab
- Observe contents through large viewing window
- Access ports in side walls for probes, thermocouples or sensors

- Cell culture
- Solubility studies
- Extraction procedures
- General mixing
- Protein expression
- Bacterial suspensions
- Staining and destaining
- Washing procedures
- Hybridizations
- Plasmid purification



### **Ordering Information**

Select the right shaker for your needs and customize by selecting either a Universal Platform or a Dedicated Platform.

#### MaxQ 5000 Shaker

Shaker Options	Speed Range (rpm)	Orbit Diameter In. (cm)	Max. Load Lb. (kg)	Temperature Range and Accuracy	Temperature Uniformity		erall Dimensio Dimensions In		Shipping Weight	Model. No. 120V. 50/60 Hz	Model No. 240V. 50/60 Hz
	(ipili)	iii. (ciii)	LD. (Kg)	Accuracy	Officiality	L	W	Н	Lb. (kg)	1201, 30/00 112	2400, 30/00 112
MaxQ 5000 - La	rge Incubated Fl	oor Shaker									
Analog	40-400	1.0 (2.54)	75 (34)	10°C above ambient to	±0.5°C at 37°C	32 (81.3)/	41 (104.1)/	41 (104.1)/	476 (215.9)	SHKA5000	SHKA5000-1CE
				$60^{\circ}\text{C} \pm 0.1^{\circ}\text{C}$ at $37^{\circ}\text{C}$ in flask	in flask	21.9 (55.6)	34.2 (86.9)	21.2 (53.8)			
Digital	15-500 ±1	1.0 (2.54)	75 (34)	10°C above ambient to	±0.5°C at 37°C	32 (81.3)/	41 (104.1)/	41 (104.1)/	476 (215.9)	SHKE5000	SHKE5000-1CE
				$60^{\circ}\text{C} \pm 0.1^{\circ}\text{C}$ at $37^{\circ}\text{C}$ in flask	in flask	21.9 (55.6)	34.2 (86.9)	21.2 (53.8)			
MaxQ 5000 - La	rge Incubated a	nd Refrigerated Flo	oor Shaker								
Analog	40-400	1.0 (2.54)	75 (34)	15°C below ambient to	±0.5°C at 37°C	32 (81.3)/	41 (104.1)/	41 (104.1)/	512 (232.2)	SHKA5000-7	SHKA5000-8CE
				$60^{\circ}\text{C} \pm 0.1^{\circ}\text{C}$ at $37^{\circ}\text{C}$ in flask	in flask	21.9 (55.6)	34.2 (86.9)	21.2 (53.8)			
Digital	15-500 ±1	1.0 (2.54)	75 (34)	15°C below ambient to	±0.5°C at 37°C	32 (81.3)/	41 (104.1)/	41 (104.1)/	512 (232.2)	SHKE5000-7	SHKE5000-8CE
		,	` '	$60^{\circ}\text{C} \pm 0.1^{\circ}\text{C}$ at $37^{\circ}\text{C}$ in flask	in flask	21.9 (55.6)	34.2 (86.9)	21.2 (53.8)			

#### **Platforms**

Maximize flexibility by choosing your platform and selecting a mixture of clamps.

MaxQ 5000				Model. No.
Platforms Choose the platform that best fits your needs.	Universal Platforms  Maximum flexibility for using a mix of different size labware on a single platform.  See Universal Clamp Guide for clamp capacities. Purchase clamps separately.	30 x 18" (76 x 45.7 cm)	Platform without Clamps	30115BI
	Dedicated Platforms Clamps come installed to provide maximum capacity.	30 x 18" (76 x 45.7 cm)	Platform with Clamps	See Dedicated Platforms below
Clamps	Mix and match clamps for your Universal Platform.			See Universal Clamp Guide below

#### Universal Clamp Guide

Mix and match to customize the Universal Platform for your unique needs. Clamps sold as individual units.

Clamp	Model No.	Clamp Capacity Guide  Max. clamp capacity of vessels for the Universal Platform
		MaxQ 5000
		30 x 18" (76 x 45.7 cm)
Flask Clamp Starter Kit, includes (1) microplate clamp, (2) 125 ml flask clamps, (4) 250 ml flask clamps, (4) 500 ml flask clamps, (2) 1L flask clamps, (2) 2L flask clamps	30129	
Microplate/Deep-well plate	30175	18
10 ml Erlenmeyer Flask	30150BI	112
25 ml Erlenmeyer Flask	30151	112
50 ml Erlenmeyer Flask	30152BI	112
125 ml Erlenmeyer Flask	30153	44
250 ml Erlenmeyer Flask	30154BI	24
300 ml Erlenmeyer Flask	30155	20
500 ml Erlenmeyer Flask	30156BI	18
1L Erlenmeyer Flask	30157BI	12
2L Erlenmeyer Flask	30158	6
4L Erlenmeyer Flask	30159	6
6L Erlenmeyer Flask	30160	3
2500 ml Low Form Culture Flask	30161	3
2800 ml Fernbach Flask	30162	5
Adhesive Flask Mat, 9 x 9" (23 x 23 cm)	300349 <sup>3</sup>	-
Test Tube Racks – Full Size		
10-13 mm, red, 6 x 12 array	30180BI	13
14-16 mm, orange, 6 x 12 array	30182 <sup>1</sup>	7
17-20 mm, white, 4 x 10 array	30184	9
21-25 mm, blue, 4 x 10 array	30186	7
26-30 mm, green, 3 x 8 array	30188 <sup>2</sup>	7
Microcentrifuge, 1.5 ml, blue, 8 x 12 array	30190	8
Test Tube Racks – Half Size		
10-13 mm, red, 6 x 6 array	30181	21
14-16 mm, orange, 6 x 6 array	30183¹	10
17-20 mm, white, 4 x 5 array	30185	18
21-25 mm, blue, 4 x 4 array	30187	10
26-30 mm, green, 3 x 3 array	30189 <sup>2</sup>	15
Microcentrifuge, 1.5 ml, blue, 4 x 6 array	30191	14

 $^{1}\mbox{Fits}$  15 ml centrifuge tubes  $^{2}\mbox{Fits}$  50 ml centrifuges tubes  $^{3}\mbox{Can}$  be cut to fit, reusable

#### Dedicated Platforms with Clamps Maximize capacity by choosing your platform with pre-installed clamps.

Clamps come installed to provide maximum capacity						
Platform Size		Capacity	Model No.			
30 x 18"	10 ml Erlenmeyer Flask	112	3599-1			
(76 x 45.7 cm)	25 ml Erlenmeyer Flask	112	3599-2			
	50 ml Erlenmeyer Flask	112	3599-3			
	125 ml Erlenmeyer Flask	56	3599-4			
	250 ml Erlenmeyer Flask	40	3599-5			
	300 ml Erlenmeyer Flask	24	3599-6			
	500 ml Erlenmeyer Flask	24	3599-7			
	1L Erlenmeyer Flask	12	3599-8			
	2L Erlenmeyer Flask	12	3599-9			
	4L Erlenmeyer Flask	6	3599-10			
	6L Erlenmeyer Flask	4	3599-11			
	2500 ml Low Form Culture Flask	5	3599-12			
	2800 ml Fernbach Flask	6	3599-13			
	Utility Tray	_	3599-46			
	Adjustable Vessel Platform	_	3599-63			

#### Miscellaneous Accessories

MaxQ 5000	Model No.
Stainless steel shelf for chamber L x W 33.25 x 4.0" (84.5 x 10.2 cm)	SHK5000-6
Gassing manifold with 8 outlets (customer installed	ed) SHK5000-8GM
Gassing manifold with 16 outlets (customer instal	lled) SHK5000-16GM

Note: Optional gassing manifold enables direct gassing into flasks for anaerobic cultures.



Easy-access drain system offers convenience in draining and disinfecting the system.



Retractable foot casters allow easy manipulation in lab.



## MaxQ 6000 Incubated and Refrigerated Stackable Shakers

# Save valuable lab space with stackable shakers

Combines orbital shaking with general purpose incubation for added versatility

- Units can be stacked two high on the floor to save valuable bench space
- Two adjustable-height shelves provide added storage
- Large viewing window and internal light offer sample visibility
- Door can be hinged from the right or left by the user for convenient placement in the lab
- In-chamber electrical outlet provides power for operating stirrers or rotators
- Spacious stainless steel chamber permits stacking an 18 x 18" platform to double the shaking capacity

- Bacterial suspensions
- Solubility studies
- Extraction procedures
- General mixing
- Staining and destaining
- Hybridizations
- Diagnostic test
- Washing procedures
- Protein expression
- Plasmid purification



Ordering Information
Select the right shaker for your needs and customize by selecting either a Universal Platform or a Dedicated Platform.

#### MaxQ 6000 Shaker

Shaker Options	Speed Range (rpm)	Orbit Diameter In. (cm)	Max. Load Lb. (kg)	Temperature Range and Accuracy	Temperature Uniformity		rerall Dimension Dimensions Ir		Shipping Weight	Model. No. 120V	Model No. 240V
	(ipili)	III. (CIII)	LD. (Ng)	Accuracy	Officiality	L	W	Н	Lb. (kg)	1200	2400
MaxQ 6000 - La	rge Stackable Ir	cubated Floor Sha	ker								
Digital	15-500 ±1 (unstacked)	0.75 (1.9)	35 (15.9)	10°C above ambient to 80°C, +0.1°C at 37°C in flask	±0.5°C at 37°C in flask	33 (83.8)	27 (69.9)	40.5 (102.9)	330 (150)	SHKE6000 (60 Hz)	SHKE6000-1CE (50/60 Hz)
	15-300 ±1 (stacked)			20.1 0 at 07 0 11 habit	III IIdok	21 (53.3)	22 (55.9)	27 (68.6)		(00 1.12)	(00/00 112)
MaxQ 6000 - La	rge Stackable Ir	cubated and Refri	gerated Floor	Shaker							
Digital	15-500 ±1 (unstacked)	0.75 (1.9)	35 (15.9)	15°C below ambient to 80°C, ±0.1°C at 37°C in flask	±0.5°C at 37°C in flask	33 (83.8)	27 (69.9)	40.5 (102.9)	430 (195)	SHKE6000-7 (60 Hz)	SHKE6000-8CE (50 Hz)
	15-300 ±1 (stacked)					21 (53.3)	22 (55.9)	27 (68.6)			

#### **Platforms**

Maximize flexibility by choosing your platform and selecting a mixture of clamps.

MaxQ 6000	MaxQ 6000						
Platforms Choose the platform that best fits	Universal Platforms  Maximum flexibility for using a mix of different size labware on a	18 x 18" (45.7 x 45.7 cm)	Platform without Clamps	30110			
your needs.	single platform. See Universal Clamp Guide for clamp capacities. Purchase clamps separately.	18 x 18" (45.7 x 45.7 cm)	Dual Stacked Platform without Clamps	30128			
	Dedicated Platforms Clamps come installed to provide maximum capacity.	18 x 18" (45.7 x 45.7 cm)	Platform with Clamps	See Dedicated Platforms below			
Clamps	Mix and match clamps for your Universal Platform.			See Universal Clamp Guide below			

#### Universal Clamp Guide

Mix and match to customize the Universal Platform for your unique needs. Clamps sold as individual units.

Clamp	Model No.	Clamp Capacity Guide Max. clamp capacity of vessels for the Universal Platform
		MaxQ 6000
		18 x 18" (45.7 x 45.7 cm)
Flask Clamp Starter Kit, includes (1) microplate clamp, (2) 125 ml flask clamps, (4) 250 ml flask clamps, (4) 500 ml flask clamps, (2) 1L flask clamps, (2) 2L flask clamps	30129	
Microplate/Deep-well plate	30175	10
10 ml Erlenmeyer Flask	30150BI	113
25 ml Erlenmeyer Flask	30151	64
50 ml Erlenmeyer Flask	30152BI	32
125 ml Erlenmeyer Flask	30153	32
250 ml Erlenmeyer Flask	30154BI	16
300 ml Erlenmeyer Flask	30155	16
500 ml Erlenmeyer Flask	30156BI	16
1L Erlenmeyer Flask	30157BI	9
2L Erlenmeyer Flask	30158	6
4L Erlenmeyer Flask	30159	4
6L Erlenmeyer Flask	30160	2
2500 ml Low Form Culture Flask	30161	1
2800 ml Fernbach Flask	30162	4
Adhesive Flask Mat, 9 x 9" (23 x 23 cm)	300349 <sup>3</sup>	-
Test Tube Rack – Full Size		
10-13 mm, red, 6 x 12 array	30180BI	6
14-16 mm, orange, 6 x 12 array	30182¹	4
17–20 mm, white, 4 x 10 array	30184	5
21-25 mm, blue, 4 x 10 array	30186	3
26-30 mm, green, 3 x 8 array	30188 <sup>2</sup>	4
Microcentrifuge, 1.5 ml, blue, 8 x 12 array	30190	5
Test Tube Racks – Half Size		
10–13 mm, red, 6 x 6 array	30181	12
14-16 mm, orange, 6 x 6 array	30183 <sup>1</sup>	6
17-20 mm, white, 4 x 5 array	30185	8
21-25 mm, blue, 4 x 4 array	30187	6
26-30 mm, green, 3 x 3 array	30189 <sup>2</sup>	9
Microcentrifuge, 1.5 ml, blue, 4 x 6 array	30191	8

<sup>1</sup>Fits 15 ml centrifuge tubes 
<sup>2</sup>Fits 50 ml centrifuges tubes 
<sup>3</sup>Can be cut to fit, reusable

#### Dedicated Platforms with Clamps

Maximize capacity by choosing your platform with pre-installed clamps.

Clamps come installed to provide maximum capacity				
Platform Size		Capacity	Model No.	
18 x 18"	10 ml Erlenmeyer Flask	113	3524-1	
(45.7 x 45.7 cm)	25 ml Erlenmeyer Flask	64	3524-2	
	50 ml Erlenmeyer Flask	64	3524-3	
	125 ml Erlenmeyer Flask	32	3524-4	
	250 ml Erlenmeyer Flask	25	3524-5	
	300 ml Erlenmeyer Flask	16	3524-6	
	500 ml Erlenmeyer Flask	16	3524-7	
	1L Erlenmeyer Flask	9	3524-8	
	2L Erlenmeyer Flask	5	3524-9	
	10 ml beaker	152	3524-35	
	20 ml beaker	104	3524-36	
	30 ml beaker	104	3524-37	
	100 ml beaker	44	3524-38	
	250 ml beaker	25	3524-39	
	400 ml beaker	25	3524-40	
	600 ml beaker	16	3524-41	
	Utility Tray	_	3524-46	

#### **Optional Accessories**

'	
MaxQ 6000	Model No.
Stacking Kit for additional MaxQ 6000 shaker	SHK6000-10
Adapter set for stacking two platforms	3522-3
Seismic Restraint	SHK6000-20





# MaxQ 8000 Incubated and Refrigerated Stackable Shakers

# Maximizes flexibility and production capability in a convenient stackable design

- Units can be stacked two to three high for space savings with a speed range of 25 to 400 rpm  $\pm 1$  rpm
- HEPA filter evenly distributes air inside the chamber and reduces cross contamination improving culturing conditions; rated at 95% efficient at 0.3 microns for entrapment of airborne particles
- Ergonomically designed fold down door and a platform that slides out 100% with a maximum platform height of 61" (154.9 cm) when stacked three units high improves sample handling
- Stacking kit is FREE with every unit
- User interface displays both set and actual run conditions to simplify programming and prevent entry error
- Crevice-free stainless steel interior with coved corners and built-in drain keeps spills within work area and promotes easy cleaning
- All maintenance can be handled from the front of the unit without having to move or unstack the shakers
- Chamber is tall enough to accommodate 2L Erlenmeyer flasks
- Standard remote alarm contacts allow convenient monitoring of alarm conditions from another location

#### **Applications**

- Growth of bacteria or yeast
- Dissolution studies
- Staining and destaining of electrophoresis gels
- Extractions
- Protein expression
- Growth of insect cells
- Hybridizations
- Protein purification



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Ordering Information
Select the right shaker for your needs and customize by selecting either a Universal Platform or a Dedicated Platform.

#### MaxQ 8000 Shaker

Shaker Options	Speed Range (rpm)	Orbit Diameter	Max. Load Lb. (kg)	Temperature Range and Accuracy	Temperature Uniformity			Shipping Weight	Model. No. 120V, 50/60 Hz	Model No. 240V. 50/60 Hz	
	(i þill)	III. (CIII)	Lu. (kg)	Accuracy	Officiality	L	W	Н	Lb. (kg)	1200, 30/00 112	2407, 30/00 112
MaxQ 8000 - Sta	MaxQ 8000 – Stackable Incubated Shaker										
Digital	25-400 ±1	1.0 (2.54)	35.5 (16.1)	10°C above ambient to 60°C	±0.3°C at 37°C	33.3 (84.6)/	46.5 (118.1)/	25 (63.5)/	658 (298.5)	SHKE8000	SHKE8000-1CE
				±0.15°C at 37°C in flask	in flask	21 (53.3)	22 (55.9)	27 (68.6)			
MaxQ 8000 - Sta	MaxQ 8000 – Stackable Incubated and Refrigerated Shaker										
Digital	25-400 ±1	1.0 (2.54)	35.5 (16.1)	20°C below ambient to 60°C	±0.3°C at 37°C	33.3 (84.6)/	56.5 (143.5)/	25 (63.5)/	723 (328)	SHKE8000-7	SHKE8000-8CE
				±0.15°C at 37°C in flask	in flask	21 (53.3)	22 (55.9)	27 (68.6)			

#### **Platforms**

#### Maximize flexibility by choosing your platform and selecting a mixture of clamps.

MaxQ 8000				Model. No.
Platforms	Universal Platforms	29.5 x 18"	Platform	238061
Choose the	Maximum flexibility for using a mix of different size labware on a single platform.	(74.9 x 45.7 cm)	without Clamps	
	See Universal Clamp Guide for clamp capacities. Purchase clamps separately.			
fits your needs.	Dedicated Platforms	29.5 x 18"	Platform	See Dedicated Platforms on p. 25
	Clamps come installed to provide maximum capacity.	(74.9 x 45.7 cm)	with Clamps	
Clamps	Mix and match clamps for your Universal Platform.			See Universal Clamp Guide below



#### Universal Clamp Guide

#### Mix and match to customize the Universal Platform for your unique needs. Clamps sold as individual units.

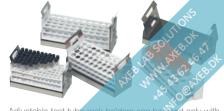
Clamp	Model No.	Clamp Capacity Guide  Max. clamp capacity of vessels for the Universal Platform
	000000	wax. Clarify Capacity of vessels for the Oniversal Flationin
Flask Clamp Starter Kit, includes (1) microplate clamp, (2) 25 ml flask clamps, (2) 50 ml flask clamps, (2) 125 ml flask clamps, (4) 35 (2) 00 ml flask clamps, (4) 11 flask clamps, (5) 11 flask clamps, (6) 11 flask clamps, (7) 11 flask clamps, (8) 12 ml flask clamps, (8) 12 ml flask clamps, (9) 12 ml flask clamps, (1) 12 ml flask clamps, (1) 13 ml flask clamps, (2) 12 ml flask clamps, (2) 12 ml flask clamps, (3) 13 ml flask clamps, (4) 15 ml flask clamps, (5) 12 ml flask clamps, (6) 12 ml flask clamps, (7) 12 ml flask clamps, (8) 12 ml flask clamps, (8	236099	-
(4) 250/300 ml flask clamps, (4) 500 ml flask clamps, (2) 1L flask clamps, (2) 2L flask clamps and replacement screws	000005	40
Microplate  OF all Educations Floats	236025	18
25 ml Erlenmeyer Flask	236010	91
50 ml Erlenmeyer Flask	236011	91
125 ml Erlenmeyer Flask	236012	39
250/300 ml Erlenmeyer Flask	236013	30
500 ml Erlenmeyer Flask	236014	24
1L Erlenmeyer Flask	236015	12
2L Erlenmeyer Flask	236016	11
2800 ml Fernback Flask	236019	6
Adhesive Flask Mat, 9 x 9" (23 x 23 cm)	300349 <sup>3</sup>	-
$Replacement \ Screws: (50) \ \#10-24 \ x \ 5/16" \ countersink \ Phillips \ head \ screws \ for \ clamps \ and \ (6) \ 1/4-20 \ x \ 3/4" \ countersink \ flat \ head \ socket \ for \ lateral \ for \ lateral \ for \ lateral \ l$	194046	
platforms and (2) 1/4"-20 x 1-1/2" hex socket set screws		
Universal Test Tube Rack with Holder (Must purchase desired test tube rack in addition to holder)		
Universal adjustable angle test tube rack holder	600088	-
Test tube rack, 72 places, 10–13 mm (3–7 ml) tubes	950040 <sup>2</sup>	5 angled
Test tube rack, 40 places, 16–20 mm (10–20 ml) tubes	950060 <sup>2</sup>	4 angled
Test tube rack, 40 places, 21–25 mm (30 ml) tubes	600074 <sup>2</sup>	4 angled
Test tube rack, 24 places, 26–30 mm (50 ml) tubes	600075 <sup>2</sup>	4 angled
Adjustable Test Tube Racks with Holder (Includes one test tube rack)		
Adjustable angle test tube rack holder with test tube rack, 72 places, 10-13 mm (3-7 ml) tubes	6000764	5 angled
Adjustable angle test tube rack holder with test tube rack, 40 places, 16-20 mm (10-20 ml) tubes	6000774	4 angled
Adjustable angle test tube rack holder with test tube rack, 40 places, 21-25 mm (30 ml) tubes	6000784	4 angled
Adjustable angle test tube rack holder with test tube rack, 24 places, 26–30 mm (50 ml) tubes	6000794	4 angled
Vial/Tube Inserts		•
Pack of 5 vial/tube inserts, perforated for (3) 50 ml tubes, (3) 20 ml tubes, and (8) 1.5-2 ml vials (Requires 1L Erlenmeyer Flask Clamp 236015	) 161033	3 x 50 ml tubes, 3 x 20 ml tubes and 8 x 1.5/2.0 ml vials
Microplate Rack Inserts		
Microplate rack insert for standard plates, 3 shelves (Requires Universal adjustable angle test tube rack holder)	600090	7 racks, 63 plates
Microplate rack insert for deep-well plates, 2 shelves (Requires Universal adjustable angle test tube rack holder)	6000891	5 racks, 30 plates
Replacement Screws		
Replacement Screws (50) #10-24 x 5/16" countersink Phillips headscrews for mounting tube holders to platform	194024	-
10 belong at a 15 degree angle. 20 aurises 11 C7C 0.00 or a definited adjustable angle toot tube paid belong of the corresponding size. 30 or be out to fit repeable.	ilnoludos rook ho	

1Shaken at a 15 degree angle 2Requires 11-676-039 or a dedicated adjustable angle test tube rack holder of the corresponding size 3Can be cut to fit, reusable 4Includes rack holder





The universal test tube rack holder can be adjusted to fit any of the four available test tube rack sizes. Universal design requires the separate purchase of a test tube rack.



Adjustable test tube rack holders can be used only with their corresponding rack size. This design includes

#### **Dedicated Platforms with Clamps**

Maximize capacity by choosing your platform with pre-installed clamps.

Clamps come installed to provide maximum capacity					
Platform Size	Description	Capacity	Model No.		
29.5 x 18"	25 ml Erlenmeyer Flask	91	238066		
(74.9 x 45.7 cm)	50 ml Erlenmeyer Flask	91	238067		
	125 ml Erlenmeyer Flask	61	238068		
	250/300 ml Erlenmeyer Flask	30	238069		
	250/300 ml Erlenmeyer Flask	40	238070		
	500 ml Erlenmeyer Flask	24	238071		
	1L Erlenmeyer Flask	15	238072		
2L Erlenmeyer Flask		12	238073		
	2800 ml Fernbach Flask	6	238074		



#### Microplate Rack Inserts

Our Microplate Rack Inserts are available for the Dedicated Adjustable Angle Test Tube Rack Holder (50 ml)-No. 600079 and the Universal Adjustable Angle Test Tube Rack Holder-No. 600088. You can increase your microplate shaking capacity, shake deepwell format plates at an angle, and remove many plates from the shaker at once for quick and easy transport to your benchtop.

#### **Optional Accessories**

MaxQ 8000		Model No.
Stand for one Stackable Shaker		194222
45.5"W x 29.6"H x 35.3"D (115.6 x 75.2 x 89.7 cm);		
30.6" (77.7 cm) max. height with leveling feet extended		
Stand for two Stackable Shakers		194223
45.5"W x 11.8"H x 30.5"D (115.6 x 30.0 x 77.5 cm);		
12.8" (32.5 cm) max. height with leveling feet extended		
Door Glass Cover Prevents light from entering through window		194224
7 Day Recorder 0-100°C, 6"	115V, 50/60 Hz	201126
	220V, 50/60 Hz	201127
Chart Paper, 50 sheet per box		197075
HEPA filter, replacement		760440
Sensaphone® Telephone Dialing System	Four Channel, 120V/60 Hz	400047
Alarm system that will notify user via the telephone	Eight Channel, 120V/60 Hz	400134



#### Stands for Stackable Shakers

The single and dual shaker stands place the stackable shakers at a convenient working height. No stand is required for units stacked three high.



Vial/Tube Inserts for 1 Liter flast Clamps
Flexible, reusable, closed-cell foam Vial/Tube Inserts are dealed shaking a mix of tube and vial sizes in temperature crigosculo to 70°C (158°F). The insert fits snugly into a 1 liter flast clarp, repels spills, and is easy to clean.



# MaxQ 7000 Water Bath Shakers

### Maintain outstanding temperature uniformity for water bath shaker applications

- Easy access drain with quick disconnect located in the front of the cabinet for convenience in draining and disinfecting
- Alarm alerts operator in case of low water level
- Prevent heat loss and minimize evaporation with use of optional covers
- Minimize splashing and turbulence with twin baffles
- Optional cooling coil available for near ambient temperatures and below
- Bacterial suspensions
- Staining and destaining
- Washing procedures
- Hybridization



MaxQ 7000 with stainless-steel gable cover Model No. SHK7000-30 (See Optional Accessories, page 27)



MaxQ 7000 with Plexiglas® gable coverage of the coverage of th Model No. SHK7000-32 (See Optional Accessories, page 27)

Ordering Information
Select the right shaker for your needs and customize by selecting either a Universal Platform or a Dedicated Platform.

#### MaxQ 7000 Shaker

Shaker Options	Speed Range (rpm)	Orbit Diameter In. (cm)	Max. Load Lb. (kg)	Temperature Range and Accuracy	Temperature Uniformity		verall Dimension Dimensions Inc W		Chamber Capacity Gallons (L)	Shipping Weight Lb. (kg)	Model. No. 120V, 50/60 Hz	Model No. 240V, 50/60 Hz
MaxQ 7000 - Wa	ater Bath Shake	r										
Analog	40-400	0.50 (1.27)	35 (15.9)	5°C above ambient to 65°C	±0.1°C at 37°C	25 (63.5)/	21.5 (54.6)/	18 (45.7)/	7.7	107	SHKA7000	SHKA7000-1CE
				±0.2°C at 37°C in flask	in flask	16 (41)	14 (36)	8 (20.3)	(29.4)	(48.5)		
Digital	15-500 ±1	0.50 (1.27)	35 (15.9)	5°C above ambient to 65°C	±0.1°C at 37°C	25 (63.5)/	21.5 (54.6)/	18 (45.7)/	7.7	107	SHKE7000	SHKE7000-1CE
				±0.2°C at 37°C in flask	in flask	16 (41)	14 (36)	8 (20.3)	(29.4)	(48.5)		

#### **Platforms**

Maximize flexibility by choosing your platform and selecting a mixture of clamps.

MaxQ 7000				Model. No.
Platforms Choose the platform that best fits your needs.	Universal Platforms  Maximum flexibility for using a mix of different size labware on a single platform.  See Universal Clamp Guide for clamp capacities. Purchase clamps separately.	11 x 13" (28 x 33 cm)	Platform without Clamps	30105
	Dedicated Platforms Clamps come installed to provide maximum capacity.	11 x 13" (28 x 33 cm)	Platform with Clamps	See Dedicated Platforms below
Clamps	Mix and match clamps for your Universal Platform.			See Universal Clamp Guide below

Universal Clamp Guide
Mix and match to customize the Universal Platform for your unique needs. Clamps sold as individual units.

Clamp	Model No.	Clamp Capacity Guide  Max. clamp capacity of vessels for the Universal platform
		MaxQ 7000
		11 x 13" (28 x 33 cm)
Flask Clamp Starter Kit, includes (1) microplate clamp, (2) 125 ml flask clamps, (4) 250 ml flask clamps, (4) 500 ml flask clamps, (2) 1L flask clamps, (2) 2L flask clamps	30129	
Microplate/Deep-well plate	30175	5
10 ml Erlenmeyer Flask	30150BI	60
25 ml Erlenmeyer Flask	30151	60
50 ml Erlenmeyer Flask	30152BI	30
125 ml Erlenmeyer Flask	30153	13
250 ml Erlenmeyer Flask	30154BI	9
300 ml Erlenmeyer Flask	30155	7
500 ml Erlenmeyer Flask	30156BI	6
1L Erlenmeyer Flask	30157BI	4
2L Erlenmeyer Flask	30158	1
4L Erlenmeyer Flask	30159	1
6L Erlenmeyer Flask	30160	1
2500 ml Low Form Culture Flask	30161	1
2800 ml Fernbach Flask	30162	1
Test Tube Racks – Full Size		
10-13 mm, red, 6 x 12 array	30180BI	3
14-16 mm, orange, 6 x 12 array	30182 <sup>1</sup>	2
17-20 mm, white, 4 x 10 array	30184	3
21-25 mm, blue, 4 x 10 array	30186	2
26-30 mm, green, 3 x 8 array	30188 <sup>2</sup>	2
Microcentrifuge, 1.5 ml, blue, 8 x 12 array	30190	2
Test Tube Racks – Half Size		
10-13 mm, red, 6 x 6 array	30181	6
14-16 mm, orange, 6 x 6 array	30183¹	4
17-20 mm, white, 4 x 5 array	30185	4
21-25 mm, blue, 4 x 4 array	30187	4
26-30 mm, green, 3 x 3 array	30189 <sup>2</sup>	6
Microcentrifuge, 1.5 ml, blue, 4 x 6 array	30191	4
¹Fits 15 ml centrifuge tubes ²Fits 50 ml centrifuges tubes	9	



#### **Dedicated Platforms with Clamps** Maximize capacity by choosing your platform with pre-installed clamps.

Clamps come installed to provide maximum capacity						
Platform Size		Capacity	Model No.			
11 x 13"	10 ml Erlenmeyer Flask	63	3540-1			
(28 x 33 cm)	25 ml Erlenmeyer Flask	32	3540-2			
	50 ml Erlenmeyer Flask	32	3540-3			
	125 ml Erlenmeyer Flask	16	3540-4			
	250 ml Erlenmeyer Flask	9	3540-5			
	300 ml Erlenmeyer Flask	8	3540-6			
	500 ml Erlenmeyer Flask	6	3540-7			
	1L Erlenmeyer Flask	4	3540-8			
	2L Erlenmeyer Flask	2	3540-9			
	10 ml Beaker	76	3540-35			
	20 ml Beaker	52	3540-36			
	30 ml Beaker	52	3540-37			
	100 ml Beaker	22	3540-38			
	Utility Tray	_	3540-46			
	Basket Platform	-	3540-49			
	with Retainer Springs					

#### Optional Accessories

MaxQ 7000	Model No.
Cooling Coil, customer installed	SHK7000-373
Needed for near-ambient temperature and below	5
Gable cover, Stainless-steel	SHK7000-30
For temperatures up to 90°C	31117000-30
Gable cover, Plexiglas®	SHK7000-32
For temperatures up to 65°C	311K/000-32
Auxiliary Platform Suspension Arms	SHK7000-40
Used for rapid platform changes	CAS OFT
Movable Dolly	SHK7000-45
For under lab bench operation	1/21
Mobile Cart	SHK7000-48
This assessment requires a sirculating shiller	7

<sup>3</sup>This accessory requires a circulating chille



#### Your cultures need to be protected.

That's why our MaxQ High Performance shakers feature set point security which restricts unauthorized or inadvertent changes to key functions. To ensure the safety of your samples, our shakers are equipped with alarm contacts allowing them to be connected to remote alarms making you aware of how the shaker is performing at all times, safeguarding both the shaker and contents.

### Your cultures require optimum growth.

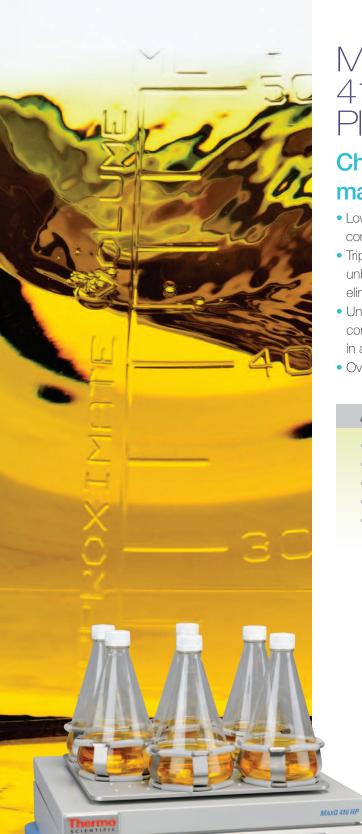
Outstanding temperature uniformity of  $\pm 0.3^{\circ}$ C is provided by a directed laminar airflow and HEPA filtration system even when the units are fully loaded with samples. Low end temperature of 4°C is achieved efficiently and effectively by the filtered front to back refrigeration system airflow. This design outperforms side-to-back and back-to-back airflow designs even in high ambients.

#### Your sample monitoring just got easier!

Our MaxQ High Performance shakers feature a backlit display that can be viewed in bright or dimly lit conditions. It contains both run points and set points of temperature, speed and time which can be viewed simultaneously, preventing toggling from one display to another.

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## MaxQ High Performance 416 and 430 Open Air Platform Shakers

# Choice of two platform sizes maximizes capacity

- Low heat 24V DC motor with moisture resistant electronics provides continuous maintenance-free operation on the benchtop or in a chamber
- Triple counter-balanced mechanism for optimum handling of full or unbalanced loads regardless of vessel placement and completely eliminates walking
- Units operate in temperature range of 4°C to +40°C and humidity conditions from 50 to 80% non-condensing enabling them to be used in a variety of environments
- Oversized, adjustable suction cup feet minimize vibration

- Cell culture
- Solubility studies
- Extraction procedures
- Diagnostic tests
- General mixing

- Bacterial suspensions
- Staining
- Destaining
- Washing procedures
- Hybridizations



#### **Ordering Information**

Select the right shaker for your needs and customize by selecting either a Universal Platform or a Dedicated Platform.

#### MaxQ High Performance 416 and 430 Shakers

Shaker Options	Speed Range	Orbit Diameter	Max Load	Overall Dimensions Inches (cm)		Shipping Weight	Model No.		
Shaker Options	(rpm)	In. (cm)	Lb. (kg)	L	W	Н	Lb. (kg)	115V/230V, 50/60Hz (Dual Voltage)	
MaxQ 416 HP - N	/lid-Size Open Air S	Shaker							
Digital	25-525 ±1	1.0 (2.5)	71 (32)	26 (66)	24.3 (61.7)	7.8 (19.8)	234 (106)	SHKE416HP	
MaxQ 430 HP - L	MaxQ 430 HP - Large Open Air Shaker								
Digital	25-525 ±1	1.0 (2.5)	71 (32)	26 (66)	30.5 (77.5)	7.8 (19.8)	234 (106)	SHKE430HP	

#### **Platforms**

Maximize flexibility by choosing your platform and selecting a mixture of clamps.

MaxQ 416 HP				Model No.
Platforms	Universal Platforms Maximum flexibility for using a mix of different size labware on a single	18" x 18" (45.7 x 45.7 cm)	Platform without Clamps	238000
Choose the platform that best	platform. See Universal Clamp Guide for clamp capacities. Purchase clamps separately.	24" x 18" (60.9 x 45.7 cm)	Platform without Clamps	238008
fits your needs.	Dedicated Platforms	18" x 18" (45.7 x 45.7 cm)	Platform with Clamps	See Dedicated Platforms below
	Clamps come installed to provide maximum capacity.	24" x 18" (60.9 x 45.7 cm)	Platform with Clamps	See Dedicated Platforms below
Clamps	Mix and match clamps for your Universal Platform			See Universal Clamp Guide below
MaxQ 430 HP				Model No.
Platforms	Universal Platforms Maximum flexibility for using a mix of different size labware on a single	29.5" x 18" (74.9 x 45.7 cm)	Platform without Clamps	238001
Choose the platform that best	platform. See Universal Clamp Guide for clamp capacities. Purchase clamps separately.	36" x 24" (91.4 x 60.9 cm)	Platform without Clamps	238002
fits your needs.	Dedicated Platforms	29.5" x 18" (74.9 x 45.7 cm)	Platform with Clamps	See Dedicated Platforms below
	Clamps come installed to provide maximum capacity.	36" x 24" (91.4 x 60.9 cm)	Platform with Clamps	See Dedicated Platforms below
Clamps	Mix and match clamps for your Universal Platform			See Universal Clamp Guide below

#### Universal Clamp Guide

Mix and match to customize the Universal Platform for your unique needs. Clamps sold as individual units.

Clamp	Model No. Clamp Capacity Guide  Maximum clamp capacity of vessels for the Universal Platform.						
		MaxQ			430 HP		
		18" x 18"	24" x 18"	29.5" x 18"	36" x 24"		
		(45.7 x 45.7 cm)		(74.9 x 45.7 cm)	(91.4 x 60.9 cm)		
Flask Clamp Starter Kit includes: (2) 25 ml flask clamps, (2) 50 ml flask clamps, (2) 125 ml flask clamps, (4) 500 ml flask clamps, (2) 11. flask clamps, and (2) 21. flask clamps	236099						
Microplate / Deepwell Plate	236025	10	16	18	31		
25 ml Erlenmeyer Flask	236010	49	80	91	150		
50 ml Erlenmeyer Flask	236011	49	80	91	150		
125 ml Erlemeyer Flask	236012	25	40	39	75		
250/300 ml Erlenmeyer Flask	236013	18	25	30	55		
500 ml Erlenmeyer Flask	236014	16	20	24	30		
1L Erlenmeyer Flask	236015	8	12	12	24		
2L Erlenmeyer Flask	236016	6	8	11	15		
4L Erlenmeyer Flask	236017	4	5	6	11		
5L Erlenmeyer Flask	236028	4	4	6	8		
6L Erlenmeyer Flask	236018	2	4	4	8		
2800 ml Fernbach Flask	236019	4	5	6	11		
Adhesive Flask Mat	300349	-	_	-	_		
Adjustable Test Tube Racks with Holder (In	cludes one	test tube rack)					
10-13 mm - 3-7 ml tube rack - 72 place	600076	4	6	8	16		
16-20 mm - 10-20 ml tube rack - 40 place	600077	4	6	7	16		
21-25 mm - 30 ml tube rack - 40 place	600078	3	5	6	9		
26-30 mm - 50 ml tube rack -24 place	600079	3	5	6	9		
Universal Test Tube Rack with Holder (Mus	t purchase	desired test tube	rack in addition to	o holder)			
Universal adjustable angle test tube rack holder	600088	_	_	-	_		
10-13 mm - 3-7 ml tube rack - 72 place	950040	3	4	5	9		
16-20 mm - 10-20 ml tube rack - 40 place	950060	3	4	5	9		
21-25 mm - 30 ml tube rack - 40 place	600074	2	3	4	7		
26-30 mm - 50 ml tube rack -24 place	600075	2	3	4	7		
Microplate Racks and Vial/Tube Inserts							
Microplate Rack for Standard Plates	600090 <sup>1</sup>	4 racks, 36 plates	5 racks, 45 plates	7 racks, 63 plates	8 racks, 72 plates		
Microplate Rack for Deepwell Plates	600089 <sup>2</sup>	3 racks, 18 plates	4 racks, 24 plates	5 racks, 30 plates	7 racks, 42 plates		
Pack of 5 vial/tube inserts for use in 1L flask clamps	161033*	8	12	12	24		
Universal Utility Trays							
9" x 18" (22.9 x 45.7 cm) Utility Tray with 0.5" (1.3 cm) rubber pad	236026	1	2	3	3		
18" x 18" (45.7 x 45.7 cm) Utility Tray with 0.5" (1.3 cm) rubber pad	236027	1	1	1	2		

<sup>\*</sup>Holds 3 x 50 ml tubes, 3 x 20 ml tubes, and 8 x 1.5/2.0 ml vials 13 shelves 22 shelves

#### Miscellaneous Accessories

MaxQ HP 416, 430	Model No.
9.0" x 18.0" (22.9 x 45.7 cm) Utility tray with 0.5" (1.3 cm) thick rubber pad	236026
18.0" x 18.0" (45.7 x 45.7 cm) Utility tray with 0.5" (1.3 cm) thick rubber pad	236027
Quick change platform adapter	194040
MagNote wipe-off magnet and pen kit (benchtop models only)	194140
Four channel Sensaphone telephone dialing system	400047
Eight channel Sensaphone telephone dialing system	400134
Replacement screws: (50) #10-24 x 3/8" pan head Phillips screws for mounting test tube holders to platform	194024
Replacement screws: (50) #10-24 x 5/16" Countersink Phillips Head Screws for Clamps and (12) 1/4-20 x 3/4" Countersink Flat Head Socket Screws for Platforms	194046

#### **Dedicated Platforms with Clamps**

Maximize capacity by choosing your platform with pre-installed clamps.

Platform Size	talled to provide maximum capac  Description	Capacity	Model No.
MaxQ 416 HP			
18" x 18"	25 ml Erlenmeyer Flask	49	238010
(45.7 x 45.7 cm)	50 ml Erlenmeyer Flask	49	238011
( ,	125 ml Erlemeyer Flask	25	238012
	125 ml Erlemeyer Flask*	36	238049
	250/300 ml Erlenmeyer Flask	18	238013
	250/300 ml Erlenmeyer Flask*	25	238050
	500ml Erlenmeyer Flask	16	238014
	1L Erlenmeyer Flask	8	238015
	2L Erlenmeyer Flask	6	238016
	4L Erlenmeyer Flask	4	238046
	5L Erlenmeyer Flask	4	238053
	6L Erlenmeyer Flask	2	238047
	2800ml Fernbach Flask	4	238048
24" x 18"	25 ml Erlenmeyer Flask	80	238036
(60.9 x 45.7 cm)	50 ml Erlenmeyer Flask	80	238037
(55.5 % 10.7 611)	125 ml Erlemeyer Flask	40	238038
	250/300 ml Erlenmeyer Flask	25	238052
	250/300 ml Erlenmeyer Flask*	35	238039
	500 ml Erlenmeyer Flask	20	238040
	1L Erlenmeyer Flask	12	238041
	2L Erlenmeyer Flask	8	238042
		5	238042
	4L Erlenmeyer Flask		
	5L Erlenmeyer Flask	4	238055 238044
	6L Erlenmeyer Flask		
MaxQ 430 HP	2800 ml Fernbach Flask	5	238045
	OF ml Erlanmouar Flack	01	220017
29.5" x 18"	25 ml Erlenmeyer Flask	91	238017
(74.9 x 45.7 cm)	50 ml Erlenmeyer Flask	91	238018
	125 ml Erlemeyer Flask	61	238019
	250/300 ml Erlenmeyer Flask	30	238051
	250/300 ml Erlenmeyer Flask*	40	238020
	500 ml Erlenmeyer Flask	24	238021
	1L Erlenmeyer Flask	15	238022
	2L Erlenmeyer Flask	12	238023
	4L Erlenmeyer Flask	6	238024
	5L Erlenmeyer Flask	6	238054
	6L Erlenmeyer Flask	4	238025
	2800 ml Fernbach Flask	6	238026
36" x 24"	25 ml Erlenmeyer Flask	150	238057
(91.4 x 60.9 cm)	50 ml Erlenmeyer Flask	150	238058
	125 ml Erlemeyer Flask	96	238027
	250/300 ml Erlenmeyer Flask*	700	238028
	500 ml Erlenmeyer Flask	30	238029
	1L Erlenmeyer Flask	24	238030
	2L Erlenmeyer Flask	J15 6	238031
	4L Erlenmeyer Flask	11x <sup>1</sup> x	238032
	5L Erlenmeyer Flask	8	238056
	6L Erlenmeyer Flask	8	238033
	2800 ml Fernbach Flask	11	238034



## MaxQ High Performance 420 Large Benchtop Incubated Shakers

# Outstanding temperature uniformity improves product yields

Double-wall, insulated chamber contributes to optimum growth

- $\bullet$  Twin blowers and gasketed lid ensure temperature uniformity of  $\pm 0.3^{\circ}\text{C}$  (in flask) creating an ideal environment for temperature sensitive cultures
- Triple counter-balanced mechanism
- Microprocessor functions are calibrated through keypad
- Platform easily accommodates 6 x 2L flasks
- Clear acrylic lid withstands years of use without cracking or discoloration
- Audible/visual over and under-temperature alarms ensure sample protection
- Innovative design ensures system protection in case of spills

#### **Applications**

- Cell culture
- DNA fingerprinting
- Solubility studies
- Extraction procedures
- Protein expressions
- Bacterial suspensions
- Washing procedures
- Staining and destaining



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### **Ordering Information**

Select the right shaker for your needs and customize by selecting either a Universal Platform or a Dedicated Platform.

#### MaxQ High Performance 420 Shakers

Shaker Options	Speed Range (rpm)	Orbit Diameter	Max Load Lb. (kg)	Temperature Range and Accuracy	Temperature	iformity In (cm)		Shipping Weight	Model No. 115V/230V, 50/60Hz (Dual Voltage)	
	(i þill)	III. (GIII)	LD. (Ng)	Accuracy	Officiality	L	W	H	Lb. (kg)	113V/230V, 30/00112 (Duai Voltage)
MaxQ 420 HP - I	ncubated Bench	top Shaker								
Digital	25-525 ±1	1.0 (2.5)	71 (32)	$5^{\circ}$ C above ambient to $80^{\circ}$ C, $\pm 0.1^{\circ}$ C	±0.3°C at 37°C in flask	29 (73.7)/ 21.2 (53.8)	24.3 (61.7)/ 21.4 (54.4)	20.9 (53.1)/ 12.6 (32)	250 (113.4)	SHKE420HP

#### **Platforms**

Maximize flexibility by choosing your platform and selecting a mixture of clamps.

MaxQ 420 HP				Model No.
Platforms Choose the platform that best	Universal Platforms Maximum flexibility for using a mix of different size labware on a single platform. See Universal Clamp Guide for clamp capacities. Purchase clamps separately.	18" x 18" (45.7 x 45.7 cm)	Platform without Clamps	238000
fits your needs.	Dedicated Platforms Clamps come installed to provide maximum capacity.	18" x 18" (45.7 x 45.7 cm)	Platform with Clamps	See Dedicated Platforms below
Clamps	Mix and match clamps for your Universal Platform			See Universal Clamp Guide below

#### Universal Clamp Guide

Mix and match to customize the Universal Platform for your unique needs. Clamps sold as individual units.

Clamp	Model No.	Clamp Capacity Guide Maximum clamp capacity of vessels
		for the Universal Platform.
		MaxQ 420 HP
		18" x 18" (45.7 x 45.7 cm)
Flask Clamp Starter Kit includes: (2) 25 ml flask clamps, (2) 50 ml flask clamps, (2) 125 ml flask clamps, (4) 250 ml flask clamps, (4) 500 ml flask clamps, (2) 1L flask clamps, and (2) 2L flask clamps	236099	
Microplate / Deepwell Plate	236025	10
25 ml Erlenmeyer Flask	236010	49
50 ml Erlenmeyer Flask	236011	49
125 ml Erlemeyer Flask	236012	25
250/300 ml Erlenmeyer Flask	236013	18
500 ml Erlenmeyer Flask	236014	16
1L Erlenmeyer Flask	236015	8
2L Erlenmeyer Flask	236016	6
2800 ml Fernbach Flask	236019	4
Adhesive Flask Mat	300349	-
Adjustable Test Tube Racks with Holder (Includes one test tube rack)		
10–13 mm - 3–7 ml tube rack - 72 place	600076	4
16-20 mm - 10-20 ml tube rack - 40 place	600077	4
21-25 mm - 30 ml tube rack - 40 place	600078	3
26–30 mm - 50 ml tube rack -24 place	600079	3
Universal Test Tube Racks with Holder (Must purchase desired test tube		on to holder)
Universal Adjustable Tube Rack Holder	600088	-
10–13 mm - 3–7 ml tube rack - 72 place	950040	3
16-20 mm - 10-20 ml tube rack - 40 place	950060	3
21-25 mm - 30 ml tube rack - 40 place	600074	2
26–30 mm - 50 ml tube rack -24 place	600075	2
Microplate Racks and Vial/Tube Inserts		
Microplate Rack for Standard Plates (3 shelves)	600090	4 racks, 36 plates
Microplate Rack for Deepwell Plates (2 shelves)	600089	3 racks, 18 plates
Pack of 5 vial/tube inserts for use in 1L flask clamps	161033*	8
Universal Utility Trays		
9" x 18" (22.9 x 45.7 cm) Utility Tray with 0.5" (1.3 cm) rubber pad	236026	1
18" x 18" (45.7 x 45.7 cm) Utility Tray with 0.5" (1.3 cm) rubber pad	236027	1
*Holds 3 x 50 ml tubes, 3 x 20 ml tubes and 8 x 1.5/2.0 ml vials		

# Dedicated Platforms with Clamps Maximize capacity by choosing your platform with pre-installed clamps.

Clamps come installed to provide maximum capacity					
Platform Size	Description	Capacity	Model No.		
18" x 18"	25 ml Erlenmeyer Flask	49	238010		
(45.7 x 45.7 cm)	50 ml Erlenmeyer Flask	49	238011		
	125 ml Erlemeyer Flask	25	238012		
	125 ml Erlemeyer Flask	36	238049		
	250/300 ml Erlenmeyer Flask	18	238013		
	250/300 ml Erlenmeyer Flask	25	238050		
	500 ml Erlenmeyer Flask	16	238014		
	1L Erlenmeyer Flask	8	238015		
	2L Erlenmeyer Flask	6	238016		
	2800 ml Fernbach Flask	4	238048		

#### Miscellaneous Accessories

Wildelianeous Accessories		
MaxQ HP 420		Model No.
Dual-stack benchtop shaker kit, includes kneewell side mount and orbital shaker stand		452000
Kneewell slide mount, shaker slides out on rails for easy access: 26.6" W x 22.2" H x 33" D (67.6 cm x 56.4 cm x 83.8 cm)		452002
Orbital shaker stand, uses 33.5" W x 37.3" H x 35.3" D of floor space (85.1 cm x 94.7 cm x 89.7 cm)		452001
Four drawer assembly, dimensions: 9.0" W x 18.0" H x 21.5" D (22.9 cm x 45.7 cm x 54.6 cm)		191494
Roller base for drawer assembly, adds 3" (7.6cm) to height: 9.4" W x 3.6" H x 21.9" D (23.9 cm x 9.1 cm x 55.6 cm)		191591
Gassing manifold (one gas)		194045
Free-standing 0-100°C, 6", seven day chart recorder, 115V, 60 Hz		201126
Free-standing 0-100°C, 6", seven day chart recorder, 220V, 50 Hz		201127
Replacement chart paper, 50 per box		197075
9.0" x 18.0" (22.9 x 45.7 cm) Utility tray with 0.5" (1.3 cm) thick rubber pad	(0)	236026
18.0" x 18.0" (45.7 x 45.7 cm) Utility tray with 0.5" (1.3 cm) thick rubber pad	(A)	236027
Quick change platform adapter	all all	194040
MagNote wipe-off magnet and pen kit (benchtop models only)	ter in	194140
Four channel Sensaphone telephone dialing system	Y 17 5	400047
Eight channel Sensaphone telephone dialing system	×'n	400134
Replacement screws: (50) #10-24 x 3/8" pan head Phillips screws for mounting test tube holders to platform		194024
Replacement screws: (50) #10-24 x 5/16" Countersink Phillips Head Screws for Clamps and (12) 1/4-20 x 3/4" Countersink Flat Head Screws for Platforms		194046



# MaxQ High Performance Incubated and Refrigerated Floor Shakers Models 435 (436) and 480R (481R)

# high capacity requirements

- HEPA filtration for maximum protection from contamination
- Drain system with valve makes it easy to eliminate liquid, reducing the risk of water borne contamination
- Directed laminar airflow system for optimum temperature uniformity
- Crevice-free, stainless steel interior with coved corners for easy cleaning
- Viewing window offers sample visibility
- Access port in rear of cabinet allows insertion of probes, CO, gassing manifolds or other equipment
- Foot pedal opens lid for hands free operation
  - Floor models meet specified performance of 4°C to 60°C even in high ambient temperatures
  - · Low end temperature is achieved by the filtered front to back refrigeration air flow system

- Cell culture
- Extractions
- Plasmid purifications
- Solubility studies
- Hybridizations
- Staining and destaining

### **Ordering Information**

Select the right shaker for your needs and customize by selecting either a Universal Platform or a Dedicated Platform.

#### MaxQ High Performance 435 (436) and 480R (481R) Shakers

Shaker Options	Speed Range (rpm)	Orbit Diameter In. (cm)	Max Load Lb. (kg)	Temperature Range and Accuracy	Temperature Uniformity	Overall Dimer	nsions/Chamb In (cm) W	er Dimensions H	Shipping Weight Lb. (kg)	Model No. 120V, 60Hz	Model No. 230V, 50/60Hz
MaxQ 435 / 436 HP - Large Incubated Floor Shaker											
Digital	25-525 ±1	1.0 (2.5)	71 (32)	5°C above ambient to 60°C, ±0.1°C	±0.2°C at 37°C in flask	30 (76.2)/ 21.1 (53.6)	45 (114.3)/ 34.3 (87.1)	40.4 (102.6)/ 18.5 (47)	610 (277)	SHKE435HP	SHKE436HP
MaxQ 480R / 481R HP - Large Incubated and Refrigerated Floor Shaker											
Digital	25-525 ±1	1.0 (2.5)	71 (32)	4°C to 60°C, ±0.1°C	±0.2°C at 37°C in flask	30 (76.2)/ 21.1 (53.6)	45 (114.3)/ 34.3 (87.1)	40.4 (102.6)/ 18.5 (47)	665 (302)	SHKE480HP	SHKE481HP

#### **Platforms**

Maximize flexibility by choosing your platform and selecting a mixture of clamps.

MaxQ 435 / 436 / 480R / 48	Model No.		
Platforms Choose the platform that best	Universal Platforms Maximum flexibility for using a mix of different size labware on a single platform. See Universal Clamp Guide for clamp capacities. Purchase clamps separately.	29.5" x 18" (74.9 x 45.7 cm) Platform without Clamps	238001
fits your needs.	Dedicated Platforms Clamps come installed to provide maximum capacity.	29.5" x 18" (74.9 x 45.7 cm) Platform with Clamps	See Dedicated Platforms below
Clamps	Mix and match clamps for your Universal Platform		See Universal Clamp Guide below

#### Universal Clamp Guide

Mix and match to customize the Universal Platform for your unique needs. Clamps sold as individual units.

Clamp	Model No.	Clamp Capacity Guide Maximum clamp capacity of vessels for the Universal Platform.
		MaxQ 435 / 436 / 480R / 481R HP
		29.5" x 18" (74.9 x 45.7 cm)
Flask Clamp Starter Kit includes: (2) 25 ml flask clamps, (2) 50 ml flask clamps, (2) 125 ml flask clamps, (4) 250 ml flask clamps, (4) 500 ml flask clamps, (4) 500 ml flask clamps, (4) 500 ml flask clamps	236099	
Microplate / Deepwell Plate	236025	18
25 ml Erlenmeyer Flask	236010	91
50 ml Erlenmeyer Flask	236011	91
125 ml Erlemeyer Flask	236012	39
250/300 ml Erlenmeyer Flask	236013	30
500 ml Erlenmeyer Flask	236014	24
1L Erlenmeyer Flask	236015	12
2L Erlenmeyer Flask	236016	11
4L Erlenmeyer Flask	236017	6
5L Erlenmeyer Flask	236028	6
6L Erlenmeyer Flask	236018	4
2800 ml Fernbach Flask	236019	6
Adhesive Flask Mat	300349	_
Adjustable Test Tube Racks with Holder (Includes one test tube rack)		
10-13 mm - 3-7 ml tube rack - 72 place	600076	4
16-20 mm - 10-20 ml tube rack - 40 place	600077	4
21-25 mm - 30 ml tube rack - 40 place	600078	3
26-30 mm - 50 ml tube rack -24 place	600079	3
Universal Test Tube Racks with Holder (Must purchase desired test tube	rack in addition	on to holder)
Universal Adjustable Tube Rack Holder	600088	_
10-13 mm - 3-7 ml tube rack - 72 place	950040	3
16-20 mm - 10-20 ml tube rack - 40 place	950060	3
21-25 mm - 30 ml tube rack - 40 place	600074	2
26-30 mm - 50 ml tube rack -24 place	600075	2
Microplate Racks and Vial/Tube Inserts		
Microplate Rack for Standard Plates (3 shelves)	600090	7 racks, 63 plates
Microplate Rack for Deepwell Plates (2 shelves)	600089	5 racks, 30 plates
Pack of 5 vial/tube inserts for use in 1L flask clamps	161033*	12
Universal Utility Trays		
9" x 18" (22.9 x 45.7 cm) Utility Tray with 0.5" (1.3 cm) rubber pad	236026	1
18" x 18" (45.7 x 45.7 cm) Utility Tray with 0.5" (1.3 cm) rubber pad	236027	1
*Holds 3 x 5 0 ml tubes, 3 x 20 ml tubes and 8 x 1.5/2.0 ml vials		

#### Dedicated Platforms with Clamps Maximize capacity by choosing your platform with pre-installed clamps.

Clamps come installed to provide maximum capacity					
Platform Size	Description	Capacity	Model No.		
29.5" x 18"	25 ml Erlenmeyer Flask	91	238017		
(74.9 x 45.7 cm)	50 ml Erlenmeyer Flask	91	238018		
	125 ml Erlemeyer Flask	61	238019		
	250/300 ml Erlenmeyer Flask	30	238051		
	250/300 ml Erlenmeyer Flask	40	238020		
	500 ml Erlenmeyer Flask	24	238021		
	1L Erlenmeyer Flask	15	238022		
	2L Erlenmeyer Flask	12	238023		
	4L Erlenmeyer Flask	6	238024		
	5L Erlenmeyer Flask	6	238054		
	6L Erlenmeyer Flask	4	238025		
	2800 ml Fernbach Flask	6	238026		

#### Miscellaneous Accessories

Wilderfull Today / Todasadi Toda	
MaxQ HP 435, 436, 480, 481	Model No.
Removable shelf	194033
Gassing manifold (one gas)	194045
0°C to 60°C, seven day chart recorder, 115V, 50/60 Hz	201113
Replacement chart paper, 50 per box	180006
HEPA filter replacement	760164
9.0" x 18.0" (22.9 x 45.7 cm) Utility tray with 0.5" (1.3 cm) thick rubber pad	236026
18.0" x 18.0" (45.7 x 45.7 cm) Utility tray with 0.5" (1.3 cm) thick rubber pad	236027
Platform adapter for NBS 30" x 18.0" (76.2cm x 45.7cm) platform	194041
Quick change platform adapter	194040
MagNote wipe-off magnet and pen kit (floor models only)	194139
Four channel Sensaphone telephone dialing system	400047
Eight channel Sensaphone telephone dialing system	400134
Replacement screws: (50) #10-24 x 3/8" pan head Phillips screws for mounting test tube holders to platform	194024
Replacement screws: (50) #10-24 x 5/16" Countersink Phillips Head Screws for Clamps and (12) 1/4-20 x 3/4" Countersink Flat Head Socket Screws for Platforms	194046

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