



Shakers and Mixers

Technical specifications

Model	Reax top	Reax control	Multi Reax	Titramax 100	Titramax 101	Titramax 1000	Vibramax 100	Vibramax 110	Rotamax 120
Motion	vibrating	orbital							
Rotation speed (rpm)	0 - 2500	0 - 2500	150 - 2000	150 - 1350	150 - 1350	150 - 1350	150 - 1350	150 - 2500	20 - 300
Rotation speed setting	analog	electronic contr.	digital	electronic contr.					
Orbit (mm	5	5	3	1.5	3.0	1.5	3.0	1.5	20
Angle (°	-	-	-	-	-	-	-	-	-
Operating mode	automatic or	automatic or	automatic or	timer or	timer or	timer or	timer or	timer or	timer or
	continuous								
Input power (W	51	51	50	31	31	31	31	46	33
Weight (kg	2.8	2.8	9.8	5.5	5.5	6.5	5.5	5.0	5.5
Dimensions (wxhxd) (mm)	134 x 105 x 172	134 x 105 x 172	270 x 172 x 410	245 x 125 x 310	245 x 125 x 310	320 x 125 x 375	245 x 125 x 310	245 x 140 x 310	245 x 125 x 310
Platform size (mm)				220 x 220	220 x 220	290 x 258	220 x 220	140 x 140	220 x 220
Included			2 carousel	space for 4	space for 4	space for 6	non-skid	non-skid	non-skid
			attachments	microtiterplates	microtiterplates	microtiterplates	rubber mat	rubber mat	rubber mat
Max. load capacity (kg)			1.5	2	2	2	2	2	2
Supply voltage*	115 V / 60 Hz								
	230/240 V/50 Hz								
Overheating protection	self-								
	resetting								
Permissible ambient	5-40 at 85%	5-40 at 85%	0-50 at 80%						
temperature (°C)	relative humidity								
Protection class (DIN EN 60529	IP 22	IP 22	IP 30	IP 30	IP 30	IP 40	IP 30	IP 30	IP 30

Model	Unimax 1010	Unimax 2010	Promax 1020	Promax 2020	Duomax 1030	Polymax 1040	Polymax 2040	Reax 2	Reax 20/4 Reax 20/8 Reax 20/12
Motion	orbital	orbital	reciprocating	reciprocating	rocking	wave	wave	overhead	overhead
Rotation speed (rpm)	30 - 500	20 - 400	30 - 250	20 - 400	2 - 50	2 - 50	2.5 - 50	20 - 100	1 - 16
Rotation speed setting	digital	digital	digital	digital	electronic contr.	electronic contr.	digital	analog	electronic contr.
Orbit (mm	10	20	32	20					
Angle (°	1				5/10	5/10	5/10		
Operating mode	timer or								
	continuous								
Input power (W	50	115	50	115	115	115	115	27	280
Weight (kg	8.0	16	8.0	16	8.0	8.0	16	5.2	23, 28, 33
Dimensions (wxhxd) (mm	320 x 125 x 375	426 x 135 x 435	320 x 125 x 375	426 x 135 x 435	320 x 185 x 375	320 x 195 x 375	426 x 208 x 435	510 x 180 x 235	490 x 465 x 520
Platform size (mm	290 x 258	390 x 340	290 x 258	390 x 340	290 x 258	290 x 258	390 x 340		770 x 465 x 520
Included	non-skid	universal	1050x465 x 520						
	rubber mat	adapter							
Max. load capacity (kg	5	10	5	10	5	5	10	1	30
Supply voltage*	115 V / 60 Hz								
	230/240 V/50 Hz	230 V / 50 Hz	230 V / 50 Hz						
Overheating protection	self-								
	resetting								
Permissible ambient	0-50 at 80%	0-40 at 80%	0-40 / 80% rel.						
temperature (°C	relative humidity								
Protection class (DIN EN 60529	IP 40	IP 20	IP 40	IP 20	IP 40	IP 40	IP 20	IP 21	IP 21

^{*} others on request, please specify for order

While you concentrate on research, we'll look after your support needs

The team at Heidolph is dedicated and committed about delivering the highest quality product and services to its customers, allowing you to concentrate on research. Take the walk with us and see for yourself.

- 24 hour service for all inquires
- Individual application support
- Short delivery time for standard equipment
- After sales service provided by your local dealer
- More than 80 distributors worldwide
- Priority technical service
- 3 year warranty



Shakers and Mixers

Heidolph is your first choice for shaking, mixing and heating of small or large wells in biology, microbiology, medical diagnosis and biochemistry.

Your benefit:

- Shaking, mixing and heating, all in one
- Insulated motor virtually no platform heat-up
- Encapsulated housing prevents spills and increased performance life
- Self-resetting overheat protection
- Maintenance free sparkless and brushless motors



Test tube shaker vibrating	Page 6
Platform shaker vibrating orbital reciprocating rocking wave	Page 7-8 Page 9 Page 10 Page 11 Page 12
Overhead shaker Incubator 1000 Accessories	Page 13 Page 14-15 Page 16-17

Complete packages

Page 18

The Modular Concept

- The modular concept consists of one shaker, one heating module and your choice of a flat or high incubator hood
- Incubators can be combined with shakers of all specific motions at any time
- No contamination of your well, due to convection based heating system
- All components are designed to function together
- High efficiency with limited space requirements
- · Complete system available from one manufacturer



General Advantages

... of Heidolph Shakers and Mixers

- Shaking, mixing and heating, all in one
- Various models from test tube shakers to large platform shakers
- Choose from 6 specific motions, from one to three dimensional movements
- Three platform sizes and load capacities: 2 kg up to 10 kg
- Modular system including the Incubator 1000 with your choice of a flat or high incubator hood
- Large range of flask attachments for all common vessels

For your safety:

- Insulated platform with virtually no heat-up
- Designed for continuous operation
- Maintenance free sparkless and brushless motors
- Heidolph shakers are CE marked and comply with EMC and low voltage regulations
- High quality and long service life
- 3 year warranty

Heating module

Test tube shaker - vibrating

- Vibrating motion continuously adjustable up to 2,500 rpm
- 3 different models
- Various accessories for test tubes and multiple tubes

Reax

- Vibration orbit of 5 mm
- Switch easily from continuous mode to automatic mode
- High stability
- Plate for 20 mm diameter test tubes included
- Protection class IP 22

Reax top

Standard test tube shaker

- Test tube shaker with all above mentioned advantages
- Features analog dial speed control
- Vibration frequency up to 2,500 rpm

Reax control

Constant vibration under changing loads

- Test tube shaker with all above mentioned advantages
- Features electronic speed control
- Vibration frequency up to 2,500 rpm



Reax top (not shown) P/N 541-10000-00 Reax control P/N 541-11000-00 Accessories: Category A

Multi Reax

Unique shaker to accommodate up to 26 vessels with various diameters

- Vibration orbit of 3 mm
- Vibration frequency to 2,000 rpm
- Digital speed setting
- Digital process timer allows for unattended operation up to 999 minutes and sends an acoustic signal
- Delivery includes 2 carousel attachments:
- Carousel up to 26 test tubes
- (ø 10-16 mm)
- Carousel up to 12 test tubes (ø 16-32 mm)
- Contact us for customized test tube attachments
- Protection class IP 30







Multi Reax P/N 545-10000-00 Accessories: Category H

Platform shaker - vibrating

- Vibrating motion continuously adjustable up to 1,350 rqm
- 5 platformshakers for up to 2 kg
- Vibration orbit of 1.5 mm guarantees no spills even with full vessels
- Vibration orbit of 3 mm for best mixing results even with smallest quantities
- Full range attachments for all common vessels, such as tension roller attachments for test tubes



Titramax 101 P/N 544-11300-00 Titramax 100 (not shown) P/N 544-11200-00

Titramax

- Vibration frequency from 150 to 1,350 rpm
- Analog dial controls for vibration frequency
- Process timer allows for unattended operation up to 120 minutes and sends an acoustic signal
- Insulated motor, virtually no platform heat up

Titramax 100

4 Microtiterplates - small orbit

- Small vibration orbit of 1.5 mm to prevent contamination even with full wells
- Protection class IP 30

Titramax 101

4 Microtiterplates - large orbit

- Large vibration orbit of 3 mm for best mixing results even with small quantities
- Protection class IP 30

Titramax 1000

6 Microtiterplates - small orbit

- Small vibration orbit of 1.5 mm to prevent contamination even with full wells
- Can be integrated into the Incubator 1000 for reproducible temperature control
- Ability to combine this shaker with the Incubator 1000
- Protection class IP 40



Please order accessories separately

Platform shaker - vibrating

Vibramax

- Designed for vibrating test tubes or other vessels
- Analog dial controls for vibration frequency
- Process timer allows for unattended operation up to 120 minutes and sends an acoustic signal
- Insulated motor, virtually no platform heat up
- Comes with non-skid rubber mat
- Protection class IP 30

Vibramax 100

Tension roller, large orbit

- Vibration frequency from 150 to 1,350 rpm
- Large vibration orbit of 3 mm for best mixing results even with small quantities

Vibramax 110

Test tube attachment, small orbit

- Vibration frequency from 150 to 2,500 rpm
- Small vibration orbit of 1.5 mm to prevent contamination even with full wells



Vibramax 100 P/N 544-21200-00 Accessories: Category B

Vibramax 110 P/N 544-31200-00 Accessories: Category C

Please order accessories separately



Unimax 2010 P/N 542-10020-00 Accessories: Category E

Platform shaker - orbital

- Two dimensional motion continuously adjustable from 20 to 500 rpm
- 3 models for load capacities of 2 kg, 5 kg and 10 kg
- Best results for gentle movement in round culture plates and Erlenmeyer flasks up to 1000 ml
- Attachments and clamps for up to 36 Erlenmeyer flasks available
- · Comes with non-skid rubber mat



Rotamax 120 P/N 544-41200-00 Accessories: Category B



Unimax 1010 P/N 543-12310-00 Accessories: Category D

Rotamax 120

Maximum load capacity of 2 kg

- Vibration orbit of 20 mm for gentle circles
- Rotation continuously adjustable from 20 to 300 rpm
- Analog dial controls for vibration frequency
- Designed for culture plates and Erlenmeyer flasks up to 250 ml
- Process timer allows for unattended operation up to 120 minutes and sends an acoustic signal
- Protection class IP 30

Unimax

Unimax 1010

Maximum load capacity of 5 kg

- Vibration orbit of 10 mm for gentle circles
- Rotation continuously adjustable from 30 to 500 rpm
- Designed for medium sized vessels
- Analog dial controls for vibration frequency
- Digital process timer allows for unattended operation up to 999 minutes and sends an acoustic signal
- Ability to combine this shaker with the Incubator 1000
- Protection class IP 40

Unimax 2010

Maximum load capacity of 10 kg

- Vibration orbit of 20 mm for gentle circles
- Rotation continuously adjustable from 20 to 400 rpm
- Analog dial controls for vibration frequency
- Process timer allows for unattended operation up to 120 minutes and sends an acoustic signal
- Protection class IP 20

8 9

Platform shaker - reciprocating

- One dimensional motion continuously adjustable up to 400 rpm
- 2 models for load capacities of 5 kg and 10 kg
- Best results with separatory funnels and media bottles
- Best results with common standard vessels
- Attachments and clamps for up to 4 separatory funnels available
- Attachments and clamps for Erlenmeyer flasks available
- Comes with non-skid rubber mat
- Protection class IP 20

Promax

Promax 1020

Maximum load capacity of 5 kg

- Shaking orbit of 32 mm
- Speed continuously adjustable from 30 to 250 rpm
- Analog dial controls for reciprocating frequency
- Digital process timer allows for unattended operation up to 999 minutes and sends an acoustic signal
- Ability to combine this shaker with the Incubator 1000

Promax 2020

Maximum load capacity of 10 kg

- Shaking orbit of 20 mm
- Speed continuously adjustable from 20 to 400 rpm
- Analog dial controls for reciprocating frequency
- Process timer allows for unattended operation up to 120 minutes and sends an acoustic signal



Promax 1020 P/N 543-22332-00 Accessories: Category D



Promax 2020 P/N 542-20020-00 Accessories: Category E

Platform shaker - rocking

- One dimensional motion continuously adjustable up to 50 rpm
- For homogeneous mixing without creating undesirable disturbances, 5 and 10 angles of degree are available
- Best results with media bottles and common standard vessels
- Also available with attachment for Erlenmeyer flasks

Duomax 1030

Platform tilts to an angle of 5° or 10°

- Speed continuously adjustable from 2 to 50 rpm
- Maximum load capacity of 5 kg
- Designed for flasks, media bottles and large vessels
- Analog dial controls for rocking frequency
- Process timer allows unattended operation up to 120 minutes and sends an acoustic signal
- Comes with non-skid rubber mat
- Ability to combine this shaker with the Incubator 1000
- Protection class IP 40



Duomax 1030P/N 543-32205-00 ⋅ angle 5°
P/N 543-32210-00 ⋅ angle 10°
Accessories: Category D

Please order accessories separately 10 11

Platform shaker - wave

- Three dimensional motion continuously adjustable up to 50 rpm
- For optimum distribution of cells or solutes, two different angles of inclination are available
- 2 models for load capacities of 5 kg and 10 kg
- Best results with culture plates and Erlenmeyer flasks
- Good results with common standard vessels
- Attachment for separatory funnels available
- Analog dial controls for wave frequency adjustment
- Process timer allows for unattended operation up to 120 minutes and sends an acoustic signal
- Comes with non-skid rubber mat

Polymax

Polymax 1040

Ability to combine this shaker with the Incubator 1000

- Speed continuously adjustable from 2 to 50 rpm
- Maximum load capacity of 5 kg
- Rotates at an 5° or 10° angle of inclination
- Designed for small vessels and culture plates
- Protection class IP 40



Polymax 1040 P/N 543-42205-00 · angle 5° P/N 543-42210-00 · angle 10° Accessories: Category D

Polymax 2040 Large platform

- Speed continuously adjustable from 2.5 to 50 rpm
- Maximum load capacity of 10 kg
- Rotates at an 5° or 10° angle of inclination
 Designed for large vessels and culture plates
- Protection class IP 20



Polymax 2040 P/N 542-40005-00 · angle 5° P/N 542-40010-00 · angle 10° Accessories: Category E

Overhead shaker

- One dimensional swirling action continuously adjustable from 1 to 100 rqm
- Complies with DIN 38414 Item 4 , determination of elutriation with water"
- 4 different models available for 2 bottles, 4 bottles, 8 bottles and 12 bottles
- Comes with attachments for your choice of two liter, one liter or 0.5 liter bottles
- Attachments for smaller vessels also available
- Designed for continuos use
- Encapsulated housing prevents spills and increased performance life
- Maintenance free sparkless and brushless motors



Reax 2 P/N 541-21001-00 Accessories: Category F



Reax 20/8 P/N 541-20008-00 Reax 20/4 (not shown) P/N 541-20004-00 Reax 20/12 (not shown) P/N 541-20012-00 Accessories: Category G

Reax 2

For common vessels

- Speed continuously adjustable from 20 to 100 rpm
- Superior in hematology, medical diagnostics, materials testing and biochemistry
- Analog dial controls for rpm adjustment
- Comes with easy-to-change universal adapter for the use of various vessels
- Adapter for the use of 20 test tubes at the same time (Accessory)
- Comes with non-skid rubber mat
- Protection class IP 21

Reax 20/4 · 20/8 · 20/12

For 4, 8 or 12 bottles

- Speed continuously adjustable from 1 to 16 rpm
- Also speed ranges of 0.5 8 rpm and 2 32 rpm available
- Analog dial controls for rpm adjustment
- Easy and fast attachment of bottles
- Comes with attachment for 2 liter bottles
- Attachment for bottle sizes of 0.5 liters and 1 liter available
- Other vessels of 270 mm height and max diameter of 136 mm can be fixed with a tension plate.
- Protection class IP 21

Reax 20/8 · for 8 bottles specifications see above Reax 20/12 · for 12 bottles

specifications see above

Please order accessories separately 13

Incubator 1000

- World-wide unique modular incubator for Shaking-Mixing and Heating all in one
- For superior results in molecular biology, bacteria cultivation and DNA analysis
- Your choice of a flat or high incubator hood for high or small vessels
- Separately controlled heating module for reproducible temperature control
- Incubate and mix simultaneously or independently
- Transparent non-fogging PETG hood allows for easy viewing
- Easy and fast access to vessels
- Compatible with shaker models Unimax 1010, Promax 1020, Duomax 1030, Polymax 1040 and Titramax 1000

Flat hood

For small vessels and culture plates

- Flat incubator hood with total height of 163 mm
- Transparent, non-fogging PETG material for easy viewing
- Immediate and convenient access to vessels
- Recommended especially for microtiter plates, culture plates, small flasks, media bottles and Erlenmeyer flasks up to 100 ml



Application sample: Titramax 1000 + heating module + flat hood

Heating module

Shaking-heating-mixing all in one

- Electrical heater along with a low-noise blower
- Heating power 300 W
- Digital temperature settings from + 5 °C over room temperature to 65 °C
- Temperature accuracy of ± 2 K up to 50 °C
- Temperature accuracy of ± 4 K over 50 °C
- Individual digital display for set temperature and actual temperature
- Temperature regulation with Pt 100 sensor
- Safety circuits prevent overheating
- Designed for continuous use
- Dimensions 170 x 97 x 375 mm
- Protection class IP 30

High hood

For high vessels and flasks

- High incubator hood with total height of 267 mm
- Transparent, non-fogging PETG material for easy viewing
- Immediate and convenient access to vessels
- Recommended especially for large flasks and media bottles, Erlenmeyer flasks up to 1000 ml and medium sized or large common vessels

High hood XL - for 2000 ml Erlenmeyer flasks

• Especially recommended for 2000 ml Erlenmeyer flasks, hood comes with a total height of 395 mm



High hood



P/N 549-90030-00 High hood XL (not shown) P/N 549-90060-00

Please order accessories separately

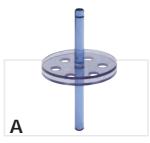
Test tube tray, large for test tubes and flasks up to 50 ml P/N 549-19000-00



Test tube holding device Attachment to hold one test tube safe and secure for continuous shaking P/N 549-20000-00



Attachment for 10 test tubes Foam attachment provides space for 10 test tubes for simultaneously mixing with just one shaker P/N 549-01000-00



Test tube stand for up to 6 Eppendorf vessels $(1.5 \, \text{ml})$ P/N 549-04000-00



Frame with tension roller Attachment with 2 tension rollers P/N 549-70000-00



Spare tension roller 1 tension roller for accessory P/N 549-70000-00 P/N 549-71000-00



(250 ml, 500 ml, 1000 ml) For Tablar 2000, space for max. 4 (250 ml), 3 (500 ml) and 3 (1000 ml) clamps P/N 549-57000-00



(2000 ml) For Tablar 2000, space for max. 2 clamps P/N 549-61000-00



Tension rollers Attachment with 2 tension rollers P/N 549-81000-00



Spare tension roller 1 tension roller for attachment P/N 549-81000-00 P/N 11-008-007-08



Tablar 100 Perforated platform Universal perforated platform allows for individual arrangements of vessels

P/N 549-59100-00



Test tube attachment for up to 49 test tubes with Ø 12 mm, length up to 80 mm P/N 549-82000-00 for up to 36 test tubes with Ø 16 mm, length up to 80 mm P/N 549-83000-00



Tablar 2000 Perforated platform Universal perforated platform allows for individual arrangements of vessels P/N 549-59000-00



Frame tension roller Frame without tension roller P/N 549-50000-00



Tension roller 1 tension roller for the frame P/N 549-50000-00 P/N 549-58000-00



Multi-tier attachment Includes Tablar 2000 and 4 supporting rods P/N 549-62000-00



25 ml Erlenmeyer attachment Attachment for up to 22 Erlenmeyer flasks with a size of 25 ml P/N 549-72000-00



50 ml Erlenmeyer attachment Attachment for up to 14 Erlenmeyer flasks with a size of 50 ml P/N 549-73000-00



100 ml Erlenmeyer attachment Attachment for up to 9 Erlenmeyer flasks with a size of 100 ml P/N 549-74000-00



250 ml Erlenmeyer attachment Attachment for up to 5 Erlenmeyer flasks with a size of 250 ml P/N 549-75000-00



Adapter for 20 test tubes Allows for simultaneously mixing 20 test tubes Ø 10-18 mm with just one shaker P/N 549-21000-00



Universal adapter Allows for using common vessels and test tube racks P/N 549-30000-00



Attachment for 1 I bottles (Set of 4) Allows for the use of four 1 liter bottles P/N 549-26000-00



Attachment for 0.5 I bottles (Set of 4) Allows for the use of four 0.5 I bottles P/N 549-27000-00



500 ml Erlenmeyer attachment Attachment for up to 4 Erlenmeyer flasks with a size of 500 ml P/N 549-76000-00



1000 ml Erlenmeyer attachment Attachment for up to 2 Erlenmeyer flasks with a size of 1000 ml P/N 549-77000-00



Perforated platform Universal perforated platform allows for individual arrangements of vessels P/N 549-59200-00

Tablar 1000



Separatory funnel attachment Attachment for 4 separatory funnels (50 ml, conical) or 4 separatory funnels (100 ml, conical) P/N 549-78000-00



Tension plate with caps Allows for the use of common bottles with Ø 94 mm P/N 11-001-001-81



Carousel attachment for up to 26 test tubes (Ø 10-16 mm, length 160 mm) P/N 549-01600-00



Carousel attachment for up to 12 test tubes (Ø 16-32 mm, length 120 mm) P/N 549-03000-00

Accessories for:





(D) Unimax 1010, Duomax 1030, Polymax 1040, Promax 1020

Vibramax 100, Rotamax 120

Unimax 2010, Promax 2020, Polymax 2040



Reax 2

Reax 20/4 · 20/8 · 20/12



(H) Multi Reax

Clamp for the perforated platform

8	Size 1 for 25 ml Erlenmeyer flasks	Size 2 for 50 ml Erlenmeyer flasks	Size 3 for 100 ml Erlenmeyer flasks	Size 4 for 250 ml Erlenmeyer flasks	Size 5 for 500 ml Erlenmeyer flasks	Size 6 for 1000 ml Erlenmeyer flasks
P/N	549-51000-00	549-52000-00	549-53000-00	549-54000-00	549-55000-00	549-56000-00
for tablar 100	max. 16	max. 16	max. 8	max. 5	max. 3	max. 2
for tablar 1000	max. 20	max. 20	max. 14	max. 8	max. 4	max. 4
for tablar 2000	max. 36	max. 36	max. 23	max. 12	max. 9	max. 5

Accessories

Complete packages at a special price

Package Titramax

Package includes:

- Vibrating platform shaker, Titramax 1000
- Heating module Incubator 1000
- Flat incubator hood



Package Unimax

Package includes:

- Orbital platform shaker, Unimax 1010
- Heating module Incubator 1000
- · High incubator hood



Call or write for free service

- **Application information** Reference list
- Trials or demonstrations
- Literature

