4. Stirring, Shaking, Mixing Shakers

Shakers overview						
Movement	Load capacity (kg)	Rotation speed (rpm)	Orbit (mm)	Variable speed range	Variable amplitude	IP class
orbital	0	0-2850	3	Yes	No	IP22
orbital	0	150-1000	2	Yes	No Yes	5-40°C / IP 20
orbital orbital	0	20 2-40	-	No Yes	Yes	4-60°C / IP 31 4-60°C / IP 31
orbital	0	750-3000	2	Yes	No	5-40°C / IP 20
orbital	0.1	2800	4.5	No	No	IP 40
orbital	0.2	0-1100	3	Yes	No	IP 21
orbital	0.4	500-2500	4	Yes	No	IP 21
orbital	0.5	0-3000	4.5	Yes	No	IP 21
orbital	0.5	0-3000	4.5	Yes	No No	IP 21
orbital orbital	0.5 0.5	200-2500 2500	4.2 4.2	Yes No	No	5-40°C / IP 31 5-40°C / IP 31
orbital	1	250-1250	1.5	Yes	No	IP 31
orbital	2	0-2200	4	Yes	No	IP 21
orbital	2	250-1250	1.5	Yes	No	IP 31
orbital	2	80-800	4	Yes	No	IP 21
orbital	2	80-800	4	Yes	No	IP 21
orbital	3	30-300	16	Yes	No	5-40°C / IP 31
orbital	3	50-300	10	Yes	No No	5-40°C / IP 20
orbital	7.5	10-500	10	Yes	No	IP 21
orbital orbital	7.5 8	20-500 20-500	10 10	Yes Yes	No	IP 21 IP 20
orbital	8 10	30-300	10	Yes	No	5-40°C / IP 31
orbital	15	0-300	30	Yes	No	IP 21
orbital	15	20-300	30	Yes	No	IP 20
orbital	15	20-300	30	Yes	No	IP 20
orbital	15.9	40-400	19	Yes	No	IP 20
orbital	15.9	15-500	19	Yes	No	IP 20
orbital	20	10-500	20	Yes	No	IP 30
orbital	20	10-500	20	Yes	No No	IP 30
orbital orbital	22.7 22.7	40-400 15-500	25.4 25.4	Yes Yes	No	IP 20 IP 20
orbital	30	20-250	32	Yes	No	IP 20 IP 20
orbital	30	20-250	32	Yes	No	IP 20
vibrating	0	0-2500	5	Yes	No	IP 22
vibrating	0	0-2500	5	Yes	No	IP 22
vibrating	1.2	100-1450	3	Yes	No	IP 20
vibrating	1.5	150-2000	3	Yes	No	IP 30
vibrating	2	150-1350	1,5	Yes	No	IP 30
vibrating	2	150-1350	3	Yes	No No	IP 30
vibrating	2 2	150-1350 150-2500	3	Yes	No	IP 30 IP 30
vibrating vibrating	5	150-1350	1,5 1,5	Yes Yes	No	IP 30 IP 40
reciprocating	5	30-250	32	Yes	No	IP 40
reciprocating	7.5	10-300	20	Yes	No	IP 21
reciprocating	7.5	20-300	20	Yes	No	IP 21
reciprocating	8	20-300	20	Yes	No	IP 20
reciprocating	10	20-400	20	Yes	No	IP 20
reciprocating	10	25-250	20	Yes	No	5-40°C / IP 31
reciprocating	15 15	0-300 20-300	30 30	Yes	No No	IP 21 IP 20
reciprocating reciprocating	15	20-300	30	Yes Yes	No	IP 20 IP 20
reciprocating, 360° rotation, vibration	0.5	10 - 100	-	Yes	Yes	4-40°C / IP 20
reciprocating, 360° rotation, vibration	0.8	10-100	-	Yes	Yes	4-40°C / IP 20
orbital	2	20-300	20	Yes	No	IP 30
orbital	5	30-500	10	Yes	No	IP 40
orbital	10	20-400	20	Yes	No	IP 20
wave	5	2-50	-	Yes	No	IP 40
wave	5	2-50	-	Yes	No No	IP 40
wave	10 10	2,5-50	-	Yes Yes	No	IP 20 IP 20
wave wave, 3°	15	2,5-50 2-50	-	Yes	No	IP 20 IP 20
wave, 3°	15	2-50	-	Yes	No	IP 20
overhead	0	6-80		Yes	No	IP 20
overhead	20	1-20		Yes	No	IP 20
rocking	5	2-50	-	Yes	No	IP 40
rocking	5	2-50	-	Yes	No	IP 40
rocking and rolling	5	33	16	No	No	4-60°C / IP 20
rocking and rolling	5	33	16	No	No	4-60°C / IP 20
rocking and rolling	5	5-60	16	Yes	No	4-60°C / IP 20
rocking and rolling rocking, 3°	5 15	5-60 2-50	16 -	Yes Yes	No No	4-60°C / IP 20 IP 20
rocking, 3°	15	2-50	-	Yes	No	IP 20 IP 20
rocking, 7°	0.5	7,5-30	-	Yes	No	4-40°C / IP 20
rocking, 7°	3	5-70	-	Yes	No	5-40°C / IP 30
rocking, 7°	10	5-70	-	Yes	No	5-40°C / IP 30
3D / fixed 20°	0.8	20	-	No	No	IP22
3D / 3-12°	3	5-70	-	Yes	Yes	5-40°C / IP 30
3D / 3-12°	10	5-70	-	Yes	Yes	5-40°C / IP 30
3D / fixed 5°	0.8	20	-	No	No	IP22
3D / fixed 7°	0.5	10-30	-	Yes	No	4-40°C / IP 20
3D / fixed 7°	5	3-60	-	Yes	No	IP22
3D 7° and rotation	1 3	5-30	22	Yes	Yes No	4-40°C / IP 20
arc, 7.2°	5	8 - 800 osc.		Yes	NU	IP 31

4. Stirring, Shaking, Mixing Shakers

No No No No No No No No No No No No No N	No No No No No No No No No	No No No No No No No No	Vortex Mixer VX-200 Micro plate shaker PMS-1000 Rotator SB2 Rotator SB3 Mini-Vortex mixer PV-1 Shaker lab dancer Microtiter shaker MTS 2/4 digital Vortex Genius 3	Labnet Grant Stuart Stuart Grant IKA	No. 9.595 320 9.721 025 9.645 322 9.645 323
NO NO NO NO NO NO NO NO NO NO NO NO NO N	No No No No No No No No	No No No No No No	Micro plate shaker PMS-1000 Rotator SB2 Rotator SB3 Mini-Vortex mixer PV-1 Shaker lab dancer Microtiter shaker MTS 2/4 digital	Grant Stuart Stuart Grant	9.721 025 9.645 322
No No No No No No No No No No No No No N	No No No No No No No	No No No No No	Rotator SB2 Rotator SB3 Mini-Vortex mixer PV-1 Shaker lab dancer Microtiter shaker MTS 2/4 digital	Stuart Stuart Grant	9.645 322
No No No No No No No No No No No No No N	No No No No No No	No No No No	Rotator SB3 Mini-Vortex mixer PV-1 Shaker lab dancer Microtiter shaker MTS 2/4 digital	Stuart Grant	
No No No No No No No No No No No No No N	No No No No No	No No No No	Mini-Vortex mixer PV-1 Shaker lab dancer Microtiter shaker MTS 2/4 digital	Grant	5.045 525
No No No No No No No No No No No No No	No No No No	No No No	Shaker lab dancer Microtiter shaker MTS 2/4 digital		9.721 000
No No No No No No No No No No No	No No No	No No	Microtiter shaker MTS 2/4 digital		9.729 936
No No No No No No No No No No No	No No No	No		IKA	9.838 195
No No No No No No No No No No	No No			IKA	9.729 950
No No No No No No No No No	No	NU	Small-sized shaker MS 3 digital	IKA	9.729 930
NO NO NO NO NO NO NO NO NO NO		No	Small-sized shaker MS 3 basic	IKA	9.729 939
No No No No No No No No	No	No	Vortex mixer SA8		9.729 938
lo lo lo lo lo lo lo	No No	No		Stuart	
lo lo lo lo lo lo			Vortex mixer SA7	Stuart	9.950 433
NO NO NO NO NO	No	No	Microtiter shaker SSM5	Stuart	9.728 850
lo lo lo lo	No	No	Orbitalshaker Vibrax VXR basic	IKA	9.729 900
lo lo lo	No	No	Microtiter shaker SSL5	Stuart	9.728 853
10 10 10	No	No	Orbital shaker KS 130 basic	IKA	9.838 150
lo lo	No	No	Orbital shaker KS 130 control	IKA	9.838 155
lo	No	No	Mini orbital shaker SSM1	Stuart	9.728 830
	No	No	Orbital shaking platform POS-300	Grant	9.721 020
	No	No	Laboratory shaker KS 260 control	IKA	9.838 175
lo	No	No	Orbital shaker KS 260 basic	IKA	9.838 074
lo	No	No	Shaker model 3005	GFL	9.837 905
lo	No	No	Orbital shaker SSL1	Stuart	9.728 840
lo	No	No	Orbital shaker KS 501 digital	IKA	9.838 040
lo	No	No	Shaker model 3015	GFL	9.837 915
10	No	No	Shaker model 3017	GFL	9.837 917
lo	No	No	Max Q 2000 analog	Thermo Sci.	4.011 045
lo	No	No	Max Q 2000 digital	Thermo Sci.	4.011 057
′es	No	Yes	Incubation shaker KS 4000i control	IKA	9.837 890
'es	Yes	Yes	Incubation shaker KS 4000ic control	IKA	9.837 891
lo	No	No	Max Q 3000 analog	Thermo Sci.	4.011 048
10	No	No	Max Q 3000 digital	Thermo Sci.	4.011 059
10	No	No	Shaker model 3019	GFL	9.837 919
lo	No	No	Shaker model 3020	GFL	9.837 920
10	No	No	Test tubes shaker Reax top	Heidolph	9.730 040
lo	No	No	Test tubes shaker Reax control	Heidolph	9.730 042
lo	No	No	Vibration shaker 3023	GFL	9.837 921
No	No	No	Shaker Multi Reax	Heidolph	9.839 810
No	No	No	Microtiter plate shaker Titramax 100	Heidolph	9.839 831
No	No	No	Microtiter plate shaker Titramax 101	Heidolph	9.839 832
No	No	No	Shaker Vibramax 100	Heidolph	9.839 833
No	No	No	Shaker Vibramax 110	Heidolph	9.839 835
No	No	No	Microtiter plates shaker Titramax 1000	Heidolph	9.839 830
No	No	No	Shaker Promax 1020	Heidolph	9.839 853
NO NO	No	No	Horizontal shaker HS 260 control	IKA	9.838 185
No	No	No	Horizontal shaker HS 260 basic	IKA	9.838 063
No	No	No	Shaker model 3006	GFL	9.837 906
10	No	No	Shaker Promax 2020		
				Heidolph	9.839 802
lo	No	No	Reciprocating shaker SSL2	Stuart	9.728 841
lo	No	No	Horizontal shaker IKA HS 501 digital	IKA	9.838 041
lo	No	No	Shaker model 3016	GFL	9.837 916
lo	No	No	Shaker model 3018	GFL	9.837 918
lo	No	No	Multi function rotator PTR-30	Grant	9.721 027
lo	No	No	Multi function rotator PTR-60	Grant	9.721 030
lo	No	No	Shaker Rotamax 120	Heidolph	9.839 837
lo	No	No	Shaker Unimax 1010	Heidolph	9.839 851
lo	No	No	Shaker Unimax 2010	Heidolph	9.839 801
lo	No	No	Shaker Polymax 1040 5°	Heidolph	9.839 857
lo	No	No	Shaker Polymax 1040 10°	Heidolph	9.839 859
lo	No	No	Shaker Polymax 2040 5°	Heidolph	9.839 804
lo	No	No	Shaker Polymax 2040 10°	Heidolph	9.839 800
lo	No	No	Shaker model 3011	GFL	9.837 911
lo	No	No	Shaker model 3012	GFL	9.837 912
lo	No	No	Test tube rotator 3025	GFL	9.837 925
lo	No	No	Shaker model 3040	GFL	9.837 931
lo	No	No	Shaker Duomax 1030 5°	Heidolph	9.839 855
lo	No	No	Shaker Duomax 1030 10°	Heidolph	9.839 856
10	No	No	Roller mixer SRT6	Stuart	9.728 810
lo	No	No	Roller mixer SRT9	Stuart	9.728 812
lo	No	No	Roller mixer SRT6D	Stuart	9.728 811
0	No	No	Roller mixer SRT9D	Stuart	9.728 813
lo	No	No	Shaker model 3014	GFL	9.837 914
lo	No	No	Shaker model 3013	GFL	9.837 913
lo	No	No	Mini platform rocker PMR-30	Grant	9.721 011
lo	No	No	Mini-shaker SSM4	Stuart	9.728 821
10 10	No	No	See-saw shaker SSL4	Stuart	
lo	No	No		Labnet	9.728 801
		No	Shaker GyroMini 3-D Minischaker SSM3		9.595 330
lo	No		Mini-shaker SSM3	Stuart	9.728 820
lo	No	No	Gyratory shaker SSL3	Stuart	9.728 800
0	No	No	Shaker Enduro MiniMix 3-D	Labnet	9.595 331
0	No	No	Mini 3D platform mixer PS-3D	Grant	9.721 014
lo	No	No	GyroTwister GX-1000 3-D	Labnet	6.227 093
10	No No	No No	Multi function rotator 3D mixer PS-M3D	Grant	9.721 017

(NEW)

BOLA

Grant

4. Stirring, Shaking, Mixing

Shakers and mixers/Vortexer



Globe Stirrer Couplings, POM

Made of POM, a plastic material with a good mechanical strength, powerful transmission of up to 300Ncm, suitable for a speed of up to 1.200 rounds per minute, maximum misalignment of axes 10mm. Ideal for balancing misalignment of axes between agitator and stirrer shaft,

suitable for glass, metal or BOLA stirrer shafts. Opening for stirrer shaft diameter 8 + 10mm. Upper diameter 10mm. - very low centrifugal forces due to low weight

- suitable for both left and right-handed rotation (except for GL 10 thread: no left-handed rotation possible)
- no resonance
- simple assembly by means of screw joints with clamp rings
- pivot (length 90mm) can be shortened by the user

	Overall length mm	РК	Cat. No.
190 1 7.632 676	mm		
	190	1	7.632 676



Vortex mixer PV-1

With low profile and small footprint for gentle mixing to vigorous re-suspension of cell or chemical pellets.

- variable speed: 750rpm to 3000rpm
- continuous or touch operation
- for tubes up to 20mm diameter

Specifications Speed range:

Dimensions (WxDxH): Temperature range:

250 bis 3000rpm 82 x 145 x 75mm 4 to 45°C

Туре	РК	Cat. No.
PV-1	1	9.721 000

1		1		
6	-	-		
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E	a la			

For shaking and mixing of small volumes.

Vortex Genie 2-Mixer

Stable housing with noise reducing feet. Continous mixing control. Switch for constant or intermediate shaking.

Supplied complete with shaking attachment for one 25ml test tube, 75mm disc for beakers, erlenmeyer flasks etc.

Specifications:

Speed range: Dimensions (WxDxH): Weight: Supply requirements:

600 - 2700 min⁻¹ 122 x 165 x 165mm 4.0kg 220V 50 Hz, 250mA.

Description

Vortex Genie 2-Mixer



Vortex Mixer Select Vortex

Mix and vortex any size tube

- Gentle mixing or vigorous vortexing. Continuously variable speed makes the Select Vortex useful for a variety of applications, from gentle mixing to resuspending pellets.
- ease of operation. "Touch" or continuous mode.
- mix a variety of tubes and plates

Specification

Specifications
Speed range 120V
Speed range 230V
Operating modes
Dimensions (WxDxH)
Weight

0 to 3400rpm 0 to 2850rpm Touch or continuous 14 x 16 x 13cm 2.2kg

E & OE.

Туре

Vortex Mixer

Cat. No.

9.730 060

SBP

PK

4. Stirring, Shaking, Mixing Shakers and mixers/Vortexer

9.950 433

PK Cat. No.

Stuart

IKA

Accessories for Vortex Mixer Select Vortex

		SBP
Туре	РК	Cat. No.
Head attachment for 24 x 1.5/2.0ml tubes, 24 x 0.5ml and 32 x 0.2ml tubes	1	9.595 321
Head attachment for 1 microplate or 64 x 0.2ml tubes or 8 x 0.2ml tube strips	1	9.595 322
Head attachment for 8 x 15ml and 8 x 12/13mm diameter tubes	1	9.595 323
Head attachment for 6 x 50ml tubes	1	9.595 324
Head attachment for 12 x 1.5/2.0ml tubes, held horizontally	1	9.595 325
Head attachment for 4 x 15ml tubes, held horizontally	1	9.595 326
Head attachment for 2 x 50ml tubes, held horizontally	1	9.595 327

Mixers, vortex, SA7, SA8

- Low profile, ergonomic design
- Robust, die-cast housing avoids unnecessary movement during use
- Powerful vortex mixing action, ideal for a range of tubes
- Two models available
- Economic fixed speed model SA7
- Variable speed model SA8 with choice between intermittent or continuous operation
- Integral retort rod fixing
- Range of accessory heads available

With BioCote, silver-based, antimicrobial protection.

Specifications	SA 7/SA 8
Speed:	2500rpm/200 to 2500rpm
Orbit:	4.2mm
Continuous mode:	No/Yes
Accessory heads:	No/Yes
Maximum load:	0.5kg
Overall dimension:	78 x 135 x 215mm
Net weight:	3.2kg
Electrical supply:	90-240 V, 20W

Туре

SA7	1 9.950 433 1
SA8	1 9.720 969
Accessory head for micro plates and micro tubes	1 9.720 970
Support rod 300 x 12.5mm	1 9.720 971

Test tube shaker, lab dancer

Inexpensive, compact, attractively designed, test tube vortex shaker. Designed for mixing small test samples by touch function.

- Small, compact and reliable
- For small containers up to 30mm in diameter, e.g. test tubes, centrifuge tubes, Eppendorf tubes
- Fixed speed (2800rpm)
- Excellent mixing
- Top of housing and the test tube accessories are made from chemically inert plastic.
- The bottom section is a coated, zinc die-casting.
- Includes lightweight 12V mains adapter

Specifications:

Mixing:	orbital/vortex
Orbit:	4.5mm
Capacity, volume:	1 tube, max. 50ml
Motor rating input/output:	1.2/0.8W
Speed:	2800rpm (fixed)
Dimensions (Dia. x H):	100 x 70mm
Weight:	550g
Material housing:	PP
Material attachment:	TPU
Material base:	Zinc, coated
Enclosure according to DIN EN 60529:	IP40
Supply requirements:	100-240V 50/60 Hz
Tested to DIN EN IEC 61010-1.	

Туре	РК	Cat. No.
lab dancer EU/CH	1	9.729 936
lab dancer UK	1	4.008 065

(NEW!)

NEW IKA

IKA

PK

Cat. No.

IKA

4. Stirring, Shaking, Mixing

Shakers and mixers/Vortexer

1	-	
6		
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1 Shaker Vortex 1

New test tube shaker with touch function. Specially for mixing small sample volumes with touch function. Infinitely adjustable speed range

Specifications
Type of movement:
Orbital diameter:
Max, shaken quantit

Type of movement:	orbital/vortex
Orbital diameter:	4.5mm
Max. shaken quantity (1 test tube)	100ml
Motor rating input/output:	1.2/0.8W
Speed range:	1000 to 2800r
Dimensions (W x H x D):	95 x 110 x 70r
Weight:	0.55kg
Enclosure according to DIN EN 60529:	IP 40

.5mm
.00ml
2/0.8W
.000 to 2800rpm
5 x 110 x 70mm
.55kg
P 40

Туре	РК	Cat. No.
VORTEX 1	1	9.729 931



9.729 932



9.729 933

Shaker VORTEX 4 basic/digital	
Compact, universal small shaker suitable for shaking tasks microtiter plates	with small vessels and
Specifications Type of movement: Orbital diameter: Max. permitted shaking weight (incl. attachment) Motor rating input/output: Speed range: Timer: Dimensions (W x H x D): Weight: Enclosure according to DIN EN 60529:	orbital/vortex 4.5mm 0.5kg 10/8W 0 to 3000rpm only for VORTEX 4 digital (1 sec 999 min) 176 x 190 x 63mm 3.0kg IP 21

Туре	PK Cat. No.
VORTEX 4 basic	1 9.729 932 2
VORTEX 4 digital	1 9.729 933 3



Shaker Vortex Genius 3

Vortex shaker suitable for intermittent operation (touch function), activated by pressing shaker attachment, or for continuous operation.

- Wide speed range, infinitely adjustable
- Versatile, due to 3 accessory interchangeable attachments and 7 inserts (e.g. Eppendorf tubes, microtitre plates, 250ml Erlenmeyer flasks etc.), please order separately
- Attachments securely click onto shaker in any position
- Strap clamp (VG3.36) ensures easy holding of round/Erlenmeyer flasks
- Sturdy, die cast zinc casing
- Stable at high speeds due to special feet (silicone base with ultra high vibration damping)
- Eccentric drive with ball bearings
- Self-ventilated motor allows continuous operation with minimal warm-up of the housing

Specifications

opeenications	
Type of movement:	orbital/vortex
Orbital diameter:	4mm
Motor rating input/output:	58/10W
Speed range:	500 to 2500rpm
Speed indication:	scale 0 to 6
Dimensions (W x H x D):	127 x 149 x 136mm
Weight:	4.5kg
Protection class acc. to DIN EN 60529:	IP 21
Supply requirements:	230V 50/60 Hz
Tested to DIN EN IEC 61010-1.	

Туре

VORTEX Genius 3	1	9.729 950
VORTEX Genius 3 UK	1	4.008 061

Accessories for shaker Vortex Genius 3

		IKA
Туре	Description	PK Cat. No.
VG 3.1	Standard attachment, for test tubes, small vessels*	1 9.729 954
VG 3.2	One-hand attachment 88mm, rubber inlet	1 9.729 955
VG 3.3	Standard tray 150mm, rubber inlet	1 9.729 951
VG 3.31	Insert for 54 Eppendorf tubes	1 9.729 956
VG 3.32	Insert for 18 x 10mm diameter test tubes	1 9.729 957
VG 3.33	Insert for 12 x 12mm diameter test tubes	1 9.729 958
VG 3.34	Insert for 8 x 16mm diameter test tubes	1 9.729 959
VG 3.35	Insert for 8 x 20mm diameter test tubes	1 9.729 952
/G 3.36	Attachment for Erlenmeyer and round vessels 100 to 250ml	1 9.729 953
VG 3.37	Holder for 1 standard microtitre plate	1 9.729 960

included in delivery



Test tube shakers Reax top/control

Vibrating

Ideal for mixing samples in Eppendorf tubes, vials and similar vessels of different diameters at extremely high speed rates. The ridged mixing orbit yields consistent results and is ideal for product dissolution.

Reax top - The standard model

- The strong 5mm vibration orbit accomplishes best results even with high viscosity media or solids to give smooth and even dispersion quickly
- Switch to continuous mode, the unit performs a permanent vibration motion
- Switch to automatic mode, the unit will start once a vessel is pressed to the plate and will stop automatically once this pressure is released
- Fast and dependable mixing results due to high vibration frequency that rates up to 2500rpm
- Features an analog dial speed control, no settings of specified rpm numbers

Dimensions (W x H x D) [mm]: 134 x 105 x 172

Voltage/frequency: 230 V/50 Hz (others also available)

Reax control - The accurate model Includes all Reax top features, plus:

- Features analog dial speed control with accurate rpm numbers setting
- Improve your results by the electronic speed control that provides constant rpm output even at very low speed and under changing loads

Туре	РК	Cat. No.
Reax top, incl. attachment	1	9.730 040
Reax top, incl. attachment UK	1	9.730 041
Reax control, incl. attachment	1	9.730 042
Attachment, large, for tubes or flasks up to 50 ml	1	9.730 019

Heidolph

Heidolph

IKA

Shakers and mixers/Orbital shakers



1 Test tube shakers Multi Reax

The all purpose - Vibrating

Shipment includes as standard:

- Attachment for 26 vessels with diameters from 10mm to 16mm
- Attachment for 12 vessels with diameters from 16mm to 32mm
- Your digital process timer allows for unattended operation and can be set from 1 to 999 minutes. After time expires this model sends an acoustic alarm and operation is stopped
- Set and continuously adjust the variable speeds from 150rpm to 2000rpm on the digital display
- The 3mm vibration orbit accomplishes excellent results especially in large vessels.
- The Multi Reax allows for ridged to smooth dispersion of viscous media and solids

Dimensions (wxhxd) (mm): 270 x 410 x 172 Supply voltage: 230/240V/50/60 Hz or 115V/50/60 Hz

Description	РК	Cat. No.
Multi Reax	1	9.839 810
Carousel for 26 test tubes (10 to 16 mm dia.)	1	9.739 258
Carousel for 12 test tubes (16 to 32 mm dia.)	1	9.739 259

Shaker MS3 basic/digital

Compact, universal small shaker suitable for shaking tasks with all small vessels and microtitre plates.

- Continuous or touch operation (with standard attachment)
- Two operating modes available:
- Mode A (safe mode with attachment detection)

the maximum speed of 3000rpm is only attained with the standard attachment in touch mode.

When using other attachments the speed is limited to 1300rpm.

Mode B (without attachment detection)

a speed of 3000rpm is possible with all attachments.

- Stable in all speed ranges
- Sturdy, zinc, die-cast casing
- MS 3 digital additionally with countdown function timer (1sec to 999min).
- Items supplied with MS3 basic + digital: Standard attachment, universal attachment, one-hand insert
- Additional items supplied with MS3 digital:

Microtitre plate attachment, test tube insert with 6 holes for 12mm diameter tubes

Specifications: Type of movement:	orbital
Orbit:	4.5mm
Max. permitted shaking weight (incl. attachment):	0.5kg
Motor rating input/output:	10/8W
Speed display:	Scale
Speed range:	0 to 3000rpm
Dimensions (WxDxH):	148 x 205 x 63mm
Weight:	2.9kg
Protection class acc. to DIN EN 60529	IP21
Supply requirements:	100-240V 50/60Hz
Tested to DIN EN IEC 61010-1.	

Туре		PK Cat. No.
MS 3 basic EU/UK/CH/US	Continuous mode and touch operation	1 9.729 938 2
MS 3 digital EU/UK/CH/US	Timer and continous mode, touch operation	1 9.729 939 3



9.729 938



9.729 939

4. Stirring, Shaking, Mixing Shakers and mixers/Orbital shakers

(NEW!)

Accessories for Shaker MS 3

		I
Гуре	Description	PK Cat. No.
IS 3.1	Standard attachment	1 9.729 942
IS 3.3	Universal attachment	1 9.729 944
IS 3.4	Microtitre plate attachment	1 9.729 943
IS 3.5	PCR attachment	1 6.237 469
IS 1.21	One-hand insert	1 9.729 945
S 1.31	Test tube insert, with 14 holes for tubes diameter 10mm	1 9.729 946
S 1.32	Test tube insert, with 6 holes for tubes diameter 12mm	1 9.729 947
S 1.33	Test tube insert, with 4 holes for tubes diameter 16mm	1 9.729 948
5 1.34	Test tube insert, plain, for user to drill	1 9.729 949



Vibrating shaker, VXR basic Vibrax[®]

Optoelectronically controlled small shaker with a very wide speed range.

- Suitable for continuous operation
- New design and improved drive system
- Circular shaking motions
- Slow speeds are well maintained
- Attachments are interchangeable

Please order the required shaker attachment separately.

Specifications:	
Shaking motion:	Orbital
Orbit:	4mm
Motor rating input/output:	35/13.2W
Speed range:	0 to 2200rpm
Dimensions (WxDxH):	157 x 247 x 130mm
Weight (without attachment):	6.1kg
Max. loading:	2kg
Protection class DIN EN 60529:	IP21
Supply requirements:	230V 50/60Hz
Tested to DIN EN IEC 61010-1.	

Туре	РК	Cat. No.
VXR basic Vibrax®	1	9.729 900
VXR basic Vibrax [®] UK	1	6.202 467
Optional accessories: Attachements: VX 1, VX 2, VX 2E, VX 7, VX 8, VX 11, VX 11.1, VX11.2, VX 11.3, VX 11.4		

Vibrating shaker, Vibrax[®] VXR basic, accessory attachments

VX 1 one-hand attachment
For shaking single, non-fixed vessels of 1ml to 250ml.
VX 2 test tube attachment
For up to 36 test tubes or centrifugal tubes with a diameter of 16 mm.
VX 2E "Eppendorf" attachment
For intensive shaking of up to 64 "Eppendorf" tubes (1.5ml).
VX 7 bowl attachment
For careful shaking of culture bottles, Petri dishes, etc.
VX 8 Universal attachment
For rapid and secure clamping, e.g. 2 Erlenmeyer flasks up to 500ml.
, , ,

Туре	Width	Depth	Height	PK Cat. No.
	mm	mm	mm	
VX 1	130	135	40	1 9.729 901 7
VX 2	140	145	115	1 9.729 902 8
VX 2E	210	210	65	1 9.729 914 9
VX 7	410	210	40	1 9.729 907
VX 8	265	136	60	1 9.729 908

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9.729 902



IKA

4. Stirring, Shaking, Mixing Shakers and mixers/Orbital shakers





9.729 915



VX 11 Basic holder
Attachment for test tube inserts.
VX 11.1 Test tube insert
Attachment for Eppendorf tubes or test tube inserts.
VX 11.2/ VX 11.3/VX 11.4 Test tube inserts
For test tubes.

Туре	No.of holes	Diameter of holes mm	PK Cat. No.
VX 11			1 6.231 284
VX 11.1	70	10	1 6.232 813
VX 11.2	41	12	1 6.231 285
VX 11.3	32	16	1 6.228 246
VX 11.4	18	20	1 9.729 915 2

4 5 Orbital shaker, KS 130 basic/ Package

Small, quiet running, low-friction shaker with effective orbital movement and a maximum loading of 2kg.

- Electronic speed control and timer adjustment

- LED scale bar speed and time display

- Large selection of attachments for different container types and sizes
- Attachments not included Please order separately.

KS 130 control available on request.



Specifications

Shaking movement:	orbital
Orbit:	4mm
Max. capacity including attachment:	2kg
Motor rating input/output:	45/10W
Speed range:	80 to 800rpm
Speed indication:	LED scale bar
Timer:	5 to 50 min/continuous
Dimensions (WxDxH):	270 x 316 x 98mm
Weight:	8.8kg
Housing IP rating to DIN EN 60529:	IP21
Power source:	230V 50/60Hz
Tested to DIN EN IEC 61010-1.	

1	Туре	РК	Cat. No.
	KS 130 basic	1	9.838 150
	KS 130 basic Package (incl. adhesive mat	1	9.838 151
	STICKMAX, AS 130.3 Dish attachment)		



IKA

Accessories for orbital shaker KS 130

AS 130.1 Universal attachment

Able to hold most types of container using adjustable tension rollers

AS 130.2 Fixing clip platform

For shaking round bottom vessels, volumetric and Erlenmeyer flasks. Supplied without clips

AS 130.3 Petri dish attachment

For gentle mixing and suspension of cell cultures or growth media in petri dishes, culture bottles and containers. With integral anti-slide mat (PP).

AS 130.4 Test tube holder

For intensive vibrating of small tubes, test tubes, cuvettes, centrifuge tubes.

Туре	Description	Dimensions (W x D x H)	PK Cat. No.
		mm	
AS 130.1	Separating funnel attachment	325 x 234 x 88	1 9.838 160 1
AS 130.2	Fixing clip platform*	230 x 230 x 24	1 9.838 161 2
AS 130.3	Petri dish attachment	420 x 270 x 32	1 9.838 162 3
AS 130.4	Test tube holders	220 x 230 x 95	1 9.838 163 4
labworldsoft [®]	Software for control and data collection for KS 130 control		1 9.910 320

* Clips AS 2.1 (9.838 091), AS 2.2 (9.838 092), AS 2. 3 (9.838 093), AS 2.4 (9.838 094), AS 2.5 (9.838 095) please order separately.



6 Orbital shaker, KS 260 basic/ Pa	ackage	(NEW!) 5	
Compact, low-level, platform shaker with highly capacity 7.5kg. - Electronic speed control and timer adjustment - LED indicator display - Large selection of attachments for different co - Attachments not included - Please order separ	ntainer types and sizes	IKA	9.838 074
Specifications Shaking motion: Orbit: Max. loading (incl. attachment): Motor rating input/output: Speed range: Speed indication: Timer: Dimensions (WxDxH): Weight: Housing IP rating to DIN EN 60529: Supply requirements: Tested to DIN EN IEC 61010-1.	Orbital 10mm 7.5kg 45/10W 20 to 500rpm LED scale 5 to 50 min/continuous 360 x 420 x 98mm 8.5kg IP21 230V 50/60Hz	6	

Туре	РК	Cat. No.
KS 260 basic	1	9.838 074 5
KS 260 basic Package (incl. 2 x STICKMAX, AS 260.3 Dish attachment)	1	9.838 075

NEW

PK Cat. No.

IKA

IKA

4. Stirring, Shaking, Mixing

Shakers and mixers/Orbital shakers



9.838 175



2 Orbital shaker, KS260 control/ Package

Compact, low-level, platform shaker with highly effective, orbital motion, maximum

- capacity 7.5kg.
- Electronic speed control and timer adjustment
- Separate digital speed and timer displays with operating mode indication
- Timer: 0 to 9 h 59 min or continuous operation
- Controlled stop-point positioning function (enables use in automated robotic sampling routines)
- All functions can be controlled and documented using labworldsoft® software
- Special variant with reverse rotation function available on request
- Large selection of attachments enable use with a wide variety of vessel shapes and sizes
- Attachments are not included Please order separately

Specifications	
Shaking motion:	orbital
Orbit:	10mm
Max. loading (incl. attachment):	7.5kg
Motor rating input/output:	45/10W
Speed range:	10 to 500rpm
Speed indication:	digital
Timer:	1 to 599 min./continuous
Dimensions (WxDxH):	360 x 420 x 98mm
Weight:	8.8kg
Housing IP rating to DIN EN 60529:	IP21
Interface:	RS232/analogue
Supply requirements:	230V 50/60Hz
Tested to DIN EN IEC 61010-1.	

Туре

KS260 control	1 9.838 175 1
KS 260 control Package	1 9.838 176
(incl. 2 x STICKMAX, AS 260.3 Dish attachment)	



Reciprocating shaker, HS260 basic

Compact, low-level, platform shaker with highly effective, reciprocating motion, maximum capacity 7.5kg.

- Electronic speed control and timer adjustment
- LED scale bar indicator display
- Large selection of attachments for different container types and sizes
- Attachments are not included Please order separately.

Specifications	
Shaking motion:	reciprocating
Stroke:	20mm
Max. loading incl. attachment:	7.5kg
Motor rating input/output:	45/10 W
Speed range:	20 to 300rpm
Speed indication:	LED scale bar
Timer:	5 to 50 min/continuous
Dimensions (WxDxH):	360 x 420 x 100mm
Weight:	8.5kg
Housing IP rating to DIN EN 60529:	IP21
Supply requirement:	230V 50/60Hz
Tested to DIN EN IEC 61010-1.	
Туре	

 Type
 PK
 Cat. No.

 HS260 basic
 1
 9.838 063

4. Stirring, Shaking, Mixing Shakers and mixers/Orbital shakers

Horizontal shaker, HS 260 control

Compact, low-level, platform shaker with highly effective, reciprocating motion, maximum capacity 7.5kg.

- Electronic speed control and timer adjustment
- Separate digital speed and timer displays with operating mode indication
- Timer: 0 to 9 h 59 min or continuous operation
- Controlled stop-point positioning function (enables use in automated robotic sampling routines)
- All functions can be controlled and documented using labworldsoft® software
- Large selection of attachments enable use with a wide variety of vessel shapes and sizes
- Attachments are not included Please order separately

Specifications Shaking motion: Stroke: Max. loading incl. attachment: Motor rating input/output: Speed range: Speed indication: Time switch clock: Dimensions (WxDxH): Weight: Housing IP rating to DIN EN 60529:
Weight:

Туре

HS 260 control

20 mm 7.5 kg 45W/10 W 10 to 300 rpm digital 1 h 599 min/continuous 360 x 420 x 100 mm 8.8 kg IP 21 RS 232/analogue 230 V 50/60Hz

reciprocating

Cat. No. 9.838 185

PK

1

Accessories for orbital shakers HS/KS 260	2	3
AS 260.1 Universal attachment IKA	100	
Able to hold most types of container using adjustable tension rollers.	and a second	
Surface: 320 x 320mm		
AS 260.2 Fixing clip platform	100	1000
For shaking round bottom vessels, volumetric and Erlenmeyer flasks. Supplied without clips.	9.838 080	9.838 191
Max. number of clips (capacity held): 56 x AS 2.1 (25ml), 23 x AS 2.2 (50ml), 23 x AS 2.3 (100ml),	5.030 000	5.050 191
11 x AS 2.4 (250ml), 9 x AS 2.5 (500ml), 5 x AS 2.6 (1000ml)	4	5
AS 260.3 Petri dish attachment	· · · · · · · · · · · · · · · · · · ·	
For gentle mixing and suspension of cell cultures or growth media in petri dishes, culture bottles and containers.		and the second
With integral anti-slide mat (PP).	1 A	
AS 260.5 Separating funnel attachment		
For HS 260 basic and control		100
For shaking, elution, extraction, gassing out, dissolving, enriching. The 3 tension rollers supplied are height-adjustable	9.838 192	9.838 193
to accommodate different separating funnel sizes. The separating funnels are secured by means of O-rings	9.030 192	9.030 193
(6 O-rings supplied).		

Capacity: Number of funnels (pear shaped) x volume 6 x 50ml, 5 x 100ml, 3 x 250ml, 3 x 500ml

Туре	Description	Dimensions (W x D x H)	PK Cat. No.
		mm	
AS 260.1	Universal attachment	425 x 335 x 135	1 9.838 080
AS 260.2	Gridded clip platform attachment*	330 x 330 x 24	1 9.838 191
AS 260.3	Petri dish attachment	410 x 370 x 32	1 9.838 192
AS 260.5	Separating funnel attachment	334 x 425 x 145	1 9.838 193
labworldsoft®	Software for control and data collection		1 9.910 320
	for HS/KS 260 control		

* Clips AS 2.1 (9.838 091), AS 2.2 (9.838 092), AS 2. 3 (9.838 093), AS 2.4 (9.838 094), AS 2.5 (9.838 095) please order separately.



IKA

4. Stirring, Shaking, Mixing

Shakers and mixers/Orbital shakers



1 Orbital shaker, KS501 digital/Reciprocating shaker, HS 501 digital

Low-profile laboratory shaker with large platform and 15kg load capacity. With continuously adjustable speed range: 0 to 300rpm, digital display and timer. Continuous operation is guaranteed even under extreme loads. Requires accessory attachments for operation (these are not supplied)

Orbital shaker, KS501 digital

Ideally suited for vessel sizes over 250ml, e.g. round bottom flasks, erlenmeyer flasks, culture flasks, bottles etc. Developed for biological and microbiological growth tests and for production of stock solutions.

Reciprocating shaker, HS 501 digital

Ideally suited for flasks, measuring cylinders and particularly separating funnels. Developed for universal applications.

Specifications

Shaking movement KS 501 digital: HS 501 digital: Orbital diameter: Max. shaking weight (with attachment): Motor rating input/output: Speed range: Timer: Dimensions (WxDxH): Weight (without attachment): Protection class acc. to DIN EN 60529: Supply requirements: Tested to DIN EN IEC 61010-1.

orbital reciprocal 30mm 15kg 70/19W 0 to 300rpm 0 to 56 mins./continuous 505 x 585 x 120mm 26kg IP21 230V 50/60Hz

Туре

Туре	FK	Cat. NO.
KS 501 digital	1	9.838 040
HS 501 digital	1	9.838 041
HS 501 digital UK	1	6.203 237
Optional accessories: Shaking attachments: AS 501 1, AS 5014, AS 501 5, Non-slin mat STICKMAY		



IKA

Shakers, KS/HS501 digital, accessories

For orbital shaker Ika KS501 digital and reciprocating shaker Ika HS501 digital.

AS 501.1 Universal attachment

For a variety of vessels (flasks, beakers etc.) with volumes of at least 50ml (ideally greater than 250ml). With tension rollers that can be mounted on 2 levels. Usable area: 420mm x 420mm.

Dimensions (WxDxH) 480mm x 500mm x 120mm.

AS 501.2 Separating funnel attachment

Only for HS 501 digital. For shaking separating funnels from 50ml to 250ml capacity.

Comprises basic holder, 6 tension rollers, 2 x 6 clamping devices. Suitable for 12 x 50ml, 10 x 100ml or 6 x 250ml separating funnels.

AS 501.3 Separating funnel attachment

For HS 501 digital only. For shaking separating funnels of 500ml to 2000ml. Comprises basic holder, 4 tension rollers, 2 x 4 clamping devices. Suitable for 4 x 500ml, 3 x 1000ml or 2 x 2000ml separating funnels.

AS 501.6 Separating funnel attachment

Only for HS 501 digital. For shaking 4 x 1000ml separating funnels.

Comprising basic holder, 4 clamping devices, 4 support bars and 8 ground cone section holders.

Dimensions (W x D x H) 480mm x 505mm x 225mm, weight 5500g.

AS 501.4 Gridded clip attachment

(Without spring clips). For shaking round bottom, flat-bottom, pear-shaped, volumetric and erlenmeyer flasks etc. Minimum volume 25ml. Dimensions (W x D x H) 475mm x 460mm x 95mm, weight 2640g.

Capacity: Number of fixing clips (volume held) 110 x AS 2.1 (25ml), 55 x AS 2.2 (50ml), 35 x AS 2.3 (100ml), 16 x AS 2.4 (250ml), 12 x AS 2.5 (500ml), 8 x AS 2.6 (1000ml)

AS 501.5 Dish attachment

500

AS 2.5

For the gentle movement of petri dishes, but also suitable for gentle mixing in vessels with large, flat bottoms (wide mouth erlenmeyers, beakers). Fitted with a non-slip, plastic mat.

Dimensions (W x D x H) 450mm x 450mm x 45mm, weight 1120g. 4 clamping devices with rod AS 1.7.

Suitable for 4 x 500ml, 3 x 1000ml or 2 x 2000ml separating funnels.

Туре	Description	РК	Cat. No.
AS 501.1	Universal attachment	1	9.838 046 1
AS 501.2			9.838 047 2
AS 501.3	Separating funnel attachment	1	9.838 048 3
AS 501.6	Separating funnel attachment	1	9.838 045 4
AS 501.4	Gridded clip attachment*	1	9.838 050 5
AS 501.5	Dish attachment	1	9.838 049 6
* Clips AS 2	1 (9.838 091), AS 2.2 (9.838 092), AS 2. 3 (9.838 093), AS 2.4 (9.838 094), AS 2.5 (9.838 095) please order separately.		



7 Ac	ccessories for orbital and reciprocating shakers			7
reciproc	for orbital shakers Ika KS 130 basic/control, KS 260 basic/control and cating shakers Ika HS 260 basic/control, HS 501 digital, KS 501 digital, KS ic control.		IKA	
Туре	For bottle ml	РК	Cat. No.	Sel
AS 2.1	25	1	9.838 091	
AS 2.2	50	1	9.838 092	
AS 2.3	100	1	9.838 093	
AS 2 4	200/250	1	9.838.094	



9.838 095

NEW

4. Stirring, Shaking, Mixing

Shakers and mixers/Orbital shakers



1 Shaker Multi Vortex Genie[®]

Robust and reliable shaking device for mixing and shaking of samples in Erlenmeyer flasks or vials.

Properties:

- Digital display for speed and time
- Speed increase in steps of 10rpm Robust metal case
- Secure stand at high speed thanks to supports with high vibration damping
- Can be loaded with e. g. max. 6 Erlenmeyer flasks 250ml or 2 multi racks each for 12 test tubes
 - (max. tube diameter 29mm, length min. 85mm)
 - After 10 minutes of non use, the mixer switches to "sleep" mode

Supplied with: incl. platform with clamp/tension roller (for securely attaching standing vessels) and 2 multi-racks.

Specifications

Description

Type of movement:	vibrating
Dimensions (WxDxH):	310mm x 270mm x 195mn
Weight:	11.3kg
Supply requirements:	230V, 50Hz
Speed range:	250rpm to 950rpm

m

PK	Cat.	No.
FK	cat.	140.

Multi Vortex-Genie®	1	9.730 090
2 Shaker Orbital-Genie [®]		NEW!

Benchtop Orbital Shaker with Universal Ratcheting Clamps provides the flexibility for using a mix of different size and shape vessels on a single platform. Unit is supplied with two ratcheting and one non-ratcheting cushioned clamps. Extra ratcheting clamps for more than two rows of smaller vessels are optional.

Specifications

Type of movement: Dimensions (WxDxH): Weight: Supply requirements: Speed range: Description

orbital 310mm x 270mm x 195mm 12kg 230V, 50Hz 10 to 300rpm

> PK Cat. No.

> > 9.730 091



Heidolph

Platform shakers Titramax 100/101/1000

Vibrating

Your advantages

- Rule out accidents: all models have been designed with a low centre of gravity which prevents gliding at high speed, even on a damp surface
- Choose between different shaking motions, orbits, angles and load capacities the right model for your specific application
- Unlimited visual reaction control at all times: the transparent, non-fogging PETG material offers it all
- For applications in microbiology: insulated drive system prevents any heat-up coming from the motor and consequently thermal damage to your sample
- Immediate access: optional incubator hood opens instantly and interlocks in any position
- An over temperature sensor preventatively shuts off the unit in a dangerous heat-up situation, particularly valuable for you in case of unattended continuous operation

Titramax 100 - The compact model

- Titramax 100 is a compact and space saving unit that accepts load capacities of 2kg and space for 4 microtiter plates
 Your analog process timer allows for unattended operation and can be set from 1 to 120 mins. After time expires this
- model sends an acoustic alarm and operation is stopped
- Set and continuously adjust the variable speed on the analog control knob from 150rpm to 1350rpm
- The 1.5mm vibration orbit performs gentle mixing with best results using small sample volumes

Titramax 101 - The strong model

- Includes all Titramax 100 features, plus:
- The 3mm vibration orbit accomplishes better results with higher volume samples than the Titramax 100 to yield consistent mixing of samples in the plate

Titramax 1000 - The incubating model

- Includes all Titramax 100 features, plus:
- The use of 6 microtiter plates increases your throughput by 50%
- The 1.5mm vibration orbit performs gentle mixing with best results using small sample volumes
- Titramax 1000 is a medium sized model and accepts load capacities of 5kg
- This model is suitable for the modular incubator system and is recommended for applications which require variable temperature control of up to $65^{\circ}C$

Туре	Orbit	Rotation speed	Max. no. plates	Width	Depth	Height	PK	Cat. No.
	mm	rpm		mm	mm	mm		
Titramax 100	1,5	150 - 1350	4	245	310	125	1	9.839 831
Titramax 101	3,0	150 - 1350	4	245	310	125	1	9.839 832
Titramax 1000	1,5	150 - 1350	6	320	375	125	1	9.839 830

Platform shakers Vibramax 100/110

Vibrating

Vibramax 100 - The compact model

- A large selection of attachments is provided for the use of various vessels and sizes
- Vibramax 100 is a compact and space saving unit with a load capacity of 2kg
- The 3mm vibration orbit gives excellent results especially in large vessels, allows for smooth to ridged mixing of viscous media and solids
- Set and continuously adjust the variable speed on the analog control knob from 150rpm to 1350rpm
- Analog process timer allows for unattended operation and can be set from 1 to 120 minutes. After time expires this
 model sends an acoustic alarm and operation is stopped
- Optional attachments with tension rollers accepts any glassware size

Vibramax 110 - The efficient model

includes all Vibramax 100 features, plus:

- The shaking orbit of 1.5mm performs a gentle motion for sensitive samples
- Set and continuously adjust the variable speed on the analog control knob from 150rpm to 2500rpm
- Ideal for the optional attachment to use 49 test tubes that increases your throughput significantly

Туре	Orbit	Rotation speed		Internal dimensions (W x D x H)	РК	Cat. No.	
	mm	rpm	kg	mm			
Vibramax 100	3,0	150 - 1350	2	245 x 310 x 125	1	9.839 833	2
Vibramax 110	1,5	150 - 2500	2	245 x 310 x 140	1	9.839 835	3
Attachments are not included - Please order separately							

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9.839 835

4. Stirring, Shaking, Mixing

Shakers and mixers/Multidimensional shakers



Platform shakers Duomax 1030 - rocking

Duomax 1030 - The incubating model

- This model is suitable for the modular incubator system and is recommended for applications which require variable temperature settings
- Choose your angle between these two options: Tilt angle to 5° for soft and gentle movements
- or tilt angle to 10° for a much stronger motion
- Set and continuously adjust the variable speed on the analog control knob from 2rpm to 50rpm, ideal for media bottles
- Analog process timer allows for unattended operation and can be set from 1 to 120 minutes. After time expires this model sends an acoustic alarm and operation is stopped
- The Duomax 1030 is a medium sized model and accepts load capacities of 5kg

Туре	5	Rotation speed rpm	Max loading kg	PK	Cat. No.
Duomax 1030	5	2 - 50	I	1	9.839 855
Duomax 1030	10	2 - 50	5	1	9.839 856



Platform shakers Polymax 1040/2040 - wave

Polymax 1040 - The incubating model

- This model is suitable for the modular incubator system and is recommended for
- applications which require variable temperature control up to 65° - Choose your angle between these two options: Tilt angle to 5° for soft and gentle movements artilt angle to 10° for a much stranger metion
- or tilt angle to 10° for a much stronger motion
- Use this model for any vessel, from culture plates, media bottles and Erlenmeyer flasks, there is no limit
- Set and continuously adjust the variable speed on the analog control knob from 2rpm to 50rpm, ideal for cell culture plates
- Your analog process timer allows for unattended operation and can be set from 1 to 120 minutes. After time expires this model sends an acoustic alarm and operation is stopped
- The Polymax 1040 is a medium sized model and accepts load capacities of 5kg

Polymax 2040 - The resilient model

includes all Polymax 1040 features, plus:

- Set and continuously adjust the variable speed on the digital display from 2.5rpm to 50rpm, ideal for cell culture plates
- Your digital process timer allows for unattended operation and can be set from 1 to 120 minutes. After time expires this model sends an acoustic alarm and operation is stopped
- The Polymax 2040 is a large model and accepts load capacity of 10kg for high sample throughput

Туре	Angle	Rotation speed		Dimensions (W x D x H)	РК	Cat. No.
		rpm	kg	mm		
Polymax 1040	5	2 - 50	5	320 x 375 x 195	1	9.839 857
Polymax 1040	10	2 - 50	5	320 x 375 x 195	1	9.839 859
Polymax 2040	5	2,5 - 50	10	426 x 435 x 208	1	9.839 804
Polymax 2040	10	2,5 - 50	10	426 x 435 x 208	1	9.839 800



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Platform Shakers Rotamax 120/Unimax 1010/2010 - orbital

Rotamax 120 - The compact model

- Wide range or accessories, attachments and clamps for up to 16 Erlenmeyer flasks available
- The shaking orbit of 20mm performs a gentle motion for sensitive samples and supports culture plates and Erlenmeyer flasks
- Set and adjust continuously variable speed on the analog control knob from 20rpm to 300rpm
- Your analog process timer allows for unattended operation and can be set from 1 to 120 minutes. After time expires this model sends an acoustic alarm and operation is stopped
- Rotamax 120 is a compact and space saving unit that accepts load capacities of 2kg and offers space for 4 medium sized culture plates

Unimax 1010 - The incubating model

includes all Rotamax/Unimax features, plus:

- This model is suitable for the modular incubator system and is recommended for applications which require variable temperature control up to 65°C
- The shaking orbit of 10mm performs a gentle motion for sensitive samples and supports culture plates and Erlenmeyer flasks
- Set und continuously adjust the variable speed on the digital display from 30rpm to 500rpm
- Your digital process timer allows for unattended operation and can be set from 1 to 999 minutes. After time expires this model sends an acoustic alarm and operation is stopped
- The Unimax 1010 is a medium sized model and accepts load capacities of 5kg

Unimax 1010 package

Includes

- 1 x orbital platform shaker Unimax 1010
- 1 x heating modul
- 1 x high incubator hood

Unimax 2010 - The resilient model

includes all Unimax 1010 features, plus:

- The shaking orbit of 20mm performs a gentle motion for sensitive samples and supports culture plates and Erlenmeyer flasks
- Set and adjusturent continuously variable speed on the digital display from 20rpm to 400rpm
- Your digital process timer allows for unattended operation and can be set from 1 to 120 minutes. After time expires this model sends an acoustic alarm and operation is stopped
- Increase your sample throughput with the optional multi-tier attachment for a variety of vessel sizes
- The Unimax 2010 is a large model and accepts a load capacity of 10kg for high sample throughput

					5.005 001	
Туре	Orbit	Rotation speed		Dimensions (W x D x H)	РК	Cat. No.
	mm	rpm	kg	mm		
Rotamax 120	20	20 - 300	2	245 x 310 x 125	1	9.839 837 1
Rotamax 120 UK	20	20 - 300	2	245 x 310 x 125	1	9.839 799
Unimax 1010	10	30 - 500	5	320 x 125 x 375	1	9.839 851 2
Unimax 1010 UK	10	30 - 500	5	320 x 125 x 375	1	9.839 797
Unimax 1010 Package	10	30 - 500	5	320 x 125 x 375	1	9.839 839
Unimax 2010	20	20 - 400	10	426 x 135 x 435	1	9 839 801

Attachments are not included - Please order separately

Platform shakers Promax 1020/2020 - reciprocating

Promax 1020 - The incubating model

- This model is suitable for the modular incubator system and is recommended for applications which require variable temperature control up to 65°C
- Wide range of accessories, attachments and clamps for separatory funnels available
- With a stroke length of 32mm the Promax model performs an ideal motion for separatory funnels
- Set and continuously adjust the variable speed on the digital display from 30rpm to 250rpm
- Your digital process timer allows for unattended operation and can be set from 1 to 999 minutes. After time expires
- this model sends an acoustic alarm and operation is stopped
- The Promax 1020 is a medium sized model and accepts load capacities of 5kg

Promax 2020 - The resilient model

includes all Promax 1020 features, plus:

- With a stroke length of 20mm this Promax model can mix larger volumes with ease
- Set and continuously adjust the variable speed on the digital display from 20rpm to 400rpm; ideal for separations
- Your digital process timer allows for unattended operation and can be set from 1 to 120 minutes. After time expires this model sends an acoustic alarm and operation is stopped
- The Promax 2020 is a large model land accept a load capacity of 10kg for high sample throughput

Туре	Orbit	Rotation speed		Dimensions (W x D x H)	РК	Cat. No.
	mm	rpm	kg	mm		
Promax 1020	32	20 - 250	5	320 x 375 x 125	1	9.839 853
Promax 2020	20	20 - 400	10	426 x 435 x 135	1	9.839 802











9.839 801

E & OE

4. Stirring, Shaking, Mixing

Shakers and mixers/Multidimensional shakers

NEW

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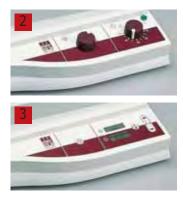
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1 Accessories for shakers and mixers

Temperature Controlled Shaking

Туре	Class	РК	Cat. No.
Attachment with 2 tension rollers	В	1	9.839 844
Test tube attachment for up to 49 test tubes, 12 x 80mm dia. x L	С	1	9.839 841
Test tube attachment for up to 36 test tubes, 16 x 80mm dia. x L	C	1	9.839 842
Attachment for up to 22 x 25ml erlenmeyer flasks	D	1	9,839 861
Attachment for up to 14 x 50ml erlenmeyer flasks	D	1	9.839 862
Attachment for up to 9 x 100ml erlenmeyer flasks	D	1	9,839 863
Attachment for up to 5 x 250ml erlenmeyer flasks	D	1	9.839 864
Attachment for up to 4 x 500ml erlenmeyer flasks	D	1	9,839 865
Attachment for up to 2 x 1000ml erlenmeyer flasks	D	1	9,839 866
Attachment with 2 tension rollers	D	1	9,839 869
Spare tension roller	D	1	9,839 870
Attachment for up to 4 conical separating funnels, 50ml or 100ml	D	1	9,839 871
Universal perforated platform 1000	D	1	9.839 814
Universal perforated platform 2000	E	1	9,839 813
Size 1, 25ml erlenmeyer clamp with attachment clip	B, C, D, E	1	9.839 816
for the perforated platform, max. 36 per platform			
Size 2, 50ml erlenmeyer clamp with attachment clip	B, C, D, E	1	9.839 817
for the perforated platform, max. 36 per platform			
Size 3, 100ml erlenmeyer clamp with attachment clip	B, C, D, E	1	9.839 818
for the perforated platform, max. 23 per platform			
Size 4, 250ml erlenmeyer clamp with attachment clip	B, C, D, E	1	9,839 819
for the perforated platform, max. 12 per platform			
Size 5, 500ml erlenmeyer clamp with attachment clip	B, C, D, E	1	9.839 821
for the perforated platform, max. 9 per platform			
Size 6, 1000ml erlenmeyer clamp with attachment clip	B, C, D, E	1	9,839 822
for the perforated platform, max. 5 per platform			
Size 7, 2000ml erlenmeyer clamp with attachment clip	B, C, D, E	1	9.839 820
for the perforated platform, max. 3 per platform			
Size 1 separatory funnel clamp for platform 2000	E	1	9.839 823
(250 ml - max. 4, 500/1000ml - max. 3 per platform)			
Size 2 separatory funnel clamp for platform 2000	E	1	9.839 827
(2000 ml - max. 2 per platform)			
Frame for tension roller	E	1	9.839 811
only. Supplied without tension roller			
Tension roller and frame complete. Order at least 2	E	1	9.839 812
Multi-storey attachment. Includes perforated	E	1	9.839 826
platform 2000 and 4 supporting rods			
Test tube stand for up to 6 Eppendorf vessels (1.5ml)		1	6.229 903
Tension plate for caps allows for the use of common bottles with dia. 94mm		1	7.055 418
V2A support rod with vessel holder		1	9.730 021
Attachment for 10 test tubes 10 or 60mm		1	9.730 045
Adapter for 20 test tubes dia. 10 to 18mm		1	9.730 222
Universal adapter (for flasks, bottles, test tube racks, etc.)		1	9.730 223
Set of holders for four 1I bottles		1	9.839 808
Set of holders for four 0.5I bottles		1	9.839 809



Shakers, 3000 series

Housing made of high impact strength polystyrene, finished in off-white.

GFL The base plate is made of electrolytically galvanized, powder-coated sheet steel, the shaking platform of anodised aluminium, equipped with four plastic pins (models 3005 to 3018 and 3023) for secure attachment of accessory equipment (holds almost all shapes of vessels used in standard laboratory applications). Models 3019/3020: Shaking platform made of electrolytically galvanized, powder-coated sheet steel, equipped with four support rods with screw-type clamps made of stainless steel. Clearly laid out control panels for easy operation and an a.c. motor with overload protection drives the unit. Stepless, electronic speed control, with soft-start and quiet operation. Constant speed maintained during continuous operation, independent of load. Suitable for use in laboratories, incubation and controlled environment rooms at ambient temperatures between +10°C and +50°C. The devices are low-maintenance, have the German seal for proven Safety (GS) and the CE mark.

Analogue control models (1) 3005/3006/3011/3013/3015/3016/3019/3023. Timer for operations up to 60min. and continuous operation.

Digitally control models (2) 3012/3014/3017/3018/3020. Microprocessor controlled, with interface RS232. Timer: 1 min. up to 99:59 h or continuous operation. Speed and remaining time indicated by two LCD readouts.

GFL

PK

1

PK

1

PK

1

Cat. No.

9.837 911

9.837 912

Cat. No.

9.837 906

GFL

Cat. No.

9.837 905

Shaker 3005

With orbital motion.

Space-saving, universally applicable. Either for gentle movement of liquids or vigorous mixing. Applications are in biology and microbiology laboratories and in diagnostic test reactions. Compact, low-wear counterbalanced drive mechanism, ensuring high stability for continuous operation.

380 x 510 x 140mm

Specifications

Overall (WxDxH): Platform (W x D): Max. loading: Type of movement: Orbit: Shaking speed: Supply requirements: Net/Gross weight: Timer:

330 x 330mm max. 8kg orbital 10mm 20 to 500rpm 230V 50/60Hz, 82 W 10/12kg up to 60 min or continuous operation



3005

2 Shaker 3006

With reciprocating motion. For gentle back and forth motion as well as intensive shaking of liquids, especially in separating funnels. Applications are in medical diagnostics or analysis, as well as for culturing micro-organisms, cell and tissue cultures. The stable, low-friction, counterbalanced drive mechanism ensures a reliable, continuous operation.

Technical Specification:

Overall (WxDxH): Platform (W x D): Max. loading: Type of movement: Stroke: Shaking speed: Supply requirements: Net/gross weight: Timer: 380 x 510 x 140mm 330 x 330mm 8kg Reciprocating 20mm 20 to 300rpm. 230V 50/60Hz, 65W 10/12kg up to 60 min. or continuous operation



Туре

3006

Shakers 3011 and 3012

With orbital rocking motion.

For gentle and uniform orbital rocking motion, quiet. Applications in AIDS research, for diagnostic tests with test plates or for growing cell cultures and microorganisms. (3012 with RS 232 interface)

Technical Specifications

Overall (WxDxH):	510 x 625 x 168mm
Platform (W x D):	450 x 450mm
Max. loading:	max. 15kg
Type of movement:	Three-dimensional, orbital rocking
Platform angle:	3°
Shaking speed:	2 to 50rpm.
Supply requirements:	
3011:	230V 50/60Hz, 90W
3012:	230V 50 or 60 Hz, 90W*
Net/gross weight:	18/22kg
Timer:	
3011:	up to 60 min or continuous operation
3012:	1 min to 99:59 hours or continuous operation
Model 3012:	microprocessor controlled; RS232 interface

Туре

3011 3012** * Please specify when placing your order !

**Speed and remaining time indicated by 2 LC-displays

GFL

Cat No.

GFL



Shakers 3013 and 3014

With rocking motion.

Compact, low-wear counterbalanced drive mechanism for slow and uniform rocking motion, quiet. The devices create reproducible growth and processing conditions at low speeds for cell cultures and other media. Ideal rinsing and tumbling of the samples. Various applications, e.g. for the supply of parallel cultures and cell lines or for staining or de-staining of gels.

Technical Specifications	
Overall (WxDxH):	510 x 625 x 168mm
Platform (W x D):	450 x 450mm
Max. loading:	15kg
Platform angle:	3°
Shaking speed:	2 to 50rpm.
Supply requirements:	
3013:	230V 50/60Hz, 90W
3014:	230V 50 or 60Hz, 90W*
Net/gross weight:	18/21kg
Timer:	
Model 3013:	1 to 60 min or continuous operation
Model 3014:	1 min to 99:59 hours or continuous operation
Model 3014:	microprocessor controlled,
	with RS-232 interface

Tvr

туре	PK.	Cal. NO.
3013	1	9.837 913
3014**	1	9.837 914
* Please specify when placing your order		

* Please specify when placing your order!
 **Speed and remaining time indicated by 2 LC-displays.



Shakers 3015 and 3017

With orbital motion.

For gentle motion or vigorous shaking of liquids. Quiet operation. For universal application, e.g. in biochemistry, biotechnology, microbiology, bacteriology and virology, especially suitable for growing microorganisms, cell and tissue cultures. Compact, low-wear counterbalanced drive mechanism for orbital shaking motion.

Technical Specifications Overall (WxDxH): 510 x 625 x 142mm Platform (W x D): 450 x 450mm Max. loading: 15kg Type of movement: Orbital Orbit: 30mm 20 to 300rpm. Shaking speed: Supply requirements 230V 50/60Hz, 65W 3015: 230V 50 or 60Hz, 65W* 3017: 18/22kg Net/gross weight: Timer: 3015: up to 60 min. or continous operation 3017: 1 min up to 99:59 hours or continous operation Model 3017: microprocessor controlled, with RS-232 interface

Туре	PK	Cat. No.
3015	1	9.837 915
3017**	1	9.837 917
* Please specify when placing your order!		
**Speed and remaining time indicated by 21C displays		

*Speed and remaining time indicated by 2 LC-displays.

Shakers 3016 and 3018

With reciprocating motion.

For vigorous and intensive shaking e.g. of clamped, recumbent flasks, mixing flasks or separating funnels. Quiet operation. The shaking platform's jerky, back and forth motion creates high turbulence, thus thoroughly mixing the media, e.g. when producing suspensions and emulsions. Applications are varied, e.g. medical diagnostics, foodstuffs or environmental analyses. Compact, low-wear, counterbalanced drive mechanism for reciprocal shaking motion. (3018 supplied with RS232 interface)

Technical Specifications:

Overall (WxDxH):	510 x 625 x 145mm
Platform (W x D):	450 x 450mm
Max. loading:	15kg
Type of movement:	Reciprocating
Stroke:	30mm
Shaking speed:	20 to 300rpm.
Supply requirements:	
3016:	230V 50/60Hz, 65W
3018:	230V 50/60Hz, 65W*
Net/gross weight:	18/22kg
Timer:	-
3016:	Up to 60 min. or contiunous operation
3018:	1 min. up to 99:59h. or continous operation
Model 3018:	is microprocessor controlled

Туре	РК	Cat. No.
3016	1	9.837 916
3018**	1	9.837 918

* Please specify when placing your order. **Speed and remaining time indicated by 2 LC-displays.

Shakers 3019 and 3020

With orbital motion.

With a large shaking tray for accommodating heavier loads. Well-suited for gentle motion or vigorous mixing of the most varying liquids, thanks to its useful shaking amplitude and the option of adjusting its speed. Quiet, universally applicable, e.g. for analytical or diagnostic applications in the pharmaceutical industry, chemistry, biology, or in plant breeding or nutritional applications, in the growing of microorganisms, cell and tissue cultures. Compact, low-wear counterbalanced drive mechanism, ensuring high stability and dependability. (3020 with RS 232 interface)

Technical Specifications

Overall (WxDxH): Platform (W x D):	745 x 730 x 135mm 676 x 540mm
Max. loading:	30kg
Type of movement:	Orbital
Orbit:	32mm
Shaking speed:	20 to 250rpm, when the rack
	frame is used 20 to 200rpm
Supply requirements:	
3019:	230V 50/60Hz, 90W
3020:	230V 50 or 60Hz, 90W*
Net/gross weight:	34/40 kg
Timer:	
3019:	Up to 60 min. or continuous operation
3020:	1 min. up to 99:59 h. or continous operation
Model 3020:	microprocessor controlled, with a built-in RS-232 interface

Туре	РК	Cat. No.
3019	1	9.837 919
3020**	1	9.837 920
* Please specify when placing your order		

**Speed and remaining time indicated by 2 LC-displays.





4. Stirring, Shaking, Mixing

Shakers and mixers/Multidimensional shakers



1 Shaking Trays

Made of stainless steel with holes to accommodate clamps for Erlenmeyer flasks and other accessory equipment. Type 3950: for Shakers 3005 and 3006. GFL

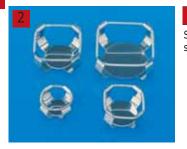
GFL

Type 3966: for Shakers 3011 to 3018 (see also Shaking Incubator 3031).

Type 3980: for Shakers 3019/3020 (see also Shaking Incubator 3033).

Made of 3mm thick anodised aluminium, with holes to accommodate clamps for Erlenmeyer flasks and other accessory equipment.

Туре	For Type	РК	Cat. No.
3950	3005 / 3006	1	9.837 972
3966	3011 - 1018 / 3031	1	9.837 936
3980	3019 / 3020 / 3033	1	9.837 980



Clamps for Erlenmeyer Flasks

Stainless steel, for screwing onto shaking tray 3950, 3966 and 3980, supplied with attachment fittings (see also Shaking Incubators 3031-3033).

		shaker Model	shaker Model		
ml	3005, 3006	3011 to 3018	3019, 3020		
25	45	79	99	1	9.837 983
50	25	49	99	1	9.837 984
100	16	36	50	1	9.837 985
200	12	22	26	1	9.837 986
50-300	9	16	26	1	9.837 987
500	9	12	26	1	9.837 988
1000	4	9	12	1	9.837 989
2000	2	4	9	1	9.837 991
	25 50 100 200 50-300 500 1000	25 45 50 25 100 16 200 12 50-300 9 500 9 1000 4 2000 2	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$

Other clamps on request



(see also Shaking Stainless steel, for r with clamping spring	and 3006, 3015 to 3020 Incubator 3031, 3032 and 3033). nax. 24 test tubes, 12mm to 17mm diameter, perforated section can be tilted by 90°, gs for secure grip and silent shaking of tubes. naking trays 3950, 3966 and 3980.	GFL
For trays:	Number of racks:	
3950	3	
3966	6	
3980	9	
Туре	РК	Cat. No.
3953	1	9.837 974



4 Clamps for Separating Funnels	(NEW!)
Stainless steel, for screwing onto base trays 3950 and 3966.	GFL

Туре	Capacity Max. clips per platform	Neck width	РК	Cat. No.
	ml			
3957	50 6/11	19 / 26 (ISO / Squibb)	1	9.837 975
3958	100 6/11	19 / 26 (ISO / Squibb)	1	9.837 976
3959	250 4/8	19 / 26 (ISO / Squibb)	1	9.837 977
3955	250 4/8	29 / 32 (conical)	1	9.837 970
3956	500 3/6	29 / 32 (ISO / Squibb)	1	9.837 978
Other clar	mps on request			

other clar

GFL

Holding Frame for a Test Plate Stainless steel, for securing a test plate. GFL Screws onto shaking trays 3950, 3966 and 3980 (see also Shaking Incubator 3031). Supplied with attachment material. For trays: Number microtitration plates: 3950 4 3966 6 3980 15 For Type PK Cat. No. Туре 3005/3006, 3015-3018, 3019/3020 3910 9.837 979

Non-slip Mats

Used as a shaking platform.

For the slow moving of e.g. nutrient media solutions in Petri dishes and flasks. Type 3965 also for Shaking Incubator 3031.

Туре	For Type	Width	Length	РК	Cat
		mm	mm		
3951	3005 / 3006	300	300	1	9.837
3965	3011 - 3018 / 3031	420	420	1	9.837

Universal Mounts

For secure attachment of various shaking vessels. Type 3952 for Shakers 3005 and 3006. With 4 rubber coated bars.

Type 3967 for Shakers 3011/3012, 3013/3014, 3015/3017, 3016/3018 (see also Shaking Incubator 3031). With 6 rubber coated bars.

Type 3982 for Shakers 3019/3020. It consists of 2 longitudinal bars and 6 transverse bars. Screw-type clamps are used for adjusting the longitudinal bars vertically and the transverse bars horizontally.

Туре	For Type	РК	Cat. No.
3952	3005 / 3006	1	9.837 973
3967	3011 - 3018 / 3031	1	9.837 937
3982	3019 / 3020	1	9.837 982

4 P	latform Frame		
With 4	hakers 3011 to 3014. I levels, with top rims, 3 levels removable. Frame and trays made of stainless steel. Ice between trays 60m. Grooved rubber mats on trays to ensure secure grip of objects.		GFL
Туре	For Type	РК	Cat. No.
3968	3011 - 3014	1	9.837 938



9.837 981 1





Stuart

4. Stirring, Shaking, Mixing Shakers and mixers/Multidimensional shakers



Туре	Description	PK Cat. No.
SSM1	Shaker, orbital, mini	1 9.728 830 1
SSM1/1	Accessory cradle with 4 securing bars	1 9.728 831 2
Attachments	s are not included - Please order separately	

4
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5 Rocking Shaker SSM3/SSM4

- Small space saving design, ideal for personal use
- Gentle rocking action

Technical Specification

Platform dimensions (W x D):

Overall dimensions (WxDxH):

Rocking action:

Speed range:

Angle of tilt:

Net weight:

Type SSM3

SSM4

Angle adjustable:

Electrically supply:

Maximum load:

- Choice of two models: 3D gyratory action SSM3 and See-saw wave action SSM4
- Digital speed control and built-in timer
- Optional tier system available to increase capacity

These compact rockers are ideal where gentle mixing is required. There is a choice of two models: **Model SSM3** provides a 3D gyratory motion, ideal for low foaming agitation, DNA extractions, staining and de-staining procedures etc. The tilt angle can be adjusted to any position by hand to optimise mixing of vessels. **Model SSM4** has a see-saw rocking action that creates a wave motion within vessels such as culture flasks, Petri dishes etc.

Both models are supplied with a non-slip mat and have digital selection of both speed and time. An accessory tier sytem is available. Fitted in seconds, without the need for tools, it triples the available space for samples.

With BioCote, silver-based, antimicrobial protection.



SSM3/SSM4

3D gyratory/See-saw wave 235 x 235mm/235 x 235mm 5 to 70rpm/5 to 70rpm 3 to 12°/7° Yes by hand/No 3kg/3kg 240 x 300 x 165mm/240 x 300 x 150mm 5kg/5kg 230V 50Hz, 50W

Rocker, gyratory, mini 1 9.728 820 Rocker, see-saw, mini 1 9.728 821	Description	РК	Cat. No.
Rocker, see-saw, mini 1 9.728 821	Rocker, gyratory, mini	1	9.728 820
	Rocker, see-saw, mini	1	9.728 821

Stuart

Cat N עס

Stuart

Shakers, large platform, SSL1 & SSL2

- available with orbital or reciprocating action - digital speed selection to 300rpm with soft start
- built-in digital timer
- reliable, quiet running mechanism
- fully adjustable cradle system

These lab scale platform shakers have powerful yet quiet shaking mechanisms and have been designed for trouble-free, continuous use. The cradle type platforms have six rubber cushioned horizontal securing bars which can be easily adjusted both vertically and horizontally to hold most sizes and types of vessel, including flasks, bottles and beakers. For example, they will accommodate the following Erlenmeyer flasks or bottles: 12 x 250ml or 8 x 500ml or 6 x 1000ml or 2 x 2000ml. Speed is continuously adjustable and is set digitally. The speed is accurately maintained, even over long runs. A built-in digital timer allows shaking times from 1 to 999 minutes to be set. Alternatively the unit can be set for continuous operation.

With BioCote silver based antimicrobial protection.

Technical Specification

	SSL1/SSL2
Platform dimensions (W x D):	335 x 335mm
Speed range:	30 to 300rpm/25 to 250rpm
Orbit/stroke:	16mm/20mm
Maximum loading:	10kg
Overall dimensions (WxDxH):	360 x 420 x 270mm
Net weight:	11kg
Supply requirements:	230V, 50Hz, 50W

туре	Description	PK CdL NU.
SSL1	Shaker, orbital, large platform	1 9.728 840 1
SSL2	Shaker, reciprocating, large platform	1 9.728 841
SSL1/1*	Accessory platform 510 x 510 mm	1 9.728 842
	with twelve rubber securing bars	
SSL1/2	Accessory flat platform 350 x 350 mm without cradle	1 9.728 843
* For use with	h SSL1 only	

use with SSL1 only

Rocking shakers SSL3/ SSL4, large platform

- Large platform rockers ideal for multiple users
- Gentle rocking action
- Choice of two models
- 3D gyratory action SSL3
- See-saw, wave action SSL4
- Digital speed control and built-in timer
- Optional tier system available to increase capacity
- These rockers have large platforms able to accommodate a number of samples, ideal for a busy lab.
- They are very quiet in operation and designed to be run continuously. There are two models available:

Model SSL3 provides a 3D gyratory motion, ideal for low foaming agitation, DNA extractions, staining

and de-staining procedures etc. The tilt angle can be adjusted to any position by hand to optimise mixing of vessels. Model SSL4 has a see-saw rocking action that creates a wave motion within vessels such as culture flasks, petri dishes etc.

Both models are supplied with a non-slip mat and have digital selection of both speed and time. An accessory tier system is available. Fitted in seconds, without the need for tools, it triples the available space for samples.

With BioCote, silver-based, antimicrobial protection.

Specifications

Rocking action: Platform dimensions (W x D): Speed range: Angle of tilt: Angle adjustable: Maximum load: Overall dimensions (W xD xH): Net weight: Supply requirements:

SSL3/SSL 4 3D gyratory/See-saw wave 355 x 355mm/335 x 355mm 5 to 70rpm/5 to 70rpm 3 to 12°/7° Yes by hand/No 10ka/10ka 360 x 420 x 170mm/360 x 420 x 160mm 10kg/10kg 230V, 50Hz, 50W

Type Description PK Cat. No. 9.728 800 SSL3 Rocker, gyratory, lab scale 1 SSL4 Rocker, see-saw, lab scale 1 9.728 801 Attachments are not included - Please order separately







9.728 800



Labnet

Grant

4. Stirring, Shaking, Mixing

Shakers and mixers/Multidimensional shakers



1 GyroTwister[™]/Gyro Twister Ad

- gyratory action provides gentle, thorough mixing
- Ideal for staining gels, washing membranes and mixing samples in tubes
- fixed angle and adjustable tilt models
- safe for cold room or incubator use
- platform: 30 x 30 cm
- speed range: 3-60rpm
 - timer: 20 to 120 min or continious
 - Motion/Pitch: 3D/adjustable $\pm 10^\circ$
 - Motion/Pitch: 3D/Fixed 7° pitch
 - max. load: 5kg
- operating range: +4° to 70°C - dimensions: 33 x 35.2 x 21cm
- weight: 6.6kg
- electrical: 230V, 50/60Hz

Shaker comes with 30cm x 30cm non-slip platform and dimped tube mat.

Description		Cat. No.
GyroTwister Adjustable	1	6.227 093
Dimpled mat, 30 x 30cm, for holding tubes	- 1	6.227 094
GyroTwister 3-D Shaker	1	9.595 334
Staking platform 30 x 30cm, with hardware	1	9.595 335
Large platform, 40 x 40cm, with non-slip rubber mat	1	9.595 336
Extra large platform, 50 x 50cm, with non-slip rubber mat	1	9.595 337
Elasticated tie-down	4	9.595 338

3D platform rotator PS-3D

- Smooth 3D orbital motion for mixing in tubes, culture flasks, dishes and boxes.
- ideal size for personal use
- variable speed: 10 to 30rpm
- operating range: +5° to +40°C
- fixed position: 7° tilt angle
- Loads up to 0.5kg
- 215 x 215mm platform

Туре	РК	Cat. No.
PS-3D	1	9.721 014
3 Multi-function 3D rotator PS-M3D		
With consistent and reproducible agitation throughout the speed range, multi segment program.		Grant
- multi function: rotation, reciprocation, vibration		
- reciprocal 3D rotation: 1 to 360°		
- vibration: 1 to 6°		
- loads up to 1kg		

- variable speed: 5 to 30rpm
- fixed position: 7° tilt angle
- 215 x 215mm platform

Туре	РК	Cat. No.
PS-M3D	1	9.721 017



Accessories for 3D platform rotator PS-3D and multi-function rotator PSM-3D

Туре	Description	РК	Cat. No.
PDM	Dimpled mat, prevents tubes from rolling around	1	9.721 013
PTP-26	Adaptor for 26 tubes up to 11mm dia.	1	9.721 012



9.721 013



9.721 012

3D-Mini Twist and Mini Mixer

The Mini Twist and Mini Mixer are small mixers that combine the motions of an orbital shaker and a rocker to produce a three dimensional action. This action provides

thorough yet gentle mixing without foaming. The pitch and speed of the Mini Twister are fixed.

A dimpled mat on the platform surface holds tubes firmly in place. The mat will hold as many as 60 x 1.5ml tubes,

30 paediatric blood tubes (3ml), 21 standard blood tubes (7ml), 17 x 15ml tubes or 9 x 50ml tubes.

The Mini Mixer has a pitch and speed that produces the perfect motion for processing western blots and staining gels. The tilt angle is large.

Both shakers may be used in temperature controlled environments.

- gyratory action provides gentle, thorough mixing
- Mini Twist: Perfect for centrifuge and blood tubes
- Mini Mixer: Designed for processing blots and staining gels
- optimal fixed speed and pitch
- safe for temperature controlled environments
- Blot boxes
- 2 sizes: medium and large
- hinged lid and positive catch

Supplied with:

Mini Twist incl. positioning mat Mini Mixer incl. anti-slip mat and 2 large blot boxes

Specifications

Speed range	20rpm
Motion/Pitch	Mini Twist: 3-D/fixed 20°
	Mini Mixer: 3-D/fixed 5°
Maximum load	0.8 kg
Ambient operating range	+4° to 65°C
Dimensions (WxDxH):	Mini Twist: 24.1 x 17.15 x 15.24 cm
	Mini Mixer: 24 x 17.5 x 15cm
Weight	0.88kg
Electrical supply	230V, 50 Hz

Description	РК	Cat. No.
Mini Twist 3-D shaker	1	9.595 330
Mini Mixer 3-D shaker	1	9.595 331
Blot Box 9.1 x 6.6 cm, 3-5 ml	10	9.595 332
Blot Box 11.7 x 8.9 cm , 6-10ml	10	9.595 333

SBP



Grant

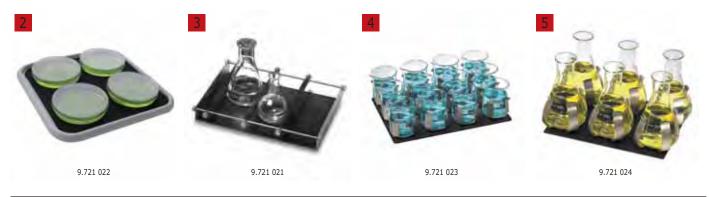
4. Stirring, Shaking, Mixing Shakers and mixers/Multidimensional shakers

1	1 Orbital Shaker PSU-10i	NEW!
	 Microprocessor controlled shaking platform providing smooth and quiet horizontal orbital motion for mixing in bottles, flasks and beakers. Variable shaking speed: 30rpm to 450rpm Interchangeable platforms for use with a variety of vessels Loads up to 3kg Continuous or timed operation with automatic switch-off Reliable direct drive system Automatic load balancing system The four interchangeable accessory platforms enable a wide choice of vessels to be used, including bottles, flasks and beakers, dishes, boxes and petri-dishes. 	Grant

Туре	РК	Cat. No.
PSU-10i	1	9.721 019

Accessories for Orbital shaking platform PSU-10i

		Grant
Туре	Description	PK Cat. No.
Bio PP-4	Flat platform	1 9.721 022 2
PUP-12	Universal platform	1 9.721 021 3
P12-100	Platform with clamps for 12 x 100ml flasks / 150ml beakers	1 9.721 023
P6-250	Platform with clamps for 6 x 250ml flasks / 400ml beakers	1 9.721 024 📕



Platform rocker PMR-30, fixed tilt

Smooth rocking motion for gentle sample agitation in tubes, culture flasks, dishes and boxes.

- side to side rocking motion
- variable speed: 7.5 to 30rpm
- load up to 0.5kg
- fixed position: 7° tilt angle
 continuous or timed operation with automatic switch-off
- integral timer: 1 min to 24 hours
- 210 x 210mm platform
- operating ambient 4°C to 40°C

Туре	РК	Cat. No.
PMR-30	1	9.721 011



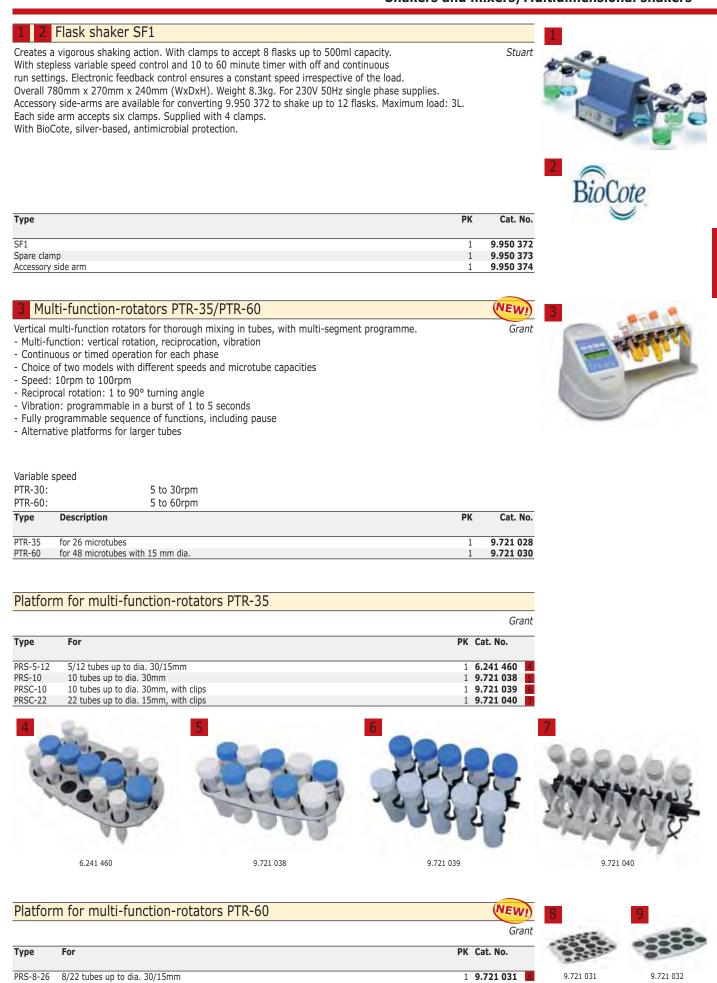
PRS-14

PRS-48

14 tubes up to dia. 30mm

48 tubes up to dia. 15mm

4. Stirring, Shaking, Mixing Shakers and mixers/Multidimensional shakers



1 9.721 032 9

1 9.721 048



1 Test Tube Rotator 3025

shaking and mixing of powdered or liqu	 particularly suitable for gentle to intensive id substances, e.g. for separating or mixing tubes can be removed and can also be loaded outside the novable clamps 	e rotator.	GFL
Compact, low-wear drive mechanism. E the axle and the collecting trough are m	xternal housing is made of electrolytically galvanized pow nade of stainless steel. Electronic speed control, stepless.		sheet steel,
Maintenance-free, GS safety approval, o	comes with CE mark.		
For max. 24 test tubes: Ø 12/17 mm/ k	ength: 75 to 180 mm		
Technical Specification			
External dimensions (WxDxH):	490 x 330 x 220mm		
Rotational speed:	6 to 80rpm.		
Supply requirements:	230V 50/60Hz, 80W		
Net/gross weight:	10/12kg		
Туре		РК	Cat. No.
3025		1	9.837 925



Rotating Shaker 3040

The specialist shaker with uniform rotating motion. Various applications, e.g. for precise GFL sedimention, mixing and processing of soil samples (particularly well-suited for processing soil samples in glass/plastic wide mouth vessels up to 2000ml rated volume as per DIN 38414, Part 4 to German Standard Methods for Water, Wastewater and Sludge Analysis - Determination of Leachability by Water. Compact, low-wear drive mechanism. External housing is made of electrolytically galvanized, powder-coated sheet steel. Clearly laid out control panel for easy operation. With LED speed display. Holding device guarantees easy clamping of sample vessels on the shaking rack. Electronic, stepless speed control, constant speed during continuous operation. Rotating rack incorporates ball bearings on both sides, accommodating a max. of 12 flasks/vessels, round or rectangular, up to 110mm max. dia. and 270mm max. height, stacked in 4 levels, each level with 3 holding frames. Drive motion is achieved via a v-belt and a sliding hub.

With stainless steel clamping frame for safe securing of the sample vessels.

For ambient temperatures from 10 to 40°C. Maintenance-free, GS safety approval, CE marked.

Technical Specification

Motion:	orbital rotating		
Speed range:	1 to 20rpm.		
Speed control:	Electronic, stepless		
Speed display:	Digital		
Capacity:	12 bottles/vessels		
Bottle height range:	to max. 270mm height		
Max. bottle dims.:	110mm, round or square		
Drive:	d.c. motor with overload protection		
Dimensions (WxDxH):	770 x 700 x 715mm		
Supply requirements:	230V 50/60Hz, 100W		
Max. load:	20kg		
Net/gross weight:	approx. 62/78kg		
Туре		РК	Cat. No.
3040		1	9.837 931



Overhead Shaker Reax 2

- Quickly clamps in 2 vessels of any size and accepts load capacities up to 1kg

Heidolph

- Speed continuously adjustable from 20rpm to 100rpm
- Universal adapter allows for the use of various vessels of 50mm to 160mm height
- In addition an optional adapter is available for the use of 20 test tubes at a time

Mains supply:	230V/50Hz	
Weight:	5.2kg	
Size (B x T x H):	510 x 235 x 180mm	
Speed:	20 to 100rpm, electronically controlled	

REAX 2

-

9.730 221

Cat. No.

Overhead shakers Reax 20

- Overhead Shaker for 4, 8 or 12 bottles
- Set and continuously adjust the variable speed on the analog control knob from 1rpom to 16rpm, ideal for waste water analysis. DIN38414-4 conformed.
- Other rotation speeds available upon request, for example 0.5rpm to 8rpm or 2rpm to 32rpm
- Easy and fast attachments of bottles
- Other vessels with 160mm to 290mm height and max. 136mm diameter can be used with a tension plate accessory

Туре	Width	Depth	Height	РК	Cat. No.
	mm	mm	mm		
Reax 20 / 4	490	520	465	1	9.839 805
Reax 20 / 8	770	520	465	1	9.839 806
Reax 20 / 12	1050	520	465	1	9.839 807

Rotator drive unit STR4

For use with the STR4/1 drum, STR4/2 flask/bottle rotator Drum, STR4/3 figure 8 drum, STR4/4 bottle holder or STR4/5 eppendorf-type tube rack holder. Fitted with illuminated mains on/off switch. Has variable speed with electronic speed control, range 6rpm to 60rpm, fitted with 10 to 60 minute timer with off and manual over-ride position. Fitted with panel mounted fuse. For use on 230V 50Hz single phase supplies. Overall dimensions (WxDxH) 650mm x 250mm x 250mm. Net weight 6kg. Requires accessory drums for operation. With BioCote, silver-based, antimicrobial protection.

Туре	РК	Cat. No.
STR4	1	9.950 375

4 5 Drum STR4/1 for rotator drive unit STR4		
Square drum which accepts one plate of clips on each side. The plates plug into the drum which is fitted with a push button release/lock mechanism. Without accessory plates.		Stuart
Туре	РК	Cat. No.
STR4/1	1	9.950 376

Accessor	y plates for STR4/1		
To fit drum 9	9.950 376. Fitted with clips to accept tubes vertically. Suppl	lied in pairs.	Stuart
No. of	Dia.	РК	Cat. No.

tubes			
	mm		
12	12	2	9.950 378
10	16	2	9.950 379
8	19	2	9.950 380
7	24	2	9.950 381

7	Drum, flask, STR4/2 for rotator drive unit STR4
---	---

Drum with two platforms for STR4. Accepts two 500ml conical flasks or reagent bottles. The support columns can be detached to give two platforms 10.5cm x 17.5cm each for separating funnels, jars or test tube racks.

With BioCote, silver-based, antimicrobial protection.

Туре STR4/2



9.950 382

PK

1











Heidolph

Stuart



Stacking system for roller mixers

Туре

Stuart

Cat. No.

9.728 815

PK

4

Stuart

PK Cat. No.

Rotators SB2/SB3

The Stuart rotators give gentle but effective mixing, ideal for life sciences applications such as keeping blood samples in suspension. The angle of tilt is fully adjustable. The Rotators can be used in incubators up to 60° C and in cold rooms down to 4° C.

There are six types of tube holder available. Please order separately.

SB2:

Fixed speed of 20rpm.

SB3:

Variable speed of 2rpm to 40rpm. Additional digital timer of 1 to 999 minutes. Digital speed control.

Specifications:

Dimensions (WxDxH):	200 x 270 x 230mm
Supply:	230 V/50 Hz, 50W
Weight:	3.2kg

Туре





Tube holders for rotators SB2/SB3

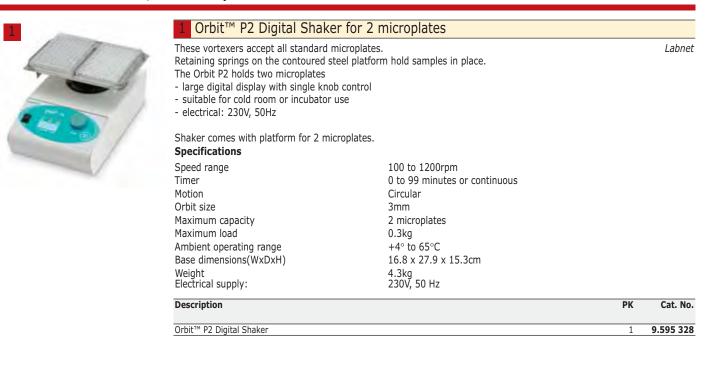
				Stuart
Туре	For	No. of vessels	РК	Cat. No.
SB3/1	Micro tubes, 10 to 11.5mm dia.	40	1	9.645 324
SB3/2	Test/blood tubes, 9 to 20mm dia.	20	1	9.645 325
SB3/3	50ml centrifuge tubes, 25 to 35mm dia.	12	1	9.645 326
SB3/4	Culture tubes, 12mm dia.	63	1	9.645 327
SB3/5	Culture tubes, 16mm dia.	63	1	9.645 328
SB3/6	Culture tubes, 26mm dia.	30	1	9.645 329



IKA

Grant

4. Stirring, Shaking, Mixing Shakers and mixers/Microtitre plate shakers



2	
A second	

Microtitre shaker MTS 2/4 digital

Dedicated shaker for two or four microtitre plates. Orbital movement.

- Electronic speed regulation
- Digital timer
- Acoustic signal at end of timed period
- With attachment but without plates

Specifications

Motor rating input/output: Orbit: Capacity: Speed range: Speed range: Timer: Dimensions (WxDxH): Weight: Housing IP rating to DIN EN 60529: Supply requirements: Tested to DIN EN IEC 61010-1. 35/13.2W 3mm two or four microtitre plates 0 to 1100rpm Analogue scale 1 to 99 min/ continuous 185 x 320 x 105mm 2.7kg IP 21 230V 50/60Hz

Туре	РК	Cat. No
MTS 2/4 digital	1	9.838 195



Microplate shaker PMS-1000

Reliable, regulated shaking for two or four microplates. Simple screw attachments allow quick and easy fitting of any standard depth 96 or 384 well plates, holding the plate securely in place.

- variable speed: 150rpm to 1000rpm
- orbit: 2mm
- continuous or timed operation
- integral timer: 1 min to 24 hours
- standard option for two microplates
- optional platform MPP-4 for four microplates
- ambient 5°C to 40°C

F

Туре	Description	PK	Cat. No.
PMS-1000	Microplate shaker	1	9.721 025
MPP-4	Platform for 4 micro plates	1	9.721 026

IKA

Incubator Shaker KS4000i control

Innovative incubator shaker design allowing unattended operation in a temperature-controlled environment.

- large LED display for speed and time settings
- controls with antimicrobial coating for reduction of bacteria
- integrated PID temperature control (two Pt1000 temperature sensors can be used)
- socket in the work area for connection of an additional temperature sensor e.g. PT1000.60 (included in delivery)
- electronic temperature and speed control
- electronic timer switch: 0 to 999h (set by the minute or by the hour)
- optional built-in cooler for connection to an external cooling unit e.g. KV600
- unit switches off automatically if disturbed
- unit stops automatically when hood is lifted
- collecting tray for spillages with draining tube at rear of unit
- all functions can be controlled and documented using labworldsoft® software
- attachments not included Please order accessories as required

Specifications

Shaking movement: orbital 20mm Orbit: Max. shaker weight (with attachment): 20kg Motor rating input/output: 82/24W Power consumption: 1120W (at 230V) Operating time: continuous Speed range: 10 to 500rpm Timer switch (select minutes/hours): Heater power: 1000W Temperature range: RT +5°C to 80°C Temperature stability (200 ml H₂O at target T = $37^{\circ}C$, RT $25^{\circ}C$): 0.1K Recirculating cooler: Dimensions (WxDxH): Space required (W x D): 600 x 600mm Weight: 55kg 15 to 32°C Permissible ambient temperature: Protection class acc. to DIN EN 60529: IP30 Interface: RS232 Supply requirements: 230V 50/60Hz Tested to DIN EN IEC 61010-1.

20mm 20kg 82/24W 1120W (at 230V) continuous 10 to 500rpm 0 to 999 h/continuous 1000W RT +5°C to 80°C 0.1K additional cooling function for KS 4000 ic 580 x 750 x 525mm 600 x 600mm 55kg 15 to 32°C IP30 RS232 220V F0 (COLLE

Туре	PK	Cat. No.
KS 4000 i control	1	9.837 890
KS 4000 i control UK	1	4.008 075
KS 4000 ic control*	1	9.837 891
KS 4000 ic control* UK	1	4.008 077
*with built-in cooler		



NEW

IKA

Shakers and mixers/Incubator shakers



9.837 894



9.837 893



Туре Description PK Cat. No. AS 4000.1 1 9.837 894 Universal attachment AS 1.400 Basic holder 9.837 895 1 AS 1.401 Clamping roll* 9.837 896 AS 1.402 Fastening screw* 9.837 897 AS 4000.2 Fixing clip attachment 9.837 893 1 AS 4000.3 Dish attachment 9,837 892 1 STICKMAX Adhesive mat 6.236 293

*Spare parts for universal attachment.



Incubator 1000, suitable for Heidolph Platform Shakers

This truly unique incubator gives you all in one: Shaking, mixing and heating with visual reaction control at all times. These platform shakers are compatible with the incubator system: Duomax 1030, Polymax 1040, Titramax 1000, Unimax 1010 und Promax 1020.

Heidolph

Heating module allows for gentle temperature adjustments up to 65°C

Accessories for Incubator Shaker KS4000i control

For various types of vessels. Infinitely variable clamping rolls allow universal adaptation

Included with delivery: 1 x AS 1.400 Basic holder, 6 x AS 1.401 Clamping roll, 12 x AS 1.402 Fastening screw

Number of fixing clips (volume): 50 x AS 2.1(25ml), 48 x AS 2.2 (50ml), 25 x AS 2.3 (100ml), 16 x AS 2.4 (250ml),

For smooth shaking operations in the low viscosity range, e.g. for cell cultures, nutrient media in Petri dishes,

For shaking flasks, Erlenmeyer flasks and bottles with a round crosssection (without fixing clips).

culture bottles and vessels with a low centre of gravity. With integrated slip-resistant foil (PP).

AS 4000.1 Universal attachment

AS 4000.2 Fixing clip attachment

12 x AS 2.5 (500ml), 7 x AS 2.6 (1000 ml)

Base plate: 360mm x 410mm

Base plate: 430mm x 430mm

AS 4000.3 Dish attachment

Base plate: 430mm x 430mm

Dimensions (WxDxH): 470mm x 447mm x 135mm

Dimensions (W x D x H): 470mm x 444mm x 25 mm

Dimensions (W x D x H): 470mm x 440mm x 25mm

to various vessels.

Weight: 3200g

Weight: 2650g

Weight: 800g

- Electrical heater allows for quick and even temperature distribution throughout the entire enclosure
- Unlimited visual reaction control at all times: The transparent and non-fogging PETG construction offers it all
- Three options available: A flat hood for small vessels and mictrotiter plates, a high hood for all common medium sized vessels and even a high hood XL for larger Erlenmeyer flasks up to 2000ml
- Immediate access: The incubator hood opens instantly and interlocks in any position
 - Use ONE incubator for numerous shakers, interchangeability is ensured and takes less than 2 mins. You can incubate and mix simultaneously or independently

Heating module

- Heating capacity of 300W allows for quick temperature adjustments
- Digital temperature settings up to 65°C and separate display for actual temperature
- To protect your sample from thermal damages this unit features a safety circuit to prevent overheating
- Electrical heater comes with low, noise blower and provides accuracy of ±2°C up to 50°C and ±4°C over 50°C

Width	Depth	Height	PK	Cat. No.
mm	mm	mm		
170	375	97	1	9.839 875
546	394	163	1	9.839 876
546	394	267	1	9.839 877
546	394	428	1	9.839 878
ar products pleas			1	9.839 8
	mm 170 546 546 546	mm mm 170 375 546 394 546 394 546 394 546 394	mm mm mm 170 375 97 546 394 163 546 394 267	mm mm 170 375 97 1 546 394 163 1 546 394 267 1 546 394 428 1

468

4. Stirring, Shaking, Mixing Shakers and mixers/Incubator shakers

MaxQ 2000 & 3000 Open Air Platform Shakers

- Triple eccentric drive handles heavy loads, provides uniform agitation and continuous 24-hour operation, even at high speeds.
- Units operate in temperature ranges of 0°C to 40°C and humidity conditions from 20% to 80%,
- non-condensing enables them to be used in incubators, warm rooms, environmental chambers and refrigerators. - Variable speed control from 15rpm to 500rpm.
- Minimise errors by viewing speed and operating time simultaneously on two individual LED displays.
- Shaker shutdown and visual/audible alarms signal if unit operates ±10% of set speed,
- preventing shaker from moving.
- User-adjustable speed calibration can be performed using a digital handheld tachometer,
- where verification is required and protocols can be standardised.
- Available as CO₂ Resistant Digital Operating System (only for MaxQ 2000)
- Five year warranty on parts, one year labor and LIFETIME on drive mechanism.

Specification

Speed range:	15 to 500 ±1rpm digital
	40 to 400 ±1rpm analog
Operating time:	Continuous and timed operation from 0.1 hour to 999 hours
	or 0.1 minute to 999 minutes.
Electrical supply:	240V, 50/60 Hz

Туре	Description	Load max.	Amplitude	Dimensions (W x D x H)	РК	Cat. No.
		kg	mm	mm		
MaxQ 2000	Benchtop orbital shaker, analog	15.9	19.0	343 x 442 x 163	1	4.011 045
MaxQ 2000	Benchtop orbital shaker, digital	15.9	19.0	343 x 442 x 163	1	4.011 057
MaxQ 2000	Benchtop orbital shaker, digital, CO2 resistant	15.9	19.0	343 x 442 x 163	1	4.011 058
MaxQ 3000	Benchtop orbital shaker, analog	22.7	25.4	747 x 655 x 246	1	4.011 048
MaxQ 3000	Benchtop orbital shaker, digital	22.7	25.4	747 x 655 x 246	1	4.011 059

MaxQ 4000, Orbital Shaker with a Spacious Chamber

- Spacious chamber holds six 2L flasks.
- View speed, time and temperature simultaneously.
- Choose from three temperature ranges.
- Clear lid allows sample viewing without disturbing chamber atmosphere.
- Choice of analog or digital operating systems.
- Triple eccentric drive handles heavy loads, provides uniform agitation and continuous 24-hour operation, even at high speeds.
- View speed, operating time and temperature simultaneously on three individual LED displays.
- User-adjustable speed calibration
- Unbalanced load sensor
- Soft start feature
- Over-temperature safety feature with independent thermostat provides additional backup by controlling heat if main temperature controller fails.
- Five year warranty on parts, one year labor and LIFETIME on mechanism.

Also available with analog operating system.

Specifications

Speed range, rpm:	15 to 500, ±1 rpm digital
	40 to 400, ±1 rpm analog
Temperature accuracy:	±0.1°C accuracy at 37°
Operating time:	0.1 hour to 999 hours or 0.1 minute to 999 minutes
Dimensions (L x W x H):	813 x 572 x 559 mm
Supply requirements:	240V, 50/60 Hz

Description	Temp.	Load	Amplitude	PK	Cat. No.
	range	max.			
	°C	kg	mm		
Bench-Top-Shaker incubated, analog	RT+10° C - 60° C	22.7	19.0	1	4.011 049
High Temperature Bench-Top-Shaker incubated, analog	RT+10° C - 80° C	22.7	19.0	1	4.011 050
Refrigerated Bench-Top-Shaker incubated, analog	RT- 15° C - 60° C	22.7	19.0	1	4.011 051
Bench-Top-Shaker incubated, digital	RT+10° C - 60° C	22.7	19.0	1	4.011 060
High Temperature Bench-Top-Shaker incubated, digital	RT+10° C - 80° C	22.7	19.0	1	4.011 061
Refrigerated Bench-Top-Shaker incubated, digital	RT- 15° C - 60° C	22.7	19.0	1	4.011 062





NEW

Thermo Scientific

Shakers and mixers/Incubator shakers



1 MaxQ 4450 Compact Benchtop Incubated Shakers, orbital

- Holds up to 4 x 1L flasks.
- Requires minimal bench space.
- Choose between two temperature ranges, 5°C above ambient to 80°C or 5°C below ambient to 80°C.
- Clear lid lets you view samples without disturbing internal temperature
- Triple eccentric drive handles heavy loads, provides uniform agitation and continuous 24-hour operation, even at high speeds.
- Monitor and control chamber temperature range with $\pm 0.1^{\circ}$ C accuracy and $\pm 0.5^{\circ}$ C uniformity at 37°C.
- View speed, operating time and temperature simultaneously on three individual LED displays.
- Visual/audible alarms alert you to temperature deviations. Heat turns off if temperature deviates ±1°C of set point.
 - Soft start feature eliminates sudden starts and stops, splashing of vessel contents or wetting of flask closure.
 - Retains parameters during power failure and restarts unit automatically after power is restored.
 - Over-temperature safety feature with independent thermostat provides additional backup by controlling heat if main temperature controller fails.
 - Safety interlock stops platform motion when lid is opened.
 - 5 year warranty and 10 year on drive mechanism.
 - Also available with analog operating system.

Specifications

Speed range, rpm:

Temperature range: Operating time: Dimensions (L x W x H): Supply requirements: 15 to 500 \pm 1 rpm digital 40 to 400 \pm 1 rpm analog \pm 0.1°C accuracy at 37° 0.1 hour to 999 hours or 0.1 minute to 999 minutes 691mm x 358mm x 401mm 240V, 50/60 Hz

Description	Temp. range	Load max.	Amplitude	РК	Cat. No.
	°C	kg	mm		
Benchtop Incubated Shaker, mini analog	RT +5°C - 80°C	15.9	19.0	1	4.011 052
Benchtop Incubated Shaker with Cooling Coil, mini analog	RT +5°C - 80°C	15.9	19.0	1	4.011 053
Benchtop Incubated Shaker, digital	RT +5°C - 80°C	15.9	19.0	1	4.011 063
Benchtop Incubated Shaker with Cooling Coil, digital	RT +5°C - 80°C	15.9	19.0	1	4.011 064



4. Stirring, Shaking, Mixing Shakers and mixers/Incubator shakers

MaxQ 5000 Incubated and Refrigerated Floor Shakers, orbital

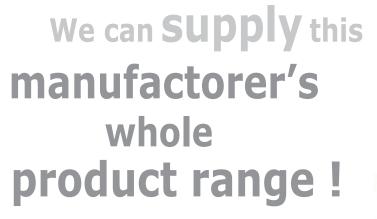
- Combines Incubated/Refrigerated Temperatures with an Orbital Shaker for Large Capacity Applications
- Spacious chamber holds four 6L flasks
- Wide temperature range, 10°C above ambient to 60°C on incubated models and 15°C below ambient to 60°C on refrigerated models
- Easy-access drain system with quick disconnect fitting permits easy clean up of spills
- Drip pan under platform contains spills
- Foot pedal opens lid for hands free operation
- Retractable foot casters allow easy positioning in the lab
- Observe flask contents without opening the door through a large viewing window
- Access ports for probes, thermocouples or sensors provided through side of cabinet wall
- Triple eccentric drive handles heavy loads, provides uniform agitation and continuous 24-hour operation, even at high speeds.
- View speed, operating time and temperature simultaneously on three individual LED displays.
- Unbalanced load sensor stops platform motion when excess vibration is detected and visual/audio alarms signal until condition is corrected.
- Soft start feature eliminates sudden starts and stops, splashing of vessel contents or wetting of flask closure.
- Retains parameters during power failure and restarts unit automatically after power is restored.
- Over-temperature safety feature with independent thermostat provides additional backup by controlling heat if main temperature controller fails.
- 5 year warranty and 10 year on drive mechanism.

Also available with analog operating system.

Specifications

Speed range, rpm: Temperature accuracy: Operating time: Dimensions (L x W x H): Supply requirements: 15 to 500 \pm 1rpm digital / 40 to 400 \pm 1rpm analog \pm 0.1°C accuracy at 37° 0.1 hour to 999 hours or 0.1 minute to 999 minutes 813mm x 1041mm x 1041mm 240V, 50/60 Hz

Description	Load max.	Amplitude	Temp. range	РК	Cat. No.
	kg	mm	°C		
Incubated Floor Shaker, analog	34.0	25.4	RT +10°C - 60°C	1	4.011 054
Incubated and Refrigerated Floor Shaker, analog	34.0	25.4	RT -15°C - 60°C	1	4.011 055
Incubated Floor Shaker, digital	34.0	25.4	RT +10°C - 60°C	1	4.011 065
Incubated and Refrigerated Floor Shaker, digital	34.0	25.4	RT -15°C - 60°C	1	4.011 066









Thermo Scientific

NEW

4. Stirring, Shaking, Mixing

Shakers and mixers/Incubator shakers



MaxQ 6000 Incubated and Refrigerated Stackable Shakers, orbital

- Available in incubated or refrigerated models.
- Units can be stacked two high on the floor with the stacking kit accessory.
- Two adjustable-height shelves provide added storage.
- Large viewing window and internal light offer sample visibility.
- View temperature, speed and time simultaneously on three individual displays.
- Door can be hinged from the right or left by the user for convenient placement in lab.
- Triple eccentric drive handles heavy loads, provides uniform agitation and continuous 24-hour operation, even at high speeds.
- Visual/audible alarms alert you to temperature deviations. Heat turns off if temperature deviates ±1°C of set point.
- Shaker shut down and visual/audible alarms signal if unit operates ±10% of set speed, preventing shaker from moving.
- Unbalanced load sensor stops platform motion when excess vibration is detected visual/audio alarms signal until condition is corrected.
- Soft start feature eliminates sudden starts and stops, splashing of vessel contents or wetting of flask closure.
- Retains parameters during power failure and restarts unit automatically after power is restored.
- Over-temperature safety feature with independent thermostat provides additional backup by controlling heat if main temperature controller fails.
- Safety interlock stops shaking motion when the door is open.
- 5 year warranty and 10 year on drive mechanism.

Specifications

Speed range:

Temperature Floor Shaker: Refrigerated Floor Shaker: Timer: Power supply Floor Shaker: Refrigerated Floor Shaker: Dimensions (L x W x H): 15rpm to 300rpm ±1rpm (stacked) 15rpm to 500rpm ±1rpm (unstacked) 10°C above ambient to 80°C

15°C below ambient to 80°C 0.1 hr. up to 999 hr. or 0.1 to 999 min.

240V 50/60Hz, 4.5A, 1100W 240V 50/60Hz, 7A, 1500W 838 x 699 x 1029 mm

Description	Load max.	Amplitude	РК	Cat. No.
	kg	mm		
Stackable Incubated Floor Shaker, digital	15.9	19.0	1	4.011 067
Stackable Incubated and Refrigerated Floor Shaker	15.9	19.0	1	4.011 068



2 Universal Platform for MaxQ Shaker

Thermo Scientific Description Dimensions PK Cat. No. cm Universal Platforms for MaxQ 2000/4450 28 x 33 4.009 327 1 Universal Platforms for MaxQ 2000 Universal Platforms for MaxQ2000/4000 and 6000 46 x 61 4.009 329 46 x 46 4.009 330 Universal Platforms for MaxQ 3000 76 x 46 4.009 331 Universal Platforms for MaxQ 3000/5000 76 x 46 4.010 227 Universal Platforms for MaxQ 3000 91 x 61 4.010 228



4. Stirring, Shaking, Mixing Shakers and mixers/Incubator shakers

(NEW!)

(NEW

1 Clamps for MaxQ Shaker (except MaxQ 8000)

		mo Scientific
Description	РК	Cat. No
Clamps for Microplate/Deep-well plate	1	4.009 340
Clamps for Erlenmeyer Flask 10ml	1	4.010 229
Clamps for Erlenmeyer Flask 25ml	1	4.009 332
Clamps for Erlenmeyer Flask 50ml	1	4.010 230
Clamps for Erlenmeyer Flask 125ml	1	4.009 333
Clamps for Erlenmeyer Flask 250ml	1	4.010 231
Clamps for Erlenmeyer Flask 300ml	1	4.009 334
Clamps for Erlenmeyer Flask 500ml	1	4.010 232
Clamps for Erlenmeyer Flask 1000ml	1	4.010 233
Clamps for Erlenmeyer Flask 2000ml	1	4.009 33
Clamps for Erlenmeyer Flask 4000ml	1	4.009 33
Clamps for Erlenmeyer Flask 6000ml	1	4.009 33
Clamps for Low Form Culture Flask 2500ml	1	4.009 33
Clamps for Fernbach Flask 2800ml	1	4.009 33



Racks for MaxQ Shaker

				Therm	no Scientific
Racks	Size	Description	Colour	РК	Cat. No.
for					
	mm				
Test Tube Racks - Full Size	10-13	6x12	red	1	4.010 234
Test Tube Racks - Full Size	14-16	6x12	orange	1	4.009 342
Test Tube Racks - Full Size	17-20	4x10	white	1	4.009 344
Test Tube Racks - Full Size	21-25	4x10	blue	1	4.009 346
Test Tube Racks - Full Size	26-30	3x8	green	1	4.009 348
Microcentrifuge, 1.5ml - Full Size		8x12	blue	1	4.009 350
Test Tube Racks - Half Size	10-13	6x6	red	1	4.009 341
Test Tube Racks - Half Size	14-16	6x6	red	1	4.009 343
Test Tube Racks - Half Size	17-20	4x5	white	1	4.009 345
Test Tube Racks - Half Size	21-25	4x5	blue	1	4.009 347
Test Tube Racks - Half Size	26-30	3x3	green	1	4.009 349
Microcentrifuge, 1.5ml - Half Size		4x6	white	1	4.009 351

Adhesive Flask Mat for MaxQ Shakers	NEW!	2
Our Adhesive Flask Mat is an alternative to flask clamps for securing odd shaped objects such as bottles, volumetric flasks and test tube racks to a shaker platform.	Thermo Scientific	
 Simply place the 23cm x 23cm Adhesive Flask Mat on an anodised aluminum or stainless steel secure the vessel to it. It will hold Erlenmeyer flasks as large as 4L that contain 2L of media at The mat is not suitable for use in water baths. Easy-to-view samples. The white background makes it easy to determine when to harvest you Simple to clean. Can be restored to like new condition by wiping with alcohol Long lasting. Months of use without losing adhesive properties 	speeds up to 250rpm.	

 Description
 PK
 Cat. No.

 Flask Mat 23cm x 23cm
 1
 4.009 506

4. Stirring, Shaking, Mixing Shakers and mixers/Incubator shakers

1 MaxQ 8000 Incubated and Refrigerated Stackable Shakers Can be Stacked Two to Three High on the Floor for Space Savings Thermo Scientific - Choose from two temperature ranges to fulfill a number of molecular biology applications. Thermo Scientific - HEPA filter ensures air inside the chamber remains clean and reduces cross contamination improving culturing conditions. Slide out platform provides convenient 100% sample access. - Slide out platform provides steel chamber with coved corners and built-in drain keeps spills within the work area

- and promotes easy cleaning. - Chamber is tall enough to accommodate 2L Erlenmeyer flasks.
- Top platform height is under 61.0 in. (154.9 cm) when units are stacked three high,
- ensuring ease-of-use and convenient accessibility.
- Easy to clean platforms are constructed of 5/16 in., heavy duty brushed anodized aluminum, which does not chip or rust.
- Large viewing window and internal xenon light allow sample visibility minimizing the need to open the chamber door.
- Electronic components and HEPA filter are easily accessed from the front of the unit, eliminating the need to move
 - the shaker during regular maintenance or service.
 - 5 year warranty and 10 year on drive mechanism.

For a complete system order:

1. Shaker, 2. Platform, 3. Clamps

Specifications Speed range:

Temperature range: Operating time: Dimensions (L x W x H): Supply requirements: speed ranges from 25rpm to 400rpm \pm 1rpm \pm 0.15°C 5 min. to 199 hours and 59 min. 605mm x 846mm x 300mm 240V, 50/60 Hz

Туре	Temp. range	Load max.	Amplitude	РК	Cat. No.
	°C	kg	mm		
MaxQ 8000 Incubated shaker	10°C above ambient to 60°C	16.1	25.4	1	4.011 070
MaxQ 8000 Refrigerated shaker	5°C or 20°C below ambient to 60°C	16.1	25.4	1	4.011 071

Universal Platform for MaxQ 8000		NEW!
	Therr	no Scientific
Description	РК	Cat. No.
Universal Platform without clamps, 75cm x 46cm	1	4.009 494

Clamps Starter Kit for Thermo Scientific MaxQ 8000 Stackable Orbital Shakers: Content: 2 brackets for 25ml Erlenmeyer flask 2 brackets for 50ml Erlenmeyer flask 2 clamps for 125ml Erlenmeyer flask 2 clips for 250/300ml Erlenmeyer flask 4 clamps for 500ml Erlenmeyer flask 2 brackets for 1L Erlenmeyer flask 2 brackets for 2L Erlenmeyer flask 1 spare parts pouch (screws)	Thermo Scientific
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Description	РК	Cat. No.
Clamps Starter Kit	1	4.009 441



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EQUIPMENT FOR:

LABORATORY

ANALYTIC

& PROCESS



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5. Sample preparation Contents

Sampling Samplers, Solids 477 + Samplers, Liquids 481	477
Grinding	487
Jaw breaker 487 + Mills 487 + Mortars 508	
Sieving	510
Sieve shakers 510 + Test sieves 514 + Sample divider 520	
Mixing, Homogenisation	522
Dispersers 522 + Ultrasonic homogenizers 532 + Homogenisers 541	