

4. Stirring, Shaking, Mixing

Shakers overview

Shakers Overview

Movement	Load capacity (kg)	Rotation speed (rpm)	Orbit (mm)	Variable speed range	IP class	Product	Cat. No.	Page
orbital, vibrating	0,1	2800	4,5	No	IP40	lab dancer, IKA	9.729 936	483
orbital, vibrating	0,1	0-4500	4,5	Yes	IP43	LLG-uniTEXER 1	6.263 490	483
orbital, vibrating	0,1	1000-2800	4,5	Yes	IP40	VORTEX 1, IKA	9.729 931	484
orbital, vibrating	0,1	300-1800	2	Yes	-	LLG-uniPLATESHAKER 1	6.263 488	522
orbital, vibrating	0,1	750-3000	4	Yes	-	Mini-Vortex Mixer PV-1, Grant	9.721 000	483
orbital, vibrating	0,15	1000, 2000, 3000	3,7	No	IP20	LLG-uniTEXER	6.261 826	485
orbital, vibrating	0,3	500-2500	4	Yes	IP21	VORTEX 3, IKA	9.729 950	487
orbital, vibrating	0,3	500-2850	-	Yes	-	Digital Vortex-Genie® 2, Scientific Industries	6.242 793	486
orbital, vibrating	0,3	600-2700	-	Yes	-	Vortex Genie® 2, Scientific Industries	9.730 060	486
orbital, vibrating	0,3	600-2700	-	Yes	-	Vortex-Genie® 2T, Scientific Industries	6.252 823	486
orbital, vibrating	0,4	500-2500	4	Yes	IP21	VORTEX 2, IKA	7.971 443	484
orbital, vibrating	0,5	0-3000	4,5	Yes	IP21	VORTEX 4 basic, IKA	9.729 932	484
orbital, vibrating	0,5	0-3000	4,5	Yes	IP21	VORTEX 4 digital, IKA	9.729 933	484
orbital, vibrating	0,5	0-3000	4,5	Yes	IP21	MS 3 basic, IKA	9.729 938	488
orbital, vibrating	0,5	0-3000	4,5	Yes	IP21	MS 3 digital, IKA	9.729 939	488
orbital, vibrating	2	0-2200	4	Yes	IP21	VXR basic, IKA	9.729 900	489
orbital, vibrating	2	200-950	-	Yes	-	Multi Vortex-Genie®, Scientific Industries	9.730 090	490
orbital, vibrating	8	20-250	20	Yes	-	PSU-20i, Grant	6.256 816	492
orbital	0,3	100-1200	3	Yes	-	Orbit™ P2, Labnet	9.595 328	522
orbital	0,6	100-1200	3	Yes	-	Orbit™ P4, Labnet	6.285 556	522
orbital	2	5-220	20	Yes	IP21	Orbital shaker KM CO2, Bühler	6.285 189	493
orbital	2	30-420	8	Yes	-	Combi shaker KL 2, Bühler	9.838 320	493
orbital	2	80-800	4	Yes	IP21	KS 130 basic, IKA	9.838 150	494
orbital	2,5	100-800	4	Yes	IP21	RS-OS 10, Phoenix Instrument	9.852 120	491
orbital	3	30-300	16	Yes	-	SSM1, Stuart	9.728 830	491
orbital	3	50-450	10	Yes	-	PSU-10i, Grant	9.721 019	490
orbital	4,5	20-300	19	Yes	-	Orbital shaker, Heathrow Scientific	6.270 566	492
orbital	7,5	100-500	4	Yes	IP21	RS-OS 20, Phoenix Instrument	9.852 121	491
orbital	7,5	10-500	10	Yes	IP21	KS 260 control, IKA	9.838 175	495
orbital	7,5	20-500	10	Yes	IP21	KS 260 basic, IKA	9.838 074	495
orbital	8	20-500	10	Yes	IP20	3005, GFL	9.837 905	496
orbital	10	30-300	16	Yes	IP31	SSL1, Stuart	9.728 840	494
orbital	15	0-300	30	Yes	IP21	KS 501 digital, IKA	6.285 448	499
orbital	15	20-300	30	Yes	IP20	3015, GFL	9.837 915	496
orbital	15	20-300	30	Yes	-	3017, GFL	9.837 917	496
orbital	25	50-500	25	Yes	-	LLG-uniSHAKER 25	6.263 590	500
orbital	30	20-250	32	Yes	-	3019, GFL	9.837 919	497
orbital	30	20-250	32	Yes	-	3020, GFL	9.837 920	497
reciprocating	7,5	100-350	10	Yes	IP21	RS-LS 20, Phoenix Instrument	9.852 123	502
reciprocating	8	20-300	20	Yes	IP20	3006, GFL	9.837 906	503
reciprocating	15	0-300	30	Yes	IP21	HS 501 digital, IKA	6.270 850	504
reciprocating	15	20-300	30	Yes	IP20	3016, GFL	9.837 916	504
tumbling	2	5-80	-	-	IP21	Rocker 2D basic, IKA	9.729 984	506
tumbling	2	5-80	-	-	IP21	Rocker 2D digital, IKA	9.729 985	506
tumbling	3	5-70	-	-	-	SSM4, Stuart	9.728 821	507
tumbling	5	1-99	-	Yes	IP20	PMR-100, Grant	9.721 015	508
tumbling	5	10-120	-	Yes	-	35 EZ, Labnet	6.283 296	506
tumbling	10	5-70	-	-	-	SSL4, Stuart	9.728 801	507
tumbling	0,5	5-30	-	-	-	PMR-30, Grant	9.721 011	508
tumbling	0,5	5-60	-	-	-	PS-3D, Grant	9.721 014	509
tumbling	1	1-100	22	Yes	-	PS-M3D, Grant	9.721 017	509
tumbling	1,6	20	-	-	-	LLG-uniSHAKER 2, LLG	6.263 640	508
tumbling	2	30	-	-	IP21	Rocker 3D basic, IKA	9.729 986	509
tumbling	2	5-80	-	-	IP21	Rocker 3D digital, IKA	9.729 987	509
tumbling	3	5-70	-	-	-	SSM3, Stuart	9.728 820	510
tumbling	10	5-70	-	-	-	SSL3, Stuart	9.728 800	510
overhead	0,4	10-40	-	-	-	RotoFlex™ Plus, Argos TechNologies	6.281 561	516
overhead	0,5	5-30	-	Yes	-	PTR-25, Grant	9.721 016	517
overhead	0,5	10-100	-	Yes	-	PTR-35, Grant	9.721 028	517
overhead	0,8	20	-	No	-	SB2, Stuart	9.645 322	519
overhead	0,8	2-40	-	Yes	-	SB3, Stuart	9.645 323	519
overhead	0,8	10-100	-	Yes	-	PTR-60, Grant	9.721 030	517
overhead	2	20	-	No	IP21	Trayster basic, IKA	9.837 870	517
overhead	2	5-80	-	Yes	IP21	Trayster digital, IKA	9.837 871	517
overhead	2	0-80	-	Yes	IP21	LLG-uniROTATOR 2	6.263 660	516
overhead	2	0-80	-	Yes	IP21	LLG-unio 2	6.263 665	519
overhead	8	6-60	-	-	-	STR4, Stuart	9.950 375	518
overhead	20	1-20	-	Yes	-	3040, GFL	9.837 931	517
rolling, rocking	2	30	24,5	No	IP21	Roller 6 basic, IKA	9.729 970	521
rolling, rocking	2	30	24,5	No	IP21	Roller 10 basic, IKA	9.729 972	521
rolling, rocking	2	5-80	24,5	Yes	IP21	Roller 6 digital, IKA	9.729 971	521
rolling, rocking	2	5-80	24,5	Yes	IP21	Roller 10 digital, IKA	9.729 973	521
rolling, rocking	5	33	16	No	IP20	SRT6, Stuart	9.728 810	520
rolling, rocking	5	33	16	No	IP20	SRT9, Stuart	9.728 812	520
rolling, rocking	5	5-60	16	Yes	IP20	SRT6D, Stuart	9.728 811	520
rolling, rocking	5	5-60	16	Yes	IP20	SRT9D, Stuart	9.728 813	520

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

1 Test tube shaker LLG-uniTEXER 1

Compact and cost-efficient test tube shaker with brushless motor drive and touch function for short-term operation.

Adjustable speed control up to 4500 rpm for excellent mixing results in a very short time. Especially for small volumes.

Specifications

Type of movement:	orbital
Orbit:	4.5 mm
Speed range:	0 to 4500 rpm
Permissible ambient temperature:	5 to 40 °C
Permissible relative moisture:	< 80 %
Dimensions (W x D x H):	100 x 100 x 70 mm
Weight:	0.55 kg
Power supply:	100-240 V, 50/60 Hz
Protection class:	IP 43
Warranty:	3 years

Type	PK	Cat. No.
LLG-uniTEXER 1 with EU-plug	1	6.263 490
LLG-uniTEXER 1 with UK-plug	1	6.263 491

1



2 Vortex mixer PV-1

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

- variable speed: 750 rpm to 3000 rpm
- continuous or touch operation
- for tubes up to 28.5 mm (50 ml) diameter

Specifications

Type of movement:	orbital
Orbit:	4 mm
Speed range:	750 to 3000 rpm
Dimensions (WxDxH):	90 x 150 x 80 mm
Temperature range:	4 to 40 °C

Type	PK	Cat. No.
PV-1	1	9.721 000

2

Grant



3 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 30 mm in diameter, e.g. test tubes, centrifuge tubes, Eppendorf tubes
- Fixed speed (2800 rpm)
- 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 12 V mains adapter

Specifications

Mixing:	orbital/vortex
Orbit:	4.5 mm
Capacity, volume:	1 tube, max. 50 ml
Motor rating input/output:	1.2/0.8 W
Speed:	2800 rpm (fixed)
Dimensions (Diam. x H):	100 x 70 mm
Weight:	550 g
Material housing:	PP
Material attachment:	TPU
Material base:	Zinc, coated
Enclosure according to DIN EN 60529:	IP 40
Supply requirements:	100-240 V 50/60 Hz
Tested to DIN EN IEC 61010-1.	

Type	PK	Cat. No.
lab dancer EU/CH	1	9.729 936
lab dancer UK	1	4.008 065

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

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1 Shaker VORTEX 1

Test tube shaker with infinitely adjustable speed range. Specially for mixing small sample volumes with touch function.

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Specifications

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

Type	PK	Cat. No.
VORTEX 1	1	9.729 931

2



2 Shaker VORTEX 2

Vortex shaker especially for short time operation (Touch function) or continuous operation.

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Specifications

Type of movement:	orbital/vortex
Orbital diameter:	4 mm
Max. shaken quantity:	400 g
Motor rating input/output:	39/9 W
Speed range:	500 to 2500 rpm
Dimensions (W x H x D):	120 x 138 x 140 mm
Weight:	3.9 kg
Enclosure according to DIN EN 60529:	IP 21

Type	PK	Cat. No.
VORTEX 2	1	7.971 443

3



9.729 932

Shaker VORTEX 4 basic/digital

Compact, universal small shaker suitable for shaking tasks with small vessels and microtiter plates

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Specifications

Type of movement:	orbital/vortex
Orbital diameter:	4.5 mm
Max. permitted shaking weight (incl. attachment)	0.5 kg
Motor rating input/output:	10/8 W
Speed range:	0 to 3000 rpm
Timer:	only for VORTEX 4 digital (1 sec. - 999 min)
Dimensions (W x H x D):	176 x 190 x 63 mm
Weight:	3.0 kg
Enclosure according to DIN EN 60529:	IP 21

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9.729 933

Type	PK	Cat. No.
VORTEX 4 basic	1	9.729 932
VORTEX 4 digital	1	9.729 933

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

1 2 3 4 Vortexer LLG-uniTEXER with universal attachment

One head - multiple uses

Vortexer with single carrier head, accommodating the most popular consumables and tubes:
for 1 x assay plate, 2 x 50 ml conical tubes, 2 x 15 ml conical tubes, 2 x 5 ml conical tubes, 4 x 1.5/2 ml microcentrifuge tubes, 6 x 0.5 ml and 24 x 0.2 ml microcentrifuge tubes.

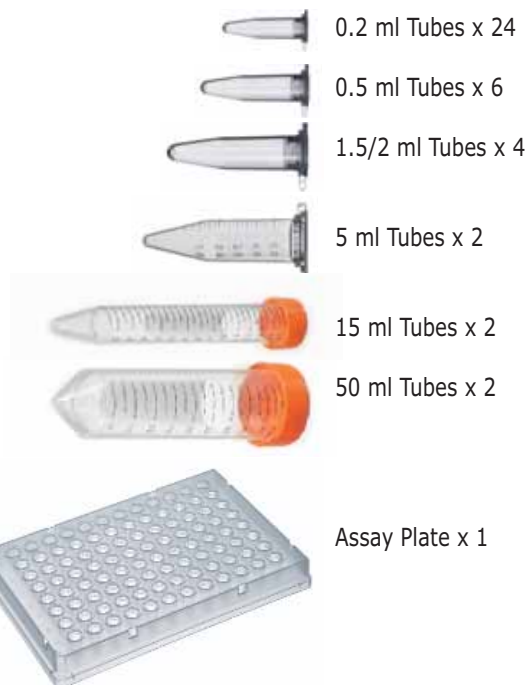
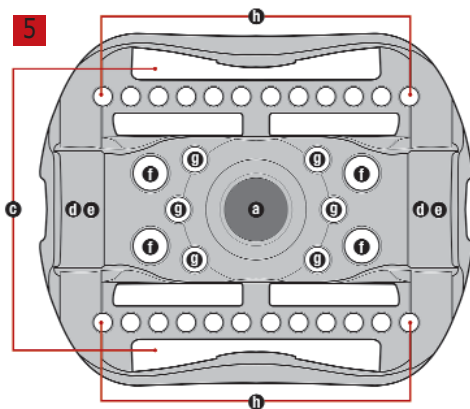
- Touch function for short-term operation
- Very easy to clean
- Elastomeric feet ensure excellent stability on the bench
- Modern design
- Robust housing made of ABS

Specifications

Type of movement:	orbital/vortex
Orbital diameter:	3.7 mm
Speed:	1000, 2000 und 3000 rpm
Dimensions (W x D x H):	173 x 198 x 198 mm
Weight:	3.8 kg
Power supply:	220 V, 50/60 Hz
Protection class:	IP 20
Warranty:	3 years



Type	PK	Cat. No.
LLG-uniTEXER	1	6.261 826



5 Mixing head with multiple loading possibilities

a	Center pad area for hand held mixing
b	Assay plate x 1 (to be used with retention cords)
c	50 ml conical tubes x 2 (horizontally mounted)
d	15 ml conical tubes x 2 (horizontally mounted)
e	5 ml tubes x 2 (horizontally mounted in the same retention space as 15 ml)
f	1.5/2 ml microfuge tubes x 4 (vertically mounted)
g	0.5 ml microfuge tubes x 6 (vertically mounted)
h	0.2 ml microfuge tubes (strip tubes) x 24 (vertically mounted)

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

GENERAL CATALOGUE EDITION 20

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1 Vortex-Genie®-series

Robust and reliable shakers for speedy mixing and shaking of samples. Multiple accessories: e.g. adapter tops for test tubes, beakers, centrifuge tubes etc. Adapter tops can be changed easily with the snap fit system.

Scientific Industries

Vortex-Genie® 2: Variable speed for precise mixing from gentle to vigorous. Broad range of attachments for most tubes, plates and other containers. Hands-Free or Touch On control.

Vortex-Genie® 2T with an integrated timer: Timer function: (Touch On) 1-60 seconds, (Hands-Free) 1-60 minutes or continuous. Unit automatically stops at the end of user programmed time.

Digital Vortex-Genie® 2 with digital control and display of speed and time: Digital display provides accuracy, reproducibility and repeatability. Timer function: (Touch On) 1-99 seconds, (Hands-Free) 1-99 minutes or continuous. Specially configured unit for Applied Biosystems protocol available.

Vortex Genie® Pulse: Fully programmable vortex mixer with ON/OFF feature. Pulse 0.1 sec to 99 min.

Specifications

Shaking movement:
Speed display/Timer:
Speed range:
Timer
Interval operation:
Hands-free mode:
Dimensions (L x W x H):
Permissible ambient conditions:
Weight:
Power supply:

Vortex-Genie® 2 / Vortex-Genie® 2T / Digital Vortex-Genie® 2 / Vortex Genie® Pulse

orbital
Scale/No / Scale/Scale / Digital/Digital
600-2700 rpm/600-2700 rpm/500-2850 rpm/500-2850 rpm
-/ 1 to 60 s/1 to 99 s/0.1 s to 99 min
-/ 1 to 60 min/1 to 99 min/1 to 99 min
165 x 122 x 165 mm
0 to 38 °C at 95 % rh
4 kg
230 V, 50/60 Hz

Type	Connector	PK	Cat. No.
Vortex Genie® 2	EU	1	9.730 060
Vortex Genie® 2	UK	1	6.251 939
Vortex Genie® 2	CH	1	6.235 684
Vortex-Genie® 2T	EU	1	6.252 823
Vortex-Genie® 2T	UK	1	6.252 946
Vortex-Genie® 2T	CH	1	9.730 121
Digital Vortex-Genie® 2	EU	1	6.242 793
Digital Vortex-Genie® 2	UK	1	9.730 120
Digital Vortex-Genie® 2	CH	1	6.240 599
Vortex Genie® Pulse	EU	1	6.287 671
Vortex Genie® Pulse	UK	1	6.287 674
Vortex Genie® Pulse	CH	1	6.287 675

Accessories for Vortex-Genie®-series

Scientific Industries

Description	PK	Cat. No.
Standard shaking attachment, diam. 25 mm	1	9.730 051
Microtube holder for 12 x 1.5 or 2.0 ml tubes	1	6.253 281
TurboMix® attachment	1	7.400 045
Recessed platform	1	7.301 382 3
Elastic bands for recessed platform	2	6.235 226
Foam inserts for 9-16 mm tubes, for recessed platform	2	7.510 295
Platform (diam. 150 mm)	1	7.091 220
Foam inserts for microtubes, for platform (diam. 150 mm)	2	6.252 944 4
Foam inserts for microplates, for platform (diam. 150 mm)	1	9.730 058
Platform (diam. 75 mm) with rubber cover	1	6.254 016
Spare rubber cover (diam. 75 mm)	1	9.730 053
Attachment, horizontal, for 24 microtubes	1	6.252 814 5
Attachment, horizontal, for 12 x 15 ml tubes	1	7.970 740
Attachment, vertical, for 6 x 50 ml tubes	1	6.252 942
Attachment, vertical, for 24 microtubes	1	6.257 992
Attachment, vertical, for 6 x 50 ml, 6 x 15 ml and 12 x microtubes	1	7.930 215
High speed attachment, vertical, for 3 x 50 ml tubes	1	6.259 054 2



6.259 054



7.301 382



6.252 944



6.252 814

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

1 Shaker Vortex 3

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

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- Wide speed range, infinitely adjustable
- Versatile, due to 3 accessory interchangeable attachments and 7 inserts (e.g. Eppendorf tubes, microtitre plates, 250 ml Erlenmeyer flasks etc.), please order separately
- Attachments securely click onto shaker in any position
- Strap clamp (VG 3.36) 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

Supplied with standard attachment.

Specifications

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

Type	PK	Cat. No.
VORTEX 3 EU	1	9.729 950
VORTEX 3 CH	1	4.008 062
VORTEX 3 UK	1	4.008 061

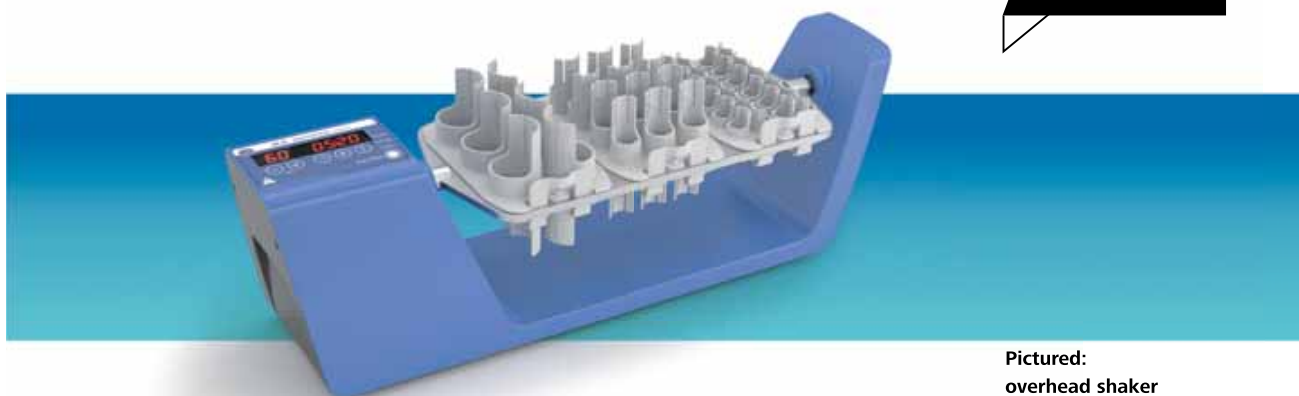
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designed for scientists

Gentle, yet efficient

/// Shakers by IKA

IDEAL FOR
BIOLOGICAL SAMPLES



Pictured:
overhead shaker
Trayster digital



Clear display of
time and speed.



Various applications are possible
thanks to **different attachments**
and **inserts**.

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

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9.729 951

Accessories for shaker Vortex 3

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

*included in delivery

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9.729 938

Shaker MS3 basic/digital

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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 3000 rpm is only attained with the standard attachment in touch mode. When using other attachments the speed is limited to 1300 rpm.

Mode B (without attachment detection)

a speed of 3000 rpm is possible with all attachments.

- Stable in all speed ranges
- Sturdy, zinc, die-cast casing

MS 3 digital additionally with countdown function timer (1 sec to 999 min).

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 12 mm diameter tubes

Specifications:

Type of movement:	orbital
Orbit:	4.5 mm
Max. permitted shaking weight (incl. attachment):	0.5 kg
Motor rating input/output:	10/8 W
Speed display:	Scale
Speed range:	0 to 3000 rpm
Dimensions (W x D x H):	148 x 205 x 63 mm
Weight:	2.9 kg
Protection class acc. to DIN EN 60529:	IP 21
Supply requirements:	100-240 V, 50/60 Hz
Tested to DIN EN IEC 61010-1.	

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9.729 939

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

4



9.729 942

Accessories for Shaker MS 3

IKA

Type	Description	PK	Cat. No.
MS 3.1	Standard attachment	1	9.729 942
MS 3.4	Microtitre plate attachment	1	9.729 943
MS 3.5	PCR attachment	1	6.237 469

➔ Microplate shakers please see page 522.

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

1 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

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Please order the required shaker attachment separately.

Specifications:

Shaking motion:	Orbital
Orbit:	4 mm
Motor rating input/output:	35/13.2 W
Speed range:	0 to 2200 rpm
Dimensions (W x D x H):	157 x 247 x 130 mm
Weight (without attachment):	6.1 kg
Max. loading:	2 kg
Protection class DIN EN 60529:	IP 21
Supply requirements:	230 V, 50/60 Hz
Tested to DIN EN IEC 61010-1.	

Type	PK	Cat. No.
VXR basic	1	9.729 900
VXR basic UK	1	6.202 467

Optional accessories: Attachments: 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, VXR basic Vibrax®, accessory attachments

VX 1 one-hand attachment:

For shaking single vessels 1 ml to 250 ml.

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9.729 901

VX 2 test tube attachment:

For up to 36 test tubes or centrifugal tubes with a diam.of 16 mm.

VX 2E "Eppendorf" attachment:

For shaking of max. 64 "Eppendorf" tubes (1.5 ml).

Type	Width mm	Depth mm	Height mm	PK	Cat. No.
VX 1	130	135	40	1	9.729 901
VX 2	140	145	115	1	9.729 902
VX 2E	210	210	65	1	9.729 914



9.729 902

Accessories for Shaker VXR basic Vibrax®

VX 11 Basic holder:

Attachment for test tube inserts.

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6.231 284

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.

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



9.729 915

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

GENERAL CATALOGUE EDITION 20



1 Shaker Multi Vortex Genie®

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

Scientific Industries

- Digital display for speed and time
- Speed increase in steps of 10 rpm
- 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 250 ml or 2 multi racks each for 12 test tubes (max. tube diameter 29 mm, length min. 85 mm)
- 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

Type of movement:	vibrating
Dimensions (W x D x H):	310 x 270 x 195 mm
Weight:	11.3 kg
Supply requirements:	230 V, 50 Hz
Speed range:	200 rpm to 950 rpm

Type	Connector	PK	Cat. No.
Multi Vortex-Genie®	EU	1	9.730 090
Multi Vortex-Genie®	UK	1	6.265 221
Multi Vortex-Genie®	CH	1	6.265 222



2 Orbital Shaker PSU-10i

Microprocessor controlled shaking platform providing smooth and quiet horizontal orbital motion for mixing in bottles, flasks and beakers.

Grant

- Continuous or timed operation with automatic switch-off
- Reliable direct drive system
- Automatic load balancing system
- The five interchangeable accessory platforms enable a wide choice of vessels to be used, including bottles, flasks and beakers, dishes, boxes and petri-dishes.

Specifications

Type of movement:	orbital
Orbit:	10 mm
Max. Load:	3 kg
Speed range:	50 to 450 rpm / 10 rpm increments
Timer range:	1 min to 96 hours or continuous
Overall dimensions (W x D x H):	220 x 205 x 90 mm
Power supply:	100-240 V, 50/60 Hz

Type	Max. Load kg	PK	Cat. No.
PSU-10i	3.0	1	9.721 019



9.721 021

Accessories for Orbital shaking platform PSU-10i

Grant

Type	Description	PK	Cat. No.
Bio PP-4	Flat platform, working area 230 x 230 mm	1	9.721 018
PUP-12	Universal platform, working area 270 x 195 mm	1	9.721 021
P12-100	Platform with clamps for 12 x 100 ml flasks / 150 ml beakers	1	9.721 023
P6-250	Platform with clamps for 6 x 250 ml flasks / 300 ml beakers	1	9.721 024
P16-88	Platform with spring holders for 88 tubes up to 30 mm	1	9.721 049

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

1 Orbital shaker RS-OS series

A compact, orbital shaker with ideal swivel motion. The shakers can be set up individually by using the comprehensive range of accessories.

Phoenix Instrument

Features at a glance RS-OS 10/20:

- compact shaker for a maximum shaking weight of 2.5 and 7.5 kg
- Backlight LCD display for speed and timer adjustment.
- Speed, time and operating mode can be viewed simultaneously
- Comprehensive accessories
- Electronic time switching clock: control time or continuous operation mode
- PC control via RS232 interface, the special Shaker PC software can realise the setting of instrument parameters on the PC and the display of working curves real-time.
- 2 years warranty

Please order attachments and further accessories separately.

Specifications

Type of movement:	orbital
Orbit:	4 mm
Speed range:	100 to 800 rpm
Max. Load RS-OS10/ RS-OS 20:	2.5kg/7.5 kg
Voltage:	100 to 240 VAC, 50/60 Hz
Power consumption:	30 W
Speed display:	digital
Interface:	RS 232
Platform dimensions (W x D):	240 x 240 mm
Overall dimensions (W x D x H):	340 x 300 x 100 mm
Housing IP rating	IP 21

Type	Dimensions mm	Rotation speed rpm	Max. Load kg	Weight kg	PK	Cat. No.
RS-OS 10	340 x 300 x 100	100-800	2.5	8.1	1	9.852 120
RS-OS 20	420 x 370 x 100	100-500	7.5	13.5	1	9.852 121



2 Accessories linear and orbital shaker RS-OS/RS-LR series

Phoenix Instrument

Type	Description	PK	Cat. No.
RSS-E 100	universal attachment with clamping rolls for OS/LS 10	1	9.852 125
RSS-E 110	universal attachment with vertical adjustable clamping rolls for OS/LS 10	1	9.852 127
RSS-E 200	universal attachment with clamping rolls for OS/LS 20	1	9.852 129
RSS-E 220	dish attachment with tensioning belt for OS/LS 20	1	9.852 146



Orbital shaker SSM1

- Smooth orbital shaking action
- Built-in digital timer
- Variable speed control 30 to 300rpm
- Supplied with non-slip mat for microplates etc.
- Optional accessory cradle system for flasks and bottles

Stuart

The compact SSM1 provides a smooth uniform circular motion with an orbit of 16mm. It is supplied with a non-slip mat that can hold up to four microplates or diagnostic cards. Alternatively, an accessory cradle system is available that can accommodate a variety of vessels including flasks, bottles or beakers via four rubber securing bars. It will hold up to: 4 x 250 ml or 2 x 500 ml or 1 x 1000 ml Erlenmeyer Flasks or bottles.

Speed is variable from 30 rpm to 300 rpm. Once set on the digital display, the shaking speed is effectively maintained even over long periods of time. Shaking times can be set to run for 1 second to 9 hours on the built-in digital timer, or the unit can also be set for continuous operation. With BioCote, silver-based, antimicrobial protection.

Specifications

Type of movement:	orbital
Orbit:	16 mm
Speed range:	30 to 300 rpm
Max. Load:	3 kg
Platform dimensions (W x D):	220 x 220 mm
Overall dimensions (W x D x H):	240 x 300 x 140 mm
Net weight:	5 kg
Supply requirement:	230 V, 50 Hz, 50 W

Type	Description	Max. Load kg	PK	Cat. No.
SSM1	Shaker, orbital, mini	3.0	1	9.728 830
SSM1/1	Accessory cradle with 4 securing bars		1	9.728 831

Attachments are not included. - Please order separately.



9.728 830



9.728 831

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



1 Digital Orbital Shaker

NEW

Heathrow Scientific

- Electronically controlled and programmable shakers
- Slow, soft-start greatly decreases the risk of spills
- Erlenmeyer flasks, beakers, culture flasks and micro plates can easily be fixed using 8 rubber strips
- Digital LCD display for speed and run time control
- Integrated overload shutdown
- Permanent motor feedback, which automatically adjusts the speed even if the load is changed during operation
- Continuous mode or timer for up to 49 hours
- Soft rubber feet minimise system movement
- Platform with non-slip surface

Platform capacity:

Erlenmeyer Flasks e.g.: 25 ml x 50 ml, 16 ml x 125 ml, 9 ml x 250 ml, 4 ml x 500 ml, 4 ml x 1000 ml, 1 ml x 2000 ml

Beakers e.g.: 36 ml x 50 ml, 25 ml x 100 ml, 16 ml x 250 ml, 9 ml x 400 ml, 4 ml x 1000 ml

Deep well assay plates e.g.: 6 x standard (more if stacking is an option)

Supplied with: Orbital Shaker incl. universal attachment, universal power supply, non-slip rubber mat and 8 elastic ties

Specifications

Type of movement:	orbital
Orbit:	19.0 mm
Speed range:	20 to 300 rpm (adjustable) / 1 rpm increments
Max. Load:	4.5 kg
Timer range:	0 to 49 hours / 1 second increments
Speed display:	digital
Ambient conditions:	4 to 40 °C; 20 % to 80 % RH, non-condensing
Platform interior dimensions:	279 x 279 mm
Overall dimensions (W x D x H):	314 x 310 x 197 mm
Weight:	8.2 kg
Power supply:	100 to 240 V, 50/60 Hz

Description	PK	Cat. No.
Digital Orbital Shaker	1	6.270 566



2 Orbital Shaker PSU-20i

Grant

Powerful and efficient microprocessor controlled, multi-functional orbital shaker **providing all that is required to mix your samples: rotation, reciprocation and vibration.** This enables optimisation of the mixing whether in flasks, beakers, Petri dishes or other laboratory vessels.

- Orbital motion, orbital reciprocation and vibration functions all in one product
- Reciprocal rotation: 0 to 360° turning angle, in 30 degree steps
- Vibration: 0 to 5° turning angle, 1 degree steps
- Loading capacity: 8 kg
- Fully programmable sequence that can use one or all the functions
- 6 interchangeable platforms for vessels up to 1000 ml including a multi-level platform to hold a large number of various microplates, Petri dishes and culture bags.

Specifications

Type of movement:	orbital/reciprocal/vortex
Orbit:	20 mm/0 to 360°/0 to 5°
Speed range:	20 to 250 rpm
Max. Load:	8 kg
Timer:	1 min to 96 h
Permissible ambient temperature:	4 to 40 °C
Dimensions (W x D x H):	410 x 410 x 130 mm
Weight:	13 kg
Power supply:	240 V, 50/60 Hz

Type	Max. Load kg	PK	Cat. No.
PSU-20i	8.0	1	6.256 816

Accessories for Orbital shaker PSU-20i

Grant



9.721 063

Type	Description	PK	Cat. No.
PUP-330	Universal platform with adjustable bars	1	9.721 081
PP-20	Flat platform with non-slip mat, 480 x 380 mm	1	6.256 809
P30-100	Platform with clamps for 30 x 100 ml flasks	1	9.721 061
P16-250	Platform with clamps for 16 x 250 ml flasks	1	9.721 062
P9-500	Platform with clamps for 9 x 500 ml flasks	1	9.721 063
P6-1000	Platform with clamps for 6 x 1000 ml flasks	1	9.721 064

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

Orbital shaker KM CO₂/KM 2

NEW

1

KM CO₂: Stainless Steel Shaker especially for incubators with CO₂ concentration.
Scope of supply: Shaker incl. basic platform with rubber mat and external control unit.

KM 2: Highly reliable shaker which requires little space.
Scope of supply: Basic device incl. basic platform and rubber mat.

Type of movement:	orbital
Orbit:	20 mm
Speed range:	5 to 220 rpm, in steps of 5
Max. Load:	2 kg
CO ₂ concentration:	20 %
Timer:	0 to 99 h 59 min/continuous
Power consumption:	4 W
Permissible ambient temperature:	4 to 45 °C
Power supply:	100-240 V, 50/60 Hz
Protection class:	IP 21

Bühler



6.285 189

2



9.838 140

Type	Dimensions (W x D x H) mm	Weight kg	PK	Cat. No.
Orbital shaker KM CO ₂	230 x 340 x 145	7.6	1	6.285 189
Orbital shaker KM 2	250 x 415 x 145	8.1	1	9.838 140

Accessories for Orbital shaker KM CO₂/KM 2

NEW

3

Description	PK	Cat. No.
Universal tray KM Mini for KM 2 (without spring clamps)	1	6.070 276
Universal tray KM (without spring clamps)	1	6.900 348
Clamping strips KM	1	6.070 277

Bühler



6.900 348

4 Komto shaker KL 2

NEW

4

Mini shaker which can be switched between orbital and reciprocating motions.
Includes flask attachment system with 3 clamping rollers. Versatile, for use in medical diagnostics, haematology, for cell cultivation or analysis.

Scope of supply: Shaker and accessory platform with 3 clamping rollers and anti-slip mat.

Speed range:	30 to 420 rpm. with stepless electronic adjustment
Orbit or stroke:	8 mm
Max. loading:	2 kg
Platform (W x D):	300 x 300 mm
Overall (W x D x H):	355 x 455 x 195 mm
Weight:	13.5 kg
Supply requirements:	230 V, 50/60 Hz, 125 W.

Bühler



Type	PK	Cat. No.
Komto shaker KL 2	1	9.838 320

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



9.728 840

Orbital shakers SSL1

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

Stuart

This lab scale platform shaker has powerful yet quiet shaking mechanisms and has been designed for trouble-free, continuous use. The cradle type platforms have four 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 250 ml or 9 x 500 ml or 6 x 1000 ml or 2 x 2000 ml. 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.

Specifications

Type of movement:	orbital
Orbit:	16 mm
Speed range:	30 to 300 rpm
Max. Load:	10 kg
Timer:	1 to 999 min
Power consumption:	50 W
Working temperature:	4 to 40 °C
Platform dimensions (W x D):	335 x 335 mm
Overall dimensions (W x D x H):	360 x 420 x 270 mm
Net weight:	11 kg
Supply requirements:	230 V, 50 Hz

Type	Description	Max. Load kg	PK	Cat. No.
SSL1	Shaker, orbital, large platform	10.0	1	9.728 840
SSL1/1	Accessory platform 510 x 510 mm with 6 rubber securing bars		1	9.728 842
SSL1/2	Accessory flat platform 350 x 350 mm without cradle		1	9.728 843



Orbital shaker, KS 130 basic/ Package

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

IKA

- 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.

Package includes: KS 130 basic, adhesive mat STICKMAX, AS 130.3 Dish attachment
KS 130 control available on request.

Specifications

Type of movement:	orbital
Orbit:	4 mm
Max. Load (incl. attachment):	2 kg
Motor rating input/output:	45 /10 W
Speed range:	80 to 800 rpm
Speed indication:	LED scale bar
Timer:	5 to 50 min/continuous
Dimensions (W x D x H):	270 x 316 x 98 mm
Weight:	8.8 kg
Housing IP rating to DIN EN 60529:	IP 21
Power supply:	230 V, 50/60 Hz
Tested to DIN EN IEC 61010-1.	



Type	Max. Load kg	PK	Cat. No.
KS 130 basic	2.0	1	9.838 150
KS 130 basic Package (incl. adhesive mat STICKMAX, AS 130.3 Dish attachment)	2.0	1	9.838 151

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

Orbital shaker, KS260 control/ Package

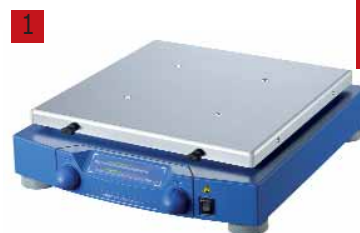
Compact, low-level, platform shaker with highly effective, orbital motion, maximum capacity 7.5 kg.

IKA

- 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

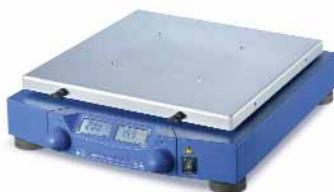
Type of movement:	orbital
Orbit:	10 mm
Max. Load (incl. attachment):	7.5 kg
Motor rating input/output:	45/10 W
Speed range KS 260 basic/KS 260 control:	20 to 500 rpm/10 to 500 rpm
Speed indication KS 260 basic/KS 260 control:	LED/digital
Timer KS 260 basic/KS 260 control:	5 to 50 min/continuous/1 to 599 min/continuous
Dimensions (W x D x H):	360 x 420 x 98 mm
Weight KS 260 basic/KS 260 control:	8.5 kg/8.8 kg
Housing IP rating to DIN EN 60529:	IP 21
Interface:	RS 232/analogue
Supply requirements:	230 V, 50/60 Hz
Tested to DIN EN IEC 61010-1.	



9.838 074



9.838 075



9.838 175



9.838 176

Type	Max. Load kg	PK	Cat. No.
KS 260 basic	7.5	1	9.838 074 1
KS 260 basic Package (incl. 2 x STICKMAX, AS 260.3 Dish attachment)	7.5	1	9.838 075 2
KS260 control	7.5	1	9.838 175 3
KS 260 control Package (incl. 2 x STICKMAX, AS 260.3 Dish attachment)	7.5	1	9.838 176 4

5 Accessories for orbital and reciprocating shakers

Clamps for orbital shakers Ika KS 130 basic/control, KS 260 basic/control and reciprocating shakers Ika HS 260 basic/control, HS 501 digital, KS 501 digital, KS 4000 i/ic control.

IKA

Type	For volume ml	PK	Cat. No.
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
AS 2.5	500	1	9.838 095



➔ Accessories for KS260 can be found in our webshop.

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

GENERAL CATALOGUE EDITION 20



1 2 Shakers, 3000 series

Housing made of high impact strength polystyrene, finished in off-white. 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 maintenance-free and have the CE mark. Analogue control models (1) GFL

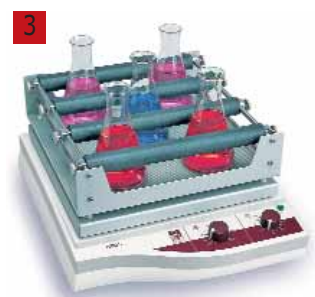
3005/3006/3015/3016/3019/3023.

Timer for operations up to 60min. and continuous operation. Digital control models (2)

3017/3018/3020.

Microprocessor controlled, with interface RS 232. Timer: 1 min. up to 99:59 h or continuous operation. Speed and remaining time indicated by two LCD readouts.

The following shaker types are available: Orbital shakers, reciprocating shakers, rocking shakers, tumbling shakers and overhead shakers. Please see the different motion types of the 3000 series shakers in the relevant chapters.



3 Orbital shaker 3005

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. GFL

Specifications

Type of movement:	orbital
Orbit:	10 mm
Speed range:	20 rpm to 500 rpm
Max. Load:	max. 8 kg
Platform (W x D):	330 x 330 mm
Dimensions (W x D x H):	380 x 510 x 140 mm
Supply requirements:	230 V, 50/60 Hz, 65 W
Net/Gross weight:	10 kg / 12 kg
Timer:	up to 60 min or continuous operation

Type	Max. Load kg	PK	Cat. No.
3005	8.0	1	9.837 905



4 Orbital shakers 3015 and 3017

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. GFL

Specifications

Type of movement:	orbital
Orbit:	30 mm
Speed range:	20 to 300 rpm
Max. Load:	15 kg
Platform (W x D):	450 x 450 mm
Overall (W x D x H):	510 x 625 x 142 mm
Supply requirements	
3015:	230 V, 50/60Hz, 65 W
3017:	230 V, 50 or 60Hz, 65 W*
Net/gross weight:	18/22 kg
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

Type	Max. Load kg	PK	Cat. No.
3015	15.0	1	9.837 915
3017**	15.0	1	9.837 917

* Please specify when placing your order!

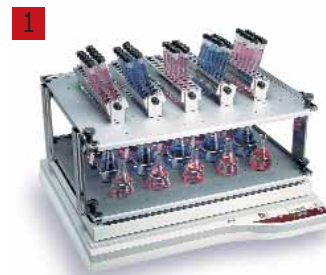
**Speed and remaining time indicated by 2 LC-displays.

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

1 Orbital shakers 3019 and 3020

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)

GFL



Specifications

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

Type	Max. Load kg	PK	Cat. No.
3019	30.0	1	9.837 919
3020**	30.0	1	9.837 920

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

2 Shaking Trays

Made of stainless steel with holes to accommodate clamps for Erlenmeyer flasks and other accessory equipment.

GFL



Type 3950: for Shakers 3005 and 3006.

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

Type	For Type	PK	Cat. No.
3966	3031 / 3011 to 3018	1	9.837 936
3950	3005 / 3006	1	9.837 972
3980	3019 / 3020 / 3033	1	9.837 980

3 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).

GFL



Type	For flasks ml	Clips required			PK	Cat. No.
		shaker Model 3005, 3006	shaker Model 3011 to 3018	shaker Model 3019, 3020		
3983	25	45	79	99	1	9.837 983
3984	50	25	49	99	1	9.837 984
3985	100	16	36	50	1	9.837 985
3986	200	12	22	26	1	9.837 986
3987	250-300	9	16	26	1	9.837 987
3988	500	9	12	26	1	9.837 988
3989	1000	4	9	12	1	9.837 989
3990	2000	2	4	9	1	9.837 991

Other clamps on request

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

GENERAL CATALOGUE EDITION 20

1



1 Test tube rack

For **Shakers 3005 and 3006, 3015 to 3020 and Shaking Incubator 3031 (Tray 3966), 3032 (Tray 3970/3 racks) and 3033 (Tray 3980)**.
Stainless steel, for max. 24 test tubes, 12mm to 17mm diameter, perforated section can be tilted by 90°, with clamping springs for secure grip and silent shaking of tubes. For screwing onto **shaking trays 3950, 3966 and 3980**. GFL

For trays:	Number of racks:
3950	3
3966	6
3980	9

Type	PK	Cat. No.
3953	1	9.837 974

2



2 Clamps for Separating Funnels

Stainless steel, for screwing onto base trays 3950 and 3966. GFL

Type	Capacity ml	Max. clips per platform	Neck width	PK	Cat. No.
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 (ISO / Squibb / conical)	1	9.837 970
3956	500	3 / 6	29 / 32 (ISO / Squibb)	1	9.837 978

Other clamps on request

3



3 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**. GFL

Type	For Type	Width mm	Length mm	PK	Cat. No.
3951	3005 / 3006	300	300	1	9.837 971
3965	3011 - 3018 / 3031	420	420	1	9.837 935

4



4 Universal Mounts

For secure attachment of various shaking vessels. GFL
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.

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

5



5 Rack Frame

For **Shakers 3019/3020**. GFL
For doubling the capacity by accommodating 2 **shaking trays 3980**. Distance between trays 205 mm. The bottom tray can be loaded with flasks up to a max. of 500 ml.

Type	For Type	PK	Cat. No.
3981	3019 / 3020	1	9.837 981

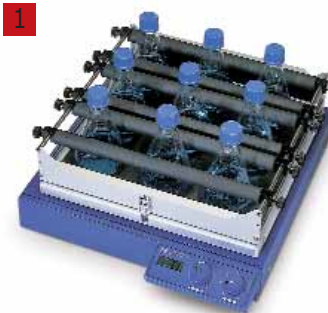
4. Stirring, Shaking, Mixing Shakers and mixers/Orbital shakers

1 Orbital shaker KS501 digital

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

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

IKA



Specifications

Type of movement:	orbital
Orbit:	30 mm
Max. Load (incl. attachment):	15 kg
Motor rating input/output:	70/19 W
Speed range:	0 to 300 rpm
Timer:	0 to 56 min./continuous
Interface:	RS 232
Dimensions (W x D x H):	505 x 585 x 120 mm
Weight (without attachment):	26 kg
Protection class acc. to DIN EN 60529:	IP 21
Supply requirements:	230 V, 50/60 Hz
Tested to DIN EN IEC 61010-1.	

Type	PK	Cat. No.
KS 501 digital	1	6.285 448

Optional accessories: Shaking attachments: AS 501.1, AS 501.4, AS 501.5, Non-slip mat STICKMAX

Shakers, KS/HS501 digital, accessories

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

IKA

AS 501.1 Universal attachment

For a variety of vessels (flasks, beakers etc.) with volumes of at least 50 ml (ideally greater than 250 ml). With tension rollers that can be mounted on 2 levels. Usable area: 420 mm x 420 mm. Dimensions (W x D x H) 480 mm x 500 mm x 120 mm.

AS 501.4 Gridded clip attachment

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

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

AS 501.5 Dish attachment

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) 450 mm x 450 mm x 45 mm, weight 1120 g. 4 clamping devices with rod AS 1.7. Suitable for 4 x 500 ml, 3 x 1000 ml or 2 x 2000 ml separating funnels.

Further accessories on request.

Type	Description	PK	Cat. No.
AS 501.1	Universal attachment	1	9.838 046
AS 501.4	Gridded clip attachment*	1	9.838 050
AS 501.5	Dish attachment	1	9.838 049

* 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.

2



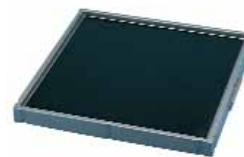
9.838 046

3



9.838 050

4



9.838 049

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

GENERAL CATALOGUE EDITION 20

1



1 2 Orbital shaker LLG-uniSHAKER 25

Powerful, smooth running orbital shaker for **loads up to 25 kg**. The maintenance free brushless motor and the shaking mechanism with counter weight allow any time smooth and stable operation. Digital display for speed and time. Adjustable speed from 50 to 500 rpm, built-in timer from 1 to 99 minutes or continuous. Two different platforms (610 x 460 mm or 760 x 460 mm) and 7 clamps for vessels from 25 to 2000 ml available. Platforms and clamps must be ordered separately.

- **Stable and robust metal housing**
- **Maximum load capacity 25 kg**
- Shaking orbit 25 mm
- Different platforms and clamps available

2



Specifications

Type of movement:	orbital
Orbit:	25 mm
Speed range:	50 to 500 rpm
Max. Load:	25 kg
Motor:	brushless DC motor
Timer:	0 - 99 minutes, continuous
Power consumption:	250 VA
Permissible ambient temperature:	4 to 75 °C
Dimensions (W x D x H):	600 x 550 x 150 mm
Weight:	48 kg
Power supply:	230 V, 50 Hz
Warranty:	3 years

Type	PK	Cat. No.
LLG-uniSHAKER 25 with EU-plug	1	6.263 590
LLG-uniSHAKER 25 with UK-plug	1	6.263 599
Universal attachment, 610 x 460 mm	1	6.263 591
Universal attachment, 610 x 460 mm, with securing bars	1	6.263 589
Universal attachment, 760 x 460 mm	1	6.263 592
Clamp, 25 ml	1	6.263 699
Clamp, 50 ml	1	6.263 700
Clamp, 100 ml	1	6.263 593
Clamp, 250 ml	1	6.263 594
Clamp, 500 ml	1	6.263 595
Clamp, 1000 ml	1	6.263 596
Clamp, 2000 ml	1	6.263 597
Adhesive rubber mat, blue, 150 x 150 x 3 mm	2	6.263 598

3



3 Multi-Flask Shaker VKS 75 control

NEW

Big heavy-duty shaker for high loads also during continuous operation (floor installation only). Further accessories on request.

Bühler

Scope of supply: Basic device without shaking plate, without rack system
With digital display and programmable control.

Speed range:	30 to 200 rpm stepless
Orbit or stroke:	26 mm (model A) 50, 36, 60 or 80 mm (model B)
Max. loading:	max. 75 kg
Platform (W x D):	760 x 600 mm
Overall (W x D x H):	1050 x 835 x 250 mm
Weight:	110 kg
Supply requirements:	230 V, 50/60 Hz, 125 W

Type	PK	Cat. No.
VKS 75 A control	1	9.838 400
VKS 75 B control	1	9.838 403
Shaking plate VKS (1-storey)	1	9.838 405
Rack system Combifix VKS, Set A	1	9.838 411
Rack system Combifix VKS, Set B	1	9.838 412
Universal tray VKS (1-storey, without spring clamps)	1	9.838 451

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

1 2 Universal shakers, SM 30 series /SM 30 control

NEW
Bühler

Powerful shakers for large loads. Choice of orbital or reciprocating action models. Suitable for continuous operation. For analytical or diagnostic processes in biology, chemistry or pharmacy, plant culture or in the food industry, e.g. for transport simulations. Various attachments for different requirements are available as accessories. Programmable controller with advanced features for control devices.

Scope of supply: supplied with shaking rack and rubber mat.

Attachments required, please order separately.

Speed range:	15 to 300 rpm. with stepless, electronic adjustment
Orbit or travel:	26 mm (A + C models) 30, 46 or 50 mm (B models)
Max. loading:	30 kg
Timer:	Programmable/continuous operation ("control" devices) or 0 to 120 mins. or continuous operation (rest of range)
Platform (W x D):	560 x 400 mm
Overall (W x D x H):	680 x 610 x 160 mm
Weight:	33 kg
Supply requirements:	230 V, 50/60 Hz, 35 W

Type	Description	PK	Cat. No.
SM 30 A	Orbital	1	9.838 101
SM 30 B	Reciprocating	1	9.838 111
SM 30 C	Orbital/reciprocating switchable	1	9.838 115
SM 30 A control	Orbital / digital display	1	9.838 121
SM 30 B control	Reciprocating / digital display	1	9.838 131
SM 30 C control	Orbital / reciprocating switchable, digital display	1	9.838 135



3 4 Accessories for universal shaker SM 30

Bühler

Type	PK	Cat. No.
Rack system Combifix SM, Set A	1	9.838 201
Rack system Combifix SM, Set B	1	9.838 205
Rack system Combifix SM, Set C	1	9.838 208
Universal tray SM (without spring clamps)	1	9.838 210
Sliding plate for top frame with Combifix SM, Set A	1	6.231 576
Sliding plate for top frame with Combifix SM, Set B	1	6.285 190
Sliding plate for top frame with Combifix SM, Set C	1	6.285 191
Mounting set for universal trays or sliding plates	1	6.255 238
2-storey top frame SM (without platforms)	1	9.838 211
2-storey top frame SM/TH (for using SM with TH)	1	6.510 572
Incubator Hood TH 30	1	9.838 470



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

GENERAL CATALOGUE EDITION 20

1



1 Reciprocating shakers RS-LS series

A compact shaker with ideal swivel motion. The shakers can be set up individually by using the comprehensive range of accessories.

Phoenix Instrument

Features at a glance RS-LS10/20:

- compact shaker for a maximum shaking weight of 2.5 and 7.5 kg
- Backlight LCD display for speed and timer adjustment.
- Speed, time and operating mode can be viewed simultaneously
- Comprehensive accessories
- Electronic time switching clock: control time or continuous operation mode
- PC control via RS232 interface, the special Shaker PC software can realise the setting of instrument parameters on the PC and the display of working curves real-time.
- 2 years warranty

Please order attachments and further accessories separately.

Specifications

Type of movement:	reciprocal
Shaking diameter:	10 mm
Max. Load RS-LS10/ RS-LS 20:	2.5 kg / 7.5 kg
Voltage:	100 to 240 VAC, 50/60 Hz
Power consumption:	30 W
Speed display:	digital
Interface:	RS 232
Housing IP rating	IP 21

Type	Dimensions mm	Rotation speed rpm	Max. Load kg	Weight kg	PK	Cat. No.
RS-LS 10	340 x 300 x 100	100-350	2.5	8.1	1	9.852 122
RS-LS 20	420 x 370 x 100	100-350	7.5	13.5	1	9.852 123

2



2 Accessories linear and orbital shaker RS-OS/RS-LR series

Phoenix Instrument

Type	Description	PK	Cat. No.
RSS-E 100	universal attachment with clamping rolls for OS/LS 10	1	9.852 125
RSS-E 110	universal attachment with vertical adjustable clamping rolls for OS/LS 10	1	9.852 127
RSS-E 200	universal attachment with clamping rolls for OS/LS 20	1	9.852 129
RSS-E 220	dish attachment with tensioning belt for OS/LS 20	1	9.852 146

3



3 Komto shaker KL 2

NEW
Bühler

Mini shaker which can be switched between orbital and reciprocating motions. Includes flask attachment system with 3 clamping rollers. Versatile, for use in medical diagnostics, haematology, for cell cultivation or analysis.

Scope of supply: Shaker and accessory platform with 3 clamping rollers and anti-slip mat.

Speed range:	30 to 420 rpm. with stepless electronic adjustment
Orbit or stroke:	8 mm
Max. loading:	2 kg
Platform (W x D):	300 x 300 mm
Overall (W x D x H):	355 x 455 x 195 mm
Weight:	13.5 kg
Supply requirements:	230 V, 50/60 Hz, 125 W.

Type	PK	Cat. No.
Komto shaker KL 2	1	9.838 320

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

1 Reciprocating shakers, large platform, SSL2

NEW
Start

- available with orbital or reciprocating action
- digital speed selection up to 250 rpm with soft start
- built-in digital timer
- reliable, quiet running mechanism
- fully adjustable cradle system

This lab scale platform shaker has powerful yet quiet shaking mechanisms and has been designed for trouble-free, continuous use. The cradle type platforms have four 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 250 ml or 9 x 500 ml or 6 x 1000 ml or 2 x 2000 ml. 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.



Specifications

Type of movement:	reciprocal
Shaking diameter:	20 mm
Speed range:	25 to 250 rpm
Max. Load:	10 kg
Timer:	1 to 999 min
Power consumption:	50 W
Working temperature:	4 to 40 °C
Platform dimensions (W x D):	335 x 335 mm
Overall dimensions (W x D x H):	360 x 420 x 270 mm
Net weight:	11 kg
Supply requirements:	230 V, 50 Hz

Type	Description	Max. Load kg	PK	Cat. No.
SSL2	Shaker, reciprocating, large platform	10.0	1	9.728 841

2 3 Shakers, 3000 series

Housing made of high impact strength polystyrene, finished in off-white. 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 and +50 °C. The devices are maintenance-free and have the CE mark.

Analogue control models (1)

3005/3006/3015/3016/3019/3023.

Timer for operations up to 60min. and continuous operation.

Digital control models (2)

3017/3018/3020.

Microprocessor controlled, with interface RS 232. Timer: 1 min. up to 99:59 h or continuous operation.

Speed and remaining time indicated by two LCD readouts.

The following shaker types are available: Orbital shakers, reciprocating shakers, rocking shakers, tumbling shakers and overhead shakers. Please see the different motion types of the 3000 series shakers in the relevant chapters.

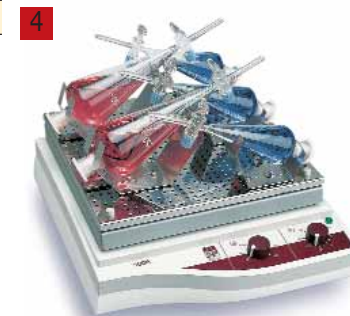
4 Reciprocating shaker 3006

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.

Specifications

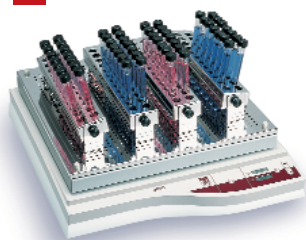
Type of movement:	reciprocal
Shaking diameter:	20 mm
Speed range:	20 to 300 rpm
Max. Load:	8 kg
Platform (W x D):	380 x 510 x 140 mm
Overall (W x D x H):	330 x 330 mm
Supply requirements:	230 V, 50/60 Hz, 65 W
Net/gross weight:	10/12 kg
Timer:	up to 60 min. or continuous operation

Type	Max. Load kg	PK	Cat. No.
3006	8.0	1	9.837 906



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

1



1 Reciprocating shakers 3016 and 3018

GFL

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 RS 232 interface)

Specifications

Type of movement:	reciprocal
Shaking diameter:	30 mm
Speed range:	20 to 300 rpm
Max. Load:	15 kg
Platform (W x D):	450 x 450 mm
Overall (W x D x H):	510 x 625 x 145mm
Net/gross weight:	18/22kg
Supply requirements	
3016:	230 V, 50/60 Hz, 65 W
3018:	230 V, 50 or 60 Hz, 65 W*
Timer:	
3016:	Up to 60 min. or continuous operation
3018:	1 min. up to 99:59 h. or continuous operation

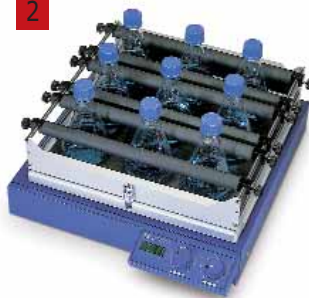
Type	Max. Load kg	PK	Cat. No.
3016	15.0	1	9.837 916
3018**	15.0	1	9.837 918

* Please specify when placing your order!

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

➔ Accessories for Model 3006/3016/3018 - please see page 497.

2



2 Reciprocating shaker HS 501 digital

NEW

IKA

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

Specifications

Type of movement:	reciprocal
Shaking diameter:	30 mm
Max. Load (with attachment):	15 kg
Motor rating input/output:	70/19 W
Speed range:	0 to 300 rpm
Timer:	0 to 56 mins./continuous
Dimensions (W x D x H):	505 x 585 x 120 mm
Weight (without attachment):	26 kg
Protection class acc. to DIN EN 60529:	IP 21
Supply requirements:	230 V, 50/60 Hz
Tested to DIN EN IEC 61010-1.	

Type	Max. Load kg	PK	Cat. No.
HS 501 digital	15.0	1	6.270 850

➔ Accessories for Model HS 501 - please see page 499.

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

1 Flask shaker SF1

Creates a vigorous shaking action. With clamps to accept 8 flasks up to 500 ml capacity. With stepless variable speed control from 80 to 800 oscillations/min. and 10 to 60 minute timer with off and continuous run settings. Electronic feedback control ensures a constant speed irrespective of the load.

Stuart



Overall 780 x 270 x 240 mm (W x D x H). Weight 8.3 kg. For 230 V, 50 Hz single phase supplies.

Accessory side-arms are available for converting 9.950 372 to shake up to 12 flasks. Maximum load: 3 L. Each side arm accepts six clamps. Supplied with 4 clamps.

With BioCote, silver-based, antimicrobial protection.

Type	PK	Cat. No.
SF1	1	9.950 372
Spare clamp	1	9.950 373
Accessory side arm	1	9.950 374

2 3 Universal shakers, SM 30 series /SM 30 control

Powerful shakers for large loads. Choice of orbital or reciprocating action models. Suitable for continuous operation. For analytical or diagnostic processes in biology, chemistry or pharmacy, plant culture or in the food industry, e.g. for transport simulations. Various attachments for different requirements are available as accessories. Programmable controller with advanced features for control devices.

Scope of supply: supplied with shaking rack and rubber mat. Attachments required, please order separately.

Speed range:	15 to 300 rpm. with stepless, electronic adjustment
Orbit or travel:	26 mm (A + C models) 30, 46 or 50 mm (B models)
Max. loading:	30 kg
Timer:	Programmable/continuous operation ("control" devices) or 0 to 120 mins. or continuous operation (rest of range)
Platform (W x D):	560 x 400 mm
Overall (W x D x H):	680 x 610 x 160 mm
Weight:	33 kg
Supply requirements:	230 V, 50/60 Hz, 35 W

Type	Description	PK	Cat. No.
SM 30 A	Orbital	1	9.838 101
SM 30 B	Reciprocating	1	9.838 111
SM 30 C	Orbital/reciprocating switchable	1	9.838 115
SM 30 A control	Orbital / digital display	1	9.838 121
SM 30 B control	Reciprocating / digital display	1	9.838 131
SM 30 C control	Orbital / reciprocating switchable, digital display	1	9.838 135

4 5 Accessories for universal shaker SM 30

Type	PK	Cat. No.
Rack system Combifix SM, Set A	1	9.838 201
Rack system Combifix SM, Set B	1	9.838 205
Rack system Combifix SM, Set C	1	9.838 208
Universal tray SM (without spring clamps)	1	9.838 210
Sliding plate for top frame with Combifix SM, Set A	1	6.231 576
Sliding plate for top frame with Combifix SM, Set B	1	6.285 190
Sliding plate for top frame with Combifix SM, Set C	1	6.285 191
Mounting set for universal trays or sliding plates	1	6.255 238
2-storey top frame SM (without platforms)	1	9.838 211
2-storey top fram SM/TH (for using SM with TH)	1	6.510 572
Incubator Hood TH 30	1	9.838 470

Bühler



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

GENERAL CATALOGUE EDITION 20

Rocking shaker Rocker 2D basic/2D digital

Rocking shaker with fixed speed for smooth mixing tasks. For homogeneous mixing in flasks, culture flasks, Petri dishes and tubes. Even with load and voltage fluctuations the shaking speed remains constant. A fixed tilt angle ensures reproducible test results.

IKA

- Different attachments allow a variety of applications
- Usable at 4 to 50 °C in incubators
- Anti-slip rubber mat included
- Easy operation by foil keypad
- Suitable for continuous operation

Rocker 2D digital only:

- Timer: Countdown, adjustable from 1 s to 99 h 59 min
- Counter: Display of shaking time
- Error code display

Specifications

Type of movement:	rocking
Rocking angle Rocker 2D basic/2D digital:	8° / 0 - 15°
Max. Load (incl. attachment):	2 kg
Motor rating input/output:	16/9 W
Speed range:	5 to 80 rpm
Speed display:	7 segment LED
Dimensions (W x D x H):	280 x 330 x 150 mm
Weight:	2.2 kg
Protection class acc. to DIN EN 60529:	IP 21
Power supply:	100-240 V, 50/60 Hz

Type	Max. Load kg	PK	Cat. No.
Rocker 2D basic	2.0	1	9.729 984 1
Rocker 2D digital	2.0	1	9.729 985

Rocking shaker 35 EZ

NEW

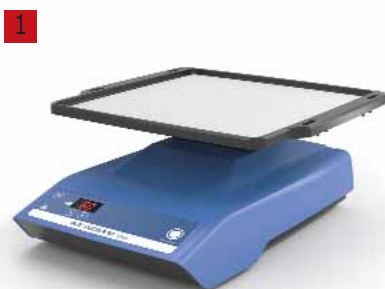
The Rocker 35 EZ is the next generation large capacity rocker from Labnet. This upgraded Rocker 35 is designed for durability in laboratories requiring a larger platform area and precise control over rocking parameters. It is backed by a 5 year warranty. Both speed and time are easily selectable and the analog control has been upgraded to display discreet values. The tilt is now easily adjustable with knob on side. This system can easily handle up to 5 kg of load so a double platform can be fully loaded without any variation to speed. This unit comes in both single and dual platform models and includes a ribbed non-slip rubber mat to keep containers in place.

Labnet

Specifications

Type of movement:	rocking
Rocking angle:	adjustable, ±20°
Max. Load (incl. attachment):	5 kg
Timer:	10 to 120 min or continuous
Speed range:	10 to 120 rpm
Power:	6 W
Dimensions (W x D x H) single/double platform:	360 x 360 x 170 mm/360 x 360 x 260 mm
Weight single/double platform:	6.5 kg/7.8 kg
Power supply:	230 V, 50/60 Hz

Description	Max. Load kg	PK	Cat. No.
Single platform	5.0	1	6.283 296 2
Double platform	5.0	1	6.283 298



9.729 984



6.283 296

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

1 Rocking Shaker, Mini, SSM4

NEW
Stuart

This compact rocker is ideal where gentle mixing is required. It has a see-saw rocking action that creates a wave motion within vessels such as culture flasks, Petri dishes etc.

- Small space saving design, ideal for personal use
- Gentle rocking action
- Digital speed control and built-in timer
- Optional tier system available to increase capacity
- supplied with a non-slip mat
- 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

Type of movement:	rocking
Rocking angle:	7°
Angle adjustable:	No
Speed range:	5 to 70 rpm
Max. Load:	3 kg
Platform dimensions (W x D):	235 x 235 mm
Overall dimensions (W x D x H):	240 x 300 x 150 mm
Net weight:	5 kg
Power supply:	230 V, 50 Hz, 50 W

Type	Description	Max. Load kg	PK	Cat. No.
SSM4	Rocker, see-saw, mini	3.0	1	9.728 821

Rocking shaker SSL4, large platform

Stuart

- Large platform rockers - ideal for multiple users
- Gentle rocking action
- Digital speed control and built-in timer
- Optional tier system available to increase capacity
- incl. non-slip mat

This rocker has large platform able to accommodate a number of samples, ideal for a busy lab. It is very quiet in operation and designed to be run continuously.

The see-saw rocking action creates a wave motion within vessels such as culture flasks, petri dishes etc.

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

Type of movement:	rocking
Rocking angle:	7°
Angle adjustable:	No
Speed range:	5 to 70 rpm
Max. Load:	10 kg
Platform dimensions (W x D):	355 x 355 mm
Overall dimensions (W x D x H):	360 x 420 x 160 mm
Net weight:	10 kg
Supply requirements:	230 V, 50 Hz, 50 W

Type	Description	Max. Load kg	PK	Cat. No.
SSL4	Rocker, see-saw, lab scale	10.0	1	9.728 801
SSL3/1	Tier system (2 platforms plus 8 bars)		1	9.728 802

Attachments are not included - Please order separately



4. Stirring, Shaking, Mixing Shakers and mixers/Rocking shakers-Tumbling shakers

1



1 Rocking shaker PMR-100

Large capacity, adjustable angle and speed platform rocker, providing soft or intensive side to side rocking for optimal mixing of samples. For use in cold rooms or incubators with ambient operating temperature range +4 to +40 °C. Continuous or timed operation, with automatic switch-off. Integral timer: 1 min to 99 h 59 min.

Grant

Specifications

Type of movement:	rocking
Rocking angle (adjustable):	0 to 10° (fixed at 10° over 50 rpm)
Max. Load (incl. attachment):	5 kg
Power consumption:	13 W
Speed range:	1 to 99 rpm
Speed display:	LCD
Dimensions platform (W x D x H):	460 x 360 mm
Dimensions (W x D x H):	400 x 480 x 250 mm
Weight:	12 kg
Protection class acc. to DIN EN 60529:	IP 20
Power supply:	12 V

Type	Max. Load kg	PK	Cat. No.
PMR-100	5.0	1	9.721 015

2



2 Tumbling Shaker LLG-uniSHAKER 2

NEW

Multi-functional shaker with dimpled mat, perfect for foam-free mixing of blood and other biological samples in centrifuge tubes. Suitable for a variety of tubes and dishes.

Specifications

Type of movement:	tumbling
Tumbling angle:	20°
Speed:	fixed, 20 rpm
Max. Load:	1.6 kg
Ambient Temperature:	4 to 45 °C
Platform Dimensions (W x D):	202.5 x 152.5 mm
Dimensions (W x D x H):	202.5 x 152.5 x 202.5 mm
Weight:	2 kg
Power supply:	230 V, 50 Hz, 0.2 A
Warranty:	3 years

Type	PK	Cat. No.
LLG-uniSHAKER 2 with EU-plug	1	6.263 640
LLG-uniSHAKER 2 with UK-plug	1	6.263 641

3



3 Platform tumbling shaker PMR-30

Smooth rocking motion for gentle sample agitation in tubes, culture flasks, dishes and boxes. Continuous or timed operation with automatic switch-off.

Grant

Specifications

Type of movement:	tumbling
Tumbling angle:	7°
Speed range:	5 to 30 rpm
Max. Load:	1.0 kg
Timer:	1 min to 23 h 59 min
Ambient Temperature:	+4 to 40 °C
Dimensions Platform (W x D):	210 x 210 mm
Dimensions (W x D x H):	220 x 205 x 120 mm
Weight:	2 kg
Power supply:	12 V

Type	Max. Load kg	PK	Cat. No.
PMR-30	0.5	1	9.721 011

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

1 Platform tumbling shaker PS-3D

Smooth tumbling orbital motion for mixing in tubes, fixed tilt, culture flasks, dishes and boxes. Ideal size for personal use.

Grant

Specifications

Type of movement:	tumbling
Tumbling angle:	7°
Speed range:	5 to 60 rpm
Max. Load:	1.0 kg
Ambient Temperature:	+4 to 40 °C
Dimensions Plattform (W x D):	215 x 215 mm
Dimensions (W x D x H):	85 x 150 x 80 mm
Weight:	1.2 kg
Power supply:	12 V

Type	Max. Load kg	PK	Cat. No.
PS-3D	0.5	1	9.721 014



2 Multi-function tumbling shaker PS-M3D

With consistent and reproducible agitation throughout the speed range, multi segment program.

Grant

Specifications

Type of movement:	orbital (diam. 22 mm) reciprocal (0 to 360°, 30° steps) vibrating (0 to 5°, 1° steps)
Tumbling angle:	7°
Speed range:	1 to 100 rpm
Max. Load:	1.0 kg
Timer Type of movement orbital and reciprocal/vibrating:	0 to 250 sec/0 to 5 sec
Ambient Temperature:	+4 to 40 °C
Dimensions Plattform (W x D):	210 x 210 mm
Dimensions (W x D x H):	225 x 170 x 125 mm
Weight:	2 kg
Power supply:	12 V

Type	Max. Load kg	PK	Cat. No.
PS-M3D	1.0	1	9.721 017



Tumbling shakers Rocker 3D basic/3D digital

Shaker with three-dimensional tumbling motion and a fixed speed for smooth mixing tasks.

IKA

A fixed angle ensures reproducible test results.

- Different attachments allow a variety of applications
- Usable at 4 to 50 °C in incubators
- Anti-slip rubber mat included
- Easy operation by foil keypad
- Suitable for continuous operation

Rocker 3D digital only:

- Timer: Countdown, adjustable from 1 s to 99 h 59 min
- Counter: Display of shaking time
- Error code display

Specifications

Type of movement:	tumbling
Tumbling angle Rocker 3D basic/3D digital:	8°/0 - 15°
Max. Load (incl. attachment):	2 kg
Motor rating input/output:	16/9 W
Speed range Rocker 3D basic/3D digital:	30 rpm (fixed)/5 to 80 rpm
Speed display (Rocker 3D digital only):	7 segment LED
Dimensions (W x D x H) Rocker 3D basic/3D digital:	280 x 330 x 165 mm / 280 x 330 x 185 mm
Weight:	2.2 kg
Protection class acc. to DIN EN 60529:	IP 21
Power supply:	100-240 V, 50/60 Hz

Type	Max. Load kg	PK	Cat. No.
Rocker 3D basic	2.0	1	9.729 986
Rocker 3D digital	2.0	1	9.729 987



9.729 986

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

1



1 Tumbling Shaker, Mini, SSM3

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.

Stuart

This compact rocker is ideal where gentle mixing is required.

- Small space saving design, ideal for personal use
- Gentle rocking action
- Digital speed control and built-in timer
- Optional tier system available to increase capacity
- supplied with a non-slip mat
- 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

Type of movement:	tumbling
Tumbling angle:	3 to 12°
Angle adjustable:	Yes by hand
Speed range:	5 to 70 rpm
Maximum load:	3 kg
Platform dimensions (W x D):	235 x 235 mm
Overall dimensions (W x D x H):	240 x 300 x 165 mm
Net weight:	5 kg
Power supply:	230 V, 50 Hz, 50 W

Type	Description	Max. Load kg	PK	Cat. No.
SSM3	Rocker, gyratory, mini	3.0	1	9.728 820

2



9.728 800

Tumbling shaker SSL3, large platform

NEW

Stuart

- Large platform rocker - ideal for multiple users
- Gentle rocking action
- Digital speed control and built-in timer
- Optional tier system available to increase capacity
- incl. non-slip mat

This rocker has a large platform able to accommodate a number of samples, ideal for a busy lab. Designed to be run continuously, they are very quiet in operation. The tumbling gyratory motion is 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.

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

Type of movement:	tumbling
Tumbling angle:	3° to 12°
Angle adjustable:	Yes by hand
Speed range:	5 to 70 rpm
Max. Load:	10 kg
Platform dimensions (W x D):	355 x 355 mm
Overall dimensions (W x D x H):	360 x 420 x 170 mm
Net weight:	10 kg
Supply requirements:	230 V, 50 Hz, 50 W

Type	Description	Max. Load kg	PK	Cat. No.
SSL3	Rocker, gyratory, lab scale	10.0	1	9.728 800
SSL3/1	Tier system (2 platforms plus 8 bars)		1	9.728 802

Attachments are not included - Please order separately

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

1 Thermo shaker LLG-uniTHERMIX 1 and 2

NEW

1

The LLG-uniTHERMIX is ideal for shaking and temperature control of a variety of tubes or plates (depending on the block used). With its high temperature uniformity, fast heating rate and excellent mixing results the LLG-uniTHERMIX is perfect for the incubation of samples of any kind, in particular for Life Science applications, e.g. Enzyme reactions, transformations, denaturation of DNA and RNA.

- Precise temperature control system
- Temperatures up to 100 °C
- Temperature accuracy of ± 0.5 °C (20 to 45 °C)
- Efficient mixing up to 1500 rpm (depending on the heating block)
- Up to 9 storable programs
- Many block options available (see below)
- Automatic block recognition

LLG-uniTHERMIX 1: with shaking and heating function,

Temperature range: RT +5 °C to approx. +100 °C

LLG-uniTHERMIX 2: with shaking, cooling and heating function,

Temperature range: 15 °C below RT to approx. +100 °C

Blocks must be ordered separately.

Specifications

Temperature range	
LLG-uniTHERMIX 1:	RT +5 °C to approx. +100 °C
LLG-uniTHERMIX 2:	15 °C below RT to approx. +100 °C
Temperature control:	± 0.5 °C (at 20 to 45 °C)
Uniformity:	Max. ± 0.5 °C (at 20 to 45 °C)
Max. heating rate:	5.5 °C/min
Max. cooling rate (LLG-uniTHERMIX 2 only):	5 °C/min (100 °C to RT) 0.5 °C/min (below RT)
Speed range:	300 to 1500 rpm
Orbit:	3 mm
Display:	LCD
Programs:	6 stages, 9 programs
Timer:	1 to 99 min or continuous
Capacity:	1 exchangeable block*
Dimensions (W x D x H):	200 x 235 x 120 mm
Weight:	7.3 kg
Electrical heating/cooling power:	200 W
Power supply:	220-240 V, 50/60 Hz
Warranty:	3 years



Type	PK	Cat. No.
LLG-uniTHERMIX 1 with EU-plug	1	6.263 470
LLG-uniTHERMIX 1 with UK-plug	1	6.263 471
LLG-uniTHERMIX 2 with EU-plug	1	6.263 472
LLG-uniTHERMIX 2 with UK-plug	1	6.263 473

*Exchangeable blocks are not included in delivery.

Heating blocks for Thermo shaker LLG-uniTHERMIX 1 and 2

NEW

2

For	PK	Cat. No.
96 well PCR plates non-skirted, 0.2 ml tubes*	1	6.263 474
96/384 micro plate*	1	6.263 480
24 tubes, 0.5 ml*	1	6.263 475
24 tubes, 1.5 ml*	1	6.263 476
24 tubes, 2.0 ml*	1	6.263 477
8 tubes, 5 ml	1	6.263 481
8 tubes, 15 ml, max. 800 rpm	1	6.263 478
4 tubes, 50 ml, max. 600 rpm	1	6.263 479

*with lid



6.263 476

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

1



1 Thermoshaker PCMT for microtubes and PCR plates

Variable speed, variable temperature heating and cooling thermoshaker with a choice of blocks for microtubes and microplates. The PMCT can cool down to 15 °C below ambient temperature.

Grant

- Fast heat-up and cooling times
- Temperature setting range +4 °C to +100 °C
- Temperature control range 15 °C below ambient to +100 °C
- Shaking speed: 250 to 1400 rpm
- Temperature uniformity at 37 °C: ±0.1 °C
- Choice of 5 interchangeable blocks

**Block is required and not included in delivery.
Please order separately.**

Applications:

- Genetic analyses, extraction of DNA, RNA and further sample preparation
- Biochemical studies of enzymatic reactions and processes
- Extraction of metabolites from cellular material

Type	PK	Cat. No.
PCMT	1	9.721 050

2



9.721 052

Accessory blocks for Thermoshaker PCMT

Grant

Type	For	PK	Cat. No.
HC24N	24 x 1.5 ml microtubes	1	9.721 073
HC18	20 x 0.5 + 12 x 1.5 ml microtubes	1	9.721 052
HC24	24 x 2.0 ml microtubes	1	9.721 053
HC32	20 x 0.2 + 12 x 1.5 ml microtubes	1	9.721 054
HC96	96-well microplates (0.2 ml)	1	9.721 055

3



6.234 725

Microtube thermoshaker PHMT

Grant

The PHMT is a compact and versatile thermoshaker, ideal for applications requiring heating and shaking in microtubes and suitable for use in cold rooms and incubators (operating temperature range 4 to 40 °C). It is effectively three instruments in one: a microtube thermoshaker, a compact benchtop incubator without shaking, a microtube shaker without temperature control. By combining the mixing operation with the incubation phase, reaction process times and operator workload are reduced and efficiency of many procedures is increased, resulting in a higher throughput.

- temperature range: ambient +5 to 100 °C
- uniformity at 37 °C: ±0.1 °C
- shaking speed: 250 rpm to 1400 rpm
- timed shaking operation: 1 min to 96 hours
- rapid heat-up
- continuous or timed operation, with alarm buzzer and automatic switch-off facility
- incl. interchangeable block
- mixing and incubation phases are combined reducing reaction processing times

Scope of supply: Thermoshaker with one block as indicated. Further blocks on request.

4



9.721 079

Type	For	PK	Cat. No.
PHMT-PSC18	20 x 0.5 ml + 12 x 1.5 ml	1	6.234 725
PHMT-PSC32	20 x 0.2 ml + 12 x 1.5 ml	1	9.721 079
PHMT-PSC24	24 x 2.0 ml	1	9.721 041
PHMT-PSC24N	24 x 1.5 ml	1	9.721 072
PHMT-PSC96	1 x 96 well	1	9.721 080

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

Thermo shaker AccuTherm

The AccuTherm is a temperature controlled mixer that uses peltier technology to rapidly heat and cool precious samples. The combination of heating/cooling with mixing makes the AccuTherm ideal for many life science research applications in the fields of molecular biology, biochemistry and clinical chemistry. It's compact footprint incorporates an intuitive control panel with a large multicolor display, which allows users to easily program and view temperature, time and speed settings. Eight interchangeable aluminum blocks accommodate PCR plates and tubes ranging in size from 0.2 ml to 15 ml.

Specifications

Temperature operation range:	Amb. -14 °C to +100 °C
Temperature adjustable range:	0 °C to +105 °C
Accuracy/resolution:	±0.5 °C/0.5 °C
Max. heating time:	6.5 °C/min
Max. cooling time:	1.5 °C/min
Shaking frequency:	300 to 1500 rpm
Orbit:	3 mm
Dimensions (W x D x H):	330 x 166 x 240 mm
Capacity:	1 exchangeable block*
Weight:	8.5 kg
Electrical heating/cooling power:	150 W
Power supply:	230 V, 50/60 Hz

Description	PK	Cat. No.
Shaking incubator AccuTherm	1	6.261 411
Block A for 40 x 1.5 ml reaction tubes	1	6.261 695
Block B for 54 x 0.5 ml reaction tubes	1	6.261 696
Block C for 96 x 0.2 ml reaction tubes	1	6.261 697
Block D for 24 x 15 ml reaction tubes	1	6.261 698
Block E, water bath (115 x 73 x 38 mm)	1	6.261 699
Block G for 26 x 0.5 ml and 24 x 1.5 ml reaction tubes	1	6.261 706
Block H for 40 x 2.0 ml reaction tubes	1	6.261 707
Block J for 96 well Elisa plates	1	6.261 708

*Exchangeable blocks are not included in delivery.



6.261 411



6.261 697



6.261 708

4 Shaking Incubators VorTemp™ 56/ 1550

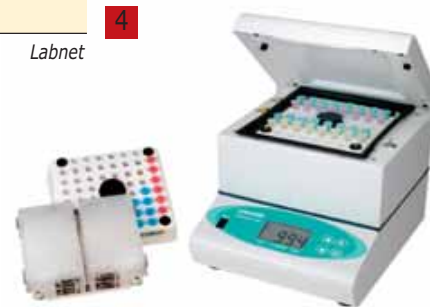
VorTemp™ 56 is supplied with interchangeable platforms for microtubes (56 x 1.5 ml tubes, or small tubes with adapters) or microplates (accepts standard and deepwell plates, up to 2.0 ml). VorTemp™ 1550 includes platforms for 8 x 50 ml and 18 x 15 ml tubes. The shaker in the VorTemp™ 56 may be turned off, allowing the unit to be used as a static incubator.

- shake and incubate samples simultaneously
- interchangeable platforms
- broad temperature and speed range
- intelligent control with digital LED display

Specifications

Temperature range:	Ambient + 5 °C to 99 °C
Temperature accuracy:	±0.5 °C
Speed range	
VorTemp 56:	200 to 1200 rpm
VorTemp™ 1550:	200 to 900 rpm
Motion/orbit:	Circular/3 mm
Timer:	1 to 99 minutes or continuous
Capacity	
VorTemp 56:	56 x 1.5/2.0 ml tubes, 4 standard or 2 deep well microplates
VorTemp™ 1550:	18 x 15 ml, 8 x 50 ml tubes
Dimensions (W x D x H)	
VorTemp™ 56:	23 x 31 x 23 cm
VorTemp™ 1550:	26 x 31 x 31 cm
Weight	
VorTemp™ 56:	11 kg
VorTemp™ 1550:	12 kg
Power supply:	230 V, 50 Hz or 120 V, 60 Hz

Description	PK	Cat. No.
VorTemp™ 56	1	9.945 760
VorTemp™ 1550	1	9.945 761
Additional platform for microtubes	1	9.945 762



Labnet

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



1 Eppendorf ThermoMixer™ F1.5/Eppendorf ThermoMixer™ FP

Eppendorf AG

To simplify your lab routines. Whether you regularly work with 1.5 mL reaction vessels or microplates (MTP and DWP), our customized systems offer you the perfect solution for your special applications. From 4 °C above RT to 100 °C, there are no limits to the application possibilities. The ThermoMixer F1.5 is equipped with block for 1.5 mL reaction vessels and the ThermoMixer FP has a block for microplates

- Efficient mixing thanks to 2DMix-Control and anti-spill technology
- Simple and intuitive operation using predefined temperature keys (37 °C, 42 °C, 56 °C and 95 °C)
- Improved temperature homogeneity with the new ThermoTop

Specifications

Temperature operation range:	min: +4 °C above RT, max: +100 °C
Temperature adjustable range:	+1 °C/+100 °C
Accuracy/Resolution ThermoMixer™ F1.5:	±0.5 °C at +20 to +45 °C
Accuracy/Resolution ThermoMixer™ FP:	±1.0 °C at +20 to +45 °C
Max. heating time ThermoMixer™ F1.5:	11 °C/min
Max. heating time ThermoMixer™ FP:	18 °C/min
Shaking frequency ThermoMixer™ F1.5:	300 to 1500 rpm
Shaking frequency ThermoMixer™ FP:	300 to 2000 rpm
Orbit:	3 mm orbital
Dimensions (W x D x H):	206 x 304 x 131 mm
Capacity ThermoMixer™ F1.5:	24 tubes 1.5 ml
Capacity ThermoMixer™ FP:	Microplates/Deepwell plates
Weight ThermoMixer™ F1.5:	6.0 kg
Weight ThermoMixer™ FP:	5.8 kg
Electrical heating power:	200 W (max.)
Power supply:	220-240 V ±10 %, 50/60Hz

Type	PK	Cat. No.
ThermoMixer™ F1.5	1	9.776 904
ThermoMixer™ FP	1	9.776 905



2 Eppendorf ThermoMixer C

Eppendorf AG

The Eppendorf ThermoMixer C combines unique mixing performance with excellent temperature control to consistently guarantee complete, dependable and reproducible test results. Improve your assay results by mixing and incubating samples at the same time.

- Excellent mixing performance due to unique 2DMix-Control technology
- Prevent condensation and improve temperature homogeneity with the new ThermoTop
- Ergonomic design
- Eppendorf QuickRelease™ Technology for fast and simple block exchange of Eppendorf SmartBlocks™
- Highest flexibility thanks to broad choice of exchangeable SmartBlocks™
- Heating, mixing and cooling of all common tubes and microplates with a volume range of 5 µl to 50 ml

Now you can control the temperature of your samples with ease: The ThermoTop, with unique condensation protection technology, reliably prevents condensation formation on the tube lid and wall. It also improves temperature homogeneity. The Eppendorf ThermoTop does not have a cable connection. It is detected by the device as soon as it is positioned, via inductive signal transmission, and thermo-regulation starts automatically. The sample temperature is not affected: optimal sample protection with optimal reaction conditions produce optimal results.

Specifications

Temperature operation range:	min: 15 °C below RT, max: +100 °C
Temperature adjustable range:	+1 to +100 °C
Accuracy/Resolution:	±0.5 °C at +20 to +45 °C
Max. heating time:	6 °C/min
Max. cooling time:	2.5 °C/min between +100 °C and RT
Shaking frequency:	300 to 3000 rpm
Orbit:	3 mm
Dimensions (W x D x H):	206 x 304 x 131 mm
Capacity:	dependent on Eppendorf SmartBlock™
Weight:	6.2 kg
Electrical heating power:	200 W (max.)
Power supply:	220-240 V ±10 %, 50/60Hz

Type	PK	Cat. No.
Eppendorf ThermoMixer™ C	1	9.776 902

4. Stirring, Shaking, Mixing Shakers and mixers/Thermoshakers-Overhead shakers

1 Exchangeable blocks Eppendorf SmartBlocks™ and accessories for Eppendorf ThermoMixer™ C and ThermoStat C

Exchangeable blocks:

- Flexibility has never been this easy. Eppendorf offers a variety of SmartBlocks™ for tubes from 5 ml to 50 ml.
- Fast and simple block exchange due to Eppendorf Quick Release
 - Optimized block design guarantees maximum temperature transfer to the sample

Transfer Racks:

- Autoclavable transport aid for tubes from 0.5 to 2.0 ml
- For transferring up to 24 tubes in/from the heating block at the same time
- Offers protection against burns when transferring hot samples

Type	Description	PK	Cat. No.
Eppendorf SmartBlock™ 0.5 mL	24 tubes, 0.5 ml	1	9.776 906
Eppendorf SmartBlock™ 1.5 mL	24 tubes, 1.5 ml	1	9.776 907
Eppendorf SmartBlock™ 2.0 mL	24 tubes, 2.0 ml	1	9.776 908
Eppendorf SmartBlock™ 5.0 mL	8 Eppendorf Tubes®, 5.0 ml	1	9.776 909
Eppendorf SmartBlock™ 15 mL	8 conical tubes, 15 ml	1	9.776 910
Eppendorf SmartBlock™ 50 mL	4 conical tubes, 50 ml	1	9.776 911
Eppendorf SmartBlock™ 12 mm	24 tubes, diam. 11 to 11.9mm	1	9.776 912
Eppendorf SmartBlock™ cryo	24 cryogenic tubes, 1.5 to 2.0 ml, all bottom forms	1	9.776 913
Eppendorf SmartBlock™ plates	For micro plates and Deepwell plates, incl. lid	1	9.776 914
Eppendorf SmartBlock™ PCR 96	PCR plates 96, incl. lid	1	9.776 915
Eppendorf SmartBlock™ PCR 384	PCR plates 384, incl. lid	1	9.776 916
Transfer Rack	For 24 tubes, 0.5 ml	1	6.280 936
Transfer Rack	For 24 tubes, 1.5 to 2.0 ml	1	6.280 935



2 Accessories for Eppendorf Thermomixer™

Eppendorf ThermoTop® with condens.protect® technology avoids condensation and improves temperature uniformity.

Eppendorf AG

Lid for Eppendorf Thermomixer™ F1.5 and FP, for Eppendorf Smart Blocks™ 0.5-2.0 mL, plates, PCR 96 and PCR 384



Type	PK	Cat. No.
Eppendorf ThermoTop®	1	9.776 918
Lid	1	9.776 917

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

1



1 Overhead mixer LLG-uniROTATOR 2

NEW

Analogue overhead mixer with vertical rotary motion for gentle but effective mixing. Ideal for biological samples. Suitable for cutting and mixing processes of powdered and liquid samples in tubes up to 50 ml. With easily interchangeable clamps that allow a quick cleaning of the mixer.

- Compact design
- Housing easy to clean
- Non-slip, adjustable screw feet

Scope of delivery: Overhead mixer incl. 12 clamps each for 2 ml, 15 ml and 50 ml tubes

Specifications

Type of movement:	overhead
Variable speed:	0 - 80 rpm
Rotation angle:	360°
Permissible shaking weight (incl. attachment):	2 kg
Motor rating input:	20 W
Dimensions (W x D x H):	530 x 150 x 190 mm
Power supply:	100-240 V, 50/60 Hz
Protection class:	IP 21
Warranty:	3 years

Type	PK	Cat. No.
LLG-uniROTATOR 2 with EU-plug	1	6.263 660
LLG-uniROTATOR 2 with UK-plug	1	6.263 661
Clamp for 2 ml centrifuge tube	12	6.263 662
Clamp for 15 ml centrifuge tube	12	6.263 663
Clamp for 50 ml centrifuge tube	12	6.263 664

2



2 Vertical mini rotator PTR-25

Grant

Compact, economy solution with simple to use controls, providing thorough mixing of samples in tubes up to 50 ml. Suitable for preventing blood coagulation in tubes and for fulfilment of procedures of extraction of biological components. For use in cold rooms and incubators.

- 360° vertical rotation
- Vertical rotation speed range: 5 rpm to 30 rpm
- Timer: 1 min to 24 hours, with audible alarm and automatic switch-off
- Simple to use controls
- Platform accommodating 22 tubes (up to 15 mm diameter) is included as standard

Type	Description	Max. Load kg	PK	Cat. No.
PTR-25	for 22 microtubes	0.5	1	9.721 016

3



3 Vertical mini rotator RotoFlex™ Plus

NEW

Argos Technologies

This simple benchtop rotator is ideal for a number of laboratory applications including DNA purification, hybridization or sample mixing. It is digitally controlled and can also be set in an oscillating mode to increase mixing efficiency. This tube rotator accepts tubes from 0.5 to 50 ml. The rotisseries to hold each of the tubes are included in the set.

Features:

- 360° revolution, adjustable angle from 0 to 90°
- Speed: 10 to 40 rpm, adjustable
- For tubes of 0.5 to 50 ml, interchangeable tube racks
- Can be used in a cold room or incubator (4 °C to 60 °C)

Type	PK	Cat. No.
Vertical mini rotator RotoFlex™ Plus	1	6.281 561

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

Multi-function rotator PTR-35/PTR-60

Vertical multi-function rotator for thorough mixing in tubes, with multi-segment programme.

- Multi-function: vertical rotation, reciprocation, vibration
- Continuous or timed operation for each phase
- Choice of two models with different microtube capacities
- Speed: 1 rpm to 100 rpm
- Reciprocal rotation: 1° to 90° turning angle
- Vibration: programmable in a burst of 1 to 5 seconds
- Fully programmable sequence of functions, including pause
- Alternative platforms for larger tubes

Grant



9.721 028

Type	Description	PK	Cat. No.
PTR-35	for 26 microtubes with 15 mm dia.	1	9.721 028
PTR-60	for 48 microtubes with 15 mm dia.	1	9.721 030

Overhead shaker Trayster basic/digital

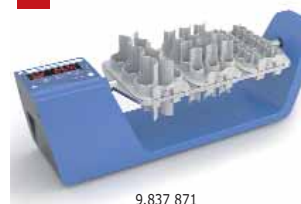
Overhead shaker with vertical rotation for smooth but effective mixing with a fixed speed. Ideal for biological samples, particularly blood samples. Suitable for separating and mixing processes of powdered and liquid samples in Eppendorf tubes and Greiner tubes up to 50 ml. The easy removable attachments allow simple and quick cleaning of the unit of spilled samples.

- Different attachments allow a variety of applications
- Usable at 4 to 50 °C in incubators
- Suitable for continuous operation
- Easy operation by foil keypad
- Suitable for continuous operation

Trayster digital only:

- Timer: Countdown, adjustable from 1s to 99h 59min
- Counter: Display of shaking time
- Error code display

IKA



9.837 871

Attachments are not included. Please order separately.

Specifications

Type of movement:	overhead
Shaking diameter:	vertical or horizontal
Permissible shaking weight (incl. attachment):	2 kg
Motor rating input/output:	16/9 W
Dimensions (W x D x H):	460 x 140 x 180 mm
Protection class acc. to DIN EN 60529:	IP 21
Power supply:	100-240 V, 50/60 Hz

Type	Rotation speed rpm	PK	Cat. No.
Trayster basic	20	1	9.837 870
Trayster digital	5 - 80	1	9.837 871

3 Rotating Shaker 3040

The specialist shaker with uniform rotating motion. Various applications, e.g. for mixing and processing of soil samples. 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 110 mm max. dia. and 270 mm max. height, stacked in 4 levels, each level with 3 holding frames. Drive motion is achieved by an overload protected DC motor. With stainless steel clamping frame for safe securing of the sample vessels. For ambient temperatures from 10 to 40 °C. Maintenance-free, CE marked.

GFL



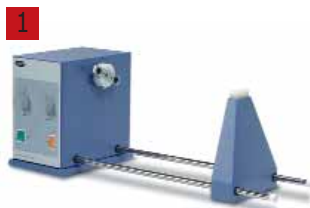
Specifications

Motion:	orbital rotating
Speed range:	1 to 20 rpm.
Speed control:	Electronic, stepless
Speed display:	Digital
Capacity:	12 bottles/vessels
Bottle height range:	to max. 270 mm height
Max. bottle dims.:	110 mm, round or square
Drive:	d.c. motor with overload protection
Dimensions (W x D x H):	770 x 700 x 715 mm
Supply requirements:	230 V 50/60 Hz, 100 W
Max. load:	20 kg
Net/gross weight:	approx. 62/78 kg

Type	PK	Cat. No.
3040	1	9.837 931

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

GENERAL CATALOGUE EDITION 20



1 Overhead shakers 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 option and manual over-ride position. Fitted with panel mounted fuse. For use on 230 V, 50 Hz single phase supplies. Overall dimensions (W x D x H) 650 x 250 x 250 mm. Net weight 6.4 kg. Requires accessory drums for operation. Stuart

With BioCote, silver-based, antimicrobial protection.
Drum and accessories sold separately.

Type	PK	Cat. No.
STR4	1	9.950 375



2 Drum STR4/1 for overhead shakers 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. Drive cat. no. 9.950 375 separately. Stuart

Type	PK	Cat. No.
STR4/1	1	9.950 376

* Tubes not included

Accessory plates for STR4/1

To fit drum 9.950 376. Fitted with clips to accept tubes vertically. Supplied in pairs. Drive cat. no. 9.950 375 separately. Stuart

Diam. mm	No. of tubes	PK	Cat. No.
12	12	2	9.950 378
16	10	2	9.950 379
19	8	2	9.950 380
24	7	2	9.950 381



3 Drum, Flask, STR4/2 for overhead shakers STR4

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

With BioCote, silver-based, antimicrobial protection.
Drive cat. no. 9.950 375 separately.

Type	PK	Cat. No.
STR4/2	1	9.950 382



4 Drum figure-of-8 STR4/3 for overhead shakers STR4

The drum has a platform which can be adjusted within the drum from horizontal to 45°. In this way the sample container can be rolled and turned end over end at the same time. Suitable for extractions, paint mixing, powders and granular samples. The sample container is held by an adjustable velcro strap. Stuart

With BioCote, silver-based, antimicrobial protection.
Drive cat. no. 9.950 375 separately.

Type	PK	Cat. No.
STR4/3	1	9.950 384



5 Bottle holder STR4/4 for overhead shakers STR4

Perspex four segment cradle with velcro straps for STR4. Holds 2 to 4 bottles each up to 1000 ml capacity. Stuart

With BioCote, silver-based, antimicrobial protection.
Drive Art. no 9.950 375 separately.

Type	PK	Cat. No.
STR4/4	1	9.950 385

➔ For our range of environmental analysis please see chapter 12.

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

1 Disc rotator LLG-uniLOOPMIX 2

NEW

Analogue Disc rotator for gentle and effective sample mixing. Suitable for all biological samples. With easily interchangeable clamps that allow a **quick cleaning** of the rotator. For a maximum of 48 x 1.5 ml, 16 x 5 or 15 ml, 8 x 50 ml tubes. Also for parallel use of different sizes, can be equipped individually.

- Variable speed 0 - 80 rpm
- Compact design
- Housing easy to clean
- Non-slip, adjustable screw feet

Scope of delivery: Disc rotator incl. 12 clamps each for 2 ml, 15 ml and 50 ml tubes

Specifications

Type of movement:	rotating
Variable speed:	0 - 80 rpm
Rotation angle of disc:	360°
Permissible shaking weight (incl. attachment):	2 kg
rel. Moisture:	up to max 80 %
Working temp.:	+5 to +40 °C
Motor rating input/output:	20 W
Dimensions (W x D x H):	220 x 300 x 310 mm
Power supply:	100-240 V, 50/60 Hz
Protection class:	IP 21
Warranty:	3 years

Type	PK	Cat. No.
LLG-uniLOOPMIX 2 with EU-plug	1	6.263 665
LLG-uniLOOPMIX 2 with UK-plug	1	6.263 666
Clamp for 2 ml centrifuge tube	12	6.263 662
Clamp for 15 ml centrifuge tube	12	6.263 663
Clamp for 50 ml centrifuge tube	12	6.263 664



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.

Stuart

SB2: Fixed speed of 20 rpm.

SB3: Variable speed of 2 rpm to 40 rpm. Additional digital timer of 1 to 999 minutes. Digital speed control.

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

Specifications:

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

Type	PK	Cat. No.
SB2	1	9.645 322
SB3	1	9.645 323



9.645 323

3 Tube holders for rotators SB2/SB3

Stuart

Type	For	No. of vessels	PK	Cat. No.
SB3/1	Micro tubes, 10 to 11.5 mm dia.	46	1	9.645 324
SB3/2	Test/blood tubes, 9 to 20 mm dia.	20	1	9.645 325
SB3/3	50 ml centrifuge tubes, 25 to 35 mm dia.	12	1	9.645 326
SB3/4	Culture tubes, 12 mm dia.	63	1	9.645 327
SB3/5	Culture tubes, 16 mm dia.	63	1	9.645 328
SB3/6	Culture tubes, 26 mm dia.	30	1	9.645 329

Additional accessories on request.



519

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

1



6.263 652

Roller Mixers LLG-uniROLLER 6 and 10, digital

NEW

Digital tube rollers **with 6 or 10 rolls** for the efficient mixing of biological samples, viscous substances and liquid-solid suspensions. The LLG-uniROLLER 6 and 10 are equipped with very easily detachable rollers enabling the user to adjust the space to hold tubes and bottles of different diameter and to quickly clean and decontaminate the unit in case of sample spillage.

- **Detachable rollers for very easy cleaning** in case of sample spills
- Speed ranging from 10 to 80 rpm
- Timer from 1 min to 99 min and continuous mode
- **Pulse mode feature for increased mixing efficiency**
- Microprocessor controller for accurate speed under variable load
- Brushless DC motor for quiet operation and maintenance free long life
- **Digital display**
- Save up to 9 user defined programs
- **Can be used in incubators up to 40 °C and humidity up to 80 %**
- Stackable design
- Tilting and rolling movement for ideal mixing

Specifications

Type of movement:	rocking and rolling
Amplitude:	24 mm
Load max.:	2 kg
Ambient temperature:	up to + 40 °C
Max. humidity:	up to 80 %
Roller size (l x Ø):	330 x 30 mm
Power supply:	100-240 V, 50/60 HZ
Protection class:	IP 21
Warranty:	3 years

Type	Dimensions (W x D x H) mm	Rollers	PK	Cat. No.
LLG-uniROLLER 6, with EU plug	502 x 301 x 92.5	6	1	6.263 650
LLG-uniROLLER 6, with UK plug	502 x 301 x 92.5	6	1	6.263 651
LLG-uniROLLER 10, with EU plug	502 x 448 x 92.5	10	1	6.263 652
LLG-uniROLLER 10, with UK plug	502 x 448 x 92.5	10	1	6.263 653

2



9.728 811

Tube Roller Mixer, SRT6, SRT6D, SRT9, SRT9D

These roller mixers provide a gentle, but highly efficient, rocking and rolling action. Stuart
There are four models available, two analogue models with either 6 or 9 rollers, with a fixed speed of 33 rpm. Or two more advanced digital models with either 6 or 9 rollers, with digitally controlled speed between 5 and 60 rpm and programmable timer.

The roller mixers feature easy to remove side panels. The side panels provide the user with complete peace of mind that samples will remain on the roller during continuous use. The rollers conveniently detach to accommodate larger vessels and therefore allow the user to mix a wide variety of differently sized tubes and bottles. Recommended for mixing blood samples, viscous substances and liquid-solid suspensions where minimum aeration is required. Units can be used in incubators up to 60 °C and humidity up to 80 %, or in cold rooms down to 4 °C.

- Rocking and rolling action for complete mixing
- Choice of analogue fixed speed or digital variable speed model
- 6 or 9 roller design with footprint
- Designed for continuous quiet operation
- Removable side panels to keep tubes on the roller
- With BioCote antimicrobial protection

Type	Dimensions (W x D x H) mm	Rotation speed rpm	Rollers	Load max. kg	PK	Cat. No.
SRT6	565 x 240 x 110	33 (fixed)	6	5.0	1	9.728 810
SRT6D	565 x 240 x 110	5 to 60	6	5.0	1	9.728 811
SRT9	565 x 360 x 110	33 (fixed)	9	5.0	1	9.728 812
SRT9D	565 x 360 x 110	5 to 60	9	5.0	1	9.728 813

Stacking system for roller mixers

Stuart

Type	PK	Cat. No.
SRT/STACK	4	9.728 815

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

Tube roller Roller 6 basic/6 digital/10 basic/10 digital

Roller shaker with 6 or 10 rolls, with smooth rocking and rolling action and a fixed speed. IKA
Particularly for mixing blood samples, solid and liquid suspensions and viscous samples.
The unit can be used for all conventional tubes and cylindrical bottles. The easy removable rolls allow simple and quick cleaning of the unit from spilled samples.

- Usable from 4 to 50 °C in incubators
- Suitable for continuous operation
- Removable rolls make it suitable for larger tubes
- Easy operation by foil keypad
- Easy removable rolls

Roller 6 digital/10 digital only:

- Timer: Countdown, adjustable from 1 s to 99 h 59 min
- Counter: Display of shaking time
- Error code display

Specifications

Type of movement:	rocking and rolling
Shaking diameter	24.5 (height)
Roller size (l x Ø):	310 x 32 mm
Ambient temperature:	+4 °C to +50 °C
Max. humidity:	80 %
Protection class:	IP 21
Power supply:	100-240 V, 50/60 Hz



Type	Dimensions (W x D x H) mm	Rotation speed rpm	Rollers	Load max. kg	PK	Cat. No.
Roller 6 basic	240 x 545 x 115	30 (fixed)	6	2.0	1	9.729 970
Roller 6 digital	240 x 545 x 115	5 - 80	6	2.0	1	9.729 971
Roller 10 basic	380 x 545 x 115	30 (fixed)	10	2.0	1	9.729 972
Roller 10 digital	380 x 545 x 115	5 - 80	10	2.0	1	9.729 973



4. Stirring, Shaking, Mixing

Shakers and mixers/Microtitre plate shakers

GENERAL CATALOGUE EDITION 20

1



1 2 Microtitre shaker LLG-uniPLATESHAKER 1

The LLG-uniPLATESHAKER 1 has been designed for accommodating and mixing a single micro plate. Due to its **small footprint** it can be used in working areas with limited space such as fume hoods and bio safety cabinets. It can also be used inside a cold-room.

- Digital Display with Speed and Time settings
- **Variable speed** from 300 to 1800 rpm
- Maintenance free brushless DC motor
- Orbital Diameter of 2 mm for thorough mixing
- Timer setting from 1 to 99 min and continuous mode
- **Universal fit**; comes with interchangeable clamps for different micro plate sizes
- Comes with foam attachment for 20 x 1.5/2 ml microtubes

Specifications

Type of movement:	orbital
Orbital diameter:	2 mm
Speed range:	300 to 1800 rpm
Motor:	brushless DC motor
Timer:	1 to 99 min, continuous
Power consumption:	15 W
Permissible ambient temperature:	4 to 40 °C
Dimensions (W x D x H):	127 x 85 x 86 mm
Weight:	1.4 kg
Power supply:	100-230 V, 50/60 Hz
Warranty:	3 years

Type	PK	Cat. No.
LLG-uniPLATESHAKER 1 with EU-plug	1	6.263 488
LLG-uniPLATESHAKER 1 with UK-plug	1	6.263 489

2



3 Microtitre shaker PMS-1000i

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.

- direct drive
- brushless motor
- RPM set and display
- variable speed: 150 rpm to 1200 rpm
- orbit: 2 mm
- continuous or timed operation
- integral timer: 1 min to 24 hours
- standard option for two microplates
- optional platform MPP-4 for four microplates
- ambient 4 °C to 40 °C

Grant

Type	Description	PK	Cat. No.
PMS-1000i	Microplate shaker	1	9.721 074
MPP-4	Platform for 4 micro plates	1	9.721 026

4



4 Digital Shakers Orbit™ P2/P4 for 2 or 4 microplates

These vortexers accept all standard microplates. Retaining springs on the contoured steel platform hold samples in place. Shaker P2 holds two microplates, P4 four microplates

- large digital display with single knob control
- suitable for cold room or incubator use
- electrical: 230V, 50Hz

NEW

Labnet

Scope of supply: Shaker with platform for 2 or 4 microplates.

Specifications

Speed range	100 to 1200 rpm
Timer	0 to 99 minutes or continuous
Motion	Circular
Orbit size	3 mm
Maximum load:	0.3 kg
Ambient operating range	+4 to 65 °C
Base dimensions (W x D x H)	168 x 279 x 153 mm
Weight	4.3 kg
Power supply:	230 V, 50 Hz

Type	For	PK	Cat. No.
Orbit™ P2	2 microplates	1	9.595 328
Orbit™ P4	4 microplates	1	6.285 556

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

1 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

IKA



Specifications

Motor rating input/output:	35/13.2 W
Orbit:	3 mm
Capacity:	2 or 4 microtitre plates
Speed range:	0 to 1100 rpm
Speed range:	Analogue scale
Timer:	1 to 99 min/continuous
Dimensions (W x D x H):	185 x 320 x 105mm
Weight:	2.7 kg
Housing IP rating to DIN EN 60529:	IP 21
Supply requirements:	230 V, 50/60 Hz
Tested to DIN EN IEC 61010-1.	

Type	PK	Cat. No.
MTS 2/4 digital with EU-plug	1	9.838 195

2 Shaker, microtitre plate, SSM5/SSL5

- Vibrational mixing action - ideal for microtitre plates
- Digital selection of mixing speed
- Built-in digital timer or continuous operation
- Optional tube holders available for mixing microcentrifuge tubes

Stuart



Designed for use with microtitre plates and microcentrifuge tubes. The aluminium tray is fitted with a specially designed mat that securely holds in place up to four wellplates. High speed combined with a tiny orbit creates the vibrational shaking action required for mixing the very small volumes contained in the wells or in microcentrifuge tubes. Speed is variable from 250 to 1250 rpm and is easily set via the digital display. Shaking times can be set from 1second to 9999 minutes on the built in digital timer. The unit can also be set for continuous operation. Tube holders are available as optional accessories. They fit securely onto the platform turning the unit into an effective tube mixer.

With BioCote, silver-based, antimicrobial protection.

Specifications

	SSM5 SSL5
Platform dimensions (W x D):	220 x 220 mm 306 x 306 mm
Number of plate positions:	4 8
Speed range:	250 to 1250 rpm
Orbit diameter:	1.5 mm 1.5 mm
Maximum load:	1 kg 2 kg
Overall dimensions (W x D x H):	240 x 300 x 160 mm 360 x 420 x 160 mm
Supply requirements:	230 V, 50 Hz (50 W)

Description	PK	Cat. No.
SSM5, shaker, microtitre	1	9.728 850
SSL5, shaker, microtitre	1	9.728 853
SSM5/1, tube holder for 1.5 ml tubes	1	9.728 851
SSM5/2, tube holder for 0.5 ml tubes	1	9.728 852
SSM5/3, tube holder for 0.2 ml tubes	1	9.728 854

➔ Incubator- and Thermo shaker please see page 512.

4. Stirring, Shaking, Mixing

Shakers and mixers/Microtitre plate shakers

GENERAL CATALOGUE EDITION 20

1



1 Mixer MixMate®

Eppendorf AG

The MixMate is a compact and versatile mixer, specially designed for mixing small volumes (5 µl to 2 ml) in numerous plate and tube formats. The fast and precisely controlled mixing movements (2DMix-Control) enable efficient and homogeneous mixing of samples in all vessel formats, allowing MixMate to be used for virtually any application. It accommodates micro test tubes, PCR plates, PCR strips, deepwell plates and MTPs. The integrated touch vortex function, with minimal hand/arm vibration transfer (Eppendorf PhysioCare Concept), completes this unique product profile. The innovative additional 2 second run timer allows vortexing of your next sample without restarting. Incl. 3 tube holders: PCR 96; 0.5 ml; 1.5/2.0 ml

Specifications

Mixing frequency:	300 to 3000 rpm
Touch vortexing frequency:	3500 rpm
Adjustable mixing time:	15 s to 99.5 h; continuous
Mixing and vortexing radius:	1.5 mm (3 mm mixing stroke)
Noise level:	< 50 dB(A)
Power supply:	230 V, 50/60 Hz

Type	Dimensions (W x D x H) mm	Weight kg	Power W	PK	Cat. No.
MixMate®	170 x 230 x 130	4.2	40	1	9.776 660

2



9.721 033

Microplate thermoshaker PHMP/PHMP-100/PHMP-4

Grant

For 96- and 384-well plates. The PHMP is a variable speed, variable temperature microplate shaker incubator with excellent temperature uniformity across the microplate. The patented heated lid and base which completely cover the plate produce a controlled micro-environment. This is combined with powerful orbital shaking to produce the maximum yield from your incubations.

- Stability ±0.1 °C, uniformity ±0.25 °C, rapid heat-up
- For standard 96 or 384-well plates (max. 14 mm height)
- Choice of models with a capacity of 2 microplates (PHMP/PHMP-100) or 4 microplates (PHMP-4)
- Variable speed: 250 rpm to 1200 rpm
- 2mm shaking orbit for effective mixing
- Temperature setting range: +25 to 60 °C, PHMP-100: +25 to 100 °C
- Temperature control range: RT +5 to 60 °C, PHMP-100: RT +5 to 100 °C
- Timed operation: 1 min to 96 hours

Type	Temp. range max. °C	PK	Cat. No.
PHMP	RT +5 to 60	1	9.721 033 2
PHMP-100	RT +5 to 100	1	6.280 073
PHMP-4	RT +5 to 60	1	6.227 761 3

3



6.227 761

4



4 Deep well plate thermoshaker TS-DW

NEW

Grant

A thermoshaker designed for shaking and heating of deep well plates. A multisystem principle, used in the design of the thermoshaker allows it to operate as 3 independent devices: Incubator, Plate shaker and Thermoshaker

- Profiled platform for perfect plate fit and maximum heat transfer
- Temperature setting range: +25 to 100 °C
- Temperature control range: +5 °C above ambient to 100 °C
- Shaking speed: 250 to 1400 rpm
- Rapid heat-up speed
- Very small footprint

Applications: Life science applications, molecular biology, cell biology lab, cell lysis, DNA isolation and purification, sample preparation for PCR, pellet re-suspension, or any other method where you have many samples that need mixing in deep well plates.

Type	PK	Cat. No.
TS-DW	1	6.280 074

5



6.280 070

Heating Blocks for Deep well plate thermoshaker TS-DW

NEW

Grant

Type	For	PK	Cat. No.
B-2A	1 Axygen® deep well plate 96/2000 µl	1	6.280 068
B-2E	1 Eppendorf® deep well plate 96/1000 µl	1	6.280 070 5
B-25	1 Sarstedt® deep well plate 96/2200 µl	1	6.280 071
B-2SL	1 Starlab® deep well platte 96/1200 µl	1	6.280 072