

ΕN

# QUIET AND USER-FRIENDLY

Passionately enabling chemists to create a better world since 1910. From A to Z.

SHAKERS MADE BY IKA.

## Shakers

/// World in motion!

### For over a century, IKA has been leading the way with innovative technologies and applications in the field of laboratory, analytical and process equipment.

In 1925, IKA first produced the conventional shaker and displayed this entire product line at ACHEMA. To give our loyal customers a leading edge, IKA has ensured that new product innovation has been introduced time and time again. And once again, IKA has completely revamped its' shaker line by incorporating advanced technology with unique designs. As always, we continue our 100 year old tradition of bringing design, innovation, ease of use and commitment to our customers!

IKA already has a line of well known and proven orbital and horizontal shakers. IKA is proud to introduce a brand new series of Rollers, Rockers and Overhead Rotators. The wide range of Rocking, Rolling, Rotating and Shaking covers the entire spectrum of motions in mixing technology. All new devices are available in a basic and digital version. IKA has also added a sibling to its' voluminous incubator shaker KS 4000 i control and ic control. The expanded product range facilitates the use of our equipment in a wider range of applications, especially in the medical and biological field. The hallmark of IKA, exceptional design, innovation, quality, high efficiency, smooth operation and excellent performance continues as it has for 100 years!



Find out more about IKA and order our fascinating products online: www.ika.com.

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### **Shakers**

/// Overview

IKA offers a wide range of lab shakers for mixing and shaking applications. Products are equipped with digital display, timer function, and controlling options via the lab software labworldsoft.

Integrated end point positioning allows for automated sampling. An extensive array of attachments is available for the use of different vessels.





VXR basic Vibrax (R)

MTS 2/4 digital Microtitier shaker



lab dancer



Vortex 3

VORTEX

 $\bigcirc$ 





Vortex 1

Vortex 4 basic



Vortex 2



MS 3 basic | digital



RECIPROCATING

HS 260 basic | control HS 501 digital



**ROCKING AND** ROLLING





Roller 6 basic | digital Roller 10 basic | digital





KS 4000 i | ic control



Trayster basic | digital

Lopster basic | digital





Rocker 2D basic | digital

Rocker 3D basic | digital



KS 130 basic | control KS 260 basic | control KS 501 digital









#### ROTATING



ROCKING

### lab dancer

/// Small, compact and reliable

Attractively designed, test tube shaker with fixed speed. Designed for mixing small test samples with a touch function.



Test tube shaker with touch function and adjustable speed range. Designed for test samples of up to 30 mm.

#### LAB DANCER

- > for small containers up to 30 mm in diameter, e.g. test tubes, centrifuge tubes, Eppendorf beakers
- > fixed speed (2.800 rpm)
- > excellent mixing action
- > The upper casing and the test tube surface are made from inert plastic. The bottom section is a coated, zinc die-casting







VORTEX 1

> infinitely adjustable speed from 1.000 to 2.800 rpm

Shakers

### Vortex 2

/// For touch operation or continuous operation





### VORTEX 2

- touch function
- > suitable for continuous operation
- > stable operation at high speeds due to silicon base feet
- infinitely adjustable speed range
- > wide range of attachemets for various applications
- sturdy metal die cast housing



### VORTEX 3

- $\rightarrow$  touch function
- > orbital action
- wide speed range enables intensive mixing, even for small vessels
- different applications easily handled with interchangeable attachments and inserts

Shakers



Accessories on pages 40 – 41

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### **Vortex 4 basic**

/// Compact, universal small shaker

The Vortex 4 shaker is suitable for shaking tasks with small vessels and microtiter plates.



sample preparation processes.







MS 3 BASIC

- With the introduction of the MS 3 control, IKA is extending its range
- from entry-level shaking tasks to a device that is integrateable in various



**MS 3 DIGITAL** 

## VXR basic Vibrax (R)

/// Electronically controlled shaker

The VXR Vibrax has a very wide speed range (0 - 2.200 rpm) and wide application field due to different attachments.

## MTS 2/4 digital Microtitier shaker

/// Shaking two or four microtiter plates

Special shaker for the orbital shaking of two or four microtiter plates.



#### VXR BASIC VIBRAX (R)

- > suitable for continuous operation
- > improved drive system
- circular shaking motions
- > slow speeds are well maintained
- > attachments are interchangeable





**Alarm** to indicate set time has expired.



## **Orbital shaker series KS**

/// Small footprint

The HS reciprocationg or KS orbital shakers ensure long life with ideal swivel motion for different loads.



KS 130 BASIC



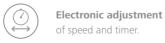
KS 130 CONTROL



KS 260 BASIC



KS 501 DIGITAL



**Wide range** of attachment combinations allows for almost all shapes and sizes of vessels.

Shakers



### **Horizontal shaker series HS**

/// Proven and reliable

#### HS 260 BASIC

- > electronic adjustment of speed and timer
- > LED display for speed and time adjustment
- wide range of attachment combinations makes it possible to use almost all shapes and sizes of vessels
- > attachments are not included in delivery, please order separately

#### HS 260 CONTROL

Additional to the basic version:

- > digital display makes it possible to read the speed, timer function and operating modes
- > electronic time switching clock: 0 9 h 59min or continuous operation (endless)
- > with integrated endpoint positioning (for automated robot-controlled sampling)
- > all functions can be controlled and documented with labworldsoft<sup>®</sup> software

#### HS 501 DIGITAL

- > infinitely variable speed control from 0 300 rpm digital speed display
- > ideal for all lying vessels, e.g. separating funnels
- > continuous operation (endless) even under extreme loads
- > timer
- > attachments are not included, please order separately
- > integrated USB and RS 232 interfaces





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### KS 3000 i control | ic control

/// Incubator shakers

The KS 3000 series is the latest addition to the incubator shaker family. These sleek, compact, high-performance shakers are designed for safe, unattended operation in a temperature-controlled environment. Additionally, KS 3000 ic control is equipped with a built-in cooling coil for connection to an external cooling unit. Precise temperature control makes the incubator shaker a reliable asset in every lab, ensuring quiet, vibration-free and reliable operation - an excellent device for controlled mixing!





Assure highly accurate **temperature control**.



Wide range of attachments allows for using almost all shapes and sizes of vessels.



**Built-in cooling coil** for connection to an external cooling unit (available only for KS 3000 ic control).



**Large LED display** for speed, temperature and timer.



2 years + 1 year following registration at www.ika.com/en/register.



**USB interface** to control and document all parameters using labworldsoft<sup>®</sup> software and for updating your firmware. Shakers

## KS 4000 i control | ic control

/// Incubator shakers

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







KS 4000 I CONTROL

All functions can be controlled and documented with labworldsoft<sup>®</sup>.



**Unit stops automatically** when hood is lifted.

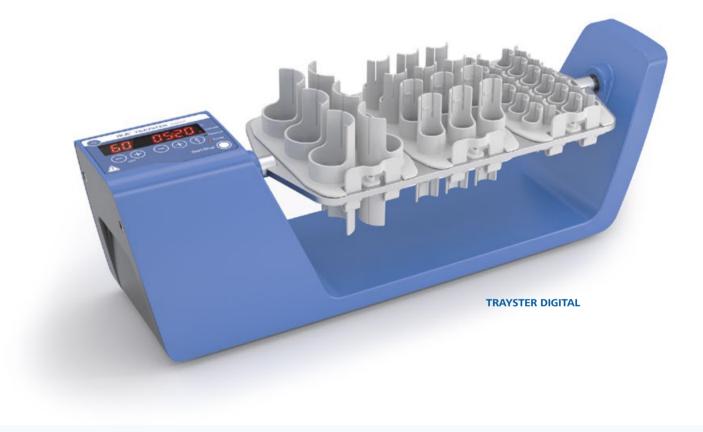


**Optional built-in cooler** for connection to an external cooling unit.

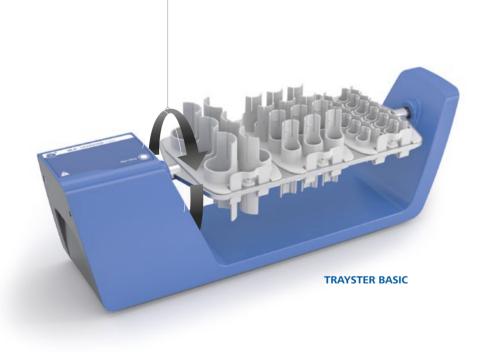
/// Upside down and up

Overhead shakers with vertical rotating action for smooth and effective mixing at fixed or infinitely adjustable speed. Ideal for biological samples, particularly blood and suitable for the separating and mixing of powdered and liquid samples in tubes of up to 50 ml. Easily removable attachments provide for quick cleaning in case of sample spills.





VERTICAL ROTATING ACTION



Three easily LMs interchangeable tray inserts.

Vertical rotating action.

2+1

2 years + 1 year following registration at www.ika.com.



Touch keypad for easy operation.



**C/T button** for choosing the counter or the timer function.



Timer

Timer display for accurate and reproducible conditions.

## **Loopster basic | digital**

/// Spin it right round

Rotate your samples smoothly and effectively, at fixed or infinitely variable speeds with freely adjustable rotary angles. Ideal for biological samples, particularly blood samples and also suitable for separating and mixing of powdered and liquid samples in multiple tube sizes as large as 50 ml conical tubes. Easily removable attachments provide for quick cleaning in case of sample spills.





2+1

at www.ika.comr.

LOOPSTER BASIC



Touch keypad for easy operation.



**C/T button** for choosing the counter or the timer function.



Timer

Timer display for accurate and reproducible conditions.

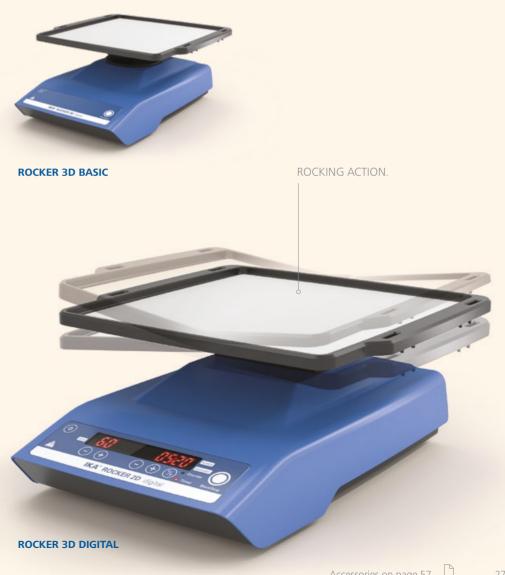
### **Rocker shaker series**

/// 2D and 3D basic | digital

The brand new range of 2D and 3D Rockers provide gentle rocking/ see-saw action and are used for homogenous mixing in flasks, culture flasks, Petri dishes and tubes. The compact, small footprint and dual platform saves valuable bench space and facilitates easy-handling. Even with load and voltage fluctuations, shaking speeds remain constant. Precision in speed (available in fixed and variable) and adjustable tilt angle allow for a variety of applications.







Three-dimensional

tumbling rocking/see-saw motion.



**C/T button** for choosing the counter or the timer function.



### **Roller shaker series**

/// Smart and safe mixing

Gentle mixing applications demand smooth rocking and rolling action. Our 6 and 10 Rollers, operated at fixed and infinitely adjustable speed deliver this requirement efficiently. Easily removable attachments provide for quick cleaning in case of sample spills. Removable rollers allow for the use of larger tubes. Truly, a Rock n' Roll experience in the laboratory!













C/T button for choosing the counter or the timer function.

Timer display

Timer display for accurate and reproducible conditions.

### **Technical data**

/// Vortex shakers

	<b>lab dancer</b> Ident. No. 0003365000	Vortex 1 Ident. No. 0004047700
Type of movement	orbital	orbital
Shaking diameter	4,5 mm	4,5 mm
Permissible shaking weight (incl. attachment)	max. 50 ml (1 test tube)	0,1 kg
Motor rating input/output	1,2/0,8 W	1,2/0,8 W
Permissible ON time	100 %	100 %
Speed range	2.800 rpm (fixed)	1.000 – 2.800 rpm
Speed display	no	no
Timer	no	no
Timer display	no	no
Operating mode	touch operation	touch operation
Dimensions (W $\times$ D $\times$ H)	100 × 70 mm (Ø × H)	95 × 110 × 70 mm
Weight	0,55 kg	0,55 kg
Permissible ambient temp.	5 – 40 °C	5 – 40 °C
Permissible relative moisture	80 %	80 %
Protection class acc. to DIN EN 60529	IP 40	IP 40
Interface	no	no
Voltage	100 – 240 V	100 - 240 V
Frequency	50/60 Hz	50/60 Hz



	Vortex 2 Ident. No. 0025000258	Vortex 3 Ident. No. 0003340000	<b>Vortex 4 basic</b> Ident. No. 0004049600
Type of movement	orbital	orbital	orbital
Shaking diameter	4 mm	4 mm	4,5 mm
Permissible shaking weight (incl. attachment)	0,4 kg	0,4 kg	0,5 kg
Motor rating input/output	39/9 W	58/10 W	10/8 W
Permissible ON time	100 %	100 %	100 %
Speed range	500 – 2.500 rpm	500 – 2.500 rpm	0 – 3.000 rpm
Speed display	scale 0 – 6	scale 0 – 6	scale
Timer	no	no	no
Timer display	no	no	no
Operating mode	continuous/ touch operation	continuous/ touch operation	continuous operation/ touch operation
Dimensions (W $\times$ D $\times$ H)	120 × 138 × 140 mm	127 × 149 × 136 mm	176 × 190 × 63 mm
Weight	3,9 kg	4,5 kg	3 kg
Permissible ambient temp.	5 – 40 °C	5 – 40 °C	5 – 40 °C
Permissible relative moisture	80 %	80 %	80 %
Protection class acc. to DIN EN 60529	IP 21	IP 21	IP 21
Interface	no	no	no
Voltage	230 V	230 V	100 - 240 V
Frequency	50/60 Hz	50/60 Hz	50/60 Hz

/// Shakers with orbital motion

	MS 3 basic   digital Ident. No. 0003617000   0003319000	MS 3 control Ident. No. 0020016017
Type of movement	orbital	orbital
Shaking diameter	4,5 mm	4,5 mm
Permissible shaking weight (incl. attachment)	0,5 kg	0,5 kg
Motor rating input/output	10/8 W	10/8 W
Permissible ON time	100 %	100 %
Speed range	200 – 3.000 rpm	100 – 3.000 rpm
Speed display	scale   digital	digital
Timer	no   1/60 min – 999 min	1/60 min – 999 min
Timer display	no   digital	LCD
Operating mode	continuous/ touch operation   timer and continuous/ touch operation	timer and continuous / touch operation
Dimensions (W $\times$ D $\times$ H)	148 × 205 × 63 mm	148 × 205 × 63 mm
Weight	2,9 kg	2,9 kg
Permissible ambient temp.	5 – 40 °C	5 – 40 °C
Permissible relative moisture	80 %	80 %
Protection class acc. to DIN EN 60529	IP 21	IP 21
Interface	no	no
	100 - 240 V	100 – 240 V
Voltage	100 240 0	

TECHNICAL DATA /// Comparison	
	MTS 2/4 digital Microtitier shaker Ident. No. 0003208000
Type of movement	orbital
Shaking diameter	3 mm
Permissible shaking weight (incl. attachment)	2 or 4 microtiter plates (MTP)
Motor rating input/output	35/13,2 W
Permissible ON time	100 %
Speed range	0 – 1.100 rpm
Speed display	scale
Timer	∞/1 – 99 min
Timer display	digital
Operating mode	timer and continuous operation
Dimensions (W $\times$ D $\times$ H)	185 × 320 × 105 mm
Weight	2,7 kg
Permissible ambient temp.	5 – 40 °C
Permissible relative moisture	80 %
Protection class acc. to DIN EN 60529	IP 21
Interface	no
Voltage	230 V
Frequency	50/60 Hz
	€ 1.457,00

€ 1.457,00

/// Incubator shakers

	KS 3000 i control   ic control Ident. No. 0003940000 Ident. No. 0003940100	KS 4000 i control   ic cont Ident. No. 0003510000 Ident. No. 0003510100
Type of movement	orbital	orbital
Shaking diameter	20 mm	20 mm
Permissible shaking weight (incl. attachment)	7,5 kg	20 kg
Motor rating input/output	45/10 W	82/24 W
Power input	1.120 W	1.120 W
Permissible ON time	100 %	100 %
Speed range	10 – 500 rpm	10 – 500 rpm
Speed display	LED	LED
Heating temperature range	RT +5 - 80 °C   RT - 10 - 80 °C	RT +5 - 80 °C   RT - 10 - 80 °C
Timer	∞/1 – 99 min	∞/1 – 99 min
Timer display	LED	LED
Time setting range	1 s – 999 h	1 s – 999 h
Operating mode	Timer and continuous operation	Timer and continuous operation
Heat output	1.000 W	1.000 W
Temperature display	LED	LED
Temp. stability (0.2   H2O; RT 25°C, T = 37°C)	± 0,1 K	± 0,1 K
Dimensions (W $\times$ D $\times$ H)	465 × 695 × 430 mm	580 × 750 × 525 mm
Weight	35 kg   37 kg	50 kg   55 kg
Permissible ambient temperature	15 – 32 °C	15 – 32 °C
Permissible relative moisture	80 %	80 %
Protection class acc. to DIN EN 60529	IP 30	IP 30
Interface	USB and RS232	RS 232
Voltage	230 V	230 V
Frequency	50/60 Hz	50/60 Hz
Built-in cooling coil	no   yes	no   yes
	€ 4.999,00   € 5.999,00	€ 6.049,00   € 7.049,00

	KS 130 basic   control Ident. No. 0002980000 Ident. No. 0002980100	KS 260 basic   control Ident. No. 0002980200 Ident. No. 0002980300	KS 501 digital Ident. No. 002500298
Type of movement	orbital	orbital	orbital
Shaking diameter	4 mm	10 mm	30 mm
Permissible shaking weight (incl. attachment)	2 kg	7,5 kg	15 kg
Motor rating input/output	45/10 W	45/10 W	70/19 W
Permissible ON time	100 %	100 %	100 %
Speed range	80 – 800 rpm	50 – 500 rpm   10 – 500 rpm	0 – 300 rpm
Speed display	LED line   digital	LED line   digital	7 Segment LED
Timer	∞/5 – 50 min   ∞/0 – 9 h 59 min	∞/5 – 50 min   ∞/0 – 9 h 59 min	∞/1 – 56 min
Timer display	LED line   digital	LED line   digital	scale
Operating mode	Timer and continuous operation	Timer and continuous operation	Timer and continuous operation
Dimensions (W $\times$ D $\times$ H)	270 × 316 × 98 mm	360 × 420 × 98 mm	505 × 585 × 120 mm
Weight	8,8 kg	8,5 kg   8,8 kg	26 kg
Permissible ambient temp.	5 – 50 °C	5 – 50 °C	5 – 50 °C
Permissible relative moisture	80 %	80 %	80 %
Protection class acc. to DIN EN 60529	IP 21	IP 21	IP 21
Interface	no   RS 232	no   RS 232	USB and RS232
Voltage	230 V	230 V	230 V
Frequency	50/60 Hz	50/60 Hz	50/60 Hz

## **Technical data**

/// Horizontal shaker series

### **Technical data**

/// Rotating shaker series

	HS 260 basic   control Ident. No. 0003066600 Ident. No. 0003066700	<b>HS 501 digital</b> Ident. No. 0025002982
Type of movement	reciprocating	reciprocating
Shaking diameter	20 mm	30 mm
Permissible shaking weight (incl. attachment)	7,5 kg	15 kg
Motor rating input/output	45/10 W	70/19 W
Permissible ON time	100 %	100 %
Speed range	20 – 300 rpm   10 – 300 rpm	0 – 300 rpm
Speed display	LED line   digital	7 Segment LED
Timer	∞/5 – 50 min   ∞/0 – 9 h 59 min	∞/1 – 56 min
Timer display	LED line   digital	scale
Operating mode	Timer and continuous operation	Timer and continuous operation
Dimensions (W × D × H)	360 × 420 × 100 mm	505 × 120 × 585 mm
Weight	8,5 kg   8,8 kg	26 kg
Permissible ambient temp.	5 – 50 °C	5 – 50 °C
Permissible relative moisture	80 %	80 %
Protection class acc. to DIN EN 60529	IP 21	IP 21
Interface	no   RS 232	USB and RS232
Voltage	230 V	230 V
Frequency	50/60 Hz	50/60 Hz

	Trayster basic   digital Ident. No. 0004005000* Ident. No. 0004006000*	Loopster basic   digital Ident. No. 0004015000 * Ident. No. 0004016000 *
Type of movement	rotating, vertical or horizontal	rotating, adjustable from horizontal to vertical
Permissible shaking weight (incl. attachment)	2 kg	2 kg
Motor rating input/output	16/9 W	16/9 W
Permissible ON time	100 %	100 %
Speed range	20 rpm (fixed)   5 – 80 rpm	20 rpm (fixed)   5 – 80 rpm
Speed display	no   7 segment LED	no   7 segment LED
Timer	no   ∞/1 s – 99,9 h	no   ∞ / 1 s – 99,9 h
Timer display	no   7 segment LED	no   7 segment LED
Operating mode	continuous operation   timer and continuous operation	continuous operation   timer and continuous operation
Dimensions (W $\times$ D $\times$ H)	460 × 140 × 180	300 × 300 × 360 mm
Weight	1,6 kg	3 kg
Permissible ambient temp.	4 – 50 °C	4 – 50 °C
Permissible relative moisture	80 %	80 %
Protection class acc. to DIN EN 60529	IP 21	IP 21
Interface	no	no
Voltage	100 – 240 V	100 – 240 V
Frequency	50/60 Hz	50/60 Hz
DC Voltage	24 V	24 V
	€ 749,00   € 849,00	€ 649,00 € 749,00

\* Loopster and Trayster accessories have to be ordered seperately.



### **Technical data**

/// Rocker shaker series

## **Technical data**

/// Roller shaker series

	Rocker 2D basic   digital Ident. No. 0004002000 Ident. No. 0004003000	Rocker 3D basic   digital Ident. No. 0004000000 Ident. No. 0004001000
Type of movement	rocking	tumbling
Shaking diameter	8°   2,5 – 15° (angle)	8°   0 – 15° (angle)
Permissible shaking weight (incl. attachment)	2 kg	2 kg
Motor rating input/output	16/9 W	16/9 W
Permissible ON time	100 %	100 %
Speed range	5 – 80 rpm	30 rpm (fixed)   5 – 80 rpm
Speed display	7 segment LED	no   7 segment LED
Timer	no   ∞/1 s – 99,9 h	no   ∞/1 s – 99,9 h
Timer display	no   7 segment LED	no   7 segment LED
Operating mode	continuous operation   timer and continuous operation	continuous operation   timer and continuous operation
Dimensions (W $\times$ D $\times$ H)	280 × 330 × 150 mm	280 × 330 × 165 mm   280 × 330 × 185 mm
Weight	2,2 kg	2,2 kg   2,3 kg
Permissible ambient temp.	4 – 50 °C	4−50 °C
Permissible relative moisture	80 %	80 %
Protection class acc. to DIN EN 60529	IP 21	IP 21
Interface	no	no
Voltage	100 – 240 V	100 - 240 V
Frequency	50/60 Hz	50/60 Hz
DC Voltage	24 V	24 V
	€ 749,00   € 849,00	€ 799,00   € 899,00

	Roller 6 basic   digital Ident. No. 0004010000 Ident. No. 0004011000	Roller 10 basic   digital Ident. No. 0004012000 Ident. No. 0004013000
Type of movement	rocking and rolling	rocking and rolling
Shaking diameter	24,5 mm (high)	24,5 mm (high)
Permissible shaking weight (incl. attachment)	2 kg	2 kg
Motor rating input/output	16/9 W	16/9 W
Permissible ON time	100 %	100 %
Speed range	30 rpm (fixed)   5 – 80 rpm	30 rpm (fixed)   5 – 80 rpm
Speed display	no   7 segment LED	no   7 segment LED
Timer	no   ∞/1 s – 99,9 h	no   ∞/1 s – 99,9 h
Timer display	no   7 segment LED	no   7 segment LED
Operating mode	continuous operation   timer and continuous operation	continuous operation   timer and continuous operation
Dimensions (W × D × H)	240 × 545 × 115	380 × 545 × 115 mm
Weight	4 kg	6 kg
Permissible ambient temp.	4 – 50 °C	4 – 50 °C
Permissible relative moisture	80 %	80 %
Protection class acc. to DIN EN 60529	IP 21	IP 21
Interface	no	no
Voltage	100 – 240 V	100 – 240 V
Frequency	50/60 Hz	50/60 Hz
DC Voltage	24 V	24 V
	€ 1.299,00   € 1.399.00	€ 1.599,00   € 1.699.00

€ 1.399,00

€ 1.699,00

/// Vortex shakers

		Description	Price
	Vortex 2/Vortex 3 acces	sories	
)	VG 3.1 Ident. No. 0003341200	Standard attachment for reagent glasses/small vessels (continuous/touch operation), included with delivery.	€ 9,00
)	VG 3.2 Ident. No. 0003342300	One-hand attachment One-hand attachment, 88 mm, round, with rubber insert (continuous/touch operation).	€ 20,00
	VG 3.21 Ident. No. 0020008398	Rubber pad For use with VG 3.2 One-hand attachment.	€ 13,00
)	VG 3.3 Ident. No. 0003342400	Universal attachment Universal attachment, 150 mm, with rubber insert (continuous operation).	€ 22,00
)	VG 3.30 Ident. No. 0025005779	Test tube attachment For 96 PCR tubes 0,2 ml .	€ 25,00
)	VG 3.31* Ident. No. 0003344300	Test tube attachment For 54 Eppendorf tubes (continuous operation).	€ 56,00
)	VG 3.32* Ident. No. 0003343900	Test tube attachment For 18 reagent glasses, Ø 10 mm (continuous operation).	€ 29,00
)	VG 3.33* Ident. No. 0003344000	Test tube attachment For 12 reagent glasses, Ø 12 mm (continuous operation).	€ 29,00
)	VG 3.34* Ident. No. 0003344100	Test tube attachment For 8 reagent glasses, Ø 16 mm (continuous operation).	€ 29,00
)	VG 3.35* Ident. No. 0003344200	Test tube attachment For 8 reagent glasses, Ø 20 mm (continuous operation).	€ 29,00
)	VG 3.36* Ident. No. 0003342100	Erlenmeyer flask attachment For 1 Erlenmeyer/round flask from 100 to 250 ml (continuous operation).	€ 29,00
D	VG 3.37* Ident, No. 0003344400	Microtiter plate attachment For 1 standard microtiter plate (continuous operation).	€ 29,00



\* Used with VG 3.3 universal attachment, ordered separately.

Shakers



/// MS 3 shakers

		Description	Price
	MS 3 basic/digital acces	sories	
2)	MS 3.1 Ident. No. 0003426300	Standard attachment For test tubes and small vessels up to Ø 50 mm, included with the minishakers MS 3 basic and MS 3 digital.	€ 15,00
•	MS 3.3 Ident. No. 0003426600	Universal attachment For various foam inserts, included with the minishakers MS 3 basic and MS 3 digital.	€ 15,00
4)	MS 1.21 Ident. No. L001540	One-hand insert For inserting into the universal attachment, included with the minishakers MS 3 basic and MS 3 digital.	€ 20,00
5)	MS 1.30 Ident. No. 0025005776	Test tube insert For 0,5 ml tubes.	€ 43,00
6)	MS 1.31 Ident. No. L001840	Test tube insert For inserting into universal attachment, for 14 test tubes Ø 10 mm, material: ethylvinyl-acetate.	€ 45,00
7)	MS 1.32 Ident. No. L001850	Test tube insert For inserting into the universal attachment, for 6 test tubes Ø 12 mm. Material: ethylvinyl-acetate. Included with the minishakers MS 3 digital.	€ 45,00
8	MS 1.33 Ident. No. L001860	Test tube insert For inserting into the universal attachment, for 4 test tubes Ø 16 mm. Material: ethylvinyl-acetate.	€ 45,00
9	MS 1.34 Ident. No. L001830	Test tube insert For inserting into the universal attachment, for any number of bore holes. Material: ethylvinyl-acetate.	€ 21,00
0	MS 3.4 Ident. No. 0003426400	Microtiter plate attachment For use with a microtiter plate, included with the minishaker MS 3 digital.	€ 45,00
1)	MS 3.5 Ident, No. 0003428000	PCR plate attachment For holding PCR plates, 96-well. Includes holder and insert.	€ 45,00



Shakers



/// VXR basic Vibrax (R)



VX 11.1 TEST TUBE INSERT Attachment for Eppendorf tubes or test tubes.

Details VX 11.1, Ident. No. 0003	659000	
Bore holes (number)	70	
Hole Ø	10 mm	
	€ 129,00	



VX 11.3 TEST TUBE INSERT Attachment for test tubes.

Details VX 11.3, Ident. No. 00036	559200
Bore holes (number)	32
Hole Ø	16 mm



VX 11.2 TEST TUBE INSERT

VX 11.2, Ident. No. 0003659100

41

12 mm € 129,00

Attachment for test tubes.

Bore holes (number)

Details

Hole Ø

#### VX 11.4 TEST TUBE INSERT Attachment for test tubes.

<b>Details</b> VX 11.4, Ident. No. 0003	659300	
Bore holes (number)	18	
Hole Ø	20 mm	
	€ 99,00	



#### VX 11.5 TEST TUBE INSERT Attachment for 50 ml tubes.

05778
05778
24
12 mm



#### VX 11.6 TEST TUBE INSERT Attachment for 30 ml tubes.

VX 11.6, Ident. No. 0025	005777
Bore holes (number)	8
Hole Ø	27,5 mm



#### VX 2E "EPPENDORF" ATTACHMENT For intensive mixing of up to 64 "microcentrifuge" tubes (1.5 ml).

Details	
VX 2E, Ident. No. 0001618100	

	€ 359,00
Weight	790 g
Dimensions (W $\times$ D $\times$ H)	210 × 210 × 65 mm



#### VX 8 UNIVERSAL ATTACHMENT

For rapid and secure clamping, e.g. 2 Erlenmeyer flasks up to 500 ml.

Details VX 8, Ident. No. 0000910400		
Dimensions (W $\times$ D $\times$ H)	265 × 136 × 60 mm	
Clamping range	25 – 135 mm	
Min. height of vessel	80 mm	
Weight	760 g	

€ 599,00



### VX 1 ONE-HAND ATTACHMENT

For shaking single, non-fixed vessels of 1 – 250 ml.

	€ 85,00
Weight	160 g
Dimensions (W $\times$ D $\times$ H)	130 × 135 × 40 mm
Details VX 1, Ident. No. 000060720	00

Shakers



#### VX 7 DISH ATTACHMENT For careful mixing of culture bottles, Petri dishes, etc.

<b>Details</b> VX 7, Ident. No. 00009533	00
Dimensions (W $\times$ D $\times$ H)	$410 \times 210 \times 40 \text{ mm}$
Weight	740 g
	€ 249,00



#### VX 2 TEST TUBE ATTACHMENT

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

#### Details

VX 2, Ident. No. 0000568900

Dimensions (W × D × H) Material

macrolon 300 g

140 × 145 × 115 mm

Weight

€ 359,00



VX 11 BASIC HOLDER

Attachment for test tube inserts.



VX 8.1 CLAMPING ROLL Spare for use with VX 8 universal attachment.

Ident. No. 0003627700 € **129,00** 

Ident. No. 0003375400 € 33,00

/// KS 130



AS 130.1 UNIVERSAL ATTACHMENT For use with various types of vessels by means of universal, infinitely variable clamping rolls. Included with delivery: 1 × AS 1.30 Basic holder, 3 × AS 1.31 Clamping roll, 6 × AS 1.5 Fastening screw

	€ 299.00
Weight	850 g
Set-up plate	220 × 220 mm
Dimensions (W $\times$ D $\times$ H)	325 × 234 × 88 mm
<b>Details</b> AS 130.1, Ident. No. 00080	17300



AS 130.3 DISH ATTACHMENT For smooth shaking operations in the low viscosity range, e.g. Petri dishes or culture bottles. With integrated slip-resistant foil (PP).

<b>Details</b> AS 130.3, Ident. No. 0003120000		
Dimensions (W $\times$ D $\times$ H)	420 × 270 × 32 mm	
Set-up plate	220 × 340 mm	
Weight	370 g	
	€ 85,00	



AS 130.2 FIXING CLIP ATTACHMENT For processing round flasks, measuring flasks and Erlenmeyer flasks. Please order fixing clips separately. Accessories: Fixing clips: AS 2.1, AS 2.2, AS 2.3, AS 2.4, AS 2.5

Number of fixing clips (volume)	4 × AS 2.4 (250 ml) 4 × AS 2.5 (500 ml)
	12 × AS 2.2 (50 ml) 12 × AS 2.3 (100 ml)
	20 × AS 2.1 (25 ml)
Dimensions (W $\times$ D $\times$ H)	230 × 230 × 24 mm



AS 130.4 TEST TUBE ATTACHMENT For intensive shaking, e.g. small tubes,

test tubes, cuvettes, centrifuge tubes.

<b>Details</b> AS 130.2, Ident. No. 00031	120300
Dimensions (W $\times$ D $\times$ H)	220 × 230 × 95 mm
Capacity	64
Vessel Ø	10 – 16 mm
Min. height of vessel	80 mm
Min. height of vessel	670 g
	€ 201,00

**Accessories** 

/// KS/HS 260 basic/control and KS 3000



#### AS 260.1 UNIVERSAL ATTACHMENT

For various types of vessels. Infinitely variable clamping rolls allow universal adaptation to the vessels. Included with delivery:  $1 \times AS 1.60$  Basic holder,  $4 \times AS 1.61$  Clamping roll, 8 × AS 1.5 Fastening screw

<b>Details</b> AS 260.1, Ident. No. 00080	017400
Dimensions (W $\times$ D $\times$ H)	425 × 335 × 135 mm
Set-up plate	320 × 320 mm
Weight	1.600 g
	€ 499,00



### AS 260.2 FIXING CLIP ATTACHMENT

For shaking flasks, Erlenmeyer flasks and bottles with a round cross-section (without fixing clips). Accessories: Fixing clips: AS 2.1, AS 2.2, AS 2.3, AS 2.4, AS 2.5

Weight	1.290 g
	5 × AS 2.6 (1.000 ml)
	9 × AS 2.5 (500 ml)
(volume)	11 × AS 2.4 (250 ml)
Number of fixing clips	23 × AS 2.3 (100 ml)
	23 × AS 2.2 (50 ml)
	56 × AS 2.1 (25 ml)
Dimensions (W $\times$ D $\times$ H)	330 × 330 × 24 mm



#### AS 260.3 DISH ATTACHMENT

For smooth movement for cell cultures, nutrient media in Petri dishes, culture bottles and vessels with a low center of gravity. With integrated slip-resistant foil (PP).

Dimensions (W $\times$ D $\times$ H)	410 × 370 × 32 mm
Set-up plate	320 × 320 mm
Weight	460 g



#### AS 260.5 SEPARATING FUNNEL ATTACHMENT

For shaking out, salting out, extracting, eluting and enriching. The 3 clamping rolls (included in delivery) are height-adjustable for adaption to different separating funnel sizes. The separating funnels are secured with O-rings (6 O-rings included).

Details				
AS 260.5,	Ident.	No.	0003120900	

Dimensions (W $\times$ D $\times$ H)	334 × 425 × 145 mm
	6 × 50 ml
Capacity: (number of	5 × 100 ml
separating funnels per	3 × 250 ml
volume, pear-shaped)	3 × 500 ml
Veight	1.550 g
weight	1.550 g

€ 519,00

/// HS/KS 501 digital



AS 501.1 UNIVERSAL ATTACHMENT For various types of vessels with a minimum volume of 50 ml. Ideally more than 250 ml. The clamping rolls may be adjusted to two levels. Included with delivery: 1 × AS 1.10 Basic holder, 6 × AS 1.11 Clamping roll, 12 × AS 1.6 Fastening screw

AS 501.1, Ident. No. 0008000200	
Dimensions (W $\times$ D $\times$ H)	480 × 500 × 120 mm
Set-up plate	420 × 420 mm
Weight	4.000 g

€ 1.499,00



AS 501.3 SEPARATING FUNNEL ATTACHMENT Same features as AS 501.2. Included with delivery: 1 × AS 1.10, 4 × AS 1.6, 4 × AS 1.7

Details AS 501.3, Ident. No. 0008000400	
Dimensions (W $\times$ D $\times$ H)	480 × 505 × 190 mm
Capacity: (number of separating funnels per volume, pear-shaped)	4 × 500 ml 3 × 1.000 ml 2 × 2.000 ml
Weight	3.720 g

€ 1.299,00



AS 501.2 SEPARATING FUNNEL ATTACHMENT For shaking out, eluting, extracting, gassing out, dissolving, enriching, etc. Adjustment for the clamping rolls is infinitely variable, the set-up height can be changed by means of clamping devices. Included with delivery:  $1 \times AS 1.10, 6 \times AS 1.11, 6 \times AS 1.6, 6 \times AS 1.7$ 

480 × 505 × 190 mm
12 × 50 ml
10 × 100 ml
6 × 250 ml
4.180 g
4.180 g



AS 501.4 FIXING CLIP ATTACHMENT For shaking flasks, Erlenmeyer flasks and pear-shaped flasks (without fixing clips). Accessories: Fixing clips : AS 2.1, AS 2.2, AS 2.3, AS 2.4, AS 2.5

Weight	12 × AS 2.5 (500 ml) 8 × AS 2.6 (1.000 m 2.640 g
(ioianic)	12 × AS 2.5 (500 ml)
(rolanic)	
(volume)	16 × AS 2.4 (250 ml)
Number of fixing clips	35 × AS 2.3 (100 ml)
	55 × AS 2.2 (50 ml)
	110 × AS 2.1 (25 ml)
Dimensions (W $\times$ D $\times$ H)	475 × 460 × 95 mm



#### AS 501.5 DISH ATTACHMENT

For smoothly shaking dishes, but also for smooth mixing in vessels with a large, flat bottom (wide-necked Erlenmeyer flasks and beakers). A plastic foil with mild adhesive prevents the vessel from slipping.

#### Details

AS 501.5, Ident. No. 0002339600

Dimensions (W  $\times$  D  $\times$  H)

Set-up plate Weight 450 × 450 × 45 mm 420 × 420 mm 1.120 g

€ 199,00



#### AS 501.6 SEPARATING FUNNEL ATTACHMENT

Same features as AS 501.2. This attachment will hold 4  $\times$  1.000 ml separating funnels. Included with delivery: 1  $\times$  AS 1.10, 4  $\times$  AS 1.6, 4  $\times$  AS 1.12, 8  $\times$  AS 1.13

### Details

	€ 2.299,00
Weight	5.500 g
Capacity: (number of separating funnels per volume, pear-shaped)	4×1.000 ml
Dimensions (W $\times$ D $\times$ H)	480 × 505 × 225 mm
AS 501.6, Ident. No. 0008	000500

/// Further accessories HS/KS



AS 1.30 BASIC HOLDER For use with universal attachment AS 130.1. Accessories: AS 1.31, AS 1.5



AS 1.10 BASIC HOLDER For use with universal attachment AS 501.1 and separating funnel attachments AS 501.2, AS 501.3 and AS 501.6. Accessories: AS 1.11, AS 1.6, AS 1.7, AS 1.8, AS 1.12, AS 1.13

€ 675,00

Details AS 1.30, Ident. No. 0003148000

Dimensions (W  $\times$  D  $\times$  H) 252  $\times$  234  $\times$  88 mm

€ 253,00



AS 1.10, Ident. No. 0002339700

Details

AS 1.31

CLAMPING ROL /// Comparison	-		
	<b>AS 1.31</b> Ident. No. 0003030500	<b>AS 1.61</b> Ident. No. 0003030501	<b>AS 1.11</b> Ident. No. 0002339800
for attachment	AS 130.1	AS 260.1	AS 501.1
for basic holder	AS 1.30	AS 1.60	AS 1.10
Length	228 mm	335 mm	410 mm
	€ 27,00	€ 34,00	€ 63,00



AS 1.60 BASIC HOLDER For use with universal attachment AS 260.1. Accessories: AS 1.61, AS 1.5

	540 × 555 × 155 mm
Dimensions (W $\times$ D $\times$ H)	348 × 335 × 135 mm
AS 1.60, Ident. No. AS 1.60	

#### STICKMAX

Universal adhesive mat for KS 130, KS/HS 260, KS/HS 501, KS 3000 and KS 4000 shakers.

- > Ideal for frequently changing vessel types and sizes
- > Self-adhesive
- > Devices can be easily removed by side tilting movement
- > Suitable for disinfection
- > Peel-away strength required: 5 N/cm<sup>2</sup>

Details STICKMAX, Ident. No. 0003	920000	
Dimensions (W $\times$ D $\times$ H)	200 × 200 m	m
Permissible ambient temperature	5 – 80 °C	
Max. speed	300 rpm	
Number of adhesive mats per shaker	KS 130 KS/HS 260 KS/HS 501 KS 3000 i KS 4000 i	1 pcs. 3 pcs. 4 pcs. 2 pcs. 4 pcs

€ 46,00

Shakers





/// Incubator shakers

		Description	Price
	Other accessories		
1)	AS 1.6 Ident. No. 0001268400	Fastening screw Two AS 1.6 clamping devices are required for fastening a clamping roll to the corresponding basic holder (for basic holder AS 1.10 only).	€ 43,00
2)	AS 1.7 Ident. No. 0001269200	Clamping device Two AS 1.6 and two AS 1.7 clamping devices are required for fastening two clamping rolls one above the other (for clamping separating funnels). For basic holder AS 1.10 only.	€ 61,00
3)	AS 1.12 Ident. No. 0002594500	Supporting bar For attaching two AS 1.13 ground section holders for fixing 1.000 ml separating funnels. For basic holder AS 1.10 only. Accessories: AS 1.13	€ 125,00
4)	AS 1.13 Ident. No. 0002597000	AS 1.13 Ground section holder For attaching separating funnels with ground opening NS 29 (2 × AS 1.13 necessary per separating funnel). For basic holder AS 1.10 only.	€ 121,00
	AS 2.0 Ident. No. 0020016475	Fixing clips, 10 ml	€ 41,00
5)	AS 2.1 Ident. No. 0001234300	Fixing clips, 25 ml	€ 21,00
6)	AS 2.2 Ident. No. 0001234400	Fixing clips, 50 ml	€ 21,00
	AS 2.3 Ident. No. 0001234500	Fixing clips, 100 ml	€ 21,00
Ð	AS 2.4 Ident. No. 0001234600	Fixing clips, 200/250 ml	€ 41,00
3	AS 2.5 Ident. No. 0001234700	Fixing clips, 500 ml	€ 41,00
9	AS 2.6 Ident, No. 0003819300	Fixing clips, 1.000 ml	€ 41,00





AS 1.400 BASIC HOLDER Spare for use with universal attachment AS 4000.1

 Details

 AS 4000, Ident. No. 0003710200

 Dimensions (W × D × H)
 446 × 447 × 135 mm

€ 455,00



#### AS 4000.1 UNIVERSAL ATTACHMENT

For use with various types of vessels. Infinitely variable clamping rolls allow universal adaptation to the vessels. Included with delivery: 1 × Basic holder, 6 × Clamping roll, 12 × Fastening screw

<b>Details</b> AS 4000.1, Ident. No. 0008022200				
Dimensions (W $\times$ D $\times$ H)	470 × 447 × 135 mm			
Set-up plate	380 × 410 mm			
Weight	3 200 g			

€ 799,00

AS 1.401 CLAMPING ROLL

Spare for use with universal attachment AS 4000.1.Length 417 mm

Ident. No. 0003712000 **€ 44,00** 



#### AS 1.402 FASTENING SCREW

Spare for use with universal attachment AS 4000.1. Two AS 1.402 fastening screws are required for fastening a clamping roll onto the corresponding basic holder.

Ident. No. 0003712300 **€ 7,00** 

/// Trayster basic | digital



AS 4000.2 FIXING CLIP ATTACHMENT For shaking flasks, Erlenmeyer flasks and bottles with a round cross section (without fixing clips).

430 X 430 11111
430 × 430 mm
50 × AS 2.1 (25 ml) 48 × AS 2.2 (50 ml) 25 × AS 2.3 (100 ml) 16 × AS 2.4 (250 ml) 12 × AS 2.5 (500 ml) 7 × AS 2.6 (1.000 ml)
470 × 444 × 25 mm



#### AS 4000.3 DISH ATTACHMENT

For smooth shaking operations in the low viscosity range, e.g. for cell cultures, nutrient media in Petri dishes, culture bottles and vessels with a low center of gravity. With integrated slip-resistant foil (PP).

Details AS 4000.3, Ident. No. 0003710000				
Dimensions (W $\times$ D $\times$ H)	470 × 444 × 25 mm			
Set-up plate	430 × 430 mm			
Weight	800 g			
	€ 174,00			



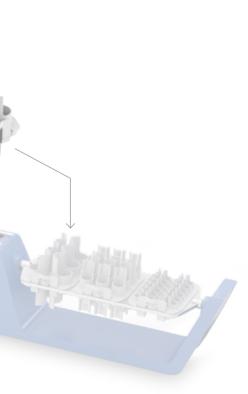








	Price
ge tubes, Ø 10 mm	€ 36,00
n	€ 36,00
es, Ø 16 mm	€ 36,00
s, Ø 28 mm	€ 36,00

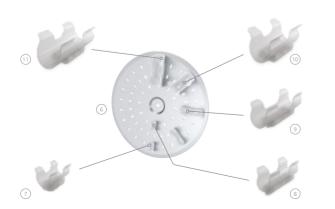


/// Loopster basic | digital

## Accessories

/// 2D & 3D Rockers

		Description	Price
	Tube attachment		
1)	DS 1 Ident. No. 0004524000	48 × 1,5 ml microcentrifuge, Ø 10 mm	€ 172,00
2)	DS 2 Ident. No. 0004524100	24 × 5 ml tubes, Ø 12 mm	€ 124,00
3)	DS 3 Ident. No. 0004524200	20 × 15 ml centrifuge tubes, Ø 16 mm	€ 124,00
4)	DS 4 Ident. No. 0004524300	12 × 30 ml, Ø 25 mm	€ 124,00
5	DS 5 Ident. No. 0004524400	12 × 50 ml centrifuge tubes, Ø 28 mm	€ 124,00
5)	DS 6 Universal disc Ident. No. 0004524500	Single tube attachment for holding five different kinds of tubes for greater versatility.	€ 104,00
	Spare clips		
Ð	DS 6.1 Ident. No. 0004524600	48 × 1.5 ml, Ø 10 mm, 12 Pcs	€ 32,00
8)	DS 6.2 Ident. No. 0004524700	24 × 5 ml tubes, Ø 12 mm, 12 Pcs	€ 32,00
Ð	DS 6.3 Ident. No. 0004524800	20 × 15 ml, Ø 16 mm, 12 Pcs	€ 32,00
0	DS 6.4 Ident. No. 0004524900	12 × 30 ml, Ø 25 mm, 12 Pcs	€ 32,00
	DS 6.5	12 × 50 ml, Ø 28 mm,	€ 32,00













Rocker accessories TB 1 dent. No. 0004532200 TB 2 dent. No. 0004532300	Description Tray, 28 × 5 ml, Ø 12 mm Tray, 16 × 15 ml,
TB 1 Ident. No. 0004532200	Ø 12 mm
Ident. No. 0004532200	Ø 12 mm
	Tray, 16 × 15 ml,
	Ø 16 mm
TB 3 Ident. No. 0004532400	Tray, 14 × 30 ml, Ø 25 mm
TB 4 Ident. No. 0004532500	Tray, 10 × 50 ml, Ø 28 mm
RD 1* Ident. No. 0004532000	Universal mat
RD 2 Ident. No. 0004532100	Burled mat
Α 2	Second level attachment
	dent. No. 0004532000 RD 2 dent. No. 0004532100

\* Included in the delivery.

SPECIAL UNIVERSAL MAT available to accommodate various kinds of vessels for maximum flexibility!

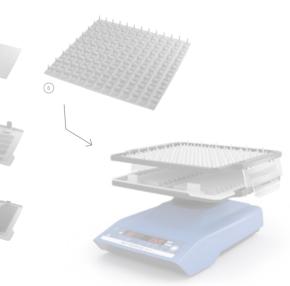






Price
€ 31,00
€ 31,00
€ 31,00
€ 31,00
€ 17,00
€ 19,00
€ 57,00





### **Shakers**

/// Recommendation for various flask sizes

IKA Shaker	Attachment Combination	25 ml	50 ml	100 ml	250 ml	500 ml	1.000 ml	2.000 ml	3.000 ml	5.000 ml
Erlenmeyer Flask	(5									
KS 130	STICKMAX	23	15	6	5	4	1	1**		0
KS 130	AS 130.1	15	12	6	2	2	1	1**		0
KS 130	required clamping rolls	4	4	3	2	2	2	2		0
KS 130	AS 130.2 Fixing clip attachment	12	12	8	4	4	1	0		0
KS 260	STICKMAX	25	16	9	10	9	5	2		1
KS 260	AS 260.1	21	18	15	8	6	3	1		1
KS 260	required clamping rolls	4	4	4	4	4	3	2		2 (4)
KS 260	AS 260.2 Fixing clip attachment	31	28	16	10	8	5	4		0
KS 501	STICKMAX	25	16	9	25	16	9	5	1	1
KS 501	AS 501.1	50	40	30	16	12	9	4	4	1
KS 501	required clamping rolls	6	6	6	5	4	6	3	3	2
KS 501	AS 501.4 Fixing clip attachment	50	35	30	16	12	8	5	0	0
KS 3000 icc	STICKMAX	56	36	25	16	9*	4	0	0	0
KS 3000 icc	AS 3000.1	28	18	15	6	6	2	0	0	0
KS 3000 icc	required clamping rolls	5	4	4 (10)***	4	4	2	0	0	0
KS 3000 icc	AS 3000.2 Fixing clip attachment	29	20	16	9	9	4	0	0	0
KS 3000 icc	AS 3000.3 Dish attachment	49	36	25	9	9	4	0	0	0
KS 4000 i control	STICKMAX	25	16	9	29	16	9	4	1	0
KS 4000 i control	AS 4000.1	45	40	30	16	9	8	4	2	0
KS 4000 i control	required clamping rolls	6	6	6	8	4	4	4	2	0
KS 4000 i control	AS 4000.2 Fixing clip attachment	55	38	25	16	11	7	4	0	0

\* Limited recommendation! \*\* Not recommended! \*\*\* 4 = only up; 10 = up + down

IKA Shaker	Attachment Combination	25 ml	50 ml	100 ml	200 ml	250 ml	500 ml	1.000 ml	2.000 ml
Volumetric Flask	s								
KS 130	STICKMAX	25	16	9	5	5	2	1**	**
KS 130	AS 130.1	16	12	6	3	2	2	0	0
KS 130	required clamping rolls for AS 130.1	5	4	3	3	2	2	0	0
KS 130	AS 130.2	15	8	8	4	4	4	1	0
KS 260	STICKMAX	49	36	25	10	10	9	4	**
KS 260	AS 260.1 max. quantity	32	24	20	12	16	6	2	**
KS 260	required clamping rolls for AS 260.1	5	5	7	6	6	4	2	**
KS 260	AS 260.2	30	29	23	9	9	8	4	3
KS 501	STICKMAX	100	64	36	20	16	9	20	**
KS 501	AS 501.1 + 10 AS 1.11 Clamping Roll + 20 AS 1.6 Fastening Screw	70	56	30	25	20	12	6	**
KS 501	required clamping rolls for AS 501.1	8	14	10	6	5	6	4	**
KS 501	AS 501.2	55	50	35	20	20	11	8	5
KS 3000 icc	STICKMAX	64	36	25	16*	12	6	0	0
KS 3000 icc	AS 3000.1	32	18	20	12	8	6	0	0
KS 3000 icc	required clamping rolls for AS 3000.1	5	4	8	6	4	4	0	0
KS 3000 icc	AS 3000.2 Fixing clip attachment	31	31	20	10	10	5	0	0
KS 3000 icc	AS 3000.3 Dish attachment	64	36	25	16	12	6	0	0
KS 4000 i control	STICKMAX	100	64	36	20	20	16	6*	0
KS 4000 i control	AS 4000.1	70	40	24	20	20	12	6	0
KS 4000 i control	required clamping rolls for AS 4000.1	8	6	5	8	8	6	4	0
KS 4000 i control	AS 4000.2	52	49	30	19	19	11	6	0

\* Limited recommendation! \*\* Not recommended!

IKA Shaker	Attachment Combination	25 ml	50 ml	100 ml	150 ml	250 ml	400 ml	600 ml	800 ml	1.000 ml	2.000 ml	3.000 ml
Beakers (high fo	rm)											
KS 130	STICKMAX	25	16	9	9	9	5	4	4	4*	1*	1*
KS 130	AS 130.1 max. quantity	18	15	8	6	6	3	2	2	2	1*	1*
KS 130	required clamping rolls for AS 130.1	4	3	3	3	3	2	2	2	2	2	2
KS 260	STICKMAX	64	36	25	25	16	9	9	9	9	4*	4*
KS 260	AS AS 260.1 max. quantity	45	28	18	15	15	8	6	6	6	2	2
KS 260	required clamping rolls for AS 260.1	6	5	4	4	4	3	3	3	3	2	2
KS 501	STICKMAX	121	81	49	36	36	25	16	16	9	9	4
KS 501	AS 501.1 max. quantity	96	90	40	35	24	20	12	12	12	12	4
KS 501	required clamping rolls for AS 501.1	9	8	5	5	5	4	4	4	4	3	4
KS 3000 icc	STICKMAX	81	49	36* (25+)	25	25*	16	16	9	9	4	
KS 3000 icc	AS 3000.1 max. quantity	50	28	18	15	10	8	6	6	6	2	
KS 3000 icc	required clamping rolls	6	5	4	4	3	3	3	3	3	2	
KS 3000 icc	AS 3000.3 Dish attachment	100	49	36	25	25	16	16	9	9	4	
KS 4000 i control	STICKMAX	121	81	49	36	36	25	16	16	9	9	4
KS 4000 i control	AS 4000.1 max. quantity	77	48	35	30	24	20	12	12	12	6	4
KS 4000 i control	required clamping rolls for AS 4000.1	8	7	6	5	5	4	4	4	4	3	3

IKA Shaker	Attachment Combination	25 ml	50 ml	100 ml	150 ml	250 ml	400 ml	600 ml	800 ml	1.000 ml	2.000 ml	3.000 ml	5.000 ml	10.000 ml
Beakers (low for	rm)													
KS 130	STICKMAX	25	16	9	9	5	4	4	4	2	1	1*	1*	**
KS 130	AS 130.1 max. quantity	15	8	8	8	4	2	2	2	2	2	1*	0	**
KS 130	required clamping rolls for AS 130.1	4	3	3	3	3	2	2	2	2	2	2		
KS 260	STICKMAX	64	36	25	16	10	9	9	6	6	4	2	1	1*
KS 260	AS 260.1 max. quantity	32	24	15	12	8	6	6	6	2	2	2	1	1*
KS 260	required clamping rolls for AS 260.1	5	5	4	4	3	3	3	3	2	2	2	2	2
KS 501	STICKMAX	100	64	49	36	25	16	16	10	9	9	4	4	1
KS 501	AS 501.1 max. quantity	70	48	42	30	20	16	12	9	9	6	4	1	1
KS 501	required clamping rolls for AS 501.1	8	7	6	5	4	4	3	3	3	3	3	2	2
KS 3000 icc	STICKMAX	64	49* (36+)	25	25*	16	9	9		6	4		0	0
KS 3000 icc	AS 3000.1 max. quantity	32	24	15	12	8	6	6		2	2		0	0
KS 3000 icc	required clamping rolls for AS 3000.1	5	5	4	4	3	3	3		2	2		0	0
KS 3000 icc	AS 3000.3 Dish attachment	64	36	36* (25+)	25	16	9	9		9	4		0	0
KS 4000 i control	STICKMAX	100	64	49	36	25	16	16	10	9	9	4	4	1*
KS 4000 i control	AS 4000.1 max. quantity	70	48	30	20	20	12	12	9	6	4	4	2	1*
KS 4000 i control	required clamping rolls for AS 4000.1	8	7	6	5	5	4	4	4	3	3	3	2	2

\* Limited recommendation! \*\* Not recommended! + recommended!

\* Limited recommendation! \*\* Not recommended! + recommended!

### **Overview**

/// Select your ideal shaker

Shaking diameter	Max. Permissible shaking weight	Speed range	Recommended IKA device	Applications			
Vortex     The cup generates a 'wheeledge of the second seco	nirlpool' vortex action						
4,5 mm	0,5 kg	0,5 kg 0 – 3.000 rpm <b>MS 3 basic</b>		Suitable for shaking small vessels and missatites plates			
4,5 mm	0,5 kg	0 – 3.000 rpm	MS 3 digital, Vortex 4 digital	Suitable for shaking small vessels and microtiter plates			
4,5 mm	max. 50 ml (1 test tube)	2 800 rpm (fixed) lab dancer		Ideal for use with all small vessels of up to 30 mm in diameter, e.g. test tubes, centrifuge			
4,5 mm	0,1 kg	1.000 – 2.800 rpm	Vortex 1	tubes and microcentrifuge tubes			
4 mm	0,4 kg	kg 500 – 2.500 rpm <b>Vortex 2</b>		Suitable for mixing in test tubes, microcentrifuge			
4 mm	0,4 kg	500 – 2.500 rpm	Vortex 3	tubes, reagent glasses/small vessels, Erlenmeyer/round			
4,5 mm	0,5 kg	0 – 3.000 rpm	Vortex 4 basic	flask and microtiter plates			
Orbital The platform moves in a							
	20 kg	10 – 500 rpm	KS 4000 i control				
20 mm		10 – 500 rpm 10 – 500 rpm	KS 4000 i control	Ideal for unattended operation in a			
20 mm 20 mm	20 kg	· · · · · · · · · · · · · · · · · · ·		Ideal for unattended operation in a temperature-controlled environment			
20 mm 20 mm 20 mm	20 kg 20 kg	10 – 500 rpm	KS 4000 ic control				
20 mm 20 mm 20 mm 20 mm	20 kg 20 kg 7,5 kg	10 – 500 rpm 10 – 500 rpm	KS 4000 ic control KS 3000 i control				
20 mm 20 mm 20 mm 20 mm 4 mm	20 kg 20 kg 7,5 kg 7,5 kg	10 – 500 rpm 10 – 500 rpm 10 – 500 rpm	KS 4000 ic control KS 3000 i control KS 3000 ic control				
20 mm 20 mm 20 mm 20 mm 4 mm 3 mm	20 kg 20 kg 7,5 kg 2 kg 2 kg 2 or 4	10 - 500 rpm 10 - 500 rpm 10 - 500 rpm 0 - 2.200 rpm	KS 4000 ic control KS 3000 i control KS 3000 ic control VXR basic MTS 2/4 digital	temperature-controlled environment			
20 mm 20 mm 20 mm 20 mm 4 mm 3 mm 4 mm	20 kg 20 kg 7,5 kg 7,5 kg 2 kg 2 or 4 microtiter plates	10 - 500 rpm 10 - 500 rpm 10 - 500 rpm 0 - 2.200 rpm 0 - 1.100 rpm	KS 4000 ic control KS 3000 i control KS 3000 ic control VXR basic MTS 2/4 digital microtiter shaker	temperature-controlled environment Ideal for mixing in test tubes, microtiter plates, bottles, flasks and beakers. A wide range of attachment combinations allows for using			
20 mm 20 mm 20 mm 20 mm 20 mm 4 mm 3 mm 4 mm 4 mm 10 mm	20 kg 20 kg 7,5 kg 7,5 kg 2 kg 2 or 4 microtiter plates 2 kg	10 - 500 rpm 10 - 500 rpm 10 - 500 rpm 0 - 2.200 rpm 0 - 1.100 rpm 80 - 800 rpm	KS 4000 ic control KS 3000 i control KS 3000 ic control VXR basic MTS 2/4 digital microtiter shaker KS 130 basic	temperature-controlled environment Ideal for mixing in test tubes, microtiter plates, bottles, flasks and beakers. A wide range			
20 mm 20 mm 20 mm 20 mm 4 mm 3 mm 4 mm 4 mm	20 kg 20 kg 7,5 kg 7,5 kg 2 kg 2 or 4 microtiter plates 2 kg 2 kg 2 kg	10 - 500 rpm 10 - 500 rpm 10 - 500 rpm 0 - 2.200 rpm 0 - 1.100 rpm 80 - 800 rpm 80 - 800 rpm	KS 4000 ic control KS 3000 i control KS 3000 ic control VXR basic MTS 2/4 digital microtiter shaker KS 130 basic KS 130 control	temperature-controlled environment Ideal for mixing in test tubes, microtiter plates, bottles, flasks and beakers. A wide range of attachment combinations allows for using			

#### SELECT YOUR IDEAL SHAKER /// Comparison Max. Permissible Shaking diameter shaking weight Speed range Reciprocating The platform moves back and forth horizontally 20 mm 7,5 kg 20 – 300 rpm 20 mm 7,5 kg 10 – 300 rpm 15 kg 0 – 300 rpm 30 mm Rocking (See-saw action) The platform rocks on a central pivot 8° (angle) 2 kg 5 – 80 rpm 2 kg 5 – 80 rpm 0 – 15° (angle) Rocking (3D Tumbling motion) The platform moves in a three-dimensional motion 30 rpm (fixed) 8° (angle) 2 kg 0 – 15° (angle) 2 kg 5 – 80 rpm Rocking and Rolling The platform rocks on a central pivot as well as revolves around a fixed point 24,5 mm (high) 2 kg 30 rpm (fixed) 24,5 mm (high) 2 kg 5 – 80 rpm 24,5 mm (high) 2 kg 30 rpm (fixed) 24,5 mm (high) 2 kg 5 – 80 rpm Rotating Platform revolves at a tilted angle adjustable from horizontal to vertical 2 kg 20 rpm (fixed) adjustable from horizontal to vertical 2 kg 5 – 80 rpm vertical or horizontal 2 kg 20 rpm (fixed) 5 – 80 rpm vertical or horizontal 2 kg

	Applications					
HS 260 basic	ting appring out					
HS 260 control         Ideal for shaking out, eluting, extrac           dissolving, enriching, etc.         dissolving, enriching, etc.	ling, gassing out,					
HS 501 digital						
Rocker 2D basic Used for homogenous mixing in flas	iks, culture flasks,					
Rocker 2D digital Petri dishes and tubes						
Rocker 3D basic Ideal for low foaming agitation, DN	A extractions,					
Rocker 3D digital staining and de-staining procedures,	, etc.					
Roller 6 basic						
Roller 6 digital Recommended for mixing blood sar viscous substances and liquid-solid s						
Roller 10 basic where minimum aeration is required	1					
Roller 10 digital						
Loopster basic						
Loopster digital Ideal for keeping biological samples	in suspension					
Trayster basic and for general mixing applications						
Trayster digital						

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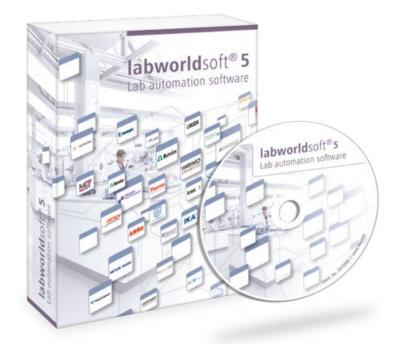
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