

Orbitale - Va-et-vient - Incubateur - Travailler avec microtitration

**KS 4000i - KS 4000ic - MS 3 Basic - MS 3 Digital - Lab Dancer - Vortex 3
VXR Basic - MTS 2/4 digital microtiter shaker - KS 130 Basic - KS 130 Control
KS 260 Basic - KS 260 Control - KS 501 digital - HS 260 Basic
HS 260 Control - HS 501 Digital**



KS 4000 i control
New, innovative incubator shaker design allowing unattended operation.



Technical data		
Shaking movement		orbital
Orbital diameter		4,5 mm
Max. permitted shaking weight (incl. attachment)		0,5 kg
Motor rating input		10 W
Motor rating output		8 W
Permissible ON time		100 %
Infinitely adjustable speed range		0 – 3.000 rpm
Speed display		scale
Timer	MS 3 basic	no
	MS 3 digital	yes
Time setting	MS 3 basic	–
	MS 3 digital	1 s – 999 min
Operating mode	MS 3 basic	Continuous / touch operation
	MS 3 digital	Timer and continous mode, touch operation
General data		
Dimensions (W x D x H)		148 x 205 x 63 mm
Weight		2,9 kg
Permissible ambient temperature		5 – 40 °C
Permissible relative humidity		80 %
Protection class acc. to DIN EN 60529		IP 21

Technical data	
Shaking movement	orbital
Orbital diameter	4,5 mm
Shaken quantity (1 test tube)	max. 50 ml
Motor rating input	1,2 W
Motor rating output	0,8 W
Speed (fixed)	2.800 rpm
General data	
Material casing	PP
Material attachment	TPU
Material bottom	zinc, coated
Dimensions (Ø x H)	100 x 70 mm
Weight	0,55 kg
Permissible ambient temperature	5 – 40 °C
Permissible relative humidity	80 %
Protection class acc. to DIN EN 60529	IP 40

**MS 3 basic
MS 3 digital**

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

- Wide range of attachments
- Attachment detection
- Continuous or touch operation (with standard attachment)
- Two operating modes:

Mode A (safe mode with attachment detection)

The maximum speed of 3.000 rpm is only reached with the standard attachment in touch mode. When using other attachments the speed is limited to 1.300 rpm.

Mode B (without attachment detection)

A speed of 3.000 rpm is possible with all attachments.

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

MS 3 digital additionally:
Timer with countdown function

Accessories (page):

Attachments (56): MS 1.31, MS 1.32, MS 1.33, MS 3.5

Included with delivery (page):

MS 3.1 Standard attachment (56), MS 3.3 Universal attachment (56), MS 1.21 One-hand insert (56), MS 3 digital complete with MS 3.4 Microtiter attachment and MS 1.32 Test tube insert (56)



MS 3 basic
Ident. No.
3617000 100 – 240 V 50/60 Hz
3617001 100 – 240 V 50/60 Hz



MS 3 digital
Ident. No.
3319000 100 – 240 V 50/60 Hz
3319001 100 – 240 V 50/60 Hz

lab dancer

Economic, compact test tube shaker with touch function. Its compact and clever design makes it an indispensable tool for every laboratory.

- Can be used with all small vessels of up to 30 mm in diameter, e.g. test tubes, centrifuge tubes, Eppendorf vessels
- Excellent mixing action
- The upper casing and the test tube surface are made from inert plastic
- Secure stand due to coated zinc die cast base
- Incl. light 12 V power pack set



Ident. No.
3365000 100 – 240 V 50/60 Hz

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**KS 4000i - KS 4000ic - MS 3 Basic - MS 3 Digital - Lab Dancer - Vortex 3
VXR Basic - MTS 2/4 digital microtiter shaker - KS 130 Basic - KS 130 Control
KS 260 Basic - KS 260 Control - KS 501 digital - HS 260 Basic
HS 260 Control - HS 501 Digital**



Ident. No.
3340000 230 V 50/60 Hz
3340001 115 V 50/60 Hz

VORTEX Genius 3

Vortex shaker suitable for short-time operation (touch function), activated through pressing shaker attachment or continuous operation.

- Wide speed range, infinitely adjustable
- Different applications due to 3 interchangeable attachments and 7 inserts (e.g. Eppendorf tubes, microtiter plates, Erlenmeyer flasks 250 ml etc.), please order separately
- Attachments securely click onto appliance in any position
- Special strap (VG 3.36, page 57) ensures easy handling of round/Erlenmeyer flasks
- Sturdy metal zinc die cast casing
- Compact design
- Short-time operation activated by pressing attachment (touch function)
- Stable at high speeds due to special feet (silicon base with ultra high vibration damping)
- Eccentric with ball bearings
- Suitable for continuous operation with low self heating due to self ventilation of motor

Accessories (page):
Attachments (57): VG 3.1, VG 3.2, VG 3.3
Inserts (57): VG 3.31, VG 3.32, VG 3.33, VG 3.34, VG 3.35, VG 3.36, VG 3.37

Technical data	
Shaking movement	orbital
Orbital diameter	4 mm
Max. shaking weight	0,4 kg
Motor rating input	58 W
Motor rating output	10 W
Permissible ON time	100 %
Infinitely adjustable speed range	500 – 2.500 rpm
Speed display	scale 0 – 6
Speed setting	knob, front
General data	
Dimensions (W x D x H)	127 x 149 x 136 mm
Weight	4,5 kg
Permissible ambient temperature	5 – 40 °C
Permissible relative humidity	80 %
Protection class acc. to DIN EN 60529	IP 21



Ident. No.
2819000 230 V 50/60 Hz
2819001 115 V 50/60 Hz

VXR basic Vibrax®

Opto-electronically 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

Accessories (page):
Attachments (58 / 59): VX 1, VX 2, VX 2E, VX 7, VX 8, VX 8.1, VX 11, VX 11.1, VX 11.2, VX 11.3, VX 11.4

Technical data	
Shaking movement	orbital
Orbital diameter	4 mm
Max. shaking weight (with attachment)	2 kg
Motor rating input	35 W
Motor rating output	13,2 W
Permissible ON time	100 %
Speed range	0 – 2.200 rpm
Speed display	scale
General data	
Dimensions (W x D x H)	157 x 247 x 130 mm
Weight (without attachment)	6,1 kg
Permissible ambient temperature	5 – 40 °C
Permissible relative humidity	80 %
Protection class acc. to DIN EN 60529	IP 21



Technical data	
Shaking movement	orbital
Orbital diameter	3 mm
Max. shaking weight	2 or 4 microtiter plates
Motor rating input	35 W
Motor rating output	13,2 W
Permissible ON time	100 %
Speed range	0 – 1.100 rpm
Speed display	scale
Timer	∞ / 1 – 99 min
Timer display	digital
General data	
Dimensions (W x D x H)	185 x 320 x 105 mm
Weight	2,7 kg
Permissible ambient temperature	5 – 40 °C
Permissible relative humidity	80 %
Protection class acc. to DIN EN 60529	IP 21

MTS 2/4 digital Microtiter shaker

Special shaker for shaking two or four microtiter plates.

- Electronic speed control
- Digital timer
- Alarm to indicate set time has expired
- Incl. attachment (without microtiter plate)



Ident. No.
3208000 230 V 50/60 Hz
3208001 115 V 50/60 Hz

Technical data	
Shaking movement	orbital
Orbital diameter	4 mm
Max. shaking weight (with attachment)	2 kg
Motor rating input	45 W
Motor rating output	10 W
Permissible ON time	100 %
Speed range	80 – 800 rpm
Speed display	KS 130 basic LED line KS 130 control digital
Timer	KS 130 basic ∞ / 5 – 50 min KS 130 control ∞ / 0 – 9 h 59 min
General data	
Dimensions (W x D x H)	270 x 316 x 98 mm
Weight	KS 130 basic 8,8 kg KS 130 control 9,8 kg
Permissible ambient temperature	5 – 50 °C
Permissible relative humidity	80 %
Protection class acc. to DIN EN 60529	IP 21
Interfacetrol	KS 130 control RS 232 / analog

**KS 130 basic
KS 130 control**

Small, quiet shaker ensures long life with ideal swivel motion, for a maximum shaking weight of 2 kg.

- Electronic adjustment of speed and timer
- LED display for speed and time adjustment
- Wide range of attachment combinations allows for using almost all shapes and sizes of vessels
- Attachments are not included, please order separately



KS 130 basic
Ident. No.
2980000 230 V 50/60 Hz
2980001 115 V 50/60 Hz

KS 130 control additionally with:

- A digital display allows for reading the speed, timer function and operating modes
- Electronic time switching clock: 0 - 9 h 59 min or continuous operation (∞)
- With integrated end point positioning (for automated robot-controlled sampling)
- All functions can be controlled and documented with labworldsoft®
- Special version with reverse rotating direction available upon request

Accessories (page):

Attachments (60): AS 130.1, AS 130.2, AS 130.3, AS 130.4, STICKMAX (62)
KS 130 control additionally:
labworldsoft® (139), PC 1.5 Cable (143)



KS 130 control
Ident. No.
2980100 230 V 50/60 Hz
2980101 115 V 50/60 Hz

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KS 260 Basic - KS 260 Control - KS 501 digital - HS 260 Basic
HS 260 Control - HS 501 Digital**



KS 260 basic

Ident. No.	
2980200	230 V 50/60 Hz
2980201	115 V 50/60 Hz



KS 260 control

Ident. No.	
2980300	230 V 50/60 Hz
2980301	115 V 50/60 Hz



Ident. No.	
2526400	230 V 50/60 Hz
2526401	115 V 50/60 Hz

**KS 260 basic
KS 260 control**

Compact, flat shaker with optimal swivel motion, for a maximum shaking weight of 7,5 kg.
- Electronic adjustment of speed and timer
- LED display for speed and time adjustment
- Wide range of attachment combinations allows for using almost all shapes and sizes of vessels
- Attachments are not included, please order separately

KS 260 control additionally with:

- Digital display allows for reading the speed, timer function and operating modes
- Electronic time switching clock: 0 - 9 h 59 min or continuous operation
- With integrated end point positioning (for automated robot-controlled sampling)
- All functions can be controlled and documented with labworldsoft®
- Special version with reverse rotating direction available upon request

Accessories (page):

Attachments (60 / 61): AS 260.1, AS 260.2, AS 260.3, STICKMAX (62)
KS 260 control additionally: labworldsoft® (139), PC 1.5 Cable (143)

KS 501 digital

Low profile laboratory shaker with a pleasant design, large mounting surface and load capacity of up to 15 kg.
- Infinitely variable speed control of 0 - 300 rpm
- Digital display
- Ideal for vessels with a volume of more than 250 ml, e.g. round flasks, Erlenmeyer flasks, culture flasks and culture bottles
- Guaranteed continuous operation (∞) even under extreme loads
- Incl. timer
- Attachments are not included, please order separately

Accessories (page):

Attachments (61 / 62): AS 501.1, AS 501.4, AS 501.5, STICKMAX (62)

Technical data		
Shaking movement		orbital
Orbital diameter		10 mm
Max. shaking weight (with attachment)		7,5 kg
Motor rating input		45 W
Motor rating output		10 W
Permissible ON time		100 %
Infinitely adjustable speed range		
	KS 260 basic	20 – 500 rpm
	KS 260 control	10 – 500 rpm
Speed display	KS 260 basic	LED line
	KS 260 control	digital
Timer	KS 260 basic	∞ / 5 – 50 min
	KS 260 control	∞ / 0 - 9 h 59 min
Timer display	KS 260 control	digital
General data		
Dimensions (W x D x H)		360 x 420 x 98 mm
Weight	KS 260 basic	8,5 kg
	KS 260 control	8,8 kg
Permissible ambient temperature		5 – 50 °C
Permissible relative humidity		80 %
Protection class acc. to DIN EN 60529		IP 21
Interface	KS 260 control	RS 232 / analog

Technical data		
Shaking movement		orbital
Orbital diameter		30 mm
Max. shaking weight (with attachment)		15 kg
Motor rating input		70 W
Motor rating output		19 W
Permissible ON time		100 %
Infinitely adjustable speed range		0 – 300 rpm
Speed display		digital
Timer		∞ / 1 – 56 min
General data		
Dimensions (W x D x H)		505 x 585 x 120 mm
Weight		26 kg
Permissible ambient temperature		5 – 50 °C
Permissible relative humidity		80 %
Protection class acc. to DIN EN 60529		IP 21



Technical data		
Shaking movement		reciprocating
Orbital diameter		20 mm
Max. shaking weight (with attachment)		7,5 kg
Motor rating input		45 W
Motor rating output		10 W
Permissible ON time		100 %
Infinitely adjustable speed range		
	HS 260 basic	20 – 300 rpm
	HS 260 control	10 – 300 rpm
Speed display	HS 260 basic	LED line
	HS 260 control	digital
Timer	HS 260 basic	∞ / 5 – 50 min
	HS 260 control	∞ / 0 - 9 h 59 min
Timer display	HS 260 control	digital
General data		
Dimensions (W x D x H)		360 x 420 x 100 mm
Weight	HS 260 basic	8,5 kg
	HS 260 control	8,8 kg
Permissible ambient temperature		5 – 50 °C
Permissible relative humidity		80 %
Protection class acc. to DIN EN 60529		IP 21
Interface	HS 260 control	RS 232 / analog

**HS 260 basic
HS 260 control**

Compact, flat shaker with optimal swivel motion, for a maximum shaking weight of 7,5 kg.
- Electronic adjustment of speed and timer
- LED display for speed and time adjustment
- Wide range of attachment combinations allows for using almost all shapes and sizes of vessels
- Attachments are not included in delivery, please order separately

HS 260 control additionally:

- Digital display allows for reading the speed, timer function and operating mode
- Electronic time switching clock: 0 - 9 h 59 min or continuous operation
- With integrated endpoint positioning (for automated robot-controlled sampling)
- All functions can be controlled and documented with labworldsoft® software

Accessories (page):

Attachments (60 / 61): AS 260.1, AS 260.2, AS 260.3, AS 260.5, STICKMAX (62)
HS 260 control additionally: labworldsoft® (139), PC 1.5 Cable (143)



HS 260 basic

Ident. No.	
3066600	230 V 50/60 Hz
3066601	115 V 50/60 Hz



HS 260 control

Ident. No.	
3066700	230 V 50/60 Hz
3066701	115 V 50/60 Hz



HS 501 digital

Low profile laboratory shaker with a pleasant design, large mounting surface and load capacity of up to 15 kg.
- Infinitely variable speed control of 0 - 300 rpm
- Digital display
- Ideal for all lying vessels, e.g. separating funnels
- Guaranteed continuous operation even under extreme loads
- Includes timer
- Attachments are not included in delivery, please order separately

Accessories (page):

Attachments (61 / 62): AS 501.1, AS 501.2, AS 501.3, AS 501.4, AS 501.5, AS 501.6, STICKMAX (62)



Ident. No.	
2527000	230 V 50/60 Hz
2527001	115 V 50/60 Hz

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HS 260 Control - HS 501 Digital**

54 Incubator shakers



KS 4000 i control
Ident. No.
3510000 220 – 240 V 50/60 Hz
3510001 110 – 120 V 50/60 Hz

**KS 4000 i control
KS 4000 ic control**

New incubator shaker with innovative design allowing unattended operation in a temperature-controlled environment.

KS 4000 ic control with built in cooling coil for connecting an external cooling unit e.g. KV 600.

- Large LED display for speed and time settings
- Controls with antimicrobial coating for reduction of bacteria
- Integrated PID temperature control (use of two PT 1000 temperature sensors)
- Junction box in the workspace for connection of an additional temperature sensor e.g. PT 1000.60 (incl. with delivery)
- Electronic temperature and speed control
- Electronic timer switch: ∞ / 1 s - 999 h (set by the minute or by the hour)
- Unit switches off automatically if unstable
- Unit stops automatically when hood is lifted
- Collecting tray with drain hose on rear of unit
- Simple operation
- All functions can be controlled and documented using the labworldsoft® software
- Attachments not included – please order accessories as needed



KS 4000 ic control with built-in cooling coil

KS 4000 ic control
Ident. No.
3510100 220 – 240 V 50/60 Hz
3510101 110 – 120 V 50/60 Hz



included with unit
Ident. No. 3516800

Technical data	
Shaking movement	orbital
Orbital diameter	20 mm
Max. shaker weight (with attachment)	20 kg
Motor rating input	82 W
Motor rating output	24 W
Power consumption (at 230 V)	1.120 W
Permissible ON time	100 %
Speed range	10 – 500 rpm
Heater power	1.000 W
Temperature range	RT + 5 °C to 80 °C
Temperature stability	0,1 K
(200 ml H ₂ O at target T = 37 °C, RT 25 °C)	
Timer switch	∞ / 1 s - 999 h (select minutes/hours)
Speed, time and temperature display	digital
Additional cooling function for KS 4000 ic control	
Cooling coil	built in
Temperature range at flow temperature (3 °C) KV 600	RT - 10 °C to 80 °C
Cooling connection for hose	∅ 10 mm
Adapter nipple for hose connection	yes
General data	
Dimensions (W x H x D)	580 x 750 x 525 mm
Space required (W x D)	600 x 600 mm
Weight	KS 4000 i 50 kg KS 4000 ic 55 kg
Permissible ambient temperature	15 – 32 °C
Permissible relative humidity	80 %
Protection class acc. to DIN EN 60529	IP 30
Interface	RS 232



Shakers accessories (KS 4000 i / KS 4000 ic)

55

General data	
Dimensions (W x D x H)	470 x 447 x 135 mm
Set-up plate	380 x 410 mm
Weight	3.200 g

AS 4000.1 Universal attachment

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

Included with delivery:
1 x Basic holder, 6 x Clamping roll, 12 x Fastening screw



Ident. No.
8022200

General data	
Dimensions (W x D x H)	470 x 444 x 25 mm
Number of fixing clips (volume)	50 x AS 2.1 (25 ml) 48 x AS 2.2 (50 ml) 25 x AS 2.3 (100 ml) 16 x AS 2.4 (250 ml) 12 x AS 2.5 (500 ml) 7 x AS 2.6 (1.000 ml)
Set-up plate	430 x 430 mm
Weight	2.650 g

AS 4000.2 Fixing clip attachment

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

Accessories (page):
Fixing clips (65): AS 2.1, AS 2.2, AS 2.3, AS 2.4, AS 2.5



Ident. No.
3710100

General data	
Dimensions (W x D x H)	470 x 444 x 25 mm
Set-up plate	430 x 430 mm
Weight	800 g

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).



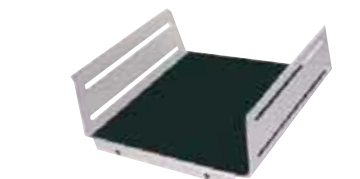
Ident. No.
3710000

General data	
Dimensions (W x D x H)	446 x 447 x 135 mm

AS 1.400 Basic holder

Spare for use with universal attachment AS 4000.1.

Accessories (page):
AS 1.401 Clamping roll (55), AS 1.402 Fastening screw (55)



Ident. No.
3710200

General data	
Length	417 mm

AS 1.401 Clamping roll

Spare for use with universal attachment AS 4000.1.



Ident. No.
3712000

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.

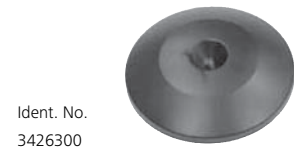


Ident. No.
3712300

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KS 260 Basic - KS 260 Control - KS 501 digital - HS 260 Basic
HS 260 Control - HS 501 Digital**

56 Shakers accessories (MS 3 basic / digital)



Ident. No.
3426300

MS 3.1 Standard attachment

For test tubes and small vessels up to Ø 50 mm, included with the minishakers MS 3 basic and MS 3 digital.



Ident. No.
3426600

MS 3.3 Universal attachment

For various foam inserts, included with the minishakers MS 3 basic and MS 3 digital.



Ident. No.
3426400

MS 3.4 Microtiter plate attachment

For use with a microtiter plate, included with the minishaker MS 3 digital.



Ident. No.
3428000

MS 3.5 PCR plate attachment

For holding PCR plates, 96-well.



Ident. No.
L001540

MS 1.21 One-hand insert

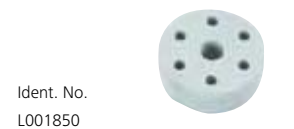
For inserting into the universal attachment, included with the minishakers MS 3 basic and MS 3 digital.



Ident. No.
L001840

MS 1.31 Test tube insert

For inserting into universal attachment, for 14 test tubes Ø 10 mm, material: ethylvinyl-acetate.



Ident. No.
L001850

MS 1.32 Test tube insert

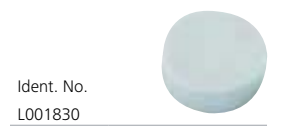
For inserting into the universal attachment, for 6 test tubes Ø 12 mm. Material: ethylvinyl-acetate. Included with the minishakers MS 3 digital.



Ident. No.
L001860

MS 1.33 Test tube insert

For inserting into the universal attachment, for 4 test tubes Ø 16 mm. Material: ethylvinyl-acetate.



Ident. No.
L001830

MS 1.34 Test tube insert

For inserting into the universal attachment, for any number of bore holes. Material: ethylvinyl-acetate.



VG 3.1 Standard attachment

Standard attachment for reagent glasses / small vessels (continuous / touch operation), included with delivery.

Ident. No.
3341200



VG 3.2 One-hand attachment

One-hand attachment, 88 mm, round, with rubber insert (continuous / touch operation).

Ident. No.
3342300



VG 3.3 Universal attachment

Universal attachment, 150 mm, with rubber insert (continuous operation).

Ident. No.
3342400



VG 3.31 Test tube attachment*

For 54 Eppendorf tubes (continuous operation).

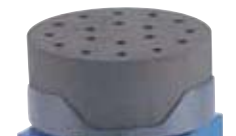
Ident. No.
3344300



VG 3.32 Test tube attachment*

For 18 reagent glasses, 10 mm (continuous operation).

Ident. No.
3343900



VG 3.33 Test tube attachment*

For 12 reagent glasses, 12 mm (continuous operation).

Ident. No.
3344000



VG 3.34 Test tube attachment*

For 8 reagent glasses, 16 mm (continuous operation).

Ident. No.
3344100



VG 3.35 Test tube attachment*

For 8 reagent glasses, 20 mm (continuous operation).

Ident. No.
3344200



VG 3.36 Erlenmeyer flask attachment*

For 1 Erlenmeyer / round flask from 100 to 250 ml (continuous operation).

Ident. No.
3342100



VG 3.37 Microtiter plate attachment*

For 1 standard microtiter plate (continuous operation).

Ident. No.
3344400



* for VG 3.3 Universal attachment

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HS 260 Control - HS 501 Digital**



VX 1 One-hand attachment

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

General data	
Dimensions (W x D x H)	130 x 135 x 40 mm
Weight	160 g



VX 2 Test tube attachment

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

General data	
Dimensions (W x D x H)	140 x 145 x 115 mm
Material	macrolon
Weight	300 g



VX 2E "Eppendorf" attachment

For intensive mixing of up to 64 "Eppendorf" tubes (1,5 ml).

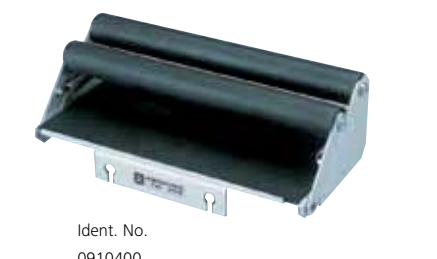
General data	
Dimensions (W x D x H)	210 x 210 x 65 mm
Weight	790 g



VX 7 Dish attachment

For careful mixing of culture bottles, Petri dishes, etc.

General data	
Dimensions (W x D x H)	410 x 210 x 40 mm
Weight	740 g



VX 8 Universal attachment

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

General data	
Dimensions (W x D x H)	265 x 136 x 60 mm
Clamping range	25 - 135 mm
Min. height of vessel	80 mm
Weight	760 g



VX 8.1 Clamping roll

Spare for use with VX 8 universal attachment.

Ident. No.
3375400



VX 11 Basic holder

Attachment for test tube inserts.



Ident. No.
3627700

VX 11.1 Test tube insert

Attachment for Eppendorf tubes or test tubes.



Ident. No.
3659000

VX 11.2 Test tube insert

Attachment for test tubes.



Ident. No.
3659100

VX 11.3 Test tube insert

Attachment for test tubes.



Ident. No.
3659200

VX 11.4 Test tube insert

Attachment for test tubes.



Ident. No.
3659300

General data	
Bore holes (number)	70
Hole Ø	10 mm

General data	
Bore holes (number)	41
Hole Ø	12 mm

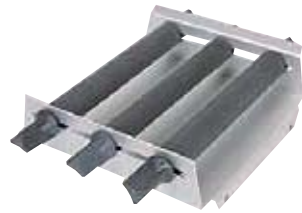
General data	
Bore holes (number)	32
Hole Ø	16 mm

General data	
Bore holes (number)	18
Hole Ø	20 mm

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KS 260 Basic - KS 260 Control - KS 501 digital - HS 260 Basic
HS 260 Control - HS 501 Digital**

60 Shakers accessories (KS 130 and HS / KS 260)



Ident. No.
8017300

AS 130.1 Universal attachment

For use with various types of vessels by means of universal, infinitely variable clamping rolls.

Included with delivery (page):
1 x AS 1.30 Basic holder (63),
3 x AS 1.31 Clamping roll (63),
6 x AS 1.5 Fastening screw (64)

General data	
Dimensions (W x D x H)	325 x 234 x 88 mm
Set-up plate	220 x 220 mm
Weight	850 g



Ident. No.
3115000

AS 130.2 Fixing clip attachment

For processing round flasks, measuring flasks and Erlenmeyer flasks. Please order fixing clips separately.

Accessories (page):
Fixing clips (65): AS 2.1, AS 2.2, AS 2.3,
AS 2.4, AS 2.5

General data	
Dimensions (W x D x H)	230 x 230 x 24 mm
Number of fixing clips (volume)	20 x AS 2.1 (25 ml) 12 x AS 2.2 (50 ml) 12 x AS 2.3 (100 ml) 4 x AS 2.4 (250 ml) 4 x AS 2.5 (500 ml)
Weight	650 g

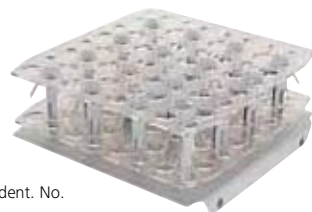


Ident. No.
3120000

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).

General data	
Dimensions (W x D x H)	420 x 270 x 32 mm
Set-up plate	220 x 340 mm
Weight	370 g



Ident. No.
3120300

AS 130.4 Test tube attachment

For intensive shaking, e.g. small tubes, test tubes, cuvettes, centrifuge tubes.

General data	
Dimensions (W x D x H)	220 x 230 x 95 mm
Capacity	64
Vessel Ø	10 – 16 mm
Min. height of vessel	80 mm
Weight	670 g



Ident. No.
8017400

AS 260.1 Universal attachment

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

Included with delivery (page):
1 x AS 1.60 Basic holder (63),
4 x AS 1.61 Clamping roll (63),
8 x AS 1.5 Fastening screw (64)

General data	
Dimensions (W x D x H)	425 x 335 x 135 mm
Set-up plate	320 x 320 mm
Weight	1.600 g



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

AS 260.2 Fixing clip attachment

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

Accessories (page):
Fixing clips (65): AS 2.1, AS 2.2, AS 2.3, AS 2.4, AS 2.5



Ident. No.
3115500

General data	
Dimensions (W x D x H)	410 x 370 x 32 mm
Set-up plate	320 x 320 mm
Weight	460 g

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).



Ident. No.
3120600

General data	
Dimensions (W x D x H)	334 x 425 x 145 mm
Capacity: (number of separating funnels per volume, pear-shaped)	6 x 50 ml 5 x 100 ml 3 x 250 ml 3 x 500 ml
Weight	1.550 g

AS 260.5 Separating funnel attachment

For shaking out, salting out, extracting, eluting, 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).



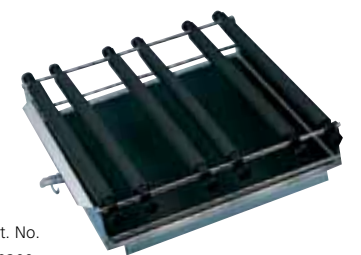
Ident. No.
3120900

General data	
Dimensions (W x D x H)	480 x 500 x 120 mm
Set-up plate	420 x 420 mm
Weight	4.000 g

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 (page):
1 x AS 1.10 Basic holder (63), 6 x AS 1.11 Clamping roll (63), 12 x AS 1.6 Fastening screw (64)



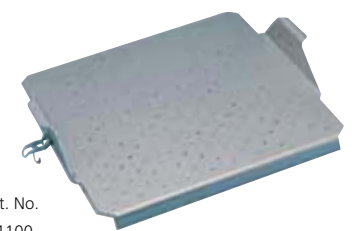
Ident. No.
8000200

General data	
Dimensions (W x D x H)	475 x 460 x 95 mm
Number of fixing clips (volume)	110 x AS 2.1 (25 ml) 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 (1.000 ml)
Weight	2.640 g

AS 501.4 Fixing clip attachment

For shaking flasks, Erlenmeyer flasks and pear-shaped flasks (without fixing clips).

Accessories (page):
Fixing clips (65): AS 2.1, AS 2.2, AS 2.3,
AS 2.4, AS 2.5



Ident. No.
2341100

Orbitale - Va-et-vient - Incubateur - Travailler avec microtitration

**KS 4000i - KS 4000ic - MS 3 Basic - MS 3 Digital - Lab Dancer - Vortex 3
VXR Basic - MTS 2/4 digital microtiter shaker - KS 130 Basic - KS 130 Control
KS 260 Basic - KS 260 Control - KS 501 digital - HS 260 Basic
HS 260 Control - HS 501 Digital**

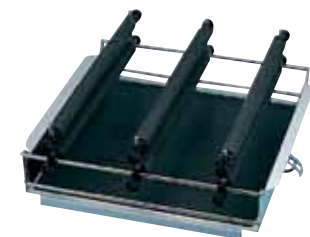


Ident. No.
2339600

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.

General data	
Dimensions (W x D x H)	450 x 450 x 45 mm
Set-up plate	420 x 420 mm
Weight	1.120 g



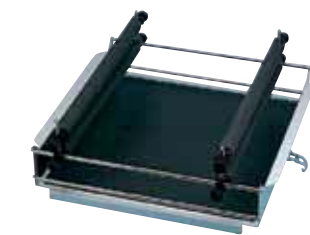
Ident. No.
8000300

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.

General data	
Dimensions (W x D x H)	480 x 505 x 190 mm
Capacity: (number of separating funnels per volume, pear-shaped)	12 x 50 ml 10 x 100 ml 6 x 250 ml
Weight	4.180 g

Included with delivery (page):
1 x AS 1.10 (63), 6 x AS 1.11 (63), 6 x AS 1.6 (64),
6 x AS 1.7 (64)



Ident. No.
8000400

AS 501.3 Separating funnel attachment

Same features as AS 501.2.

Included with delivery (page):
1 x AS 1.10 (63), 4 x AS 1.11 (63), 4 x AS 1.6 (64),
4 x AS 1.7 (64)

General data	
Dimensions (W x D x H)	480 x 505 x 190 mm
Capacity: (number of separating funnels per volume, pear-shaped)	4 x 500 ml 3 x 1.000 ml 2 x 2.000 ml
Weight	3.720 g



Ident. No.
8000500

AS 501.6 Separating funnel attachment

Same features as AS 501.2. This attachment will hold 4 x 1.000 ml separating funnels.

Included with delivery (page):
1 x AS 1.10 (63), 4 x AS 1.6 (64), 4 x AS 1.12 (65),
8 x AS 1.13 (65)

General data	
Dimensions (W x D x H)	480 x 505 x 225 mm
Capacity: (number of separating funnels per volume, pear-shaped)	4 x 1.000 ml
Weight	5.500 g



Ident. No.
3920000

STICKMAX

New universal adhesive mat for the fixing clip attachments of KS 130, KS/HS 260, KS/HS 501 and KS 4000 i 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/cm²

General data	
Dimensions (W x D x H)	200 x 200 mm
Permissible ambient temperature	5 – 80 °C
Max. speed	300 rpm
Number of adhesive mats per shaker	KS 130 1 pcs. KS/HS 260 3 pcs. KS/HS 501 4 pcs. KS 4000 i 4 pcs.

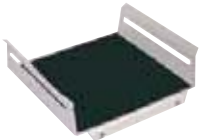


General data	
Dimensions (W x D x H)	252 x 234 x 88 mm

AS 1.30 Basic holder

For use with universal attachment AS 130.1.

Accessories (page):
AS 1.31 (63), AS 1.5 (64)



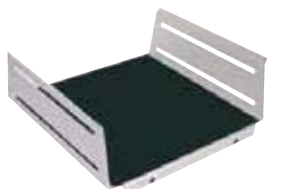
Ident. No.
3148000

General data	
Dimensions (W x D x H)	348 x 335 x 135 mm

AS 1.60 Basic holder

For use with universal attachment AS 260.1.

Accessories (page):
AS 1.61 (63), AS 1.5 (64)



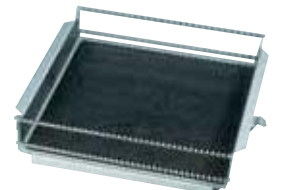
Ident. No.
3149000

General data	
Dimensions (W x D x H)	480 x 480 x 120 mm

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 (page):
AS 1.11 (63), AS 1.6 (64), AS 1.7 (64), AS 1.8 (64),
AS 1.12 (65), AS 1.13 (65)



Ident. No.
2339700

AS 1.31	
For basic holder	AS 1.30
Length	228 mm
AS 1.61	
For basic holder	AS 1.60
Length	335 mm
AS 1.11	
For basic holder	AS 1.10
Length	410 mm

Clamping roll

AS 1.31

AS 1.61

AS 1.11



Ident. No.
3030500 AS 1.31
3030501 AS 1.61
2339800 AS 1.11

Orbitale - Va-et-vient - Incubateur - Travailler avec microtitration

**KS 4000i - KS 4000ic - MS 3 Basic - MS 3 Digital - Lab Dancer - Vortex 3
VXR Basic - MTS 2/4 digital microtiter shaker - KS 130 Basic - KS 130 Control
KS 260 Basic - KS 260 Control - KS 501 digital - HS 260 Basic
HS 260 Control - HS 501 Digital**



Ident. No.
2979400

AS 1.5 Fastening screw

Fastening screw for the universal attachments AS 130.1, AS 260.1 and the separating funnel attachment AS 260.5. Two AS 1.5 fastening screws are required for fastening a clamping roll onto the corresponding basic holder.



Ident. No.
1268400

AS 1.6 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).



Ident. No.
1269200

AS 1.7 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.



Ident. No.
1268900

AS 1.8 Supporting clamping device

Two AS 1.6 clamping devices and two AS 1.8 supporting clamping devices are required if a clamping roll is to be attached at a higher position (e.g. for fixing a vessel which has a higher point of gravity). For basic holder AS 1.10 only.



General data

Length	437 mm
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AS 1.12 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 (page):
AS 1.13 (65)



Ident. No.
2594500

AS 1.13 Ground section holder

For attaching separating funnels with ground opening NS 29 (2 x AS 1.13 necessary per separating funnel). For basic holder AS 1.10 only.



Ident. No.
2597000

General data

For flask volume	AS 2.1	25 ml
	AS 2.2	50 ml
	AS 2.3	100 ml
	AS 2.4	200 ml / 250 ml
	AS 2.5	500 ml
	AS 2.6	1.000 ml

1 AS 2.1 Fixing clip

2 AS 2.2 Fixing clip

3 AS 2.3 Fixing clip

4 AS 2.4 Fixing clip

5 AS 2.5 Fixing clip

6 AS 2.6 Fixing clip

Ident. No.

1	1234300	AS 2.1
2	1234400	AS 2.2
3	1234500	AS 2.3
4	1234600	AS 2.4
5	1234700	AS 2.5
6	3819300	AS 2.6

