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A PRACTICAL OVERVIEW
SHAKERS BROCHURE

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Mini Rocker - Shaker MR-1

The Shaker is a compact, noiseless device. The use of direct drive and brushless motor allows continuous mixing up to 7 days and ensures reliable, trouble-free operation for more than 2 years.

Mixing frequency range: 1–30 oscil/min

Digital time setting: 1 min-24 hrs / non-stop

Fixed tilt angle: 7°

Maximum continuous operation time: 168 h

Platform working area: 215x215 mm

Overall dimensions: 220x205x120 mm



Rocker - Shaker MR-12

MR-12 Rocker–Shaker provides both soft and intensive mixing of solutions or nutrient media in vessels or plastic bags placed on the platform. Adjustable speed and platform tilt angle allows setting parameters for optimal solution transfer and mixing.

Mixing frequency range: 1–99 oscill/min (increment 1 oscill/min)

Digital time setting: 1 min–99 hrs 59 min (increment 1 min) / non-stop

Fixed tilt angle: 10°

Maximum continuous operation time: 168 h

Platform working area: 480 x 380 mm

Overall dimensions: 430 × 480 × 210 mm



“Sunflower” 3D Mini–Shaker

The Mini–Shaker provides adjustable three-dimensional smooth rotation of the platform and is designed for mixing blood samples, for minigel staining and destaining, sample washing, blot hybridization reactions. A compact device with low energy consumption.

Speed control range: 5–60 rpm

Fixed tilt angle: 7°

Maximum continuous operation time: 168 h

Platform working area: 215x215 mm

Overall dimensions: 235x235x140 mm (with platform)



INSTRUMENT + ACCESSORIES

Part Number	Description
BS-010152-AAG	Mini Rocker - Shaker MR-1
BS-010130-AAI	Rocker - Shaker MR-12
BS-010151-AAG	“Sunflower” 3D Mini-Shaker
BS-010125-AAG	Multi Bio 3D
PDM	Dimpled mat PDM (for MR-1 / 3D Mini / Multi Bio 3D)

All shakers can be used in cold rooms or incubators, operating at ambient temperature range +4°C to +40°C.

Multi Bio 3D

Multi Bio 3D provides realization of several types of motion in one module. Microprocessor control allows performing not only (1) Orbital 3D rotation of the platform, but also (2) (Reciprocal 3D motion (of ping-pong type) as well as (3) Soft vibrating rocking. These three motion types can be performed separately, pairwise and in cycles, periodically repeating the sequence of three motion types. The shaker is designed for laboratories with increased demands for quality of mixing, extraction and cell growing processes.

Speed control range: 1 - 100 RPM (Orbital and reciprocal motion) (1) (2)

Turning angle: 0°–360° (increment 30°) (Reciprocal motion) (2)

Rocking angle: 0°–360° 0°–5° (increment 1°) (Vibro motion) (3)

Fixed platform tilt angle: 7°

Maximum continuous operation time: 24 h

Platform working area: 215x215 mm

Overall dimensions: 235x235x140 mm (with platform)



Orbital Shaker PSU-10i

Provides regulated orbital motion of the platform. Shaker PSU-10i incorporates a direct drive system, a brushless motor with a guaranteed service life up to 35,000 hours and an automatic loading balancing system. These innovations allow for continuous mixing up to 7 days, ensure reliable, trouble-free operation for more than 2 years and significantly expand the range of the device performance in both high and low limits.

Speed control range: 50 - 450* RPM (increment 10 rpm)

*max. speed depends on the load and vessels' shape

Digital Time Settings: 1 min–96 hrs / non–stop

Maximum continuous operation time: 168 h

Overall dimensions: 255x255x100 mm



INSTRUMENT + ACCESSORIES

Part Number	Description
BS-010144-AAN	Orbital Shaker PSU-10i
BS-010108-AK	UP-12, Universal platform with adjustable bars for different types of flasks, bottles, and beakers with silicone mat.
BS-010116-AK	Bio PP-4, Flat platform with non-slip silicone mat for Petri dishes, culture flasks, agglutination.
BS-010108-EK	P-12/100, Platform with clamps for flasks.
BS-010108-DK	P-6/250, Platform with clamps for flasks.
BS-010116-BK	P-16/88, Platform with spring holders for up to 88 tubes up to 30 mm diameter (e. g. 10 ml, 15 ml, 50 ml tubes).
BS-010108-FK	HB-200, Additional holding bar for UP-12
BS-010108-BK	PP-4, Flat platform with non-slip silicone mat for Petri dishes, culture flasks, agglutination cards.
BS-010111-BK	SPM, Double-sided adhesive mat. SPM is compatible with PP-4 platform.

CPS-20, Co2 Shaker

CPS-20 is specifically designed for use in harsh environments such as CO₂ and humidity and provides reproducible results for cell culture growth. A choice of 5 interchangeable platforms provide the possibility of performing various procedures and techniques in various cultivation vessels. The specially designed remote controller protect the electronics from a CO₂ incubator environment, as well as, the remote control minimizes interference with the incubator environment and the ongoing experiment.



Speed control range: 50 - 250* RPM (increment 10 rpm)

*max. speed depends on the load and vessels' shape

Digital Time Settings: 1 min–96 hrs / non–stop

Maximum continuous operation time: 168 h

Overall dimensions: 255x255x100 mm

PSU-20i Multi–functional Orbital Shaker

Shaker PSU-20i provides three motion types: orbital, reciprocal and vibrating, which can be performed separately, pairwise and sequentially in repeated cycles. A choice of nine (9) different interchangeable platforms provides possibility of performing various procedures and techniques.



Speed control range: 20 - 250* RPM (increment 5 rpm)

*max. speed depends on the load and vessels' shape

Digital Time Settings: 1 min–96 hrs / non–stop (increment 1 min)

Maximum continuous operation time: 168 h

Overall dimensions: 410x410x130 mm

INSTRUMENT + ACCESSORIES

Part Number	Description		
On request	CPS-20, Co2 shaker		
BS-010145-ACI	PSU-20i Multi–functional Orbital Shaker		
BS-010145-AK	UP-330, Universal platform with adjustable bars can accommodate laboratory glassware of different shapes.		
BS-010135-BK	Platform with clamps for flasks.		
BS-010135-CK	P-16/250 Platform with clamps for flasks.		
BS-010135-AK	P-9/500 Platform with clamps for flasks.		
BS-010135-DK	P-6/1000 Platform with clamps for flasks.		
S-010126-EK	PP-20/4 Flat platform with non-slip rubber mat can accommodate various low profile containers (4 levels).		
BS-010126-DK	PP-20/3 Flat platform with non-slip rubber mat can accommodate various low profile containers (3 levels).		
BS-010126-CK	PP-20/2 Flat platform with non-slip rubber mat can accommodate various low profile containers (2 levels).		
BS-010126-BK	PP-20 Flat platform with non-slip rubber mat can accommodate various low profile containers.		
BS-010135-JK	UP-168 Universal platform with clamps can accommodate flasks or bottles of different volume sizes. Clamps are not included with platform and need to be ordered separately.		
BS-010135-MK	SPML Double-sided adhesive strips. SPML is compatible with UP-168 platform, that fits both on PSU-20i orbital shaker and in ES-20/60, ES-20/80 Shakers-Incubators.		
BS-010135-LK	TR-44/15 Adjustable angle test tube rack for UP-168	BS-010126-JK	FC-250 Clamp 250 ml - Ø85 mm for UP-168
BS-010135-KK	TR-21/50 Adjustable angle test tube rack for UP-168	BS-010126-LK	FC-500 Clamp 500 ml - Ø105 mm for UP-168
BS-010126-MK	FC-50 Clamp 50 ml - Ø50 mm for UP-168	BS-010126-İK	FC-1000 Clamp 1000 ml - Ø130 mm for UP-168
BS-010126-HK	FC-100 Clamp 100 ml - Ø65 mm for UP-168	BS-010126-NK	FC-2000 Clamp 2000 ml - Ø165 mm for UP-168

MPS-1 High-Speed Multi Plate Shaker

The shaker is compact and user-friendly. The shaker can be used in virtually any application by providing adjustable mixing of reagents in microtest plates, PCR plates, deepwell plates and test tubes (shaking tubes 0.2 to 2 ml and vortexing any volume up to 50 ml).



Mixing speed control range: 300–3,200 rpm (100 rpm increment)

Digital Time Settings: 0–60 min (15 s increment) / non-stop

Maximum continuous operation time: 8 h

Overall dimensions: 225×215×150 mm

PSU-2T Mini-Shaker for Immunology

Mini-Shaker PSU-2T is designed for immunoassays and provides adjustable mixing of reagents in microplates. The device ensures smooth movement of the platform even at low speeds.

All shakers can be used in cold rooms or incubators, operating at ambient temperature range +4°C to +40°C.

Speed control range: 150–1,200 rpm

Digital Time Settings: 1 min–24 hrs / non-stop

Maximum continuous operation time: 168 h

Overall dimensions: 255×255×100 mm



PST-60/100(C)HL Plate Shaker-Thermostat

Plate Thermo-Shakers are designed for shaking and thermostating 2 or 4 standard 96-well microplates. A multisystem principle, used in design of the Thermo-Shaker, allows operating it as 3 independent devices:

- incubator
- microplate shaker
- thermo-shaker

A distinctive feature of Biosan Plate Thermo-Shakers is the patented company Two-Side Microplates Heating, which allows to achieve full correspondence of the set and actual temperature in the microplate wells.

Temperature setting range: +25°C ... +60°C / 100°C 100HL

Temperature control range: +5°C above ambient... +60°C / 100°C 100HL

Temperature setting resolution: 0.1°C

Temperature stability: ±0.1°C

Temperature uniformity at +37°C: ±0.25°C / ±0.2°C 100HL

Digital Time Settings: 0–60 min (15 s increment) / non-stop

Maximum continuous operation time: 8 h

Speed control range: 250–1200 rpm (increment 10 rpm)

Platform dimensions: 250×150 mm (60HL - 100 HL) 290×210 mm (60HL-4)

Overall dimensions: 270×260×125 mm (60HL - 100HL) 380×390×140 mm (60HL-4)



TS-100(C) Thermo-Shaker for microtubes and PCR plates

Thermo-Shaker provides intensive mixing and temperature control of samples in microtest tubes or PCR plate. Functions of heating (up to +100°C) and mixing can be performed both simultaneously and independently, i.e. the unit implements three devices in one:

- Shaker
- Dry-block Thermostat
- Thermo-Shaker

The TS-100C and TS-100C Smart differs from the TS-100 with a possibility of cooling samples down to +4°C, the TS-100C Smart can also control up to 7 units from PC via Bluetooth® technology.

Temperature setting range: +4°C ... +100°C (+25°C ... +100°C TS-100)
Temperature control range: 15°C below ambient ... +100°C (+ 5°C-100°C TS-100)
Temperature setting resolution: 0.1°C
Temperature stability: ±0.1°C
Temperature uniformity at +37°C: ±0.5°C
Average heating speed from +25°C to +100°C: 5°C/min
Average cooling speed from +100°C to +25°C: 5°C/min
Average cooling speed from +25°C to +4°C: 1.8°C/min
Digital Time Settings: 1 min–96 hrs (1 min increment)
Maximum continuous operation time: 168 h
Speed control range: 250–1400 rpm
Overall dimensions: 220x240x90 mm



INSTRUMENT + ACCESSORIES

Part Number	Description
BS-010216-A03	MPS-1 High-Speed Multi Plate Shaker
BS-010216-CK	P-02/96 Platform for 96 tubes 0.2 ml or semi-/ unskirted PCR plate.
BS-010216-AK	P-2/24 For 24 tubes 1.5-2 ml.
BS-010216-BK	P-05/32 For 32 tubes 0.5 ml.
BS-010216-DK	P-02/05 For 24 tubes 0.5 ml and 48 tubes 0.2 ml.
BS-010155-AAG	PSU-2 T Mini-shaker for immunology Including IPP-2 platform
BS-010102-AK	IPP-4 Platform
BS-010119-AAI	PST-60HL Plate Shaker-Thermostat, 2 standard 96-well microplates
BS-010128-AAI	PST-60HL-4 Plate Shaker-Thermostat, 4 standard 96-well microplates
BS-010142-AAI	PST-100HL Plate Shaker-Thermostat, 2 standard 96-well microplates
BS-010120-AAI	TS100 Thermo-Shaker for microtubes and PCR plates
BS-010143-AAI	TS-100C Thermo-Shaker with cooling for microtubes and PCR plates
BS-010171-A01	TS-100C Smart Thermo-Shaker with cooling for microtubes and PCR plates
BS-010143-AK	SC-18C 20 × 0.5 ml + 12 × 1.5 ml microtubes
BS-010143-CK	SC-18/02C 20 × 0.2 ml microtubes + 12 × 1.5 ml microtubes
BS-010143-GK	SC-24NC 24 × 1.5 ml microtubes
BS-010143-EK	SC-24C 24 × 2 ml microtubes
BS-010143-FK	SC-96AC 96-well unskirted or semi-skirted microplate (0.2 ml) for PCR

TS-DW Thermo-Shaker for Deep Well Plates

TS-DW Thermo-Shaker is designed for shaking and incubating deep well plates. A multisystem principle, used in the design of the Thermo-Shaker, allows operating it as 3 independent devices: Incubator, Plate shaker and Thermo-Shaker.

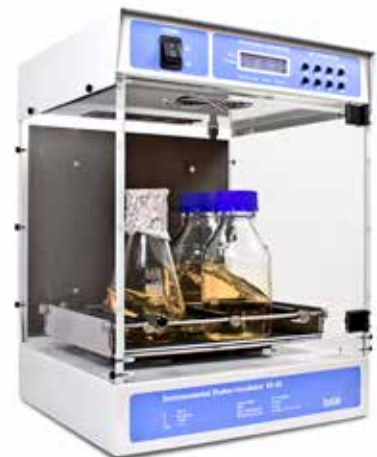
-
- Temperature setting range: +25°C ... +100°C
-
- Temperature control range: 5°C above ambient ... +100°C
-
- Temperature setting resolution: 0.1°C
-
- Temperature stability: ±0.1°C
-
- Temperature accuracy at +37°C: ±0.5°C
-
- Digital Time Settings: 1 min–96 hrs (1 min increment)
-
- Speed control range: 250–1400 rpm
-
- Overall dimensions: 240x260x160 mm
-



ES-20 - Orbital Shaker-Incubator

The ES-20 is extremely easy to operate, with very straightforward setup of temperature, speed and time, using the two line set-up and status display, which clearly indicates both set and actual values for each of the three parameters.

-
- Temperature setting range: +25°C ... + 42°C
-
- Temperature control range: 5°C above ambient ... + 42°C
-
- Speed control range: 50–250 rpm
-
- Setting resolution: 0.1°C / 10 rpm
-
- Temperature stability: ±0.5°C
-
- Temperature uniformity at +37°C: ±0.5°C
-
- Digital Time Settings: 1 min–96 hrs / non-stop
-
- Dimensions of the inner chamber: 305x260x250 mm
-
- Overall dimensions: 340x340x435 mm
-



INSTRUMENT + ACCESSORIES

Part Number	Description
BS-010159-A02	TS-DW Thermo-Shaker for Deep Well Plates
BS-010159-AK	B-2E Block for one deep-well plate Eppendorf® 96/1000 µl
BS-010159-CK	B-2S Block for one deep-well plate Sarstedt® Megablock 96/2200 µl
BS-010159-EK	B-2P Block for one deep-well plate Porvair® 96/2000 µl
BS-010159-FK	B-2A Block for one deep-well plate Axygen® 96/2200 µl
BS-010159-BK	B-2V Block for one deep-well plate Vector-Best® 96/1000 µl
BS-010159-KK	B-06A block for one deep-well plate Axygen® 96/600 µl
BS-010111-AAA	ES-20 Orbital Shaker-Incubator
BS-010108-AK	UP-12 Universal platform with adjustable bars for different types of flasks, bottles, and beakers with silicone mat.
BS-010108-EK	P-12/100 Platform with clamps for flasks.
BS-010108-DK	P-6/250 Platform with clamps for flasks.
BS-010116-BK	P-16/88 Platform with spring holders for up to 88 tubes up to 30 mm diameter (e. g. 10 ml, 15 ml, 50 ml tubes).
BS-010108-FK	HB-200 Additional holding bar for UP-12
BS-010108-BK	PP-4 Flat platform with non-slip silicone mat for Petri dishes, culture flasks, agglutination cards
BS-010111-BK	SPM Double-sided adhesive mat. SPM is compatible with PP-4 platform

ES-20/60 - Orbital Shaker-Incubator

Shaker-Incubator ES-20/60 provides smooth or intensive mixing in flasks installed on the platform. Shaker is equipped with a direct-drive mechanism for platform motion. It provides reliable and stable operation for the long term experiments.

-
- Temperature setting range: +25°C ... +80°C
-
- Temperature control range: 10°C above ambient ... + 80°C
-
- Speed control range: 50–250 rpm (increment 10 rpm)
-
- Temperature Setting resolution: 0.1°C
-
- Temperature stability: ±0.5°C
-
- Temperature uniformity at +37°C: ±0.5°C
-
- Digital Time Settings: 1 min–96 hrs / non-stop (1 min increment)
-
- Maximum continuous operation time: 30 days
-
- Dimensions of the inner chamber: 460 × 400 × 310 mm
-
- Overall dimensions: 590 × 525 × 510 mm
-



INSTRUMENT + ACCESSORIES

Part Number	Description
BS-010135-AAA	ES-20/60 Orbital Shaker-Incubator
BS-010135-BK	P-30/100 Platform with clamps for flasks.
BS-010135-CK	P-16/250 Platform with clamps for flasks.
BS-010135-AK	P-9/500 Platform with clamps for flasks.
BS-010135-DK	P-6/1000 Platform with clamps for flasks.
BS-010135-FK	PP-400 Flat platform with non-slip silicone mat can accommodate various low profile containers.
BS-010135-JK	UP-168 Universal platform with clamps can accommodate flasks or bottles of different volume sizes. Clamps are not included with platform and need to be ordered separately.
BS-010135-LK	TR-44/15 Adjustable angle test tube rack for UP-168
BS-010135-KK	TR-21/50 Adjustable angle test tube rack for UP-168
	Clamps for 50(ø50mm) - 100 (ø65mm) - 250 (ø85mm) - 500 (ø105mm) and 1000ml (ø130mm) for UP168

ES-20/80(C) - Orbital Shaker-Incubator

The unit is equipped with a newly developed triple eccentric mechanism for platform motion that provides supreme balancing characteristics, superior reliability and quiet operation. The achieved stability of the unit during vigorous mixing allows for stacking installation of up to 3 units which enables to save space. The new display and easy to use user interface provide a clear and intuitive control of parameters and also allow data logging, storage and display over time.

-
- Temperature setting range: +25°C ... +80°C / +4°C... +80°C ES-20/80C
-
- Temperature control range: 10°C above ambient ... + 80°C
-
- Speed control range: 50–250 rpm / 50–400 rpm ES-20/80C (increment 10 rpm)
-
- Temperature Setting resolution: 0.1°C
-
- Temperature stability: ±0.5°C / ±0.1°C ES-20/80C
-
- Temperature uniformity at +37°C: ±0.5°C / ±0.3°C ES-20/80C
-
- Digital Time Settings: 1 min–96 hrs / non-stop (1 min increment)
-
- Maximum continuous operation time: 30 days
-
- Dimensions of the inner chamber: 460 × 400 × 310 mm
-
- Overall dimensions: 590 × 525 × 510 mm / 620 × 530 × 510 mm ES-20/60C
-



INSTRUMENT + ACCESSORIES

Part Number	Description
BS-010135-AAA	ES-20/60 Orbital Shaker-Incubator
BS-010135-FK	PP-400 Flat platform with non-slip silicone mat can accommodate various low profile containers.
BS-010167-LK	HSP-6/1000 Platform with tight fit clamps for flasks.
BS-010167-NK	HSP-9/500 Platform with tight fit clamps for flasks.
BS-010167-MK	HSP-16/250 Platform with tight fit clamps for flasks.
BS-010167-KK	HSP-30/100 Platform with tight fit clamps for flasks.
BS-010135-JK	UP-168 Universal platform with clamps can accommodate flasks or bottles of different volume sizes. Clamps are not included with platform and need to be ordered separately.
BS-010135-LK	TR-44/15 Adjustable angle test tube rack for UP-168
BS-010135-KK	TR-21/50 Adjustable angle test tube rack for UP-168
	Clamps for 50(ø50mm) - 100 (ø65mm) - 250 (ø85mm) - 500 (ø105mm) and 1000ml (ø130mm) for UP168

KS4000 I(C) Shaker

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



Shaking movement: orbital

Orbital diameter: 20 mm

Max. shaking weight (with attachment): 20 kg

Infinitely adjustable speed range: 10 - 500 rpm

Temperature range: RT + 5°C to 80 °C (KS4000I) / RT - 10° - 80 °C (KS4000IC)

Operating area inner chamber: 440 x 440 x 352 mm

Dimensions: 580 x 525 x 750 mm

INSTRUMENT + ACCESSORIES

Part Number	Description
0003510000	KS 4000 i control (440 x 440 x 352 mm)
0003510100	KS 4000 ic control (440 x 440 x 352 mm)
0003940000	KS 3000 i control (330 x 330 x 258 mm)
0003940100	KS 3000 ic control (330 x 330 x 258 mm)
0003710200	1.400 Basic holder, Spare for use with universal attachment 4000.1
0003712000	1.401 Clamping roll Spare for use with universal* attachment.
0003920000	Stickmax Universal adhesive mat for shakers.
0008022200	4000.1 For various types of vessels. Infinitely variable clamping rolls allow universal adaptation to the vessels.
0003710100	4000.2 For shaking of flasks, Erlenmeyer flasks and bottles with a round crosssection (without fixing clips).
0003710000	4000.3 Dish 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).
	Clamps for 25 - 50 - 100 - 200/250 - 500 - 1000 - 2000ml

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)



Shaking movement: orbital

Orbital diameter: 3 mm

Max. shaking weight (with attachment): 2 or 4 microtiter plates

Speed range: 0 - 1100 rpm

Time Setting Range: 1 - 99 min

Operating time: timer and continuous operation

Dimensions: 185 x 105 x 320 mm

KS 130 Control Shaker

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

- Electronic time switching clock: 0 - 9 h 59min or continuous operation (endless)
- With integrated end point positioning (for automated robot-controlled sampling)
- All functions can be controlled and documented with labworldsoft®
- Wide range of attachment combinations makes it possible to use almost all shapes and sizes of vessels



Shaking movement: orbital

Shaking Stroke: 4 mm

Max. shaking weight (with attachment): 2 kg

Speed range: 0 - 800 rpm

Time Setting Range: 1-599 min

Operating mode: timer and continuous operation

Dimensions: 270x98x316 mm

INSTRUMENT + ACCESSORIES

Part Number	Description
0003208000	MTS 2/4 Digital Microtiter Shaker
0002980100	KS 130 control
0003030500	1.31 Clamping roll
0008017300	130.1 Universal attachment for use with various types of vessels by means of universal, infinitely variable clamping rolls.
0003115000	130.2 Fixing clip attachment for processing round flasks, measuring flasks and Erlenmeyer flasks. Please order fixing clips separately.
0003120000	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).
0003120300	130.4 Test tube support for intensive shaking, e.g. small tubes, test tubes, cuvettes, centrifuge tubes.
0003148000	1.30 Basic holder for use with universal attachment AS 130.1.
0003920000	Stickmax Universal adhesive mat for shakers.
	Clamps for 25 - 50 - 100 - 200/250 - 500 - 1000 - 2000ml

HS 260 Basic

Compact, flat reciprocal shaker with ideal 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 makes it possible to use almost all shapes and sizes of vessels

Shaking movement: reciprocating

Shaking Stroke: 20 mm

Max. shaking weight (with attachment): 7.5 kg

Speed range: 0-300 rpm

Time Setting Range: 5-50 min

Operating mode: timer and continuous operation

Dimensions: 360x100x420 mm



HS 260 Control Shaker

Compact, flat reciprocal shaker with ideal swivel motion, for a maximum shaking weight of 7.5 kg.

- Electronic adjustment of speed and timer
- 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® software
- Wide range of attachment combinations makes it possible to use almost all shapes and sizes of vessels

Shaking movement: reciprocating

Shaking Stroke: 20 mm

Max. shaking weight (with attachment): 7.5 kg

Speed range: 10 - 800 rpm

Time Setting Range: 1-599 min

Operating mode: timer and continuous operation

Dimensions: 360x100x420 mm



INSTRUMENT + ACCESSORIES

Part Number	Description
0003066600	HS 260 Basic
0003066700	HS 260 control
0003920000	Stickmax Universal adhesive mat for shakers.
	Clamps for 25 - 50 - 100 - 200/250 - 500 - 1000 - 2000ml
0003030501	1.61 Clamping roll
0003115500	260.2 Fixing clip attachment for shaking flasks, Erlenmeyer flasks and bottles with a round cross-section (without fixing clips).
0003120600	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 slipresistant foil (PP).
0003120900	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.
0003149000	1.60 Basic holder for use with AS 1.61 clamping roll.
0008017400	260.1 Universal attachment for various types of vessels. Infinitely variable clamping rolls allow universal adaptation to the vessels.

Incubator Shaker Benchtop IST-3075 & 4075

With its wide speed range, the Jeio Tech IST-3075 Bench Top Incubator Shaker is a digital incubating/refrigerating bench top orbital shaker that allows laboratories to carry out effective sample preparation in a temperature-controlled environment.



Temperature Range: - Ambient +5°C to 80°C for IST-3075 / 4075
- Ambient -15°C (Min. 15) to 80°C for IST-3075R / 4075R

Shaking speed: up to 500 rpm

Max. load: 10 kg / 14 kg

Timer: 1 min. to 999 hr 59 min.

Dimensions platform: 350x350 mm / 450x450 mm

Dimensions exterior: 440x785x510 mm / 540x 890 x510 mm

Incubator Shaker Chamber

Specially designed to be double-stacked on the floor or located on the lab benches for space saving.

Temperature Range: - Ambient +5°C to 80°C for ISS-3075 / 4075.
- Ambient -20°C (Min. +4) to 80°C for ISS-3075R / 4075R.

Speed range: up to 500 rpm

Shelves: Standard 2 - max. 8 / Standard 2 - max. 11

Max. load: 15 kg / 21 kg

Timer: 1 min. to 999 hr 59 min.

Dimensions platform: 350x350 mm / 450x450 mm

Dimensions exterior: 578x815x854 mm / 678x895x934 mm



Open-Air Shaker OS-7100/7200

Powerful driving system with a durable body structure increases shaking capacity.

Orbital shaking motion in various diameter. - 25.4mm for OS-7100

- 50.8mm for OS-7200

Speed range: 30 to 500 rpm / 30 to 300 rpm

Max. load per load: 400 rpm 30 kg / 250 rpm 35 kg

Timer (countdown): 9999hr 59min

Dimensions platform: 755 x 520 mm

Dimensions: 755 x 627 x 151 mm



Interesse in huren? Een interessante optie!

Wiltent Instrumenten Benelux biedt een uitgebreid scala aan verhuurbare apparatuur.

Meer weten? info@wiltent.nl

Open-Air Shaker Dual-Action

Dual-action benchtop platform shakers accommodate flask up to 6L. Shaking motion orbital and reciprocating.

Speed range: 20 to 500rpm

Amplitude size: 19.1mm

Timer (countdown): 999hr 59min

Dimensions platform: 320x260 / 350x350 / 450x450 mm

Dimensions: 354x388x146 / 409x508x141 / 510x632x156 mm



INSTRUMENT + ACCESSORIES

Part Number	Description
AAH23465U	IST-3075 Incubated Shaker (350x350 mm)
AAH23565U	IST-3075/R Refrigerated Incubated shaker (350x350 mm)
AAH23665U	IST-4075 Incubated Shaker (450x450 mm)
AAH23765U	IST-4075R Refrigerated Incubated shaker (450x450 mm)
AAH23415U	ISS-3075 Incubated Shaker Chamber (350x350 mm)
AAH23515U	ISS-3075R Refrigerated Incubated Chamber (350x350 mm)
AAH23615U	ISS-4075 Incubated Shaker Chamber (350x350 mm)
AAH23715U	ISS-4075R Refrigerated Incubated Chamber (450x450 mm)
AAH3D1415K	OS-7100 Open-air Shaker Orbital (500 rpm)
AAH3D1515K	OS-7200 Open-air Shaker Orbital (300 rpm)
AAH3D1115K	OS-2000 Open-air Shaker Dual Action Orbital/ reciprocating (320x260 mm)
AAH3D1215K	OS-3000 Open-air Shaker Dual Action Orbital/ reciprocating (350x350 mm)
AAH3D1315K	OS-4000 Open-air Shaker Dual Action Orbital/ reciprocating (450x450 mm)
	Universal platforms provide flexibility for mixing assortments of test tubes and glassware of varying sizes on a single platform. Various clamps for Erlenmeyer flasks and separatory funnels are available. Universal platform with flash clamps stainless steel. From 50 ml to 6 litre Universal platform with flash clamps plastic. From 50 ml to 2 litre Universal platform with funnel clamps. From 250 ml to 2 litre
	Dedicated platforms: When using a single flask size only, the dedicated platforms with pre-installed clamps provide maximum capacity. 250mL and 500mL clamps are standard but other sizes can be available.
	Test tube racks easy to release and mount racks made of durable stainless steel with adjustable angle and tube height support. Test tube racks are used with an optional universal platform. From Ø8 mm to Ø50 mm
	Microplate holders available in three styles: tower type, flat type (small and large), and single type. Tower type holder is for 10 standard or deep well plates. Large flat holder is for 4 standard or deep well plates. Small flat holder is for 3 standard or deep well plates. Single type holder is for 1 standard or deep well plate. (standard well plates' height: 14.7mm)
	Rubber mats designed for low-speed applications, non-skid rubber mats allow quick addition or removal of flasks, plates or tubes.
	Spring wire racks ideal for holding a wide variety of tubes, flasks, and other glassware. All components are made of stainless steel. From 50 ml to 2.8 litre.
	Universal attachments (utility carriers) Several adjustable clamping bars for quickly securing a variety of glassware or tubes on non-skid rubber mats. Suitable for flat-bottomed flasks of various sizes.

LD-48 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)

Shaking movement: orbital

Speed range: 50 - 1250 rpm

Permissible ambient temperature: 5 - 40 °C

Permissible relative humidity: 80%

Dimensions: 310 x 340 x 140 mm



INSTRUMENT + ACCESSORIES

Part Number	Description
48000	LD-48 Shaker
48450	holder micro-titre plate holder (4 plates)
48452	holder micro-titre plate holder (8 plates)
48454	Holder Reaction-Vial (for holders check accessories)
48427	General Plate
48423	Plate Erlenmeyer
48420	Holder test-tube shaker (for holders check accessories)
48425	Plate with holes for erlenmeyerholders
	Polythene foam holders (set of 4) for 128 or 96 tubes from 7 to 34 mm
	Polythene trays for 48454, pkg of 5 for 20 tubes ea 0,4 ml - 0,5 ml or 1,5 ml

Rocking/3D Shaker RS-RR 10/RS-RD 10

New and powerful shaker for gentle mixing of samples. The adjustment and control of speed and time can be done easily via the LCD-Display with this fully digital version. An individual configuration of your shaker is easily possible by using the comprehensive range of accessories.

Shaking movement: Sea-saw rocking / 3D orbital

Speed range: 0-70 rpm

Max. shaking weight: 10 kg / 5 kg

Dimensions platform: 320x320 mm / 320x320 mm

Dimensions exterior: 340x300x100 mm / 420x370x100mm



Orbital/Linear Shaker RS-OS/RS-LS

The orbital and linear shaker of the RS-OS/LS offer the suitable instrument for your daily laboratory routines. You can select between a linear and an orbital shaker with a maximum shaking capacities of 2,5 kg or 7,5 kg

Shaking movement: Orbital / Linear

Speed range: 100-800 rpm / 100-350 rpm

Shaking movement diameter: 4mm

Dimensions platform: 240x240 mm

Dimensions exterior: 340x300x100 mm



Shaker RS-OS 5/RS-LS 5

New economic laboratory shaker for gentle and effective sample mixing. Both versions have a max. shaking weight of 3 kg. An individual configuration of your shaker is easily possible by using the comprehensive range of accessories and all that at very competitive prices.

Shaking movement: Orbital / Linear

Speed: 0-200

Max. shaking weight: 3 kg

Dimensions platform: 240x240 mm

Dimensions exterior: 330x270x110 mm



INSTRUMENT + ACCESSORIES

Part Number	Description
RS-RR 10	RS-RR 10 Digital Rocking Shaker (Sea-saw rocking)
RS-RD 10	RS-RD 10 3D Digital Rocking Shaker (3D orbital)
RS-OS 10	RS-OS 10 Orbital Shaker max. shaking weight 2,5kg
RS-OS 20	RS-OS 20 Orbital Shaker max. shaking weight 7,5 kg
RS-LS 10	RS-LS 10 Linear Shaker max. shaking weight 2,5kg
RS-LS 20	RS-LS 20 Linear Shaker max. shaking weight 7,5kg
RS-OS 5	Analog Orbital Shaker
RS-LS 5	Analog Lineair Shaker
RSS-E 100	Universal attachment incl. clamping rolls for OS/LS 10
RSS-E 105	Base plate for OS/LS 10 to be used with fixing clips for Erlenmeyer flasks
RSS-E 110	Universal attachment with vertical adjustable clamping rolls for OS/LS 10
RSS-E 115	Dish attachment for OS/LS 10
RSS-E 200	Universal attachment incl. clamping rolls for OS/LS 20
RSS-E 205	Base plate for OS/LS 20 to be used with fixing clips for Erlenmeyer flasks
RSS-E 210	Universal attachment with vertical adjustable clamping rolls for OS/LS 20
RSS-E 220	Attachment with fixing strap
	Fixing clip for 25 - 50 - 100 - 200/250 - 500 ml Erlenmeyer flask



WILTEN
instrumenten

Service & Verhuur

Technische dienst - Onderhoud & Reparaties

Het eigen technical service center is verantwoordelijk voor onderhoud en reparatie en aanvullende technische ondersteuning. Onze service engineers zijn dagelijks op pad om diverse diensten aan te bieden, variërend van eenvoudige reparaties tot het geven van trainingen voor eindgebruikers. Er bestaan diverse service-overeenkomsten om er van verzekerd te zijn dat uw apparatuur ten alle tijde operationeel blijft.

Technische dienst - Productontwikkeling & -modificaties

Regelmatig blijkt dat standaard laboratoriuminstrumenten en -apparatuur voor klanten net niet past binnen het technische of ergonomische plaatje dat er voor ogen is. Onze technici zijn in staat om voor vrijwel alle apparatuur maatwerkoplossingen te realiseren: zowel mechanisch als elektronisch.

Heeft u vragen over de mogelijkheden van service-overeenkomsten of over andere onderwerpen? Neem dan contact met ons op door te bellen naar 076-508 65 00 of te mailen naar info@wilten.nl