

SHAKER AND STIRRER



V1 PLUS

BOECO VORTEX MIXER V1 PLUS

Vortex mixer V1 plus with variable speed control. Continuous operation as well as with automatic starter, triggered by pressing the attachment. Incl. standard attachment for test tubes up to 20 mm ø.

Specification:

Kind of motion:	orbital, 4 mm
Speed range:	750 - 3000 rpm.
Time of acceleration:	3 sec.
Tube's capacity:	1,5-50ml
Speed display:	scale (min/max)
Switch:	touch / continuous mode
Overall size:	90 x 150 x 80 mm
Weight:	0,8 kg
Power:	12 V. DC 2,0A (External power adapter)

Code

BOE 8055000

Description

Vortex mixer V1plus, AC Adapter 100-240 V with Multi plug (EU, US, UK, AU)



V2H

BOECO VORTEX MIXER V2H

Heavy Vortex high speed mixer with brushless motor, digital display and optional attachments.

Specification:

Motor:	brushless DC motor
Kind of motion:	orbital, 4 mm
Speed range:	300 - 4200 rpm. / speed accuracy: ± 10 rpm
Max. loading capacity:	500 g
Display:	digital speed / time setting
Switch:	ON / OFF / Touch
Pulse mode (default):	vibration for 5 secs. than pause for 5 secs.
Pulse mode (programm):	vibration time & pause time can be defined by user between 1 to 99 secs.
Timer:	1 to 999 mins. & continuous mode
Overall size:	205 x 136 x 138,5 mm
Weight:	2,8 kg
Power:	external power adapter, 1.6A

Code

BOE 8062000

Description

Vortex mixer V2H, with standard Vortex cup
AC adapter 100-240 V, 50/60 Hz

BOE 8062001

Microplate/Microtube (20x1,5/2,0ml)
attachment

BOE 8062003

Erlenmeyer flask attachment



BOECO COMBI-SPIN, FVL-2400N PLUS

this combination of a centrifuge and a vortex mixer for Micro test tubes is specially designed for the genetic engineering researches (especially for PCR-diagnostics experiments). It can be used also in biochemical clinical laboratories as well as microbiological and industrial biotechnology laboratories. Combi-Spin ensures the possibility for the simultaneous mixing and separation of the samples, using centrifuge and mixing modules

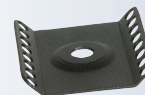
Specification:

Rotation speed (constant):	2800 rpm (50 Hz), 3500 rpm (60 Hz)
Max RCF:	500 x g (50 Hz), 700 x g (60 Hz)
Continuous operation time:	< 60 min
Accessories included:	1 rotor for 12 x 1,5 ml 1 rotor for 12 x 0,5 and 0,2 ml
Overall size:	190 x 235 x 125 mm
Weight:	1,7 kg

Code	Description
BOE 8071000	Combi-Spin, FVL-2400N plus, 220 V, 50/60 Hz
BOE 8071100	Combi-Spin, FVL-2400N plus, 110 V, 60 Hz
BOE 8071001	SR-16, rotor for 2 x 8-well 0,2 ml microtest strips
BOE 8071002	SR-32, rotor for 4 x 8-well 0,2 ml microtest strips



COMBISPIN
FVL-2400N PLUS



SR-16

BOECO ROTATOR BIO RS-24

Mini-rotator with vertical rotation of the platform for soft mixing of test tubes, microtubes and vacutainers.

Incl. Standard platform PRS-22 for 22 tubes up to 15 mm diam.

Specification:

Speed range:	5 - 30 1/min
Digital Timer:	from 1 min to 23 h 59 min / non-stop
Overall size:	325 x 180 x 155 mm
Weight:	1,4 kg
Power:	12 V. DC 2,0A (External power adapter)

Code	Description
BOE 8024000	Rotator Bio RS-24, with platform PRS-22, AC Adapter 100-240 V with Multi plug (EU, US, UK, AU)
BOE 8073001	Platform PRS-4/12 (4x30 mm diam. and 12x15 mm)



RS-24

BOECO BLOOD TUBE ROTATOR BTR 16

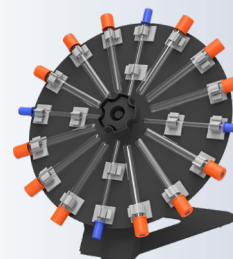
our compact designed BTR 16 with its circular rotating action gives gentle but effective mixing. It can accommodate up to 16 tubes (4 ESR tubes & 12 blood collection tubes) The tubes are easy to fix and remove.

The BTR 16 has a robust construction with a strong metal frame design

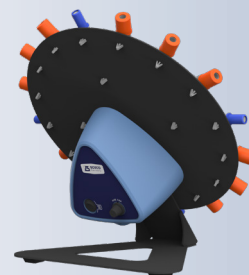
Specification:

Capacity:	16 Tubes (12 Blood collection Tubes + 4 ESR Tubes)
Motor:	AC Synchronous motor for noiseless operation
Speed:	Fixed Speed of 30 rpm with an accuracy of ± 2
Run Time:	Continuous / Infinite
Angle of Disc Plate:	Fixed angle of 38°
Maximum operational weight capacity:	1,5 kg
Protection class:	IP 21
Dimension (W x D x H):	278 x 252 x 183 mm
Weight:	1,4 kg

Code	Description
BOE 8026000	Blood Tube Rotator BTR 16, 220 V, 50/60 Hz
BOE 8026100	Blood Tube Rotator BTR 16, 110 V, 60 Hz



BTR-16



BOECO SUNFLOWER MINI-SHAKER 3D

Mini-Shaker 3D with adjustable speed and constant angle of mixing. Very small and ideal for private diagnostics. Incl. black non-slip silicone mat.

Specification:

Kind of motion:	three-dimensional orbital movement
Angle:	7°
Speed range:	50 - 60 rpm
Speed display:	scale (min/max)
Platform size:	215 x 215 mm
Overall size:	235 x 235 x 140 mm
Max Loading:	1 kg
Weight:	1,3 kg
Power:	12 V. DC 2,0A (External power adapter)

Code

BOE 8058000

Description

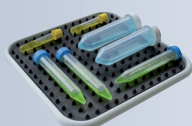
Sunflower Mini Shaker 3D, AC Adapter
100-240 V with Multi plug (EU, US, UK, AU)

BOE 8050200

Dimpled mat



3D



DIMPLED MAT

BOECO TUBE ROLLER TR-6

the microprocessor controlled BOECO TR-6 provides gentle rocking and rolling motion. The user can define programs (speed & time) and its Pulse mode provides a momentary pause for through mixing (Pulse can be set for a range of 30 sec. to 90 sec. time) The rollers are fully autoclavable and easy to remove which could allow to use bigger tubes.

Specification:

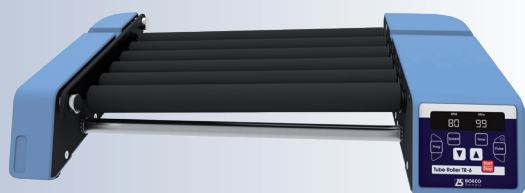
Housing:	Plastic (ABS)
Motion:	Rolling & Rocking
Tilt angle	± 3°
Motor:	Brushless DC motor
Speed range:	10 - 80 rpm / 1 rpm
Speed display:	LED
Timer:	1 minute to 99 min. / non-stop
Roller:	6 Rolls / 5 positions (Nylon - autoclavable)
Roller Length:	327 mm
Max Loading capacity	2 kg
Protection class	IP 21
Permissible ambient temp.	4°C to 50°C
Permissible rel. humidity	<80°C
Input voltage	100-240 VAC, 50/60 Hz
Output voltage	24VDC
Overall size:	505x293x90 (WxDxH)
Weight:	approx. 4,2 kg

Code

BOE 8025010

Description

Tube roller TR-6, AC adapter 100-240 V, 50/60Hz



TR-6

BOECO MAGNETIC STIRRER MMS 3000

Motor drive magnetic stirrer, with stainless steel plate and speed regulation up to 3000 rpm. An optional to be ordered detachable support rod allows to fix different sensors (temperature, pH etc.) inside the Liquid.

Specification:

Speed range:	0 - 3000 1/min
Max. stirring volume:	up to 20,0 l
Platform size:	160 mm diam.
Platform material:	stainless steel
Support rod height:	320 mm
Overall size:	185 x 230 x 75 mm
Weight:	1,5 kg
Power:	12 V. DC 2,0A (External power adapter)

Code	Description
BOE 8056500	Magnetic stirrer MMS-3000, AC Adapter 100-240 V with Multi plug (EU, US, UK, AU)
BOE 8056501	Detachable support rod



MMS 3000



BOECO MAGNETIC STIRRER WITH CERAMIC HOTPLATE HSC-400

Our analog hot plate stirrer with a square ceramic heating plate. Resistant, safe and reliable. The ideal solution for basic heating and stirring application. You can rely on the BOECO HSC-400 for everyday laboratory applications, as it stirs volumes up to 15 liters (H₂O).

The BOECO HSC-400 is equipped with a cutting-edge Heating Plate technology that ensures temperature homogeneity, thermal efficiency and durable heating performance over time.

The BOECO HSC-400 stirs aqueous solutions from 50 up to 1300 rpm being a suitable solution for general laboratory applications performed in chemistry and biology in academia and laboratories.

The BOECO HSC-400 provides LED Indicators for Heating and Stirring.

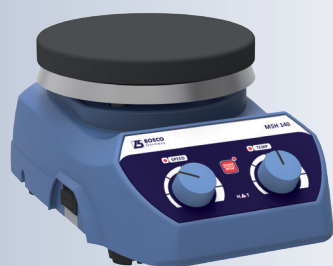
Specification:

Housing material:	Technopolymer
Hot platform size:	180x180 mm (7x7 in)
Hot platform material:	Ceramic
Stirring speed range:	50 - 1300 rpm
Speed control:	Analog
Stirring volume (H ₂ O):	15 L
Motor:	Monophase PCM
Temperature range:	Room temperature to 400°C
Heating control:	Analog
Power input:	800 W
Permissible ambient temp.:	40°C
Dimensions (WxHxD):	203 x 94 x 233 mm
Weight:	3,4 kg

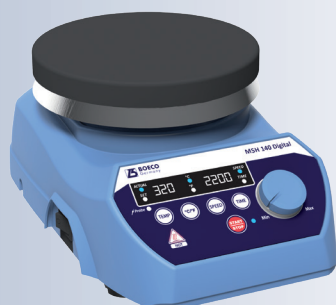
Code	Description
BOE F20500552BO	Magnetic stirrer with hotplate HSC-400, 220 V
BOE F20510552BO	Magnetic stirrer with hotplate HSC-400, 110 V



HSC 400



MSH 140



MSH 140 DIGITAL



500 ML REACTION BLOCK

BOECO MAGNETIC STIRRER WITH HOTPLATE MSH 140, MSH 140 DIGITAL

Motor drive Magnetic stirrer with ceramic coated stainless steel hot plate for simultaneously stirring and heating of chemical reagents. „Hot-Surface“ alert indicator light when the plate temperature exceeds 50°C

Specification:

	MSH140 digital	MSH140
Over all dimensions (LxBxH) (mm)	156x248x104	156x248x104
Set-up plate dimensions (mm)	140	140
Stirring quantity in Ltr (max)	10	10
Number of stirrer positions	1	1
Setup plate feature (Coating)	ceramic coated stainless steel plate	
IP Rating	IP 21	IP 21
Product weight (kg)	2,3	2,3
Safety temp circuit	Yes	no
Safe temp. (°C)	345	no
Power supply	110/240VAC	110/240VAC
Maximum bar size (mm)	25 - 60	25 - 60
Speed range (rpm)	200 - 2200	200 - 2200
Heating temp. range (°C)	320	320
Hot surface alert (°C)	50	50

Control

Time range	1 to 999 minutes & continuous	no
Motor type	DC	DC
Motor rating input & Output (W)	5-7	5-7
Accuracy in RPM (+/- RPM)	+/-80	-
speed step	10	-
Heat Output (W)	600	300
Power output (W)	610	310
Temp Accuracy [+/-K]	1	-
Temp increment	1	-
Temp indication	yes	no
Permissible ambient temp (°C)	5-40	5-40
Error code Display	yes	no
Housing Material	ABS	ABS
Display	Yes	no

Code Description

BOE 8014000	Magnetic stirrer with hotplate MSH 140, 240V
BOE 8014001	Magnetic stirrer with hotplate MSH 140, 110V
BOE 8014110	Magnetic stirrer with hotplate MSH 140 digital, 240V
BOE 8014111	Magnetic stirrer with hotplate MSH 140 digital, 110V

Accessories for MSH 140 digital

Code	Description
BOE 8014120	Support stand with boss head clamp for PT 1000 sensor probe
BOE 8014121	PT 1000 sensor
BOE 8014122	Reaction block, 500 ml

BOECO OVERHEAD STIRRERS OST-25 / OST-40

- » With digital display
- » Compact size
- » Brushless DC maintenance free long life motor
- » The speed will remain constant even with changing viscosities
- » Suitable for viscosities 10.000 and 30.000 mPas and volumes (25/40l)

Technical details	OST-25	OST-40
Stirring quantity (H ₂ O):	25 l	40 l
Max. viscosity:	10.000 mPas	30.000 mPas
Motor rating input/output:	59 W / 45 W	
Output at stirring shaft:	42 W	
Max. ON-time	100%	
Max. torque at chuck (100rpm)	20 Ncm	40 Ncm
Speed range	50 - 2.000 rpm	50 - 1.000 rpm
Speed display:	digital (LED)	
Speed control:	stepless	
Setting accuracy speed:	± 1 rpm	
Reversible direction of rotation:	yes	
Power intermittent operation	yes, (resumes from last run)	
Chuck range:	0,7 - 10 mm	
Extension arm diameter:	13 mm	
Length of extension arm:	160 mm	
Timer (LED):	Yes	
Timer setting range:	1 min - 99 hr 59 min & continuous.	
Protection class:	IP 54 (acc. to DIN EN 60529)	
Protection:	Overload, overcurrent, overtemperature	
Voltage:	100-240 V	
Frequency	50/60 Hz	
DC voltage:	24 V	
Housing material	Thermoplastic polymer	
Dimensions in (WxHxD):	79 x 173 x 176 mm	
Net weight:	approx. 1,4 kg	

Code	Description
BOE 8901170	BOECO overhead stirrer OST-25, 100-240V, 50/60 Hz, package , incl. plate stand (220x320mm/ shaft length 550mm/ diameter 10mm), boss head clamp and 4-bladed propeller stirrer
BOE 8901180	BOECO overhead stirrer OST-40, 100-240V, 50/60 Hz, package , incl. plate stand (220x320mm/ shaft length 550mm/ diameter 10mm), boss head clamp and 4-bladed propeller stirrer



PACKAGE WITH PLATE STAND,
BOSS HEAD CLAMP AND 4-BLADED PROPELLER
STIRRER INCLUDED



MR-1

BOECO MINI-ROCKER SHAKER MR-1

provides gentle rocking motion. It is perfect for soft mixing of biological components. Incl. black non-slip silicone mat

Specification:

Kind of motion:	rocking with fixed 7° angle
Speed range:	5 - 30 rpm
Speed display:	scale (min/max)
Timer:	digital, 1 min - 23h 59min / non-stop
Platform size:	215 x 215 mm
Overall size:	220 x 205 x 120 mm
Max Loading:	1 kg
Weight:	2,1 kg
Power:	12 V. DC 2,0A (External power adapter)

Code

BOE 8058500

Description

MR-1, Mini-rocker Shaker, AC Adapter 100-240 V with Multi plug (EU, US, UK, AU)

BOECO ROTATOR MULTI BIO RS-24

is an intelligent rotator for soft mixing microtubes and vacutainers. The BioRotator RS-Multi provides 3 types of motion, which can be used separately (except for vortex mode, which works in conjunction with reciprocal motion mode) and consecutively in a cycle:

1. Orbital motion



simple even circular motion - common type of motion used in Rotators. Adjustable speed from 1 to 100 rpm.

2. Reciprocal motion



vertical rotation with changing direction of rotation. Adjustable turning angle (from 1° to 90°, increment 1°) sets the limits for this type of motion. The speed is the same as set for rotational motion (from 1 to 100 rpm). In this type of motion there is a pause function (from 0 to 5 sec., increment 1 sec.) settable in the Vortex/pause mode.

3. Vortex motion



intensive mixing of samples at high speed with small amplitude - Vortex motion. The vortex mode is necessary for intensive mixing in and it is provided to decrease adhesion of solutions with tube surface, which is especially important for conducting microquantity research when the sample weight may be equal to the adhesion force. The vortex, mode has an adjustable turning angle of 0° to 5° (increment 1°) and the timer has a pause function from 0 to 5 sec., increment 1 sec.)

Specification:

Standard platform capacity:	PRS-26 for 26 (Microtubes and vacutainers)
Power:	12 V. DC 2,0A (External power adapter)
Size:	365 mm x 195 mm x 155 mm
Weight:	1,8 kg

Code

BOE 8073000

Description

Rotator Multi Bio RS-24, with platform PRS-26 AC Adapter 100-240 V with Multi plug (EU, US, UK, AU)

BOE 8073002

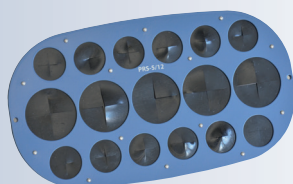
Platform PRS-5/12 for tubes (5 x 30 mm diam. and 12 x 15 mm diam.)

BOE 8073003

Platform PRSC-10 for tubes 10 x 50 ml (Tube Diam 20-30 mm)

BOE 8073004

Platform PRSC-22 for tubes 22 x 15 ml (Tube Diam 10-16 mm)

ROTATOR
MULTI BIO RS-24

PRS-5/12



PRSC-10



PRSC-22

BOECO MICROPLATE SHAKER PSU-2T

Specially designed for medical diagnostic. Orbital shaking platform IPP-2 with a holding mechanism for 2 standard microtiter plates.

The use of direct drive and brushless motor allows continuous mixing up to 7 days and ensures reliable, trouble-free operation.

The variable speed control provides an optimally adapted speed range from 150 to 1200 rpm with an orbit of 2 mm.

Specification:

Orbit size:	2 mm
Speed range:	150 - 1200 1/min
Speed display:	scale (min/max)
Timer:	digital, 1 min - 23h 59min / non-stop
Overall size:	220 x 205 x 90 mm
Weight:	2 kg
Power:	12 V. DC 2,0A (External power adapter)

Code	Description
BOE 8052000	Microtiter Plate Shaker PSU-2T, incl. platform IPP-2 AC Adapter 100-240 V with Multi plug (EU, US, UK, AU)
BOE 8052002	Platform IPP-4 for 4 Microtiter Plates



PSU-2T



PLATFORM IPP-4

BOECO MICROPLATE INCUBATOR SHAKER PST-60 HL

The PST-60 HL shakers provide orbital shaking of the samples and have a heating platform for 2 x 96 or 4 x 96 wells microplates and an upper heating lid. The display indicates simultaneous set and actual time, temperature and shaking speed. The PST-60 HL are ideal for a variety of cytochemistry, immunochemistry, biochemistry and research applications.

Specification:	PST-60 HL	PST-60 HL 4
Temperature regulation range:	25°C 60°C	
Temperature setting resolution:	0,1°C	
Temp. Stability:	± 0,1 °C	
Temp. Uniformity over the platform:	± 0,25 °C	
Time of thermoblock heating from RT till 37°C:	12 min.	
Orbit :	2 mm	
Max. height of micotest plate:	18 mm	
Speed regulation:	250 –1200 rpm / increment 10 rpm	
Timer with sound signal:	1 min - 96 hrs, increment 1 min	
Power (external) :	DC 12 V. 5 A	
Platform dimensions:	250 x 150 mm	210 x 290 mm
Number of microplates:	2	4
Size :	270x260x125 mm	380x390x140 mm
Weight incl. power supply :	6,1 kg	9,1 kg

Code	Description
BOE 8072000	Microplate Incubator Shaker PST-60 HL, for 2 plates, AC 100-240 V, 50/60 Hz
BOE 8072040	Microplate Incubator Shaker PST-60 HL 4, for 4 plates, AC 100V-240 V, 50/60 Hz



PST-60 HL



PST-60 HL 4



OS-20 ILLUSTRATED WITH
PP-4 PLATFORM

BOECO UNIVERSAL ORBITAL SHAKER OS-20

Compact, low-profile, orbital laboratory shaker for versatile applications in the fields of biotechnology, microbiology and medical diagnostics. The OS-20 provides gentle rotational mixing and precise circulation at each point of the platform. Variable digital displayed speed control from 50-250 rpm. Digital timer for setting a time interval and continuous operation.

Specification:

Kind of motion:	orbital
Orbit size:	20 mm
Speed regulation:	50 - 250 rpm
Speed display:	digital (LED)
Timer:	from 1 min to 999 min / continuous
Time display:	digital (LED)
Max. load:	2,5 kg excl. attachment
Power:	12 V. DC 2,0A (External power adapter)
Overall size :	265 x 270 x 70 mm (w/o attachment)
Weight:	3,3 kg

Code

BOE 8059000

Description

Universal Orbital Shaker OS-20, AC Adapter
100-240 V with Multi plug (EU, US, UK, AU)



PSU-10i ILLUSTRATED WITH
UP-12 PLATFORM

BOECO UNIVERSAL ORBITAL SHAKER PSU-10i

Equipped with the direct drive system and brushless motor, our compact, powerful and quiet microprocessor controlled orbital laboratory shaker for many general purpose shaking applications. Speed and time setting are easy and during operation the LCD status display clearly indicates both set and actual speed, plus set and elapsed time.

Specification:

Kind of motion:	orbital
Orbit size:	10 mm
Speed regulation:	50 - 450 rpm
Speed display:	digital (LCD)
Timer:	from 1 min to 96 hours / continuous
Time display:	digital (LCD)
Max. load:	3 kg excl. attachment
Power:	12 V. DC 2,0A (External power adapter)
Overall size:	220 x 205 x 90 mm (w/o attachment)
Weight:	3,2 kg

Code

BOE 8069200

Description

Universal Orbital Shaker PSU-10i, AC Adapter
100-240 V with Multi plug (EU, US, UK, AU)

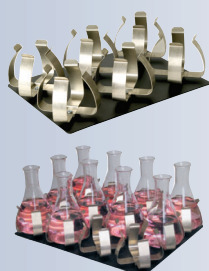
ACCESSORIES FOR OS-20 AND PSU-10i

PLATFORM PP-4

PLATFORM UP-12

PLATFORM P-6/250

PLATFORM P-12/100



Code

BOE 8059001

BOE 8059002

BOE 8059003

BOE 8059004

Description

Dish platform PP-4 with silicone mat for Petri dishes, culture flasks etc. 235 x 235 mm

Universal platform UP-12 for all kind of flasks 285 x 215 mm, stainless steel with variable clamping rolls and silicone mat.

Numbers of flasks at the platform

100- 150 ml flasks max 12-9 pieces

200- 250 ml flasks max 6-4 pieces

500-1000 ml flasks max 4-2 pieces

Platform P-6/250 with fixed clamps for 6 flasks 250/300 ml, 250 x 190 mm

Platform P-12/100 with fixed clamps for 12 flasks 100/150 ml, 250 x 190 mm

BOECO PROGRAMMABLE ORBITAL SHAKER PSU-15i

The PSU-15i belongs to a generation of multifunctional mixing devices: The design, direct drive system, brushless motor (service life up to 35000 hours) and automatic loading balancing system make the PSU-15i even more reliable especially for the long non-stop operation. The PSU-15i has a microprocessor control which allows real-time program correction, indication of set and actual speed, angle and time, operation timer in the display.

1. Orbital motion



simple even circular motion - common type of motion used in shakers. Adjustable speed from 20 to 250 rpm.

2. Reciprocal motion



vertical rotation with changing direction of rotation. Adjustable turning angle (from 0° to 360°, increment 30°) sets the limits for this type of motion. The speed is the same as set for rotational motion (from 20 to 250 rpm).

3. Vortex motion of the platform (vibration)



intensive mixing of samples at high speed with small amplitude - Vortex motion. Adjustable turning angle of 0° to 5° (increment 1°)

Specification:

Kind of motion:	orbital
Orbit size:	20 mm
Speed regulation:	20 - 250 rpm
Speed display:	digital (LCD)
Timer:	from 1 min to 96 hours / continuous
Time display:	digital (LCD)
Max. load:	8 kg
Continuous operation time:	max 168 hrs.
Power (external):	DC 12 V. 3,2 A
Overall size (w/o platform):	410 x 410 x 130 mm
weight:	11,6 kg

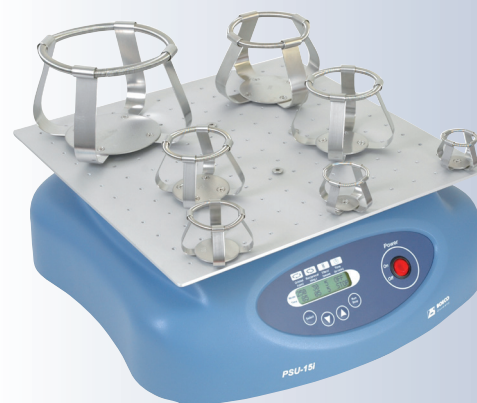
Code	Description
BOE 8079000	Orbital Shaker PSU-15i, 100-240 VAC/12DC 4,16A without platform

Accessories

Code	Description
BOE 8079010	Universal platform UP-330 for all kind of flasks 430 x 330 mm, stainless steel with 4 variable clamping rolls and rubber mat
BOE 8080011	Flat platform PP-20, 480 x 380 mm
BOE 8080012	4 level platform PP-20-4, 480 x 380 x 170 mm Distance between platforms: 170 mm Total height: 510 mm
BOE 8080005	Universal tray platform, 360 x 360 mm with holes to accommodate clamps for Erlenmeyer flasks, separating funnels and test tube racks Clamps have to be ordered separately
BOE 8081001	Spring clamp, 25 ml max.: 36 pcs.
BOE 8081002	Spring clamp, 50 ml max.: 36 pcs.
BOE 8081003	Spring clamp, 100 ml max.: 25 pcs.
BOE 8081004	Spring clamp, 250 ml max.: 16 pcs.
BOE 8081005	Spring clamp, 500 ml max.: 9 pcs.
BOE 8081006	Spring clamp, 1000 ml max.: 9 pcs.
BOE 8081007	Spring clamp, 2000 ml max.: 4 pcs.
BOE 8081009	Holding device for Separating funnels 250-1000 ml



PSU-15i WITH PLATFORM UP-330



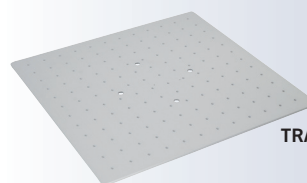
PSU-15i WITH TRAY PLATFORM



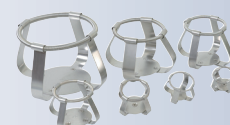
PP-20



PP-20-4



TRAY PLATFORM



SPRING CLAMPS

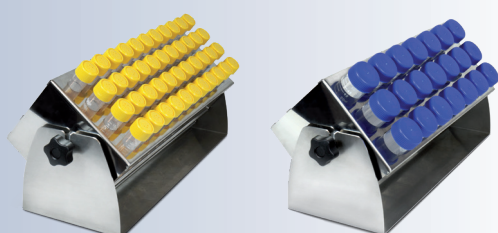
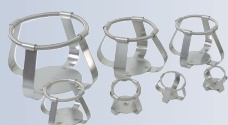


HOLDING DEVICE FOR SEPARATING FUNNELS

BOECO ORBITAL SHAKER INCUBATOR ES-20/80

Our BOECO ES-20/80 shaker-incubator for biotechnological and pharmaceutical laboratories is a professional category equipment. The typical applications include microbiological and cell culture cultivation, protein expression, solubility studies, general mixing, as well as other various applications in the fields of biology and chemistry. 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. Additional features like out of balance sensor and automatic thermostat failure detection make this shaker-incubator an advanced and safe product. Bluetooth connectivity to PC allows for data management, data logging, parameter control and profiling in a dedicated software that can be requested separately.

A built-in heat-resistant brushless fan provides precise temperature distribution inside the chamber (from 10°C above ambient up to +80°C). Additionally, excellent sample temperature uniformity of ± 0.3 °C at 37 °C is achieved. The inner chamber is made of stainless steel. State-of-the-art motor, thermal insulation materials and parameter PID-control decrease the energy consumption and make the shaker-incubator highly energy efficient despite its relatively large size.



Specification:

Speed control range	50–400 rpm (increment 10 rpm)
Digital time setting	1 min–96 hrs / non-stop (1 min increment)
Maximum continuous operation time	30 days
Maximum load	10,6 kg
Orbit	20 mm
Stacking	up to 3
Display	TFT
Data transfer	Bluetooth
Temperature setting range	+25°C... +80°C (increment 0,1°C)
Temperature control range	10°C above ambient... +80°C
Sample temperature uniformity	$\pm 0,3$ °C at 37°C
Temperature precision	$\pm 0,1$ °C at 37°C
Temperature accuracy	$\pm 0,1$ °C at 37°C
Sample temperature stability	$\pm 0,1$ °C at 37°C
Heat up time to max. temperature	75 min
Overall dimensions (WxDxH)	620 x 530 x 510 mm
Dimensions of the inner chamber	460 x 350 x 400 mm
Weight	48 kg
Nominal operating voltage	230 V, 50/60 Hz or 120 V, 50/60 Hz
Power consumption	230 V / 450 W (2 A) 120 V / 450 W (4.5 A)

Code

Description

BOE 8086000	Orbital Shaker Incubator ES 20/80 230V, 50/60Hz, without platform
BOE 8086100	Orbital Shaker Incubator ES 20/80 120V, 50/60Hz, without platform

Accessories

Code

Description

BOE 8086400	Platform PP-400 360 x 400 mm with silicone mat
BOE 8080005	Universal tray platform 360 x 360 mm clamps have to be ordered separately
BOE 8082003	Tight fit clamp, 100 ml max.: 25 pcs.
BOE 8082004	Tight fit clamp, 250 ml max.: 16 pcs.
BOE 8082005	Tight fit clamp, 500 ml max.: 9 pcs.
BOE 8082006	Tight fit clamp, 1000 ml max.: 9 pcs.
BOE 8086015	Test tube rack TR-44/15 for 44 x 15 ml tubes
BOE 8086050	Test tube rack TR-21/50 for 21 x 50 ml tubes

BOECO DESKTOP INCUBATOR I-18 BOECO UNIVERSAL DESKTOP OVEN U-18

The I-18/U-18 are featured with unique design, modern appearance, and advanced manufacturing techniques. they have an accurately temperature control system, daily maintains and operates easily. Those Incubator/Oven are widely used in bacteria & microbial scientific research, medical science, pharmacy, biological and biochemical industries etc

Features:

- » Vertical design, box body made by high quality cold-rolled steel, the surface is treated by electrostatic spraying process, stable and beautiful appearance.
- » LCD fuzzy-PID control temperature controller with overtemperature protection
- » Stainless Steel inner chamber, Circular arc transition corners, adjustable shelf, and easy cleaning.
- » The external chamber is processed by cold rolling steel plate after anti-corrosive coating.
- » Door with double toughened glass window enables large angle observation. Elastic adjustable lock type handle. High temperature silica gel sealing strip, to ensure good sealing and prevent heating loss.

Specification I-18:

Volume:	18 l
Heating power:	200W
Operating Temp. Range:	Room Temperature + 5°C... + 65°C
Temp. Uniformity:	± 0,5
Temp. Fluctuation:	± 0,5
Temperature Setting:	0,1°C
Time range:	1 -9999min, continuous.
Max. Number of shelves:	2
Shelf Load:	15 kg
Internal Dimension:	260 x 260 x 260 mm (L x W x H)
External Dimension:	460 x 510 x 695 mm (L x W x H)
Weight net:	16,3 kg

Code	Description
BOE 8042000	BOECO Desktop Incubator I-18, 220 V, 50/60 Hz incl. 2 stainless steel shelves
BOE 8042100	BOECO Desktop Incubator I-18, 115 V, 60 Hz incl. 2 stainless steel shelves

Specification U-18:

Volume:	18 l
Heating power:	600W
Operating Temp. Range:	Room Temperature + 10°C... + 300°C
Temp. Uniformity:	± 0,5
Temp. Fluctuation:	± 0,5
Temperature Setting:	0,1°C
Time range:	1 -9999 min, continuous.
Max. Number of shelves:	2
Shelf Load:	15 kg
Internal Dimension:	260 x 260 x 260 mm (L x W x H)
External Dimension:	460 x 510 x 695 mm (L x W x H)
Weight net:	16,4 kg

Code	Description
BOE 8043000	BOECO Universal Desktop oven U-18, 220 V, 50/60 Hz incl. 2 stainless steel shelves
BOE 8043100	BOECO Universal Desktop oven U-18, 115 V, 60 Hz incl. 2 stainless steel shelves

