

AXIMS7-H550-Pro – LCD Digital Magnetic Hotplate



The AXIMS7-H550-Pro is one of the most technically advanced hotplate-stirrers in the marketplace. With independent back-lit LCD displays for both heat and stirring functions and PID technology. The AXIMS7-H550-Pro controls temperature at +/- 1°C. It also incorporates a DC brushless (spark free) motor for extremely long life and excellent performance.

AXIMS7-H550-Pro LCD Digital Magnetic Hotplate Stirrer Features:

- Easy-to-read independent back-lit LCD displays for heat and stirring
- Heat only, stir only or heat and stir together functions
- RS232 for remote control
- Low temperature stability
- Free accessory! PT-1000 Sensor for medium temperature control
- Accessory PT-1000 stand available (built in stand mount)
- Electronic speed control for constant speed even during changes in load
- Maintenance free DC brushless motor for long life
- High magnetic adhesion
- Hot warning above 50°C
- cTUVus certified
- 2 YEAR WARRANTY

S7-H550-Pro with sensor and sensor support stand



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 100-240V 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. then 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

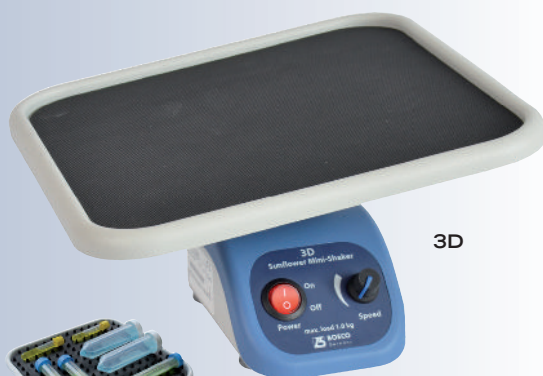
Vortex mixer V2H, with standard Vortex cup AC adapter 100-240V, 50/60Hz

BOE 8062001

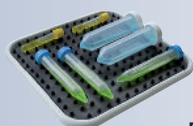
Microplate/Microtube (20x1,5/2,0ml) attachment

BOE 8062003

Erlenmeyer flask attachment



3D



DIMPLED MAT

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: | 1,2 kg |
| Power: | 12 V. DC 2,0A (External power adapter) |

Code

BOE 8058000

Description

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

BOE 8050200

Dimpled mat

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: | 450 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, 220V 50/60 Hz |
| BOE 8071100 | Combi-Spin, FVL-2400N plus, 110V 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 100-240V with Multi plug (EU, US, UK, AU) |
| BOE 8073001 | Platform PRS-4/12 (4x30 mm diam. and 12x15 mm) |



RS-24

BOECO TUBE ROLLER TR-6

the microprocesor 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: | Powder coated sheet metal (from 2019 ABS) (from approx. 2019 plastic) |
| 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: | 500x301x93 mm (from 2019: 505x323x90) |
| Weight: | approx. 6 kg (from 2019: 4,2 kgs) |



TR-6



TR-6 WITH PLASTIC BODY
AVAILABLE IN APPROX 2019

| Code | Description |
|-------------|--|
| BOE 8025000 | Tube roller TR-6, AC adapter 100-240V, 50/60Hz |



MMS 3000

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

BOE 8056500

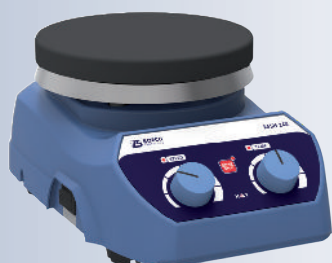
Description

Magnetic stirrer MMS-3000, AC Adapter
100-240V with Multi plug (EU, US, UK, AU)

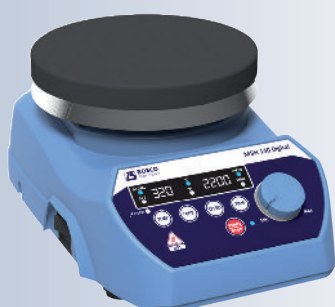
BOE 8056501

Detachable support rod

Available Q3/2018 !



MSH 140



MSH 140 DIGITAL

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) | 2,2 | 2,2 |
| 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 | 600 |
| Power output (W) | 610 | 610 |
| 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

BOE 8014000

Description

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

BOE 8014120

Description

Support stand with boss head clamp for PT 1000 sensor probe

BOE 8014121

PT 1000 sensor

BOE 8014122

Reaction block, 500 ml

500 ML REACTION
BLOCK

BOECO MAGNETIC STIRRER WITH HOTPLATE MSH 420

Motor drive Magnetic stirrer with all in one glass-ceramic hot plate for simultaneously stirring and heating of chemical reagents.

The Glass-ceramic top plate is easy to clean, chemical-resistant, corrosion-resistant and scratch resistant.

The MSH 420 provides LED Indicators for Power, Heating and Stirring.

Specification:

| | |
|-------------------------|---|
| Speed range: | 60 - 1110 1/min |
| Temperature regulation: | ambient temperature to 450 °C. |
| Max. stirring volume: | up to 15,0 l |
| Hot Platform size: | 200 x 200 mm |
| Hot Platform material: | glass-ceramic |
| "Hot Top" indicator: | a "Hot" light illuminates if the temperature on the hot plate exceeds 55°C |
| Over-Heat protection: | The heating power will cut-off in abnormal situations by limiting top plate temperature to 550 °C and light flash |
| Overall size: | 320 (w) x 210 (d) x 105 (h) mm |
| Heating power: | 750 Watts |
| Weight: | 3,6 kg |



MSH 420

| Code | Description |
|-------------|--|
| BOE 8054000 | Magnetic stirrer with hotplate MSH 420, 220V |
| BOE 8054100 | Magnetic stirrer with hotplate MSH 420, 110V |

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 (WxDxH): | 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, boss head clamp, and 4-bladed propeller stirrer |
| BOE 8901180 | BOECO overhead stirrer OST-40, 100-240V, 50/60 Hz, package , incl. plate stand, boss head clamp, and 4-bladed propeller stirrer |

Available Q3/2018 !



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: | 2,10 kg |
| Power: | 12 V. DC 2,0A (External power adapter) |

Code

BOE 8058500

Description

MR-1, Mini-rocker Shaker, AC Adapter 100-240V 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: | 1,7 kg |

Code

BOE 8073000

Description

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

BOE 8073002

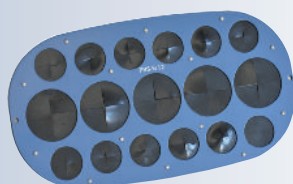
Platform PRS-5/12 for tubes (5 x 30 mm diam. and 12 x 15 mm diam.)

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 100-240V 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:

| | | |
|--|----------------------------------|----------------|
| 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 | |
| | PST-60 HL | PST-60 HL 4 |
| 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 | 8.8 kg |

Code

Description

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



PST-60 HL
PLUS



PST-60 HL 4
PLUS



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: | 3,2 kg. |

Code

BOE 8059000

Description

Universal Orbital Shaker OS-20, AC Adapter 100-240V 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: | 3,4 kg |

Code

BOE 8069200

Description

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

ACCESSORIES FOR OS-20 AND PSU-10i

Code

BOE 8059001

Description

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

BOE 8059002

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

BOE 8059003

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

BOE 8059004

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

PLATFORM PP-4

PLATFORM UP-12

PLATFORM P-6/250

PLATFORM P-12/100



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: | 11,7 kg |

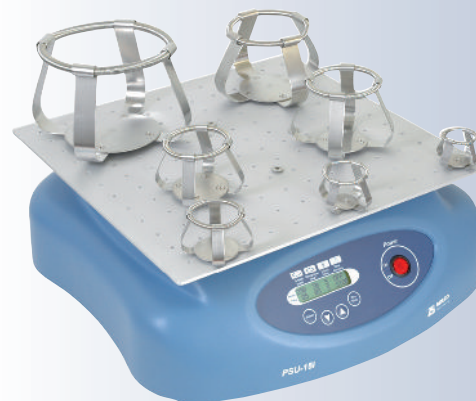
| Code | Description |
|-------------|--|
| BOE 8079000 | Orbital Shaker PSU-15i, 100-240VAC/12DC 4,16A without platform |

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



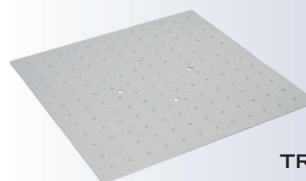
PSU-15i WITH TRAY PLATFORM



PP-20



PP-20-4



TRAY PLATFORM



SPRING CLAMPS



HOLDING DEVICE FOR SEPARATING FUNNELS

Available Q3/2018 !



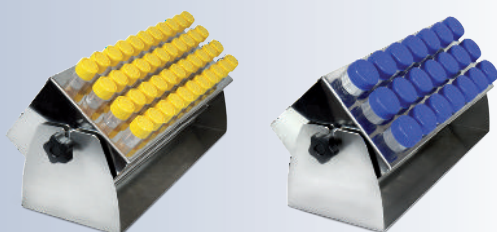
BOECO ORBITAL SHAKER INCUBATOR ES-20/80

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 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 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 PERSONAL DIGITAL INCUBATOR SI-22

due to its compact architecture the SI-22 provides an economical, efficient and space saving personal solution for incubating culture flasks, dishes, tubes and test plates.

A personal incubator avoids contamination and reagent confusion caused by multiple people using one machine.

The integrated UV light provides disinfection after use.
The UV disinfection mode is blocked during incubation.

The SI-22 has a double-deck metal plate reinforced door with door open alarm and automatic turn off UV lamp function. The watch window adopts anti-UV-explosion-proof glass, which allows people to inspect running condition of the machine.

The inner chamber is made out of stainless steel and easy to clean.

A small cord port at the back of the unit allows the use of small mixers.

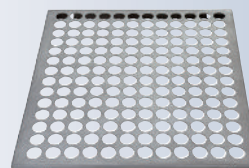
Specification:

| | |
|-------------------------|----------------------------------|
| Volume: | 22,5 l |
| Operating Temp. Range: | Room Temperature + 5°C... + 80°C |
| Temp. Uniformity: | ± 0,65 (37°C) |
| Temp. Fluctuation: | ± 0,65 (37°C) |
| Temperature Setting: | 0,1°C |
| Ramping Time: | 30 min. |
| Timekeeping Time: | 99 hours, 59 min, 59 sec. |
| UV Disinfection Power: | 6 W |
| Max. Number of shelves: | 2 |
| Internal Dimension: | 273 x 300 x 304 mm (L x W x H) |
| External Dimension: | 400 x 345 x 463 mm (L x W x H) |
| Weight net: | 18 kg |

| Code | Description |
|-------------|--|
| BOE 8038000 | Digital Incubator SI-22, 220V, 50/60 Hz incl. 1 stainless steel shelf |
| BOE 8038100 | Digital Incubator SI-22, 115V, 60 Hz incl. 1 stainless steel shelf |

Accessories

| Code | Description |
|-------------|---|
| BOE 8038001 | Additional perforated stainless steel shelf |



BOECO ASPIRATOR WITH TRAP FLASK MODEL FTA-1

is designed for aspiration/removal of alcohol/buffer remaining quantities from microtest tube walls during DNA/RNA purification and other macromolecule reprecipitation techniques.

The FTA-1 can also be used for routine operations of cell washing from culture medium and resuspension in buffer.

A suction microbiological filter eliminates the risk of contamination from the trap flask with bacteria, viruses and infected particles.

Specification:

| | |
|----------------------|--|
| Operating Principle: | Creating negative pressure in trapping flask using built-in microprocessor |
| Vacuum | -500mbar |
| Trap Flask vol.: | 1000 ml |
| Dimension: | 160 x 210 x 340 mm (with trap flask) |
| Power: | External power supply DC 12 V, 125 A |
| Net Weight: | 1,7 kgs. |

| Code | Description |
|-------------|--|
| BOE 8039000 | Aspirator with trap flask, model FTA-1 |
| BOE 8039001 | Optional 8-channel adapter manifold MA-8 |





BOECO COMPACT CO2 INCUBATOR S-BT

S-Bt Smart Biotherm is designed for work in the areas of cell biology (operations with animal cell cultures and tissues), molecular biology (DNA/RNA reaction analysis, hybridization reactions), biotechnology (synthesis of target proteins and other molecules), immunology (synthesis of antibodies and other proteins of immune system).

Features:

- ▶ Six-sided heating: The heating elements are located on the walls and on the door, thus providing excellent uniform temperature distribution, regardless of external factors, such as ambient temperature and positioning of the device.
- ▶ Built-in infrared CO₂-sensor allows an accurate control of the CO₂ level. The sensor makes measurement non-sensitive to changes in temperature and humidity inside the incubator.
- ▶ The chamber is made of stainless steel with smoothed seams to minimize contamination and to facilitate cleaning.
- ▶ The BOECO S-Bt is equipped with a UV air recirculation system - One UV lamp and a fan are mounted behind the rear wall, providing decontamination of the working volume.
- ▶ A convenient access port is built in the wall of the incubator for easy output of wire sensors or devices' installed inside. The access port is heated independently to prevent formation of condensate.
- ▶ An error tracing and alarm system lowers significantly potential risks during operation.
- ▶ The unit is equipped with a "black box" system that records temperature, humidity and CO₂ levels, as well as statuses for door opening, UV lamp, fan and errors, to the inner memory.
- ▶ Bluetooth connection to PC is available as an option.

Technical details:

| | |
|---|---------------------------------|
| Working chamber material | Stainless Steel (1 mm) |
| Temperature setting range | +25°C ... +60°C |
| Temperature stability | ±0.1°C |
| Temperature uniformity at +37°C | ±0.3°C |
| Working volume | 46 litres |
| Number of shelves | 3 (max. 6) |
| Inner glass door | yes |
| Relative humidity | >90% @ 37°C |
| Humidity delivery | Water Pan |
| CO ₂ control range | 0 – 20% |
| CO ₂ sensor | Infrared CO ₂ sensor |
| Temperature and CO ₂ level input | Digital |
| UV lamp | 1 × 6 W, TUV G6T5 |
| Data output | Wireless |
| Access port | 1 (ø 26 mm) |
| Dimensions | 400 × 410 × 580 mm |
| Weight | 37.7 kg |
| Nominal operating voltage | 230V, 50/60Hz; 115V, 50/60Hz |

| Code | Description |
|-------------|--|
| BOE 8087000 | BOECO compact CO ₂ incubator, 230V, 50/60HZ |
| BOE 8087100 | BOECO compact CO ₂ incubator, 115V, 50/60Hz |

Accessories

| Code | Description |
|-------------|-----------------------------------|
| BOE 8087001 | Additional shelf |
| BOE 8087002 | PC Software and Bluetooth adapter |
| BOE 8087003 | Incubator stacking device |

BOECO AUTOCLAVE BTE-23D

Features:

- ▶ Three times fractionated pre-vacuum
- ▶ Stainless steel chamber
- ▶ LCD display
- ▶ Equipped with high quality and high performance pump
- ▶ 1 tray holder, 1 tray handle and 3 trays included
- ▶ High quality water pump and valves
- ▶ Independent steam generator
- ▶ Two samples self-calibration
- ▶ Overhead type water storage tank, easy to clean.
- ▶ Drying procedure: Dry by vacuum.
- ▶ Sterilization temperature: 121°C and 134°C
- ▶ Test programs: Helix test, B&D test and Vacuum test.
- ▶ Sterilization cycles: 9 cycles are available and 3 test programmes.

| Program | Temperature | Pressure | Sterilization time | Total time |
|--------------|-------------|----------|--------------------|------------|
| SOLID 134 | 134°C | 2.1 bar | 4 min | 25-45 min |
| SOLID 121 | 121°C | 1.1 bar | 20 min | 35-60 min |
| LIQUID 134 | 134°C | 2.1 bar | 10 min | 35-60 min |
| LIQUID 121 | 121°C | 1.1 bar | 30 min | 35-65 min |
| WRAPPED 134 | 134°C | 2.1 bar | 4 min | 35-60 min |
| WRAPPED 121 | 121°C | 1.1 bar | 20 min | 35-65 min |
| TEXTILE 134 | 134°C | 2.1 bar | 6 min | 45-65 min |
| (or wrapped) | | | | |
| TEXTILE 121 | 121°C | 1.1 bar | 20 min | 50-70 min |
| (or wrapped) | | | | |
| PRION | 134°C | 2.1 bar | 18 min | 45-70 min |
| B&D TEST | 134°C | 2.1 bar | 3.5 min | 22-35 min |
| Helix TEST | 134°C | 2.1 bar | 3.5 min | 22-35 min |
| Vacuum TEST | - | - | - | 15-20 min |

- ▶ It only have several buttons, very easy to use, any people can run it easily.
- ▶ All cycles are fully automatic; there is no need for human intervention in cycle management.
- ▶ Pressure protection locking system that ensures the door will not be opened once there is any pressure in chamber.
- ▶ Sterilization documentation: Integrated Micro Printer and USB port to store the information of the programme cycle in flash memory.
- ▶ The sterilization time and dry time can be adjusted by manual, ensure user to obtain best sterilization effects according to private requirements.
- ▶ Malfunction detection system, corresponding error code will be showed on the display once there is something going wrong.

Safety:

- ▶ Warning system prevents starting a cycle if door is not properly locked.
 - ▶ Triple threat protection for overheating and overpressure.
 - The pressure protection system will automatically cut off the electricity supply once the temperature of chamber inside is abnormally. Motorola pressure sensor is used to accurately sense the state of pressure inside chamber.
- Temperature control system is using high quality PT1000 temperature sensor, it is high precision, reliable service and prompt measurement, ensure accurate and timely transmission of temperature fluctuation.
- The safety valve will release steam in case the pressure inside chamber exceeds normal levels.

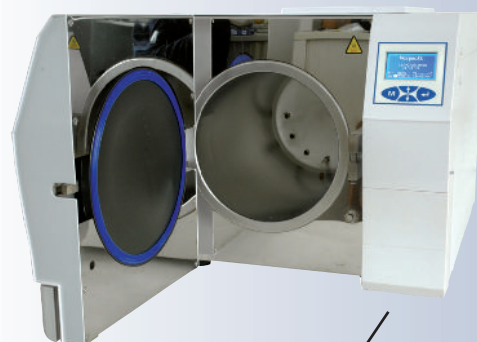
Technical Information:

- ▶ Conform to CE and EN13060
- ▶ Manufactured under ISO 13485 norms
- ▶ Chamber Size: ø 247 x 450 mm (23 l)
- ▶ External dimension: 490 x 480 x 680 mm, Net weight 51 kg
- ▶ Packing box 750x560x460 mm, Gross weight 58 kg
- ▶ Power: 220V, 50/60 Hz or 110V, 60Hz

| Code | Description |
|-------------|--|
| BOE 8902300 | BOECO BTE-23D Bench Top Autoclave, Vol. 23 l. incl 1 tray holder, 1 tray handle and 3 trays, micro printer and USB port, 220V, 50/60Hz |
| BOE 8902310 | BOECO BTE-23D as above but for 110 V, 60 Hz |

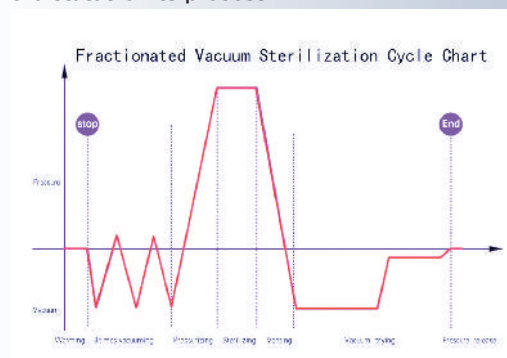


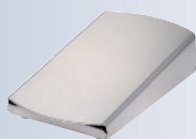
BOECO BTE-23D



MICRO PRINTER AND USB PORT

This BTE-23D adopts 3 times pre-fractionated vacuum system, the following chart simply describes the status of its process





FOOT PEDAL

BOECO FUEGO SCS BASIC SAFETY LABORATORY GAS BURNER

is a new standard among laboratory gas burners. With its innovative design this laboratory gas burner is suitable for all flame related applications in the laboratory.

Specification:

Technology:

Microprocessor

Programs

Foot pedal:

Standard (flame during pressed foot pedal)
Start-Stop with timer, 60 min

Button:

Start-Stop with timer, 60 min

Safety features

Safety Control System (SCS)
with gas safety cut off:

ignition and flame control
temperature monitor
burner head clogging
and assembly monitor (BHC)
automatic unit switch off, 4 h
residual heat display

Gas supply and consumption

Gas connection:

1/4" left with gas filter

Gas types:

natural gas E/LL, 18 - 25 mbar

liquid gas II2ELL3B/P, 20 - 50 mbar

70 g/h liquid gas

Connected load:

Continuous cartridge
operation:

CV 360 - 40 min, Express 444 - 50 min

CG 1750 - 150 min, C 206 - 170 min

CP 250 - 210 min, CV 470 - 370 min

Temperatures

Flame temperature:

1350 °C on liquid gas

1300 °C on natural gas (E)

Electrical

Power consumption:

2VA

Power connection:

100 - 240 V / 50/60 Hz / max. 0,3 A

9 V DC / 1A

Mechanical

Casing and operation
controls:

stainless steel / glass,
UV and solvent resistant

Cover of burner shaft:

ø 23 mm, with drains

Size (w x h x d):

103 x 49 x 130 mm

Weight:

700 g

Licenses

DIN-DVGW Reg.-No:

NG-2211AS0167

CE:

EN 61326-1, EN 61010-1

EEC guidelines:

2004 / 108 / EC, 73/23/EEC

Code

Description

BOE 8201000

BOECO Fuego SCS basic, Safety Laboratory gas burner with button function and foot pedal, 3 standard-programs for button (function knob) and foot pedal SCS (Safety Control System) with BHC (Burner Head Control), Removable and decomposable burner head Tild mechanism, right / left, Holding device for 3 inoculation loop holders. Nozzles for natural gas, propane / butane gas, Turbo flame Wrench 17 mm for gas connection, Screwdriver for burner head and cover of burner shaft. Tubing connector with swivel nut, Switching power supply

Accessories

Code

Description

USB 5431

Inoculation Loop / needle holder, 230 mm,

USB 5460

Inoculation Loop, st. steel wire ø 0,6mm, ø loop 1,5mm

USB 5461

Inoculation Loop, st. steel wire ø 0,6mm, ø loop 2,5mm

USB 5462

Inoculation Loop, st. steel wire ø 0,6mm, ø loop 4,0mm



BOECO WATER BATH PWB-4 AND PWB-8

The personal advanced PID microprocessor controlled waterbath PWB-4 and PWB-8 with their specification, easy operation and small foot print are designed for chemical, pharmaceutical, medical and biological routine laboratory use and as well as for research purpose.

► Control Panel:

Easy setting and operating, adjustable temperature, alarm signal display Single Line 4 digitals LED

► Overheat Protection:

The power will automatically be turned off when the internal temperature is over 110 °C

Specification

| | PWB-4 | PWB-8 |
|--------------------------------------|---|-------------|
| Capacity: | 4 l | 8 l |
| Temperature Range: | Room Temperature +5°C.. +99,9°C | |
| Temperature Setting: | 0,1°C | |
| Uniformity: | ± 0,2 (37°C) | |
| Fluctuation of Temp.: | ± 0,5°C (RT + 5 - 80°C), ± 0,8 (80 - 99,9°C) | |
| Heating Time: | ≤ 100 min (from 30°C to 95°C at RT 25°C) | |
| Input Power: | 400 W | 600 W |
| Water outlet: | No | Yes |
| Bath Inner Dimensions: (LxWxH mm) | 238x135x146 | 325x265x150 |
| Outside Dimensions: (LxWxH mm) | 380x212x250 | 445x285x316 |
| Weight (net): | 6,5 kgs | 8 kgs |

PWB-4

| Code | Description |
|-------------|--|
| BOE 8036000 | Waterbath PWB-4, without lid, 220V, 50/60 Hz |
| BOE 8036100 | Waterbath PWB-4, without lid, 115V, 60 Hz |

Accessories for PWB-4

| Code | Description |
|-------------|--|
| BOE 8036001 | Gabled plastic lid |
| BOE 8036002 | Flat stainless steel lid with 2 concentric rings |
| BOE 8036018 | Test tube rack st. steel with 41 x 18 mm ø holes |
| BOE 8036015 | Test tube rack st. steel with 41 x 15 mm ø holes |
| BOE 8036003 | Flask tray, stainless steel |

PWB-8

| Code | Description |
|-------------|--|
| BOE 8037000 | Waterbath PWB-8, without lid, 220V, 50/60 Hz |
| BOE 8037100 | Waterbath PWB-8, without lid, 115V, 60 Hz |

Accessories for PWB-8

| Code | Description |
|-------------|--|
| BOE 8037001 | Gabled stainless steel lid |
| BOE 8037002 | Flat stainless steel lid with 4 concentric rings |
| BOE 8037018 | Test tube rack st. steel with 76 x 18 mm ø holes |
| BOE 8037015 | Test tube rack st. steel with 76 x 15 mm ø holes |
| BOE 8037003 | Flask tray, stainless steel |



FLAT LID FOR PWB-4



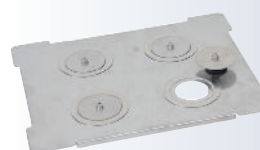
GABLED PLASTIC LID FOR PWB-4



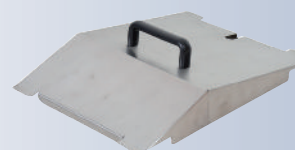
TEST TUBE RACK FOR PWB-4



FLASK TRAY FOR PWB-4



FLAT LID FOR PWB-8



GABLED LID FOR PWB-8



TEST TUBE RACK FOR PWB-8



FLASK TRAY FOR PWB-8



BOECO MUFFLE FURNACE MF 8/1100

our new muffle furnace, designed for materials testing, heat treatment, ceramic and stoneware samples firing. The furnace can be used in laboratories, educational institutions, ceramic studios and industrial laboratories.

Standard design of furnace

- ▶ Maximum temperature 1100°C
- ▶ Capacity 8.2 L
- ▶ High thermal efficiency
- ▶ Vacuumed ceramic fiber chamber
- ▶ Heating elements are embedded in fiber
- ▶ High quality thermoinsulation materials
- ▶ Door safety interlock switch
- ▶ Ceramic bottom plate
- ▶ Fast heating time
- ▶ Low power consumption
- ▶ Good stability and uniformity

Control

- ▶ Microprocessor temperature controller (Omron E5CC)
- ▶ Temperature measurement by thermocouple type "K"
- ▶ PID electronic regulator, double digital display reference temperature and measured temperature

Technical details:

| | |
|--|--------------|
| | MF 8/1100 |
| Useful volume | 8,2 L |
| Rated power not more then | 1.8 kW |
| Rated supply voltage | 230 V |
| Rated frequency | 50/60 Hz |
| Number of phases | 1 |
| Continuous operating Temperature | 1100°C |
| Maximum temperature | 1100°C |
| Working chamber material | Fibre muffle |
| Maximum heating- up time (without charge) | 50 min |
| Temperature stability in working chamber at rated temperature in thermal steady state without charge not more than | ±2°C |
| Temperature uniformity in working space at rated temperature in thermal steady state without charge not more than | ±10°C |
| Furnace working chamber dimensions | |
| width | 200 mm |
| depth | 300 mm |
| height | 133 mm |
| Furnace dimensions: | |
| width | 440 mm |
| depth | 620 mm |
| height | 510 mm |
| Weight (Netto) | 28 kg |

Code

BOE 8641100

Description

BOECO Muffle Furnace, MF 8/1100, 230V, 50/60Hz

BOECO PCR WORKSTATION WITH UV AIR RECIRCULATOR, TYPE UVC/T-AR

For the preparation of PCR reactions and many other methods in molecular biology, a contamination-free working environment is required. The UVC/T-AR PCR Workstation is designed for DNA/RNA decontamination in the laboratory working place.

The UVC/T-AR is a bench top model, constructed from metallic skeleton and plexiglas and has a painted metal working place and a digital timer control of UV exposure. One open 25 W UV-lamp substantially decreases contamination level during UV-exposure (15-30 min).

White 15 W lamp provides local illumination of the working place and ensures good conditions for visual control of operation.

The model UVC/T-AR includes not only traditional UV source for direct lighting the surface of the inner working place of the PCR-box, but also additional UV air flow cleaner (UV - recirculator) for biosafety DNA decontamination to protect the user from direct UV-light during operation.

UV-recirculator consists of a UV lamp, fan and dust filters organized in a special box for maximum increasing (1000 x fold) density of UV-light leading sufficiently to effectivity of DNA inactivation. UV-recirculator generates 100 volumes of the PCR per 1 hour air flow exchange giving maximum aseptic conditions inside the box.

Advantages

No HEPA filters, Ozone free high density UV decontamination
Long living UV lamps (8000 hrs)-No noise, low energy consumption-
Compact bench top for personal labs.

The PCR workstation UVC/T-AR is recommended for labs working in the fields of DNA analysis, genetic engineering, molecular biology.

Specification

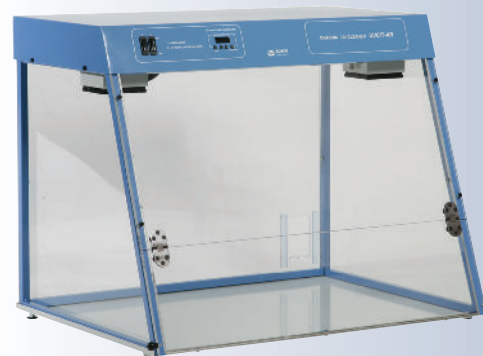
| | |
|--|----------------------------------|
| Direct UV-lamp light: | TUV 25W G13 UV-C Special Philips |
| Radiation type: | Ultraviolet (254 nm), ozone free |
| UV-lamp life time: | 9000 hrs |
| UV-recirculator: | TUV 25W G13 UV-C Special Philips |
| Digital time setting of direct UV-exposure | 1 min - 24 hrs |
| Luminiescent (visible light lamp) | 15W/830 G13 Philips |
| Plexiglass type: | Polymethylmethacrylate |
| Optical transmission: | 92 % |
| UV-protection: | 99,9% |
| Thickness of plexiglass sides: | 4 mm |
| Thickness of upper front side: | 8 mm |
| Thickness of protective front screen: | 8 mm |
| Working place: | 650x475 mm |
| Overall size: | 690x535x555 mm |
| Power: | 100-240 V, 50/60 Hz, 67 W |
| Weight: | 23,0 kg |

Code

BOE 8040000

Description

PCR Workstation UVC/T-AR, 100-240VAC, 50/60 Hz



UVC/T-AR

BOECO DRY BATH BLOCK INCUBATOR DBI-100, DBI-200

are ideal for incubation and activation of cultures, enzyme reactions, blood urea nitrogen determinations, immunoassays, melting/boiling points and a wide variety of laboratory procedures.

A supplied special block extraction tool allows to remove blocks easily.

Specification:

| | | |
|---|---------------------|-------------|
| Model: | DBI-100 | DBI-200 |
| Temperature control range: | RT +5°C - 105°C | |
| Display Accuracy : | ± 0,1°C | |
| Temperature Stability @100°C | 0,4°C | |
| Uniformity ¹⁾ within the block @37°C | ≤ 0,5°C | |
| Heating Time (20 to 105°C) | less than 15 min | |
| Timer: | 1 min - 99 h 59 min | |
| Block Quantity: | 1 | 2 |
| Power, max: | 120 W | 240 W |
| Size mm : | 250x190x130 | 365x210x150 |
| Weight: | 2,5 kg | 4,5 kg |

Code Description

| | |
|-------------|--|
| BOE 8018000 | Dry Block Thermostat DBI-100, 200/240 V 50/60 Hz |
| BOE 8018100 | Dry Block Thermostat DBI-100, 110/120 V 50/60 Hz |
| BOE 8019000 | Dry Block Thermostat DBI-200, 200/240 V 50/60 Hz |
| BOE 8019100 | Dry Block Thermostat DBI-200, 110/120 V 50/60 Hz |

Aluminium blocks with conical bottom for microtubes:

Code Description

| | |
|-------------|--|
| BOE 8018001 | Block DB 01 for 96 x 0,2 ml PCR tubes |
| BOE 8018002 | Block DB 02 for 45 x 0,5 ml tubes |
| BOE 8018003 | Block DB 03 for 35 x 1,5 ml tubes |
| BOE 8018004 | Block DB 04 for 35 x 2,0 ml tubes |
| BOE 8018005 | Block DB 05 for 15 x 0,5 ml + 20 x 1,5 ml tubes |
| BOE 8018006 | Block DB 06 for 20 x 1,5 ml + 15 x 2,0 ml tubes |
| BOE 8018007 | Block DB 07 for 32 x 0,2 ml + 25 x 0,5 ml + 9 x 1,5 ml tubes |

Aluminium blocks with flat bottom:

Code Description

| | |
|-------------|---|
| BOE 8018008 | Block DB 08 for 20 x 5 ml tubes Bore size: 14 mm Ø, Depth 40 mm |
| BOE 8018009 | Block DB 09 for 20 x 10 ml tubes Bore size: 16 mm Ø, Depth 47 mm |
| BOE 8018010 | Block DB 10 ²⁾ for 12 x 15 ml tubes Bore size: 16,9 mm Ø, Depth 58,5 mm |
| BOE 8018011 | Block DB 11 ²⁾ for 6 x 50 ml tubes Bore size: 29 mm Ø, Depth 58,5 mm |

Aluminium blocks with round bottom:

Code Description

| | |
|-------------|--|
| BOE 8018015 | Block DB 15 ²⁾ for 40 x 6 mm Ø tubes Bore size: 6,5 mm Ø, Depth: 33 mm |
| BOE 8018016 | Block DB 16 ²⁾ for 28 x 10 mm Ø tubes Bore size: 10,5 mm Ø, Depth: 47 mm |
| BOE 8018017 | Block DB 17 ²⁾ for 24 x 12 mm Ø tubes Bore size: 12,5 mm Ø, Depth: 47 mm |
| BOE 8018018 | Block DB 18 ²⁾ for 24 x 13 mm Ø tubes Bore size: 13,5 mm Ø, Depth: 47 mm |
| BOE 8018020 | Block DB 20 ²⁾ for 14 x 16 mm Ø tubes Bore size: 16,5 mm Ø, Depth: 47 mm |
| BOE 8018027 | External Sensor, PT 1000 |

¹⁾ uniformity is measured with a sample height within the block

²⁾ for blocks DB 10, 11 the lid cannot be closed, for blocks DB 15-19 the lid could only be closed if the tube height is less than 80 mm



DB-01



DB-02



DB-03



DB-4



DB-5



DB-06



DB-07



DB-08



DB-09



DB-10



DB-11



DB-15



DB-16



DB-17



DB-18



DB-20

BOECO THERMO-SHAKER FOR MICROTUBES, TS-100

is a compact and cost-efficient solution for shaking and temperature control of small samples in 0,5 ml, 1,5 ml and 2,0 ml microtubes. The TS-100 is microprocessor controlled and has a display which indicates simultaneous set and actual time, temperature and shaking speed.

Specification:

| | |
|--------------------------|---------------------------------------|
| Orbit size: | 2 mm |
| Temperature range: | 25°C - 100°C |
| Speed range: | 250 - 1400 1/min, increment 10 rpm |
| Acceleration time: | 3 sec |
| Timer with sound signal: | digital, 1 min - 96 h increment 1 min |
| Power (external): | DC 12 V. 5 A |
| Overall size: | 205 x 230 x 130 mm |
| Weight: | 3,20 kg |

| Code | Description |
|-------------|--|
| BOE 8064000 | Thermo-Shaker for microtubes TS-100, without block, AC 100-240V 50/60 Hz |
| BOE 8064001 | Interchangeable block, SC-18 for 20x0,5 ml and 12 x 1,5 ml microtubes |
| BOE 8064004 | Interchangeable block, SC-18/02 for 20x0,2 and 12 x 1,5 ml microtubes |
| BOE 8064005 | Interchangeable block, SC-24N for 24x1,5 ml microtubes |
| BOE 8064007 | Interchangeable block, SC-24 for 24x2,0 ml microtubes |
| BOE 8064006 | Interchangeable block, SC-96A for 96-well PCR microplate |



TS-100 with block SC-24N

BOECO THERMO-SHAKER FOR MICROTUBES, TS-100C

is a heating and cooling thermomixer. Active cooling using Peltier technology offers a temperature regulation range from +4°C to +100°C. Temperature control and mixing modes can be used simultaneously and independently. The TS-100C is microprocessor controlled and has a display which indicates simultaneous set and actual time, temperature and shaking speed. The low voltage power supply enables safe cold room or incubator operation. The TS-100C is applicable for DNA analysis, extraction of proteins, polysaccharids, lipids and other cell components

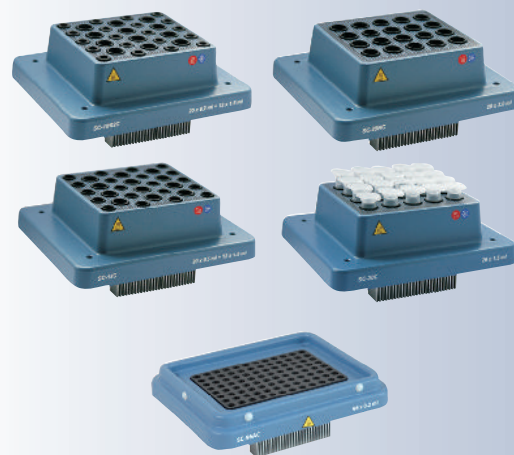
Specification:

| | |
|----------------------------|--|
| Speed range: | 250 - 1400 1/min, increment 10 rpm |
| Acceleration time: | 3 sec |
| Orbit size: | 2 mm |
| Temperature control range: | 15°C below room temp. to +100°C |
| Temperature setting range: | +4°C to 100°C |
| Average heating rate: | 5°C / min (from +25 to +100°C in 15 min) |
| Average cooling speed: | From +100°C to +25°C: 5°C / min From +25°C to +4°C: 1,8°C / min |
| Timer with sound signal: | digital, 1 min - 96 h, increment 1 min |
| Power (external): | DC 12 V. 5 A |
| Overall size: | 205 x 230 x 130 mm (w x d x h) |
| Weight: | 3,7 kg |

| Code | Description |
|-------------|---|
| BOE 8064050 | Thermo-Shaker for microtubes TS-100C, without block, AC 100-240V 50/60 Hz |
| BOE 8064051 | Interchangeable block, SC-18C for 20x0,5 ml and 12 x 1,5 ml microtubes |
| BOE 8064054 | Interchangeable block, SC-18/02C for 20x0,2 ml and 12 x 1,5 ml microtubes |
| BOE 8064057 | Interchangeable block, SC-24NC for 24x1,5 ml microtubes |
| BOE 8064055 | Interchangeable block, SC-24C for 24x2,0 ml microtubes |
| BOE 8064056 | Interchangeable block, SC-96AC for 96-well PCR microplate |



TS-100C with block





THERMAL CYCLER TC-SQ

BOECO THERMAL CYCLER TC-SQ

is a personal Thermal Cycler with compact structure and small footprint and a friendly user interface with big LCD display which gives reliable results for teaching and research laboratories.

The TC-SQ provides superior performance especially in the cooling and heating speed, temperature control accuracy and uniformity of the block.

Specification:

| | |
|---------------------------------|---|
| Sample Capacity: | 24 x 0,2 ml, 8-strip, 24 x 0,2 ml plate |
| Temperature control range: | + 4 ~ +99 °C |
| Heating rate (max.): | ≥ 5,0°C /sec |
| Cooling rate (max.): | ≥ 4,0°C /sec |
| Block temp. uniformity: | ≤ ± 0,5°C |
| Block temp. accuracy: | ≤ ± 0,3°C |
| Temp. of hot lid: | 30°C - 110°C |
| Adjustability of hot lid press: | Yes |
| Temp. control mode: | Block or Tube |
| Display: | 320 x 240 LCD |
| Program storage: | 100 files |
| Max. segments | 5 segments |
| Max. program steps: | 16 steps |
| Max. cycles: | 99 cycles |
| Size: | 297 (L) x 212 (W) x 200 (H) mm |
| Weight: | 3,2 kg |
| Interface: | RS 232 |

| Code | Description |
|-------------|---|
| BOE 8085240 | Thermal cycler TC-SQ, 220-240 V, 50/60 Hz with sample block for 24 x 0,2 ml |
| BOE 8085241 | Thermal cycler TC-SQ, 100-120 V, 50/60 Hz with sample block for 24 x 0,2 ml |

Optional Block:

| Code | Description |
|-------------|------------------------------|
| BOE 8085185 | Sample Block for 18 x 0,5 ml |



THERMAL CYCLER TC-TE

BOECO THERMAL CYCLER TC-TE

is a personal Thermal Cycler with compact structure and small footprint and a friendly user interface with colored 5,7" touch screen and a fixed gradient block for 96 x 0,2 ml which gives reliable results for teaching and research laboratories.

Specification:

| | |
|----------------------------|--|
| Sample capacity: | 96 x 0,2 ml, 8-strip, 24 x 0,2 ml plate |
| Cooling technology: | Peltier |
| Temperature control range: | + 4 ~ +99°C |
| Heating speed of ramping: | up to 4,0°C /sec |
| Cooling speed of ramping : | up to 4,0°C /sec |
| Block temp. uniformity: | ≤ ± 0,3°C |
| Block temp. accuracy: | ≤ ± 0,1°C (55°C) ≤ ± 0,2°C (≥90°C) |
| Display resolution: | 0,1°C |
| Temp. control mode: | Block or Tube |
| Ramping rate adjustable: | 0,1°C - 4°C |
| Memories: | 250 typical programs (unlimited by USB) |
| Max. cycles: | 99 cycles for Nested PCR |
| Time up/down: | 0-9 min59s, suit for LongPCR |
| Temperature up/down: | 0,1 - 9,9°C suit for TouchdownPCR |
| Soak function: | Yes |
| Gradient range: | 30°C ~ 99°C |
| Temp. differential range: | 1°C ~ 30°C |
| Temp. of hot lid: | 30°C -110 °C (Temp. / pressure adjusted) |
| Size: | 335 (W) x 260 (D) x 270 (H) mm |
| Weight: | 8 kg |
| Interface: | 1 x USB |
| Power Supply: | 100 - 240V, 50-60 Hz ≤ 600W |

| Code | Description |
|-------------|--|
| BOE 8089602 | Thermal cycler TC-TE, 100-240 V, 50-60 Hz with gradient sample block for 96 x 0,2 ml |

BOECO THERMAL CYCLER TC-PRO

is a multifunctional compact sized thermal cycler equipped with high end Peltier technology. His five interchangeable sample block give the BOECO TC-PRO an exceptional versatility for PCR methods using tubes, strip wells or plates. Its high ramping rate and precision temperature control provide fast, accurate results. The extra large display and user-friendly interface make operation easy. The unit automatically recognizes which sample block is in place, eliminating the need for an operator to manually supply this information. The instrument can work either by itself or with computer control. One computer can control up to 30 sets of the thermal cyclers.

Specification:

| | |
|----------------------------|---|
| Temperature control range: | + 4 ~ +99°C |
| Heating rate (max.): | ≥ 4,0°C /sec |
| Cooling rate (max.): | ≥ 4,0°C /sec |
| Block temp. uniformity: | ≤ ± 0,3°C |
| Block temp. accuracy: | ≤ 0,1°C (55°C), ≤ 0,2°C (90°C) |
| Temp. of hot lid: | 30°C - 110°C |
| Gradient range: | 1°C - 30°C |
| Temp. control mode: | Block or tube |
| Program storage: | ≥ 100 files (No limitation with USB flash disk) |
| Max. segments | 5 segments |
| Max. program steps: | 16 steps |
| Max. cycles: | 99 cycles |
| Power max.: | 600 W |
| Size: | 470 (L) x 340 (W) x 260 (H) mm |
| Weight: | 6,3 kg (main body) + 4,2 kg (block) |
| Interface: | USB, LAN |
| Operation System: | Windows 7, Windows 2000 / XP / |
| | Memory:> 256M, |
| | Hard disk: >10G, CPU: Pentium 4) |



THERMAL CYCLER TC-PRO

| Code | Description |
|-------------|-------------------------------------|
| BOE 8085000 | Thermal cycler TC-PRO, AC 110-240 V |

Interchangeable Blocks:

| Code | Description |
|-------------|---------------------------------------|
| BOE 8085001 | Block 96G: 96 x 0,2 ml gradient block |

This aluminium alloy block and hot lid is for 96 x 0,2 ml microplate or tubes; 12 x 8 strip; 8 x 12 strip. This block can be used run gradient temperature programs. The temperature and hot lid are adjustable.

| Code | Description |
|-------------|--|
| BOE 8085002 | Block 384G: 384 wells plate gradient block |

This aluminium alloy block and hot lid is for 384 well plates. This block can be used run gradient temperature programs. The temperature and hot lid are adjustable.

| Code | Description |
|-------------|---|
| BOE 8085003 | Block 3048: mixed block, 30 x 0,5 + 48 x 0,2 ml |

This aluminium alloy mixed block and hot lid is for a max. of 30 x 0,5 ml 48 x 0,2 ml microtest tubes. The temperature and hot lid are adjustable.

| Code | Description |
|-------------|--|
| BOE 8085004 | Block 48D: dual block, 2 x 48 x 0,2 ml |

This module consists of two separate aluminium alloy blocks, both for 0,2 ml microtest tubes, but each with its own hot lid. Each block accepts a maximum of 48 tubes for a total of 96 tubes. The temperature and pressure of the hot lids are independently adjustable.

| Code | Description |
|-------------|--------------------------------------|
| BOE 8085005 | Block 4I: block for 4 In Situ plates |

This aluminium alloy block and hot lid is for 4 in situ plates. The temperature and hot lid are adjustable.



BLOCK 96G



BLOCK 384G



BLOCK 3048



BLOCK 48D



BLOCK 4I