

ES-20/60, Orbital Shaker-Incubator

DESCRIPTION

Orbital Shaker-Incubator **ES-20/60** for biotechnological and pharmaceutical laboratories is a professional category equipment designed for cultivation of microorganisms and eukaryotic cells including animal, plant and insect cells. It is also possible to cultivate thermophilic bacteria in **ES-20/60** shaker-incubator.

Shaker is equipped with a direct-drive mechanism for platform motion. It provides reliable and stable operation for the long term experiments needed for cell growth.

Shaker-Incubator **ES-20/60** provides smooth or intensive mixing in flasks installed on the platform.

Built-in noiseless thermoresistant brushless fan provides precise temperature distribution inside the chamber (adjustable for up to +80°C). The inner chamber is made of stainless steel. State-of-the-art motor, newest thermal insulation materials, soft-start of the platform motion and temperature PID-control decrease the energy consumption and make the Shaker-Incubator highly energy efficient despite its relatively large size.



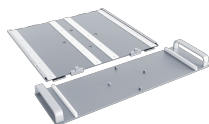
SPECIFICATIONS

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 accuracy at +37°C	±2°C
Temperature uniformity at +37°C	±2°C
Orbit	20 mm
Display	LCD, 2 × 16 signs
Digital time setting	1 min–96 hrs / non–stop (1 min increment)
Timer sound signal	+
Maximum load	8 kg
Maximum continuous operation time	30 days
Dimensions of the inner chamber	460 × 400 × 310 mm
Overall dimensions (W×D×H)	590 × 525 × 510 mm
Weight	41.1 kg
Power consumption (230V / 120 V)	450 W (2 A) / 450 W (4.5 A)
Nominal operating voltage	230 V, 50/60 Hz or 120 V, 50/60 Hz

ACCESSORIES

CAT. NUMBER

Without platform	Without platform
BS-010135-AAA	230VAC 50/60Hz Euro plug
BS-010135-AAB	230VAC 50/60Hz UK plug
BS-010135-AA3	230VAC 50/60Hz AU plug
BS-010135-AAC	120VAC 60Hz US plug
please, inquire	100VAC 50/60Hz US plug
BS-010135-HK	IQ OQ document
BS-010135-IK	PQ document



P-EX
BS-010173-CK
platform exchange set

Platform Exchange Set allows for faster replacement of flat platforms. Thanks to the platform sliding system, it is now possible to install 4 × 2l flasks in ES-20/60, ES-20/80, ES-20/80C ...

[read more](#)



P-30/100
BS-010135-BK
platform

Platform with clamps for flasks.



P-16/250
BS-010135-CK
platform

Platform with clamps for flasks.



P-9/500
BS-010135-AK
platform

Platform with clamps for flasks.



P-6/1000
BS-010135-DK
platform

Platform with clamps for flasks.



PP-400
BS-010135-FK
platform

Flat platform with non-slip silicone mat can accommodate various low profile containers.



UP-168
BS-010135-JK
platform

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.



SPML
BS-010135-MK
double-sided adhesive strips

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.



TR-44/15
BS-010135-LK
rack

Adjustable angle test tube rack for UP-168



TR-21/50
BS-010135-KK
rack

Adjustable angle test tube rack for UP-168



FC-50
BS-010126-MK
clamp

Clamp 50 ml - Ø50 mm for UP-168



FC-100
BS-010126-HK
clamp

Clamp 100 ml - Ø65 mm for UP-168



FC-250
BS-010126-JK
clamp

Clamp 250 ml - Ø85 mm for UP-168



FC-500
BS-010126-LK
clamp

Clamp 500 ml - Ø105 mm for UP-168



FC-1000
BS-010126-KK
clamp

Clamp 1000 ml - Ø130 mm for UP-168



FC-2000
BS-010126-NK
clamp

Clamp 2000 ml - Ø165 mm for
UP-168
Max. - 200 rpm