

ES-20/60 Orbital Shaker-Incubator

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.

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. Platforms should be ordered separately.

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.

Part number 104.3530



ES-20/60 with platform P-6/1000

Temperature setting range	+25°C... +80°C
Temperature control range	10°C above ambient up to +80°C
Speed control range	50 - 250 U/min (increment 10 rpm)
Temperature setting resolution	0.1°C
Temperature stability	±0.5°C
Temperature accuracy at +37°C	±0.5°C
Temperature uniformity at +37°C	±0.5°C
Höchstlast	8 kg
Orbit	20 mm
Digital time setting	1 min – 96 h / non-stop (increment 1 min)
Timer sound signal	ja
Maximum continuous operation time	30 Tage
Display	LCD, 2 x 16 signs
Overall dimensions (WxDxH)	590 × 525 × 510 mm
Dimensions of the inner chamber	460 × 400 × 310 mm
Weight	41,1 kg
Nominal operating voltage	230 V, 50/60 Hz
Power consumption	450 W (2.2 A)

Platforms for ES-20/60, Orbital Shaker-Incubator

P-6/1000



**Platform with 6 clamps
for 1000 ml flasks**

Dimensions:
360 × 400 mm
Working Area:
360 × 400 mm
Part number:
105.3534

P-30/100



**Platform with 30 clamps
for 100 ml flasks**

Dimensions:
360 × 400 mm
Working Area:
360 × 400 mm
Part number:
105.3531

P-9/500



**Platform with 9 clamps
for 500 ml flasks**

Dimensions:
360 × 400 mm
Working Area:
360 × 400 mm
Part number:
105.3533

P-16/250



**Platform with 16 clamps
for 250 ml flasks**

Dimensions:
360 × 400 mm
Working Area:
360 × 400 mm
Part number:
105.3532

UP-168



**Universal platform with
clamps for flasks/bottles**
Clamps are not included
with platform and need to
be ordered.

Dimensions:
360 × 400 mm
Part number:
105.3536

PP-400



**Flat platform with
non-slip silicone mat**
Can accommodate various
low profile containers

Working Area:
360 × 400 mm
Part number:
105.3535

FC-100, FC-250, FC-500, FC-1000



**Clamps for platform
UP-168**
for flasks with
100 ml - Ø 65 mm
250 ml - Ø 85 mm
500 ml - Ø 105 mm
1000 ml - Ø 130 mm

**Maximum number of
clamps for platform
UP-168**

100 ml	16
250 ml	9
500 ml	9
1000 ml	4

TR-21/50



**Adjustable
angle test tube rack**
for up to 21 tubes 50 ml
(for UP-168)

TR-44/15



**Adjustable
angle test tube rack**
For up to 21 tubes 50 ml
(for UP-168)