

Orbital Shaker-Incubator with Cooling - ES-20/80C

Description

The orbital shaker incubator ES-20/80 is particularly suitable for biotechnological and pharmaceutical laboratories.

Typical applications:

- Microbial and cell culture cultivation
- Protein expression
- Solubility studies
- General mixing
- As well as other various applications in the fields of biology and chemistry

It is the new version with integrated cooling capability of highly successful shaker-incubator ES 20/80. 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 three 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 the included software.



ES-20/80C with platform HSP-6/1000

A combination of an electric heating element and a built-in heat-resistant brushless fan provides precise temperature distribution inside the chamber from 10°C below ambient up to +80°C.

Cooling of the chamber is provided by additional Peltier modules allowing to cool until -10 °C from the ambient temperature. Additionally, an excellent sample temperature uniformity of $\pm 0.3^{\circ}\text{C}$ at 37°C is achieved.

Orbital Shaker-Incubator ES-20/80C



Technical Data

Order No. Shaker-Incubator ES-20/80C Please order shaker platform separately (see page 3)	104.3545 (Basic unit)
Temperature setting range	+4°C up to +80°C
Temperature control range	10°C above ambient up to +80°C
Speed control range	50 – 400 rpm (increment 10 rpm)
Temperature setting resolution	0.1°C
Temperature stability	±0.1°C
Temperature accuracy at +37°C	±0.1°C
Temperature uniformity at +37°C	±0.3°C
Maximum load	10.6 kg
Orbit	20 mm
Digital time setting	1 min–96 hrs / non–stop (1 min increment)
Timer sound signal	yes
Display	TFT, 5 inches
Overall dimensions (W×D×H)	620 × 530 × 510 mm
Dimensions of the inner chamber	460 × 400 × 310 mm
Weight	48 kg
Nominal operating voltage	230 V, 50/60 Hz
Power consumption	500 W (2.2 A)

Orbital Shaker-Incubator ES-20/80C



Platform HSP-6/1000

With 6 clamps
für 1000 ml flasks.

Dimensions:
360 × 400 mm
Order No.:
105.3534



Platform HSP-30/100

With 30 clamps
for 100 ml flasks

Dimensions:
360 × 400 mm
Order No.:
105.3531



Platform HSP-9/500

With 9 clamps
for 500 ml flasks.

Dimensions:
360 × 400 mm
Order No.:
105.3533



Platform HSP-16/250

With 16 clamps for
250 ml flasks

Dimensions:
360 × 400 mm
Order No.:
105.3532



Platform UP-168

Universal platform for
holding flasks/bottles in
clamps.

(These are not included
in the scope of delivery
and must be ordered
separately (see below).

Dimensions:
360 × 400 mm
Order No.:
105.3536



Platform PP-400

Flat platform with
non-slip silicone mat

Dimensions:
360 × 400 mm
Order No.:
105.3535



Clamps for Platform UP-168

Models

HSC-50, HSC-100,
HSC-250, HSC-500,
HSC-1000

For Erlenmeyer Flasks:

50 ml - Ø 50 mm
100 ml - Ø 65 mm
250 ml - Ø 85 mm
500 ml - Ø 105 mm
1000 ml - Ø 130 mm

Max. number of clamps for platform UP-168

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



Adapter TR-21/50

Adjustable
angle test tube rack
for platform UP-168.

Max. Capacity:
21 x 50 ml tubes



Adapter TR-44/15

Adjustable
angle test tube rack
for platform UP-168.

Max. Capacity:
44 x 15 ml tubes