

SONOPULS Series HD 4000

Ultrasonic homogenisers

SONOPULS HD 4050

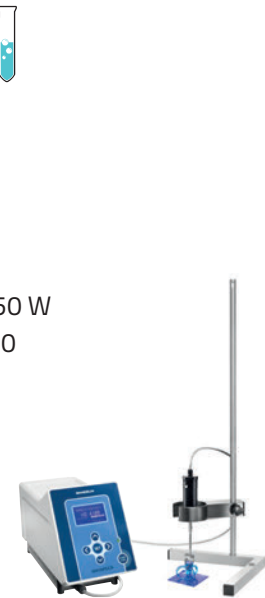
for volumes from 0.5–100 ml
(depending on the probe used)

- Available probes Ø:
2 / 3 / 4.5 / 6 / 9 mm

Ready-to-use set:

Nominal ultrasonic power max. 50 W

- Ultrasonic generator GM 4200
- Ultrasonic converter UW 50
- Probe TS 102, Ø 2 mm
(for volumes 0.5-20 ml)
- Tools for mounting the probes



Code No.
4050 - EU plug CEE 7/7
4050-GB - GB connector BS 1363
4050-CH - CH connector SEV 1011: T12
4050-1 - US plug NEMA 5-15

SONOPULS HD 4100

for volumes from 2–200 ml
(depending on the probe used)

- Available probes Ø:
2 / 3 / 4.5 / 6 / 9 / 13 mm

Ready-to-use set:

Nominal ultrasonic power max. 100 W

- Ultrasonic generator GM 4200
- Ultrasonic converter UW 100
- Step horn SH 100 G
- Probe TS 103, Ø 3 mm
(for Volumina 3-50 ml)
- Tools for mounting the probes



Code No.
4100 - EU plug CEE 7/7
4100-GB - GB Connector BS 1363
4100-CH - CH Connector SEV 1011: T12
4100-1 - US plug NEMA 5-15

SONOPULS HD 4200

for volumes from 5-1,000 ml
(depending on the probe used)

- Available probes Ø:
3 / 4.5 / 6 / 9 / 13 / 16 / 19 / 25 mm

Ready-to-use set:

Nominal ultrasonic power max. 200 W

- Ultrasonic generator GM 4200
- Ultrasonic converter UW 200
- Booster horn SH 200 G
- Titanium plate TT 213, Ø 13 mm
(for volumes 20-900 ml)
- Tools for mounting the probes



Code No.
4200 - EU plug CEE 7/7
4200-GB - GB Connector BS 1363
4200-CH - CH Connector SEV 1011: T12
4200-1 - US plug NEMA 5-15

SONOPULS HD 4400

for volumes from 100-3,000 ml
(depending on the probe used)

- Available probes Ø:
13 / 16 / 19 / 25 / 32 / 38 mm

Ready-to-use set:

Nominal ultrasonic power max. 400 W

- Ultrasonic generator GM 4400
- Ultrasonic converter UW 400
- Booster horn SH 400 G
- Probe TS 425, Ø 25 mm
(for volumes 500-2000 ml)
- Tools for mounting the probes



Code No.
4400 - EU plug CEE 7/7
4400-GB - GB Connector BS 1363
4400-CH - CH Connector SEV 1011: T12

Ultrasonic converter

An ultrasonic converter is used to convert the electrical energy supplied by the ultrasonic generator into mechanical vibrations.

All SONOPULS ultrasonic converters in the 4000 series operate at an ultrasonic frequency of 20 kHz.

Ultrasonic operation can be started and stopped by pressing the "START/STOP" button on the generator or via the button on the ultrasonic converter. Ultrasonic operation is active as long as the button is pressed. The button can be used to pulse manually.

Ultrasonic converter UW 50

Suitable for:
GM 4200

Dimension:
Ø 50 × 190 mm

Cable length:
2.5 m

Code No. 3720



Ultrasonic converter UW 100

Suitable for:
GM 4200

Dimension:
Ø 70 × 170 mm

Cable length:
2.5 m

Code No. 3721



Ultrasonic converter UW 200

Suitable for:
GM 4200 / 4400

Dimension:
Ø 70 × 170 mm

Cable length:
2.5 m

Code No. 3722



Ultrasonic converter UW 400

Suitable for:
GM 4400

Dimension:
Ø 90 × 180 mm

Cable length:
2.5 m

Code No. 3723



SONOPULS Series HD 4000

Ultrasonic generator

The ultrasonic generator transforms the absorbed mains energy (mains frequency 50 or 60 Hz) into high-frequency energy with a frequency of 20 kHz. It is housed in an easy-care and robust plastic casing with connections for ultrasonic converter, temperature sensor and foot switch. The control and display panel with backlit LC display shows operating parameters and status information. The ultrasonic operating modes are either pulsating or continuous. The ultrasonic power is set via the amplitude on the generator. The nine programme memory locations are used to quickly start recurring processes.



Ultrasonic generator GM 4200

- Suitable for:
- HD 4050
 - HD 4100
 - HD 4200
- External dimensions
(l × w × h):
335 × 150 × 230 mm

Power range:
30-150 W

- Code No.
- 3711 - 230 V EU plug CEE 7/7
 - 3711-GB - 230-V-GB plug BS 1363
 - 3711-CH - 230 V-CH Connector SEV 1011: T12
 - 3711-1 - 115 V US plug NEMA 5-15

Ultrasonic generator GM 4400

- Suitable for:
- HD 4200
 - HD 4400
- External dimensions
(l × w × h):
335 × 150 × 230 mm

Power range:
60-300 W

- Code No.
- 3715 - 230 V EU plug CEE 7/7
 - 3715-GB - 230-V-GB plug BS 1363
 - 3715-CH - 230-V-CH plug SEV 1011: T12

Front side

- LC-Display
- Control LED
- Control buttons
- START/STOP" button
- Mains switch
- Connection for temperature sensor
- Connection for ultrasonic converter MINI-SNAP®



Back side

- Remote control socket
- IEC panel plug with fuse holder
- RS-232 interface

