

# Elmasonic P 180 H

## Ultrasonic cleaning unit



Pictured P 30 H

### Elma Order Nos.

|                           |          |
|---------------------------|----------|
| Elmasonic P 180 H (230 V) | 101 3804 |
| Basket stainless steel    | 100 4275 |
| Lid (plastic)             | 100 3286 |

Further accessories on request

The Elmasonic P is the ideal unit for the professional application in analytical and medical laboratories and in industrial production processes. The unit series consists of 6 different unit sizes with tank capacities ranging from 2.75 to 28 litre. Microprocessor-controlled ultrasonic cleaning with multi-frequency technology (37/80 kHz) and special features are perfect for intensive cleaning tasks and laboratory applications. As the units are more powerful than standard ultrasonic cleaning units, the ultrasonic power can be reduced electronically depending on the cleaning task.

### Further advantages:

- ultrasonic tank made of cavitation-proof stainless steel
- casing made of stainless steel, hygienic and easy to clean
- sandwich-type performance transducer systems
- two ultrasonic frequencies, switchable in one unit:
  - 37 kHz und 80 kHz
  - 37 kHz: for the removal of coarse contaminations and for mixing, dissolving, dispersing and degassing
  - 80 kHz: perfect for the cleaning of capillaries and for the use in quiet work areas, prolonged cleaning period
- automatic frequency switch-over for simultaneous coarse and fine cleaning
- activatable Sweep mode for an optimised sound field distribution within the cleaning bath
- activatable Pulse mode for an intensified ultrasonic cleaning power, additional ultrasonic power up to 20%
- activatable Degas mode for the quick degassing of HPLC samples or solvents, and of fresh cleaning liquids
- Auto Degas mode for an automatic degassing cycle, e.g. for fresh cleaning liquids
- ultrasonic power variable for sensitive surfaces
- temperature-controlled ultrasonic operation: ultrasound starts automatically as soon as the preset temperature is reached
- indication of unit settings (e.g. set and actual values) by alphanumeric display
- saving of the last unit settings at switch-off
- electronic turning knobs
- drain duct mounted to the unit rear, operation of the drain duct on the unit side
- run dry safe heating
- automatic stirring during heating-up process
- pluggable mains cable
- automatic safety switch-off after 12 h operation to prevent unintended permanent operation
- automatic safety switch-off at 90 °C to protect the cleaning items against excess temperatures

### Technical data

|  |                 |                                      |                     |
|--|-----------------|--------------------------------------|---------------------|
| Mains voltage (Vac)                    | 220-240 V       | Weight (kg)                          | 8,5                 |
| Mains frequency (Hz)                   | 50 / 60         | Material tank                        | stainless steel V2A |
| Ultrasonic frequency (kHz)             | 37 / 80         | Material casing                      | stainless steel V2A |
| Power consumption total P 180 H (W)    | 1130            | Drain                                | 3/8"                |
| Ultrasonic power effective (W)         | 330             | CE directive 2006/95/EWG (EC/EEC)    | √                   |
| Ultrasonic peak performance max.(W)    | 1320            | CE directive 2004/108/EWG (EC/EEC)   | √                   |
| Heating power (units w. heating) (W)   | 800             | Protection class                     | IP 20               |
| Unit outer dimensions W/D/H (mm)       | 390 / 340 / 321 | Sound pressure level (LpAU) * (dB)   | 62 / 58             |
| Tank internal dimensions W/D/H (mm)    | 327 / 300 / 200 | Ultrasonic sound level (LpZ) ** (dB) | 96 / 87             |
| Max. filling volume tank (lit. / gal.) | 18,0            |                                      |                     |

\* Sound pressure level measured with basket and cover at a distance of 1 m

\*\* Ultrasonic sound level measured with basket and cover at a distance of 1 m