

## Data Sheet Mixing / Shakers



## MS 3 digital

Compact, universal small shaker suitable for shaking tasks with all small vessels and microtiter plates

- Wide range of attachments
- Attachment detection
- Timer with countdown function
- Continuous or touch operation (with standard attachment)
- Two operating modes:
- Mode A (safe mode with attachment detection)
- the maximum speed of 3.000 rpm is only reached with the standard attachment in
- touch mode. When using other attachments the speed is limited to 1.300 rpm. Mode B (without attachment detection)

A speed of 3,000 rpm is possible with all attachments, depending on the application (see accessory list in the manual).

- Stable in all speed ranges
- Sturdy zinc die cast casing

Accessories: MS 3.1 Standard attachment, MS 3.4 Microtiter attachment, MS 3.3 Universal attachment, MS 3.5 PCR plate attachment, MS 1.21 One-hand insert, MS 1.34 Test tube insert, MS 1.31 Test tube insert, MS 1.32 Test tube insert, MS 1.33 Test tube insert

Technical Data Type of movement Shaker diameter [mm] Permissible shaking weight (incl. attachment) [kg] Motor rating input [W] Motor rating output [W] Permissible ON time [%] Speed min (adjustable) [rpm] Speed range [rpm] Speed display	orbital 4.5 0.5 10 8 100 2000
Type of movement  Shaker diameter [mm]  Permissible shaking weight (incl. attachment) [kg]  Motor rating input [W]  Motor rating output [W]  Permissible ON time [%]  Speed min (adjustable) [rpm]  Speed range [rpm]  Speed display	4.5 0.5 10 8 100 200
Shaker diameter [mm] Permissible shaking weight (incl. attachment) [kg] Motor rating input [W] Motor rating output [W] Permissible ON time [%] Speed min (adjustable) [rpm] Speed range [rpm] Speed display	4.5 0.5 10 8 100 200
Permissible shaking weight (incl. attachment) [kg]  Motor rating input [W]  Motor rating output [W]  Permissible ON time [%]  Speed min (adjustable) [rpm]  Speed range [rpm]  Speed display	0.5 10 8 100 200
Motor rating input [W]  Motor rating output [W]  Permissible ON time [%]  Speed min (adjustable) [rpm]  Speed range [rpm]  Speed display	10 8 100 200
Motor rating output [W]  Permissible ON time [%]  Speed min (adjustable) [rpm]  Speed range [rpm]  Speed display	8 100 200
Permissible ON time [%] Speed min (adjustable) [rpm] Speed range [rpm] Speed display	100 200
Speed min (adjustable) [rpm] Speed range [rpm] Speed display	200
Speed range [rpm] Speed display	
Speed display	2 2222
	0 - 3000
	scale
Timer	yes
Timer display	7 segment LED
Time setting range [min]	1/60 - 999
Operating mode	timer and continuous operation
Touch function	yes
Working with microtiter plates	yes
Number of microtiter plates	1
Dimensions (W x H x D) [mm]	148 x 63 x 205
Weight [kg]	2.9
Permissible ambient temperature [°C]	5 - 40
Permissible relative humidity [%]	80
Protection class according to DIN EN 60529	IP 21
Voltage [V]	100 - 240
Frequency [Hz]	50/60
Power input [W]	20
DC Voltage [V=]	24
Current consumption [mA]	
Ident. No.	800