



designed for scientists



MATRIX Orbital Delta FP

/// Data Sheet

The IKA Matrix Orbital Δ FP is part of a new and powerful product family of thermoshakers available. IKA Matrix Orbital Δ FP mixes, heats and has a universal holder for microtiter plates. Whether its blood samples, pharmaceutical agents, DNA/RNA samples or ELISA assays – samples with even the smallest volumes mix reliably and completely in all laboratory applications. No cross-contamination and an optimal mixing result.

In addition, IKA Matrix Orbital Δ FP comes with numerous user-friendly features:

- Large and clear display with a convenient menu structure allows for intuitive operation



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- Stable quick lock for fast and easy change of inserts and attachments as well as automatic attachment detection
- Speeds of up to 2,000 rpm and shaker diameter of 3 mm ensure the liquid mixes quickly and effectively
- Two different speed modes for gentle heating of the samples
- Programmable ramps allow for automatic execution of mixing and heating tasks
- Smart speed adjustment according to insert, attachment and filling volume
- Aluminum die cast housing ensures secure positioning, excellent stability and everyday robustness



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Technical Data

Type of movement	orbital
Shaking stroke [mm]	3
Maximum load [kg]	0.3
Permissible ON time [%]	100
Speed min (adjustable) [rpm]	300
Speed range [rpm]	0 - 2000
Speed display	TFT
Speed deviation [rpm]	±30
Speed control	10 RPM Steps
Timer	yes
Timer display	TFT
Time setting min. [s]	1
Time setting max. [min]	6000
Operating mode	timer, continuous and program operation
Working with microtiter plates	yes
Number of microtiter plates	1
Heating temperature range [°C]	room temp. +4° - 100
Heat output [W]	100
Heat control	TFT
Set temperature resolution [°C]	±1
Temperature control accuracy [°C]	±1.0 (@ 20°C ... 45°C); ±4.0
Temperature stability [°C]	0.5
Temperature homogeneity [°C]	±0.5 (@ 20°C ... 45°C); ±1.5
Heating rate [°C/min]	18
Temperature display	yes
Number of PCR plates	1
Number of Deep Well Plates (DWP)	1
Dimensions (W x H x D) [mm]	216 x 147 x 351
Weight [kg]	9.2
Permissible ambient temperature [°C]	5 - 40
Permissible relative humidity [%]	80
Protection class according to DIN EN 60529	IP 21
RS 232 interface	yes
USB interface	yes
Voltage [V]	100 - 240
Frequency [Hz]	50/60
Power input [W]	240
Power input max. [W]	240
Fuse	2x T4A 250V

