



designed for scientists



EUROSTAR 100 digital

/// Data Sheet

The new generation of EUROSTAR overhead stirrers combines modern design, user-friendliness and reliable performance. With up to 23% less space required compared to the previous models they fit perfectly into any laboratory. EUROSTAR 100 digital is the right solution for simple mixing tasks up to 100 liters (H₂O) and viscosities up to 70 000 mPas. Its maximum torque of 100 Ncm at 1300rpm and linear adjustment to 60 Ncm at maximum speed guarantee reliable and powerful performance.

The innovative torque trend measurement shows the viscosity trend of the sample (+/- 6 Ncm accuracy). The torque trend is shown directly on the display and provides important feedback on the mixing process. The desired stirring speed 30-2000rpm is always guaranteed even with changes to the torque demand or viscosity of the material.



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ISO Class 7/8 Cleanroom Compliance allows for use in cleanroom environments in pharmaceutical, biotech, medical device, electronics, and aerospace labs, industries where particle control is critical.

Maximum safety and reliability

- User-friendly: Large LCD display shows all parameters at a glance
- Quick Sense Keyless Chuck: allows the mixing tools to be changed with one hand, without additional tools
- Lock key: Prevents accidental changes to settings
- Safety Circuits: automatic safety shutoff from stirring impeller blockage or user specified torque limit
- Protection class IP 54: Resistant to splash water and steam for reliable use in demanding environments
- Brushless motor: Durable, clean and quiet in operation

Connectivity and documentation

- USB and RS232 interfaces
- Compatible with labworldsoft® laboratory software for integration into digital workflows and documentation of processes

Features

- 23% smaller size than previous models
- Torque Trend Measurement
- Quick Sense Keyless Chuck
- Cleanroom ISO 7/8 Classification
- IP 54
- Timer/Counter function
- Lock Key
- LCD Display
- USB Interface
- RS 232



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Technical Data

Stirring quantity max. per stirring position (H ₂ O) [l]	100
Motor rating input [W]	186
Motor rating output [W]	136
Motor principle	Brushless DC
Speed display	LCD
Speed range [rpm]	0/30 - 2000
Viscosity max. [mPas]	70000
Output max. at stirring shaft [W]	136
Permissible ON time [%]	100
Torque max. at stirring shaft [Ncm]	200
Short-term - Torque max at stirring shaft at 30-600 rpm / up to 20 min [Ncm]	200
Torque max. at stirring shaft at 600-1300 rpm [Ncm]	120-100
Torque max. at stirring shaft at 1300-2000 rpm [Ncm]	100-60
Speed adjustment	stepless
Setting accuracy speed [rpm]	±1
Deviation of speed measurement n > 300rpm [%]	±1
Deviation of speed measurement n < 300rpm [rpm]	±3
Stirring element fastening	chuck
Chuck range diameter [mm]	0.5 - 10
Hollow shaft, inner diameter [mm]	11
Hollow shaft (push-through - when stopped)	yes
Fastening on stand	extension arm
Extension arm diameter [mm]	16
Extension arm length [mm]	220
Torque display	yes
Speed control	electronic
Nominal torque [Nm]	1
Torque measurement	trend
Deviation of torque measurement I [Ncm]	±6
Timer	yes
Timer display	LCD
Time setting range [min]	1 - 6000
Housing material	alu-cast coating / thermoplastic polymer
Clean room qualified	yes
Noise without element [dB(A)]	52
ISO Cleanroom Class (900rpm)	Class 7
ISO Cleanroom Class (1800rpm)	Class 8
Dimensions (W x H x D) [mm]	89 x 237 x 191
Weight [kg]	3.8
Permissible ambient temperature [°C]	5 - 40
Permissible relative humidity [%]	80
Protection class according to DIN EN 60529	IP 54
RS 232 interface	yes
USB interface	USB-C
Voltage [V]	100 - 240
Frequency [Hz]	50/60
Power input [W]	186