



designed for scientists



## EUROSTAR 100 control P4

/// Data Sheet

The extremely powerful laboratory stirrer EUROSTAR 100 control P4 with a removable wireless controller and a digital TFT display is especially suitable for highly viscous applications and provides a torque of up to 320 Ncm. It automatically adjusts the speed through microprocessor controlled technology within the speed range of 0/10 - 300 rpm. The stirrer comes equipped with a RS 232 and a USB interface to control and document all parameters. Furthermore, an integrated torque trend display is provided for the measurement of viscosity changes and its electronic safety circuit ensures automatic cut-off in an anti-stall or overload conditions. Continuous comparison of shaft speed to desired speed is maintained and variations are adjusted automatically. This guarantees a constant speed even with changes in viscosities of the sample.



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- Reverse function
- Multilingual TFT display
- Programmable functions
- Integrated temperature measurement
- Interval operation
- Timer function
- Adjustable safety circuit
- Locked function
- Infinitely adjustable speed
- Push-through agitator shafts
- Overload protection
- Short-term overload operation
- Quiet operation
- Error code Display
- H 67.60 temperature sensor and WH 11 WiCo holder included in delivery



## Technical Data

Stirring quantity max. per stirring position (H2O) [l]	100
Motor rating input [W]	174
Motor rating output [W]	142
Motor principle	Brushless DC
Speed display	TFT
Speed range [rpm]	10 - 300
Reversible direction of rotation	yes
Intermittent operation	yes
Viscosity max. [mPas]	100000
Output max. at stirring shaft [W]	100
Permissible ON time [%]	100
Torque max. at stirring shaft [Ncm]	320
Speed control	stepless
Setting accuracy speed [ $\pm$ rpm]	1
Deviation of speed measurement $n < 300$ rpm [ $\pm$ rpm]	3
Stirring element fastening	chuck
Connection for ext. temperature sensor	PT1000
Temperature display	yes
Chuck range diameter [mm]	0.5 - 10
Fastening on stand	extension arm
Extension arm diameter [mm]	16
Extension arm length [mm]	220
Torque display	yes
Nominal torque [Nm]	3.20
Torque measurement	trend
Deviation of torque measurement I [ $\pm$ Ncm]	30
Timer	yes
Timer display	TFT
Time setting range [min]	1 - 6000
Temperature measuring range [°C]	-10 - +350
Temperature measurement resolution [K]	0.1
Accuracy of temperature measurement [K]	$\pm 0.5$ + tolerance PT1000 (DIN IEC 751 Class A)
Limit deviation temperature sensor [K]	$\leq \pm (0.15 + 0.002 \times  T )$
Housing material	alu-cast coating / thermoplastic polymer
Communication distance (depend on building) max. [m]	150
Dimensions (W x H x D) [mm]	86 x 352 x 230
Weight [kg]	5.2
Permissible ambient temperature [°C]	5 - 40
Permissible relative humidity [%]	80
Protection class according to DIN EN 60529	IP 40
RS 232 interface	yes
USB interface	yes
Voltage [V]	230 / 115 / 100
Frequency [Hz]	50/60
Power input [W]	150