



designed for scientists



## MINISTAR 20 control package

/// Data Sheet

Package includes

MINISTAR 20 control

R 1342 Propeller stirrer, 4-bladed

R 1826 Plate stand

R 182 Boss head clamp

[www.ika.com](http://www.ika.com)

Subject to technical changes



## Technical Data

Stirring quantity max. per stirring position (H2O) [l]	5
Motor rating input [W]	32
Motor rating output [W]	22
Motor principle	Brushless DC
Speed display	LCD
Speed min. [rpm]	30
Speed min. [rpm]	0/30
Speed max. [rpm]	2000
Viscosity max. [mPas]	4000
Output max. at stirring shaft [W]	15.7
Permissible ON time [%]	100
Torque max. at stirring shaft [Ncm]	7.5
Torque max. at stirring shaft at 60 1/min (overload) [Ncm]	7.5
Torque max. at stirring shaft at 100 1/min [Ncm]	7.5
Torque max. at stirring shaft at 1.000 1/min [Ncm]	7.5
torque I max. [Ncm]	7.5
Speed range I (50 Hz) [rpm]	30 - 2000
Speed range I (60 Hz) [rpm]	30 - 2000
Speed control	Turning knob
Setting accuracy speed [ $\pm$ rpm]	1
Deviation of speed measurement $n > 300$ rpm [ $\pm$ %]	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 - 8
Hollow shaft, inner diameter [mm]	8.5
Hollow shaft (push-through - when stopped)	yes
Fastening on stand	extension arm
Extension arm diameter [mm]	13
Extension arm length [mm]	160
Torque display	yes
Speed control	electronic
Nominal torque [Nm]	0.075
Torque measurement	trend
deviation of torque measurement I [ $\pm$ Ncm]	3
Timer	yes
Timer display	LCD
Time setting range [min]	0 - 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]	60 x 173 x 136
Weight [kg]	1.18
Permissible ambient temperature [°C]	5 - 40



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Permissible relative humidity [%]	80
Protection class according to DIN EN 60529	IP 54
USB interface	yes
Voltage [V]	100 - 240
Frequency [Hz]	50/60
Power input [W]	32
DC Voltage [V=]	24
Current consumption [mA]	1300

