Data Sheet

MICROSTAR 15 control

The first compact and high-performance overhead stirrers with lifetime warranty. Suitable for low viscosities (750 - 8000mPas) and volumes (2-25l). A microprocessor-controlled operation keeps the speed range constant, depending on the model from 0/30 - 500/2000 rpm. Actual and set speed can be adjusted continously. The speed will remain constant even with changing viscosities. A torque trend measurement will show any changes in viscosities of the sample. An electronic safety circuit as well as a state-of-the-art vibration detection guarantees the stirrer to stop when an anomaly is detected. Operating and documenting all parameters, as well as updating the latest firmware are possible by the USB interface.

Chemically resitant housing
Display with glass surface
Clear LCD display
Adjustable vibration detection
PT 1000 temperature sensor connector
Lock key
Timer and counter function
Compact footprint
USB interface
Lifetime warranty

Accessories: R 1342 Propeller stirrer, 4-bladed, R 1345 Propeller stirrer, 4-bladed, R 1381 Propeller stirrer, 3-bladed, R 1382 Propeller stirrer, 3-bladed, R 1389 (PTFE-coated) Propeller stirrer, 3-bladed, R 1311 Turbine stirrer, R 1312 Turbine stirrer, R 1352 Centrifugal stirrer, R 1355 Centrifugal stirrer, R 1300 Dissolver stirrer, R 1303 Dissolver stirrer, R 1375 Paddle stirrer, R 1330 Anchor stirrer, R 1331 Anchor stirrer, R 3003 Spiral stirrer, R 3004 Blade stirrer, R 3004.1 Blade stirrer, H 67.60 Temperature sensor, stainless steel, H 70 Extension cable, BC 1000 Beaker cap, FK 1 Flexible coupling, R 182 Boss head clamp, R 270 Boss head clamp, R 271 Boss head clamp, RH 3 Strap clamp, RH 5 Strap clamp, R 1825 Plate stand, R 1826 Plate stand, R 1827 Plate stand, R 2722 H-Stand, R 2723 Telescopic stand, labworldsoft®

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]	1000
Reversible direction of rotation	no
Intermittent operation	no
Viscosity max. [mPas]	1500
Output max. at stirring shaft [W]	15.7
Permissible ON time [%]	100
Torque max. at stirring shaft [Ncm]	15

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Torque max. at stirring shaft at 60 1/min (overload) [Ncm]	15
Torque max. at stirring shaft at 100 1/min [Ncm]	15
Torque max. at stirring shaft at 1.000 1/min [Ncm]	15
torque I max. [Ncm]	15
Speed range I (50 Hz) [rpm]	30 - 1000
Speed range I (60 Hz) [rpm]	30 - 1000
Speed control	Turning knob
Setting accuracy speed [±rpm]	1
Deviation of speed measurement n > 300rpm [±%]	1
Deviation of speed measurement n < 300rpm [±rpm]	3
Stirring element fastening	chuck
Connection for ext. temperature sensor	PT1000
Temperature display	yes
Chuck range min. diameter [mm]	0.5
Chuck range max. diameter [mm]	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
Nominal torque [Nm]	0.15
Torque measurement	trend
deviation of torque measurement I [±Ncm]	3
Timer	yes
Timer display	LCD
Time setting range [min]	0 - 6000
Temperature measuring range min. [°C]	-10
Temperature measuring range max. [°C]	350
Temperature measurement resolution [K]	0.1
Accuracy of temperature measurement [K]	±0.5 + tolerance PT1000 (DIN IEC 751 Class A)
Limit deviation temperature sensor [K]	<= ± (0.15 + 0.002xITI)
housing material	alu-cast coating / thermoplastic polymer
clean room qualified	no
explosion proofed	no
communication distance (depend onbuilding) max. [m]	150
Dimensions (W x H x D) [mm]	60 x 123 x 110
Weight [kg]	1.26
Permissible ambient temperature [°C]	5 - 40
Permissible relative humidity [%]	80
Protection class according to DIN EN 60529	IP 54
RS 232 interface	no
USB interface	yes
Analog output	no
Voltage [V]	100 - 240
Frequency [Hz]	50/60
Power input [W]	32
DC Voltage [V=]	24
Current consumption [mA]	1300
Ident. No.	**0025001986**

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