



designed for scientists



MINISTAR 80 control

/// Data Sheet

The new MINISTAR series by IKA: Developed using the latest cutting-edge technology, this high-tech overhead stirrer with its compact design is ideal for special applications.

Combining high performance with particular excellence, they require minimum space and come with a lifetime guarantee. See for yourself:

"The Power Pack" in the high-tech mini class, small and as strong as an ox, reaches up to 500 RPM!

- Hardened glass enclosed, fast response display for maximum visibility and chemical resistance



- State-of-art vibration sensors detect deviations from permissible thresholds and automatically stop the process
- Clear display for all essential information at a glance
- Integrated timer / counter for the control of kinetic sensitive reactions and reminders
- Viscosities up to 60,000 mPas and volumes of up to 50 l
- Continuously adjustable speed between 0/30 500 rpm
- USB interface, e.g. for documenting parameters using labworldsoft® or installing firmware updates
- Intuitive and simple handling; touch-sensitive surface for long service life
- Temperature reading on display
- Chemical resistant housing
- Key lock function
- Microprocessor-controlled speed governor for constant rotational speed, even with changes in viscosity



Technical Data

| Technical Data | |
|--|--|
| Stirring quantity max. per stirring position (H2O) [I] | 50 |
| Motor rating input [W] | 60 |
| Motor rating output [W] | 46 |
| Motor principle | Brushless DC |
| Speed display | LCD |
| Speed min. [rpm] | 30 |
| Speed min. [rpm] | 0/30 |
| Speed max. [rpm] | 500 |
| Viscosity max. [mPas] | 60000 |
| Output max. at stirring shaft [W] | 42 |
| Permissible ON time [%] | 100 |
| Torque max. at stirring shaft [Ncm] | 80 |
| 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 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] | 0.8 |
| Torque measurement | trend |
| deviation of torque measurement I [±Ncm] | 8 |
| Timer | yes |
| Timer display | |
| Time setting range [min] | 0 - 6000 |
| Temperature measuring range [°C] | -10 - 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] | $\leq \pm (0.15 \pm 0.002 \text{x} \text{T})$ |
| housing material | alu-cast coating / thermoplastic polymer |
| communication distance (depend onbuilding) max. [m] | 150 |
| Dimensions (W x H x D) [mm] | 70 x 193 x 154 |
| Weight [kg] | 1.72 |
| Permissible ambient temperature [°C] | 5 - 40 |
| Permissible relative humidity [%] | 80 |
| Protection class according to DIN EN 60529 | IP 54 |
| USB interface | |
| Voltage [V] | yes 100 - 240 |
| Frequency [Hz] | 50/60 |
| Power input [W] | 69 |
| i owei mpar [w] | |



| DC Voltage [V=] | 24 |
|--------------------------|------|
| Current consumption [mA] | 2900 |



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