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## MINISTAR 20 digital

/// Data Sheet

The space-saving high performers from IKA MICROSTAR and MINISTAR series have been complemented by additional models. The new and easy-to-use stirrers convince with perfect basic functionalities, as well as with a compact design.

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

### Compact design

The reduced design and the focus on the most essential aspects make the new IKA MICROSTAR and MINISTAR



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stirrers reliable laboratory companions.

#### Constant torque

All models of the IKA MICROSTAR and MINISTAR series guarantee a constant torque over the entire rpm range. The new devices are available in six different versions with rpms of up to 2,000 rpm and a torque of up to 80 Ncm.

#### Ease of operation

Operation takes place using a stable rotary knob. The display clearly shows the rotational speed.

#### Rapid updates

Regular software updates can be undertaken rapidly and simply via the USB interface.



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## Technical Data

|                                                                     |                                          |
|---------------------------------------------------------------------|------------------------------------------|
| Stirring quantity max. per stirring position (H <sub>2</sub> O) [l] | 15                                       |
| Motor rating input [W]                                              | 60                                       |
| Motor rating output [W]                                             | 46                                       |
| Motor principle                                                     | Brushless DC                             |
| Speed display                                                       | LED                                      |
| Speed range [rpm]                                                   | 0/50 - 2000                              |
| Viscosity max. [mPas]                                               | 10000                                    |
| Output max. at stirring shaft [W]                                   | 42                                       |
| Permissible ON time [%]                                             | 100                                      |
| Torque max. at stirring shaft [Ncm]                                 | 20                                       |
| Speed adjustment                                                    | 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                                    |
| Chuck range diameter [mm]                                           | 0.5 - 8.2                                |
| 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                                      |
| Nominal torque [Nm]                                                 | 0.2                                      |
| Timer display                                                       | none                                     |
| Housing material                                                    | alu-cast coating / thermoplastic polymer |
| Dimensions (W x H x D) [mm]                                         | 70 x 193 x 147                           |
| Weight [kg]                                                         | 1.56                                     |
| Permissible ambient temperature [°C]                                | 5 - 40                                   |
| 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]                                                     | 69                                       |
| Power input standby [W]                                             | 0.5                                      |
| DC Voltage [V=]                                                     | 24                                       |
| Current consumption [mA]                                            | 2900                                     |