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## EUROSTAR 400 high torque digital

/// Data Sheet

The EUROSTAR 400 high torque digital is a powerful overhead motor for demanding mixing tasks up to 150 liters (H<sub>2</sub>O) and viscosities up to 100 000 mPas. Its maximum torque of 400 Ncm guarantees reliable and powerful performance.

The innovative torque trend measurement shows the viscosity trend of the sample (+/- 6 Ncm accuracy). The torque trend is shown directly on the display and provides important feedback on the mixing process. The desired stirring speed 10 - 300 rpm is always guaranteed even with changes to the torque demand or viscosity of the material.

Maximum safety and reliability

- User-friendly: Large LCD display shows all parameters at a glance



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- Keyless Chuck: allows the mixing tools to be changed with one hand, without additional tools
- Lock key: Prevents accidental changes to settings
- Safety Circuits: automatic safety shutoff from stirring impeller blockage or user specified torque limit
- Protection class IP 54: Resistant to splash water and steam for reliable use in demanding environments
- Brushless motor: Durable, clean and quiet in operation

#### Connectivity and documentation

- USB and RS232 interfaces
- Compatible with labworldsoft® laboratory software for integration into digital workflows and documentation of processes

#### Features

- 23% smaller size than previous models
- Torque Trend Measurement
- Keyless Chuck
- IP 54
- Timer/Counter function
- Lock Key
- LCD Display
- USB Interface
- RS 232



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## Technical Data

|                                                                     |                                          |
|---------------------------------------------------------------------|------------------------------------------|
| Stirring quantity max. per stirring position (H <sub>2</sub> O) [l] | 150                                      |
| Motor rating input [W]                                              | 174                                      |
| Motor rating output [W]                                             | 142                                      |
| Motor principle                                                     | Brushless DC                             |
| Speed display                                                       | LCD                                      |
| Speed range [rpm]                                                   | 10 - 300                                 |
| Viscosity max. [mPas]                                               | 100000                                   |
| Output max. at stirring shaft [W]                                   | 100                                      |
| Permissible ON time [%]                                             | 100                                      |
| Torque max. at stirring shaft [Ncm]                                 | 400                                      |
| Torque max. at stirring shaft at 10-260 rpm [Ncm]                   | 400                                      |
| Torque max. at stirring shaft at 260-300 rpm [Ncm]                  | 400-350                                  |
| Speed adjustment                                                    | stepless                                 |
| Setting accuracy speed [rpm]                                        | ±1                                       |
| Deviation of speed measurement n > 300rpm [%]                       | ±1                                       |
| Stirring element fastening                                          | chuck                                    |
| Chuck range diameter [mm]                                           | 0.5 - 10                                 |
| Hollow shaft, inner diameter [mm]                                   | 11                                       |
| Hollow shaft (push-through - when stopped)                          | yes                                      |
| Fastening on stand                                                  | extension arm                            |
| Extension arm diameter [mm]                                         | 16                                       |
| Extension arm length [mm]                                           | 220                                      |
| Torque display                                                      | yes                                      |
| Speed control                                                       | electronic                               |
| Nominal torque [Nm]                                                 | 4                                        |
| Torque measurement                                                  | trend                                    |
| Deviation of torque measurement I [Ncm]                             | ±30                                      |
| Timer                                                               | yes                                      |
| Timer display                                                       | LCD                                      |
| Time setting range [min]                                            | 1 - 6000                                 |
| Housing material                                                    | alu-cast coating / thermoplastic polymer |
| Dimensions (W x H x D) [mm]                                         | 89 x 240 x 191                           |
| Weight [kg]                                                         | 3.8                                      |
| Permissible ambient temperature [°C]                                | 5 - 40                                   |
| Permissible relative humidity [%]                                   | 80                                       |
| Protection class according to DIN EN 60529                          | IP 54                                    |
| RS 232 interface                                                    | yes                                      |
| USB interface                                                       | USB-C                                    |
| Voltage [V]                                                         | 100 - 240                                |
| Frequency [Hz]                                                      | 50/60                                    |
| Power input [W]                                                     | 150                                      |