



## **I-MAG Industry stirrer**

/// Data Sheet

I-MAG is a powerful yet compact magnetic stirrer for applications in laboratory and production environments.

In combination with the I-MAG SP set-up frames for large vessels, which are available as accessories, up to 300 liters of water can be mixed efficiently. The wired operating unit (controller) ensures convenient handling and simple integration into e.g. process engineering systems.

The robust drive unit (IP protection class 64) consists of the high-torque and wear-free motor and the magnetic coupling with high-performance neodymium magnets. This enables the effective mixing of viscous media as well as mixing in











## designed for scientists

vessels with a larger distance between the installation surface and the stirring rod (e.g. double-walled containers or vessels with insulated bottoms).

In order to reliably achieve high speeds even under difficult conditions, I-MAG has an adjustable start-up speed that prevents the magnetic stirring bar from breaking off during the acceleration phase. Process reliability is additionally achieved by the integrated detection of the magnetic stirring bar coupling. In the event of a tear-off or failure of the magnetic coupling, the user is informed via the operating unit.

The I-MAG controller has a variety of digital and analog interfaces. Equipped in this way, the device can, for example, be controlled with a foot switch or operating button or can be integrated into a network via USB/LAN/WIFI. With appropriate software (for example labworldsoft® 6), I-MAG can thus be integrated into an automated plant process.

#### Further features:

- Drive with very high IP protection class 64: unrestricted use even under harsh environmental conditions thanks to enclosed stainless steel housing
- Electronically controlled motor for very stable speeds even under load for reproducible results
- Secure and ergonomic mounting of the controller directly on the vessel or with a stand rod using the I-MAG UHC universal holder (available as accessory)
- Multilingual menu navigation

Dimensions (W x H x D): Drive unit: 260 x 70 x 300 mm Control unit: 165 x 65 x 335 mm









# designed for scientists

### **Technical Data**

| Technical Data  |   |
|---|---|
| Number of stirring positions  | 1   |
| Speed deviation [rpm]   | ±10                                       |
| Stirring quantity max. per stirring position (H2O) [I]                      | 300                                       |
| Maximun load [kg]   | 75  |
| Stirring quantity max. (without extension platform I-MAG SP) [I]            | 50  |
| Motor rating output [W]   | 90  |
| Direction of rotation   | right / left                              |
| Speed display set-value   | TFT                                       |
| Speed display actual-value  | TFT                                       |
| Speed adjustment  | Turning knob                              |
| Speed range [rpm]   | 100 - 1500                                |
| Setting accuracy speed [rpm]  | 10  |
| Stirring bar length [mm]  | 30 - 140                                  |
| Self-heating of the set-up plate by max. stirring (RT:22°C/duration:1h) [K] | +26                                       |
| Operating temperature min. (with external cooling) [°C]                     | 5   |
| Operating temperature max. (with external heating) [°C]                     | 70  |
| Set-up plate material   | stainless steel 1.4301                    |
| Set-up plate dimensions [mm]  | 260 x 260                                 |
| Automatic reverse rotation  | yes                                       |
| Intermittent mode   | yes                                       |
| Break detection stirring bar  | yes                                       |
| Timer   | yes                                       |
| Timer display   | TFT                                       |
| Time setting range [min]  | 1 - 14399                                 |
| Programs  | yes                                       |
| Analog pedal control  | yes                                       |
| Cable from controller to device [mm]  | 2000                                      |
| Dimensions (W x H x D) [mm]   | 260 x 70 x 300                            |
| Weight [kg]   | 8   |
| Permissible ambient temperature [°C]  | 5 - 40                                    |
| Permissible relative humidity [%]   | 80  |
| Protection class according to DIN EN 60529                                  | IP 64 (Drive unit) / IP 22 (Control unit) |
| RS 232 interface  | yes                                       |
| USB interface   | yes                                       |
| WiFi Interface  | yes                                       |
| Analog output   | yes                                       |
| Analog input  | yes                                       |
| Voltage [V]   | 100 - 240                                 |
| Frequency [Hz]  | 50/60                                     |
| Power input [W]   | 140                                       |
| Power input standby [W]   | 5   |
|   |   |



