

TECHNICAL DATA SHEET

ALab™ DMS5-340M Magnetic Hotplate Stirrer

Magnetic hotplate stirrer · Ø135 mm ceramic-coated plate · RT–340 °C · 50–1500 rpm · 20 L max. stirring volume (H₂O)



ACS Material ALab™ DMS5-340M Magnetic Hotplate Stirrer

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SECTION I

Product Overview

The ALab™ DMS5-340M Magnetic Hotplate Stirrer uses a strong magnetic field and is specified as suitable for viscous samples. A Ø135 mm (5 inch) ceramic-coated aluminium plate heats from room temperature to 340 °C in 1 °C steps while a brushless DC motor stirs from 50 to 1500 rpm in 1 rpm steps, with a specified maximum stirring volume of 20 L of water and a maximum stirrer size [length] of 80 mm. Speed, temperature and timer information share one LCD. Three selectable heating modes are listed: A rapid, B standard and C stable. Thermal protection includes overheating protection at 420 °C, a waste-heat warning above 50 °C, and a settable safety temperature. The stirrer supports a PT1000 external temperature sensor with a specified accuracy of ±0.2 °C for measuring liquid temperature.

SECTION II

Core Advantages

- **Strong magnetic field** — specified as suitable for viscous samples
- **PT1000 sensor support** — specified accuracy ±0.2 °C, for measuring liquid temperature
- **20 L specified stirring volume** — specified maximum stirring volume for water (H₂O), from a Ø135 mm plate; max. stirrer size (length) 80 mm
- **Timer keeps stirring** — at zero, heating stops and stirring continues

SECTION III

Specifications

Specifications	
Working Plate / Motor	Ø135 mm (5 inch) · aluminium with ceramic coating · brushless DC motor, 10 W, 1 stirring position
Speed / Display / Timer	50–1500 rpm, increment 1 rpm · LCD (speed, temperature, time) · timer 1 min–99 h 59 min
Max. Stirring Volume [H ₂ O]	20 L · maximum stirrer size [length] 80 mm
Heating Temperature Range	Room temperature–340 °C, increment 1 °C · modes A / B / C
Temperature Accuracy / Sensor	±1 °C (<100 °C) · ±1% (>100 °C) on heating liquid · display ±0.1 °C · PT1000 external sensor supported, ±0.2 °C
Thermal Protection and Safety	Overheating protection 420 °C · waste-heat warning 50 °C · settable safety temperature · two independent monitoring circuits · error stop on overheat or sensor failure · power cut-off on short circuit
Connection / Protection Class	RS232 · remote control via PC connection · IP42 (specification table); see note
Power Requirements	100–120 / 200–240 V, 50/60 Hz · 650 W total · 600 W heating output
Dimensions [L×W×H] / Weight	270 × 175 × 98 mm · 2.2 kg · ambient 5–40 °C, 80% RH
Magnetic field	Strong magnetic field — specified as suitable for viscous samples. Coupling behaviour with a specific medium is not specified.

Configuration and scope of supply

- **Standard package contents: confirmed in the final sales configuration and order documentation**
- **Request a written scope of supply with your quotation**
- **Connection: RS232 · remote control via PC; protocol and cable**
- **Sensor: supports PT1000 external temperature sensor, specified accuracy ± 0.2 °C**
- **Electrical supply: 100–120 / 200–240 V, 50/60 Hz, 650 W**
- **Options: accessory range exists; part numbers confirmed on request**

SECTION IV**Applications**

Typical applications for the ALab™ DMS5-340M Magnetic Hotplate Stirrer include:

- **Viscous sample stirring** — the specified application for the strong magnetic field
- **Heated stirring to 340 °C** — with liquid temperature measured by a supported PT1000 sensor
- **Chemical synthesis laboratories** — colleges and universities, scientific research and enterprise laboratories
- **Timed procedures** — 1 min to 99 h 59 min; heating stops at countdown end, stirring continues

Chemical compatibility with specific reagents is not specified in the current technical data; evaluate suitability for your substance, concentration, temperature and contact time.

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