

TECHNICAL DATA SHEET

ALab™ MX-S Vortex Mixer

Variable speed 0–3000 rpm · orbital motion, 4 mm orbital diameter · touch or continuous operation · electronic speed control



ALab™ MX-S Vortex Mixer

The ALab™ MX-S is a variable speed vortex mixer with Touch operation and Continuous run types for laboratory sample mixing. Image shown for reference.

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SECTION I

Product Overview

The ALab™ MX-S Vortex Mixer is a variable speed vortex mixer with a variable speed of 0 to 3000 rpm for gentle shaking to rapid mixing of samples. Electronic speed control maintains constant speed even during changes in load. The steel base with specially designed vacuum suction feet provides stability and dampens vibration, and the MX-S has a robust aluminum-cast construction.

The MX-S has an orbital mixing motion with a 4 mm orbital diameter, a scale speed display, and touch or continuous operation mode. It uses a shaded pole motor (motor rating input 58 W, motor rating output 10 W). Published electrical specifications are: voltage, frequency, 100–120 V / 200–240 V, 50/60 Hz; power, 60 W. It includes a standard top head, the VT1.1 standard top, for mixing a single test tube or other small vessel up to 30 mm in diameter; tube adapters, a platform pad, a universal top plate, a microplate clamp, an ampule/tube attachment, and an Erlenmeyer flask attachment are listed by catalog number.

SECTION II

Core Advantages

- **Variable speed 0–3000 rpm** — gentle shaking to rapid mixing of samples; scale speed display
- **Electronic speed control** — maintains constant speed even during changes in load
- **Steel base, vacuum suction feet** — provides stability and dampens vibration; robust aluminum-cast construction
- **Touch or continuous** — run type: Touch operation / Continuous
- **Standard top head** — VT1.1 standard top (default) for a single test tube or other small vessel up to 30 mm in diameter
- **Tubes, flasks & plates** — tube adapters, platform pad, universal top plate, microplate clamp, ampule/tube and Erlenmeyer flask attachments

SECTION III

Specifications

Technical data — MX-S

Specifications	
Brand	ALab™ by ACS Material
Product Name	ALab™ MX-S Vortex Mixer
Model	MX-S
SKU #	ALMXS000
Voltage, Frequency	100–120 V / 200–240 V, 50/60 Hz
Power	60 W
Mixing motion	Orbital
Orbital diameter	4 mm
Motor type	Shaded pole motor
Motor rating input	58 W
Motor rating output	10 W
Speed range	0–3000 rpm
Speed display	Scale
Run type	Touch operation / Continuous
Dimension [W × H × D]	127 × 130 × 160 mm
Weight	2.0 kg
Permissible ambient temperature	5–40 °C
Permissible relative humidity	80% RH
Protection class	IP20
Standard Top (Default)	VT1.1 standard top (Cat. No. 18900034)

Accessories — MX-S

Accessories		
Model	Cat. No.	Description
VT1.1	18900034	Standard top (default), for <Ø30 mm tubes and small vessels
VT1.2	18900044	Tube holding rod, used with tube adapters
VT1.3	18900505	Universal top plate, Ø100 mm; includes 4 vacuum chuck
VT1.3.1	18900020	Tube adapter, for 48 test tubes, Ø6 mm (1 mL)
VT1.3.2	18900021	Tube adapter, for 15 test tubes, Ø10 mm (1.5–2 mL)
VT1.3.3	18900022	Tube adapter, for 16 test tubes, Ø12 mm (5 mL)
VT1.3.4	18900023	Tube adapter, for 8 test tubes, Ø16 mm (10 mL)
VT1.3.5	18900024	Tube adapter, for 8 test tubes, Ø20 mm (10–15 mL)
VT1.3.6	18900043	Platform pad, Ø99 mm, multiple small tubes and vessels
VT1.3.7	18900158	Vacuum chuck, made of rubber
VT1.3.8	18900395	Tube adapter, for 24 holes test tubes, Ø10 mm (1.5–2 mL)
VT1.3.9	18204185	PCR tube adapter, for 56 test PCR tubes, strips of 8, Ø5 mm (0.1–0.5 mL)
VT1.3.10	18900855	Tube adapter, for 4 holes test tubes, Ø28 mm (50 mL)
VT1.3.11	18900862	Tube adapter, 12 × Ø9.8 mm + 12 × Ø6.6 mm + 12 × Ø5 mm (1.5/2.0/0.5/0.2 mL)
VT1.3.12	18900875	Large platform multi-specimen test tube adapter, 44 holes × Ø5 mm + 55 holes × Ø6.6 mm + 30 holes × Ø9.8 mm (1.5/2.0/0.5/0.2 mL)
PS1.0	18204342	Microplate clamp, includes rectangle PCR tube adapter
VT1.4	18204566	Ampule/tube attachment, 4 pc ampule/tube (0.2–15 mL)
VT1.5	18204561	Erlenmeyer flask attachment, 100–250 mL; operating speed: 0–1500 rpm

Scope of delivery

- **Standard configuration:** one MX-S main unit with one VT1.1 standard top (Cat. No. 18900034).
- **Additional accessories:** specify separately in the quotation. The accessory table describes compatible configurations, not the standard packing list.

SECTION IV

Applications

For laboratory mixing of single test tubes and small vessels, from gentle shaking to rapid mixing. Application of accessories (adjustable speed model): Touch mode (high speed area) — VT1.1; VT1.2 + VT1.3.1 to VT1.3.5; VT1.3 + VT1.3.6. Continuous mode (low speed area) — VT1.1; VT1.3 + VT1.3.1 to VT1.3.5. The VT1.5 Erlenmeyer flask attachment (100–250 mL) has an operating speed of 0–1500 rpm. When replacing the tray, first remove the standard head that comes with it for replacement.

Product value: a variable speed of 0–3000 rpm with electronic speed control, an orbital motion with a 4 mm orbital diameter, touch or continuous operation, and a shaded pole motor in a 127 × 130 × 160 mm (W × H × D), 2.0 kg instrument. Confirm the accessories and vessel types against your application requirements before ordering.

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