

# Laboratory Flask Mixer



## LM100/110/200/210 Series

Max. Speed Range 50 ~1000rpm

Max. Torque 0.1N·m



LM100

LM200  
with Digital Display

LM Series compact design flask mixer features integrated drive and stirring seal allowing direct installation of flask and stirring in a vacuum and sealed state. No time-consuming shaft alignment required. Its strong stirring power is perfect for samples of high volume and high viscosity.

LM100/110 is designed with manual type rotation speed while LM200/210 is equipped with digital indicator.

- Wide range rotation speed of 50-1000 rpm
- Capable of vacuuming up to 399.9Pa without impairing rotation efficiency
- Directly attachable to a three-neck flask 24/40, 29/42 optional
- Maintenance free and superior DC brushless motor
- Belt drive transmission minimizes noise and vibration
- Variety of stirring shafts and blades available to handle small to large volume samples
- Fluorine rubber seal as standard for shaft seal, superior chemical resistant Teflon® rubber seal available as option
- At the flask joint, FKM o-ring is used as standard, superior chemical resistant Kalrez® o-ring available as option
- Equipped with 24/40 rotary joint, 29/42 optional
- Capable of AC100-240 by changing power cord

### Specifications

Model	LM100	LM110	LM200	LM210
Operating temp. range	5°C~35°C			
Operating speed range* <sup>1</sup>	50~1000rpm			
Max. torque	0.1N·m			
Max. ultimate vacuum	≤399.9Pa			
Exterior	PBT /ADC12 (Surface treatment: Baking finish)			
Motor	DC brushless motor 30 W			
Power switch	Speed control dial with switch (stepless adjustment)			
Rotation speed indication	None		3 digits ×10 rpm (Digital display)	
Operation indicator lamp	LED (Green)		None (Confirm operation with speed indicator)	
Adaptable flask size	50~5000ml			
Joint size	TS24/40			
Chuck	ø8mm (ø7.9~7.95)			
Sealing material	PTFE (rotary joint) / FKM (oil seal,o ring)			
Safety device	Overload protection function* <sup>2</sup> , coupling cover (hair entanglement prevention structure), slow start function			
External dimensions	W69 × D108 × H222 mm			
Power source	Single phase AC100V~AC120V 50/60Hz 1A	Single phase AC200V~AC220V 50/60Hz 1A	Single phase AC100V~AC120V 50/60Hz 1A	Single phase AC200V~AC220V 50/60Hz 1A
Power cord	A type 3P (AC115V 50/60Hz)	O type 3P (AC220V 50/60Hz)	A type 3P (AC115V 50/60Hz)	O type 3P (AC220V 50/60Hz)
Weight	700 g (main body only)			
Included accessories	Hexagon socket head cap screw & wrench, AC adapter, 3m power cord, Coupling cover, handle(arbor), flask clip			
Operational accessories* <sup>3</sup>	Stirring shaft (PTFE, stainless steel, glass), propellers (different types and sizes), stand			

\*1 Max. revolutions differ depending on the combination of oil seal + stirring shaft  
50~1000rpm: FKM oil seal + PTFE stirring shaft / PTFE oil seal + glass or SUS stirring shaft  
50~300rpm: FKM oil seal + glass or SUS stirring shaft / PTFE oil seal + PTFE stirring shaft

\*2 When load exceeding maximum torque is applied, current limit circuit automatically controls the current to protect the motor

\*3 Sold separately

### LM Set Guide

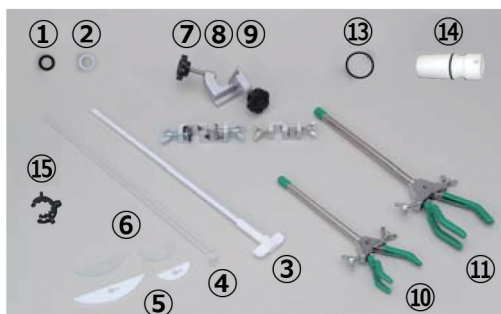
LM-100A	LM-100 SET MAIN BODY, STAND, PTFE STIRRING BAR W/ PROPELLER L450mm×φ50mm, BURETTE CLAMP φ9.5~φ29mm and Double Opening Clamp 3~55mm.
LM-110A	LM-110 SET MAIN BODY, STAND, PTFE STIRRING BAR W/ PROPELLER L450mm×φ50mm, BURETTE CLAMP φ9.5~φ29mm and Double Opening Clamp 3~55mm
LM-200A	LM-200 SET MAIN BODY, STAND, PTFE STIRRING BAR W/ PROPELLER L450mm×φ50mm, BURETTE CLAMP φ9.5~φ29mm and Double Opening Clamp 3~55mm
LM-210A	LM-210 SET MAIN BODY, STAND, PTFE STIRRING BAR W/ PROPELLER L450mm×φ50mm, BURETTE CLAMP φ9.5~φ29mm and Double Opening Clamp 3~55mm

## LM200 with BM100 Water Bath



### Accessories

Product code	Model	Product name	No.	Specification
231640	OLM60	FKM oil seal	①	FKM Black, 2pcs/set (standard)
231641	OLM62	PTFE oil seal	②	Teflon®, 2pcs/set
231615	OLM10	PTFE stirring shaft with blade	③	L350×ø30mm, 100 ~ 300mL
231616	OLM12			L450×ø30mm, 100 ~ 500mL
231617	OLM14			L450×ø50mm, 200 ~ 1000mL
231618	OLM16			L450×ø80mm, 300 ~ 1000mL
231619	OLM18			L600×ø80mm, 1000 ~ 1500mL
231620	OLM20			L600×ø100mm, 1000 ~ 5000mL
231621	OLM22			L600×ø120mm, 3000 ~ 5000mL
231622	OLM24	Glass stirring shaft	④	L350mm
231623	OLM26			L400mm
231624	OLM28			L530mm
231625	OLM30	PTFE half-moon blade	⑤	ø40×16×t3mm
231626	OLM32			ø50×17×t3mm, 100 ~ 500mL
231627	OLM34			ø60×17×t4mm, 500 ~ 5000mL
231628	OLM36			ø100×17×t4mm, 1000 ~ 5000mL
231629	OLM38			ø125×30×t5mm, separable flask
231630	OLM40	Glass half-moon blade	⑥	ø50×17×t3.3mm, 100 ~ 5000mL
231631	OLM42			ø80×17×t3.8mm, 500 ~ 5000mL
231632	OLM44	Burette clamp (muff)	⑦	ø5 ~ ø13mm
231633	OLM46	Burette clamp (muff)	⑧	ø6 ~ ø17mm
231634	OLM48	Burette clamp (muff)	⑨	ø9.5 ~ ø29mm
231635	OLM50	Double opening clamp	⑩	Range 3~55 mm, ø10mm, 50mL~3000mL
231636	OLM52	Double opening clamp	⑪	Range 3~80 mm, ø12mm, 50mL~5000mL
231086	--	Y stand	⑫	H725×ø25, Leg W400 (Internal 310mm) × 420mm
231642	OLM64	FFKM o ring	⑬	Kalrez® 29/42
231643	OLM66			Kalrez® 24/40
LT00038897	--	FKM o ring	⑭	29/42
LT00038898	--			24/40 (standard)
231639	OLM58	24/40 rotary joint seal set	⑮	Set of oil seal, o ring etc.
231644	OLM68	29/42 rotary joint seal set		Set of oil seal, o ring etc.
231637	OLM54	Flask clip	⑮	2 pcs set for 29/42
231638	OLM56	Flask clip		2 pcs set for 24/40



## O ring and Oil seal Comparison Table of Chemical Resistance

Chemical	FKM O ring + FKM oil seal (Standard)	FFKM O ring + PTFE oil seal (Option)
Acetone	D	A
Acetone 60°C	D	A
Hydrochloric acid (10%)	A	A
Hydrochloric acid (10%) 70°C	A	A
Hydrochloric acid (20%)	A	A
Hydrochloric acid (20%) 80°C	A	A
Hydrochloric acid (36%)	A	A
Hydrochloric acid (36%) 70°C	A	A
Xylene	A	A
Chloroform	B	A
Acetic acid (10%)	D	A
Acetic acid (100%)	D	A
Acetic acid (25%)	D	A
Acetic acid (50%)	D	A
Acetic acid (50%) 70°C	D	A
Acetic acid (anhydrous)	D	A
Tetrahydrofuran	D	A
Toluene	C	A
Pyridine	D	A
Hexane	A	A
Benzene	C	A
Benzene 70°C	C	A

A: Good B: Usable based on a condition C/D: Unusable

### Related Products

MFD800 + BOG oil bath +  
LM200 flask mixer



MFH800 + OA167 aluminum block +  
LM100 flask mixer