

Laboratory Flask Mixer

LM100/200

Operating speed range 50~1000rpm*1

Rotation speed indication 3-digit ×10 rpm (Digital display) LM200

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 is designed with manual type rotation speed while LM200 is equipped with digital indicator
- Wide range rotation speed of 50-1000 rpm
- Capable of vacuuming up to 399.9Pa without impairing rotation efficiency
- It can be used from AC100-240V by changing the power cord

Built-in example



Specifications

Product code	231527	231528
Model	LM100	LM200
Operating temp. range	5°C~35°C	
Operating speed range	50~1000rpm*1	
Max. torque	Approx. 0.1N·m	
Max. ultimate vacuum	Less than 399.9Pa	
Exterior	PBT /ADC12 (Surface treatment: Baking finish)	
Motor	DC brushless motor 30W	
Rotation adjustment	Volume with power off point switch	
Rotation speed indication	None	3-digit ×10 rpm (Digital display)
Operation indicator lamp	LED (Green)	None (Confirm operation with rotation speed indicator)
Adaptable flask size	50~5000ml	
Joint size	Φ29/42	
Applicable stirring shaft	Exclusive stirring shaft	
Applicable stirring shaft outer diameter (Chuck)	φ8mm (ø7.9~7.95)	
Sealing material	PTFE (rotary joint) / FKM (oil seal, o ring)	
Safety device	Overload protection function, Coupling cover (wraparound prevention), Slow start function	
External dimensions	W69×D108×H222 mm	
Power source (50/60 Hz)	AC100V~AC120V Single phase 1A (up to 240V by changing the power cord)	
Weight	700 g (main body only)	
Included accessories	Arbor (φ12mm), M5 hexagon socket head screw, Hexagonal wrench, AC adapter, 3m power cord, Flask clip (Φ29/42), Coupling cover (built into the body)	

*1 When the FKM oil seal is combined with a glass or stainless steel stirring shaft, or when the PTFE oil seal is combined with a PTFE stirring shaft, the operating speed is 50 to 300 rpm.

Example of anhydrous reaction system with nitrogen gas substitution



Product name	Model	Q'ty	Product code
Flask mixer	LM200	1	231528
Oil bath	BO601	1	222118
PTFE stirring shaft (with blades)	OLM14	1	231617
Burette clamp (muff)	OLM46	2	231633
Double opening clamp	OLM50	1	231635
Cooling water circulator	CF302	1	221593
Diaphragm pump	PG201	1	255158
Three-neck flask 500mL	sold separately		
Glass dispensing tube			
Thermometer, thermometer folder			
Piping etc.			

*The above system example is a set of oil bath and CF302

Comparison of chemical resistance of O-rings and oil seals

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

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

Chemical	FKM O ring + FKM oil seal (Standard)	FFKM O ring + PTFE oil seal (Option)
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

*This is a chemical resistance test by immersion. This product is to be used in a gas atmosphere.

Optional Items

Many stirring shafts and stirring blades are available for small to large volumes.

The agitation seal can be selected from ¥29/42 or ¥24/40.

The shaft seal can be selected in Teflon[®] for its excellent chemical resistance.

The O-ring for the agitation seal can be selected from Kalrez[®] for its excellent chemical resistance.



Optional Items

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