Laboratory Flask Mixer

LM100/110/200/210 Series

Max. Speed Range

Max. Torque

0.1N•m



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

Weight 700 g (main body only) Hexagon socket head cap screw & wrench, AC adapter, 3m power cord, Coupling cover, handle(arbor), flask clip	Model	LM100	LM110	LM200	LM210		
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*², coupling cover (hair entanglement prevention structure), slow start function External dimensions W69 × D108 × H222 mm Power source Single phase AC100V~AC120V 50/60Hz 4C220V 50/60Hz 1A Single phase AC200V~AC220V 50/60Hz 1A Single phase AC200V~AC220V 50/60Hz 1A AC200V~AC220V 50/60Hz 1A O type 3P (AC115V 50/60Hz) 50/60Hz 1A O type 3P (AC115V 50/60Hz) 50/60Hz) 50/60Hz) O type 3P (AC115V 50/60Hz) 50/60Hz) 50/60Hz) O type 3P (AC115V 50/60Hz) 50/60Hz) 50/60Hz) 50/60Hz O type 3P (AC115V 50/60Hz) 50/60Hz) 50/60Hz O type 3P (AC115V 50/60Hz) 50/60Hz) 50/60Hz O type 3P (AC115V 50/60Hz) 50/60Hz O type 3P (AC115V 50/60Hz) 50/60Hz <td< td=""><td>Operating temp. range</td><td colspan="6">5°C~35°C</td></td<>	Operating temp. range	5°C~35°C					
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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*2, coupling cover (hair entanglement prevention structure), slow start function External dimensions W69 × D108 × H222 mm Power source Single phase AC100V~AC120V 50/60Hz 1A Power cord Atype 3P (AC115V 50/60Hz) Of type 3P (AC220V 50/60Hz) Atype 3P (AC215V 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	Max. ultimate vacuum	≤399.9Pa					
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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*2, 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 AC200V~AC220V 50/60Hz 1A Power cord A type 3P (AC115V 50/60Hz) (AC115V 50/60Hz) (AC115V 50/60Hz) O type 3P (AC220V 50/60Hz) (AC115V 50/60Hz) O type 3P (AC220V 50/60Hz) 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	Power switch	Speed control dial with switch (stepless adjustment)					
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Sealing material PTFE (rotary joint) / FKM (oil seal,o ring) Overload protection function*2, coupling cover (hair entanglement prevention structure), slow start function External dimensions W69 × D108 × H222 mm Single phase AC100V~AC120V 50/60Hz 1A Single phase AC200V~AC220V 50/60Hz 1A Power cord A type 3P (AC115V 50/60Hz) (AC115V 50/60Hz) Veight Coupling cover (hair entanglement prevention structure) Single phase AC200V~AC220V 50/60Hz 1A Single phase AC200V~AC120V 50/60Hz 1A Single phase AC200V~AC120V 50/60Hz 1A O type 3P (AC215V 50/60Hz) (AC215V 50/60Hz) Veight Too g (main body only) Hexagon socket head cap screw & wrench, AC adapter, 3m power cord, Coupling cover, handle (arbor), flask clip	Joint size	TS24/40					
Safety device Overload protection function*2, coupling cover (hair entanglement prevention structure), slow start function External dimensions W69 × D108 × H222 mm Single phase AC100V~AC120V 50/60Hz 1A Single phase AC200V~AC220V 50/60Hz 1A Power cord A type 3P (AC115V 50/60Hz) (AC115V 50/60Hz) Veight Overload protection function*2, coupling cover (hair entanglement prevention structure), slow start function Single phase AC200V~AC120V 50/60Hz 1A Single phase AC200V~AC120V 50/60Hz 1A O type 3P (AC200V~AC120V 50/60Hz 1A O type 3P (AC215V 50/60Hz) Veight Too g (main body only) Hexagon socket head cap screw & wrench, AC adapter, 3m power cord, Coupling cover, handle (arbor), flask clip	Chuck	ø8mm (ø7.9~7.95)					
Safety device 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 Otype 3P (AC200V~AC120V 50/60Hz 1A Otype 3P (AC115V 50/60Hz) (AC115V 50/60Hz) Otype 3P (AC220V 50/60Hz) (AC115V 50/60Hz) Otype 3P (AC220V 50/60Hz) 50/60Hz) Otype 3P (AC220V 50/60Hz) Otype 3P (AC220V 50/60Hz) Otype 3P (AC115V 50/60Hz) Otype 3P (AC220V 50/60Hz)	Sealing material	PTFE (rotary joint) / FKM (oil seal,o ring)					
Single phase	Safety device						
Power source AC100V~AC120V 50/60Hz 1A AC200V~AC220V 50/60Hz 1A AC100V~AC120V 50/60Hz 1A AC200V~AC120V 50/60Hz 1A AC200V~AC120V 50/60Hz 1A AC200V~AC220V 50/60Hz 1A AC200V~AC120V 50/60	External dimensions	W69 × D108 × H222 mm					
Weight 700 g (main body only) Hexagon socket head cap screw & wrench, AC adapter, 3m power cord, Coupling cover, handle(arbor), flask clip	Power source	AC100V~AC120V	AC200V~AC220V	AC100V~AC120V	AC200V~AC220V		
Included accessories Hexagon socket head cap screw & wrench, AC adapter, 3m power cord, Coupling cover, handle(arbor), flask clip	Power cord				O type 3P (AC220V 50/60Hz)		
cover, handle(arbor), flask clip	Weight	700 g (main body only)					
Operational accessories*3 Stirring shaft (PTFE, stainless steel, glass), propellers (different types and sizes), stand	Included accessories						
	Operational accessories*3	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

LM200 with BM100 Water Bath





Accessories

7 100000				
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			L350×ø30mm, 100 ~ 300mL
231616	OLM12			L450×ø30mm, 100 ~ 500mL
231617	OLM14	DTEE -4:: b - 64		L450×ø50mm, 200 ~ 1000mL
231618	OLM16	PTFE stirring shaft with blade	3	L450×ø80mm, 300 ~ 1000mL
231619	OLM18	with blade		L600×ø80mm, 1000 ~ 1500mL
231620	OLM20			L600×ø100mm, 1000 ~ 5000mL
231621	OLM22			L600×ø120mm, 3000 ~ 5000mL
231622	OLM24			L350mm
231623	OLM26	Glass stirring shaft	4	L400mm
231624	OLM28			L530mm
231625	OLM30			ø40×16×t3mm
231626	OLM32	PTFE half-moon		ø50×17×t3mm, 100 ~ 500mL
231627	OLM34	blade	5	ø60×17×t4mm, 500 ~ 5000mL
231628	OLM36	Diaue		ø100×17×t4mm, 1000 ~ 5000mL
231629	OLM38			ø125×30×t5mm, separable flask
231630	OLM40	Glass half-moon	6	ø50×17×t3.3mm, 100 ~ 5000mL
231631	OLM42	blade		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
231640	OLM64	FFKM o ring	13)	Kalrez® 29/42
231640	OLM66	TTRWOTING		Kalrez® 24/40
LT00038897		FKM o ring		29/42
LT00038898				24/40 (standard)
231639	OLM58	24/40 rotary joint seal set	(14)	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	(1)	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	Α
Acetone 60°C	D	Α
Hydrochloric acid (10%)	А	Α
Hydrochloric acid (10%) 70°C	А	Α
Hydrochloric acid (20%)	A	Α
Hydrochloric acid (20%) 80°C	А	Α
Hydrochloric acid (36%)	А	Α
Hydrochloric acid (36%) 70°C	А	Α
Xylene	Α	Α
Chloroform	В	Α
Acetic acid (10%)	D	Α
Acetic acid (100%)	D	Α
Acetic acid (25%)	D	Α
Acetic acid (50%)	D	Α
Acetic acid (50%) 70°C	D	Α
Acetic acid (anhydrous)	D	Α
Tetrahydrofuran	D	Α
Toluene	С	Α
Pyridine	D	Α
Hexane	A	Α
Benzene	С	Α
Benzene 70°C	Č	Α

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

■ Related Products (Baths and Chiller)



BS200/400/600/660



BM100/200/401



CATV2-201804











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