

# Laboratory Stirrer

## LT400/500 Series

Max. Speed Range 3,000rpm (400 model) 1,200rpm (500 model)

Operation Wide speed range  
Wide torque range



LT400A

\*Operational accessories purchased separately



LT series stirrers include LT400A and LT500A with higher torque, LT400B and LT500B with well-balanced speed and torque, and LT400C and LT400D with high speed to support different applications.

- Highly sensitive feedback system keeps the set speed even with changing viscosity during stir
- Maintenance free DC brushless motor
- Digital speed indicator for accurate speed setting and confirmation
- Noise prevention measures for optimal work environment
- More safety-oriented design

### Specifications

Model	LT400A	LT400B	LT400C	LT400D	LT500A	LT500B
Viscosity of sample	High	Medium	Medium-low	Low	High	Medium
Speed range	10~300rpm	15~600rpm	25~1,200rpm	60~3,000rpm	60~3,000rpm	25~1,200rpm
Torque	0.9N•m (9.0kgf•cm)	0.5N•m (5.0kgf•cm)	0.3N•m (3.0kgf•cm)	0.1N•m (1.0kgf•cm)	1.0N•m (10.0kgf•cm)	0.6N•m (6.0kgf•cm)
Motor	DC brushless motor 30W			DC brushless motor 70W		
Speed control	Feedback control					
Panel display	Digital speed display, Overload display* <sup>1</sup> , Torque indicator (20% gradation)* <sup>2</sup>					
Chuck	ø8mm drill chuck					
Safety device	Current limit circuit* <sup>3</sup> , Thermal protector* <sup>4</sup> , Drill chuck cover					
External dimensions	W146 x D154 x H165mm					
Power source	AC100V~AC125V 50/60Hz					
Power cord	Power supply cord with bipolar grounding type plug 2m					
Weight	2.4kg					
Included accessories	Clamp, Safety cover, Chuck handle					
Operational accessories*	Stirring shaft (stainless steel or glass), Propellers (different types and sizes), Stand and rod					

\*<sup>1</sup>, When load exceeding the maximum torque is applied, tachometer display flashes.

\*<sup>2</sup>, Torque indicator LED displays the loading status by 5 gradation.

\*<sup>3</sup>, When load exceeding the maximum torque is applied, current limit circuit automatically controls the current to protect the motor.

\*<sup>4</sup>, When temperature of the motor exceeds the upper limit temperature, thermal protector shuts off the current flowing to the motor and prevents it from burnout.

# Digital Laboratory Stirrers

## LR500A/B

Max. Speed Range 1,000rpm

Operation Low noise  
Maintenance free

- DC brushless motor considered superior in safety as there are no brushes to cause sparks and no brush replacement required
- Direct-drive system reduces noise and require low maintenance
- Achieves high torque enabling stirring of high viscosity solution
- Digital tachometer for easy speed setting and confirmation
- Load on the stirring shaft can be monitored by LED2 display. An overload lamp turns on when exceeding the maximum load, stopping the motor automatically
- Revolution feedback control function can maintain the setting rate despite change of load (especially suitable for high viscosity samples)

### Specifications

Model	LR500A	LR500B
Speed range * <sup>1</sup>	34~340rpm	100~1,000rpm
Max. torque	1.96N•m (20kgf•cm)	0.98N•m (10kgf•cm)
Display of speed / torque	Digital, 3-digit / Green LED, 2 steps + Overload display	
Motor (brushless DC)	70W	100W
Speed control	Speed feedback control	
Safety device	Stops when overloaded	
Stirring function / shaft dia.	Gearless direct drive type / ø10mm	
Power source	AC100 -125V, 50/60Hz, 3A	AC100 -125V, 50/60Hz, 3.5A
Included accessories	Stirring shaft (Ø10*500mm), 75mm 4-blade propeller, Clamp	
Operational accessories*	Stand and rod	
Optional accessories	Propellers (different types and sizes), Vacuum adapter, Extra long stirring shaft (Ø10*800mm), Glass stirring shaft	

\*<sup>1</sup>, No load



LR500A

\*Operational accessories purchased separately

# Accessories Laboratory Stirrer LT400/500 LR500A/B

## Adapter for depressurizing stirrer (for LT400/500)

Material	Fluoride resin & Nitrile rubber		
Stirrer shaft	ø8mm		
Vacuum level	6.7Pa (5×10 <sup>-2</sup> Torr)		
Accessories	Oil Seal (Nitrile rubber) 2pcs.		
Joint type	T24/40	Product code	231380
	T29/42		231381



## Additional stirrer support (for LT400/500)

Product code	231382
Size	Max. 3L beaker 2pcs.
Stirrer shaft	ø8mm
Stirrer shaft interval	135mm
Belt	O-ring (VitonP120)
Accessories	Hexagon wrench (2pcs.)
	Belt (1pc.)
	Chuck handle (1pc.)
	Clamp (1pc.)
	Puller (1pc.)



## Adapter for depressurizing stirrer (for LR500)

Material	Fluoride resin & Nitrile rubber		
Stirrer shaft	ø10mm		
Vacuum level	6.7Pa (5×10 <sup>-2</sup> Torr)		
Accessories	Oil Seal (Nitrile rubber) 2pcs. Stirring propeller for small mouth		
Joint type	T24/40	Product code	231097
	T29/42		231098



## Additional stirrer support (for LR500)

Product code	231096
Size	Max. 3L beaker 2pcs.
Stirrer shaft	ø10mm
Stirrer shaft interval	135mm
Belt	O-ring (VitonP120)
Accessories	Hexagon wrench (2pcs.)
	Belt (1pc.)
	Chuck handle (1pc.)
	Clamp (1pc.)
	Puller (1pc.)



\*Use with propeller less than 60mm

## PTFE Stirring shaft and propeller



Product code	Product name	Model	Rod diameter	Length	Propeller	Material
F-4011-01	PTFE coated stirring shaft (with propeller)	LT400/500	ø8mm	450mm	Length 80mm	PTFE upper stainless
F-4012-04	PTFE coated stirring shaft (with propeller)	LT400/500	ø8mm	500mm	Length 100mm	PTFE internal iron core
F-4013-01	PTFE large stirring shaft	LT400/500	ø8mm	600mm	Width 16 x length 80mm	PTFE internal stainless bar
F-4013-02		LR500	ø10mm	800mm	Width 20 x length 120mm	PTFE internal stainless bar
F-4014-04	PTFE propeller type coated stirring shaft	LT400/500	ø8mm	450mm	Dia. ø52mm	PTFE upper stainless



Product code	Product name	Rod diameter	Length
F-4053-01	PTFE coated stirring shaft for LT400/500	ø8mm	350mm
F-4053-02		ø8mm	450mm
F-4053-03		ø8mm	500mm
F-4053-04		ø8mm	600mm

● F-4022 and F-4053 must be purchased together

Product code	Product name	Propeller diameter
F-4022-01	PTFE coated half-moon blade propeller	40×16mm×3t
F-4022-02		50×19mm×3t
F-4022-03		60×19mm×4t
F-4022-04		75×20mm×4t
F-4022-05		90×24mm×4t
F-4022-06		100×24mm×4t
F-4022-07		125×30mm×5t
F-4022-08		150×30mm×5t

## Propellers



### 4-blade propeller

Standard  
Material: Stainless steel SUS 304

Product code	Propeller diameter	Mounting screw
280078	75mm	M5
280079	60mm	M5
LR41AY0003	40mm	M5



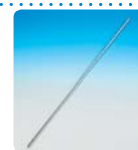
### Folding propeller

For narrow mouth bottle (up to I.D.18mm)  
Material: Stainless steel SUS 304

Product code	Propeller diameter	Mounting screw
LR41AY0006	45mm	M5

## Stirring shaft

Product code	Model	Diameter	Material
231384	LT400/500	500mm ø8mm	SUS316
LR41231169	LR500	500mm ø10mm	
LR41AY0002	LR500	800mm ø10mm	



### 2-blade glass propeller

Use for corrosive or strong acid samples  
Material: Hard glass

Product code	Model	Propeller Ø	Shaft Diameter
231385	LT400/500	60mm	ø8
2310661018	LR500	60mm	ø10



### 2 blade propeller

For wide mouth bottle. Use for high viscosity samples.  
Material: Stainless steel SUS 304

Product code	Propeller diameter	Mounting screw
LR41AY0009	100mm	M5
LR41AY0008	28mm	M5

## Fixing Support for Water Bath (for LT400/500, LR500)

Max. thickness of container's edge	Max. 35mm
Stirring shaft's changeable angle	Up to 60°
Product code	231032



### Round plate turbine

Use for deep container for less air intake during stirring  
Material: Stainless steel SUS 304

Product code	Propeller diameter	Mounting screw
LR41AY0022	100mm	M5
LR41AY0010	60mm	M5



### 2 stage round plate turbine

Material: Stainless steel SUS 304

Product code	Model	Propeller Ø	Mounting screw
2310630101	LR500	60mm	ø10
231386	LT400/500	60mm	ø8

## Stand & Rod Set

Product code	Product name	Dimension
LR-41-124	Stand & rod set	~7kg
2310030209	Rod	Length 725mm E.D. 25mm
YSA000194	U-stand	Width 400mm Depth 420mm

