



SA300 with Test tube holder / SA320 with Separatory funnel holder

The SA300 achieves two-dimensional shaking, horizontally or vertically, while the SA320 enables rotary shaking that yields a higher shaking effect. The SA400 is a double-sided vertical shaking type.

Model		
SA300	SA320	SA400
Shaking Method		
Horizontal / Vertical	Rotary & Horizontal / Rotary & Vertical	Double-sided Vertical
Shaking Number		
20 to 300	20 to 210	20 to 300
Shaking Width		
40 mm		

- The main unit themselves shake vertically, but it can be laid on their side so that they shake horizontally.
- The various holders can be easily attached and removed, and are extremely durable.
- The SA400 is a double-sided vertical shaker and its 1 liter liquid load holder can shake 6 sample holders simultaneously.
- With the adoption of a spare direct-flow motor, the SA400 can generate stable shaking frequencies and high-torque shaking power.
- Though compact, it is equipped with added weight (10kg for one side).
- Easy-to-use dial settings for shaking frequency, and digital displays. Possible to switch between timer operation and continuous operation.

■ Specifications

Model	SA300	SA320	SA400
Shaking method	Horizontal / Vertical reciprocate shakings	Horizontal / Vertical rotary shakings	Double sided vertical reciprocate shaking
Holder maximum rack number	100ml x 5 , 200ml x 4 , 300ml x 4 500ml x 4 , 1000ml x 3 , 2000ml x 2		100ml x 10 , 200ml x 8 , 300ml x 8 500ml x 8 , 1,000ml x 6 , 2000ml x 4
Shaking speed	Approx. 20 to 300 times/min. (Horizontal shaking)	Approx. 20 to 210 times/min. (Horizontal rotary shaking)	Approx. 20 to 300 times/min. (Vertical shaking)
Speed control display	Dial Setting		Dial setting/ Digital display
Timer	0 to 60min.		
Motor	DC motor, 90W		
External dimensions	460×460×423 (mm)		520×460×483 (mm)
Power source 50/60Hz	100/220V, single phase, 2.2/1.0A		100/220V, with external transformer, single phase, 2.2/1.0A
Weight	Approx. 55.5 kg		Approx. 39 kg
Accessories			
	Fuse 1 pcs.		
	Carbon brush 1 set		



Horizontal Shaking

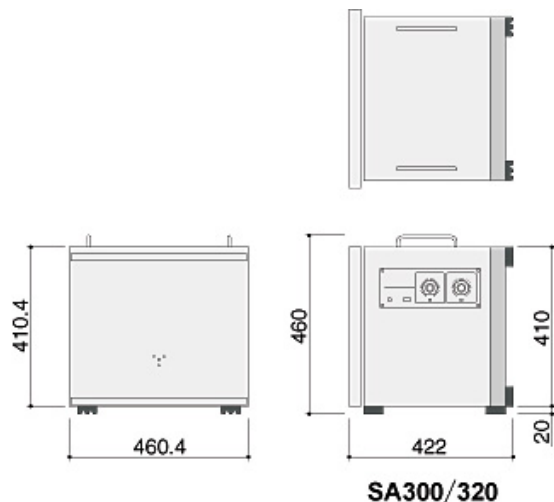


Rotary Shaking



Vertical Shaking

■ Dimensional drawing (mm)



■ Optional items (glass equipments are not included)

**Centrifugal tube holder
(SA300/320/400)**



For Horizontal / vertical shaking

Product code	Specification
232087	Dia 16 - 35mm Length 110 - 130mm Max. 18pcs support

**Test tube holder
(SA300/320)**



For Horizontal Shaking

Product code	Specification
232086	Dia 16.5 - 18mm Length 160 - 190 Max. 18pcs support

**2L separatory funnel holder
(SA300/320/400)**



For Vertical Shaking

Product code	Specification
232089	50ml 100ml - 1,000ml 2,000ml

**Separatory funnel holder
(SA300/320/400)**



For Vertical Shaking

Product code	Specification
232096	100ml - 1,000ml

**Test tube rack holder
(SA300/320)**



For Horizontal Shaking

Product code	Specification
232088	Maximum test tube rack can be installed W238 x D121 x H105
2 stages	

**Non-slip Sheet for clamp fixing stage (SA300/320)
(Clamp fixing stage is necessary)**



For Horizontal Shaking

Product code	Specification
232071	1mm thickness W450 x D396

**Erlenmeyer flask holder
(SA300/320)**



For Horizontal Shaking

Product code	Specification
232097	100 - 1000ml

**Erlenmeyer flask nail clamp (SA300/320)
(Clamp fixing stage is necessary)**



For Horizontal Shaking

Product code	Capacity	Number of sets
232062	For 100ml	10pcs
232063	For 200ml	9pcs
232064	For 300ml	5pcs
232065	For 500ml	4pcs
232066	For 1L	2pcs

**Clamp fixing stage
(SA300/320)**



For Horizontal Shaking

Product code	Specification
232095	Erlenmeyer Flask Fixable Clamp Qty. For 100ml 28pcs For 200ml 19pcs For 500ml 14pcs For 1000ml 9pcs

**Shaking rack (SA300/320)
(Clamp fixing stage is necessary)**



For Horizontal Shaking

Erlenmeyer flask nail clamp

Product code	Capacity
232067	For 100ml
232068	For 200ml
232069	For 300ml

Inclined test tube

Product code	Diameter	Quantity
232080	Φ12mm	50pcs
232081	Φ16.5mm	20pcs
232082	Φ18mm	20pcs

**2 layers spring shaking rack
(SA300/320)**



For Horizontal Shaking

Product code	Specification
232079	For Test tube Φ16mm x 320pcs (20mm pitch)