Laboratory Shaker
Vertica! / Horizontal / Rotary / Double-sided vertical shaking motion
SA300/320/400

The SA300 achieves two dimensional shaking (horizontal and vertical), while the SA320 enables rotary shaking and SA400 is double-sided vertical shaking. All models are efficient in extraction, culture and mixture stirring of samples.

- Stable turns from low to high speed can be obtained
- Compact and equipped with a powerful shaking load
- Easy-to-use dial settings for shaking frequency and digital displays.
- Possible to switch between timer operation and continuous operation
- Various holders can be easily attached and removed and are extremely durable

**SA300/320**
- The main unit shakes vertically, but it can be laid on the side to shake horizontally

**SA400**
- 6 pieces of 1 liter liquid sample holder and 4 pieces of 2 liter liquid sample holder can shake simultaneously
- Double sided shaking possibility

### Specifications

<table>
<thead>
<tr>
<th>Model</th>
<th>SA300</th>
<th>SA320</th>
<th>SA400</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shaking method</td>
<td>Horizontal / Vertical shaking</td>
<td>Horizontal / Vertical rotary shaking</td>
<td>Double sided vertical shaking</td>
</tr>
<tr>
<td>Max. number of sample holder</td>
<td>100ml x 5, 200ml x 4, 300ml x 4, 1000ml x 3</td>
<td>100ml x 10, 200ml x 8, 300ml x 8, 1000ml x 6</td>
<td>200ml x 10, 500ml x 8, 2000ml x 4</td>
</tr>
<tr>
<td>Shaking speed: horizontal</td>
<td>20~300 rpm</td>
<td>20~210 rpm</td>
<td>None</td>
</tr>
<tr>
<td>Shaking speed: vertical</td>
<td>20~300 rpm</td>
<td>20~210 rpm</td>
<td>20~300 rpm</td>
</tr>
<tr>
<td>Speed setting display</td>
<td>Dial setting</td>
<td>Dial setting</td>
<td>Dial setting / Digital display</td>
</tr>
<tr>
<td>Timer</td>
<td>Dial setting 0~60 min. (minimum scale 5 min.). Continuous switching function</td>
<td>Dial setting</td>
<td></td>
</tr>
<tr>
<td>Motor</td>
<td>DC motor 90W</td>
<td></td>
<td></td>
</tr>
<tr>
<td>External dimensions</td>
<td>W460 x D460 x H423</td>
<td>W520 x D460 x H483</td>
<td></td>
</tr>
<tr>
<td>Weight</td>
<td>~40kg</td>
<td>~39kg</td>
<td></td>
</tr>
<tr>
<td>Power source (50/60Hz)</td>
<td>Single phase, AC115V 2A / AC220V 1A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Included accessories</td>
<td>Fuse x 1, carbon brush x 1</td>
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</tbody>
</table>

Horizontal Shaking

Rotary + Horizontal Shaking

Vertical Shaking

Rotary + Vertical Shaking
**Operational Accessories**

- **Centrifugal tube holder**
  - For all models
  - Horizontal / vertical shaking
  - Dia. 16~35mm
  - Length 110~130mm
  - 18 pcs.
  - Product code 232087

- **Test tube holder**
  - For SA300/320
  - Horizontal shaking
  - Dia. 16.5~18mm
  - Length 160~190mm
  - 18 pcs.
  - Product code 232086

- **Separating funnel holder**
  - For all models
  - Vertical shaking
  - 50ml
  - 100~1000ml
  - 2000ml
  - Product code 232089

- **Separating funnel holder**
  - For all models
  - Vertical shaking
  - 100~1000ml
  - Product code 232096

- **Mounting stage**
  - For SA300/320
  - Horizontal shaking
  - Capacity No. of pcs.
  - 100ml 28
  - 200ml 19
  - 500ml 14
  - 1L 9
  - Product code 232095

- **Erlenmeyer flask holder clamp**
  - For SA300/320
  - Horizontal shaking
  - Product code Capacity No. of pcs.
  - 232062 100ml 10
  - 232063 200ml 9
  - 232064 300ml 5
  - 232065 500ml 4
  - 232066 1L 2

- **Diagonal rack**
  - For SA300/320
  - Horizontal shaking
  - Diagonal erlenmeyer flask holder
  - Product code Capacity No. of pcs.
  - 232067 100ml 10
  - 232068 200ml 9
  - 232069 300ml 5
  - Diagonal test tube holder
  - Product code Size No. of pcs.
  - 232080 ø12mm 50
  - 232081 ø16.5mm 20
  - 232082 ø18mm 20
  - Mounting stage sold separately

- **Non-skid sheet**
  - Thickness 1mm
  - W450 x D396mm
  - Product code 232071

- **Test tube rack holder**
  - For SA300/320
  - Vertical horizontal shaking
  - Max. test tube rack
  - W238 x D121 x H105mm
  - 2 lines
  - Product code 232088

- **Erlenmeyer flask holder**
  - For SA300/320
  - Horizontal shaking
  - Adjustable 100~1000ml
  - Product code 232097

- **Two layer spring shaking rack**
  - For SA300/320
  - Horizontal shaking
  - 320 pcs. of ø16 test tube
  - (Pitch 20mm)
  - Product code 232079