Laboratory Shaker (Vertical & Horizontal Shaking)

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 (Option)

**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>Shaking method</th>
<th>Max. number of separating funnel</th>
<th>Shaking speed: horizontal</th>
<th>Shaking speed: vertical</th>
<th>Speed setting display</th>
<th>Timer</th>
<th>Motor</th>
<th>External dimensions</th>
<th>Power source (50/60Hz)</th>
<th>Included accessories</th>
</tr>
</thead>
<tbody>
<tr>
<td>SA300</td>
<td>Horizontal / Vertical shaking</td>
<td>100ml×5, 200ml×4, 300ml×4, 500ml×4, 1000ml×3</td>
<td>20~300 rpm</td>
<td>20~300 rpm</td>
<td>Dial setting</td>
<td>Dial setting 0~60 min. (minimum scale 5 min.). Continuous switching function</td>
<td>DC motor 90W</td>
<td>W460×D460×H423</td>
<td>Single phase, AC115V 2A / AC220V 1A</td>
<td>Fuse×1, Carbon brush×1</td>
</tr>
<tr>
<td>SA320</td>
<td>Horizontal / Vertical rotary shaking</td>
<td>100ml×10, 300ml×8, 1000ml×6, 200ml×8, 500ml×8, 2000ml×4</td>
<td>20~210 rpm</td>
<td>20~210 rpm</td>
<td>Dial setting / Digital display</td>
<td></td>
<td></td>
<td>W520×D460×H483</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SA400</td>
<td>Double sided vertical shaking</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Shaking speed

- **Horizontal Shaking**: 20~300 rpm (SA300/400), 20~210 rpm (SA320)
- **Vertical Shaking**: 20~300 rpm
- **Rotary Shaking**: None
- **Double-sided Shaking**: 20~300 rpm

**SA300 with test tube holder**

**SA300 with separating funnel holder**

**SA320 with separating funnel holder**

**SA400 with separating funnel holder**

*Holders & glasswares sold separately*
**Operational Accessories** (Glasswares are not included)

*Operational accessories are needed for SA300/320/400 operation depending on glassware type. There items are not included with the main unit and must be ordered separately.

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

### Test tube holder
- For SA300/320
- Horizontal shaking
- Product code: 232088
- Specifications:
  - Dia. 16.5~18mm
  - Length 160~190mm
  - 18 pcs.

### 2000mL Separating funnel holder
- For all models
- Vertical shaking
- Product code: 232096
- Capacity:
  - 100~1000ml
  - Not applicable for squibb-type separating funnels (500-1000mL)

### Separating funnel holder
- For SA300/320
- Vertical shaking
- Product code: 232096
- Capacity:
  - 100~1000ml

### Mounting stage
- For SA300/320
- Horizontal shaking
- Product code: 232095
- Capacity:
  - 100ml: 28 pcs.
  - 200ml: 19 pcs.
  - 500ml: 14 pcs.
  - 1L: 9 pcs.

### Erlenmeyer flask holder clamp
- For SA300/320
- Horizontal shaking
- Product code: 232062
- Capacity:
  - 100ml: 10 pcs.
  - 200ml: 9 pcs.
  - 300ml: 5 pcs.

### Diagonal rack
- For SA300/320
- Horizontal shaking
- Product code: 232066
- Capacity:
  - 500ml: 4 pcs.
  - 1L: 2 pcs.

### Non-skid sheet
- For SA300/320
- Horizontal shaking
- Product code: 232071
- Dimensions:
  - W450 x D396mm

### Test tube rack holder
- For SA300/320
- Vertical horizontal shaking
- Product code: 232089
- Specifications:
  - Max. test tube rack W238 x D121 x H105mm
  - 2 lines

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

### Two layer spring shaking rack
- For SA300/320
- Horizontal shaking
- Product code: 232079
- Specifications:
  - 320 pcs. of ø16 test tube
  - Pitch 20mm

Operational Accessories are needed for SA300/320/400 operation depending on glassware type. All items are not included with the main unit and must be ordered separately.

*Not applicable for squibb-type separating funnels (500-1000mL)*