



# Mixing



Labfirst Scientific Instruments (Shanghai) Co., Ltd.

# Vortex S

## Variable speed Vortex Mixer

### Features

- Variable speed of 0 to 3,000rpm for gentle shaking to rapid mixing of samples
- Touch or continuous operation mode
- Includes a standard top head for mixing a single test tube or other small vessel up to 30mm in diameter
- Electronic speed control maintains constant speed even during changes in load
- Steel base with specially designed vacuum suction feet provides stability and dampens vibration
- Robust aluminum-cast construction



#### VT1.1 Standard top(Default)

Cat. No.921001

for <Ø30mm tubes and small vessels



| Specifications                  | Vortex S<br>(Adjustable speed) |
|---------------------------------|--------------------------------|
| Voltage,Frequency               | 100-120V/200-240V,50/60Hz      |
| Power                           | 60W                            |
| Mixing motion                   | Orbital                        |
| Orbital diameter                | 4mm                            |
| Motor type                      | Shaded pole motor              |
| Motor rating input              | 58W                            |
| Motor rating output             | 10W                            |
| Speed range                     | 0-3000rpm                      |
| Speed display                   | Scale                          |
| Run type                        | Touch operation/Continuous     |
| Dimension[W×H×D]                | 127×130×160mm                  |
| Weight                          | 2.0kg                          |
| Permissible ambient temperature | 5-40°C                         |
| Permissible relative humidity   | 80%RH                          |
| Protection class                | IP20                           |



**VT1.3.1 tube adapter**

Cat. No.921004

for 48 test tubes, Ø6mm (1 ml)


**VT1.2 Tube holding rod**

Cat. No.921002

used with tube adapters


**VT1.3.2 tube adapter**

Cat. No.921005

for 15 test tubes, Ø10mm (1.5-2 mL)


**VT1.3 Universal top plate**

Cat. No.921003

Ø 100mm


**VT1.3.3 tube adapter**

Cat. No.921006

for 16 test tubes, Ø12mm (5 mL)


**VT1.3.6 Platform pad**

Cat. No.921009

Ø99mm, multiple small tubes and vessels


**VT1.3.4 tube adapter**

Cat. No.921007

for 8 test tubes, Ø16mm (10 mL)


**VT1.3.7 vacuum chuck**

Cat. No.921010

made of rubber

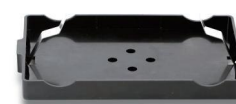

**VT1.3.5 tube adapter**

Cat. No.921008

for 8 test tubes, Ø20mm (10-15 mL)


**PS1.2 Microplate clamp**

Cat. No.921202


**VT1.3.6 PCR tube adapter**

Cat. No.921012

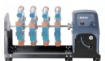
 for 56 test PCR tubes, strips of 8 ,  
Ø5mm (0.1mL-0.5 mL)


## Application of accessories

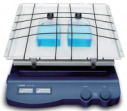
| Accessories     | Adjustable speed model<br>(0-2500rpm) |                                     |
|-----------------|---------------------------------------|-------------------------------------|
|                 | Touch mode<br>(High speed area)       | Continuous mode<br>(Low speed area) |
| VTI.1           | Y                                     | Y                                   |
| VTI.2 + VT1.3.1 | Y                                     |                                     |
| VTI.2 + VT1.3.2 | Y                                     |                                     |
| VTI.2 + VT1.3.3 | Y                                     |                                     |
| VTI.2 + VT1.3.4 | Y                                     |                                     |
| VTI.2 + VT1.3.5 | Y                                     |                                     |
| VTI.3 + VT1.3.6 | Y                                     |                                     |
| VTI.3 + VT1.3.1 |                                       | Y                                   |
| VTI.3 + VT1.3.2 |                                       | Y                                   |
| VTI.3 + VT1.3.3 |                                       | Y                                   |
| VTI.3 + VT1.3.4 |                                       | Y                                   |
| VTI.3 + VT1.3.5 |                                       | Y                                   |



Lab1st mixers range can be divided into different series as per mixing speed, working mode, load capacity etc:

| Series                    | Image                                                                               | Model            | Speed Range        | Working mode                                 | Capacity                                                     |
|---------------------------|-------------------------------------------------------------------------------------|------------------|--------------------|----------------------------------------------|--------------------------------------------------------------|
| <b>Vortex Mixer</b>       |    | Vortex S         | 0~3000rpm          | Orbital<br>(touch + continuous modes)        | -                                                            |
|                           |    | Vortex F         | 3000rpm(fixed)     | Orbital<br>(touch + continuous modes)        | -                                                            |
|                           |    | Vortex E         | 3000rpm<br>(fixed) | Orbital<br>(touch mode)                      | -                                                            |
|                           |    | Vortex C         | 0~3000rpm          | Orbital<br>(touch + continuous modes)        | 8x2mL                                                        |
| <b>Microplate Mixer</b>   |    | Microster M      | 0~1500rpm          | Orbital<br>(continuous mode)                 | 0.5Kg                                                        |
| <b>Disk Rotator</b>       |   | Rotaster 3       | 10~70rpm           | 360° rolling<br>(timer + continuous)         | 60x1.5mL, 16x15mL,<br>8x50mL,<br>(available for 3<br>layers) |
| <b>Rotisserie Rotator</b> |  | Grillster T      | 10~70rpm           | 360° rolling<br>(timer + continuous)         | 48x1.5mL, 24x15mL,<br>24x50mL                                |
| <b>Disk Rotator</b>       |  | Rotaster 1 basic | 0~80rpm            | 360° rolling<br>(continuous)                 | 48x2mL, 16x15mL,<br>8x50mL                                   |
| <b>Rotisserie Rotator</b> |  | Grillster basic  | 0~80rpm            | 360° rolling<br>(continuous)                 | 32x2mL,<br>20x15mL, 16x50mL                                  |
| <b>Rocker</b>             |  | See-saw 30 basic | 0~30rpm            | 30±3° rocking<br>(continuous)                | 10x10mL, 4x50mL                                              |
|                           |  | See-saw 30L      | 0~30rpm            | 30±3° rocking<br>(continuous)                | 16x10mL<br>6x50mL                                            |
|                           |  | See-saw 30D      | 0~30rpm            | 40±3° rocking<br>(continuous)                | 32x10mL, 12x50mL                                             |
| <b>Roller</b>             |  | Rollster 6       | 0~70rpm            | 360° rocking&rolling<br>(timer + continuous) | 4Kg                                                          |
|                           |  | Rollster 6 basic | 0~70rpm            | 360° rocking&rolling<br>(continuous)         | 4Kg                                                          |

Lab1st shaker series can be divided to different types as per different motion models:

| Series         | Image                                                                               | Model              | Plate Size  | Display | Speed Range | Max. Load Capacity |
|----------------|-------------------------------------------------------------------------------------|--------------------|-------------|---------|-------------|--------------------|
| Orbital Shaker |    | Orbister 330       | 32x32cm     | LCD     | 100-500rpm  | 7.5Kg              |
|                |    | Orbister 250       | 25x24.5cm   | LCD     | 100-800rpm  | 2.5Kg              |
|                |    | Orbister 330 basic | 33.5x33.5cm | LCD     | 70-400rpm   | 3Kg                |
|                |  | Orbister 250 basic | 26.8X26.8cm | LED     | 40-200rpm   | 2Kg                |
| Linear Shaker  |  | Recipster 330      | 32x32cm     | LCD     | 100-350rpm  | 7.5Kg              |
|                |  | Recipster 250      | 25x24.5cm   | LCD     | 100-350rpm  | 2.5Kg              |
| Rocking Shaker |  | Wavester 330       | 30x28.5cm   | LCD     | 10-70rpm    | 10Kg               |
|                |  | Wavester 250 basic | 26.8x26.8cm | LED     | 10-80rpm    | 2Kg                |
| 3D Shaker      |  | 3D-Ster 330        | 30x28.5cm   | LCD     | 10-70rpm    | 5Kg                |