

Shaker

- Orbital Shaker
- Accessories for Shaker
- Shaker for CO₂ Incubator
- Rocking Shaker
- Waving Shaker
- Microplate Shaker
- Heating Shaker
- Vortex Shaker
- Digital Pulse Mixer
- Separatory Funnel Shaker



Orbital Shaker

- > Two different shaking functions: reciprocal, and orbital
- > Adjustable shaking speed and range
- > Timer function for maximum flexibility
- > Corrosion-resistant power-coated stainless steel housing
- > Easy to clean and maintain
- > Large mounting surface and big load capacity of up to 12 kg
- > Suitable for various vessels, like round flasks, Erlenmeyer flasks, culture flasks, or culture bottles
- > Widely used for bacterial cultures, fermentation, hybridization, biochemical reactions, enzyme or tissue research
- > Shaking motion can be set in up to 6 different ways
- > Wide range of accessories are available.



The distinctive and economical models offer the most felicitous shaking motion

Two types of shaking motions (orbital or reciprocal). Three types of orbital or reciprocal lengths. The compact and interchangeable platform design accommodates various types and sizes of vessels and suitable for use in chambers.

Model	WS-50D	WS-50DR
Motion Type	Orbital	Reciprocal
Speed Range (rpm)	10 to 300	10 to 250
Accuracy (rpm)	±2 (100 rpm)	±2 (100 rpm)
Timer	1min to 99 hrs 59 min	1min to 99 hrs 59 min
Shaking Throw	8 / 14 / 20 Available - Standard 20	8 / 14 / 20 Available - Standard 20
Maximum Load (kg)	7	7
Power (W)	80	80
Platform (WxD) (mm)	320x260	320x260
Overall (WxDxH) (mm)	355x375x140	355x375x140
Weight(kg)	20	20
Order No.	3A126C	3A226C



Multi-function Shaking System

Intensive multi-function shaking system surpasses all the previous levels of shaker units. Mix and match clockwise, counterclockwise, start, and stop motions. (Making 6 possible combinations - refer to each model spec.)

Dual-Action Shakers

Benchtop platform shakers with advanced dual-shaking features, for flasks up to maximum 6L.

Performances: Orbital or reciprocal action and variable-speed control provide gentle to vigorous agitation. It offers user-friendly operating and safety features for reliable shaking of lab glassware.



Note: Mounting plate not included



Specifications

Model	WS-100D	WS-150D	WS-200D
Display and Control	TFT Digital Display / On-Touch Control	TFT Digital Display / On-Touch Control	TFT Digital Display / On-Touch Control
Motion Type	Orbital or reciprocal motion selectable	Orbital or reciprocal motion selectable	Orbital or reciprocal motion selectable
Accuracy(rpm)	±1 (100rpm)	±1 (100rpm)	±1 (100rpm)
Speed Range (rpm)	10-300	10-300	10-300
Shaking Throw (mm)	20, 30, 40 Available - Standard 30	20, 30, 40 Available - Standard 30	30, 40, 50, 60, 70 Available - Standard 30
Timer	R1min to 99 hrs 59 min		
Maximum Load (kg)	7	15	30
Power (W)	100	110	130
Platform (WxD) (mm)	350x350	450x450	755x481
Overall (WxDxH) (mm)	410x490x150	510x595x150	820x610x166
Weight (Kg)	24	29	50
Order No.	200200C	200300C	200400C

The try of various specifications for individual fitting can be ordered separately to be assembled by users.

Accessories for Shaker



Sticky Plate

The Wiggins Sticky Plate can be loaded with any kind of vessels with a smooth base. Even at a speed of up to 350 rpm the vessel sticks to the plate. Other vessels, like microtitre plates can be shaken on the Wiggins Sticky Plate as well. but, only up to a speed of 220 rpm.

Suitable for	WS-50D/50DR	WS-100D	WS-150D	WS-200D
Order No.	3A901	31901	31902	31903
Dimensions(W x D in mm)	320x260	350x350	450x450	755x481
Sticky (singal piece) (need 4 pieces for replacement on the try)	3A901 -1	31901 -1	31902 -1	31903-1
Try (Without sticky pieces)	3A901 -2	31901 -2	31902 -2	31903-2



Multi-Purpose Spring

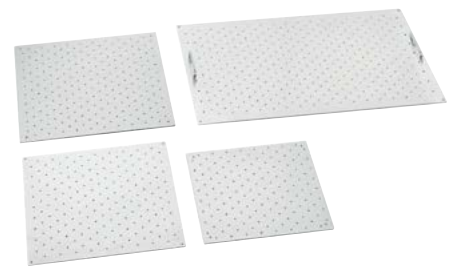
The multi-purpose tray is made of stainless steel and can be used for a diverse range of unusual specifications.

Suitable for	WS-50D/50DR	WS-100D	WS-150D	WS-200D
Order No.	3A521	31521	31522	31523-W
Dimensions(W x D x H mm)	320*260*120	350*350*120	450*450*120	754*478*97
Max. Load of Flasks				
50mL	12	16	25	40
100mL	6	9	16	28
250mL	3	4	9	15
300mL	3	4	9	15
500mL	3	4	5	10
1L	2	2	4	8
2L	-	1	2	4
2.8L	-	1	2	4



Adjustable Bar Tray

Suitable for	WS-50D/50DR	WS-100D	WS-150D	WS-200D
Order No.	3A511	31511	31512	31513
Dimensions(W x D x H mm)	320x260x97	350x350x97	450x450x97	754x478x97
Number of bar	3	3	3	6
Order No. of bar	3A511-05	31511-05	31512-05	31513-05



Universal Tray

The Universal Trays have a drilled grid for individual loadings of test tube holders with clamps, molds for microtitre plates, and deep-well plates.

Suitable for	WS-50D/50DR	WS-100D	WS-150D	WS-200D
Order No.	3A501	31501	31502	31503
Dimensions(W x D in mm)	320x260	350x350	450x450	755x481
Max. Load of Flask Clamps				
50mL	20	32	49	96
100mL	9	25	36	65
250mL	9	13	25	40
300mL	6	13	25	40
500mL	4	9	13	24
1L	2	4	8	12
2L	1	2	5	11
4L	-	2	2	4
Max. Load of Separatory Funnel Clamps				
250mL	4	4	6	11
500mL	3	3	4	9
1L	2	2	3	5
2L	-	1	2	4



Erlenmeyer flask clamp

Size of flask	Reference No.	Order No.
25mL	31274	-
50mL	31279	23550
100mL	31271	23551
250mL	31275	23552
300mL	-	23556
500mL	31280	23553
1000mL	31272	23554
2000mL	31273	23555
3000mL	31277	-
4000mL	31278	23558
5000mL	31281	-
6000mL	-	23559



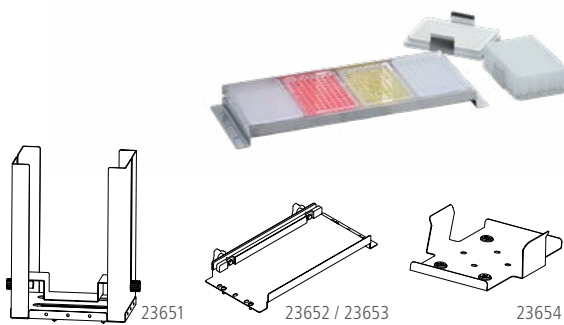
Separatory Funnel Clamp

Funnel Volumes	250mL	500mL	1L	2L
Order No.	23562	23563	23564	23565
Dimensions(W x D in mm)	152x60	165x70	230x80	255x90

Multi-Pore Holder

The Wiggins multi-pore holders can be installed on the Wiggins sticky plates or the Wiggins universal trays. All holders can be installed on small pores and deeper holes. In total, four different multi-pore holders are available:

1. Multi-Layer Holder
2. Single-Layer Single-Position Holder
3. Single-Layer Three-Position Holder
4. Single-Layer Four-Position Holder



Max. No. of Mountable Holders	Multi-Layer	Four-Position	Three-Position	Single-Position
Order No.	23651	23652	23653	23654
Dimensions(W x D x H mm)	131x91x181	380x161x48	300x161x48	129x89x31
Max. mountable holders				
WS-50D/50DR	4	-	1	6
WS-100D	6	-	2	8
WS-150D	10	2	3	15
WS-200D	16	3	5	25



Rubber Mat

Designed for low-speed applications, non-skid rubber mats allow quick addition or removal of flasks, plates or tubes.

Suitable for	WS-50D/50DR	WS-100D	WS-150D	WS-200D
Order No.	3A531	31531	31532	31533
Dimensions(W x D x H mm)	350x290x23	352x352x23	450x450x23	775x478x90

Plastic clamps for Erlenmeyer flask

Order No.	Description	Order No.	Description
31285	100mL	31287	500mL
31286	250mL		

Stainless steel clamps for Fernbach flask

Order No.	Description	Order No.	Description
31283	1.8L	31284	2.8L



Test tube rack for long type

Order No.	Description	Order No.	Description
31342	144 x Ø8mm	31356	39 x Ø18mm
31343	100 x Ø10mm	31358	36 x Ø20mm
31347	72 x Ø12mm	31359	33 x Ø22mm
31352	64 x Ø14mm	31360	20 x Ø25mm
31354	36 x Ø16mm	31361	16 x Ø30mm

Test tube rack for short type

Order No.	Description
31348	72 x Ø12mm
31353	64 x Ø14mm
31357	39 x Ø18mm (Suitable for Greiner Bio-one tube)

Rack for plastic test tube

Order No.	Description
31355	36x Ø16mm (15mL)
31362	16x Ø30mm (50mL)

187mm test tube rack for short type

Order No.	Description	Order No.	Description
31344	44 x Ø12mm	31349	21 x Ø20mm
31346	24 x Ø18mm		

Shaker for CO₂ Incubator

This is Compact Shaker with benefits such as small foot print and easy to move. The non-belt magnetic drive provides low noise, low vibration. Despite compact size, shaking is powerful and the workplace is large to load various vessels.



Specification

Model	SRC	CRC	MRC
Motion	Orbital		
Control	Microprocessor Digital		
Motor	Plate BLDC motor		
Drive System	Direct Magnetic Drive		
Display	LED display		
Speed Range (rpm)	30 ~ 300	30 ~ 300	30 ~ 300
Accuracy (rpm)	±1	±1	±1
Shaking Throw (mm)	25	25	25
Time Range	Continuous or up to 99 hours 59min		
Time Increment	1min		
Shaker size(W x L x H mm)	300 x 345 x 90	450 x 390 x 120	465 x 520 x 130
Weight (Kg)	7.5	14	25
Platform Size(W x L mm)	300 x 330	440x370	455 x 455
Control box Size(W x L x H mm)	155 x 95 x 25 / 0.5		
Power	100-240V 50/60HZ		
Load Capacity	100mL x 16	100ml x 23	100mL x 36
	250mL x 9	250ml x 10	250mL x 23
	500mL x 5	500ml x 6	500mL x 16
	1000mL x 4	1000ml x 5	1000mL x 9
	2000mL x 1	2000ml x 2	2000mL x 4
Order No.	W6100100	W6100200	W6100300

The try of various specifications for individual fitting can be ordered separately to be assembled by users.

Features

Gentle magnetic drive

The non-belt magnetic drive design affords for high performance of water resistance. This most gentle drive unit has exceptionally smooth start-up and braking behavior, and is specifically good for cell cultures.

Made of stainless steel

The entire housing of shaker is made of stainless steel (SUS304), meeting the demand of GMP's cleaning requirements. It is easy for the removal of any unwanted liquids and can be cleaned with chemicals.

Magnetic Attachment

The thin Wire Cable connection between the shaker and the control box can pass through the sealing part of the inner glass door although no access port is in your incubator.

Placing remote box with Magnet

Depending on the material type of the incubator or the situation of the lab, placing remote box is available with integrated magnets.

Accessories

Order No.	Name
Suitable for SRC	
W6100101	Sticky Plate
W6100102	Universal Tray
W6100103	Multi-Purpose Tray
W6100104	Microplate Rack
Suitable for CRC	
W6100201	Sticky Plate
W6100202	Universal Tray
W6100203	Multi-Purpose Tray
W6100204	Microplate Rack
Suitable for MRC	
W6100301	Sticky Plate
W6100302	Universal Tray
W6100303	Multi-Purpose Tray
W6100304	Microplate Rack



Sticky Plate



Universal Tray



Multi-Purpose Tray



Microplate Rack

Microplate Rack

Rocking Shaker

Simple Adjustments for Rocking Speed

WIGGENS Rocking Shaker is innovatively designed for use in a wide range of lab applications. WS-350R provides controlled seesaw-like motion, while the Shakers offer a smooth, low-foaming, 3D wave motion. Each unit includes a dimpled mat and universal harness
It can be used in the incubator because the unit is designed for ambient temperature between 2 °C and 50°C

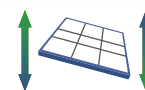
Your advantages

- > Working speeds range from 5rpm to 100rpm
- > Bright TFT with display resolution 1rpm, easy to operate with the knob and control keys
- > Tilt Angle ranges from 7° to 13°
- > Smooth Starting function to protect sample spilling out
- > Users can set the timer from 1 min to 99 hour 59 min, with the count-down timer.
- > BLDC motor provides low noise and strong durability
- > During overload situation, it shows overload sign, make alarm and stop the running



Application

Mixing blood samples, DNA extractions, blotting techniques, staining and destaining gels, hybridizations



Specifications

Model		WS-350R
Shaking System	Speed range(rpm)	5~ 100
	Speed control type	Feedback Control
	Tilt Angle	Easy adjustable from 7° to 13°
	Timer	1min to 99 hrs 59 min, Count-down time
Safety device	Over current protection	
Max. Load including attachment (kg)	5	
Motor type	BLDC motor	
Control panel	TFT, Delete touch keys and the control knob	
Dimension	Overall Dimension (W×D×H, mm)	276 x 343 x 150
	Tray dimension (W x D, mm)	276x 276
	Net Weight (kg)	6.9
Materials	PP, PET, Powder coated steel (Housing)	
Electrical requirement	100 ~ 240VAC, 50/60 Hz	
Order No.	W5011001	

Standard package includes: shaker and try (Order No.W5011101)

Accessories

Order No.	Part	Description
W5011101	Removable tray (Standard)	Included tray, silicon mate and universal harness (6ea)
W5011102	Removable tray	Included tray, rubber mat and universal harness (6ea)
W5011201	Tray	Tray only
W5011202	Rubber mat	Rubber mat
W5011203	Dimpled mat	Dimpled mat
W5011204	Universal harness, 6ea	Universal harness, 6ea



W5011101

W5011102

Waving Shaker

Simple Adjustments for Tilt Angle and Speed

WIGGENS Waving Shaker is innovatively designed for use in a wide range of lab applications. WS-350W provides controlled orbital motion, while the Shakers offer a smooth, low-foaming, 3D wave motion. Each unit includes a dimpled mat and universal harness. It can be used in the incubator because the unit is designed for ambient temperature between 2 °C and 50°C.

Your advantages

- > Working speeds range from 8rpm to 100rpm
- > Bright TFT with display resolution 1rpm, easy to operate with the knob and control keys
- > Tilt Angle ranges from 0° to 13°
- > Smooth starting function to protect sample from spilling out
- > Users can set the timer from 1 min to 99 hour 59 min, with the count-down timer.
- > BLDC motor provides low noise and strong durability
- > During overload situation, it shows overload sign, make alarm and stop the running



Application

Mixing blood samples, DNA extractions, blotting techniques, staining and destaining gels, hybridizations



Specifications

Model		WS-350W
Shaking System	Speed range(rpm)	8~ 100
	Speed control type	Feedback Control
	Tilt Angle	Easy adjustable from 0° to 13°
	Timer	1min to 99 hrs 59 min, Count-down time
Safety device	Over current protection	
Max. Load including attachment (kg)	5	
Motor type	BLDC motor	
Control panel	TFT, Delete touch keys and the control knob	
Dimension	Overall Dimension (W×D×H, mm)	276 x 343 x 150
	Tray dimension (W x D, mm)	276x 276
	Net Weight (kg)	7.3
Materials	PP, PET, Powder coated steel (Housing)	
Electrical requirement	100 ~ 240VAC, 50/60 Hz	
Order No.	W5011002	

Standard package includes: shaker and try (Order No.W5011101)

Accessories

Order No.	Part	Description
W5011101	Removable tray (Standard)	Included tray, silicon mate and universal harness (6ea)
W5011102	Removable tray	Included tray, rubber mat and universal harness (6ea)
W5011201	Tray	Tray only
W5011202	Rubber mat	Rubber mat
W5011203	Dimpled mat	Dimpled mat
W5011204	Universal harness, 6ea	Universal harness, 6ea



Microplate Shaker

Suitable for Microplate, Micro-tube and Conical tube

The microplate shaker is driven by brushless DC motor. It is mainly used in the mixed oscillation of enzyme label plate (96-well / 384-well plate), cell culture plate (24-well plate, 48-well plate, 96-well plate), micro tube and conical tube. It can be used in immunoassays, staining and other experiments. It has compact design and ensures, simple and convenient operation, safety, stability and no noise.

Your advantages

- > Working speeds range from 150rpm to 1200rpm
- > Bright TFT with display resolution 1rpm, easy to operate with the knob and control keys
- > Rotational motion with shaking radius of 3mm
- > Smooth starting function to protect the sample from spilling out
- > Users can set the timer from 1 min to 99 hour 59 min, with the count-down timer.
- > Possible to use 1.5mL Micro-tube, 15mL, 50mL conical tube.
- > BLDC motor provides low noise and strong durability
- > During overload situation, it shows overload sign, make alarm and stop the running



Specifications

Model		WS-350P
Shaking System	Speed range(rpm)	150~1,200 (No-load running)*
	Speed control type	Feedback Control
	Orbital diameter (mm)	3
	Timer	1min to 99 hrs 59 min, Count-down time
Safety device		Over current protection
Max. Load including attachment (kg)		4
Motor type		BLDC motor
Control panel		TFT, Delete touch keys and the control knob
Dimension	Overall Dimension (W×D×H, mm)	249 x 329 x 127
	Tray dimension (W x D, mm)	267x 183
	Net Weight (kg)	10.3
Materials		PP, PET, Powder coated steel (Housing)
Electrical requirement		100 ~ 240VAC, 50/60 Hz
Order No.		W5011003

* Maximum speed at full load is 600 rpm

Standard package includes: shaker and tray for 4 SBS micro-plates

Accessories

Order No.	Part	Description
W5011301	Tube rack	1.5mL Tube rack
W5011302	Tube rack	15mL Tube rack
W5011303	Tube rack	50mL Tube rack



1.5ml Tube rack



15ml Tube rack



50ml Tube rack

Heating Shaker

Useful for a variety of molecular biology applications.

Interval mix function in program mode can be properly set according to users' test condition.

Features

- > Microprocessor PID control ensuring consistent shaking motion and precision accuracy.
- > Speed range from 150 to max. of 1500 rpm (depending on the choice of interchangeable blocks)
- > Maximum 9 temperature range-specific calibration.
- > Memory function of programmed protocols allowing relevant parameters (such as temp., rpm, time) of each protocol step to be stored.
 - Up to 10 protocols allowed for memory storage.
 - Up to 10 steps allowed for each protocol.
 - Interval Mix function (continuous switching between shaking and phasing)
- > Two types of timer modes:
 - Timer 1 starts only after reaching the set temp.
 - Timer 2 starts right after the timer setting.



- > 96-Well Tube Block Set with Covers
- > 0.5mL / 1.5mL / 50mL Tube Block Set with Covers



Specifications

Mode		WS-350B	
Order No.	W5012350		
Control	Feedback control PID		
Display	VFD (0.1°C resolution)		
Temperature	Range (°C)	Amb.+5-100°C	
	Stability at 80°C (±°C)	0.3	
	Variation at 80°C (±°C)	0.7	
	Heating power (W)	360	
Safety	OverTemp.	Heating plate	
	Over Current	Current limit protection	
	Motion Type	Orbital	
Shaking System Dimension (WxDxH)	Speed range (rpm)	96-well tube block	150 -1500
		0.5mL tube block	150- 1000
		1.5 mL tube block	150-1000
		50 mL tube block	150-800
	Orbit Size (mm)	2	
Overall(WxDxH) (mm)	276 x 334 x 170		
Weight (kg)	8.3		
Electrical requirements	230V, 50/60 Hz, 1.7A		

Constructional

- > Bright VFD display with responsive touch buttons.
- > Its powder coated stainless steel body is highly chemical-resistant and easy-to-clean.
- > Optimal heat transfer is achieved by the tight coupling design of the main body and the corrosion-resistant anodized aluminum blocks.
- > Low-profile design with rubber feet for minimal vibration and noise.
- > Blocks can be easily interchanged by the included block lifter.



W5012454

W5012451



W5012452

W5012453

Accessories

Order No.	Description	Max. Mountable Tube
W5012451	0.5 mL Tube Block Set with Cover	0.5mL x 48 holes (microtube)
W5012452	1.5 mL Tube Block Set with Cover	1.5mL x 24 holes (microtube)
W5012453	50 mL Tube Block Set with Cover	50mL x 6 holes (centrifuge tube)
W5012454	96-well Tube Block Set with Cover	0.2mL x 96 holes (microtube)

Vortex Shaker -Vortex3000 Elite

Low profile design and highly touch sensitive sensor reduce wrist stress when pushing and holding experiment tools resulting in less fatigue and unpleasant feeling.

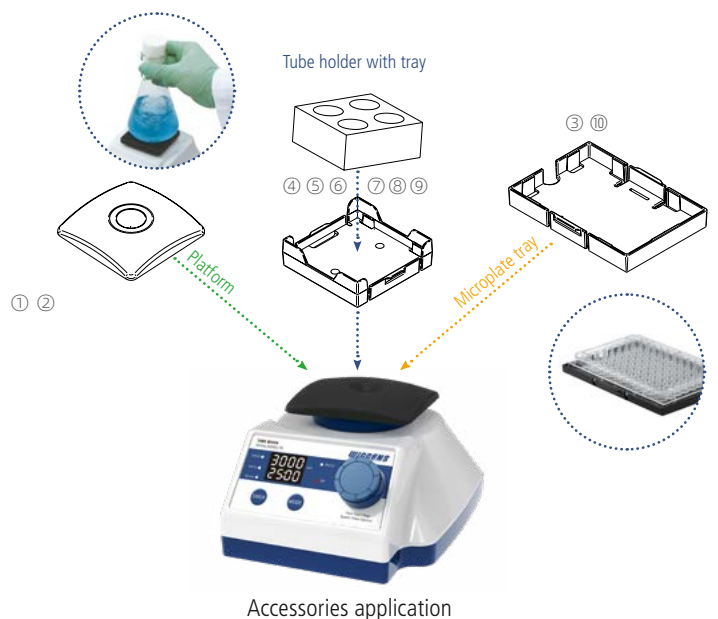
Features

- > Elaborate design for safe and reliable vortex shaking
- > Variable speed is from 100 to 3000 rpm
- > Very suitable for work in fume hoods and on sterile workbenches
- > Excellent vortex mixing of test tubes and cap vials
- > Shaking operation can be switched between continuous and on-touch operation
- > Two modes of time: 1s-99min59s and 1min-99hr59min
- > Countdown in timer mode allows to calculate the experiment time.
- > LED light shows set mixing speed.
- > Rubber feet guarantee stability of the shaker
- > Power cut-off function in case of electrical overload or excess current.
- > Chemically resistant PP (polypropylene) housing.
- > A wide range of accessories available (the rubber platform comes standard).



Specifications

Mode	Vortex3000 Elite
Order No.	W3060215
Motion	Orbital
Shaking throw (mm / inch, Ø)	4/1.6
Operation mode	Touch/Continuous
Timer	Yes
Interface	RS232, USB (B)
Display	Dual LED
Operation panel	Glass
Control mode	Knob/Button
Speed range (rpm)	100-3000
Speed increment (rpm)	10
Speed resolution (rpm)	1
Time increment (min/s)	1
Time (min/s)	1
Time range	1s-99min:59s or 1min-99hr:59min
Power (V)	DC24V, 0.75A
Dimension (WxDxH/mm):	147x173x92
Output (W)	15
Net weight	2.8kg



Vortex Shaker

Low profile design and touch sensitive sensor reduce wrist stress when pushing and holding experiment tools resulting in less fatigue and unpleasant feeling.

Features

- > Elaborate design for safe and reliable vortex shaking
- > Speed can be set between 0 and 3000 rpm (Scale)
- > Suitable for work under fume hoods, and on sterile workbenches
- > Excellent vortex mixing of test tubes and capped vials
- > Shaking operation can be switched between continuous and on-touch operation
- > LED light shows the actual shaking operation method
- > Rubber feet guarantee stability of the shaker
- > Power cut-off function in case of electrical overload or excess current.
- > Chemically resistant PP (polypropylene) molded exterior.
- > A wide range of accessories available.(the rubber platform comes standard)

Specifications

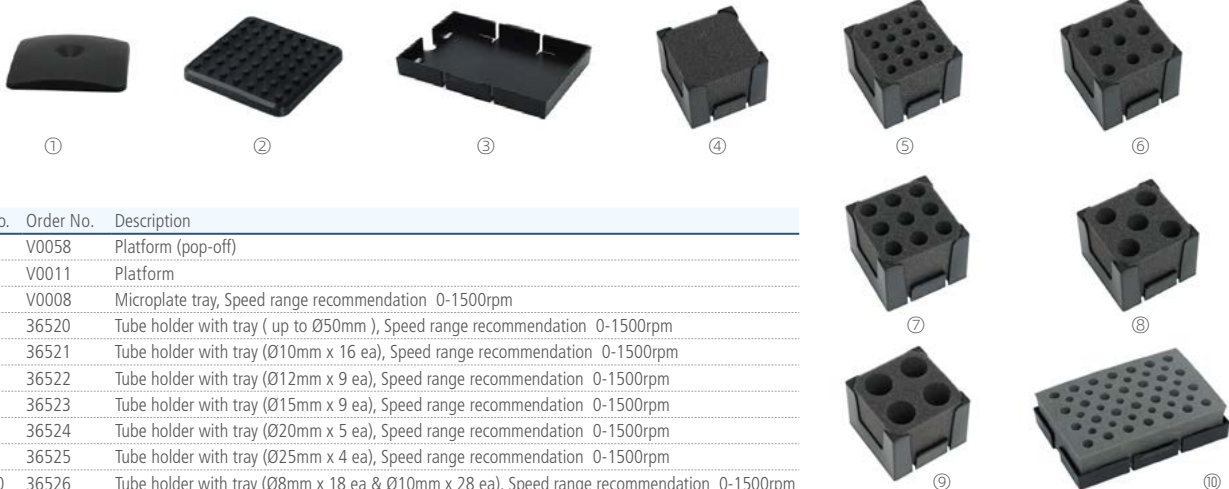
Model	Vortex3000		
Technical Data	Motion	Orbital	
	Speed Range (rpm)	0 - 3,000 (Turning knob scale display)	
	Control	Scale	
	Shaking Throw (mm / inch, Ø)	4 / 0.16	
	Operating Mode	Touch, Continuous	
	Motor Rating Input / Output (W)	12 / 6	
	Motor	BLDC motor	
	Max. Load (kg / lbs) - incl. attachment	0.5 / 1.1	
	General Data	Material	Body Polypropylene Platform Silicone rubber
		Dimension (mm / inch, W×D×H)*	148×159×77 / 5.8×7.4×3
Net Weight (kg / lbs)		2.6 / 5.7	
Safety Device		Current limit protection	
Protection Class (DIN EN 60529)		IP 42	
Order No.	360115		



Best-seller!



Accessories for Vortex 3000 Series



No.	Order No.	Description
1	V0058	Platform (pop-off)
2	V0011	Platform
3	V0008	Microplate tray, Speed range recommendation 0-1500rpm
4	36520	Tube holder with tray (up to Ø50mm), Speed range recommendation 0-1500rpm
5	36521	Tube holder with tray (Ø10mm x 16 ea), Speed range recommendation 0-1500rpm
6	36522	Tube holder with tray (Ø12mm x 9 ea), Speed range recommendation 0-1500rpm
7	36523	Tube holder with tray (Ø15mm x 9 ea), Speed range recommendation 0-1500rpm
8	36524	Tube holder with tray (Ø20mm x 5 ea), Speed range recommendation 0-1500rpm
9	36525	Tube holder with tray (Ø25mm x 4 ea), Speed range recommendation 0-1500rpm
10	36526	Tube holder with tray (Ø8mm x 18 ea & Ø10mm x 28 ea), Speed range recommendation 0-1500rpm

TM Series Vortex Shaker

- > Very accurate shaking speed due to the micro-chip speed controller
- > Stable and reliable performance
- > High shaking speed of up to 2500 rpm
- > Shaking operation can be switched between continuous and on-touch operation
- > Suitable for shaking test tubes or other small volume vials
- > Large range of platforms and other accessories
- > Aluminum housing
- > Suitable for deep well titer plates
- > Can be used as a stirrer and flask shaker when choosing the right accessories.



TM-1



TM-1F



TM-1F / 2F Accessories

TM-1F/2F 6 in 1 Package

Platform (standard) ①
Order No.: 3601-06

One-hand insert ③
Order No.: 3601-04

Universal Tray ②
Order No.: 3601-01

Test Tube Platform (6 Holes) ④
Order No.: 3601-04

Universal Tray ②
Order No.: 3601-01

Elisa Plate Tray ⑤
Order No.: 3601-03

Magnetic Stirring Plate ⑥
Stirring Speed 0~1500rpm
Order No.: 3601-02

TM-1F / 2F

Specifications

Model	TM-1	TM-1F	TM-2	TM-2F
Shaking Speed(rpm)	0-2500	0-2500	0-2500	0-2500
Max. Volume (L) in Stirring Mode	2	2	2	2
Housing Material	Plastic-Aluminum	Plastic-Aluminum	Plastic-Aluminum	Plastic-Aluminum
Shaking Throw (mm)	4.5	4.5	4.5	4.5
Speed Control/Display	Turning Knob Scale Display	Turning Knob Scale Display	Turning Knob LED Display	Turning Knob LED Display
Operation Mode	Continuous / On-Touch	Continuous / On-Touch	Continuous / On-Touch	Continuous / On-Touch
Accessories	Shaker Tray	Accessory Pack	Shaker Tray	Accessory Pack
Power (W)	17.3	17.3	17.3	17.3
Dimension (mm)	115X230X60	115X230X60	115X230X60	115X230X60
Order No.	360110	36011F	360120	36012F

Accessories for TM Series



Universal Tray

Can be used with different foam plastic platforms for simultaneous shaking of several test tubes
Order No. : 3601-01



Magnetic Stirring Plate

Can be directly installed on the shaker and used for stirring of smaller samples
Stirring speed: 0-1500rpm
Order No. : 3601-02



Elisa Plate Tray

Can be used with an ELISA Plate
Speed range recommendation: 0-1500rpm
Order No. : 3601-03



Test Tube Platform (6 Holes)

Can be used in combination with the universal tray for shaking operation of 6 test tubes with 12 mm diameter
Speed range recommendation: 0-2000rpm
Order No. : 3601-04



Test Tube Platform (4 Holes)

Can be used in combination with the universal tray for shaking operation of 4 test tubes with 16 mm diameter
Speed range recommendation: 0-2000rpm
Order No. : 3601-05



One-hand insert

80mm
Speed range recommendation: 0-800rpm
Order No. : 3601-06



Universal Base Plate

Base plate for foam plastic platforms with 120 mm diameter
Speed range recommendation: 0-1500rpm
Order No. : 3602-01



Test Tube Platform (54 Holes)

Can be used in combination with the universal base plate for shaking operation of 54 Eppendorf tubes
Speed range recommendation: 0-1500rpm
Order No. : 3602-02



Test Tube Platform (18 Holes)

Can be used in combination with the universal base plate for shaking operation of 18 test tubes with 10 mm diameter
Speed range recommendation: 0-1500rpm
Order No. : 3602-03



Test Tube Platform (12 Holes)

Can be used in combination with the universal base plate for shaking operation of 12 test tubes with 12 mm diameter
Speed range recommendation: 0-1500rpm
Order No. : 3602-04



Test Tube Platform (8 Holes)

Can be used in combination with the universal base plate for shaking operation of 8 test tubes with 20 mm diameter
Speed range recommendation: 0-1500rpm
Order No. : 3602-05



Test Tube Platform (8 Holes)

Can be used in combination with the universal base plate for shaking operation of 8 test tubes with 20 mm diameter
Speed range recommendation: 0-1500rpm
Order No. : 3602-06



Flask Holder

Can be used in combination with the universal base plate for shaking operation of Erlenmeyer or round flasks with a volume between 100 and 250 mL
Order No. : 3602-07



Digital Pulse Mixer

Performing high or low speed pulse vortexing/mixing for most applications

WIGGENS Digital Pulse Mixer is capable of performing high or low speed pulse vortexing/mixing for most applications. This unit is able to accommodate a wide variety of glassware, racks, well plates or reactor blocks for accurate, repeatable results. The microprocessor-based control technology allows for display of speed, multi-function timer, and pulse profiling.



Your advantages

- > Working speed range from 100rpm to 1500rpm
- > Bright TFT with display resolution 1rpm, easy to operate
- > Built-in digital timer (seconds: 1-60, minutes 1-60, hours 1-24)
- > Preset run times of 30, 60, 90 and 120 seconds
- > User selectable pulse profile (Pulses-per-minute: 1-100), Ppm-duty-cycle: 1-99 %
- > Timer and Pulse mode may be combined for timed-pulse mode
- > Fail Safe Mode to prevent speed fluctuations
- > BLDC motor provides low noise and strong durability
- > User-friendly operating panel (4 buttons)
- > Smooth Starting function to protect the sample from spilling out
- > RS232 interface, optional software for real time data acquisition



Application

Solution phase synthesis, solid phase chemistry, bacteria cultivation

Specifications

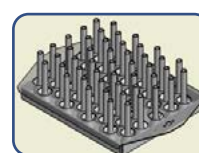
Model	DPM-24
Order No.	W5021001
Working speed range(rpm)	100 ~1500
Speed control type	Feedback Control
Control panel	TFT, Push button
Motor type	BLDC motor
Quick timing mode	30s, 60s, 90s, 120s are available
Pulse mode	Pulses adjustment range(min): 1-100 Duty Cycle adjustment range(%): 1-100
Timer and Pulse mode	Timer: 00:00:00 to 24:60:60 Pulses adjustment range(min): 1-100 Duty Cycle adjustment range(%): 1-100
Electrical requirement	110 or 240VAC, 50/60 Hz

Sample Preparation

Our Digital Pulse Mixers are ideal for preparation work in volumetric flasks.

Simply changing the chemical resistant bottom foam pad allows you to quickly switch flask sizes while using one standard hold down top.

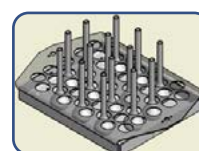
Order No.	Description
W5021101	Hold down top with holes
W5021102	15mm pad for 25mL vol. flask, 49 Position
W5021103	15mm pad for 50mL vol. flask, 14 Position
W5021104	15mm pad for 100mL vol. flask, 14 Position
W5021105	15mm pad for 250mL vol. flask, 8 Position
W5021106	15mm pad for 500mL vol. flask, 6 Position



25mL Vol. Flasks



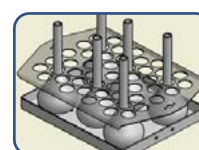
50mL Vol. Flasks



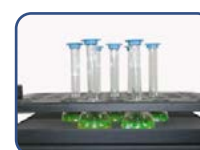
100mL Vol. Flasks



250mL Vol. Flasks



500mL Vol. Flasks



Digital Pulse Mixer Shown with 100mL Volumetric Flasks & Hold Down Top

Separatory Funnel Shaker

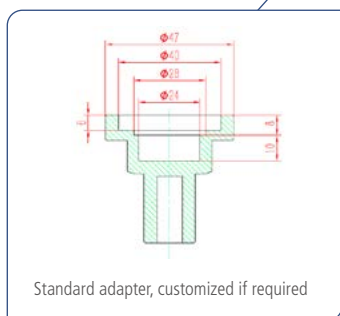
WS-1

Intensive vertical reciprocal quick solvent extraction shaking unit.

The separatory funnel shaker is able to shake six samples under identical conditions for any series or comparative protocols in chemistry, biotech, and medical labs.



WS-1
Angle is not adjustable



WS-1PLUS
0~20° Angle adjustable

Features

- > Intensive vertical shaking
- > Shaking of 6 samples under identical conditions possible
- > Mostly used in chemical, biotech, and medical laboratories
- > The speed can be set between 50 and 300 rpm
- > The timer can either be set on continuous or between 0 and 60 min
- > Flasks of up to 40 mm width can be used
- > Bright TFT display for convenient speed monitoring
- > Wide speed range and high precision of the speed control
- > Feedback loop to a digital controller
- > At the end of a shaking session the device stops automatically with an audible alarm
- > Easily adjustable flask holder (max. 5 flasks per side)
- > It comes with six funnel holders as standard capable of accommodating up to 1000ml
- > WS-1 PLUS entails a flask holder to adjust the shaking angle

* Funnel Capacities (per each side)

Capacity	Round type funnel	Slim type funnel
under 500mL	3-5	5
500mL	3	3
1L	--	3
2L	--	2

Accessories Included

- 500mL Separatory Funnel Holder (Order No.: 32500)
- 1L Separatory Funnel Holder (Order No.: 32501)
- 2L Separatory Funnel Holder (Order No.: 32502)

Specifications

Model	WS-1	WS-1 PLUS
Motion Type	Vertical reciprocal	
Speed Range (rpm)	50 ~ 300	
Accuracy(± rpm)	± 1	
Vertical Stroke Length (mm)	40	
Timer	60 min or continuous operation	
Overall (W×D×H) (mm)	445×730×505	
Max. Load per each Side (kg)	3	
Power (W)	90	
Fixture	6	
Weight (Kg)	77	90
Shaking Angle	Fixed	Angle adjustable 0-16°
Order No.	32012KA	32012KB

Funnel Separatory, Glass or PTFE stopper



Order No.	Capacity (mL)	Joint	Plug Bore (mm)	Stopper
189111-05	50	14/20	2	PTFE stopper
189111-06	50	19/22	2	PTFE stopper
189111-07	100	14/20	2	PTFE stopper
189111-08	100	19/22	2	PTFE stopper
189111-09	125	14/20	2	PTFE stopper
189111-10	125	19/22	2	PTFE stopper
189111-11	125	24/40	2	PTFE stopper
189111-12	250	14/20	4	PTFE stopper
189111-13	250	19/22	4	PTFE stopper
189111-14	250	24/40	4	PTFE stopper

Order No.	Capacity (mL)	Joint	Plug Bore (mm)	Stopper
189111-19	50	14/20	2	Glass stopper
189111-20	50	19/22	2	Glass stopper
189111-21	100	14/20	2	Glass stopper
189111-22	125	14/20	2	Glass stopper
189111-23	100	19/22	2	Glass stopper
189111-24	125	19/22	2	Glass stopper
189111-25	125	24/40	2	Glass stopper
189111-26	250	14/20	4	Glass stopper
189111-27	250	19/22	4	Glass stopper
189111-28	250	24/40	4	Glass stopper

Optional accessories

Order No.	Description
189111-29	2mm PTFE locking stopper
189111-30	4mm PTFE locking stopper
189111-31	14/20 Glass stopper
189111-32	19/22 Glass stopper
189111-33	14/20 PTFE locking stopper
189111-34	19/22 PTFE locking stopper
189111-35	24/40 PTFE locking stopper

Funnel Separatory, Glass locking stopper



Order No.	Capacity (mL)	Stopper Size (mm)	Plug Bore (mm)	Stopper
189112-02	60	16	2	PTFE
189112-03	125	22	2	PTFE
189112-04	250	22	4	PTFE
189112-05	500	27	4	PTFE
189112-06	1000	27	4	PTFE

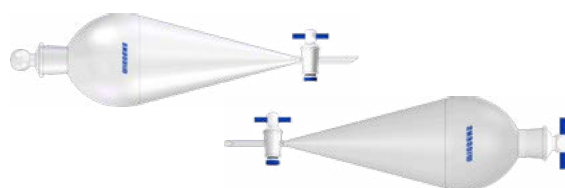
Optional accessories

Order No.	Description
189112-07	2mm Glass locking stopper
189112-08	4mm Glass locking stopper

Optional accessories

Order No.	Description
189113-49	2mm PTFE locking stopper
189113-50	4mm PTFE locking stopper

Funnel Separatory, PTFE locking stopper



Order No.	Capacity (mL)	Joint	Plug Bore (mm)	Stopper
189113-06	50	14/20	2	Glass stopper
189113-07	50	19/22	2	Glass stopper
189113-08	60	N0.16	2	Glass stopper
189113-09	100	14/20	2	Glass stopper
189113-10	100	19/22	2	Glass stopper
189113-11	125	14/20	2	Glass stopper
189113-12	125	19/22	2	Glass stopper
189113-13	125	24/40	2	Glass stopper
189113-14	125	N0.22	2	Glass stopper
189113-15	250	19/22	4	Glass stopper
189113-16	250	24/40	4	Glass stopper
189113-17	250	29/42	4	Glass stopper
189113-18	250	N0.22	4	Glass stopper
189113-19	500	24/40	4	Glass stopper
189113-20	500	29/42	4	Glass stopper
189113-22	500	N0.27	4	Glass stopper
189113-23	1000	24/40	4	Glass stopper
189113-24	1000	N0.27	4	Glass stopper

Order No.	Capacity (mL)	Joint	Plug Bore (mm)	Stopper
189113-31	50	14/20	2	PTFE stopper
189113-32	50	19/22	2	PTFE stopper
189113-33	60	N0.16	2	PTFE stopper
189113-34	100	14/20	2	PTFE stopper
189113-35	100	19/22	2	PTFE stopper
189113-36	125	14/20	2	PTFE stopper
189113-37	125	19/22	2	PTFE stopper
189113-38	125	24/40	2	PTFE stopper
189113-39	125	N0.22	2	PTFE stopper
189113-40	250	19/22	4	PTFE stopper
189113-41	250	24/40	4	PTFE stopper
189113-42	250	29/42	4	PTFE stopper
189113-43	250	N0.22	4	PTFE stopper
189113-44	500	24/40	4	PTFE stopper
189113-45	500	29/42	4	PTFE stopper
189113-46	500	N0.27	4	PTFE stopper
189113-47	1000	24/40	4	PTFE stopper
189113-48	1000	N0.27	4	PTFE stopper

Pressure Release Valves

These pressure release valves reduce the hazards of pressure build-up. They simply slip over the drain of a WIGGENS funnel and tighten down with a twist of the wrist. The valve can be easily removed when it is time to drain the funnel. Each valve is made of Teflon resin and is factory preset to release at 1 psi of pressure.

The valve can be adjusted to release at pressures up to 5 psi by turning the pressure release slug on the top of the valve with a screwdriver.



Order No.	Description
PRV6	For WIGGENS funnels SEP0060–SEP1000 or spout OD 7.5–9.5 mm
PRV10	For WIGGENS SEP2000 or spout OD 12.5–13.0 mm