Orbital Shakers

> Two different shaking functions: back and forth, and orbital
> Adjustable shaking speed and range
> Timer function for maximum flexibility
> Corrosion resistant stainless steel housing,
> Easy to clean and maintain
> Large mounting surface and big load capacity of up to 12 kg
> Ideal for vessels with more than 250 ml capacity, 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.

Economy Shakers

The distinctive and economical models offer the most felicitousshaking motion
Two types of shaking motions (orbital or reciprocating), four types of an orbit or reciprocating lengths. The compact and interchangeable platform design accommodates various types and sizes of vessels and suitable for use in chambers.

Specifications

CE

Model	WS-50D	WS-50DR
Motion Type	Orbital	Reciprocating
Speed Range (RPM)	10 to 300	10 to 250
Accuracy (rpm)	± 2 (100 RPM)	± 2 (100 RPM)
Timer (min)	Delay On / Off Time : 1min to 999hr 59min Forward & Backward, Pause : 10sec to 59min 59 sec	
Amplitude Size (mm)	20 (10 to 300rpm/14mm; 10 to 300rpm/8mm Available)	20 (10 to 300rpm/14mm; 10 to 300rpm/8mm Available)
Platform (W×D) (mm)	320x260(mm)	320x260(mm)
Overall (LxWxH)(WxDxH)	355x375x140(mm)	355x375x140(mm)
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.)
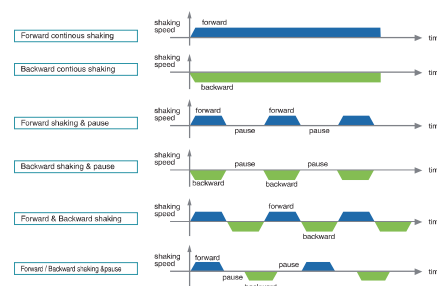
Dual-Action Shakers

Benchtop platform shakers with advanced dual-shaking features, for flask up to maximum 6L.
Performances Orbital or Reciprocating action and variable-speed control provided gentle to vigorous agitation. Offers user-friendly operating and safety features for reliable shaking of lab glassware.

Note:
Mounting plate not included

Specifications

CE

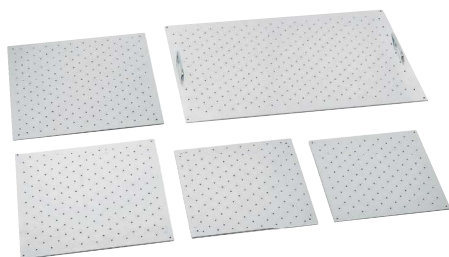| Model	WS-100D	WS-150D	WS-200D
Display and Control	TFT Digital Display / On-Touch Control	TFT Digital Display / On-Touch Control	TFT Digital Display / On-Touch Control
Motion Type	Orbital or Reciprocating motion selectable		
Accuracy(rpm)	±1	±1	±1
Speed Range (RPM)	10~300	10~300	10~300
Amplitude Size (mm)	20, 30, 40 Available - Standard 30	20, 30, 40 Available - Standard 30	30, 40, 50, 60, 70 Available - Standard 30
Timer (min)	Run time: 10 sec to 999 hr 59 min 59 sec Forward & Backward, Pause : 10 sec to 59 min 59 sec		
Maximum Load (kg)	7	12	30
Power (W)	45/10	70/19	140/38
Platform (W×D) (mm / inch)	350×350 / 13.8×13.8	450×450 / 17.7×17.7	755×481 / 29.7×18.9
Overall (W×D×H) (mm/inch)	410×490×150 / 16.1×19.3×5.9	510×595×150 / 20.1×23.4×5.9	820×610×166 / 32.3×24×6.5
Weight (Kg / lbs)	24 / 52.9	29 / 63.9	50 / 110.2
Order No.	200200C	200300C	200400C

Accessories for Shakers

Sticky Plate

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

Universal Trays

The Universal Trays employ a drilled grid for individual loadings of test tube holders, 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 Holders				
50ml	21	36	55	99
100ml	14	28	44	74
250ml	8	13	24	39
300ml	8	13	24	39
500ml	5	10	16	25
1L	3	5	8	14
2L	1	4	5	9
2.8L	1	2	4	6
4L	-	1	2	4
Max. Load of Separatory Funnel Holders				
250ml	4	4	6	11
500ml	3	3	4	9
1L	2	2	3	5
2L	-	1	2	4

Multi-Purpose Tray

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
Max. Load of Beakers				
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

Multi-Pore Holders

The Wiggens multi-pore holders can be installed on the Wiggens sticky plates or the Wiggens 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
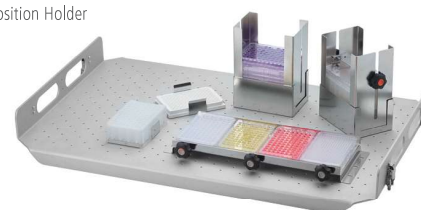
Max. No. of Mountable Holders	Multi-Layer	Four-Position	Three-Position	Single-Position
Order No.	23651	23652	23653	23654
Max. mountable holders				
WS-50D/50DR	4	-	1	6
WS-100D	6	-	2	8
WS-150D	10	2	3	15
WS-200D	16	3	5	25