ORBITAL SHAKER

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Allows for easy and accurate rack placement, data retrieval on power failure and slow start up function prevents liquid spillage. Applications like stability and dissolution studies, liquid extractions, protein precipitation studies, small peptide synthesis and dilutions makes it an ideal choice.
Used in Stability, Dissolution Studies, Liquid Extractions, Protein Precipitation, Small Peptide Synthesis, Dilutions.
Also known as Laboratory Orbital Shaker.

LO11 SERIES ORBITAL SHAKER

- Microprocessor control with simultaneous display of time and speed
- Brushless DC motor ensures maintenance-free, reliable and quiet operation
- Adjustable speed control provides gentle to vigorous agitation
- Audio alarm signals program completion
- Accommodate a variety of platforms, non-slip rubber mat, conical flasks and other sample containers

SPECIFICATIONS

Model	LO111	LO112	LO113
Speed Range	50-350 rpm	50-300 rpm	50-250 rpm
Temperature Range	4-45°C		
Shaking Orbit	10 mm	20 mm	30 mm
Timing Range	1 min~99 h59 min		
Motion	Orbital		
Maximum Load Capacity	2 kg		
Operation	Continuous/Timed		
Overall Dimension	280x260x90 mm		
Display	LED		
Weight	7.5 kg		
Power	50 W		
Power Supply	AC100-230 V, 60 Hz		

OPTIONAL ACCESSORIES

Accessory Code	Name	Description
SX5052	Platform	Flat platform with non-slip rubber mat
SX5053	Platform	Double deck flat platform with non-slip rubber mat
SX5054	Platform	Platform with clamps for flasks 100-150 ml
SX5055	Platform	Platform with clamps for flasks 250-300 ml

Accessory Code	Name	Description
SX5056	Platform	Universal platform with adjustable bars
SX5057	Platform	Universal platform with springs
SX5058	Platform	Sticky pad (not platform. can be put in the platform SX5052 or SX5053)

LO21 SERIES ORBITAL SHAKER

- Microprocessor control with simultaneous display of time and speed
- Compact space-saving design fits easily in incubator and refrigerator
- Brushless DC motor ensures maintenance-free, reliable and quiet operation
- Adjustable speed control provides gentle to vigorous agitation
- Multi-functional shaking system Audio alarm signals program completion
- Accommodate a variety of platforms, non-slip rubber mat, conical flasks and other sample containers

SPECIFICATIONS

Model	LO211	LO212	LO213
Speed Range	50-300 rpm	50-250 rpm	
Temperature Range	Ambient +5-40°C		
Shaking Orbit	10 mm	20 mm	10, 15, 20 mm available (15mm by default)
Timing Range	1 min~99 h59 min		
Motion	Orbital		
Maximum Load Capacity	3 kg	2.5 kg	8 kg
Operation	Continuous/Timed		
Overall Dimension	280x270x110 mm		320x350x145 mm
Display	LED		
Weight	7.2 kg		17.5 kg
Power	51 W	50 W	-
Power Supply	AC100~240 V, 50/60 Hz, 2 A		AC90~240 V, 50/60 Hz, 2 A
Platform Dimension	-	-	270x240 mm

OPTIONAL ACCESSORIES

Accessory Code	Name	For Models
SX5008	Flat Platform	LO211, LO212
SX5009	Platform	LO211, LO212
SX5010	Platform	LO211, LO212
SX5011	Universal Platform	LO211, LO212
SX5012	Platform with springs	LO211, LO212
SX5013	Flask Clamp	LO213
SX5014	Flask Clamp	LO213

Accessory Code	Name	For Models
SX5015	Flask Clamp	LO213
SX5016	Flask Clamp	LO213
SX5017	Platform	LO213
SX5018	Platform	LO213
SX5019	Platform	LO213
SX5020	Platform	LO213

LO211, LO212

LO213

LO31 SERIES ORBITAL SHAKER

- Easy to operate with one touch knob
- DC brushless motor for gentle and powerful motion

SPECIFICATIONS

Model	LO311
Speed Range	50-300 rpm
Speed Increment	1 rpm
Timing Range	1 min ~ 99 h59 min
Maximum Load Capacity	3 kg
Overall Dimension	280×270×110 mm
Weight	6.5 kg
Power	45 W
Power Supply	220 V/120 V

LO41 SERIES ORBITAL SHAKER

LO411, LO412   LO413   LO414

FEATURES

	LO411	LO412	LO413	LO414
Brushless DC motor ensures maintenance-free, reliable and quiet operation	●	●	●	●
Compact space-saving design fits easily in incubator and refrigerator	●	●		
Simultaneous display of speed, timer and operating mode	●	●		
Electronic time switching clock controls time or continuous operation mode	●	●		
RS232 interface enables data logging & computer control	●	●		
Over speed detection and protection	●	●		
Accommodate a variety of platforms, non-slip rubber mat, conical flasks and other sample containers	●	●		
Max. load capacity is 3kg with platform			●	●
Double LEDs for independent display of time and speed			●	●
Various platform accessories are available			●	●

SPECIFICATIONS

Model	LO411	LO412	LO413	LO414
Speed Range	100-350 rpm (Linear) 100-500 (orbital)	100-350 rpm (Linear) 100-800 (orbital)	40-200 rpm	0-200 rpm
Temperature Range	4-40°C		-	-
Permissible Ambient Temperature	5-40°C		5-40°C, 80%RH	
Shaking Orbit	10 mm	4 mm	20 mm	
Permissible Relative Humidity	0.8		-	-
Timing Range	1-1199 min		1 min ~ 99 h59 min	-
Motion	Orbital/Linear		-	-
Motor rating Input [W]	28		16	
Motor rating output [W]	15		10	
Maximum Load Capacity	7.5 kg	2.5 kg	3 kg	
Operation	Continuous/Timed		-	-
Overall Dimension	420x370x100 mm	340x300x100 mm	270×330×110mm	
Display	LCD		LED	-
Weight	13.5 kg	8.1 kg	3.1 kg	
Power	30 W			
Power Supply	100-240 V, 50/60 Hz		100-240 V, 50/60 Hz	
Protection Class	-	-	IP21	

OPTIONAL ACCESSORIES

Accessory Code	Name	For Models
SX5084	Fixing clip for flask volume 25 ml	All
SX5085	Fixing clip for flask volume 50 ml	All
SX5086	Fixing clip for flask volume 100 ml	All
SX5087	Fixing clip for flask volume 200 / 250 ml	All
SX5088	Fixing clip for flask volume 500 ml	All
SX5089	Universal attachment with 4 bars	LO411, LO412
SX5090	Fixing clip attachment	LO411, LO412
SX5091	Lengthways roller attachment	LO411, LO412

Accessory Code	Name	For Models
SX5092	Dish platform with non-slip mat and fixed string(8 pcs)	LO411, LO412
SX5093	Universal attachment, black	LO411, LO412
SX5079	Universal attachment with 3 bars	LO413, LO414
SX5080	Fixing clip attachment	LO413, LO414
SX5081	Lengthways roller attachment	LO413, LO414
SX5082	Dish Attachment with non-slip mat	LO413, LO414
SX5083	Universal attachment, black	LO413, LO414

LO42 SERIES ORBITAL SHAKER

LO421, LO422   LO423   LO424

FEATURES

	LO421	LO422	LO423	LO424
Brushless DC motor ensures maintenance-free, reliable and quiet operation	●	●	●	●
Compact space-saving design fits easily in incubator and refrigerator	●	●		●
Simultaneous display of speed, timer and operating mode	●	●		●
Electronic time switching clock controls time or continuous operation mode	●	●		●
RS232 interface enables data logging & computer control	●	●		●
Over speed detection and protection	●	●		●
Accommodate a variety of platforms, non-slip rubber mat, conical flasks and other sample containers	●	●		●
Double LEDs for independent display of time and speed			●	
Various platform accessories are available				●

SPECIFICATIONS

Model	LO421	LO422	LO423	LO424
Speed Range	100-500 rpm (orbital) 100-350 rpm (Linear)	100-800 rpm (orbital) 100-350 rpm (Linear)	40-200 rpm	0-200 rpm
Permissible Ambient Temperature	5-40°C		5-40°C, 80%RH	-
Shaking Orbit	10 mm	4 mm	-	20 mm
Permissible Relative	0.8		-	-

Humidity				
Timing Range	1-1199 min		1 min-19 h59 min	-
Motion	Orbital/Linear	-	-	Orbital/Linear
Motor rating Input [W]	28		16	-
Motor rating output [W]	15		10	-
Maximum Load Capacity	7.5 kg	2.5 kg	3 kg	
Operation	Continuous/Timed		-	Continuous
Overall Dimension	420x370x100 mm	340x300x100 mm	270×330×110 mm	330x270x110 mm
Display	LCD		LED	Analog
Weight	13.5 kg	8.1 kg	3.1 kg	
Power	30 W			
Power Supply	110 V-240 V, 50/60 Hz		100-240 V,50/60 Hz	240 V, 50/60 Hz
Amplitude	-	-	20 mm	-
Protection Class	-	-	IP21	-
Temperature Range	-	-	-	5-40°C

OPTIONAL ACCESSORIES

Accessory Code	Name	For Models
SX5084	Fixing clip for flask volume 25 ml	All
SX5085	Fixing clip for flask volume 50 ml	All
SX5086	Fixing clip for flask volume 100 ml	All
SX5087	Fixing clip for flask volume 200 / 250 ml	All
SX5088	Fixing clip for flask volume 500 ml	All
SX5089	Universal attachment with 4 bars	LO421
SX5090	Fixing clip attachment	LO421
SX5091	Lengthways roller attachment	LO421

Accessory Code	Name	For Models
SX5092	Dish platform with non-slip mat and fixed string(8 pcs)	LO421
SX5093	Universal attachment, black	LO421
SX5079	Universal attachment with 3 bars	LO422, LO423, LO424
SX5080	Fixing clip attachment	LO422, LO423, LO424
SX5081	Lengthways roller attachment	LO422, LO423, LO424
SX5082	Dish Attachment with non-slip mat	LO422, LO423, LO424
SX5083	Universal attachment, black	LO422, LO423, LO424

LO43 SERIES ORBITAL SHAKER

| LO431 | LO432 | LO433 |

FEATURES

	LO431	LO432	LO433
Various platform accessories are available	●	●	●
DC Motor	●	●	●
Max. load capacity is 10kg with platform	●		
Double LCDs for independent display of time and speed	●		
Max. load capacity is 3kg with platform		●	●
Double LEDs for independent display of time and speed		●	

SPECIFICATIONS

Model	LO431	LO432	LO433
Speed Range	10-70 rpm	10-80 rpm	0-80 rpm
Permissible Ambient Temperature	5-40°C, 80%RH		
Timing Range	1 min-19 h59 min		-
Angle Range	9°	7°	
Motor rating Input [W]	40	16	
Motor rating output [W]	24	10	
Maximum Load Capacity	10 kg	3 kg	
Overall Dimension	360×410×200 mm	270×330×130 mm	
Display	LCD	LED	-
Protection Class	IP21		
Weight	9 kg	3.2 kg	
Power	50 W	20 W	
Power Supply	100-240 V, 50/60 Hz		

OPTIONAL ACCESSORIES

Accessory Code	Name	For Models
SX5084	Fixing clip for flask volume 25 ml	All
SX5085	Fixing clip for flask volume 50 ml	All
SX5086	Fixing clip for flask volume 100 ml	All
SX5087	Fixing clip for flask volume 200 / 250 ml	All
SX5088	Fixing clip for flask volume 500 ml	All
SX5089	Universal attachment with 4 bars	LO431
SX5090	Fixing clip attachment	LO431

Accessory Code	Name	For Models
SX5092	Dish platform with non-slip mat and fixed string(8 pcs)	LO431
SX5093	Universal attachment, black	LO431
SX5079	Universal attachment with 3 bars	LO432, LO433
SX5080	Fixing clip attachment	LO432, LO433
SX5081	Lengthways roller attachment	LO432, LO433

SX5091	Lengthways roller attachment	LO431

SX5082	Dish Attachment with non-slip mat	LO432, LO433
SX5083	Universal attachment, black	LO432, LO433

LO44 SERIES ORBITAL SHAKER

LO441

LO442

LO443

FEATURES

	LO441	LO442	LO443
Three-dimensional rocking motion	●	●	●
Various platform accessories are available	●	●	●
DC Motor	●	●	●
Max. load capacity is 5kg with platform	●		
Double LCDs for independent display of time and speed	●		
Max. load capacity is 3kg with platform		●	●
Double LEDs for independent display of time and speed			●

SPECIFICATIONS

Model	LO441	LO442	LO443
Speed Range	10-70 rpm	10-80 rpm	0-80 rpm
Timing Range	1 min-19 h59 min		-
Motion	Reciprocal	-	-
Angle Range	9°	7°	
Motor rating Input [W]	40	16	
Motor rating output [W]	24	10	
Maximum Load Capacity	5 kg	3 kg	
Overall Dimension	360×430×106 mm	270×330×130 mm	
Display	LCD	LED	-
Protection Class	IP21		
Weight	9 kg	2.7 kg	
Fuse	250 V,1 A, Φ5x20	-	-
Power	50 W	20 W	
Power Supply	100-240 V, 50/60 Hz	100-240 V,50/60 Hz	
Permissible Ambient Temperature	-	5-40°C, 80%RH	

OPTIONAL ACCESSORIES

Accessory Code	Name	For Models
SX5084	Fixing clip for flask volume 25 ml	All
SX5085	Fixing clip for flask volume 50 ml	All
SX5086	Fixing clip for flask volume 100 ml	All
SX5087	Fixing clip for flask volume 200 / 250 ml	All
SX5088	Fixing clip for flask volume 500 ml	All
SX5089	Universal attachment with 4 bars	LO441
SX5090	Fixing clip attachment	LO441
SX5091	Lengthways roller attachment	LO441

Accessory Code	Name	For Models
SX5092	Dish platform with non-slip mat and fixed string(8 pcs)	LO441
SX5093	Universal attachment, black	LO441
SX5079	Universal attachment with 3 bars	LO442, LO443
SX5080	Fixing clip attachment	LO442, LO443
SX5081	Lengthways roller attachment	LO442, LO443
SX5082	Dish Attachment with non-slip mat	LO442, LO443
SX5083	Universal attachment, black	LO442, LO443