





CENTRIFUGES



## **Company Profile**

Dragon Laboratory Instruments Limited, known as Dragonlab and founded in 2002 as a specialized manufacturer, is now one of the leading manufacturing and distributing companies worldwide of high quality laboratory instruments and equipment for industries, diagnostics and research.

All our products are designed and manufactured in accordance with ISO9001 / 13485 by our dedicated and experienced R&D & Engineering team. The state-of-the-art manufacturing facility spreads over an area of 21,000 sgm and is based in China's capital, Beijing. Its quality controls that go from the metal processing through the final inspections of the end products adequate to the most strict world standards.

Our growing international presence is shaping Dragon Laboratory Instruments Limited into the brand DLAB and in 2016 we have founded our USA-subsidiary as DLAB Scientific Inc and India-subsidiary as DLAB Scientific India Private Limited.

DLAB is committed to become an one-stop supplier for a growing range of general laboratory instruments, characterized by reliability, high accuracy and a high competitive value along with skilled application and after-sales support.

"DLAB is always your accessible solution"







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DLAB products are manufactured in accordance with ISO9001 and ISO13485. All products comply with EU and North America standards, CE, cTÜVus, FCC marked and subjected to the strict QC control.

DLAB instruments are tested and conform to the following safety and EMC standards:

EN 61010-1 UL 3101-1 CAN/CSA C22.2(1010-1)

EN 61010-2-10 EN 61326-1 EMC-guidelines: 89/336/EWG Instrument guidelines: 73/023/EWG

# Liquid Handling



## **Electronic pipette**

### **dPette**

## **Electonic Pipette**

#### **Features**

- A motor drive digital control pipette with multifunction Pipetting, Mixing, Stepper and Dilution
- 2 buttons handle all operation and setting
- Light weight, ergonomic design, small body dimension for easy handling that guarantees fatigue free pipetting
- High accuracy, high performance stepper motor assures precision and repeatability and eliminates manual pipetting errors
- A wide range of pipetting modules for selection
- Adjustable speeds for aspiration and dispensing
- Li-ion battery and two charging mode enable longer operation time
- Self calibration By link it to a PC and a balance with USB connector, user can calibrate dPette by himself. No need to send it to the third party for calibration.



### **Specifications**

Channels	Volume Range Increment		Test Volume	Inaccuracy		Imprecision		
Chamicis	uL	uL	uL	uL	%	s.d.*uL	CV%*	
1	0.5~10	0.01	10 1	±0.10 ±0.03	±1.0 ±3.0	0.05 0.03	0.50 2.00	
1	5~50	0.1	50 5	±0.40 ±0.14	±0.80 ±2.75	0.15 0.08	0.30 1.50	
1	30~300	1	300 30	±1.80 ±0.75	±0.60 ±2.50	0.60 0.23	0.20 0.75	
1	100~1000	5	1000 100	±5.00 ±2.25	±0.50 ±2.25	1.50 0.50	0.15 0.50	

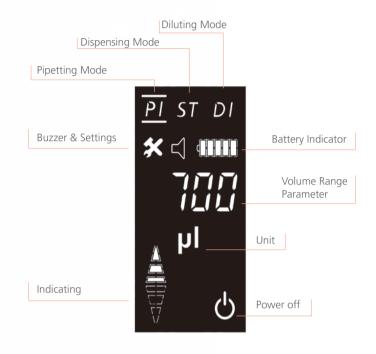
<sup>\*</sup> s.d. = Standard Deviation

<sup>\*</sup>CV = Coefficient of Variation

## **Electronic pipette**



dPette is an innovative electronic pipette developed by DLAB. It combines the feature of manual pipette as ergonomic and light weight with the feature of electronic pipette as labor-saving and high performance, it offers new pipetting experience to the Lab users.





## **Mechanical Pipettes**



## **MicroPette plus**



#### **Features**

- Fully autoclavable
- Ergonomic design provides excellent operating experience
- Easy-to-read volume display
- The pipettes cover the volume range from 0.1µL to 10mL
- Easy calibration and maintenance
- Manufactured from innovative materials
- Each MicroPette Plus supplied with an individual calibration certificate according to ISO8655

# MicroPette plus multi-channel



#### **Features**

- 8 and 12 channel pipettes are appropriate for 96-well plates
- Dispensing head rotates for effortless pipetting convenience
- Individual piston and tip cone assemblies allows for easy repair and maintenance
- Compound material-made tip cone secures high sealing performance
- Compatible with most universal tip brands





8 channels

#### **Fully autoclavable**

The MicroPette Plus pipettes are fully Autoclavable enable easy cleaning to reduce the risk of contamination. Steam autoclaving can be performed at 121 °C, 1 bar for 20 minutes. After autoclaving the pipette must be cooled down and left to dry for 12 hours before use.

It is recommended to check the performance of the pipette after each autoclaving. Greasing and sealing of the pipette piston after every 10th autoclaving will secure an enhanced function.







## **Mechanical Pipettes MicroPette**

## **MicroPette**

#### **Features**

- 121°C HALF Autoclave
- Ergonomic design provide excellent operating experience
- Large display window allow for easier volume identification
- Pipettes cover a volume range from 0.1µL to 10mL
- Easy calibration and maintenance
- Each MicroPette supplied with an individual calibration certificate according to ISO8655





# MicroPette multi-channel

121°C HALF Autoclave

#### **Features**

- 8 and 12 channel pipette are appropriate for 96-well plates
- Dispensing head rotates for effortless pipetting convenience
- Individual piston and tip cone assemblies allowing easy repair and maintenance
- Compound material-made tip cone secures high sealing performance
- Compatible with most universal tip brands





8 channels

#### **Calibration**

All DLAB pipettes have been quality tested according to ISO8655-2:2002 and are supplied with individual calibration certificates. The quality control includes gravimetric testing of each pipette with distilled water at 22°C.

Our website **www.dlabsci.com** allows users easy access to DLAB online calibration software to achieve accurate and timely calibration , a free service dedicated to our customers.

Use our knowledge to your advantage.

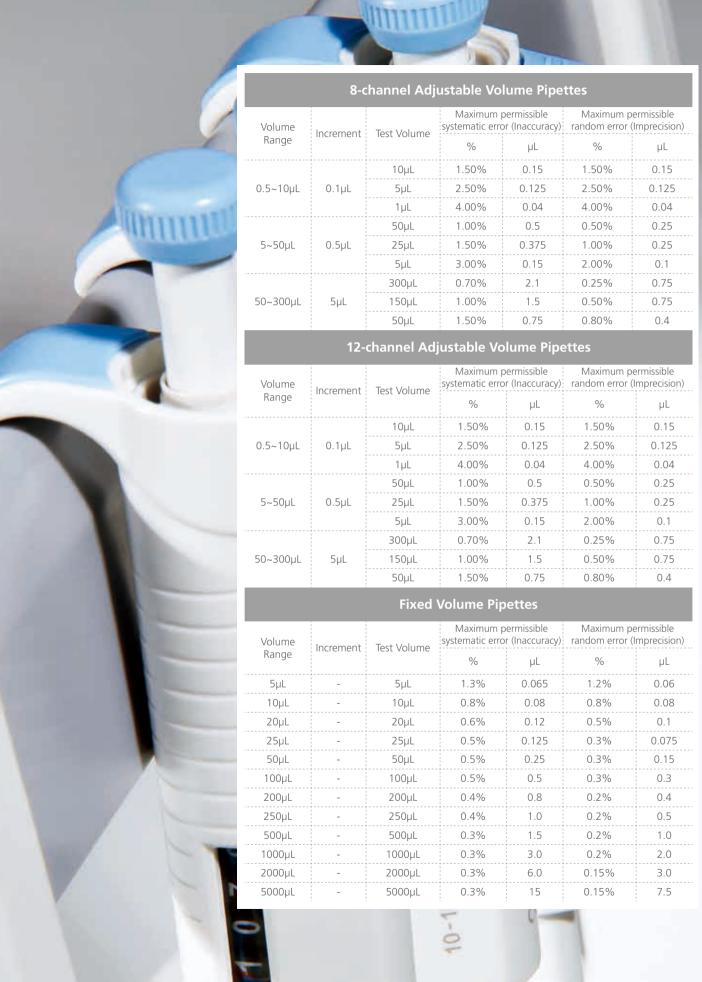


# **Mechanical Pipette Volume Selection**

## **Specifications**

This list is appropriate for MicroPette and MicroPette plus (Adjustable and Fixed volume)

Single-channel Adjustable Volume Pipettes							
Volume Range Increment	Increment	Test Volume	Maximum permissil (Inacc	ble systematic error uracy)	Maximum permissible random error (Imprecision)		
			%	μL	%	μL	
		2.5µL	2.50%	0.0625	2.00%	0.05	
0.1~2.5µL	0.05μL	1.25µL	3.00%	0.0375	3.00%	0.0375	
		0.25µL	12.00%	0.03	6.00%	0.015	
		10µL	1.00%	0.1	0.80%	0.08	
0.5~10µL	0.1μL	5µL	1.50%	0.075	1.50%	0.075	
		1μL	2.50%	0.025	1.50%	0.015	
		20μL	0.90%	0.18	0.40%	0.08	
2~20µL	0.5μL	10μL	1.20%	0.12	1.00%	0.1	
		2µL	3.00%	0.06	2.00%	0.04	
 		50μL	0.60%	0.3	0.30%	0.15	
5~50µL	0.5μL	25µL	0.90%	0.225	0.60%	0.15	
		5µL	2.00%	0.1	2.00%	0.1	
10~100μL 1μL		100µL	0.80%	0.8	0.15%	0.15	
	1µL	50µL	1.00%	0.5	0.40%	0.2	
		10µL	3.00%	0.3	1.50%	0.15	
	)~200µL 1µL	200µL	0.60%	1.2	0.15%	0.3	
20~200μL 1μL		100µL	0.80%	0.8	0.30%	0.3	
		20μL	3.00%	0.6	1.00%	0.2	
		200µL	0.60%	1.2	0.15%	0.3	
50~200µL	1µL	100µL	0.80%	0.8	0.30%	0.3	
1		50μL	1.00%	0.5	0.40%	0.2	
1		1000µL	0.60%	6	0.20%	2	
100~1000μL	5µL	500µL	0.70%	3.5	0.25%	1.25	
		100µL	2.00%	2	0.70%	0.7	
		1000µL	0.60%	6	0.20%	2	
200~1000μL	5µL	500µL	0.70%	3.5	0.25%	1.25	
		200μL	0.90%	1.8	0.30%	0.6	
		5000µL	0.50%	25	0.15%	7.5	
1000~5000µL	50µL	2500µL	0.60%	15	0.30%	7.5	
		1000µL	0.70%	7	0.30%	3	
		10mL	0.60%	60	0.20%	20	
2~10mL	0.1mL	5mL	1.20%	60	0.30%	15	
	=	2mL	3.00%	60	0.60%	12	



## **Pipette Filler**

### **Levo Plus**

### **Pipette Filler**

#### **Features**

 Appropriate for most of the plastic and glass pipettes from 0.1 ~100ml

• Eight speeds of selection for aspiration and dispensing

• Large LCD display showing low battery warning and speed settings

• Enabling single-handed operation with minimum effort

• Light and ergonomic design providing easy usability

• High capacity Li-ion battery enable long runtime of operation

• Low battery indication

• Powerful motor fills a 25mL pipette in<5 seconds

• 0.45µm replaceable Hydrophobic filter

• Rechargeable during use

Operating buttons fine-tuned for aspiration and dispensing

Operating button for motor and gravity dispensing

Silicone adapter for 0.1~100ml

pipette tip, fully autoclavable

Hydrophobic filter 0.45µm

#### **Specifications**



25ml < 5s (8 shift)

Motor (8 shift) / Gravity

Lithium-lon

More than 8 Hours of Intermittence Use

2~3 Hours

Glass or Plastic Pipette (0.1~100mL), Pasteur Pipettes

0.45 µm Hydrophobic

200g

Large LCD display showing low battery warning and speed settings

Select the desired coarse speed by pressing the button +/-





## **Pipette Filler**

## **Levo ME**

## **Pipette Filler**

Levo ME pipetting filler has an excellent feature and ergonomic design, suitable for almost all commonly used glass or plastic pipettes.

#### **Features**

- Enabling single-handed operation with minimum effort
- Appropriate for most of the plastic and glass pipettes from  $0.1 \sim 100 \text{ml}$
- Easily adjusted speed control
- 0.45µm replaceable Hydrophobic filter
- Stable and reliable performance, elegant appearance



### **Specifications**

25ml < 7s
Motor / Gravity
Lithium-lon
More than 8 Hours of Intermittence Use
2~3 Hours
Glass or Plastic Pipette (0.1~100mL), Pasteur Pipettes
0.45 μm Hydrophobic
200g



## **Pipette Controllers & Pumps**

### Levo

### **Pipette Controller**

#### **Features**

- Ease of use
- Precise pipetting control
- Robust and lightweight
- Appropriate for most of the plastic and glass pipettes from 0.1 ~100ml
- 3µm replaceable Hydrophobic filter
- Easy cleaning and maintenance



### Levo E

### **Pipette Pump**

#### **Features**

- Volume capacity 2mL, 10mL and 25mL
- Colour-coded by volume with green, blue and red
- Thumb wheel guarantees precise operation
- Resistant to acids and alkalis
- Easy for cleaning and maintenance





Designed for single-handed operation, Pipette Pump identifies itself with a thumbwheel, allowing precise aspiration or dispensing. The feature of side lever enables liquid dispensing to be emptied completely, without a droplet remaining.





The Stepmate Stepper is a common instrument in diagnostics, molecular biology, environmental analysis, and many more.

Based on the principle of positive displacement, StepMate Stepper is designed for trouble-free and reliable dispensing of liquids, especially for high viscosity, high density and high vapor pressure. The 48-step dispensing allows for enhanced accuracy and usability.

## **StepMate**

#### Stepper

#### **Features**

- Light and ergonomic solution provide easy usability
- Single-handed operation
- Volume range from 1µL to 5mL
- Up to 48 dispensing steps
- Maintenance free
- Equipped with durable tip insertion lever
- Fits seven sizes of disposable polypropylene syringes from 0.5mL to 50mL

Optimized for smooth dispensing of even the smallest volumes

Five easy-to-select settings control dispensing volume

By pushing the slide upwards, the syringe is filled up

#### How to select dispensing volume

- Find the required dispensing volume
- Use the adjusting wheel to set the required volume
- Select and insert suitable tips
- Follow the maximum dispensing steps

Tip volume

Dispensing Volume

Tips Sel.	1			4	5
0.05ml	144	2,1	3µ1	-4µI	5µl
0.50ml	19µl	20µI	30µl	40µl	50µ
1.25ml	25µi	50µl	75µI	100ul	125µI
2.50ml	50µI	100µl	150µl	200µl	250µI
5:00ml	الر100	208µl	300µI	الو400	500µl
12.50ml	250µI	500µI	750µl	1000µl	1250µl
25.00ml	500µI	1000µl	1500µl	2000µf	2500µl
50.00ml	1000µl	2000µі	الر6668	4000µl	5000µl
Steps	48	23	15	-11	8

Steps

The stop lever secures the syringe



## **Stepper**

DLAB stepper tips are particularly suitable for dispensing of fluids with high viscosity, high vapor pressure etc.

Tips are made from high-quality materials (Cylinder: PP, Piston: PE-HD) without soft lubricants or other additives.

## **Specifications**

Note: The first and last dispensing liquid should be discarded for precision.

Dial setting	1	2	3	4	5
Number of steps	48	23	15	11	8



			İ						
Cat. No.	Syringe volume (mL)		Sam	ıple volı (µL)	ume		Α%	Р%	Desciption
17900032	0.50	10	20	30	40	50	± 0.8	≤ 0.7	0,5 ml, piston PE-HD, cylinder PP, 1 packing, 5 pcs/packing
17900033	1.25	25	50	75	100	125	± 0.8	≤ 0.5	1,25 ml, piston PE-HD, cylinder PP, 1 packing, 5 pcs/packing
17900034	2.50	50	100	150	200	250	± 0.8	≤ 0.4	2,5 ml, piston PE-HD, cylinder PP, 1 packing, 5 pcs/packing
17900035	5.00	100	200	300	400	500	± 0.4	≤ 0.3	5ml, piston PE-HD, cylinder PP, 1 packing, 5 pcs/packing
17900036	12.50	250	500	750	1000	1250	± 0.3	≤ 0.3	12,5 ml, piston PE-HD, cylinder PP, 1 packing, 5 pcs/packing
17900037	25.00	500	1000	1500	2000	2500	± 0.2	≤ 0.3	25ml, piston PE-HD, cylinder PP, 1 packing, 2pcs/packing with 1 pc adaptor
17900038	50.00	1000	2000	3000	4000	5000	± 0.2	≤ 0.2	50ml, piston PE-HD, cylinder PP, 1 packing, 2pcs/packing with 1 pc adaptor

## **dTrite**

#### **Electronic Titrator**

The dTrite Digital Burette delivers accurate, precise and convenient bottle-top titration, as well as optimum operator safety.

It combines the magnetic stirrer with the titration process, making it easier for the operator to achieve the satisfactory results in the field of analytical chemistry, food industry, water analysis, etc.

DIAB



- High quality motor providing excellent precision and accuracy
- Electronic control decreases the repetitive strain injury
- The remote control panel makes the operating process without the manual disturbance
- Build-in magnetic stirrer support

The bottles sold separately

#### **Specifications**

Volume range	0.01mL~99.99mL, Max piston lift is 10mL, resolution is 10μL
Volume accuracy	R=0.2% CV=0.07%
Velocity	16 stages
Operating temperature range	10°C~30°C
Quality control	DIN EN ISO 8655
Control type	External control, including the stirrer and the burette program

## **Electronic Bottle-Top Dispenser**

## **dFlow**

**Electronic Bottle-Top Dispenser** 

#### **Features**

- Motor operation minimizes the grip force
- Electronic control decreases the repetitive strain injury
- The remote control panel makes the operating process without the manual disturbance
- Two Dispensing modes, dispenser and stepper function options



### **Specifications**

Volume range	0.1~99.9mL, Max piston lift is 10mL, resolution is 100μL
Volume accuracy	Dispenser: R = 10mL ±30μL; CV = 10ml ±10μL Stepper: R = 1ml ±6μL; CV = 1ML ±9μL
Operating temperature range	10°C~30°C
Quality control	DIN EN ISO 8655
Control type	External control

## **Bottle-Top Dispensers**



- **Features**
- Excellent chemical resistance, components are made of PTFE, FEP, BSG, PP
- Fully autoclavable at 121°C
- Four ranges of bottle-top dispenser covering a volume range from 0.5mL to 50mL
- Easy for cleaning and maintenance
- The optional flexible discharge tube with safety handle permits fast and precise dispensing
- Vapor pressure Max. 500mbar, viscosity max. 500mm<sup>2</sup>/s, temperature max. 40°C, density max. 2.2g/cm<sup>3</sup>
- Dispensemate is supplied with S40, GL32, GL38,GL25, GL28 sized adaptors

#### **Specifications**

	Volume	Graduation	A≤±		CV≤	
Cat. No.	Range mL	mL	%	μL	%	μL
731100017777	0.5~5	0.1	0.5	25	0.1	5
731100027777	1.0~10	0.2	0.5	50	0.1	10
731100037777	2.5~25	0.5	0.5	125	0.1	25
731100047777	5.0~50	1.0	0.5	250	0.1	50

### **Accessories**

Cat. No.	Description
17100553	GL45, Adapter, 45mm
17000069	S40, Adapter, 45/40mm
17400017	GL32, Adapter, 45/32mm
17400018	GL38, Adapter, 45/38mm
17400019	GL25, Adapter, 32/25mm
17400020	GL28, Adapter, 32/28mm
17400037	Reagent Bottle (Brown, 1L, Options)
17400021	Filling tube(m)
17100073	Discharge tube(m)

## **Vacuum Aspiration System**



SafeVac is designed for laboratory waste recovery and separation of liquid and solid. It can be widely used in cell culture, DNA extraction, microplate waste removal, and any other liquid separation or recovery.

### **SAFEVAC**

## **Vacuum Aspiration Systems**

#### **Features**

- Vacuum power can be set to different levels to achieve 1ml/s to 15ml/s aspirating speed
- Sensitive level sensor to prevent liquid overflow during operation.
- Waste bottle, tubing and handle are fully autoclavable
- Lid, tubing and handle are easy for disassembling, cleaning and autoclaving
- Wide range of adapters to fit tube, microplate and disk plate for various tasks

#### **Specifications**

Vacuum range	0~600 mbar
Aspirating speed	1~15 ml/s
Autoclave component	tube; waste bottle; operation handle;
Dimension [ W× D× H ]	180 × 240 × 450mm
Weight	3 kg
Input voltage	100~240 VAC, 50/60 Hz
Bottle Volume	4L

Hydrophobic filter 0.45µm Φ6mm

Wide range of adapters fit well with tube, microplate and disk plate for various of tasks, all of which can be fully autoclaved.





## **Dispenser & Diluter System**



The diluter & dispenser system can greatly improve work efficiency in the sample preparation process, It is wildly used in the Analytical Techniques such as High Performance Liquid Chromatography (HPLC); Gas Chromatography (GC); Liquid Scintillation; Atomic Absorption (AA); Inductively Coupled Plasma Spectroscopy(ICP).It can also be used in forensic Analysis; Mining Industry; Oil Sampling; Environmental Analysis; Reagent Dispensing, etc.

#### DL-D50-Pro

### **Dispenser & Diluter Systems**

#### **Features**

- It is ideal for dispensing and diluting applications
- Five operating modes enabling fast and precise operation in priming, titration, volume measurements, as well as in diluting, dispensing, mixing, pipetting and rinsing.
- Easy-to-use pipelines and easy-to-switch modes
- The high torque, precision stepper motors provide excellent accuracy
- Full range from 250µL to 25mL
- Compatible with 7 kinds of Syringes
- Adjustable pipetting speed for 9 stages

#### **Specifications**

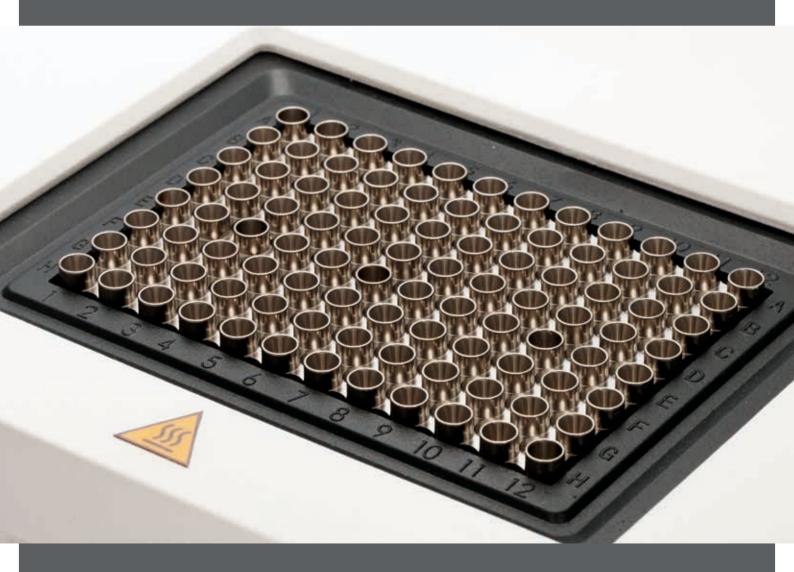
Accuracy	±1%
Precision	+ 0.2%
riecision	± U.Z /0
Flow Rate	0.003~6000 µL/s (depending on the syringe that is selected)
Compatible Syringes	250, 500 μL, 1, 2.5, 5, 10, 25mL
Fluid Path	Borosilicate, PTFE, CTFE
Voltage	100~240VAC
Frequency	50/60Hz
Dimension[W×D×H]	190 ×180× 350 mm
Weight	4.5kg
Permissible relative temperature	5~40°C
Permissible relative humidity	80%

#### **Accessories**

Cat. No.	Descriptions
17900094	syringe,250ul
17900095	syringe,500ul
17900096	syringe,1ml
17900097	syringe,2.5ml
17900098	syringe,5ml
17900099	syringe,10ml
17900100	syringe,25ml







## TC1000-S

## **Thermo Cycler**

Thermo cyclers are essential laboratory instruments in the field of biotechnology, cloning, genotyping, mutagenesis, etc.

The excellent heating and cooling rates and temperature uniformity, fulfilling every wish for easy optimization of PCR assays with maximum throughput.

#### **Features:**

- Innovative heating/cooling elements
- High performance DSP and temperature control algorithm
- Excellent temperature uniformity
- High precise temperature control
- Fast heating and cooling rate
- 7 inch Large color touch pannel screen for easy programming









## **Thermo Cycler**





Excellent temperature uniformity



LCD touch panel



Excellent temperature accuracy



## **Specifications**

Sample Capacity
Heating Temperature Range
Lid Temperature Range
Temperature Display Accuracy
Temperature Control Accuracy [at 55°C]
Temperature uniformity[at 55°C]
Max. Heating/Cooling Rate
Adapter block material
Display
Input
User defined file system
Power off protection
Power Supply
Dimension[WxDxH]
Weight

## TC1000-S

101000 5
96X0.2mL PCR tube, 8X12 PCR plate or 96 well plate
4~105°C
30~110°C
0.1°C
±0.3°C
<0.3°C
3°C/Sec
aluminum
7" 800x480mm LCD
Touch panel
30 segments 99 cycle max. 16 folder and 16 files each folder max.
yes
100~120V/200~240V,50/60Hz
280x370x250 mm
11kg





## **Dry bath**

#### **Features:**

- A wide range of temperature control up to 120°C
- Timer function support is availabe
- Various types of optional blocks are available
- Overheating protection
- Lid for protection and heat preservation

May and May
5

Functions
Temperature range
Temperature control accuracy
Temperature uniformity
Max heating rate
Timer
Screen
Overheating protection
Adapter block material
Voltage, Frequency
Power
Dimension[W×D×H ]
Weight

**Specifications** 

HB120-S
Heating
Room temp.~120°C
± 0.5°C
± 0.5°C
5.5°C/min
1min~99h59min
LED
140°C
aluminum
100~120V/220~240V,50Hz/60Hz
160W
95x150x50mm
3kg
3

Cat.No.	Block types	Capacity	Diameter Depth
18900218		0.2mLx54	6.4mm 15mm
18900219		0.5mLx40	8.2mm 26.4mm
18900253 (1.5ml) 18900220 (2ml)		1.5/2mLx40	11mm 34.7mm
18900221		5/15mLx28	17mm 48mm
18900222	2000	50mLx8	29.8mm 48mm
18900224		0.2mL+0.5mL+1.5/2mL 18+18+18	-
18900223		96 or 384 well plate	-



Adapter block selection



Overheating protection



Timer



LED display



## **Thermo Mix**

## HC110-Pro

## **Dry bath with cooling**

#### **Features:**

- Precise temperature control for heating and cooling
- Flexible adapter selection
- Programmable
- Compatible with various tubes



Excellent temperature accuracy



Programmable



Adapter self recognition



Cat.No.	Blocks	Speed	Capacity	Diameter x Deep
18900238		1500 RPM	24 x 0.5ml	8.1x26mm
18900237		1500 RPM	24x 1.5ml	10.9x31mm
18900239		1500 RPM	24x 2ml	10.6x26mm
18900240	***************************************	1500 RPM	8x 5ml	13.6x36mm
18900241		800 RPM	8x 15ml	16.5x95mm
18900242		600 RPM	4x 50ml	28.7x75mm
18900244		1500 RPM	well plate	-
18900243		1500 RPM	0.2ml x 96 PCR plate	<u>-</u>



Functions

Temperature range

Temperature control accuracy[@ 20–45°C]
Temperature uniformity[@ 20–45°C]

Max heating rate

Max cooling rate

Screen Program

Overheating protection

Adapter block material

Voltage, Frequency

Power

 $\begin{array}{c} {\sf Dimension[W\times D\times H]}\\ {\sf (\ without\ the\ heating\ block\ )} \end{array}$ 

Weight

### HC110-Pro

Heating&cooling

Heating: room temp.  $\sim 110^{\circ}\text{C}$  Cooling: room temp.  $\sim$  below room temp.  $25^{\circ}\text{C}$ 

± 0.5°C

Max ± 0.5 °C

5.5°C/min

2.5°C/min (100°C~room temp.) 0.5°C/min (below room temp.)

TFT

9

150°C

aluminum

100-240V,50/60Hz

200W

200×235×120mm

7.3kg



The Thermo Mix series allow for precise and efficient heating and mixing, as well as excellent temperature accuracy and uniformity, offering a wide range of applications, such as gene synthesis, gene purification, gene and protein denaturation, enzymatic reaction, bacterial growth, etc.

#### HCM100-Pro

**Thermo Mix** 

### HM100-Pro

Thermo Mix with heating

#### **Features:**

- Excellent mixing result
- Stable and wide range of speed adjustment
- Precise temperature control for heating and cooling
- Flexible adapter selection
- Programmable
- Compatible with various tubes



Blocks self recognition





#### **Specifications**

		F	Į	J	n	1	1	ti	C	10	٦	S					
 -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
n	٠,	`	_	r	_	1			r	^		r		r		~	_

Temperature range

Temperature control accuracy[@ 20–45°C]
Temperature uniformity[@ 20–45°C]

Max. heating rate

Max. cooling rate

Mixing frequency

Mixing orbit

Screen

Program

Overheating protection

Adapter block material

Voltage, Frequency

Power

 $\begin{array}{c} {\sf Dimension[W\times D\times H]}\\ (\ {\sf without\ the\ heating\ block\ }) \end{array}$ 

Weight

#### HCM100-Pro

Heating, cooling &mixing

Heating: room temp. ~ 100°C Cooling: room temp. ~ below room temp. 15°C

± 0.5°C

Max ± 0.5 °C

5.5°C/min

5 °C /min(110°C-room temp.)

0.5 °C/min(below room temp.)

300~1500rpm

3mm

TFT

9

150°C

aluminum

100–240V,50/60Hz

200W

200×235×120mm

7.3kg

#### HM100-Pro

Heating&mixing

Heating: room temp. ~ 100 °C

± 0.5°C

Max ± 0.5 °C

5.5°C/min

-

300~1500rpm

3mm

TFT

9

150°C

aluminum

100-240V,50/60Hz

200W

200×235×120mm

7.3kg

**27** 



Distilling & Mixing



## **Rotary Evaporator**

## RE100-Pro

### **Digital Rotary Evaporator**



LCD Digital Rotary Evaporator is an essential instrument in chemical laboratories for the efficient and gentle removal of solvents from samples by evaporation. It offers an excellent distilling solution in a wide range of applications.

#### **Features:**

- Digital display for both rotation speed and heating temperature allows for optimal controlling of all distillation processes
- Motor lift automatic release the evaporating flask to a safety position in case of power failure
- Wide temperature range of the 5L heating bath (Room temp. to 180 °C), Overheating protection temperature at 220°C
- Speed range from 20 to 280 rpm, and interval operation in clockwise and anticlockwise directions for drying process
- Patented condenser (cooling surface 1,500 cm²) with excellent cooling effect
- Ejection mechanism ensures easy removal of evaporating
- Patented double spring sealing ring which made of PTFE provides an excellent sealing performance
- Remote function provides PC control and data transmission



Large LCD display



**USB** connector



Chemical resistance



Overheating protection



Compatible with all range of glassware

#### **Specifications**

Motor type
Speed Range
Display
Clockwise and anti-clockwise
Heating Temperature Range
Control Accuracy
Heating power
Stroke displacement
Timer
Time Setting Range
Dimension [ D×W×H ]
Weight
Permissible Ambient Temperature
Permissible Relative Humidity
Protection Class
USB Interface
Voltage/Frequency
Power

RE100-Pro						
Brushless DC motor						
20~280 rpm						
LCD(speed, tempereature, time)						
Yes						
Room temp. to 180°C						
±1°C						
1300 W						
automatic 150 mm						
Yes						
1~999 min						
465×457×583 mm						
15 kg						
5~40°C						
80%						
IP20						
Yes						
100~120/200~240V 50/60 Hz						
1400 W						

# **Rotary Evaporator | Accessories**

## Condenser



Vertical			
Cat. No.	Glassware type	Volume	Cooling surface
18900165	Evaporating flask(NS29/32)Receiving flask(KS35/20)	1000ml	1500cm <sup>2</sup>
18900173	Evaporating flask(NS24/40)Receiving flask(KS35/20)	1000ml	1500cm <sup>2</sup>
18900166 (COATED)	Evaporating flask(NS 29/32) Receiving flask (KS 35/20)	1000ml	1500cm <sup>2</sup>
18900174 (COATED)	Evaporating flask(NS 24/40) Receiving flask (KS 35/20)	1000ml	1500cm <sup>2</sup>



Diagonal			
Cat. No.	Glassware type	Volume	Cooling surface
18900163	Evaporating flask(NS29/32)Receiving flask(KS35/20)	1000ml	1500cm <sup>2</sup>
18900171	Evaporating flask(NS24/40)Receiving flask(KS35/20)	1000ml	1500cm <sup>2</sup>
18900164 (COATED)	Evaporating flask(NS 29/32) Receiving flask (KS 35/20)	1000ml	1500cm²
18900172 (COATED)	Evaporating flask (NS 24/40) Receiving flask (KS 35/20)	1000ml	1500cm <sup>2</sup>



Heating Bath		
Cat. No.	Descriptions	Volume
18900201	Rotary Evaporator, 220V	5L
18900202	Rotary Evaporator, 110V	5L







## **Rotary Evaporator | Accessories**

## **Glassware**

18300202

18300203

18300204

18300205







250ml

500ml

1000ml

2000ml



Receiving flask		
Cat. No.	Volume	Size
18300107	100ml	KS 35/20
18300108	250ml	KS 35/20
18300109	500ml	KS 35/20
18300110	1000ml	KS 35/20
18300111	2000ml	KS 35/20



B 1 4 11111	1.1	- ()	/ 141 4 (1 1	57
Distillina si	older with	5 flasks	(without flask	aı
	Side With	5 Hasks	(vvicilo a c ilasi	24

Cat. No.	Volume	Size
18900194	/	NS 29/32, NS24/29
18900177	/	NS 29/32 NS19/26





NS 24/40

NS 24/40

NS 24/40

NS 24/40

Vapor tube			
Cat. No.	Volume	Size	
18100998	/	NS 29/32	
18300206	/	NS 24/40	



Connector		
Cat. No.	Volume	Size
18300094	/	NS 29/32, NS24/29
18300095	/	NS 29/32, NS19/26
18300096	/	NS 29/32, NS14/23
18300199	/	NS24/40, NS19/22
18300200	/	NS 24/40, NS14/20
18900193	/	NS 24/40, NS 29/42

## **Rotary Evaporator | Accessories**

### **Additional**

#### **DVR-380 Vacuum controller**

#### **Specification**

Suitable for the vacuum diaphragm vacuum pump controller Pressure stability: ± 0.1 Torr/0.133mbar Nozzle size: 8mm

Sensor material: stainless steel

Cat. No.	Voltage
18201048	Vacuum controller 220~240V, 50/60Hz
18201049	Vacuum controller 100~120V, 50/60Hz



## C410 Chemistry-design diaphragm pump

#### **Specification**

Maximum Vacuum:13mbar Work Mode: In Successions Nozzle Size:8mm, Power: 95W Motor speed:1450rpm Flow Rate:

mbar 1000 880 750 600 480 280 L/min 25 22 20 12 7.5 5

Noise:50dB



Cat. No.	voitage
18200743	220~240V, 50/60Hz
18200745	100~120V 50/60Hz

### CVC 3000 vacuum controller

#### **Specification**

Vacuum sensor:Integration.
Upper measuring limit:1080 / 810mbar
Lower measuring limit:0.1 / 0.1mbar
Temperature coefficient:< 0.07 mbar/hPa/0.05 torr /K
Dimension (L x W x H):181 x 162 x 174mm

Weight :1.5kg

Measurement principle:Ceramic diaphragm (alumina), capacitive, gas indep., absolute pressure

Accuracy of measurement: $<\pm 1$  mbar/hPa/torr /  $\pm 1$  digit (after adjustment, constant temp.)

Venting valve, connection:Integrated, hose nozzle DN 4~5 mm

Cat. No.	Descriptions
18900245	Vacuum Controller



### MZ 1C Chemistry-design diaphragm pump

#### **Specification**

Number of heads / stages:2 / 2 Max. pumping speed:0.75 m³/h Ultimate vacuum (abs.):12mbar Nozzle Size:DN 8~10 mm Rated motor power:0.06kW Rated motor speed:1500/1800 rpm Noise level:45dB ATEX:II 3G IIC T3 X Internal Atm. only



Cat. No.	Voltage
18900231	Cn plug, 100V~120V/50Hz/60Hz
18900232	Euro plug,100V~120V/50Hz/60Hz
18900233	USA plug,100V~120V/50Hz/60Hz
18900234	UK plug,100V~120V/50Hz/60Hz

#### Seals and other accessories

Cat. No. Descriptions

18100926

Seal made of PTFE with a built-in stainless steel spring



18900190 Evaporation flask clip(red) CS002440



18900188 Evaporation flask clip(green)
CS002942



## Vacuum regulator/moisture trap

Cat. No. Descriptions

In use of control small volume, installed in a vacuum between DVR380 and vacuum system.

86 Material: PVDF, PTFE, ABS,

18900186 Material: PVDF, PTFE, ABS, Borosilicate Glass, Stainless Steel



## **Magnetic Hotplate Stirrers**

DLAB 550°C series magnetic stirrer is developed for demanding applications. It is widely used in chemical synthesis, physical and chemical analysis, bio-pharmaceuticals, to name a few, etc. Combining with glass ceramic work plate, brushless DC motor, external temperature sensor and the work plate temperature optimized up to 550°C.

#### MS7-H550-Pro

### **LCD Digital Magnetic Hotplate Stirrer**

#### **Features**

- LCD display for precise monitoring of speed and temperature
- Built-in PID controller ensures the safe heating of the medium with overheating protection
- Max. Heating plate temperature 550°C
- Glass ceramic work plate provides excellent chemical resistant performance and most efficient heat transfer
- External temperature control is possible by connecting the temperature sensor(PT 1000) with an accuracy at ±0.2°C
- Digital speed controlling, Max. speed at 1500rpm
- Outstanding brushless DC motor performance enables more stirring power
- Two rotating knobs enable the easy and direct change of speed and temperature
- The "HOT" warning will flash when the work plate temperature is above 50°C even if the hotplate is turned off
- Remote function provides PC control and data transmission





### MS7-H550-S

#### **LED Magnetic Hotplate Stirrer**

#### **Features**

- LED display for precise monitoring of temperature
- A wide speed range of 0 to 1500rpm
- Max. Heating plate temperature 550°C
- External temperature control is possible by connecting the temperature sensor(PT 1000) with accuracy at ±0.2°C
- The "HOT" warning will flash when the work plate temperature is above 50°C even the hotplate is turned off





Overheating protection



External sensor



Wide range of accessory



Chemical resistance



## **Specifications**

Work plate Dimension [W x D]
Work plate material
Motor type
Motor rating input
Motor rating output
Power
Heating output
Voltage
Stirring positions
Max. stirring quantity, [H <sub>2</sub> O]
Max. magnetic bar[length]
Speed range
Speed display
Temperature display
Heating temperature range
Temperature control accuracy
Overheating protection
Temperature display accuracy
External temperature sensor
"Hot" warning
Data connector
Protection class
Dimension [W x D x H]
Weight
Permissible ambient temperature and humidity

## MS7-H550-Pro

184x184mm (7 inch)
Glass ceramic
Brushless DC motor
18W
10W
1050W
1000W
100~120/200~240V 50/60Hz
1
20L
80mm
100~1500rpm
resolution ±1rpm
LCD
LCD
Room Temp550°C, increment 1°C
±1°C(<100°C) ±1%(>100°C)
580°C
±0.1°C
PT1000 (accuracy ±0.2)
50°C
RS232
IP21
215x360x112mm
5.3kg
5~40°C 80%

## MS7-H550-S

11137 11330 3
184x184mm (7 inch)
Glass ceramic
Shaded pole motor
15W
1.5W
1030W
1000W
100~120/200~240V 50/60Hz
1
10L
80mm
0~1500rpm
Scale
Scale LED
Room temp550°C, increment 5°C
±10°C
580°C
±1°C
PT1000 (accuracy ±0.2)
50°C
30 C
- IP21
215x360x112mm
4.5kg
4.5kg 5~40°C 80%
5~40 C 60%

## **Magnetic Hotplate Stirrers**

DLAB 340°C magnetic hotplate stirrers include all leading safety standards and features for superior easy of use and cost-effective. They are widely used in chemical synthesis, physical and chemical analysis, bio-pharmaceuticals, etc.

MS-H-Pro<sup>T</sup>

**LCD Digital Magnetic Hotplate Stirrer with Timer** 

## MS-H-Pro<sup>+</sup>

**LCD Digital Magnetic Hotplate Stirrer** 

#### **Features**

- Brushless DC motor is maintenance free and explosion-proof
- Digital temperature control with Max. temperature at 340°C
- Digital speed control with Max. speed up to 1500rpm
- Max. stirring quantity of H<sub>2</sub>O at 20L
- Safety circuits provide overheating protection
- The "HOT" warning will flash when the plate temperature is above 50°C even the hotplate is turned off
- Wide range timer function from 1min to 99h59min(MS-H-Pro<sup>T</sup> only)
- The high-resolution LCD display shows actual temperatures and speed(MS-H-Pro<sup>T</sup> include the time)
- External temperature control is possible by connecting the temperature sensor(PT 1000) with accuracy at ±0.2°C
- Stainless steel work plate with ceramic coating providing good chemical-resistant performance
- Remote function provide PC control and data transmission
- A wide variety of accessories are available





### MS-H-S

### **Magnetic Hotplate Stirrer**

#### **Features**

- Maintenance free brushless DC motor
- Temperature to 340°C
- Stirring speed up to 1500 rpm
- Stainless steel work plate with ceramic coating provides good chemical-resistant performance
- Safety circuits provide overheating protection
- A wide variety of accessories are available



**Magnetic Hotplate Stirrers** 



External sensor



Brushless DC motor



Wide range of accessory



RS232 connector



Chemical resistance







10W 550W 500W

100~120/200~240V 50/60Hz

20L 80mm 100~1500rpm resolution±1rpm

> LCD LCD Room temp.-340°C

increment 1°C ±1°C(<100°C) ±1%(>100°C) 360°C

±0.1°C

PT1000 (accuracy ±0.2)

50°C 1min to 99h 59min RS232 IP42

160×280×85mm 2.8kg

5~40°C 80%



## **Specifications**

Work plate Dimension Work plate material Motor type Motor rating input Motor rating output Power Heating output Voltage Stirring positions Max. stirring quantity[H2O] Max. magnetic bar[length]

Speed range

Speed display Temperature display

Heating temperature range

Temperature control accuracy

Over temperature protection Temperature display accuracy External temperature sensor

"Hot" warning Timer function Data connector Protection class Dimension [W x D x H]

Weight Permissible ambient temperature and humidity

#### MS-H-PRO

135mm(5 inch) stainless steel cover with ceramic Brushless DC motor 18W 10W

550W 500W

100~120/200~240V 50/60Hz

20L 80mm

> 100~1500rpm resolution±1rpm

LCD LCD Room temp.-340°C increment 1°C

±1°C(<100°C) ±1%(>100°C)

> 360°C ±0.1°C

PT1000 (accuracy ±0.2)

50°C RS232 IP42 160×280×85mm 2.8kg

5~40°C 80%

#### MS-H-S

135mm(5 inch) stainless steel cover with ceramic Brushless DC motor 18W 10W 530W 500W 100~120/200~240V 50/60Hz 20L 80mm 0~1500rpm

> Scale Room temp.-340°C

resolution±1rpm

Scale

350°C ±0.5°C

IP42 160×280×85mm

5~40°C 80%

## **Magnetic Hotplate Stirrers**

DLAB MS-H280-Pro is a perfect device for handling small volume task on daily application, as a low temperature magnetic stirrer with Max. temperature at 280°C.

## MS-H280-Pro

## **LED Digital Magnetic Hotplate Stirrer**

#### **Features:**

- Digital temperature control with Max. temperature to 280°C
- Digital speed control with Max. speed up to 1500rpm
- Stainless steel work plate with ceramic coating provides good chemical-resistant performance
- External temperature control is possible by connecting the temperature sensor (PT 1000) with an accuracy at ±0.5°C
- LED display shows temperature and speed
- The "HOT" warning will flash when the work plate temperature is above 50°C even if the hotplate is turned off





External sensor



Wide range of accessory



Chemical resistance



LED display



#### **Specifications**

Work plate Dimension
Work plate material
Motor type
Motor rating input
Motor rating output
Power
Heating output
Voltage
Stirring positions
Max. stirring quantity
Max. magnetic bar[length]
Speed range
Speed display
Temperature display
Speed display resolution
Heating temperature range
Control accuracy of work plate
Overheating protection
Temperature display accuracy
External temperature sensor
"Hot" warning
Protection class
Dimension [W x D x H]
Weight
Permissible ambient temperature and humidity

MS-H280-Pro
0135mm(5 inch)
stainless steel cover with ceramic
DC motor
5W
3W
515W
500W
100~120/200~240V 50/60Hz
1
3L
50mm
100~1500rpm
LED
LED
±1rpm
Room temp280, increment 1°C
±1°C(<100°C) ±1%(>100°C)
320°C
±1°C
PT1000 (accuracy ±0.5°C)
50°C
IP21
150×260×80mm
1.8kg
5~40°C 80%

## **Magnetic Hotplate Stirrers**

## **MS-H-S10**

## **10-Position Magnetic Hotplate Stirrer**

#### **Features:**

- Maintenance-free brushless DC motor
- Max speed 1100rpm
- Max.temperature 120°C

• Stainless steel work plate, cover with silicone cushion, provides the excellent performance of heating uniformity and skid resistance





Skid resistance



Multiple position



Brushless DC motor



#### **Specifications**

Work plate Dimension [W x D]
Work plate material
Motor type
Motor rating input
Motor rating output
Power
Heating output
Voltage
Stirring positions
Max. stirring quantity
Max. magnetic bar[length]
Speed range
Speed display
Temperature display
Heating temperature range
Overheating protection
Protection class
Dimension [W x D x H]
Weight
Permissible ambient temperature and humidity

MS-H-S10
180x450mm()
Stainless steel with silicone
Brushless DC motor
12W
4W
490W
470W
100~120/200~240V 50/60Hz
10
0.4L x 10
40mm
0~1100rpm
scale
scale
Room temp.~120°C
140°C
IP42
182×622×65mm
3.2kg
5~40°C 80%

## **Magnetic Hotplate Stirrers | Accessories**



# **Magnetic Hotplate Stirrers | Accessories**







and a second						
est Coll		Stirrer bar	S			
9			nd stirrer bar re use below 150°c			
		Models				
		MS-H550-Pro MS-H550-S MS-H-Pro <sup>†</sup> MS-H-Pro <sup>T</sup> MS-H-S MS-S	MS-H280-Pro MS-PA MS-PB	MS-H-S10 MS-M-S10 FlatSpin EcoStir		
Cat. No.	Size of stirrer bars (L x Ø) [mm]	Suitable for Max. stirrer bar 80mm	Suitable for Max. stirrer bar 50mm	Suitable for Max. stirrer bar 40mm		
18900006	10mm x 6mm	<b>-</b>	•	•		
18900007	15mm x 8mm	•	<b>-</b>	<b>-</b>		
18900008	20mm x 8mm	•	<b>_</b>	•		
18900009	25mm x 8mm	•	<b>_</b>	•		
12500005	30mm x 6mm	•	•	<b>-</b>		
18900011	40mm x 8mm	<b>-</b>	•	•		
12500004	51mm x 8mm	•	•			
18900013	65mm x 8mm	<b>-</b>				
18900014	80mm x 13mm	<b>-</b>				
18900015	Stirrer bar remover, length of 200mm	•	•	•		

## **HP550-S**

## **LED Hotplate**

#### **Features:**

- LED display shows temperature
- Max. temperature to 550°C.
- Separate safety circuits with fixed safety temperature of 580°C
- External temperature control is possible by connecting the temperature sensor(PT 1000) with an accuracy at ±0.5°C
- Glass ceramic work plate provides excellent chemical-resistant performance and most efficient heat transferer
- The "HOT" warning will flash when the work plate temperature is above 50°C even the hotplate is turned off





Wide range of accessory



Chemical resistance



Overheating protection



"HOT" warning to prevent burns



#### **Specifications**

560000000000000000000000000000000000000
Work plate Dimension [W x D]
Work plate material
Power
Voltage Frequency
Heating Power
heating position
Heating temperature range
Control accuracy of work plate
Safety temperature
Temperature display
Temperature display accuracy
External temperature sensor
Heating warning
Protection class
Dimension [W x D x H]
Weight
Permissible ambient temperature and humidity

#### HP550-S

ПЬЭЭЛ-Э
184x184mm (7 inch)
Glass ceramic
1010W
100~120/200~240V,50/60Hz
1000W
1
Room temp550°C,increment 5°C
±10°C
580°C
led
±1°C
PT1000(±0.5°C)
50°C
IP2X
215x360x112mm
4.5kg
5~40°C 80%

## **MS7-S**

## 7" Square Magnetic Stirrer

#### **Features:**

- Speed range of 0~1500 rpm
- Max. stirring quantity of H<sub>2</sub>O at 10L
- Ceramic work plate provides excellent chemical resistant performance



## MS-S Magnetic Stirrer

#### **Features:**

- Maintenance free brushless DC motor
- Speed range of 0~1500 rpm
- Max. stirring quantity of H<sub>2</sub>O at 20L
- Stainless steel work plate cover with caramic material provides good chemical resistance performance





Chemical resistance



Strong magnetism



## Specifications

Work plate Dimension
Work plate material
Motor type
Motor input power
Motor output power
Power
Voltage
Stirring positions
Max. stirring quantity[H <sub>2</sub> O]
Max. magnetic bar[length]
Speed range
Speed display
Protection class
Dimension [W x D x H]
Weight
Permissible ambient temperature and humidity

MS7-S
184 x 184(7inch)mm
Glass ceramic
Shaded pole motor
15W
1.5W
30W
100~120/200~240V,50/60Hz
1
10L
80mm
0~1500rpm
Scale
IP2X
215 x 360 x 112mm
3.8kg
5~40°C,80%



135(5 inch)mm
Stainless steel cover with ceramic
Brushless DC motor
18W
10W
30W
100~120/200~240V,50/60Hz
1
20L
80mm
0~1500rpm
Scale
IP42
160×280×85mm
2.8kg

5~40°C,80%



### **MS-PA**

## **LED Digital Magnetic Stirrer**

#### **Features:**

- Digital speed control with a range of 100~1500rpm
- Max. stirring quantity of H<sub>2</sub>O at 3L
- LED display shows speeds
- ABS housing provides a good performance of weak acids and alkalis resistance

## **MS-PB**

#### **Magnetic Stirrer**

#### **Features:**

- A wide range of 0~1500rpm
- Max. stirring quantity of H<sub>2</sub>O at 3L
- ABS housing provides a good performance of weak acids and alkalis resistance





Chemical resistance



Strong magnetism



LED display



MS-PA

135(5 inch)mm

ABS

DC motor

5W

3W

15W

100~120/200~240V,50/60Hz



		ıca		

Work plate Dimension
Work plate material
Motor type
Motor input power
Motor output power
Power
Voltage
Stirring positions
Max. stirring quantity[H₂O]
Max. magnetic bar[length]
Speed range
Speed display
Protection class
Dimension [W x D x H]
Weight
Permissible ambient temperature and humidity

positions	1
quantity[H <sub>2</sub> O]	3L
etic bar[length]	50mm
d range	100~1500rpm
d display	LED
tion class	IP42

			IP42
			150×260×80mm
			1.8kg
			5~40°C,80%

# MS-PB 0135(5 inch)mm ABS DC motor 5W 3W 10W 100~120/200~240V,50/60Hz 1 3L 50mm 0~1500rpm Scale 1P42 150×260×80 mm

1.8kg

5~40°C,80%

### **MS-M-S10**

## **10-Position Magnetic Stirrer**

#### **Features:**

- Maintenance-free brushless DC motor
- Speed range of 0~1100rpm
- Stainless steel work plate cover with silicone cushion, provide excellent performance of skid resistance





## **MS-M-S16**

## **16-Position Magnetic Stirrer**

#### **Features:**

- A space saving unit with 16 stirring positions and 4 independent speed control channels
- A wide range of speed from 0 to 1100rpm
- High magnetic adhesion prevents stirrer spin bar out of control
- Stainless steel work plate, cover with silicone cushion, provides excellent performance of skid resistance



Skid resistance



Multiple position





#### **Specifications**

Work plate Dimension [W x D]
Work plate material
Motor type
Motor input power
Motor output power
Power
Voltage
Stirring positions
Max. stirring quantity[H₂O]
Max. magnetic bar[length]
Speed range
Speed display
Protection class
Dimension [W x D x H]
Weight
Permissible ambient temperature and humidity

#### MS-M-S10

180×450mm		
Stainless steel with silicone coating		
Brushless DC motor		
12W		
4W		
20W		
100~120/200~240V,50/60Hz		
10		
0.4LX10		
40mm		
0~1100rpm		
Scale		
IP2X		
182×622×65mm		
3.2kg		
5~40°C,80%		

#### NAC NA C16

IVIS-IVI-5 16
365×345mm
Stainless steel with silicone coating
DC motor
12W
4W
20W
100~120/200~240V,50/60Hz
16(4 channel)
0.4LX16
40mm
0~1100rpm
Scale
IP2X
380×622×65mm
6kg
5~40°C,80%

With excellent stirring functionality, the compact shape of FlatSpin takes less bench space and makes storage easier.

## **FlatSpin**

## **Ultra-flat Compact Magnetic Stirrer**

#### **Features:**

- A wide range of speed from 15 to 1500rpm
- Automatic reverse rotation for excellent mixing
- Protection class (IP 65)
- PET top provides excellent chemical resistance
- Ultra silence and vibration-free



Ultrathin



Silent operation



Vibration free



Switchable reverse rotation





#### **Specifications**

Work plate Dimension
Work plate material
Motor output power
Power
Voltage
Stirring positions
Max. stirring quantity[H <sub>2</sub> O]
Max. magnetic bar[length]
Speed range
Speed setting
Protection class
Dimension [W x D x H]
Weight

Permissible ambient temperature and humidity

FlatSpin	
🗓 90mm	
PET	
3W	
5W	
100~120/200~240,V50/60Hz	
1	
0.8L	
40mm	
15~1500rpm	
button	
IP65	
175x120x15mm	
0.3kg	
5~40°C,80%	

EcoStir is a magnetic stirrer customized for liquid mixing, suitable for chemical analysis, biology reagent mixing, regular laboratory experiments and liquid handling.

### **EcoStir**

### **Economical Magnetic Stirrer**

#### **Features:**

- Maintenance freebrushless DC motor
- Rare earth magnets give powerful stirring
- Stepless speed regulation 300~2000rpm
- Ultra silence and vibration-free design.
- PET top provides excellent chemical resistance
- Shaft can be fitted with a PH sensor or sensors for other purposes



Brushless DC motor



Strong magnetic



Chemical resistance



External sensor







#### **Specifications**

Work plate Dimension
Work plate materials
Motor type
Motor output power
Power
Voltage
Stirring positions
Max. stirring quantity[H <sub>2</sub> O]
Max. magnetic bar[length]
Speed range
Speed setting
Protection class
Dimension [W x D x H]
Weight
Permissible ambient temperature and humidity

EcoStir
0120mm
PET
Brushless DC motor
1.2W
7.2W
100~120/200~240V,50/60Hz
1
1.5L
40mm
300~2000prm
scale
IP21
150x145x50mm
0.3kg
5~40°C,80%

MS-C series provide remarkable performance in constant speed stirring, cycle stirring and dual speed stirring with various working modes for cell culture.



Design for low speed stirrer



LED display



Programmable



Multi-mode selection

#### MS-C-S1

**Magnetic Stirrer for Cell Culture** 

#### MS-C-S4

**4-position Magnetic Stirrer for Cell Culture** 

#### **Features:**

- Easy to program
- Digital LED displays the actual speed
- Multiple work modes selection
- Available in both single position and 4 position

## Double Sidearm Celstir Spinner Flask

The Celstir Spinner Flask features an adjustable paddle blade impeller for better mixing.

Cat.No. Volume 18900235 500ml 18900236 3L







#### **Specifications**

Work plate Dimension
Work plate material
Motor type
Motor output power
Power\Voltage
Stirring positions
Max. stirring quantity[H <sub>2</sub> O]
Max. magnetic bar[length]
Speed range
Speed display
Timer range
Data connector
Protection class
Dimension [W x D x H]
Weight

Permissible ambient temperature and humidity

□105mm	
Cast Aluminum	
Stepper Motor	
15W	
100~120/200~240V,50/60Hz	
1	
3 L	
80mm	
5~200rpm (resolution ±1rpm)	
LED	
0~49min59s	
RS232	
IP2X	
205x250x90mm	

2.5kg 5~40°C,80%

MS-C-S1

MS-C-S4
0105mm
Cast Aluminum
Stepper Motor
15W
100~120/200~240V,50/60Hz
4(each point distance 190mm)
3 L x 4
80mm
5~200rpm (resolution ±1rpm)
LED
0~49min59s
RS232
IP2X
395x450x90mm
5.5kg
5~40°C,80%





LCD display



Torque display



Speed adjusting with viscosity changing



Wide range of accessory

DLAB Overhead Stirrers can accomplish the most demanding tasks and provide high safety and increased performance. They are widely used in chemical synthesis, pharmaceutical synthesis, physical and chemicalanalysis, petrochemical industries, etc.

## OS20-Pro OS40-Pro

#### **LCD Digital Overhead Stirrer**

#### **Features:**

- High reliability and outstanding performance
- LCD display for precise monitoring of set and actual speeds, a wide range of speed from 50 to 2200rpm with control accuracy of ±3 rpm
- Brushless DC motor for long life, maintenance free and explosion proof
- Torque trend display for real-time information on viscosity changes
- Safety circuits allow for safe stop function in anti-stall or overload conditions
- Smooth operation prevents accidental spillage and splashing
- Provides a constant speed even with changes in viscosities of the sample
- Remote function provide PC control and data transmission





#### **Specifications**

Max. stirring quantity[H <sub>2</sub> O]
Motor type
Motor input power
Motor output power
Voltage
Power
Speed range
Speed display accuracy
Speed display
Torque display
Overload protection display
Max. torque
Viscosity max.
Chuck range diameter
Dimension [W x H xD]
Weight
Protection class
Permissible ambient temperature and humidity
Data connector

OS20-Pro	OS40-Pro
20L	40L
brushless DC motor	brushless DC motor
60W	120W
50W	100W
100~220V, 50/60 Hz	100~220V, 50/60 Hz
70W	130W
50~2200rpm	50~2200rpm
±3rpm	±3rpm
LCD	LCD
LCD	LCD
LED lights	LED lights
40Ncm	60Ncm
10000mPas	50000mPas
0.5~10mm	0.5~10mm
83 x 220 x 186mm	83 x 220 x 186mm
2.8kg	2.8kg
IP21	IP21
5~40°C,80%	5~40°C,80%
RS232	RS232

## **Overhead Stirrers**

## OS20-S OS40-S

#### **LED Overhead Stirrer**

#### **Features:**

- High reliability and outstanding performance
- A wide range of speed from 50 to 2200rpm
- Brushless DC motor for long life, maintenance free and explosion proof
- LED display for precise monitoring of actual speed
- Safety circuits allow for safe stop function in anti-stall or overload conditions



Explosion-proof



Wide range of accessories





OS40-S

40L brushless DC motor 120W 100W 100~220V, 50/60 Hz 130W 50~2200rpm ±3rpm LED LED lights 60Ncm 50000mPas 0.5~10mm 83 x 220 x 186mm 2.8kg IP42 5~40°C,80%

Specifications
Max. stirring quantity(H <sub>2</sub> O)
Motor type
Motor input power
Motor output power
Voltage
Power
Speed range
Speed display accuracy
Speed display
Overload protection display
Max. torque
Viscosity max.
Chuck range diameter
Dimension [W x H xD]
Weight
Protection class
Permissible ambient temperature and humidity

OS20-S	
20L	
brushless DC motor	
60W	
50W	
100~220V, 50/60 Hz	
70W	
50~2200rpm	
±3rpm	
LED	
LED lights	
40Ncm	
10000mPas	
0.5~10mm	
83 x 220 x 186mm	
2.8kg	
IP42	
5~40°C,80%	

## **Overhead Stirrers | Accessories**

### Universal plate stand

Dimension  $[W \times D \times H]$ : 200 x 310 x 780mm Material: stainless steel



18900258



#### **Propeller stirrer**

shaft length 400mm stirrer diameter 50mm

Material: 316L stainless steel **Application:** Standard stirring element used at medium and high speeds

18900071



## Straight stirrer

shaft length 40cm stirrer diameter 6cm

Material: 316L stainless steel

Application: Ideal for the mixing of low viscosity media at medium and high speeds

#### Cat. No.

18900072



#### **Paddle stirrer**

shaft length 40cm stirrer diameter 6.8cm

Material: 316L stainless steel

**Application:** Suitable for samples needed gentle processing at low and medium speeds



#### Centrifugal stirrer

shaft length 40cm stirrer diameter 9cm

Material: 316L stainless steel

**Application:** Two-bladed stirrer who's blades open with increasing speed, perfect for stirring in round vessels with narrow necks. Medium to high speeds required.

#### Cat. No.



### **Propeller stirrer**

shaft length 35cm stirrer diameter 6.5cm Material: PTFE coated

Application: Standard stirring element, used at medium and high speeds

#### Cat. No.



### Straight stirrer

shaft length 35cm stirrer diameter 7cm Material: PTFE coated

Application: Ideal for the mixing of low viscosity media at medium and high

speeds

#### Cat. No.



#### **Paddle stirrer**

shaft length 35cm stirrer diameter 6.8cm Material: PTFE coated

**Application:** Suitable for samples needed gentle processing at low and medium

speeds

#### Cat. No.

18900077



#### Centrifugal stirrer

shaft length 35cm stirrer diameter 8.5cm

Material: PTFE coated

**Application:** Two-bladed stirrer who's blades open with increasing speed. perfect for stirring in round vessels with narrow necks. Medium to high speeds required

#### Cat. No.

18900078





## **Vortex Mixers**

Vortex Mixers are ideal instruments for mixing to vigorous resuspension of cells, biological and chemical liquid components in tubes using an eccentric mechanism. They are widely used in life science, physical and chemical analysis fields.



Wide range of accessories

### MX-S

**Vortex Mixer** 

#### **Features:**

- Touch operation or continuous mode
- Variable speed control from 0 to 2500rpm
- Used for various mixing applications with optional adapters
- Specially designed vacuum suction feet for body stable
- Robust aluminum-cast construction

#### **MX-F**

**Vortex Mixer** 

#### **Features:**

- Touch operation or continuous mode
- Fixed Speed 2500rpm
- Used for various mixing applications with optional adapters
- Specially designed vacuum suction feet for body stable
- Robust aluminum-cast construction

# VT1.1 Standard top (Default)

for <Ø30mm tubes and small vessels

Cat. No.18900034





Continuous 60mm

Touch operat

3 | 5~40°C 80%



IVIX-F
(Fixed speed)
110~120V/220~230V,50/60Hz
60W
Orbital
4mm
Shaded pole motor
58W
10W
2500rpm
-
Touch operation/Continuous
127×130×160mm
3.5kg
5~40°C
80%

IP21

#### **Specifications**

Voltage
Power
Mixing motion
Orbital diameter
Motor type
Motor rating input
Motor rating output
Speed range
Speed display
Run type
Dimension[W×H×D]
Weight
Permissible ambient temperature
Permissible relative humidity
Protection class

## **Vortex Mixers | Accessories**



#### VT1.2 Tube holding rod

used with tube adapters **Cat. No.** 18900044



Ø 100mm

Cat. No.18900035





VT1.3.1 tube adapter

for 48 holes test tubes, Ø6mm Cat. No.18900020





VT1.3.2 tube adapter

for 15 holes test tubes, Ø10mm Cat. No.18900021





VT1.3.3 tube adapter

for 12 holes test tubes, Ø12mm Cat. No.18900022





VT1.3.4 tube adapter

for 8 holes test tubes, Ø16mm Cat. No.18900023





VT1.3.5 tube adapter

for 8 holes test tubes, Ø20mm Cat. No.18900024





for <Ø99mm tubes and small vessels

Cat. No.18900043





#### **Application of accessories**



VTI.3 + VT1.3.3 VTI.3 + VT1.3.4 VTI.3 + VT1.3.5 Adjustable speed model (0~2500rpm)





VT1.3.7 vacuum chuck

made of rubber Cat. No.18900158



## **Microplate Mixers**

Capable of holding single or double microplates, the compact shape of MX-M Microplate Mixer takes less bench space and makes storage easier. It is widely used in life sciences including microbiology, cell and molecular biology, immunology and biotechnology.

#### MX-M

### **Microplate Mixers**

#### **Features:**

- A wide range of speed from 0 to 1500rpm
- Used for various mixing applications with optional adapters
- Maintenance-free brushless DC motor





## **PS1.1 Universal top plate**

Used with tube adapters

**Cat. No.**18900067



#### VT1.3.1 tube adapter

for 48 holes test tubes, Ø6mm Cat. No.18900020



#### VT1.3.2 tube adapter

for 15 holes test tubes, Ø10mm Cat. No.18900021



#### VT1.3.3 tube adapter

for 12 holes test tubes, Ø12mm Cat. No.18900022



#### VT1.3.4 tube adapter

for 8 holes test tubes, Ø16mm Cat. No.18900023



#### VT1.3.5 tube adapter

for 8 holes test tubes, Ø20mm Cat. No.18900024



Brushless DC motor



Wide range of accessories





## PS1.2 Microplate clamp

Cat. No.18900042





#### **MXM-116**

Double microplate clamps **Cat. No.**18900079

#### **Specifications**

Shaking movement
Orbital diameter
Max. shaking weight
(with accessory)
Motor type
Motor rating input
Motor rating output

Speed range

Speed display

Voltage

Power

Dimension

Weight

Permissible ambient
temperature and humidity

Protection class

## MX-M

Orbital 4.5mm

0.5kg Brushless DC motor

18W 10W Single microplate: 0~1500rpm Double microplate : 0~1000rpm

> Scale 100~240V,50/60Hz 20W

260×150×80mm

3kg 5~40°C,80%

IP21



held in 1.5mL to 50mL micro tubes, and are used in a variety of applications including immune precipitations, prevention of blood coagulation, latex diagnostics, etc.

DLAB rotators give gentle but effective mixing of biological samples

#### **MX-RD-Pro**

### **LCD Digital Rotator**

#### **Features:**

- Electronic adjustment of speed and time
- LCD display speed and time
- Speed range from 10 to 70rpm
- Rolling action, gives gentle but effective mixing
- Adjustable mixing angle from 0 to 90°
- A wide variety of accessories are available

### **MX-RD-E**

#### **Economical Rotator**

#### **Features:**

- Provides gentle and effective mixing of biological samples
- Adjustable speed range from 0 to 80 rpm
- A wide variety of accessories are available



LCD display



Adjustable angle



Wide range of accessories





Specifications	MIX-RD-Pro	MX-RD-E
Motor type	DC motor	DC motor
Tilt angle	0~90°	-
Speed range	10~70rpm	0~80rpm
Speed display	LCD	Scale
Timer display	LCD	Scale
Timer	1~1199min	-
Operation mode	Continuous / timer	Continuous
Voltage	100~240V, 50/60Hz	100~240V, 50/60Hz
Power	40W	20W
Dimension [D×W×H ]	280×210×300mm	300×220×310mm
Permissible ambient temperature and humidity	5~40°C, 80%	5~40°C, 80%
Protection class	IP21	IP21

## **MX-RL-Pro**

## **LCD Digital Rotator**

#### **Features:**

- Electronic adjustment of speed and time
- LCD display speed and time
- Speed range from 10 to 70 rpm
- Provides gentle but effective rolling
- A wide variety of accessories are available

### **MX-RL-E**

#### **Economical Rotator**

#### **Features:**

- Provides gentle but effective rolling
- Adjustable speed range from 0 to 80 rpm
- A wide variety of accessories are available





LCD display



Wide range of accessories





Specifications	MX-RL-Pro	MX-RL-E
Motor type	DC motor	DC motor
Speed range	10~70rpm	0~80rpm
Speed display	LCD	Scale
Timer display	LCD	Scale
Timer	1~1199min	-
Operation mode	Continuous / timer	Continuous
Voltage	100~240V, 50/60Hz	100~240V, 50/60Hz
Power	40W	20W
Dimension [D×W×H ]	220×510×260mm	150X530X190mm
Permissible ambient temperature and humidity	5~40°C,80%	5~40°C,80%
Protection class	IP21	IP21

## **Rotators | Accessories**



## **Disk Accessories Type-1**

Used for MX-RD-Pro for 1.5mL x 60 centrifuge tubes holder

Cat. No.

18900160



#### **Disk Accessories Type-2**

Used for MX-RD-Pro for 15mL x 16 centrifuge tubes holder

Cat. No.

18900161





## **Disk Accessories Type-3**

Used for MX-RD-Pro for 50mL x 8 centrifuge tubes holder

Cat. No.

18900162



### Disk support rods

4 pcs in a group use with disk accessories

Cat. No.

18900140



## **Rotisserie Accessory Type-1**

Used for MX-RL-Pro, for 1.5mL x 48 centrifuge tubes held horizontally

**Rotisserie Accessory Type-3** 

Used for MX-RL-Pro, for 50mL x 24

centrifuge tubes held horizontally

Cat. No.

18900142

Cat. No.

18900144



### **Rotisserie Accessory Type-2**

Used for MX-RL-Pro, for 15mL x 24 centrifuge tubes held horizontally

Cat. No.

18900143



#### **Rotisserie Accessory Type-4**

Used for MX-RL-Pro, for 1.5mL x 32

Cat. No.



centrifuge tubes held vertically

18900145



## **Rotisserie Accessory Type-5**

Used for MX-RL-Pro, for 15mL x 16 centrifuge tubes held vertically

Cat. No.

18900146



#### **Rotisserie Accessory Type-6**

Used for MX-RL-Pro, for 50mL x 16 centrifuge tubes held vertically

Cat. No.

18900147



## **Plastic Clips**

Used with MX-RL-E/MX-RD-E Disk/Rotisserie accessory, for 50mL, 15mL and 1.5mL centrifuge tubes



## **Tube Rollers**



## **MX-T6-Pro**

## **LCD Digital Tube Roller**

#### **Features:**

- LCD displays the speed and time
- Speed range of 10~70rpm
- Six roller design for gentle rolling and easy to clean
- Continuous or timer operation

DLAB tube rollers provide a gentle and highly efficient rolling motions, ideal for mixing blood samples, viscous substances and liquid-solid suspensions. Used in a variety of applications, such as the prevention of blood coagulation and immune precipitation, etc.



LCD display



Timer

## MX-T6-S

## **Tube Roller**

- **Features:**
- Speed range of 0~70rpm
- Six roller design for gentle rolling and easy to clean





#### **Specifications**

Amplitude  Motor type  Rocking motion  Amplitude
Rocking motion Amplitude
Rocking motion Amplitude
Amplitude
KALL Land and Co.
Max. load capacity
Number of rollers
Roller size [length]
Speed range
Speed display
Timer
Timer display
Time setting range
Operation mode
Voltage
Power
Dimension [D×W×H]
Weight
Permissible ambient temperature and humidity
Protection class

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MX-T6-Pro
24mm
DC motor
Rocking and rolling
24mm
4kg
6
280mm
10 ~70rpm
LCD
Yes
LCD
1~1199min
Continuous / timed
100~240V,50/60Hz
30W
450×260×120mm
5.1kg
5~40°C,80%
IP21

#### MX-T6-S

1417. 10 3
24mm
DC motor
Rocking and rolling
24mm
4kg
6
280mm
0~70rpm
Scale
-
-
-
Continuous
100~240V,50/60Hz
25W
450×260×120mm
4.5kg
5~40°C,80%
IP21

DLAB orbital and linear shakers are ideal for almost any vessel from microcentrifuge tubes through petri dishes and microtitre plates to conical flasks.

## SK-O330-Pro SK-O180-Pro LCD Digital Orbital Shaker

#### **Features:**

- Max. load capacity is 7.5kg(O330) and 2.5kg(O180) with platform
- Double LCDs for independent display of time and speed
- Used with a wide variety of accessories
- Maintenance- free brushless DC motor
- Over speed detection and protection
- Remote function provide PC control and data transmission





# **SK-O180-S LED Digital Orbital Shaker**

#### **Features:**

- Max.load capacity is 3kg with platform
- Double LEDs for independent display of time and speed
- Speed range of 40~200 rpm
- A wide range of platforms accessories

## SK-0180-E

#### **Economical digital Orbital Shaker**

#### **Features:**

- Max. load capacity is 3kg with platform
- Speed range of 0~200 rpm
- A wide range of platforms accessories







Timer



Wide range of accessories









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Orbital diameter Max. load capacity (with platform) Motor type Motor input power Motor output power Speed range Speed display Timer display Time settings range Voltage Power Weight Permissible ambient temperature and humidity Dimension[W×D×H] Protection class

Data connector

SK-O330-Pro	SK
10mm	
7.5kg	
Brushless DC motor	Brus
28W	
15W	
100~500rpm	1
LCD	
LCD	
1min~19h59min	1m
100~240V,50/60Hz	100
30W	
13.5kg	

5~40°C, 80%

370×420×100mm

IP21

RS232

SK-O180-Pro
4mm
2.5kg
Brushless DC motor
28W
15W
100~800rpm
LCD
LCD
1min~19h59min
100~240V,50/60Hz
30W
8.1kg
5~40°C,80%
300×340×100mm
IP21
RS232

SK-O180-S
20mm
3kg
DC motor
16W
10W
40~200rpm
LED
LED
1min~19h59min
100~240V,50/60Hz
20W
3.1kg
5~40°C,80%
270×330×110mm
IP21

SK-O180-E
20mm
3kg
DC motor
16W
10W
0~200rpm
scale
-
-
100~240V,50/60Hz
20W
3.1kg
5~40°C,80%
270×330×110mm
IP21
_



## SK-L330-Pro SK-L180-Pro

## **LCD Digital Linear Shaker**

#### **Features:**

- Max. load capacity is 7.5kg(L330) and 2.5kg(L180) with platform
- Double LCDs for independent display time and speed
- A wide range of platforms accessories
- Maintenance- free brushless DC motor
- Over speed detection and protection



### **SK-L180-S**

## **LED Digital Linear Shaker**

#### **Features:**

- Max.load capacity is 3kg with platform
- Double LEDs for independent display of time and speed
- Speed range of 40~200 rpm
- Various of platforms accessories



#### **SK-L180-E**

### **Economical digital Linear Shaker**

#### **Features:**

- Max. load capacity is 3kg with platform
- Speed range of 0~200 rpm
- Various of platforms accessories











Wide range of accessories





SK-L180-Pro





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Specifications
Amplitude
Max. load capacity (with platform)
Motor type
Motor input power
Motor output power
Speed range
Speed display
Timer display
Time settings range
Voltage
Power
Weight
Permissible ambient temperature and humidity
Dimension[W×D×H]
Protection class
Data connector

SK-L330-Pro	
10mm	
7.5kg	

10mm	4mm
7.5kg	2.5kg
Brushless DC motor	Brushless DC motor
28W	28W
15W	15W
100~350rpm	100~350rpm
LCD	LCD
LCD	LCD
1min~19h59min	1min~19h59min
100~240V,50/60Hz	100~240V,50/60Hz
30W	30W
13.5kg	8.1kg
5~40°C, 80%	5~40°C, 80%
370×420×100mm	300×340×100mm
IP21	IP21
RS232	RS232

3K-L100-3
20mm
3kg
DC motor
16W
10VV
40~200rpm
LED
LED
1min~19h59min
100~240V,50/60Hz
20W
3.1kg
5~40°C, 80%
270×330×110mm
IP21
_

SK-LIOU-E
20mm
3kg
DC motor
16W
10VV
0~200rpm
scale
-
-
100~240V,50/60Hz
20W
3.1kg
5~40°C, 80%
270×330×110mm
IP21
-

DLAB rocking and 3D shakers provide perfect solution in wide fields including electrophoresis gel dyeing/discoloration, sample washing, molecular hybridization, immunoprecipitation, Western blot and cell culture.

#### SK-R330-Pro

#### **LCD Digital Rocking Shaker**

#### **Features:**

- Rocking motion angle 9°
- Max. load capacity is 10kg with platform
- Speed range of 10~70rpm
- Double LCDs for independent display time and speed
- Various of platforms, accessories





# **SK-R1807-S LED Digital Rocking shaker**

#### **Features:**

- Rocking motion angle 7°
- Max. load capacity is 3kg with platform
- Speed range of 10~80rpm
- Double LEDs for independent display time and speed
- Various of platforms, accessories

## SK-R1807-E

#### **Economical Rocking Shaker**

#### **Features:**

- Rocking motion angle 7°
- Max. load capacity is 3kg with platform
- Speed range of 0~80rpm
- Various of platforms, accessories









Timer



Wide range of accessories







Tilt angle
Max. load capacity (with platform)
Motor type
Motor input power
Motor output power
Speed range
Speed display
Timer display
Time settings range
Voltage
Power
Weight
Permissible ambient temperature and
humidity
Dimension[W×D×H]
Protection class

**Specifications** 

SK-R330-Pro	SK-R1807-S
9°	7°
10kg	3kg
DC motor	DC motor
40W	16W
24W	10W
10~70rpm	10~80rpm
LCD	LED
LCD	LED
1min~19h59min	1min~19h59min
100~240V,50/60Hz	100~240V,50/60Hz
50W	20W
9kg	3.2kg
5~40°C,80%	5~40°C,80%
360×410×200mm	270×330×130mm
IP21	IP21

SK-R1807-S	SK-R1807-E
7°	7°
3kg	3kg
DC motor	DC motor
16W	16W
10W	10W
10~80rpm	0~80rpm
LED	-
LED	-
1min~19h59min	-
100~240V,50/60Hz	100~240V,50/60Hz
20W	20W
3.2kg	3.2kg
5~40°C,80%	5~40°C,80%
270×330×130mm	270×330×130mm
IP21	IP21





# **SK-D3309-Pro LCD Digital 3D Shaker**

#### **Features:**

- Three-dimensional rocking motion with an angle of 9°
- Max. load capacity is 5kg with platform
- Speed range of 10~70rpm
- Double LCDs for independent display time and speed
- Various of platforms accessories



#### SK-D1807-S

## **LED Digital 3D shaker**

#### **Features:**

- Three-dimensional rocking motion with the angle of 7°
- Max. load capacity is 3kg with platform
- Speed range of 10~80rpm
- Double LEDs for independent display time and speed
- Various of platforms accessories





## **SK-D1807-E**

#### **Economical 3D Shaker**

#### **Features:**

- Three-dimensional rocking motion with the angle of 7°
- Max. load capacity is 3kg with platform
- Speed range of 0~80rpm
- Wide range of platforms for use with a variety of vessels





Timer



Wide range of accessories







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Tilt angle				
Max. load capacity (with platform)				
Motor type				
Motor input power				
Motor output power				
Speed range				
Speed display				
Timer display				
Time settings range				
Voltage				
Power				
Weight				
Permissible ambient temperature and				
humidity				
Dimension[W×D×H]				
Protection class				
Data connector				

SK-D3309-Pro	SK-D1807-S	SK-D1807-E
9°	7°	7°
5kg	3kg	3kg
DC motor	DC motor	DC motor
40W	16W	16W
24W	10W	10W
10~70rpm	10~80rpm	0~80rpm
LCD	LED	scale
LCD	LED	-
1min~19h59min	1min~19h59min	-
100~240V,50/60Hz	100~240V,50/60Hz	100~240V,50/60Hz
50W	20W	20W
9kg	2.7kg	2.7kg
5~40°C, 80%	5~40°C, 80%	5~40°C, 80%
360×430×106mm	270×330×130mm	270×330×130mm
IP21	IP21	IP21
_	_	_

## **Shakers** | Accessories

	Cat. No.	Descriptions	SK-O330-Pro SK-L330-Pro SK-R330-Pro SK-D3309-Pro	SK-O180-Pro/S/E SK-L180-Pro/S/E SK-R1807-S/E SK-D1807-S/E
SK330.5	18900155	Dish plateform with non-slip mat and fixed string (8 pcs) Dimension[WxD]: 30x28.5cm	•	
SK180.4	18900185	Dish attachment with non-slip mat Dimension[WxD]: 24x21.5cm		•
SK180.5	18900200	Large size dish attachment with non-slip mat Dimension[WxD]: 30x23cm		•
SK180.6	18900326	Dish attachment with non-slip mat Dimension[WxD]: 28x28cm		•
SK330.1	18900027	Universal attachment with 4 bars Dimension[WxD]: 30x30cm	•	
SK330.3	18900040	Lengthways roller attachment Dimension[WxD]: 30x30cm	•	
SK180.1	18900025	Universal attachment with 3 bars Dimension[WxD]: 24x24cm		•
SK180.3	18900038	Lengthways roller attachment Dimension[WxD]: 24x24cm		•
<del></del>	18900036	Bar for SK330.1 universal attachment	•	
-	18900037	Bar for SK180.1 universal attachment		•
	18900280	Connect sticks for double dishes shaker		•

# **Shakers** | Accessories

10 8			•	
	Cat. No.	Descriptions	SK-O330-Pro SK-L330-Pro SK-R330-Pro SK-D3309-Pro	SK-O180-Pro/S/E SK-L180-Pro/S/E SK-R1807-S/E SK-D1807-S/E
SK330.2	18900028	Fixing clip attachment	•	
SK180.2	18900026	Fixing clip attachment		•
	18900029	Fixing clip for flask volume 25mL, used with SK330.2[28pcs] SK180.2 [9pcs]	•	•
	18900030	Fixing clip for flask volume 50mL, used with SK330.2[16pcs] SK180.2 [9pcs]	•	•
	18900031	Fixing clip for flask volume 100mL, used with SK330.2[16pcs] SK180.2 [9pcs]		•
8	18900032	Fixing clip for flask volume 200/250 ml, used with SK330.2[9pcs] SK180.2 [4pcs]	•	•
B	18900033	Fixing clip for flask volume 500mL, used with SK330.2[9pcs] SK180.2 [2pcs]	•	•





## **High Speed Micro-Centrifuges**

#### **High Speed Micro Centrifuge**

High speed micro centrifuges are widely used in physical and chemical analysis, biochemistry, cellular and molecular biology, clinical Labs and blood donation centers, ideal for high-end research applications

- Sedimentation of cells and viruses
- Separation of sub-cellular organelles
- Isolation of macromolecules such as DNA, RNA, proteins or lipids

#### Precise control

- Brushless DC motor accelerates quickly to the set speed
- High accuracy of speed in ±20 rpm
- Digital timer adjustable from 30 sec. to 99 min or set for continuous run
- Timer starts when reach the target speed, to achieve the accuracy of separation time

#### Conforms to international safety standards and regulations

- DLAB centrifuges gain and maintain CE, cTÜVus and FCC certificates provided by TÜVRheinland company(Germany). All DLAB test items are proven with the highest level of reliability and confidence according to IEC/EN 61010-1, and pass MCA test according to IEC/EN61010-2-20, including explosion-proof and bio-safe tests.
- Quiet operation, maximum reliability
- High strength metal casing ensures security of centrifugal process
- Dual door interlock design for safety(D3024 & D3024R)
- Gentle braking at low speed with efficient separation

#### **Ergonomic design**

- User-friendly large LCD display shows real-time information
- Both RPM or G-force can be set and displayed
- The parameters can be modified after the set speed is reached.
- The short spin function is used for quick spins by pressing and holding PULSE key. The centrifuge speed can be accelerated and held at the target speed
- Automatic lid-lock release prevents sample warming and allows easy access(excluding D3024R)
- Concise display and Sound-alert



## D1536 series

DLAB D1536 series multi-purpose centrifuge is a universal one compatible with various of fixed angle rotors, swing bucket rotors and an extensive range of adapters for swing-out rotor, standard tubes up to100 mL, micro-plates, tubes with a screw cap, blood collection tubes or cytology accessories. With the fixed angle rotors, the max speed can reach 15000rpm, which is ideal for physical and chemistry analysis, biochemistry, cellular and molecular biology, clinical labs, blood donation, and high-end research applications.

#### **D1536**

**High Speed Multi-Purpose Centrifuge** 

#### **D1536R**

**High Speed Multi-Purpose Centrifuge Refrigerated** 

#### **Features:**

- Speed range from 300rpm to 15000rpm
- Maximum capacity of the centrifuge: 100mLx4
- Powerful cooling system for precise temperature control for both chamber and samples (1536R)
- 9 Acceleration/10 Brake speed settings to ensure optimal separation
- A wide range of accessories
- Automatic rotor identification
- Timers can be set up to 99min. for short run/continuous run
- Extremely guiet with low vibration levels during operation
- 9 procedures stored in memory makes the operation much simplified.



Brushless DC motor



Wide range of rotors



Specifications	D1536	D1536R
Speed range	300~15000rpm	300~15000rpm
Max. RCF	25150xg	25150xg
Speed accuracy	±20rpm	±20rpm
Temperature Range	<del>-</del>	-20~40°C
Rotor Capacity	9 types	9 types
Run Time	30sec~99mins/continue	30sec~99mins/continue
Motor	Brushless DC	Brushless DC
Display	LCD	LCD
Program Memory	9	9
Safety Devices	door,imb,motor over hot,speed over,chamber over temper	door,imb,motor over hot,speed over,chamber over temper
Acceleration/Braking time	9s ↑ /10s ↓	9s ↑ /10s ↓
Power	Single-phase AC220V~240V, 50Hz/60Hz, 6.3A; AC110V~120V,50Hz/60Hz,10A	Single-phase AC220V~240V, 50Hz/60Hz, 12.5A;AC110V~120V,50Hz/60Hz,15A
Dimension[WxDxH]	445x579x269mm	630x579x269mm
Weight	36kg	50kg
Certification	CE cTÜVus FCC MCA	CE cTÜVus FCC MCA
Advanced Features	speed/rcf switch; rotor identification	speed/rcf switch; rotor identification



**SE4-100** for D1536 & D1536R

**Cat. No.** 19400041

Max. speed :4000rpm Max. RCF:2830×g

Rotor material:stainless steel body and adaptor



## **D1536 series | Rotors and Adapters**

### **Available rotors**



### **AS6-50V** for D1536 & D1536R

Max. speed:12500rpm Max. RCF:18690×g

Rotor capacity:50mL×6(culture tube)

Rotor material:aluminum Bio-safe(Bio sealing):YES



### **AS12-PCR8** for D1536 & D1536R

Max. speed :14000rpm Max. RCF:21910×g Rotor capacity:PCR 8 trips×12 Rotor material:aluminum

Bio-safe(Bio sealing):YES

**Cat. No.** 19400036

**Cat. No.** 19400038



### AS30-2(Standard accessory) for D1536 & D1536R

Max. speed :15000rpm Max. RCF:25150×g Rotor capacity:2mL×30 Rotor material:aluminum Bio-safe(Bio sealing):YES

### **Cat. No.** 19400034

# for D1536 & D1536R

Max. speed :14000rpm Max. RCF:21910×g Rotor capacity:2mL×60 Rotor material:aluminum Bio-safe(Bio sealing):YES

AS60-2

**Cat. No.** 19400037



## **D1536 series | Rotors and Adapters**



Cat. No. 19400035

**Cat. No.** 19400039

**Cat. No.** 19400062

**Cat. No.** 19400040

### **AS18-5V**

for D1536 & D1536R

Max. speed: 15000rpm Max. RCF: 25150xg

Rotor capacity: 5mlx18(culture tube) Rotor material:aluminum body



A8-50

for D1536 & D1536R

Max. speed: 5000rpm Max. RCF: 3460xg

Rotor capacity: 50mlx8 or 15mlx16

Rotor material: aluminum body and stainless steel adaptor



S2-MP

for D1536 & D1536R

Max. speed :4000rpm Max. RCF:2200×g

Rotor capacity: Micro-plants 384-PCR; 96-PCR Rotor material:aluminum body and buckets



A30-15

for D1536 & D1536R

Max. speed :4500rpm Max. RCF:2110×g Rotor capacity:15mL×30

Rotor material:aluminum body and stainless steel adaptor

 $\Phi \times L mm$ 

**Tubes Quantity** 

13×75 30

13×100 30

17×105

30

17×120

30

### D3024

### **High Speed Micro Centrifuge**

### **Unique Features**

- Special multi-flow air cooling design with patent ensures fast cooling of the rotor and low energy consumption
- Unique temperature display appropriate for gentle handling of sensitive samples
- Bio-safe rotor/anti-sample overflow prevents accidental leakage in centrifugal process allowing risk-free microbial contamination
- High strength aluminum alloy rotor can be fully autoclaved for unlimited service life
- Four rotors are optional complete with 24 places 1.5/2.0mL tubes, bigger 5.0mL, smaller 0.2mL and 0.5mL tubes with the use of adapters





### **D3024R**

### **High Speed Refrigerated Micro Centrifuge**

### Powerful cooling system for precise temperature control

- Pre-cooling program ensures optimal protection of the sample before warming
- Guaranteed 2°C cooling within only 7 minutes for both chamber and samples even at maximum speed and capacity utilization
- Sound-alert allows your undivided attention on other tasks warming
- Locked lid after operation maintains the chamber temperature
- Intermittent temperature control mode, CFC-free refrigerant and low carbon life rotor capacity
- Bio-safe rotor/anti-sample overflow prevents accidental leakage in centrifugal process allowing risk-free microbial contamination
- High strength aluminum alloy rotor can be fully autoclaved for unlimited service life
- Four rotors are optional complete with 24 place 1.5/2.0mL tubes, bigger 5.0mL, smaller 0.2mL and 0.5mL tubes with the use of adapters
- Quiet running, noise level ≤ 54dB

### D3024 series



Brushless DC motor



Wide range of rotors







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### **Specifications**

Max. Speed

Max. RCF

Speed Accuracy

Temperature Range

Rotor Capacity

Run Time

Motor

Safety Devices

Power

Acceleration /Braking time [Sec]

Dimension [W×D×H]

Weight

Certification

Advanced features

### D3024

15000rpm (200~15000rpm), increment:10rpm

21380×g, increment:10×g

±20 rpm

5mL×18,

0.2mL/0.5mL/1.5mL/2mL×24, 0.5mL×36, PCR8×4

30sec~99min / Continuous

Brushless DC motor

Dual door interlock, Over-speed detection, Over-temperature detection, Automatic internal diagnosis

Single-phase, AC220V~240V, 50Hz/60Hz, 5A, AC110V~120V, 50Hz/60Hz, 8A 200W

25s ↑ 25s ↓

280×364×266mm

12kg

CE cTÜVus FCC MCA

Speed/RCF switch; Short-time run function; sound-alert function

### D3024R

15000rpm (200~15000rpm), increment:10rpm

21380×g, increment: 10×g

±20 rpm

-20°C~40°C

5mL×18,

0.2mL/0.5mL/1.5mL/2mL×24, 0.5mL×36, PCR8×4

30sec~99min / Continuous

Brushless DC motor

Dual door interlock, Over-speed detection, Over-temperature detection, Automatic internal diagnosis

Single-phase, AC220V~240V, 50Hz/60Hz, 10A, AC110V~120V, 50Hz/60Hz, 10A 400W

25s ↑ 25s ↓

338×580×324mm

30kg

CE cTÜVus FCC MCA

Speed/RCF switch; Short-time run function; sound-alert function







DLAB rotors are manufactured militaryindustrial-grade aluminum alloy with high mechanical strength for precise running and safety (excludes D2012 plus rotor)

- Every rotor can reach a Max. speed of 15000rpm
- Rotors are seated on a tapered shaft, concentric and self-aligning, perfect for achieving running stability at high speeds
- D3024 & D3024R with bio-safe rotors/antisample overflow prevents accidental leakage in centrifugal process allowing risk-free microbial contamination. D3024 & D3024R rotors have passed MCA test according to IEC/EN61010-2-20, including explosionproof and bio-safe tests
- High strength aluminum alloy rotors are fully autoclavable and provide unlimited service life (D2012 plus rotor not included)
- Powerful cooling system minimizes rotor heating. D3024 rotors heat up less than 10°C and D2012 rotors less than 8°C after running an hour

Seals within the aluminum alloy rotor

### **Rotor Features**

### **Fully autoclavable**

High strength aluminum alloy rotors are fully autoclavable, withstanding steam sterilizing at 121°C for 20 minutes, Unlimited service life is a reality.

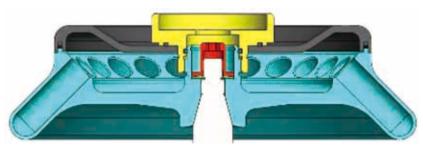
### **Bio-safe**

Aspired to be the top-of-the-line model, D3024 & D3024R rotors are designed to prevent sample leakage. Each and every rotor is hermetically sealed by three rubber seals.

### **Explosion-proof**

DLAB centrifuges are checked under MCA conditions according to IEC / EN61010-2-20, causing disruption by partially cutting and overloading rotor assembly, and guarantee that no any part shall be detached to cause danger to person or the environment.

Three rubber seals fitted to achieve bio-safe condition





## **D3024 series** | Rotors and Adapters

### **Available rotors**



### AS24-2

### for D3024 & D3024R

Max. speed :15000rpm Max. RCF:21380×g

Rotor capacity:2mL/1.5mL×24,0.2mL×24,0.5mL×24

Rotor material:Aluminum alloy Bio-safe(Bio sealing):YES

Available rotor adapters:A02P2,A05P2



### **AS12-5V**

### for D3024 & D3024R

Max. speed :15000rpm Max. RCF:21380×g

Rotor capacity:5mL×12(culture tube) Rotor material:Aluminum alloy Bio-safe(Bio sealing):YES



### **AS36-05**

#### for D3024 & D3024R

Max. speed :15000rpm Max. RCF:21380×g

Rotor capacity:0.5mL×36,0.2mL×36 Rotor material:Aluminum alloy Bio-safe(Bio sealing):YES Available rotor adapters:A02P05



### **AS4-PCR8**

### for D3024 & D3024R

Max. speed :15000rpm Max. RCF:21380×g

Rotor capacity:0.2mL/PCR8×4 Rotor material:Aluminum alloy Bio-safe(Bio sealing):YES **Cat. No.** 19400007

**Cat. No.** 19400032

**Cat. No.** 19400006

**Cat. No.** 19400008

## **D3024 series** | Rotors and Adapters



**Cat. No.** 19400012

### AS18-5

for D3024 & D3024R

Max. speed :15000rpm
Max. RCF:21380×g
Rotor capacity:5mL×18
Rotor material:Aluminum alloy
Bio-safe(Bio sealing):YES

### **Available adapters**



**Cat. No.** 19500001

### A02P2

0.2mL rotor adapter Used with A12-2, A12-2P, AS24-2 and A24-2P rotors 24pcs/pk

**Cat. No.** 19500002

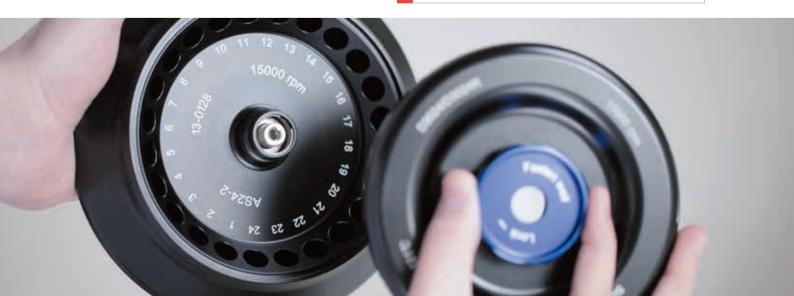
### A05P2

0.5mL rotor adapter Used with A12-2,A12-2P, AS24-2 and A24-2P rotors 24pcs/pk

**Cat. No.** 19500003

### A02P05

0.2mL rotor adapter Used with AS36-05 rotor 36pcs/pk





### **D2012 plus**

### **High Speed Mini Centrifuge**

### **Features**

- Powerful centrifugal force 15100xg and Max speed 15000rpm ideal for various applications
- Brushless DC motor drive quickly accelerates the rotor to the set speed
- Quiet working, Low noise ≤56dB
- D2012 is proven by IEC/EN 61010-1
- D2012 Plus passed the rigorous explosion-proof test and accredited with CE, cTUVus, FCC certificates, and MCA test. MCA test according to IEC/EN61010-2-20



Brushless DC motor



LCD display



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### <u>D20</u>12 plus

15000rpm (500~15000rpm), increment:100rpm

15100×g, increment:100×g

±20 rpm

0.2mL/0.5mL/1.5mL/ 2mL×12

30sec~99min / Continuous

Brushless DC motor

Door interlock, Over-speed detection,

Over-temperature detection, Automatic internal diagnosis

Single-phase, AC110V~240V, 50Hz/60Hz, 3A 100W

≤54dB

11s ↑ /9s ↓

255×245×140mm

6kc

EMC, CE, FCC, ICES, cTUVus, CB

Speed/RCF switch, Short-time run function, sound-alert function

### Specifications

Max. Speed

Max. RCF

Speed Accuracy

**Rotor Capacity** 

Run Time

Driving Motor

Safety Devices

Power

Noise level

Acceleration /Braking time

Dimension [D×W×H]

Weight

Certification

Advanced features



## **D2012 series** | Rotors and Adapters



### **Available rotors**

**Cat. No.** 19400010

### A12-2P

for D2012plus only

Max. speed :15000rpm Max. RCF:15100×g

Rotor capacity:2mL/1.5mL×12,0.2mL×12,0.5mL×12

Rotor material:High strength plastic Available rotor adapters:A02P2,A05P2

### **Available adapters**



Cat. No. 19500001

### A02P2

0.2mL rotor adapter Used with A12-2, A12-2P, AS24-2 and A24-2P rotors 24 pcs/pk

**Cat. No.** 19500002

### A05P2

0.5mL rotor adapter Used with A12-2,A12-2P, AS24-2 and A24-2P rotors 24 pcs/pk



## **Clinical Centrifuges**

DLAB clinical centrifuges are wildly used in the separation of serum, plasma, urea, blood samples and other routine applications in hospital and research laboratories.

## Conforms to international safety standards and regulations

- DLAB clinical centrifuges have marked with CE, cTUVus and FCC, and passed the explosion-proof test / MCA test according to IEC/EN61010-2-20
- Passed EN61010-2-101:2002 particular requirements for in vitro diagnostic (IVD) medical equipment
- High strength plastic rotor gives excellent balance to guarantee stable operation
- Dual protection housing particularly advantageous for safe running
- Brushless DC motor precisely accelerates to the set speed









#### **Precise control**

- Powerful CPU for easy operation of speed, time and all other parameters
- High accuracy of speed
- Digital timer adjustable from 30 sec. to 99 min or set for continuous run
- Gentle braking at low speeds with efficient separation

### **Ergonomic design**

- Easy operation thanks to intuitive menu and easy-to-read display
- RPM or G-force can be set and displayed
- Parameters can be modified after the set speed is reached
- Pressing and holding PULSE key for quick spin function
- Automatic lid-lock release
- Easy-to-read processing display and sound alert





DLAB DM0636 Multi-Purpose Clinical Centrifuge is ideal for the centrifugation of samples in clinical chemistry, cytology, research laboratories, industrial laboratories, etc.

This centrifuge is suitable for tubes with caps, blood collection or urine tubes. Swing-out bucket rotors and adapters can be compatible with standard tubes up to 100 mL at low speed.

### **DM0636**

**Multi-Purpose Clinical Centrifuge** 

### **DM0636R**

**Multi-Purpose Clinical Centrifuge Refrigerated** 

#### **Features:**

- Speed can be set from 300 rpm to a max. of 6000 rpm
- Maximum capacity of the centrifuge: 100 mL x4
- 9 Acceleration/10 Brake speed settings to ensure optimal separation
- Powerful cooling system for precise temperature control of both chamber and samples(0636R)
- A wide range of accessories(fixed angle and swing-out bucket rotors)
- Automatic rotor identification
- Timers can be set up to 99 min. for short run/ continuous run
- 9 procedures stored in memory makes the operation much simplified
- Maintenance-free brushless DC motors





### **Specifications**

Speed range
Max. RCF
Speed accuracy
Temperature Range
Rotor Capacity
Run Time
Motor
Display
Program Memory
Safety Devices
Acceleration/Braking time
Power
Dimension[WxDxH] Weight Certification

Advanced features

DM0636
300~6000rpm increment:10rpm
4300xg
±20rpm
-
9 types
30sec~99mins/continue
Brushless DC
LCD
9
door,imb,motor over hot,speed over,chamber over temper
9s ↑ /10 ↓
Single-phase AC220V~240V, 50Hz/60Hz, 6.3A; AC110V~120V,50Hz/60Hz,10A
445x579x269mm
36kg
CE cTÜVus FCC IVD
speed/rcf switch;
Rotor identification

DM0636R
300~6000rpm increment:10rpm
4300xg
±20rpm
-20~40°C
9 types
30sec~99mins/continue
Brushless DC
LCD
9
door,imb,motor over hot,speed over,chamber over temper
9s ↑ /10 ↓
Single-phase AC220V~240V, 50Hz/60Hz, 12.5A; AC110V~120V,50Hz/60Hz,15A
630x579x269mm
50kg
CE cTÜVus FCC IVD
speed/rcf switch:

Rotor identification

## **DM0636 series** | Rotors and Adapters



### **Uncapping block**

for S4-100 rator





**SE4-100**(Standard accessory) for DM0636 & DM0636R

Max. speed :4000rpm Max. RCF:2830×g

Rotor material:stainless steel body and adaptor









19400043



19400042

bucket	x 4										
tube	х 3	36		x 16		x 8	x 4	x 4	x 8	x 8	x 20
Nominal volume	3~7	7mL	10mL	12mL	15mL	50mL	100mL	85mL	50mL	15mL	3~7mL
□×L mm	13×75	13×100	15×100	17×105	17×120	34×100	*	38×104	34×100	17×120 13×100 13×75	13×100 13×75
tube											
adapter	with plug						A10	DP80	A100P50	<b>(</b> ) A100P15	<b>(iii</b> ) A100P10
Package	36		4 1 1 1 1 1				2	1	4	4	4
Tubes per rotor	36	36	16	16	16	8	4	4	8	8	20
Radius(mm)	14	16.5	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.1	14.7
Max rcf (g-force)	2500	2950	2840	2840	2840	2840	2840	2840	2840	2700	2630

## **DM0636 series** | Rotors and Adapters

### **Available rotors**



## **AS12-PCR8** for D1536 & D1536R

Max. speed :14000rpm Max. RCF:21910×g Rotor capacity:PCR 8 trips×12 Rotor material:aluminum Bio-safe(Bio sealing):YES **Cat. No.** 19400036



# AS30-2(Default) for D1536 & D1536R

Max. speed :15000rpm Max. RCF:25150×g Rotor capacity:2mL×30 Rotor material:aluminum Bio-safe(Bio sealing):YES Cat. No. 19400034



### AS60-2

for D1536 & D1536R

Max. speed :14000rpm Max. RCF:21910×g Rotor capacity:2mL×60 Rotor material:aluminum Bio-safe(Bio sealing):YES **Cat. No.** 19400037



### S2-MP

for D1536 & D1536R

Max. speed :4000rpm Max. RCF:2200×g

Rotor capacity: Micro-plants 384-PCR; 96-PCR

Rotor material:stainless steel body and aluminum buckets

## **DM0636 series** | Rotors and Adapters

### **Available rotors**



### **AS6-50V**

for DM0636 & DM0636R

Max. speed :12500rpm Max. RCF:18690×g Rotor capacity:50mL×6 Rotor material:aluminum Bio-safe(Bio sealing):YES **Cat. No.** 19400038

**Cat. No.** 19400035

**Cat. No.** 19400039

**Cat. No.** 19400040



for DM0636 & DM0636R

Max. speed : 15000rpm Max. RCF: 25150×g Rotor capacity: 5mL×18

Rotor material:stainless steel body and aluminum buckets



A8-50

for DM0636 & DM0636R

Max. speed : 5000rpm Max. RCF: 3460×g

Rotor capacity: 50mL×8 or 15mLx16

Rotor material: aluminum body and stainless steel adaptor



A30-15

for DM0636 & DM0636R

Max. speed :4500rpm Max. RCF:2570×g Rotor capacity:15mL×30

Rotor material:aluminum body and stainless steel adaptor

Bio-safe(Bio sealing):YES



Capacity	3~7mL Blood collection tube	10mL Blood collection tube	12mL urine tube	15mL
0×L mm	13×75	13×100	17×105	17×120
Tubes Quantity	30	30	30	30



### DM0412 series

DLAB DM0412 & DM0412S clinical centrifuges support applications with small sample volumes. The centrifuges are supplied with an angle rotor that can hold up to 15mL×8 or 10mL/7mL/5mL×12 vacuum tubes.

They are widely used in medical and veterinary practices for the centrifugation of blood and urine samples, in environmental analyses for the clarification of water and soil samples or in universities and other research institutes



### **Clinical Centrifuge**

#### **Features:**

- Easy programming to achieve high accuracy of speed control
- Easy operation with intuitive menu and easy-to-read display
- Rotor speed can be set and displayed by RPM or G-force
- Maintenance-free brushless DC motors
- Pressing and holding PULSE key for quick spin function
- Lid with electric lock and automatic release function saves processing time and prevents samples overheating
- Automatic self-diagnosis on startup showing accumulative running time and last running parameters

### **DM0412S**

### **Economical Clinical Centrifuge**

### **Features:**

- Max. speed at 4500rpm
- Precise control of speed and time separately
- Faster acceleration and deceleration
- Perfectly suited for 15mL cell culture tubes and a full line of collection tubes





## DM0412 series





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### **Specifications**

Speed range
Max. RCF
Speed accuracy
Rotor Capacity
Run Time
Null Time
Motor
Display
Safety Devices
Acceleration/Braking time
Power
Dimension[WxDxH]
Weight
Certification
Advanced features

### DM0412

300~4500rpm, increment: 100rpm
2490×g
±20rpm
1 type
30sec~99min
HOLD(Continuous operation)
Brushless DC motor
LCD
Door interlock,Overspeed detector; Automatic internal diagnosis
20s ↑ 13s ↓
Single-phase, 110V~240V,50Hz/60Hz, 3A 70W
245×255×140mm
6kg
CE, UL, IVD
Speed/RCF switch;Short-time run function; sound-alert function

### DM0412S

300~4500rpm, increment:100rpm
2490×g
±100rpm
1 type
1sec~99min
HOLD(Continuous operation)
DC motor
LED
Door interlock,Over-speed detection
23s ↑ 23s ↓
Single-phase,220V~240V,50Hz/60Hz, 3A;110V~120V,50Hz/60Hz, 3A 70W
364×280×266mm
6kg
-

sound-alert function





## **DM0412 series** | Rotors and Adapters

### **Available rotors**



**A12-10P** for DM0412 & DM0412S

Max. speed :4500rpm Max. RCF:2500×g

Rotor capacity: 8x15ml;12x10ml Rotor material: High strength plastic

Cat. No. 19200348

Available tubes	Tube quantity	Dimension (Φ×L mm)	Adapters	Maximum speed(rpm)	Radius (cm)	Maximum RCF (×g)
15mL con	8	17×120		4500	11	2490
1.5~5mL vacu	12	13×75	A10P15 & Plug	4500	9.8	2218
4~7 mL vacu		13×100	A10P15		11	2490
	12	16×75		4500	9.8	2218
8.5~10 mL vacu	12	16×107		4500	11	2490
2.7~3 mL(EU) collection tube	12	11×66	A10P15 & Plug	4500	9.8	2218
7.5~8.2 mL(EU) collection tube	12	15×92	A10P15	4500	11	2490

Note: Made of plastic, A12-10P rotor cannot be autoclaved or applied with UV irradiation. Regular sterilization is recommended.



### DM1424 series



DLAB hematocrit centrifuge with AC24P hematocrit rotor is used for determination of volume fractions of erythrocytes in blood for diagnostic purposes and doping tests. Also it is used to derive plasma for the photometric determination of the bilirubin content of the blood of neonates.

Hematocrit centrifuge with A24-2P tube rotor is suit for 1.5/2mL tubes, which can be used for extraction of DNA and RNA.

### **DM1424**

### **Hematocrit Centrifuge**

### **Features:**

- Speed range of 200~14000rpm, Max. RCF 18620×g
- Precise control of speed and time separately
- Easy operation with intuitive menu and easy-to-read display
- Maintenance-free brushless DC motors
- Pulse operation for quick spins
- Rotor capacity: Hematocrit rotor: 24 capollary Max. speed:12000rpm Tube rotor: 1.5/2mL×24 Max. speed: 14000rpm

### **DM1224E**

### **Economical Hematocrit Centrifuge**

### **Features:**

- MAX.speed is 12000rpm, Max. RCF 13680×g
- Precise control of speed and time separately
- Rotor capacity: Hematocrit rotor: 24 capillary



### DM1424 series







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### **Specifications**

Speed range
Max. RCF
Speed accuracy
Rotor Capacity
Run Time
Motor
Display
Safety Devices
Acceleration/Braking time
Power

Dimension[WxDxH]

Weight

Certification

Advanced features

### DM1424

200~14000rpm,
increment: 10rpm
18620×g
±30
2 type
30sec~99min / Continuous
Brushless DC motor
LCD

Door interlock, Overspeed detector; Over-temperature detector; Automatic internal diagnosis; Automatic rotor identification

### 20s ↑ 20s ↓

Single-phase, 220V~240V,50Hz/60Hz, 5A; 110V~120V,50Hz/60Hz, 5A 160W

364×280×266mm

10kg

CE cTÜVus FCC MCA IVD

Speed/RCF switch; Short-time run function; sound-alert function

### DM1224E

300~12000rpm,
increment: 100rpm
13680×g
±100
1 type
30sec~99min / Continuous
Brushless DC motor
LCD

Door interlock,Imb protection

### 50s ↑ 50s ↓

Single-phase, 220V~240V,50Hz/60Hz, 5A; 110V~120V,50Hz/60Hz, 5A 160W

370×280×220mm

8kg

Speed/RCF switch; Short-time run function; sound-alert function

## **DM1424 series** | Rotors and Adapters

### **Available rotors**



**A24- 2P** for DM1424

Max. speed : 14000rpm Max. RCF: 18620×g

Rotor capacity: 2mL/1.5mL×24,0.2mL×24,0.5mL×24

Rotor material: High strength plastic

Available rotor adapters: A02P2, A05P2, A10P15 & Mat



AC24P

for DM1424 & DM1424E

Max. speed : 12000rpm Max. RCF: 13680×g

Rotor capacity: capillary tubes x24 Rotor material: High strength aluminum



**Available adapters** 

**Cat. No.** 19500001

Cat. No.19400013

Cat. No. 19400023

A02P2

2mL to 0.2mL rotor adapter, used with A12-2, A12-2P, AS24-2 and A24-2P rotors, 24pcs/pk

**Cat. No.** 19500002

A05P2

2mL to 0.5mL rotor adapter, used with A12-2, A12-2P, AS24-2 and A24-2P rotors, 24pcs/pk

**Cat. No.** 19500003

A10P15

Rotor adapter, used with A12-10P, 12pcs/pk

## **Palm Micro Centrifuges**

### **D1008** series

### **Palm Micro Centrifuge**

### **Features**

- Ideal for microfiltration and quick spin-downs
- Easy-to-use with dual start/stop function
- 7000rpm fixed speed (D1008)
- 5000rpm fixed speed (D1008E)
- Compatible with 2mL x 8 and PCR8 x 2 rotors
- Quiet running, noise level ≤45 dB
- Rotor change without tools
- Accelerates and brakes in seconds
- Four colors available, green, blue, yellow and pink, add color to your routine laboratory life



Quiet operation



Vibration free







Specifications	D1008	D1008E
Max. Speed	7000rpm	5000rpm
Max. RCF	2680×g	1360×g
Rotor Capacity	0.2/0.5/1.5/2.0mL×8; 0.2mL×16 PCR strips or 0.2mL×2 PCR 8 strips	0.2/0.5/1.5/2.0mL×8; 0.2mL×16 PCR strips or 0.2mL×2 PCR 8 strips
Run Time	Continuous operation	Continuous operation
Driving Motor	DC motor	DC motor
Power	AC110~240V/50Hz/60Hz 20W	AC110~240V/50Hz/60Hz 20W
Noise level	≤45dB	≤45dB
Dimension [D×W×H]	160 x 170 x 122mm	160 x 170 x 122mm
Weight	0.5kg	0.5kg
Certification	CE cTÜVus FCC MCA	CE cTÜVus FCC MCA

## **Palm Micro Centrifuges** | Rotors and Adapters

### **Available rotors**



### A08-2

**Cat. No.** 19400015

Max. speed:10000/7000/5000rpm
Max. RCF:5460/2680/1360×g
Rotor capacity:2mL/1.5mL×8,0.2mL×8,0.5mL×8
Rotor material:High strength plastic
Available rotor adapters:SA02P2, SA05P2



### A02-PCR8

**Cat. No.** 19400017

Max. speed:10000/7000/5000rpm Max. RCF:5460/2680/1360×g

Rotor capacity:0.2mL×16 PCR strips,0.2 mL×2 PCR 8 strips

Rotor material:High strength plastic

### **Available adapters**



### **SA02P2**

**Cat. No.** 19400029

0.2mL rotor adapter Used with A08-2 rotor 8pcs/pk



### **SA05P2**

**Cat. No.** 19400026

0.5mL rotor adapter Used with A08-2 rotor 8pcs/pk

### **Spectrophotometer**

### **Spectrophotometer**

SP-V1000/SP-UV1000/SP-V1100/ SP-UV1100

The spectrophotometer is an indispensable instrument routinely used in colleges, universities and research institutes for quantitative analysis in fields including biotechnology and quality control of new material developed. V Series provide high resolution, high performance and excellent stability.



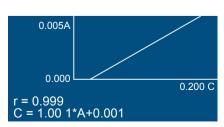
#### **Features:**

- User Friendly Operation and Information Rich LCD Display. The large 128 x 64 dots, backlit LCD screen with adjustable brightness control displays a large array of data also in graphical format.
- On-Board Data Storage. The System can save the test results, up to 200 groups of data and 200 standard curves in the RAM memory.
- Data can be restored after a sudden power failure.
- Auto setting wavelength. To set wavelength automatically to calibrate the system through arrow keys to avoid operation errors.
- Tungsten & Deuterium lamps switching is automatic. Selectable from a wavelength range of 190 to 1100nm.
- PC control through application software. The spectrophotometer is fully equipped and capable of executing all functions in stand-alone mode. The optional application software Wave Professional provides computer control for the spectrophotometer ( through the built-in USB port), apart from other functions such as spectrum scan, Time scan ( kinetics), multi-wavelength scanning & Nucleic Acid /Protein measurement.(SP-V1100/SP-UV1100)
- Large sample compartment. To accommodate 5 100mm path length cuvettes with optional holders. A variety of optional accessories are available.

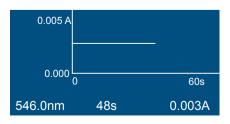
### **Basic Mode**

546.0	nm	0.001A
No.	WL.	Abs.
1	230.0	0.001
2	340.0	0.000
3	450.0	0.002
4	540.0	0.000
5	620.0	0.003

### Quantitative



### **Kinetics**













Model	SP-V1000	SP-UV1000	SP-V1100	SP-UV1100
Optical System	Single Beam	Single Beam	Single Beam	Single Beam
Light Source	Tungsten lamp	Tungsten lamp & Deuterium lamp	Tungsten lamp	Tungsten lamp &Deuteri- um lamp
Spectral Bandwidth	4.0nm	4.0nm	2.0nm	2.0nm
Wavelength Range	325~1000nm	200~1000nm	320~1100nm	190~1100nm
Wavelength Accuracy	±2nm	±2nm	±0.5nm	±0.5nm
Wavelength Repeatability	≤1nm	≤1nm	≤0.3nm	≤0.3nm
Photometric Range	-0.3 ~ 3.0 A, 0 ~ 200 %T	-0.3 ~ 3.0 A, 0 ~ 200 %T	-0.3 ~ 3.0 A, 0 ~ 200 %T	-0.3 ~ 3.0 A, 0 ~ 200 %T
Photometric Accuracy	±0.003 A @ 0.5 A, ±0.006 A @ 1.0 A, ±0.5 %T @ 100 %T	±0.003 A @ 0.5 A, ±0.006 A @ 1.0 A, ±0.5 %T @ 100 %T	±0.002 A @ 0.5 A, ±0.004 A @ 1.0 A, ±0.3 %T @ 100 %T	±0.002 A @ 0.5 A, ±0.004 A @ 1.0 A, ±0.3 %T @ 100 %T
Photometric Repeatability	≤0.0015 A @ 0.5 A, ≤0.003 A @ 1.0 A, ≤0.25 %T @ 100 %T	≤0.0015 A @ 0.5 A, ≤0.003 A @ 1.0 A, ≤0.25 %T @ 100 %T	≤0.001 A @ 0.5 A, ≤0.002 A @ 1.0 A, ≤0.15 %T @ 100 %T	≤0.001 A @ 0.5 A, ≤0.002 A @ 1.0 A, ≤0.15 %T @ 100 %T
Stability	≤0.002 A/h @ 500 nm ( after preheat 2 hours)	≤0.002 A/h @ 500 nm ( after preheat 2 hours)	≤0.002 A/h @ 500 nm ( after preheat 2 hours)	≤0.002 A/h @ 500 nm ( after preheat 2 hours)
Stray Light	≤0.2 @ 360 nm	≤0.2 @ 220 & 360 nm	≤0.05 @ 360 nm	≤0.05 @ 220 & 360 nm
Sample Compartment	4-position, 10mm path- length cuvette	4-position, 10mm pathlength cuvette	4-position, 10mm path- length cuvette	4-position, 10mm path- length cuvette
Display	LCD	LCD	LCD	LCD
Output	USB Port & Parallel Port ( Printer)	USB Port & Parallel Port ( Printer)	USB Port & Parallel Port ( Printer)	USB Port & Parallel Port ( Printer)
Power	110/220 V AC, 50/60 Hz, 80 W	110/220 V AC, 50/60 Hz, 120 W	110/220 V AC, 50/60 Hz, 80 W	110/220 V AC, 50/60 Hz, 120 W
Dimension(L×W×H)	490×360×210 mm	490×360×210 mm	490×360×210 mm	490×360×210 mm
Weight	10kg	12kg	10kg	12kg

## **Spectrophotometer | Accessories**



**Cat. No.** 18900337 Micro Cell holder



**Cat. No.** 18900340 8-position auto cell changer (for SP-V1100&SP-UV1100)



Cat. No. 18900331 4-cell holder for 10mm squ.cuvette



Cat. No. 18900332 4-cell holder for 10mm to 50mm squ. cuvette



Cat. No. 18900333 4-cell holder for up to 100mm squ.cuvette



**Cat. No.** 18900338 Test tube holder(ø8~ø22mm)



Cat. No. 18900334 cylindrical cell holder(ø16mm)



Cat. No. 18900339 solid sample holder (Ø1.5~3mmø1 position)



**Cat. No.** 18900335 10mm water-jacketed 1 cell holder (for SP-V1100&SP-UV1100)



Cat. No. 18900336 10mm water-jacketed 4-cell holder (for SP-V1100&SP-UV1100)



Square cuvettes glass/quartz 1~5mm/10~100mm



**Cat. No.** 18900341 12V20W halogen lamp



**Cat. No.** 18900342 Milas deuterium lamp,10V,300mA, 30W (for SP-UV1000&SP-UV1100)