DLAB 한국대리점
한국코프로텍(주)
Korea Process Technology Co., Ltd.

Company Profile

Dragon Laboratory Instruments Limited, known as Dragon Lab - Founded in 2002, is now one of the leading companies worldwide for 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. Our quality control processes start from the metal processing all the way through to the final inspections of the end products and adhere to Worldwide Accepted Quality Standards.

With Our growing international presence and to create a New Corporate Identity, we have created a new brand " DLAB ". Consequently, Dragon Laboratory Instruments Limited will henceforth be re-named as DLAB Scientific Co., Ltd. We have already founded our USA-subsidiary as DLAB Scientific Inc and India-subsidiary as DLAB Scientific Private Limited.

DLAB Scientific Co., Ltd is committed to become a one-stop partner for distributors worldwide with a growing range of general laboratory instruments. Our products are characterized by reliability, high accuracy and have a highly competitive value along with skilled application and after-sales support.

"DLAB is always your accessible solution"

Contents

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 dual charging modes 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	
	uL	uL	uL	uL	%	s.d.*uL	CV%*
1	0.5~10	0.01	10	±0.10	±1.00	0.05	0.50
			1	±0.035	±3.50	0.03	3.00
1	5~50	0.1	50	±0.40	±0.80	0.15	0.30
			5	±0.15	±3.00	0.125	2.50
1	30~300	1	300	±1.80	±0.60	0.60	0.20
			30	±0.90	±3.00	0.21	0.70
1	100~1000	5	1000	±6.00	±0.60	2.00	0.20
			100	±3.00	±3.00	0.60	0.60

* s.d. = Standard Deviation
*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.

Parameter Knob

Function Wheel

Display

Pipette Tipcone

Diluting Mode

Dispensing Mode

Pipetting Mode

Buzzer & Settings

Indicating

PI ST DI

Battery Indicator

Volume Range Parameter

700

μl

Unit

Power off
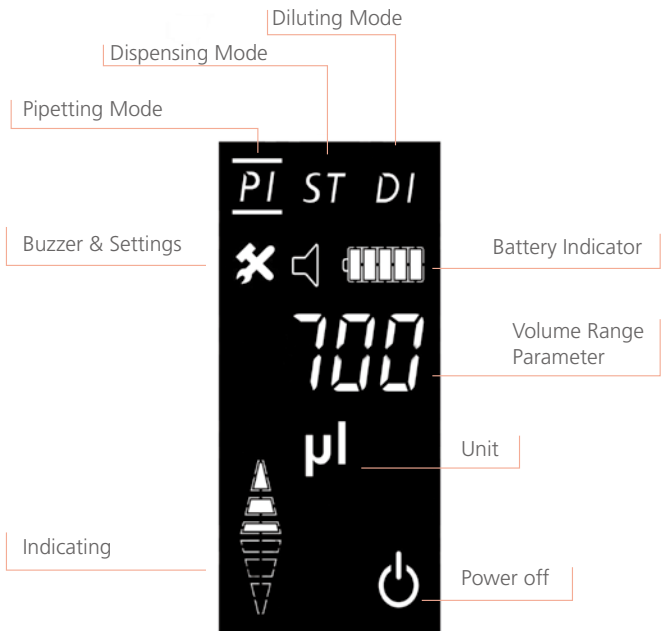
Mechanical Pipettes

MicroPette plus

121℃
FULLY
Autoclave

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

121℃
FULLY
Autoclave

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

Push button for volume
adjustment

Comforatble Finger support

Low force tip ejector
for easy operation

Spring loaded tip cones for easy
cleaning and maintenance

High chemical-resistance
materials to secure long lifetime

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℃
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℃
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

Push button for volume adjustment

Comfortable Finger support

Low force tip ejector for easy operation

Spring loaded tip cones for easy cleaning and maintenance

High chemical-resistance materials to secure long lifetime

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

8-channel Adjustable Volume Pipettes

Volume Range	Increment	Test Volume	Maximum permissible systematic error (Inaccuracy)		Maximum permissible random error (Imprecision)	
			%	μL	%	μL
0.5~10μL	0.1μL	10μL	1.50%	0.15	1.50%	0.15
		5μL	2.50%	0.125	2.50%	0.125
		1μL	4.00%	0.04	4.00%	0.04
5~50μL	0.5μL	50μL	1.00%	0.5	0.50%	0.25
		25μL	1.50%	0.375	1.00%	0.25
		5μL	3.00%	0.15	2.00%	0.1
50~300μL	5μL	300μL	0.70%	2.1	0.25%	0.75
		150μL	1.00%	1.5	0.50%	0.75
		50μL	1.50%	0.75	0.80%	0.4

12-channel Adjustable Volume Pipettes

Volume Range	Increment	Test Volume	Maximum permissible systematic error (Inaccuracy)		Maximum permissible random error (Imprecision)	
			%	μL	%	μL
0.5~10μL	0.1μL	10μL	1.50%	0.15	1.50%	0.15
		5μL	2.50%	0.125	2.50%	0.125
		1μL	4.00%	0.04	4.00%	0.04
5~50μL	0.5μL	50μL	1.00%	0.5	0.50%	0.25
		25μL	1.50%	0.375	1.00%	0.25
		5μL	3.00%	0.15	2.00%	0.1
50~300μL	5μL	300μL	0.70%	2.1	0.25%	0.75
		150μL	1.00%	1.5	0.50%	0.75
		50μL	1.50%	0.75	0.80%	0.4

Fixed Volume Pipettes

Volume Range	Increment	Test Volume	Maximum permissible systematic error (Inaccuracy)		Maximum permissible random error (Imprecision)	
			%	μL	%	μL
5μL	-	5μL	1.3%	0.065	1.2%	0.06
10μL	-	10μL	0.8%	0.08	0.8%	0.08
20μL	-	20μL	0.6%	0.12	0.5%	0.1
25μL	-	25μL	0.5%	0.125	0.3%	0.075
50μL	-	50μL	0.5%	0.25	0.3%	0.15
100μL	-	100μL	0.5%	0.5	0.3%	0.3
200μL	-	200μL	0.4%	0.8	0.2%	0.4
250μL	-	250μL	0.4%	1.0	0.2%	0.5
500μL	-	500μL	0.3%	1.5	0.2%	1.0
1000μL	-	1000μL	0.3%	3.0	0.2%	2.0
2000μL	-	2000μL	0.3%	6.0	0.15%	3.0
5000μL	-	5000μL	0.3%	15	0.15%	7.5

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 different liquids
- 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
- Powerful pump fills a 25mL pipette in<5 seconds
- 0.45µm replaceable Hydrophobic filter
- Rechargeable during use

Large LCD display showing low battery warning and speed settings

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

Operating buttons fine-tuned for aspiration and dispensing

Operating button for motor and gravity dispensing

Hydrophobic filter 0.45µm

Silicone adapter for 0.1~100ml pipette tip, fully autoclavable

Specifications

Aspirate Speeds	25ml < 5s (8 shift)
Dispense Speeds	Motor (8 shift) / Gravity
Battery	Lithium-Ion
Battery Service Life	More than 8 Hours of Intermittence Use
Charging Time	2~3 Hours
Pipette Types	Glass or Plastic Pipette (0.1~100mL), Pasteur Pipettes
Filter	0.45 µm Hydrophobic
Weight	200g

Levo ME
Pipette Filler

Levo ME pipette 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 ~100ml
- Easily adjusted speed control
- 0.45μm replaceable Hydrophobic filter
- Stable and reliable performance, elegant appearance
- High capacity Li-ion battery enable long runtime of operation

Specifications

Aspirate Speeds	25ml < 7s
Dispense Speeds	Motor / Gravity
Battery	Lithium-Ion
Battery Service Life	More than 8 Hours of Intermittence Use
Charging Time	2~3 Hours
Pipette Types	Glass or Plastic Pipette (0.1~100mL), Pasteur Pipettes
Filter	0.45 μm Hydrophobic
Weight	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

Compress the suction bellows before attaching the pipette

Button to expel residual liquid when using blow-out pipette

Aspirating and dispensing comfortably achieved with a sensitive lever

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

3µm replaceable Hydrophobic filter

Silicone adapter for 0.1~100ml pipette tip, fully autoclavable

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

Tip volume

Dispensing Volume

The stop lever secures the syringe

Sel. Tips	1	2	3	4	5
0.05ml	1µl	2µl	3µl	4µl	5µl
0.50ml	10µl	20µl	30µl	40µl	50µl
1.25ml	25µl	50µl	75µl	100µl	125µl
2.50ml	50µl	100µl	150µl	200µl	250µl
5.00ml	100µl	200µl	300µl	400µl	500µl
12.50ml	250µl	500µl	750µl	1000µl	1250µl
25.00ml	500µl	1000µl	1500µl	2000µl	2500µl
50.00ml	1000µl	2000µl	3000µl	4000µl	5000µl
Steps	48	23	15	11	8

Steps

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			

Cat. No.	Syringe volume (mL)	Sample volume (µL)					A %	P %	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 provides 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.

Features

- 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

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

DispensMate
Bottle-Top Dispensers

Easy-to-use volume adjustment

Smooth piston design provides effortless dispensing

Adapters allow fitting to standard reagent bottles

Filling tube adjusts easily for different size bottles

Closure cap protects,against reagent contact and is easy to attach and remove, without taking glove off.

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. $500mm^2$/s, temperature max. 40°C, density max. $2.2g/cm^3$
- Dispensemate is supplied with S40, GL32, GL38,GL25, GL28 sized adaptors

Specifications

Cat. No.	Volume Range mL	Graduation mL	A≤±		CV≤	
			%	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%
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℃
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

Thermo Control

TC1000-G
Thermal Cycler gradient

TC1000-S
Thermal Cycler standard

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

The TC1000-G features gradient function to achieve excellent heating and cooling rates and temperature uniformity in a single run, fulfilling every wish for easy optimization of PCR assays with maximum throughput.

Features:

- Reliable heating/cooling elements and innovative temperature control
- High performance DSP and temperature control
- Excellent temperature uniformity
- High precise temperature control
- Fast heating and cooling rate
- 7 inch Large color touch pannel screen for easy programming
- Large user program storage

Thermo Cycler
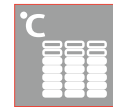
Excellent temperature uniformity

Gradient function

LCD touch panel

Excellent temperature accuracy

Specifications

	TC1000-G	TC1000-S
Sample Capacity	96X0.2mL PCR tube, 8X12 PCR plate or 96 well plate	96X0.2mL PCR tube, 8X12 PCR plate or 96 well plate
Heating Temperature Range	4~105°C	4~105°C
Lid Temperature Range	30~110°C	30~110°C
Temperature Display Accuracy	±0.1^{o}C	±0.1^{o}C
Temperature Control Accuracy [at 55°C]	±0.3^{o}C	±0.3^{o}C
Temperature uniformity[at 55°C]	<0.3^{o}C	<0.3^{o}C
Max. Heating/Cooling Rate	3°C/Sec	3°C/Sec
Gradient Temperature Setting Range	30~99°C	-
Gradient Range	1~42°C	-
Adapter block material	aluminum	aluminum
Display	7" LCD 800x480	7" LCD 800x480
Input	Touch panel	Touch panel
User defined file system	30 segments 99 cycle max. 16 folder and 16 files each folder max.	30 segments 99 cycle max. 16 folder and 16 files each folder max.
Power off protection	yes	yes
Power Supply	100~120V/200~240V,50/60Hz	100~120V/200~240V,50/60Hz
Dimension[WxDxH]	280x370x250 mm	280x370x250 mm
Weight	11kg	11kg

Dry Bath

HB120-S

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

Specifications	HB120-S
Functions	Heating
Temperature range	Room temp.~120°C
Temperature control accuracy	± 0.5°C
Temperature uniformity	± 0.5°C
Max heating rate	5.5°C/min
Timer	1min~99h59min
Screen	LED
Overheating protection	140°C
Adapter block material	aluminum
Voltage, Frequency	100~120V/220~240V,50Hz/60Hz
Power	160W
Dimension[W×D×H]	95x150x50mm
Weight	3kg

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)		1.5mLx40 2mLx40	11mm 34.7mm
18900221		5/15mLx28	17mm 48mm
18900222		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	10.9x30.8mm
18900239		1500 RPM	24x 2ml	10.9x30.8mm
18900240		1500 RPM	8x 5ml	13.6x42mm
18900241		800 RPM	8x 15ml	16.5x80mm
18900242		600 RPM	4x 50ml	29.6x80mm
18900244		1500 RPM	well plate	-
18900243		1500 RPM	0.2ml x 96 PCR plate	-

Specifications	HC110-Pro
Functions	Heating&cooling
Temperature range	Heating: room temp. ~ 110°C Cooling: room temp. ~ below room temp. 25°C
Temperature control accuracy[@ 20–45°C]	± 0.5°C
Temperature uniformity[@ 20–45°C]	Max ± 0.5 °C
Max heating rate	5.5°C/min
Max cooling rate	2.5°C/min (100°C~room temp.) 0.5°C/min (below room temp.)
Screen	TFT
Program	9
Overheating protection	150°C
Adapter block material	aluminum
Voltage, Frequency	100–240V,50/60Hz
Power	200W
Dimension[W×D×H] (without the heating block)	200×235×120mm
Weight	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.
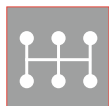
HCM100-Pro
Thermo Mix

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

	HCM100-Pro	HM100-Pro
Functions	Heating, cooling &mixing	Heating&mixing
Temperature range	Heating: room temp. ~ 100°C Cooling: room temp. ~ below room temp. 15°C	Heating: room temp. ~ 100 °C
Temperature control accuracy[@ 20–45°C]	± 0.5°C	± 0.5°C
Temperature uniformity[@ 20–45°C]	Max ± 0.5 °C	Max ± 0.5 °C
Max. heating rate	5.5°C/min	5.5°C/min
Max. cooling rate	5 °C /min(110°C-room temp.) 0.5 °C/min(below room temp.)	-
Mixing frequency	300~1500rpm	300~1500rpm
Mixing orbit	3mm	3mm
Screen	TFT	TFT
Program	9	9
Overheating protection	150°C	150°C
Adapter block material	aluminum	aluminum
Voltage, Frequency	100–240V,50/60Hz	100–240V,50/60Hz
Power	200W	200W
Dimension[W×D×H] (without the heating block)	200×235×120mm	200×235×120mm
Weight	7.3kg	7.3kg

Distilling & Mixing

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 flask
- Patented double spring sealing ring which made of PTFE provides an excellent sealing performance
- Remote function provides PC control and data transmission
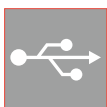
LCD	Large LCD display
	USB connector
	Chemical resistance
℃	Overheating protection
	Compatible with all range of glassware

Specifications	RE100-Pro
Motor type	Brushless DC motor
Speed Range	20~280 rpm
Display	LCD(speed,tempereature,time)
Clockwise and anti-clockwise	Yes
Heating Temperature Range	Room temp. to 180°C
Control Accuracy	±1°C
Heating power	1300 W
Stroke displacement	automatic 150 mm
Timer	Yes
Time Setting Range	1~999 min
Dimension [D×W×H]	465×457×583 mm
Weight	15 kg
Permissible Ambient Temperature	5~40°C
Permissible Relative Humidity	80%
Protection Class	IP20
USB Interface	Yes
Voltage/Frequency	100~120/200~240V 50/60 Hz
Power	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^2
18900173	Evaporating flask(NS24/40)Receiving flask(KS35/20)	1000ml	1500cm^2
18900166 (COATED)	Evaporating flask(NS 29/32) Receiving flask (KS 35/20)	1000ml	1500cm^2
18900174 (COATED)	Evaporating flask(NS 24/40) Receiving flask (KS 35/20)	1000ml	1500cm^2

Diagonal

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

Heating Bath

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

Glassware

Evaporating flask

Cat. No.	Volume	Size
18300116	50ml	NS 29/32
18300117	100ml	NS 29/32
18300118	250ml	NS 29/32
18300119	500ml	NS 29/32
18300120	1000ml	NS 29/32
18300121	2000ml	NS 29/32
18300655	50ml	NS24/40
18300201	100ml	NS 24/40
18300202	250ml	NS 24/40
18300203	500ml	NS 24/40
18300204	1000ml	NS 24/40
18300205	2000ml	NS 24/40

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

Distilling spider with 5 flasks(without flask)

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

Foam brake

Cat. No.	Volume	Size
18300093	250ml	NS 29/32
18300207	250ml	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

DVR480 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
18900361	Vacuum controller 100~240V, 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:<± 1 mbar/hPa/torr / ± 1 digit (after adjustment, constant temp.)
Venting valve, connection:Integrated, hose nozzle DN 4~5 mm

Cat. No.	Descriptions
18900245	Vacuum Controller

Seals and other accessories

Cat. No.	Descriptions
18202027	PTFE vacuum seal
18900362	Ultra resistant FFKM seal for applications with highly abrasive solutions
18900190	Evaporation flask clip(red) CS002440
18900188	Evaporation flask clip(green) CS002942

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.	Voltage
18200743	220-240V, 50/60Hz
18200745	110-120V, 50/60Hz

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/200-230V 50Hz/60Hz
18900232	Euro plug,100V-120V/200-230V 50Hz/60Hz
18900233	USA plug,100V-120V/200-230V 50Hz/60Hz
18900234	UK plug,100V-120V/200-230V 50Hz/60Hz

Vacuum regulator/moisture trap

Cat. No.	Descriptions
18900186	In use of control small volume, installed in a vacuum between DVR380 and vacuum system. Material: P V D F, P T F E, A B S, Borosilicate Glass, Stainless Steel

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 settings and 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

	MS7-H550-Pro	MS7-H550-S
Work plate Dimension [W x D]	184x184mm (7 inch)	184x184mm (7 inch)
Work plate material	Glass ceramic	Glass ceramic
Motor type	Brushless DC motor	Shaded pole motor
Motor rating input	18W	15W
Motor rating output	10W	1.5W
Power	1050W	1030W
Heating output	1000W	1000W
Voltage	100~120/200~240V 50/60Hz	100~120/200~240V 50/60Hz
Stirring positions	1	1
Max. stirring quantity, [H_2O]	20L	10L
Max. magnetic bar[length]	80mm	80mm
Speed range	100~1500rpm resolution ±1rpm	0~1500rpm
Speed display	LCD	Scale
Temperature display	LCD	LED
Heating temperature range	Room Temp.-550℃, increment 1℃	Room temp.-550℃, increment 5℃
Temperature control accuracy	±1℃(<100℃) ±1%(>100℃)	±10℃
Overheating protection	580℃	580℃
Temperature display accuracy	±0.1℃	±1℃
External temperature sensor	PT1000 (accuracy ±0.2)	PT1000 (accuracy ±0.2)
"Hot" warning	50℃	50℃
Data connector	RS232	-
Protection class	IP21	IP21
Dimension [W x D x H]	215x360x112mm	215x360x112mm
Weight	5.3kg	4.5kg
Permissible ambient temperature and humidity	5~40℃ 80%	5~40℃ 80%

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^T
LCD Digital Magnetic Hotplate Stirrer with Timer

MS-H-Pro$^+$
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_2O 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^T only)
- The high-resolution LCD display shows actual temperatures and speed(MS-H-Pro^T 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

Specifications

	MS-H-PRO+	MS-H-PROT	MS-H-S
Work plate Dimension	⌀135mm(5 inch)	⌀135mm(5 inch)	⌀135mm(5 inch)
Work plate material	stainless steel cover with ceramic	stainless steel cover with ceramic	stainless steel cover with ceramic
Motor type	Brushless DC motor	Brushless DC motor	Brushless DC motor
Motor rating input	18W	18W	18W
Motor rating output	10W	10W	10W
Power	550W	550W	530W
Heating output	500W	500W	500W
Voltage	100~120/200~240V 50/60Hz	100~120/200~240V 50/60Hz	100~120/200~240V 50/60Hz
Stirring positions	1	1	1
Max. stirring quantity[H_2O]	20L	20L	20L
Max. magnetic bar[length]	80mm	80mm	80mm
Speed range	100~1500rpm resolution±1rpm	100~1500rpm resolution±1rpm	0~1500rpm resolution±1rpm
Speed display	LCD	LCD	Scale
Temperature display	LCD	LCD	Scale
Heating temperature range	Room temp.-340°C, increment 1°C	Room temp.-340°C, increment 1°C	Room temp.-340°C
Temperature control accuracy	±1°C(<100°C) ±1%(>100°C)	±1°C(<100°C) ±1%(>100°C)	-
Over temperature protection	360°C	360°C	350°C
Temperature display accuracy	±0.1°C	±0.1°C	±0.5°C
External temperature sensor	PT1000 (accuracy ±0.2)	PT1000 (accuracy ±0.2)	-
"Hot" warning	50°C	50°C	-
Timer function	-	1min to 99h 59min	-
Data connector	RS232	RS232	-
Protection class	IP42	IP42	IP42
Dimension [W x D x H]	160×280×85mm	160×280×85mm	160×280×85mm
Weight	2.8kg	2.8kg	2.8kg
Permissible ambient temperature and humidity	5~40°C 80%	5~40°C 80%	5~40°C 80%

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	MS-H280-Pro
Work plate Dimension	Ø135mm(5 inch)
Work plate material	stainless steel cover with ceramic
Motor type	DC motor
Motor rating input	5W
Motor rating output	3W
Power	515W
Heating output	500W
Voltage	100~120/200~240V 50/60Hz
Stirring positions	1
Max. stirring quantity	3L
Max. magnetic bar[length]	50mm
Speed range	100~1500rpm
Speed display	LED
Temperature display	LED
Speed display resolution	±1rpm
Heating temperature range	Room temp.-280, increment 1°C
Control accuracy of work plate	±1°C(<100°C) ±1%(>100°C)
Overheating protection	320°C
Temperature display accuracy	±1°C
External temperature sensor	PT1000 (accuracy ±0.5°C)
"Hot" warning	50°C
Protection class	IP21
Dimension [W x D x H]	150×260×80mm
Weight	1.8kg
Permissible ambient temperature and humidity	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
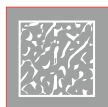
Skid resistance

Multiple position

Brushless DC motor

Specifications

Specifications	MS-H-S10
Work plate Dimension [W x D]	180x450mm()
Work plate material	Stainless steel with silicone
Motor type	Brushless DC motor
Motor rating input	12W
Motor rating output	4W
Power	490W
Heating output	470W
Voltage	100~120/200~240V 50/60Hz
Stirring positions	10
Max. stirring quantity	0.4L x 10
Max. magnetic bar[length]	40mm
Speed range	0~1100rpm
Speed display	scale
Temperature display	scale
Heating temperature range	Room temp.~120°C
Overheating protection	140°C
Protection class	IP42
Dimension [W x D x H]	182×622×65mm
Weight	3.2kg
Permissible ambient temperature and humidity	5~40°C 80%

	Cat. No.	Descriptions	MS7-H550-Pro	MS7-H550-S	MS-H-Pro⁺	MS-H-Proᵀ	MS-H-S	MS-H280-Pro
1	18900001	Blue carrying plate, use with color quarter pies			■	■	■	■
2	18900065	Blue Fixed ring, use with color quarter pies			■	■	■	■
3	18900002	Red quarter pie, 11 holes, 4 mL reaction vessel, Ø15.2mm, 20mm depth	■	■	■	■	■	■
4	18900003	Purple quarter pie, 4 holes, 20 mL reaction vessel, Ø28mm, 24mm depth	■	■	■	■	■	■
5	18900004	Blue quarter pie, 4 holes, 30mL reaction vessel, Ø28mm, 30mm depth	■	■	■	■	■	■
6	18900005	Black quarter pie, 4 holes, 40mL reaction vessel, Ø28mm, 43mm depth	■	■	■	■	■	■
7	18900048	Green quarter pie, 6 holes, 8mL reaction vessel, Ø17.8mm, 26mm depth	■	■	■	■	■	■
8	18900049	Golden quarter pie, 4 holes, 16mL reaction vessel, Ø21.6mm, 31.7mm depth	■	■	■	■	■	■
9	18101006	Reaction block for 50mL round bottom flask (one flask capacity)			■	■	■	■
10	18101007	Reaction block for 100mL round bottom flask (one flask capacity)			■	■	■	■
11	18101008	Reaction block for 250mL round bottom flask (one flask capacity)			■	■	■	■
12	18101009	Reaction block for 500mL round bottom flask (one flask capacity)			■	■	■	■
13	18900019	F101 protective cover, temperature resistance of 135°C			■	■	■	■
14	18900016	PT1000-A, length of 230mm	■	■	■	■		■
15	18900136	PT1000-B, temperature sensor with glass coated, length of 230mm	■	■	■	■		■
16	18900017	Support clamp of PT1000	■	■	■	■		
17	18900148	Support clamp of PT1000						■

Stirrer bars

Stirrer bars and stirrer bar remover(PTFE), use below 150°C

Cat. No.	Size of stirrer bars (L x Ø) [mm]	Models		
		MS-H550-Pro MS-H550-S MS-H-Pro⁺ MS-H-Proᵀ MS-H-S MS-S	MS-H280-Pro MS-PA MS-PB	MS-H-S10 MS-M-S10 FlatSpin EcoStir
		Suitable for Max. stirrer bar 80mm	Suitable for Max. stirrer bar 50mm	Suitable for Max. stirrer bar 40mm
18900006	10mm x 6mm	■	■	■
18900007	15mm x 8mm	■	■	■
18900008	20mm x 8mm	■	■	■
18900009	25mm x 8mm	■	■	■
12500005	30mm x 6mm	■	■	■
18900011	40mm x 8mm	■	■	■
12500004	51mm x 8mm	■	■	
18900013	65mm x 8mm	■		
18900014	80mm x 13mm	■		
18900015	Stirrer bar remover, length of 200mm	■	■	■

HP550-S
LED Hotplate

Features:

- LED screen 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

	HP550-S
Work plate Dimension [W x D]	184x184mm (7 inch)
Work plate material	Glass ceramic
Power	1010W
Voltage Frequency	100~120/200~240V,50/60Hz
Heating Power	1000W
heating position	1
Heating temperature range	Room temp.-550°C,increment 5°C
Control accuracy of work plate	±10°C
Safety temperature	580°C
Temperature display	led
Temperature display accuracy	±1°C
External temperature sensor	PT1000(±0.5°C)
Heating warning	50°C
Protection class	IP2X
Dimension [W x D x H]	215x360x112mm
Weight	4.5kg
Permissible ambient temperature and humidity	5~40°C 80%

Magnetic Stirrers

MS7-S
7" Square Magnetic Stirrer

Features:

- Speed range of 0~1500 rpm
- Max. stirring quantity of H_2O 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_2O at 20L
- Stainless steel work plate cover with caramic material provides good chemical resistance performance

F100 protective cover

for non-hotplate model,
use with MS-S

Chemical resistance

Strong magnetism

Specifications	MS7-S	MS-S
Work plate Dimension	184 x 184(7inch)mm	⌀135(5 inch)mm
Work plate material	Glass ceramic	Stainless steel cover with ceramic
Motor type	Shaded pole motor	Brushless DC motor
Motor input power	15W	18W
Motor output power	1.5W	10W
Power	30W	30W
Voltage	100~120/200~240V,50/60Hz	100~120/200~240V,50/60Hz
Stirring positions	1	1
Max. stirring quantity[H_2O]	10L	20L
Max. magnetic bar[length]	80mm	80mm
Speed range	0~1500rpm	0~1500rpm
Speed display	Scale	Scale
Protection class	IP2X	IP42
Dimension [W x D x H]	215 x 360 x 112mm	160×280×85mm
Weight	3.8kg	2.8kg
Permissible ambient temperature and humidity	5~40°C,80%	5~40°C,80%

Magnetic Stirrers

MS-PA
LED Digital Magnetic Stirrer

Features:

- Digital speed control with a range of 100~1500rpm
- Max. stirring quantity of H_2O at 3L
- LED display shows speeds
- ABS housing provides a good performance of chemical resistance

MS-PB
Magnetic Stirrer

Features:

- A wide range of 0~1500rpm
- Max. stirring quantity of H_2O at 3L
- ABS housing provides a good performance of chemical resistance

Chemical resistance

Strong magnetism

LED display

Specifications	MS-PA	MS-PB
Work plate Dimension	Ø135(5 inch)mm	Ø135(5 inch)mm
Work plate material	ABS	ABS
Motor type	DC motor	DC motor
Motor input power	5W	5W
Motor output power	3W	3W
Power	15W	10W
Voltage	100~120/200~240V,50/60Hz	100~120/200~240V,50/60Hz
Stirring positions	1	1
Max. stirring quantity[H_2O]	3L	3L
Max. magnetic bar[length]	50mm	50mm
Speed range	100~1500rpm	0~1500rpm
Speed display	LED	Scale
Protection class	IP42	IP42
Dimension [W x D x H]	150×260×80mm	150×260×80 mm
Weight	1.8kg	1.8kg
Permissible ambient temperature and humidity	5~40°C,80%	5~40°C,80%

Magnetic Stirrers

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
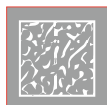
Skid resistance

Multiple position

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

Specifications	MS-M-S10	MS-M-S16
Work plate Dimension [W x D]	180×450mm	365×345mm
Work plate material	Stainless steel with silicone coating	Stainless steel with silicone coating
Motor type	Brushless DC motor	DC motor
Motor input power	12W	12W
Motor output power	4W	4W
Power	20W	20W
Voltage	100~120/200~240V,50/60Hz	100~120/200~240V,50/60Hz
Stirring positions	10	16(4 channel)
Max. stirring quantity[H_2O]	0.4LX10	0.4LX16
Max. magnetic bar[length]	40mm	40mm
Speed range	0~1100rpm	0~1100rpm
Speed display	Scale	Scale
Protection class	IP2X	IP2X
Dimension [W x D x H]	182×622×65mm	380×622×65mm
Weight	3.2kg	6kg
Permissible ambient temperature and humidity	5~40℃,80%	5~40℃,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
- Space saving

Ultrathin

Silent operation

Vibration free

Switchable reverse rotation

Specifications	FlatSpin
Work plate Dimension	Ø90mm
Work plate material	PET
Motor output power	3W
Power	5W
Voltage	100~120/200~240,V50/60Hz
Stirring positions	1
Max. stirring quantity[H_2O]	0.8L
Max. magnetic bar[length]	40mm
Speed range	15~1500rpm
Speed setting	button
Protection class	IP65
Dimension [W x D x H]	175x120x15mm
Weight	0.3kg
Permissible ambient temperature and humidity	5~40℃,80%

Magnetic Stirrers

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	EcoStir
Work plate Dimension	120mm
Work plate materials	PET
Motor type	Brushless DC motor
Motor output power	1.2W
Power	7.2W
Voltage	100~120/200~240V,50/60Hz
Stirring positions	1
Max. stirring quantity[H_2O]	1.5L
Max. magnetic bar[length]	40mm
Speed range	300~2000prm
Speed setting	scale
Protection class	IP21
Dimension [W x D x H]	150x145x50mm
Weight	0.3kg
Permissible ambient temperature and humidity	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.

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
- Low speed prevents cell damage
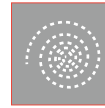
⬚	Design for low speed stirrer
LED	LED display
⚙	Programmable
👥	Multi-mode selection

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	**MS-C-S1**	**MS-C-S4**
Work plate Dimension	⬚105mm	⬚105mm
Work plate material	Cast Aluminum	Cast Aluminum
Motor type	Stepper Motor	Stepper Motor
Motor output power	15W	15W
Power\Voltage	100~120/200~240V,50/60Hz	100~120/200~240V,50/60Hz
Stirring positions	1	4(each point distance 190mm)
Max. stirring quantity[H_2O]	3 L	3 L x 4
Max. magnetic bar[length]	80mm	80mm
Speed range	5~200rpm (resolution ±1rpm)	5~200rpm (resolution ±1rpm)
Speed display	LED	LED
Timer range	0~49min59s	0~49min59s
Data connector	RS232	RS232
Protection class	IP2X	IP2X
Dimension [W x D x H]	205x250x90mm	395x450x90mm
Weight	2.5kg	5.5kg
Permissible ambient temperature and humidity	5~40°C,80%	5~40°C,80%

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

LCD display

Torque display

Speed adjusting with viscosity changing

Wide range of accessory

Specifications

	OS20-Pro	OS40-Pro
Max. stirring quantity[H_2O]	20L	40L
Motor type	brushless DC motor	brushless DC motor
Motor input power	60W	120W
Motor output power	50W	100W
Voltage	100~220V, 50/60 Hz	100~220V, 50/60 Hz
Power	70W	130W
Speed range	50~2200rpm	50~2200rpm
Speed display accuracy	±3rpm	±3rpm
Speed display	LCD	LCD
Torque display	LCD	LCD
Overload protection display	LED lights	LED lights
Max. torque	40Ncm	60Ncm
Viscosity max.	10000mPas	50000mPas
Chuck range diameter	0.5~10mm	0.5~10mm
Dimension [W x H xD]	83 x 220 x 186mm	83 x 220 x 186mm
Weight	2.8kg	2.8kg
Protection class	IP21	IP21
Permissible ambient temperature and humidity	5~40°C,80%	5~40°C,80%
Data connector	RS232	RS232

Use proper

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 screen for monitoring actual speed
- Safety circuits allow for safe stop function in anti-stall or overload conditions

EX

Explosion-proof

Wide range of accessories

Specifications	OS20-S	OS40-S
Max. stirring quantity(H$_2$O)	20L	40L
Motor type	brushless DC motor	brushless DC motor
Motor input power	60W	120W
Motor output power	50W	100W
Voltage	100~220V, 50/60 Hz	100~220V, 50/60 Hz
Power	70W	130W
Speed range	50~2200rpm	50~2200rpm
Speed display accuracy	±3rpm	±3rpm
Speed display	LED	LED
Overload protection display	LED lights	LED lights
Max. torque	40Ncm	60Ncm
Viscosity max.	10000mPas	50000mPas
Chuck range diameter	0.5~10mm	0.5~10mm
Dimension [W x H xD]	83 x 220 x 186mm	83 x 220 x 186mm
Weight	2.8kg	2.8kg
Protection class	IP42	IP42
Permissible ambient temperature and humidity	5~40°C,80%	5~40°C,80%

Overhead Stirrers | Accessories

Universal plate stand

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

Cat. No.

18900258

Propeller stirrer

shaft length 400mm
stirrer diameter 50mm
Material: 316L stainless steel
Application: Standard stirring element used at medium and high speeds

Cat. No.

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

Cat. No.

18900073

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.

18900074

Propeller stirrer

shaft length 35cm
stirrer diameter 6.5cm
Material: PTFE coated
Application: Standard stirring element, used at medium and high speeds

Cat. No.

18900075

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.

18900076

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

Specifications

	MX-S (Adjustable speed)	MX-F (Fixed speed)
Voltage	110~120V/220~230V,50/60Hz	110~120V/220~230V,50/60Hz
Power	60W	60W
Mixing motion	Orbital	Orbital
Orbital diameter	4mm	4mm
Motor type	Shaded pole motor	Shaded pole motor
Motor rating input	58W	58W
Motor rating output	10W	10W
Speed range	0~2500rpm	2500rpm
Speed display	Scale	-
Run type	Touch operation/Continuous	Touch operation/Continuous
Dimension[W×H×D]	127×130×160mm	127×130×160mm
Weight	3.5kg	3.5kg
Permissible ambient temperature	5~40°C	5~40°C
Permissible relative humidity	80%	80%
Protection class	IP21	IP21

Vortex Mixers | Accessories

VT1.2 Tube holding rod
used with tube adapters
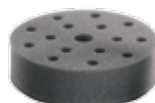**Cat. No.** 18900044

VT1.3 Universal top plate
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

VT1.3.6 Platform pad
for <Ø99mm tubes and small vessels
Cat. No. 18900043

Application of accessories

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

VT1.3.7 vacuum chuck

made of rubber
Cat. No. 18900158

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

Brushless DC motor

Wide range of accessories

PS1.2 Microplate clamp
Cat. No.18900042

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

MXM-116
Double microplate clamps
Cat. No.18900079

Specifications	MX-M
Shaking movement	Orbital
Orbital diameter	4.5mm
Max. shaking weight (with accessory)	0.5kg
Motor type	Brushless DC motor
Motor rating input	18W
Motor rating output	10W
Speed range	Single microplate: 0~1500rpm Double microplate : 0~1000rpm
Speed display	Scale
Voltage	100~240V,50/60Hz
Power	20W
Dimension	260×150×80mm
Weight	3kg
Permissible ambient temperature and humidity	5~40℃,80%
Protection class	IP21

DLAB rotators give gentle but effective mixing of biological samples 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.

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	MX-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℃, 80%	5~40℃, 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 from10 to 70rpm
- 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℃,80%	5~40℃,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

Cat. No.

18900142

Rotisserie Accessory Type-2

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

Cat. No.

18900143
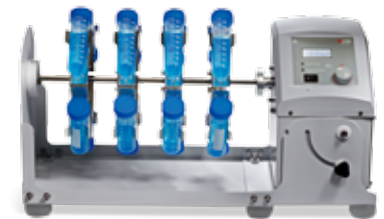
Rotisserie Accessory Type-3

Used for MX-RL-Pro,for 50mL x 24 centrifuge tubes held horizontally

Cat. No.

18900144

Rotisserie Accessory Type-4

Used for MX-RL-Pro,for 1.5mL x 32 centrifuge tubes held vertically

Cat. No.

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

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	MX-T6-Pro	MX-T6-S
Amplitude	24mm	24mm
Motor type	DC motor	DC motor
Rocking motion	Rocking and rolling	Rocking and rolling
Amplitude	24mm	24mm
Max. load capacity	4kg	4kg
Number of rollers	6	6
Roller size [length]	280mm	280mm
Speed range	10 ~70rpm	0~70rpm
Speed display	LCD	Scale
Timer	Yes	-
Timer display	LCD	-
Time setting range	1~1199min	-
Operation mode	Continuous / timed	Continuous
Voltage	100~240V,50/60Hz	100~240V,50/60Hz
Power	30W	25W
Dimension [D×W×H]	450×260×120mm	450×260×120mm
Weight	5.1kg	4.5kg
Permissible ambient temperature and humidity	5~40℃,80%	5~40℃,80%
Protection class	IP21	IP21

Shakers

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-O180-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

Specifications	SK-O330-Pro	SK-O180-Pro	SK-O180-S	SK-O180-E
Orbital diameter	10mm	4mm	20mm	20mm
Max. load capacity (with platform)	7.5kg	2.5kg	3kg	3kg
Motor type	Brushless DC motor	Brushless DC motor	DC motor	DC motor
Motor input power	28W	28W	16W	16W
Motor output power	15W	15W	10W	10W
Speed range	100~500rpm	100~800rpm	40~200rpm	0~200rpm
Speed display	LCD	LCD	LED	scale
Timer display	LCD	LCD	LED	-
Time settings range	1min~19h59min	1min~19h59min	1min~19h59min	-
Voltage	100~240V,50/60Hz	100~240V,50/60Hz	100~240V,50/60Hz	100~240V,50/60Hz
Power	30W	30W	20W	20W
Weight	13.5kg	8.1kg	3.1kg	3.1kg
Permissible ambient temperature and humidity	5~40°C, 80%	5~40°C,80%	5~40°C,80%	5~40°C,80%
Dimension[W×D×H]	370×420×100mm	300×340×100mm	270×330×110mm	270×330×110mm
Protection class	IP21	IP21	IP21	IP21
Data connector	RS232	RS232	-	-

Shakers

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

Timer

Wide range of accessories

Specifications	SK-L330-Pro	SK-L180-Pro	SK-L180-S	SK-L180-E
Amplitude	10mm	4mm	20mm	20mm
Max. load capacity (with platform)	7.5kg	2.5kg	3kg	3kg
Motor type	Brushless DC motor	Brushless DC motor	DC motor	DC motor
Motor input power	28W	28W	16W	16W
Motor output power	15W	15W	10W	10W
Speed range	100~350rpm	100~350rpm	40~200rpm	0~200rpm
Speed display	LCD	LCD	LED	scale
Timer display	LCD	LCD	LED	-
Time settings range	1min~19h59min	1min~19h59min	1min~19h59min	-
Voltage	100~240V,50/60Hz	100~240V,50/60Hz	100~240V,50/60Hz	100~240V,50/60Hz
Power	30W	30W	20W	20W
Weight	13.5kg	8.1kg	3.1kg	3.1kg
Permissible ambient temperature and humidity	5~40°C, 80%	5~40°C, 80%	5~40°C, 80%	5~40°C, 80%
Dimension[W×D×H]	370×420×100mm	300×340×100mm	270×330×110mm	270×330×110mm
Protection class	IP21	IP21	IP21	IP21
Data connector	RS232	RS232	-	-

Shakers

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

Specifications

Specifications	SK-R330-Pro	SK-R1807-S	SK-R1807-E
Tilt angle	9°	7°	7°
Max. load capacity (with platform)	10kg	3kg	3kg
Motor type	DC motor	DC motor	DC motor
Motor input power	40W	16W	16W
Motor output power	24W	10W	10W
Speed range	10~70rpm	10~80rpm	0~80rpm
Speed display	LCD	LED	-
Timer display	LCD	LED	-
Time settings range	1min~19h59min	1min~19h59min	-
Voltage	100~240V,50/60Hz	100~240V,50/60Hz	100~240V,50/60Hz
Power	50W	20W	20W
Weight	9kg	3.2kg	3.2kg
Permissible ambient temperature and humidity	5~40°C,80%	5~40°C,80%	5~40°C,80%
Dimension[W×D×H]	360×410×200mm	270×330×130mm	270×330×130mm
Protection class	IP21	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 platform 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 platform 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

Specifications	SK-D3309-Pro	SK-D1807-S	SK-D1807-E
Tilt angle	9°	7°	7°
Max. load capacity (with platform)	5kg	3kg	3kg
Motor type	DC motor	DC motor	DC motor
Motor input power	40W	16W	16W
Motor output power	24W	10W	10W
Speed range	10~70rpm	10~80rpm	0~80rpm
Speed display	LCD	LED	scale
Timer display	LCD	LED	-
Time settings range	1min~19h59min	1min~19h59min	-
Voltage	100~240V,50/60Hz	100~240V,50/60Hz	100~240V,50/60Hz
Power	50W	20W	20W
Weight	9kg	2.7kg	2.7kg
Permissible ambient temperature and humidity	5~40°C, 80%	5~40°C, 80%	5~40°C, 80%
Dimension[W×D×H]	360×430×106mm	270×330×130mm	270×330×130mm
Protection class	IP21	IP21	IP21
Data connector	-	-	-

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		■
	18900036	Bar for SK330.1 universal attachment	■	
	18900037	Bar for SK180.1 universal attachment		■
	18900280	Connect sticks for double dishes shaker	■	■

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
18900028	Fixing clip attachment	■	
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]	■	■
18900032	Fixing clip for flask volume 200/250 ml, used with SK330.2[9pcs] SK180.2 [4pcs]	■	■
18900033	Fixing clip for flask volume 500mL, used with SK330.2[9pcs] SK180.2 [2pcs]	■	■

SK330.2

SK180.2

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 quiet with low vibration levels during operation
- 9 procedures stored in memory makes the operation much simplified.

Brushless DC motor

Wide range of rotors

Specifications

Specifications	D1536	D1536R
Speed range	300~15000rpm	300~15000rpm
Max. RCF	25150xg	25150xg
Speed accuracy	±20rpm	±20rpm
Temperature Range	-	-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

	19400043		19400042			
bucket	x 4		x 4			
tube	x 8	x 4	x 4	x 4	x 8	x 20
Nominal volume	50mL	100mL	85mL	50mL	15mL	3~7mL
φ×L mm	34×100	38×108	38×104	34×100	17×120 13×100 13×75	13×100 13×75
tube						
adapter		A100P80		A100P50	A100P15	A100P10

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Available rotors

AS6-50V

Cat. No. 19400038

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

Cat. No. 19400036

for D1536 & D1536R

Max. speed :14000rpm
Max. RCF:21910×g
Rotor capacity:PCR 8 trips×12
Rotor material:aluminum
Bio-safe(Bio sealing):YES

AS30-2(Standard accessory)

Cat. No. 19400034

for D1536 & D1536R

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

AS60-2

Cat. No. 19400037

for D1536 & D1536R

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

AS18-5V

for D1536 & D1536R

Cat. No. 19400035

Max. speed : 15000rpm
Max. RCF: 25150xg
Rotor capacity: 5mlx18(culture tube)
Rotor material:aluminum body

A8-50

for D1536 & D1536R

Cat. No. 19400039

Max. speed : 5000rpm
Max. RCF: 3460xg
Rotor capacity: 50mlx8 or 15mlx16
Rotor material:aluminum body and stainless steel adaptor

S2-MP

for D1536 & D1536R

Cat. No. 19400062

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

Cat. No. 19400040

Max. speed :4500rpm
Max. RCF:2110×g
Rotor capacity:15mL×30
Rotor material:aluminum body and stainless steel adaptor

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

D3024 series

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

Brushless DC motor

Wide range of rotors

Specifications

	D3024	D3024R
Max. Speed	15000rpm (200~15000rpm), increment:10rpm	15000rpm (200~15000rpm), increment:10rpm
Max. RCF	21380×g, increment:10×g	21380×g, increment: 10×g
Speed Accuracy	±20 rpm	±20 rpm
Temperature Range	-	-20℃~40℃
Rotor Capacity	5mL×18, 0.2mL/0.5mL/1.5mL/ 2mL×24, 0.5mL×36, PCR8×4	5mL×18, 0.2mL/0.5mL/1.5mL/ 2mL×24, 0.5mL×36, PCR8×4
Run Time	30sec~99min / Continuous	30sec~99min / Continuous
Motor	Brushless DC motor	Brushless DC motor
Safety Devices	Dual door interlock, Over-speed detection, Over-temperature detection, Automatic internal diagnosis	Dual door interlock, Over-speed detection, Over-temperature detection, Automatic internal diagnosis
Power	Single-phase, AC220V~240V, 50Hz/60Hz, 5A, AC110V~120V, 50Hz/60Hz, 8A 200W	Single-phase, AC220V~240V, 50Hz/60Hz, 10A, AC110V~120V, 50Hz/60Hz, 10A 400W
Acceleration /Braking time [Sec]	25s ↑ 25s ↓	25s ↑ 25s ↓
Dimension [W×D×H]	280×364×266mm	338×580×324mm
Weight	12kg	30kg
Certification	CE cTÜVus FCC MCA	CE cTÜVus FCC MCA
Advanced features	Speed/RCF switch; Short-time run function; sound-alert function	Speed/RCF switch; Short-time run function; sound-alert function

DLAB rotors are manufactured military-industrial-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/anti-sample 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 explosion-proof 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

Available rotors

Cat. No. 19400006

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

Cat. No. 19400032

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

Cat. No. 19400007

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

Cat. No. 19400008

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

D3024 series | Rotors and Adapters

AS18-5
for D3024 & D3024R

Cat. No. 19400012

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

Available adapters

A02P2

Cat. No. 19500001

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

A05P2

Cat. No. 19500002

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

A02P05

Cat. No. 19500003

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

CE FC

Specifications

	D2012 plus
Max. Speed	15000rpm (500~15000rpm), increment:100rpm
Max. RCF	15100×g, increment:100×g
Speed Accuracy	±20 rpm
Rotor Capacity	0.2mL/0.5mL/1.5mL/ 2mL×12
Run Time	30sec~99min / Continuous
Driving Motor	Brushless DC motor
Safety Devices	Door interlock, Over-speed detection, Over-temperature detection, Automatic internal diagnosis
Power	Single-phase, AC110V~240V, 50Hz/60Hz, 3A 100W
Noise level	≤54dB
Acceleration /Braking time	11s↑ /9s↓
Dimension [D×W×H]	255×245×140mm
Weight	6kg
Certification	EMC, CE, FCC, ICES, cTUVus, CB
Advanced features	Speed/RCF switch, Short-time run function, sound-alert function

D2012 series | Rotors and Adapters

Available rotors

A12-2P

Cat. No. 19400010

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

A02P2

Cat. No. 19500001

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

A05P2

Cat. No. 19500002

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

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 to100 mL at low speed.

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

DM0636
Multi-Purpose Clinical Centrifuge

DM0636R
Multi-Purpose Clinical Centrifuge Refrigerated

Specifications

	DM0636	DM0636R
Speed range	300~6000rpm increment:10rpm	300~6000rpm increment:10rpm
Max. RCF	4300xg	4300xg
Speed accuracy	±20rpm	±20rpm
Temperature Range	-	-20~40℃
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 ↑ /10 ↓	9s ↑ /10 ↓
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 IVD	CE cTÜVus FCC IVD
Advanced features	speed/rcf switch; Rotor identification	speed/rcf switch; Rotor identification

Uncapping block

for S4-100 rator

SE4-100 (Standard accessory)
for DM0636 & DM0636R

Cat. No. 19400041

Max. speed :4000rpm
Max. RCF:2830×g
Rotor material:stainless steel body and adaptor

	19400045		19400044			19400043	19400042				
bucket	x 4										
tube	x 36		x 16			x 8	x 4	x 4	x 4	x 8	x 20
Nominal volume	3~7mL		10mL	12mL	15mL	50mL	100mL	85mL	50mL	15mL	3~7mL
⌀×L mm	13×75	13×100	15×100	17×105	17×120	34×100	38×108	38×104	34×100	17×120 13×100 13×75	13×100 13×75
tube											
adapter	with plug						A100P80	A100P50		A100P15	A100P10
Package	36						4			4	8	4
Tubes per rotor	36	36	16	16	16	8	4	4	4	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

Available rotors

AS12-PCR8
D0636&D0636R

Cat. No. 19400036

Max. speed :6000rpm
Max. RCF:4300×g
Rotor capacity:PCR 8 trips×12
Rotor material:aluminum
Bio-safe(Bio sealing):YES

AS30-2(Default)
D0636&D0636R

Cat. No. 19400034

Max. speed :6000rpm
Max. RCF:4300×g
Rotor capacity:2mL×30
Rotor material:aluminum
Bio-safe(Bio sealing):YES

AS60-2
D0636&D0636R

Cat. No. 19400037

Max. speed :6000rpm
Max. RCF:4300×g
Rotor capacity:2mL×60
Rotor material:aluminum
Bio-safe(Bio sealing):YES

S2-MP
D0636&D0636R

Cat. No. 19400062

Max. speed :4000rpm
Max. RCF:2200×g
Rotor capacity:Micro-plants 384-PCR; 96-PCR
Rotor material:stainless steel body and aluminum buckets

Available rotors

AS6-50V

Cat. No. 19400038

for DM0636 & DM0636R

Max. speed :6000rpm
Max. RCF:4300×g
Rotor capacity:50mL×6
Rotor material:aluminum
Bio-safe(Bio sealing):YES

AS18-5V

Cat. No. 19400035

for DM0636 & DM0636R

Max. speed : 6000rpm
Max. RCF: 4300×g
Rotor capacity: 5mL×18
Rotor material:stainless steel body and aluminum buckets

A8-50

Cat. No. 19400039

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

Cat. No. 19400040

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
⌀×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

DM0412
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

CE ▲ FC

Specifications

Specifications	DM0412	DM0412S
Speed range	300~4500rpm, increment: 100rpm	300~4500rpm, increment:100rpm
Max. RCF	2490×g	2490×g
Speed accuracy	±20rpm	±100rpm
Rotor Capacity	1 type	1 type
Run Time	30sec~99min HOLD(Continuous operation)	1sec~99min HOLD(Continuous operation)
Motor	Brushless DC motor	DC motor
Display	LCD	LED
Safety Devices	Door interlock,Overspeed detector; Automatic internal diagnosis	Door interlock,Over-speed detection
Acceleration/Braking time	20s ↑ 13s ↓	23s ↑ 23s ↓
Power	Single-phase, 110V~240V,50Hz/60Hz, 3A 70W	Single-phase,220V~240V,50Hz/60Hz, 3A;110V~120V,50Hz/60Hz, 3A 70W
Dimension[WxDxH]	301×354×217mm	301×354×217mm
Weight	6kg	6kg
Certification	CE, UL, IVD	-
Advanced features	Speed/RCF switch;Short-time run function; sound-alert function	sound-alert function

DM0412 series | Rotors and Adapters

Available rotors
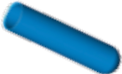
A12-10P
for DM0412 & DM0412S

Cat. No. 19200348

Max. speed :4500rpm
Max. RCF:2500×g
Rotor capacity: 8x15ml;12x10ml
Rotor material: High strength plastic

Available tubes	Tube quantity	Dimension (Ø×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	12	13×100	A10P15	4500	11	2490
		16×75			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.

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

Specifications

	DM1424	DM1224E
Speed range	200~14000rpm, increment: 10rpm	300~12000rpm, increment: 100rpm
Max. RCF	18620×g	13680×g
Speed accuracy	±30	±100
Rotor Capacity	2 type	1 type
Run Time	30sec~99min / Continuous	30sec~99min / Continuous
Motor	Brushless DC motor	Brushless DC motor
Display	LCD	LCD
Safety Devices	Door interlock,Overspeed detector; Over-temperature detector; Automatic internal diagnosis; Automatic rotor identification	Door interlock,Imb protection
Acceleration/Braking time	20s ↑ 20s ↓	50s ↑ 50s ↓
Power	Single-phase, 220V~240V,50Hz/60Hz, 5A; 110V~120V,50Hz/60Hz, 5A 160W	Single-phase, 220V~240V,50Hz/60Hz, 5A; 110V~120V,50Hz/60Hz, 5A 160W
Dimension[WxDxH]	280×364×266mm	280×370×220mm
Weight	10kg	8kg
Certification	CE cTÜVus FCC MCA IVD	-
Advanced features	Speed/RCF switch;Short-time run function; sound-alert function	Speed/RCF switch;Short-time run function; sound-alert function

Available rotors

A24- 2P
for DM1424

Cat. No. 19400013

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

AC24
for DM1424 & DM1424E

Cat. No. 19400046

Max. speed : 12000rpm
Max. RCF: 13680×g
Rotor capacity: capillary tubes x24
Rotor material: High strength aluminum

Available adapters

A02P2

Cat. No. 19500001

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

A05P2

Cat. No. 19500002

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

A10P15

Cat. No. 19500003

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

CE FC

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

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.
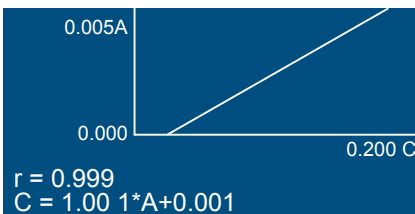
Features:

- 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.
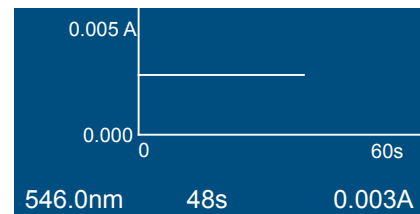
Basic Mode

546.0nm		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

0.005A

0.000

0.200 C

r = 0.999
C = 1.00 1*A+0.001

Kinetics

0.005 A

0.000

0 60s

546.0nm   48s   0.003A

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 &Deuterium 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 pathlength cuvette	4-position, 10mm pathlength cuvette	4-position, 10mm pathlength cuvette	4-position, 10mm pathlength 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)