



ALP Co.,Ltd.
TOKYO JAPAN

Automatic **AUTOCLAVE**

CL-32 CL-40 series

40~140°C, 37 & 54L **CL-32S & L** models

40~137°C, 60~105L **CL-40S,M & L** models

With warm air drying **-DP** models



Quick lock lid
Lid interlock
Light lid -up -down

More safety and more ease !

★ QUICK LOCK LID

By the central lock lever, you can easily lock the lid with fingertip.
The lid is lightened up and down by the automatic hinge.

★ LID INTERLOCK

The lid is locked reliably during operation and cooling down to the safe temperature.

★ ELECTRO MECHANICAL LOCKING SYSTEM

This function brings more safety to operator by locking the lid at the power failure or in the power OFF, to prevent operator from contamination by contacting un-sterilized objects carelessly. Locking is released only on standby state in the power ON.

★ GRAPHIC DISPLAY

The current process is indicated clearly.

★ TIMED FREE STEAMING

This reliable automatic air exhaust system guarantees always sure sterilization under pure steam exposure.

★ ADJUSTABLE AUTO. EXHAUST

After sterilization process, steam is slowly released or cooled by the key set especially for liquid bottles.

★ WARMING & DISSOLVING OF CULTURE MEDIUM

Warming after sterilization and dissolving of culture medium.

★ LIGHT TO USE ... -S models

-32S and -40S models have very low loading heights especially for heavy objects such as liquid bottles.

It is possible to work with light steps.

★ START-TIMER BY CALENDER

You can set operation start by month, day, hour and minute.
The sterilized objects can be taken out at your work-start.

★ MEMORY BACK UP

Even on a power failure, the process progress is memorized.
When the power is returned, it is re-displayed.

★ COMPLIANCE WITH EMC (ELECTROMAGNETIC COMPATIBILITY) REQUIREMENTS

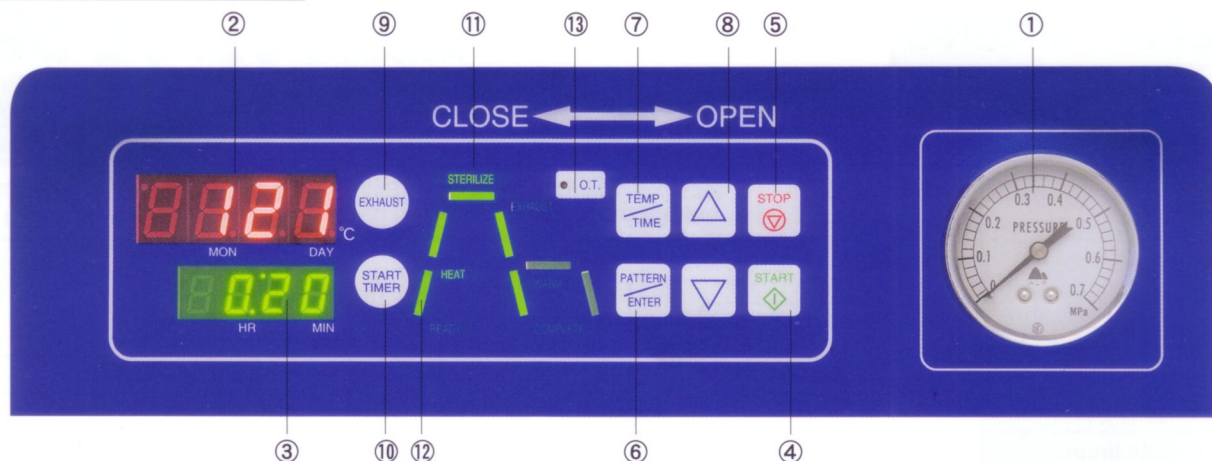
These products comply with EMI requirements which must not radiate radio waves to surrounding electro instruments, and more, comply with EMS requirements which must have immunity from radio waves of surrounding electro instruments.
The EMC test of CL series is based on IEC 61326(2002).

★ WARM AIR DRYING... -DP models

By warm flow through 0.2 μ m micro-filter, the sterilized objects can be dried clearly and cleanly.
The vacuum-drying models (CLG series) with pulse pre-vacuum system by the vacuum pump are also prepared.



OPERATION PANEL



- ① PRESSURE GAUGE
- ② TEMPERATURE DISPLAY
- ③ TIME DISPLAY
- ④ START KEY
- ⑤ STOP KEY

- ⑥ PATTERN/ENTER KEY
- ⑦ TEMP/TIME KEY
- ⑧ CHANGE KEY
- ⑨ EXHAUST KEY
- ⑩ START TIMER KEY

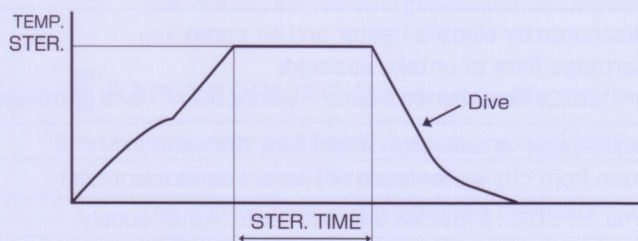
- ⑪ CHARACTER DISPLAY
- ⑫ PROCESS LINE DISPLAY
- OPTION
- ⑬ OBJECT TEMP. KEY

OPERATION PATTERNS

It can be chosen from 3 patterns (-DP 5 patterns) according to your purposes. Once changed the values are stored, even if the power is switched off.

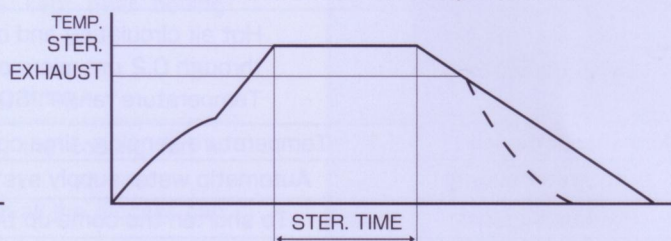
STERILIZATION OF SOLIDS / INSTRUMENTS

① A : Ster. (with auto, exhaust)



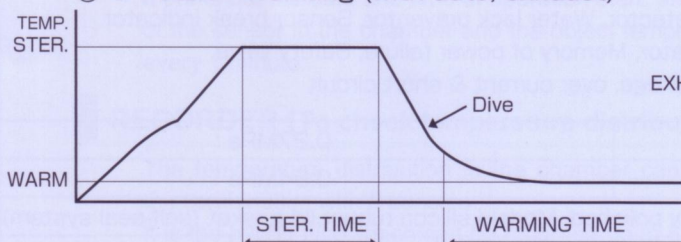
STERILIZATION OF LIQUID

(without exhaust or with adjustment)



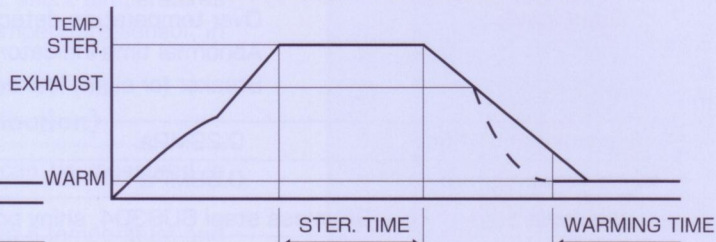
STERILIZATION OF SOLIDS WITH WARMING

② B : Ster. / Warming (with auto, exhaust)



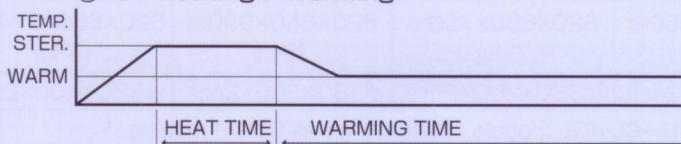
STERILIZATION OF AGAR

(without exhaust or with adjustment)



DISSOLVING OF AGER

③ C : Heating / Warming

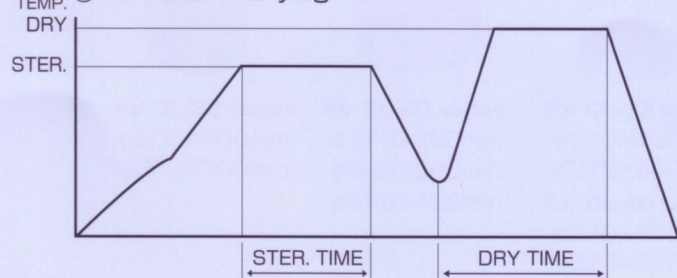


Caution

If a lot of materials difficult of air-exhaust, such as many small containers in sterilization bags, are sterilized at usable maximum temperature, pressure inside the chamber must increase and the over pressure detector may operate. Then, it is requested to decrease the set temperature a little (about 3°C or more).

STERILIZATION OF SOLIDS / CLOTHS WITH DRYING

④ D : Ster. / Drying

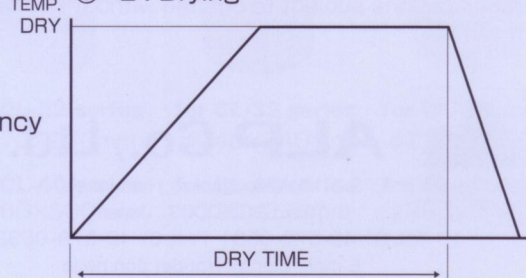


Insufficiency



Equipped with Drying devices(-DP)
FOR ADDITIONAL DRYING

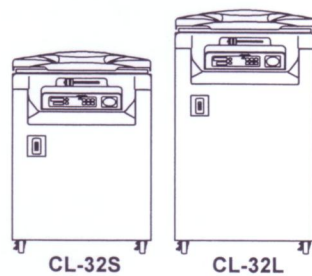
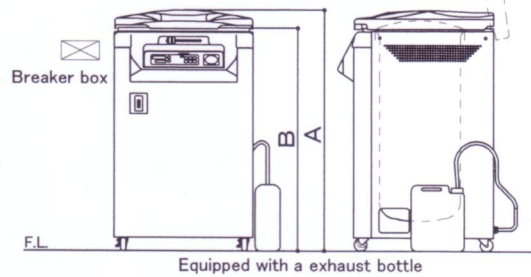
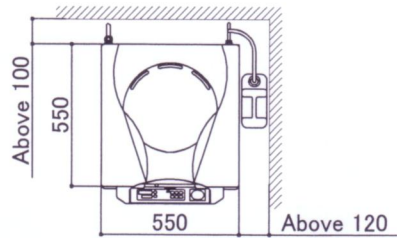
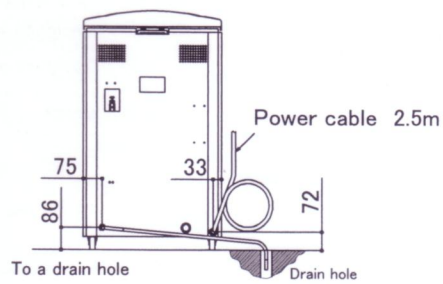
⑤ E : Drying



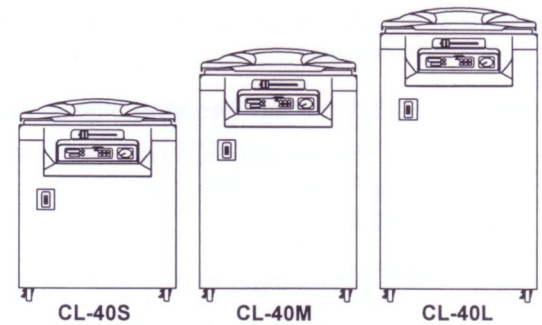
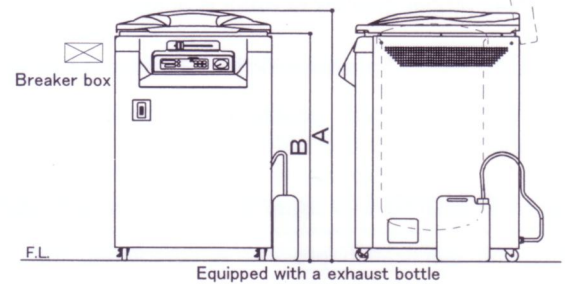
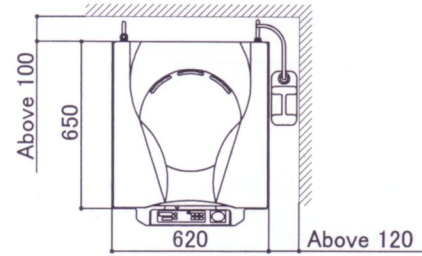
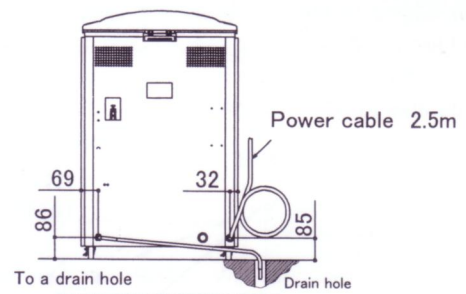
INSTALLATION

Unit(mm)

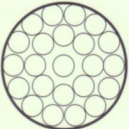
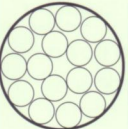
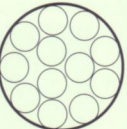
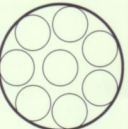
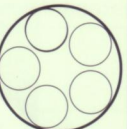
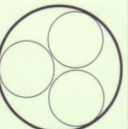
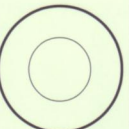
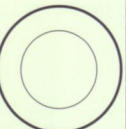
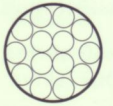
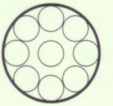
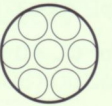
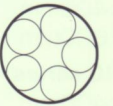
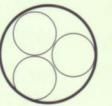
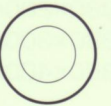
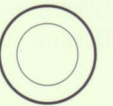
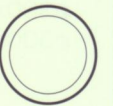
Model		CL-32S	CL-32L
Total height	A	790	950
Loading height	B	720	880



Model		CL-40S	CL-40M	CL-40L
Total height		790	990	1140
Loading height		700	900	1050



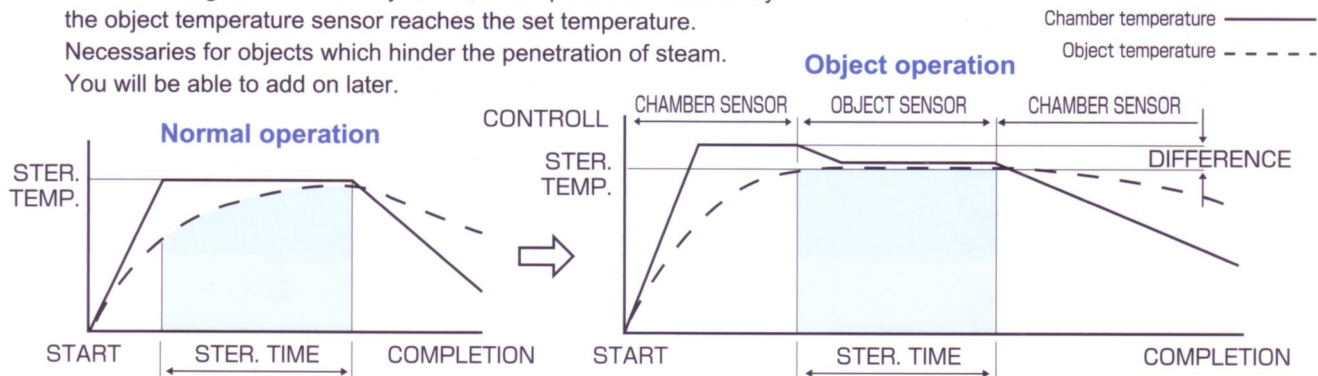
LOADING CAPACITY FOR LABORATORY FLASKS

	100ml	200ml	300ml	500ml	1,000ml	2,000ml	3,000ml	5,000ml
Round flasks								
Dimension	102 φ66	126 φ80	148 φ90	171 φ108	215 φ134	270 φ172	305 φ190	330 φ234
in CL-40 stainless wire basket	 23pcs.	 16pcs.	 12pcs.	 8pcs.	 5pcs.	 3pcs.	 1pc.	 1pc.
in CL-32 stainless wire basket	 14pcs.	 9pcs.	 7pcs.	 5pcs.	 3pcs.	 1pc.	 1pc.	 1pc.

OPTIONAL FUNCTIONS

OBJECT TEMPERATURE SENSOR «For reliable sterilization»

The timer begins to move only after the temperature measured by the object temperature sensor reaches the set temperature.
Necessaries for objects which hinder the penetration of steam.
You will be able to add on later.



AUTOMATIC WATER SUPPLY «To save your manual water supply»

In stead of troublesome check and manual supply of water before operation, proper quantity of water is automatically supplied.

PRE-HEATING «To shorten the heating-up time»

The water for steam generation is always kept near boiling condition.

RAPID COOLING «To shorten the cooling time»

When the sterilization process is completed, the cooling fan is operated to cool the chamber.
The cooling time which occupies the majority in all the process can be much reduced.

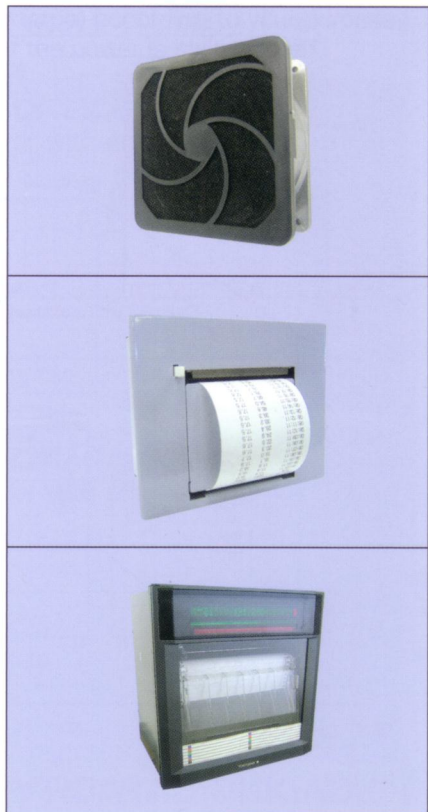
PRINTER «To manage the sterilization temperature»

It prints out the date and time of operation start, and 2 temperatures of the sensor in the chamber and the object temperature sensor, in every 1 minute.

RECORDER «To check temperature distribution»

The temperature distribution in the chamber can be measured in the combination with 3 sensors.
It is the hybrid type which can be recorded up to 5 temperature and 1 pressure.

We can submit documents for validation requirements.



STANDARD / OPTIONAL ACCESSORIES

● Stainless wire basket



for CL-32 series
φ300×200mm
φ300×300mm



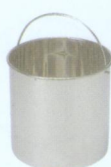
for CL-40 series
φ380×200mm
φ380×300mm
φ380×400mm

● Basket with pan



for CL-32 series
φ270×400mm
φ270×600mm
for CL-40 series
φ370×400mm
φ370×600mm

● Stainless bucket



for CL-32 series
φ270×270mm
for CL-40 series
φ360×300mm



for CL-32 series
φ240×240mm
for CL-40 series
φ330×270mm

● Stainless dressing drum



for CL-32 series
φ270×180mm
for CL-40 series
φ360×240mm

SPECIFICATIONS

Autoclave **CL/CL-DP** series

Model	Basic	CL-32S	CL-32L	CL-40S	CL-40M	CL-40L
	With warm air drying	CL-32SDP	CL-32LDP	CL-40SDP	CL-40MDP	CL-40LDP
Chamber(usable inner size) Capacity		φ320×420mm 34L	φ320×676mm 54L	φ400×478mm 60L	φ400×672mm 85L	φ400×832mm 105L
Usable maximum temperature pressure		140℃ 0.27MPa		137℃ 0.25MPa		
Usable temperature		Sterilization : 40~140℃		Sterilization : 40~137℃		
		Dissolving : 40~99℃、 Warming : 40~60℃				
Usable time		Sterilization, Dissolving : 0min.~10hrs. 00min. and continuous, Warming : 0min.~48hrs.00min				
Controller		Microprocessor controller, graphic display Temperature···3digits, PID control Timer···2digits hours : 2digits minutes, down count (Temperature/Time integration system)				
Operation pattern		A : Heating→Sterilization→Exhaust(adjustable) B : Heating→Sterilization→Exhaust(adjustable)→Warming C : Dissolving→Warming				
-DP models	Operation pattern with drying	D : Heating→Sterilization→Drain→Drying E : Only drying				
	Drying devices	Hot air circulating and discharge by electric heater and air pump through 0.2 μm micro cartridge filter of untake passage Temperature range : 60~180℃, Timer range : 0min.~99hrs.59min. and continuous				
Air exhaust device		Temperature sensing·time control & solenoid valve(Timed free steaming system)				
Option	Auto. water supply	Automatic water supply system from city-water-faucet by level sensor·controller				
	Pre-heat system	To shorten the come-up time, at 60℃ . Provided only with auto. water supply.				
	Rapid cooling system	Chamber cooling system by 1~2 fans				
Safety	Safety devices	Interlock system, Electro mechanical lock system Double check system of lid close, Over pressure detector Over temperature detector, Water lack preventor, Sensor break indicator Abnormal time indicator, Memory of power failure, Safety valve Breaker for slight leakage, over current & short circuit				
	Safety valve operation	0.29MPa		0.27MPa		
	Water test pressure	0.58MPa		0.54MPa		
Material	Chamber & lid	Stainless steel SUS304, shiny polished. Modeld silicon rubber lid gasket (self-seal system)				
	Outer panel	Steel with baked melamin finish. Top panel : Heat-resisting molded resin				
Power requirement (50/60Hz)		AC220 / 230 / 240V, 1 phase				
		12A	12A	18A	18A	20A
Outer dimensions W×D×H Weight		550×550×790mm 56kg	550×550×950mm 60kg	620×650×790mm 72kg	620×650×990mm 78kg	620×650×1140mm 84kg
Accessories	Stainless wire basket	φ300×200×2pcs.	φ300×300×2pcs.	φ380×200×2pcs.	φ380×300×2pcs.	φ380×400×2pcs.
		Standard for CL-32S~CL-40L models. Optional for all CL-DP models.				
	Others	Staineless flexible drain hose, Drain bottle (only for CL-32S~CL-40L models)				
Optional accessories		Object temperature sensor, Printer, Recorder, Basket with pan, Bucket, Dressing drum				

● Please specify the voltage when you order.

● Specifications subject to change without notice for improvement.



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