

🕐 Sterilization

VERTICAL AUTOCLAVES WITH PREVACUUMS AND DRYING

AE-B SERIES CLASSIC LINE

EXCELLENT PERFORMANCE, ADVANCED FEATURES AND ALL-AROUND VERSATILITY FOR SEVERAL APPLICATIONS



The **AE-B** Series vertical floor-standing autoclaves with toploading access cover all laboratory sterilization needs in many industries and research facilities with the aim of increasing the productivity of the laboratory. A great chamber capacity, the independent integrated steam generator, the touchscreen display, the independent clean water tank, the initial prevacuum pulses, the final vacuum drying and the direct water discharge results in an excellent autoclave to perform from the most simple to the most demanding applications.

INTENDED USE

 STERILIZATION OF ITEMS OF COMPLEX GEOMETRIES, POROUS OR HOLLOW OBJECTS,
 FABRIC LOADS,
 LABORATORY WASTE BAGS, PLASTICS,
 GLASSWARE,
 CULTURE MEDIA AND
 LIQUIDS



MAIN FEATURES

EXCELLENT PERFORMANCE

AE-B Series autoclaves are autoclaves with excellent performance for several sterilization procedures. They are equipped with an independent integrated steam generator, a vacuum pump and a heating jacket to guarantee proper steam penetration on all types of loads and completely dry solid loads.

MULTIPLE TYPES OF STERILIZATION CYCLES

Several options available to perform sterilization of solids or liquids. Programmable autopreheating, auto-start, initial prevacuum pulses, duration of the final vacuum drying and optional core temperature probe for load sensed sterilization of liquids.

GREAT EASE OF USE

AE-B Series autoclaves are equipped with a 5" color touchscreen, they include an independent clean water tank that automatically feeds the independent steam generator with water, with an optional upgrade to fully automatic water feed directly from water network. Discharge is always directly sent to the drain.

SAFETY FIRST

AE-B Series autoclaves are equipped with several features to ensure the safety of the operators. These include overpressure safety valve, overtemperature safety thermostats, water level detectors, an open door detection system and an independent safety pneumatic system that locks the main door while positive pressure exists inside the sterilization chamber.



ADVANTAGES



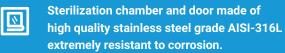
Heating by an independent integrated powerful steam generator.



Adjustable number of initial prevacuum pulses to guarantee proper steam penetration on items of complex geometries and large loads.



Final vacuum drying feature by a heating jacket and a vacuum pump to completely dry solid loads.



CE Equipment built following all applicable European Union quality, regulatory and safety standards.

> Control by a PID microprocessor and a 5" touchscreen, with 50 available programs, adjustable by time, temperature, number of prevacuum pulses, drying time and type of sterilization cycle (solids or liquids, with optional core probe control).



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Surpasses Vacuum Leak and Bowie Dick test cycles.



Suitable to sterilize all types of loads, including wrapped goods, fabric loads, porous and hollow objects and items of complex geometries with cavities thanks to the standard initial prevacuum phase.



Automatic clean water feed to the integrated steam generator from the independent water tank, with water level sensors included in both locations. Optional upgrade to fully automatic water feed directly from water network.



The discharge of each cycle is always directly sent to the drain to minimize long term sterilization chamber and water tank corrosion and calcification processes.



Programmable auto-preheating and auto-start.

Optional software for sterilization data management.



Optional integrated printer.



User management with administrator hierarchy.





STERILIZATION APPLICATIONS

AE-B Series autoclaves are intended for the sterilization of a wide range of liquids and solids such as wrapped and unwrapped loads, items of complex geometries, fabric loads, culture media, glassware, plastics, metal utensils, laboratory waste bags and other laboratory items.

WORKING PRINCIPLE

AE-B Series autoclaves provide a solution for the multiple sterilization needs of all laboratories, including wrapped and unwrapped solids, fabric loads, porous and hollow objects, plastics, metal utensils, laboratory waste bags, liquids, culture media, glassware and other laboratory items.

The load has to be placed into the vessel's baskets and, after manually filling the independent clean water tank with purified water, the equipment starts to create the initial prevacuum, automatically feeds water to the independent integrated steam generator, generating saturated steam that is directly injected into the sterilization chamber until the set combination of sterilization time and sterilization temperature is reached.

STANDARD AE-B SERIES STERILIZATION CYCLE

PREHEATING PHASE

 In this initial step, the user has the option to set up a preheating temperature up to 70°C to speed up the duration of the sterilization cycle.

PREVACUUM PHASE

 In this phase the equipment's vacuum pump mechanically removes air from the chamber and load through a single or multiple vacuum pulses of -0,75 Bargs. This allows the steam to penetrate load objects of difficult geometries that couldn't otherwise be reached with simple gravity displacement.

HEATING PHASE

 After completing the prevacuum phase the powerful independent integrated steam generator assembled outside the sterilization chamber heats up dramatically and injects saturated steam throughout the chamber.

STERILIZATION PHASE

- Upon reaching the set sterilization temperature inside the chamber the sterilization phase begins, accurately sustaining the temperature throughout the duration of this phase.
- This crucial step is controlled by a PT-100 Class A temperature probe located within the chamber. As an option for liquids sterilization processes, this phase can be regulated by a flexible PT-100 Class A temperature probe located inside a sample.

Sterilization cycle graph for a solid load

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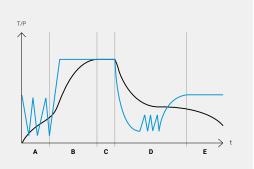
- A Prevacuum phase
 B Heating phase
- B Heating phaseC Sterilization phase
- D Vacuum drying phase
 E Cooling phase
- Temperature
- Pressure

VACUUM DRYING PHASE

 After sterilization phase finishes, only for solid programs, vacuum drying starts, where multiple vacuum pulses occur while the heating jacket is turned on, completely drying the load.

COOLING PHASE

• After the vacuum drying step is completed natural cooling begins and an acoustic beep will sound when a safety temperature is reached and the door can be opened.



DIGITAL MICROPROCESSOR WITH TOUCHSCREEN



Digital microprocessor with a 5" TFT touchscreen for an easy programming and parameters selection.



Several process parameters are shown on the screen such as current temperature, current pressure, both in numbers and in graphs, including water status or heating status.

AE-B Series autoclaves have 50 programs and the first 14 are predefined and protected. The rest of the programs are editable with the following parameters settings:

- Sterilization temperature.
- Sterilization time.
- · Prevacuum pulses number.
- Final drying time.
- · Sterilization mode (Solids or Liquids).
- Sterilization controlled by main chamber temperature probe or both main chamber temperature probe plus core temperature probe.



AE-B SERIES PROGRAMS

AE-B Series autoclaves have 50 programs, from P1 to P50, and the first fourteen are predefined and protected.

PREDEFINED PROGRAMS

| Program N° | Program name | Prevacuum pulses | Sterilization temperature °C | Sterilization time min | Drying time min | Program mode Solids or Liquids | Core probe regulation |
|----------------------|--------------|---------------------|------------------------------------|---------------------------|--------------------|------------------------------------------|-----------------------|
| P1 | BD | 3 | 134 | 4' | 4' | Solids | - |
| P2 | Vacuum | 1 | - | - | - | Solids | - |
| P3 | Porous-134 | 3 | 134 | 4' | 15' | Solids | - |
| P4 | Prion-134 | 3 | 134 | 18' | 20' | Solids | - |
| P5 | Porous-121 | 3 | 121 | 20' | 15' | Solids | - |
| P6 | Hollow-134 | 3 | 134 | 4' | 10' | Solids | - |
| P7 | Hollow-121 | 3 | 121 | 20' | 10' | Solids | - |
| P8 | Wrapped-134 | 1 | 134 | 7' | 20' | Solids | - |
| P9 | Wrapped-121 | 1 | 121 | 20' | 20' | Solids | - |
| P10 | Solids-134 | 1 | 134 | 4' | 10' | Solids | - |
| P11 | Solids-121 | 1 | 121 | 20' | 10' | Solids | - |
| P12 | Flash-134 | 1 | 134 | 3' | 1' | Solids | - |
| P13 | Liquid | 1 | 121 | 30' | - | Liquids | - |
| P14 | Liquid probe | 1 | 121 | 15' | - | Liquids | Core probe |

The rest of the programs are editable with the following parameters settings:

• Prevacuum pulses number.

Sterilization temperature.

Sterilization time.

• Final drying time.

Sterilization mode (Solids or Liquids).
Sterilization controlled by main chamber temperature probe or both main chamber temperature probe plus core temperature probe.



LOADING CAPACITIES



ISO ERLENMEYER FLASKS

| Autoclave model | Usable volume L | (| 250mL Ø85 x 143m | m) | | (0 | 500mL Ø105 x 183m | ım) | | (0 | 1000mL Ø131 x 230m | | | (0 | 2000mL 0166 x 280m | m) | |
|--------------------|-----------------------|------------------|----------------------------|------|---------|------------------|-----------------------------|------|---------|------------------|------------------------------|-------|-------|------------------|------------------------------|------|---------|
| | | Total baskets | Units/ basket | Tota | l units | Total baskets | Units/ basket | Tota | l units | Total baskets | Units/ basket | Total | units | Total baskets | Units/ basket | Tota | l units |
| | | | | А | В | | | А | В | | | А | В | | | А | В |
| AE-50-B | 50 | 3 | 7 | 21 | 28 | 1 | 4 | 4 | 12 | 1 | 1 | 1 | 3 | 1 | 1 | 1 | 2 |
| AE-75-B | 75 | 3 | 12 | 36 | 48 | 2 | 8 | 16 | 24 | 2 | 5 | 10 | = | 1 | 3 | 3 | 6 |
| AE-110-B | 110 | 4 | 12 | 48 | 60 | 3 | 8 | 24 | 32 | 3 | 5 | 15 | = | 1 | 3 | 3 | 9 |
| AE-150-B | 153 | 4 | 21 | 84 | 105 | 4 | 14 | 56 | = | 3 | 8 | 24 | = | 1 | 5 | 5 | 10 |

A: Number of units using standard baskets. B: Number of units using specially designed baskets for the specific combination of autoclave model and container.

The data contained within these tables, regarding load capacities, serves as a non-binding guide to assist you in the selection of the most appropriate autoclave model.



ISO BOTTLES

| model volu | Usable volume L | 250mL (Ø70 x 143mm) | | | 500mL (Ø80 x 185mm) | | | 1000mL (Ø101 x 230mm) | | | 2000mL (Ø136 x 260mm) | | | | | | |
|------------|-----------------------|-------------------------------|------------------|-------|-------------------------------|------------------|------------------|---------------------------------|-------|------------------|---------------------------------|------|---------|------------------|------------------|------|---------|
| | | Total baskets | Units/ basket | Total | units | Total baskets | Units/ basket | Tota | units | Total baskets | Units/ basket | Tota | l units | Total baskets | Units/ basket | Tota | I units |
| | | | | А | В | | | Α | В | | | А | В | | | А | В |
| AE-50-B | 50 | 3 | 9 | 27 | 36 | 1 | 7 | 7 | 21 | 1 | 4 | 4 | = | 1 | 1 | 1 | 2 |
| AE-75-B | 75 | 3 | 20 | 60 | 80 | 2 | 14 | 28 | 42 | 2 | 8 | 16 | = | 1 | 4 | 4 | 8 |
| AE-110-B | 110 | 4 | 20 | 80 | 100 | 3 | 14 | 42 | 56 | 3 | 8 | 24 | = | 1 | 4 | 4 | 12 |
| AE-150-B | 153 | 4 | 33 | 132 | 165 | 4 | 24 | 96 | = | 3 | 15 | 45 | = | 1 | 8 | 8 | 24 |

A: Number of units using standard baskets.

B: Number of units using specially designed baskets for the specific combination of autoclave model and container.

The data contained within these tables, regarding load capacities, serves as a non-binding guide to assist you in the selection of the most appropriate autoclave model.



Accessories

INTEGRATED BASKET LIFT SYSTEM

| References | | CLASSIC-LIFT | CLASSIC-LIFT-R |
|------------------------------------------------------|-------|------------------|------------------|
| Dimensions L x D x H mm | | 800 x 300 x 2100 | 800 x 300 x 2600 |
| Power W | | 480 | 480 |
| Voltage V | | 230 | 230 |
| Frequency Hz | | 50/60 | 50/60 |
| Weight Kg | | 40 | 45 |
| Maximum load Kg | | 30 | 40 |
| | 79 L | ✓ | - |
| For autoclaves with the following chamber volumes | 115 L | ✓ | × |
| | 175 L | - | × |

- Stainless steel electric lift system built into the side of the autoclave with swivel arm to help load and unload heavy items. The device is built into the side of the autoclave. Push-button operation with opening up to 200°.
- Motor with auto brake system in the event of obstacles or overload.
- · Available in two models: the standard lift system and reinforced lift system.
- It can be factory fitted or retrofitted.

MOBILE BASKET LIFT SYSTEM

| Reference | MOB-LIFT |
|-------------------------|------------------|
| Dimensions L x D x H mm | 420 x 800 x 2200 |
| Power W | 200 |
| Voltage V | 90 - 250 |
| Frequency Hz | 50/60 |
| Weight Kg | 70 |
| Maximum load Kg | 30 |

- Stainless steel electric lift system with casters to help load and unload heavy items up to 30Kg.
- Equipped with long-life battery for cordless use.
- Push-button operation.
- · Motor with auto brake system in the event of obstacles or overload.
- · Compatible with any autoclave model.





Accessories

STAINLESS STEEL WIRE BASKETS

| Reference | | CV-28 | CV-75-130 | CV-75S | CV-75 | CV-150-130 | CV-150S | CV-150M |
|-------------------------|----------------------|-----------|-----------|-----------|-----------|------------|-----------|-----------|
| Dimensions | Exterior Ø x H mm | 270 x 185 | 370 x 130 | 370 x 180 | 370 x 265 | 470 x 130 | 470 x 190 | 470 x 235 |
| Dimensions | Interior Ø x H mm | 260 x 180 | 360 x 125 | 360 x 175 | 360 x 260 | 460 x 125 | 460 x 185 | 460 x 230 |
| | 33 L | 2 | - | - | - | - | - | - |
| For autoclaves with the | 55 L | 3 | - | - | - | - | - | - |
| following | 79 L | - | 4 | 3 | 2 | - | - | - |
| chamber volumes | 115 L | - | 6 | 4 | 3 | - | - | - |
| volumes | 175 L | - | - | - | - | 6 | 4 | 3 |



STAINLESS STEEL LIQUIDS COLLECTOR TRAY FOR WIRE BASKETS

| Reference | | TR-270 | TR-370 | TR-470 |
|------------------------------------------|----------------------|----------|----------|----------|
| Dimensions | Exterior Ø x H mm | 240 x 50 | 320 x 50 | 420 x 50 |
| Dimensions | Interior Ø x H mm | 238 x 48 | 318 x 48 | 418 x 48 |
| | CV-28 | | - | - |
| For the following wire baskets models | CV-75S & CV-75 | - | | - |
| busilets models | CV-150S & CV-150M | - | - | |



UNPERFORATED STAINLESS STEEL BASKETS FOR LABORATORY WASTE STERILIZATION

| Reference | | CCI-28 | CCI-75S | CCI-75 | CCI-150S | CCI-150M |
|---------------------------------|----------------------|-----------|-----------|-----------|-----------|-----------|
| Dimonoiono | Exterior Ø x H mm | 270 x 185 | 370 x 180 | 370 x 265 | 470 x 190 | 470 x 235 |
| Dimensions | Interior Ø x H mm | 260 x 180 | 360 x 175 | 360 x 260 | 460 x 185 | 460 x 230 |
| | 33 L | 2 | - | - | - | - |
| For autoclaves with the | 55 L | 3 | - | - | - | - |
| following chamber volumes | 79 L | - | 3 | 2 | - | - |
| | 115 L | - | 4 | 3 | - | - |
| volumes | 175 L | - | - | - | 4 | 3 |



STAINLESS STEEL "SCHIMMELBUSCH" DRUM FOR MEDICAL INSTRUMENTS STERILIZATION

| Reference | | TBE-24x16 | TBE-34x24 | TBE-48x24 |
|----------------------------|----------------------|-----------|-----------|-----------|
| Dimensions | Exterior Ø x H mm | 240 x 165 | 340 x 240 | 480 x 240 |
| Dimensions | Interior Ø x H mm | 230 x 155 | 330 x 230 | 470 x 230 |
| | 33 L | 2 | - | - |
| For autoclayes | 55 L | 4 | - | - |
| with the following chamber | 79 L | - | 2 | - |
| volumes | 115 L | - | 3 | - |
| | 175 L | - | - | 3 |
| | | | | |





Accessories

STAINLESS STEEL CYLINDERS FOR PETRI DISHES STERILIZATION

| Reference | | CEP-1027 | CEP-1041 | CEP-1427 | CEP-1441 |
|----------------------------|-------------------------------------|-----------|-----------|-----------|-----------|
| Dimensions | Exterior Ø x H mm | 100 x 270 | 100 x 410 | 140 x 270 | 140 x 410 |
| Petri dishes | Maximum number dishes / cylinder | 10 | 18 | 10 | 18 |
| | Diameter Ø mm | 80 | 80 | 120 | 120 |
| | 33 L | 4 | 4 | 2 | 2 |
| For autoclaves with the | 55 L | 8 | 4 | 4 | 2 |
| following | 79 L | 16 | 8 | 10 | 5 |
| chamber volumes | 115 L | 24 | 16 | 15 | 10 |
| | 175 L | 28 | 14 | 16 | 8 |



STAINLESS STEEL CYLINDERS FOR PIPETTE STERILIZATION

| | CEPP-726 | CEPP-740 | CEPP-1025 | CEPP-1435 |
|----------------------|-------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Exterior Ø x H mm | 70 x 260 | 70 x 400 | 100 x 250 | 140 x 350 |
| Interior Ø x H mm | 60 x 250 | 60 x 390 | 90 x 240 | 130 x 340 |
| 33 L | 11 | 11 | 6 | 6 |
| 55 L | 22 | 11 | 12 | 12 |
| 79 L | 42 | 21 | 20 | 10 |
| 115 L | 63 | 42 | 30 | 20 |
| 175 L | 90 | 30 | 51 | 34 |
| | Ø x H mm Interior Ø x H mm 33 L 55 L 79 L 115 L | Exterior 70 x 260 M H mm 60 x 250 33 L 11 55 L 22 79 L 42 115 L 63 | Exterior Ø x H mm 70 x 260 70 x 400 Interior Ø x H mm 60 x 250 60 x 390 33 L 11 11 55 L 22 11 79 L 42 21 115 L 63 42 | Exterior Ø x H mm 70 x 260 70 x 400 100 x 250 Interior Ø x H mm 60 x 250 60 x 390 90 x 240 33 L 11 11 6 55 L 22 11 12 79 L 42 21 20 115 L 63 42 30 |



HEIGHT ADJUSTABLE TRAY SUPPORT

| Reference | | | SRA-R-300 | SRA-R-400 | SRA-R-500 |
|---------------------------------------------------------|---------|--------|----------------|----------------|----------------|
| Dimensions Ext. Ø x H mm Max. number trays / support | | | 250 x 190 | 350 x 180 | 450 x 180 |
| | | | 4 | 4 | 4 |
| Trovo | Referen | ice | TRAY-SRA-R-300 | TRAY-SRA-R-400 | TRAY-SRA-R-500 |
| Trays | Dim. Ø | x H mm | 240 x 20 | 340 x 20 | 440 x 20 |
| | | 33 L | 2 | - | - |
| For autoclay | es with | 55 L | 3 | - | - |
| the following | | 79 L | - | 3 | - |
| volumes | | 115 L | - | 4 | - |
| | | 175 L | - | - | 4 |
| | | | | | |



*The purchase of a tray support comes with a set of two trays and six fastening clips. Likewise, the purchase of a tray includes a set of three fastening clips.

• For sterilization of instruments, small bags and other small objects that must be placed straight up.

• Material: AISI-304 stainless steel.

Accessories

FLEXIBLE CORE TEMPERATURE PROBE PT-100 CLASS A

- After installing this accessory, the temperature regulation of the sterilization cycle can either be controlled by the main chamber temperature sensor or both the main chamber temperature sensor and the temperature sensor of the flexible core temperature probe.
- The temperature control by the flexible core temperature probe is especially advantageous for processes involving the sterilization of large volumes of liquids, where the sterilization process is regulated by both the temperature achieved in the center of the liquid sample as well as the temperature achieved in the sterilization chamber. Furthermore, should the autoclave be opened at chamber temperatures higher than 80°C there is a risk of liquids boiling over which can be avoided if the temperature of the sample is controlled throughout the sterilization procedure.
- · Must be installed in our facilities.

Reference: PT-2-B



EXTERNAL TEMPERATURE PROBE ADAPTER



- External adapter for continuous validation processes that allows the access of an external probe (Ø 3-6 mm) to obtain a temperature reading independent from that of the equipment microprocessor.
- It is located on the door of the autoclave.
- Must be installed in our facilities. Reference: **EXT-TP**

INTEGRATED THERMAL PRINTER



- Prints program number, cycle number, temperature, pressure, date and hour of the run and error messages.
- Selectable printing cadence between 10 and 240 seconds.
- Must be installed in our facilities. Reference: **IT/TS**

Consumable: Paper: **PAPER-IT**

CABLE GLAND



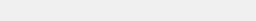
- Installation of a Ø2mm or Ø4mm cable gland to provide access to as many as eight external temperature probes for calibration and validation procedures.
- Must be installed at our factory.
 Reference: **PRENSACLAV**

TRANSPORT TROLLEY



- Auxiliary trolley to assist the loading and unloading of the autoclave.
- Built in chromed iron and plastic.
- The surface of each shelf is textured to prevent the load from shifting.
- Rubber coated wheels to reduce noise.
- Dimensions (LxDxH): 730 x 490 x 700 mm.

Reference: TR-TR





Accessories

STERILIZATION CONTROL TAPE



- Class 1 indicator for steam sterilization. The change of color indicates that the materials have been processed, without being a guarantee of proper sterilization, additional methods are needed such as biological indicators (EN ISO 11138).
- Tape roll of 50 m x 19 mm. Reference: **TEST-CT**

BOWIE DICK TEST PACK



- Class B indicator that checks the correct steam penetration in porous loads.
- Indicator printed with non-toxic inks and laminated.
- Box of 20 tests.
- Reference: TEST-BD

20 min 121°C Color change.

AUTOMATIC WATER FILLING KIT



- Water pump to automate the feed of the independent clean water tank with purified water.
- Compatible with installations that either have a purified water network, a purified water tank or facilities that have an unpurified water network, in the latter case, the kit should be supplied with two other accessories: water purifier (ECOPUR-500) and purified water tank (TANK-KLL).
- Must be installed in our facilities.

Reference: KLL-B

ECO-EFFICIENT WATER PURIFIER



- Direct flow eco-efficient water purifier without water accumulation capable of filtering 1,3L/min with LED display.
- The installation of this accessory requires the joint installation of the external tank (TANK-KLL) and the automatic water filling system (KLL-B) corresponding to each model.

Reference: ECOPUR-500

| Exterior dimensions L x D x H mm | Purity (TDS) ppm | Electrical conductivity µS | Hardness mmol/l |
|----------------------------------------|---------------------|-----------------------------------------|--------------------|
| 220 x 425 x 415 | 0,0005 | >1 | 0,0125 |

SW8000 SOFTWARE



- Communication software between the equipment and the PC that allows the real-time and posterior visualization and registry of each cycle. Cycles can also be exported to Excel or printed.
- Connection to PC via Ethernet, data can also be exported directly with USB stick.
- Supplied with an Ethernet cable, an USB stick that includes the software and installation drivers and an Ethernet to USB adapter.

Reference: SW8000

TECHNICAL SUMMARY OF AE-B SERIES AUTOCLAVES

| | Recommended setting | Industry and research laboratories |
|-----------------------------------------------|-------------------------------------------------------------------------------------------------|---------------------------------------|
| General classification | Equipment placement | Floor-standing |
| | Load direction | Top-loading |
| | Chamber profile | Round |
| Π | Culture media and liquids | ++ |
| | Laboratory waste bags | ++ |
| Recommended type of load | Porous solids and wrapped loads | ++ |
| | Glassware | ++ |
| | Method to generate steam | Independent integrated steam generate |
| | Type of purge | Vacuum |
| Sterilization technology features | Prevacuum pulses by vacuum pump | ✓ |
| | Vacuum drying by heating jacket and vacuum pump | ✓ |
|)) Transfer of data | Ethernet & USB | ✓ |
| Batch printers | Integrated printer | 0 |
| | Sterilization chamber volume | 55 - 175 L |
| | External building material | AISI-304 |
| | Sterilization chamber material | AISI-316L |
| Sterilization chamber and door specifications | Vacuum pump | Membrane |
| | Gasket material | Silicone rubber |
| | Min max. sterilization temperature | 105 - 134°C |
| | Maximum pressure (above atmospheric pressure) | 2,1 Barg |
| | Mechanism to open the door | Manual wheel |
| | Direction in which the door opens | Lateral |
| | Automatic locking with pressure | |
| | Thermally insulated door | · · · · · · · · · · · · · · · · · · · |
| User interface and microprocessor | Screen display | TFT touchscreen |
| | Screen size | 5" |
| | Total number of available programs | 50 |
| | User management with administrator hierarchy | <u>✓</u> |
| | Automatic microprocessor control | · · · · · · · · · · · · · · · · · · · |
| | Timer start | · · · · · · · · · · · · · · · · · · · |
| | Auto-preheating | · · · · · · · · · · · · · · · · · · · |
| | Vacuum leak test | · · · · · · · · · · · · · · · · · · · |
| Special cycles and process optimization | Bowie Dick test | ~ |
| | | · · · · · · · · · · · · · · · · · · · |
| | Final postvacuum drying (to completely dry solid loads) Temperature regulation by core probe | ~ |
| | | 0 1-3 |
| Adjustable cycle parameters | Number of prevacuum pulses | |
| | Temperature of sterilization phase | 105 - 134°C |
| | Duration of sterilization phase | 1 - 250 min |
| | Duration of drying phase | 1 - 360 min |
| | Temperature regulation by core probe | On/Off |
| | Sterilization mode (solids or liquids) | ✓ |
| | Air intake with bacteriological filter | ✓ |
| Other specifications | Independent clean water tank capacity | 9 - 20 L |
| | Flexible core probe | 0 |
| · · · · · · | Premium casters with brakes | ✓ |
| | Pressure gauge | ✓ |
| | Electric customization (115-230M V/230-400T V) | 0 |
| 🔑 Services | Third-party qualification (IQ/OQ/PQ) | 0 |

+: Recommended 🖌: Standard 0: Optional

TECHNICAL DATA

| TECHNICAL DATA Specifications | | | | |
|----------------------------------------------------------|------------------|------------------|------------------|------------------|
| References | AE-50-B | AE-75-B | AE-110-B | AE-150-B |
| Total/usable volume of the chamber L | 55/50 | 79/75 | 115/110 | 175/153 |
| Usable dimensions of the chamber $\emptyset \times H mm$ | 300 x 710 | 400 x 600 | 400 x 850 | 500 x 760 |
| External dimensions L x D x H mm | 505 x 580 x 1290 | 610 x 700 x 1185 | 610 x 700 x 1435 | 750 x 820 x 1400 |
| Loading height mm | 975 | 870 | 1120 | 1085 |
| Net weight Kg | 99 | 135 | 165 | 245 |
| Available powers W | 3600 | 3600 or 6000 | 6000 or 9000 | 6000 or 9000 |
| Standard voltage* V | 230 | 230 | 400 | 400 |
| Frequency Hz | 50/60 | 50/60 | 50/60 | 50/60 |
| | | | | |

*Other voltages and electrical configurations available on request. Special models with increased power may operate with other voltages.

Safety features

- · Safety valve.
- · Safety thermostats with manual rearm for the heating jacket and the steam generator.
- · Pneumatic door blocking system while positive pressure exists inside the sterilization chamber.
- Open door sensor.
- Thermally insulated door.
- · Water level detector in the independent integrated steam generator.
- Water level detector (min./max.) in the independent clean water tank with overflow drainage.
- Bacteriological filter for inlet air.
- · Several visual and acoustic safety and warning alarms.

Regulations

All our AE-B Series autoclaves are designed to comply with the strictest international directives and standards, including the following regulations:

- EN-61010-1 Safety requirements for electrical equipment for
- measurement, control and laboratory use. Part 1: General requirements.
- EN-61010-2-040 Part 2-040: Requirements for laboratory autoclaves.
- EN-61326 Electrical equipment for measurement, control and laboratory use. EMC requirements.
- · AD 2000 Merkblatt Pressure vessels.
- · 2014/35/UE Low voltage.
- · 2014/30/UE Electromagnetic compatibility.
- · 2014/68/UE Pressure equipment.



Channel.

Installation guide available for download on our website.

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General features

| Adjustable sterilization temperature | 105 - 134ºC | | |
|----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| Adjustable sterilization time | 1 - 250min | | |
| Adjustable prevacuum pulses | 1-3 | | |
| Adjustable drying time | 1 - 360min | | |
| Max. pressure | 2,1Barg | | |
| Sterilization control system | Fully automatic microprocessor control by either chamber temperature probe or flexible core temperature probe | | |
| Air purge system | Mechanical displacement by vacuum pump | | |
| Heating system | Independent integrated steam generator | | |
| Vacuum drying system | Vacuum pump plus heating jacket | | |
| Prevacuum system | Vacuum pump | | |
| External building material | AISI-304 stainless steel | | |
| Sterilization chamber material | AISI-316L stainless steel | | |
| Gasket material | Silicone rubber | | |
| Connection to PC | Ethernet | | |
| Connection to printer | Integrated | | |
| Number of programs | 50 (14 preset and 36 user free) | | |
| Programmable auto-start | Unlimited range | | |
| Screen type | 5" TFT touchscreen | | |
| Opening door mode | Horizontal swiveling door with blocking wheel | | |
| Monitoring of sterilization parameters | Self-control of obtained values (T°, P & t) vs programmed values. Cycle is automatically interrupte if obtained values differ from programmed values | | |
| Pressure display | Pressure gauge on control panel, digital display on screen, registry on software and printer tickets | | |
| Water management | Independent manually fed clean water tank that automatically feeds the independent integrated stean generator. Optional upgrade to fully automatic clean water feed directly from water network | | |
| Drainage system | Drainage connections for the direct discharge, to drain the independent clean water tank and for the overflow of the independent clean water tank | | |
| Casters | Included swiveling premium casters with brakes | | |



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