



AVS-N SERIES

AVS-N SERIES - INSTALLATION GUIDE

Information to consider before installing your RAYPA autoclave.

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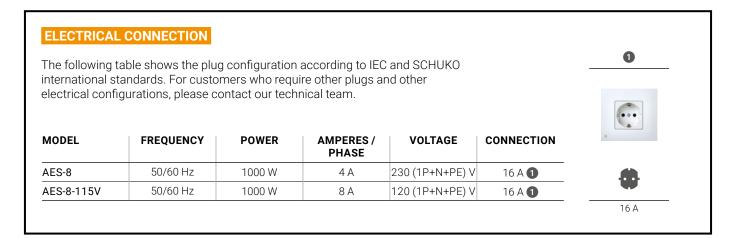






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AES-8 MODEL



CONNECTIONS GRAPH







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COMPONENTS INCLUDED

In addition to the accessories chosen at the time of purchase of the autoclave the following components are included:



1 stainless steel protective cover with legs for the heating elements of \emptyset 208 mm to place on the inner base of the sterilization chamber.



1 stainless steel wire basket of Ø220 x 150 mm.



1 heat resistant silicone hose of $\emptyset 8$ x $\emptyset 14$ mm and 1 m long for draining the sterilization chamber.

For:

3. STERILIZATION CHAMBER DRAIN OUTLET





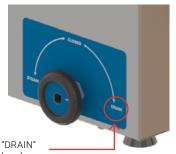
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DRAINAGE CONNECTION

To drain the water from the sterilization chamber, connect the supplied silicone hose to a drain or place a container (such as a tray) in the STERILIZATION CHAMBER DRAIN OUTLET (3).

See "DRAIN HEIGHT of the sterilization chamber" on page 5.



The valve (1) must be rotated to the "DRAIN" position to drain the sterilization chamber.

WATER SUPPLY FOR STERILIZATION

Purified water is necessary for the operation of the autoclave and is added directly and manually into the sterilization chamber until it covers completely the heating elements cover (around 1.2 L).

The valve (1) must be in the "CLOSED" position when filling and during regular operation of the auroclave.



ECOPUR-500 accessory

The ECOPUR-500 accessory is an eco-efficient purifier designed to filter water directly from a water inlet, allowing for easy and economical filling of containers. This system is ideal as an alternative in situations where purified water networks are unavailable or when purchasing purified water containers is not preferred. With high-efficiency reverse osmosis technology, our ECOPUR-500 water purifier removes up to 99% of chlorine and chemical contaminants, ensuring high-quality water. Additionally, it features a quickconnect system for easy and secure installation, making this accessory a practical and sustainable solution for providing purified water anywhere.



IMPORTANT NOTE:

PURIFIED WATER

The water quality used to feed the autoclave must be free of contaminants and meet the following hardness and conductivity requirements:

- Hardness: ≤ 0.02 mmol/l
- Conductivity: between 5 μS/cm and 15 μS/cm

Multiple systems can be used to obtain water with these requirements: osmotized, demineralized, decalcified, distilled water, etc*.

*Note: Take into account that distilled water that is too pure (conductivity less than 5 µS/cm) is not recommended as it may cause long term corrosion on stainless steel.





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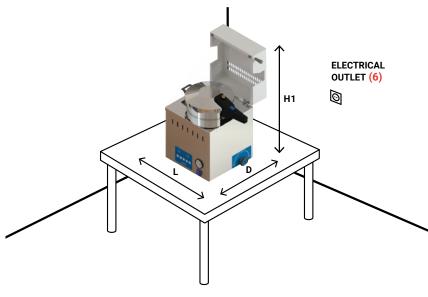
AES-8 MODEL

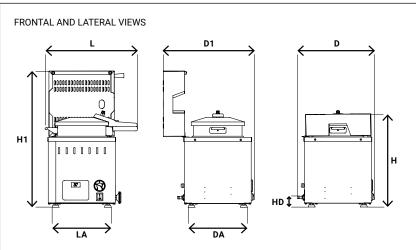


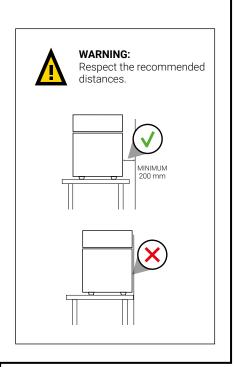
DIMENSIONS TO CONSIDER FOR THE INSTALLATION OF YOUR AUTOCLAVE

For safety reasons, the distance between both sides of the autoclave and the wall or any other object must be 100 mm, and between the autoclave and the rear wall must be at least 200 mm.

| MODEL | L | D | D1 DEPTH | H HEIGHT | H1 HEIGHT | LA X DA SUPPORT AREA | HD DDAINAGE HEIGHT |
|-------|--------|----------|---------------------------|--------------------|---------------------------|---------------------------------------|--|
| | LENGTH | | with maximum door opening | | with maximum door opening | | DRAINAGE HEIGHT of the sterilization chamber |
| AES-8 | 410 mm | 355 mm | 415 mm | 430 mm | 625 mm | 272 x 272 mm | 50 mm |







ENVIRONMENTAL CONDITIONS

This autoclave can operate under the following maximum conditions:

- Ambient temperature: 30 °C
- Humidity: 75%
- Altitude: 3,000 meters above sea level. Take into account that from 1,000 meters above sea level an adjustment of the purge parameter must be made; consult with our technical team.



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AES-8 MODEL

RECOMMENDED MAINTENANCE

Autoclaves are like cars: they need regular maintenance for them to work properly, to ensure good condition, prevent deterioration of its components, and maximize their useful life. Frequent cleaning and regular maintenance are essential, as autoclaves work at high pressures and temperatures and are therefore subject to a high level of stress.

For clients that perform multiple cycles each day, we recommend carrying out maintenance and cleaning tasks more frequently.

DAILY MAINTENANCE

Clean the gasket using a clean cotton cloth with a mild vinegar solution (or a comparable product) to reduce the formation of lime deposits.

Wipe the external surfaces with a clean cotton cloth moistened with water and a neutral detergent. Ensure all surfaces are thoroughly dried afterwards.



WEEKLY MAINTENANCE

Clean the sterilization chamber and all the components with a clean cotton cloth dampened with water and neutral detergent. Dry them after.

Perform a complete drainage of the sterilization chamber and proceed to refill it with purified water.



ANNUAL MAINTENANCE

Conducting a technical inspection is essential to ensure consistent process safety over time. It is necessary to periodically verify the thermodynamic process parameters (pressure and temperature), ensuring they remain within the accepted limits







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The following table shows the plug configuration according to IEC and SCHUKO international standards. For customers who require other plugs and other electrical configurations, please contact our technical team.



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| MODEL | FREQUENCY | POWER | AMPERES / PHASE | TENSION | CONNECTION | |
|-------------|-----------|--------|--------------------|-----------------|---------------|--|
| AES-12 | 50/60 Hz | 1000 W | 4 A | 230 (1P+N+PE) V | 16 A 🚺 | |
| AES-12-115V | 50/60 Hz | 1000 W | 8 A | 120 (1P+N+PE) V | 16 A 1 | |



16 A

CONNECTIONS GRAPH







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AES-12 MODEL

COMPONENTS INCLUDED

In addition to the accessories chosen at the time of purchase of the autoclave the following components are included:



1 stainless steel protective cover with legs for the heating elements of \emptyset 245 mm to place on the inner base of the sterilization chamber.



1 stainless steel wire basket of Ø220 x 200 mm.



1 heat resistant silicone hose of $\emptyset 8$ x $\emptyset 14$ mm and 1 m long for draining the sterilization chamber.

For:

5. STERILIZATION CHAMBER DRAIN OUTLET





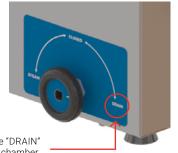
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AES-12 MODEL

DRAINAGE CONNECTION

To drain the water from the sterilization chamber, connect the supplied silicone hose to a drain or place a container (such as a tray) in the STERILIZATION CHAMBER DRAIN OUTLET (5).

See "DRAIN HEIGHT of the sterilization chamber" on page 10.

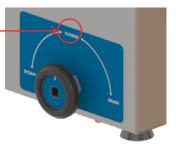


The valve (2) must be rotated to the "DRAIN" position to drain the sterilization chamber.

WATER SUPPLY FOR STERILIZATION

Purified water is necessary for the operation of the autoclave and is added directly and manually into the sterilization chamber until it covers completely the heating elements cover (around 2 L).

The valve (2) must be in the "CLOSED" position when filling and during regular operation of the auroclave.



ECOPUR-500 accessory

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Multiple systems can be used to obtain water with these requirements: osmotized, demineralized, decalcified, distilled water, etc*.

*Note: Take into account that distilled water that is too pure (conductivity less than 5 µS/cm) is not recommended as it may cause long term corrosion on stainless steel.



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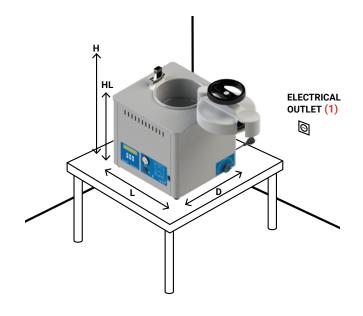
AES-12 MODEL

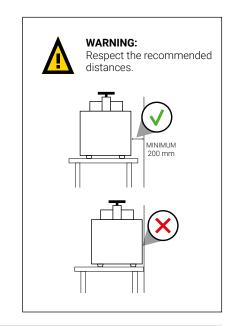


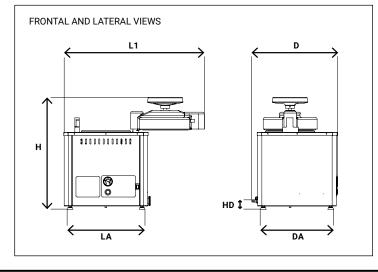
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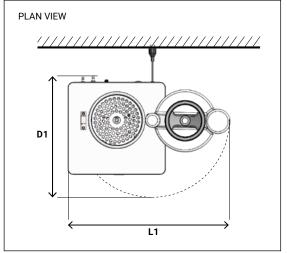
For safety reasons, the distance between both sides of the autoclave and the wall or any other object must be 100 mm, and between the autoclave and the rear wall must be at least 200 mm.

| MODEL | L LENGTH with closed door | L1 LENGTH with maximum door opening | D Depth | D1 DEPTH with maximum door opening | H HEIGHT | HL HEIGHT OF LOAD | LA X DA SUPPORT AREA | HD DRAINAGE HEIGHT of the sterilization chamber |
|--------|---------------------------------|--|-------------------|---|--------------------|-------------------------|-------------------------|---|
| AES-12 | 490 mm | 780 mm | 475 mm | 600 mm | 630 mm | 400 mm | 437 x 412 mm | 50 mm |













AVS-N SERIES

AES-12 MODEL

ENVIRONMENTAL CONDITIONS

This equipment can operate under the following maximum conditions:

- Ambient temperature: 30°C
- Humidity: 75%
- Altitude: 3000 meters above sea level. Please note that from 1000 meters above sea level, an adjustment of the purge parameter must be made. Consult with RAYPA technical team.

RECOMMENDED MAINTENANCE

Autoclaves are like cars: they need regular maintenance for them to work properly, to ensure good condition, prevent deterioration of its components, and maximize their useful life. Frequent cleaning and regular maintenance are essential, as autoclaves work at high pressures and temperatures and are therefore subject to a high level of stress.

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ANNUAL MAINTENANCE

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TECHNICAL SUPPORT, ORIGINAL SPARE PARTS AND EXPERIENCED CONSULTING SERVICES

For an optimal operation of the autoclave, always use original spare parts and schedule periodically, with a specialized technician, the relevant maintenance tasks, such as calibration of the temperature and pressure sensors or replacement of the sterilization chamber door dasket.

Additionally, we provide a comprehensive range of services to ensure a satisfactory user experience throughout the entire lifespan of our products. These services include support and training programs, guided start-up and qualification services, preventive and corrective maintenance, periodic calibration, technical support and repairs, as well as consulting on special applications.

Should you encounter any issues, have questions, or require further information regarding maintenance of the AVS-N Series autoclave, please don't hesitate to reach out to our technical support service using the following contact details.



Technical support

https://www.raypa.com/en/contact/ +34 937 830 720 (Ext. 2109)













