

# <A-Trap Instruction Manual>

Thank you for purchasing our A-Trap.

Please read this "A-Trap Instruction Manual" carefully before installation.

## 1. Summary

The "A-Trap" is a floor-mounted, box-type drainage trap designed for air conditioners. Its innovative design, featuring two check valves, provides excellent deodorizing and insect-repellent effects, even without sealing water. The simple body structure allows for easy maintenance, inspection, and cleaning, and it has demonstrated exceptional durability over the past 30 years.

## 2. Type and selection

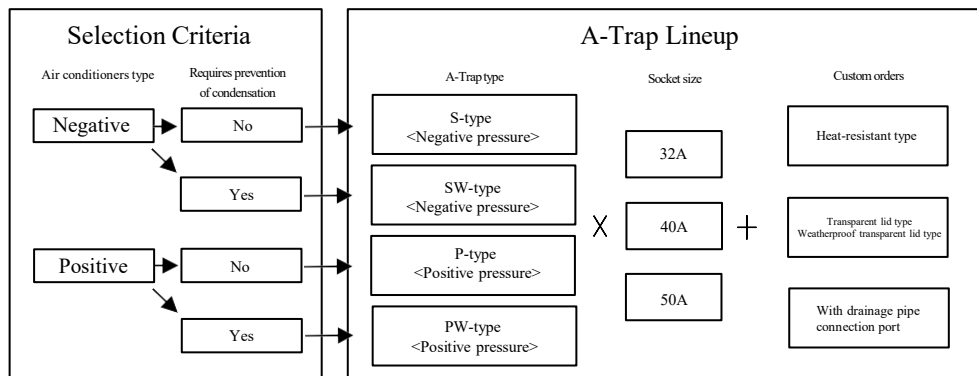
- A-Trap series has two types: "negative pressure type (S-type)" and "Positive pressure type (P-type)".

Select either one according to the type of the air conditioner (whether the machine static pressure is negative or positive) to be connected.

- To prevent condensation, select "Condensation prevention type (W-type)" that has thermal material attached to the A-Trap body.

\*The condensation prevention performance of the condensation prevention type is maintained when the temperature of the internally accumulated water is 10°C, and the ambient temperature and humidity do not exceed 30°C and 70%, respectively. When these values are exceeded, additional measures for preventing condensation are necessary.

- There are three socket sizes available.
- There are three types of custom orders available.



## 3. Precautions

### (1) Precautions for handling

- **Use this product exclusively as a drainage trap for air conditioners.**
- Handle the product carefully, as it may be damaged by strong impacts.
- Do not store or use the product near open flames or in extremely hot environments.

### (2) Precautions for installation

- **Confirm the inlet and outlet directions and install the product on a horizontal surface.**
- Observe the precautions provided by the pipe material manufacturer when connecting pipes.
- **Screwing in a pipe too strongly may distort or damage internal parts.**  
→ To connect a pipe, open the body lid and visually make sure that the internal parts are not moved while screwing in the pipe.
- **Do not install a U trap, etc. in the secondary side piping of A-Trap. (Double trap must be avoided)**
- Provide a stack vent pipe to the drainage standpipe.
- **An appropriate height difference according to the machine static pressure should be provided between the water wheel outlet and the floor where A-Trap is installed.**  
→ For details, see the back of this manual.
- After piping, run water through to **check for leaks.**
- **Provide condensation prevention measure if necessary.** (Not necessary condensation prevention type)
- Install this product so that maintenance, inspection, and cleaning can be performed.

### (3) Precautions for use

- Close the lid during normal use.
  - Do not overtighten the wing bolt for fixing the body lid.
  - Open the access port and perform routine cleaning according to dirt.  
Clean the floating ball on the inlet side, float valve on the outlet side and contact surfaces of the internal parts, and remove dirt accumulating on the bottom of the body. Also, inspect the piping connections and internal parts for deterioration.
  - Sudden change in temperature, instantaneous abnormal heat or, aging may cause water to enter the special float ball or damage it. In these cases, replace the special float ball with a new one.
  - Do not use acetone, thinner or other organic solvent for cleaning.
  - Be careful not to get burned if the product is connected to a device draining hot water.
  - The product can endure up to 60°C. (80°C in the case of the heat-resistant type)
- **We do not guarantee that the product can completely prevent reverse flow of gas and liquid.**

#### 4. Required height difference

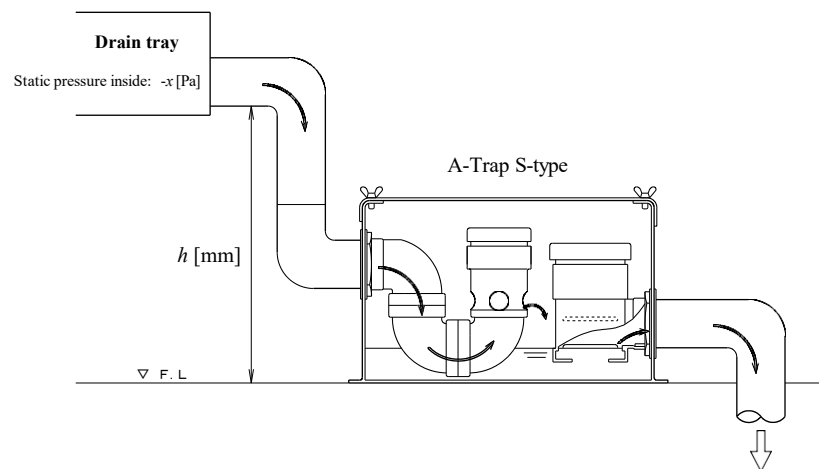
Required height difference of installation differs **depending on the types of A-Trap**.

##### ● S-type / SW-type <Negative pressure>

S-type / SW-type is designed for air conditioners operating with negative machine pressure.

It needs an appropriate height difference of installation according to the machine static pressure (negative) caused during operation of air conditioners.

Drainage may not be drained smoothly if the height difference is insufficient.



- Calculation formula for  $h$  dimension of S-type

$$h [\text{mm}] = x [\text{Pa}] / 9.8 + 75\text{mm}$$

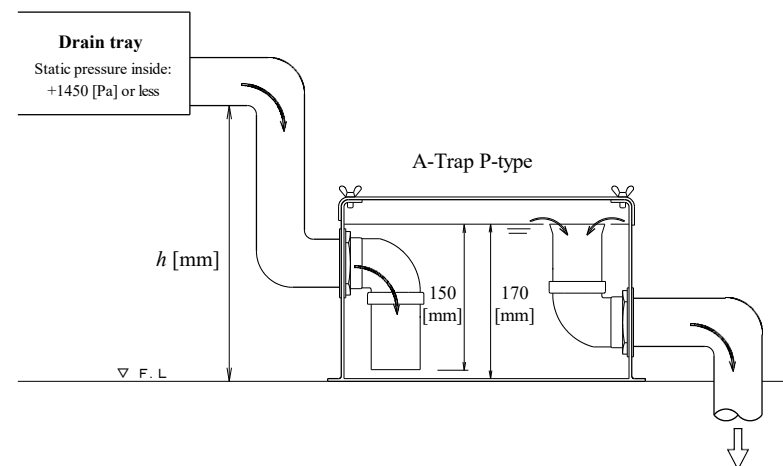
- Calculation formula for  $h$  dimension of SW-type

$$h [\text{mm}] = x [\text{Pa}] / 9.8 + 85\text{mm}$$

**\* Height difference should be equal to or more than  $h$  dimension.**

##### ● P-type / PW-type <Positive pressure>

P-type / PW-type is designed for blow-through type air conditioners with  $\pm 0$  to +1450 Pa machine static pressure.



- Required  $h$  dimension (height difference) of P-type

$$h = 180 \text{ mm or more}$$

- Required  $h$  dimension (height difference) of PW-type

$$h = 190 \text{ mm or more}$$

- \* Fill the A-Trap body with water before starting operation of the air conditioner.
- \* Add water periodically in some seasons when there is no drainage.

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