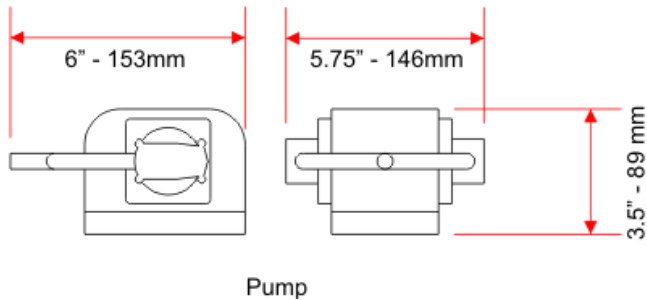
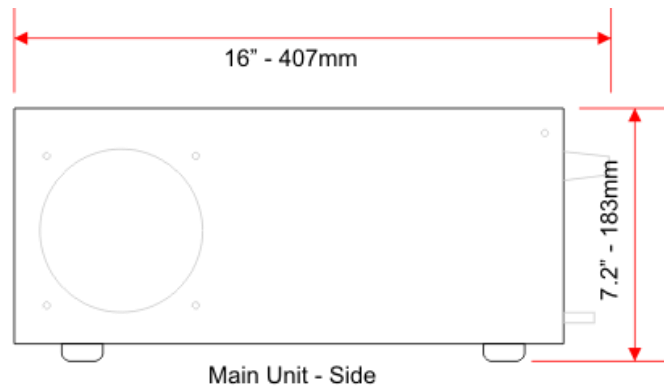
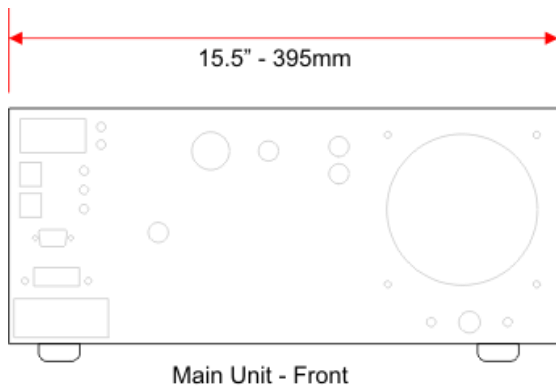


Please read carefully all of the information in this manual to ensure proper operation of the Mini One humidity generator.



1. INSTALLATION RECOMMENDATION.

An improper installation can severely compromise the operation of the unit. A level operating surface, adequate ventilation, and good access are imperative.

Power Supply:

Supply a reliable 110/220 Volt, 50/60 Hz AC power supply with ground, capable of supplying approximately 250 Watts. We recommend a dedicated power supply with surge protection for all units.

Floor plate and Unit Placement:

Provide a flat level surface so that the front of the unit is easily accessed and maintained. The access panel or door should allow easy removal of the machine in case of emergency. If possible, allow at least 6 inches / 15 cm space around the units, with a minimum of 1 inch/ 2.5 cm space on back and sides. No space need be provided above the units, but be sure to allow adequate space for installation and emergency removal. Note that adequate room should be provided at the front of the unit for hoses and wires and exhaust ducting (4 inch/ 10 cm).

Some accommodation may be needed for filling the reservoir. The pump unit and the main unit may be placed side by side, or separated up to ten feet / three meters from each other. Should you wish to stack the units, be sure to place the pump unit ABOVE the main unit. Should you need to separate the pump from the main unit by more than the amount allowed by the supplied power supply cord and hose, be sure to use at least a 16 gauge wire to carry power, and do not separate the units by more than ten feet without consulting the manufacturer

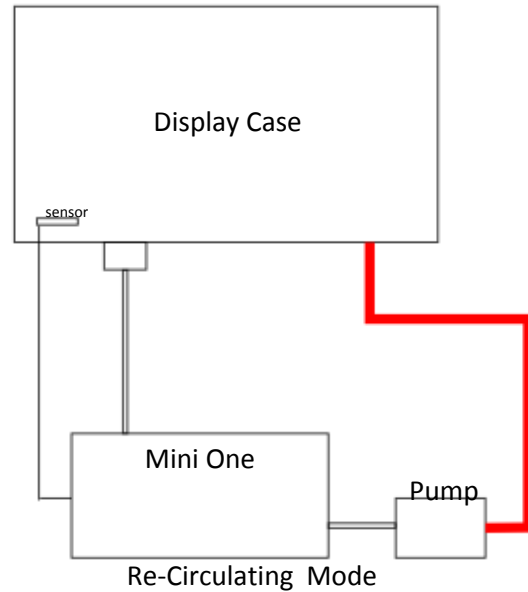
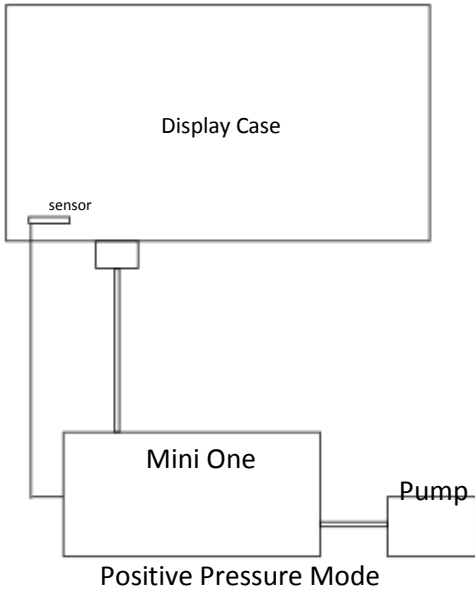
Access:

Provide a door or panel that allows easy access, installation, and removal of the unit. The front plate of the unit should be completely visible when the access is open.

2. Connection of air hoses to the display case.

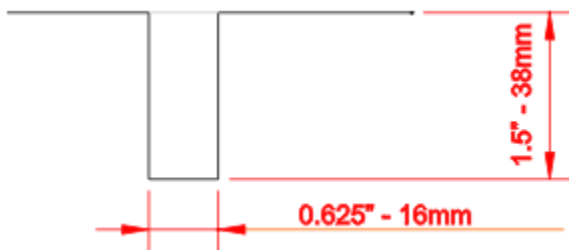
Mini One can be connected to the controlled display case in two modes:

- positive pressure mode or
- re-circulating mode.

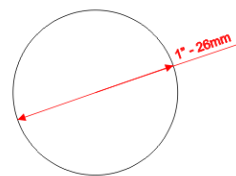


a. Positive Pressure Mode

In this mode, Mini One is connected to the display case by one air hose. Typically, the Mini One is sent with a silicone hose with an internal diameter of 5/8" - 16 mm. Connect to the hose using either fittings installed by the case manufacturer or with Preservatech's supplied air connectors (ABS). For factory installed fittings we suggest a welded piece of metal pipe, 16 mm outside diameter and 30-40 mm long. For installing our ABS fittings, a hole of 26 mm in diameter must be drilled in the case wall with a maximum wall thickness is 1" - 26mm. THE AIR FROM THE MINI ONE SHOULD ENTER DIRECTLY INTO THE VITRINE FOR OPTIMAL PERFORMANCE. AIR DIRECTED INTO THE SUB FLOOR MAY LIMIT THE PERFORMANCE OF THE MINI ONE, ESPECIALLY IN LARGE OR LEAKY ENCLOSURES.



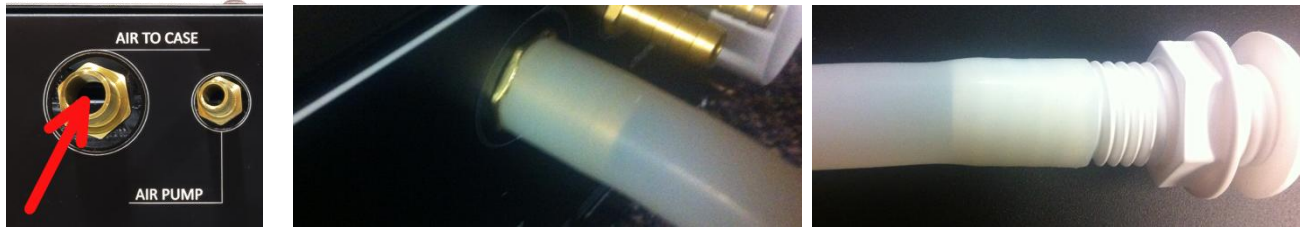
Dimmensions for factory installed fittings



Hole dimensions for installing Preservatech supplied fittings.

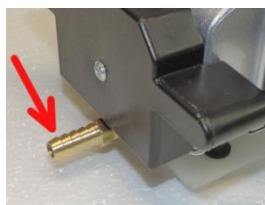
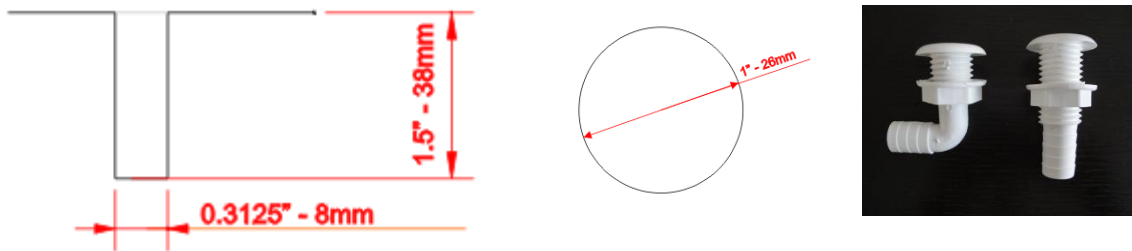


Fittings on the display case wall and machine fitting labeled: AIR TO CASE must be connected together using supplied silicone hose (16 mm inside diameter).



b. Re-circulating mode.

In the re-circulating mode, in addition to connecting the main air hose as in the positive pressure mode, a return hose must also be installed. The silicone return hose supplied with the machine has an 8 mm inside diameter. It must be connected to the case preferably by fittings installed by case manufacturer or by using Preservatech's supplied air connectors (ABS). For factory installed fittings the best is a welded piece of metal pipe, with an 8 mm outside diameter and 30-40 mm length. For installing our ABS fittings, a 26 mm diameter hole must be drilled in the case wall with a maximum wall thickness being 1" - 26mm.



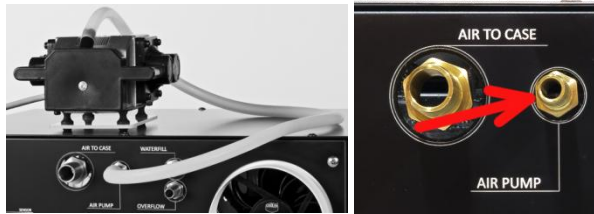
Return fitting on the display case wall and air pump fitting must be connected together using supplied silicone hose (8mm inside diameter).

THE AIR FROM THE MINI ONE SHOULD ENTER DIRECTLY INTO THE VITRINE FOR OPTIMAL PERFORMANCE. AIR DIRECTED INTO THE SUB FLOOR MAY LIMIT THE PERFORMANCE OF THE MINI ONE, ESPECIALLY IN LARGE OR LEAKY ENCLOSURES.

WHEN INSTALLING A RETURN HOSE, TAKE CARE TO SEPARATE THE AIR ENTRY AND AIR RETURN PORTS AS FAR AS POSSIBLE. AVOID THE "SHORT CIRCUITING" OF AIR FLOW, ESPECIALLY WHEN PORTS ARE LOCATED UNDER A FLOOR PLATE.

NOTE: Although all Mini One machines are ready to use in re-circulating mode, secondary air connector for connecting return hose as well as return hose, are not included in the standard shipment. It must be ordered separate.

3. Air pump connection.



The air pump unit is supplied with 39"/1m long silicone hose. The length of this hose should not be adjusted, otherwise machine may not work properly, especially with a low humidity setting. The other end of the pump hose should be connected to the machine fitting labeled "AIR PUMP".

Pump power cable must be connected to the appropriate outlet on the machine front, below the main power connection..

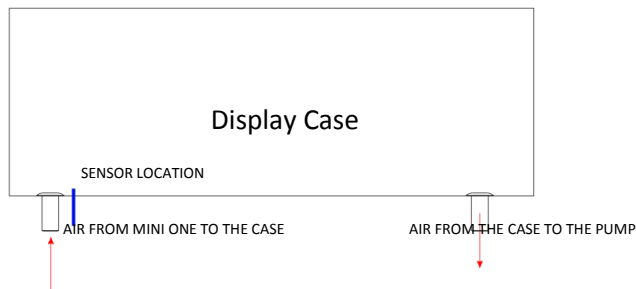


4. Sensor connection.



Sensor supplied with Mini One is built inside the brass housing 6 mm in diameter and has a 1.8 m long cable.

Sensor is shipped with rubber grommet 10.6 mm in diameter.



In most applications, locate the sensor near (but not directly in) the air input from the Mini One.

Where enclosure volumes are large, or where showcase leakage is suspected, the the sensor may be located close to the artefacts on display. Note that this may result in more variance about the target settings (until showcase equilibrates to the new rh conditions). Where showcase volumes are small, and where extremely stable conditions are called for, you may locate the sensor very near, or directly in, the air input from the Mini One.

5. Ventilation.

If the unit is not enclosed, be sure that there is adequate air available for cooling. For most effective operation, do not allow ambient temperatures around the unit to get above 75 F / 24 C. Warm temperatures may reduce the ability of the unit to provide low humidities.

Should the unit be mounted in an enclosure (e.g. beneath the showcase), provide at least TWO ventilation holes. A flexible exhaust hose must be attached to the four inch / ten centimetre mounting on the front of the unit, and directed out of the enclosure through one of the ventilation holes.



Adequate fresh air for cooling must be provided, through a hole (or holes) totalling at least 16 square inches / 100 sq. cm. All ventilation holes must be unimpeded (do not cover with any cloth, mesh, or perforated metal).

Avoid re-circulating exhaust air by separating the holes as widely as possible. For example, provide an upper hole for connection to the exhaust hose and a lower hole for fresh air intake. Be aware of walls or obstructions which might trap and re-circulate exhaust air into the fresh air intake.

NOTE: Although all Mini One machines are ready to connect 4" (100 mm) exhaust hose and hose termination are not included in the standard shipment and must be ordered separate.

6. External connectors.

Mini One is equipped with external connectors:

RH - The "OUT OF RANGE" alarm is a 12 VDC connector to power up an LED or other 12VDC device. This alarm is activated when the RH (at the sensor) is lower than "SET RH - ALA parameter" or higher than "SET RH + ALA". (see operation or programming manual) This connector works in conjunction with "OUT OF RANGE" light on the front of the machine.



LW - The "LOW WATER" alarm is a 12 VDC connector to power up an LED or other 12VDC device. This alarm is activated when water level inside machine falls below the lowest acceptable level. Water must be added to the machine when this alarm is energized. This connector works in conjunction with "EMPTY" light on the front of the machine.

EP - The "EXTERNAL PUMP" jack is used for connecting an external water reservoir. External reservoirs are available as a special order. Contact the manufacturer for details.



NOTE: Although all Mini One machines are equipped with external connectors, cables and LED's are not included in the standard shipment. It must be ordered separate.

Please contact info@preservatech.com if you require assistance. Photographs can be very useful when diagnosing installation problems.