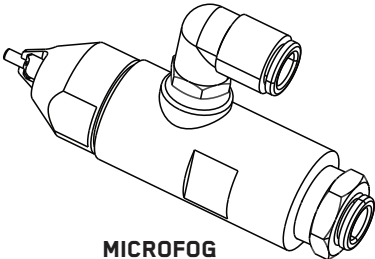


APPLICATION INFORMATION
AEROSCIENCE MODEL: MICROFOG ATOMIZER



DESCRIPTION:

The Microfog Atomizer is an ultra-low volume dry fog atomization nozzle. It requires compressed air and a liquid (solution) in order to produce dry fog measuring between .5 and 10 microns. The nozzle can atomize many different types of solutions including water, nutrient solutions, compost teas, organic pesticides, and microbial inoculants. The intent is to increase bio-availability while using less solution.

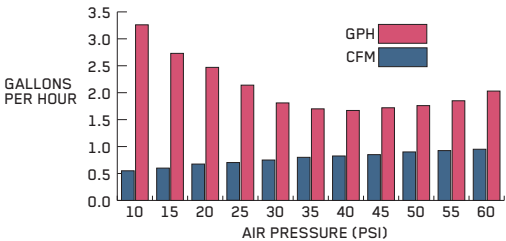
For dry fog the nozzle works optimally at an air pressure of 40 psi. (Pounds / Sq. inch) and requires .65 CFM (Cubic Feet / Minute) of compressed air. When the nozzle is operating at the proper PSI it will create a cloud of dry fog without any small droplets falling out of the fog stream. Be sure to supply the nozzle with clean compressed air. Use an oil free compressor with an oil coalescing filter working down to .01 Microns.

EFFICIENCY / SOLUTION DILUTION:

With the efficiency of the nozzle and the micron size of the dry fog it's possible that you can lower the concentration of the solutions you are applying. As an example, if the product you are applying recommends 30ml per gallon as a foliar spray, lower that to 1/4 strength (7ml per gallon) and apply to your plants. If there are adverse effects decrease the dilution as required. If the plants look ok you can increase the recommended dosage.

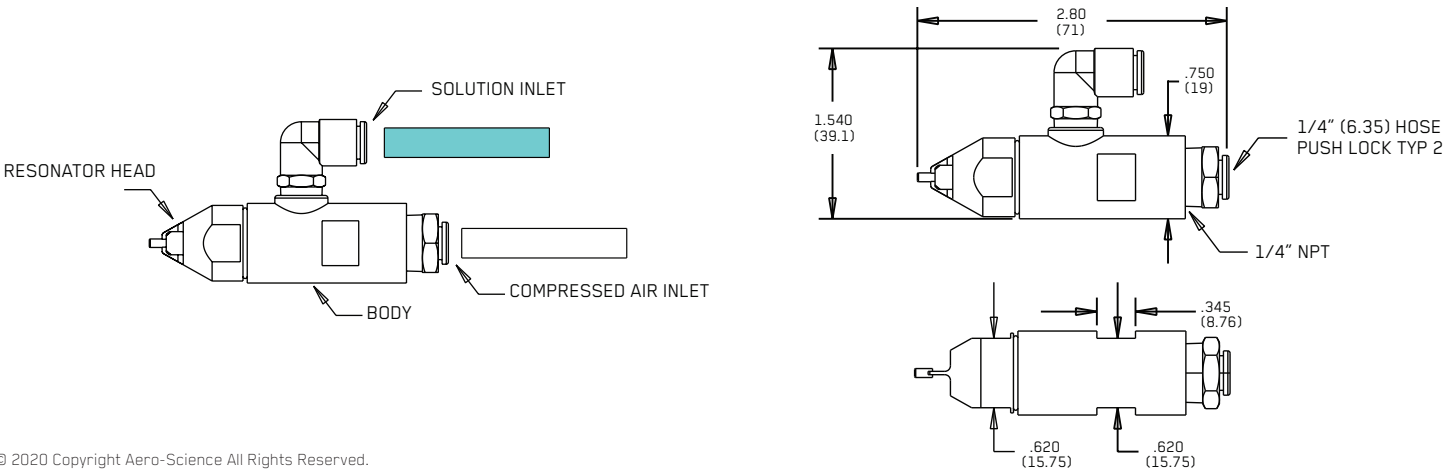
OPTIMUM AIR PRESSURE / SOLUTION USAGE:

The amount of air pressure used will effect the volume of solution used. Refer to the chart below. Optimum dry fog is produced at 40 psi and will require .65 CFM from your air compressor. The amount of solution used at this level will be approx. 1.6 gallons for one hour of fogging. As the air pressure drops below 40 psi the amount of solution used will increase and droplet size of the fog will increase. Above 40 psi the fogger will lose efficiency and simply move more air and more solution. The amount of actual pressure at the fogger tip will depend on the length and diameter of the hose from your compressor. A slight increase in air pressure at the compressor might be needed to obtain 40 psi at the resonator head.



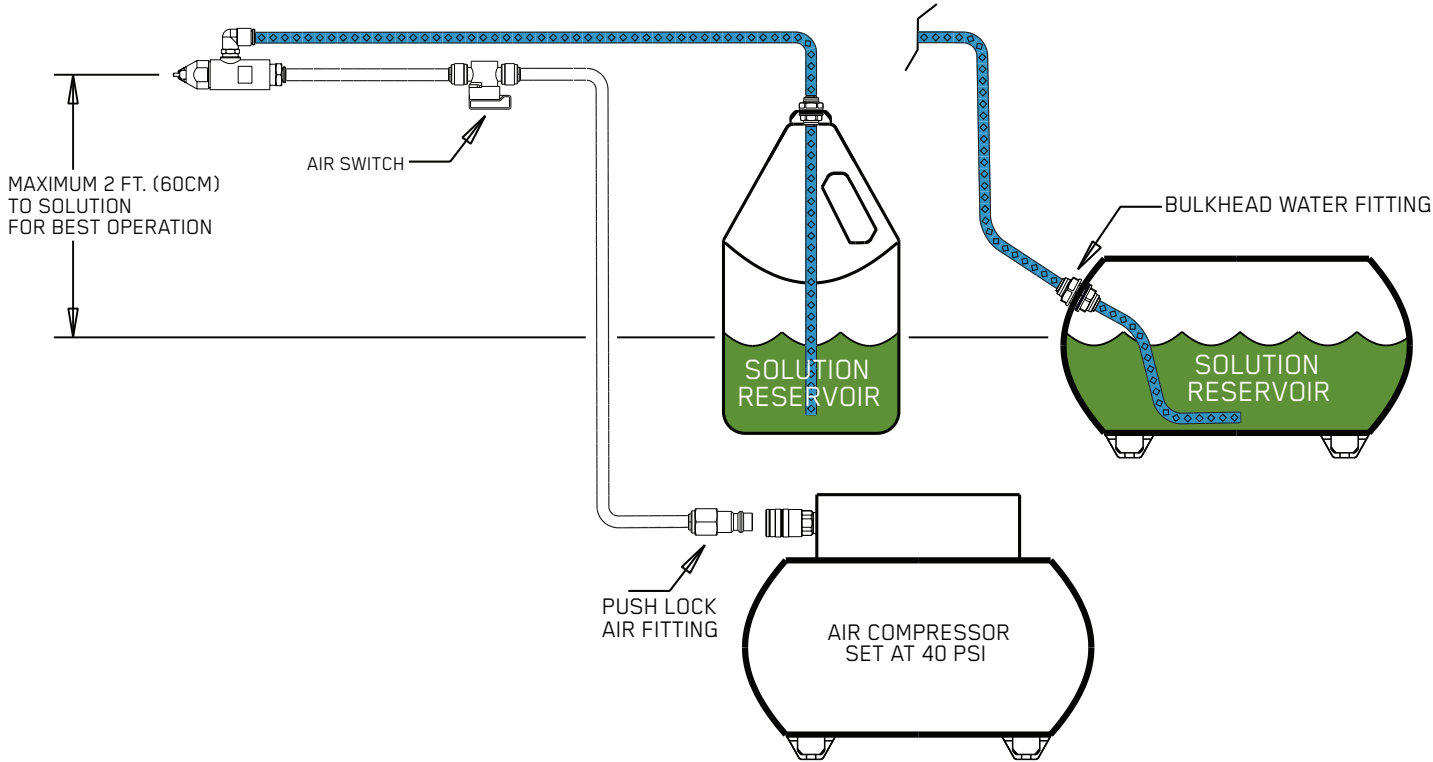
CONNECTING THE FOGGER:

The Fogger uses 1/4 inch Push Lock hose connectors designed for HDPE Tubing. The connector for the compressed air is on the end, and the connector for the solution is on the side of the fogger. Simply push the HDPE tubing into the fitting and it will lock itself into place. To remove the tubing simply push in on the connector surround and pull out the tubing.



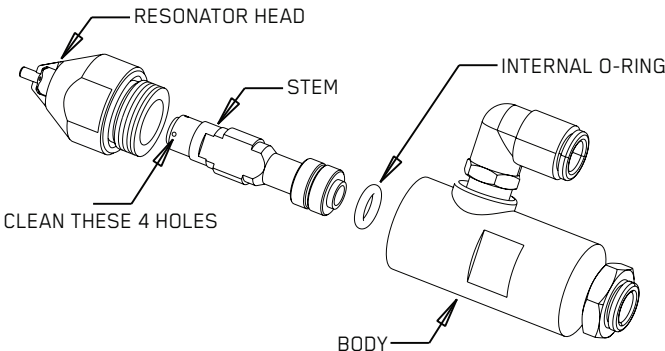
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Below is a simple schematic of "hooking up" the Microfog Atomizer. Simply push the 1/4" hose into the Atomizer and the fittings provided. The Air Switch allows you to turn the air on/off and it can be placed wherever convenient along the air line. The bulkhead fitting is supplied for convenience but is not necessary. The solution in the reservoir will be siphoned to the Atomizer as long as the hose is in the solution.



CLEANING:

To clean the MicroFog Atomizer, simply unscrew the resonator head from the body and pull out the stem. You will notice 4 small holes at the tip of the stem. Use a small pin, or paper clip to unclog the holes. If you need to sterilize the stem soak it in isopropyl alcohol. When you re-assemble the atomizer make sure the O-ring at the base inside the body is still in place. Place the stem in the body and screw in the resonator head. Do not over-tighten, but tight enough to prevent sputtering.



SAFETY

Dry fog creates ultra find droplets of water and solution. Please use protective eyeware, hazmat suits and respirators that filter down below 0.1 micron. DO NOT BREATH in dry fog particles as they can cause serious damage to your lungs and body. Be cautions about adding dry fog to electronics or rooms with electrical devices. Dry fog particles are extemely bio-available and can penetrate cell walls effectively so be cautions about the amount of solution you mix with water when applying dry fog solutions to plants. AeroScience is not liable for damage caused by dry fog solutions. USE AT YOUR OWN RISK!!!