



- 3/8" Tube and Slip-Lok Fittings
- 1/2" Tube Transition to 3/8 Tube

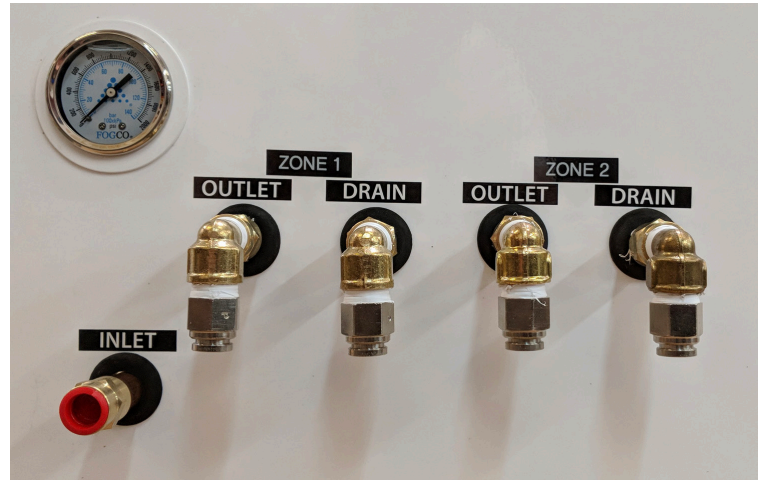
### 3/8" High Pressure Flexible Nylon Tube

The 3/8" flexible nylon high pressure tube is the water supply line from the pump to all fans in each zone. One "Outlet" is assigned to each zone line.

The tube can be easily fixed to walls with our included vinyl coated wall clamps and/or run in the ceiling areas using zip ties every ten feet. All tube is cut with a standard tube cutter designed for non metal tube.

Connections are made by sliding the tube into the Slip-Lok fittings for a leak proof seal which is long lasting for years of dependable performance.

Outlet water lines for either one zone or two zone pumps will have a downward directed elbowed Slip-Lok connections. The 3/8" nylon high pressure tube will be inserted into the designated zone "OUTLET" labeled Slip-Lok connections external to the pump enclosure allowing for quick access and install.



Each of the outlet lines at the pump after directly attached to the Slip-Loks should have excess line coiled up 4-5 times in a tight coil (recommended by the pump manufacturer and not shown) and attached by zip ties to the frame of the pump stand either directly below the connections or the side of the pump station whichever is practical. The main purpose of the coiled line is to reduce the pump vibration extending into the high pressure lines.

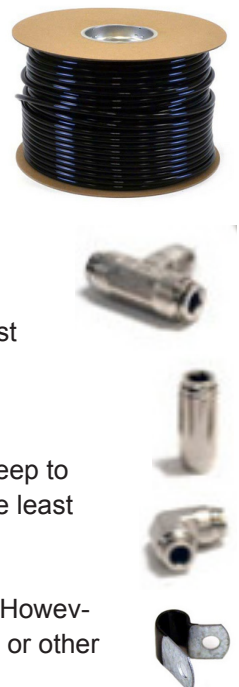
From the high pressure side of the pump, 3/8" flexible nylon tubing is plumbed to all fans. Typically, tubing comes in either 500' or 100' coils. Plan your runs to the fans to use the least amount of fitting connections by utilizing the coils provided to yield least amount of line cuts. Always plan your 90° turns to be "sweeps" – simply bending the tubing to make a 90° turn.

"Push-to-Connect" Slip-Lok fittings are used to complete the tubing lines from the pump station to all fans in the zone. Slip-Loks offer a very quick and secure installation using an internal locking ferrule with over sized O-ring to complete a leak proof seal for high pressure systems. Simply insert high pressure tube into Slip-Loks by pushing the end of tubing into the fitting AND then pull back on tubing to insure it has locked in place. Tubing can easily be removed from Slip-Loks by pushing in slip end of fitting with an open end wrench and removing the tubing.

- Slip-lok tees are used at each drop down from the ceiling to each fan with the exception of the last fan in the daisy chain line which does not require a Slip-Lok Tee fitting. Slip-Lok Tees are also used whenever a line has to junction in order to divide into two directions.

- Unions (couplings) are used to connect lines together and should be used sparingly in order to keep to a minimum the number of cuts in a tubing run. Therefore plan all tubing runs for easy access using the least amount of connections.

- Vinyl/Steel Wall Clamps (screw type) are used to fasten tubing every 10' to applicable surfaces. However most tubing is secured using zip ties every 10' feet to ceiling structures such as steel ceiling trusses or other available ceiling support fixtures.





- 3/8" Tube and Slip-Lok Fittings
- 1/2" Tube Transition to 3/8" Tube

### 1/2" Flexible Nylon High Pressure Outlet Water Lines Transitioning to 3/8" Flexible Nylon High Pressure Zone Lines

Disregard this page if your project does not call for 1/2" tube.

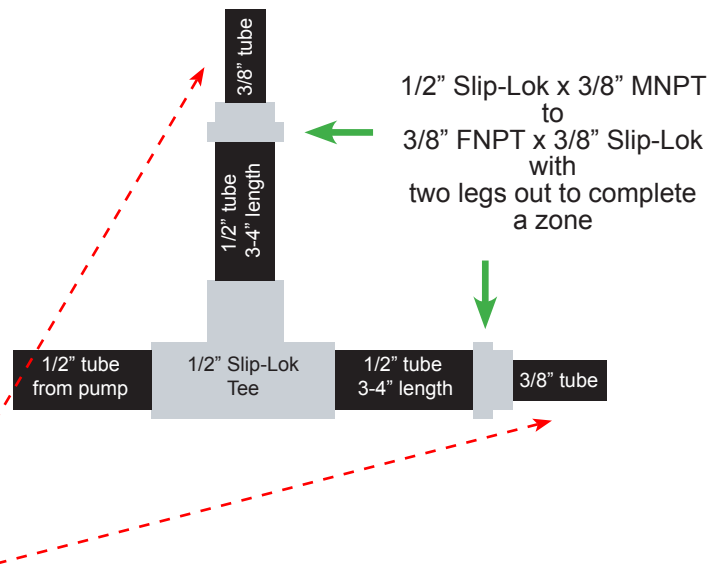
Outlet line transitions from 1/2" to 3/8" are used when conditions require higher volumes of pressurized moisture for long line runs or simply higher amounts of moisture to be atomized within a single zone. The solution is to use 1/2" tube for an extended run from the pump and to transition at some designated point to 3/8" tube. Using the water line transition provides minimum pressure loss over the entire length of the tubing runs in a zone. Generally, most tube runs will use only 3/8" tube. In order to avoid the potential for pressure loss, we may specify the use of 1/2" tubing runs from the pump station out to a specified distance where there is a junction transition from 1/2" stepping down to a single 3/8" line or a divided set of two 3/8" lines supplying 1000 psi water to fans on those extended runs.

We also may suggest the option to run lines immediately from pump stations inside conduit on the wall and then run the line with zip ties every ten feet in ceiling area strapped to trusses. Conduit on the wall up to the ceiling area helps to protect the lines and to make for a potentially more attractive installation. Most ceiling installed tube runs are simply zip tied every ten feet to available ceiling trusses or other available objects to secure the line for completion to the last fan in the line.

- Diagram for Installing 1/2" High Pressure Tubing for Higher Output Pumps Transitioning to 3/8" Tubing:

Some projects require higher volume lines in order to maintain high pressure on longer line runs. If 1/2" has been specified in a layout drawing (not typically used in most projects), the diagram shows how this is to be completed.

Note: we also may specify Stainless Steel tube with compression fittings for this function depending on project requirements.



At a transition junction, it may be considered to install a 3/8" ball valve to have control points to shut off water to each leg if ever necessary.