

Installation Instructions: 15 SCFM Membrane Drying System



WARNING

Your safety is important. System pressure must be released prior to any installation or service. Failure to follow maintenance instructions could result in operating failure or product damage. Always install the system with the arrows indicating the direction of airflow. Use only appropriate thread sealant on all connection fittings unless otherwise specified. Do not alter the filtration system from its original design as this may cause failure in its operation parameters.

DESCRIPTION

IMPORTANT: The 15 SCFM Membrane Dryer is configurable in two variations. Before beginning installation it is important to decide which configuration best meets your installation application requirements.

Incoming air enters the 1st stage water separator where water and particulates are removed down to 10 micron. The air then travels through the 2nd stage oil coalescing filter where oil aerosols are filtered down to .001 ppm and particulates are trapped down to .01 micron. Air then enters the 3rd stage activated carbon filter where oil vapor is removed down to .003 ppm. The pre-treated air then enters the Membrane Dryer where water vapor is removed from the air. This system can provide dew points down to -80°F. The air exits through the outlet regulator.

For ease of service, it is recommended to install an inlet ball valve on the 15 SCFM Membrane Dryer System

DRYER SPECIFICATIONS

Maximum Pressure: 175 psi
Maximum Flow: 15 SCFM
Maximum Inlet Air Temperature: 100°F
Sweep Air: 3.3 SCFM @100 psi
Inlet Port: 1/4" NPT
Outlet Port: 1/4" NPT

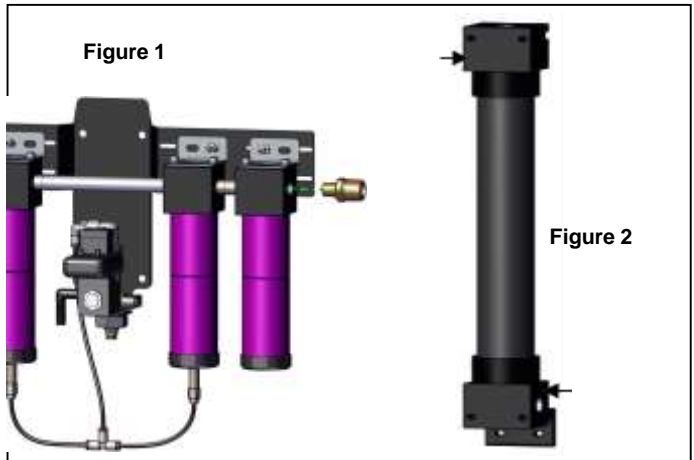
6 SCFM recommended flow to achieve 100°F dew point suppression

SERVICE REQUIREMENTS

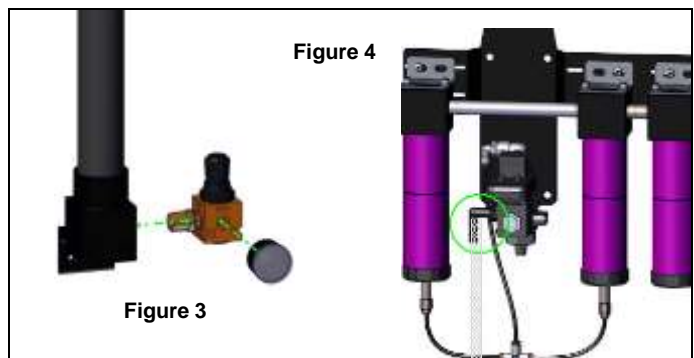
Mandatory every 6 months.

- Oil Coalescing Filter Element Replacement (P/N: 21999-0394)
- Activated Carbon Filter Element Replacement (P/N: 21999-0395)

DRYER INSTALLATION



1. Using proper thread sealant, attach the supplied brass fitting, using a 7/8" or adjustable wrench, to the outlet of activated carbon filter. See figure 1
2. Determine direction of Membrane installation. Follow flow description on Membrane Dryer when installing for your specific application.
NOTE: If horizontal installation is preferred, use a 10mm hex key to swap plugs located on inlet and outlet ports of membrane dryer. See Figure 2.
3. Install the supplied pressure gauge into regulator. Install the pressure regulator into open membrane dryer outlet port. See Figure 3
4. Using the provided hardware, install the mounting bracket, using a 9/64" hex key, to the inlet side of the Membrane Dryer.
5. Mount filter package to wall using adequate 5/16" or 1/4" hardware.
6. Plumb the inlet air into the inlet on water separator.
7. Plumb the outlet air into the pressure regulator.



8. Connect drain tubing to solenoid drain. See figure 4. Line should run to a floor drain or to a covered vessel for collection.
9. Set timer on drain controllers at 1/2 sec ON & 5 min OFF. Watch drain line to determine amount of moisture present. Adjust the timer as needed to remove the amount of moisture in your system.
10. Place the supplied oil coalescing replacement sticker somewhere visible to remind of when the filter needs to be replaced.
11. Now that the unit is assembled and mounted, slowly re-pressurize the system.

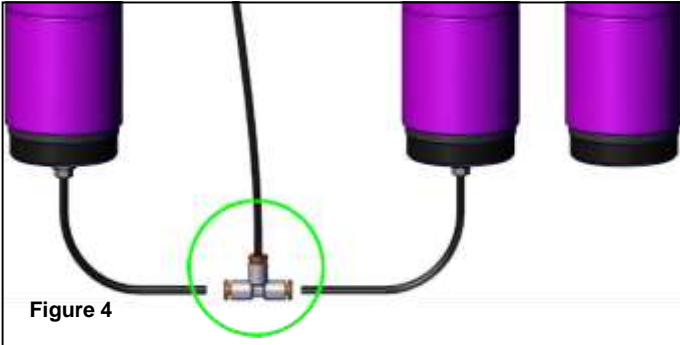
MAINTENANCE INSTRUCTIONS

Your safety is important. System pressure must be released prior to any installation or service. Failure to follow maintenance procedures will void warranty.

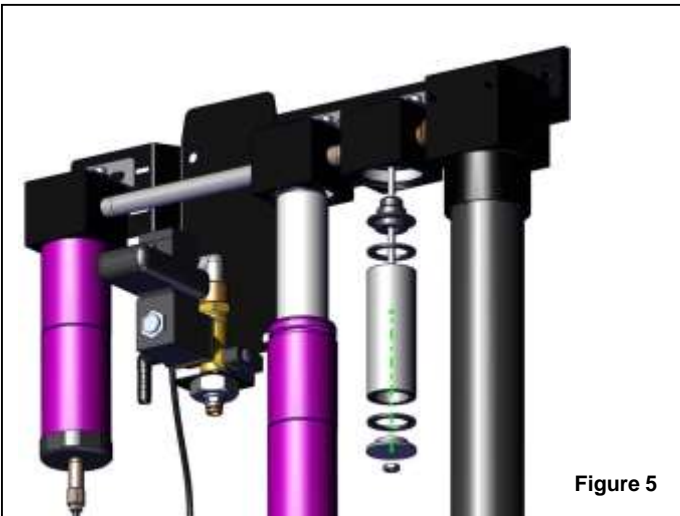
Replace 2nd stage oil coalescing filter & 3rd stage activated carbon filter every 6 months. Oil coalescing & activated carbon filters follow same element replacement routine.

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MAINTENANCE INSTRUCTIONS *cont.*



1. Remove all system pressure.
2. Unplug unit from power supply. Disconnect 1st and 2nd stage drain tubing by pushing in on orange outer connections. See Figure 4
2. Remove tube from filter head by holding filter head and rotating tube counter-clockwise.
3. Using a 5/16 wrench, remove baffle nut from threaded rod below element.
4. Remove bottom baffle, bottom gasket, filter element, top gasket, top adaptor, and O-ring. See Figure 5



5. Replace filter element and hardware in reverse order from previous steps. Tighten until filter element can no longer spin freely. **DO NOT OVER TIGHTEN NUT!**
6. Reinstall outer tube by rotating clockwise onto filter head. Reconnect drain tubing and plug unit back into wall.
7. Slowly pressurize the unit.