



Installation Instructions: 15 SCFM Membrane Dryer

# 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

Incoming contaminated air passes through the inlet ball valve before entering the first stage Tsunami Water Separator where water and particulates are removed down to 10 micron. The air then travels through a second stage oil coalescing filter where oil aerosols are filtered down to .001 ppm and particulates are trapped down to .01 micron. 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  $-40^{\circ}$ F. The air exits through the outlet regulator.

### 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

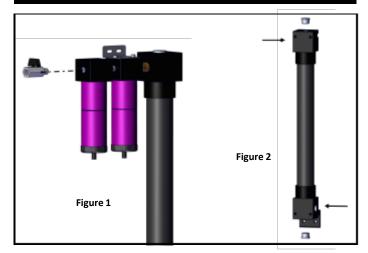
6 SCFM flow recommended to achieve 100°F dew point suppression

### SERVICE REQUIREMENTS

Mandatory every 6 months.

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

#### DRYER INSTALLATION



- 1. Mount the dryer in an upright position. Mount on sturdy wall or frame using the supplied mounting brackets. *Note: If using dryer in an automotive application, install outside of spray booth. Bake cycles may cause premature aging of the membrane tubes inside the unit.*
- 2. Install the supplied ball valve before inlet of dryer. See figure 1
- If vertical installation is appropriate for your application installation, proceed to step 6.
- 5. If horizontal installation is required, remove membrane from brass fitting on outlet of oil coalescing filter.
- Use a 7/8" or adjustable wrench to remove the regulator and fitting from outlet side of membrane.
- 7. Using a 10mm hex key to swap plugs on inlet and outlet ports of membrane dryer. See figure 2



- 5. Replace Regulator in open port. Be sure to follow flow descriptions on membrane dryer.
- 1. Using proper thread sealant, install pressure gauge into regulator. See figure 3
- 5. Plumb facility inlet air into the first filter stage using proper thread sealant.
- 6. Plumb the outlet air into the pressure regulator using proper thread sealant.
- 7. Place the supplied oil coalescing replacement sticker somewhere visible to remind of when the filter needs to be replaced.

## DRYER OPERATION INSTRUCTIONS

- 1. Open the inlet ball valve slowly to pressurize the dryer and all downstream plumbing.
- Slowly open the ball valve and pressurize the dryer. If the dryer is pressurized too quickly the float drains can falsely open and discharge air. If this happens, close the inlet ball valve and then slowly re-pressurize unit again.
- While the dryer is pressurized, a small amount of air will continuously discharge from the membrane dryer. This is referred to as sweep air.
- 4. Close the inlet ball valve when finished using the dryer.