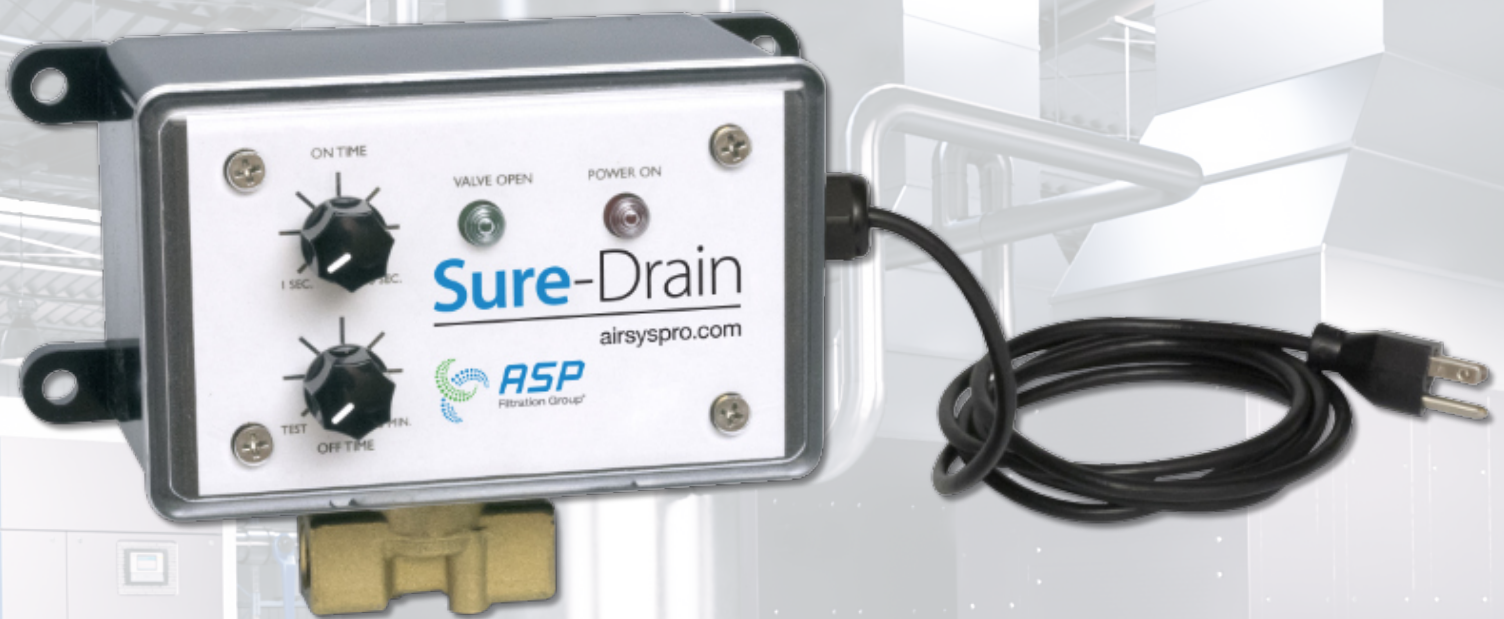


## *Installation & Operation Manual*



# INSTALLATION INSTRUCTIONS FOR THE SURE DRAIN

## INTRODUCTION

The SURE DRAIN is designed for trouble-free draining of unwanted accumulations of condensate and other foreign matter from compressed air systems.

## TESTING THE SURE-DRAIN

1. Plug the SURE-DRAIN into a 115V 60HZ grounded socket.
2. Set in "TEST" position. The SURE-DRAIN will cycle on (1-15 seconds as set) and off for 5 seconds in the "TEST" position.
3. Removing and reapplying the power will cause the drain valve to open for the set ON TIME (1-15 seconds).

## INSTALLATION and ADJUSTMENTS

**1. USE CAUTION: COMPRESSED AIR CAN BE DANGEROUS.** Be sure the pressure vessel on which the drain will be installed is depressurized prior to any attempt to install the SURE-DRAIN. **DO NOT REMOVE** the cover of the drain while it is plugged in. If the drain does not seem to be working properly, contact your distributor for return authorization. Any attempt to repair the drain without authorization will **VOID WARRANTY.**

2. The SURE-DRAIN drain valve must be installed so that the flow of the condensate is in the same direction as the arrow on the valve. Improper installation will cause the valve to leak and could damage the valve seat. For optimum life and performance, the drain or valve should be mounted in a vertical and upright position. This would reduce the possibility of any foreign matter accumulating in the core tube area. The drain should be installed as close to source as possible.

3. Fully drain the vessel by opening an auxiliary gate valve (see Diagram 1) or switch the SURE-DRAIN to test as described above (Testing the SURE-DRAIN)

4. When all of the condensate has drained, set the OFF TIME to the maximum 50 minute setting and the ON TIME to the maximum 15 seconds.

5. Return prior to the time that the drain is expected to open and check to see how long it takes for the valve to exhaust the liquid. If at the end of the drain open period all the liquid has not been expelled, adjust the OFF TIME downward and repeat steps 3, 4, and 5.

6. Set the ON TIME equal to the amount of time it takes to drain the vessel. We suggest increasing the time by 20% to compensate for small fluctuations in air system usage or climatic changes.

7. The drain should be checked periodically to ensure a proper setting was achieved. In climates with large changes in humidity, the drain should be checked and reset accordingly.

## WARRANTY

The SURE-DRAIN and valves are warranted to be free from defects in workmanship and materials for a period of one year from the date of shipment. The liability of the manufacturer and/or distributor is limited to repair or replacement of the drain at its option. In no event shall the manufacturer and/or distributor be liable for special or consequential damages or for any delay in performance of this warranty.

DIAGRAM 1 - INSTALLATION

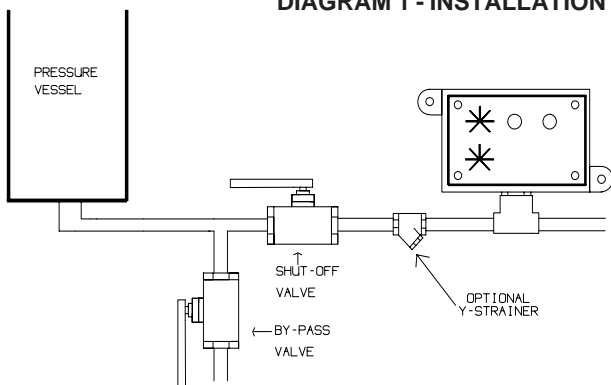
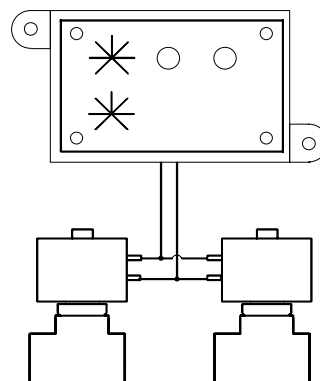


DIAGRAM 2 - WIRING MULTI-VALVE DRAIN



1. Wire in parallel
2. Maximum of four valves per controller.