

30 SCFM Desiccant Air Dryer

Installation and Maintenance Instructions

Desiccant dryers are a convenient and cost effective means of ensuring your sensitive pneumatic applications are not exposed to damaging moisture. Compact in size, and no external power sources required, these desiccant dryers can be used almost anywhere.

When air is compressed, the temperature of the air is increased as is its capacity to hold moisture. As the hot moist air travels downstream through the lines, it cools, allowing the moisture to condense. Aftercoolers, filters, drain traps, and driplegs are effective for removing liquid condensate; however, this Desiccant Dryer is designed to remove residual water vapor and aerosols with a very adsorbant bed of silica gel beads (desiccant).

This Desiccant Dryer is designed so that as air enters the unit and passes through the desiccant any moisture is adsorbed into the pores of the desiccant reducing the moisture content (dew point) of the outlet air. When the desiccant reaches its level of saturation (if using indicating desiccant the color will change from blue to pink) the dew point of the outlet air will begin to rise. At that point the desiccant should be replaced or regenerated by heating in a drying oven.

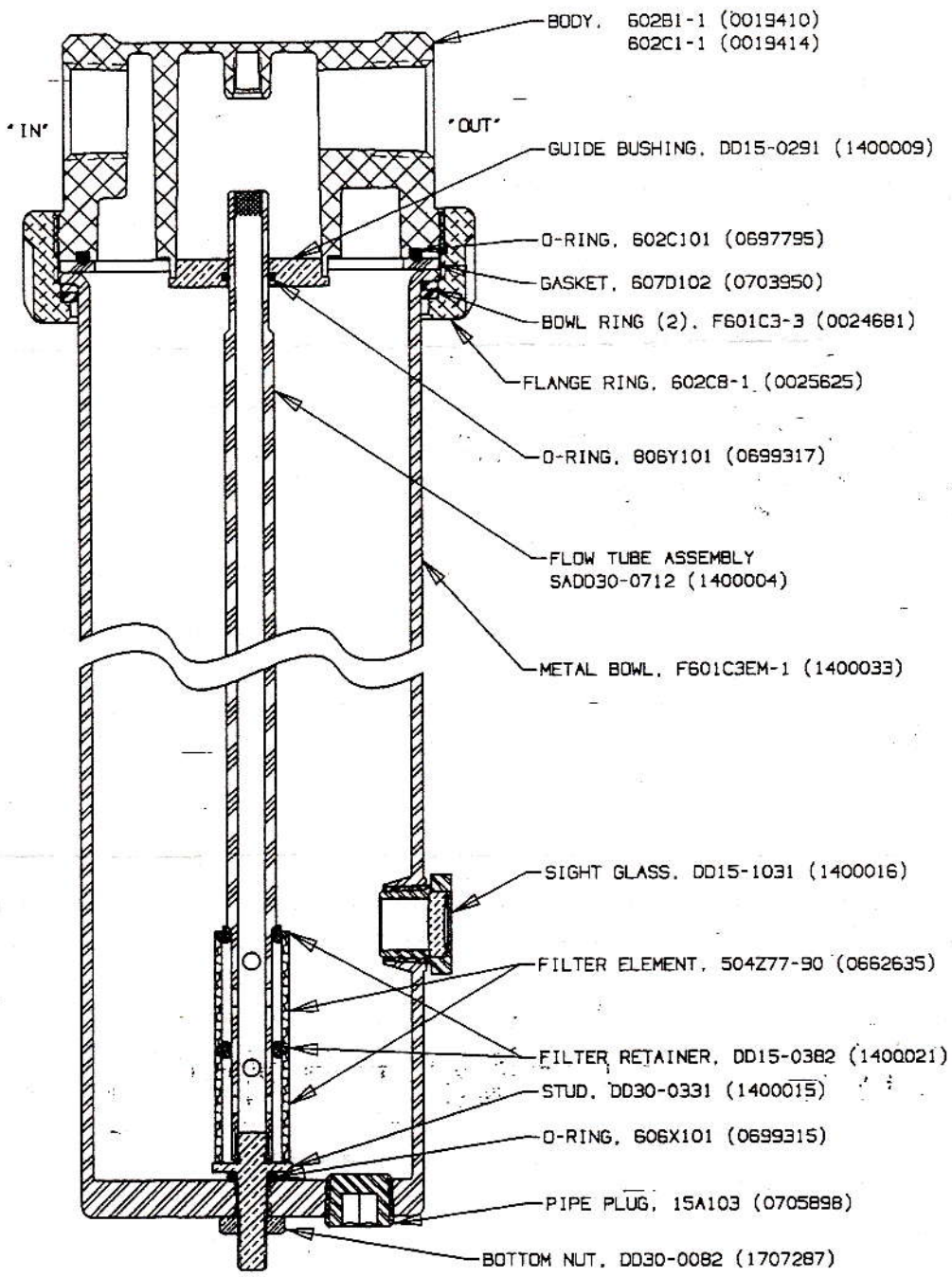
Installation:

To insure maximum drying efficiency, always install a moisture separator/particulate style filter and a coalescing filter upstream of the Desiccant Dryer. This will increase the life of the desiccant and help prevent oil contamination. Some applications may require the installation of a 5 μ or smaller particulate filter downstream of the desiccant dryer to catch any residual desiccant dust. All Watts Desiccant dryers are individually tapped (NPT) to allow direct mounting to piping. Before installing, blow out pipe line to remove scale and other foreign matter. This unit has DRYSEAL pipe threads; use pipe compound or tape sparingly to male threads only. Install units as near as possible to the equipment being serviced in pipeline so that flow is with the arrows as indicated on faces of body.

Maintenance:

- 1.) **Important:** Depressurize dryer before servicing!
- 2.) Unscrew the metal collar holding the dryer bowl to head and remove bowl and collar.
- 3.) Dump old desiccant out of bowl.
- 4.) If the pressure drop across the dryer has become unacceptable the bronze element in bottom of bowl may have become clogged. If this happens blow air through the flow tube by placing a blow gun at the top of the tube. If element replacement is needed disassemble flow tube from bowl by removing the end cap and bottom nut from the bottom of the bowl, replace element and reassemble tube in bowl.
- 5.) Refill bowl with new or regenerated desiccant. The 30 SCFM model holds 5 lbs. of desiccant.
- 6.) Reassemble bowl to head making sure that the O-Ring in head is in place.

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DESICCANT TYPE USED
SILICA GEL (ALL INDICATING)
ACTIVATED ALUMINA (NON INDICATING)

MAX OPERATING TEMP: 180°F (82°C)
 MAX WORKING PRESS: 300 PSIG (20.6 BAR)
 OPTIMUM WORKING TEMP: BELOW 100°F (37.8°C)

LIMITED WARRANTY

The Company warrants each product against defects in material and workmanship for a period of one year from the date of original shipment. In the event of such defects within the warranty period, the company will, at its option, replace or recondition the product without charge. This shall constitute the exclusive remedy for breach of warranty, and the company shall not be responsible for any incidental or consequential damages, including without limitation, damages or other costs resulting from labor charges, delays, vandalism, negligence, fouling caused by foreign material, damage from adverse air conditions, chemicals, or any other circumstances over which the Company has no control. This warranty shall be invalidated by any abuse, misuse, misapplication or improper installation of the product.

The liability of the Company for all loss or damage resulting from non-conforming goods or tender, including breach of any and all warranties, shall be limited to refund of the purchase price of the particular goods with respect to which the loss or damage occurred.

THE COMPANY MAKES NO OTHER WARRANTY. ALL OTHER WARRANTIES, ORAL OR WRITTEN, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A SPECIFIC PURPOSE ARE HEREBY EXCLUDED AND DISCLAIMED. IN NO EVENT SHALL THE COMPANY BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.