

 **WARNING**

To avoid unpredictable system behavior that can cause personal injury and property damage:

- Disconnect electrical supply (when necessary) before installation, servicing, or conversion.
- Disconnect air supply and depressurize all air lines connected to this product before installation, servicing, or conversion.
- Operate within the manufacturer's specified pressure, temperature, and other conditions listed in these instructions.
- Medium must be moisture-free if ambient temperature is below freezing.
- Service according to procedures listed in these instructions.
- Installation, service, and conversion of these products must be performed by knowledgeable personnel who understand how pneumatic products are to be applied.
- After installation, servicing, or conversion, air and electrical supplies (when necessary) should be connected and the product tested for proper function and leakage. If audible leakage is present, or the product does not operate properly, do not put into use.
- Warnings and specifications on the product should not be covered by paint, etc. If masking is not possible, contact your local representative for replacement labels.

**Safety Guide**

For more complete information on recommended application guidelines, see the Safety Guide section of Pneumatic Division catalogs or you can download the **Pneumatic Division Safety Guide** at: [www.wattsfluidair.com](http://www.wattsfluidair.com)

**Introduction**

Desiccant dryers are a convenient and cost effective means of ensuring your sensitive pneumatic applications are never exposed to damaging moisture. Compact in size, and no external power sources required, 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 drip legs are effective for removing liquid condensate. However, a desiccant dryer is designed to remove residual water vapor and aerosols with a very absorbent bed of silica gel beads (desiccant).

The desiccant dryer is designed so that, as air enters the unit and passes through the desiccant, any moisture is absorbed 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 to a temperature above 212°F, but not over 350°F. Follow these instructions when installing, operating, or servicing the product.

**Application Limits**

These products are intended for use with compressed air in industrial applications. For other applications, consult factory before use.

**Operating Pressure:**

	kPa	PSIG	bar
<b>Maximum Inlet Pressure</b>	2068	300	21.0

**Operating Temperature:**

<b>Maximum Operating Temperature</b>	82°C (180°F)
<b>Optimum Operating Temperature</b>	Below 37.8°C (100°F)

**Installation**

To ensure maximum drying efficiency, always install a moisture separator / particulate style filter (F602) and a coalescing filter (F701) upstream of the desiccant dryer. This will increase the life of the desiccant and prevent oil contamination. Some applications may require the installation of a 5 micron or smaller (F702 - 0.9 micron) particulate filter downstream of the desiccant dryer to catch any residual desiccant dust. All 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. Install in pipeline so that flow is with the arrows as indicated on faces of dryer body.

**Maintenance**

1. **IMPORTANT: Depressurize dryer before servicing!**
2. Unscrew the metal collar holding the dryer bowl to the 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. Model DD15 holds 2-1/2 lb. of desiccant, model DD30 holds 5 lb. of desiccant and model DD60 holds 10 lb. of desiccant. To regenerate Silica Gel desiccant, bake desiccant for 4 hours at 275°F.
6. Reassemble bowl to head, making sure that the O-Ring in the head is in place.

 **WARNING**

**FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS AND/OR SYSTEMS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.**

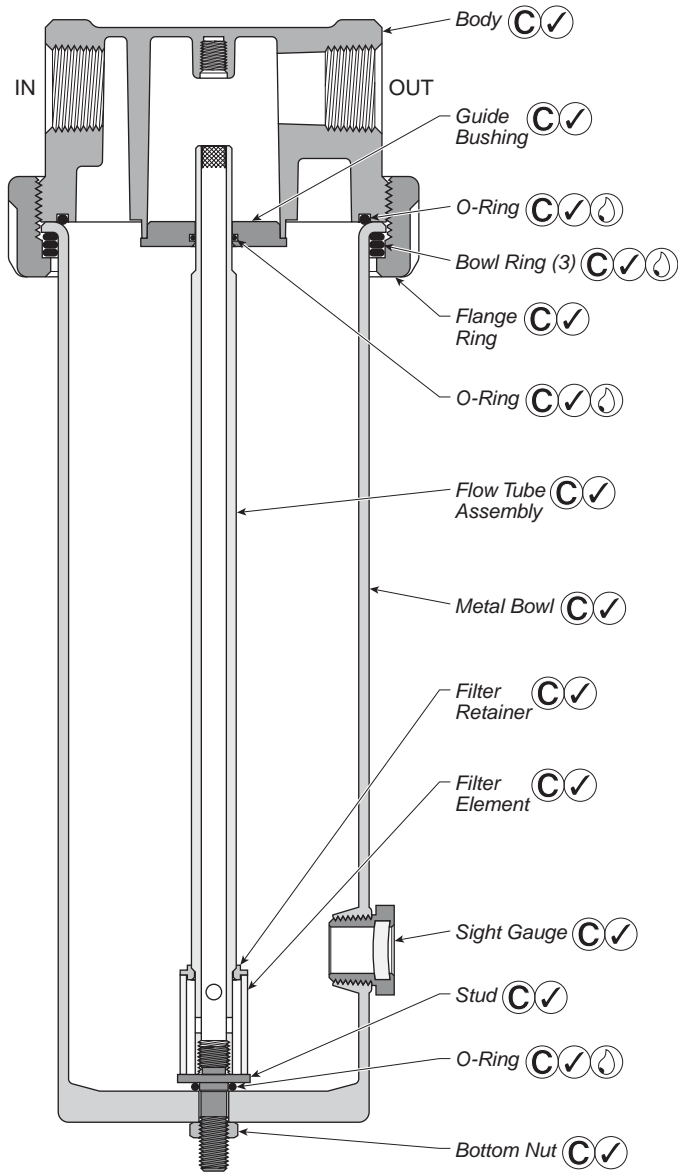
This document and other information from The Company, its subsidiaries and authorized distributors provide product and/or system options for further investigation by users having technical expertise. It is important that you analyze all aspects of your application, including consequences of any failure and review the information concerning the product or systems in the current product catalog. Due to the variety of operating conditions and applications for these products or systems, the user, through its own analysis and testing, is solely responsible for making the final selection of the products and systems and assuring that all performance, safety and warning requirements of the application are met.

The products described herein, including without limitation, product features, specifications, designs, availability and pricing, are subject to change by The Company and its subsidiaries at any time without notice.

**EXTRA COPIES OF THESE INSTRUCTIONS ARE AVAILABLE FOR INCLUSION IN EQUIPMENT / MAINTENANCE MANUALS THAT UTILIZE THESE PRODUCTS. CONTACT YOUR LOCAL REPRESENTATIVE.**

**Service Kits / Parts Available**

**DD15**

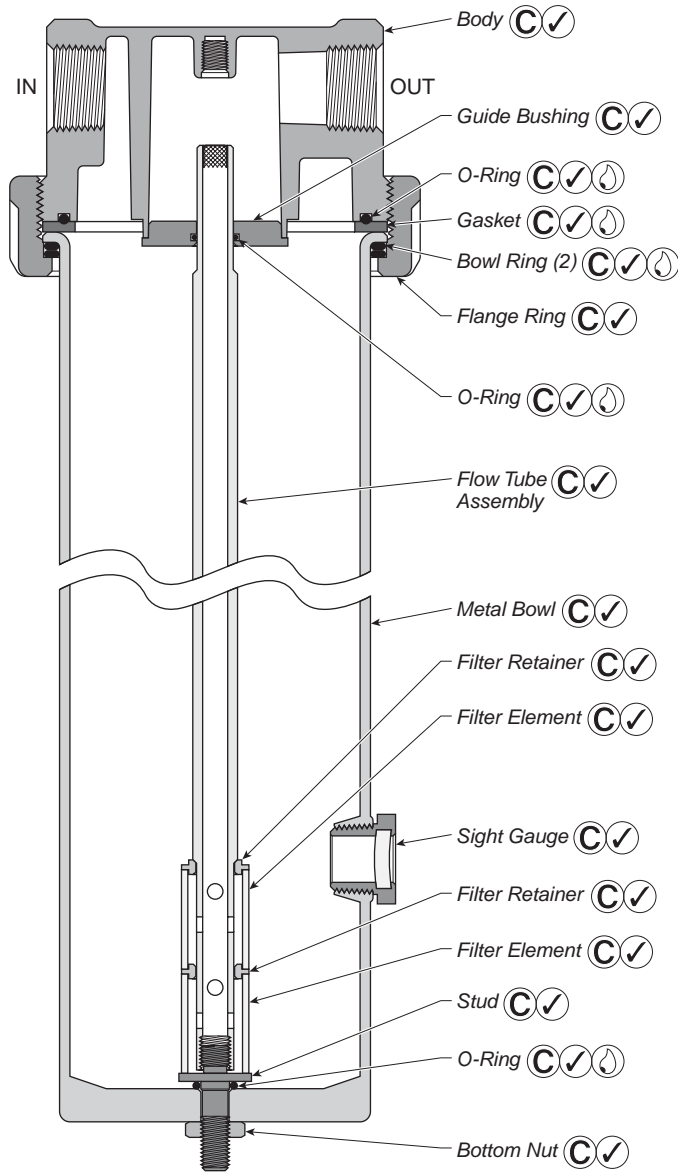


Description	Part Number
Desiccant - Silica Gel 100% Indicating – 6 x .88 lb. Bags 24 x .88 lb. Bags	SGM100-1 SGM100-4
Flow Tube Repair Kit (Tube, Filter Element(s), Adaptor)	RKDD15-02-06
Mounting Brackets (Pair of Pipe Mounted Brackets) 1/4 Inch Pipe Size 1 Inch Pipe Size	SA200YW57 SA200CW57
Spring Check Valve for Inlet (250 PSIG max.) (Maximizes Life of Desiccant) 1/4 Inch NPT 3/8 Inch NPT 1/2 Inch NPT 3/4 Inch NPT	003393001 003393002 003393003 003393004

- ☞ Lightly grease with provided lubricant.
- ✓ Inspect for nicks, scratches, and surface imperfections. If present, reduced service life is probable and future replacement should be planned.
- Ⓒ Clean with lint-free cloth.

**Service Kits / Parts Available**

**DD30**

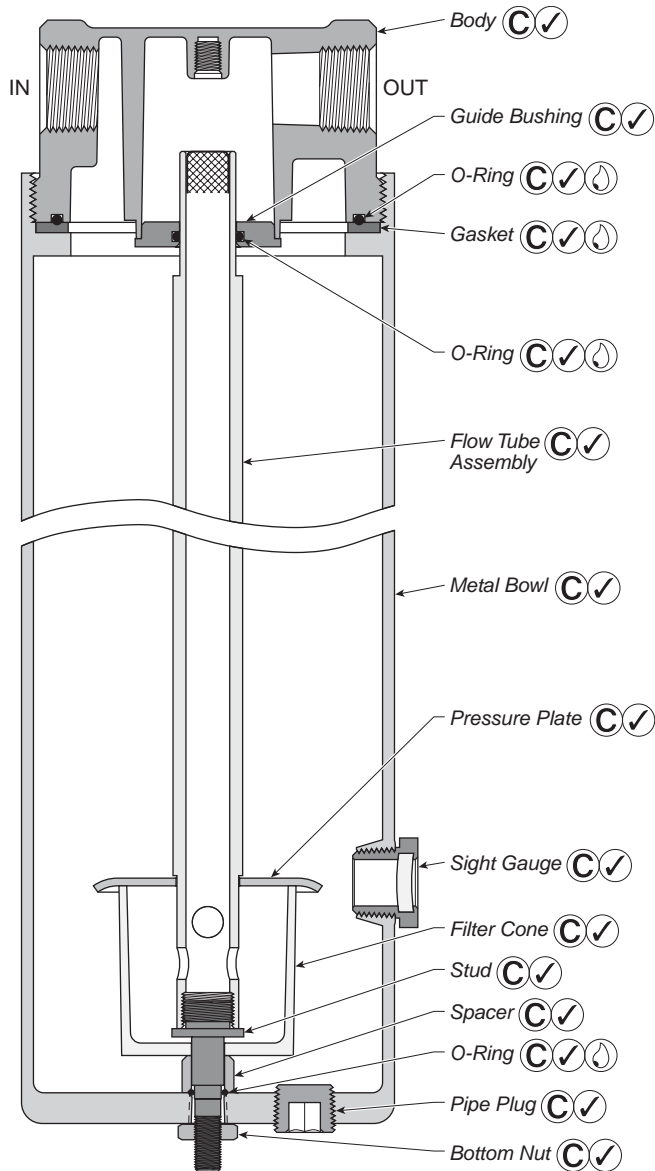


Description	Part Number
Desiccant - Silica Gel 100% Indicating – 6 x .88 lb. Bags 24 x .88 lb. Bags	SGM100-1 SGM100-4
Flow Tube Repair Kit (Tube, Filter Element(s), Adaptor)	RKDD30-03-08
Mounting Brackets (Pair of Pipe Mounted Brackets) 1/4 Inch Pipe Size 1 Inch Pipe Size	SA200YW57 SA200CW57
Spring Check Valve for Inlet (250 PSIG max.) (Maximizes Life of Desiccant) 1/4 Inch NPT 3/8 Inch NPT 1/2 Inch NPT 3/4 Inch NPT	003393001 003393002 003393003 003393004

- ☹ Lightly grease with provided lubricant.
- ✓ Inspect for nicks, scratches, and surface imperfections.  
If present, reduced service life is probable and future replacement should be planned.
- C Clean with lint-free cloth.

**Service Kits / Parts Available**

**DD60**



Description	Part Number
Desiccant - Silica Gel 100% Indicating – 6 x .88 lb. Bags 24 x .88 lb. Bags	SGM100-1 SGM100-4
Flow Tube Repair Kit (Tube, Filter Element(s), Adaptor)	RKDD60-03-08
Spring Check Valve for Inlet (250 PSIG max.) (Maximizes Life of Desiccant)	003393001 003393002 003393003 003393004

- Ⓓ Lightly grease with provided lubricant.
- ✓ Inspect for nicks, scratches, and surface imperfections. If present, reduced service life is probable and future replacement should be planned.
- Ⓒ Clean with lint-free cloth.