
 **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.

 **CAUTION**

Polycarbonate bowls, being transparent and tough, are ideal for use with Filters and Lubricators. They are suitable for use in normal industrial environments, but should not be located in areas where they could be subjected to direct sunlight, an impact blow, nor temperatures outside of the rated range. As with most plastics, some chemicals can cause damage. Polycarbonate bowls should not be exposed to chlorinated hydrocarbons, ketones, esters and certain alcohols. They should not be used in air systems where compressors are lubricated with fire-resistant fluids such as phosphate ester and di-ester types.

Metal bowls are recommended where ambient and/or media conditions are not compatible with polycarbonate bowls. Metal bowls resist the action of most such solvents, but should not be used where strong acids or bases are present or in salt laden atmospheres. Consult the factory for specific recommendations where these conditions exist.

**TO CLEAN POLYCARBONATE BOWLS USE MILD SOAP AND WATER ONLY! DO NOT** use cleansing agents such as acetone, benzene, carbon tetrachloride, gasoline, toluene, etc., which are damaging to this plastic.

Bowl guards are recommended for added protection of polycarbonate bowls where chemical attack may occur.

## Introduction

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.

### Maximum Recommended Pressure Drop:

	kPa	PSIG	bar
Coalescing Filter	70	10	0.7

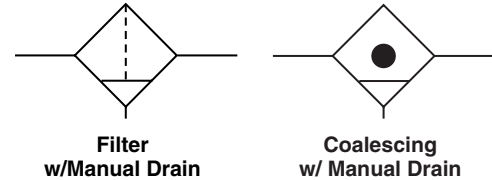
### Operating Pressure:

	kPa	PSIG	bar
Maximum Inlet Pressure	2068	300	21.0

**Operating Temperature Range:** 4°C to 82°C  
 (40°F to 180°F)

**Internal Auto Drain Option limits temperature to a maximum of 52°C (125°F).**

## ANSI Symbols



## Installation

Proper installation of a filter in a compressed air system can have a considerable effect on the cost and efficiency of the filter. It is highly recommended that a particulate filter be installed upstream of the coalescing filter to remove 40 micron and larger size particles and separate large droplets of moisture from the air line. All filters must be installed with the bowl in a vertical orientation. The correct passage of air through a coalescing filter is for the air to flow from the inside of the element to the outside. The correct passage of air through a particulate or adsorber filter is for the air to flow from the outside of the element to the inside.

## Maintenance

Never let the liquid level in bowl reach the base of the filter element. Because of the high degree of water and oil removal efficiency of high efficiency compressed air filters, it is recommended that an internal automatic drain, external automatic drain, or electronic drain be used to automatically drain the bowl.

## Differential Pressure Indicator Option

The differential pressure indicator option available on this unit is designed to provide early detection of a clogged, coalescing filter element. As the filter element becomes clogged, the red indicator will start to rise while air is flowing through the unit. When the pressure drop across the element reaches 10 to 12 PSI, the red indicator will be in full view and the element should be replaced. Failure to replace the element when the pressure drop exceeds 10 PSI can be costly, both in terms of reduced air quality due to contaminant reentrainment and the power cost associated with forcing compressed air through an obstructed filter.

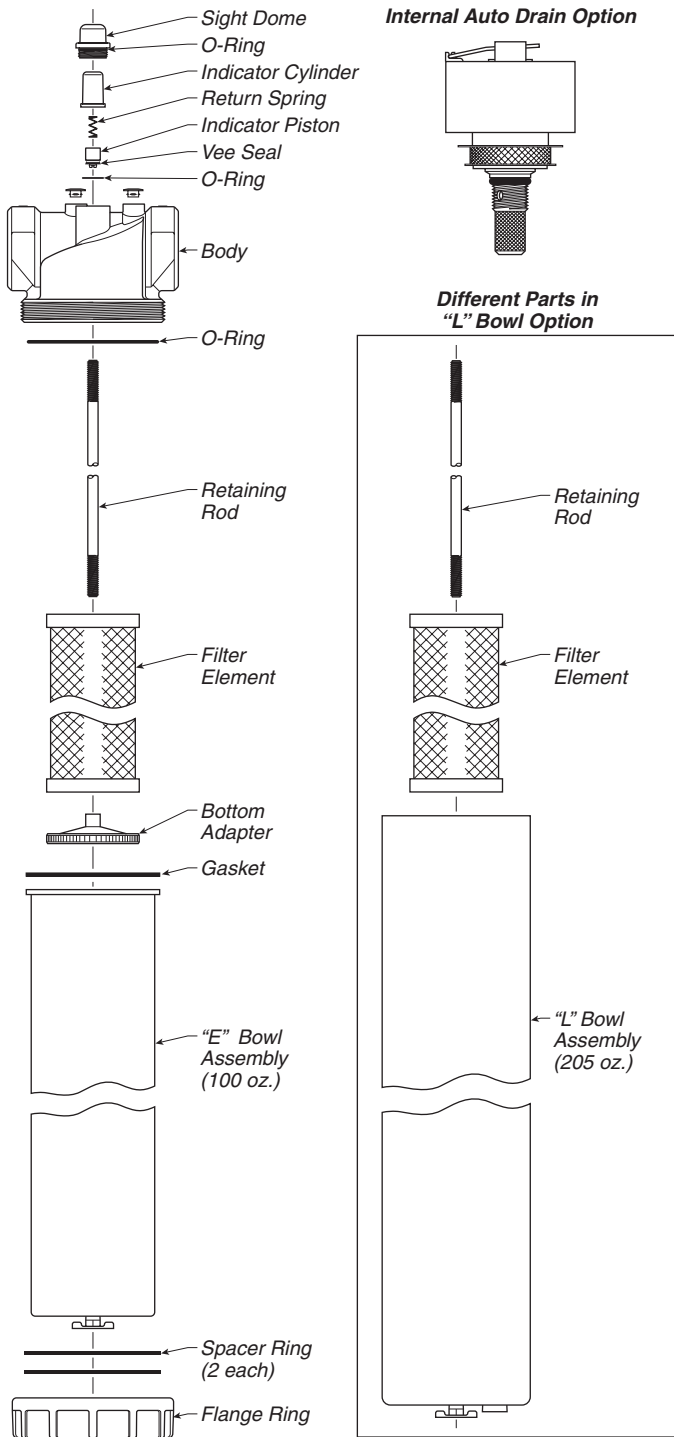
**Note: The Differential Pressure Pop-Up Indicator Option is only designed to be used with coalescing filter elements.**

## Draining Instructions

To drain, turn drain cock on bottom of bowl clockwise (from bottom). When all liquid is drained, turn drain cock counterclockwise (from bottom) to re-seal.

## Filter Element Replacement

To replace the filter element, relieve all air pressure from the filter. Unscrew flange ring (counterclockwise from bottom) and remove bowl. Remove the bottom adapter and the filter element. To reassemble, install element, bottom adapter, bowl, and flange ring.



### Internal Auto Drain Option

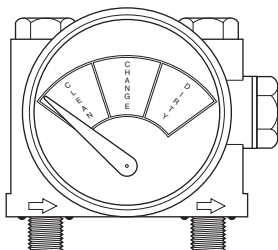
If your filter is equipped with an internal automatic drain (SA602MD or SA702MD), it is designed to automatically drain any liquid that accumulates in the bottom of the bowl. However, the bowl may be drained manually by turning the drain cock clockwise (from bottom). If the auto drain is not functioning properly, remove the auto drain assembly from the filter bowl and clean the screen. Disassemble the lever actuation mechanism by snapping the lever out of the plastic retainer on the float and remove the pin. Remove the disc and float. Carefully break away the interface fit between the plastic housing and the brass body, and remove the piston and spring. Clean all parts thoroughly with soapy water or alcohol, and clean or replace all seals as necessary. Ensure that the small orifices in the housing and the piston are not clogged. Carefully reassemble all parts.

### Service Kits / Parts Available

Description	Part Number
Bowl Kit	
“E” - Aluminum Bowl, 300 PSI Maximum Pressure	BK603C
“L” - Steel Bowl, 300 PSI Maximum Pressure	F601E3EN/BK (Bowl Only)
Replacement Element Kits	
Particulate Filters with 0.9 Micron Element	
F702-10 with E Bowl (365 SCFM)	F702-P9-0775
F702-12 with E Bowl (417 SCFM)	F702-P9-0775
F702-12 with L Bowl 542 SCFM)	F702-P9-0776
Coalescing Filters with 0.7 Micron Element	
F701-10 with E Bowl (310 SCFM)	F701-C7-0775
F701-12 with E Bowl (350 SCFM)	F701-C7-0775
F701-12 with L Bowl (450 SCFM)	F701-C7-0776
Coalescing Filters with 0.3 Micron Element	
F701-10 with E Bowl (220 SCFM)	F701-C3-0775
F701-12 with E Bowl (250 SCFM)	F701-C3-0775
F701-12 with L Bowl (325 SCFM)	F701-C3-0776
Charcoal Adsorber Element	
F702-10 with E Bowl (220 SCFM)	F702-OA-0775
F702-12 with E Bowl (250 SCFM)	F702-OA-0775
F702-12 with L Bowl (325 SCFM)	F702-OA-0776
Manual Drain	SA600Y7
Pop-Up Indicator Repair Kit (Sight Dome, Indicator Cylinder, Return Spring, Indicator Piston, O-Rings)	RK701P
Plug and O-Ring Assembly (For Units Wwithout Pop-Up indicator)	SA508Y4
Repair Kit for All Internal Auto Drains	RK602MD/M4

### Optional Differential Pressure Gauge DP276-P

This gauge is available as an accessory to the F700 High Efficiency Filter series to aid in monitoring the condition of either a Particulate, Coalescing, or Adsorbing style element. It may be used on all filters not equipped with a Pop-Up style Differential Pressure Indicator.



### Accessories

Description	Part Number	Bowl Type
Internal Automatic Drain		
“T” Option, 250 PSI Max. Pressure	SA702MD	All
“R” Option, 175 PSI Max. Pressure	SA602MD	All

### 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.

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