

Pneumatic Division
Richland, Michigan 49083
269-629-5000

Installation & Service Instructions
IS-F602

F602 Particulate Filter

ISSUED: June, 2009

Supersedes: July, 2005

Doc. #ISF602, EN #090316, Rev. 3

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 polyurethane 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.

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

Introduction

Follow these instructions when installing, operating, or servicing the product.

Application Limits

These products are intended for use in general purpose compressed air systems only.

Maximum Recommended Pressure Drop:

	kPa	PSIG	bar
Particulate Filter	70	10	0.7

With Polycarbonate Bowl

	kPa	PSIG	bar
Operating Pressure Maximum	1034	150	10

Operating Temperature Range 4°C to 49°C
(40°F to 120°F)

With Aluminum Bowl

	kPa	PSIG	bar
Operating Pressure Maximum	2068	300	21

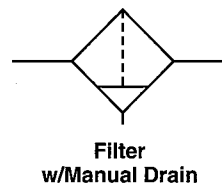
Operating Temperature Range 4°C to 82°C
(40°F to 180°F)

With Zinc Bowl with Sight Gauge

	kPa	PSIG	bar
Operating Pressure Maximum	1723	250	17.0

Operating Temperature Range 4°C to 66°C
(40°F to 150°F)

ANSI Symbols



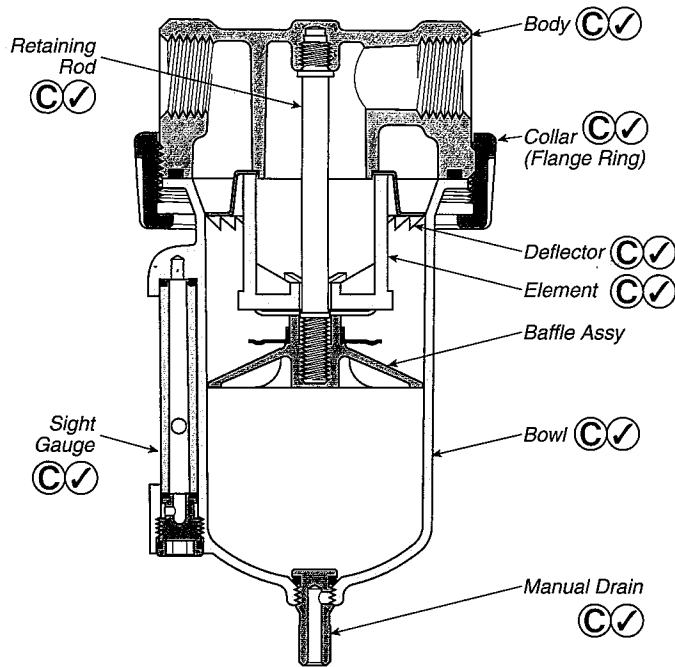
WARNING

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.



Ⓒ 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.

Installation

1. The filter should be installed with reasonable accessibility for service whenever possible – repair service kits are available. Keep pipe or tubing lengths to a minimum with inside clean and free of dirt and chips. Pipe joint compound should be used sparingly and applied only to the male pipe – never into the female port. Do not use PTFE tape to seal pipe joints – pieces have a tendency to break off and lodge inside the unit, possibly causing malfunction. Also, new pipe or hose should be installed between the filter and equipment being protected.
2. The upstream pipe work must be clear of accumulated dirt and liquids.
3. Select a filter location as close as possible to the equipment being protected and upstream of any pressure regulator.
4. Install filter so that air flows in the direction of arrow on body.
5. Install filter vertically with bowl drain mechanism at the bottom. Free moisture will thus drain into the sump “quiet zone” at the bottom of the bowl.

Operation and Service

1. To service the filter, it is not necessary to remove the unit from the airline. Manual drain filters must be drained regularly before the separated moisture and oil reaches the bottom of the lower baffle.
2. The particulate Filter Element should be removed and replaced when pressure differential across the filter is 10 PSIG.
3. Shut off air supply and depressurize the unit, before servicing.
4. Carefully remove Bowl by turning counterclockwise.
5. Remove Filter Element, Baffle, and Retainer.
6. Wipe parts, clean with soapy water or denatured alcohol, **but do not use denatured alcohol on plastic bowl or sight gauge**. If using compressed air to blow dry, be sure to wear appropriate eye protection.
7. After servicing, apply system pressure and check for air leaks. If leakage occurs, **Do Not Operate** — conduct servicing again.

Kits Available

Description	Product Number	Bowl Type	Port Size
Bowls			
Polycarbonate	BK602Y	B	1/4", 3/8"
Zinc with Sight Gauge	BK605WY	W	1/4", 3/8"
Polycarbonate	BK602A	B	1/2"
Aluminum	BK603A	E	1/2"
Zinc with Sight Gauge	BK605WA	W	1/2"
Aluminum	BK603B	E	3/4" thru 2-1/2"
Zinc with Sight Gauge	BK605WB	W	3/4" thru 2-1/2"
Element Kits			
5 Micron	EK602VY	—	1/4", 3/8"
40 Micron	EK602Y	—	1/4", 3/8"
5 Micron	EK602VA	—	1/2"
40 Micron	EK602A	—	1/2"
5 Micron	EK602VB	—	3/4" thru 1-1/2"
40 Micron	EK602B	—	3/4" thru 1-1/2"
5 Micron Bronze	EK602VB-BR	—	3/4" thru 1-1/2"
40 Micron Bronze	EK602B-BR	—	3/4" thru 1-1/2"
40 Micron	EK602G	—	2", 2-1/2"
Drain Kits			
Manual	SA600Y7-1	All	All Sizes
Piston (Poly Bowl Only)	RK602SY	B	1/4", 3/8"
Piston (Poly Bowl Only)	RK602SA	B	1/2"
External Auto. (8 oz. Poly & Metal)	SA602D	B	1/2"
External Auto. (16 oz. Aluminum)	SA603D	E	1/2"
Internal Auto.	SA602MD	All	1/2"
External Auto. (16 oz. Metal Bowl)	SA602D	W	3/4" thru 2-1/2"
External Auto. (32 oz. Aluminum)	SA603D	E	3/4" thru 2-1/2"
Internal Auto.	SA602MD	All	3/4" thru 2-1/2"
Mounting Bracket Kits			
	SAF602-0571	—	1/4", 3/8"
	SAF602-0572	—	1/2"
(2 per unit required)	SA200AW57	—	3/4"
(2 per unit required)	SA200CW57	—	1"
Repair Kits			
Deflector, Baffle Assy, Retaining Rod	RK602Y	—	1/4", 3/8"
Deflector, Baffle Assy, Retaining Rod	RK602A	—	1/2"
Deflector, Baffle Assy, Retaining Rod	RK602B	—	3/4", 1"
Deflector, Baffle Assy, Retaining Rod	RK602C	—	1-1/4", 1-1/2"
Deflector, Baffle Assy, Retaining Rod	RK602G	—	2", 2-1/2"
External Auto Drain (Short Float 602)	RK602D	—	1/2" thru 2-1/2"
External Auto Drain (Tall Float 603)	RK603D	—	1/2" thru 2-1/2"
Internal Auto Drain	RK602MD	—	1/4" thru 2-1/2"
Metal Bowl with Sight Gauge	RKB605WY	—	1/4", 3/8"
Metal Bowl with Sight Gauge	RKB605WA	—	1/2"