

 **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 hydro-carbons, 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.

Metal bowl guards are recommended for all applications.

 **CAUTION:**

REGULATOR PRESSURE ADJUSTMENT – The working range of knob adjustment is designed to permit outlet pressures within their full range. Pressure adjustment beyond this range is also possible because the knob is not a limiting device. This is a common characteristic of most industrial regulators, and limiting devices may be obtained only by special design.

 **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 Parker Hannifin Corporation, 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 system 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 Parker Hannifin Corporation and its subsidiaries at any time without notice.

Offer of Sale

The items described in this document are hereby offered for sale by Parker Hannifin Corporation, its subsidiaries or its authorized distributors. This offer and its acceptance are governed by the provisions stated on the separate page of this document entitled "Offer of Sale".

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Particulate and Coalescing Filters

Filtration

The average 10-hp compressor handles four million cubic inches of air per hour. This air can contain billions of contaminating particles.

At high concentration and high speed, these particles can be extremely harmful. They block orifices, erode components, and clog clearances between moving parts.

In addition, when ambient air is drawn into a compressor, it can, depending on weather conditions, have relative humidity up to 100 percent. As air is compressed and cooled, some water vapor¹ condenses out as free water, and even with a compressor aftercooler, some moisture is swept downstream into the air system. This may result in rusted pneumatic tools and components, contaminated lubricants, and frozen air lines during low temperature periods.

Other types of foreign matter in air lines include: impurities generated within the air line, such as wear particles, pipe scale and rust; construction and assembly debris; and contaminants introduced into the air system during maintenance or through leakage passages.

All these contaminants, which are of a size to cause air stream problems, should be removed by the filter.

¹ Water vapor, which is a gas, is not a contaminant in pneumatic systems until it condenses.

How to Select the Proper Filter

Filter element rating is the prime selection criterion. This rating must match the requirements of all downstream components. Next, the flow capacity and pressure rating of the filter should be considered. Finally, port size should match system piping to avoid unnecessary pressure drops through restricting adapters.

Bowl material and the type of drain for the application are other choices to be made.

The first step in choosing a filter is to determine the filtration requirements of the most critical components used in that system.

Contamination particle size is measured in micrometers. A micrometer is one millionth of a meter or 0.000039 inches. Frequently, micrometer is abbreviated as micron or symbolized by the Greek letter μ . Particle-removing filter elements are rated² according to the particle size they will trap. For most industrial applications, filter elements rated at 40 microns are adequate. When necessary, filtration as low as 5 microns or finer can be provided. Remember, however, that finer filtration increases the pressure drop through the element. As micron size rating varies, so does the size and type of filter.

Most oils entrained in a compressed air stream are in the form of tiny mist or aerosol droplets which can pass through a standard industrial filter element. If it is necessary to remove these aerosols, an oil-removal type coalescing filter can be used. The sub-micron oil particles which escape an oil-removal filter should have no detrimental effect on

industrial pneumatic components. But if these particles must be removed for applications such as spray painting, a coalescing type element should be used.

² The inexact nominal filter element rating indicates that most particles that size or larger will be trapped. The absolute rating indicates that all particles that size or larger will be trapped.

Filter Construction

Most pneumatic filters consist of two basic elements: a die-cast body, into which the inlet and outlet piping is connected, and a sealed removable bowl which contains collected contaminants.

The bowl is fitted with a drain mechanism to remove liquids before they rise to the baffle level. The drain system usually operates while the filter is under pressure, but the unit must be exhausted to remove the bowl for cleaning and element service. The piping need not be disturbed.

Generally a transparent bowl is the most convenient because it provides easy visual inspection of the sump level. However, hostile environment, higher pressure, or higher temperature may require a metal bowl for safety.

The most common plastic used for bowls is polycarbonate. This material performs satisfactorily for air pressures below 150 PSIG and temperatures between 40° and 120° F. Watts offers polyethylene bowl guards for added safety.

As the pressure or temperature requirement increases, you may have to specify a metal bowl with sight gauge. For extreme conditions, it is recommended that the sight gauge be eliminated. (Please refer to the individual model descriptions for specifications on bowls.)

Thus, the environment determines the choice of bowl. Polycarbonates offer great strength and visibility, but can be attacked by certain chemicals. Metal bowls offer the highest pressure and temperature rating, and provide superior protection when installed in an environment containing chemicals that are incompatible with polycarbonate.

Filter Operation

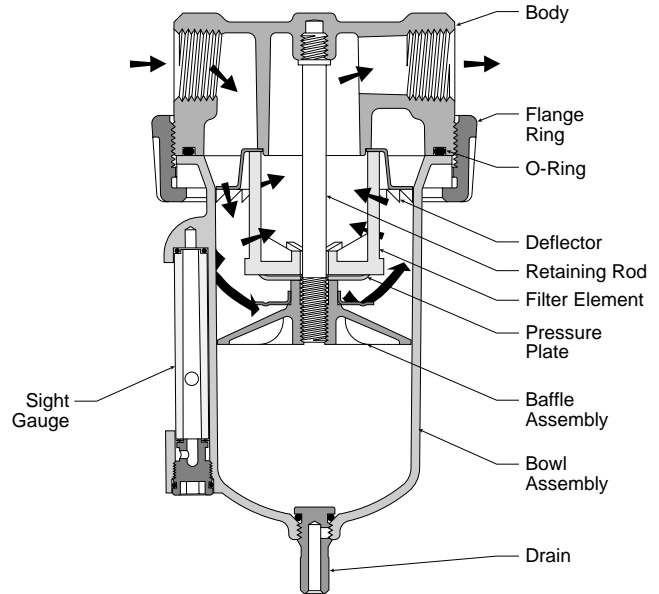
When pressurized air enters a typical filter body. The curved inlet and deflector direct the incoming air in a downward whirling pattern. Centrifugal force hurls the larger solid and liquid water particles outward where they collect on the inner surface of the filter bowl. The particles spiral down past a baffle into a quiet chamber. The baffle prevents turbulent air in the upper bowl from re-entraining liquid contaminants and carrying them downstream.

Then the dry, cleaner air follows a convoluted path through the filter element, where finer solid particles are filtered out. Finally, filtered air passes up the center of the element and out the discharge port.

Particulate and Coalescing Filters

⚠ Warning

The plastic material used to manufacture the plastic bowls, and the sight gau on metal bowls, may be attacked by certain chemicals. Do not use this filter on systems with air supplied by a compressor lubricated with synthetic oils or oils containing phosphate esters or chlorinated hydrocarbons. These oils can carry over into the air lines and chemically attack and possibly rupture the bowl or sight glass. Also, do not expose the bowl or sight glass to materials such as carbon tetrachloride, trichlorethylene, acetone, paint thinner, cleaning fluids, or other harmful materials, for they too will cause the plastic to craze and/or rupture. For use in environments where these, or any, chemicals may be present, consult the factory for approval.



Particulate Filters

Coalescing Filters

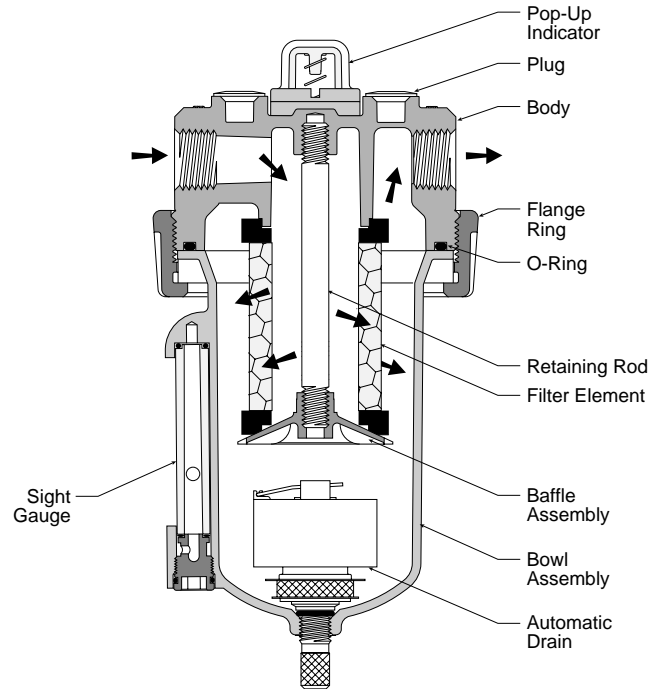
These high-efficiency filters operate on a somewhat different principle than particulate air filters. The key difference is in the element, where a fiber network is narrowly spaced to trap smaller contaminants. The special fibers hold any liquid particle which contacts them.

Pre-filtered (A particulate filter must be used prior to a coalescing filter) air enters the cylindrical element at the center. As it flows through the element, particles are captured by three different mechanisms: direct interception as particles impinge on the fibers; inertial impaction as particles are thrown against fibers by the turbulent air stream; and diffusion as smaller particles vibrate with Brownian movement to collide with fibers and other particles. As a result, coalescing elements can capture particles smaller than the nominal size of the flow passages through the element.

Collected liquid migrates to the crossing points of the fibers where larger drops form or coalesce. Pressure differential through the element then forces these drops to the downstream surface of the element where they gravitate downward to the sump.

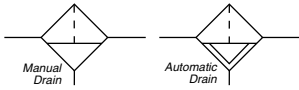
The filtered air then exits through the outlet port.

It is very important that the air be pre-filtered, as larger contaminants tend to block the passages between fibers, reducing the efficiency of the coalescing element.



Coalescing Filters

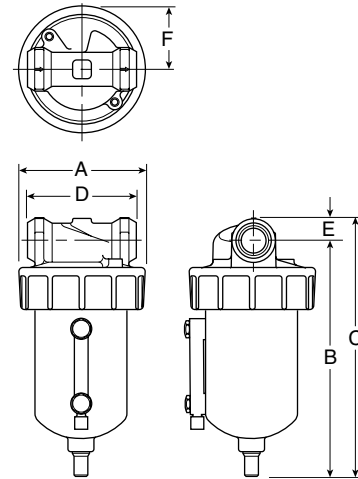
F602 General Purpose Filters



Features

- Excellent Water Removal Efficiency
- For Heavy Duty Applications with Minimum Pressure Drop Requirement
- Unique Deflector Plate that Creates Swirling of the Air Stream Ensuring Maximum Water and Dirt Separation
- Large Filter Element Surface Guarantees Low Pressure Drop and Increased Element Life
- 40 Micron Filter Element Standard, 5 Micron Available
- Metal Bowl with Sight Gauge Standard
- Twist Drain as Standard, Optional Auto Drain
- Large Bowl Capacity
- High Flow: 1/4" - 45 SCFM[§]
 3/8" - 68 SCFM

[§] SCFM = Standard cubic feet per minute at 100 PSIG inlet, and 5 PSIG pressure drop with 40 micron element.



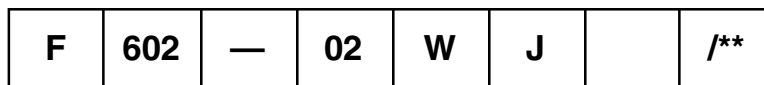
Port Size	NPT		BSPP	
	Manual Twist Drain	Internal Auto Drain	Manual Twist Drain	Internal Auto Drain
Polycarbonate Bowl / Plastic Guard				
1/4"	F602-02BJ	F602-02BJR	F602G02BJ	F602G02BJR
3/8"	F602-03BJ	F602-03BJR	F602G03BJ	F602G03BJR
Metal Bowl / Sight Gauge				
1/4"	F602-02WJ	F602-02WJR	F602G02WJ	F602G02WJR
3/8"	F602-03WJ	F602-03WJR	F602G03WJ	F602G03WJR

F602 Filter Dimensions					
A	B	C	D	E	F
F602-02B, F602-03B					
2.90 (74)	5.53 (140)	6.05 (154)	2.50 (64)	0.52 (13)	1.46 (37)
F602-02W, F602-03W					
2.91 (74)	5.37 (136)	5.89 (150)	2.50 (64)	0.52 (13)	1.46 (37)

inches
(mm)

Standard part numbers shown bold.
 For other models refer to ordering information below.

Ordering Information



Port Threads

— NPT
G BSPP

Port Size

02 1/4 Inch
03 3/8 Inch

Bowl

B Polycarbonate with Plastic Bowl Guard
W Metal with Sight Gauge

Elements

G 5 Micron
J 40 Micron

Drains and Options

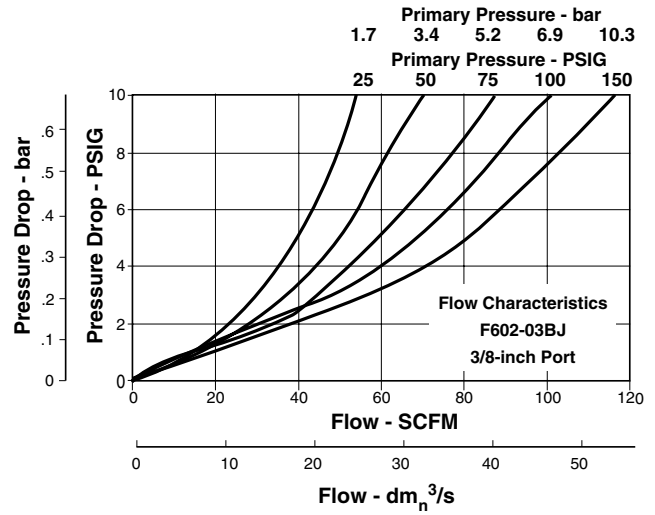
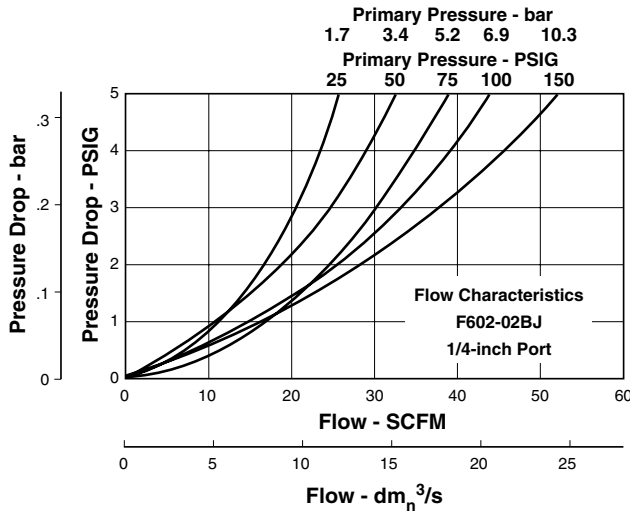
Blank
Manual Twist Drain
R Internal Auto Drain
S Automatic Pulse Drain (For Polycarbonate Bowls [B] Only)
X11 No Internal Parts

Engineering Change Designator

Will be entered at factory.

NOTE: BOLD OPTIONS ARE STANDARD.

Technical Information



F602 Filter Kits & Accessories

- Bowl Kits –**
 Metal with Sight Gauge (W) BK605WY
 Polycarbonate (B) BK602Y
- Drain Kits –**
 Internal Auto (All) SA602MD
 Manual Twist (All) SA600Y7-1
 Automatic Pulse (B) RK602SY
 Semi-Automatic “Overnight” Drain SA602A7
 (Drains automatically under zero pressure)
- Filter Element Kits –**
 5 Micron (B,W) EK602VY
 40 Micron (B,W) EK602Y
- Mounting Bracket Kit** (All) SAF602-0571
- Repair Kits –**
 Deflector, Secondary Baffle, Primary Baffle,
 and Retaining Rod (B,W) RK602Y
 Internal Auto Drain (All) RK602MD
 Metal Bowl with Sight Gauge (W) RK605WY

() = Bowl Type

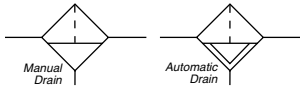
Specifications

- Bowl Capacity** 5 Ounces
- Port Threads** 1/4, 3/8 Inch
- Pressure & Temperature Ratings –**
 Polycarbonate Bowl 0 to 150 PSIG (0 to 10.2 bar)
 40°F to 125°F (4.4°C to 52°C)
 Metal Bowl 0 to 250 PSIG (0 to 17.2 bar)
 40°F to 150°F (4.4°C to 65.6°C)
 (With Internal Auto Drain 20 to 175 PSIG (1.4 to 11.9 bar))
- Weight –**
 Polycarbonate Bowl 1.5 lb. (0.68 kg) / Unit
 18 lb. (8.16 kg) / 12-Unit Master Pack
 Metal Bowl 1.8 lb. (0.82 kg) / Unit
 22 lb. (9.98 kg) / 12-Unit Master Pack

Materials of Construction

- Body** Zinc
- Bowls –**
 (B) Polycarbonate Polycarbonate
 (W) Metal (Zinc) with Sight Gauge
- Bowl Guards** Plastic
- Drain –**
 Manual Twist & Overnight Brass
 Internal Auto & Piston Acetal
- Filter Elements –**
 40 Micron (Standard) Polypropylene
 5 Micron (Optional) Polypropylene
- Seals** Buna N
- Sight Gauge** Nylon

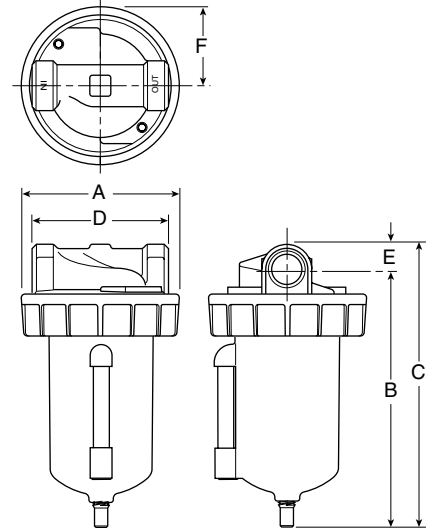
F602 General Purpose Filters



Features

- Excellent Water Removal Efficiency
- For Heavy Duty Applications with Minimum Pressure Drop Requirement
- Unique Deflector Plate that Creates Swirling of the Air Stream Ensuring Maximum Water and Dirt Separation
- Large Filter Element Surface Guarantees Low Pressure Drop and Increased Element Life
- 40 Micron Filter Element Standard, 5 Micron Available
- Metal Bowl with Sight Gauge Standard
- Twist Drain as Standard, Optional Auto Drain
- Large Bowl Capacity
- Optional High Capacity Bowl(s) Available
- High Flow: 1/2" - 90 SCFM[§]

[§] SCFM = Standard cubic feet per minute at 100 PSIG inlet, and 5 PSIG pressure drop with 40 micron element.



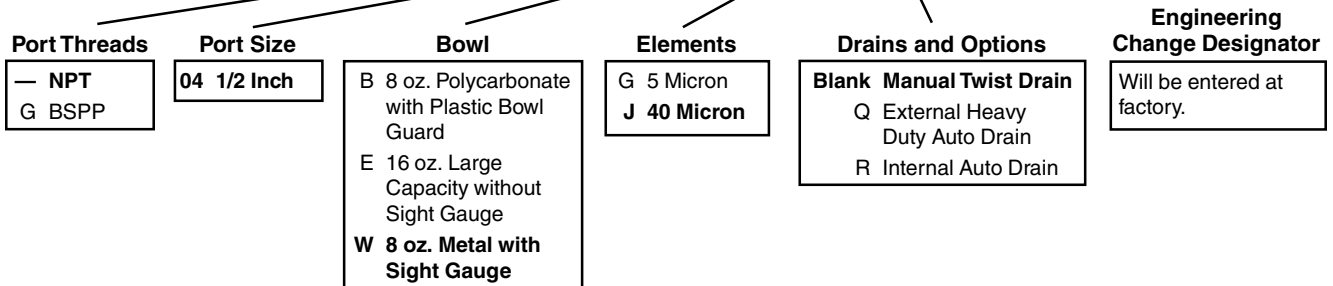
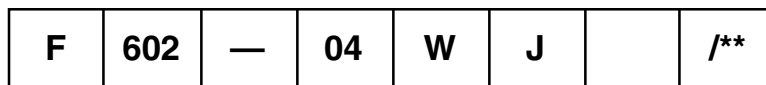
Port Size	NPT		BSPP	
	Manual Twist Drain	Internal Auto Drain	Manual Twist Drain	Internal Auto Drain
Polycarbonate Bowl / Plastic Guard				
1/2"	F602-04BJ	F602-04BJR	F602G04BJ	F602G04BJR
Metal Bowl / Sight Gauge				
1/2"	F602-04WJ	F602-04WJR	F602G04WJ	F602G04WJR
Aluminum Bowl 16 oz. without Sight Gauge				
1/2"	F602-04EJ	F602-04EJR	F602G04EJ	F602G04EJR

Standard part numbers shown bold.
 For other models refer to ordering information below.

F602 Filter Dimensions					
A	B	C	D	E	F
F602-04B					
3.77 (96)	5.97 (152)	6.56 (167)	3.25 (83)	0.59 (15)	1.88 (48)
F602-04E					
3.79 (96)	9.30 (236)	9.89 (251)	3.25 (83)	0.59 (15)	1.90 (48)
F602-04W					
3.77 (96)	6.12 (156)	6.71 (170)	3.25 (83)	0.59 (15)	1.88 (48)

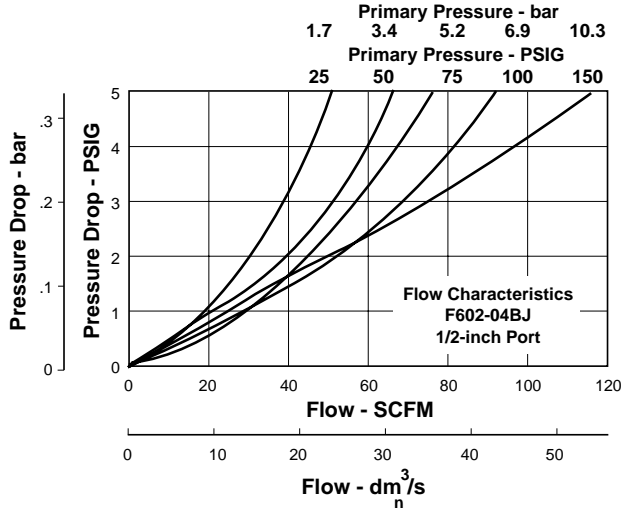
inches
(mm)

Ordering Information



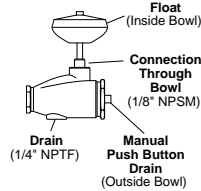
NOTE: BOLD OPTIONS ARE STANDARD.

Technical Information



“Q” Option External Heavy Duty Auto Drain SA602D / SA603D

For heavy duty applications where the filter is being used to remove large volumes of liquid and/or particulate matter from the airstream, the external automatic drain (“Q” option) should be used.



F602 Filter Kits & Accessories

Bowl Kits –

- Aluminum (E) BK603A
- Metal with Sight Gauge (W) BK605WA
- Polycarbonate with Plastic Bowl Guard (B) BK602A

Drain Kits –

- External Auto (B,W) SA602D
- External Auto (E) SA603D
- Internal Auto (All) SA602MD
- Manual Twist (All) SA600Y7-1
- Semi-Automatic “Overnight” Drain SA602A7
 (Drains automatically under zero pressure)

Filter Element Kits –

- 5 Micron (All) EK602VA
- 40 Micron (All) EK602A

Mounting Bracket Kit (All) SAF602-0572

Repair Kits –

- Deflector, Baffle Assembly, and Retaining Rod (All) RK602A
- External Auto Drain (All) RK602D
- Internal Auto Drain (All) RK602MD
- Metal Bowl with Sight Gauge (W) RKB605WA

Specifications

Bowl Capacity –

- (B, W) 8 Ounces
- (E) 16 Ounces

Port Threads 1/2 Inch

Pressure & Temperature Ratings –

- Polycarbonate Bowl (B) 0 to 150 PSIG (0 to 10.2 bar)
 40°F to 125°F (4.4°C to 52°C)
- Metal Bowl (W) 0 to 250 PSIG (0 to 17.2 bar)
 40°F to 150°F (4.4°C to 65.6°C)
- Aluminum Bowl (E) 0 to 300 PSIG (0 to 20.4 bar)
 40°F to 150°F (4.4°C to 65.6°C)
- With Internal Auto Drain (R) 20 to 175 PSIG (1.4 to 11.9 bar)
 40°F to 125°F (4.4°C to 52°C)
- With External Auto Drain (Q) 0 to 250 PSIG (0 to 17.2 bar)
 40°F to 150°F (4.4°C to 65.6°C)
 (Except with Polycarbonate “B” Bowl - See bowl limits)

Weight –

- Polycarbonate Bowl (B) 2.4 lb. (1.09 kg) / Unit
 19 lb. (8.62 kg) / 8-Unit Master Pack
- Metal Bowl (W) 2.8 lb. (1.27 kg) / Unit
 22 lb. (9.98 kg) / 8-Unit Master Pack
- Aluminum Bowl (E) 3.6 lb. (1.63 kg) / Unit
 29 lb. (13.15 kg) / 8-Unit Master Pack

Materials of Construction

- Body** Zinc
- Bowls –**

 - (B) Polycarbonate
 - (W) Metal (Zinc)
 - (E) Aluminum

- Bowl Guards** Plastic
- Drain –**

 - Manual Twist & Overnight Brass
 - Internal Auto Acetal

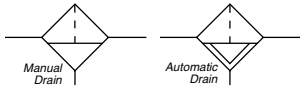
- Filter Elements –**

 - 40 Micron (Standard) Polypropylene
 - 5 Micron (Optional) Polypropylene

- Seals** Nitrile
- Sight Gauge** Nylon

() = Bowl Type

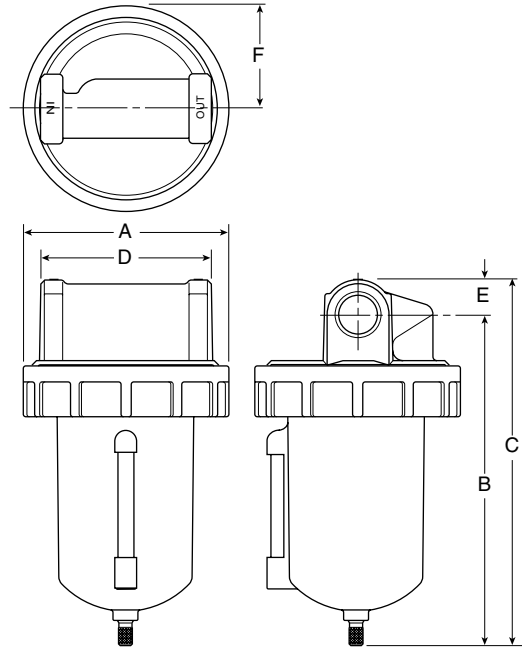
F602 Standard Filters



Features

- Excellent Water Removal Efficiency
- For Heavy Duty Applications with Minimum Pressure Drop Requirement
- Unique Deflector Plate that Creates Swirling of the Air Stream Ensuring Maximum Water and Dirt Separation
- Large Filter Element Surface Guarantees Low Pressure Drop and Increased Element Life
- 40 Micron Filter Element Standard, 5 Micron Available
- Metal Bowl with Sight Gauge Standard
- Twist Drain as Standard, Optional Auto Drain
- Large Bowl Capacity
- Optional High Capacity Bowl(s) Available
- High Flow: 3/4" - 220 SCFM, 1" - 240 SCFM[§]

[§] SCFM = Standard cubic feet per minute at 100 PSIG inlet, and 5 PSIG pressure drop with 40 micron element.



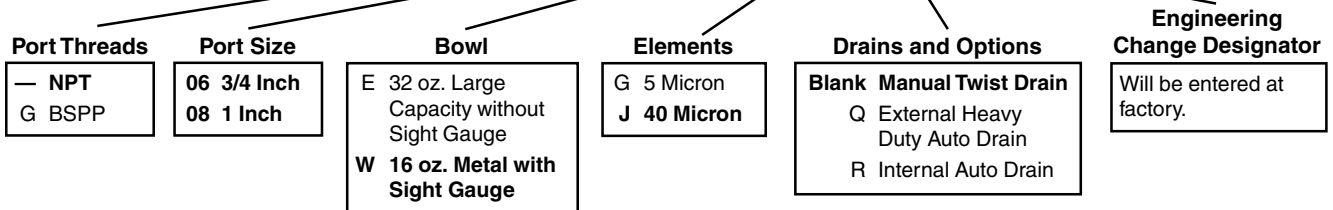
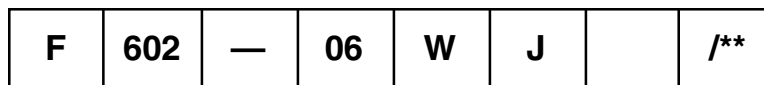
Port Size	NPT		BSPP	
	Manual Twist Drain	Internal Auto Drain	Manual Twist Drain	Internal Auto Drain
Metal Bowl / Sight Gauge				
3/4"	F602-06WJ	F602-06WJR	F602G06WJ	F602G06WJR
1"	F602-08WJ	F602-08WJR	F602G08WJ	F602G08WJR
Aluminum Bowl 32 oz. without Sight Gauge				
3/4"	F602-06EJ	F602-06EJR	F602G06EJ	F602G06EJR
1"	F602-08EJ	F602-08EJR	F602G08EJ	F602G08EJR

F602 Filter Dimensions					
A	B	C	D	E	F
F602-06W, F602-08W					
4.90 (124)	7.88 (200)	8.72 (221)	4.06 (103)	0.84 (21)	2.45 (62)
F602-06E, F602-08E					
4.90 (124)	11.10 (282)	11.94 (303)	4.06 (103)	0.84 (21)	2.45 (62)

inches
(mm)

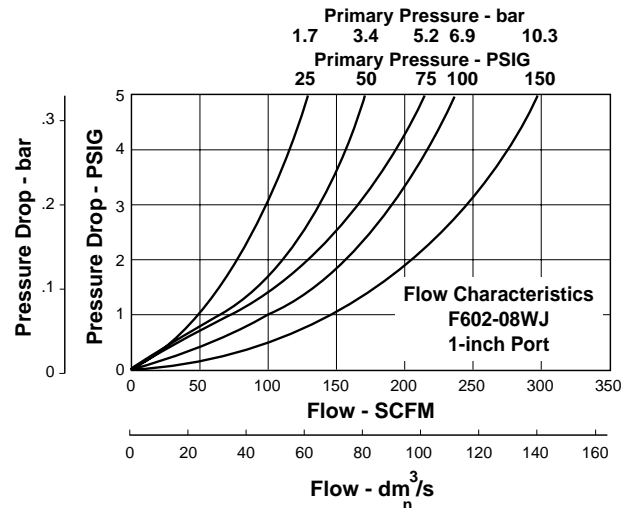
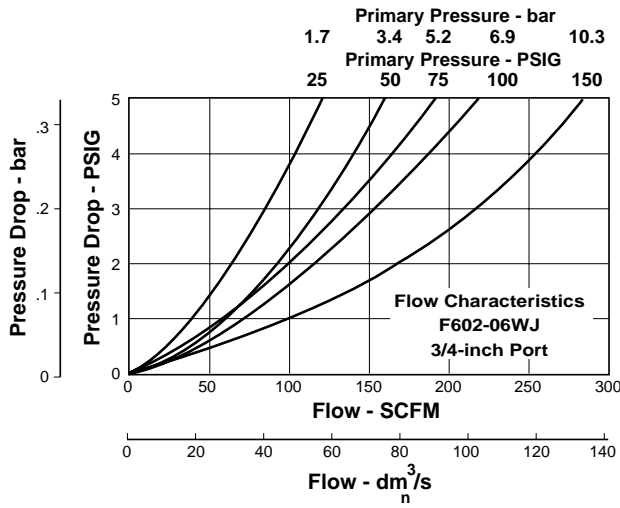
Standard part numbers shown bold.
 For other models refer to ordering information below.

Ordering Information



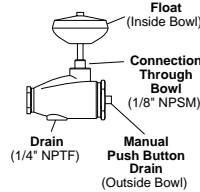
NOTE: BOLD OPTIONS ARE STANDARD.

Technical Information



**“Q” Option External Heavy Duty Auto Drain
 SA602D / SA603D**

For heavy duty applications where the filter is being used to remove large volumes of liquid and/or particulate matter from the airstream, the external automatic drain (“Q” option) should be used.



F602 Filter Kits & Accessories

Bowl Kits –

- Metal with Sight Gauge (W) BK605WB
- Aluminum (E) BK603B

Drain Kits –

- External Auto (W) SA602D
- External Auto (E) SA603D
- Internal Auto (All) SA602MD
- Manual (All) SA600Y7-1
- Semi-Automatic “Overnight” Drain SA602A7
 (Drains automatically under zero pressure)

Filter Element Kits –

- 40 Micron (All) EK602B
- 5 Micron (All) EK602VB

Mounting Bracket Kit

(Pair or 2 Kits of Pipe Mounted Brackets needed) –

- (3/4" Unit) SA200AW57
- (1" Unit) SA200CW57

Repair Kits –

- Deflector, Baffle Assembly, and Retaining Rod (E,W) RK602B
- External Auto Drain (All) RK602D
- Internal Auto Drain (All) RK602MD
- Metal Bowl with Sight Gauge (W) RKB605WB

Specifications

Bowl Capacity –

- Metal Bowl (W) 16 Ounces
- Metal Bowl (E) 32 Ounces

Port Threads 3/4, 1 Inch

() = Bowl Type

Pressure & Temperature Ratings –

- Metal Bowl (W) 0 to 250 PSIG (0 to 17.2 bar)
 40°F to 150°F (4.4°C to 65.6°C)
- Aluminum Bowl (E) 0 to 300 PSIG (0 to 20.4 bar)
 40°F to 150°F (4.4°C to 65.6°C)
- With Internal Auto Drain (R) 20 to 175 PSIG (1.4 to 11.9 bar)
 40°F to 125°F (4.4°C to 52°C)
- With External Auto Drain (Q) 0 to 250 PSIG (0 to 17.2 bar)
 40°F to 150°F (4.4°C to 65.6°C)

Weight –

- Metal Bowl (W) 6.3 lb. (2.86 kg) / Unit
- Metal Bowl (E) 25 lb. (11.34 kg) / 4-Unit Master Pack
- Aluminum Bowl 7 lb. (3.18 kg) / Unit
 28 lb. (12.70 kg) / 4-Unit Master Pack

Materials of Construction

Body Zinc

Bowls –

- Metal Bowl (W) Zinc with Sight Gauge
- Metal Bowl (E) Aluminum without Sight Gauge

Drain –

- Manual Twist & Overnight Brass
- Housing “R” Acetal
- Housing “Q” Bronze

Filter Elements –

- 40 Micron (Standard) Polypropylene
- 5 Micron (Optional) Polypropylene

Seals Nitrile

Sight Gauge Nylon

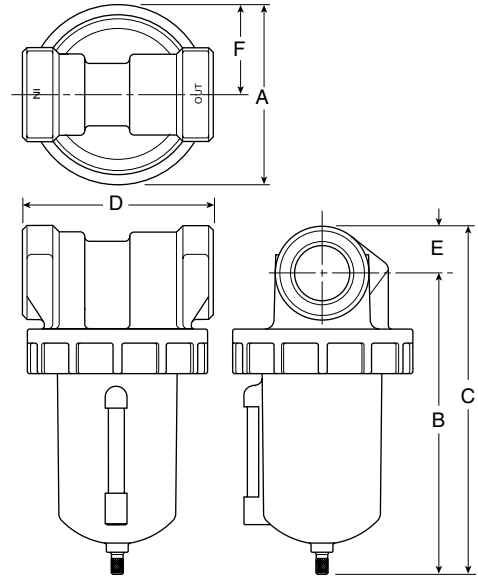
F602 Standard Filters



Features

- Excellent Water Removal Efficiency
- For Heavy Duty Applications with Minimum Pressure Drop Requirement
- Unique Deflector Plate that Creates Swirling of the Air Stream Ensuring Maximum Water and Dirt Separation
- Large Filter Element Surface Guarantees Low Pressure Drop and Increased Element Life
- 40 Micron Filter Element Standard, 5 Micron Available
- Metal Bowl with Sight Gauge Standard
- Twist Drain as Standard, Optional Auto Drain
- Large Bowl Capacity
- Optional High Capacity Bowl(s) Available
- High Flow: 1-1/4" - 390 SCFM
 1-1/2" - 450 SCFM[§]

[§] SCFM = Standard cubic feet per minute at 100 PSIG inlet, and 5 PSIG pressure drop with 40 micron element.



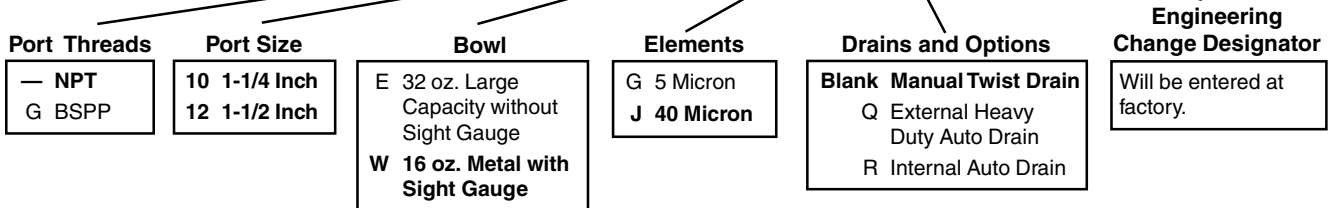
Port Size	NPT		BSPP	
	Manual Twist Drain	Internal Auto Drain	Manual Twist Drain	Internal Auto Drain
Metal Bowl / Sight Gauge				
1-1/4"	F602-10WJ	F602-10WJR	F602G10WJ	F602G10WJR
1-1/2"	F602-12WJ	F602-12WJR	F602G12WJ	F602G12WJR
Aluminum Bowl 32 oz. without Sight Gauge				
1-1/4"	F602-10EJ	F602-10EJR	F602G10EJ	F602G10EJR
1-1/2"	F602-12EJ	F602-12EJR	F602G12EJ	F602G12EJR

F602 Filter Dimensions					
A	B	C	D	E	F
F602-10W, F602-12W					
4.90 (124)	8.18 (208)	9.46 (240)	5.19 (132)	1.28 (32.4)	2.45 (62.2)
F602-10E, F602-12E					
4.90 (124)	11.41 (290)	12.69 (322)	5.19 (132)	1.28 (32.4)	2.45 (62.2)

inches
(mm)

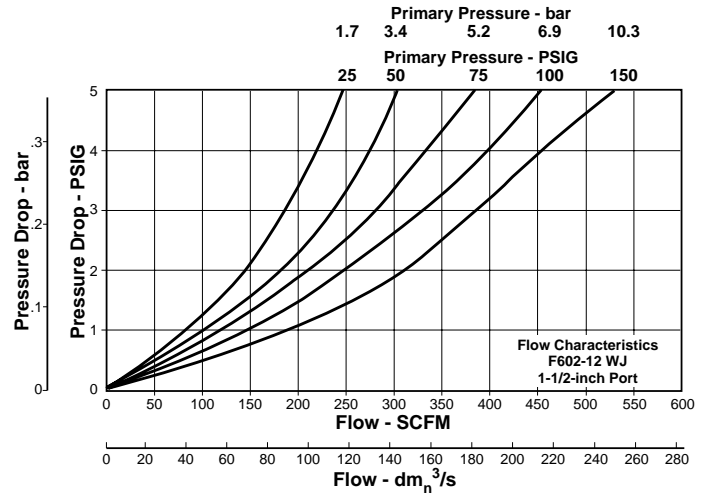
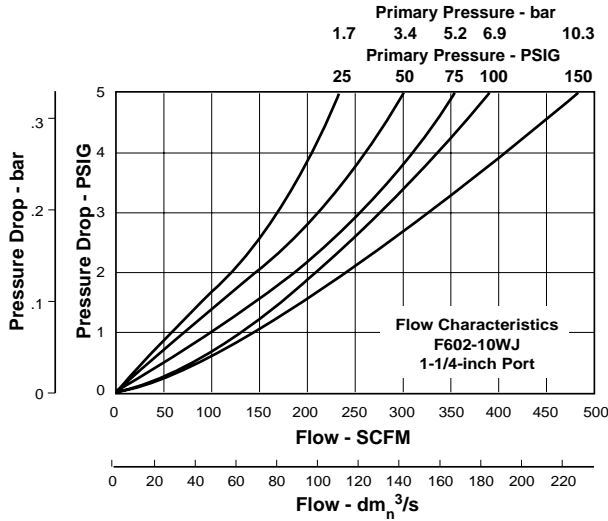
Standard part numbers shown bold.
 For other models refer to ordering information below.

Ordering Information



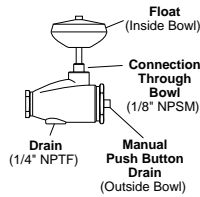
NOTE: BOLD OPTIONS ARE STANDARD.

Technical Information



**“Q” Option External Heavy Duty Auto Drain
 SA602D / SA603D**

For heavy duty applications where the filter is being used to remove large volumes of liquid and/or particulate matter from the airstream, the external automatic drain (“Q” option) should be used.



F602 Filter Kits & Accessories

Bowl Kits –

- Metal with Sight Gauge (W) BK605WB
- Aluminum (E) BK603B

Drain Kits –

- External Auto (W) SA602D
- External Auto (E) SA603D
- Internal Auto (All) SA602MD
- Manual (All) SA600Y7-1
- Semi-Automatic “Overnight” Drain SA602A7
 (Drains automatically under zero pressure)

Filter Element Kits –

- 40 Micron (All) EK602B
- 5 Micron (All) EK602VB

Repair Kits –

- Deflector, Baffle Assembly, and Retaining Rod (All) RK602C
- External Auto Drain (All) RK602D
- Internal Auto Drain (All) RK602MD
- Metal Bowl with Sight Gauge (W) RKB605WB

Specifications

Bowl Capacity –

- Metal (W) 16 Ounces
- Aluminum (E) 32 Ounces

Port Threads 1-1/4, 1-1/2 Inch

() = Bowl Type

Pressure & Temperature Ratings –

- Metal Bowl (W) 0 to 250 PSIG (0 to 17.2 bar)
 40°F to 150°F (4.4°C to 65.6°C)
- Aluminum Bowl (E) 0 to 300 PSIG (0 to 20.4 bar)
 40°F to 150°F (4.4°C to 65.6°C)
- With Internal Auto Drain (R) 20 to 175 PSIG (1.4 to 11.9 bar)
 40°F to 125°F (4.4°C to 52°C)
- With External Auto Drain (Q) 0 to 250 PSIG (0 to 17.2 bar)
 40°F to 150°F (4.4°C to 65.6°C)

Weight –

- Metal Bowl (W) 7 lb. (3.18 kg) / Unit
 28 lb. (12.70 kg) / 4-Unit Master Pack
- Aluminum Bowl (E) 7.7 lb. (3.49 kg) / Unit
 31 lb. (14.06 kg) / 4-Unit Master Pack

Materials of Construction

Body Zinc

Bowls –

- (W) Metal (Zinc) with Sight Gauge
- (E) Aluminum without Sight Gauge

Drain –

- Manual Twist & Overnight Brass
- Housing “R” Acetal
- Housing “Q” Bronze

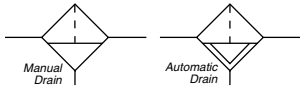
Filter Elements –

- 40 Micron (Standard) Polypropylene
- 5 Micron (Optional) Polypropylene

Seals Nitrile

Sight Gauge Nylon

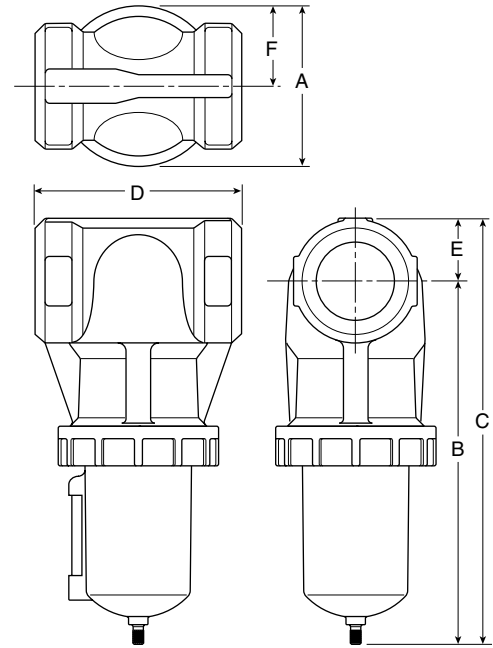
F602 Standard Filters



Features

- Excellent Water Removal Efficiency
- For Heavy Duty Applications with Minimum Pressure Drop Requirement
- Unique Deflector Plate that Creates Swirling of the Air Stream Ensuring Maximum Water and Dirt Separation
- Large Filter Element Surface Guarantees Low Pressure Drop and Increased Element Life
- 40 Micron Filter Element Standard, 5 Micron Available
- Metal Bowl with Sight Gauge Standard
- Twist Drain as Standard, Optional Auto Drain
- Large Bowl Capacity
- Optional High Capacity Bowl(s) Available
- High Flow: 2" & 2-1/2" - 1200 SCFM[§]

[§] SCFM = Standard cubic feet per minute at 100 PSIG inlet, and 5 PSIG pressure drop with 40 micron element.



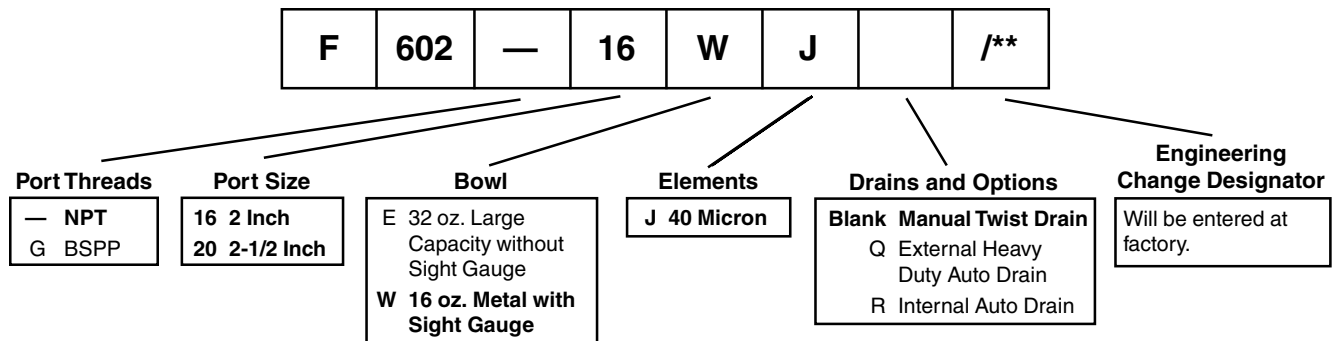
Port Size	NPT		BSPP	
	Manual Twist Drain	Internal Auto Drain	Manual Twist Drain	Internal Auto Drain
Metal Bowl / Sight Gauge				
2"	F602-16WJ	F602-16WJR	F602G16WJ	F602G16WJR
2-1/2"	F602-20WJ	F602-20WJR	F602G20WJ	F602G20WJR
Aluminum Bowl 32 oz. without Sight Gauge				
2"	F602-16EJ	F602-16EJR	F602G16EJ	F602G16EJR
2-1/2"	F602-20EJ	F602-20EJR	F602G20EJ	F602G20EJR

F602 Filter Dimensions					
A	B	C	D	E	F
F602-16W, F602-20W					
6.30 (160)	11.08 (281)	4.90 (124)	6.30 (160)	1.92 (48.7)	2.45 (62.2)
F602-16E, F602-20E					
6.30 (160)	14.36 (365)	4.90 (124)	6.30 (160)	1.92 (48.7)	2.44 (61.9)

inches
(mm)

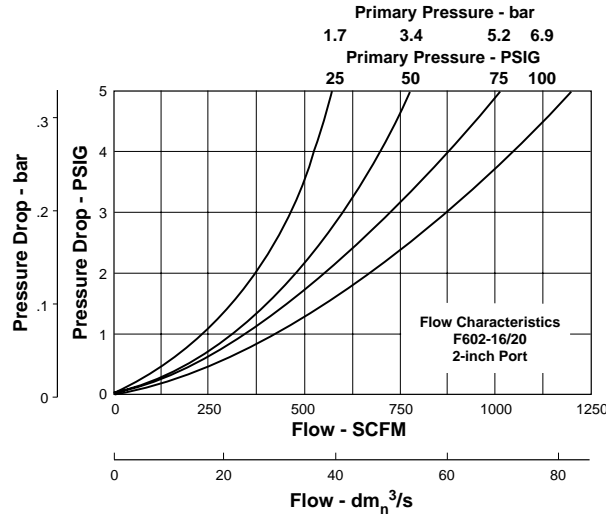
Standard part numbers shown bold.
 For other models refer to ordering information below.

Ordering Information



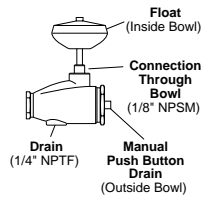
NOTE: BOLD OPTIONS ARE STANDARD.

Technical Information



**“Q” Option External Heavy Duty Auto Drain
 SA602D / SA603D**

For heavy duty applications where the filter is being used to remove large volumes of liquid and/or particulate matter from the airstream, the external automatic drain (“Q” option) should be used.



F602 Filter Kits & Accessories

Bowl Kits –

- Metal with Sight Gauge (W) BK605WB
- Aluminum (E) BK603B

Drain Kits –

- External Auto (W) SA602D
- External Auto (E) SA603D
- Internal Auto (All) SA602MD
- Manual (All) SA600Y7-1
- Semi-Automatic “Overnight” Drain SA602A7
 (Drains automatically under zero pressure)

Filter Element Kits – 40 Micron (All) EK602G

Repair Kits –

- Deflector, Baffle Assembly, and Retaining Rod (All) RK602G
- External Auto Drain (All) RK602D
- Internal Auto Drain (All) RK602MD
- Metal Bowl with Sight Gauge (W) RKB605WB

Specifications

Bowl Capacity –

- Metal (W) 16 Ounces
- Aluminum (E) 32 Ounces

Port Threads 2, 2-1/2 Inch

() = Bowl Type

Pressure & Temperature Ratings –

- Metal Bowl (W) 0 to 250 PSIG (0 to 17.2 bar)
 40°F to 150°F (4.4°C to 65.6°C)
- Aluminum Bowl (E) 0 to 300 PSIG (0 to 20.4 bar)
 40°F to 150°F (4.4°C to 65.6°C)
- With Internal Auto Drain (R) 20 to 175 PSIG (1.4 to 11.9 bar)
 40°F to 125°F (4.4°C to 52°C)
- With External Auto Drain (Q) 0 to 250 PSIG (0 to 17.2 bar)
 40°F to 150°F (4.4°C to 65.6°C)

Weight –

- Metal Bowl (W) 9.8 lb. (4.45 kg) / Unit
 39 lb. (17.69 kg) / 4-Unit Master Pack
- Aluminum Bowl (E) 10.3 lb. (4.67 kg) / Unit
 11 lb. (4.99 kg) / 1-Unit Master Pack

Materials of Construction

Body Aluminum

Bowls –

- (W) Metal (Zinc) with Sight Gauge
- (E) Aluminum without Sight Gauge

Drain –

- Manual Twist & Overnight Brass
- Housing “R” Acetal
- Housing “Q” Bronze

Filter Elements –

40 Micron (Standard) Polypropylene

Seals Buna N

Sight Gauge Nylon

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6. Changes, Reschedules and Cancellations: Buyer may request to modify the designs or specifications for the items sold hereunder as well as the quantities and delivery dates thereof, or may request to cancel all or part of this order, however, no such requested modification or cancellation shall become part of the contract between Buyer and Seller unless accepted by Seller in a written amendment to this Agreement. Acceptance of any such requested modification or cancellation shall be at Seller's discretion, and shall be upon such terms and conditions as Seller may require.

7. Special Tooling: A tooling charge may be imposed for any special tooling, including without limitations, dies, fixtures, molds and patterns, acquired to manufacture items sold pursuant to this contract. Such special tooling shall be and remain Seller's property notwithstanding payment of any charges by Buyer. In no event will Buyer acquire any interest in apparatus belonging to Seller which is utilized in the manufacture of the items sold hereunder, even if such apparatus has been specially converted or adapted for such manufacture and notwithstanding any charges paid by Buyer. Unless otherwise agreed,

Seller shall have the right to alter, discard or otherwise dispose of any special tooling or other property in its sole discretion at any time.

8. Buyer's Property: Any designs, tools, patterns, materials, drawings, confidential information or equipment furnished by Buyer, or any other items which become Buyer's property, may be considered obsolete and may be destroyed by Seller after two (2) consecutive years have elapsed without Buyer placing an order for the items which are manufactured using such property. Seller shall not be responsible for any loss or damage to such property while it is in Seller's possession or control.

9. Taxes: Unless otherwise indicated on the face hereof, all prices and charges are exclusive of excise, sales, use, property, occupational or like taxes which may be imposed by any taxing authority upon the manufacture, sale or delivery of the items sold hereunder. If any such taxes must be paid by Seller or if Seller is liable for the collection of such tax, the amount thereof shall be in addition to the amounts for the items sold. Buyer agrees to pay all such taxes or to reimburse Seller therefore upon receipt of its invoice. If Buyer claims exemption from any sales, use or other tax imposed by any taxing authority, Buyer shall save Seller harmless from and against any such tax, together with any interest or penalties thereon which may be assessed if the items are held to be taxable.

10. Indemnity For Infringement of Intellectual Property Rights: Seller shall have no liability for infringement of any patents, trademarks, copyrights, trade dress, trade secrets or similar rights except as provided in this Part 10. Seller will defend and indemnify Buyer against allegations of infringement of U.S. patents, U.S. trademarks, copyrights, trade dress and trade secrets (hereinafter "Intellectual Property Rights"). Seller will defend at its expense and will pay the cost of any settlement or damages awarded in an action brought against Buyer based on an allegation that an item sold pursuant to this contract infringes the Intellectual Property Rights of a third party. Seller's obligation to defend and indemnify Buyer is contingent on Buyer notifying Seller within ten (10) days after Buyer becomes aware of such allegations of infringement, and Seller having sole control over the defense of any allegations or actions including all negotiations for settlement or compromise. If an item sold hereunder is subject to a claim that it infringes the Intellectual Property Rights of a third party, Seller may, at its sole expense and option, procure for Buyer the right to continue using said item, replace or modify said item so as to make it noninfringing, or offer to accept return of said item and return the purchase price less a reasonable allowance for depreciation. Notwithstanding the foregoing, Seller shall have no liability for claims of infringement based on information provided by Buyer, or directed to items delivered hereunder for which the designs are specified in whole or part by Buyer, or infringements resulting from the modification, combination or use in a system of any item sold hereunder. The foregoing provisions of this Part 10 shall constitute Seller's sole and exclusive liability and Buyer's sole and exclusive remedy for infringement of Intellectual Property Rights.

If a claim is based on information provided by Buyer or if the design for an item delivered hereunder is specified in whole or in part by Buyer, Buyer shall defend and indemnify Seller for all costs, expenses or judgements resulting from any claim that such item infringes any patent, trademark, copyright, trade dress, trade secret or any similar right.

11. Force Majeure: Seller does not assume the risk of and shall not be liable for delay or failure to perform any of Seller's obligations by reason of circumstances beyond the reasonable control of Seller (hereinafter "Events of Force Majeure"). Events of Force Majeure shall include without limitation, accidents, acts of God, strikes or labor disputes, acts, laws, rules or regulations of any government or government agency, fires, floods, delays or failures in delivery of carriers or suppliers, shortages of materials and any other cause beyond Seller's control.

12. Entire Agreement/Governing Law: The terms and conditions set forth herein, together with any amendments, modifications and any different terms or conditions expressly accepted by Seller in writing, shall constitute the entire Agreement concerning the items sold, and there are no oral or other representations or agreements which pertain thereto. This Agreement shall be governed in all respects by the law of the State of Ohio. No actions arising out of sale of the items sold hereunder or this Agreement may be brought by either party more than two (2) years after the cause of action accrues.