

TECHNICAL SPECIFICATION

Filter – F18



Product Description



Performance



Construction



Accessories and Spare Parts



How to Order



Dimensional Details



PRODUCT DESCRIPTION

Wilkerson F Series Air Filters are highly efficient at removing dirt, rust, pipe scale and other particulate contaminants down to 5 microns in size - and are over 97% efficient at separating out liquid water and oils with low pressure drops at rated flows!

Features

- Extremely efficient at water separation/removal (>97%)
- Special Whirl-Flo baffle creates a cyclonic flow, ensuring maximum separation of dirt and water from air.
- 5 micron element has always been Wilkerson's standard.
- Sintered depth-type element for high dirt-holding capacity.
- Standard bowl guard with multiple viewing slots.
- Barbed manual drain connection with pipe-away.
- Bayonet-type bowl mount for ease of service.
- Can be installed modular or hard-piped.

Operation

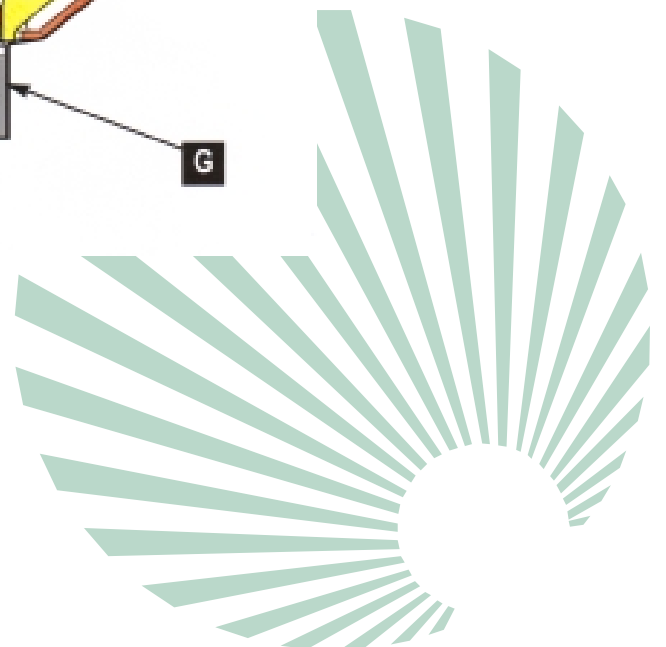
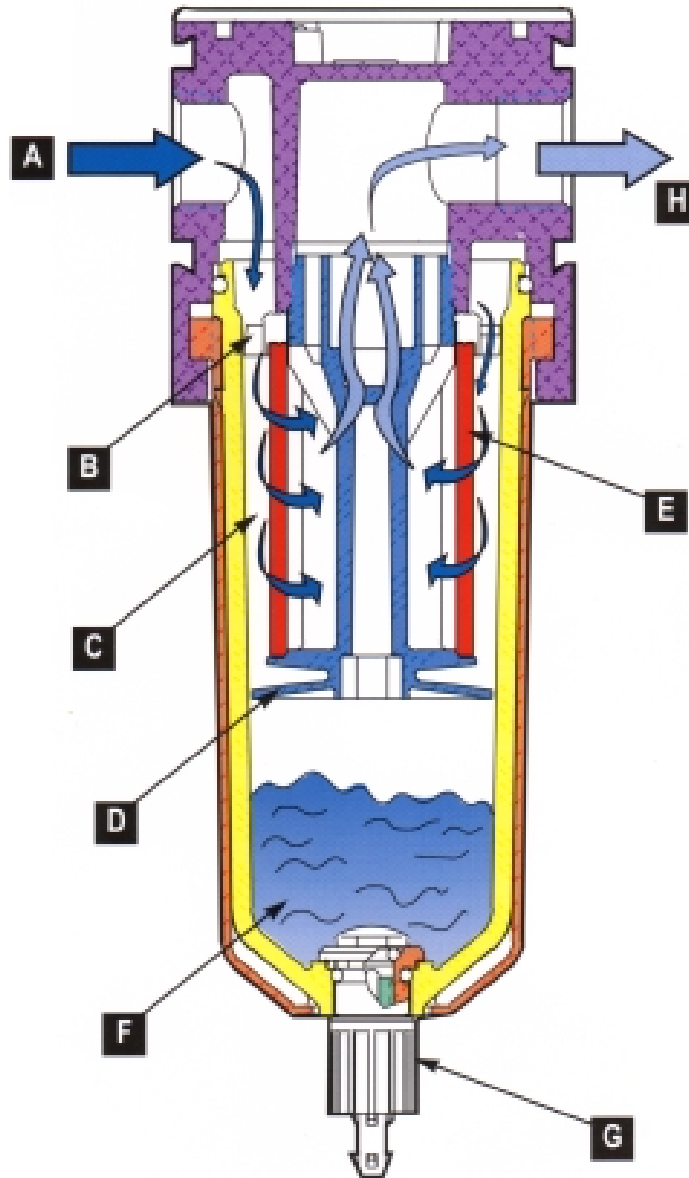
Separation

Air enters at inlet port (A) and flows through the Whirl-flo baffle (B), creating a cyclonic swirling flow (C). Liquids and large solid particles are centrifugally forced to the inner wall of the bowl, where gravity moves them to the quiet zone (F), below the quiet zone baffle (D), which prevents re-entrainment of the collected liquids into the air stream. Accumulated liquids are drained off by opening the manual drain valve (G).



Filtration

After liquids and large solid particles are separated from the air stream, the air then flows through the element (E), where dirt particles down to 5 microns in size are filtered out. The filtered air stream exits the filter (H) and continues downstream.



PERFORMANCE

Port Size	BSPP-G (ISO228)	1/4, 3/8, 1/2
Flow Capacity*	1/4	110 scfm (51,9 dm ³ /s)
	3/8	120 scfm (56,6 dm ³ /s)
	1/2	145 scfm (68,4 dm ³ /s)
Maximum Operating Temperature	Plastic Bowl	125°F (52°C)
	Metal Bowl	150°F (65,5°C)
Maximum Supply Pressure	Plastic Bowl	150 psig (10,3 bar)
	Metal Bowl	250 psig (17,2 bar)
Standard Filtration	Micron	5
Useful Retention**	oz (cm ³)	1.72 (50,9)
Weight	lb (kg)	1.08 (0,5)

* Inlet pressure 150 psig (10,3 bar). Pressure drop 5 psid (0,3 bar).

** Useful retention refers to volume below the quiet zone baffle.

"F" Series Filters, Type "A" 5 micron elements

All Wilkerson Type "A" 5 micron elements meet or exceed ISO Class 3 for maximum particle size and concentration of solid contaminants.



CONSTRUCTION

Body		Zinc
Body Cap		ABS
Bowl	Plastic Bowl Metal Bowl	Polycarbonate Zinc
Bowl Guard		Nylon
Deflector		Polypropylene
Element Retainer/Baffle		Acetal
Filter Element		Sintered Polyethylene
Seals	Plastic Bowl Metal Bowl	Nitrile Nitrile
Sight Gauge	Metal Bowl	Polycarbonate



ACCESSORIES AND SPARE PARTS

Replacement Bowl Kits

Metal Bowl with Sight Gauge, Automatic Float Drain	GRP-96-637
Metal Bowl with Sight Gauge, Manual Drain	GRP-96-636
Plastic Bowl/Bowl Guard, Auto Drain	GRP-96-635
Plastic Bowl/Bowl Guard, Manual Drain	GRP-96-634
Plastic Bowl/Bowl Guard, No Drain	GRP-96-638

Replacement Element Kits

Type A 5 Micron element only	FRP-96-639
Type A 5 Micron with retainer, deflector, and bowl O-ring	FRP-96-641

Accessories

Manual Drain	GRP-96-685
Automatic Mechanical Drain, Fluorocarbon 1/8 NPT	GRP-95-981
Automatic Mechanical Drain, Nitrile, 1/8 NPT	GRP-95-973
Wall Mounting Bracket, C-Type	GPA-96-604
Wall Mounting Bracket, T-Type	GPA-96-602
Drain, Manual Override, Auto Drain	GRP-96-000



HOW TO ORDER

Particulate Filter Numbering System

F 1 8 - 0 3 - S L 0 0

F Unit Function

F = Filter

1 Family

8 08 = Miniature

18 = Compact

28 = Standard

38 = Jumbo (Some bowl configurations are not available for the F38 Series Filter. Refer to Price List)

0 Thread Type

0 = NPT

C = BSPP (ISO, R228 [G Series])

3 Pipe Size

1 = 1/8

4 = 1/2

2 = 1/4

6 = 3/4

3 = 3/8

8 = 1

S Filter Element

0 = No element

S = 5 Micron

L Bowls/Drains

Drains

Plastic w/guard
Nitrile Standard

Metal w/sight glass¹
Fluorocarbon Standard

None

C

D

1/8 NPT Female²

E

F

Std Auto Drain²

G

H

Manual Drain

K

L

Low Flow Auto Drain²

N

P

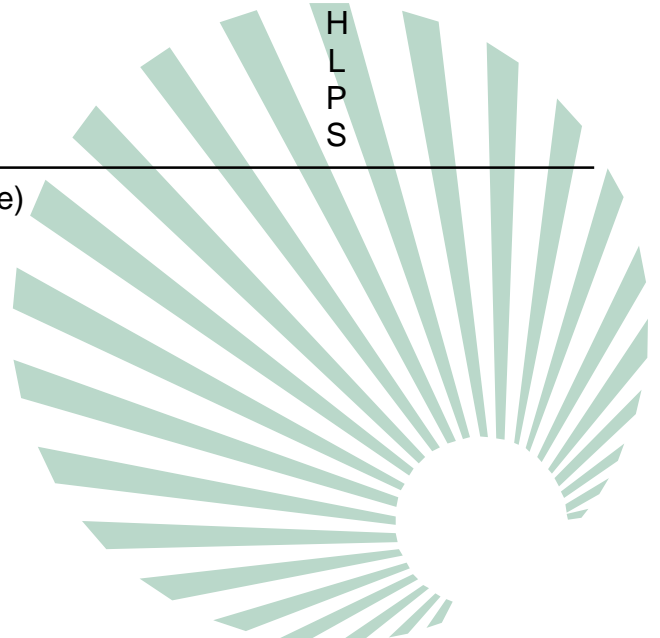
Piston Drain (B08 only)

R

S

¹F08 Filter has an all metal bowl (no sight gauge)

²Except 08 Series



0 Options

- 0 = None
- L = Differential pressure indicator
(Not available on F08 and F38 Series Filter)
- V = Fluorocarbon Seals

0 Options

- 0 = None
- L = Differential pressure indicator
(Not available on F08 and F38 Series Filter)
- V = Fluorocarbon Seals

Note: When selecting from the options columns, please enter letters in alphabetical order, for example:

F18 – 03 – S L 0 0

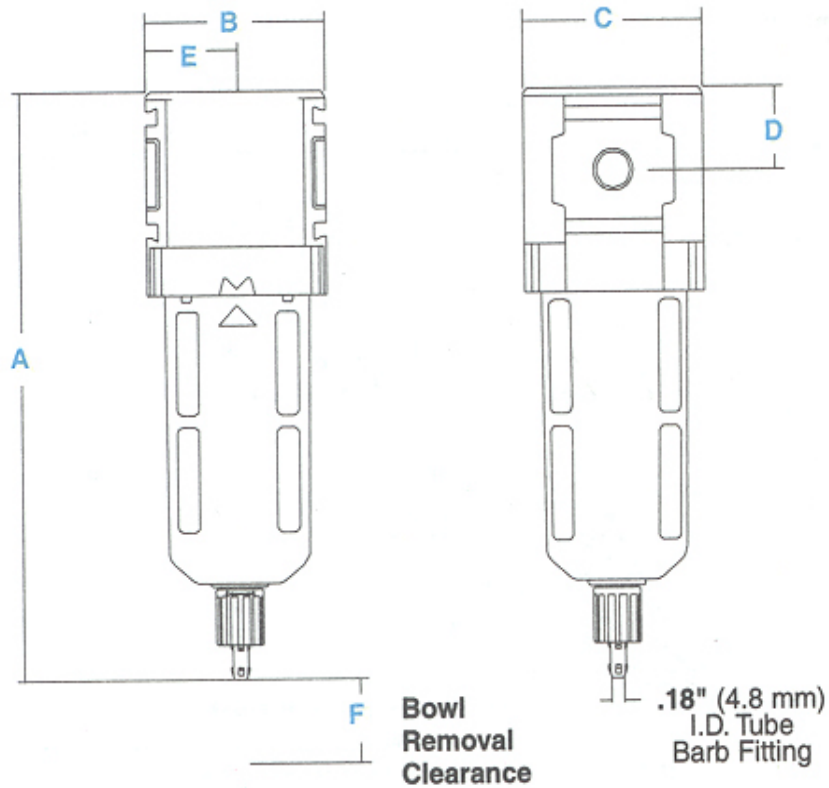
"F" Series Filters, Type "A" 5 micron elements

All Wilkerson Type "A" 5 micron elements meet or exceed ISO Class 3 for maximum particle size and concentration of solid contaminants.

Note: All classes above refer to International Standards Organisation (ISO) standard 8573-1:1991 (E), pertaining to maximum particle size and concentration of solid contaminants, and maximum oil content.



DIMENSIONAL DETAILS



Models	A mm (inches)	B mm (inches)	C mm (inches)	D mm (inches)	E mm (inches)	F mm (inches)
Standard Unit F18-XX-SK00	188 (7.4)	60 (2.36)	60 (2.36)	26 (1.0)	30 (1.18)	41 (1.6)
Automatic Mechanical Drain F18-XX-SG00	179 (7.0)	60 (2.36)	60 (2.36)	26 (1.0)	30 (1.18)	41 (1.6)
Differential Pressure Indicator	209 (8.2)	60 (2.36)	60 (2.36)	48 (1.9)	30 (1.18)	41 (1.6)
Metal Bowl with Sight Gauge and Auto Drain	179 (7.0)	60 (2.36)	69 (2.7)	26 (1.0)	30 (1.18)	41 (1.6)
Metal Bowl with Sight Gauge and Manual Drain	188 (7.4)	60 (2.36)	69 (2.7)	26 (1.0)	30 (1.18)	41 (1.6)