



Air filter standard white Series F1000/F3000/F4000 F6000/F8000-W Series

Introducing the 5 μm element for dust removal and 0.3 μm element for tar removal
(Excluding F1000 Series) Port size: 1/8 to 1

JIS symbol



Specifications

Descriptions	F1000-W	F3000-W	F4000-W	F6000-W	F8000-W
Appearance					
Working fluid	Compressed air				
Max. working pressure MPa	1.0 Note 2, 3, 4				
Withstanding pressure MPa	1.5 Note 2				
Ambient temperature range °C	5 to 60				
Filtration rating μm	5	5 or 0.3			
Drain capacity cm ³	12	45	80	80	80 (Note 1)
Port size Rc, NPT, G	1/8, 1/4 (3/8 uses an adapter)	1/4, 3/8 (1/2 uses an adapter)	1/4, 3/8, 1/2 (3/4 uses an adapter)	3/4, 1 (1 1/4 uses an adapter)	3/4, 1 (1 1/4 uses an adapter)
Product weight kg	0.087	0.25	0.45	0.9	1.16
Standard accessories	Bowl guard				

Note 1: Up to 170 m³ is stored only with the manual drain cock type.

Note 2: When "F1" with an automatic drain is selected for the F1000-W series, minimum operating pressure is 0.2 MPa, maximum operation pressure is 0.7 MPa and the guaranteed pressure resistance is 1.05 MPa. Refer to the maximum processing flow table (page 83) for the F1000-W-F1 automatic drain for the maximum working flow. Set the working flow to less than the maximum working flow.

Note 3: Minimum operating pressure of automat□

Note 4: The minimum operation pressure of the automatic drain is 0.15 MPa for the "F1" with an automatic drain.

Clean room specifications

(Catalog No. CB-033SA)

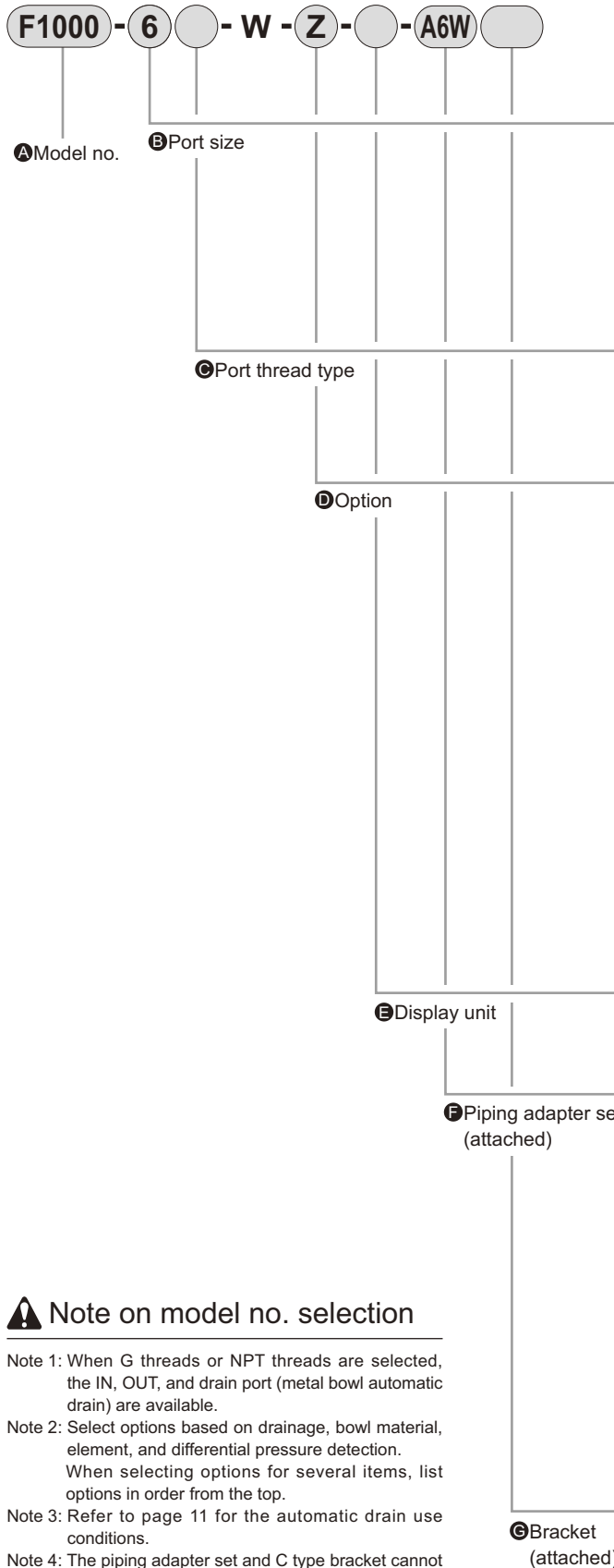
- Dust generation preventing structure for use in cleanrooms

F*000- - **P7***

- Max. working flow with F1000-W-F1 automatic drain (m³/min. (ANR))

Primary pressure MPa	0.2	0.3	0.4	0.5	0.6	0.7
Port size						
6	0.185	0.250	0.310	0.375	0.435	0.500
8	0.225	0.300	0.375	0.450	0.525	0.600

How to order



* Refer to page 9 for explanation of an option.

A Model no.				
F	F	F	F	F
1	3	4	6	8
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

Symbol	Descriptions					
B Port size						
6	1/8	●				
8	1/4	●	●	●		
10	3/8		●	●		
15	1/2			●		
20	3/4				●	●
25	1				●	●
C Port thread type						
Note 1						
Blank	Rc thread	●	●	●	●	●
N	NPT thread	●	●	●	●	●
G	G thread	●	●	●	●	●
D Option						
Note 2						
Drainage	Blank	With manual drain cock	●	●	●	●
	F	Automatic drain with manual override (NO type: Exhaust without pressurized)		●	●	●
	F1	Automatic drain with manual override (NC type: No exhaust without pressurized)	●	●	●	●
	FF	Large automatic drain with manual override (NO type: Exhaust without pressurized)				●
	FF1	Large automatic drain with manual override (NC type: No exhaust without pressurized)				●
Bowl material	Blank	Polycarbonate bowl	●	●	●	●
	Z	Nylon bowl	●	●	●	●
	M	Metal bowl		●	●	●
	M1	Metal bowl with manual drain cock		●	●	●
Element	Blank	5µm	●	●	●	●
	Y	0.3µm (submicron)		●	●	●
Differential pressure detection	Blank	Without differential pressure detection port	●	●	●	●
	Q	With differential pressure detection port (Rc1/4)				●
Flow direction	Blank	Standard flow (left → right)	●	●	●	●
	X1	Reverse flow (right → left)	●	●	●	●
E Display unit						
Blank	MPa display, Rc thread	●	●	●	●	●
J1	MPa display, NPT, G thread	●	●	●	●	●
F Piping adapter set (attached)						
Note 4 Pages 151 to 153						
Blank	Not attached	●	●	●	●	●
A6*W	1/8 piping adapter set	●				
A8*W	1/4 piping adapter set	●	●	●		
A10*W	3/8 piping adapter set	●	●	●		
A15*W	1/2 piping adapter set		●	●		
A20*W	3/4 piping adapter set				●	●
A25*W	1 piping adapter set				●	●
A32*W	1 1/4 piping adapter set				●	●
* Adaptor screw type						
Blank	Rc thread	●	●	●	●	●
N	NPT thread	●	●	●	●	●
G	G thread	●	●	●	●	●
G Bracket (attached)						
Page 148						
Blank	Not attached	●	●	●	●	●
BW	C type bracket	●	●	●	●	●

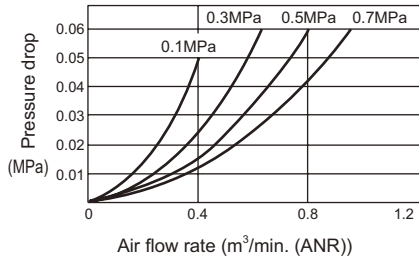
⚠ Note on model no. selection

- Note 1: When G threads or NPT threads are selected, the IN, OUT, and drain port (metal bowl automatic drain) are available.
- Note 2: Select options based on drainage, bowl material, element, and differential pressure detection. When selecting options for several items, list options in order from the top.
- Note 3: Refer to page 11 for the automatic drain use conditions.
- Note 4: The piping adapter set and C type bracket cannot be used together.

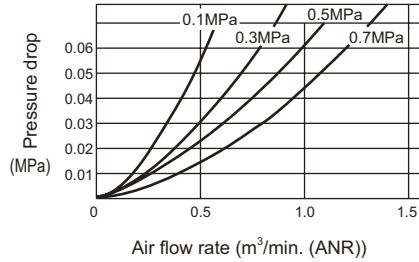
Air Filter Series

Flow characteristics

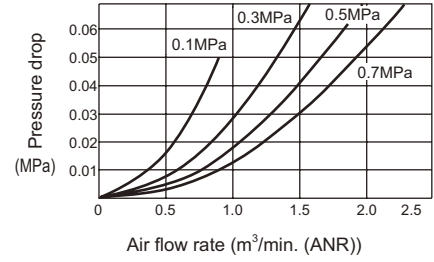
● F1000-6-W



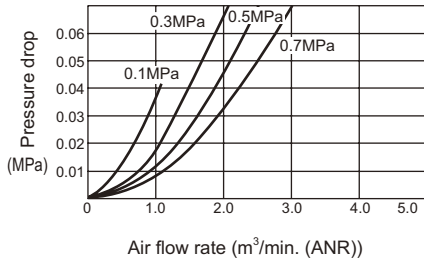
● F1000-8-W



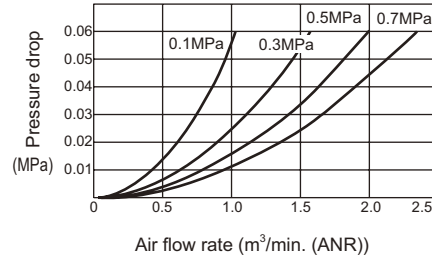
● F3000-8-W



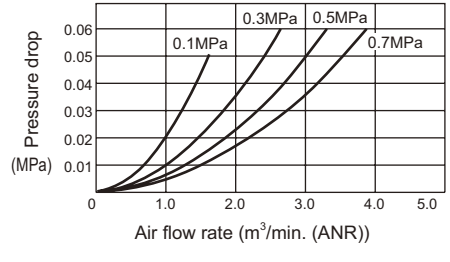
● F3000-10-W



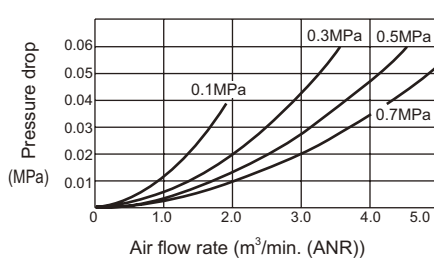
● F4000-8-W



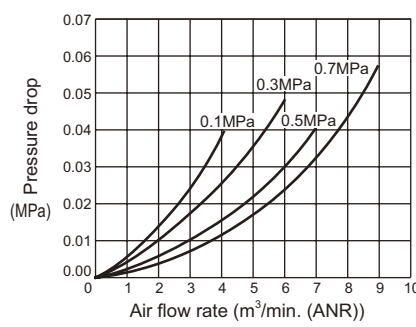
● F4000-10-W



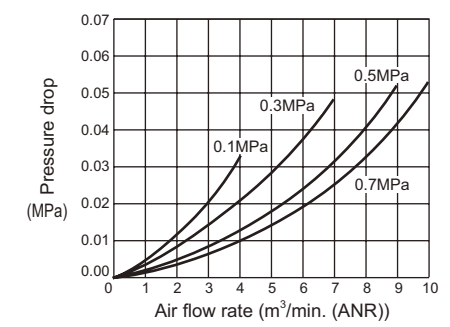
● F4000-15-W



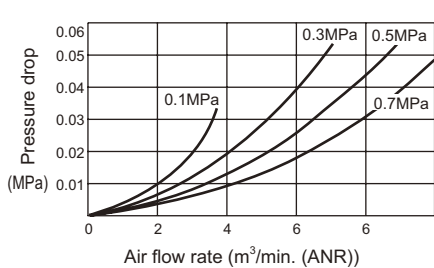
● F6000-20-W



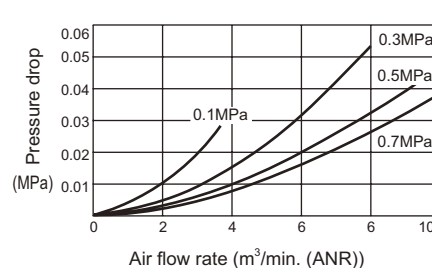
● F6000-25-W



● F8000-20-W

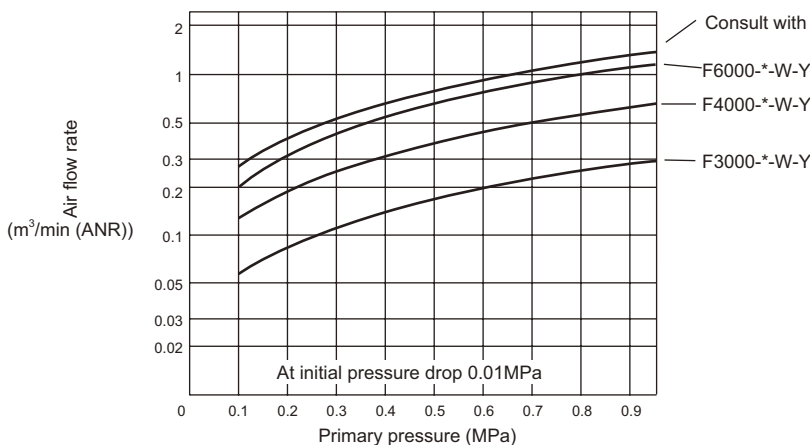


● F8000-25-W



- F3000
- F4000
- F6000 *-W-Y (0.3μm element)
- F8000

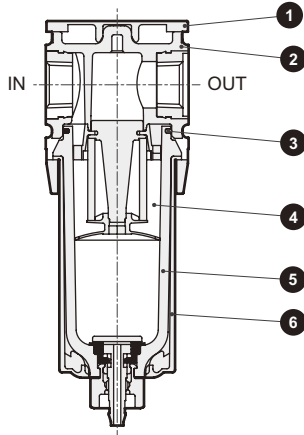
(Maximum flow rate)



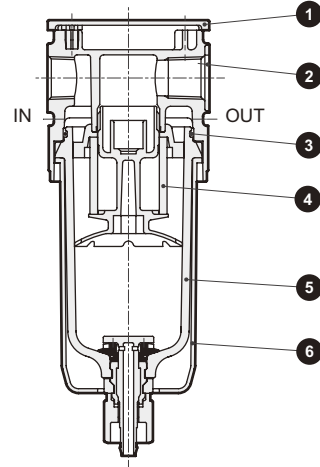
Consult with CKD for large volume type F8000- *-W-Y.

Internal structure and parts list

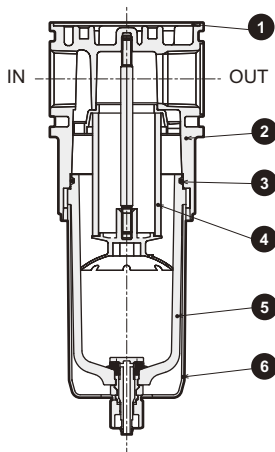
● F1000-W



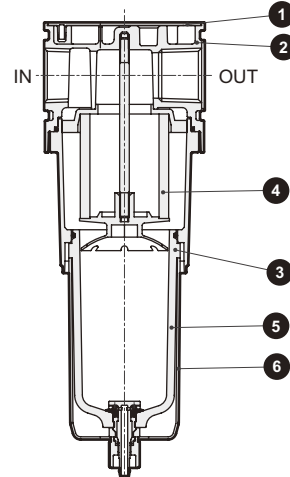
● F3000-W/F4000-W



● F6000-W



● F8000-W



No.	Part name	Material				
		F1000-W	F3000-W	F4000-W	F6000-W	F8000-W
1	Plate cover	ABS resin				
2	Body	Polyamide resin, steel	Aluminum alloy die-casting			
3	O ring <small>Note 1</small>	Special nitrile rubber				
4	Element (5 μ m) <small>Note 2</small>	Polyacetal resin polypropylene	Polypropylene			
	Element (0.3 μ m)	-				
5	Bowl assembly	Polycarbonate resin, polyacetal resin, urethane rubber resin				
6	Bowl guard	Polyamide resin	Polyamide resin, steel			

Note 1: The F1000-W O ring has a special shape.

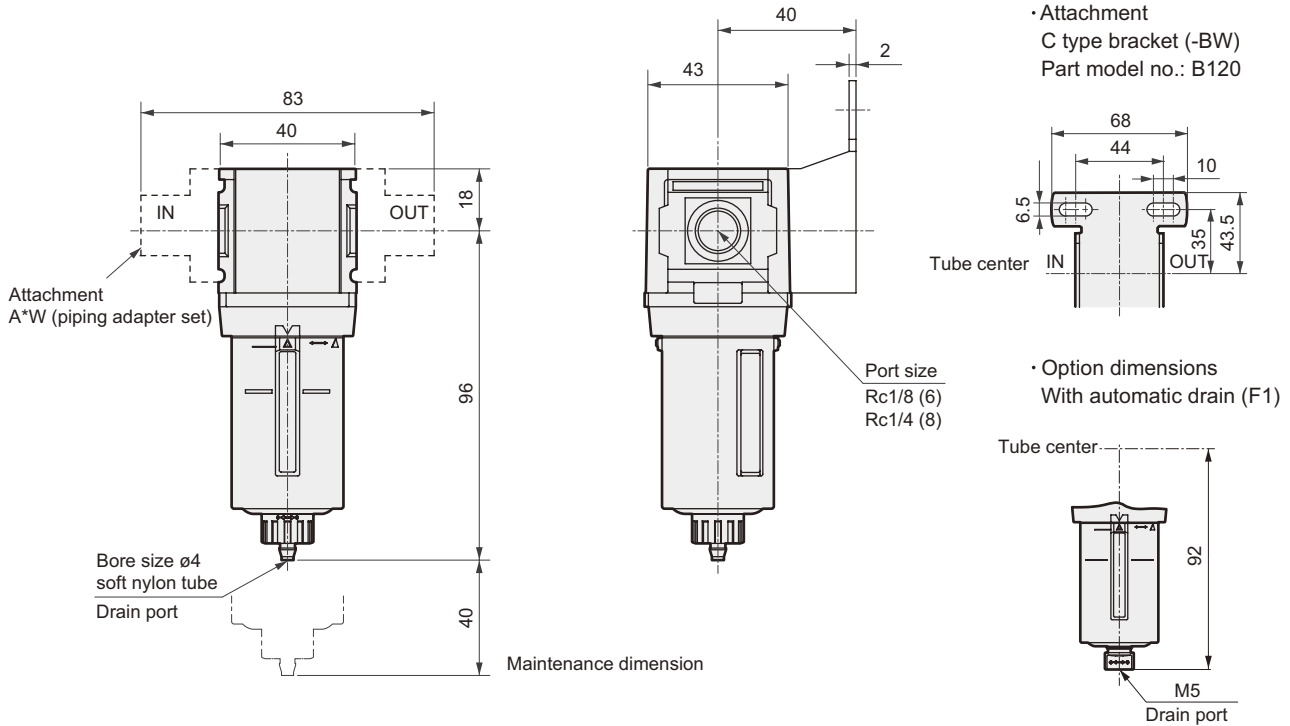
Note 2: F1000-W has an element assembly.

Note 3: Refer to page 89 for the repair kits.

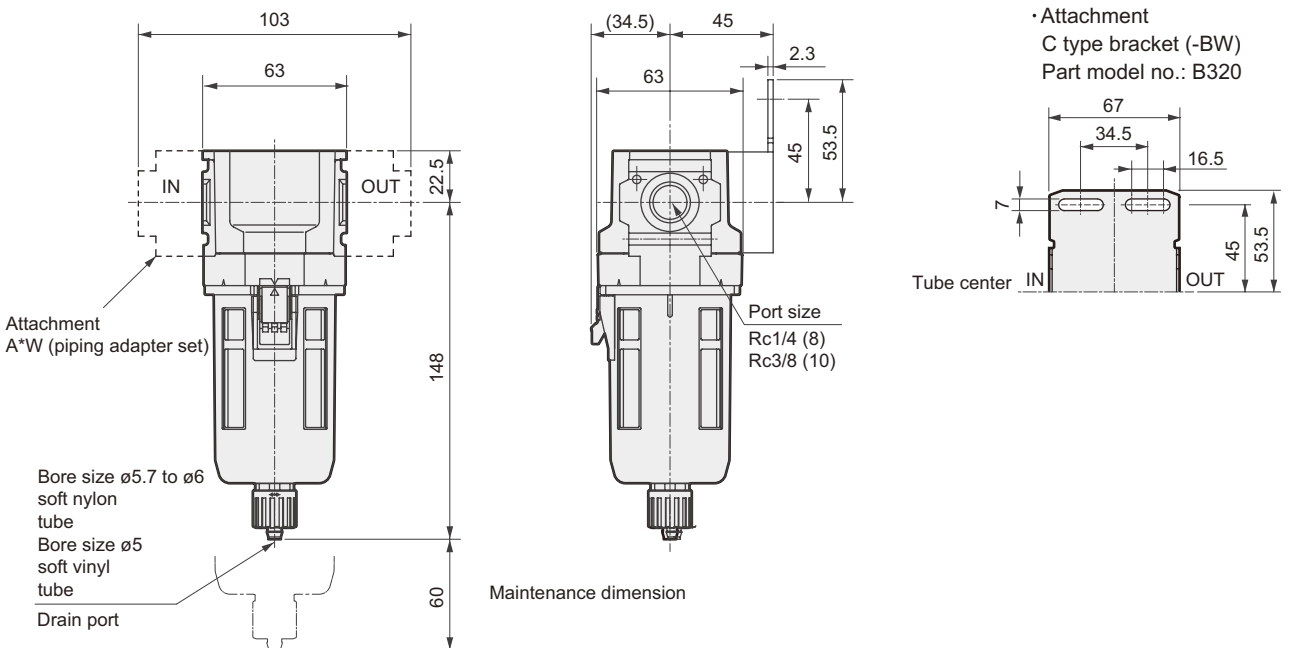
Air Filter Series

Dimensions

● F1000-W



● F3000-W

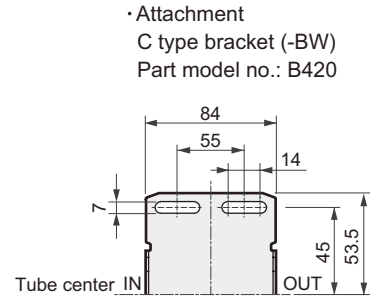
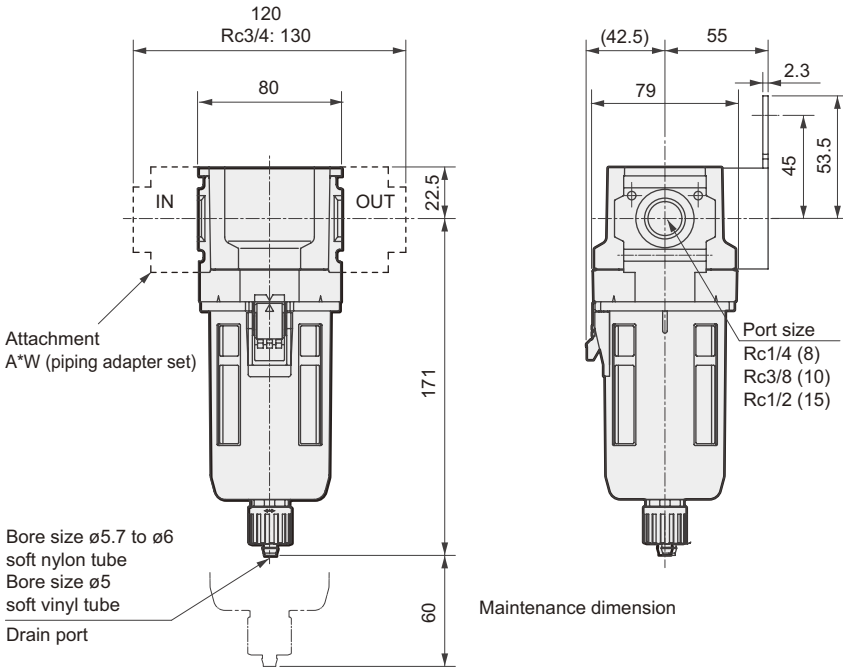


● For the plastic bowl, the dimensions are the same regardless of whether the manual cock or automatic drain is installed.

Note: The C-type bracket and piping adapter set attachments cannot be used at the same time.

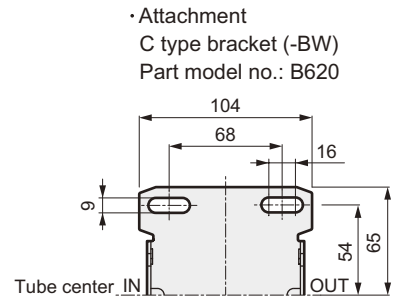
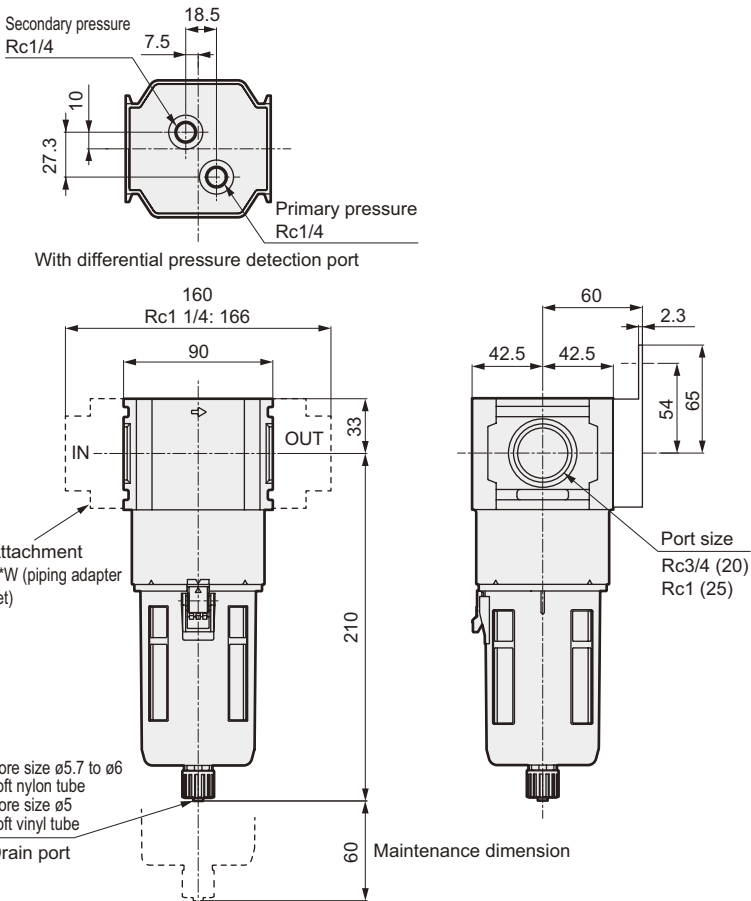
Dimensions

● F4000-W



● For the plastic bowl, the dimensions are the same regardless of whether the manual cock or automatic drain is installed.

● F6000-W

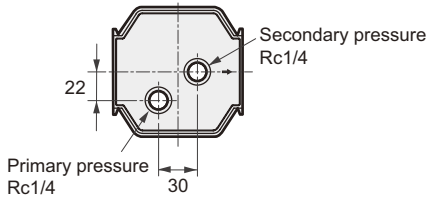


Air Filter Series

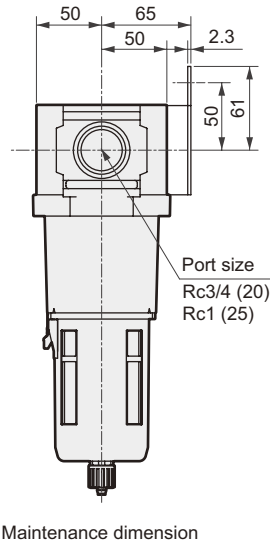
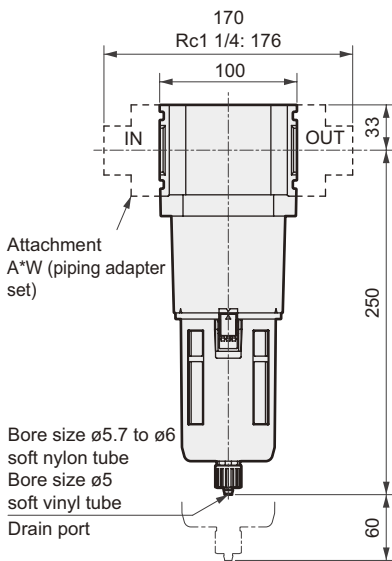
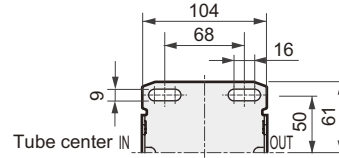
Dimensions

● F8000-W

With differential pressure detection port (Q)



• Attachment
C type bracket (-BW)
Part model no.: B820



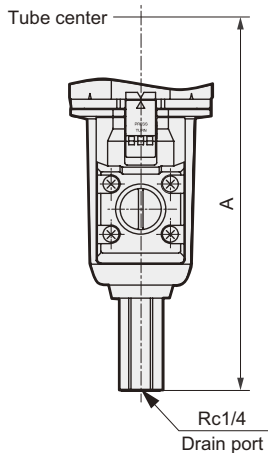
● For the plastic bowl, the dimensions are the same regardless of whether the manual cock or automatic drain is installed.

Note: The C-type bracket and piping adapter set attachments cannot be used at the same time.

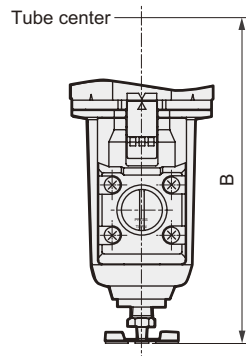
Optional dimensions

● Metal bowl F3000-W/F4000-W/F6000-W/F8000-W (option)

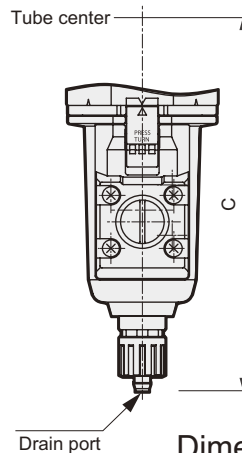
Metal manual cock
with automatic drain (F1M)



With petcock (M)



Standard manual drain
cock (M1)



Dimensions table

Model no.	F1M	M	M1
	A	B	C
F3000-W	164	143.5	154
F4000-W	187	166.5	177
F6000-W	226	205	216
F8000-W	266	245.5	256

Air Filter Series

Optional parts drawing

Element

Element model no. Model	5µm element	0.3µm element (Y)
F1000-W	F1000-ELEMENT-ASSY	-
W1000-W, W1100-W	W1000-ELEMENT-ASSY	-
F3000-W, FM3000-W	F3000-ELEMENT	F3000-ELEMENT-Y
W3000-W, W3100-W	W3000-ELEMENT	W3000-ELEMENT-Y
F4000-W, FM4000-W	F4000-ELEMENT	F4000-ELEMENT-Y
W4000-W, W4100-W	W4000-ELEMENT	W4000-ELEMENT-Y
F6000-W, FM6000-W	F6000-ELEMENT	F6000-ELEMENT-Y
F8000-W, FM8000-W	F8000-ELEMENT	F8000-ELEMENT-Y
W8000-W, W8100-W	W8000-ELEMENT	W8000-ELEMENT-Y

Note: For the F1000-W and W1000-W, the baffle and element are assembly parts.

(M1)

Metal bowl assembly with manual drain cock

(FM1)

NO type automatic drain metal bowl assembly with manual drain cock

(F1M1)

NC type automatic drain metal bowl assembly with manual drain cock



* 8000 Series large drain

(FFM1)

NO type large automatic drain metal bowl assembly with manual drain cock

(FF1M1)

NC type large automatic drain metal bowl assembly with manual drain cock

(FM)

NO type automatic drain bowl assembly with metal manual cock

(F1M)

NC type automatic drain bowl assembly with metal manual cock



* 8000 Series large drain

(FFM)

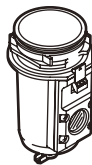
NO type large automatic drain bowl assembly with metal manual cock

(FF1M)

NC type large automatic drain bowl assembly with metal manual cock

(M)

Metal bowl assembly with cock



(F)

NO type automatic drain bowl assembly with manual cock

(F1)

NC type automatic drain bowl assembly with manual cock



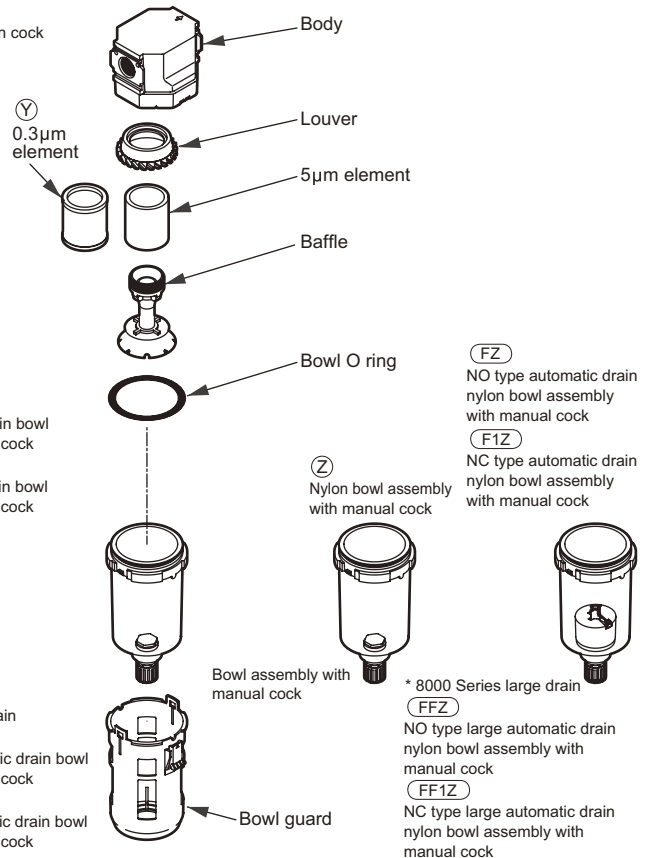
* 8000 Series large drain

(FF)

NO type large automatic drain bowl assembly with manual cock

(FF1)

NC type large automatic drain bowl assembly with manual cock



Repair kits

(Set consisting of louver, baffle, element, bowl O ring)

Repair kits model no. Model	5µm element	0.3µm element (Y)
F1000-W Note 1	F1000-KIT	-
F3000-W, FM3000-W	F3000-KIT	F3000-KIT-Y
F4000-W, FM4000-W	F4000-KIT	F4000-KIT-Y
F6000-W, FM6000-W	F6000-KIT	F6000-KIT-Y
F8000-W, FM8000-W Note 2	F8000-KIT	F8000-KIT-Y

Note 1: For the F1000-W, the baffle and element are assembly parts, so the set consists of the element assembly and bowl O ring.

Note 2: For the F8000-W, the set consists of the baffle, element, and bowl O ring.

Bowl guard

Bowl guard model no. Model	Polycarbonate bowl	Nylon bowl
F1000-W, W1000-W, W1100-W	F1000-W-BOWL-GUARD	F1000-W-BOWL-GUARD-Z
L1000-W	L1000-W-BOWL-GUARD	L1000-W-BOWL-GUARD-Z
M1000-W	M1000-W-BOWL-GUARD	M1000-W-BOWL-GUARD-Z
W3100-W, F3000-W, W3000-W, M3000-W	F3000-W-BOWL-GUARD	F3000-W-BOWL-GUARD-Z
L3000-W	L3000-W-BOWL-GUARD	L3000-W-BOWL-GUARD-Z
F4000-W, W4000-W, M4000-W, W4100-W, F6000-W, M6000-W, W8100-W, F8000-W, W8000-W, M8000-W	F4000-W-BOWL-GUARD	F4000-W-BOWL-GUARD-Z
L4000-W, L8000-W	L4000-W-BOWL-GUARD	L4000-W-BOWL-GUARD-Z
W8100-W, F8000-W, W8000-W-FF, FF1	DT4000-W-BOWL-GUARD	DT4000-W-BOWL-GUARD-Z

Note: The bowl guard for the 1000 Series F1 is sold as a set with the bowl assembly. The model is "F1000-W-BOWL-BOWL-GUARD-F1".

Bowl assembly (sets of bowl assembly, bowl O ring)

Bowl assembly model no. Model	PC bowl assembly with manual cock	PA bowl assembly with manual cock	Metal bowl assembly with manual cock	Metal bowl assembly with standard manual cock	NO type automatic drain PC bowl assembly with manual cock Note 1	NC type automatic drain PC bowl assembly with manual cock
F1000-W, W1000-W M1000-W, W1100-W	F1000-W-BOWL	F1000-W-BOWL-Z	-	-	-	F1000-W-BOWL-BOWL GUARD-F1 Note 3
F3000-W, M3000-W W3000-W, W3100-W	F3000-W-BOWL	F3000-W-BOWL-Z	F3000-W-BOWL-M	F3000-W-BOWL-M1	F3000-W-BOWL-F	M3000-W-BOWL-F1
FM3000-W, MM3000-W	-	-		-	-	-
F4000-W, F6000-W M4000-W, M6000-W F8000-W, M8000-W W4000-W, W4100-W W8000-W, W8100-W	F4000-W-BOWL	F4000-W-BOWL-Z	F4000-W-BOWL-M	F4000-W-BOWL-M1	F4000-W-BOWL-F	M4000-W-BOWL-F1
FM4000-W, FM6000-W FM8000-W, MM4000-W MM6000-W, MM8000-W	-	-		-	-	-

Bowl assembly model no. Model	NO type automatic drain PA bowl assembly with manual cock Note 1	NC type automatic drain PA bowl assembly with manual cock	NO type automatic drain metal bowl assembly with manual cock Note 1	NO type automatic drain metal bowl assembly with standard manual cock	NC type automatic drain metal bowl assembly with manual cock	NC type automatic drain metal bowl assembly with standard manual cock	NO type automatic drain bowl assembly for medium pressure Note 1	NC type automatic drain bowl assembly for medium pressure
F1000-W, W1000-W M1000-W, W1100-W	-	F1000-W-BOWL-BOWL GUARD-F1Z Note 3	-	-	-	-	-	-
F3000-W, M3000-W W3000-W, W3100-W	F3000-W-BOWL-FZ	M3000-W-BOWL-F1Z	F3000-W-BOWL-FM	F3000-W-BOWL-FM1	M3000-W-BOWL-F1M	M3000-W-BOWL-F1M1	-	-
FM3000-W, MM3000-W	-	-	-	-	-	-	FM3000-W-BOWL-F	MM3000-W-BOWL-F1
F4000-W, F6000-W M4000-W, M6000-W F8000-W, M8000-W W4000-W, W4100-W W8000-W, W8100-W	F4000-W-BOWL-FZ	M4000-W-BOWL-F1Z	F4000-W-BOWL-FM	F4000-W-BOWL-FM1	M4000-W-BOWL-F1M	M4000-W-BOWL-F1M1	-	-
FM4000-W, FM6000-W FM8000-W, MM4000-W MM6000-W, MM8000-W	-	-	-	-	-	-	FM4000-W-BOWL-F	MM4000-W-BOWL-F1
Bowl assembly model no. Model	NO type large automatic drain PC bowl assembly with manual cock	NC type large automatic drain PC bowl assembly with manual cock	NO type large automatic drain PA bowl assembly with manual cock	NC type large automatic drain PA bowl assembly with manual cock	NO type large automatic drain metal bowl assembly with metal manual drain cock	NC type large automatic drain metal bowl assembly with metal manual drain cock	NO type large automatic drain metal bowl assembly with standard manual drain cock	NC type large automatic drain metal bowl assembly with standard manual drain cock
F8000-W, W8000-W W8100-W	F8000-W-BOWL-FF	F8000-W-BOWL-FF1	F8000-W-BOWL-FFZ	F8000-W-BOWL-FF1Z	F8000-W-BOWL-FFM	F8000-W-BOWL-FF1M	F8000-W-BOWL-FFM1	F8000-W-BOWL-FF1M1

Note 1: The NO automatic drain cannot be selected for the oil mist filter M1000-W, M3000-W, M4000-W, M6000-W, or M-8000W, or for the medium pressure oil mist filter MM3000-W, MM4000-W, MM6000-W, or MM8000-W.

Note 2: The large automatic drain cannot be installed on the M8000-W.

Note 3: The bowl assembly for the 1000 Series F1 is sold as a set with the bowl guard.