




Air filter

# F1000/F3000/F4000/F8000 Series

Dust removal 5  $\mu\text{m}$  element and tar removal





0.3  $\mu\text{m}$  of element, (F1000 series excluded) port size: Rc1/8 to Rc1

JIS symbol 



CAD DATA AVAILABLE.

## Specifications

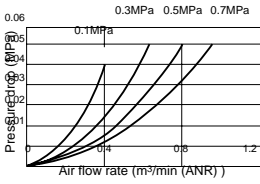
Descriptions	F1000	F3000	F4000	F8000
Appearance				
Working fluid	Compressed air			
Max. working pressure MPa	1.0			
Withstanding pressure MPa	1.5			
Working temperature $^{\circ}\text{C}$	5 to 60			
Filtration rating $\mu\text{m}$	5	5 or 0.3		
Drain capacity $\text{cm}^3$	12	45	80	80 (Note 1)
Port size Rc	1/8 and 1/4 (use an adaptor for 3/8.)	1/4 and 3/8 (use an adaptor for 1/2.)	1/4, 3/8 and 1/2 (use an adaptor for 3/4.)	3/4 and 1 (use an adaptor for 1 1/4.)
Product mass kg	0.087	0.25	0.45	1.16
Standard accessories	Bowl guard			

Note 1: Only manual drain cock type can pool drain up to 170 $\text{cm}^3$  max.

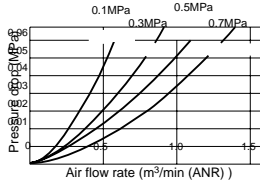
# Air Filter

## Flow characteristics

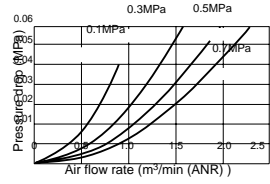
• F1000-6



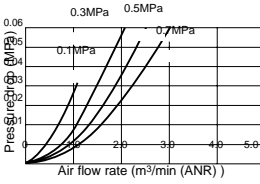
• F1000-8



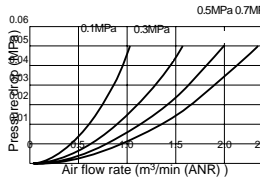
• F3000-8



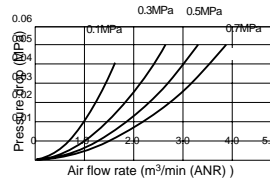
• F3000-10



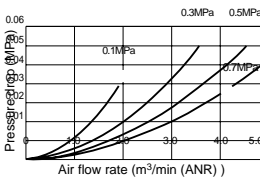
• F4000-8



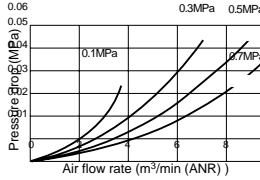
• F4000-10



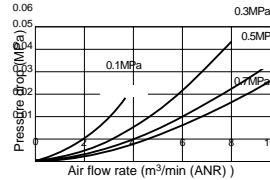
• F4000-15



• F8000-20



• F8000-25

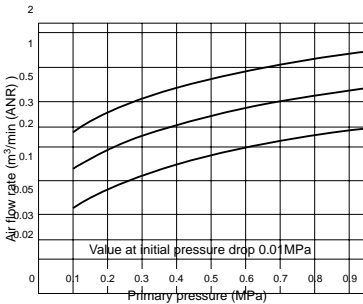


F3000

• F4000\*-Y (0.3 m elements)

F8000

$\mu$  (Max. flow rate)



F8000\*-Y

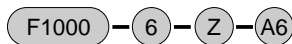
Please consult with CKD for large volume type.

F4000\*-Y

F3000\*-Y

# Air Filter Series

## How to order



**A** Model

**B** Port size

**C** Option  
 Note 1  
 Note 2  
 Note 3  
 \*Refer to Page 267 for explanation on options.

**D** Attachment  
 Note 4  
 Note 5

A Model				
F1000	F3000	F4000	F8000	

Symbol	Descriptions				
B Port size					
6	Rc1/8	●			
8	Rc1/4	●	●	●	
10	Rc3/8		●	●	
15	Rc1/2			●	
20	Rc3/4				●
25	Rc1				●

C Option						
Drainage	Blank	With manual drain cock	●	●	●	●
	F	Automatic drain with manual override (NO type)	●	●	●	●
	F1	Automatic drain with manual override (NC type)		●	●	●
	FF	Large automatic drain with manual override (NO type)				●
	FF1	Large automatic drain with manual override (NC type)				●
Bowl material	Blank	Polycarbonate bowl	●	●	●	●
	Z	Nylon bowl	●	●	●	●
	M	Metal bowl		●	●	●
Element	Blank	5 μm	●	●	●	●
	Y	0.3 μm (submicron)		●	●	●
Differential pressure detection	Blank	No differential pressure detection port	●	●	●	●
	Q	With differential pressure detection port (Rc1/4)				●

D Attachment (attached)					
A6	Rc1/8 piping adapter set	●			
A8	Rc1/4 piping adapter set	●	●	●	
A10	Rc3/8 piping adapter set	●	●	●	
A15	Rc1/2 piping adapter set		●	●	
A20	Rc3/4 piping adapter set			●	●
A25	Rc1 piping adapter set				●
A32	Rc1 1/4 piping adapter set				●
B	C type bracket	●	●	●	●

## ⚠ Note on model No. selection

Note 1: Select options per drainage, bowl material, element and differential pressure detection sections.

When selecting multiple options, write them from the top.

Note 2: Min. operating pressure of automatic drain is 0.1MPa for option symbol "F".

Purge air with initially generated drain until pressure rising to 0.1 MPa.

Note 3: Min. operating pressure of automatic drain is 0.15MPa for option symbol "F1".

Note 4: A piping adaptor set A\*00-\*\* (refer to page 586) is attached.

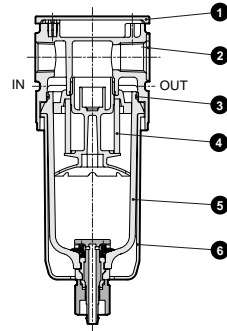
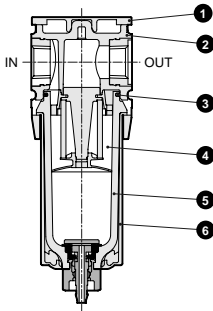
Note 5: Refer to \* auxiliary components \* (Page 557 to) for attachments.

Also, a piping adapter set and a C type bracket can not be used together.

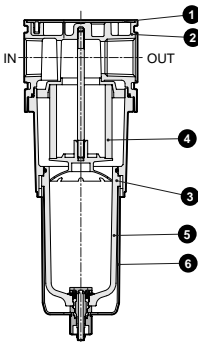
## Internal structure and parts list

• F1000

• F3000 / F4000



• F8000



No.	Part name	Material			
		F1000	F3000	F4000	F8000
1	Plate cover	ABS resin			
2	Body	Polyamide resin and steel	Aluminum ally die casting		
3	O ring <small>Note 1</small>	Special nitrile rubber			
4	Element (5 $\mu\text{m}$ ) <small>Note 2</small>	Polyacetal resin polypropylene	Polypropylene		
	Element (0.3 $\mu\text{m}$ )	—	—		
5	Bowl assembly	Polycarbonate resin, polyacetal resin and urethane rubber resin			
6	Bowl guard	Polyamide resin	Polyamide resin and steel		


Note 1: O ring of F1000 has the special shape.

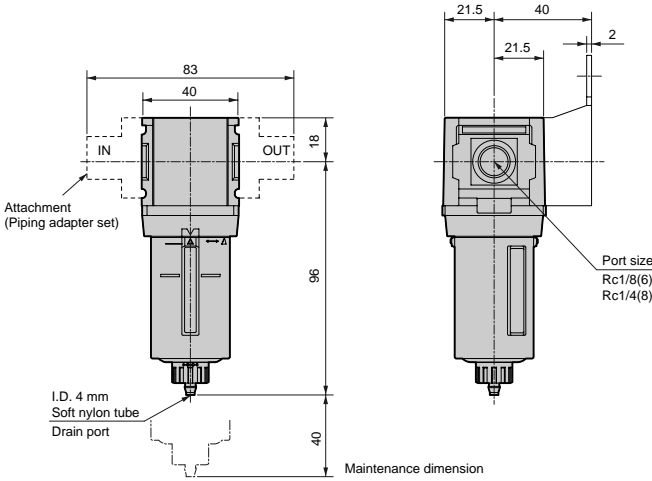
Note 2: An element assembly is provided for an element of F1000.


Note 3: Refer to Page 318 for repair kits.

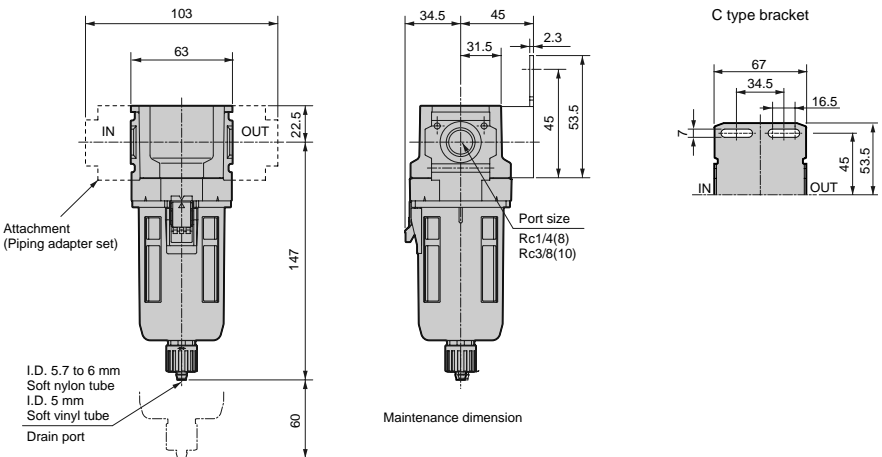
# Air Filter Series

## Dimensions

- F1000  (File name: Page 363 or Ending 15)




- F3000  (File name: Page 363 or Ending 15)

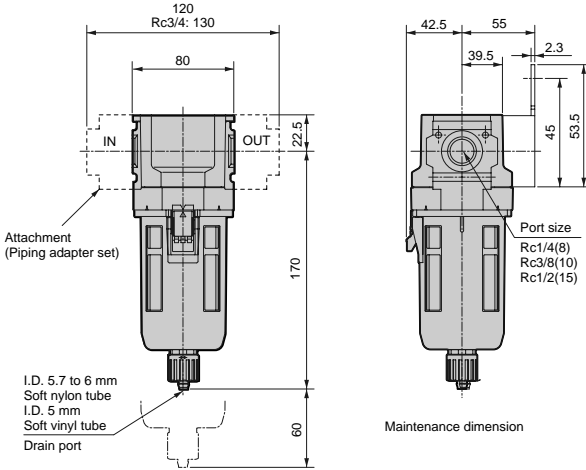


- Types with manual cock and automatic drain are same dimensions for a plastic bowl.

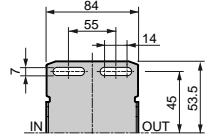
Note: C type bracket and piping adapter set can not be used together.

## Dimensions


- F4000  (File name: Page 363 or Ending 15)

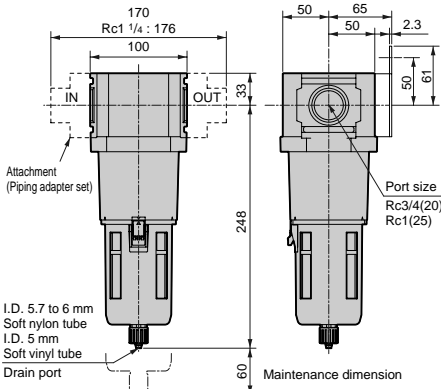
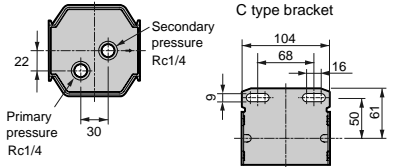


C type bracket



- Types with manual cock and automatic drain are same dimensions for a plastic bowl.

- F8000  (File name: Page 363 or Ending 15)



- Types with manual cock and automatic drain are same dimensions for a plastic bowl.

Note: C type bracket and piping adapter set can not be used together.

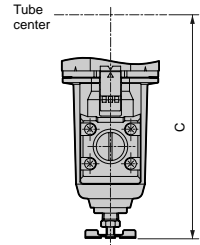
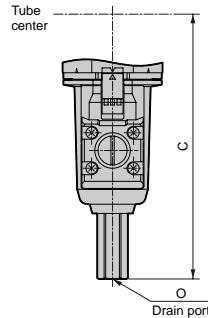
## Optional dimensions

- Metal bowl F3000 / F4000 / F8000 (option)

-  (File name: Page 589 or Ending 20)

With automatic drain (FM,F1M)

Pressure gauge and bowl guard (M)



Dimensions table

Attached pressure gauge	With automatic drain		Manual cock
	C	O	C
F3000	164	Rc1/4	140
F4000	187	Rc1/4	166
F8000	265	Rc1/4	242

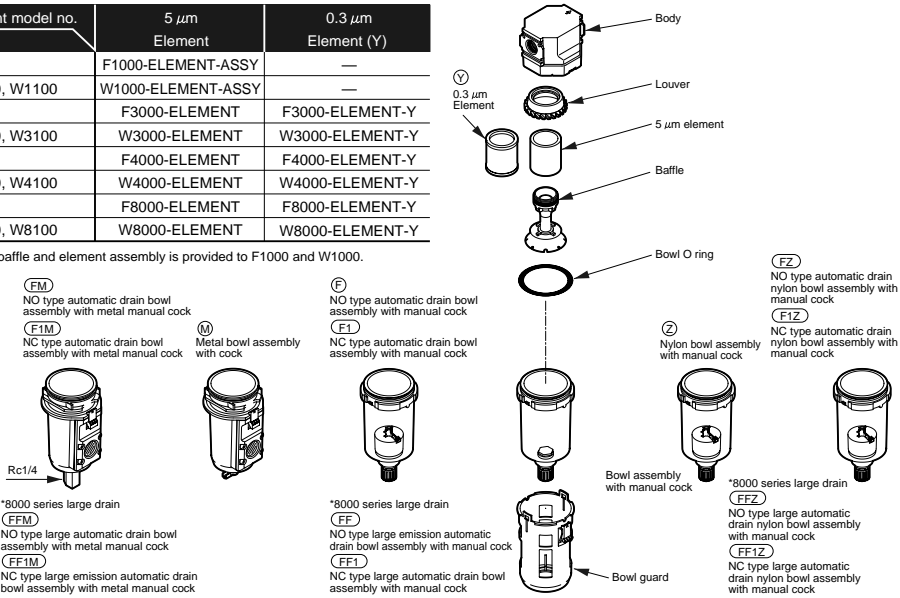
# Air Filter Series

## Optional parts drawing

### Element

Element model no.	5 $\mu$ m Element	0.3 $\mu$ m Element (Y)
F1000	F1000-ELEMENT-ASSY	—
W1000, W1100	W1000-ELEMENT-ASSY	—
F3000	F3000-ELEMENT	F3000-ELEMENT-Y
W3000, W3100	W3000-ELEMENT	W3000-ELEMENT-Y
F4000	F4000-ELEMENT	F4000-ELEMENT-Y
W4000, W4100	W4000-ELEMENT	W4000-ELEMENT-Y
F8000	F8000-ELEMENT	F8000-ELEMENT-Y
W8000, W8100	W8000-ELEMENT	W8000-ELEMENT-Y

Note: A baffle and element assembly is provided to F1000 and W1000.



### Repair kits

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

Repair kits model no.	5 $\mu$ m Element	0.3 $\mu$ m Element (Y)
F1000 Note 1	F1000-KIT	—
F3000	F3000-KIT	F3000-KIT-Y
F4000	F4000-KIT	F4000-KIT-Y
F8000 Note 2	F8000-KIT	F8000-KIT-Y

Note 1: Baffle and element assembly is provided for F1000, so a set of element assembly and bowl O ring is provided.

Note 2: A set of baffle, element and bowl O ring is provided for F8000.

### Bowl guard

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

## Bowl assembly (set of bowl assembly and bowl O ring)

Bowl assembly model no.	PC bowl assembly with manual cock	PA bowl assembly with manual cock	Metal bowl assembly with manual cock	NO type automatic drain PC bowl assembly with manual cock	NC type automatic drain PC bowl assembly with manual cock	NO type automatic drain PA bowl assembly with manual cock	NC type automatic drain PA bowl assembly with manual cock	NO type automatic drain metal bowl assembly with metal manual cock	NC type automatic drain metal bowl assembly with metal manual cock
Model									
F1000, W1000 M1000, W1100	F1000-BOWL	F1000-BOWL-Z	—	—	—	—	—	—	—
F3000, W3000 *M3000 and W3100	F3000-BOWL	F3000-BOWL-Z	F3000-BOWL-M	*F3000-BOWL-F	M3000-BOWL-F1	*F3000-BOWL-FZ	M3000-BOWL-F1Z	*F3000-BOWL-FM	M3000-BOWL-F1M
F4000, F8000, W4000 W8000, W4100, W8100 *M4000 and * M8000	F4000-BOWL	F4000-BOWL-Z	F4000-BOWL-M	*F4000-BOWL-F	M4000-BOWL-F1	*F4000-BOWL-FZ	M4000-BOWL-F1Z	*F4000-BOWL-FM	M4000-BOWL-F1M
Bowl assembly model no.	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 cock	NC type large automatic drain metal bowl assembly with metal manual cock		
Model									
*F8000 and W8000 W8100	F8000-BOWL-FF	F8000-BOWL-FF1	F8000-BOWL-FFZ	F8000-BOWL-FF1Z		F8000-BOWL-FFM	F8000-BOWL-FF1M		

\*NO type automatic drain is not selected for oil mist filters; M3000, M4000 and M8000.

\*Large automatic drain can not be installed to M8000.