

F.R.L  
F (Filtr)  
R (Reg)  
L (Lub)  
PresSW  
Shutoff  
SlowStart  
FimResistFR  
Oil-Prohr  
MedPresFR  
No Cu/  
PTFE FRL  
Outdrs FR  
F.R.L  
(Related)  
CompFRL  
LgFRL  
PrecsR  
VacF/R  
Clean FR  
ElecPneur  
AirBoost  
SpdContr  
Silncr  
CheckV/  
other  
Jnt/tube  
AirUnt  
PresCompn  
Mech/  
ElecPresSw  
ContactSW  
AirSens  
PresSW  
Cool  
AirFloSens/  
Contr  
WaterRtSens  
TotAirSys  
(Total Air)  
TotAirSys  
(Gamma)  
RefrDry  
DesicDry  
HiPolymDry  
MainFiltr  
Dischrg  
etc  
Ending



Air filter Flame-resistant series

# F3000/F4000/F8000-G4 Series

New Series of 5 µm element for dust removal, and 0.3 µm element for tar removal.

● Port size: 1/4 to 1

JIS symbol



## Specifications

Descriptions	F3000-G4	F4000-G4	F8000-G4
Working fluid	Compressed air		
Max. working pressure MPa	1.0 (≈150 psi, 10 bar) (*1, *2)		
Proof pressure MPa	1.5 (≈220 psi, 15 bar)		
Ambient / fluid temperatures °C	5 (41°F) to 60 (140°F)		
Filtration rating µm	5 or 0.3		
Drain capacity cm <sup>3</sup>	45	80	80 (*3)
Port size Rc,NPT,G	1/4,3/8 (1/2 uses an adaptor)	1/4,3/8,1/2 (3/4 uses an adaptor)	3/4,1 (1 1/4 uses an adaptor)
Weight kg	0.35	0.55	1.26
Standard specifications	Exterior: Flame-resistant material, metal bowl		

\*1: In the case of "F" with auto-drain, the min. working pressure of auto-drain is 0.1 MPa.

Air is purged with initial drainage until pressure reaches 0.1 MPa.

\*2: In the case of "F1" with auto-drain, the min. working pressure of auto-drain is 0.15 MPa.

\*3: Up to 170 cm<sup>3</sup> is stored with the manual drain type only.

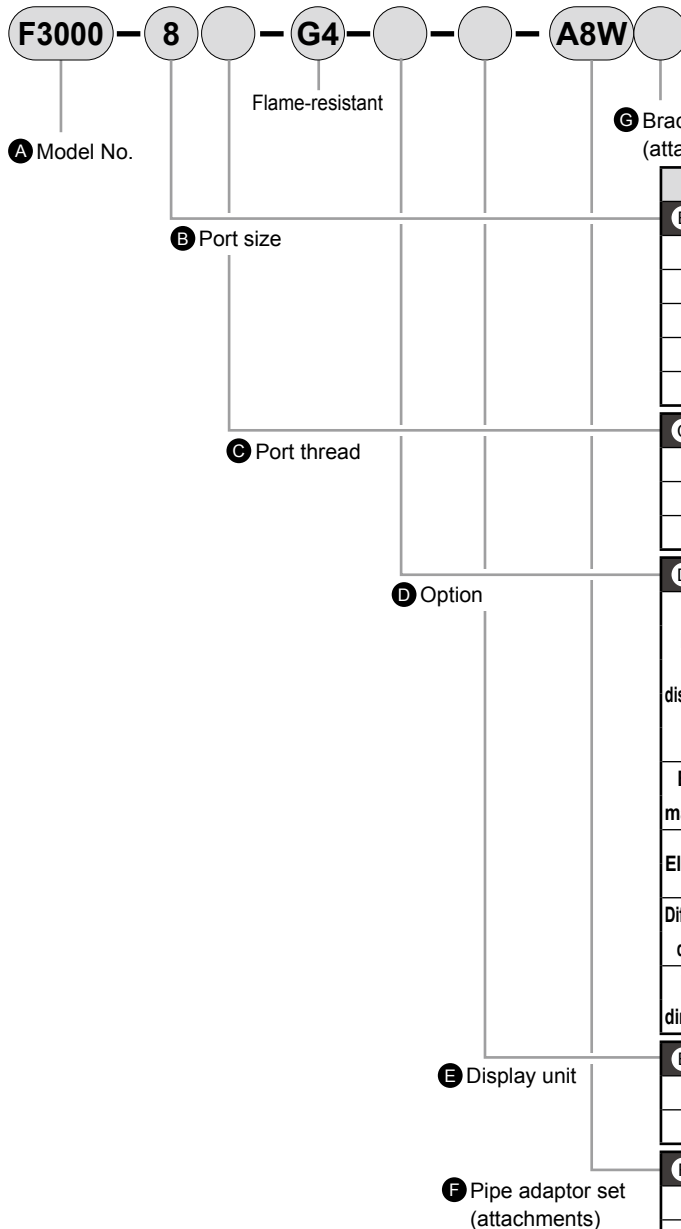
## Option weight

\* Add to the weight of the standard accessories.

Unit: kg

Code	Drain discharge				Bowl material	Pipe adaptor set						Bracket
	F	F1	FF	FF1		M	A8*W	A10*W	A15*W	A20*W	A25*W	
F3000-G4	0.02	0.02			0	0.16	0.16	0.16				0.17
F4000-G4	0.02	0.02			0	0.16	0.16	0.16	0.16			0.21
F8000-G4	0.02	0.02	0.02	0.02	0				0.53	0.53	0.53	0.36

### How to order



\* Refer to page 28 for the explanation of the option.

**A Model No.**

	F3000	F4000	F8000
<b>B Port size</b>			
8	●	●	
10	●	●	
15		●	
20			●
25			●

Code	Content	F3000	F4000	F8000
<b>B Port size</b>				
8	1/4	●	●	
10	3/8	●	●	
15	1/2		●	
20	3/4			●
25	1			●

**C Port thread**

<b>C Port thread</b>		<b>*1</b>		
Blank	Rc thread	●	●	●
N	NPT thread	●	●	●
G	G thread	●	●	●

**D Option**

<b>D Option</b>		<b>*2</b>			
Drain discharge	Blank	With manual drain cock	●	●	●
	F	Auto-drain, man OVRD (NO: no press→Exhaust)	●	●	●
	F1	Auto-drain, man OVRD (NC: no press→no exhaust)	●	●	●
	FF	Large auto-drain, man OVRD (NO: no press→Exhaust)			●
*3	FF1	Large auto-drain, man OVRD (NC: no press→no exhaust)			●
	Blank	Metal bowl (resin cock)	●	●	●
Bowl material	M	Metal bowl (metal cock)	●	●	●
	Blank	5 μm	●	●	●
Element	Y	0.3 μm (submicron)	●	●	●
	Blank	Without differential pressure detection port	●	●	●
Diff press detect	Q	With differential pressure detection port (Rc 1/4)			●
	Blank	Standard flow (left → right)	●	●	●
Flow direction	X1	Reverse flow (right → left)	●	●	●

**E Display unit**

<b>E Display unit</b>		F3000	F4000	F8000
Blank	MPa display, Rc thread	●	●	●
J1	MPa display, NPT, G thread	●	●	●

**F Pipe adaptor set (attachments)**

<b>F Pipe adaptor set (attachments) *4</b>		<b>Page 270</b>		
Blank	Not attached	●	●	●
A8*W	1/4 pipe adaptor set (white)	●	●	
A10*W	3/8 pipe adaptor set (white)	●	●	
A15*W	1/2 pipe adaptor set (white)	●	●	
A20*W	3/4 pipe adaptor set (white)		●	●
A25*W	1 pipe adaptor set (white)			●
A32*W	1 1/4 pipe adaptor set (white)			●

<b>* Adaptor thread</b>		F3000	F4000	F8000
Blank	Rc thread	●	●	●
N	NPT thread	●	●	●
G	G thread	●	●	●

<b>G Bracket (attachment)</b>		<b>Page 267</b>		
Blank	Not attached	●	●	●
BW	C type bracket (silver)	●	●	●

### ⚠️ Precautions for model No. selection

\*1: G threads and NPT threads are available for IN, OUT, drain outlet (metal bowl (metal cock) with auto-drain) and differential pressure detection port.

\*2: Select options for the drainage, bowl material, element and differential pressure detection.

When selecting options for several items, list options in order from the top.

\*3: Refer to page 280 for the auto-drain usage conditions.

\*4: The pipe adaptor set and C type bracket cannot be used together.

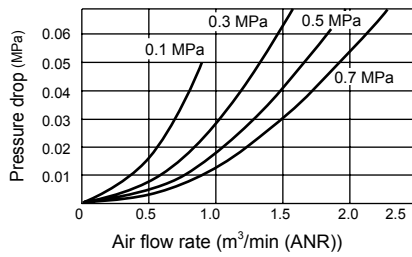
F.R.L
F (Filtr)
R (Reg)
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Shutoff
SlowStart
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MedPresFR
No Cu/PTFE FRL
Outdrs FR
F.R.L (Related)
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LgFRL
PrecsR
VacF/R
Clean FR
ElecPneuR
AirBoost
SpdContr
Silncr
CheckV/other
Jnt/tube
AirUnt
PrecsCompn
Mech/ElecPresSw
ContactSW
AirSens
PresSW Cool
AirFloSens/Contr
WaterRtSens
TotAirSys (Total Air)
TotAirSys (Gamma)
RefrDry
DesicDry
HiPolymDry
MainFiltr
Dischrg etc
Ending

# Air Filter Series

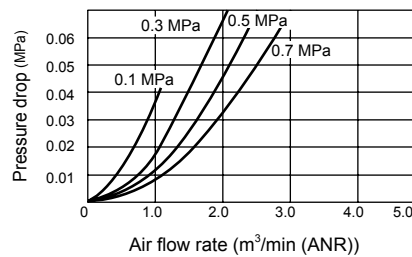
## F.R.L Flow characteristics

- F (Filtr)
- R (Reg)
- L (Lub)
- PresSW
- Shutoff
- SlowStart
- FimResistFR
- Oil-ProhR
- MedPresFR
- No Cu/PTFE FRL
- Outdrs FR
- F.R.L (Related)
- CompFRL
- LgFRL
- PrecsR
- VacF/R
- Clean FR
- ElecPneuR
- AirBoost
- SpdContr
- Silncr
- CheckV/other
- Jnt/tube
- AirUnt
- PrecsCompn
- Mech/ElecPresSw
- ContactSW
- AirSens
- PresSW Cool
- AirFloSens/Contr
- WaterRtSens
- TotAirSys (Total Air)
- TotAirSys (Gamma)
- RefrDry
- DesicDry
- HiPolymDry
- MainFiltr
- Dischrg etc
- Ending

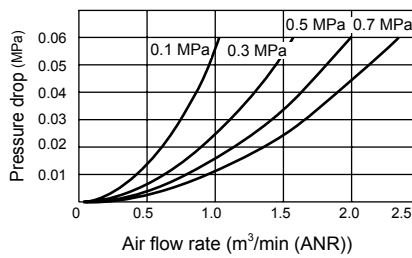
● F3000-8-G4



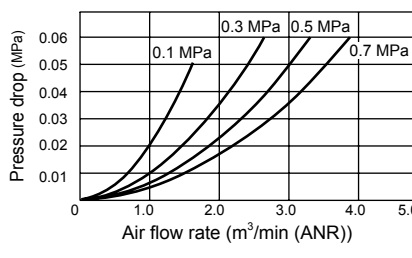
● F3000-10-G4



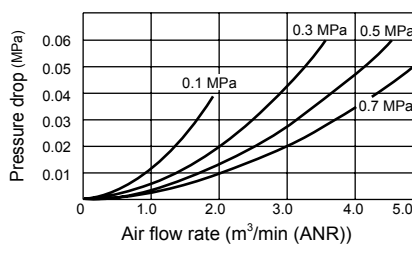
● F4000-8-G4



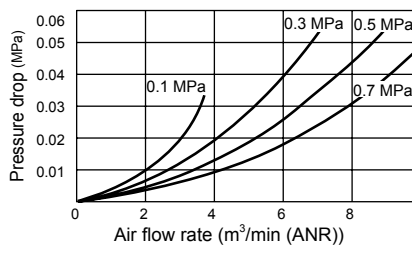
● F4000-10-G4



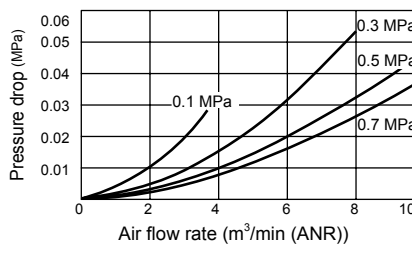
● F4000-15-G4



● F8000-20-G4



● F8000-25-G4

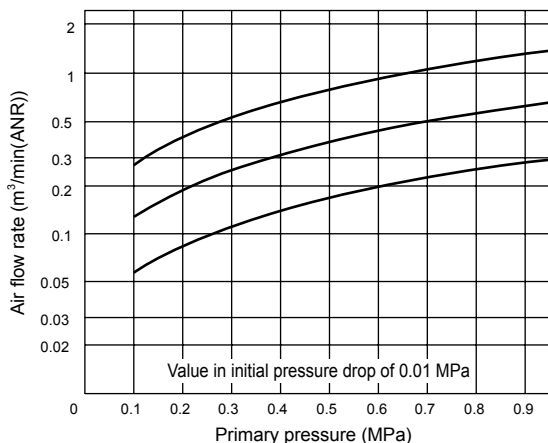


F3000

● F4000\*-G4-Y (0.3 µm element)

F8000

(Max. processing flow rate)



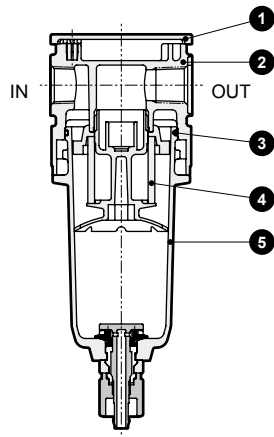
Contact CKD regarding F8000\*-G4-Y large volume.

F4000\*-G4-Y

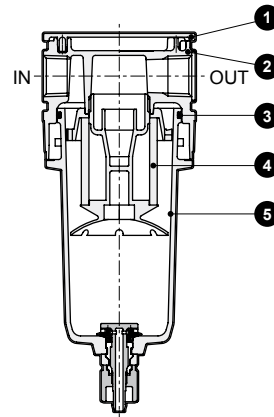
F3000\*-G4-Y

## Internal structure and parts list

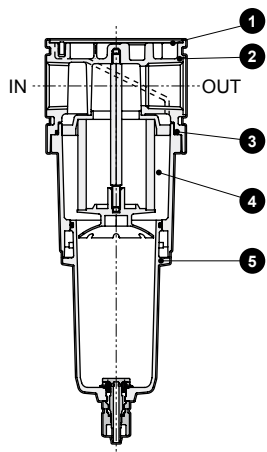
● F3000-G4



● F4000-G4



● F8000-G4



No.	Part name	Material		
		F3000-G4	F4000-G4	F8000-G4
1	Plate cover	ABS resin (*1)		
2	Body	Aluminum alloy die-casting		
3	O-ring	Special nitrile rubber		
4	Element (5 μm)	Polypropylene		
	Element (0.3 μm)	-		
5	Bowl assembly	Aluminum alloy die-casting, PBT resin (*1), glass, nitrile rubber, steel, polyacetal resin, urethane resin		

\*1 : Flame-resistant resin, UL94 Standards V-0 or equivalent

\*2 : Refer to page 198 for repair parts kits.

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- MedPresFR
- No Cu/  
PTFE FRL
- Outdrs FR
- F.R.L  
(Related)
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- LgFRL
- PrecsR
- VacF/R
- Clean FR
- ElecPneuR
- AirBoost
- SpdContr
- Silncr
- CheckV/  
other
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- AirUnt
- PrecsCompn
- Mech/  
ElecPresSW
- ContactSW
- AirSens
- PresSW  
Cool
- AirFloSens/  
Contr
- WaterRtSens
- TotAirSys  
(Total Air)
- TotAirSys  
(Gamma)
- RefrDry
- DesicDry
- HiPolymDry
- MainFiltr
- Dischrg  
etc
- Ending

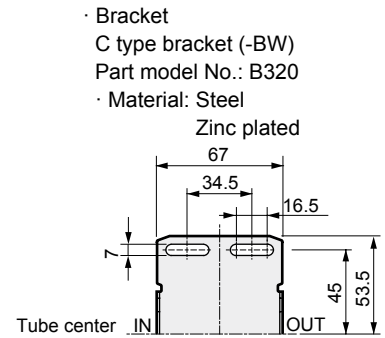
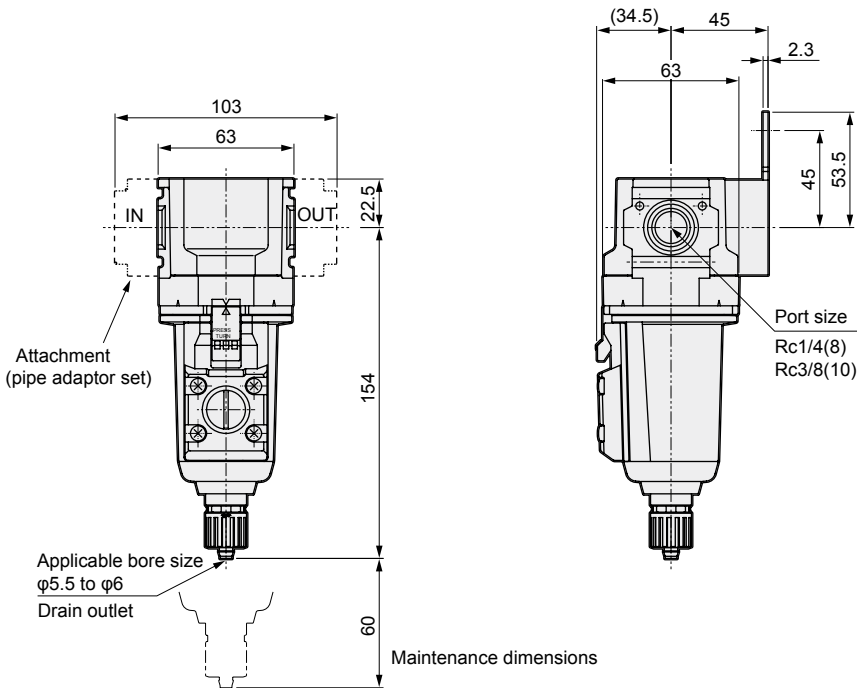
# Air Filter Series

## Dimensions



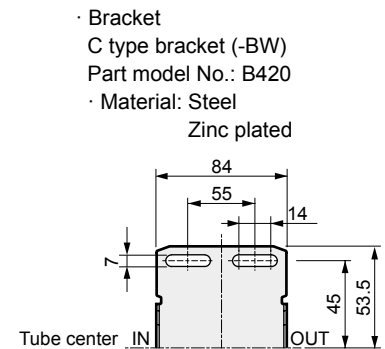
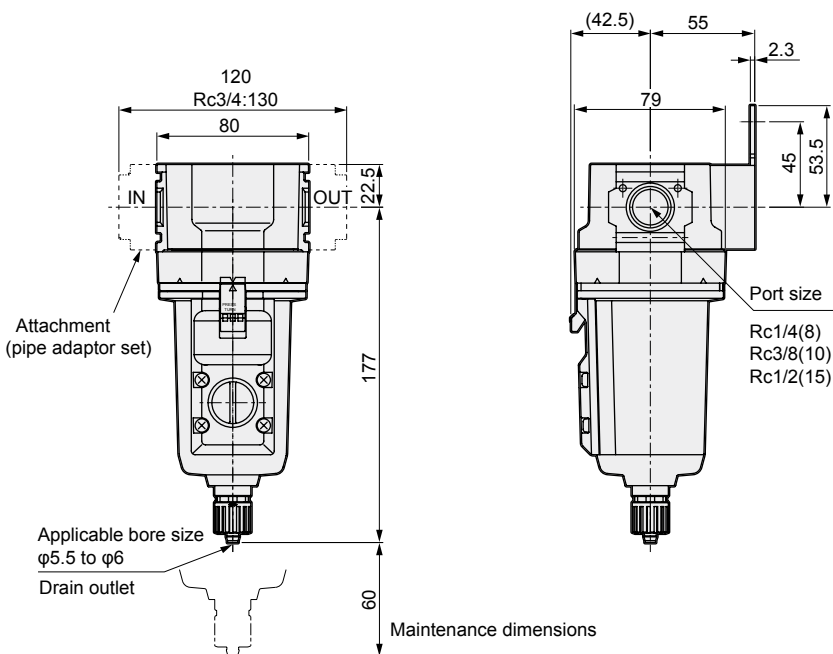
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Jnt/tube
AirUnt
PrecsCompn
Mech/ ElecPresSw
ContactSW
AirSens
PresSW Cool
AirFloSens/ Contr
WaterRtSens
TotAirSys (Total Air)
TotAirSys (Gamma)
RefrDry
DesicDry
HiPolymDry
MainFiltr
Dischrg etc
Ending

### ● F3000-G4



· For the metal bowl (resin cock), the dimensions of the manual drain cock and the auto-drain manual override are the same.  
Note: The C type bracket and pipe adaptor set attachments cannot be used together.

### ● F4000-G4



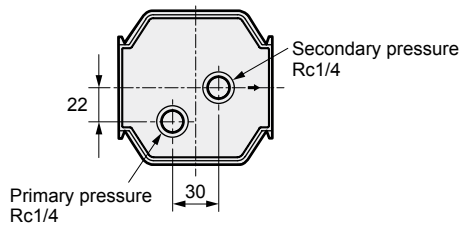
· For the metal bowl (resin cock), the dimensions of the manual drain cock and the auto-drain manual override are the same.  
Note: The C type bracket and pipe adaptor set attachments cannot be used together.

### Dimensions

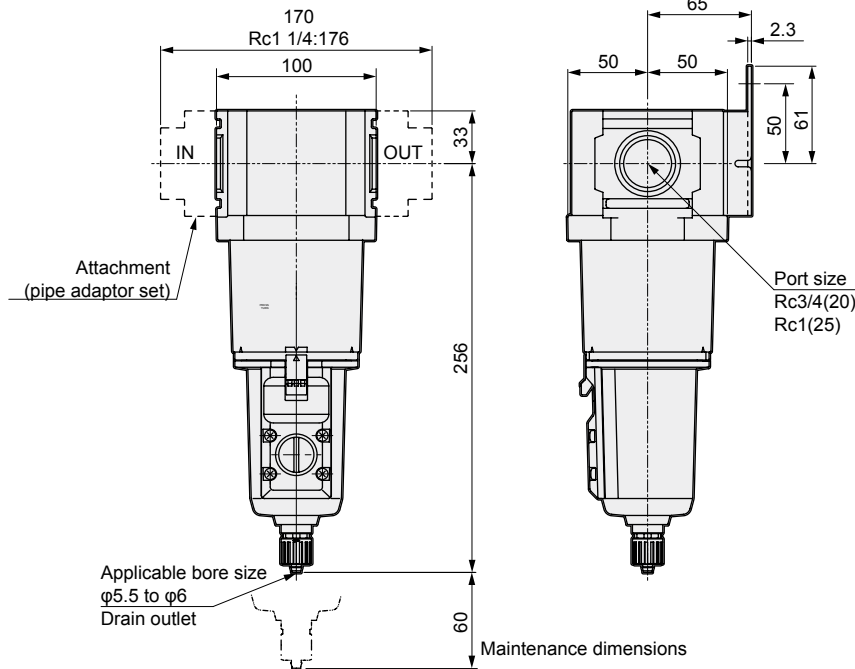
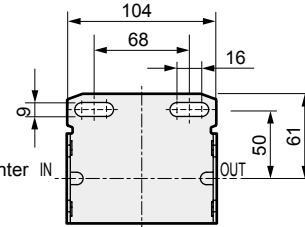


#### ● F8000-G4

With differential pressure detection port (Q)



- Bracket
- C type bracket (-BW)
- Part model No.: B820
- Material: Steel
- Zinc plated



· For the metal bowl (resin cock), the dimensions of the manual drain cock and the auto-drain manual override are the same.

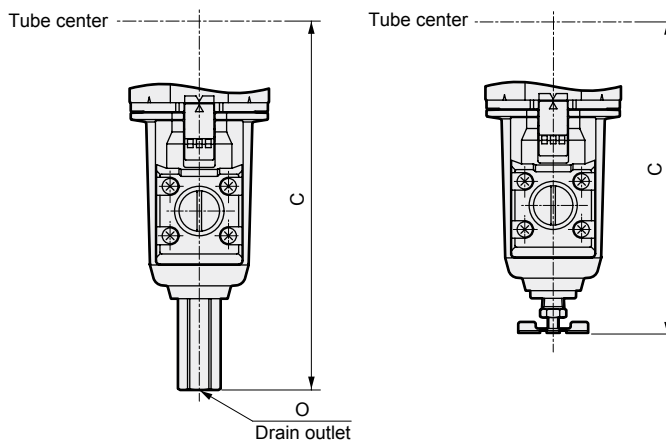
Note: The C type bracket and pipe adaptor set attachments cannot be used together.

### Optional dimensions

#### ● Metal bowl (metal cock) F3000-G4/F4000-G4/F8000-G4

Manual metal cock (FM, F1M)

Manual cock (M)



Dimensions table

Model No.	With auto-drain		Manual cock
	C	O	C
F3000-G4	164	Rc1/4	143.5
F4000-G4	187	Rc1/4	166.5
F8000-G4	266	Rc1/4	245.5

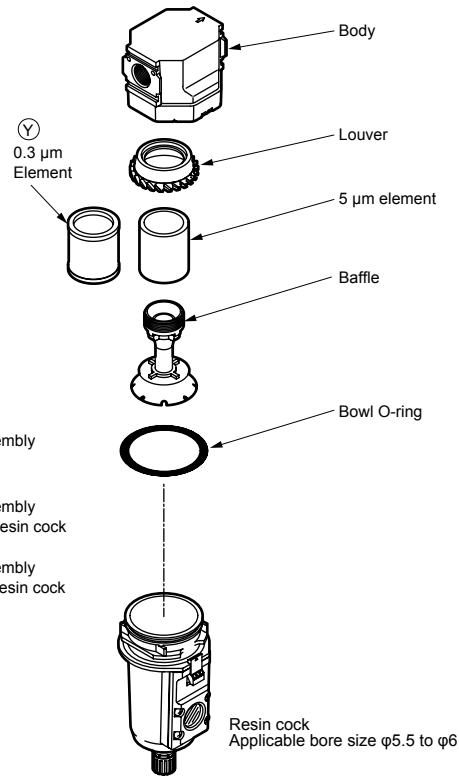
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- PrecsR
- VacF/R
- Clean FR
- ElecPneuR
- AirBoost
- SpdContr
- Silncr
- CheckV/ other
- Jnt/tube
- AirUnt
- PrecsCompn
- Mech/ ElecPresSw
- ContactSW
- AirSens
- PresSW Cool
- AirFloSens/ Contr
- WaterRtSens
- TotAirSys (Total Air)
- TotAirSys (Gamma)
- RefrDry
- DesicDry
- HiPolymDry
- MainFiltr
- Dischrg etc
- Ending

# Air Filter Series

## Optional parts diagram

### Element

Element model No.	5 µm Element	0.3 µm Element (Y)
F3000-G4	F3000-ELEMENT	F3000-ELEMENT-Y
W3000-G4, W3100-G4	W3000-ELEMENT	W3000-ELEMENT-Y
F4000-G4	F4000-ELEMENT	F4000-ELEMENT-Y
W4000-G4, W4100-G4	W4000-ELEMENT	W4000-ELEMENT-Y
F8000-G4	F8000-ELEMENT	F8000-ELEMENT-Y
W8000-G4, W8100-G4	W8000-ELEMENT	W8000-ELEMENT-Y



**(FM)**  
Metal bowl (metal cock) assembly  
NO auto-drain with manual metal cock

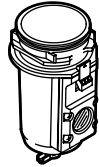
**(F1M)**  
Metal bowl (metal cock) assembly  
NC auto-drain with manual metal cock

**(M)**  
Metal bowl (metal cock) assembly  
with manual cock

**(Blank)**  
Metal bowl (resin cock) assembly  
with manual resin cock

**(F)**  
Metal bowl (resin cock) assembly  
NO auto-drain with manual resin cock

**(F1)**  
Metal bowl (resin cock) assembly  
NC auto-drain with manual resin cock



\* 8000 Series large emission

**(FFM)**  
Metal bowl (metal cock) assembly  
NO large auto-drain with manual metal cock

**(FF1M)**  
Metal bowl (metal cock) assembly  
NC large auto-drain with manual metal cock

\* 8000 Series large emission

**(FF)**  
Metal bowl (resin cock) assembly  
NO large auto-drain with manual resin cock

**(FF1)**  
Metal bowl (resin cock) assembly  
NC large auto-drain with manual resin cock

### Repair parts kit

(A set including a louver, baffle, element and bowl O-ring)

Repair parts kits model No.	5 µm Element	0.3 µm Element (Y)
F3000-G4	F3000-KIT	F3000-KIT-Y
F4000-G4	F4000-KIT	F4000-KIT-Y
F8000-G4 *1	F8000-KIT	F8000-KIT-Y

\*1: In the case of the F8000, the baffle, element and O-ring of the bowl are a package set.

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

Bowl assembly model No.	Metal bowl (resin cock) assembly with manual resin cock	NO auto-drain metal bowl (resin cock) assembly with manual resin cock	NC auto-drain metal bowl (resin cock) assembly with manual resin cock	Metal bowl (metal cock) assembly with manual cock	NC auto-drain metal bowl/cock (manual) Assy	NC auto-drain metal bowl/cock (manual) Assy
<b>Product option</b>	<b>Blank</b>	<b>F</b>	<b>F1</b>	<b>M</b>	<b>FM</b>	<b>F1M</b>
<b>Type</b>	<b>Blank</b>	<b>F</b>	<b>F1</b>	<b>M</b>	<b>FM</b>	<b>F1M</b>
F3000, W3000, W3100-G4	F3000-G4-BOWL-M1	F3000-G4-BOWL-FM1	F3000-G4-BOWL-F1M1	F3000-G4-BOWL-M	F3000-G4-BOWL-FM	F3000-G4-BOWL-F1M
F4000, F8000, W4000, W4100, W8000, W8100-G4	F4000-G4-BOWL-M1	F4000-G4-BOWL-FM1	F4000-G4-BOWL-F1M1	F4000-G4-BOWL-M	F4000-G4-BOWL-FM	F4000-G4-BOWL-F1M
<b>Bowl assembly model No.</b>	<b>NO large auto-drain metal bowl, resin cock (manual) Assy</b>	<b>NC large auto-drain metal bowl, resin cock (manual) Assy</b>	<b>NO large auto-drain metal bowl, resin cock Assy, man metal cock</b>	<b>NC large auto-drain metal bowl, resin cock Assy, man metal cock</b>		
<b>Product option</b>	<b>FF</b>	<b>FF1</b>	<b>FFM</b>	<b>FF1M</b>		
<b>Type</b>	<b>FF</b>	<b>FF1</b>	<b>FFM</b>	<b>FF1M</b>		
F8000, W8000, W8100-G4	F8000-G4-BOWL-FFM1	F8000-G4-BOWL-FF1M1	F8000-G4-BOWL-FFM	F8000-G4-BOWL-FF1M		