

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

Item	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 ³	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 cm³ is stored with the manual drain type only.

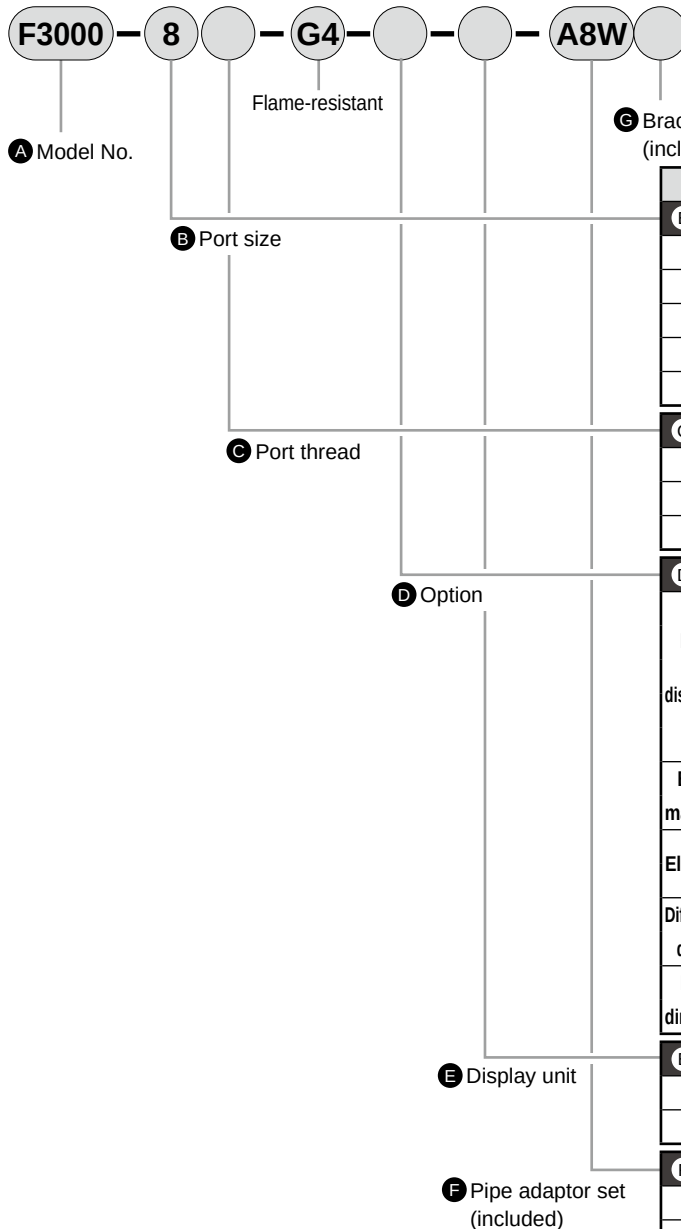
Option weight

* Add to the weight of the standard accessories.

Unit: kg

Code	Drain discharge				Bowl material	Pipe adaptor set						Bracket
	F	F1	FF	FF1		A8*W	A10*W	A15*W	A20*W	A25*W	A32*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 30 for the explanation of the option.

A Model No.

F3000	F4000	F8000
●	●	●

Code	Description	F3000	F4000	F8000
B Port size				
8	1/4	●	●	●
10	3/8	●	●	●
15	1/2	●	●	●
20	3/4	●	●	●
25	1	●	●	●

C Port thread					*1
Blank	Rc thread	●	●	●	
N	NPT thread	●	●	●	
G	G thread	●	●	●	

D Option					*2
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)	●	●	●
Bowl material	Blank	Metal bowl (resin cock)	●	●	●
	M	Metal bowl (metal cock)	●	●	●
Element	Blank	5 μm	●	●	●
	Y	0.3 μm (submicron)	●	●	●
Diff press detect	Blank	Without differential pressure detection port	●	●	●
	Q	With differential pressure detection port (Rc 1/4)	●	●	●
Flow direction	Blank	Standard flow (left → right)	●	●	●
	X1	Reverse flow (right → left)	●	●	●

E Display unit				
Blank	MPa display (Rc thread), psi display (NPT thread), bar display (G thread)	●	●	●
J1	MPa display (NPT, G thread)	●	●	●

F Pipe adaptor set (included) *4					Page 350
Blank	Not included	●	●	●	
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)	●	●	●	

* Adaptor thread				
Blank	Rc thread	●	●	●
N	NPT thread	●	●	●
G	G thread	●	●	●

G Bracket (included)					Page 346
Blank	Not included	●	●	●	
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 354 for the auto-drain usage conditions.
- *4: The pipe adaptor set and C type bracket cannot be used together.

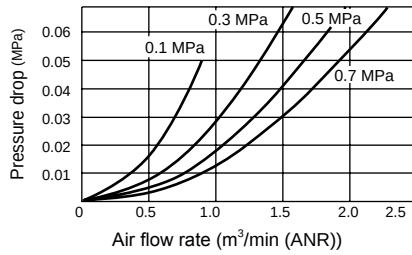
F.R.L.
F.R.
F (Filtr)
R (Reg)
L (Lub)
Drain Separ
Mech Press SW
Res press exh valve
SlowStart
Anti-bac/Bac-remove Filtr
Film Resist FR
Oil-ProhR
Med Press FR
No Cu/ PTFE FRL
Outdrs FRL
Adapter Joiner Press Gauge
CompFRL
LgFRL
PrecsR
VacF/R
Clean FR
ElecPneuR
AirBoost
Speed Ctrl
Silncr
CheckV/ other
Fit/Tube
Nozzle
Air Unit
PrecsCompn
Electro Press SW
ContactSW
AirSens
PresSW Cool
Air Flo Sens/Ctrl
WaterRiSens
TotAirSys (Total Air)
TotAirSys (Gamma)
Gas generator
RefrDry
DesicDry
HiPolymDry
MainFiltr
Dischrg etc
Ending

Air Filter Series

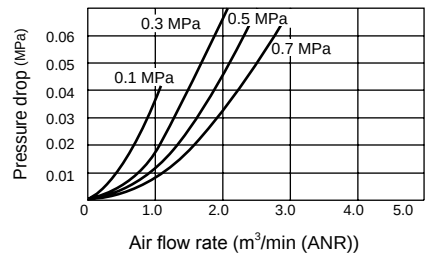
F.R.L.
F.R.
F (Filtr)
R (Reg)
L (Lub)
Drain Separ
Mech Press SW
Res press exh valve
SlowStart
Anti-bac/Bac- remove Filtr
Film
Resist FR
Oil-ProhR
Med Press FR
No Cu/ PTFE FRL
Outdrs FRL
Adapter Joiner
Press Gauge
CompFRL
LgFRL
PrecsR
VacF/R
Clean FR
ElecPneuR
AirBoost
Speed Ctrl
Silncr
CheckV/ other
Fit/Tube
Nozzle
Air Unit
PrecsCompn
Electro Press SW
ContactSW
AirSens
PresSW Cool
Air Flo Sens/Ctrl
WaterRtSens
TotAirSys (Total Air)
TotAirSys (Gamma)
Gas generator
RefrDry
DesicDry
HiPolymDry
MainFiltr
Dischrg etc
Ending

Flow characteristics

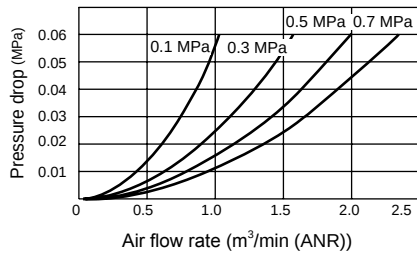
● F3000-8-G4



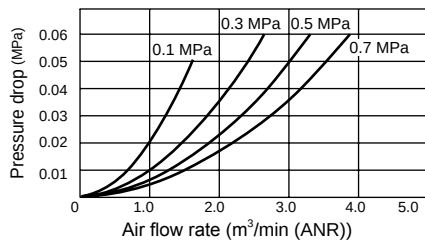
● F3000-10-G4



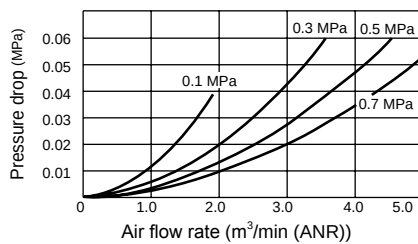
● F4000-8-G4



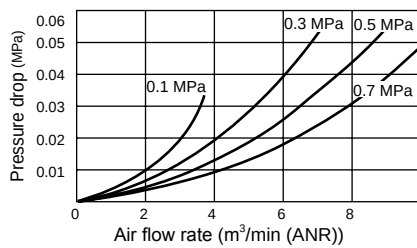
● F4000-10-G4



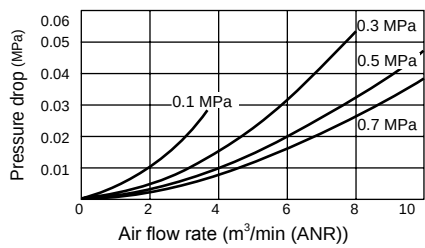
● F4000-15-G4



● F8000-20-G4



● F8000-25-G4

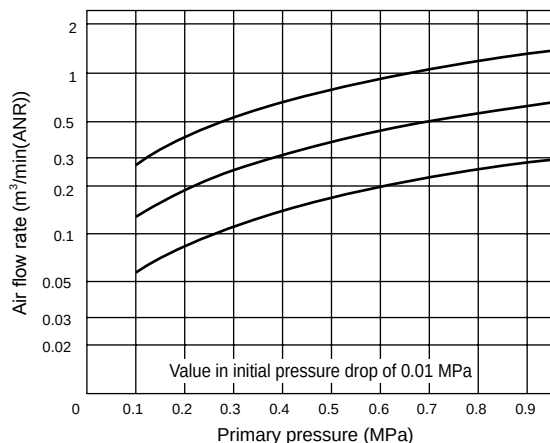


F3000

● F4000-*-G4-Y (0.3 µm element)

F8000

(Max. processing flow rate)



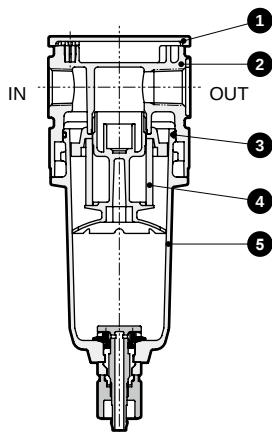
Contact CKD regarding F8000-*-G4-Y large volume.

F4000-*-G4-Y

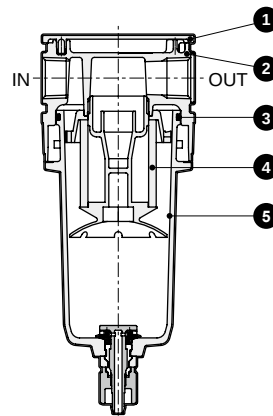
F3000-*-G4-Y

Internal structure and parts list

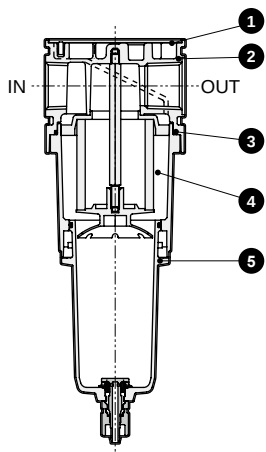
● F3000-G4



● 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 272 for repair parts kits.

F.R.L.
F.R.
F (Filtr)
R (Reg)
L (Lub)
Drain
Separ
Mech
Press SW
Res press
exh valve
SlowStart
Anti-bac/Bac-
remove Filt
Film
Resist FR
Oil-ProhR
Med
Press FR
No Cu/
PTFE FRL
Outdrs FRL
Adapter
Joiner
Press
Gauge
CompFRL
LgFRL
PrecsR
VacF/R
Clean FR
ElecPneuR
AirBoost
Speed Ctrl
Silncr
CheckV/
other
Fit/Tube
Nozzle
Air Unit
PrecsCompn
Electro
Press SW
ContactSW
AirSens
PresSW
Cool
Air Flo
Sens/Ctrl
WaterRISens
TotAirSys
(Total Air)
TotAirSys
(Gamma)
Gas
generator
RefrDry
DesicDry
HiPolymDry
MainFiltr
Dischrg
etc
Ending

Air Filter Series



F.R.L. Dimensions

F.R. ● F3000-G4

F (Filtr)

R (Reg)

L (Lub)

Drain

Separ

Mech

Press SW

Res press

exh valve

SlowStart

Anti-bac/Bac-

remove Filt

Film

Resist FR

Oil-ProhR

Med

Press FR

No Cu/

PTFE FRL

Outdrs FRL

Adapter

Joiner

Press

Gauge

CompFRL

LgFRL

PrecsR

VacF/R

Clean FR

ElecPneuR

AirBoost

Speed Ctrl

Silncr

CheckV/

other

Fit/Tube

Nozzle

Air Unit

PrecsCompn

Electro

Press SW

ContactSW

AirSens

PresSW

Cool

Air Flo

Sens/Ctrl

WaterRtSens

TotAirSys

(Total Air)

TotAirSys

(Gamma)

Gas

generator

RefrDry

DesiccDry

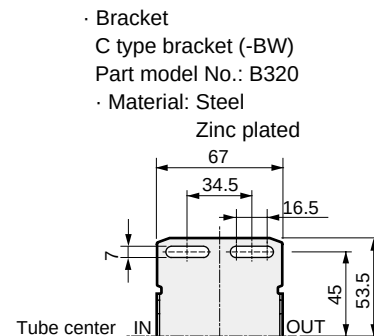
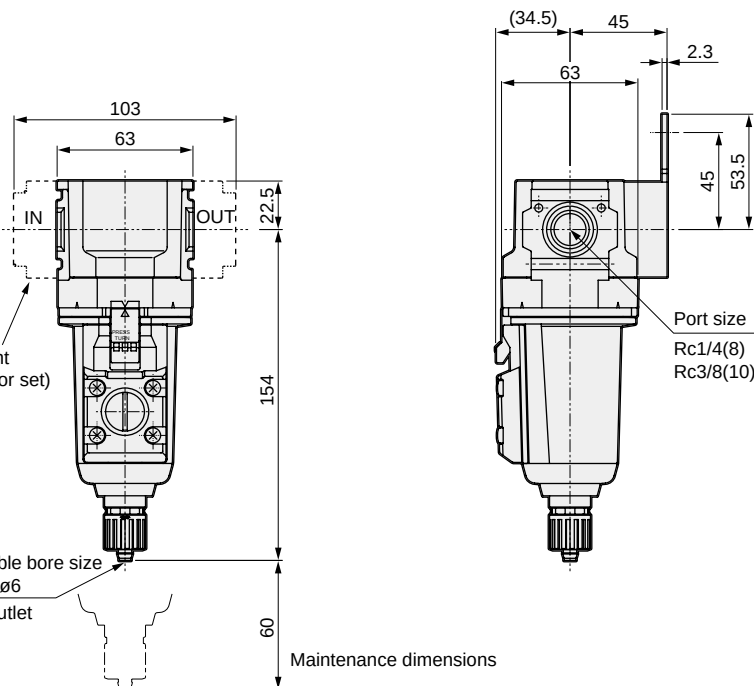
HiPolymDry

MainFiltr

Dischrg

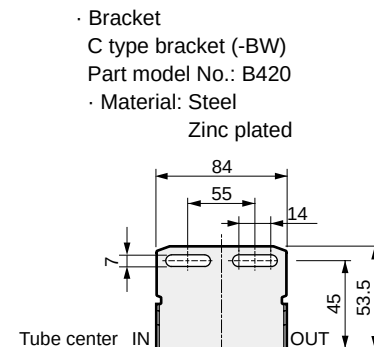
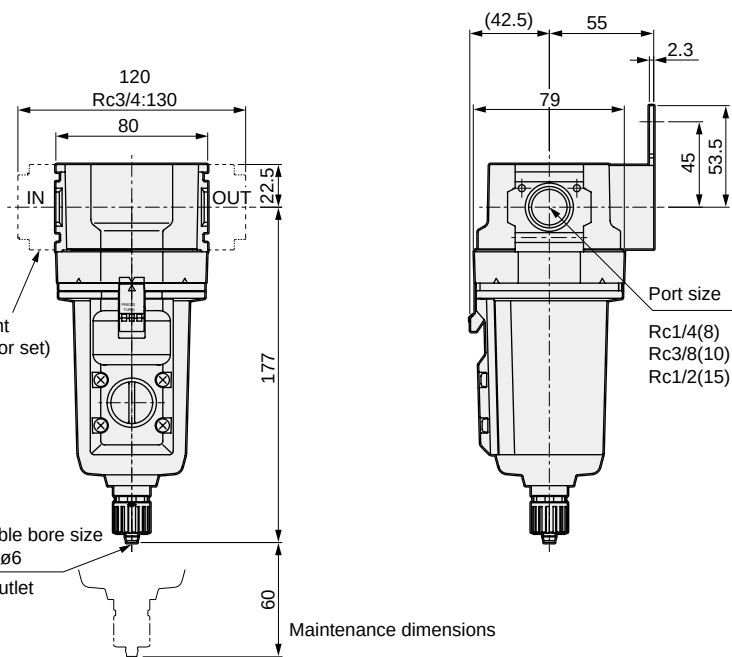
etc

Ending

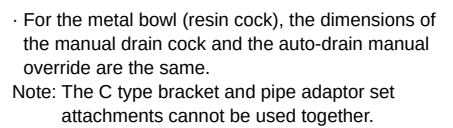


· For the metal bowl (resin cock), the dimensions of the manual drain cock and the auto-drain manual override are the same.
Note: The C type bracket and pipe adaptor set attachments cannot be used together.

● 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.



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

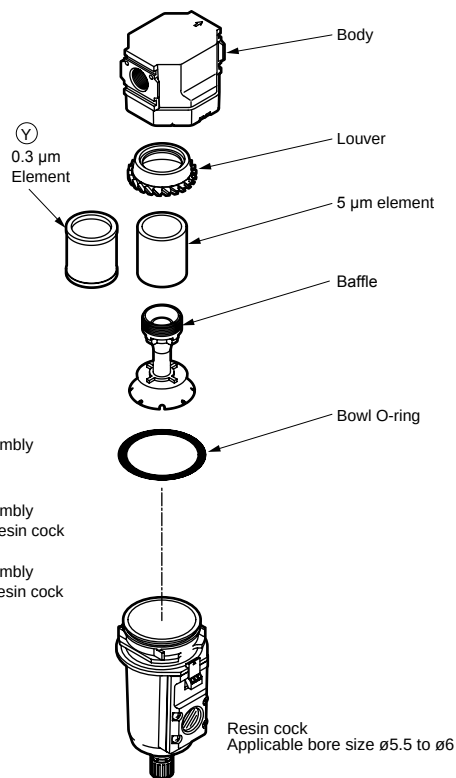
Air Filter Series

Optional parts diagram

F.R.L.
F.R.
F (Filtr)
R (Reg)
L (Lub)
Drain Separ
Mech Press SW
Res press exh valve
SlowStart
Anti-bac/Bac-remove Filt
Film Resist FR
Oil-Prohr
Med Press FR
No Cu/ PTFE FRL
Outdrs FRL
Adapter Joiner Press Gauge
CompFRL
LgFRL
PrecsR
VacF/R
Clean FR
ElecPneur
AirBoost
Speed Ctrl
Silncr
CheckV/ other
Fit/Tube
Nozzle
Air Unit
PrecsCompn
Electro Press SW
ContactSW
AirSens
PresSW Cool
Air Flo Sens/Ctrl
WaterRtSens
TotAirSys (Total Air)
TotAirSys (Gamma)
Gas generator
RefrDry
DesicDry
HiPolymDry
MainFiltr
Dischrg etc
Ending

Element

Element model No.	5 µm Element	0.3 µm Element (Y)
Model		
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

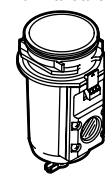
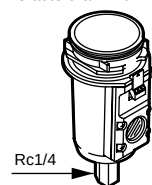
(F1M)
Metal bowl (metal cock) assembly
NC auto-drain with manual metal cock

(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)
Model		
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
Product option						
Type	Blank	F	F1	M	FM	F1M
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
Bowl assembly model No.	NO large auto-drain metal bowl, resin cock (manual) Assy	NC large auto-drain metal bowl, resin cock (manual) Assy	NO large auto-drain metal bowl, resin cock Assy, man metal cock	NC large auto-drain metal bowl, resin cock Assy, man metal cock		
Product option						
Type	FF	FF1	FFM	FF1M		
F8000,W8000,W8100-G4	F8000-G4-BOWL-FFM1	F8000-G4-BOWL-FF1M1	F8000-G4-BOWL-FFM	F8000-G4-BOWL-FF1M		