

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



Air filter medium pressure Standard White Series
FM3000-W/FM4000-W/FM6000-W/FM8000-W Series

F3000 to 8000 Series medium pressure specifications

● Port size: 1/4 to 1

JIS symbol



Specifications

Model No.	FM3000-W	FM4000-W	FM6000-W	FM8000-W
Appearance				
Working fluid	Compressed air			
Max. working pressure MPa	1.6 (≈230 psi, 16 bar) (*1, *2)			
Proof pressure MPa	2.4 (≈350 psi, 24 bar) (*2)			
Ambient temperature °C	-5 (23°F) to 60 (140°F) (no freezing) (*1, *2)			
Fluid temperature °C	5 (41°F) to 60 (140°F) (*1, *2)			
Filtration rating μm	5 or 0.3			
Drain capacity cm ³	45	80	80	80 (*3)
Port size Rc,NPT,G	1/4,3/8	1/4,3/8,1/2	3/4,1	3/4,1
Weight kg	0.35	0.55	1.0	1.26

*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. The max. working pressure is 1.5 MPa, the proof pressure is 2.25 MPa, the ambient temperature is -5 to 45°C , and the fluid temperature is 5 to 45°C.
*2: In the case of "F1" with auto-drain, the min. working pressure of auto-drain is 0.15 MPa.
The max. working pressure is 1.5 MPa, the proof pressure is 2.25 MPa, the ambient temperature is -5 to 45°C , and the fluid temperature is 5 to 45°C.
*3: Up to 170 cm³ is stored with the manual drain cock only.

Option weight

* Add to the weight of the standard accessories. Unit: kg

Code	Drain discharge		Attachment						Bracket
	F	F1	A8*W	A10*W	A15*W	A20*W	A25*W	A32*W	BW
FM3000	0.02	0.02	0.16	0.16	0.16				0.17
FM4000	0.02	0.02	0.16	0.16	0.16	0.16			0.21
FM6000	0.02	0.02				0.53	0.53	0.53	0.34
FM8000	0.02	0.02				0.53	0.53	0.53	0.36

How to order

FM3000 - **8** - **W** - **F** - **A8W**

A Model No.

(White type)

B Port size

C Port thread

D Option

E Display unit

F Other attachments

G Bracket (included)

* Refer to page 30 for the explanation of the option.

A Model No.

Code	Description	FM3	FM4	FM5	FM6		
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 *3, *4	Blank	With manual drain cock		●	●	●	●
	F	NO auto-drain (no press→Exhaust) drain outlet Rc1/8 Max. working press 1.5 MPa, max. operating amb temp 45°C		●	●	●	●
	F1	NC auto-drain (no press→no exhaust) drain outlet Rc1/8 Max. working press 1.5 MPa, max. operating amb temp 45°C		●	●	●	●
Bowl material	Blank	Metal bowl		●	●	●	●
Element	Blank	5 μm		●	●	●	●
	Y	0.3 μm		●	●	●	●
Diff press detect	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), psi display (NPT thread), bar display (G thread)			●	●	●	●
J1	MPa display (NPT, G thread)			●	●	●	●
F Other attachments							
*5, *6 Page 350							
Blank	Not included			●	●	●	●
A8*W	1/4 pipe adaptor set			●	●		
A10*W	3/8 pipe adaptor set			●	●		
A15*W	1/2 pipe adaptor set			●	●		
A20*W	3/4 pipe adaptor set				●	●	●
A25*W	1 pipe adaptor set					●	●
A32*W	1 1/4 pipe adaptor set					●	●
* Adaptor thread							
Blank	Rc thread			●	●	●	●
N	NPT thread			●	●	●	●
G	G thread			●	●	●	●
G Bracket (included)							
Page 346							
Blank	Not included			●	●	●	●
BW	C type bracket			●	●	●	●

⚠ Precautions for model No. selection

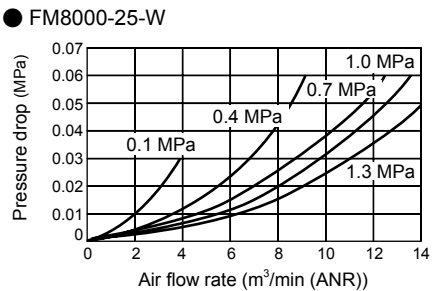
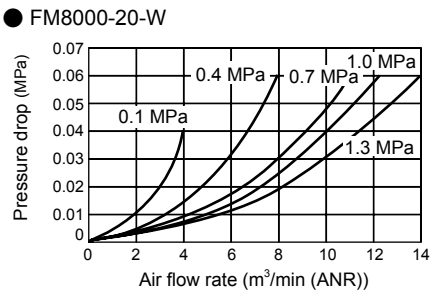
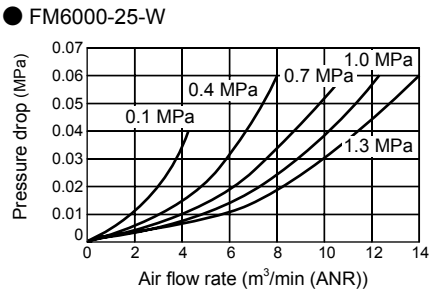
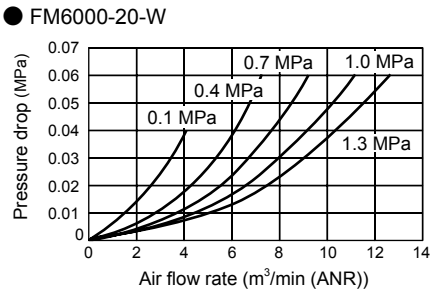
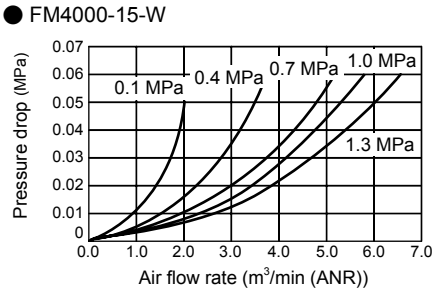
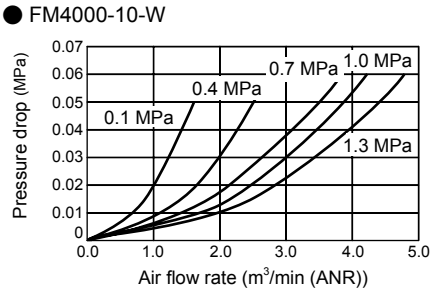
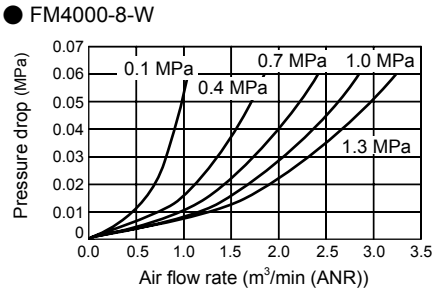
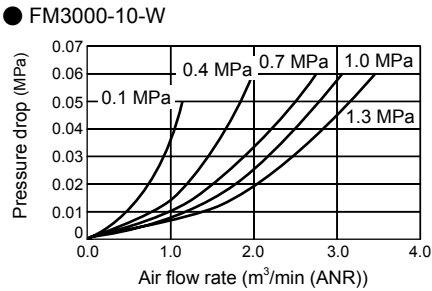
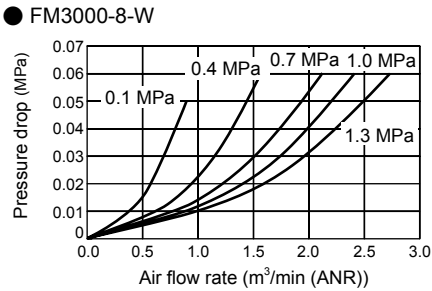
- *1 : NPT and G threads are available for IN, OUT, and drain ports.
- *2 : Select options for the drainage, bowl material, element and differential pressure detection. When selecting options for several items, list options in order from the top.
- *3 : Refer to page 354 for the auto-drain usage conditions.
- *4 : Only drain discharge "F" and "F1" of FM8000-W are large auto-drain.
- *5 : The pipe adaptor set and C type bracket cannot be used together.
- *6 : The joiner set is enclosed with the pipe adaptor set.

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

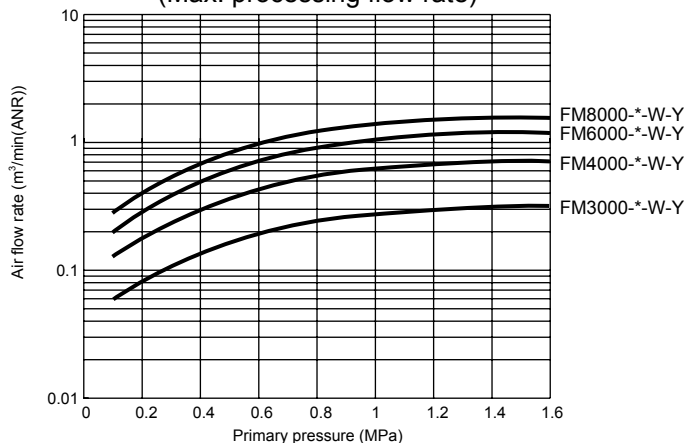
F.R.L. Flow characteristics

- 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-ProhrR
- 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



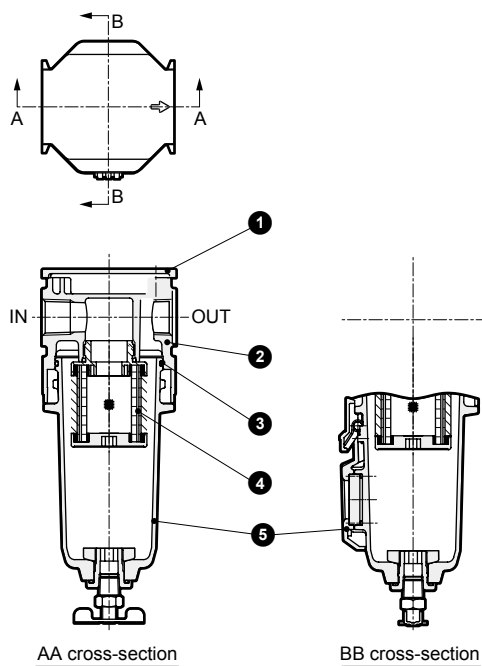
- FM3000
- FM4000
- FM6000
- FM8000

(Max. processing flow rate)

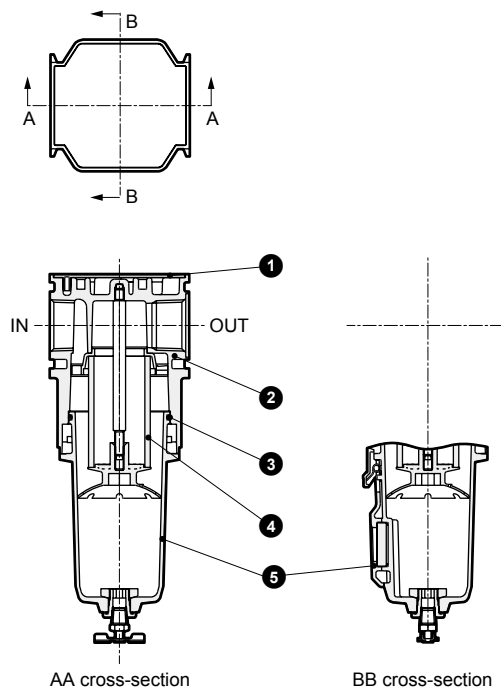


Internal structure and parts list

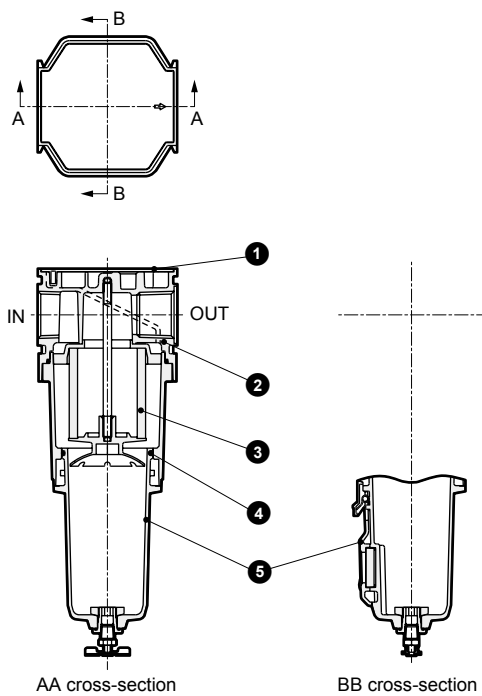
● FM3000-W/FM4000-W



● FM6000-W



● FM8000-W



No.	Part name	Material
(1)	Plate cover	ABS resin
(2)	Body	Aluminum alloy die-casting
(3)	O-ring	Special nitrile rubber
(4)	Element (5 μm)	Polypropylene
	Element (0.3 μm)	-
(5)	Metal bowl assembly	Aluminum alloy die-casting, copper alloy, glass, nitrile rubber, steel, stainless steel

*1: Refer to pages 114 to 115 for repair parts element, repair kit and bowl assembly.

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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. Dimensions

● FM3000-W

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
ElecPneR
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

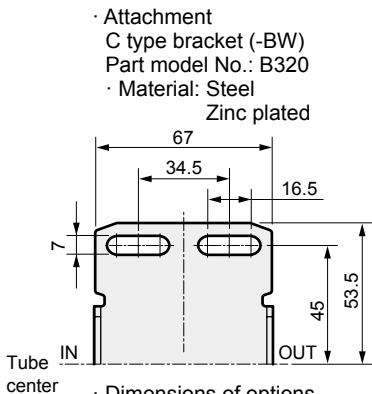
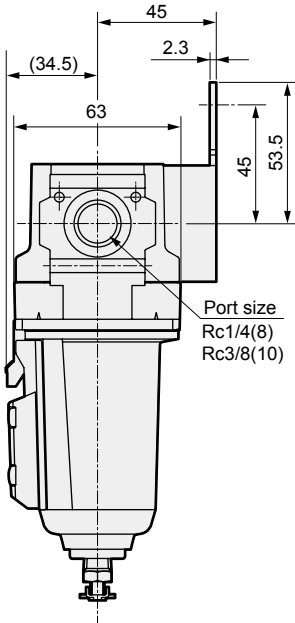
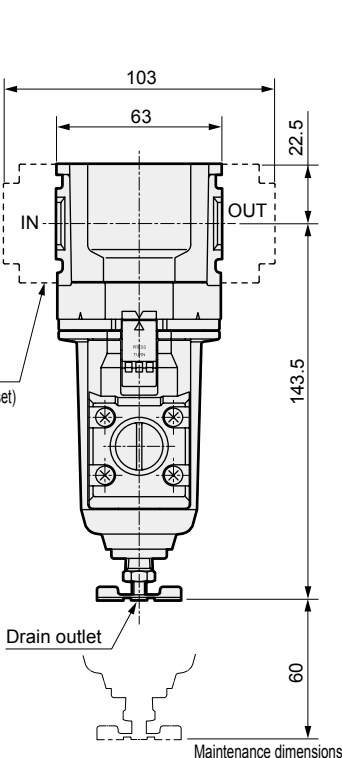
DesicDry

HiPolymDry

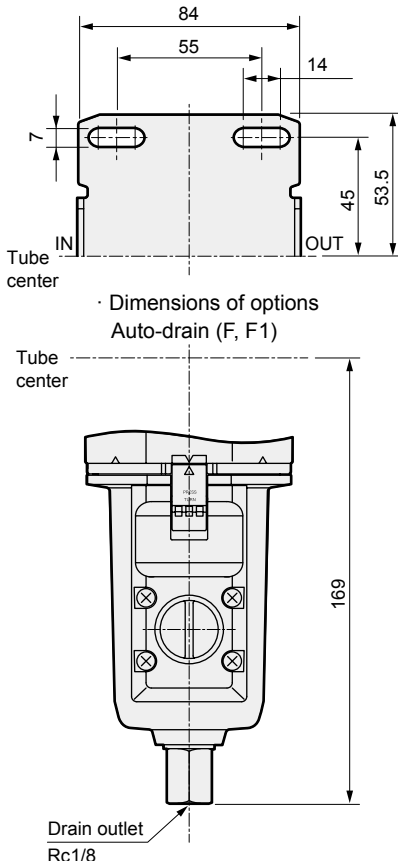
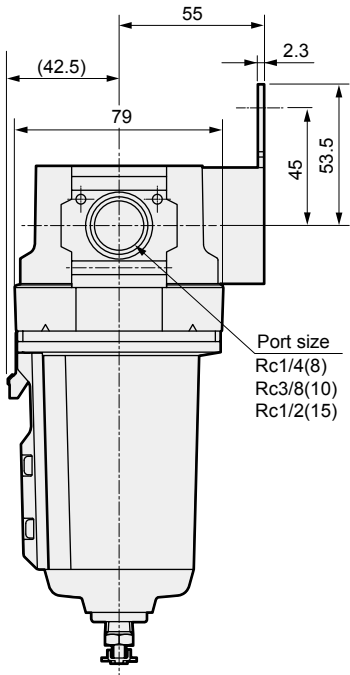
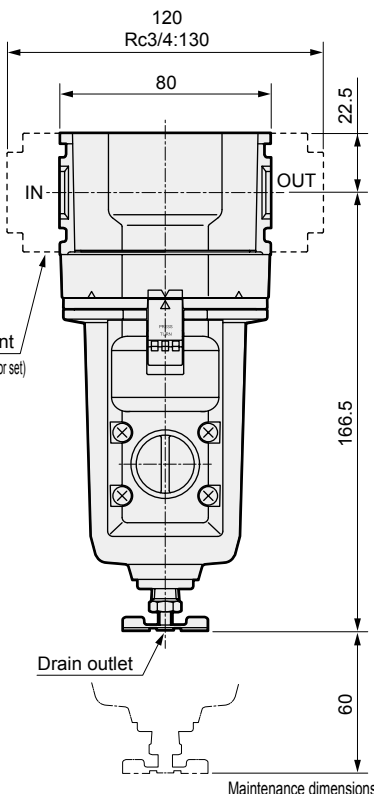
MainFiltr

Dischrg etc

Ending



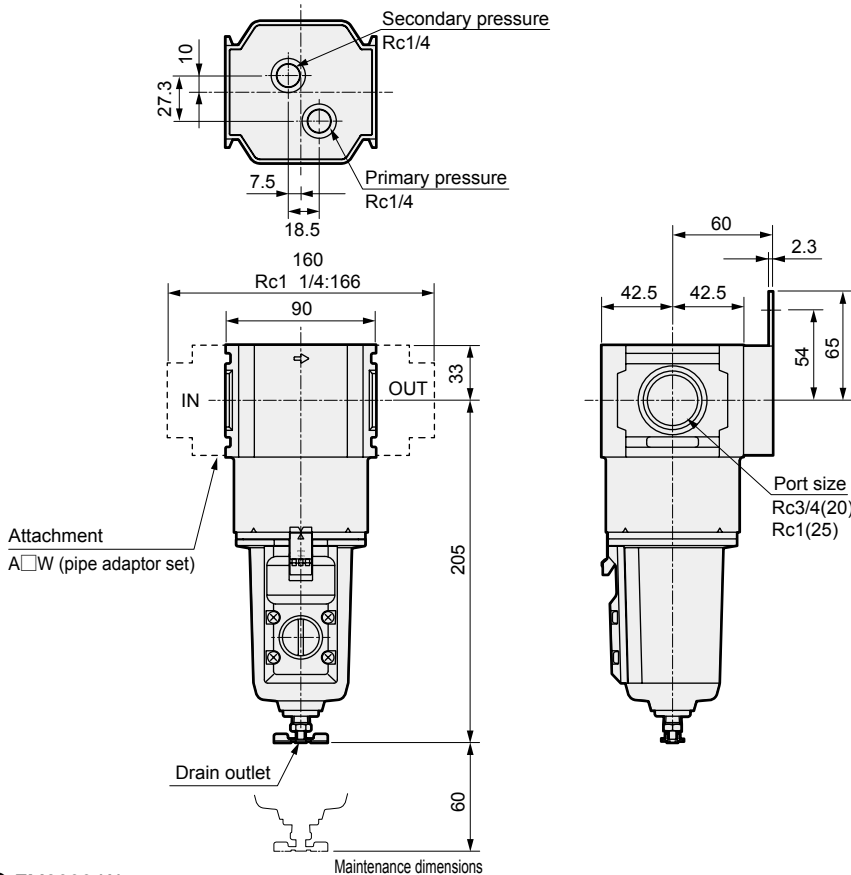
● FM4000-W



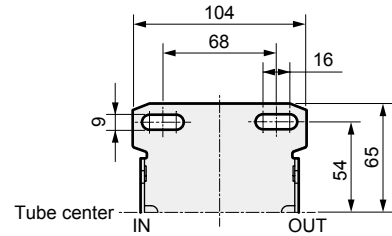
Dimensions

● FM6000-W

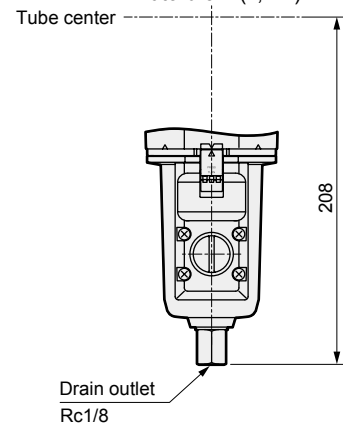
- Dimensions of options
- With differential pressure detection port (Q)



- Attachment
- C type bracket (-BW)
- Part model No.: B620
- Material: Steel
- Zinc plated

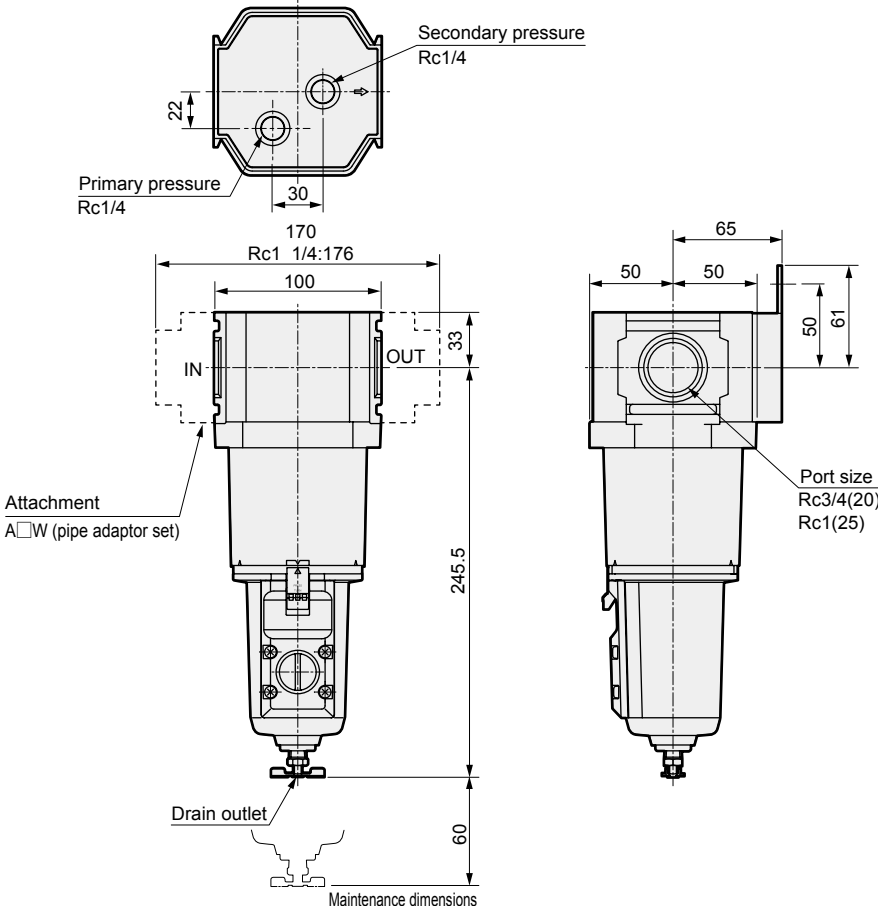


- Dimensions of options
- Auto-drain (F, F1)

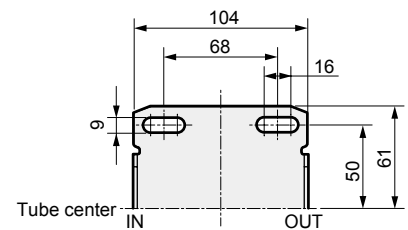


● FM8000-W

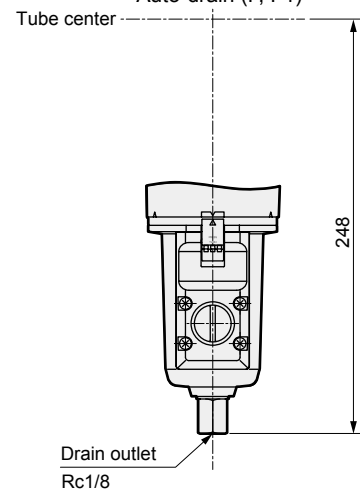
- Dimensions of options
- With differential pressure detection port (Q)



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



- Optional dimensions
- Auto-drain (F, F1)



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Outdrs FRL
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CompFRL
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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