




High performance oil mist filter Standard White Series

MX1000/MX3000/MX4000 MX6000/MX8000-W Series

Secondary oil content 0.001 mg/m³






Ideal for optical devices, such as optical positioning devices and laser processing systems.

● Port size: 1/8 to 1

JIS symbol 



Specifications

Item	MX1000-W	MX3000-W	MX4000-W	MX6000-W	MX8000-W
Appearance					
Working fluid	Compressed air				
Working pressure MPa	0.1 (≈15 psi, 1 bar) to 1.0 (≈150 psi, 10 bar) *2				
Proof pressure MPa	1.5 (≈220 psi, 15 bar)				
Ambient / fluid temperatures °C	5 (41°F) to 60 (140°F)				
Filtration rating μm	0.01 (nominal)				
Secondary side oil concentration mg/m ³	0.001 or less *3				
Max. processing flow rate ℓ /min(ANR) *1	75	180	370	670	1480
Drain capacity cm ³	3	45	80	80	80
Port size Rc,NPT,G	1/8,1/4 (3/8 uses an adaptor)	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)	3/4,1 (1 1/4 uses an adaptor)
Weight kg	0.096	0.28	0.52	0.95	1.35
Mantle (element) change	1 year (6000 hours) or pressure drop 0.1 MPa				
Standard accessories	Bowl guard				

*1: Values when primary pressure is 0.7 MPa and pressure drop is 0.01 MPa. Use the product within the max. processing flow rate.

If the max. processing flow rate is exceeded temporarily, or if the filter is installed at a location with high levels of pulsation, the mantle could be damaged or oil or drainage, etc., could splatter to the secondary side and result in a terminal malfunction.

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

*3: The secondary oil content is the value when the primary oil content is 30 mg/m³, the inlet air temperature is 21°C, and before the oil is saturated.

*4: Install an oil mist filter (S type) as a pre-filter on the primary side to prevent early clogging.

Option weight

* Add to the weight of the standard accessories.

Unit: kg

Code	Drain discharge	Bowl material			Pipe adaptor set						Bracket
	F1	M	M1	A6*W	A8*W	A10*W	A15*W	A20*W	A25*W	A32*W	BW
MX1000	0.007			0.09	0.09	0.09					0.1
MX3000	0.02	0.1	0.1		0.16	0.16	0.16				0.17
MX4000	0.02	0.1	0.1		0.16	0.16	0.16	0.16			0.21
MX6000	0.02	0.1	0.1					0.53	0.53	0.53	0.34
MX8000	0.02	0.1	0.1					0.53	0.53	0.53	0.36

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

Super Oil Mist Filter Series

How to order

How to order

MX1000 - **6** - **W** - **Z** - **A6W**

A Model No.

B Port size

C Port thread

D Option

E Display unit

F Pipe adaptor set (included)

G Bracket (included)

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

A Model No.

Code		Description	MX1000	MX3000	MX4000	MX6000	MX8000
B Port size							
6	1/8		●				
8	1/4		●	●	●		
10	3/8			●	●		
15	1/2				●		
20	3/4					●	●
25	1					●	●
C Port thread							
Blank	Rc thread		●	●	●	●	●
N	NPT thread		●	●	●	●	●
G	G thread		●	●	●	●	●
D Option							
Drain discharge	Blank	With manual drain cock	●	●	●	●	●
	F1	Auto-drain manual override		●	●	●	●
	*3, 4	(NC: no exhaust when not pressurized)		●	●	●	●
Bowl material	Blank	Polycarbonate bowl	●	●	●	●	●
	Z	Nylon bowl	●	●	●	●	●
	M	Metal bowl		●	●	●	●
	M1	Metal bowl with manual drain cock		●	●	●	●
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)							
Blank	Not included		●	●	●	●	●
A6*W	1/8 pipe adaptor set		●				
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)							
Blank	Not included		●	●	●	●	●
BW	C type bracket		●	●	●	●	●

⚠ Precautions for model No. selection

- *1: G threads and NPT threads are available for IN, OUT and drain outlet (metal bowl with auto-drain).
- *2: Select options for drainage, bowl material and differential pressure detection.
When selecting options for several items, list options in order from the top.
- *3: NO auto-drain cannot be selected.
- *4: Refer to page 354 for the auto-drain usage conditions.
- *5: The pipe adaptor set and C type bracket cannot be used together.
- *6: The joiner set is enclosed with the pipe adaptor set.

Clean-room specifications (Catalog No. CB-033SA)

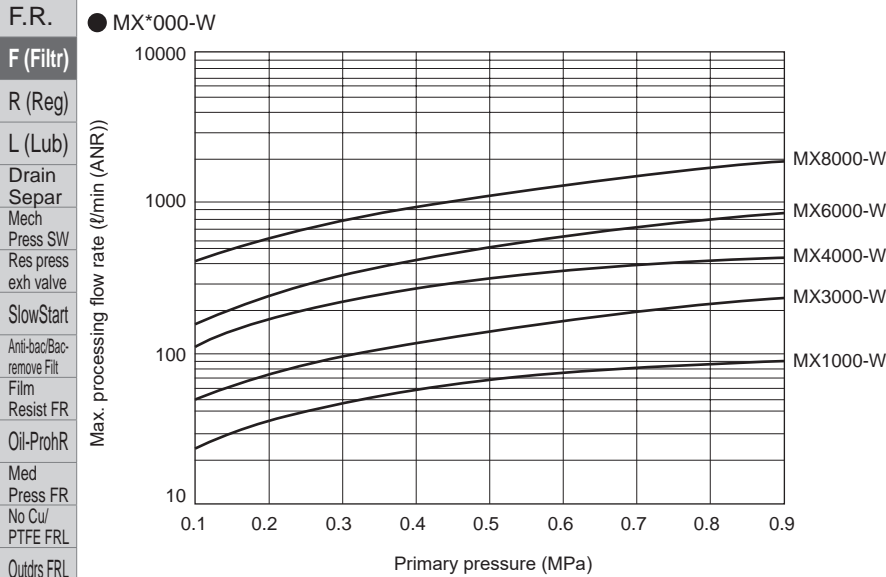
- Anti-dust generation structure for use in cleanrooms

MX*000 - - P7*

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

Super Oil Mist Filter Series

F.R.L. Flow characteristics (max. processing flow rate)



How to select oil mist filter and optional mantle

Major recommended circuit

Applications

◆ S type



- General industrial air (Secondary oil concentration 0.5 mg/m³ or less)
- Air tool
 - Air drill/air screw driver
 - Pneumatic grinder
 - Labor-saving device
 - Pneumatic jigs and tools
 - Air chuck
 - Air vice
 - Precision part cleaning air blow

◆ M type



- Oil-free air (Secondary oil concentration 0.01 mg/m³ or less)
- Instrumentation
 - Measurement
 - For sequence control
 - Movable element/pure fluid element
 - Luxury painting
 - Precision industry

◆ X type



- Odorless air (Secondary oil concentration 0.003 mg/m³ or less)
- Food industry
 - Pharmaceutical industry
 - Mixing
 - Transportation
 - Drying
 - Packaging
 - Brewing air

◆ MX type



- Super oil-free air (Secondary oil concentration 0.001 mg/m³ or less)
- Optical positioning device
 - Laser finishing machine

Note: The secondary oil concentration is the value when the primary oil concentration is 30 mg/m³, the inlet air temperature is 21°C, and before the oil is saturated. When using MX, be sure to use the S or M type oil mist filter in the previous stage.

Option code of mantle and shape

	Option code	Appearance
	Blank (M type)	
M*000-W	S (S type)	
	X (X type)	
MX*000-W		

Note: Changes for product upgrades may be made without prior notice.

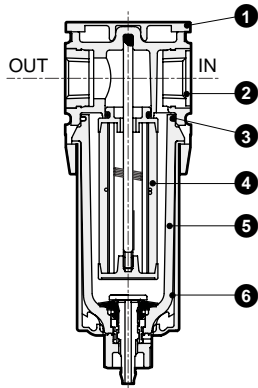
When placing an order, confirm the option code of the part model No. displayed on the body.

Super Oil Mist Filter Series

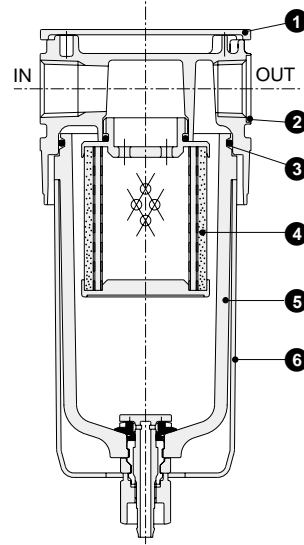
Internal structure and parts list

Internal structure and parts list

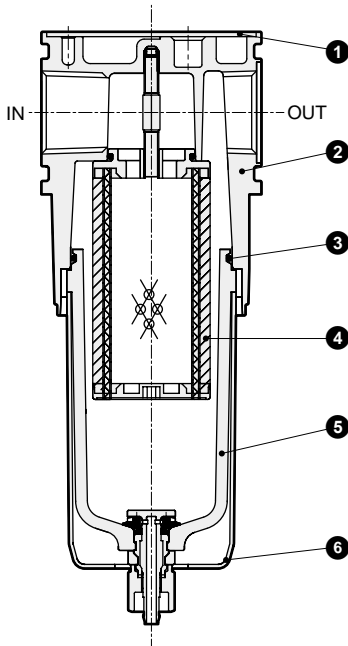
● MX1000-W



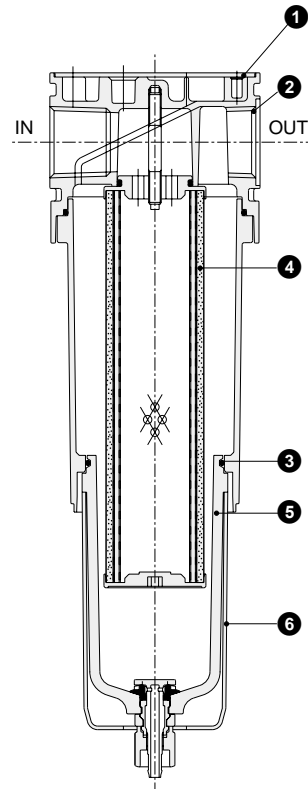
● MX3000-W/MX4000-W



● MX6000-W



● MX8000-W



No.	Part name	Material				
		MX1000-W	MX3000-W	MX4000-W	MX6000-W	MX8000-W
1	Plate cover	ABS resin				
2	Body	Polyamide resin	Aluminum alloy die-casting			
3	O-ring *1	Special nitrile rubber				
4	Mantle assembly	-				
5	Bowl assembly	Polycarbonate resin, polyacetal resin, urethane resin				
6	Bowl guard	Polyamide resin	Polyamide resin, steel			

*1: The O-ring of the MX1000-W has a special shape.

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
PresCompn
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

Super Oil Mist Filter Series



F.R.L. Dimensions

F.R. ● MX1000-W

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

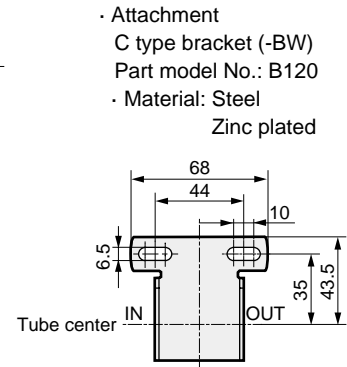
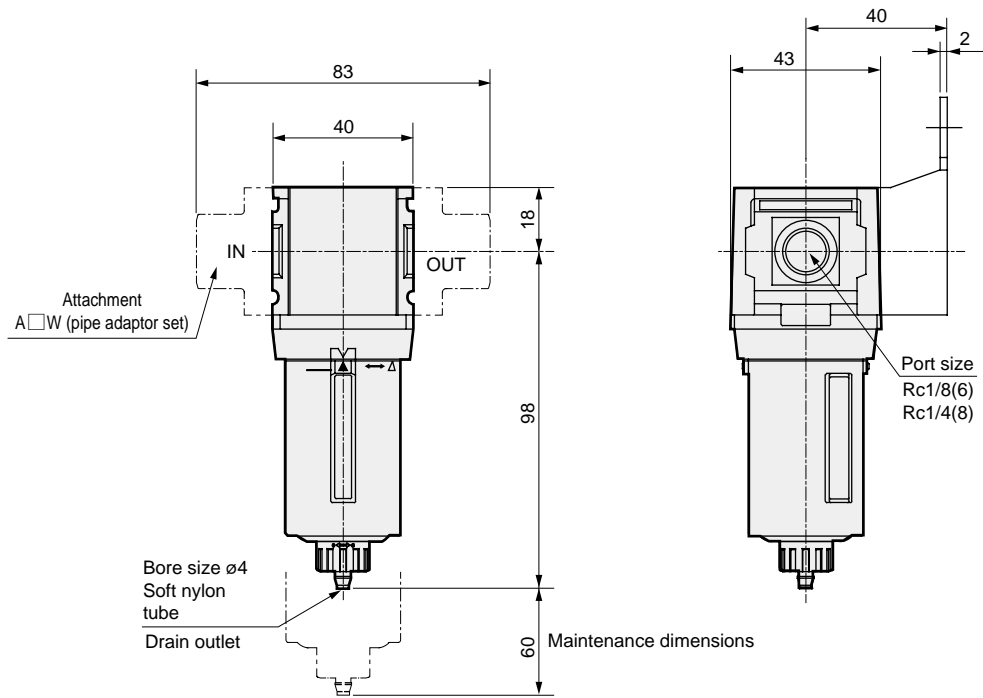
HiPolymDry

MainFiltr

Dischrg

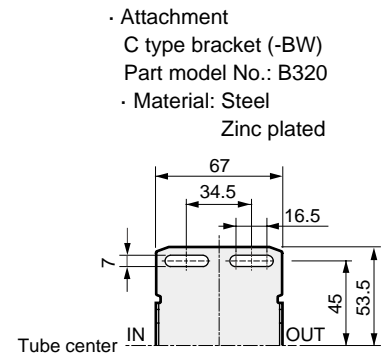
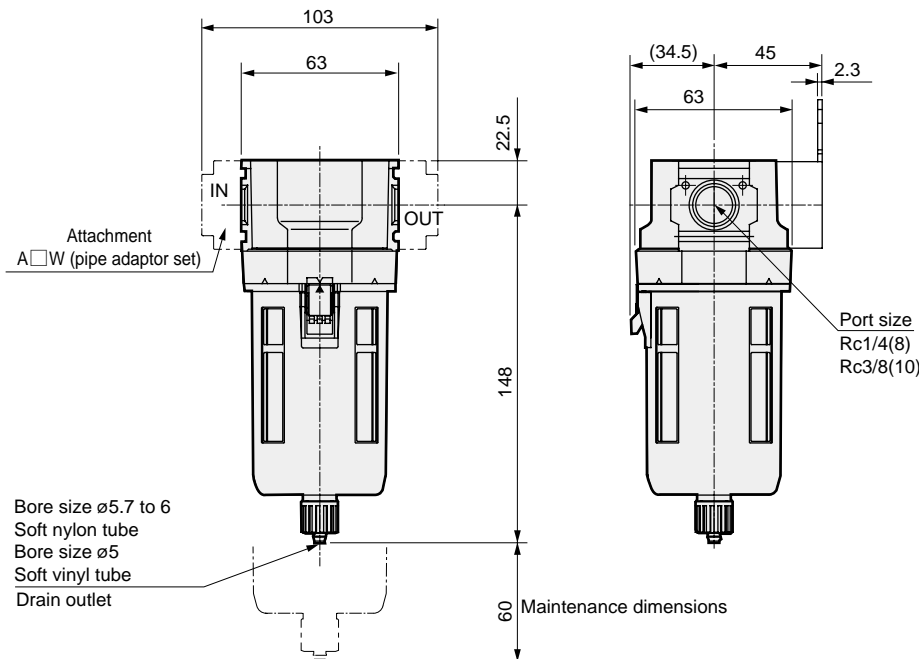
etc

Ending



· Attachment
C type bracket (-BW)
Part model No.: B120
· Material: Steel
Zinc plated

● MX3000-W



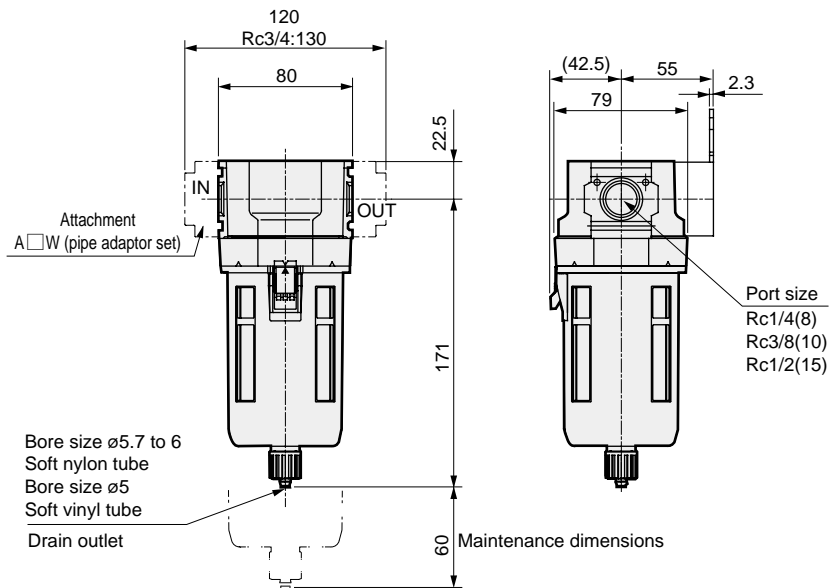
· Attachment
C type bracket (-BW)
Part model No.: B320
· Material: Steel
Zinc plated

● For the plastic bowl, the dimensions of the manual cock and the auto-drain are the same.
Note: The C type bracket and pipe adaptor set attachments cannot be used together.

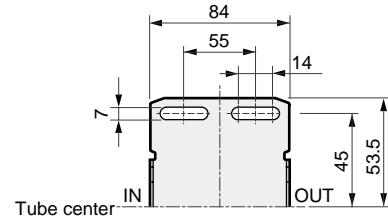
Dimensions



● MX4000-W

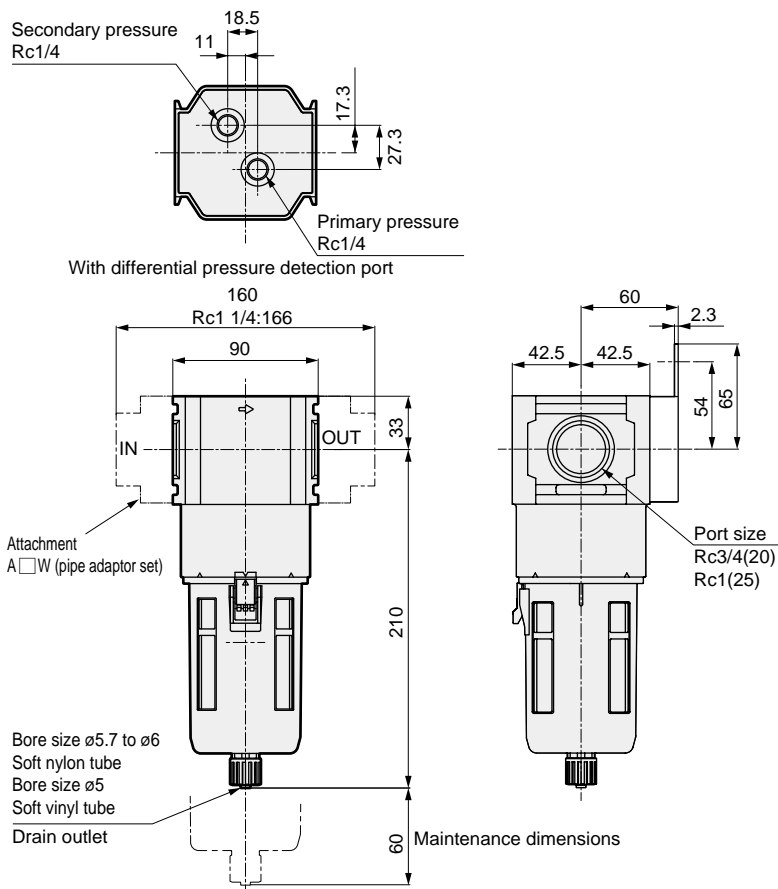


- Attachment
C type bracket (-BW)
Part model No.: B420
- Material: Steel
Zinc plated

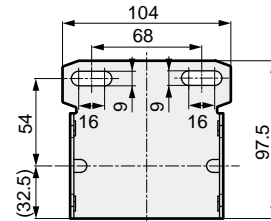


● For the plastic bowl, the dimensions of the manual cock and the auto-drain are the same.

● MX6000-W



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



● For the plastic bowl, the dimensions of the manual cock and the auto-drain are the same.
Note: The C type bracket and pipe adaptor set attachments 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

Super Oil Mist Filter Series



F.R.L. Dimensions

F.R. ● MX8000-W

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

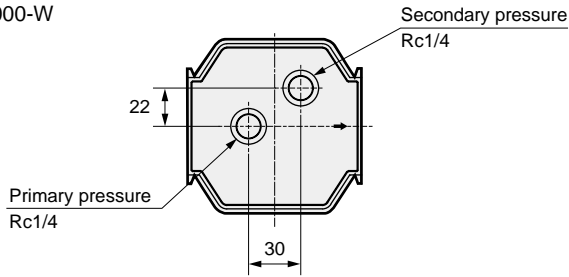
Cool

Air Flo

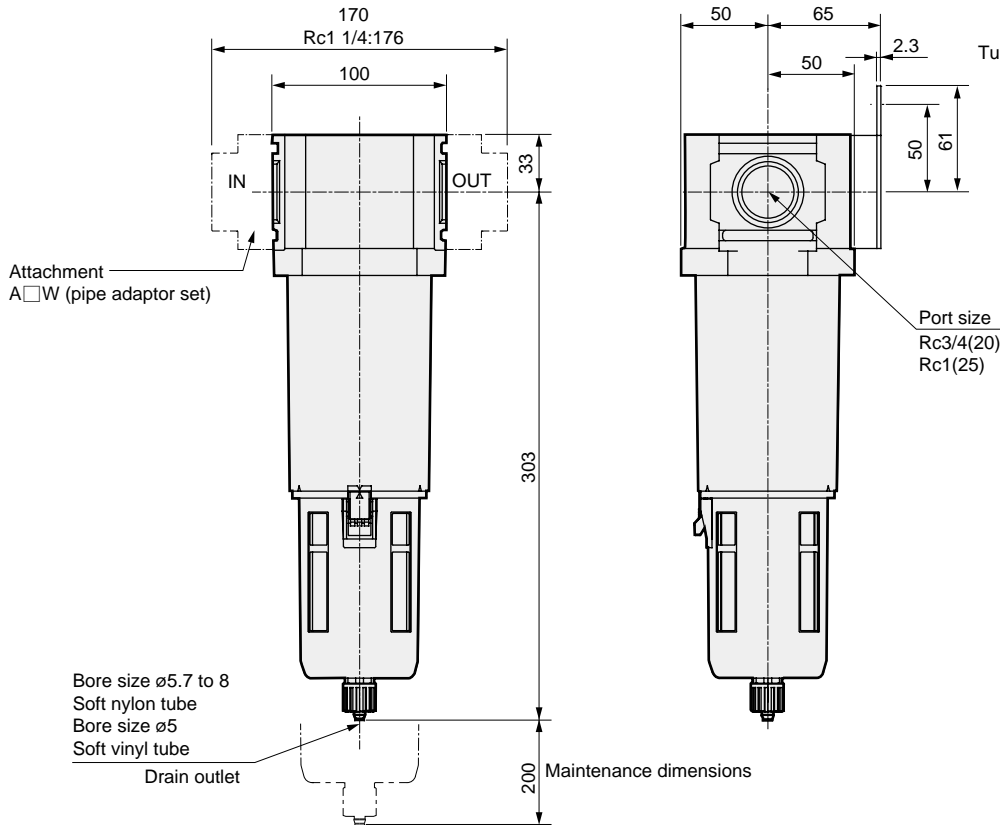
Sens/Ctrl

WaterRiSens

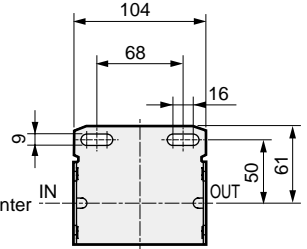
Ending



Option
(With differential pressure detection port)

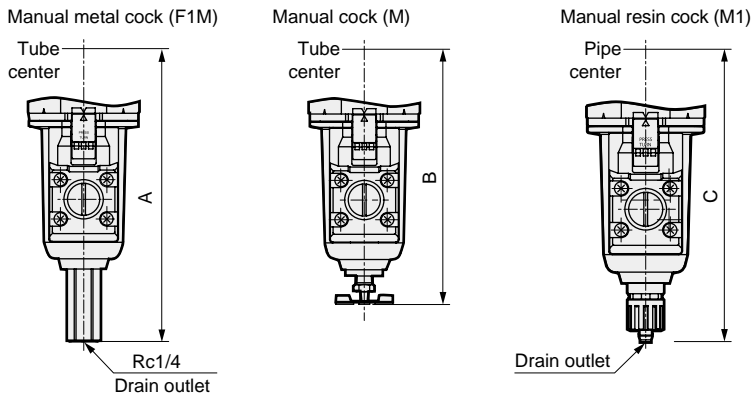


- Attachment
C type bracket (-BW)
Part model No.: B820
- Material: Steel
Zinc plated



● For the plastic bowl, the dimensions of the manual cock and the auto-drain are the same.

● Metal bowl (option)
[MX3000-W, MX4000-W, MX6000-W, MX8000-W]

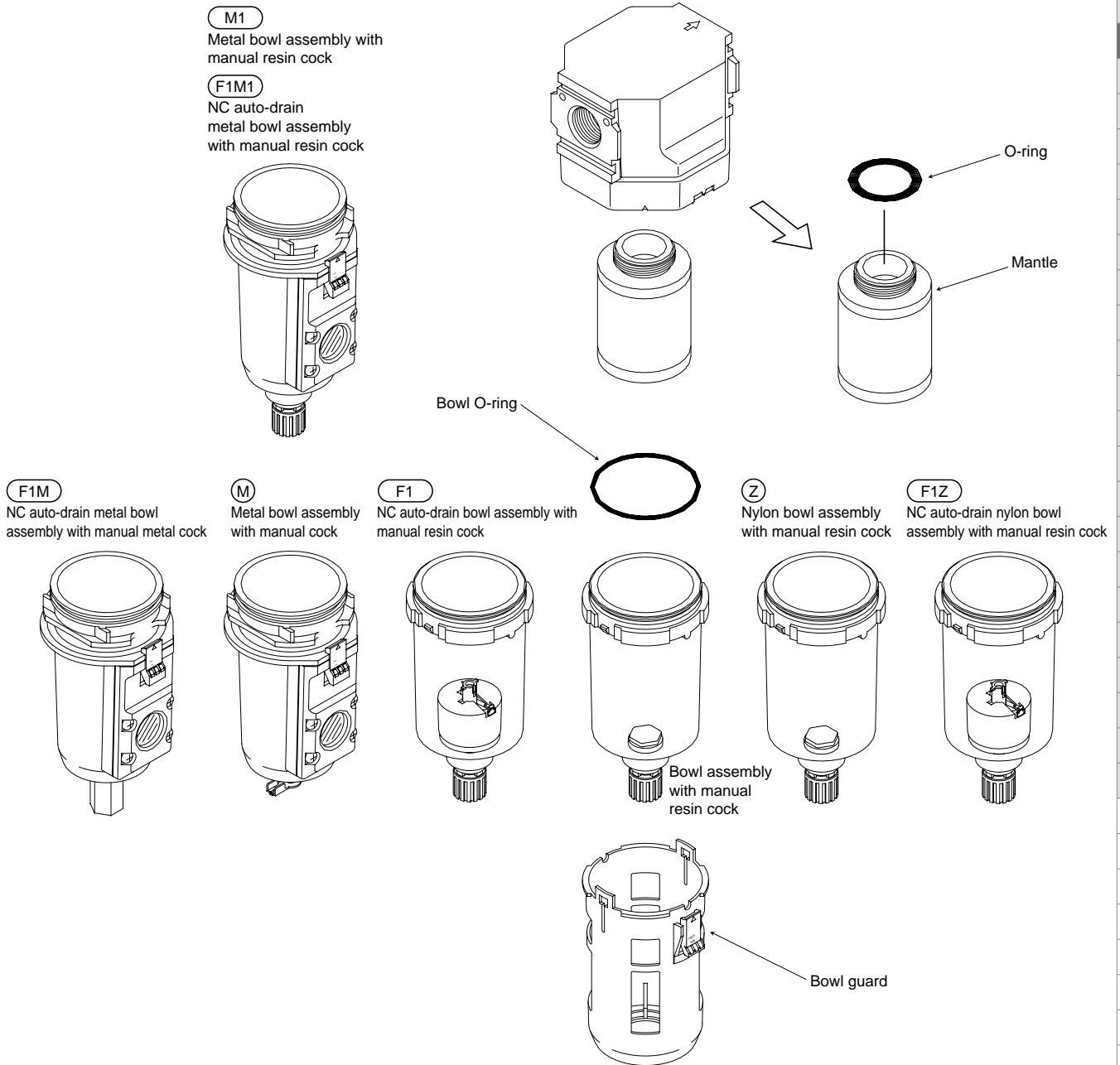


● Material of the metal bowl is aluminum die-casting.

Dimensions table

Model No.	F1M	M	M1
	A	B	C
MX3000-W	164	143.5	154
MX4000-W	187	166.5	177
MX6000-W	226	205	216
MX8000-W	319	298	309

Optional parts list - for oil mist filter



Repair parts kit model No. (set including O-ring, mantle and bowl O-ring)

Model	
MX1000-W	MX1000-KIT
MX3000-W	MX3000-KIT
MX4000-W	MX4000-KIT
MX6000-W	MX6000-KIT
MX8000-W	MX8000-KIT

Repair parts kit model No. (set including O-ring and mantle)

Model	
MX1000-W	MX1000-MANTLE-ASSY
MX3000-W	MX3000-MANTLE-ASSY
MX4000-W	MX4000-MANTLE-ASSY
MX6000-W	MX6000-MANTLE-ASSY
MX8000-W	MX8000-MANTLE-ASSY

* Refer to the air filter options and parts table on pages 114 and 115 for the bowl assembly and bowl guard.

- 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
- PresCompn
- 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