



Oil mist filter

# M2000/M3000/M4000/M6000 Series

JIS symbol



## Structure/treatment and material restriction

	Structure/treatment	Material restriction			Model No.
P7 Series	Dust generation preventing				— <b>P70</b>
	Dust generation preventing	Copper-based materials prohibited	Silicon-based materials prohibited	Halogen-based materials prohibited (fluorine, chlorine, bromine)	— <b>P74</b> Custom order product

## Specifications

Descriptions	M2000	M3000	M4000	M6000
Working fluid	Compressed air			
Working pressure MPa	0.1 to 1.0			
Proof pressure MPa	1.5			
Weight kg	0.25	0.28	0.52	0.95

Mantle option name	Blank (M type)	S (S type)	X (X type)
Max. flow rate l/min (ANR) *1	250	310	310
Primary pressure 0.7 MPa	360	450	450
	825	1000	1000
	1270	1400	1400
Ambient temperature/fluid temperature °C	5 to 50		
Filtration rating μm	0.01 (nominal)	0.3	Suction by activated charcoal *4
Secondary side oil concentration mg/m <sup>3</sup>	0.01 or less (0.1 or less after oil saturation) *2, *3	0.5 or less *2	0.003 or less *4
Mantle (Element) service life	1 year (6000 hours) or pressure drop 0.1 MPa		- *5

\*1: Use the product within the rated flow rate.

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

\*2: Primary oil content is 30 mg/m<sup>3</sup>, the inlet air temperature is 21°C, and before the oil is saturated.

\*3: Install an oil mist filter (S type) as a pre-filter on the primary side to prevent early clogging.

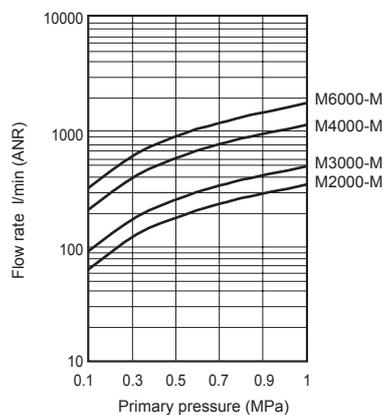
\*4: When an oil mist filter (M Series M type) is installed on the primary side.

\*5: The mantle (element) replacement period differs depending on the odor density in compressed air, and thus cannot be clearly indicated.

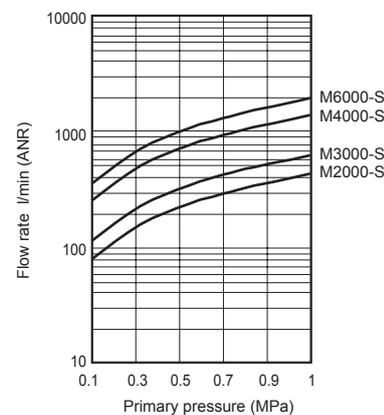
Consider the total period from the initial installation to when the smell of oil can be confirmed as the effective deodorizing period, and regularly replace. Keep the primary air temperature at 30°C or less. The deodorizing effect will drop if the temperature is high, so provide heat dissipation measures.

## Flow characteristics (Max. processing flow rate)

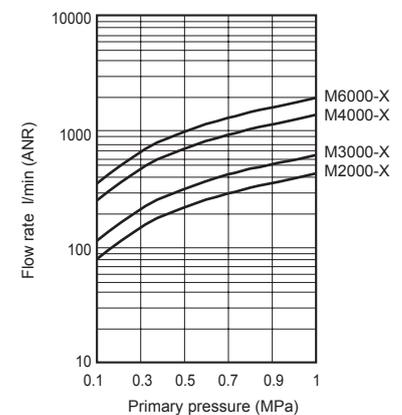
● M\*00-M



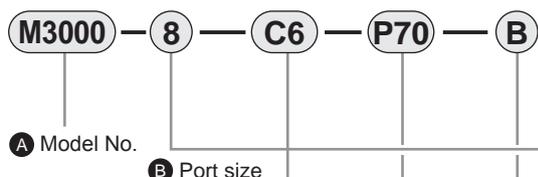
● M\*00-S



● M\*00-X



### How to order



		A Model No.							
		M2000	M3000	M4000	M6000				
Code	Content								
B Port size									
8	Rc1/4	●	●	●	●				
10	Rc3/8	●	●	●	●				
15	Rc1/2			●					
20	Rc3/4				●				
25	Rc1				●				
C Option *1 *2									
Bowl	Blank	PC bowl: without drain discharge				●	●	●	●
	C6	PC bowl: drain discharge Rc1/8				●	●	●	●
	M6	Metal bowl: drain discharge Rc1/8				●	●	●	●
Mantle (element)	Blank	M type				●	●	●	●
	S	S type				●	●	●	●
	X	X type				●	●	●	●
Differential pressure detection	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)				●	●	●	●
D Clean room specifications									
	Structure/treatment	Material restriction							
P70	Dust generation preventing	-				●	●	●	●
P74	Dust generation preventing	Copper-based/silicon-based/halogen-based materials (fluorine, chlorine, bromine) are prohibited				●	●	●	●
E Other attachments *3 *4									
Blank	Without attachment				●	●	●	●	
A8	Rc1/4 piping adaptor set				●	●	●	●	
A10	Rc3/8 piping adaptor set				●	●	●	●	
A15	Rc1/2 piping adaptor set				●	●	●	●	
A20	Rc3/4 piping adaptor set						●	●	
A25	Rc1 piping adaptor set							●	
A32	Rc1 1/4 piping adaptor set							●	
B	C bracket				●	●	●	●	

### ⚠ Precautions for model No. selection

- \*1: Select options per drainage, bowl material, element, and differential pressure detection sections. When selecting options for several items, list options in order from the top.
- \*2: One pipe plug is attached for options "C6" and "M6".
- \*3: Piping adaptor set A \*00.\*-P70 (page 804) is attached.
- \*4: Refer to pages 804 to 806 for adaptor. The piping adaptor set and C bracket cannot be used at the same time.
- \*5: "P74" is custom order.

D Clean room specifications \*5

E Other attachments

### Oil mist filter: How to use optional mantle

#### Major recommended circuit

##### ◆ S type



#### Applications

- Air for general industry (Secondary oil content 0.5 mg/m<sup>3</sup> or less)
  - Air tool
  - Air drill/air screw driver
  - Air grinder
  - Labor-saving device
  - Pneumatic jig and tool
  - Air chuck
  - Air vice
  - Precision part cleaning air blow

##### ◆ M type



- Oil less air (Secondary oil content 0.01 mg/m<sup>3</sup> or less)
  - Instrumentation
  - Measurement
  - Logic control
  - Movable element/pure fluid element
  - Luxury painting
  - Precision industry

##### ◆ X type



- Odorless air (Secondary oil content 0.003 mg/m<sup>3</sup> or less)
  - Food industry
  - Medical products industry
  - Mixing
  - Transportation
  - Drying
  - Package
  - Brewing air

Note: The secondary oil content is the value when the primary oil content is 30 mg/m<sup>3</sup>, the inlet air temperature is 21°C.

### Option code of mantle and shape

Option code	Appearance
Blank (M type)	End plate Black Plastic foam
S (S type)	End plate Green Plastic foam
X (X type)	End plate Black Punching metal

CAUTION: Changes for product upgrades may be made without prior notice. When placing an order, confirm the option code for the part model No. given here.

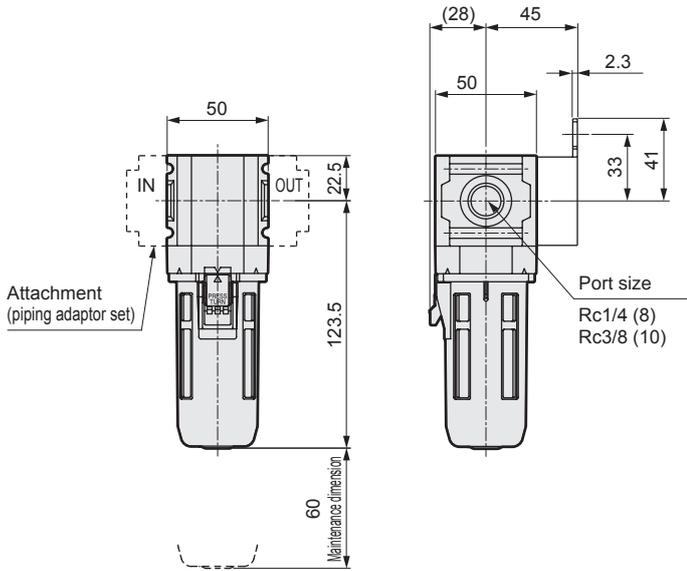
SCPD3
SCM
SSD2
MDC2
SMG
LCM
LCR
LCG
LCX
STM
STG
STR2
MRL2
GRC
Cylinder Switch
MN3E
MN4E
4GA/B
M4GA/B
MN4GA/B
F.R.(module unit)
Clean F.R
Precision R
Press gauge
Dif. press gauge
Electro-pneumatic R
Speed controller
Auxiliary valve
Fitting/tube
Clean air unit
Pressure sensor
Flow rate sensor
Valve for air blow
Ending

# Oil Mist Filter Series

## Dimensions

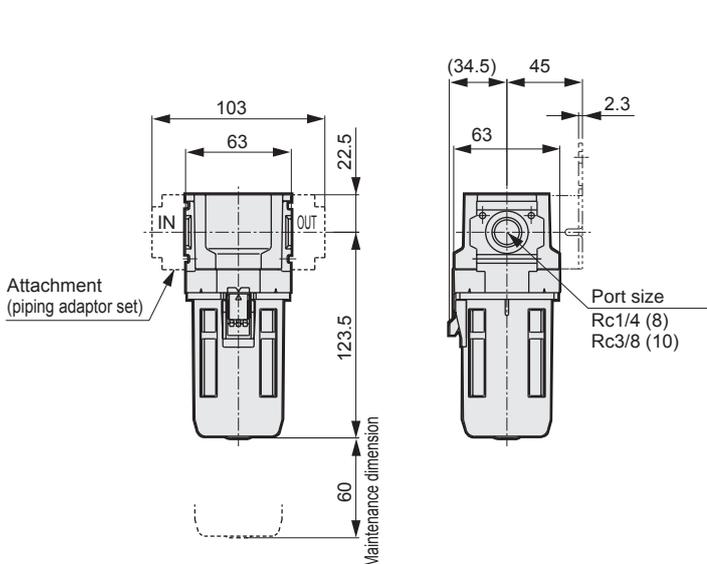
SCPD3
SCM
SSD2
MDC2
SMG
LCM
LCR
LCG
LCX
STM
STG
STR2
MRL2
GRC
Cylinder switch
MN3E MN4E
4GA/B
M4GA/B
MN4GA/B
F.R (module unit)
Clean F.R
Precision R
Press gauge Diff. press gauge
Electro-pneumatic R
Speed controller
Auxiliary valve
Fitting/tube
Clean air unit
Pressure sensor
Flow rate sensor
Valve for air blow
Ending

### ● M2000-P70/P74



Note : C bracket and piping adaptor set attachments cannot be used at the same time.

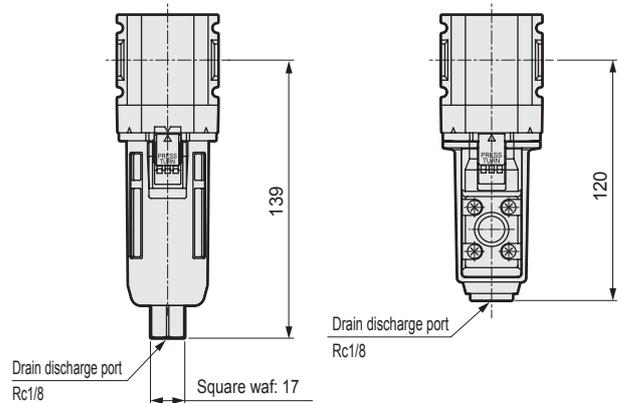
### ● M3000-P70/P74



Note : C bracket and piping adaptor set attachments cannot be used at the same time.

### [Optional dimensions]

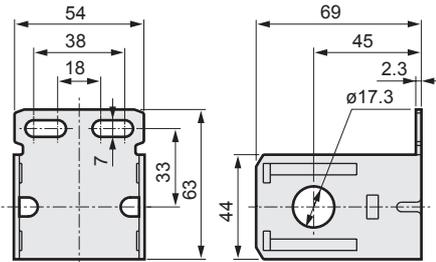
- PC bowl drain discharge Rc1/8 (C6)
- Metal bowl (M6)



Note: Mount with fixing on square waf, when pipe for drain discharge.

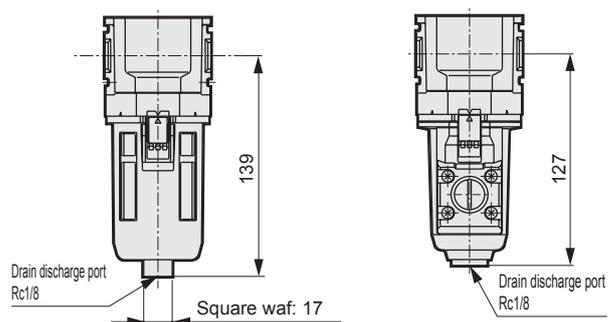
### [C bracket dimensions]

- Part model No.: B220-P70
- Material: steel, nickel plate processing



### [Optional dimensions]

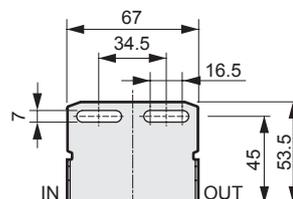
- PC bowl drain discharge Rc1/8 (C6)
- Metal bowl (M6)



Note: Mount with fixing on square waf, when pipe for drain discharge.

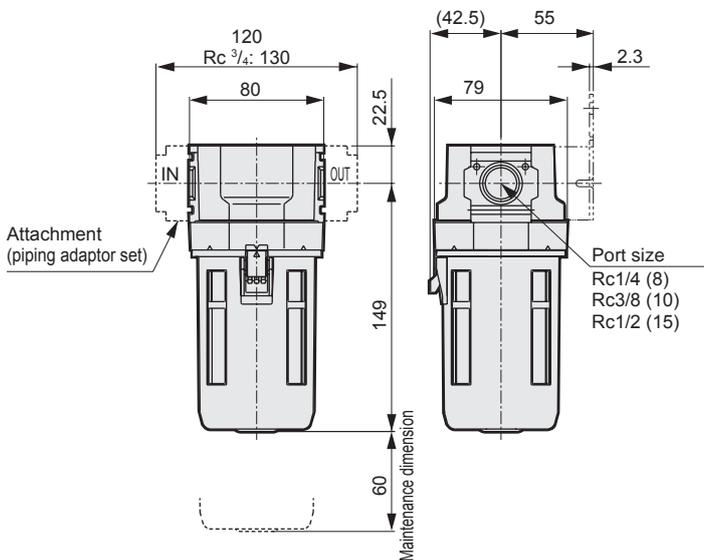
### [C bracket dimensions]

- Part model No.: B320-P70
- Material: steel, nickel plate processing



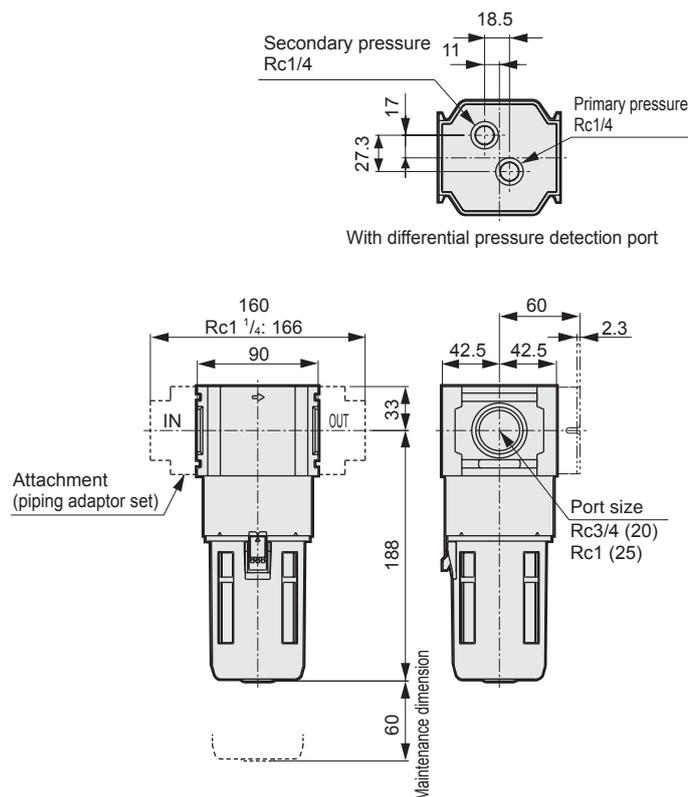
### Dimensions

#### ● M4000-P70/P74



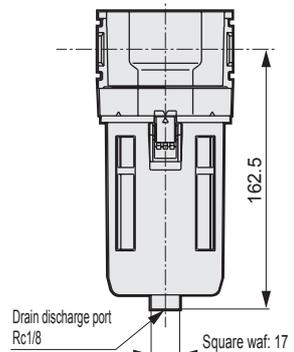
Note : C bracket and piping adaptor set attachments cannot be used at the same time.

#### ● M6000-P70/P74



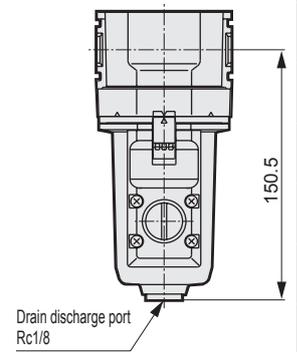
#### [Optional dimensions]

##### ● PC bowl drain discharge Rc1/8 (C6)



Note: Mount with fixing on square waf, when pipe for drain discharge.

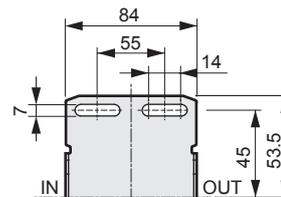
##### ● Metal bowl (M6)



#### [C bracket dimensions]

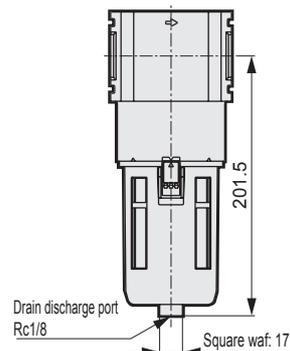
##### ● Part model No.: B420-P70

· Material: steel, nickel plate processing



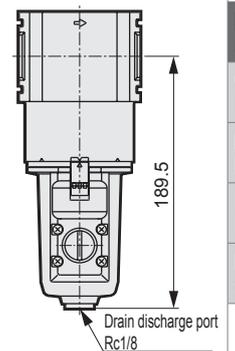
#### [Optional dimensions]

##### ● PC bowl drain discharge Rc1/8 (C6)



Note: Mount with fixing on square waf, when pipe for drain discharge.

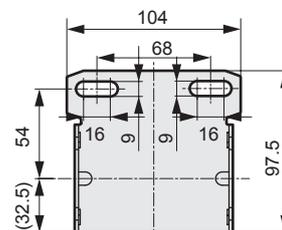
##### ● Metal bowl (M6)



#### [C bracket dimensions]

##### ● Part model No.: B620-P70

· Material: steel, nickel plate processing



SCPD3
SCM
SSD2
MDC2
SMG
LCM
LCR
LCG
LCX
STM
STG
STR2
MRL2
GRC
Cylinder Switch
MN3E MN4E
4GA/B
M4GA/B
MN4GA/B
F.R.(module unit)
Clean F.R
Precision R
Press gauge Diff. press gauge
Electro-pneumatic R
Speed controller
Auxiliary valve
Fitting/tube
Clean air unit
Pressure sensor
Flow rate sensor
Valve for air blow
Ending