

# Exhaust Cleaner

# Series AMC

Insures clean plant air and reduces noise pollution  
Over 35dB(A) noise reduction  
Over 99.9% oil mist removal

JIS symbol



## Specifications

Fluid	Compressed air
Ambient and fluid temperature	5 to 60°C*
Element supply pressure	0.1MP or less
Noise reduction	35dB or more
Oil mist removal	99.9% or more
Exhaust of oil mist	Drain cock (Standard), Drain piping
Option	Bracket**

\* It can operate in temperatures between -10°C to 60°C if there is no risk of freezing the moisture in the air.

\*\* Bracket not available on AMC810 and 910.

## Model/Male Thread Style

Specifications	Model	AMC310	AMC510	AMC610	AMC810	AMC910
Effective area		16	55	165	330	550
Max. air flow (l/min.(ANR))		300	1,000	3,000	6,000	10,000
Port size		3/8	3/4	1	1 1/2	2
Weight (kg)		0.2	0.5	0.7	1.2	1.7
Element model No.		AMC-EL3	AMC-EL5	AMC-EL6	AMC-EL8	AMC-EL9
Bracket model No.		BE30	BE50	BE60	-	-

## Model/Female Thread Style

Specifications	Model	AMC220	AMC320	AMC520
Effective area		12	16	55
Max. air flow (l/min.(ANR))		200	300	1,000
Port size		1/4	1/4, 3/8	1/2, 3/4
Weight (kg)		0.12	0.2	0.5
Element model No.		AMC-EL2	AMC-EL3	AMC-EL5
Bracket model No.		BE20	BE30	BE50

\* ANR: 20°C atmospheric pressure, relative humidity 65%

## How to Order

AMC 5 1 0 - 06

<b>Body size</b>	2 1/4 std.	3 3/8 std.	5 3/4 std.	6 1 std.	8 1/2 std.	9 2 std.	
<b>Thread</b>	1 Male thread	2 <sup>(1)</sup> Female thread					
	Note 1) Female thread: Available only AMC220, 320, 520						
<b>Thread style</b>	- R(PT), Rc(PT) N NPT F G(PF)						
<b>Port size</b>	02 Female 1/4	03 Female 3/8	04 Female 1/2	06 Female 3/4	10 Male 1	14 Male 1 1/2	20 Male 1
<b>Suffix</b>	B With bracket D <sup>(2)</sup> Drain piping (Except AMC220)						
	* Indicate "BD" if both are required. Note 2) On the AMC220, an R(PT) 1/4 fitting can be attached by removing the drain cock. (It becomes the drain piping style)						

## How to Order Oil Case Assembly

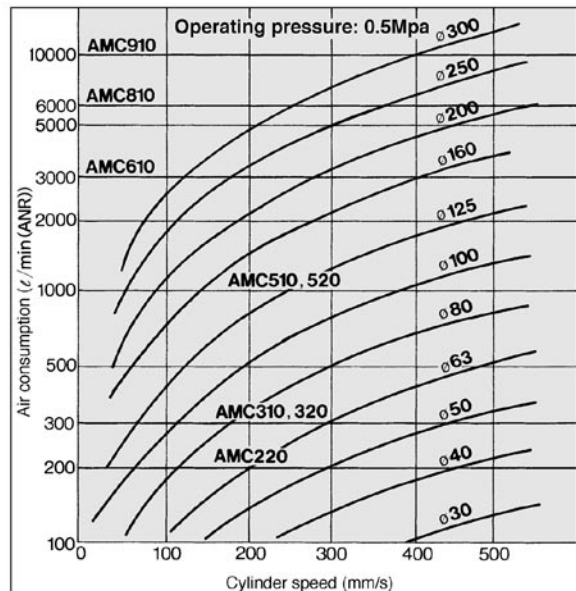
If the oil case becomes damaged, it can be replaced easily.

AMC - CA 3 - A

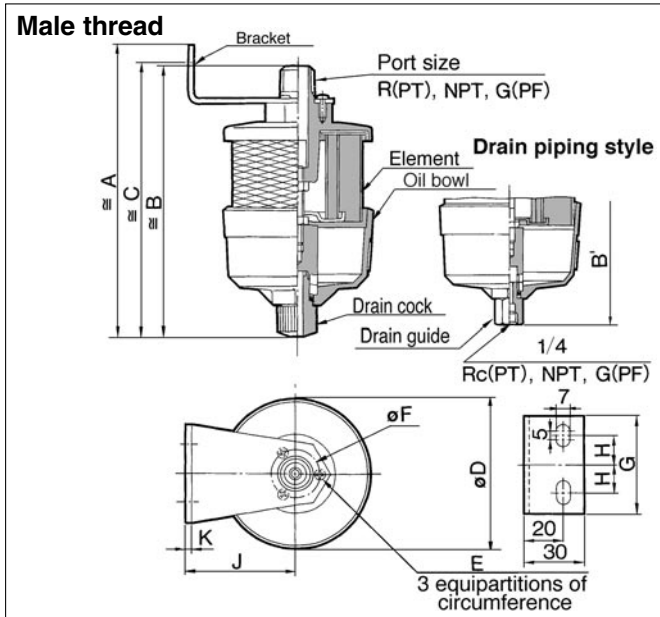
<b>Body size</b>	2 AMC220	3 AMC310, 320	5 AMC510, 520	6 AMC610	8 AMC810	9 AMC910
<b>Thread/Applicable to drain piping</b>	- Rc(PT) N NPT F G(PF)					
<b>Exhaust of oil mist</b>	A Drain cock (Standard) D Drain piping					
	Note 1) On the type for the AMC220, an R(PT) 1/4 fitting can be attached by removing the drain cock (It becomes the drain piping style). Note 2) Select the threads to match the threads on the products itself.					

## How to Select At operating pressure 0.5MPa

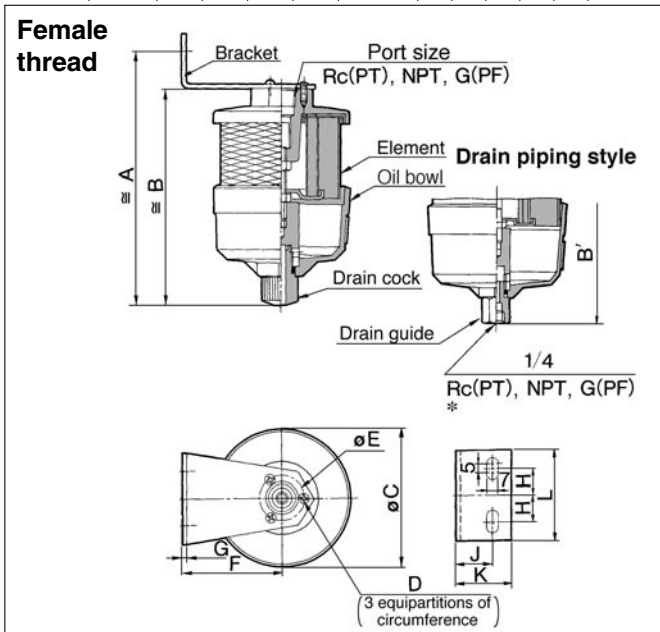
Select a model according to the air consumption of the circuit to be used.  
① Obtain the air consumption of the actuator to be used. However, if an exhaust cleaner of the centralized piping style will be used, sum the air consumption of the actuators that operate simultaneously. Also add the capacity of the piping from the cylinder to the EXH.  
② Select a model that provides a maximum processing flow volume that exceeds the consumption volume obtained in step ①.



## Construction/Dimensions



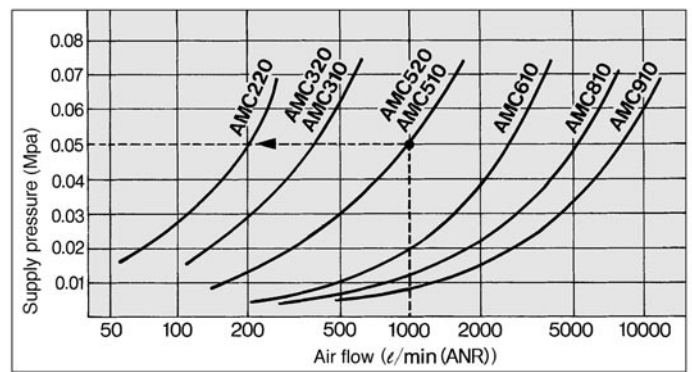
Model	Port size	A	B	C	D	Mounting bracket						Drain piping B'
						E	F	G	H	J	K	
AMC310	3/8	150.5	138.5	140.5	75	M3 Depth	24	50	15	55	2.3	141.5
AMC510	3/4	203.5	196.5	193.5	102	M4 Depth	40	70	20	70	3.2	199.5
AMC610	1	229.5	224.5	219.5	118	M4 Depth	48	70	20	80	3.2	227.5
AMC810	1 1/2	-	270	-	135	-	-	-	-	-	-	273
AMC910	2	-	327	-	153	-	-	-	-	-	-	330



Model	Port size	A	B	C	D	Mounting bracket						Drain piping B'	
						E	F	G	H	J	K		L
AMC220	1/4	100	88	56	M3 Depth	22	40	2.3	15	12	20	50	73*
AMC320	1/4, 3/8	140.5	120.5	75	M3 Depth	24	55	2.3	15	20	30	50	123.5
AMC520	1/2, 3/4	193.5	173.5	102	M4 Depth	40	70	3.2	20	20	30	70	176.5

\* On the AMC220, an R(PT)1/4 fitting can be attached by removing the drain cock.

## Flow Characteristics



How to view the diagram: If the AMC510 is operated at a flow volume of 1000 l/min (ANR), the supply pressure will be 0.05MPa.

## ⚠ Precautions

### Design

#### ⚠ Warning

- The exhaust port could become blocked by the clogging of the exhaust cleaner. Therefore, make sure to provide a safe design so as not to cause the whole system to malfunction.

#### ⚠ Caution

- If this will be used with a centralized piping system, calculate the **peak** maximum air consumption by including the actuators that operate simultaneously and the capacity of the piping that is connected. Then, select a model so that the calculated value will be less than the maximum flow volume of the **exhaust cleaner**. (Select a style with ample capacity because the exhaust speed will decrease when the **element** becomes clogged.)
- The silencing effect could vary depending on the pneumatic circuit or the pressure that is used.
- Operate at a back pressure (Supply pressure) of 0.1MPa or less.
- The attached bracket is for supporting the exhaust cleaner body. Thus, it cannot support the piping or other items. If these items need to be supported, provide an additional support.

### Mounting

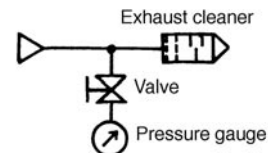
#### ⚠ Caution

- An exhaust cleaner must be mounted vertically. If it is mounted diagonally, laterally, or inverted, the oil that is separated by the element will splash on the surroundings.

### Maintenance

#### ⚠ Caution

- If the exhaust speed drops and the system performance decreases due to clogging, replace with a new element. Make sure to verify the operating condition of the actuator at least once a day.
- The replacement interval for the element is before the internal pressure during exhaust reaches 0.1MPa or after 1 year of operation, whichever comes first.



- Provide a branch on the supply side of the exhaust cleaner to mount a valve and a pressure gauge.
- During inspection, open the valve and check the pressure at the time of exhaust discharge. (The **valve** must remain closed except for inspection. The pressure gauge could break if the valve remains open.)