Exhaust Cleaner
Series AMC

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

How to Order

Model/Female Thread Type

<table>
<thead>
<tr>
<th>Specifications</th>
<th>Model/Male Thread Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effective area (mm²)</td>
<td>AMC310</td>
</tr>
<tr>
<td>16</td>
<td>55</td>
</tr>
<tr>
<td>Sic resistances (Ω)</td>
<td>3.2</td>
</tr>
<tr>
<td>Min. air flow (l/min)</td>
<td>300</td>
</tr>
<tr>
<td>Mass (kg)</td>
<td>0.5</td>
</tr>
<tr>
<td>Element part no.</td>
<td>AMC-EL3</td>
</tr>
<tr>
<td>Bracket part no.</td>
<td>BE50</td>
</tr>
<tr>
<td>Model/Female Thread Type</td>
<td></td>
</tr>
</tbody>
</table>

How to Select

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 type will be used, sum the air consumption of the actuators that operate simultaneously.

2. Select a model that provides a maximum processing flow volume that exceeds the consumption volume obtained in step 1.

Flow Characteristics (Initial conditions)

How to read the graph: If the AMC510 is operated at a flow volume of 1000 l/min (ANR), the inlet pressure will be 0.05 MPa.
Series AMC

Construction/Dimensions

Male thread

![Diagram of male thread construction](image)

Female thread

![Diagram of female thread construction](image)

<table>
<thead>
<tr>
<th>Model</th>
<th>Port size</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>J</th>
<th>K</th>
<th>Drain piping type (mm)</th>
<th>B'</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMC310</td>
<td>7/8 1/2</td>
<td>139</td>
<td>134</td>
<td>175</td>
<td>75</td>
<td>12</td>
<td>2</td>
<td>15</td>
<td>55</td>
<td>2.3</td>
<td>142</td>
<td>90</td>
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<td>AMC510</td>
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<td>120</td>
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<td>19</td>
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<td>20</td>
<td>70</td>
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<td>AMC610</td>
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<td>225</td>
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<tr>
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</table>

Drain piping type

<table>
<thead>
<tr>
<th>Model</th>
<th>Port size</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>J</th>
<th>K</th>
<th>Drain piping type (mm)</th>
<th>B'</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMC220</td>
<td>1/4 1/2</td>
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<td>88</td>
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<td>56</td>
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<td>AMC320</td>
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<td>117</td>
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<td>15</td>
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<td>30</td>
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<td></td>
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<td>AMC520</td>
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<td>20</td>
<td>30</td>
<td>70</td>
<td>177</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

How to Order Oil Bowl Assembly

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

AMC - CA | A

Body size

**Symbol** | **Type**
--- | ---
2 | AMC220
3 | AMC310, 320
5 | AMC510, 520
6 | AMC610
8 | AMC810
9 | AMC910

Exhaust of oil mist

**Symbol** | **Type**
--- | ---
A | Drain cock (Standard)
D | Drain piping

Thread type Applicable to drain piping

**Symbol** | **Type**
--- | ---
N | Nil
R | Rc
N | NPT
F | F
G | G

Note) Select the threads to match the threads on the product itself.
Series AMC
Exhaust Cleaner
Special Product Precautions
Be sure to read before handling.

**Design**

**Warning**

1. 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.

2. The inlet pressure obtained in the flow characteristic graph of silencer indicates the pressure (P1) prior to exhaust cleaner. (Refer to the diagram below.)

3. If compressed air exhausted from the solenoid valve is not clean clogging may occur.

4. Operate at a back pressure (inlet pressure) of 0.1 MPa or less.

**Selection**

**Caution**

1. Select an exhaust cleaner which is able to dispose of the maximum allowable flow capacity of compressed air exhausted from solenoid valve.

   If the flow exceeds the maximum allowable flow for the exhaust cleaner, drainage and oil may be sprayed into the environment causing damage to equipment.

2. Select a model which has a bigger effective area than that of the solenoid valve (including compound effective area).

3. 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.)

**Mounting**

**Caution**

1. Make sure not to apply a lateral load to the body during or after the installation.

2. Take precautions so that the piping load is not be applied to the main body.

   The attached bracket is for supporting the exhaust cleaner body only. Thus, it cannot support the piping or other items. If these items need to be supported, provide an additional support.

3. 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**

1. 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.

2. The replacement interval for the element is before the internal pressure during exhaust reaches 0.1 MPa or after 1 year 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.)