

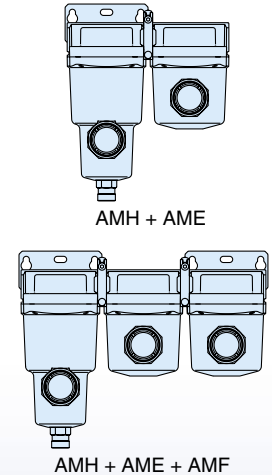
# Compressed Air Cleaning Filter Series

## For Water, Solid/Oil Separation and Deodorization

**Modular connection, Space-saving design, Labor-saving in piping!** (AMG□C, AFF□C, AM□C, AMD□C)  
(AMH□C, AME□C, AMF□C)

Uses the same spacer as the F.R.L. combination AC series.  
Possible to make a modular connection with products such as AR series regulator.

### Modular connection example



\* The C type is only suitable for modular connection.

### Options added (AMG□C, AFF□C, AM□C, AMD□C) (AMH□C, AME□C, AMF□C)

#### Addition: 5 types

- 1.6 MPa specifications
- Fluororubber specifications
- With differential pressure switch (30 VDC)
- Degreasing wash, white vaseline specifications

Differential pressure switch



### Compact, Lightweight (AME□C, AMF□C)

Height and mass reduced by up to **40%**



#### Water Separation

Water Separator/**AMG**

#### Solid/Oil Separation

Main Line Filter/**AFF**

Mist Separator/**AM**

Micro Mist Separator/**AMD**

Micro Mist Separator with Pre-filter/**AMH**

Super Mist Separator/**AME**

#### Deodorization

Odour Removal Filter/**AMF**

**Series AM□/AFF**



CAT.EUS30-11A-UK

## Water droplet removal

### Water Separator

Water droplet  
separation rate: 99%



AMG150C to 550C



AMG650/850

| Model |      | Flow capacity<br>ℓ/min (ANR)<br>Max. flow<br>capacity at<br>0.7 MPa<br>inlet pressure | Port size |
|-------|------|---------------------------------------------------------------------------------------|-----------|
| AMG   | 150C | 300                                                                                   | 1/8, 1/4  |
|       | 250C | 750                                                                                   | 1/4, 3/8  |
|       | 350C | 1,500                                                                                 | 3/8, 1/2  |
|       | 450C | 2,200                                                                                 | 1/2, 3/4  |
|       | 550C | 3,700                                                                                 | 3/4, 1    |
|       | 650  | 6,000                                                                                 | 1, 1 1/2  |
|       | 850  | 12,000                                                                                | 1 1/2, 2  |

## Large dust particle filtration, Oil droplet separation

### Main Line Filter

Nominal filtration rating: 3 μm  
[Filtration efficiency:  
99%]



AFF2C to 22C



AFF37B/75B

|     |     |        |          |
|-----|-----|--------|----------|
| AFF | 2C  | 300    | 1/8, 1/4 |
|     | 4C  | 750    | 1/4, 3/8 |
|     | 8C  | 1,500  | 3/8, 1/2 |
|     | 11C | 2,200  | 1/2, 3/4 |
|     | 22C | 3,700  | 3/4, 1   |
|     | 37B | 6,000  | 1, 1 1/2 |
|     | 75B | 12,000 | 1 1/2, 2 |

## Dust filtration, Oil mist separation

### Mist Separator

Nominal filtration rating: 0.3 μm  
[Filtration efficiency: 99.9%]  
Oil mist density at outlet:  
Max. 1.0 mg/m<sup>3</sup> (ANR)  
[≈0.8 ppm]



AM150C to 550C



AM650/850

|    |      |        |          |
|----|------|--------|----------|
| AM | 150C | 300    | 1/8, 1/4 |
|    | 250C | 750    | 1/4, 3/8 |
|    | 350C | 1,500  | 3/8, 1/2 |
|    | 450C | 2,200  | 1/2, 3/4 |
|    | 550C | 3,700  | 3/4, 1   |
|    | 650  | 6,000  | 1, 1 1/2 |
|    | 850  | 12,000 | 1 1/2, 2 |

## Dust filtration, Oil mist separation

### Micro Mist Separator

Nominal filtration rating: 0.01 μm  
[Filtration efficiency: 99.9%]  
Oil mist density at outlet:  
Max. 0.1 mg/m<sup>3</sup> (ANR)  
[≈0.08 ppm]



AMD150C to 550C



AMD650 to 850

|     |      |        |          |
|-----|------|--------|----------|
| AMD | 150C | 200    | 1/8, 1/4 |
|     | 250C | 500    | 1/4, 3/8 |
|     | 350C | 1,000  | 3/8, 1/2 |
|     | 450C | 2,000  | 1/2, 3/4 |
|     | 550C | 3,700  | 3/4, 1   |
|     | 650  | 6,000  | 1, 1 1/2 |
|     | 850  | 12,000 | 1 1/2, 2 |

## Dust filtration, Oil mist separation

### Micro Mist Separator with Pre-filter

Built-in 0.3  $\mu\text{m}$  pre-filter  
 The AM + AMD element have been integrated to achieve a space-saving design.  
 Nominal filtration rating: 0.01  $\mu\text{m}$   
 [Filtration efficiency: 99.9%]  
 Oil mist density at outlet:  
 Max. 0.1  $\text{mg}/\text{m}^3$  (ANR)  
 [ $\approx 0.08$  ppm]



AMH150C to 550C AMH650/850

| Model |      | Flow capacity<br>$\ell/\text{min}$ (ANR)<br>Max. flow<br>capacity at<br>0.7 MPa<br>inlet pressure | Port size |
|-------|------|---------------------------------------------------------------------------------------------------|-----------|
| AMH   | 150C | 200                                                                                               | 1/8, 1/4  |
|       | 250C | 500                                                                                               | 1/4, 3/8  |
|       | 350C | 1,000                                                                                             | 3/8, 1/2  |
|       | 450C | 2,000                                                                                             | 1/2, 3/4  |
|       | 550C | 3,700                                                                                             | 3/4, 1    |
|       | 650  | 6,000                                                                                             | 1, 1 1/2  |
|       | 850  | 12,000                                                                                            | 1 1/2, 2  |

## Dust filtration, Oil mist adsorption

### Super Mist Separator

Colour change indicates when element is saturated.  
 Nominal filtration rating: 0.01  $\mu\text{m}$   
 [Filtration efficiency: 99.9%]  
 Oil mist density at outlet:  
 Max. 0.01  $\text{mg}/\text{m}^3$  (ANR)  
 [ $\approx 0.008$  ppm]  
 Cleanliness at outlet:  
 Not more than 35  
 particles of size  
 0.3  $\mu\text{m}$  or larger/10  $\ell$   
 (100 particles or less/ $\text{ft}^3$ )



AME150C to 550C AME650/850

|     |      |        |          |
|-----|------|--------|----------|
| AME | 150C | 200    | 1/8, 1/4 |
|     | 250C | 500    | 1/4, 3/8 |
|     | 350C | 1,000  | 3/8, 1/2 |
|     | 450C | 2,000  | 1/2, 3/4 |
|     | 550C | 3,700  | 3/4, 1   |
|     | 650  | 6,000  | 1, 1 1/2 |
|     | 850  | 12,000 | 1 1/2, 2 |

## Deodorization

### Odour Removal Filter

Nominal filtration rating: 0.01  $\mu\text{m}$   
 [Filtration efficiency: 99.9%]  
 Oil mist density at outlet:  
 Max. 0.004  $\text{mg}/\text{m}^3$  (ANR)  
 [ $\approx 0.0032$  ppm]



AMF150C to 550C

AMF650 to 850

|     |      |        |          |
|-----|------|--------|----------|
| AMF | 150C | 200    | 1/8, 1/4 |
|     | 250C | 500    | 1/4, 3/8 |
|     | 350C | 1,000  | 3/8, 1/2 |
|     | 450C | 2,000  | 1/2, 3/4 |
|     | 550C | 3,700  | 3/4, 1   |
|     | 650  | 6,000  | 1, 1 1/2 |
|     | 850  | 12,000 | 1 1/2, 2 |

# Compressed Air Cleaning Filter Series

## Series **AM**□/**AFF**

|                                                       | Series                                                                                                                                                                                                                                                                                                                                                         | Water removal rate | Nominal filtration rating                                                                                 | Oil mist density at outlet                                           | Smell              | Page                                          |
|-------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|-----------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|--------------------|-----------------------------------------------|
| Water Separator                                       | Series AMG                                                                                                                                                                                                                                                                                                                                                     | 99%                | —                                                                                                         | —                                                                    | —                  | P.2                                           |
| Solid/Oil Separator                                   | Series AFF                                                                                                                                                                                                                                                                                                                                                     | —                  | 3 μm<br>(Filtration efficiency: 99%)                                                                      | —                                                                    | —                  | P.10                                          |
|                                                       | Series AM                                                                                                                                                                                                                                                                                                                                                      |                    | 0.3 μm<br>(Filtration efficiency: 99.9%)                                                                  | 1 mg/m <sup>3</sup> (ANR)<br>(≈0.8 ppm)<br>(after oil saturation)    |                    | P.18                                          |
|                                                       | Series AMD                                                                                                                                                                                                                                                                                                                                                     |                    | 0.01 μm<br>(Filtration efficiency: 99.9%)                                                                 | 0.1 mg/m <sup>3</sup> (ANR)<br>(≈0.08 ppm)<br>(after oil saturation) |                    | P.26                                          |
|                                                       | Series AMH                                                                                                                                                                                                                                                                                                                                                     |                    | 0.3 + 0.01 μm<br>(Filtration efficiency: 99.9%)                                                           |                                                                      | P.34               |                                               |
|                                                       | Series AME                                                                                                                                                                                                                                                                                                                                                     |                    | 0.01 μm<br>(Filtration efficiency: 99.9%)                                                                 | 0.01 mg/m <sup>3</sup> (ANR)<br>(≈0.008 ppm)                         | Reduces oil smell. | P.42                                          |
| Deodorizer                                            | Series AMF                                                                                                                                                                                                                                                                                                                                                     |                    | 0.004 mg/m <sup>3</sup> (ANR)<br>(≈0.0032 ppm)                                                            | Deodorizes oil smell.                                                | P.50               |                                               |
| Modular Connection Examples                           |                                                                                                                                                                                                                                                                                                                                                                |                    |                                                                                                           |                                                                      |                    | P.58                                          |
| How to Order Bowl Assembly                            |                                                                                                                                                                                                                                                                                                                                                                |                    |                                                                                                           |                                                                      |                    | P.59                                          |
| Options                                               | <div>• Seal material: Fluororubber • IN-OUT reversal direction • Degreasing wash, white vaseline</div> <div>• For medium air pressure • Drain guide 1/4 female threaded • With element service indicator</div> <div>• With differential pressure switch (with indicator) (125 VAC, 30 VDC) • With differential pressure switch (with indicator) (30 VDC)</div> |                    |                                                                                                           |                                                                      |                    | Refer to “How to Order” of respective models. |
| Made to Order                                         | <div>• With differential pressure gauge<br/>Possible to control product’s service life by monitoring the clogged element.</div> <div>• Auto drain type, drain guide specifications<br/>Drain piping is possible by auto drain type.</div> <div>• White vaseline specifications*<br/>Using white vaseline for lubricant.</div>                                  |                    |                                                                                                           |                                                                      |                    | P.63                                          |
| * Applicable only to the AFF37B, 75B, AM□650 and 850. |                                                                                                                                                                                                                                                                                                                                                                |                    |                                                                                                           |                                                                      |                    |                                               |
| Special Specifications                                | Clean Series<br>Usable inside a clean room.                                                                                                                                                                                                                                                                                                                    |                    | Copper-free, Fluorine-free<br>Eliminates the effects on a colour CRT by copper ion or fluoric resin, etc. |                                                                      |                    | P.63                                          |
| Related Products                                      | Auto Drain Valve, Motor Operated Auto Drain, Heavy Duty Auto Drain, Differential Pressure Gauge                                                                                                                                                                                                                                                                |                    |                                                                                                           |                                                                      |                    | P.67                                          |
| Specific Product Precautions                          |                                                                                                                                                                                                                                                                                                                                                                |                    |                                                                                                           |                                                                      |                    | Back page 3                                   |
| Discontinued Model and Equivalent Model               |                                                                                                                                                                                                                                                                                                                                                                |                    |                                                                                                           |                                                                      |                    | Back page 7                                   |

# Water Separator

## Series AMG

Can remove water droplets in compressed air. Use this product in cases where “water must be avoided, but not so dry as when an air dryer is used”.

Through the adoption of an element that is exclusively used for removing water droplets and the ample housing interior space, a 99%\* water removal rate\*\* has been achieved.

### Caution

Water separator can remove water droplets, but it cannot remove moisture.

\* Condition of inlet air

Pressure: 0.7 MPa  
Temperature: 25°C  
Relative humidity: 100%  
Liquid water content (Water droplet content): 15 g/m<sup>3</sup> (ANR)  
Compressed air flow: Rated flow of each model

\*\* Water removal rate (%) =

$\frac{\text{Removed water (Water droplet) (g)}}{\text{Inflowing water (Water droplet) (g)}} \times 100$

Modular connection is possible with AMG150C to 550C.

(For details, refer to page 58.)

### Model

| Model                                            | AMG150C  | AMG250C  | AMG350C  | AMG450C  | AMG550C | AMG650   | AMG850   |
|--------------------------------------------------|----------|----------|----------|----------|---------|----------|----------|
| Rated flow (l/min (ANR))<br><small>Note)</small> | 300      | 750      | 1500     | 2200     | 3700    | 6000     | 12000    |
| Port size                                        | 1/8, 1/4 | 1/4, 3/8 | 3/8, 1/2 | 1/2, 3/4 | 3/4, 1  | 1, 1 1/2 | 1 1/2, 2 |
| Mass (kg)                                        | 0.38     | 0.55     | 0.9      | 1.4      | 2.1     | 4.2      | 10.5     |



Note) Max. flow at 0.7 MPa.

Max. flow varies depending on the operating pressure. Refer to “Flow Characteristics” (page 5) and “Maximum Air flow” (page 6).

### Specifications

|                               |                                               |
|-------------------------------|-----------------------------------------------|
| Fluid                         | Compressed air                                |
| Max. operating pressure       | 1.0 MPa                                       |
| Min. operating pressure*      | 0.05 MPa                                      |
| Proof pressure                | 1.5 MPa                                       |
| Ambient and fluid temperature | 5 to 60°C                                     |
| Water removal rate            | 99%                                           |
| Element life                  | 2 years or when pressure drop reached 0.1 MPa |

\* With auto drain: 0.1 MPa (N.O. type) or 0.15 MPa (N.C. type)

### Accessory

| Applicable model                          | AMG150C  | AMG250C  | AMG350C  | AMG450C  | AMG550C  | AMG650 | AMG850 |
|-------------------------------------------|----------|----------|----------|----------|----------|--------|--------|
| Bracket assembly (with 2 mounting screws) | AM-BM101 | AM-BM102 | AM-BM103 | AM-BM104 | AM-BM105 | BM56   | BM57   |

### Caution

Be sure to read this before handling.

Refer to back pages 1 and 2 for Safety Instructions, “Precautions for Handling Pneumatic Devices” (M-03-E3A) for Common Precautions, and back pages 3 through to 7 for Specific Product Precautions.



AMG150C to 550C



AMG650/850

Symbol



(For drain cock)



(For auto drain)



Made to Order

(For details, refer to page 63.)

## How to Order



### AMG150C to 550C

AMG **550C** - **10** - - - -

#### Body size

|      |
|------|
| 150C |
| 250C |
| 350C |
| 450C |
| 550C |

#### Thread type

| Symbol | Type |
|--------|------|
| —      | Rc   |
| F      | G*1  |
| N      | NPT  |

\*1 Conforms to ISO1179-1.

#### Port size

| Symbol | Size | Applicable body size |      |      |      |      |
|--------|------|----------------------|------|------|------|------|
|        |      | 150C                 | 250C | 350C | 450C | 550C |
| 01     | 1/8  | ●                    |      |      |      |      |
| 02     | 1/4  | ●                    | ●    |      |      |      |
| 03     | 3/8  |                      | ●    | ●    |      |      |
| 04     | 1/2  |                      |      | ●    | ●    |      |
| 06     | 3/4  |                      |      |      | ●    | ●    |
| 10     | 1    |                      |      |      |      | ●    |

#### Accessory

| Symbol | Description |
|--------|-------------|
| —      | —           |
| B      | Bracket *2  |

\*2 Bracket is included, (but not assembled).

#### Made to Order

("How to Order" and the applicable models are different from those shown on this page. Be sure to refer to "Made to Order".)

| Symbol | Description                              | Page for details |
|--------|------------------------------------------|------------------|
| —      | —                                        | —                |
| X26    | N.C., N.O. auto drain, drain piping type | P.65             |

#### Option \*3

| Symbol | Description                        |
|--------|------------------------------------|
| —      | —                                  |
| F      | Rubber material: Fluororubber      |
| H      | For medium air pressure (1.6 MPa)  |
| J      | Drain guide 1/4 female threaded *4 |
| R      | IN-OUT reversal direction          |
| V      | Degreasing wash, *5 white vaseline |

\*4 Drain piping and piping for a stop valve such as ball valve are required.

\*5 Only body/housing is degreasing washed.

#### Auto drain \*3

| Symbol | Description                     |
|--------|---------------------------------|
| —      | Drain cock (Without auto drain) |
| C      | N.C. auto drain                 |
| D      | N.O. auto drain                 |

\*3 Refer to the table below for the combination between the draining specification and option. (Only one draining specification is selectable).

#### Auto Drain Specifications/Option Combinations

◎ : All draining specifications are available (including drain guide, J type).

△ : N.C. auto drain (C type) is not available.

▼ : N.C. auto drain (C type) and N.O. auto drain (D type) are not available.

|   | — | F | H | R | V |
|---|---|---|---|---|---|
| — | ◎ | ◎ | △ | ◎ | ◎ |
| F | ◎ | ◎ | ▼ | ◎ | ▼ |
| H | △ | ▼ | ◎ | △ | ▼ |
| R | ◎ | ◎ | △ | ◎ | ◎ |
| V | ◎ | ▼ | ▼ | ◎ | ◎ |

■ : Not available

## Options

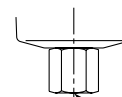
### Symbol F: Rubber material: Fluororubber

Fluororubber is used for the parts such as O-ring and gasket.

### Symbol H: For medium air pressure (1.6 MPa)

Can be used up to 1.6 MPa at maximum.

### Symbol J: Drain guide 1/4 female threaded



Can be piped to the drain exhaust port.

1/4 female threaded

### Symbol R: IN-OUT reversal direction

Air flow in the separator is changed to right to left.  
(Air flow direction of the standard: Left to right.)

### Symbol V: Degreasing wash, white vaseline

Body/housing is degreasing washed. The lubrication grease for O-ring and gasket is changed to white vaseline.



## How to Order

### AMG650/850

**AMG 650** - [ ] **10** [ ] [ ] - [ ] - [ ]

#### Body size

|     |
|-----|
| 650 |
| 850 |

#### Thread type

| Symbol   | Type |
|----------|------|
| —        | Rc   |
| <b>F</b> | G    |
| <b>N</b> | NPT  |

#### Port size

| Symbol    | Size  | Applicable body size |     |
|-----------|-------|----------------------|-----|
|           |       | 650                  | 850 |
| <b>10</b> | 1     | ●                    | —   |
| <b>14</b> | 1 1/2 | ●                    | ●   |
| <b>20</b> | 2     | —                    | ●   |

#### Accessory

| Symbol   | Description |
|----------|-------------|
| —        | —           |
| <b>B</b> | Bracket *1  |

\*1 Bracket is included, (but not assembled).

#### Made to Order

("How to Order" and the applicable models are different from those shown on this page. Be sure to refer to "Made to Order".)

| Symbol     | Description                              | Page for details |
|------------|------------------------------------------|------------------|
| —          | —                                        | —                |
| <b>X26</b> | N.C., N.O. auto drain, drain piping type | P.65             |
| <b>X12</b> | White vaseline                           | P.65             |

#### Option \*2

| Symbol   | Description                        |
|----------|------------------------------------|
| —        | —                                  |
| <b>J</b> | Drain guide 1/4 female threaded *4 |
| <b>R</b> | IN-OUT reversal direction          |

\*4 Drain piping and piping for a stop valve such as ball valve are required.

Note) Element service indicator (symbol: T) is not available as an option because water deposits inside the indicator could lead to malfunctions.

#### Auto drain \*2

| Symbol   | Description                        |
|----------|------------------------------------|
| —        | Drain cock (Without auto drain) *3 |
| <b>D</b> | N.O. auto drain                    |

\*2 Refer to "Auto Drain Specifications/Option Combinations".

\*3 Body size 850 is equipped with a ball valve (Rc3/8 female threaded). Mount a piping adapter IDF-AP609 (page 58) to the ball valve if NPT3/8 female threaded is required.



Note) Refer to "How to Order Bowl Assembly" on page 63.

### Auto Drain Specifications/Option Combinations

◎ : Available    ◻ : Not available

| Auto drain specifications/Option |                           |          | Auto drain specifications | Option   |          | Applicable model |               |
|----------------------------------|---------------------------|----------|---------------------------|----------|----------|------------------|---------------|
|                                  |                           |          | <b>D</b>                  | <b>J</b> | <b>R</b> | <b>AMG650</b>    | <b>AMG850</b> |
| Auto drain specifications        | N.O. auto drain           | <b>D</b> | ◻                         | ◻        | ◎        | ◎                | ◎             |
|                                  | Drain guide 1/4           | <b>J</b> | ◻                         | ◻        | ◎        | ◎                | ◻             |
| Option                           | IN-OUT reversal direction | <b>R</b> | ◎                         | ◎        | ◻        | ◎                | ◎             |

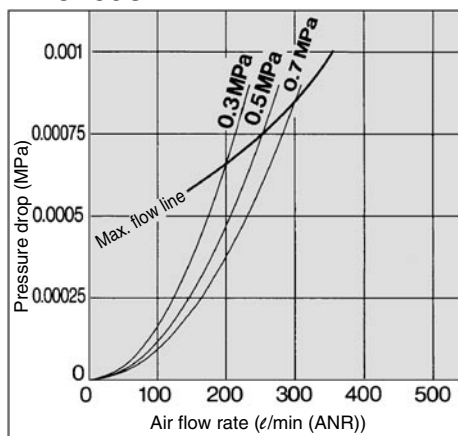
# Series AMG

## Flow Characteristics

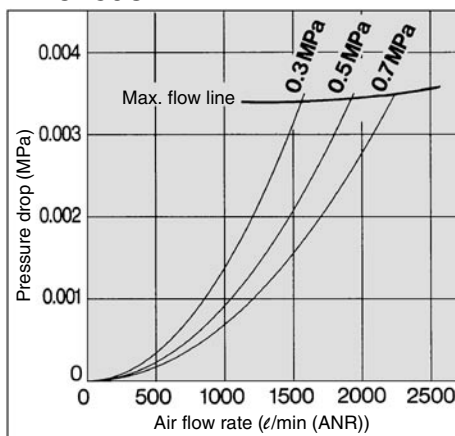


Note) Compressed air over max. flow line in the table below may not meet the specifications of the product.  
It may cause damage to the element.

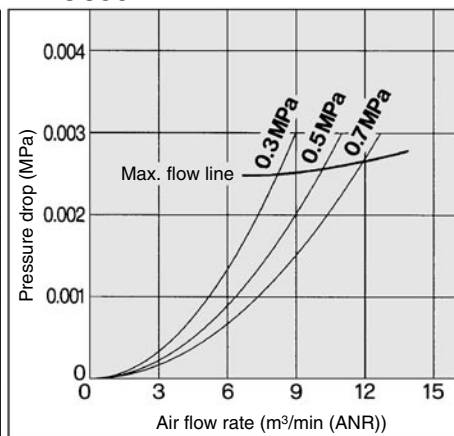
**AMG150C**



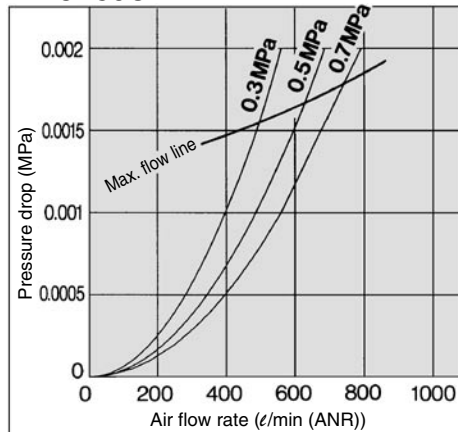
**AMG450C**



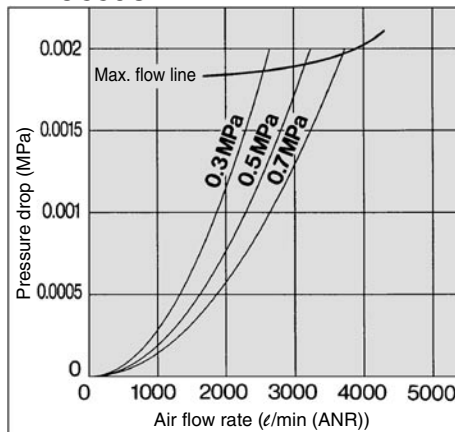
**AMG850**



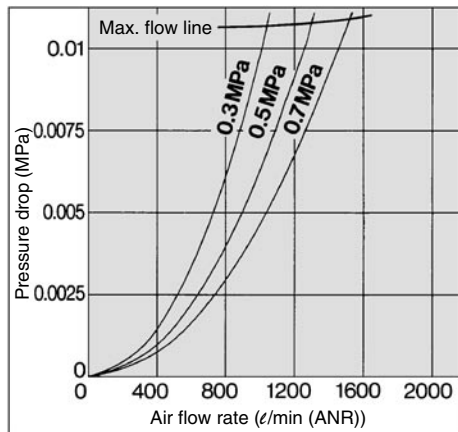
**AMG250C**



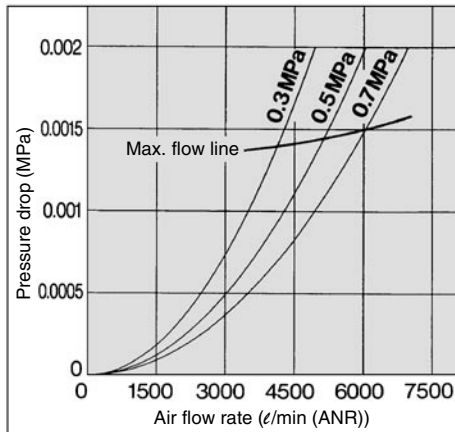
**AMG550C**



**AMG350C**

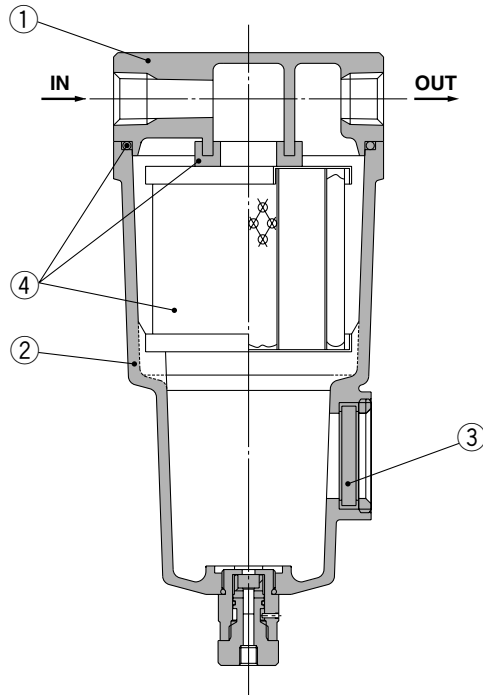


**AMG650**

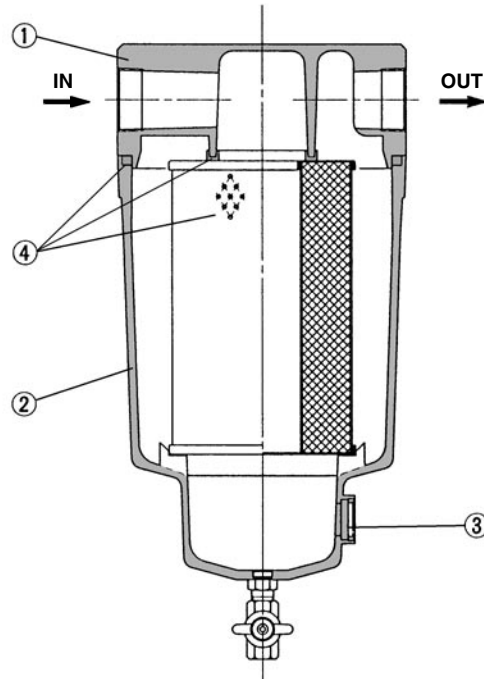


## Construction

### AMG150C to 550C, AMG650



### AMG850



## Component Parts

| No. | Description | Material             | Note                                          |
|-----|-------------|----------------------|-----------------------------------------------|
| 1   | Body        | Aluminum die-casted  | Chrome treated Epoxy coating on inner surface |
| 2   | Housing     | Aluminum die-casted* |                                               |
| 3   | Sight glass | Tempered glass       | —                                             |

\* The AMG850 is aluminum casted.



Note) Refer to "How to Order Bowl Assembly" on page 59.



Note) Sight glass is indicated in the figure for easy understanding of component parts. However, it differs from the actual construction. Refer to dimensions on pages 7 through to 9 for details.

## Replacement Parts

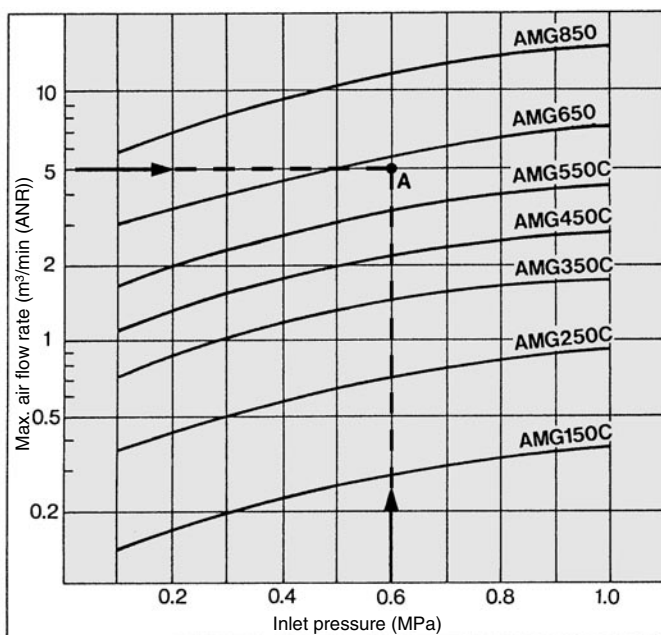
| No. | Description      | Material      | Applicable model | Model       |             |             |             |             |           |           |
|-----|------------------|---------------|------------------|-------------|-------------|-------------|-------------|-------------|-----------|-----------|
|     |                  |               |                  | AMG150C     | AMG250C     | AMG350C     | AMG450C     | AMG550C     | AMG650    | AMG850    |
| 4   | Element assembly | Resin, others | Except option F  | AMG-EL150   | AMG-EL250   | AMG-EL350   | AMG-EL450   | AMG-EL550   | AMG-EL650 | AMG-EL850 |
|     |                  |               | For option F     | AMG-EL150-F | AMG-EL250-F | AMG-EL350-F | AMG-EL450-F | AMG-EL550-F | —         | —         |

\* Element assembly: With gasket (1 pc.) and O-ring (1 pc.)

\* Refer to back page 6 for replacement of auto drain.

\* Element assemblies for Made to Order (X12, X20, X26) are same as those for standard (see the above table).

## Maximum Air Flow



## Model Selection

Select a model in accordance with the following procedure taking the inlet pressure and the max. air flow rate into consideration.

(Example) Inlet pressure: 0.6 MPa

Max. air flow rate: 5 m³/min (ANR)

1. Obtain the intersecting point A of inlet pressure and max. air flow rate in the graph.
2. The AMG650 is obtained when the max. flow line is above the intersecting point A in the graph.

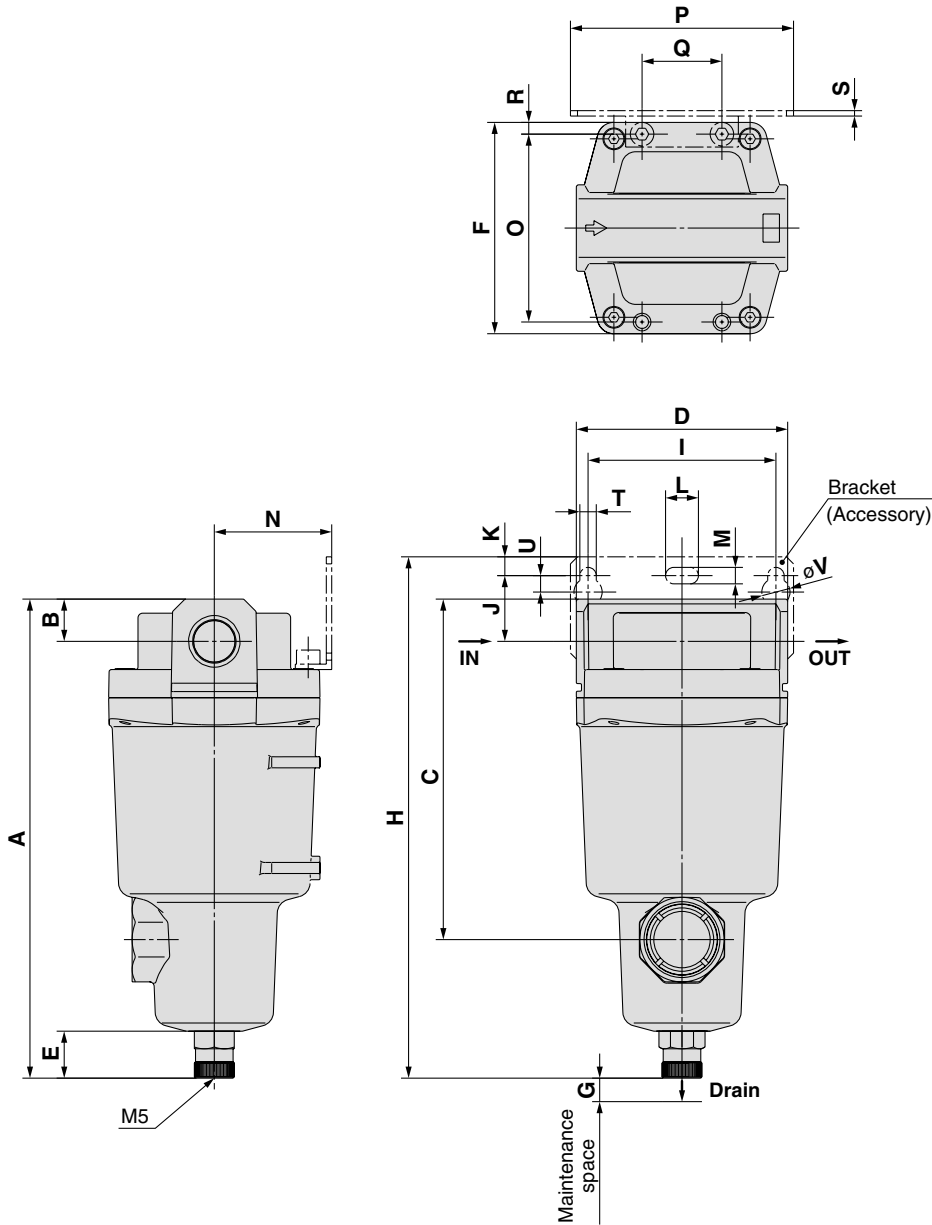


Note) Make sure to select a model that has the max. flow line above the obtained intersecting point. With a model that has the max. flow line below the obtained intersecting point, the flow rate will be exceeded, thus leading to a problem such as being unable to satisfy the specifications.

# Series AMG

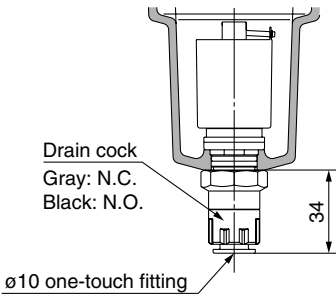
## Dimensions

AMG150C to 550C

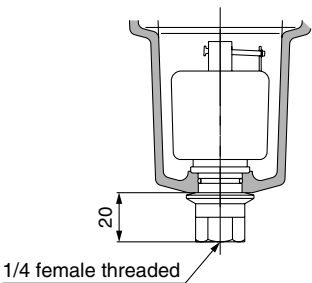


### Auto drain

C: With auto drain (N.C.)  
D: With auto drain (N.O.)

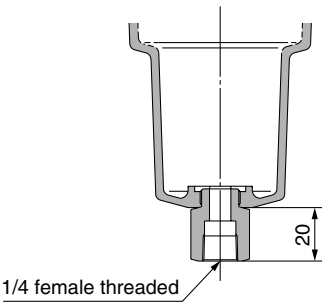


Combination of D: With auto drain (N.O.)  
and H: For medium air pressure



### Option

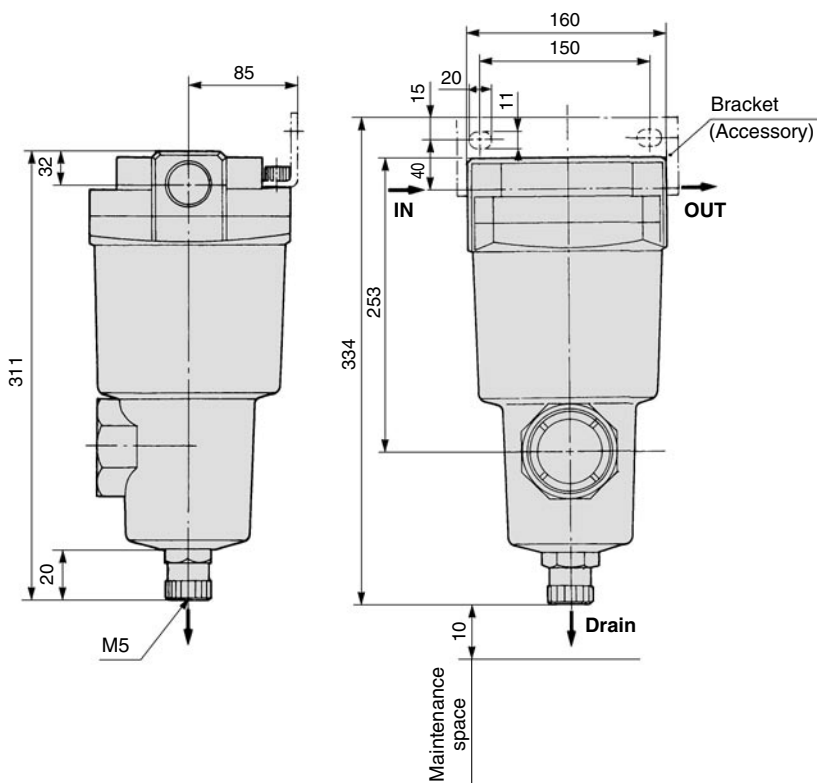
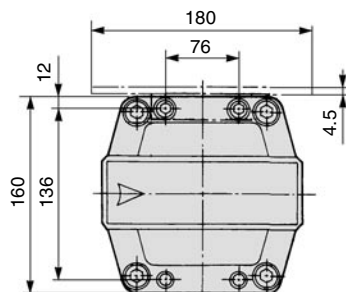
J: Drain guide 1/4 female threaded



| (mm)    |           |     |    |     |     |    |     |    |                            |     |    |    |   |   |    |   |    |    |     |     |    |     |     |
|---------|-----------|-----|----|-----|-----|----|-----|----|----------------------------|-----|----|----|---|---|----|---|----|----|-----|-----|----|-----|-----|
| Model   | Port size | A   | B  | C   | D   | E  | F   | G  | Bracket related dimensions |     |    |    |   |   |    |   |    |    |     |     |    |     |     |
|         |           |     |    |     |     |    |     |    | H                          | I   | J  | K  | T | U | L  | M | V  | N  | O   | P   | Q  | R   | S   |
| AMG150C | 1/8, 1/4  | 158 | 10 | 99  | 63  | 20 | 63  | 10 | 173                        | 56  | 20 | 5  | 6 | 6 | 12 | 6 | 10 | 35 | 54  | 70  | 26 | 4.5 | 1.6 |
| AMG250C | 1/4, 3/8  | 172 | 14 | 113 | 76  | 20 | 76  | 10 | 190                        | 66  | 24 | 8  | 6 | 6 | 12 | 6 | 10 | 40 | 66  | 80  | 28 | 5   | 2   |
| AMG350C | 3/8, 1/2  | 204 | 18 | 145 | 90  | 20 | 90  | 10 | 222                        | 80  | 28 | 8  | 7 | 7 | 14 | 7 | 12 | 50 | 80  | 95  | 34 | 5   | 2.3 |
| AMG450C | 1/2, 3/4  | 225 | 20 | 166 | 106 | 20 | 106 | 10 | 246                        | 90  | 31 | 10 | 9 | 9 | 18 | 9 | 15 | 55 | 88  | 111 | 50 | 9   | 3.2 |
| AMG550C | 3/4, 1    | 259 | 24 | 200 | 122 | 20 | 122 | 15 | 278                        | 100 | 33 | 10 | 9 | 9 | 18 | 9 | 15 | 65 | 102 | 126 | 60 | 10  | 3.2 |

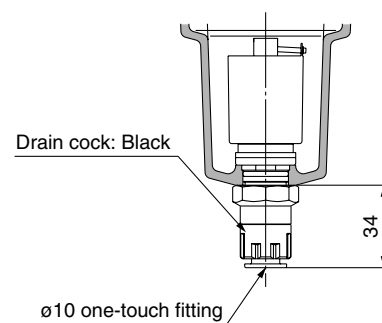
## Dimensions

### AMG650



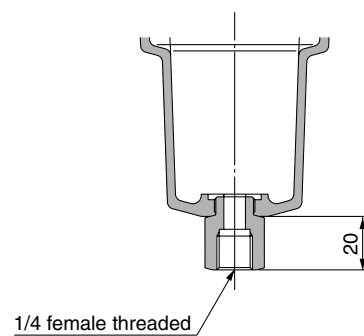
### Auto drain

D: With auto drain (N.O.)



### Option

J: Drain guide 1/4 female threaded



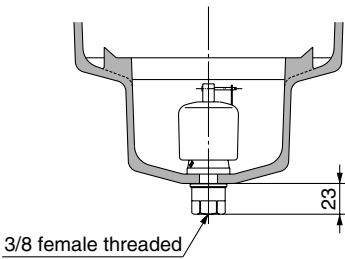
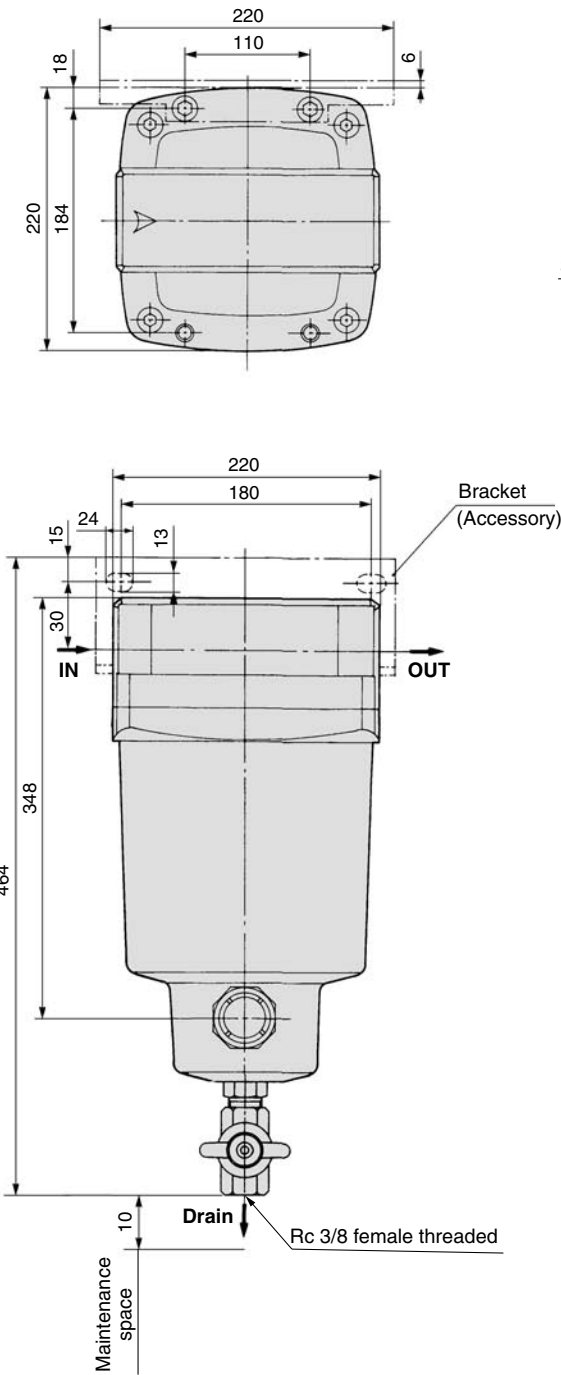
# Series AMG

## Dimensions

### AMG850

#### Auto drain

D: With auto drain (N.O.)  
for AMG850



# Main Line Filter

## Series *AFF*

Can remove impurities such as oil, water and foreign matter in compressed air and can improve the function of a dryer in the downstream, extend the life of precision filter, and prevent trouble with the equipment.

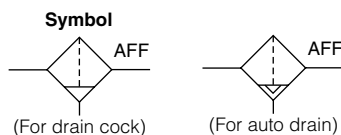
**Modular connection is possible with AFF2C to 22C.**  
(For details, refer to page 58.)



AFF2C to 22C



AFF37B/75B



**Made to Order**  
(For details, refer to page 63.)

### Caution

Be sure to read this before handling.  
Refer to back pages 1 and 2 for Safety Instructions, "Precautions for Handling Pneumatic Devices" (M-03-E3A) for Common Precautions, and back pages 3 through to 7 for Specific Product Precautions.

### Model

| Model                                                         | AFF2C    | AFF4C    | AFF8C    | AFF11C   | AFF22C | AFF37B   | AFF75B   |
|---------------------------------------------------------------|----------|----------|----------|----------|--------|----------|----------|
| Rated flow <sup>Note)</sup><br>( $\text{d}/\text{min}$ (ANR)) | 300      | 750      | 1500     | 2200     | 3700   | 6000     | 12000    |
| Port size                                                     | 1/8, 1/4 | 1/4, 3/8 | 3/8, 1/2 | 1/2, 3/4 | 3/4, 1 | 1, 1 1/2 | 1 1/2, 2 |
| Mass (kg)                                                     | 0.38     | 0.55     | 0.9      | 1.4      | 2.1    | 4.2      | 10.5     |



Note) Max. flow at 0.7 MPa.

Max. flow varies depending on the operating pressure.

Refer to "Flow Characteristics" (page 13) and "Maximum Air Flow" below.

### Specifications

|                               |                                                                   |
|-------------------------------|-------------------------------------------------------------------|
| Fluid                         | Compressed air                                                    |
| Max. operating pressure       | 1.0 MPa                                                           |
| Min. operating pressure*      | 0.05 MPa                                                          |
| Proof pressure                | 1.5 MPa                                                           |
| Ambient and fluid temperature | 5 to 60°C                                                         |
| Nominal filtration rating     | 3 $\mu\text{m}$ (Filtration efficiency: 99%)                      |
| Element life                  | 2 years (1 year for A type) or when pressure drop reached 0.1 MPa |

\* With auto drain: 0.1 MPa (N.O. type) or 0.15 MPa (N.C. type)

### Accessory/For AFF2C to 22C, AFF37B/75B

| Applicable model                             | AFF2C    | AFF4C    | AFF8C    | AFF11C   | AFF22C   | AFF37B | AFF75B |
|----------------------------------------------|----------|----------|----------|----------|----------|--------|--------|
| Bracket assembly<br>(with 2 mounting screws) | AM-BM101 | AM-BM102 | AM-BM103 | AM-BM104 | AM-BM105 | BM56   | BM57   |

### Model Selection

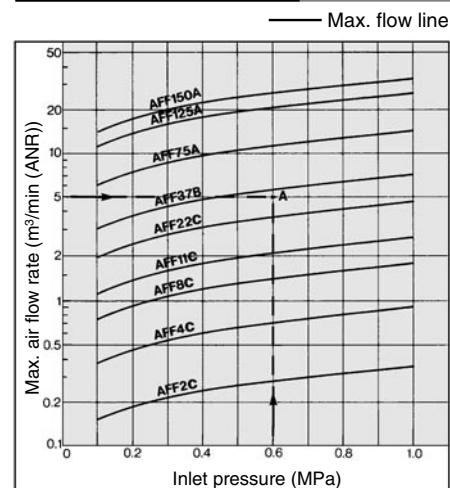
Select a model in accordance with the following procedure taking the inlet pressure and the max. air flow rate into consideration.  
(Example) Inlet pressure: 0.6 MPa  
Max. air flow rate: 5  $\text{m}^3/\text{min}$  (ANR)

- Obtain the intersecting point A of inlet pressure and max. air flow rate in the graph.
- The AFF37B is obtained when the max. flow line is above the intersecting point A in the graph.



Note) Make sure to select a model that has the max. flow line above the obtained intersecting point. With a model that has the max. flow line below the obtained intersecting point, the flow rate will be exceeded, thus leading to a problem such as being unable to satisfy the specifications.

### Maximum Air Flow



## How to Order



### AFF2C to 22C

**AFF 22C** - [ ] - [ ] - [ ] - [ ] - [ ]

#### Body size

| Symbol | Applicable compressor output (guide) |
|--------|--------------------------------------|
| 2C     | 2.2 kW                               |
| 4C     | 3.7 kW                               |
| 8C     | 7.5 kW                               |
| 11C    | 11 kW                                |
| 22C    | 22 kW                                |

#### Thread type

| Symbol | Type |
|--------|------|
| —      | Rc   |
| F      | G*1  |
| N      | NPT  |

\*1 Conforms to ISO1179-1.

#### Port size

| Symbol | Size | Applicable body size |    |    |     |     |
|--------|------|----------------------|----|----|-----|-----|
|        |      | 2C                   | 4C | 8C | 11C | 22C |
| 01     | 1/8  | ●                    |    |    |     |     |
| 02     | 1/4  | ●                    | ●  |    |     |     |
| 03     | 3/8  |                      | ●  | ●  |     |     |
| 04     | 1/2  |                      |    | ●  | ●   |     |
| 06     | 3/4  |                      |    |    | ●   | ●   |
| 10     | 1    |                      |    |    |     | ●   |

#### Accessory

| Symbol | Description |
|--------|-------------|
| —      | —           |
| B      | Bracket *2  |

\*2 Bracket is included, (but not assembled).

### Auto Drain Specifications/Option Combinations

○ : All draining specifications are available (including drain guide, J type).  
 △ : N.C. auto drain (C type) is not available.  
 ▼ : N.C. auto drain (C type) and N.O. auto drain (D type) are not available.

|   | —    | F | H | R    | S    | U    | T | V |
|---|------|---|---|------|------|------|---|---|
| — | ○    | ○ | △ | ○    |      | Note |   | ○ |
| F | ○    | ○ | ▼ | ○    |      |      |   | ▼ |
| H | △    | ▼ | ○ | △    |      |      |   | ▼ |
| R | ○    | ○ | △ |      | Note |      |   | ○ |
| S |      |   |   |      |      |      |   |   |
| U | Note |   |   | Note |      |      |   |   |
| T |      |   |   |      |      |      |   | ○ |
| V | ○    | ▼ | ▼ | ○    |      |      | ○ |   |

Note) one of them selectable      ■ : Not available

#### Made to Order

("How to Order" and the applicable models are different from those shown on this page. Be sure to refer to "Made to Order".)

| Symbol | Description                                  | Page for details |
|--------|----------------------------------------------|------------------|
| —      | —                                            | —                |
| X6     | With differential pressure gauge (GD40-2-01) | P.64             |
| X26    | N.C., N.O. auto drain, drain piping type     | P.65             |

#### Option \*3

| Symbol | Description                                 |
|--------|---------------------------------------------|
| —      | —                                           |
| F      | Rubber material: Fluororubber               |
| H      | For medium air pressure (1.6 MPa)           |
| J      | Drain guide 1/4 female threaded *4          |
| R      | IN-OUT reversal direction                   |
| U      | With differential pressure switch (30 V) *5 |
| T      | With element service indicator              |
| V      | Degreasing wash, *6 white vaseline          |

\*4 Drain piping and piping for a stop valve such as ball valve are required.

\*5 Differential pressure gauge is included, (but not assembled).

\*6 Only body/housing is degreasing washed.

#### Auto drain \*3

| Symbol | Description                     |
|--------|---------------------------------|
| —      | Drain cock (Without auto-drain) |
| C      | N.C. auto drain                 |
| D      | N.O. auto drain                 |

\*3 Refer to the table below for the combination between the draining specification and option. (Only one draining specification is selectable).

## Options

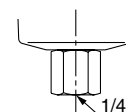
#### Symbol F: Rubber material: Fluororubber

Fluororubber is used for the parts such as O-ring and gasket.

#### Symbol H: For medium air pressure (1.6 MPa)

Can be used up to 1.6 MPa at maximum.

#### Symbol J: Drain guide 1/4 female threaded



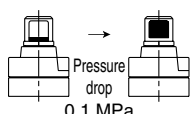
Can be piped to the drain exhaust port.

1/4 female thread

#### Symbol R: IN-OUT reversal direction

Air flow in the separator is changed to right to left.  
 (Air flow direction of the standard: Left to right.)

#### Symbol T: With element service indicator

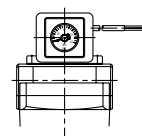


Saturation of the separator can be observed visually. (Element life check)

#### Symbol V: Degreasing wash, white vaseline

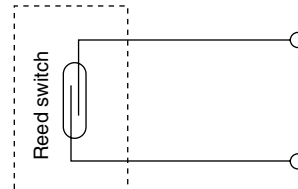
Body/housing is degreasing washed. The lubrication grease for O-ring and gasket is changed to white vaseline.

#### Symbol U: With differential pressure switch (with indicator)



Saturation of the separator can be observed visually or by an electrical signal. (Element life check)

Max. contact capacity: 10 W DC  
 Rated contact voltage (max. operating current): 30 V DC (0.33 A)



**How to Order****AFF37B/75B**
**AFF** **37B** - **10** - - - -
**Body size**

| Symbol     | Applicable compressor output (guide) |
|------------|--------------------------------------|
| <b>37B</b> | 37 kW                                |
| <b>75B</b> | 75 kW                                |

**Thread type**

| Symbol   | Type |
|----------|------|
| —        | Rc   |
| <b>F</b> | G    |
| <b>N</b> | NPT  |

**Port size**

| Symbol    | Size  | Applicable body size |            |
|-----------|-------|----------------------|------------|
|           |       | <b>37B</b>           | <b>75B</b> |
| <b>10</b> | 1     | ●                    | —          |
| <b>14</b> | 1 1/2 | ●                    | ●          |
| <b>20</b> | 2     | —                    | ●          |

**Accessory**

| Symbol   | Description |
|----------|-------------|
| —        | —           |
| <b>B</b> | Bracket *1  |

\*1 Bracket is included, (but not assembled).

**Made to Order**

("How to Order" and the applicable models are different from those shown on this page. Be sure to refer to "Made to Order".)

| Symbol     | Description                                  | Page for details |
|------------|----------------------------------------------|------------------|
| —          | —                                            | —                |
| <b>X6</b>  | With differential pressure gauge (GD40-2-01) | P.64             |
| <b>X26</b> | N.C., N.O. auto drain, drain piping type     | P.65             |
| <b>X12</b> | White vaseline specifications                | P.65             |

**Option** \*2

| Symbol   | Description                        |
|----------|------------------------------------|
| —        | —                                  |
| <b>J</b> | Drain guide 1/4 female threaded *4 |
| <b>R</b> | IN-OUT reversal direction          |
| <b>T</b> | With element service indicator     |

\*4 Drain piping and piping for a stop valve such as ball valve are required.

**Auto drain** \*2

| Symbol   | Description                        |
|----------|------------------------------------|
| —        | Drain cock (Without auto drain) *3 |
| <b>D</b> | N.O. auto drain                    |

\*2 Refer to "Auto Drain Specifications/Option Combinations".

\*3 Body size 75B is equipped with a ball valve (Rc3/8 female threaded). Mount a piping adapter IDF-AP609 (page 58) to the ball valve if NPT3/8 female threaded is required.



Note) Refer to "How to Order Bowl Assembly" on page 59.

**Auto Drain Specifications/Option Combinations**

○ : Available    □ : Not available

| Auto drain specifications/Option |                                |          | Auto drain specifications | Option   |          |          | Applicable model |               |
|----------------------------------|--------------------------------|----------|---------------------------|----------|----------|----------|------------------|---------------|
|                                  |                                |          | <b>D</b>                  | <b>J</b> | <b>R</b> | <b>T</b> | <b>AFF37B</b>    | <b>AFF75B</b> |
| Auto drain specifications        | N.O. auto drain                | <b>D</b> | □                         | □        | ○        | ○        | ○                | ○             |
|                                  | Drain guide 1/4                | <b>J</b> | □                         | ○        | ○        | ○        | ○                | ○             |
|                                  | IN-OUT reversal direction      | <b>R</b> | ○                         | ○        | □        | ○        | ○                | ○             |
|                                  | With element service indicator | <b>T</b> | ○                         | ○        | ○        | □        | ○                | ○             |

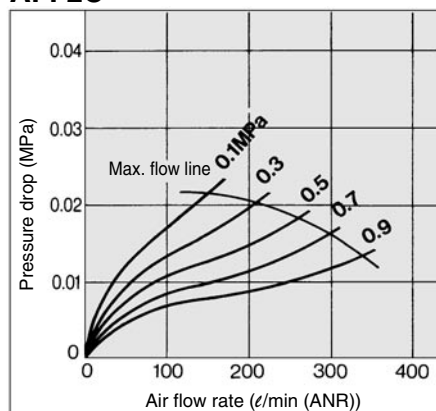
# Series AFF

## Flow Characteristics/Select the model taking the max. flow capacity into consideration. (Element oil saturation)

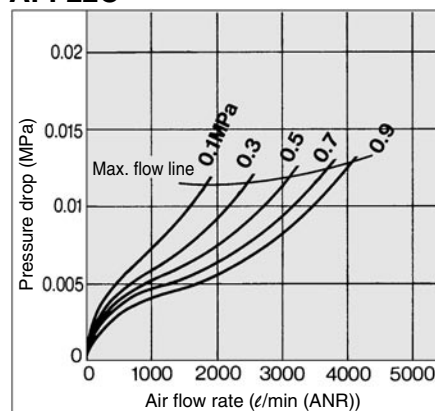


Note) Compressed air over max. flow line in the table below may not meet the specifications of the product. It may cause damage to the element.

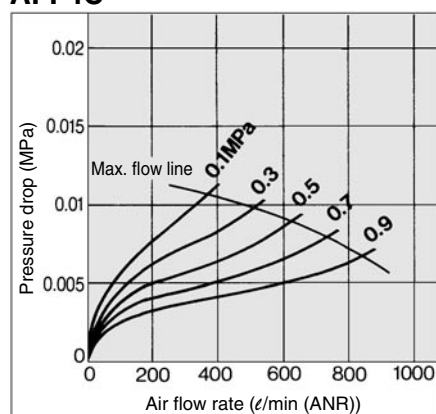
**AFF2C**



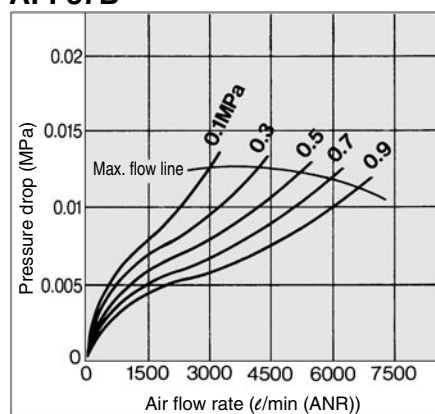
**AFF22C**



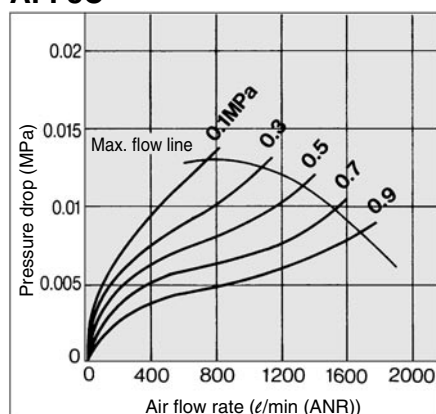
**AFF4C**



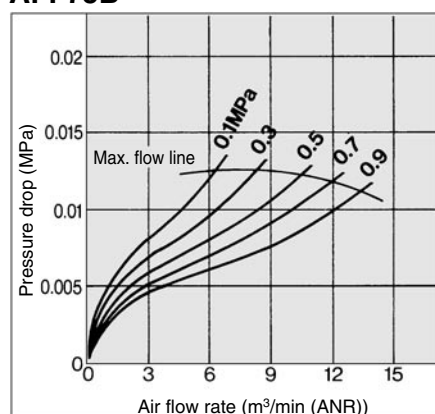
**AFF37B**



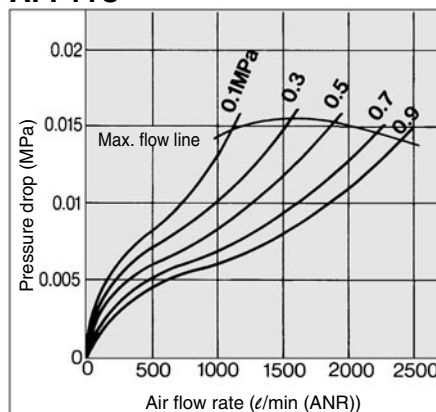
**AFF8C**



**AFF75B**

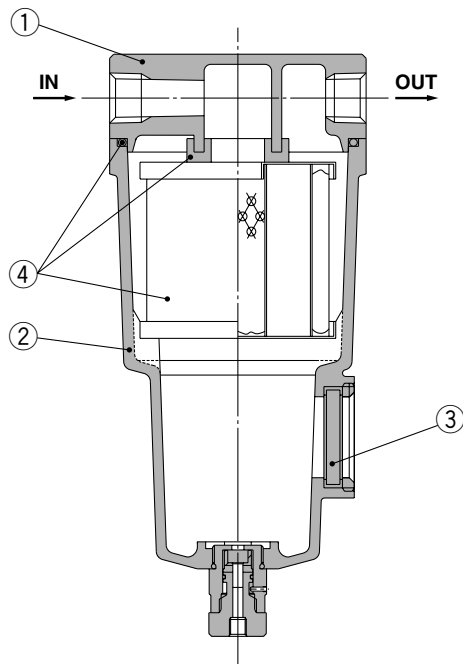


**AFF11C**

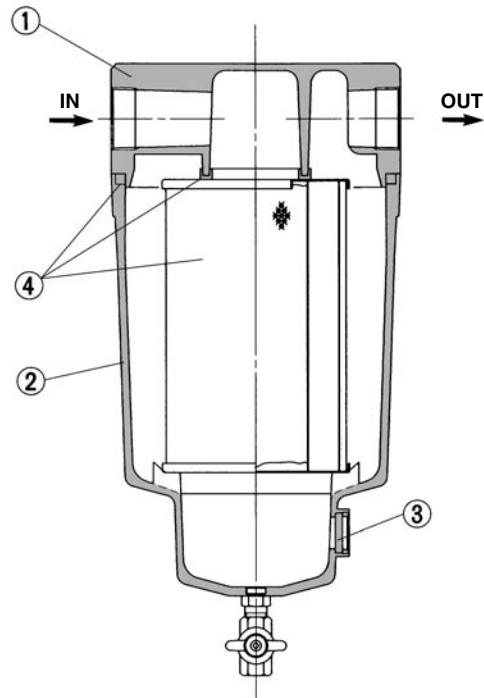


Construction

AFF2C to 22C, AFF37B



AFF75B



Component Parts

| No. | Description | Material             | Note                           |
|-----|-------------|----------------------|--------------------------------|
| 1   | Body        | Aluminum die-casted  | Chrome treated                 |
| 2   | Housing     | Aluminum die-casted* | Epoxy coating on inner surface |
| 3   | Sight glass | Tempered glass       | —                              |

\* The AFF75B is aluminum casted.



Note) Refer to "How to Order Bowl Assembly" on page 59.



Note) Sight glass is indicated in the figure for easy understanding of component parts. However, it differs from the actual construction. Please refer to pages 15 through to 17 for details.

Replacement Parts

| No. | Description      | Material             | Applicable model | Model      |            |            |             |             |           |           |
|-----|------------------|----------------------|------------------|------------|------------|------------|-------------|-------------|-----------|-----------|
|     |                  |                      |                  | AFF2C      | AFF4C      | AFF8C      | AFF11C      | AFF22C      | AFF37B    | AFF75B    |
| 4   | Element assembly | Cotton paper, others | Except option F  | AFF-EL2B   | AFF-EL4B   | AFF-EL8B   | AFF-EL11B   | AFF-EL22B   | AFF-EL37B | AFF-EL75B |
|     |                  |                      | For option F     | AFF-EL2B-F | AFF-EL4B-F | AFF-EL8B-F | AFF-EL11B-F | AFF-EL22B-F | —         | —         |

\* Element assembly: With gasket (1 pc.) and O-ring (1 pc.)

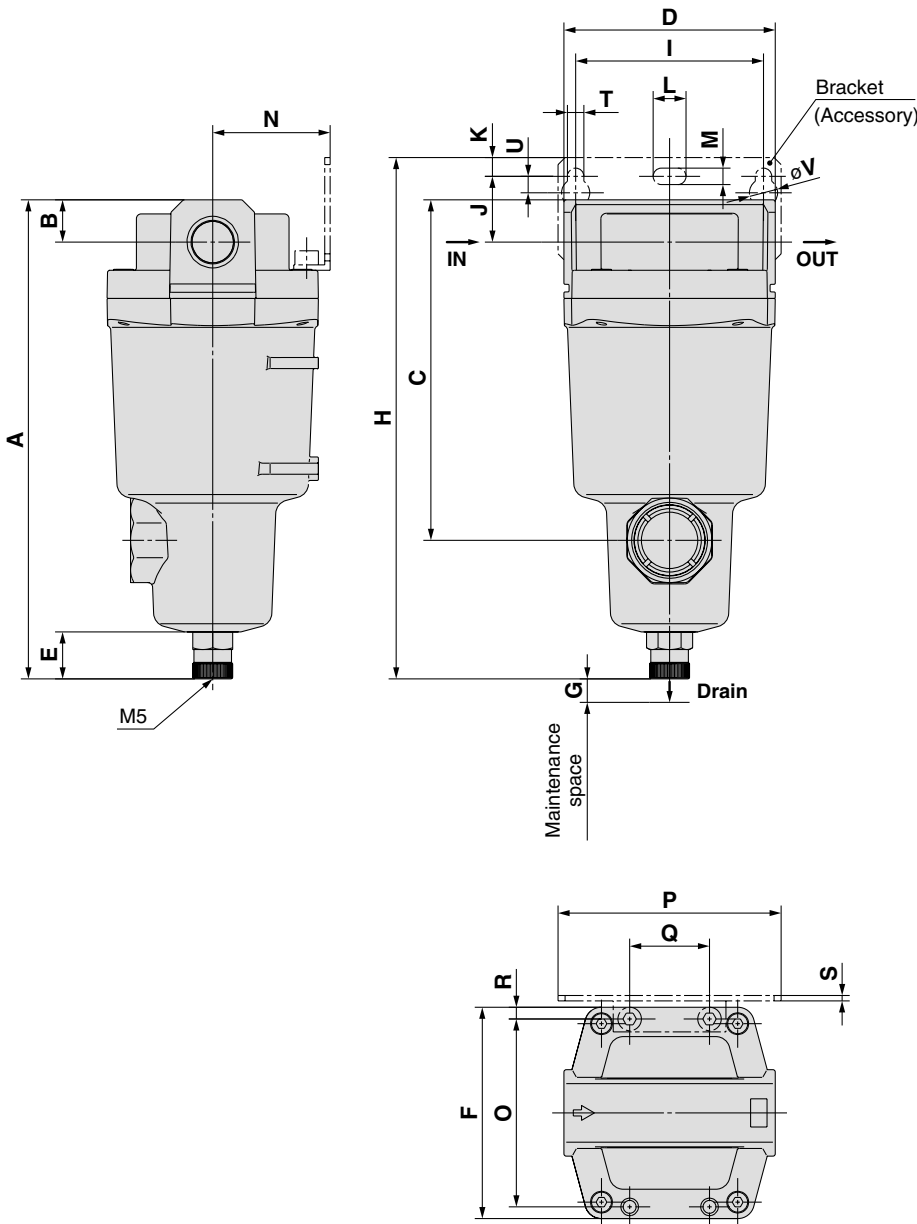
\* Refer to back page 6 for replacement of auto drain.

\* Element assemblies for Made to Order (X6, X12, X20, X26) are same as those for standard (see the above table).

# Series AFF

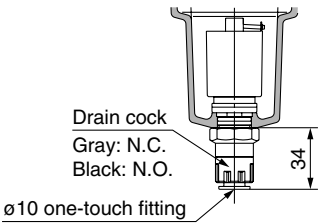
## Dimensions

AFF2C to 22C

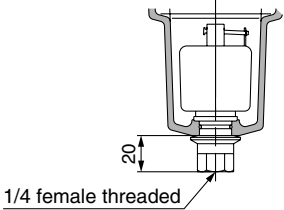


### Auto drain

C: With auto drain (N.C.)  
D: With auto drain (N.O.)

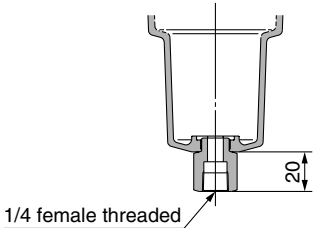


Combination of D: With auto drain (N.O.)  
and H: For medium air pressure

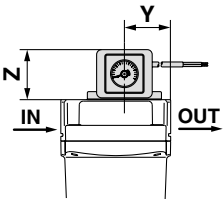


### Option

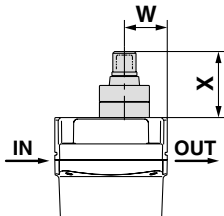
J: Drain guide 1/4 female threaded



U: With differential pressure switch (with indicator)



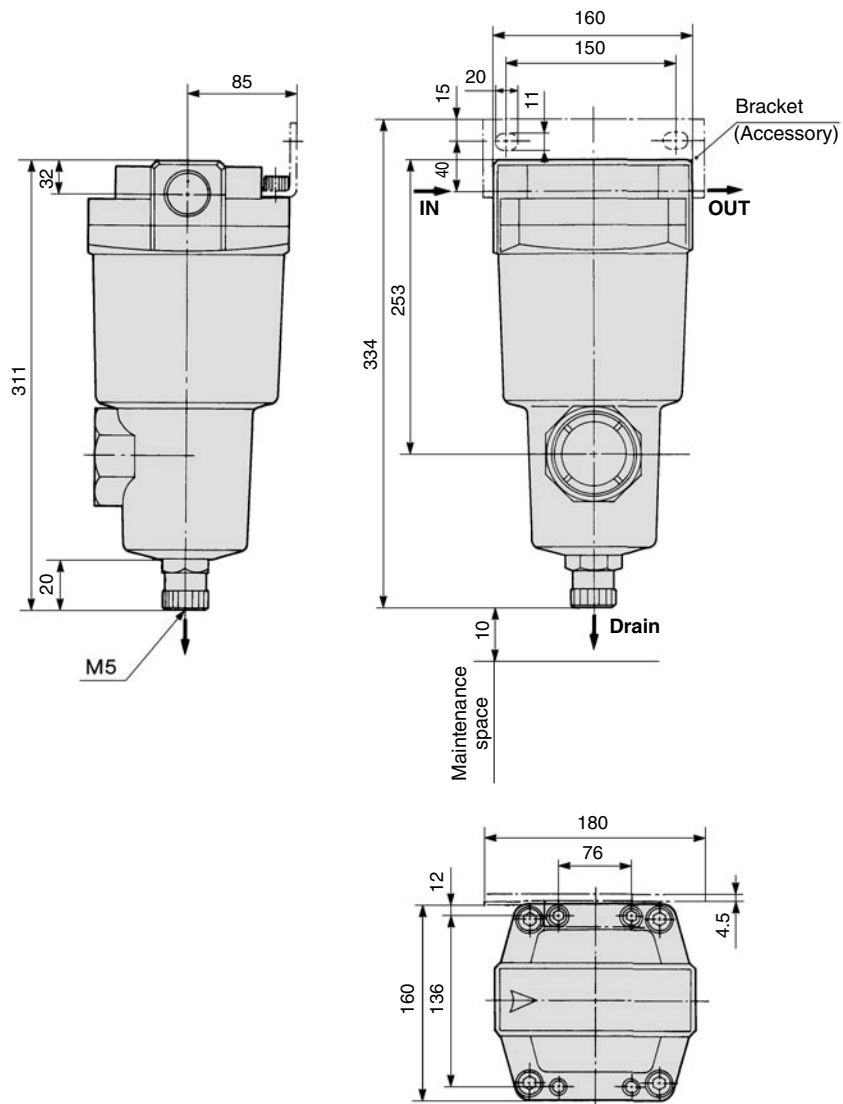
T: With element service indicator



| (mm)   |           |     |    |     |     |    |     |    |                            |     |    |    |   |   |    |   |    |    |     |     |    |     |                                              |    |                                                 |    |    |
|--------|-----------|-----|----|-----|-----|----|-----|----|----------------------------|-----|----|----|---|---|----|---|----|----|-----|-----|----|-----|----------------------------------------------|----|-------------------------------------------------|----|----|
| Model  | Port size | A   | B  | C   | D   | E  | F   | G  | Bracket related dimensions |     |    |    |   |   |    |   |    |    |     |     |    |     | Element service indicator related dimensions |    | Differential pressure switch related dimensions |    |    |
|        |           |     |    |     |     |    |     |    | H                          | I   | J  | K  | T | U | L  | M | V  | N  | O   | P   | Q  | R   | S                                            | W  | X                                               | Y  | Z  |
| AFF2C  | 1/8, 1/4  | 158 | 10 | 99  | 63  | 20 | 63  | 10 | 173                        | 56  | 20 | 5  | 6 | 6 | 12 | 6 | 10 | 35 | 54  | 70  | 26 | 4.5 | 1.6                                          | 24 | 37                                              | 32 | 41 |
| AFF4C  | 1/4, 3/8  | 172 | 14 | 113 | 76  | 20 | 76  | 10 | 190                        | 66  | 24 | 8  | 6 | 6 | 12 | 6 | 10 | 40 | 66  | 80  | 28 | 5   | 2                                            | 27 | 37                                              | 36 | 41 |
| AFF8C  | 3/8, 1/2  | 204 | 18 | 145 | 90  | 20 | 90  | 10 | 222                        | 80  | 28 | 8  | 7 | 7 | 14 | 7 | 12 | 50 | 80  | 95  | 34 | 5   | 2.3                                          | 32 | 37                                              | 42 | 41 |
| AFF11C | 1/2, 3/4  | 225 | 20 | 166 | 106 | 20 | 106 | 10 | 246                        | 90  | 31 | 10 | 9 | 9 | 18 | 9 | 15 | 55 | 88  | 111 | 50 | 9   | 3.2                                          | 37 | 37                                              | 43 | 41 |
| AFF22C | 3/4, 1    | 259 | 24 | 200 | 122 | 20 | 122 | 15 | 278                        | 100 | 33 | 10 | 9 | 9 | 18 | 9 | 15 | 65 | 102 | 126 | 60 | 10  | 3.2                                          | 39 | 37                                              | 51 | 41 |

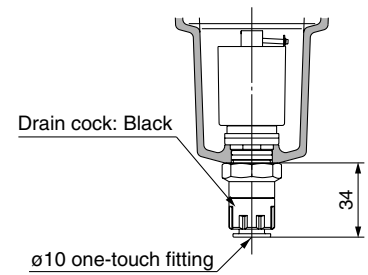
## Dimensions

**AFF37B**



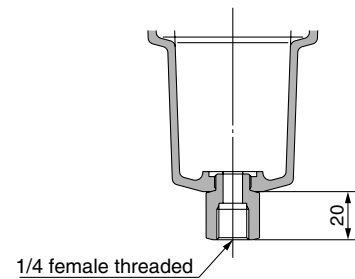
## Auto drain

**D: With auto drain (N.O.)**

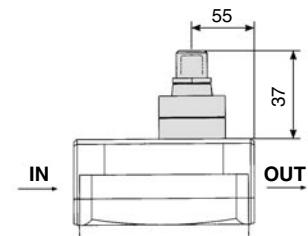


## Option

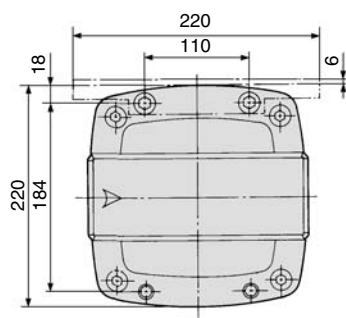
**J: Drain guide 1/4 female threaded**



**T: With element service indicator**



**AFF75B**



Technical drawing of a mechanical part, likely a valve or connector. The drawing shows a cross-section with a central vertical assembly. Dimensions are indicated: a horizontal dimension of 75 and a vertical dimension of 37. Flow arrows are labeled 'IN' on the left and 'OUT' on the right.

# Mist Separator

## Series AM

Can remove oil mist in compressed air and remove particles such as rust or carbon of more than 0.3  $\mu\text{m}$ .

Modular connection is possible with AM150C to 550C.  
(For details, refer to page 58.)

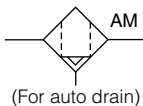
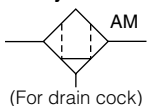


AM150C to 550C



AM650/850

Symbol



**Made to Order**  
(For details, refer to page 63.)

### Model

| Model                           | AM150C   | AM250C   | AM350C   | AM450C   | AM550C | AM650    | AM850    |
|---------------------------------|----------|----------|----------|----------|--------|----------|----------|
| Rated flow (Note) (l/min (ANR)) | 300      | 750      | 1500     | 2200     | 3700   | 6000     | 12000    |
| Port size                       | 1/8, 1/4 | 1/4, 3/8 | 3/8, 1/2 | 1/2, 3/4 | 3/4, 1 | 1, 1 1/2 | 1 1/2, 2 |
| Mass (kg)                       | 0.38     | 0.55     | 0.9      | 1.4      | 2.1    | 4.2      | 10.5     |



Note) Max. flow at 0.7 MPa.

Max. flow varies depending on the operating pressure.

Refer to "Flow Characteristics" (page 21) and "Maximum Air Flow" (page 22).



Note) Refer to "Made to Order" (page 63) for high flow type of AM850 or more.

### Specifications

|                               |                                                  |
|-------------------------------|--------------------------------------------------|
| Fluid                         | Compressed air                                   |
| Max. operating pressure       | 1.0 MPa                                          |
| Min. operating pressure*      | 0.05 MPa                                         |
| Proof pressure                | 1.5 MPa                                          |
| Ambient and fluid temperature | 5 to 60°C                                        |
| Nominal filtration rating     | 0.3 $\mu\text{m}$ (Filtration efficiency: 99.9%) |
| Oil mist density at outlet    | Max. 1.0 mg/m <sup>3</sup> (ANR) (=0.8 ppm)*     |
| Element life                  | 2 years or when pressure drop reached 0.1 MPa    |

\* With auto drain: 0.1 MPa (N.O. type) or 0.15 MPa (N.C. type)

\* Oil mist density at 30 mg/m<sup>3</sup> (ANR) blown out by compressor.

### Accessory

| Applicable model                          | AM150C   | AM250C   | AM350C   | AM450C   | AM550C   | AM650 | AM850 |
|-------------------------------------------|----------|----------|----------|----------|----------|-------|-------|
| Bracket assembly (with 2 mounting screws) | AM-BM101 | AM-BM102 | AM-BM103 | AM-BM104 | AM-BM105 | BM56  | BM57  |

### Caution

Be sure to read this before handling.

Refer to back pages 1 and 2 for Safety Instructions, "Precautions for Handling Pneumatic Devices" (M-03-E3A) for Common Precautions, and back pages 3 through to 7 for Specific Product Precautions.

## How to Order

### AM150C to 550C



AM 550C - 10 - - -

#### Body size

| Symbol | Applicable compressor output (guide) |
|--------|--------------------------------------|
| 150C   | 2.2 kW                               |
| 250C   | 3.7 kW                               |
| 350C   | 7.5 kW                               |
| 450C   | 11 kW                                |
| 550C   | 22 kW                                |

#### Thread type

| Symbol | Type |
|--------|------|
| —      | Rc   |
| F      | G*1  |
| N      | NPT  |

\*1 Conforms to ISO1179-1.

#### Port size

| Symbol | Size | Applicable body size |      |      |      |      |
|--------|------|----------------------|------|------|------|------|
|        |      | 150C                 | 250C | 350C | 450C | 550C |
| 01     | 1/8  | ●                    |      |      |      |      |
| 02     | 1/4  | ●                    | ●    |      |      |      |
| 03     | 3/8  |                      | ●    | ●    |      |      |
| 04     | 1/2  |                      |      | ●    | ●    |      |
| 06     | 3/4  |                      |      |      | ●    | ●    |
| 10     | 1    |                      |      |      |      | ●    |

#### Accessory

| Symbol | Description |
|--------|-------------|
| —      | —           |
| B      | Bracket *2  |

\*2 Bracket is included, (but not assembled).

#### Made to Order

("How to Order" and the applicable models are different from those shown on this page. Be sure to refer to "Made to Order".)

| Symbol | Description                                  | Page for details |
|--------|----------------------------------------------|------------------|
| —      | —                                            | —                |
| X6     | With differential pressure gauge (GD40-2-01) | P.64             |
| X26    | N.C., N.O. auto drain, drain piping type     | P.65             |

#### Option \*3

| Symbol | Description                                   |
|--------|-----------------------------------------------|
| —      | —                                             |
| F      | Rubber material: Fluororubber                 |
| H      | For medium air pressure (1.6 MPa)             |
| J      | Drain guide 1/4 female threaded *4            |
| R      | IN-OUT reversal direction                     |
| U      | With differential pressure switch (30 VDC) *5 |
| T      | Element service indicator                     |
| V      | Degreasing wash, *6 white vaseline            |

\*4 Drain piping and piping for a stop valve such as ball valve are required.

\*5 Differential pressure gauge is included, (but not assembled).

\*6 Only body/housing is degreasing washed.

### Auto Drain Specifications/Option Combinations

○ : All draining specifications are available (including drain guide, J type).

△ : N.C. auto drain (C type) is not available.

▽ : N.C. auto drain (C type) and N.O. auto drain (D type) are not available.

|   | —    | F | H | R    | S    | U    | T | V |
|---|------|---|---|------|------|------|---|---|
| — | ○    | ○ | △ | ○    |      | Note |   | ○ |
| F | ○    | ○ | ▽ | ○    |      |      |   | ▽ |
| H | △    | ▽ |   | △    |      |      |   | ▽ |
| R | ○    | ○ | △ |      | Note |      |   | ○ |
| S |      |   |   |      |      |      |   |   |
| U | Note |   |   | Note |      |      |   |   |
| T |      |   |   |      |      |      |   | ○ |
| V | ○    | ▽ | ▽ | ○    |      |      | ○ |   |

Note) one of them selectable    □ : Not available

#### Auto drain \*3

| Symbol | Description                     |
|--------|---------------------------------|
| —      | Drain cock (Without auto drain) |
| C      | N.C. auto drain                 |
| D      | N.O. auto drain                 |

\*3 Refer to the table below for the combination between the draining specification and option. (Only one draining specification is selectable).

## Options

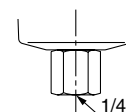
#### Symbol F: Rubber material: Fluororubber

Fluororubber is used for the parts such as O-ring and gasket.

#### Symbol H: For medium air pressure (1.6 MPa)

Can be used up to 1.6 MPa at maximum.

#### Symbol J: Drain guide 1/4 female threaded



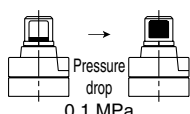
Can be piped to the drain exhaust port.

1/4 female threaded

#### Symbol R: IN-OUT reversal direction

Air flow in the separator is changed to right to left.  
(Air flow direction of the standard: Left to right.)

#### Symbol T: With element service indicator

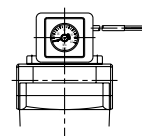


Saturation of the separator can be observed visually.  
(Element life check)

#### Symbol V: Degreasing wash, white vaseline

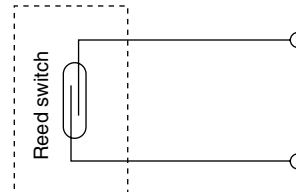
Body/housing is degreasing washed. The lubrication grease for O-ring and gasket is changed to white vaseline.

#### Symbol U: With differential pressure switch (with indicator)



Saturation of the separator can be observed visually or by an electrical signal.  
(Element life check)

Max. contact capacity: 10 W DC  
Rated contact voltage (max. operating current): 30 V DC (0.33 A)



## How to Order



### AM650/850

AM **650** - **10** - - - -

#### Body size

| Symbol     | Applicable compressor output (guide) |
|------------|--------------------------------------|
| <b>650</b> | 37 kW                                |
| <b>850</b> | 75 kW                                |

#### Thread type

| Symbol   | Type |
|----------|------|
| —        | Rc   |
| <b>F</b> | G    |
| <b>N</b> | NPT  |

#### Port size

| Symbol    | Size  | Applicable body size |     |
|-----------|-------|----------------------|-----|
|           |       | 650                  | 850 |
| <b>10</b> | 1     | ●                    | —   |
| <b>14</b> | 1 1/2 | ●                    | ●   |
| <b>20</b> | 2     | —                    | ●   |

#### Accessory

| Symbol   | Description |
|----------|-------------|
| —        | —           |
| <b>B</b> | Bracket *1  |

\*1 Bracket is included, (but not assembled).

#### Made to Order

("How to Order" and the applicable models are different from those shown on this page. Be sure to refer to "Made to Order".)

| Symbol     | Description                                  | Page for details |
|------------|----------------------------------------------|------------------|
| —          | —                                            | —                |
| <b>X6</b>  | With differential pressure gauge (GD40-2-01) | P.64             |
| <b>X26</b> | N.C., N.O. auto drain, drain piping type     | P.65             |
| <b>X12</b> | White vaseline specifications                | P.65             |

#### Option \*2

| Symbol   | Description                        |
|----------|------------------------------------|
| —        | —                                  |
| <b>J</b> | Drain guide 1/4 female threaded *4 |
| <b>R</b> | IN-OUT reversal direction          |
| <b>T</b> | With element service indicator     |

\*4 Drain piping and piping for a stop valve such as ball valve are required.

#### Auto drain \*2

| Symbol   | Description                        |
|----------|------------------------------------|
| —        | Drain cock (Without auto drain) *3 |
| <b>D</b> | N.O. auto drain                    |

\*2 Refer to "Auto Drain Specifications/Option Combinations".

\*3 Body size 850 is equipped with a ball valve (Rc3/8 female threaded). Mount a piping adapter IDF-AP609 (page 58) to the ball valve if NPT3/8 female threaded is required.



Note) Refer to "How to Order Bowl Assembly" on page 59.

### Auto Drain Specifications/Option Combinations

○ : Available    ■ : Not available

| Auto drain specifications/Option |                                |          | Auto drain specifications | Option   |          |          |   | Applicable model |              |
|----------------------------------|--------------------------------|----------|---------------------------|----------|----------|----------|---|------------------|--------------|
|                                  |                                |          | <b>D</b>                  | <b>J</b> | <b>R</b> | <b>T</b> |   | <b>AM650</b>     | <b>AM850</b> |
| Auto drain specifications        | N.O. auto drain                | <b>D</b> | ■                         | ■        | ○        | ○        | ○ | ○                | ○            |
|                                  | Drain guide 1/4                | <b>J</b> | ■                         | ■        | ○        | ○        | ○ | ○                | ○            |
| Option                           | IN-OUT reversal direction      | <b>R</b> | ○                         | ○        | ■        | ○        | ○ | ○                | ○            |
|                                  | With element service indicator | <b>T</b> | ○                         | ○        | ○        | ■        | ○ | ○                | ○            |

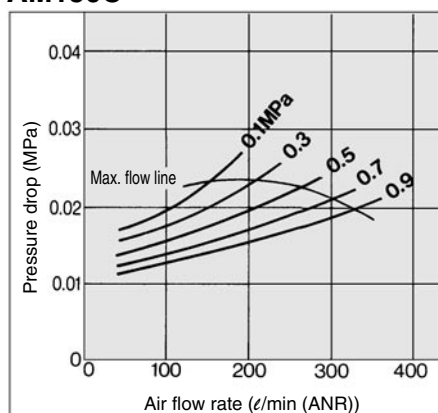
# Series AM

## Flow Characteristics (Element oil saturation)

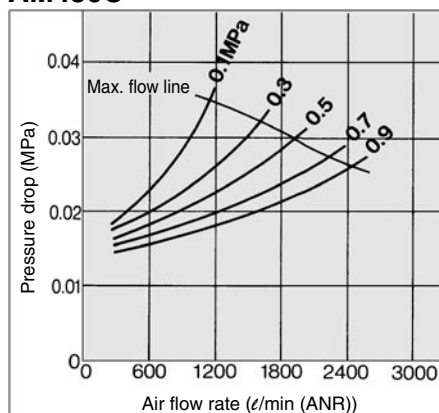


Note) Compressed air over max. flow line in the table below may not meet the specifications of the product.  
It may cause damage to the element.

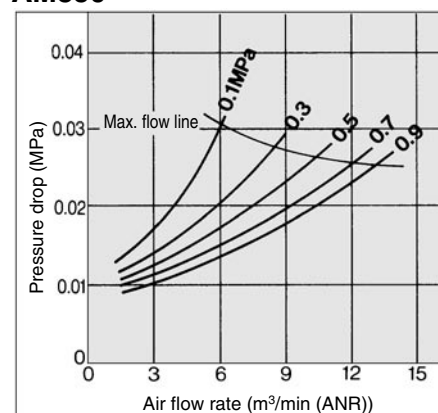
**AM150C**



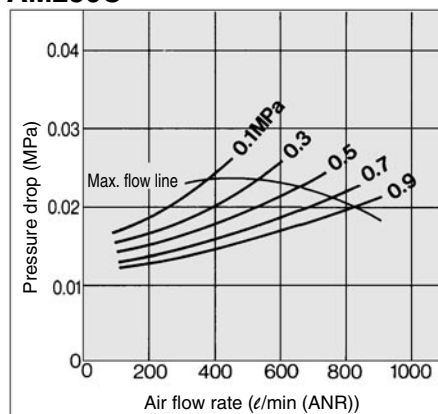
**AM450C**



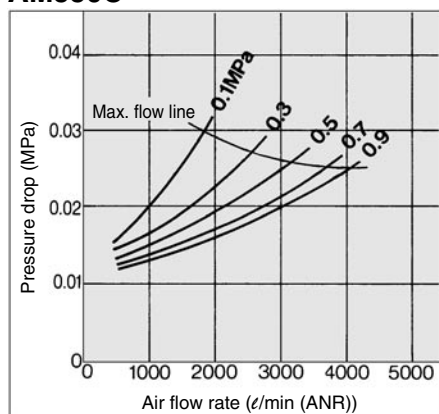
**AM850**



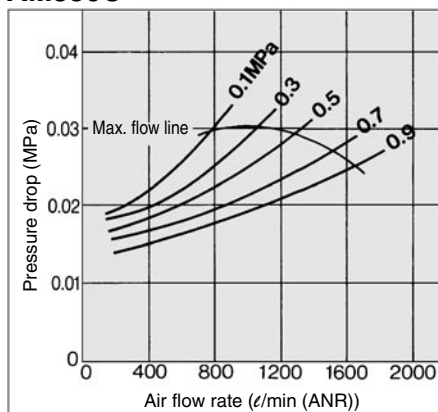
**AM250C**



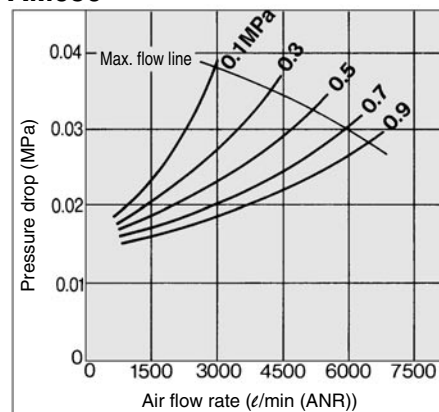
**AM550C**



**AM350C**

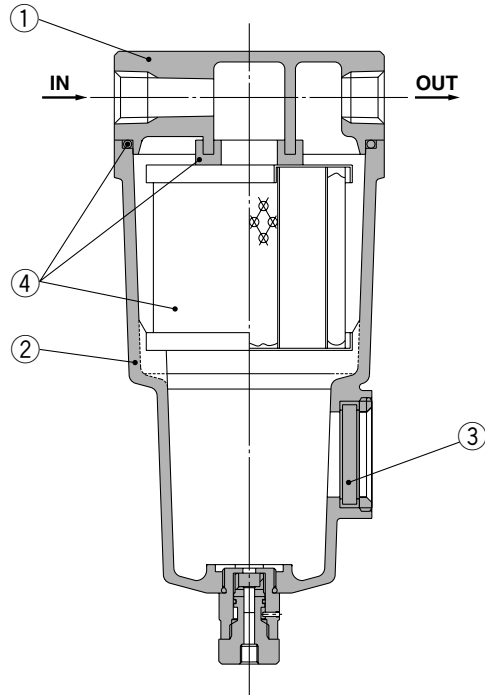


**AM650**

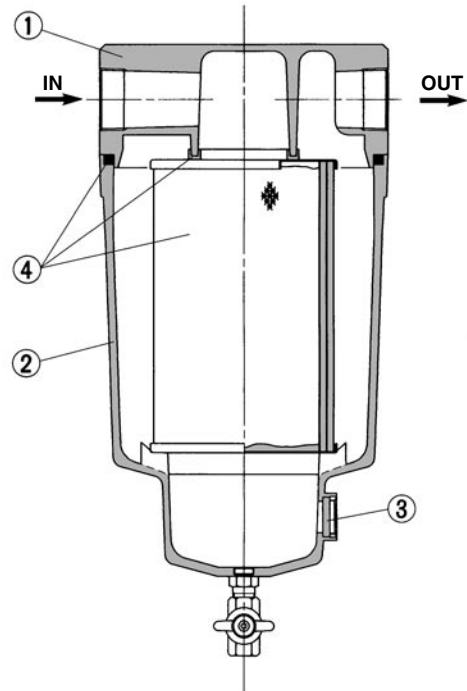


Construction

AM150C to 550C, AM650



AM850



Component Parts

| No. | Description | Material             | Note                           |
|-----|-------------|----------------------|--------------------------------|
| 1   | Body        | Aluminum die-casted  | Chrome treated                 |
| 2   | Housing     | Aluminum die-casted* | Epoxy coating on inner surface |
| 3   | Sight glass | Tempered glass       | —                              |

\* The AM850 is aluminum casted.



Note) Refer to "How to Order Bowl Assembly" on page 59.



Note) Sight glass is indicated in the figure for easy understanding of component parts. However, it differs from the actual construction. Refer to dimensions on pages 23 through to 25 for details.

Replacement Parts

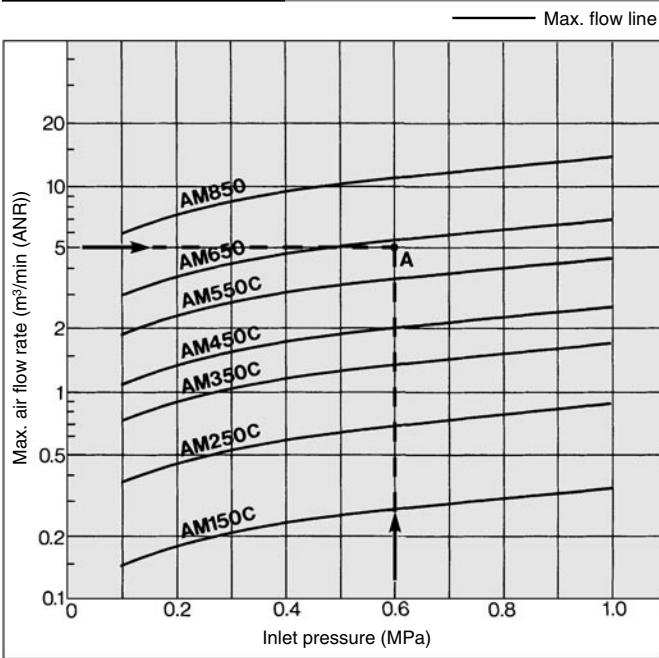
| No. | Description      | Material            | Applicable model | Model      |            |            |            |            |          |          |
|-----|------------------|---------------------|------------------|------------|------------|------------|------------|------------|----------|----------|
|     |                  |                     |                  | AM150C     | AM250C     | AM350C     | AM450C     | AM550C     | AM650    | AM850    |
| 4   | Element assembly | Glass fiber, others | Except option F  | AM-EL150   | AM-EL250   | AM-EL350   | AM-EL450   | AM-EL550   | AM-EL650 | AM-EL850 |
|     |                  |                     | For option F     | AM-EL150-F | AM-EL250-F | AM-EL350-F | AM-EL450-F | AM-EL550-F | —        | —        |

\* Element assembly: With gasket (1 pc.) and O-ring (1 pc.)

\* Refer to back page 6 for replacement of auto drain.

\* Element assemblies for Made to Order (X6, X12, X20, X26) are same as those for standard (see the above table).

Maximum Air Flow



Model Selection

Select a model in accordance with the following procedure taking the inlet pressure and the max. air flow rate into consideration.

(Example) Inlet pressure: 0.6 MPa

Max. air flow rate: 5 m³/min (ANR)

1. Obtain the intersecting point A of inlet pressure and max. air flow rate in the graph.
2. The AM650 is obtained when the max. flow line is above the intersecting point A in the graph.

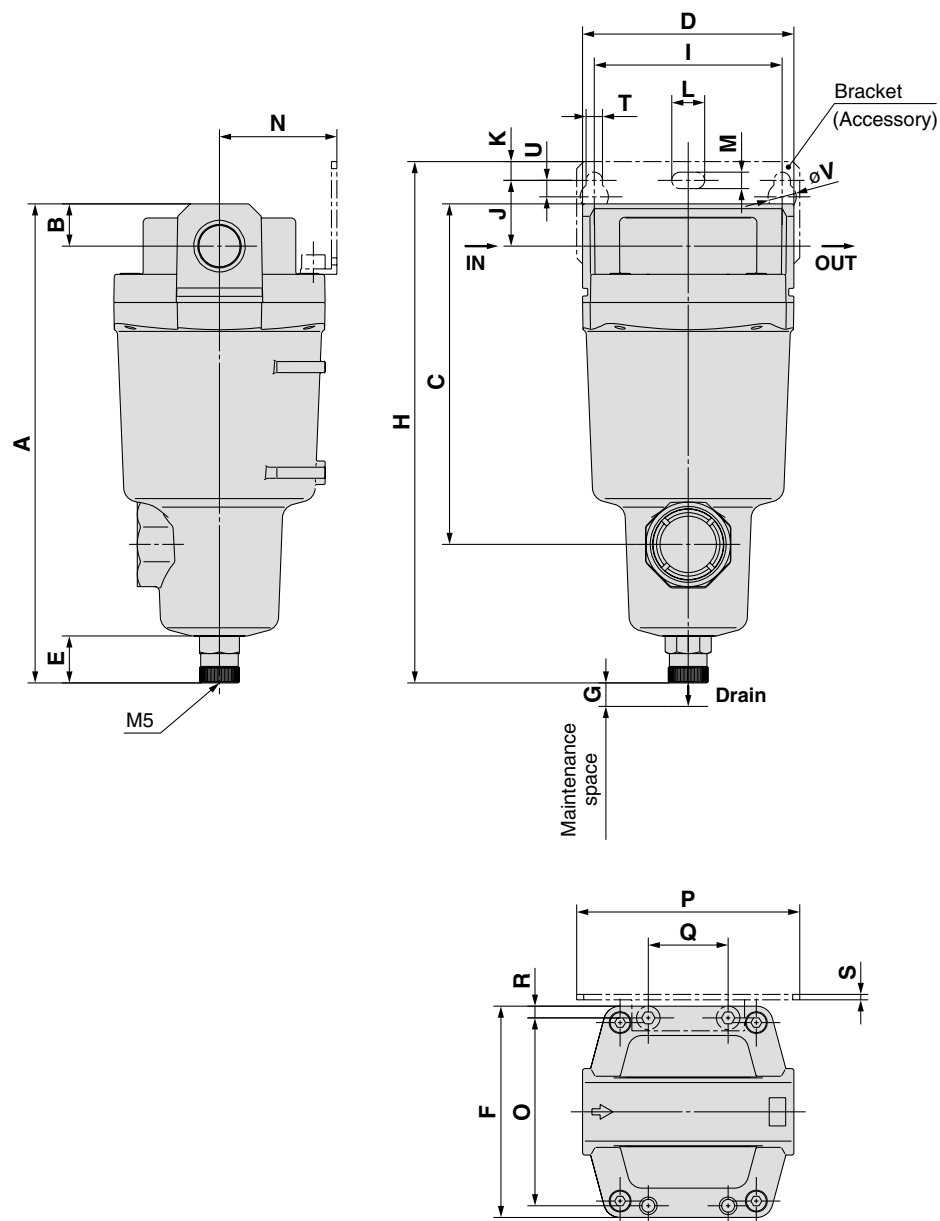


Note) Make sure to select a model that has the max. flow line above the obtained intersecting point. With a model that has the max. flow line below the obtained intersecting point, the flow rate will be exceeded, thus leading to a problem such as being unable to satisfy the specifications.

# Series AM

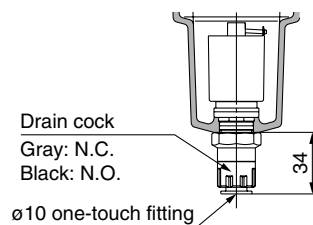
## Dimensions

### AM150C to 550C

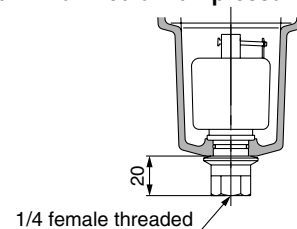


#### Auto drain

C: With auto drain (N.C.)  
D: With auto drain (N.O.)

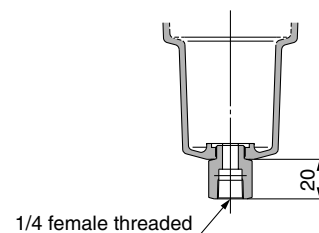


Combination of D: With auto drain (N.O.)  
and H: For medium air pressure

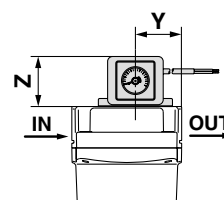


#### Option

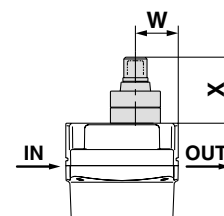
J: Drain guide 1/4 female threaded



U: With differential pressure switch (with indicator)



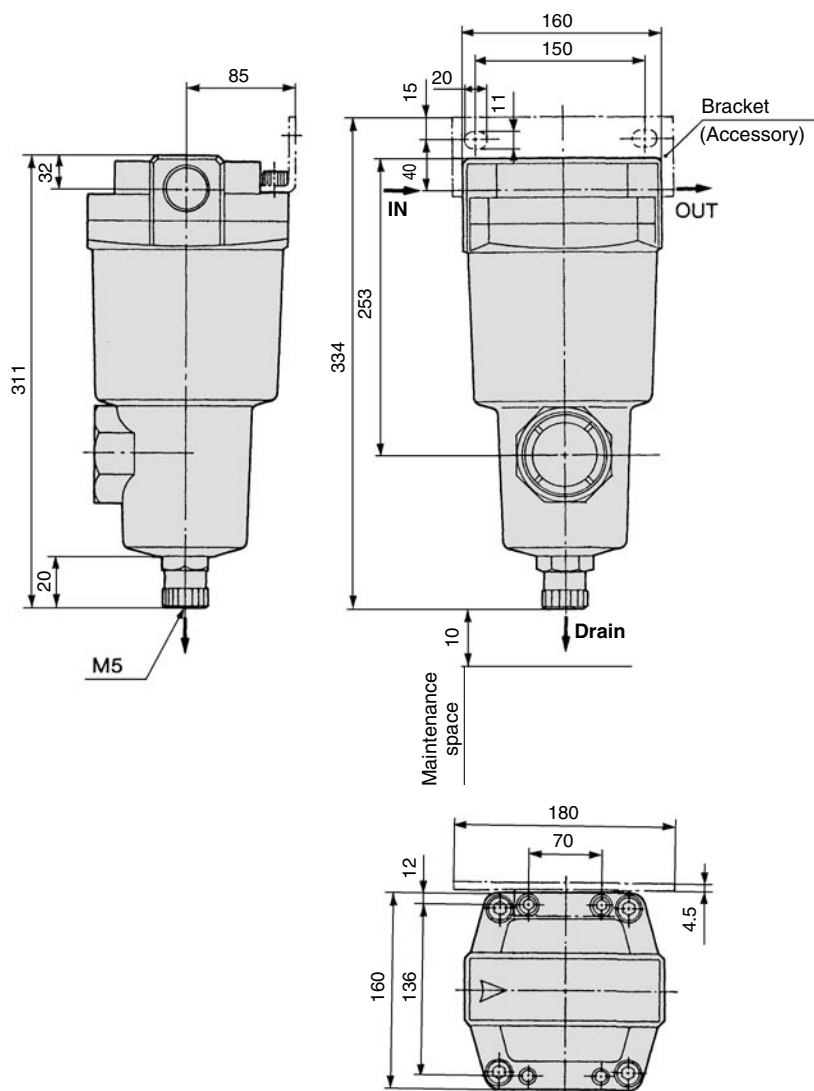
T: With element service indicator



| (mm)   |           |     |    |     |     |    |     |    |                            |     |    |    |   |   |    |   |    |    |     |     |    |     |                                              |    |                                                 |    |    |
|--------|-----------|-----|----|-----|-----|----|-----|----|----------------------------|-----|----|----|---|---|----|---|----|----|-----|-----|----|-----|----------------------------------------------|----|-------------------------------------------------|----|----|
| Model  | Port size | A   | B  | C   | D   | E  | F   | G  | Bracket related dimensions |     |    |    |   |   |    |   |    |    |     |     |    |     | Element service indicator related dimensions |    | Differential pressure switch related dimensions |    |    |
|        |           |     |    |     |     |    |     |    | H                          | I   | J  | K  | T | U | L  | M | V  | N  | O   | P   | Q  | R   | S                                            | W  | X                                               | Y  | Z  |
| AM150C | 1/8, 1/4  | 158 | 10 | 99  | 63  | 20 | 63  | 10 | 173                        | 56  | 20 | 5  | 6 | 6 | 12 | 6 | 10 | 35 | 54  | 70  | 26 | 4.5 | 1.6                                          | 24 | 37                                              | 32 | 41 |
| AM250C | 1/4, 3/8  | 172 | 14 | 113 | 76  | 20 | 76  | 10 | 190                        | 66  | 24 | 8  | 6 | 6 | 12 | 6 | 10 | 40 | 66  | 80  | 28 | 5   | 2                                            | 27 | 37                                              | 36 | 41 |
| AM350C | 3/8, 1/2  | 204 | 18 | 145 | 90  | 20 | 90  | 10 | 222                        | 80  | 28 | 8  | 7 | 7 | 14 | 7 | 12 | 50 | 80  | 95  | 34 | 5   | 2.3                                          | 32 | 37                                              | 42 | 41 |
| AM450C | 1/2, 3/4  | 225 | 20 | 166 | 106 | 20 | 106 | 10 | 246                        | 90  | 31 | 10 | 9 | 9 | 18 | 9 | 15 | 55 | 88  | 111 | 50 | 9   | 3.2                                          | 37 | 37                                              | 43 | 41 |
| AM550C | 3/4, 1    | 259 | 24 | 200 | 122 | 20 | 122 | 15 | 278                        | 100 | 33 | 10 | 9 | 9 | 18 | 9 | 15 | 65 | 102 | 126 | 60 | 10  | 3.2                                          | 39 | 37                                              | 51 | 41 |

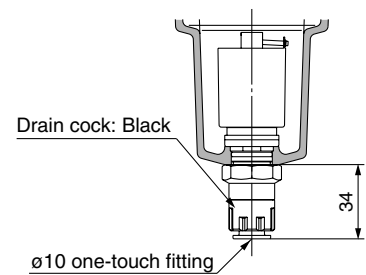
## Dimensions

## AM650



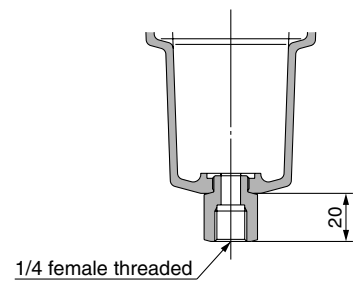
### Auto drain

**D: With auto drain (N.O.)**

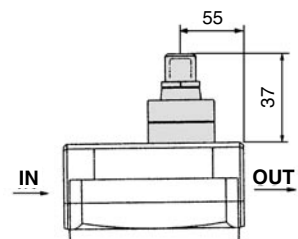


## Option

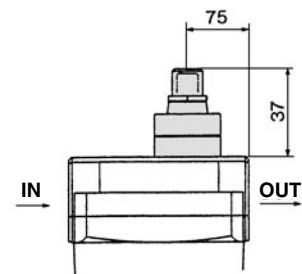
**J: Drain guide 1/4 female threaded**



**T: With element service indicator**



## AM850



# Micro Mist Separator

## Series AMD

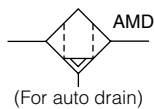
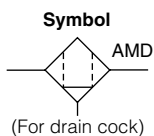
Can separate and remove aerosol state oil mist in compressed air and remove particles such as carbon or dust of more than 0.01  $\mu\text{m}$ .  
Use this product as a pre-filter for compressed air for precision instruments or clean room requiring higher clean air.

Modular connection is possible with AMD150C to 550C.  
(For details, refer to page 58.)



AMD150C to 550C

AMD650/850



**Made to Order**  
(For details, refer to page 63.)

### Model

| Model                                           | AMD150C  | AMD250C  | AMD350C  | AMD450C  | AMD550C | AMD650   | AMD850   |
|-------------------------------------------------|----------|----------|----------|----------|---------|----------|----------|
| Rated flow (Note)<br>( $\ell/\text{min}$ (ANR)) | 200      | 500      | 1000     | 2000     | 3700    | 6000     | 12000    |
| Port size                                       | 1/8, 1/4 | 1/4, 3/8 | 3/8, 1/2 | 1/2, 3/4 | 3/4, 1  | 1, 1 1/2 | 1 1/2, 2 |
| Mass (kg)                                       | 0.38     | 0.55     | 0.9      | 1.4      | 2.1     | 4.2      | 10.5     |



Note) Max. flow at 0.7 MPa.

Max. flow varies depending on the operating pressure.

Refer to "Flow Characteristics" (page 29) and "Maximum Air Flow" (page 28).

### Specifications

|                               |                                                                                                                                        |
|-------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| Fluid                         | Compressed air                                                                                                                         |
| Max. operating pressure       | 1.0 MPa                                                                                                                                |
| Min. operating pressure*      | 0.05 MPa                                                                                                                               |
| Proof pressure                | 1.5 MPa                                                                                                                                |
| Ambient and fluid temperature | 5 to 60°C                                                                                                                              |
| Nominal filtration rating     | 0.01 $\mu\text{m}$ (Filtration efficiency: 99.9%)                                                                                      |
| Oil mist density at outlet    | Max. 0.1 $\text{mg}/\text{m}^3$ (ANR)*<br>(Before saturated with oil, less than 0.01 $\text{mg}/\text{m}^3$ (ANR) $\approx 0.008$ ppm) |
| Element life                  | 2 years (1 year for flange type)<br>or when pressure drop reached 0.1 MPa                                                              |

\* With auto drain: 0.1 MPa (N.O. type) or 0.15 MPa (N.C. type)

\* Oil mist density at 30  $\text{mg}/\text{m}^3$  (ANR) blown out by compressor.

### Accessory

| Applicable model                             | AMD150C  | AMD250C  | AMD350C  | AMD450C  | AMD550C  | AMD650 | AMD850 |
|----------------------------------------------|----------|----------|----------|----------|----------|--------|--------|
| Bracket assembly<br>(with 2 mounting screws) | AM-BM101 | AM-BM102 | AM-BM103 | AM-BM104 | AM-BM105 | BM56   | BM57   |

### Caution

Be sure to read this before handling.

Refer to back pages 1 and 2 for Safety Instructions, "Precautions for Handling Pneumatic Devices" (M-03-E3A) for Common Precautions, and back pages 3 through to 7 for Specific Product Precautions.

## How to Order



### AMD150C to 550C

AMD **550C** - **10** - - - -

#### Body size

|      |
|------|
| 150C |
| 250C |
| 350C |
| 450C |
| 550C |

#### Thread type

| Symbol | Type |
|--------|------|
| —      | Rc   |
| F      | G*1  |
| N      | NPT  |

\*1 Conforms to ISO1179-1.

#### Port size

| Symbol | Size | Applicable body size |      |      |      |      |
|--------|------|----------------------|------|------|------|------|
|        |      | 150C                 | 250C | 350C | 450C | 550C |
| 01     | 1/8  | ●                    |      |      |      |      |
| 02     | 1/4  | ●                    | ●    |      |      |      |
| 03     | 3/8  |                      | ●    | ●    |      |      |
| 04     | 1/2  |                      |      | ●    | ●    |      |
| 06     | 3/4  |                      |      |      | ●    | ●    |
| 10     | 1    |                      |      |      |      | ●    |

#### Accessory

| Symbol | Description |
|--------|-------------|
| —      | —           |
| B      | Bracket *2  |

\*2 Bracket is included, (but not assembled).

### Auto Drain Specifications/Option Combinations

○ : All draining specifications are available (including drain guide, J type).  
 △ : N.C. auto drain (C type) is not available.  
 ▼ : N.C. auto drain (C type) and N.O. auto drain (D type) are not available.

|   | —    | F | H | R    | S | U | T    | V |
|---|------|---|---|------|---|---|------|---|
| — | ○    | ○ | △ | ○    |   |   | Note | ○ |
| F | ○    |   | ▼ | ○    |   |   |      | ▼ |
| H | △    | ▼ |   | △    |   |   |      | ▼ |
| R | ○    | ○ | △ |      |   |   | Note | ○ |
| S |      |   |   |      |   |   |      |   |
| U | Note |   |   | Note |   |   |      |   |
| T |      |   |   |      |   |   |      | ○ |
| V | ○    | ▼ | ▼ | ○    |   |   | ○    |   |

Note) one of them selectable      ■ : Not available

#### Made to Order

("How to Order" and the applicable models are different from those shown on this page. Be sure to refer to "Made to Order".)

| Symbol | Description                                  | Page for details |
|--------|----------------------------------------------|------------------|
| —      | —                                            | —                |
| X6     | With differential pressure gauge (GD40-2-01) | P.64             |
| X26    | N.C., N.O. auto drain, drain piping type     | P.65             |

#### Option \*3

| Symbol | Description                                   |
|--------|-----------------------------------------------|
| —      | —                                             |
| F      | Rubber material: Fluororubber                 |
| H      | For medium air pressure (1.6 MPa)             |
| J      | Drain guide 1/4 female thread *4              |
| R      | IN-OUT reversal direction                     |
| U      | With differential pressure switch (30 VDC) *5 |
| T      | With element service indicator                |
| V      | Degreasing wash, *6 white vaseline            |

\*4 Drain piping and piping for a stop valve such as ball valve are required.

\*5 Differential pressure gauge is included, (but not assembled).

\*6 Only body/housing is degreasing washed.

#### Auto drain \*3

| Symbol | Description                     |
|--------|---------------------------------|
| —      | Drain cock (Without auto drain) |
| C      | N.C. auto drain                 |
| D      | N.O. auto drain                 |

\*3 Refer to the table below for the combination between the draining specification and option. (Only one draining specification is selectable).

## Options

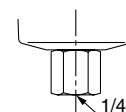
#### Symbol F: Rubber material: Fluororubber

Fluororubber is used for the parts such as O-ring and gasket.

#### Symbol H: For medium air pressure (1.6 MPa)

Can be used up to 1.6 MPa at maximum.

#### Symbol J: Drain guide 1/4 female threaded



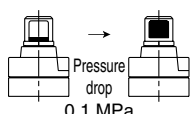
Can be piped to the drain exhaust port.

1/4 female threaded

#### Symbol R: IN-OUT reversal direction

Air flow in the separator is changed to right to left.  
 (Air flow direction of the standard: Left to right.)

#### Symbol T: With element service indicator

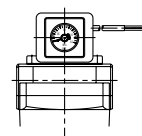


Saturation of the separator can be observed visually. (Element life check)

#### Symbol V: Degreasing wash, white vaseline

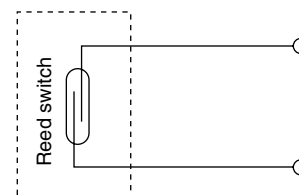
Body/housing is degreasing washed. The lubrication grease for O-ring and gasket is changed to white vaseline.

#### Symbol U: With differential pressure switch (with indicator)



Saturation of the separator can be observed visually or by an electrical signal. (Element life check)

Max. contact capacity: 10 W DC  
 Rated contact voltage (max. operating current): 30 V DC (0.33 A)





## How to Order

### AMD650/850

**AMD 650** - [ ] - [ ] - [ ] - [ ] - [ ]

#### Body size

|     |
|-----|
| 650 |
| 850 |

#### Thread type

| Symbol | Type |
|--------|------|
| —      | Rc   |
| F      | G    |
| N      | NPT  |

#### Port size

| Symbol | Size  | Applicable body size |     |
|--------|-------|----------------------|-----|
|        |       | 650                  | 850 |
| 10     | 1     | ●                    | —   |
| 14     | 1 1/2 | ●                    | ●   |
| 20     | 2     | —                    | ●   |

#### Accessory

| Symbol | Description |
|--------|-------------|
| —      | —           |
| B      | Bracket *1  |

\*1 Bracket is included, (but not assembled).

#### Auto drain \*2

| Symbol | Description                        |
|--------|------------------------------------|
| —      | Drain cock (Without auto drain) *3 |
| D      | N.O. auto drain                    |

\*2 Refer to "Auto Drain Specifications/Option Combinations".

\*3 Body size 850 is equipped with a ball valve (Rc3/8 female threaded). Mount a piping adapter IDF-AP609 (page 58) to the ball valve if NPT3/8 female threaded is required.

#### Made to Order

("How to Order" and the applicable models are different from those shown on this page. Be sure to refer to "Made to Order".)

#### Option \*2

| Symbol | Description                       |
|--------|-----------------------------------|
| —      | —                                 |
| J      | Drain guide 1/4 female threaded*4 |
| R      | IN-OUT reversal direction         |
| T      | With element service indicator    |

\*4 Drain piping and piping for a stop valve such as ball valve are required.

| Symbol | Description                                  | Page for details |
|--------|----------------------------------------------|------------------|
| —      | —                                            | —                |
| X6     | With differential pressure gauge (GD40-2-01) | P.64             |
| X26    | N.C., N.O. auto drain, drain piping type     | P.65             |
| X12    | White vaseline specifications                | P.65             |

### Auto Drain Specifications/Option Combinations



Note) Refer to "How to Order Bowl Assembly" on page 59.

○: Available    □: Not available

| Auto drain specifications/Option |                                |   | Auto drain specifications | Option |   |   | Applicable model |        |
|----------------------------------|--------------------------------|---|---------------------------|--------|---|---|------------------|--------|
|                                  |                                |   | D                         | J      | R | T | AMD650           | AMD850 |
| Auto drain specifications        | N.O. auto drain                | D |                           | ○      | ○ |   | ○                |        |
| Option                           | Drain guide 1/4                | J |                           | ○      | ○ | ○ |                  |        |
|                                  | IN-OUT reversal direction      | R | ○                         | ○      |   | ○ | ○                | ○      |
|                                  | With element service indicator | T | ○                         | ○      |   |   | ○                | ○      |

## Model Selection

Select a model in accordance with the following procedure taking the inlet pressure and the max. air flow rate into consideration.

(Example) Inlet pressure: 0.6 MPa

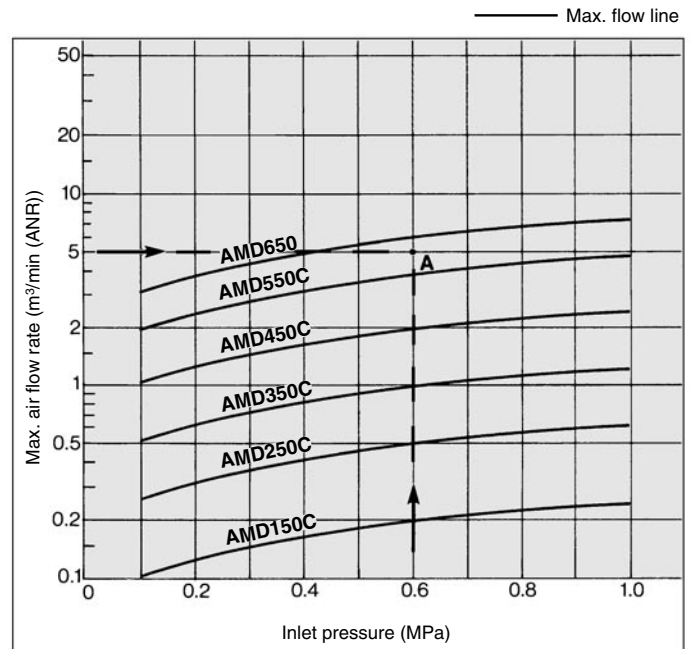
Max. air flow rate: 5 m<sup>3</sup>/min (ANR)

- Obtain the intersecting point A of inlet pressure and max. air flow rate in the graph.
- The AMD650 is obtained when the max. flow line is above the intersecting point A in the graph.



Note) Make sure to select a model that has the max. flow line above the obtained intersecting point. With a model that has the max. flow line below the obtained intersecting point, the flow rate will be exceeded, thus leading to a problem such as being unable to satisfy the specifications.

## Maximum Air Flow

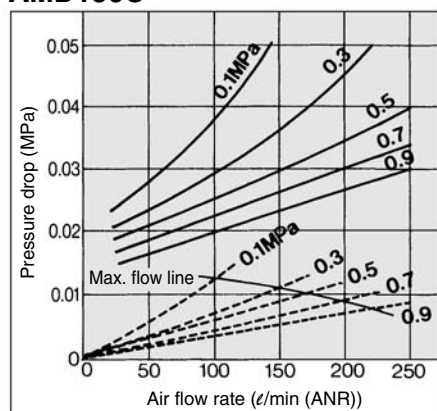


**Flow Characteristics**Select the model taking the max. flow capacity into consideration. (—— Element oil saturation ---- Initial condition)

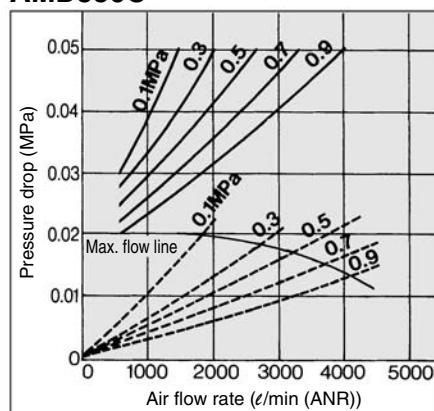


Note) Compressed air over max. flow line in the table below may not meet the specifications of the product.  
It may cause damage to the element.

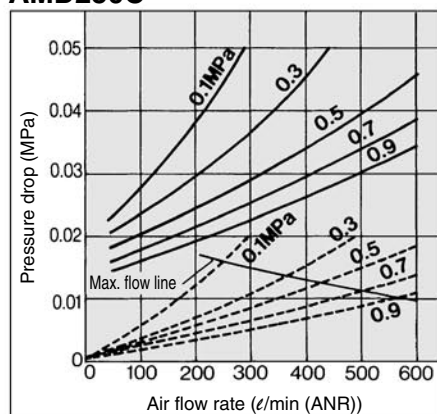
**AMD150C**



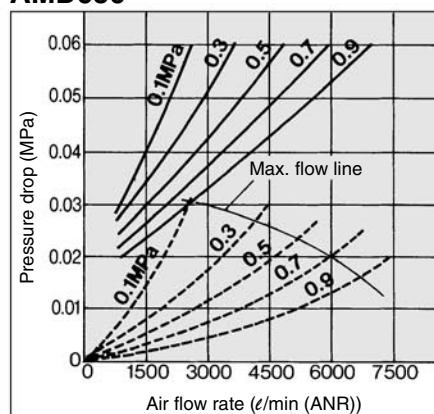
**AMD550C**



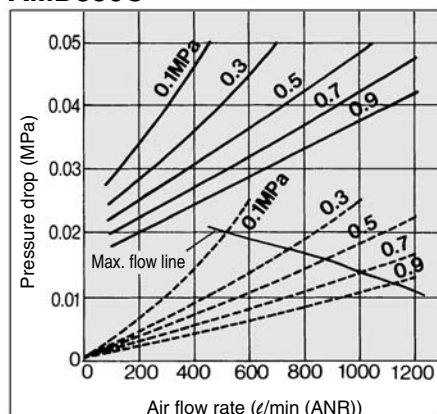
**AMD250C**



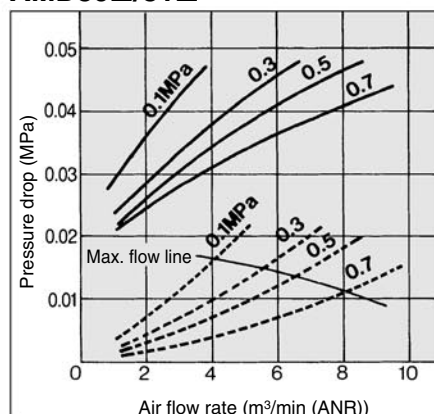
**AMD650**



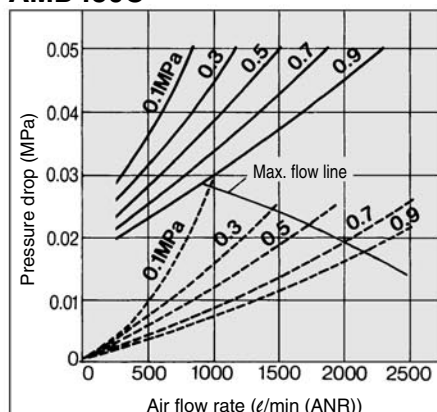
**AMD350C**



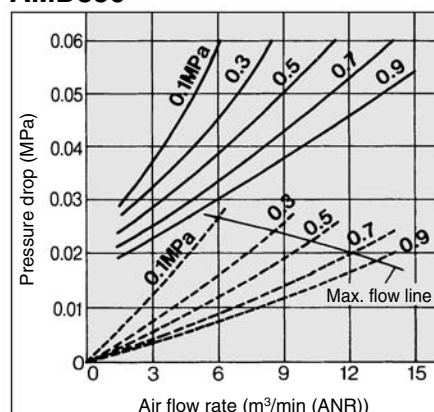
**AMD80□/81□**



**AMD450C**

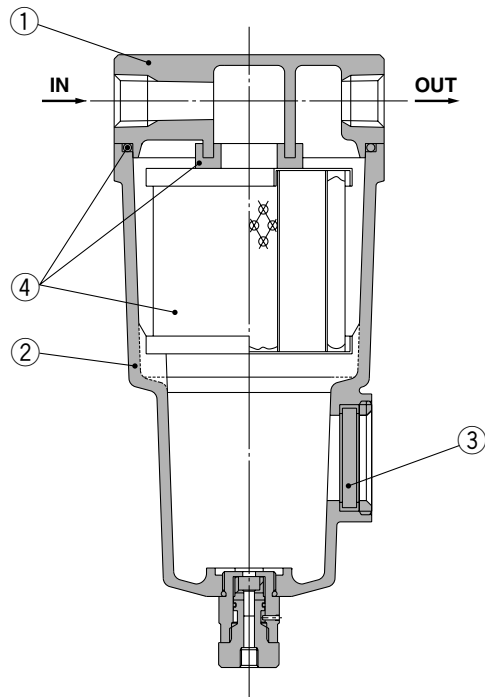


**AMD850**

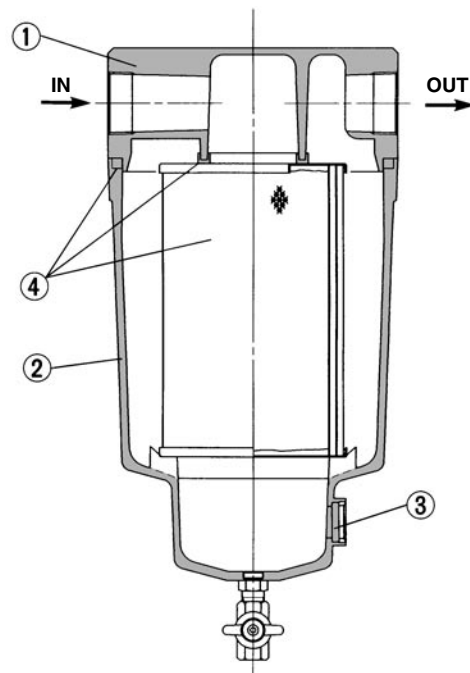


Construction

AMD150C to 550C, AMD650



AMD850



Component Parts

| No. | Description | Material             | Note                           |
|-----|-------------|----------------------|--------------------------------|
| 1   | Body        | Aluminum die-casted  | Chrome treated                 |
| 2   | Housing     | Aluminum die-casted* | Epoxy coating on inner surface |
| 3   | Sight glass | Tempered glass       | —                              |

\* The AMD850 is aluminum casted.



Note) Refer to “How to Order Bowl Assembly” on page 59.



Note) Sight glass is indicated in the figure for easy understanding of component parts. However, it differs from the actual construction. Refer to dimensions on pages 31 through to 33 for details.

Replacement Parts

| No. | Description      | Material            | Applicable model | Model       |             |             |             |             |           |           |
|-----|------------------|---------------------|------------------|-------------|-------------|-------------|-------------|-------------|-----------|-----------|
|     |                  |                     |                  | AMD150C     | AMD250C     | AMD350C     | AMD450C     | AMD550C     | AMD650    | AMD850    |
| 4   | Element assembly | Glass fiber, others | Except option F  | AMD-EL150   | AMD-EL250   | AMD-EL350   | AMD-EL450   | AMD-EL550   | AMD-EL650 | AMD-EL850 |
|     |                  |                     | For option F     | AMD-EL150-F | AMD-EL250-F | AMD-EL350-F | AMD-EL450-F | AMD-EL550-F | —         | —         |

\* Element assembly: With gasket (1 pc.) and O-ring (1 pc.)

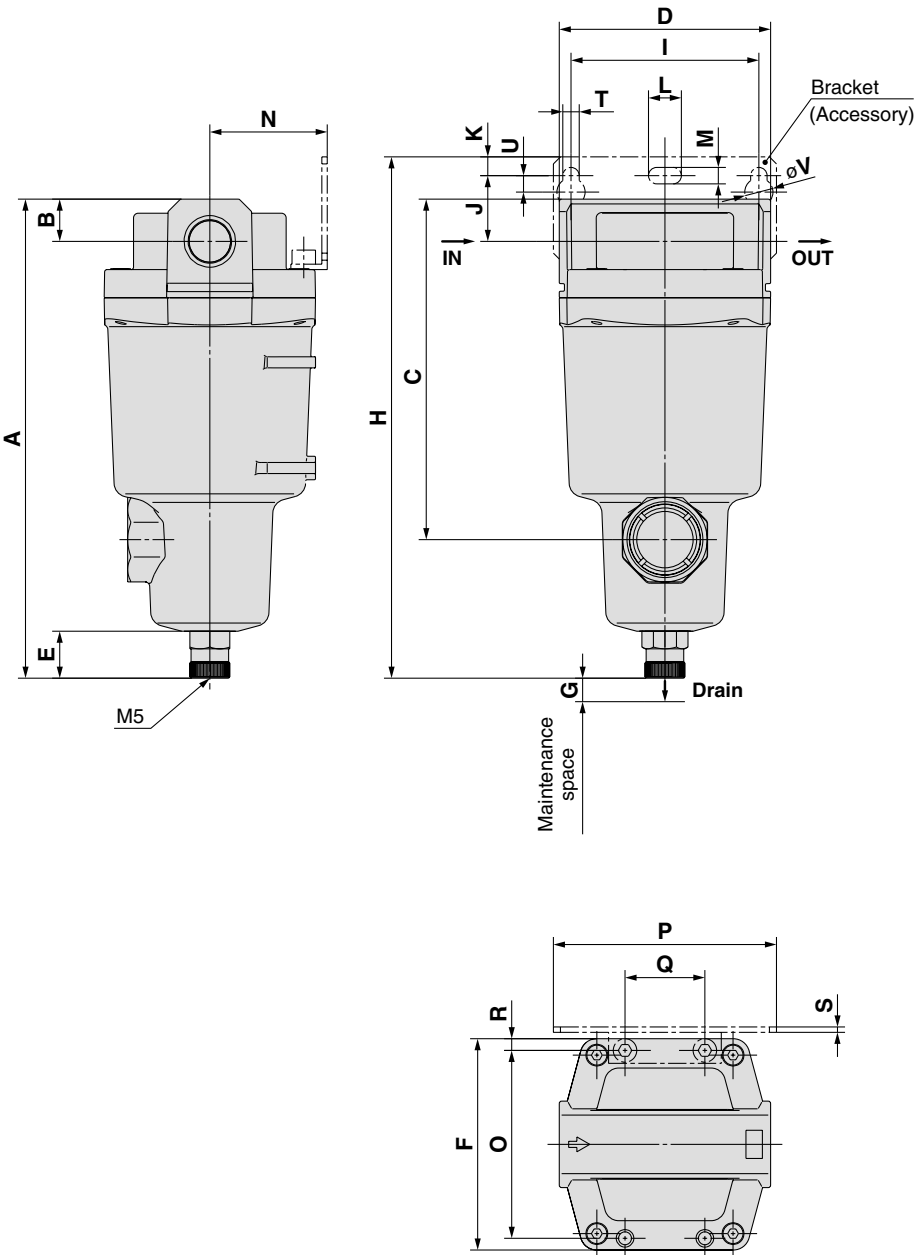
\* Refer to back page 6 for replacement of auto drain.

\* Element assemblies for Made to Order (X6, X12, X20, X26) are same as those for standard (see the above table).

# Series AMD

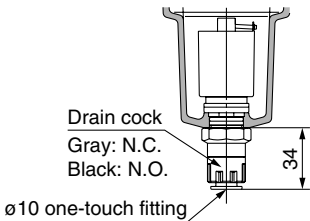
## Dimensions

AMD150C to 550C

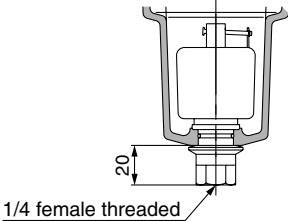


### Auto drain

C: With auto drain (N.C.)  
D: With auto drain (N.O.)

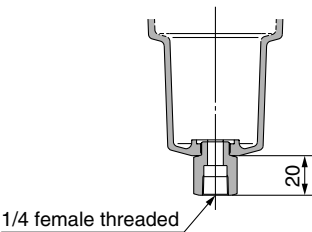


Combination of D: With auto drain (N.O.)  
and H: For medium air pressure

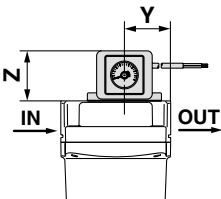


### Option

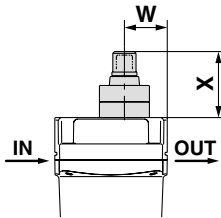
J: Drain guide 1/4 female threaded



U: With differential pressure switch (with indicator)



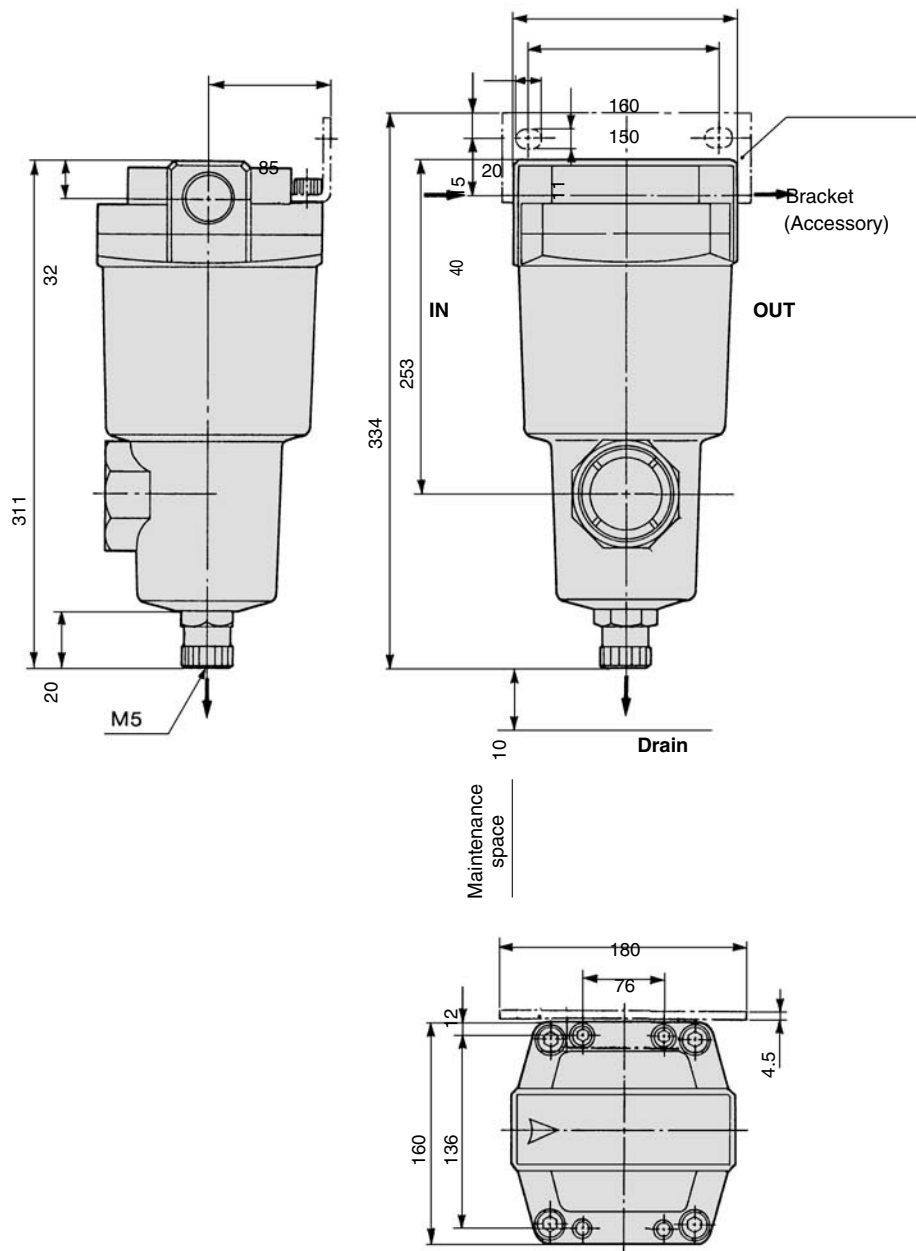
T: With element service indicator



| (mm)    |           |     |    |     |     |    |     |    |                            |     |    |    |   |   |    |   |    |    |     |     |    |     |                                              |    |                                                 |    |    |
|---------|-----------|-----|----|-----|-----|----|-----|----|----------------------------|-----|----|----|---|---|----|---|----|----|-----|-----|----|-----|----------------------------------------------|----|-------------------------------------------------|----|----|
| Model   | Port size | A   | B  | C   | D   | E  | F   | G  | Bracket related dimensions |     |    |    |   |   |    |   |    |    |     |     |    |     | Element service indicator related dimensions |    | Differential pressure switch related dimensions |    |    |
|         |           |     |    |     |     |    |     |    | H                          | I   | J  | K  | T | U | L  | M | V  | N  | O   | P   | Q  | R   | S                                            | W  | X                                               | Y  | Z  |
| AMD150C | 1/8, 1/4  | 158 | 10 | 99  | 63  | 20 | 63  | 10 | 173                        | 56  | 20 | 5  | 6 | 6 | 12 | 6 | 10 | 35 | 54  | 70  | 26 | 4.5 | 1.6                                          | 24 | 37                                              | 32 | 41 |
| AMD250C | 1/4, 3/8  | 172 | 14 | 113 | 76  | 20 | 76  | 10 | 190                        | 66  | 24 | 8  | 6 | 6 | 12 | 6 | 10 | 40 | 66  | 80  | 28 | 5   | 2                                            | 27 | 37                                              | 36 | 41 |
| AMD350C | 3/8, 1/2  | 204 | 18 | 145 | 90  | 20 | 90  | 10 | 222                        | 80  | 28 | 8  | 7 | 7 | 14 | 7 | 12 | 50 | 80  | 95  | 34 | 5   | 2.3                                          | 32 | 37                                              | 42 | 41 |
| AMD450C | 1/2, 3/4  | 225 | 20 | 166 | 106 | 20 | 106 | 10 | 246                        | 90  | 31 | 10 | 9 | 9 | 18 | 9 | 15 | 55 | 88  | 111 | 50 | 9   | 3.2                                          | 37 | 37                                              | 43 | 41 |
| AMD550C | 3/4, 1    | 259 | 24 | 200 | 122 | 20 | 122 | 15 | 278                        | 100 | 33 | 10 | 9 | 9 | 18 | 9 | 15 | 65 | 102 | 126 | 60 | 10  | 3.2                                          | 39 | 37                                              | 51 | 41 |

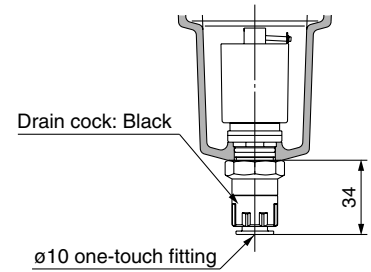
## Dimensions

### AMD650



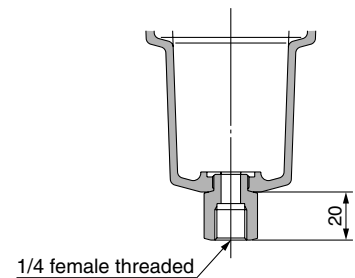
#### Auto drain

D: With auto drain (N.O.)

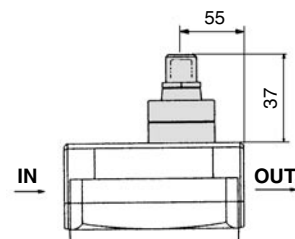


#### Option

J: Drain guide 1/4 female threaded



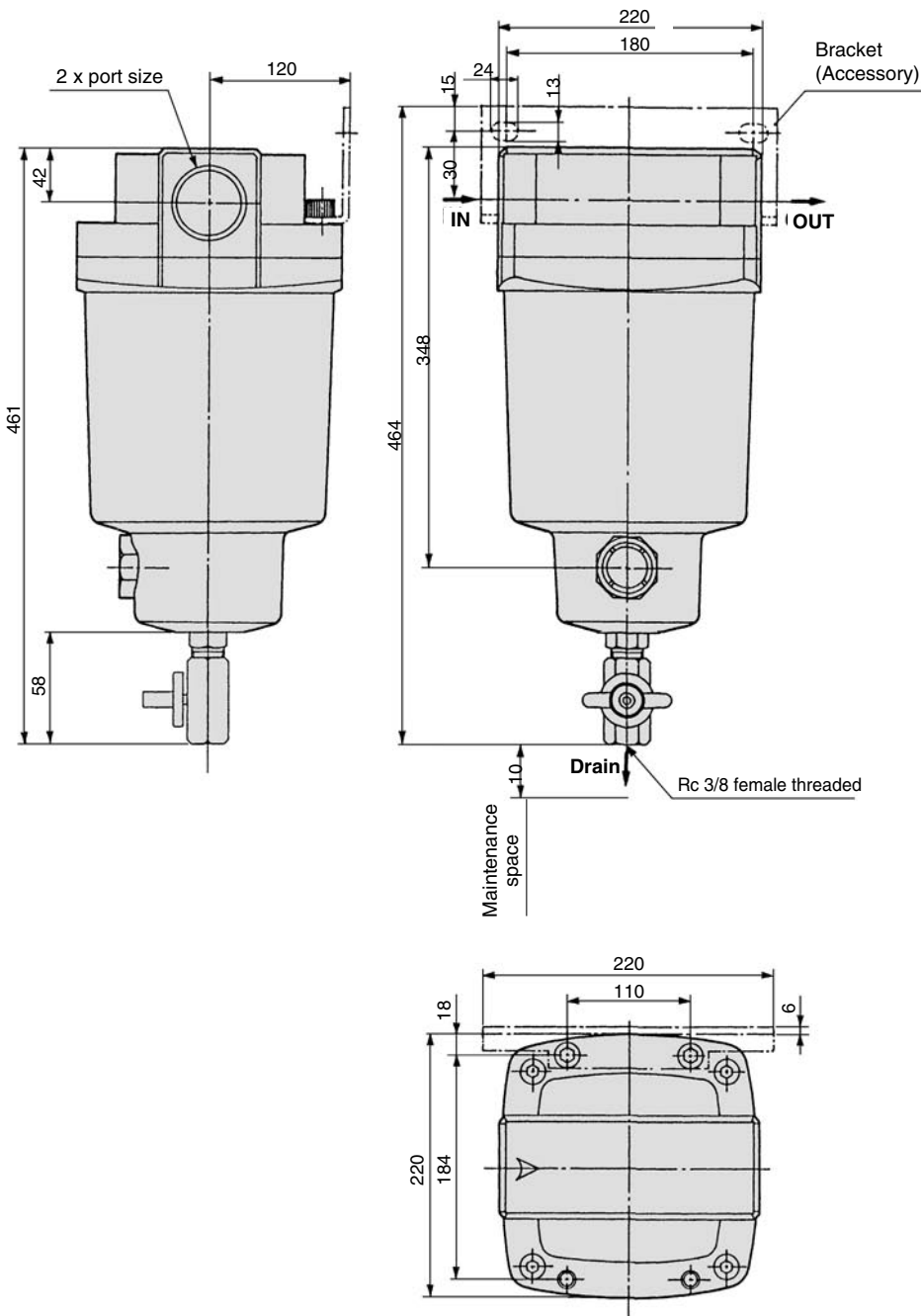
T: With element service indicator



# Series AMD

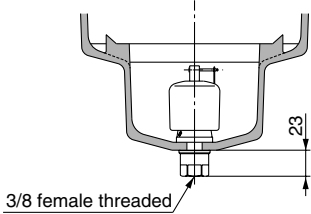
## Dimensions

### AMD850



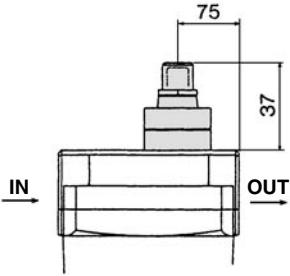
### Auto drain

D: With auto drain (N.O.)  
for AMD850



### Option

T: With element service indicator



# Micro Mist Separator with Pre-filter Series *AMH*

Can separate and remove aerosol state oil mist in compressed air and remove particles such as carbon or dust of more than 0.01  $\mu\text{m}$ .

Use this product as a pre-filter for compressed air for precision instruments or clean room requiring higher clean air.

The conventional pneumatic pressure line, AM series + AMD series have been integrated to achieve a reduction in installation space and in piping labor.

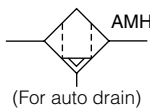
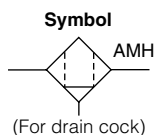
Modular connection is possible with AMH150C to 550C.  
(For details, refer to page 58.)



AMH150C to 550C



AMH650/850



**Made to Order**  
(For details, refer to page 63.)

## Model

| Model                                            | AMH150C  | AMH250C  | AMH350C  | AMH450C  | AMH550C | AMH650   | AMH850   |
|--------------------------------------------------|----------|----------|----------|----------|---------|----------|----------|
| Rated flow (l/min (ANR))<br><small>Note)</small> | 200      | 500      | 1000     | 2000     | 3700    | 6000     | 12000    |
| Port size                                        | 1/8, 1/4 | 1/4, 3/8 | 3/8, 1/2 | 1/2, 3/4 | 3/4, 1  | 1, 1 1/2 | 1 1/2, 2 |
| Mass (kg)                                        | 0.38     | 0.55     | 0.9      | 1.4      | 2.1     | 4.2      | 10.5     |



Note) Max. flow at 0.7 MPa.

Max. flow varies depending on the operating pressure.

Refer to "Flow Characteristics" (page 37) and "Maximum Air Flow" below.

## Specifications

|                               |                                                                                                                                        |
|-------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| Fluid                         | Compressed air                                                                                                                         |
| Max. operating pressure       | 1.0 MPa                                                                                                                                |
| Min. operating pressure*      | 0.05 MPa                                                                                                                               |
| Proof pressure                | 1.5 MPa                                                                                                                                |
| Ambient and fluid temperature | 5 to 60°C                                                                                                                              |
| Nominal filtration density    | 0.01 $\mu\text{m}$ (Filtration efficiency: 99.9%)                                                                                      |
| Oil mist density at outlet    | Max. 0.1 $\text{mg}/\text{m}^3$ (ANR)*<br>(Before saturated with oil, less than 0.01 $\text{mg}/\text{m}^3$ (ANR) $\approx$ 0.008 ppm) |
| Element life                  | 2 years or when pressure drop reached 0.1 MPa                                                                                          |

\* With auto drain: 0.1 MPa (N.O. type) or 0.15 MPa (N.C. type)

\* Oil mist density at 30  $\text{mg}/\text{m}^3$  (ANR) blown out by compressor.

## Accessory

| Applicable model                             | AMH150C  | AMH250C  | AMH350C  | AMH450C  | AMH550C  | AMH650 | AMH850 |
|----------------------------------------------|----------|----------|----------|----------|----------|--------|--------|
| Bracket assembly<br>(with 2 mounting screws) | AM-BM101 | AM-BM102 | AM-BM103 | AM-BM104 | AM-BM105 | BM56   | BM57   |

## Model Selection

Select a model in accordance with the following procedure taking the inlet pressure and the max. air flow rate into consideration.

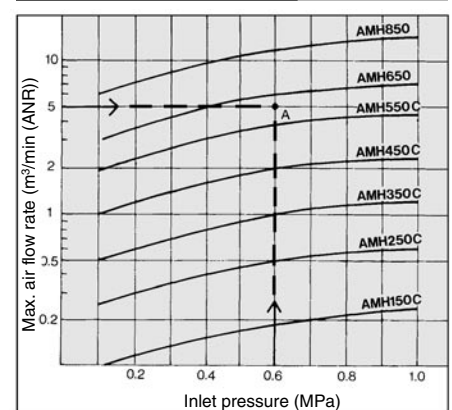
(Example) Inlet pressure: 0.6 MPa  
Max. air flow rate: 5  $\text{m}^3/\text{min}$  (ANR)

1. Obtain the intersecting point A of inlet pressure and max. air flow rate in the graph.
2. The AMH650 is obtained when the max. flow line is above the intersecting point A in the graph.



Note) Make sure to select a model that has the max. flow line above the obtained intersecting point. With a model that has the max. flow line below the obtained intersecting point, the flow rate will be exceeded, thus leading to a problem such as being unable to satisfy the specifications.

## Maximum Air Flow



## Caution

Be sure to read this before handling.

Refer to back pages 1 and 2 for Safety Instructions, "Precautions for Handling Pneumatic Devices" (M-03-E3A) for Common Precautions, and back pages 3 through to 7 for Specific Product Precautions.

## How to Order

### AMH150C to 550C



AMH 550C - 10 - - - -

#### Body size

|      |
|------|
| 150C |
| 250C |
| 350C |
| 450C |
| 550C |

#### Thread type

| Symbol | Type |
|--------|------|
| —      | Rc   |
| F      | G*1  |
| N      | NPT  |

\*1 Conforms to ISO1179-1.

#### Port size

| Symbol | Size | Applicable body size |      |      |      |      |
|--------|------|----------------------|------|------|------|------|
|        |      | 150C                 | 250C | 350C | 450C | 550C |
| 01     | 1/8  | ●                    |      |      |      |      |
| 02     | 1/4  | ●                    | ●    |      |      |      |
| 03     | 3/8  |                      | ●    | ●    |      |      |
| 04     | 1/2  |                      |      | ●    | ●    |      |
| 06     | 3/4  |                      |      |      | ●    | ●    |
| 10     | 1    |                      |      |      |      | ●    |

#### Accessory

| Symbol | Description |
|--------|-------------|
| —      | —           |
| B      | Bracket *2  |

\*2 Bracket is included, (but not assembled).

#### Made to Order

("How to Order" and the applicable models are different from those shown on this page. Be sure to refer to "Made to Order".)

| Symbol | Description                                  | Page for details |
|--------|----------------------------------------------|------------------|
| —      | —                                            | —                |
| X6     | With differential pressure gauge (GD40-2-01) | P.64             |
| X26    | N.C., N.O. auto drain, drain piping type     | P.65             |

#### Option \*3

| Symbol | Description                                   |
|--------|-----------------------------------------------|
| —      | —                                             |
| F      | Rubber material: Fluororubber                 |
| H      | For medium air pressure (1.6 MPa)             |
| J      | Drain guide 1/4 female threaded *4            |
| R      | IN-OUT reversal direction                     |
| U      | With differential pressure switch (30 VDC) *5 |
| T      | With element service indicator                |
| V      | Degreasing wash, *6 white vaseline            |

\*4 Drain piping and piping for a stop valve such as ball valve are required.

\*5 Differential pressure switch is included, (but not assembled).

\*6 Only body/housing is degreasing washed.

### Auto Drain Specifications/Option Combinations

○ : All draining specifications are available (including drain guide, J type).

△ : N.C. auto drain (C type) is not available.

▽ : N.C. auto drain (C type) and N.O. auto drain (D type) are not available.

|   | —    | F | H | R    | S    | U    | T | V |
|---|------|---|---|------|------|------|---|---|
| — | ○    | ○ | △ | ○    |      | Note |   | ○ |
| F | ○    | ○ | ▽ | ○    |      |      |   | ▽ |
| H | △    | ▽ | △ | △    |      |      |   | ▽ |
| R | ○    | ○ | △ |      | Note |      |   | ○ |
| S |      |   |   |      |      |      |   |   |
| U | Note |   |   | Note |      |      |   |   |
| T |      |   |   |      |      |      |   | ○ |
| V | ○    | ▽ | ▽ | ○    |      |      | ○ |   |

Note) one of them selectable    □ : Not available

#### Auto drain \*3

| Symbol | Description                     |
|--------|---------------------------------|
| —      | Drain cock (Without auto drain) |
| C      | N.C. auto drain                 |
| D      | N.O. auto drain                 |

\*3 Refer to the table below for the combination between the draining specification and option. (Only one draining specification is selectable).

## Options

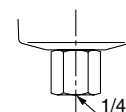
#### Symbol F: Rubber material: Fluororubber

Fluororubber is used for the parts such as O-ring and gasket.

#### Symbol H: For medium air pressure (1.6 MPa)

Can be used up to 1.6 MPa at maximum.

#### Symbol J: Drain guide 1/4 female threaded



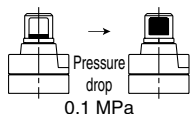
Can be piped to the drain exhaust port.

1/4 female threaded

#### Symbol R: IN-OUT reversal direction

Air flow in the separator is changed to right to left.  
(Air flow direction of the standard: Left to right.)

#### Symbol T: With element service indicator

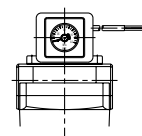


Saturation of the separator can be observed visually.  
(Element life check)

#### Symbol V: Degreasing wash, white vaseline

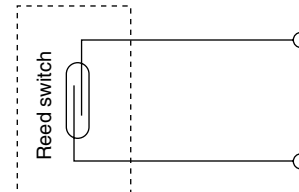
Body/housing is degreasing washed. The lubrication grease for O-ring and gasket is changed to white vaseline.

#### Symbol U: With differential pressure switch (with indicator)



Saturation of the separator can be observed visually or by an electrical signal.  
(Element life check)

Max. contact capacity: 10 W DC  
Rated contact voltage (max. operating current): 30 V DC (0.33 A)





## How to Order

### AMH650/850

**AMH** **650** - **10** - - -

#### Body size

|     |
|-----|
| 650 |
| 850 |

#### Thread type

| Symbol | Type |
|--------|------|
| —      | Rc   |
| F      | G    |
| N      | NPT  |

#### Port size

| Symbol | Size  | Applicable body size |     |
|--------|-------|----------------------|-----|
|        |       | 650                  | 850 |
| 10     | 1     | ●                    | —   |
| 14     | 1 1/2 | ●                    | ●   |
| 20     | 2     | —                    | ●   |

#### Accessory

| Symbol | Description |
|--------|-------------|
| —      | —           |
| B      | Bracket *2  |

\*2 Bracket is included, (but not assembled).

#### Made to Order

("How to Order" and the applicable models are different from those shown on this page. Be sure to refer to "Made to Order".)

| Symbol | Description                                  | Page for details |
|--------|----------------------------------------------|------------------|
| —      | —                                            | —                |
| X6     | With differential pressure gauge (GD40-2-01) | P.64             |
| X26    | N.C., N.O. auto drain, drain piping type     | P.65             |
| X12    | White vaseline specifications                | P.65             |

#### Option \*2

| Symbol | Description                        |
|--------|------------------------------------|
| —      | —                                  |
| J      | Drain guide 1/4 female threaded *4 |
| R      | IN-OUT reversal direction          |
| T      | With element service indicator     |

\*4 Drain piping and piping for a stop valve such as ball valve are required.

#### Auto drain \*2

| Symbol | Description                        |
|--------|------------------------------------|
| —      | Drain cock (Without auto drain) *3 |
| D      | N.O. auto drain                    |

\*2 Refer to "Auto Drain Specifications/Option Combinations".

\*3 Body size 850 is equipped with a ball valve (Rc3/8 female threaded). Mount a piping adapter IDF-AP609 (page 58) to the ball valve if NPT3/8 female threaded is required.



Note) Refer to "How to Order Bowl Assembly" on page 59.

### Auto Drain Specifications/Option Combinations

○: Available    □: Not available

| Auto drain specifications/Option |                                |  | Auto drain specifications |   |   |   | Option |   |   |   | Applicable model |        |
|----------------------------------|--------------------------------|--|---------------------------|---|---|---|--------|---|---|---|------------------|--------|
|                                  |                                |  | D                         |   |   |   | J      | R | T |   | AMH650           | AMH850 |
| Auto drain specifications        | N.O. auto drain                |  | D                         | □ | □ | □ | □      | ○ | ○ | ○ | ○                | ○      |
|                                  | Drain guide 1/4                |  | J                         | □ | □ | □ | ○      | ○ | ○ | ○ | ○                | ○      |
|                                  | IN-OUT reversal direction      |  | R                         | ○ | ○ | ○ | ○      | ○ | ○ | ○ | ○                | ○      |
|                                  | With element service indicator |  | T                         | ○ | ○ | ○ | ○      | ○ | ○ | ○ | ○                | ○      |

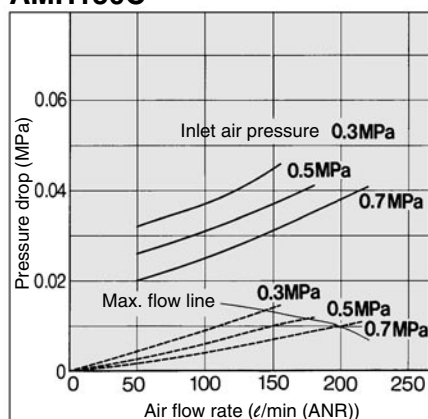
# Series AMH

**Flow Characteristics**Select the model taking the max. flow capacity into consideration. (—— Element oil saturation ---- Initial condition)

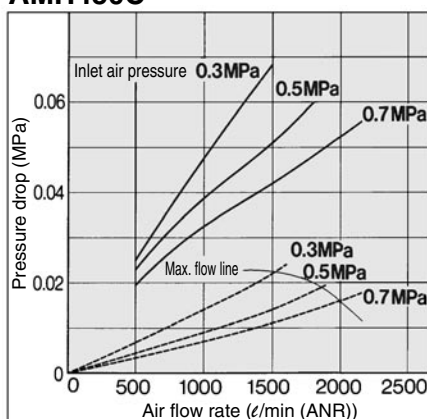


Note) Compressed air over max. flow line in the table below may not meet the specifications of the product. It may cause damage to the element.

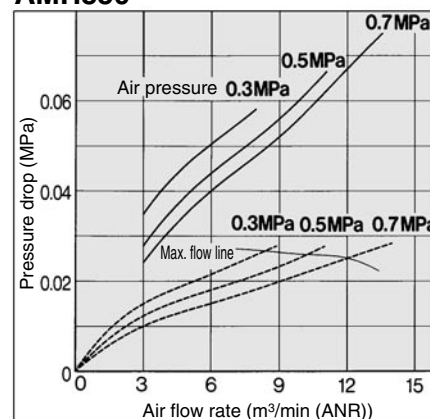
**AMH150C**



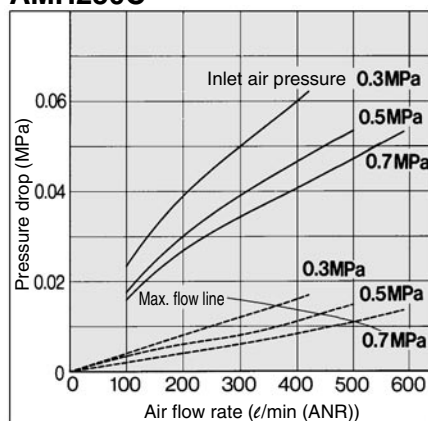
**AMH450C**



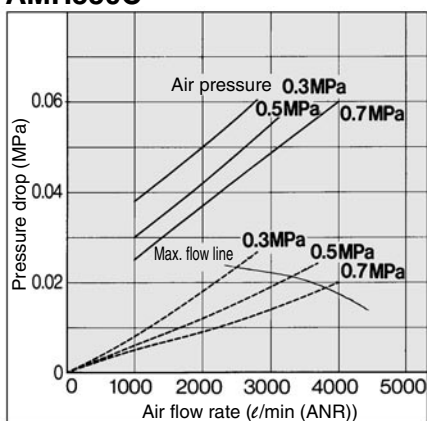
**AMH850**



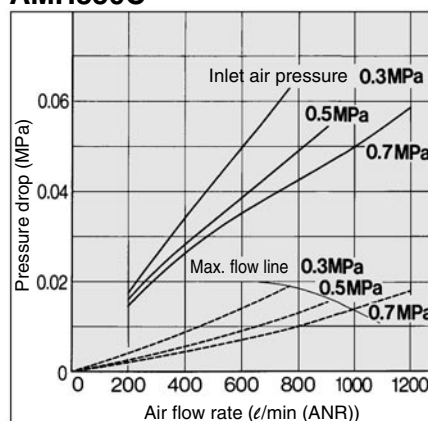
**AMH250C**



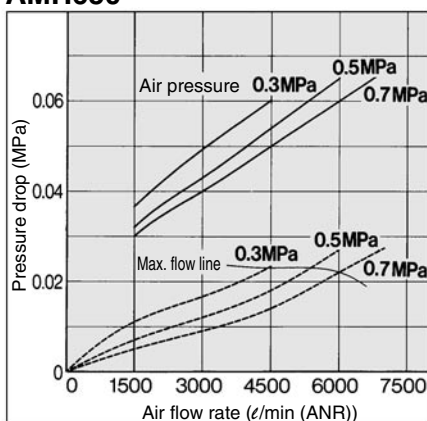
**AMH550C**



**AMH350C**

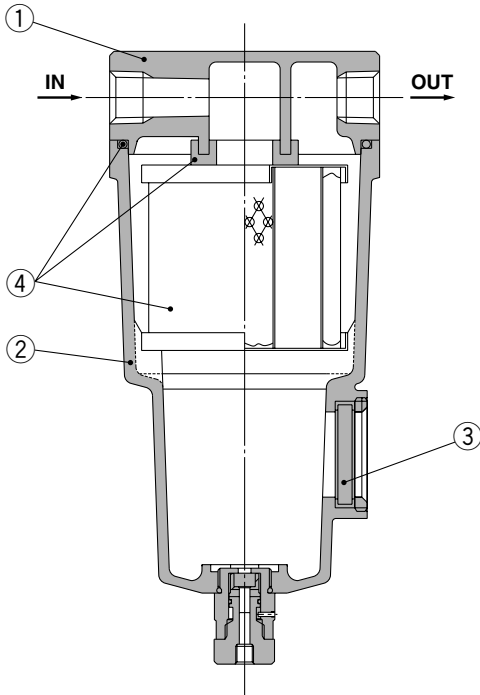


**AMH650**

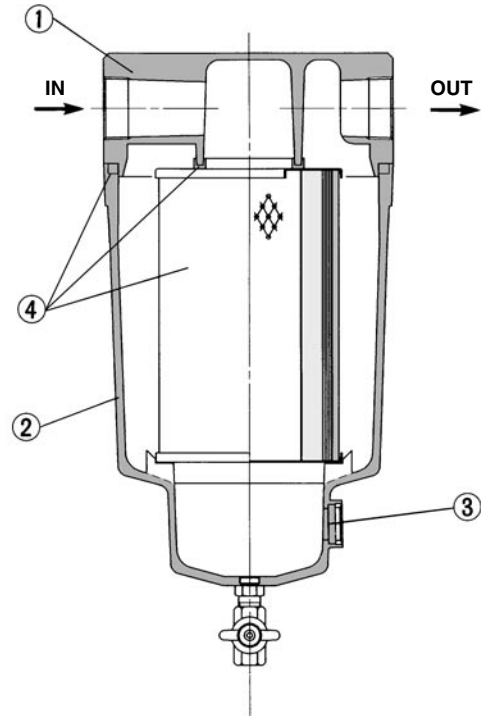


## Construction

### AMH150C to 550C, AMH650



### AMH850



## Component Parts

| No. | Description        | Material             | Note                           |
|-----|--------------------|----------------------|--------------------------------|
| 1   | <b>Body</b>        | Aluminum die-casted  | Chrome treated                 |
| 2   | <b>Housing</b>     | Aluminum die-casted* | Epoxy coating on inner surface |
| 3   | <b>Sight glass</b> | Tempered glass       | —                              |

\* The AMH850 is aluminum casted.



Note) Refer to "How to Order Bowl Assembly" on page 59.



Note) Sight glass is indicated in the figure for easy understanding of component parts. However, it differs from the actual construction. Refer to dimensions on pages 39 through to 41 for details.

## Replacement Parts

| No. | Description      | Material            | Applicable model | Model       |             |             |             |             |           |           |
|-----|------------------|---------------------|------------------|-------------|-------------|-------------|-------------|-------------|-----------|-----------|
|     |                  |                     |                  | AMH150C     | AMH250C     | AMH350C     | AMH450C     | AMH550C     | AMH650    | AMH850    |
| 4   | Element assembly | Glass fiber, others | Except option F  | AMH-EL150   | AMH-EL250   | AMH-EL350   | AMH-EL450   | AMH-EL550   | AMH-EL650 | AMH-EL850 |
|     |                  |                     | For option F     | AMH-EL150-F | AMH-EL250-F | AMH-EL350-F | AMH-EL450-F | AMH-EL550-F | —         | —         |

\* Element assembly: With gasket (1 pc.) and O-ring (1 pc.)

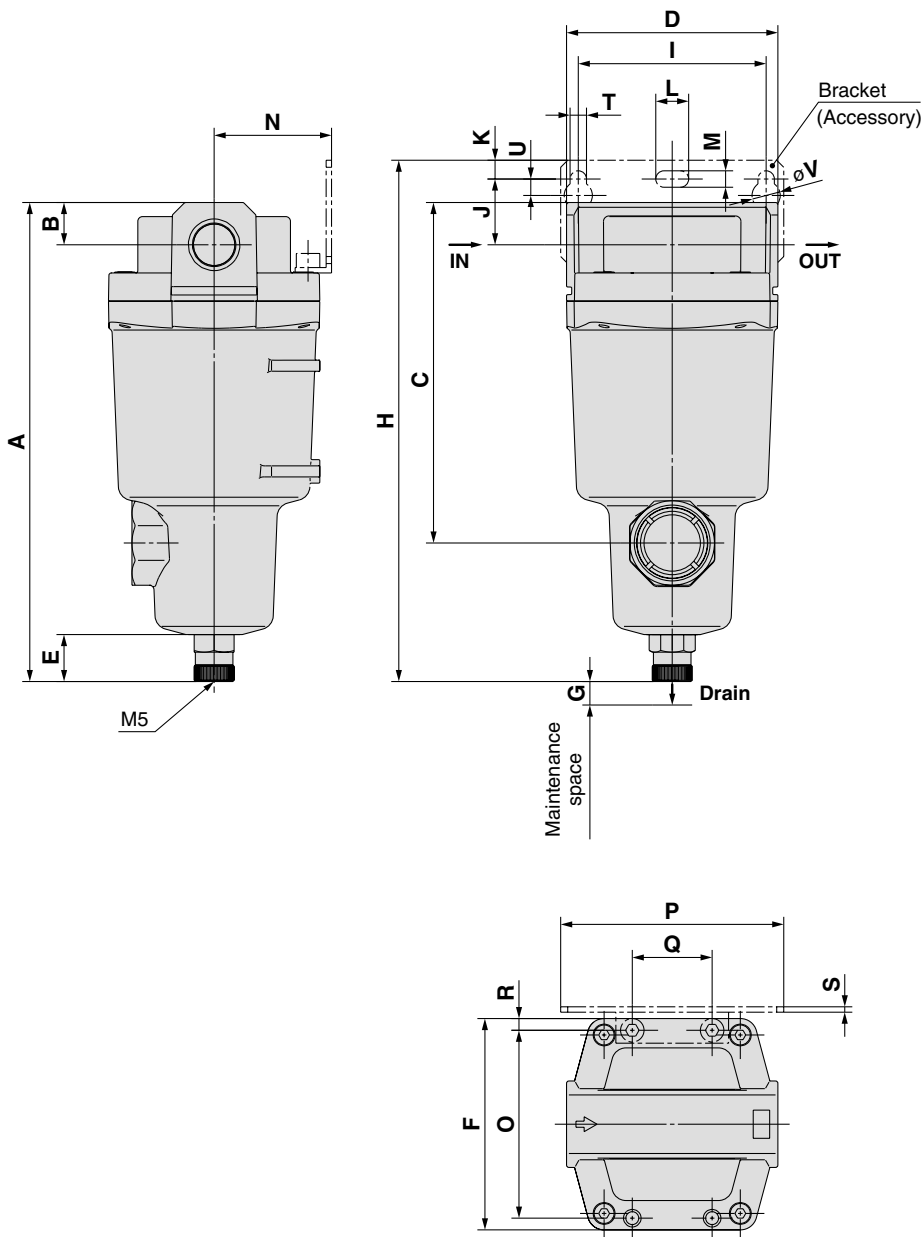
\* Refer to back page 6 for replacement of auto drain.

\* Element assemblies for Made to Order (X6, X12, X20, X26) are same as those for standard (see the above table).

# Series AMH

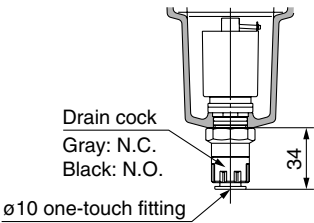
## Dimensions

AMH150C to 550C

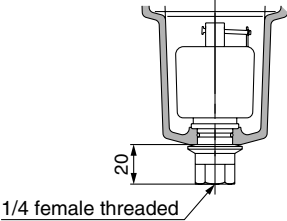


### Auto drain

C: With auto drain (N.C.)  
D: With auto drain (N.O.)

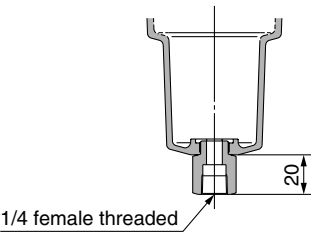


Combination of D: With auto drain (N.O.)  
and H: For medium air pressure

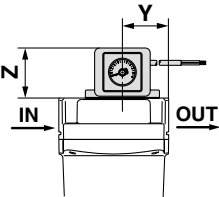


### Option

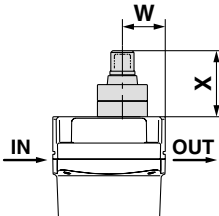
J: Drain guide 1/4 female threaded



U: With differential pressure switch (with indicator)



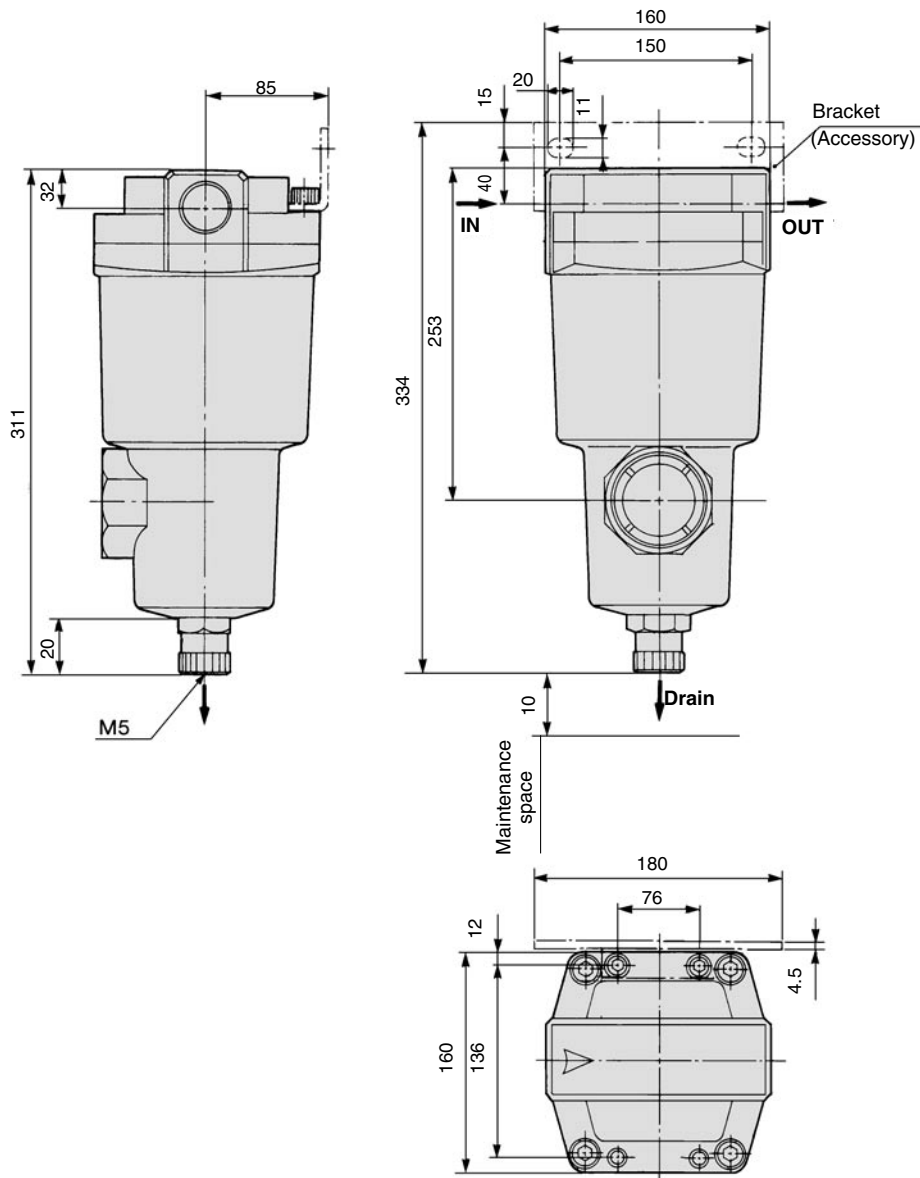
T: With element service indicator



| (mm)    |           |     |    |     |     |    |     |    |                            |     |    |    |   |   |    |   |    |    |     |     |    |     |                                              |    |                                                 |    |    |
|---------|-----------|-----|----|-----|-----|----|-----|----|----------------------------|-----|----|----|---|---|----|---|----|----|-----|-----|----|-----|----------------------------------------------|----|-------------------------------------------------|----|----|
| Model   | Port size | A   | B  | C   | D   | E  | F   | G  | Bracket related dimensions |     |    |    |   |   |    |   |    |    |     |     |    |     | Element service indicator related dimensions |    | Differential pressure switch related dimensions |    |    |
|         |           |     |    |     |     |    |     |    | H                          | I   | J  | K  | T | U | L  | M | V  | N  | O   | P   | Q  | R   | S                                            | W  | X                                               | Y  | Z  |
| AMH150C | 1/8, 1/4  | 158 | 10 | 99  | 63  | 20 | 63  | 10 | 173                        | 56  | 20 | 5  | 6 | 6 | 12 | 6 | 10 | 35 | 54  | 70  | 26 | 4.5 | 1.6                                          | 24 | 37                                              | 32 | 41 |
| AMH250C | 1/4, 3/8  | 172 | 14 | 113 | 76  | 20 | 76  | 10 | 190                        | 66  | 24 | 8  | 6 | 6 | 12 | 6 | 10 | 40 | 66  | 80  | 28 | 5   | 2                                            | 27 | 37                                              | 36 | 41 |
| AMH350C | 3/8, 1/2  | 204 | 18 | 145 | 90  | 20 | 90  | 10 | 222                        | 80  | 28 | 8  | 7 | 7 | 14 | 7 | 12 | 50 | 80  | 95  | 34 | 5   | 2.3                                          | 32 | 37                                              | 42 | 41 |
| AMH450C | 1/2, 3/4  | 225 | 20 | 166 | 106 | 20 | 106 | 10 | 246                        | 90  | 31 | 10 | 9 | 9 | 18 | 9 | 15 | 55 | 88  | 111 | 50 | 9   | 3.2                                          | 37 | 37                                              | 43 | 41 |
| AMH550C | 3/4, 1    | 259 | 24 | 200 | 122 | 20 | 122 | 15 | 278                        | 100 | 33 | 10 | 9 | 9 | 18 | 9 | 15 | 65 | 102 | 126 | 60 | 10  | 3.2                                          | 39 | 37                                              | 51 | 41 |

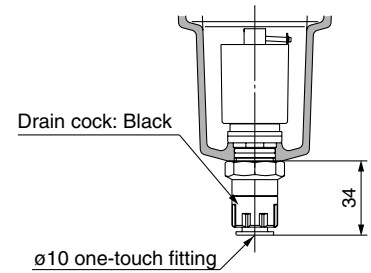
## Dimensions

### AMH650



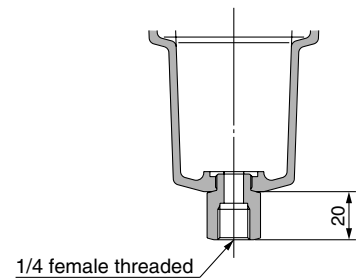
### Auto drain

D: With auto drain (N.O.)

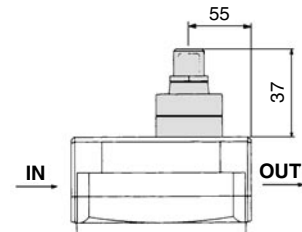


### Option

J: Drain guide 1/4 female threaded



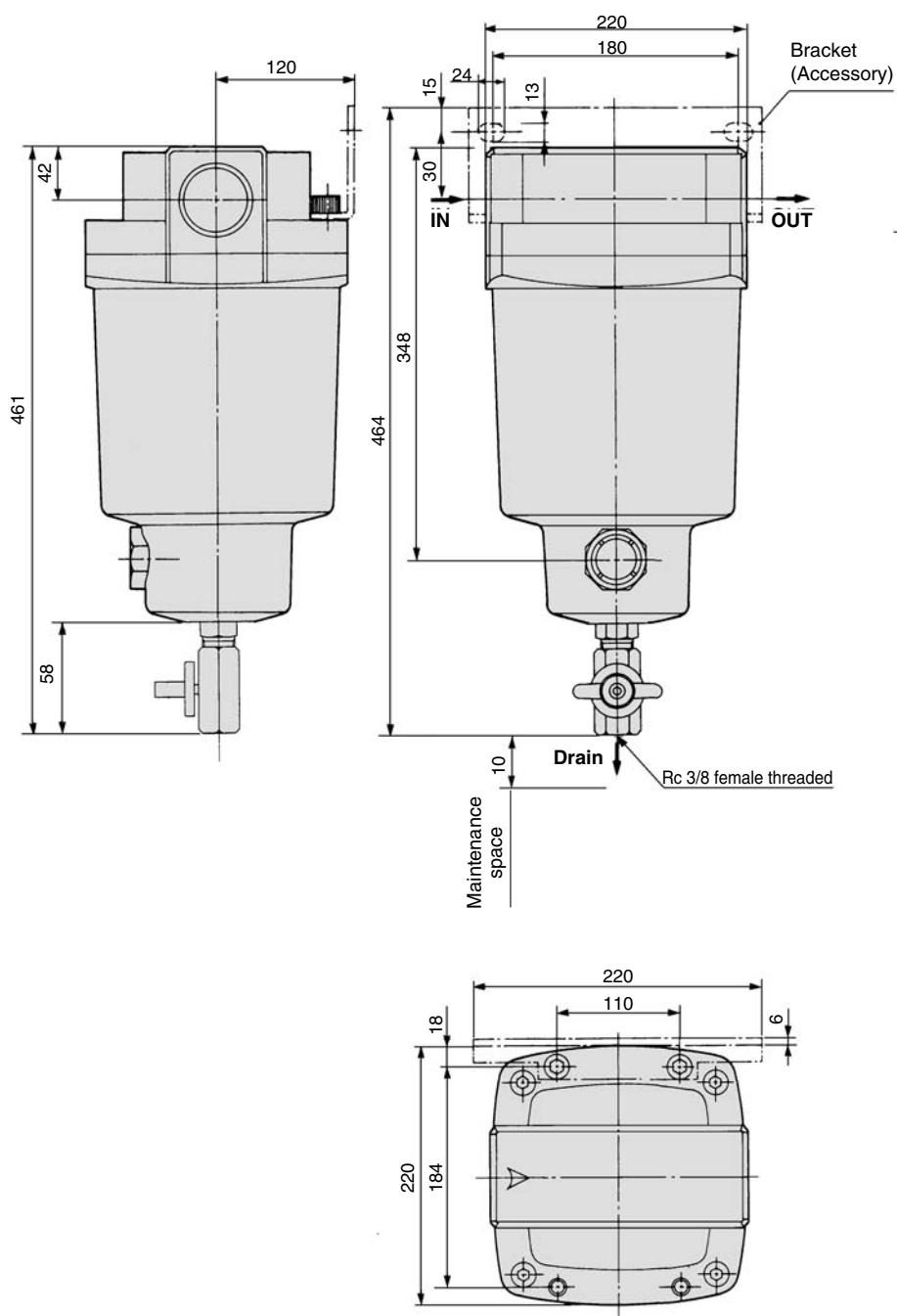
T: With element service indicator



# Series AMH

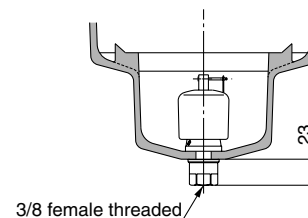
## Dimensions

### AMH850



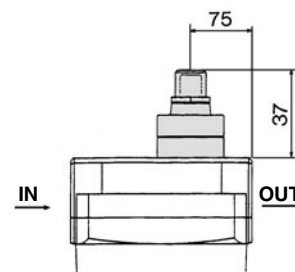
### Auto drain

D: With auto drain (N.O.)  
for AMH850



### Option

T: With element service indicator



# Super Mist Separator Series **AME**

Can separate and adsorb aerosol state fine oil particles in compressed air and change the oil lubricating compressed air to oilless air or equivalent.

Use this product for filtration of compressed air requiring higher clean air for painting lines, compressed air for clean rooms and/or equipment where oils must be avoided.

Indicates the filter element life by a colour change. Accordingly, the replacement time can be judged visually. (A red colour spot indicates the replacement time.)

## Caution

By all means the “AM” series should be used as a pre-filter.

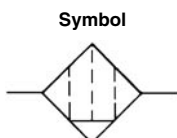
Modular connection is possible with AME150C to 550C.  
(For details, refer to page 58.)



AME150C to 350C    AME450C/550C



AME650/850



**Made to Order**  
(For details, refer to page 63.)

## Model

| Model                                           | AME150C  | AME250C  | AME350C  | AME450C  | AME550C | AME650   | AME850   |
|-------------------------------------------------|----------|----------|----------|----------|---------|----------|----------|
| Rated flow (Note)<br>( $\ell/\text{min}$ (ANR)) | 200      | 500      | 1000     | 2000     | 3700    | 6000     | 12000    |
| Port size                                       | 1/8, 1/4 | 1/4, 3/8 | 3/8, 1/2 | 1/2, 3/4 | 3/4, 1  | 1, 1 1/2 | 1 1/2, 2 |
| Mass (kg)                                       | 0.3      | 0.48     | 0.8      | 1.3      | 2.0     | 4.2      | 10.5     |



Note) Max. flow at 0.7 MPa.

Max. flow varies depending on the operating pressure.

Refer to “Flow Characteristics” (page 45) and “Maximum Air Flow” (page 45).

## Specifications

|                               |                                                                                                                                                                                                                                                                                 |
|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Fluid                         | Compressed air                                                                                                                                                                                                                                                                  |
| Max. operating pressure       | 1.0 MPa                                                                                                                                                                                                                                                                         |
| Min. operating pressure       | 0.05 MPa                                                                                                                                                                                                                                                                        |
| Proof pressure                | 1.5 MPa                                                                                                                                                                                                                                                                         |
| Ambient and fluid temperature | 5 to 60°C                                                                                                                                                                                                                                                                       |
| Nominal filtration rating     | 0.01 $\mu\text{m}$ (Filtration efficiency: 99.9%)                                                                                                                                                                                                                               |
| Cleanliness at outlet         | Less than 100 particles of 0.3 $\mu\text{m}$ or larger per cubic foot<br>[Less than 35 particles per 10 liters (ANR)]                                                                                                                                                           |
| Oil mist density at outlet    | Max. 0.01 $\text{mg}/\text{m}^3$ (ANR)<br>( $\approx 0.008$ ppm)                                                                                                                                                                                                                |
| Life of element               | 1. Element color check window (If the element is found to have red spots, replace it immediately.)<br>2. Even if the element does not have red spots, when the pressure drop reaches 0.1MPa or 2 years has passed in operation, whichever comes the first, perform replacement. |

## Accessory

| Applicable model                             | AME150C  | AME250C  | AME350C  | AME450C  | AME550C  | AME650 | AME850 |
|----------------------------------------------|----------|----------|----------|----------|----------|--------|--------|
| Bracket assembly<br>(with 2 mounting screws) | AM-BM101 | AM-BM102 | AM-BM103 | AM-BM104 | AM-BM105 | BM56   | BM57   |

## Caution

Be sure to read this before handling.

Refer to back pages 1 and 2 for Safety Instructions, “Precautions for Handling Pneumatic Devices” (M-03-E3A) for Common Precautions, and back pages 3 through to 7 for Specific Product Precautions.

## How to Order



### AME150C to 550C

AME 550C - [ ] 10 [ ] - [ ]

#### Body size

|      |
|------|
| 150C |
| 250C |
| 350C |
| 450C |
| 550C |

#### Thread type

| Symbol | Type |
|--------|------|
| —      | Rc   |
| F      | G*1  |
| N      | NPT  |

\*1 Conforms to ISO1179-1.

#### Option

| Symbol | Description                        |
|--------|------------------------------------|
| —      | —                                  |
| F      | Rubber material: Fluororubber      |
| H      | For medium air pressure (1.6 MPa)  |
| R      | IN-OUT reversal direction          |
| V      | Degreasing wash, *3 white vaseline |

\*3 Only body/housing is degreasing washed.

#### Accessory

| Symbol | Description |
|--------|-------------|
| —      | —           |
| B      | Bracket *2  |

\*2 Bracket is included, (but not assembled).

#### Port size

| Symbol | Size | Applicable body size |      |      |      |      |
|--------|------|----------------------|------|------|------|------|
|        |      | 150C                 | 250C | 350C | 450C | 550C |
| 01     | 1/8  | ●                    |      |      |      |      |
| 02     | 1/4  | ●                    | ●    |      |      |      |
| 03     | 3/8  |                      | ●    | ●    |      |      |
| 04     | 1/2  |                      |      | ●    | ●    |      |
| 06     | 3/4  |                      |      |      | ●    | ●    |
| 10     | 1    |                      |      |      |      | ●    |

## Options

### Symbol F: Rubber material: Fluororubber

Fluororubber is used for the parts such as O-ring and gasket.

### Symbol H: For medium air pressure (1.6 MPa)

Can be used up to 1.6 MPa at maximum.

### Symbol R: IN-OUT reversal direction

Air flow in the separator is changed to right to left.  
(Air flow direction of the standard: Left to right.)

### Symbol V: Degreasing wash, white vaseline

Body/housing is degreasing washed. The lubrication grease for O-ring and gasket is changed to white vaseline.



## How to Order

### AME650/850

**AME 650 - [ ] 10 [ ] - [ ] - [ ]**

#### Body size

|     |
|-----|
| 650 |
| 850 |

#### Thread type

| Symbol | Type |
|--------|------|
| —      | Rc   |
| F      | G    |
| N      | NPT  |

#### Port size

| Symbol | Size  | Applicable body size |     |
|--------|-------|----------------------|-----|
|        |       | 650                  | 850 |
| 10     | 1     | ●                    | —   |
| 14     | 1 1/2 | ●                    | ●   |
| 20     | 2     | —                    | ●   |

#### Made to Order

("How to Order" and the applicable models are different from those shown on this page. Be sure to refer to the page "Made to Order".)

| Symbol | Description                   | Page for details |
|--------|-------------------------------|------------------|
| —      | —                             | —                |
| X12    | White vaseline specifications | P.65             |

#### Option

| Symbol | Description               |
|--------|---------------------------|
| —      | —                         |
| R      | IN-OUT reversal direction |

#### Accessory

| Symbol | Description |
|--------|-------------|
| —      | —           |
| B      | Bracket*    |

\* Bracket is included, (but not assembled).



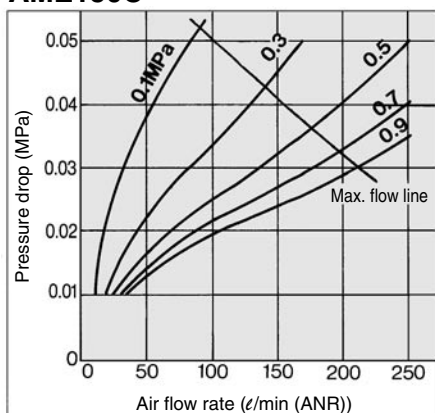
Note) Refer to "How to Order Bowl Assembly" on page 59.

## Flow Characteristics (Element initial condition)

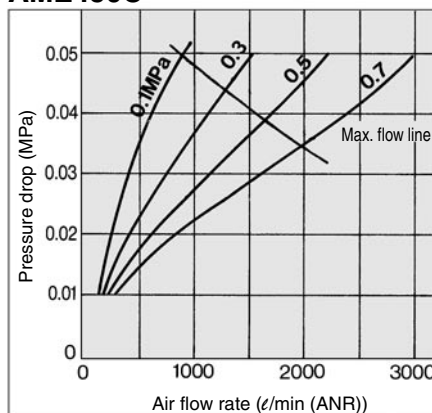


Note) Compressed air over max. flow line in the table below may not meet the specifications of the product. It may cause damage to the element.

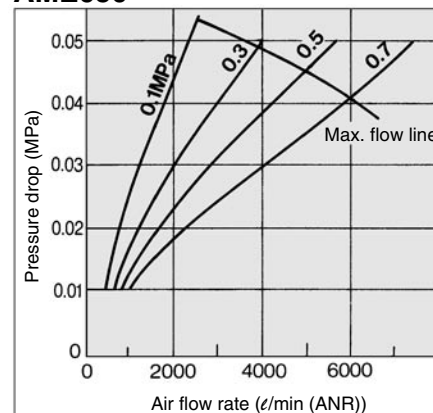
**AME150C**



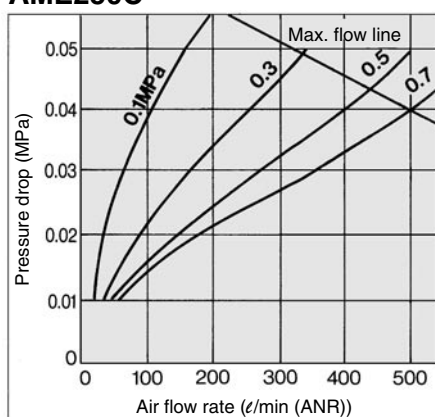
**AME450C**



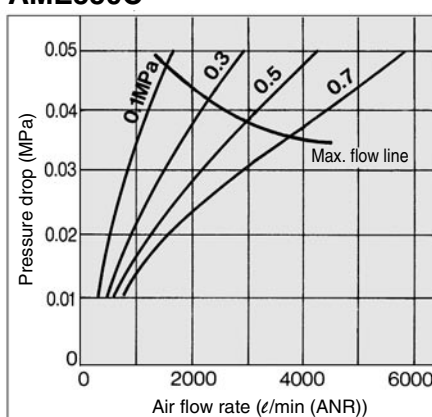
**AME650**



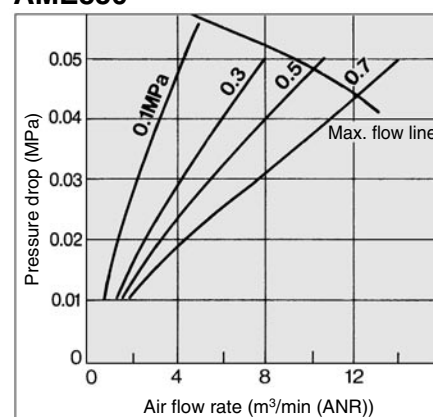
**AME250C**



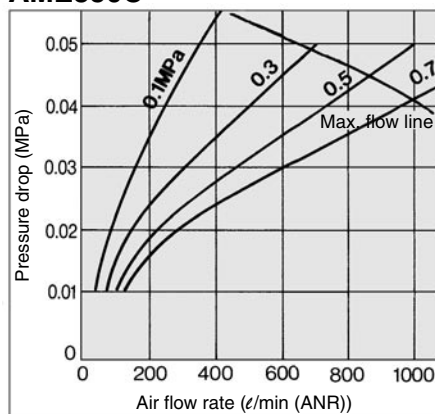
**AME550C**



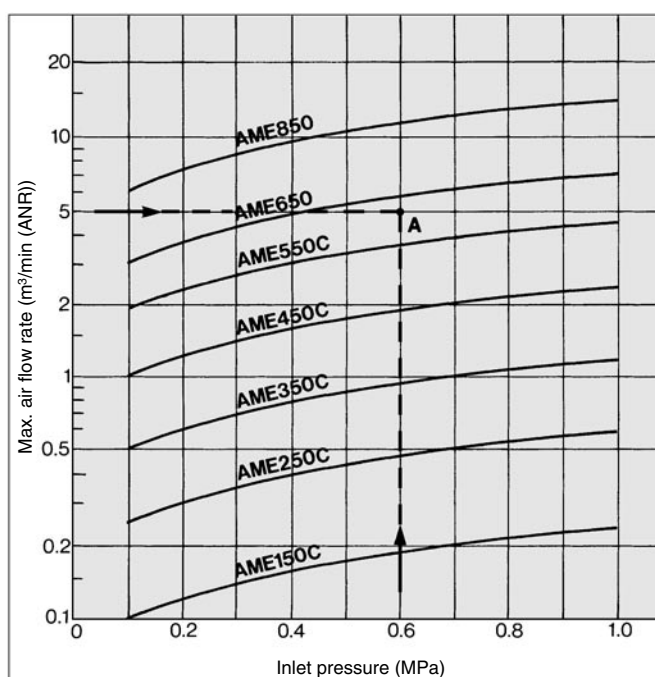
**AME850**



**AME350C**



## Maximum Air Flow



## Model Selection

Select a model in accordance with the following procedure taking the inlet pressure and the max. air flow rate into consideration.

(Example) Inlet pressure: 0.6 MPa

Max. air flow rate: 5 m³/min (ANR)

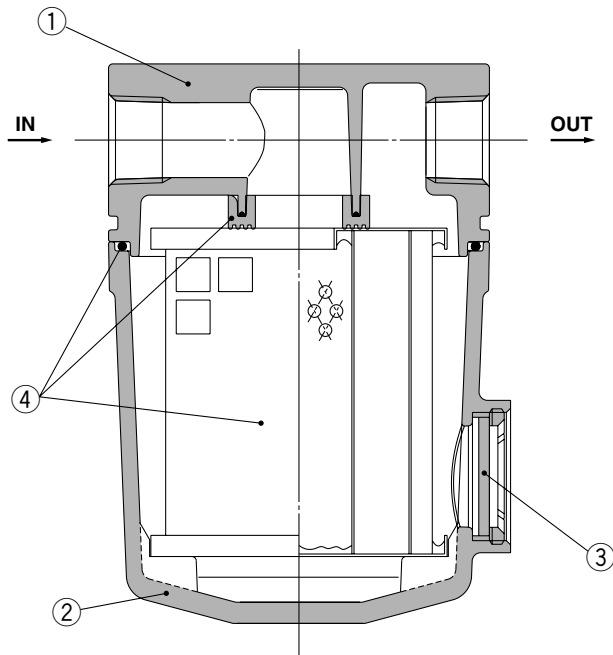
1. Obtain the intersecting point A of inlet pressure and max. air flow rate in the graph.
2. The AME650 is obtained when the max. flow line is above the intersecting point A in the graph.



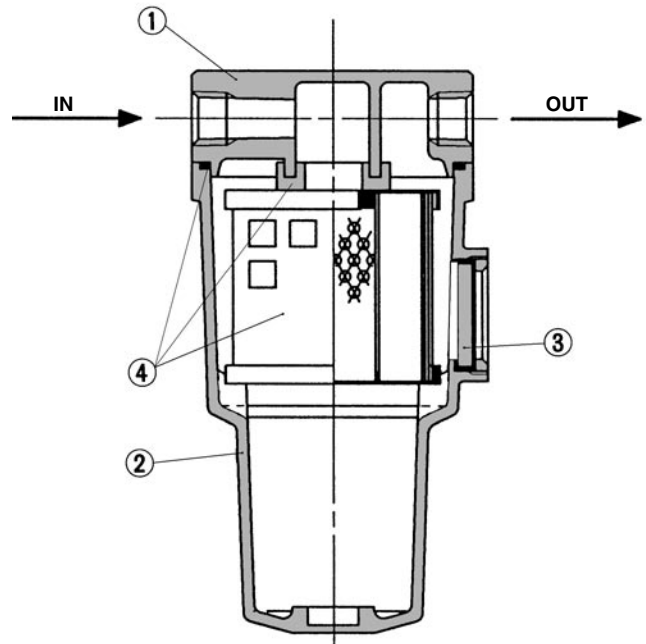
Note) Make sure to select a model that has the max. flow line above the obtained intersecting point. With a model that has the max. flow line below the obtained intersecting point, the flow rate will be exceeded, thus leading to a problem such as being unable to satisfy the specifications.

## Construction

### AME150C to 550C



### AME650/850



## Component Parts

| No. | Description        | Material             | Note                           |
|-----|--------------------|----------------------|--------------------------------|
| 1   | <b>Body</b>        | Aluminum die-casted  | Chrome treated                 |
| 2   | <b>Housing</b>     | Aluminum die-casted* | Epoxy coating on inner surface |
| 3   | <b>Sight glass</b> | Tempered glass       | —                              |

\* The AME850 is aluminum casted.



Note) Refer to "How to Order Bowl Assembly" on page 59.



Note) Sight glass is indicated in the figure for easy understanding of component parts. However, it differs from the actual construction. Refer to dimensions on pages 47 through to 49 for details.

## Replacement Parts

| No. | Description             | Material            | Applicable model                | Model                    |                          |                          |                          |                          |                |                |
|-----|-------------------------|---------------------|---------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|----------------|----------------|
|     |                         |                     |                                 | AME150C                  | AME250C                  | AME350C                  | AME450C                  | AME550C                  | AME650         | AME850         |
| 4   | <b>Element assembly</b> | Glass fiber, others | Except option F<br>For option F | AME-EL150<br>AME-EL150-F | AME-EL250<br>AME-EL250-F | AME-EL350<br>AME-EL350-F | AME-EL450<br>AME-EL450-F | AME-EL550<br>AME-EL550-F | AME-EL650<br>— | AME-EL850<br>— |

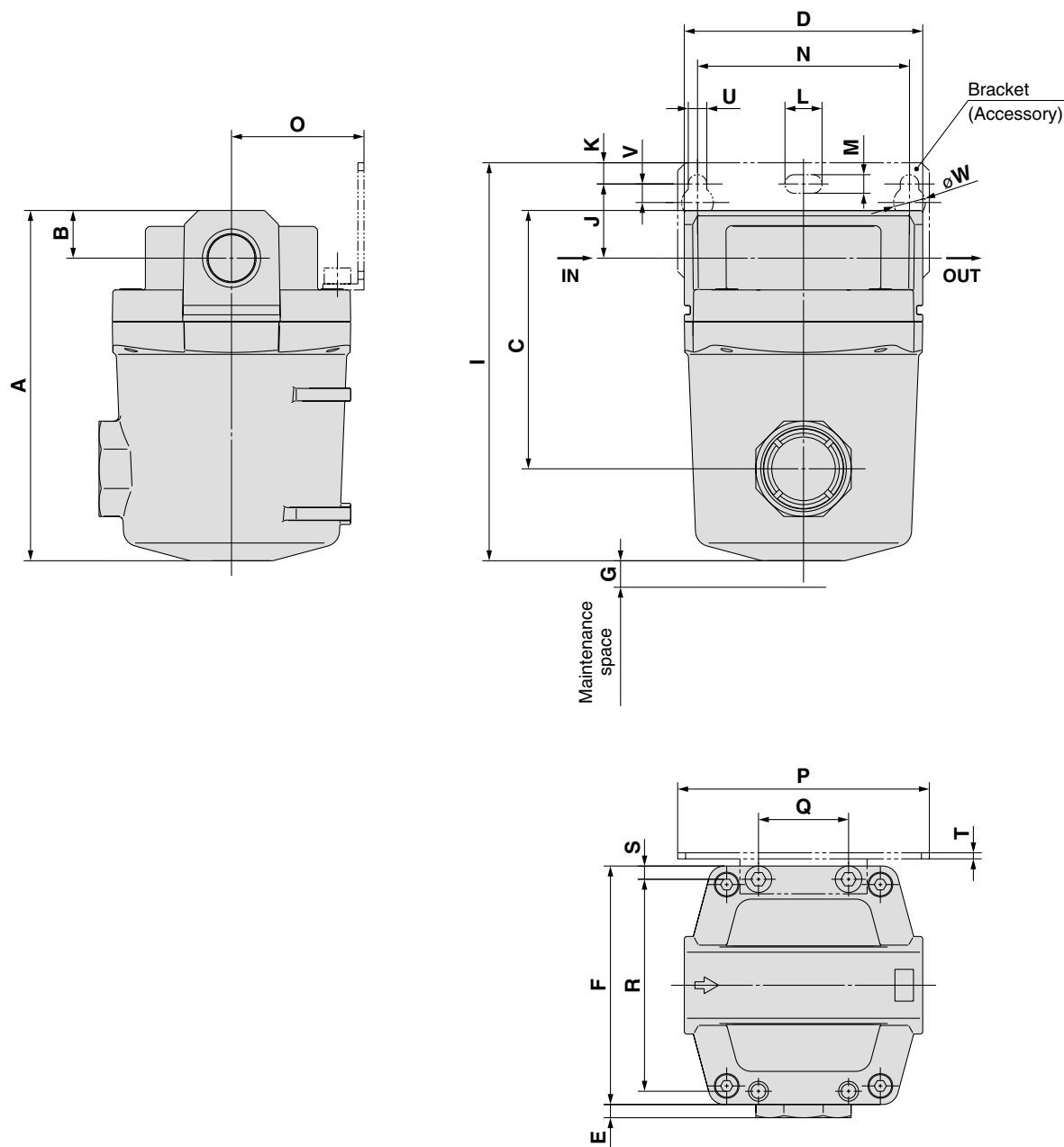
\* Element assembly: With gasket (1 pc.) and O-ring (1 pc.)

\* Element assemblies for Made to Order (X12, X20) are same as those for standard (see the above table).

# Series AME

## Dimensions

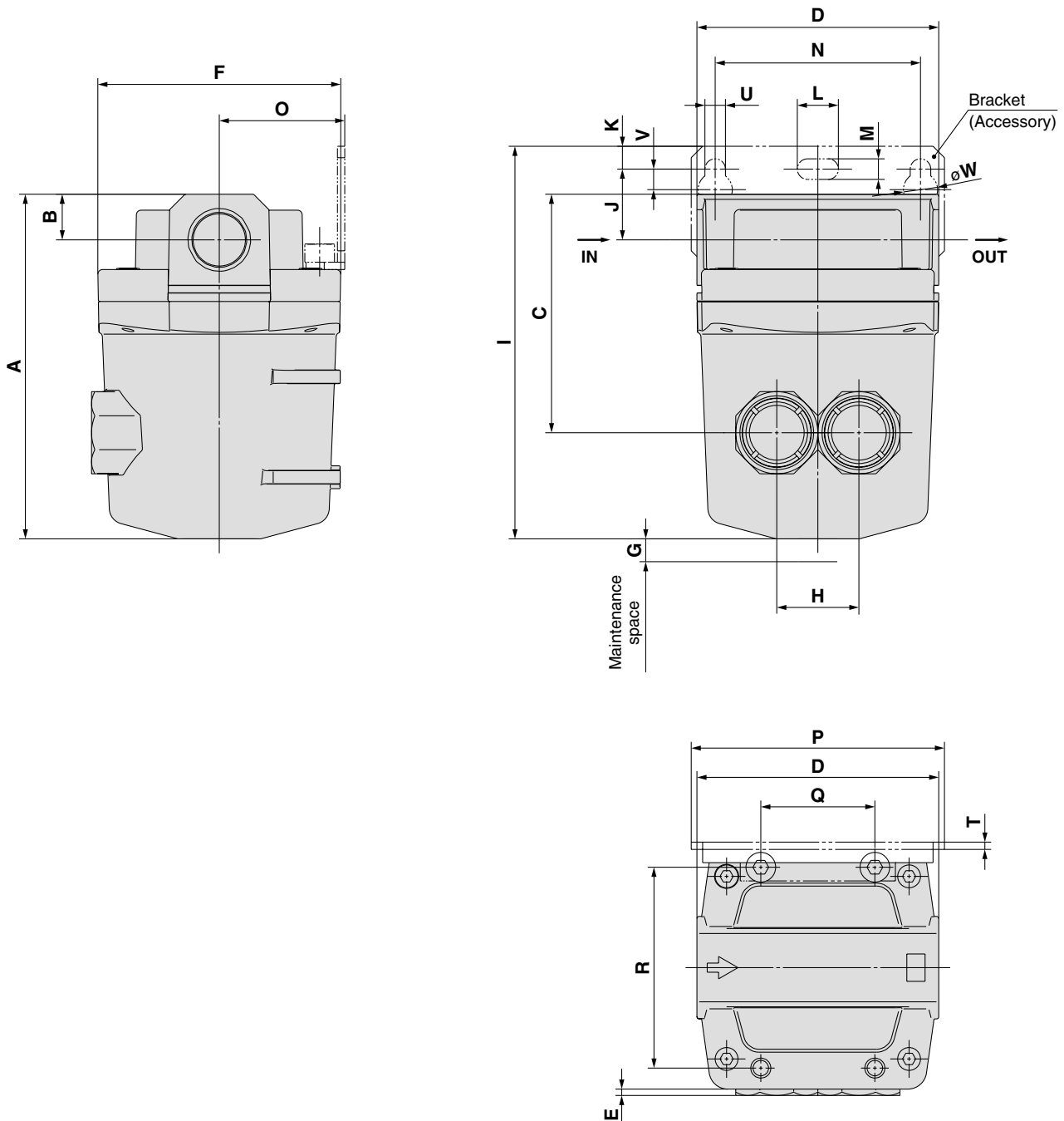
### AME150C to 350C



| (mm)    |           |     |    |    |    |     |    |    |                            |    |    |   |   |   |    |   |    |    |    |    |    |     |     |
|---------|-----------|-----|----|----|----|-----|----|----|----------------------------|----|----|---|---|---|----|---|----|----|----|----|----|-----|-----|
| Model   | Port size | A   | B  | C  | D  | E   | F  | G  | Bracket related dimensions |    |    |   |   |   |    |   |    |    |    |    |    |     |     |
|         |           |     |    |    |    |     |    |    | I                          | N  | J  | K | U | V | L  | M | W  | O  | P  | Q  | R  | S   | T   |
| AME150C | 1/8, 1/4  | 83  | 10 | 54 | 63 | 7.5 | 63 | 10 | 98.5                       | 56 | 20 | 5 | 6 | 6 | 12 | 6 | 10 | 35 | 70 | 26 | 54 | 4.5 | 1.6 |
| AME250C | 1/4, 3/8  | 103 | 14 | 73 | 76 | 5   | 76 | 10 | 121                        | 66 | 24 | 8 | 6 | 6 | 12 | 6 | 10 | 40 | 80 | 28 | 66 | 5   | 2   |
| AME350C | 3/8, 1/2  | 132 | 18 | 98 | 90 | 5   | 90 | 10 | 150                        | 80 | 28 | 8 | 7 | 7 | 14 | 7 | 12 | 50 | 95 | 34 | 80 | 5   | 2.3 |

## Dimensions

### AME450C/550C



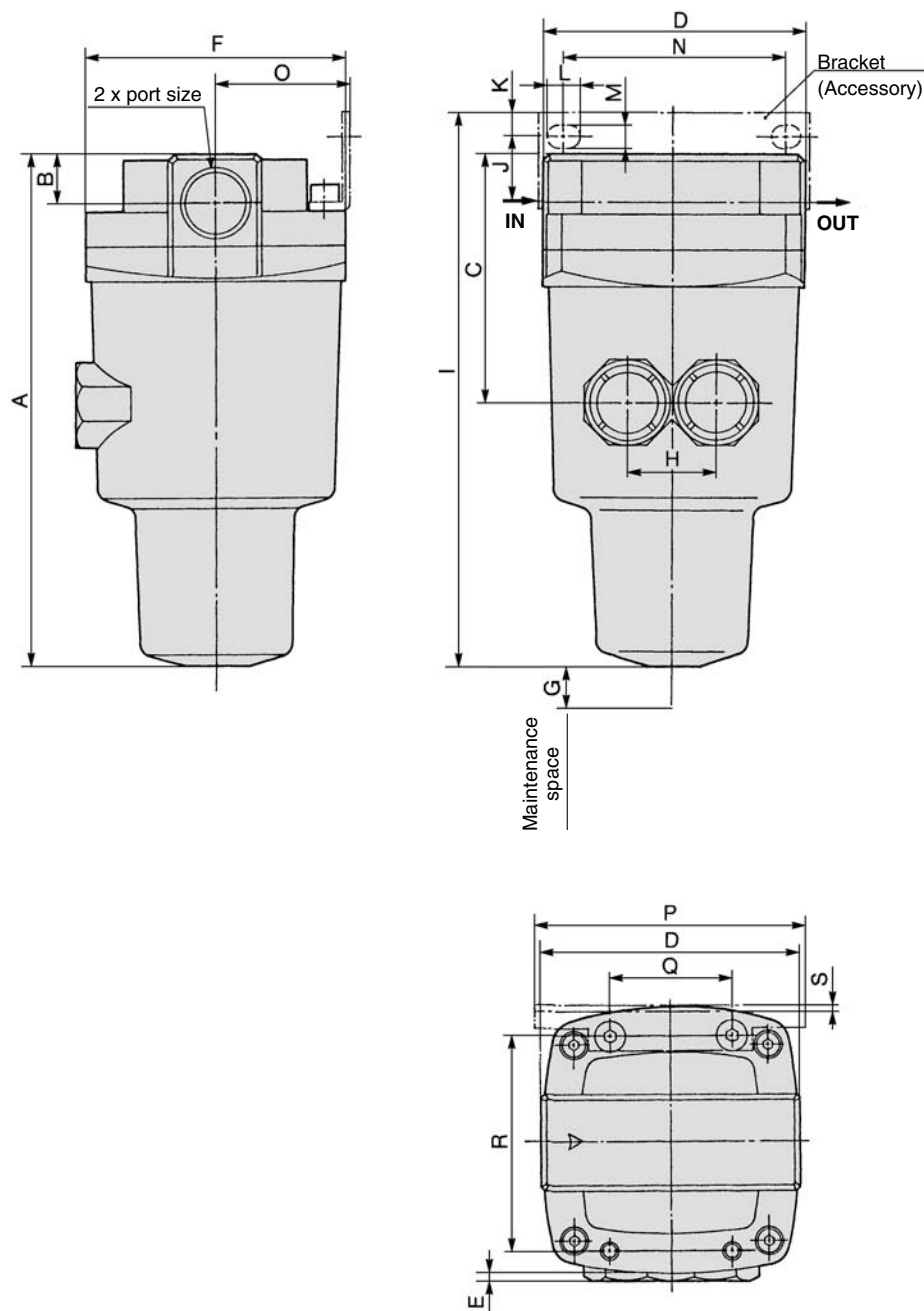
|         |           |     |    |     |     |   |     |    |    |                            |     |    |    |   |   |    |   |    |    |     |    |     | (mm) |
|---------|-----------|-----|----|-----|-----|---|-----|----|----|----------------------------|-----|----|----|---|---|----|---|----|----|-----|----|-----|------|
| Model   | Port size | A   | B  | C   | D   | E | F   | G  | H  | Bracket related dimensions |     |    |    |   |   |    |   |    |    |     |    |     |      |
|         |           |     |    |     |     |   |     |    |    | I                          | N   | J  | K  | U | V | L  | M | W  | O  | P   | Q  | R   | T    |
| AME450C | 1/2, 3/4  | 151 | 20 | 105 | 106 | 3 | 106 | 10 | 36 | 172                        | 90  | 31 | 10 | 9 | 9 | 18 | 9 | 15 | 55 | 111 | 50 | 88  | 3.2  |
| AME550C | 3/4, 1    | 187 | 24 | 130 | 122 | 3 | 122 | 15 | 44 | 206                        | 100 | 33 | 10 | 9 | 9 | 18 | 9 | 15 | 65 | 126 | 60 | 102 | 3.2  |

(mm)

# Series AME

## Dimensions

### AME650/850



| (mm)   |           |     |    |     |     |   |     |    |    |                            |    |    |    |    |     |     |     |     |     |     |
|--------|-----------|-----|----|-----|-----|---|-----|----|----|----------------------------|----|----|----|----|-----|-----|-----|-----|-----|-----|
| Model  | Port size | A   | B  | C   | D   | E | F   | G  | H  | Bracket related dimensions |    |    |    |    |     |     |     |     |     |     |
|        |           |     |    |     |     |   |     |    |    | I                          | J  | K  | L  | M  | N   | O   | P   | Q   | R   | S   |
| AME650 | 1, 1½     | 291 | 32 | 167 | 160 | — | 160 | 10 | 66 | 314                        | 40 | 15 | 20 | 11 | 150 | 85  | 180 | 76  | 136 | 4.5 |
| AME850 | 1½, 2     | 403 | 42 | 235 | 220 | — | 220 | 10 | 96 | 406                        | 30 | 15 | 24 | 13 | 180 | 120 | 220 | 110 | 184 | 6   |

# Odour Removal Filter

## Series AMF

Efficiently can remove odour in compressed air with an activated carbon element. The unit is designed for use in the area such as a clean room where odours must be avoided.  
Can remove odour and gas ingredients in compressed air.  
Activated carbon element with large filtration area.  
Easy replacement of elements.

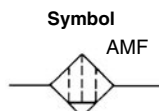
Modular connection is possible with AMF150C to 550C.  
(For details, refer to page 58.)



AMF150C to 350C AMF450C/550C



AMF650/850



**Made to Order**  
(For details, refer to page 63.)

### Model

| Model                                           | AMF150C  | AMF250C  | AMF350C  | AMF450C  | AMF550C | AMF650   | AMF850   |
|-------------------------------------------------|----------|----------|----------|----------|---------|----------|----------|
| Rated flow (Note)<br>( $\ell/\text{min}$ (ANR)) | 200      | 500      | 1000     | 2000     | 3700    | 6000     | 12000    |
| Port size                                       | 1/8, 1/4 | 1/4, 3/8 | 3/8, 1/2 | 1/2, 3/4 | 3/4, 1  | 1, 1 1/2 | 1 1/2, 2 |
| Mass (kg)                                       | 0.3      | 0.48     | 0.8      | 1.3      | 2.0     | 4.2      | 10.5     |



Note) Max. flow at 0.7 MPa.

Max. flow varies depending on the operating pressure.

Refer to "Flow Characteristics" (page 53) and "Maximum Air Flow" (page 52).

### Specifications

|                               |                                                                                                                                                                                                                             |
|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Fluid                         | Compressed air                                                                                                                                                                                                              |
| Max. operating pressure       | 1.0 MPa                                                                                                                                                                                                                     |
| Min. operating pressure       | 0.05 MPa                                                                                                                                                                                                                    |
| Proof pressure                | 1.5 MPa                                                                                                                                                                                                                     |
| Ambient and fluid temperature | 5 to 60°C                                                                                                                                                                                                                   |
| Nominal filtration rating     | 0.01 $\mu\text{m}$ (Filtration efficiency: 99.9%)                                                                                                                                                                           |
| Cleanliness at outlet         | Less than 100 particles of 0.3 $\mu\text{m}$ or larger per cubic foot<br>[Less than 35 particles per 10 liters (ANR)]<br>(The "AME" series is required on the inlet side.)                                                  |
| Oil mist density at outlet    | Max. 0.004 $\text{mg}/\text{m}^3$ (ANR) ( $\approx 0.0032$ ppm)<br>(The "AME" series is required on the inlet side.)                                                                                                        |
| Life of element               | 1. Replace when the secondary side smells of oil.<br>2. Even if there is no decrease in deodorization performance, when the pressure drop reaches 0.1MPa or 2 years has passed, whichever comes early, perform replacement. |

### Accessory (Option)

| Applicable model                             | AMF150C  | AMF250C  | AMF350C  | AMF450C  | AMF550C  | AMF650 | AMF850 |
|----------------------------------------------|----------|----------|----------|----------|----------|--------|--------|
| Bracket assembly<br>(with 2 mounting screws) | AM-BM101 | AM-BM102 | AM-BM103 | AM-BM104 | AM-BM105 | BM56   | BM57   |

### ⚠ Caution

Be sure to read this before handling.  
Refer to back pages 1 and 2 for Safety Instructions, "Precautions for Handling Pneumatic Devices" (M-03-E3A) for Common Precautions, and back pages 3 through to 7 for Specific Product Precautions.

## How to Order



### AMF150C to 550C

AMF 550C - [ ] 10 [ ] - [ ]

#### Body size

|      |
|------|
| 150C |
| 250C |
| 350C |
| 450C |
| 550C |

#### Thread type

| Symbol | Type |
|--------|------|
| —      | Rc   |
| F      | G*1  |
| N      | NPT  |

\*1 Conforms to ISO1179-1.

#### Option

| Symbol | Description                       |
|--------|-----------------------------------|
| —      | —                                 |
| F      | Rubber material: Fluororubber     |
| H      | For medium air pressure (1.6 MPa) |
| R      | IN-OUT reversal direction         |
| V      | Degreasing wash,*3 white vaseline |

\*3 Only body/housing is degreasing washed.

#### Accessory

| Symbol | Description |
|--------|-------------|
| —      | —           |
| B      | Bracket *2  |

\*2 Bracket is included, (but not assembled).

#### Port size

| Symbol | Size | Applicable body size |      |      |      |      |
|--------|------|----------------------|------|------|------|------|
|        |      | 150C                 | 250C | 350C | 450C | 550C |
| 01     | 1/8  | ●                    |      |      |      |      |
| 02     | 1/4  | ●                    | ●    |      |      |      |
| 03     | 3/8  |                      | ●    | ●    |      |      |
| 04     | 1/2  |                      |      | ●    | ●    |      |
| 06     | 3/4  |                      |      |      | ●    | ●    |
| 10     | 1    |                      |      |      |      | ●    |

## Options

### Symbol F: Rubber material: Fluororubber

Fluororubber is used for the parts such as O-ring and gasket.

### Symbol H: For medium air pressure (1.6 MPa)

Can be used up to 1.6 MPa at maximum.

### Symbol R: IN-OUT reversal direction

Air flow in the separator is changed to right to left.  
(Air flow direction of the standard: Left to right.)

### Symbol V: Degreasing wash, white vaseline

Body/housing is degreasing washed. The lubrication grease for O-ring and gasket is changed to white vaseline.



## How to Order

### AMF650/850

AMF 650 - 10 - - -

#### Body size

|     |
|-----|
| 650 |
| 850 |

#### Thread type

| Symbol | Type |
|--------|------|
| —      | Rc   |
| F      | G    |
| N      | NPT  |

#### Port size

| Symbol | Size  | Applicable body size |     |
|--------|-------|----------------------|-----|
|        |       | 650                  | 850 |
| 10     | 1     | ●                    | —   |
| 14     | 1 1/2 | ●                    | ●   |
| 20     | 2     | —                    | ●   |

#### Made to Order

("How to Order" and the applicable models are different from those shown on this page. Be sure to refer to "Made to Order".)

| Symbol | Description                   | Page for details |
|--------|-------------------------------|------------------|
| —      | —                             | —                |
| X12    | White vaseline specifications | P.65             |

#### Option

| Symbol | Description               |
|--------|---------------------------|
| —      | —                         |
| R      | IN-OUT reversal direction |

#### Accessory

| Symbol | Description |
|--------|-------------|
| —      | —           |
| B      | Bracket*    |

\* Bracket is included, (but not assembled).



Note) Refer to "How to Order Bowl Assembly" on page 59.

## Model Selection

Select a model in accordance with the following procedure taking the inlet pressure and the max. air flow rate into consideration.

(Example) Inlet pressure: 0.6 MPa

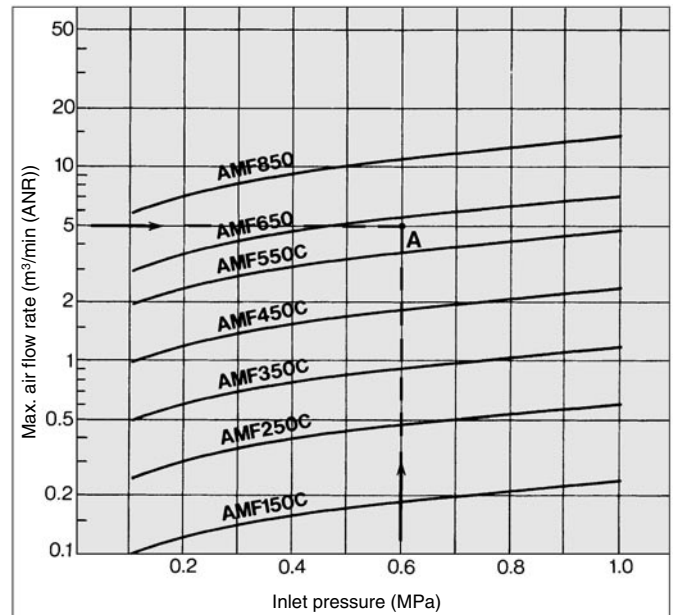
Max. air flow rate: 5 m<sup>3</sup>/min (ANR)

1. Obtain the intersecting point A of inlet pressure and max. air flow rate in the graph.
2. The AMF650 is obtained when the max. flow line is above the intersecting point A in the graph.



Note) Make sure to select a model that has the max. flow line above the obtained intersecting point. With a model that has the max. flow line below the obtained intersecting point, the flow rate will be exceeded, thus leading to a problem such as being unable to satisfy the specifications.

## Maximum Air Flow



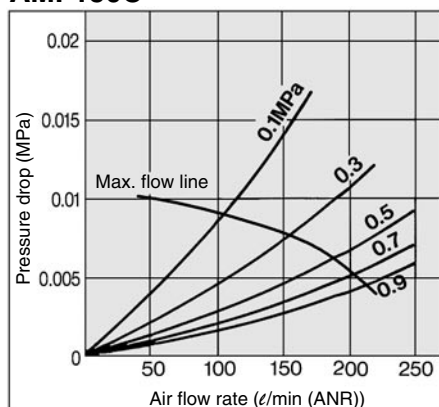
# Series AMF

## Flow Characteristics/Refer to “Model Selection” on page 54. (Element initial condition)

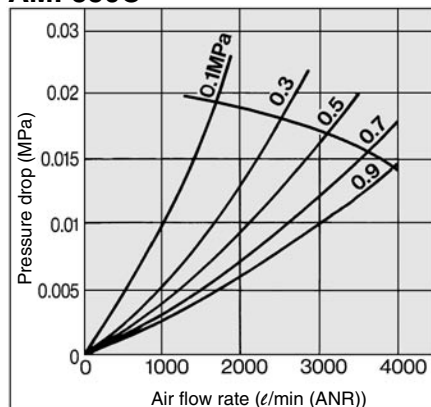


Note) Compressed air over max. flow line in the table below may not meet the specifications of the product.  
It may cause damage to the element.

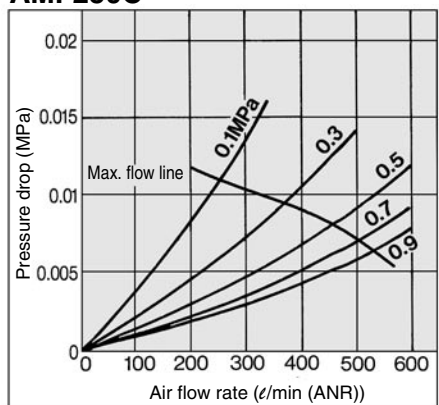
**AMF150C**



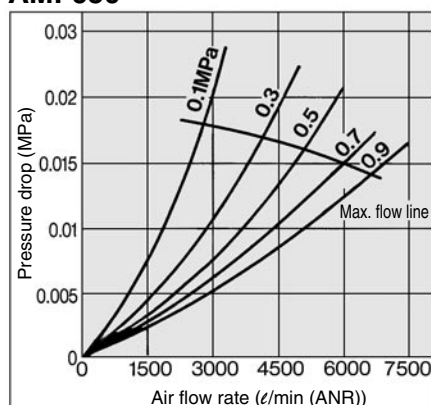
**AMF550C**



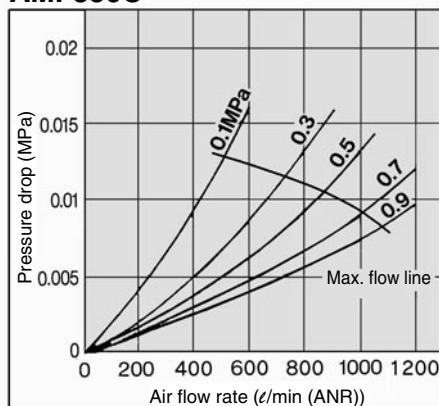
**AMF250C**



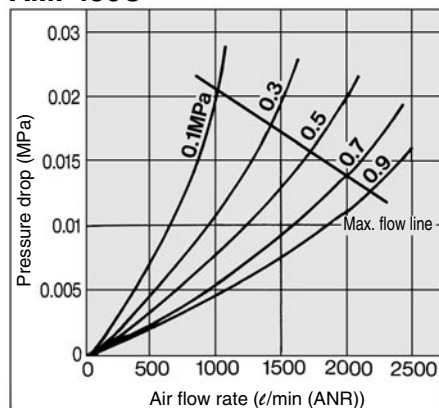
**AMF650**



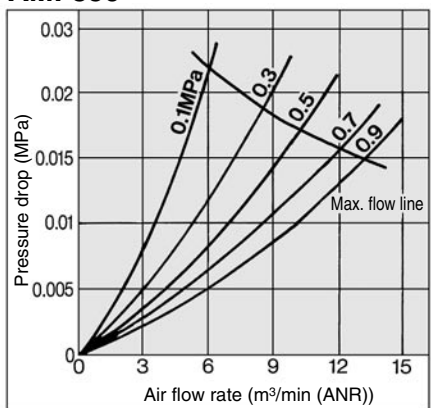
**AMF350C**



**AMF450C**

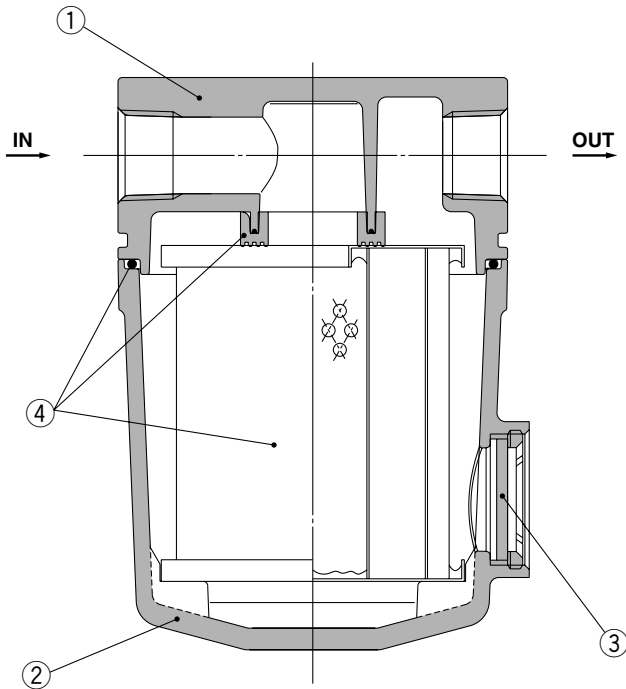


**AMF850**

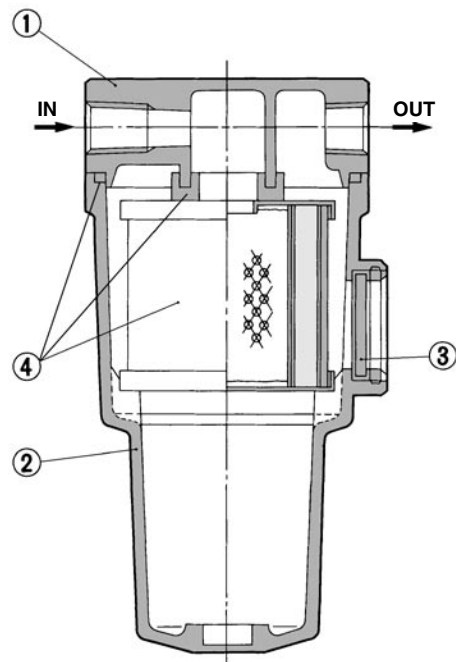


## Construction

### AMF150C to 550C



### AMF650/850



### Component Parts

| No. | Description        | Material             | Note                           |
|-----|--------------------|----------------------|--------------------------------|
| 1   | <b>Body</b>        | Aluminum die-casted  | Chrome treated                 |
| 2   | <b>Housing</b>     | Aluminum die-casted* | Epoxy coating on inner surface |
| 3   | <b>Sight glass</b> | Tempered glass       | —                              |

\* The AMF850 is aluminum casted.



Note) Refer to "How to Order Bowl Assembly" on page 59.



Note) Sight glass is indicated in the figure for easy understanding of component parts. However, it differs from the actual construction. Refer to dimensions on pages 55 through to 57 for details.

### Replacement Parts

| No. | Description      | Material            | Applicable model | Model       |             |             |             |             |           |           |
|-----|------------------|---------------------|------------------|-------------|-------------|-------------|-------------|-------------|-----------|-----------|
|     |                  |                     |                  | AMF150C     | AMF250C     | AMF350C     | AMF450C     | AMF550C     | AMF650    | AMF850    |
| 4   | Element assembly | Glass fiber, others | Except option F  | AMF-EL150   | AMF-EL250   | AMF-EL350   | AMF-EL450   | AMF-EL550   | AMF-EL650 | AMF-EL850 |
|     |                  |                     | For option F     | AMF-EL150-F | AMF-EL250-F | AMF-EL350-F | AMF-EL450-F | AMF-EL550-F | —         | —         |

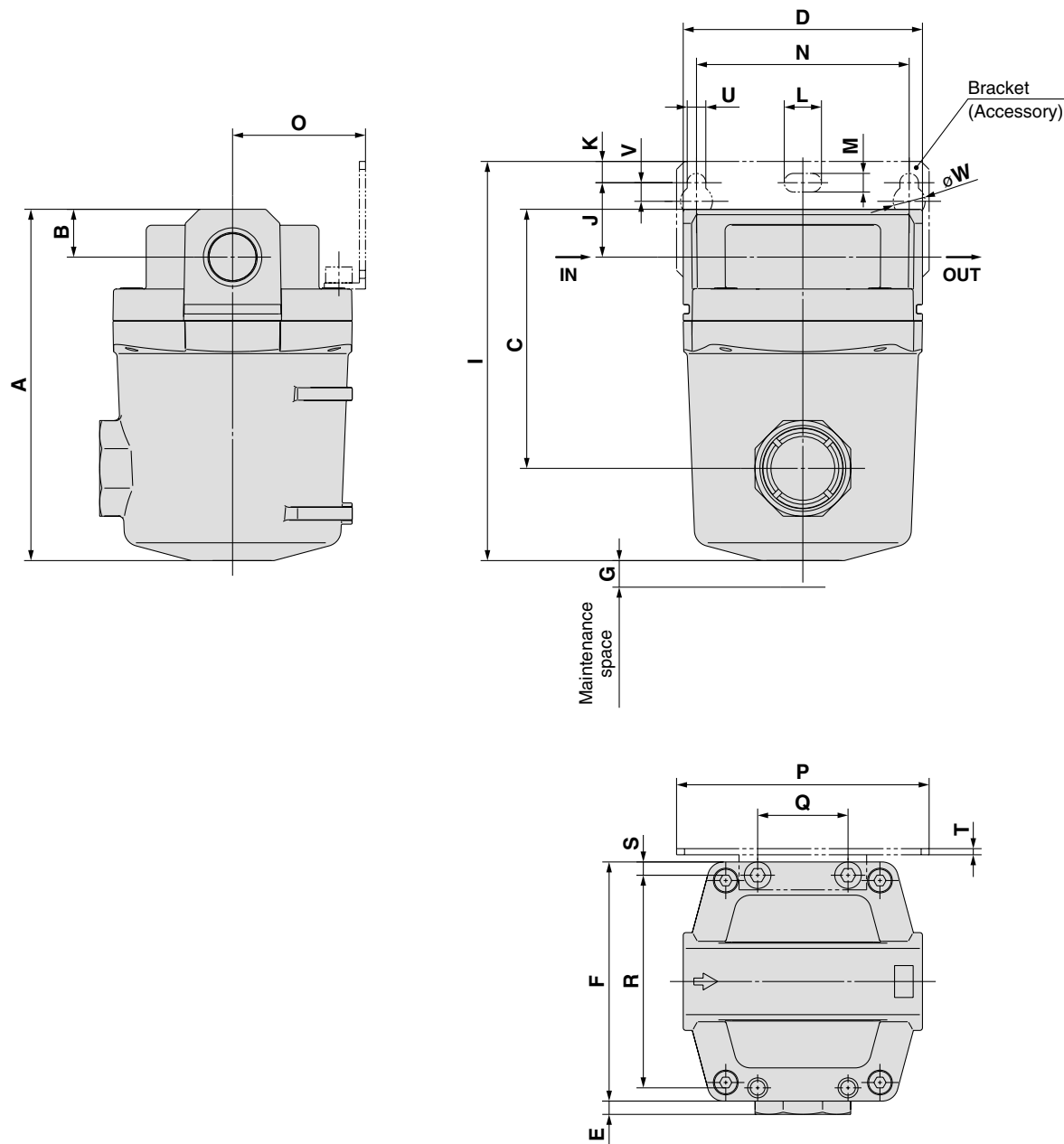
\* Element assembly: With gasket (1 pc.) and O-ring (1 pc.)

\* Element assemblies for Made to Order (X12, X20) are same as those for standard (see the above table).

# Series AMF

## Dimensions

### AMF150C to 350C

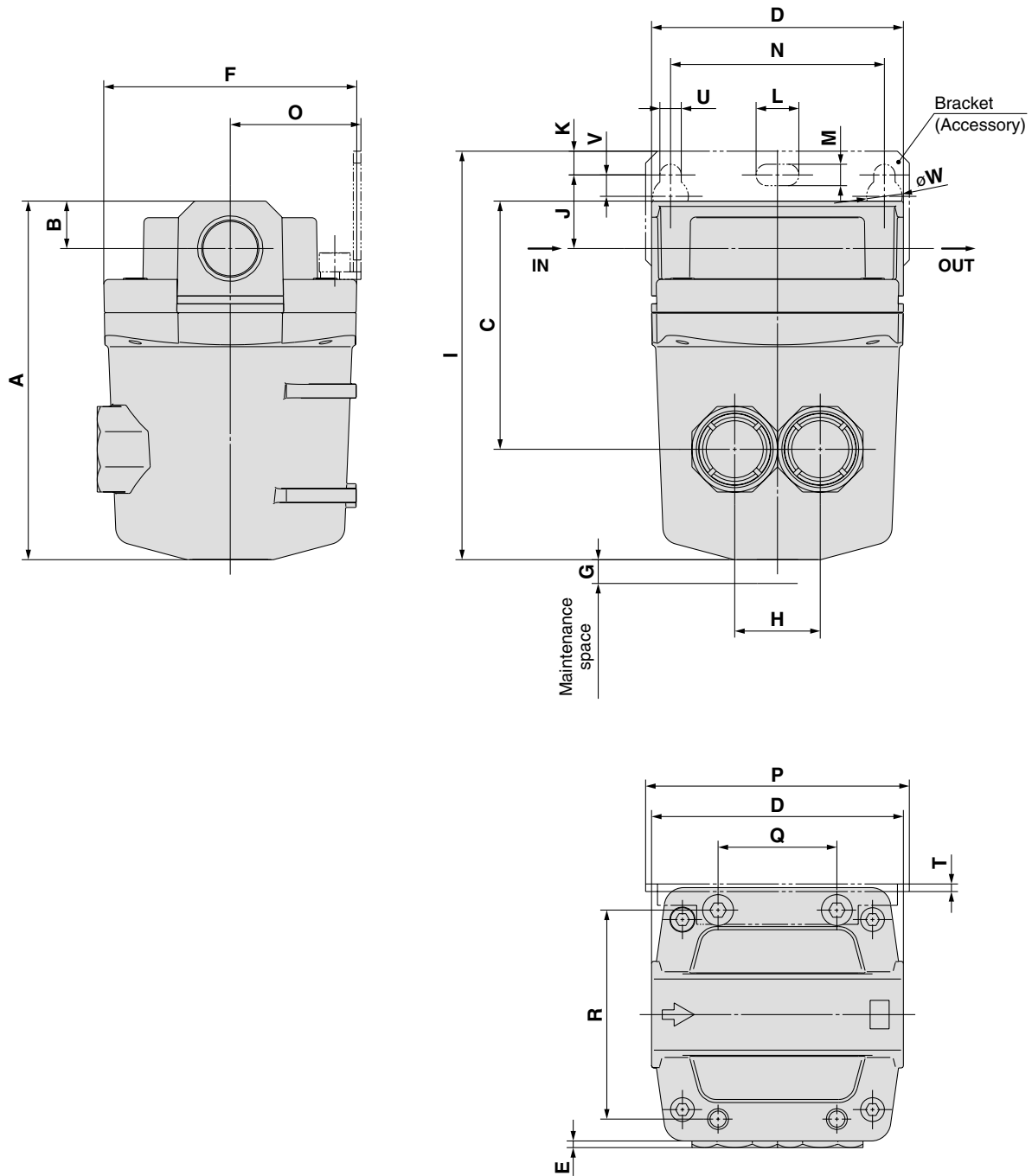


| (mm)    |           |     |    |    |    |     |    |    |                            |    |    |   |   |   |    |   |    |    |    |    |    |     |     |
|---------|-----------|-----|----|----|----|-----|----|----|----------------------------|----|----|---|---|---|----|---|----|----|----|----|----|-----|-----|
| Model   | Port size | A   | B  | C  | D  | E   | F  | G  | Bracket related dimensions |    |    |   |   |   |    |   |    |    |    |    |    |     |     |
|         |           |     |    |    |    |     |    |    | I                          | N  | J  | K | U | V | L  | M | W  | O  | P  | Q  | R  | S   | T   |
| AMF150C | 1/8, 1/4  | 83  | 10 | 54 | 63 | 7.5 | 63 | 10 | 98.5                       | 56 | 20 | 5 | 6 | 6 | 12 | 6 | 10 | 35 | 70 | 26 | 54 | 4.5 | 1.6 |
| AMF250C | 1/4, 3/8  | 103 | 14 | 73 | 76 | 5   | 76 | 10 | 121                        | 66 | 24 | 8 | 6 | 6 | 12 | 6 | 10 | 40 | 80 | 28 | 66 | 5   | 2   |
| AMF350C | 3/8, 1/2  | 132 | 18 | 98 | 90 | 5   | 90 | 10 | 150                        | 80 | 28 | 8 | 7 | 7 | 14 | 7 | 12 | 50 | 95 | 34 | 80 | 5   | 2.3 |

(mm)

## Dimensions

### AMF450C/550C



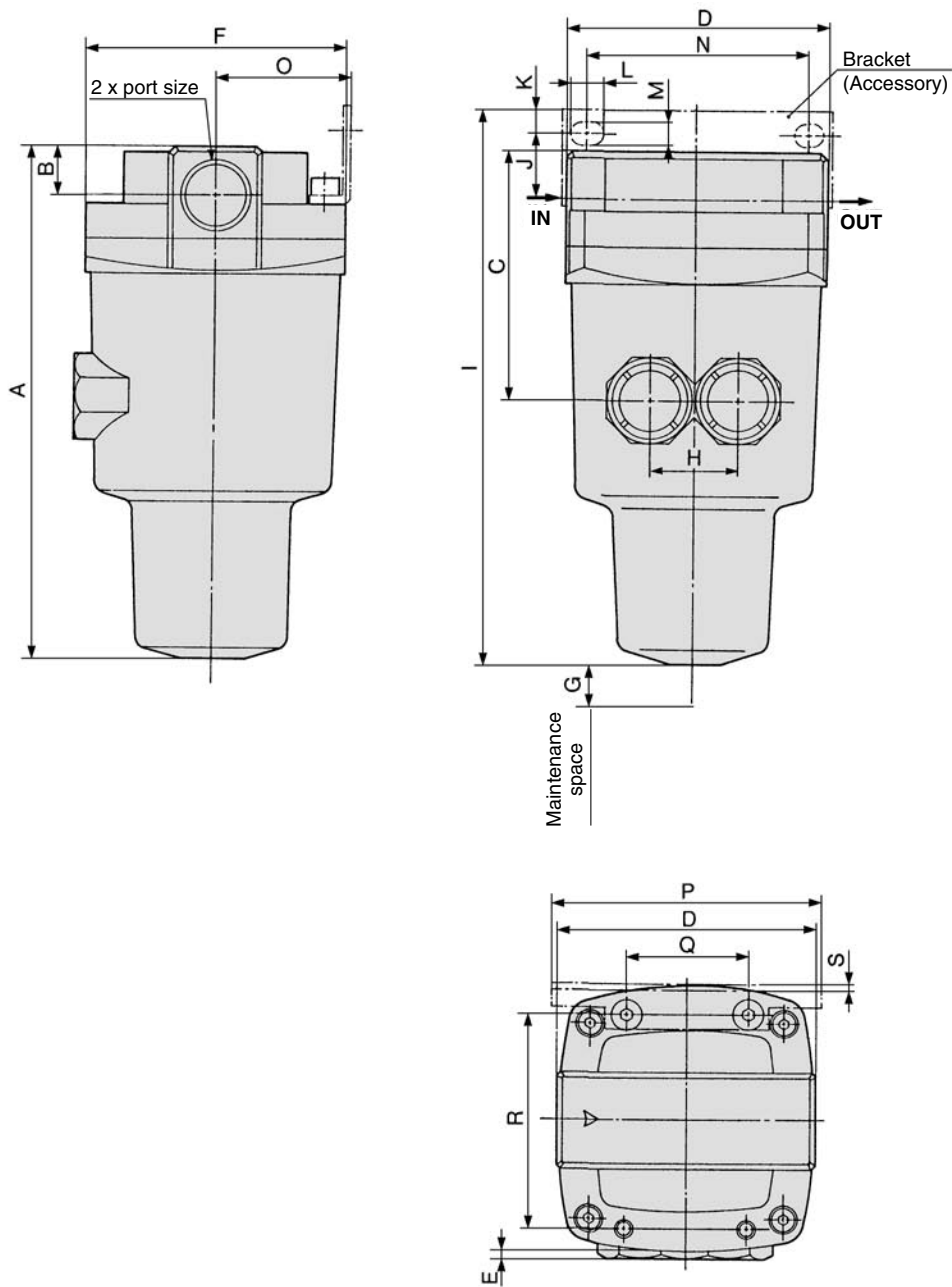
| (mm)    |           |     |    |     |     |   |     |    |    |                            |     |    |    |   |   |    |   |    |    |     |    |     |     |
|---------|-----------|-----|----|-----|-----|---|-----|----|----|----------------------------|-----|----|----|---|---|----|---|----|----|-----|----|-----|-----|
| Model   | Port size | A   | B  | C   | D   | E | F   | G  | H  | Bracket related dimensions |     |    |    |   |   |    |   |    |    |     |    |     |     |
|         |           |     |    |     |     |   |     |    |    | I                          | N   | J  | K  | U | V | L  | M | W  | O  | P   | Q  | R   | T   |
| AMF450C | 1/2, 3/4  | 151 | 20 | 105 | 106 | 3 | 106 | 10 | 36 | 172                        | 90  | 31 | 10 | 9 | 9 | 18 | 9 | 15 | 55 | 111 | 50 | 88  | 3.2 |
| AMF550C | 3/4, 1    | 187 | 24 | 130 | 122 | 3 | 122 | 15 | 44 | 206                        | 100 | 33 | 10 | 9 | 9 | 18 | 9 | 15 | 65 | 126 | 60 | 102 | 3.2 |

(mm)

# Series AMF

## Dimensions

### AMF650/850



| Model  | Port size | A   | B  | C   | D   | E | F   | G  | H  | Bracket related dimensions |    |    |    |    |     |     |     |     |     |     |  |
|--------|-----------|-----|----|-----|-----|---|-----|----|----|----------------------------|----|----|----|----|-----|-----|-----|-----|-----|-----|--|
|        |           |     |    |     |     |   |     |    |    | I                          | J  | K  | L  | M  | N   | O   | P   | Q   | R   | S   |  |
| AMF650 | 1, 1 1/2  | 291 | 32 | 167 | 160 | — | 160 | 10 | 66 | 314                        | 40 | 15 | 20 | 11 | 150 | 85  | 180 | 76  | 136 | 4.5 |  |
| AMF850 | 1 1/2, 2  | 403 | 42 | 235 | 220 | — | 220 | 10 | 96 | 406                        | 30 | 15 | 24 | 13 | 180 | 120 | 220 | 110 | 184 | 6   |  |

# Series AMF

## Spacer for Modular Connection

Select a spacer from those listed below when combining modular type AFF2C to 22C, AM□150C to 550C. The spacer must be ordered separately.

(Note: Spacer with bracket (Y200T to Y600T) cannot be used.)

### Caution

#### Modular connection

Mount the attached bracket on one side when connecting 2 sets.

Mount the attached brackets on both sides when connecting 3 sets or more.

As a guideline for the number of brackets, one bracket should be mounted for every 2 products.

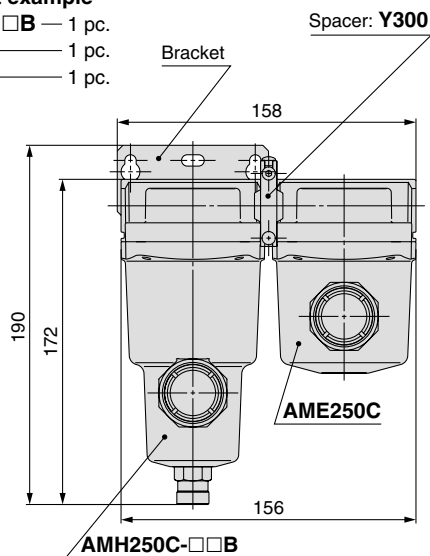
### Combination examples of modular applicable products

#### Arrangement example

AMH250C-□□B — 1 pc.

AME250C — 1 pc.

Y300 — 1 pc.



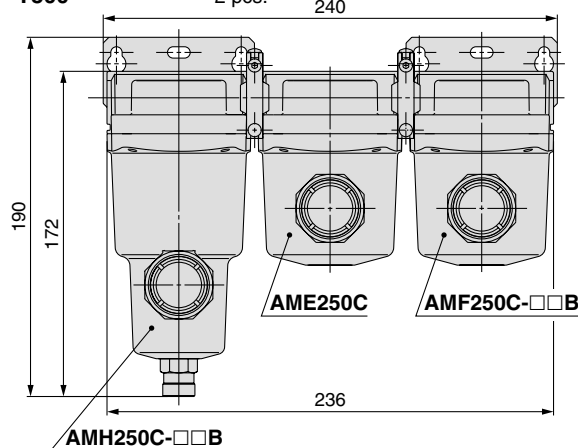
#### Arrangement example

AMH250C-□□B — 1 pc.

AME250C — 1 pc.

AMF250C-□□B — 1 pc.

Y300 — 2 pcs.



## Spacer

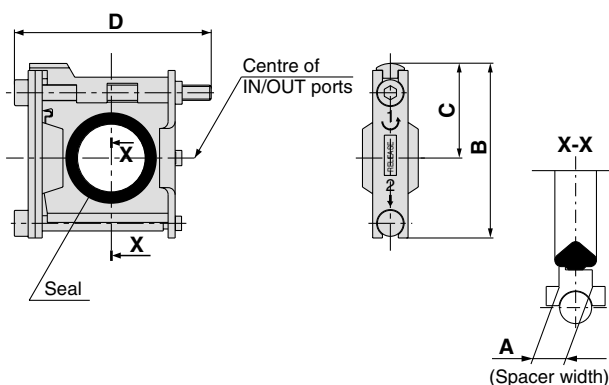


Y200



Y400

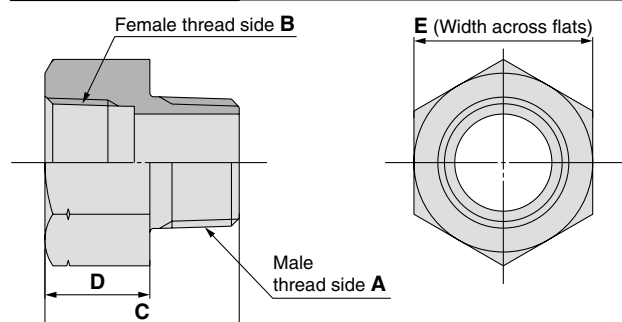
| Model | A | B    | C    | D  | Model           |
|-------|---|------|------|----|-----------------|
| Y200  | 3 | 35.5 | 18.5 | 48 | AFF2C, AM□150C  |
| Y300  | 4 | 47   | 26   | 59 | AFF4C, AM□250C  |
| Y400  | 5 | 57   | 31   | 65 | AFF8C, AM□350C  |
| Y500  | 5 | 61   | 33   | 75 | AFF11C, AM□450C |
| Y600  | 6 | 75.5 | 41   | 86 | AFF22C, AM□550C |



### Replacement Parts

| Description | Material | Part no.   |            |            |            |            |
|-------------|----------|------------|------------|------------|------------|------------|
|             |          | Y200       | Y300       | Y400       | Y500       | Y600       |
| Seal        | HNBR     | Y200P-061S | Y300P-060S | Y400P-060S | Y500P-060S | Y600P-060S |

## Piping Adapter



### Dimensions

| Part no.  | Thread type and port size |                      | C  | D  | E  | Material |
|-----------|---------------------------|----------------------|----|----|----|----------|
|           | Male thread side A        | Female thread side B |    |    |    |          |
| IDF-AP609 | R 3/8                     | NPT 3/8              | 30 | 15 | 22 | Brass    |

# Bowl Assembly

# AFF-CA□/AM□-CA□

## Bowl Assembly

Bowl assembly for the AFF and AM□ series can be replaced without removing the main body from piping if the drain exhaust specification is to be changed from the drain cock type to the auto drain type or if the bowl has been damaged.

## How to Order Bowl Assembly

### ■ AFF2C to 22C, AM, AMD, AMH, AMG150C to 550C

AM-CA□-□-□-□

#### Body size

|      |
|------|
| 150C |
| 250C |
| 350C |
| 450C |
| 550C |

#### Drain exhaust

| Symbol | Description                         |
|--------|-------------------------------------|
| A      | With drain cock                     |
| C      | With N.C. auto drain                |
| D      | With N.O. auto drain                |
| J      | With drain guide <sup>Note 1)</sup> |

Note 1) Drain piping and piping for a stop valve such as a ball valve are required.

#### Option

| Symbol | Description                       |
|--------|-----------------------------------|
| —      | —                                 |
| F      | Rubber material: Fluororubber     |
| H      | For medium air pressure (1.6 MPa) |
| V      | Degreasing wash, white vaseline   |

#### Thread type <sup>Note 2)</sup>

| Symbol               | Type |
|----------------------|------|
| —                    | Rc   |
| F <sup>Note 3)</sup> | G    |
| N                    | NPT  |

Note 2) Corresponded to the drain exhaust symbol C, D and J. Select according to the body thread type.

Note 3) Not corresponded to the drain exhaust symbol C and D. Select no symbol when the body thread symbol is F.

#### Applicable Model

| Bowl assembly model | Applicable model                          |
|---------------------|-------------------------------------------|
| AM-CA150C           | AFF2C, AM150C, AMD150C, AMH150C, AMG150C  |
| AM-CA250C           | AFF4C, AM250C, AMD250C, AMH250C, AMG250C  |
| AM-CA350C           | AFF8C, AM350C, AMD350C, AMH350C, AMG350C  |
| AM-CA450C           | AFF11C, AM450C, AMD450C, AMH450C, AMG450C |
| AM-CA550C           | AFF22C, AM550C, AMD550C, AMH550C, AMG550C |

#### Auto Drain Specifications/Option Combinations

◎ : Available □ : Not available

△ : Plural options cannot be selected.

(i.e. Combinations such as C-FV, D-FHV are not possible.)

| Symbol | F | H | V |
|--------|---|---|---|
| A      | ◎ | ◎ | ◎ |
| C      | △ | △ | △ |
| D      | △ | △ | △ |
| J      | ◎ | ◎ | ◎ |

### ■ AFF37B/75B

AFF-CA 37B-□-□

#### Body size

|     |
|-----|
| 37B |
| 75B |

#### Drain exhaust

| Symbol | Description                         |
|--------|-------------------------------------|
| A      | With drain cock <sup>Note 1)</sup>  |
| D      | With N.O. auto drain                |
| J      | With drain guide <sup>Note 2)</sup> |

Note 1) Body size 75B is equipped with a ball valve (Rc3/8 female threaded). Mount a piping adapter IDF-AP609 (page 62) to the ball valve if NPT3/8 female threaded is required.

Note 2) Drain piping and piping for a stop valve such as a ball valve are required. For body size 75B, substitute with a ball valve. (symbol: A)

#### Thread type <sup>Note 3)</sup>

| Symbol               | Type |
|----------------------|------|
| —                    | Rc   |
| F <sup>Note 4)</sup> | G    |
| N                    | NPT  |

Note 3) Corresponded to the drain exhaust symbol D and J. Select according to the body thread type.

Note 4) Not corresponded to the drain exhaust symbol C and D. Select no symbol when the body thread symbol is F.

## How to Order Bowl Assembly

### ■ AM, AMD, AMH, AMG Series

**AM -CA 650 -□□**

**AMD  
AMH  
AMG**

Body size

|     |
|-----|
| 650 |
| 850 |

Thread type <sup>Note 3)</sup>

| Symbol | Type |
|--------|------|
| —      | Rc   |
| F      | G    |
| N      | NPT  |

Note 3) Corresponded to the drain exhaust symbol D and J. Select according to the body thread type.

Drain exhaust

| Symbol | Description                         |
|--------|-------------------------------------|
| A      | With drain cock <sup>Note 1)</sup>  |
| D      | With N.O. auto drain                |
| J      | With drain guide <sup>Note 2)</sup> |

Note 1) Body size 850 is equipped with a ball valve (Rc3/8 female threaded). Mount a piping adapter IDF-AP609 (page 58) to the ball valve if NPT3/8 female threaded is required.

Note 2) Drain piping and piping for a stop valve such as a ball valve are required.  
For body size 850, substitute with a ball valve. (symbol: A)

### ■ AME, AMF150C to 550C

**AME -CA □ -A -□**

Body size

|      |
|------|
| 150C |
| 250C |
| 350C |
| 450C |
| 550C |

Option <sup>Note)</sup>

| Symbol | Description                       |
|--------|-----------------------------------|
| —      | —                                 |
| F      | Rubber material: Fluororubber     |
| H      | For medium air pressure (1.6 MPa) |
| V      | Degreasing wash, white vaseline   |

Note) Combination of FH is not available.

#### Applicable Model

| Bowl assembly model | Applicable model |
|---------------------|------------------|
| AME-CA150C          | AME150C, AMF150C |
| AME-CA250C          | AME250C, AMF250C |
| AME-CA350C          | AME350C, AMF350C |
| AME-CA450C          | AME450C, AMF450C |
| AME-CA550C          | AME550C, AMF550C |

### ■ AME, AMF650/850

**AME -CA 650 -A**

**AMF**

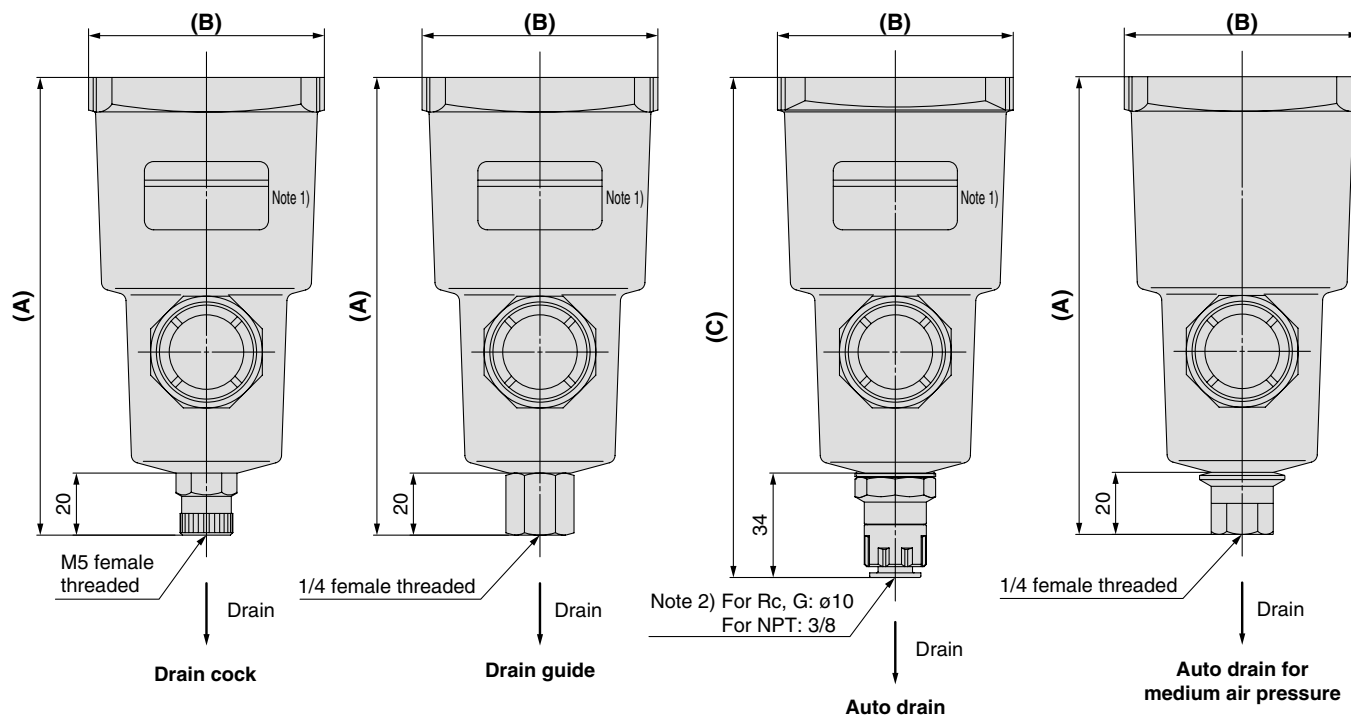
Body size

|     |
|-----|
| 650 |
| 850 |

# AFF-CA□/AM□-CA□

## Dimensions: AFF, AM, AMD, AMH, AMG Series

Size: AFF2C to 22C, AFF37B, AM□150C to 550C, AM□650



| AFF series | AM, AMD, AMG, AMH series | (mm) |     |     |
|------------|--------------------------|------|-----|-----|
| Size       | Size                     | A    | B   | C   |
| 2C         | 150C                     | 134  | 63  | 148 |
| 4C         | 250C                     | 139  | 76  | 153 |
| 8C         | 350C                     | 162  | 90  | 176 |
| 11C        | 450C                     | 178  | 106 | 192 |
| 22C        | 550C                     | 202  | 122 | 216 |
| 37B        | 650                      | 245  | 160 | 259 |

Note 1) Model no. labels are not affixed to the AM-CA150C to 550C.

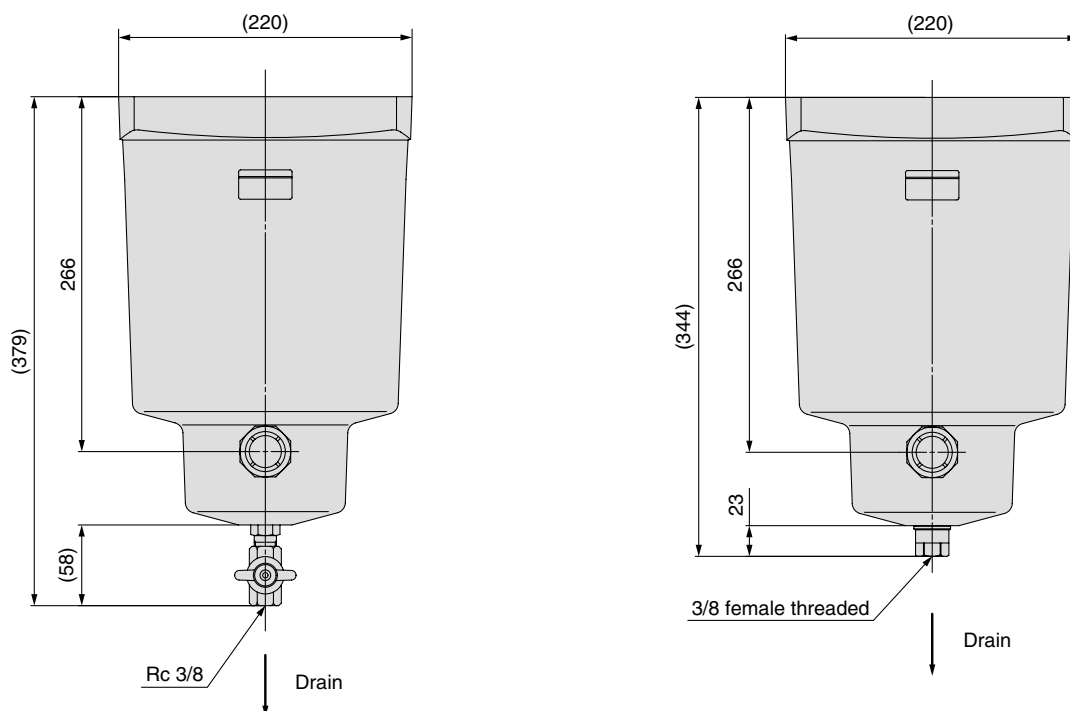
Note 2) Select according to the body thread type.

Applicable tubing size for one-touch fitting

Rc, G: ø10

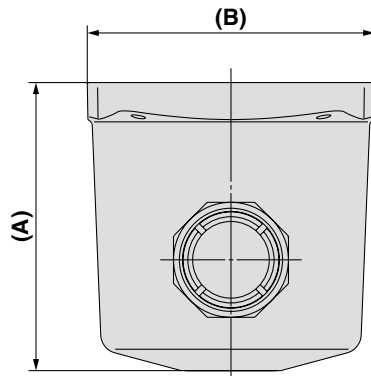
NPT: ø3/8 inch

Size: AFF75B, AM□850



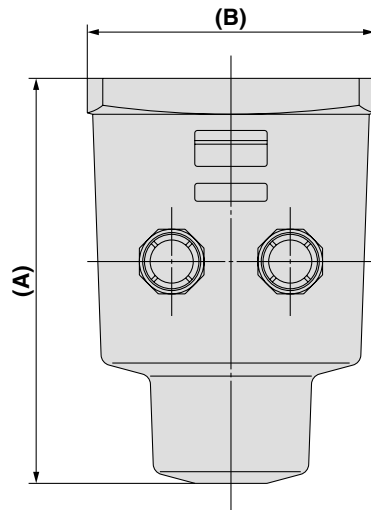
**Dimensions: AME, AMF Series**

■ AME150C to 550C, AMF150C to 550C



| (mm)            |     |     |
|-----------------|-----|-----|
| AME, AMF series | A   | B   |
| Size            |     |     |
| 150             | 60  | 63  |
| 250             | 70  | 76  |
| 350             | 90  | 90  |
| 450             | 104 | 106 |
| 550             | 130 | 122 |

■ AME650/850, AMF650/850



| (mm)            |     |     |
|-----------------|-----|-----|
| AME, AMF series | A   | B   |
| Size            |     |     |
| 650             | 225 | 160 |
| 850             | 319 | 120 |

## Compressed Air Cleaning Filter Series

# Made to Order/Special Specifications



Please consult with SMC for detailed specifications, size and delivery.

### Made to Order

| Contents                                        | Symbol | Applicable model |    |     |     |     |     |     | Reference page |
|-------------------------------------------------|--------|------------------|----|-----|-----|-----|-----|-----|----------------|
|                                                 |        | AFF              | AM | AMD | AME | AMF | AMG | AMH |                |
| 1. With Differential Pressure Gauge (GD40-2-01) | X6     | ●                | ●  | ●   | —   | —   | —   | ●   | P.64           |
| 2. N.C., N.O. Auto Drain, Drain Piping Type     | X26    | ●                | ●  | ●   | —   | —   | ●   | ●   | P.65           |
| 3. White Vaseline Specifications                | X12    | ●                | ●  | ●   | ●   | ●   | ●   | ●   |                |

### Special Specifications

| Contents                               | Applicable model |    |     |     |     |     |     | Reference page |
|----------------------------------------|------------------|----|-----|-----|-----|-----|-----|----------------|
|                                        | AFF              | AM | AMD | AME | AMF | AMG | AMH |                |
| Clean Series (10-Series)               | ●                | ●  | ●   | ●   | ●   | —   | ●   | P.66           |
| Copper-free, Fluorine-free (20-Series) | ●                | ●  | —   | —   | —   | ●   | —   |                |

# Compressed Air Cleaning Filter Series

## Made to Order 1

Please consult with SMC for detailed specifications, size and delivery.



### 1. With Differential Pressure Gauge (GD40-2-01)

A differential pressure gauge that keeps track of the filter life is installed on the filter itself. This facilitates piping and achieves a compact design.

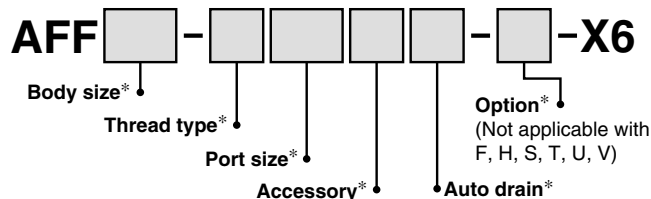
#### Specifications

|                  |                               |
|------------------|-------------------------------|
| Applicable model | <b>AFF2C to 22C, 37B, 75B</b> |
|------------------|-------------------------------|

#### How to Order



\* Refer to "How to Order" for standard specifications.



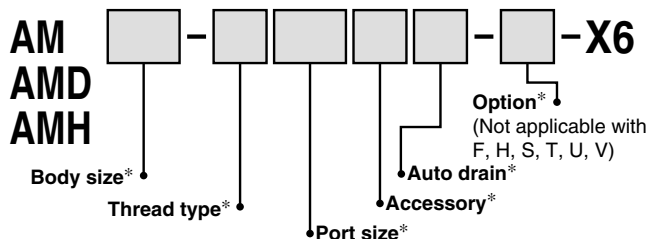
#### Specifications

|                  |                                                                                       |
|------------------|---------------------------------------------------------------------------------------|
| Applicable model | <b>AM150C to 550C, 650, 850, AMD150C to 550C, 650, 850, AMH150C to 550C, 650, 850</b> |
|------------------|---------------------------------------------------------------------------------------|

#### How to Order

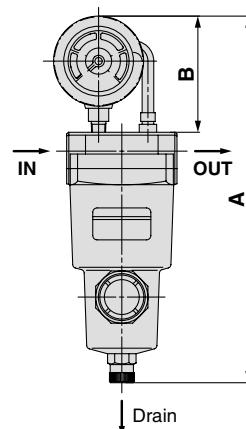


\* Refer to "How to Order" for standard specifications.



- Note) • The AMG series is not applicable since water drops could ingress inside its differential pressure gauge, resulting in malfunction or damage to the product.  
• Cannot be mounted to the AME and AMF series. (It affects the cleanliness at the outlet.)

#### Dimensions



(mm)

| AFF series<br>Size | AM, AMD, AMH series<br>Size | Port size | A   | B  |
|--------------------|-----------------------------|-----------|-----|----|
| <b>2C</b>          | <b>150C</b>                 | 1/8, 1/4  | 239 | 80 |
| <b>4C</b>          | <b>250C</b>                 | 1/4, 3/8  | 252 | 80 |
| <b>8C</b>          | <b>350C</b>                 | 3/8, 1/2  | 284 | 80 |
| <b>11C</b>         | <b>450C</b>                 | 1/2, 3/4  | 305 | 80 |
| <b>22C</b>         | <b>550C</b>                 | 3/4, 1    | 339 | 80 |
| <b>37B</b>         | <b>650</b>                  | 1, 1 1/2  | 391 | 80 |
| <b>75B</b>         | <b>850</b>                  | 1 1/2, 2  | 541 | 80 |

# Compressed Air Cleaning Filter Series

## Made to Order 2

Please consult with SMC for detailed specifications, size and delivery.

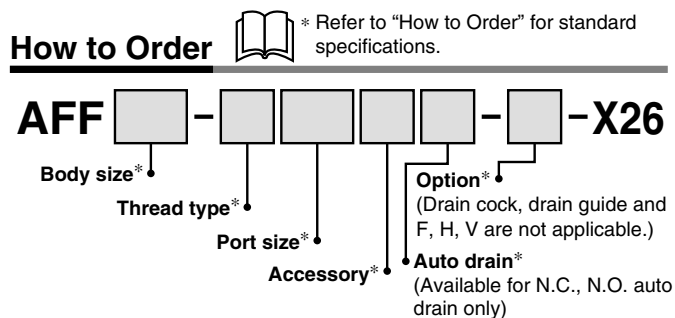


### 2. N.C., N.O. Auto Drain, Drain Piping Type

Drain piping type (drain guide specification) to the drain exhaust from N.C. auto drain and N.O. auto drain. N.C. type is not available for the AFF37B and AM□650.

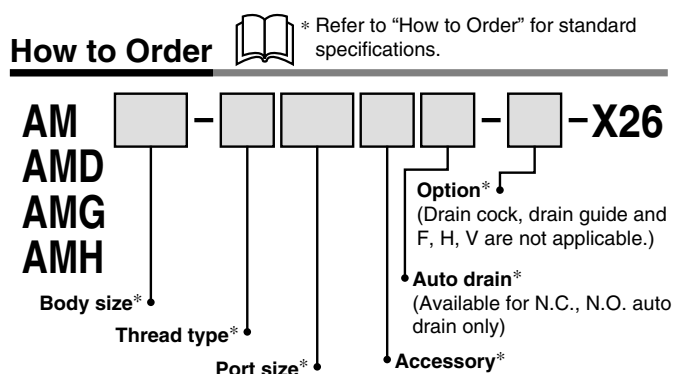
#### Specifications

|                  |                   |
|------------------|-------------------|
| Applicable model | AFF2C to 22C, 37B |
|------------------|-------------------|

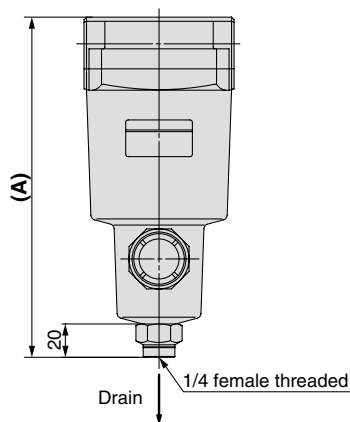


#### Specifications

|                  |               |
|------------------|---------------|
| Applicable model | AM□150 to 650 |
|------------------|---------------|



#### Dimensions



(mm)

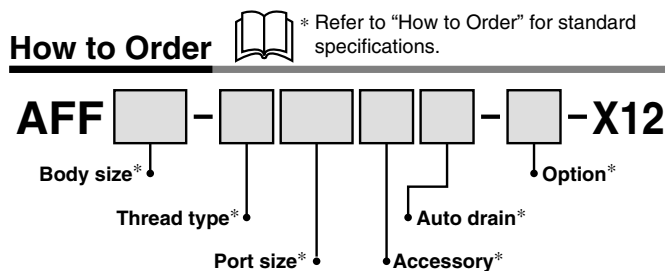
| AFF series | AM, AMD, AMG, AMH series | Port size | A   |
|------------|--------------------------|-----------|-----|
| Size       | Size                     |           |     |
| 2C         | 150C                     | 1/8, 1/4  | 159 |
| 4C         | 250C                     | 1/4, 3/8  | 172 |
| 8C         | 350C                     | 3/8, 1/2  | 204 |
| 11C        | 450C                     | 1/2, 3/4  | 225 |
| 22C        | 550C                     | 3/4, 1    | 259 |
| 37B        | 650                      | 1, 1 1/2  | 311 |

### 3. White Vaseline Specifications

Changed the grease for O-rings and gaskets as lubricant to white vaseline.

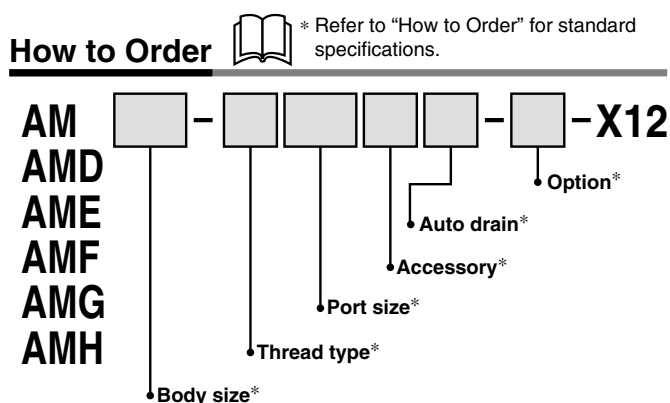
#### Specifications

|                  |             |
|------------------|-------------|
| Applicable model | AFF37B, 75B |
|------------------|-------------|



#### Specifications

|                  |                                                                             |
|------------------|-----------------------------------------------------------------------------|
| Applicable model | AM650, 850, AMD650, 850, AME650, 850, AMF650, 850, AMG650, 850, AMH650, 850 |
|------------------|-----------------------------------------------------------------------------|



# Compressed Air Cleaning Filter Series

## Special Specifications

Please consult with SMC for detailed specifications, size and delivery.

### Clean Series (10-Series)

Clean Series products are used in cleaner environments such as in clean rooms as compared to a general factory environment. For further details, refer to the Clean Series catalogue.

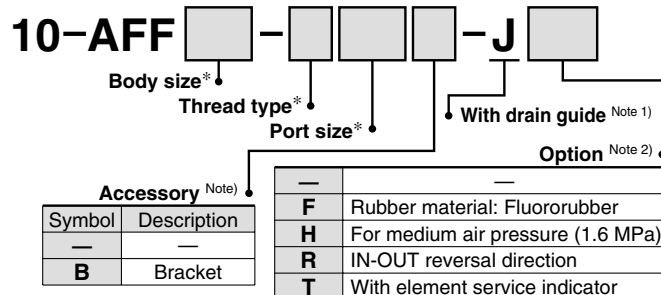
#### Specifications

| Applicable model | AFF2C to 22C, 37B, 75B |
|------------------|------------------------|
|------------------|------------------------|

#### How to Order



\* Refer to "How to Order" for standard specifications.

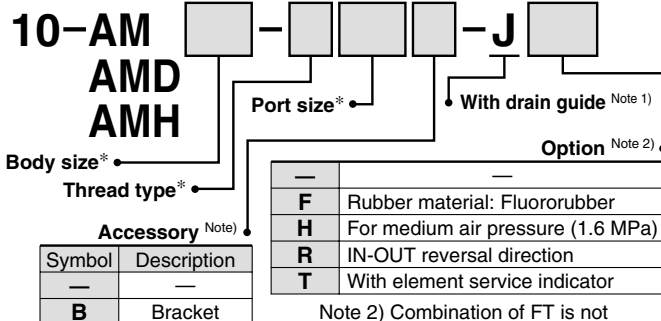


Note 1) "10-" is not applicable to standard product (with drain cock) and with auto drain.

Note 2) Combination of FT is not available.  
F and H are only applicable to the AFF2C to 22C.

#### Specifications

| Applicable model | AM150C to 550C, 650, 850, AMD150C to 550C, 650, 850, AMH150C to 550C, 650, 850 |
|------------------|--------------------------------------------------------------------------------|
|------------------|--------------------------------------------------------------------------------|

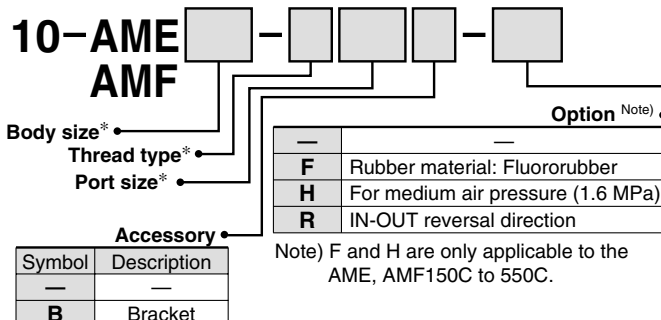


Note 1) "10-" is not applicable to standard product (with drain cock) and with auto drain.

Note 2) Combination of FT is not available.  
F and H are only applicable to the AM□150C to 550C.

#### Specifications

| Applicable model | AME150C to 550C, 650, 850, AMF150C to 550C, 650, 850 |
|------------------|------------------------------------------------------|
|------------------|------------------------------------------------------|



Note) F and H are only applicable to the AME, AMF150C to 550C.

### Copper-free, Fluorine-free (20-Series)

To eliminate effects on colour CRTs, etc. by copper ion or fluorine resin, copper materials are electroless-nickel plated or changed to copper-free materials to prevent the generation of copper ions. (It is not applicable to the AMD, AME, AMF and AMH series because those include fluorine resin in the filter material of the element.)

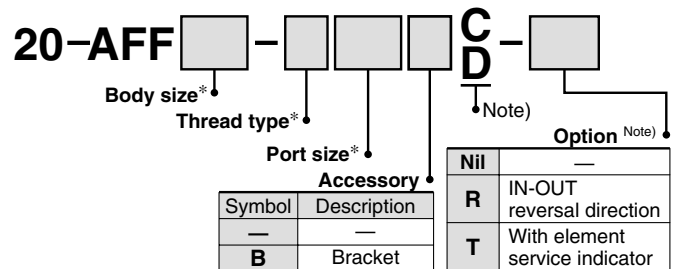
#### Specifications

| Applicable model | AFF2C to 22C, 37B |
|------------------|-------------------|
|------------------|-------------------|

#### How to Order



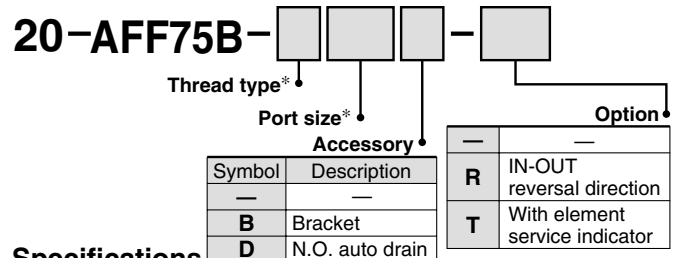
\* Refer to "How to Order" for standard specifications.



Note) "20-" is only applicable with N.C. auto drain (C) or N.O. auto drain (D). Drain cock and drain guide are copper-free, fluorine-free as standard.

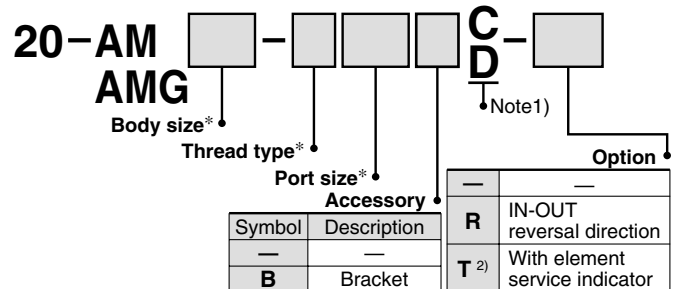
#### Specifications

| Applicable model | AFF75B |
|------------------|--------|
|------------------|--------|



#### Specifications

| Applicable model | AM150C to 550C, 650, AMG150C to 550C, 650 |
|------------------|-------------------------------------------|
|------------------|-------------------------------------------|

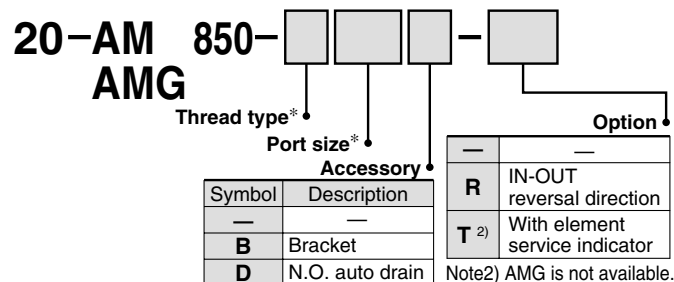


Note1) "20-" is only applicable with N.C. auto drain (C) or N.O. auto drain (D). Drain cock and drain guide are copper-free, fluorine-free as standard.

Note2) AMG is not available.

#### Specifications

| Applicable model | AM850, AMG850 |
|------------------|---------------|
|------------------|---------------|



Note2) AMG is not available.

## Related Products: Auto Drain Valve

# Series AD402/600

Drain is automatically discharged in a reliable manner, without requiring human operators.

Highly resistant to dust and corrosion, operates reliably, and a bowl guard is provided as standard equipment.



AD402



AD600

JIS Symbol



### Model/Specifications

| Model                                     | AD402                    | AD600                    |
|-------------------------------------------|--------------------------|--------------------------|
| Proof pressure                            | 1.5 MPa                  | 1.5 MPa                  |
| Max. operating pressure                   | 1.0 MPa                  | 1.0 MPa                  |
| Operating pressure range <sup>Note)</sup> | 0.1 to 1.0 MPa           | 0.3 to 1.0 MPa           |
| Ambient and fluid temperature             | –5 to 60°C (No freezing) | –5 to 60°C (No freezing) |
| Port size                                 | 1/4, 3/8, 1/2            | 3/4, 1                   |
| Drain port size                           | 3/8                      | 3/4, 1                   |
| Mass (g)                                  | 620                      | 2100                     |



Note) 400 ℓ/min (ANR) or more

### ⚠ Specific Product Precautions

Be sure to read this before handling.

Refer to back page 1 for Safety Instructions, “Precautions for Handling Pneumatic Devices” (M-03-E3A) for Common Precautions.

#### Selection

#### ⚠ Warning

Use the auto drain under the following operating conditions in order to prevent malfunction.

- 1) Operate the compressor above 3.7 kw {400 ℓ/min (ANR)}.
- 2) Use the AD402 at an operating pressure above 0.1 MPa and AD600 above 0.3 MPa.

#### Piping

#### ⚠ Warning

Piping should be done under the following conditions in order to prevent malfunction.

For drain piping, use a pipe whose I.D. is not less than ø10 and length not more than 5 m. Avoid riser piping.

### How to Order

AD402 -    03 -   

#### Thread type

|   |     |
|---|-----|
| — | Rc  |
| N | NPT |
| F | G   |

#### Option

|   |            |
|---|------------|
| — | —          |
| 2 | Metal bowl |

#### Port size

| Symbol | IN  | OUT |
|--------|-----|-----|
| 02     | 1/4 | 3/8 |
| 03     | 3/8 | 3/8 |
| 04     | 1/2 | 3/8 |

AD600 -    06

#### Thread type

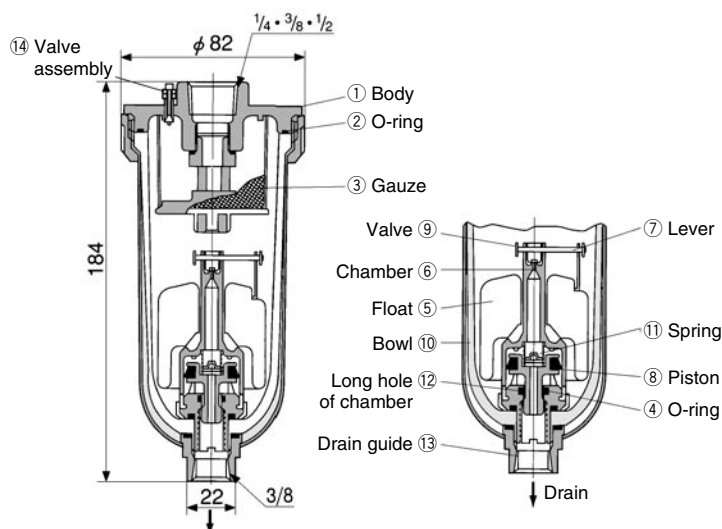
|   |     |
|---|-----|
| — | Rc  |
| N | NPT |
| F | G   |

#### Port size

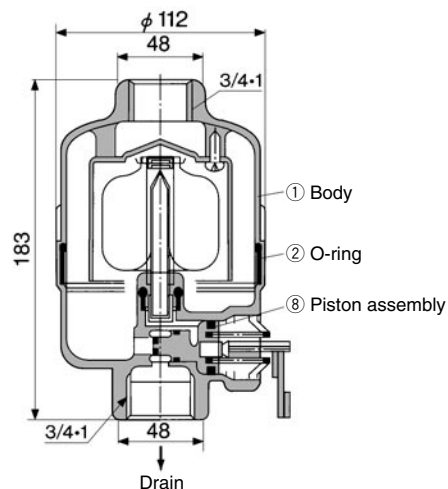
| Symbol | IN  | OUT |
|--------|-----|-----|
| 06     | 3/4 | 3/4 |
| 10     | 1   | 1   |

## Construction/Dimensions

### AD402



### AD600



### Working Principle (AD402)

- When no pressure is applied inside the bowl ⑩, float ⑤ descends of its own weight and valve ⑨ closes the chamber ⑥ hole. Piston ⑧ is pushed down by spring ⑪, and drain passes through the chamber's long hole ⑫ to enter the housing and is discharged.
- When pressure is applied inside the bowl:  
When pressure is 0.1 MPa or more, it overcomes the force of spring ⑪, allowing the piston ⑧ to ascend, and comes in contact with O-ring ④. Thus, the inside of the bowl ⑩ is isolated from the outside.
- When drain has accumulated:  
Float ⑤ ascends due to flotation and opens the chamber hole ⑥, allowing the pressure to enter the chamber ⑥. Piston ⑧ descends due to internal pressure and the force of spring ⑪, and the accumulated drain is discharged through drain guide ⑬.

### Component Parts

| No. | Description | Material            |
|-----|-------------|---------------------|
| 1   | Body        | Aluminum die-casted |

### Replacement Parts

| No.     | Description       | Material        | Model  |                |
|---------|-------------------|-----------------|--------|----------------|
|         |                   |                 | AD402  | AD600          |
| 2       | O-ring            | NBR             | 113136 | JIS B2401G-100 |
| 3       | Gauze             | Stainless steel | 20062  | —              |
| Note 1) | Internal assembly | —               | AD34PA | —              |
| 8       | Piston assembly   | —               | —      | 20025A         |

Note 1) Internal assembly: Assembly for parts ④ to ⑫ except ⑩.

Note 2) Part no. for bowl assembly: AD34

Note 3) Part no. for bowl ⑩: 201016

# Related Products:

## Heavy Duty Auto Drain

# Series ADH4000

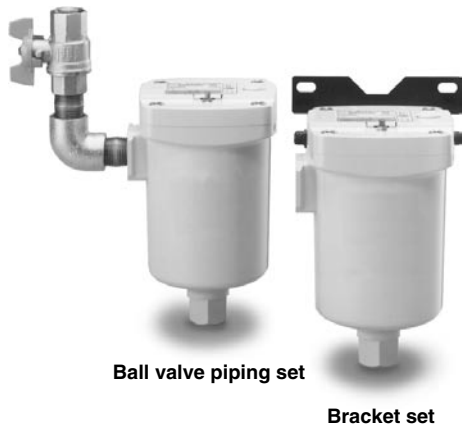
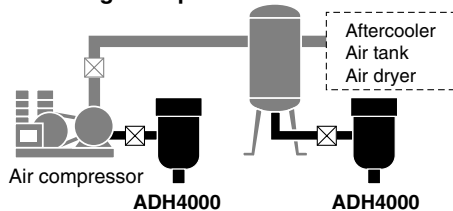
### Easy maintenance

Can maintain without removing the existing piping.

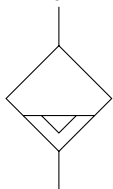
### No need for electric power and no waste of air.

Float type auto drain allows automatic drain discharge without electric power.

### Mounting example



JIS Symbol



### Specifications

|                                           |                                                                                                          |
|-------------------------------------------|----------------------------------------------------------------------------------------------------------|
| Auto drain type                           | Float type                                                                                               |
| Auto drain valve type                     | N.O. (Normally open: Open in the case of pressure loss)                                                  |
| Proof pressure                            | 2.5 MPa                                                                                                  |
| Max. operating pressure                   | 1.6 MPa                                                                                                  |
| Operating pressure range <sup>Note)</sup> | 0.05 to 1.6 MPa                                                                                          |
| Fluid                                     | Compressed air                                                                                           |
| Ambient and fluid temperature             | 5 to 60°C (With no condensation)<br><Corrosive gas, flammable gas and organic solvents are not allowed.> |
| Max. drain discharge                      | 400 cc/min (Pressure 0.7 MPa, in the case of water)                                                      |
| Mass                                      | 1.2 kg (With bracket: 1.3 kg)                                                                            |
| Paint colour                              | White                                                                                                    |



<sup>Note)</sup> Use for an air compressor with flow more than 50  $\ell$ /min (ANR).

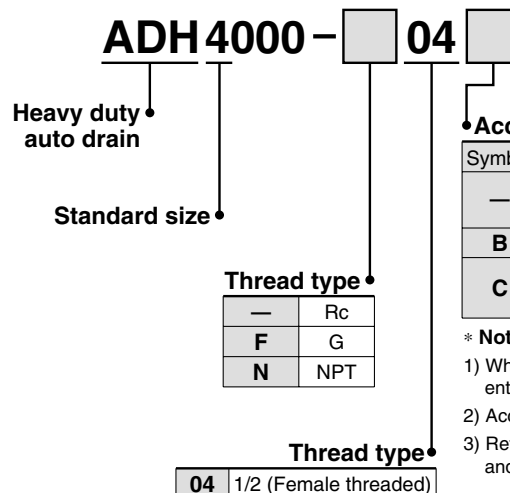
### Accessory (Option)

| Description           | Part no. | Contents                                                                                      |
|-----------------------|----------|-----------------------------------------------------------------------------------------------|
| Bracket set           | BM58     | Bracket ..... 1 pc.<br>M6 x 10 $\ell$ (Hexagon socket head cap screw) ... 2 pcs.              |
| Ball valve piping set | ADH-C400 | Ball valve/Rc 1/2 ..... 1 pc.<br>Barrel nipple/R 1/2 ..... 2 pcs.<br>Elbow/Rc 1/2 ..... 1 pc. |

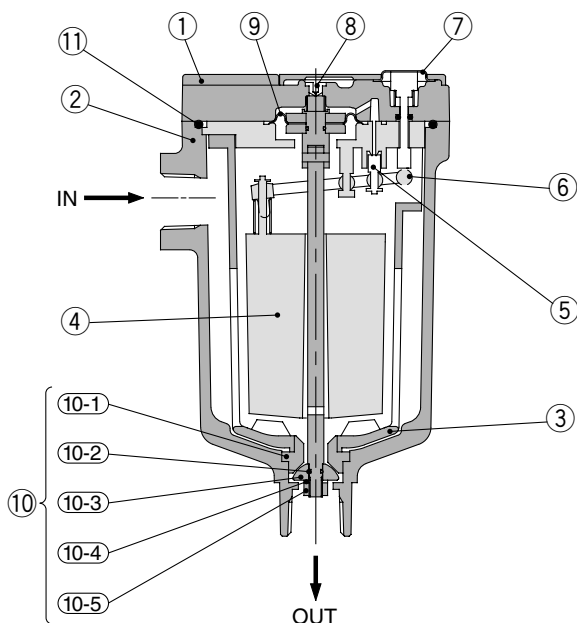


<sup>Note)</sup> Accessory (Option) is included, but not assembled.

### How to Order



## Construction



### Component Parts

| No. | Description     | Material                 | Note          |
|-----|-----------------|--------------------------|---------------|
| 1   | Body            | Aluminum alloy           | Baking finish |
| 2   | Housing         | Aluminum alloy           | Baking finish |
| 3   | Drain guard     | Aluminum alloy           | Baking finish |
| 4   | Float           | Foam rubber              |               |
| 5   | Pilot valve     | Stainless steel + Rubber |               |
| 6   | Lever           | Resin                    |               |
| 7   | Flushing button | Brass                    |               |
| 8   | Orifice         |                          |               |
| 9   | Diaphragm       | Rubber                   |               |

### Replacement Parts

| No. | Description               | Part no. | Note                                     |
|-----|---------------------------|----------|------------------------------------------|
| 10  | Repair kit for main valve | ADH-D400 | Kit includes parts from (10-1) to (10-5) |
| 11  | O-ring                    | G85(B)   | Material: NBR                            |

Note) When changing parts, follow the operating manual.  
Do not disassemble other parts.

## ⚠ Specific Product Precautions

Be sure to read this before handling. Refer to back pages 1 and 2 for Safety Instructions, "Precautions for Handling Pneumatic Devices" (M-03-E3A) for Common Precautions.

### Design

#### ⚠ Caution

1. Use this product in an area where the air pressure does not exceed 1.6 MPa.  
If exceeding 1.6 MPa, it could lead to an accident or malfunction.
2. An air pressure of 0.05 MPa and an air compressor's discharge flow rates higher than 50 ℓ/min (ANR) are required.  
Below these values, the air will be exhausted continuously from the drain exhaust port.
3. Keep the compressed air and the ambient temperature of the location where this product is installed within the range of 5 to 60°C. Exceeding this range could lead to a failure or malfunction.
4. Avoid using this product in an area where corrosive gases, flammable gases or organic solvents are contained in the compressed air or in the surrounding air.

### Selection

#### ⚠ Caution

1. The maximum dischargeable drainage rate is 400 cc/min.  
If using this product in excess of this value, there could be causing the drain to flow over to the outlet side.

### Piping

#### ⚠ Caution

1. Use piping of 1/2" or larger for drain inlet and avoid riser piping.
2. For drain piping, use a pipe whose I.D. is not less than 8 mm and length not more than 10 m. Do not make any upward angles in drain line. Be sure to secure exhaust port piping since drain is under pressure.

### Mounting

#### ⚠ Caution

1. Install with "out port" down in a vertical position.  
Inclination from the vertical line should be less than 5°.
2. Install with at least 200 mm of free space above the unit to allow for maintenance.
3. To place this product near the air compressor, install in such a way that the vibrations will not be transmitted.
4. Install a valve to drain inlet so that maintenance is possible.  
Use a ball valve with a bore size of more than 15 mm. (Ball valve piping set is available as an accessory (option).)

### Mounting

#### ⚠ Caution

5. When not draining sufficiently, open the bleed valve so that drain could run through easily.

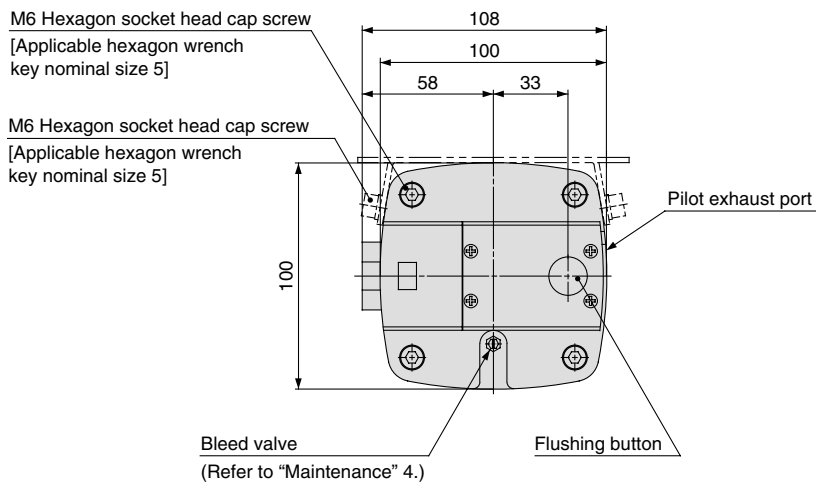
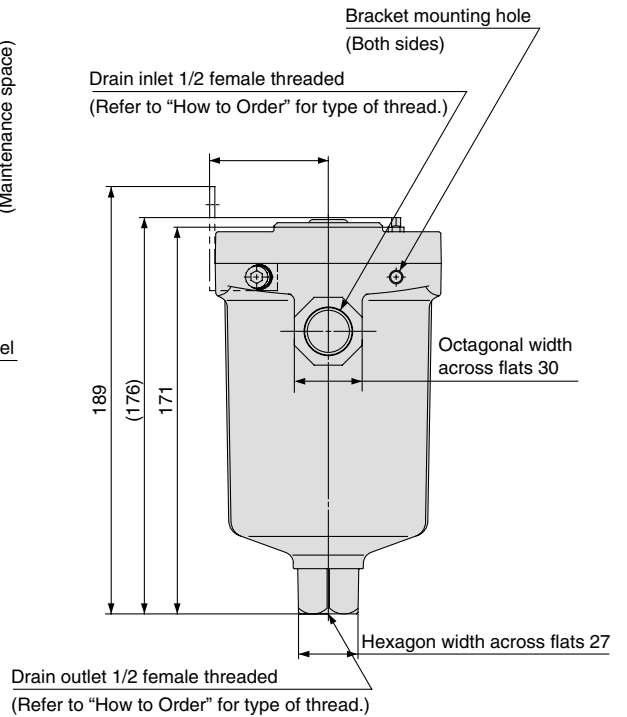
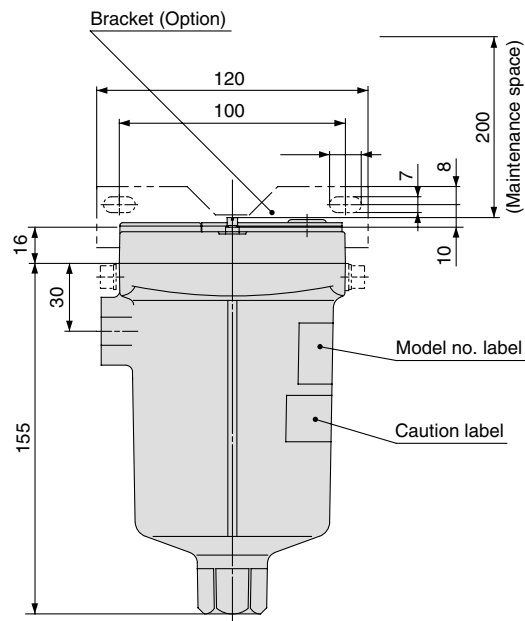
### Maintenance

#### ⚠ Caution

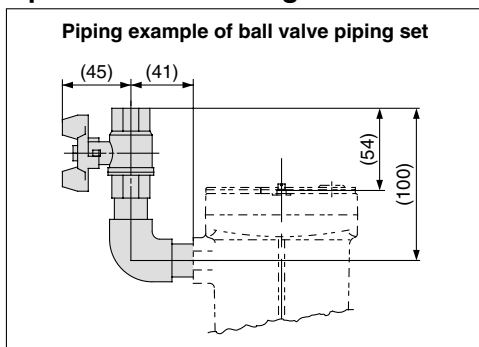
1. Check drain condition periodically (more than once a day).  
Also, push the flushing button to open the exhaust valve.
2. Pilot air is exhausted from the exhaust port indicated in "Dimensions". Do not cover this exhaust port. Clean the exhaust port so that port is not blocked by dust, etc.
3. When solid foreign objects exceeding 1 mm come in, the main valve may become blocked. After recovering the internal pressure of this product to 0 MPa (atmospheric pressure), remove the hexagon socket head cap screw (M6) from the body part and wash inside with water to remove foreign solid objects blocking the main valve.
4. When using this product, drain may not easily enter the product. In such a case, adjust the open angle of its bleed valve to lower the pressure a bit inside the bowl so that drain could run through easily.

# Series ADH4000

## Dimensions



### Option: Reference Figure of Assembly



# Related Products:

## Differential Pressure Gauge

# Series GD40-2-01

The pressure differential at the inlet and the outlet of compressed air equipment can be viewed at a glance on the differential pressure gauge. It is ideal for the maintenance control of filters.

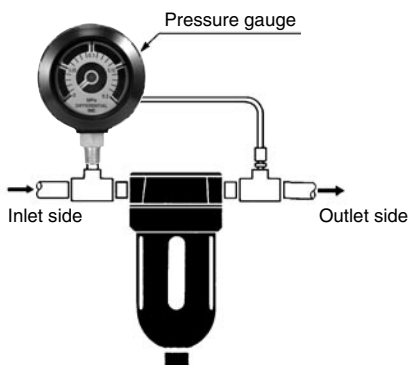
Compact and lightweight  
Can be installed easily by merely providing a bypass circuit.  
Provided with a protective cover to prevent hazards.



JIS Symbol



### Piping Example



### Model/Specifications

| Model                         | GD40-2-01      |
|-------------------------------|----------------|
| Fluid                         | Compressed air |
| Max. operating pressure       | 1 MPa          |
| Proof pressure                | 1.5 MPa        |
| Ambient and fluid temperature | 5 to 60°C      |
| Port size Rc                  | 1/8            |
| Scale range                   | 0 to 0.2 MPa   |
| Accuracy                      | ±0.006 MPa     |
| Dial size                     | ø40            |
| Mass (g)                      | 300            |

### Main Parts Material

|               |                        |
|---------------|------------------------|
| Case          | Zinc die-casted        |
| Internal part | Brass, Phosphor bronze |
| Window        | Polyester              |
| Scale plate   | Stainless steel        |

### Accessory

|                |                 |
|----------------|-----------------|
| Nylon tube     | T0425 (0.5 m)   |
| Male connector | H04-01 (1 pc.)  |
| Male elbow     | DL04-01 (1 pc.) |

## ⚠ Specific Product Precautions

Be sure to read this before handling.

Refer to back pages 1 and 2 for Safety Instructions, "Precautions for Handling Pneumatic Devices" (M-03-E3A) for Common Precautions.

### Design

#### ⚠ Caution

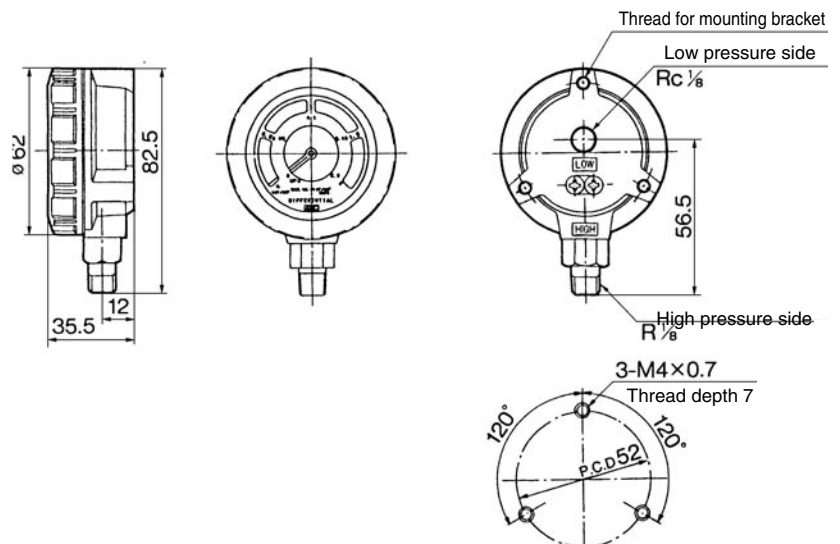
1. This product cannot be used in a location where pulsations could occur frequently.

### Mounting

#### ⚠ Caution

1. Mounting
  - 1) The HIGH and LOW marks on the back of the differential pressure gauge indicate the high pressure and low pressure sides respectively. Connect the HIGH side to the inlet side of the filter or other devices and the LOW side to their outlet side. Do not use a stop valve to prevent damage to the differential pressure gauge if the valve is inadvertently left open or closed.
  - 2) Install the differential pressure gauge vertically.
  - 3) The piping of the differential pressure gauge must be connected securely because it will break if it becomes detached.

### Dimensions





# Safety Instructions

These safety instructions are intended to prevent hazardous situations and/or equipment damage. These instructions indicate the level of potential hazard with the labels of “**Caution**,” “**Warning**” or “**Danger**.” They are all important notes for safety and must be followed in addition to International Standards (ISO/IEC)<sup>Note 1)</sup> and other safety regulations.

Note 1) ISO 4414: Pneumatic fluid power – General rules relating to systems.  
ISO 4413: Hydraulic fluid power – General rules relating to systems.  
IEC 60204-1: Safety of machinery – Electrical equipment of machines. (Part 1: General requirements)  
ISO 10218: Manipulating industrial robots -Safety.  
etc.

 **Caution:** Operator error could result in injury or equipment damage.

 **Warning:** Operator error could result in serious injury or loss of life.

 **Danger :** In extreme conditions, there is a possibility of serious injury or loss of life.

## Warning

### **1. The compatibility of the product is the responsibility of the person who designs the equipment or decides its specifications.**

Since the product specified here is used under various operating conditions, its compatibility with specific equipment must be decided by the person who designs the equipment or decides its specifications based on necessary analysis and test results. The expected performance and safety assurance of the equipment will be the responsibility of the person who has determined its compatibility with the product. This person should also continuously review all specifications of the product referring to its latest catalogue information, with a view to giving due consideration to any possibility of equipment failure when configuring the equipment.

### **2. Only personnel with appropriate training should operate machinery and equipment.**

The product specified here may become unsafe if handled incorrectly. The assembly, operation and maintenance of machines or equipment including our products must be performed by an operator who is appropriately trained and experienced.

### **3. Do not service or attempt to remove product and machinery/equipment until safety is confirmed.**

1. The inspection and maintenance of machinery/equipment should only be performed after measures to prevent falling or runaway of the driven objects have been confirmed.

2. When the product is to be removed, confirm that the safety measures as mentioned above are implemented and the power from any appropriate source is cut, and read and understand the specific product precautions of all relevant products carefully.

3. Before machinery/equipment is restarted, take measures to prevent unexpected operation and malfunction.

### **4. Contact SMC beforehand and take special consideration of safety measures if the product is to be used in any of the following conditions.**

1. Conditions and environments outside of the given specifications, or use outdoors or in a place exposed to direct sunlight.

2. Installation on equipment in conjunction with atomic energy, railways, air navigation, space, shipping, vehicles, military, medical treatment, combustion and recreation, or equipment in contact with food and beverages, emergency stop circuits, clutch and brake circuits in press applications, safety equipment or other applications unsuitable for the standard specifications described in the product catalogue.

3. An application which could have negative effects on people, property, or animals requiring special safety analysis.

4. Use in an interlock circuit, which requires the provision of double interlock for possible failure by using a mechanical protective function, and periodical checks to confirm proper operation.



# Safety Instructions

## Caution

**The product is provided for use in manufacturing industries.**

The product herein described is basically provided for peaceful use in manufacturing industries.

If considering using the product in other industries, consult SMC beforehand and exchange specifications or a contract if necessary. If anything is unclear, contact your nearest sales branch.

## Limited Warranty and Disclaimer/Compliance Requirements

The product used is subject to the following “Limited Warranty and Disclaimer” and “Compliance Requirements”. Read and accept them before using the product.

### Limited Warranty and Disclaimer

1. The warranty period of the product is 1 year in service or 1.5 years after the product is delivered.<sup>Note 2)</sup>

The product may also have specified durability, running distance or replacement parts. Please consult your nearest sales branch.

2. For any failure or damage reported within the warranty period, which is clearly SMC's responsibility, a replacement product or necessary parts will be provided.

This limited warranty applies only to SMC product independently, and not to any other damage incurred due to failure of the product.

3. Before using SMC products, please read and understand the warranty terms and disclaimers noted in the specified catalogue for the particular products.

**Note 2) Vacuum pads are excluded from this 1 year warranty.**

A vacuum pad is a consumable part, so it is warranted for a year after it is delivered.

Also, even within the warranty period, the wear of a product due to the use of the vacuum pad or failure due to the deterioration of rubber material are not covered by the limited warranty.

### Compliance Requirements

When the product is exported, strictly follow the laws required by the Ministry of Economy, Trade and Industry (Foreign Exchange and Foreign Trade Control Law).



## Series AM□/AFF

# Specific Product Precautions 1

Be sure to read this before handling. Refer to back pages 1 and 2 for Safety Instructions, and "Precautions for Handling Pneumatic Devices" (M-03-E3A) for Common Precautions.

## Design

### ⚠ Caution

1. **Design the layout so that the mist separator should be installed in an area that is less susceptible to pulsations.**

The element could be damaged if a difference between the inlet pressure and the outlet pressure exceeds 0.1 MPa.

2. **Be careful of dust generation by the pneumatic equipment mounted on the outlet side.**

When installing pneumatic equipment on the outlet side of the AM□ series, dust particles may come off from outlet equipment, which will lower the cleanliness of compressed air. Consider this impact upon the cleanliness of compressed air when installing pneumatic equipment on the outlet side.

3. **About when to use N.C. auto drain and N.O. auto drain.**

When using the AFF2C to 22C, 37B, 75B, AM□150C to 550C, 650, 850 with normally open (N.O.) auto drain, air may ceaselessly blow out of the drain discharge area when an air compressor with a small air discharge volume is used since the valve does not close unless the air pressure is 0.1 MPa or higher. Therefore, when using a compressor for 3.7 kW or less, make sure to use the normally closed (N.C.) auto drain. The minimum operating pressure is 0.15 MPa even with N.C. auto drain.

4. **Use a tubing with proper size and length for drain piping of auto drain.**

When using the AFF2C to 22C, 37B, AM□150C to 550C, 650 with auto drain:

Normally closed (N.C.) } Use tubing O.D. 10 mm and keep  
Normally open (N.O.) } the whole length within 5 m.

When using the AFF75B and AM□850 with auto drain:

Normally open (N.O.): Use tubing I.D. 9 mm or more and keep the whole length within 2.8 m.

5. **Provide a design that prevents back pressure and back flow.**

Back pressure or back flow may damage an element.

### ⚠ Warning

1. **Hold the female thread side and tighten to the recommended torque when screwing in the piping material.**

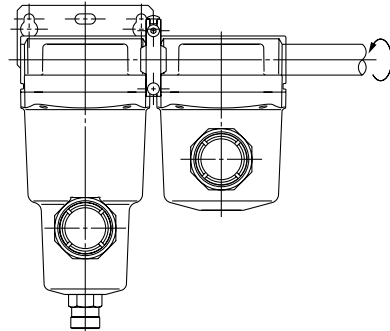
Insufficient tightening torque may cause loosening or defective sealing. Over-tightening torque may damage the thread etc. If it is tightened without holding the female thread side, excessive force will be directly applied to the piping bracket resulting in a product failure.

#### Recommended Torque

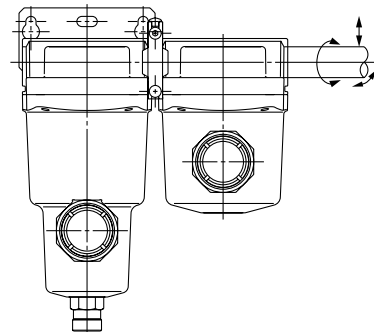
Unit: N·m

| Connection thread | 1/8      | 1/4    | 3/8      | 1/2      | 3/4      | 1        | 1 1/2    | 2        |
|-------------------|----------|--------|----------|----------|----------|----------|----------|----------|
| Torque            | 1.5 to 2 | 7 to 9 | 12 to 14 | 28 to 30 | 28 to 30 | 36 to 38 | 48 to 50 | 48 to 50 |

\* After tightening manually, tighten additionally by about 1/6 turn with a tightening tool.



2. **Do not apply torsional moment or bending moment (except the product's own weight) to the bracket. It may damage the bracket. Support external piping separately.**



3. **Inflexible piping such as steel piping tends to be affected by spread of excessive moment load or vibration from the piping side. Lay flexible tubing between the steel pipe and the product to prevent such effects.**



## Series AM□/AFF Specific Product Precautions 2

Be sure to read this before handling. Refer to back pages 1 and 2 for Safety Instructions, and “Precautions for Handling Pneumatic Devices” (M-03-E3A) for Common Precautions.

### Selection

#### ⚠ Caution

##### 1. About the system composition of purifying compressed air

Compressed air generally contains particulate contaminants as listed below, though there are some variations due to the compressor type and specifications. Determine the system configuration according to the desired cleanliness of compressed air and application, while referring to the “Air Preparation Equipment Selection Guide” for the AM□ series (Best Pneumatics).

##### [Particulate contaminants in compressed air]

- Water (drainage)
- Dust sucked from ambient air
- Degenerated oil from compressor
- Solid foreign matter such as rust inside piping and oil

##### 2. Select according to the maximum flow consumption.

When compressed air is used for air blow, etc., find the maximum air consumption before selecting the size of the AM□ series. (If compressed air exceeding the maximum flow rate is supplied, it can result in decline of the cleanliness of compressed air or element damage.)

### Mounting

#### ⚠ Caution

##### 1. About the mounting orientation of the products

Make sure to install this product on horizontal piping. If it is installed diagonally, laterally, or upside down, the drain separated by the element will splash to the outlet side.

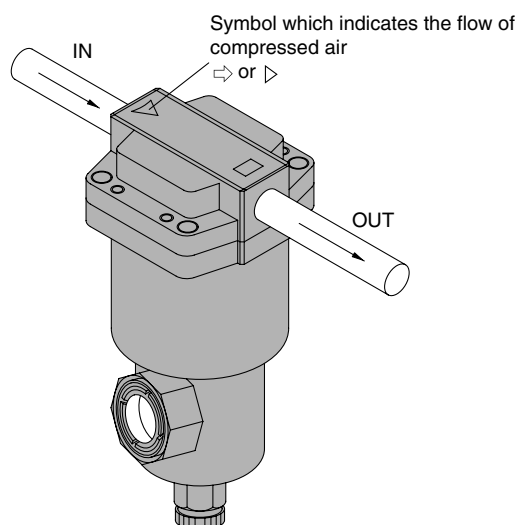
### Piping

#### ⚠ Caution

##### 1. Connect it with IN and OUT ports in proper location. It does not work with the connection reversed.

In the case of the AFF2C to 22C, 37B, 75B, AM□150C to 550C, 650, 850

Verify the direction of the flow of the compressed air and the “⇨” or “▷” mark that indicates the inlet of the product before connecting. It cannot be used if connected in the opposite direction.



##### 2. Use an air blower to flush the piping before connecting the piping.

Use an air blower to thoroughly flush the piping, or wash the piping to remove any cutting chips, cutting oil, or debris from inside the piping before connecting them.

##### 3. Wrapping of sealant tape

When screwing in the pipes or fittings, make sure to prevent cutting chips or the sealant material on the threaded portion of the pipe from entering the piping. If sealant tape is to be used, leave about 1.5 to 2 ridges of threads uncovered.

##### 4. Modular connection

Mount the attached bracket on one side when connecting 2 sets. Mount the attached brackets on both sides when connecting 3 sets or more. As a guideline for the number of brackets, one bracket should be mounted for every 2 products.



## Series AM□/AFF

# Specific Product Precautions 3

Be sure to read this before handling. Refer to back pages 1 and 2 for Safety Instructions, and "Precautions for Handling Pneumatic Devices" (M-03-E3A) for Common Precautions.

### Air Supply

#### ⚠ Caution

**1. The mist separator is not applicable to gases other than compressed air.**

The mist separator is not applicable to gases other than compressed air (example: oxygen, hydrogen, flammable gas, mixed gas).

**2. Do not use compressed air that contains chemicals, organic solvents, salt, or corrosive gases.**

Do not use compressed gas containing chemicals, organic solvents, salt or corrosive gas. This can cause rust, damage to rubber and resin parts, or malfunction.

**3. Operate within the specified operating pressure range.**

Damage, failure, or malfunction may occur if the mist separator is operated above the maximum operating pressure.

If the mist separator is used below the minimum operating pressure, increase in the air-flow resistance due to clogging will have such influence that the desired flow rate cannot be obtained.

If the mist separator is used under a low pressure such as for a blower, conduct sufficient tests by users to confirm the specifications and performances.

### Operating Environment

#### ⚠ Caution

**1. Do not use in the following environments, as this can cause failure.**

- 1) In locations having corrosive gases, organic solvents, and chemical solutions, or in locations where these elements are likely to adhere to the equipment.
- 2) In locations where salt water, water, or water vapor could come in contact with the equipment.
- 3) In locations that is exposed to shocks and vibrations.

**2. Be careful about the contamination of the workpieces due to entrainment of the ambient air.**

If compressed air is used for air blow, compressed air blowing out from the blow nozzle may entrain foreign matter (solid particles and liquid particles) floating in the ambient air, blowing it against the workpieces and causing adhesion. Therefore, sufficient precautions must be taken about the ambient environment.

### Maintenance

#### ⚠ Caution

**1. Replace the element immediately when the time for its replacement has arrived.**

To replace the element, replace the O-ring and the gasket, too. For the replacement procedure, refer to the operating manual. (For element dimensions, refer to back page 6.)

**<Element replacement timing>**

a) AFF2C to 22C, 37B, 75B, AM□150C ~ 550C, 650, 850

The replacement interval for the element is when the pressure drop reaches 0.1 MPa or after two years of operation, whichever comes first. A pressure drop can be verified with the element service indicator (-T) or with differential pressure gauge (Made to Order).

b) AME

If the element has red spots, perform replacement even before the situation has not come to (a).

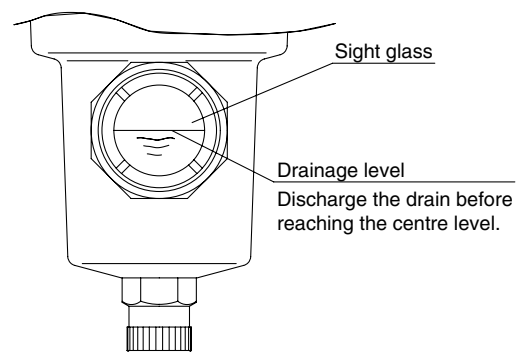
c) AMF

If the secondary side smells of oil, perform replacement even before the situation has not come to (a).

**2. Be sure to exhaust the drain accumulated in the filter container.**

Failure to discharge the drain will allow the accumulated drain to flow over to the outlet side.

When using the AFF2C to 22C, 37B, 75B, AM□150C to 550C, 650, 850 with drain cock, drain guide or ball valve, discharge the drain before the drainage level reaches the centre of the sight glass. If the drain is not discharged properly, it will flow over to the outlet side.





## Series AM□/AFF

# Specific Product Precautions 4

Be sure to read this before handling. Refer to back pages 1 and 2 for Safety Instructions, and “Precautions for Handling Pneumatic Devices” (M-03-E3A) for Common Precautions.

## Maintenance

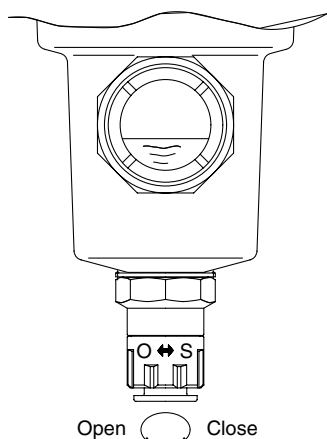
### ⚠ Caution

#### 3. In the case of a type with auto drain

- The auto drain operates when the drainage level reaches the top of the sight glass, and the drain will be discharged.
- When using the AFF2C to 22C, 37B, AM□150C to 550C, 650 with auto drain, the drain is automatically discharged with the knob tightened to the “S” side. Manual drain discharge, however, is also possible.

#### <Manual operation>

A manual knob attached to the auto drain end is tightened to the “S” side in normal operation. The drain can be discharged by loosening it to the “O” side. (Be careful, however, if pressure remains inside the filter when the drain is discharged, the drain will blow out from the drain port.)



Open → Close

#### 4. The procedures and parts for the replacement of the drain port depend on the production period.

| Description                       | Replacement parts name                                                                                                                              |                                                    | Applicable size                                      |
|-----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|------------------------------------------------------|
|                                   | Produced in Dec. 2002 or before<br>[Mfg. code: ~GZ]                                                                                                 | Produced in Jan. 2003 or after<br>[Mfg. code: HO~] |                                                      |
| Drain cock                        | AM-SA002                                                                                                                                            |                                                    | 2C to 22C<br>2B to 37B<br>150C to 550C<br>150 to 650 |
| Drain guide                       | AM-SA003-F                                                                                                                                          |                                                    |                                                      |
| N.O. auto drain                   | The auto drain cannot be replaced independently, and is included into the case assembly. (For the part number of the case assembly, refer to P206.) | Thread style Rc, G: AD43PA-D                       | 2C to 22C<br>2B to 22B<br>150C to 550C<br>150 to 550 |
|                                   |                                                                                                                                                     | Thread style NPT: NAD43PA-D                        |                                                      |
| N.C. auto drain                   |                                                                                                                                                     | Thread style Rc, G: AD53PA-D                       | 75B, 850                                             |
|                                   |                                                                                                                                                     | Thread style NPT: NAD53PA-D                        |                                                      |
| Ball valve package                | Thread style Rc, G: AD34PA-D                                                                                                                        |                                                    | 75B, 850                                             |
| N.O. auto drain <sup>(Note)</sup> | Thread style Rc, G: NAD43PA-D                                                                                                                       |                                                    |                                                      |

(Note) For the applicable size 75B and 850, a specific tool is necessary to replace the auto drain. (AM-SA005)

#### 5. The part number of the drain part depends on the option and thread style selected.

Applicable models: AFF2C~22C, AM, AMD, AMH, AMG150C~550C

| Draining method | Option | Thread style G  |
|-----------------|--------|-----------------|
| Drain cock      | F      | AM-SA002-1      |
|                 | V      | AM-SA002-2      |
|                 | FV     | AM-SA002-3      |
| Drain guide     | F      | AM-SA003-F-1    |
|                 | V      | AM-SA003-F-2    |
|                 | FV     | AM-SA003-F-3    |
| N.O. auto drain | F      | AD53PA-D-X155   |
|                 | V      | AD53PA-D-X113   |
| N.C. auto drain | F      | AD43PA-D-X155   |
|                 | V      | AD43PA-D-X113   |
|                 | H      | EAD33PA-D-X2004 |

## Others

### ⚠ Caution

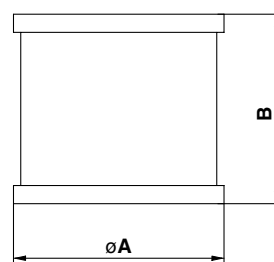
#### 1. Element interchange

Following is the element dimensions for the AFF and AM□ series:

Since elements for the same body size has the same dimensions, they are interchangeable.

However, do not interchange them easily since it can cause various kinds of problems.

If interchanging the elements is unavoidable, replace the product model number label, too.



#### Element Dimensions

| Model                                                             | Element dimensions (Reference value) |     |
|-------------------------------------------------------------------|--------------------------------------|-----|
|                                                                   | øA                                   | B   |
| AFF2C, AFF2B, AM150C, AM150<br>AMD150C, AMD150, AMH150C, AMH150   | 49                                   | 42  |
| AFF4C, AFF4B, AM250C, AM250<br>AMD250C, AMD250, AMH250C, AMH250   | 58                                   | 52  |
| AFF8C, AFF8B, AM350C, AM350<br>AMD350C, AMD350, AMH350C, AMH350   | 70                                   | 78  |
| AFF11C, AFF11B, AM450C, AM450<br>AMD450C, AMD450, AMH450C, AMH450 | 82                                   | 88  |
| AFF22C, AFF22B, AM550C, AM550<br>AMD550C, AMD550, AMH550C, AMH550 | 96                                   | 118 |
| AFF37B, AM650<br>AMD650, AMH650                                   | 122                                  | 144 |
| AFF75B, AM850<br>AMD850, AMH850                                   | 142                                  | 223 |



# Series AM□/AFF Specific Product Precautions 5

Be sure to read this before handling. Refer to back pages 1 and 2 for Safety Instructions, and "Precautions for Handling Pneumatic Devices" (M-03-E3A) for Common Precautions.

## Others

### ⚠ Caution

#### 2. About oil-free products

The AFF and AM□ series includes parts (such as resin parts, rubber parts, and elements) that does not allow degreasing wash. Therefore, oil-free products with all parts degreasing washed is not available.

#### 3. Degreasing wash

Certain parts such as the body and housing can be degreasing washed. Contact SMC after confirming the specifications. (available as Option or Made to Order)

#### 4. Change of oil

On the AFF and AM□ series, no oil such as grease is applied to parts exposed to compressed air. However, for certain specifications, there are some parts to which oil is applied. It is possible to change the type of applied oil (as Option or Made to Order).

### ⚠ Caution

#### 5. Internal volume of filter container

The product can be used as a small capacity air tank by removing the element.

Following is the volume of filter containers of the AFF and AM□ series (when the element is removed).

#### Volume Inside Filter

| Model                                                             | Volume inside filter<br>(Reference value)<br>(cm <sup>3</sup> ) |
|-------------------------------------------------------------------|-----------------------------------------------------------------|
| AFF2C, AFF2B, AM150C, AM150<br>AMD150C, AMD150, AMH150C, AMH150   | 250                                                             |
| AFF4C, AFF4B, AM250C, AM250<br>AMD250C, AMD250, AMH250C, AMH250   | 300                                                             |
| AFF8C, AFF8B, AM350C, AM350<br>AMD350C, AMD350, AMH350C, AMH350   | 600                                                             |
| AFF11C, AFF11B, AM450C, AM450<br>AMD450C, AMD450, AMH450C, AMH450 | 1000                                                            |
| AFF22C, AFF22B, AM550C, AM550<br>AMD550C, AMD550, AMH550C, AMH550 | 1500                                                            |
| AFF37B, AM650<br>AMD650, AMH650                                   | 3000                                                            |
| AFF75B, AM850<br>AMD850, AMH850                                   | 9000                                                            |

## Discontinued Model and Equivalent Model

The AFF and AM□ series were remodeled to products introduced in this catalogue in 1988.

Along with the new models, old models were provided mainly for the purpose of maintenance. However, due to the aging of metal dies and extreme decline in the quantity, the procurement of parts and consequently the maintenance of the production system became difficult. For this reason, old models were discontinued in 1994, as detailed in the table below. Use the equivalent model listed there.

### Discontinued Model and Equivalent Model

| Product name         | Production discontinuance |                                                  |                                                           |                                                          | Equivalent model |                                                          |      |
|----------------------|---------------------------|--------------------------------------------------|-----------------------------------------------------------|----------------------------------------------------------|------------------|----------------------------------------------------------|------|
|                      | Model                     | Period of production discontinuance for products | Period of production discontinuance for maintenance parts | External dimensions of product<br>Width x Depth x Height | Model            | External dimensions of product<br>Width x Depth x Height | Page |
| Main Line Filter     | AFF6                      | End of July '94                                  | End of March '99                                          | 100 x 100 x 253                                          | AFF4C            | 76 x 76 x 172                                            | P.10 |
|                      | AFF22                     |                                                  |                                                           | 150 x 140 x 446                                          | AFF22C           | 122 x 122 x 259                                          |      |
|                      | AFF37                     |                                                  |                                                           | 200 x 170 x 526                                          | AFF37B           | 160 x 160 x 311                                          |      |
|                      | AFF55                     |                                                  |                                                           | 280 x 280 x 497                                          | AFF75B           | 220 x 220 x 461                                          |      |
| Mist Separator       | AM200                     |                                                  |                                                           | 63 x 63 x 191                                            | AM150C           | 63 x 63 x 158                                            | P.18 |
|                      | AM300                     |                                                  |                                                           | 85 x 85 x 258                                            | AM250C           | 76 x 76 x 172                                            |      |
|                      | AM400                     |                                                  |                                                           | 120 x 120 x 236                                          | AM350C           | 90 x 90 x 204                                            |      |
|                      | AM500                     |                                                  |                                                           | 140 x 140 x 383                                          | AM550C           | 122 x 122 x 259                                          |      |
|                      | AM600                     |                                                  |                                                           | 180 x 170 x 465                                          | AM650            | 160 x 160 x 311                                          |      |
| Micro Mist Separator | AMD100                    |                                                  |                                                           | 63 x 63 x 136                                            | AMD150C          | 63 x 63 x 158                                            | P.26 |
|                      | AMD200                    |                                                  |                                                           | 80 x 82 x 170                                            | AMD250C          | 76 x 76 x 172                                            |      |
|                      | AMD300                    |                                                  |                                                           | 90 x 90 x 233                                            | AMD350C          | 90 x 90 x 204                                            |      |
|                      | AMD400                    |                                                  |                                                           | 140 x 140 x 380                                          | AMD450C          | 106 x 106 x 225                                          |      |
|                      | AMD500                    |                                                  |                                                           | 140 x 140 x 490                                          | AMD550C          | 122 x 122 x 259                                          |      |
|                      | AMD600                    |                                                  |                                                           | 140 x 140 x 590                                          | AMD650           | 160 x 160 x 311                                          |      |
| Odour Removal Filter | AMF200                    |                                                  |                                                           | 80 x 80 x 153                                            | AMF250C          | 76 x 76 x 103                                            | P.52 |
|                      | AMF300                    |                                                  |                                                           | 90 x 90 x 216                                            | AMF350C          | 90 x 90 x 132                                            |      |
|                      | AMF400                    |                                                  |                                                           | 140 x 140 x 250                                          | AMF450C          | 106 x 106 x 151                                          |      |
|                      | AMF500                    |                                                  |                                                           | 140 x 140 x 360                                          | AMF550C          | 122 x 122 x 187                                          |      |
|                      | AMF600                    |                                                  |                                                           | 140 x 140 x 460                                          | AMF650           | 160 x 160 x 291                                          |      |
|                      |                           |                                                  |                                                           |                                                          |                  |                                                          |      |

Note) Some models have different heights depending on the port size. They are shown in parentheses.





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