

# 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 color change. Accordingly, the replacement time can be judged visually. (A red color spot indicates the replacement time.)

## ⚠ Caution

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

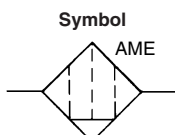
Modular connection is possible with AME150C to 550C. (For details, refer to page 61.)



AME150C to 350C AME450C/550C



AME650/850



Made to Order

(For details, refer to page 67.)

## Model

Model	AME150C	AME250C	AME350C	AME450C	AME550C	AME650	AME850
Rated flow (ℓ/min (ANR)) <sup>Note)</sup>	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 47) and "Maximum Air Flow" (page 47).

## 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 μm (Filtration efficiency: 99.9%)
Cleanliness at outlet	Less than 100 particles of 0.3 μm or larger per cubic foot [Less than 35 particles per 10 liters (ANR)]
Oil mist density at outlet	Max. 0.01 mg/m <sup>3</sup> (ANR) (≈0.008 ppm)
Element life	Element color indicator (Replace the element when a red color spot occurred on the surface.)

## Accessory

Applicable model	AME150C	AME250C	AME350C	AME450C	AME550C	AME650	AME850
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



### AME150C to 550C

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

#### Body size

150C
250C
350C
450C
550C

#### Thread type

Symbol	Type
Nil	Rc
F	G*1
N	NPT

\*1 Conforms to ISO1179-1.

#### Option

Symbol	Description
Nil	—
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
Nil	—
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
Nil	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
Nil	—	—
X12	White vaseline specifications	P.70

• **Option**

Symbol	Description
Nil	—
R	IN-OUT reversal direction

• **Accessory**

Symbol	Description
Nil	—
B	Bracket*

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



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

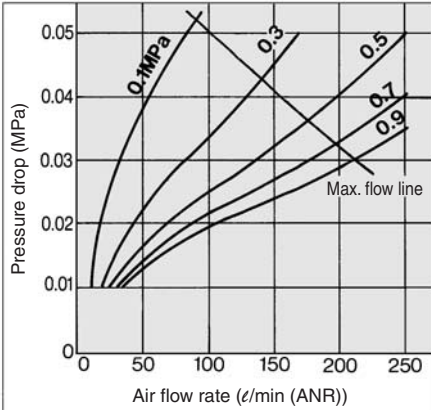
# Series AME

## Flow Characteristics (Element initial condition)

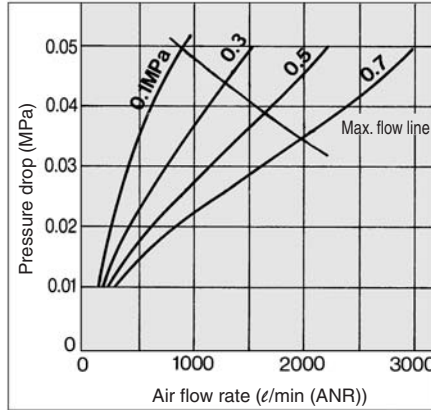


Note) Compressed air over max. flow line in the table below may not meet the specifications of the product. It may cause damage to the element.

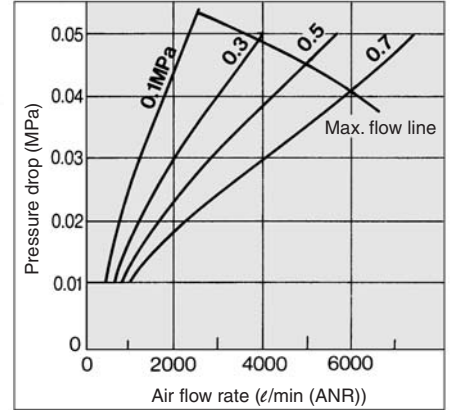
### AME150C



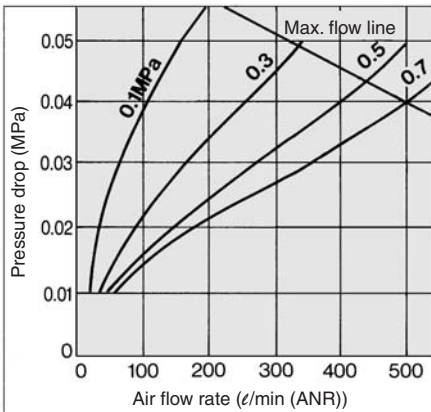
### AME450C



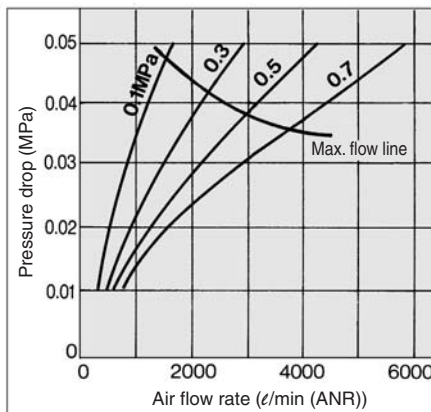
### AME650



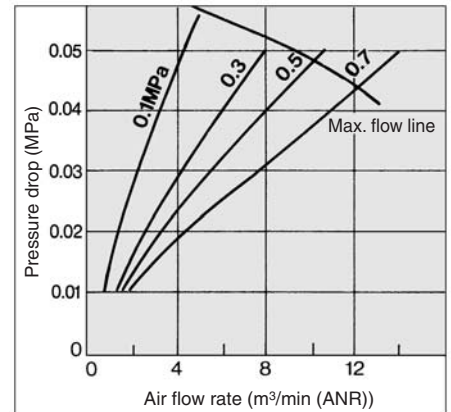
### AME250C



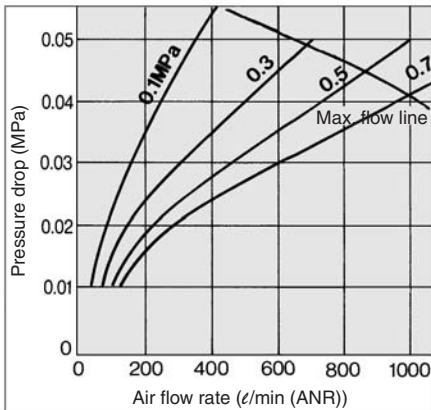
### AME550C



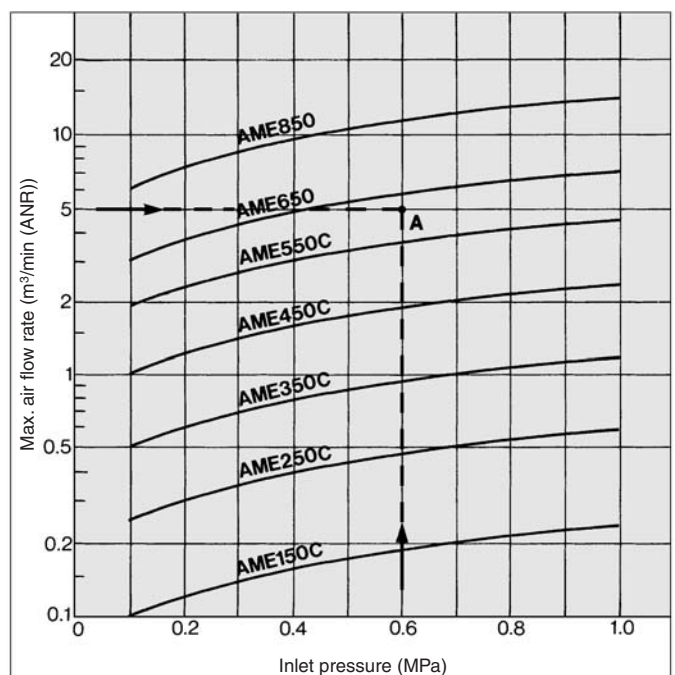
### AME850



### 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 m<sup>3</sup>/min (ANR)

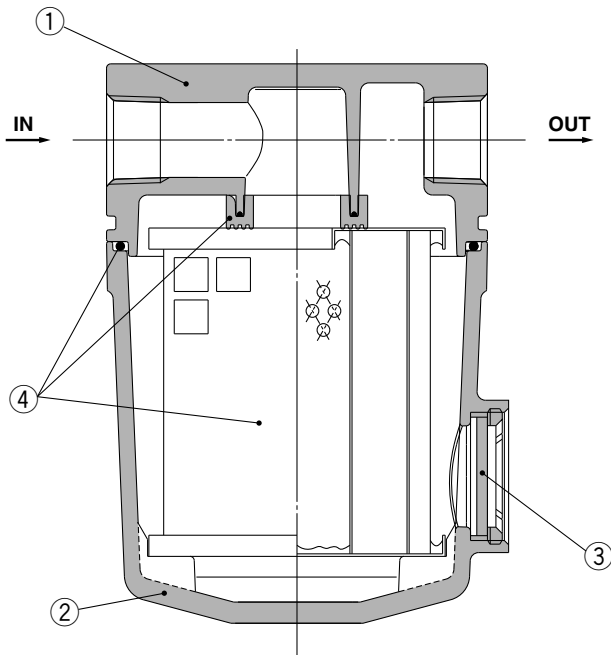
1. Obtain the intersecting point A of inlet pressure and max. air flow rate in the graph.
2. The AME650 is obtained when the max. flow line is above the intersecting point A in the graph.



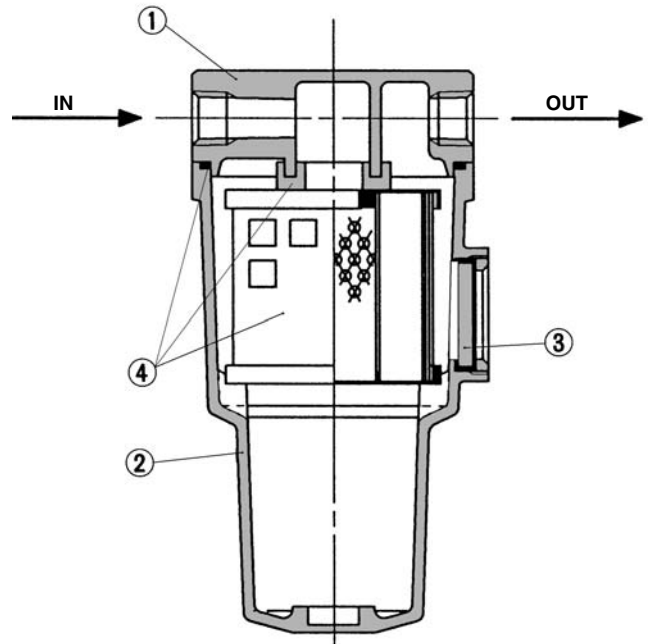
Note) Make sure to select a model that has the max. flow line above the obtained intersecting point. With a model that has the max. flow line below the obtained intersecting point, the flow rate will be exceeded, thus leading to a problem such as being unable to satisfy the specifications.

## 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 63.



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 49 through to 51 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 For option F	AME-EL150	AME-EL250	AME-EL350	AME-EL450	AME-EL550	AME-EL650	AME-EL850
				AME-EL150-F	AME-EL250-F	AME-EL350-F	AME-EL450-F	AME-EL550-F	—	—

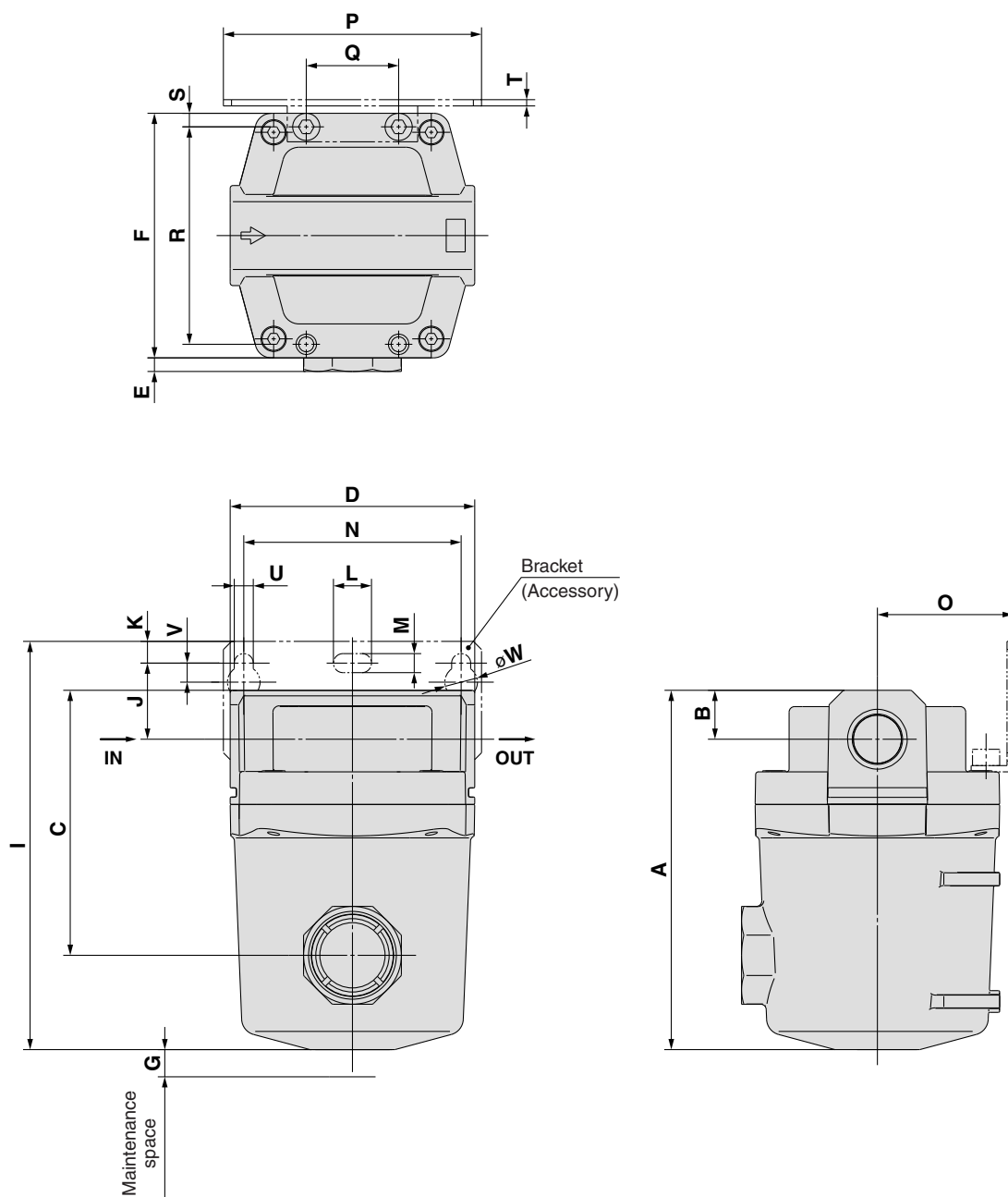
\* Element assembly: With gasket (1 pc.) and O-ring (1 pc.)

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

# Series AME

## Dimensions

### AME150C to 350C

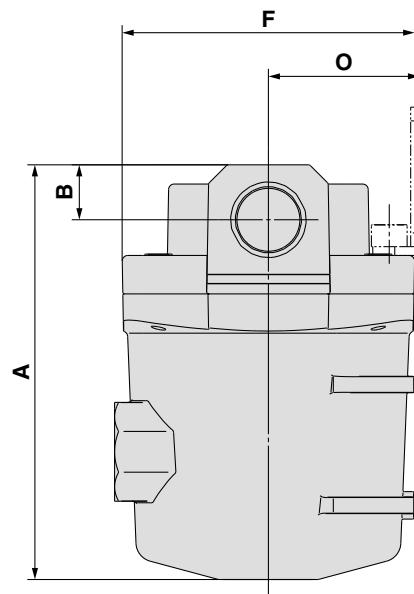
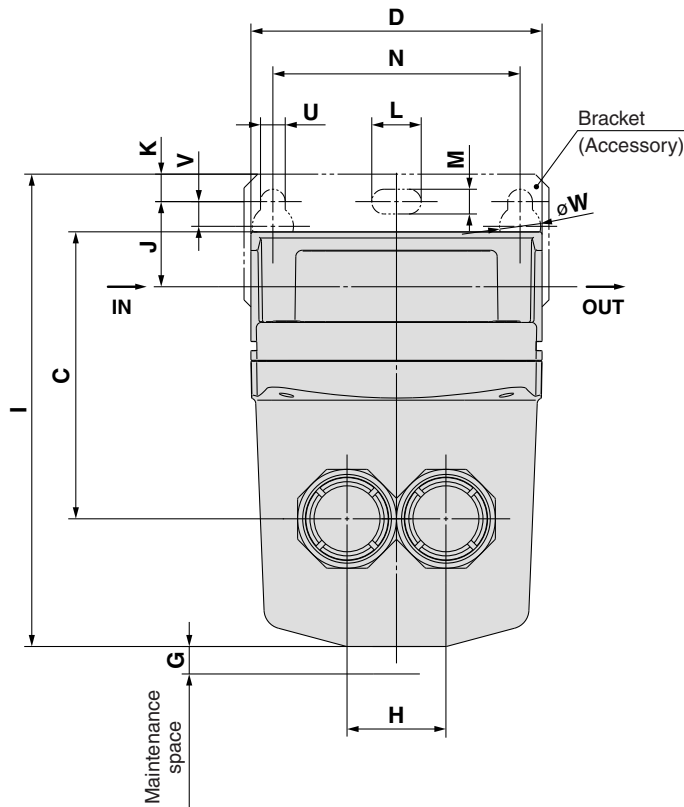
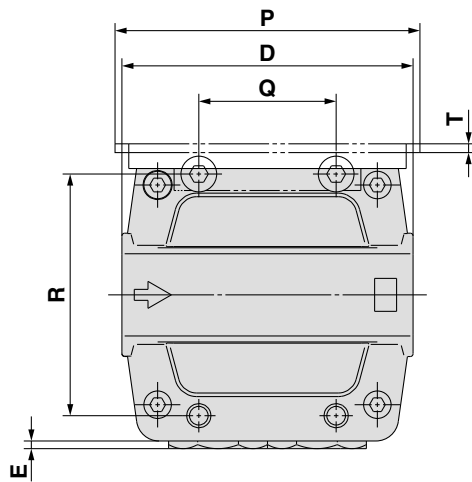


(mm)

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
<b>AME150C</b>	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
<b>AME250C</b>	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
<b>AME350C</b>	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**



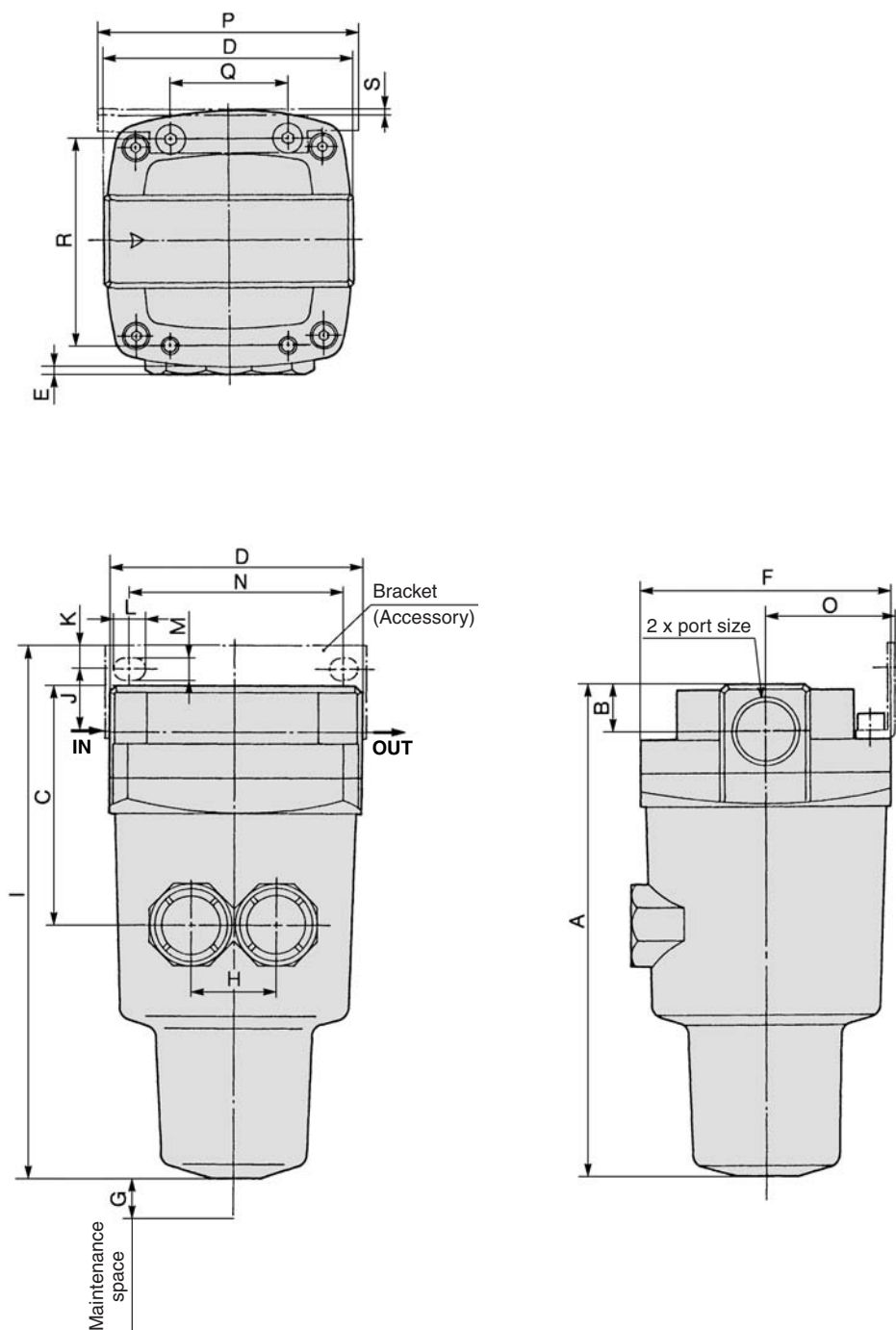
Model	Port size	A	B	C	D	E	F	G	H	Bracket related dimensions													
										I	N	J	K	U	V	L	M	W	O	P	Q	R	T
<b>AME450C</b>	1/2, 3/4	151	20	105	106	3	106	10	36	172	90	31	10	9	9	18	9	15	55	111	50	88	3.2
<b>AME550C</b>	3/4, 1	187	24	130	122	3	122	15	44	206	100	33	10	9	9	18	9	15	65	126	60	102	3.2

(mm)

# Series AME

## Dimensions

### AME650/850



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