

# 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 (%) =  $\frac{\text{Removed water (Water droplet) (g)}}{\text{Inflowed water (Water droplet) (g)}} \times 100$

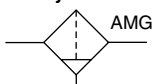
**Modular connection is possible with AMG150C to 550C.**  
 (For details, refer to page 58.)



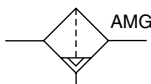
AMG150C to 550C

AMG650/850

Symbol



(For drain cock)



(For auto drain)



**Made to Order**

(For details, refer to page 63.)

## Model

Model	AMG150C	AMG250C	AMG350C	AMG450C	AMG550C	AMG650	AMG850
Rated flow (ℓ/min (ANR)) <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.**

## How to Order



### AMG150C to 550C

AMG **550C** - [ ] **10** [ ] [ ] - [ ] - [ ]

#### Body size

150C
250C
350C
450C
550C

#### Thread type

Symbol	Type
—	Rc
<b>F</b>	G*1
<b>N</b>	NPT

\*1 Conforms to ISO1179-1.

#### Port size

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

#### Accessory

Symbol	Description
—	—
<b>B</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
—	—	—
<b>X26</b>	N.C., N.O. auto drain, drain piping type	P.65

#### Option \*3

Symbol	Description
—	—
<b>F</b>	Rubber material: Fluororubber
<b>H</b>	For medium air pressure (1.6 MPa)
<b>J</b>	Drain guide 1/4 female threaded *4
<b>R</b>	IN-OUT reversal direction
<b>V</b>	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)
<b>C</b>	N.C. auto drain
<b>D</b>	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

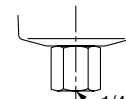
#### Symbol F: Rubber material: Fluororubber

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	
			D	J	R	J	R	AMG650	AMG850
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>	○	○	□	○	○	○	○

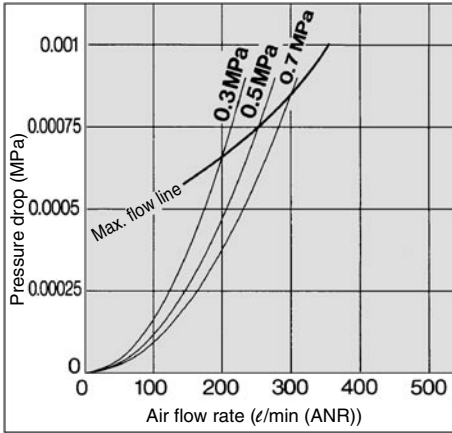
# Series AMG

## Flow Characteristics

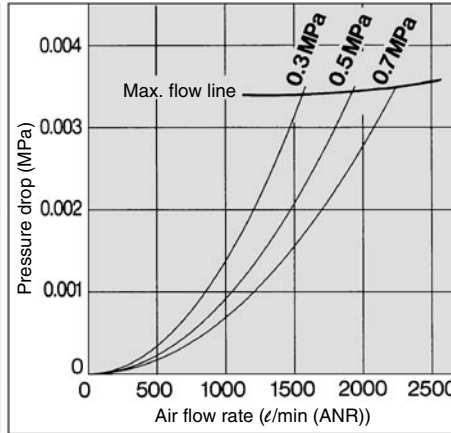


Note) Compressed air over max. flow line in the table below may not meet the specifications of the product. It may cause damage to the element.

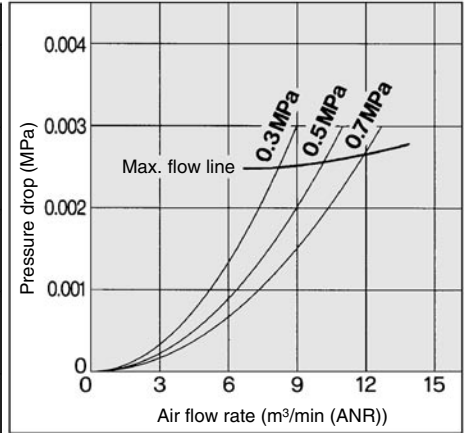
**AMG150C**



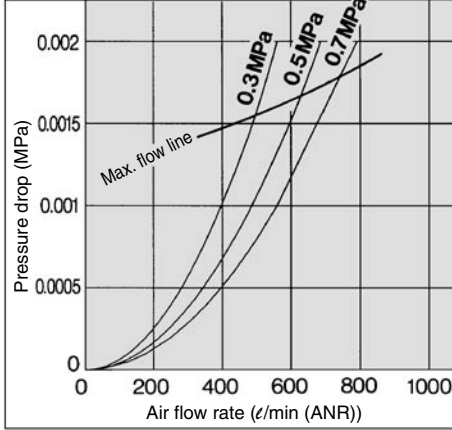
**AMG450C**



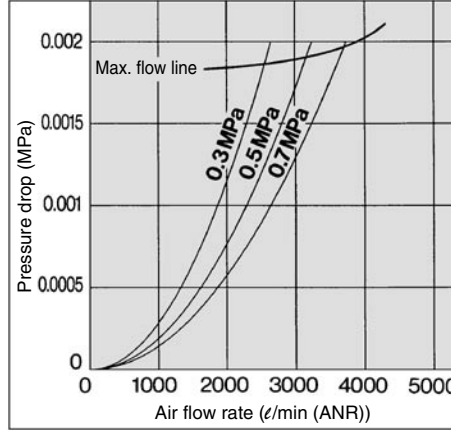
**AMG850**



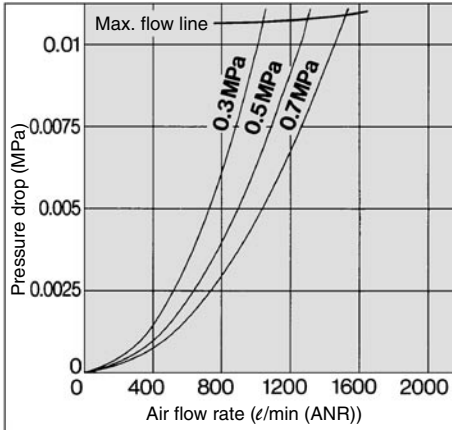
**AMG250C**



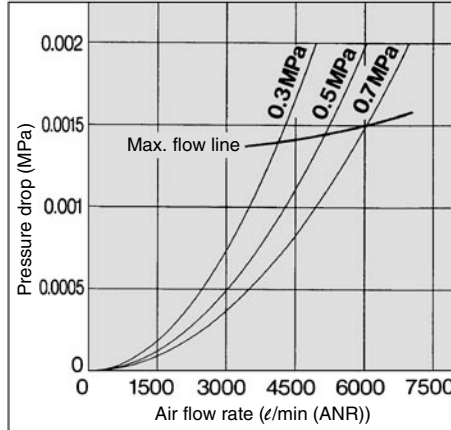
**AMG550C**



**AMG350C**

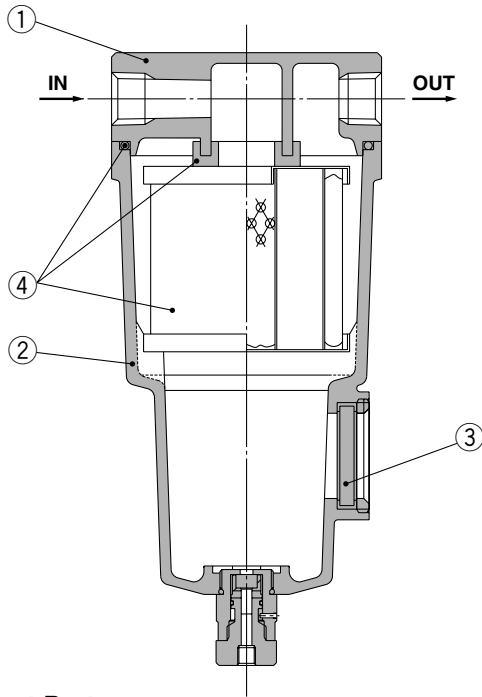


**AMG650**

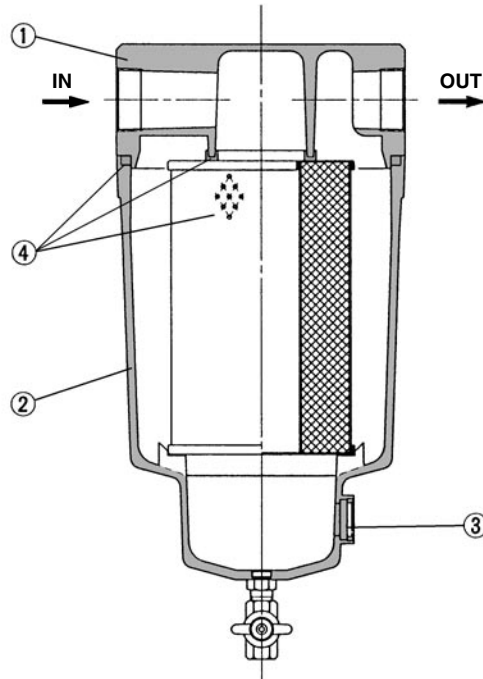


## Construction

### AMG150C to 550C, AMG650



### AMG850



## Component Parts

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

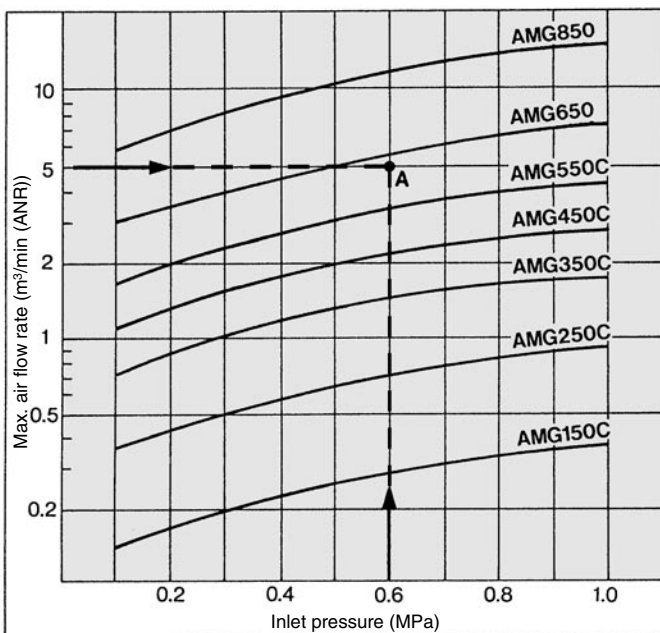
No.	Description	Material	Applicable model	Model						
				AMG150C	AMG250C	AMG350C	AMG450C	AMG550C	AMG650	AMG850
4	<b>Element assembly</b>	Resin, others	Except option F	AMG-EL150	AMG-EL250	AMG-EL350	AMG-EL450	AMG-EL550	AMG-EL650	AMG-EL850
			For option F	AMG-EL150-F	AMG-EL250-F	AMG-EL350-F	AMG-EL450-F	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 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 AMG650 is obtained when the max. flow line is above the intersecting point A in the graph.

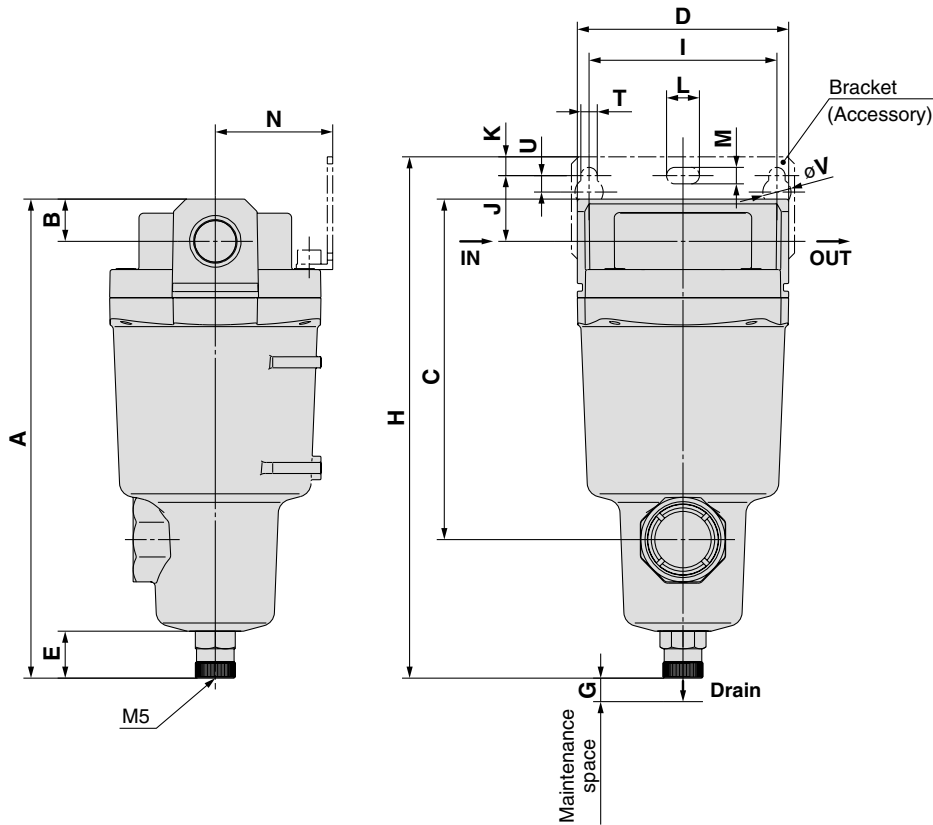
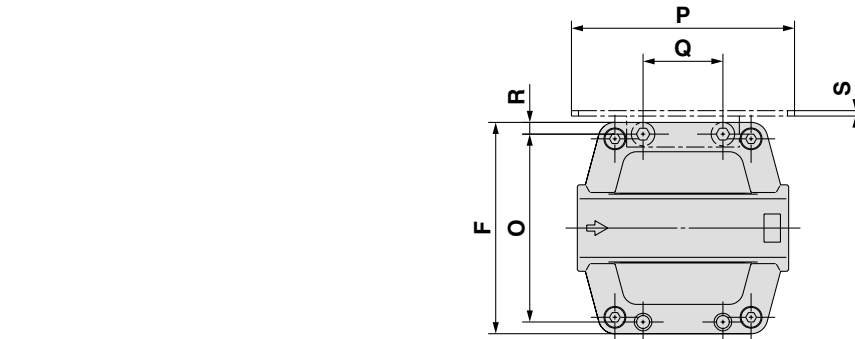


Note) Make sure to select a model that has the max. flow line above the obtained intersecting point. With a model that has the max. flow line below the obtained intersecting point, the flow rate will be exceeded, thus leading to a problem such as being unable to satisfy the specifications.

# Series AMG

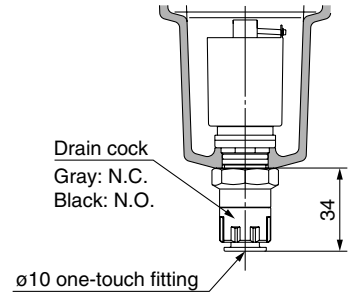
## Dimensions

### AMG150C to 550C

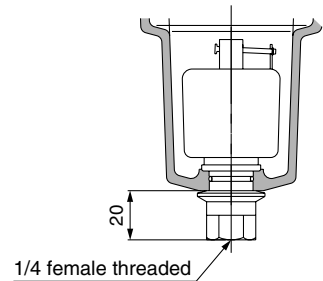


### Auto drain

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

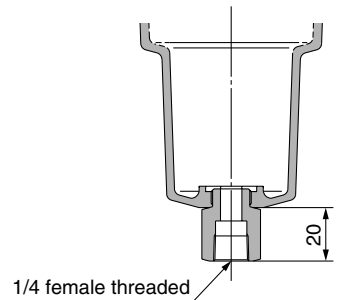


Combination of D: With auto drain (N.O.)  
and H: For medium air pressure



### Option

J: Drain guide 1/4 female threaded

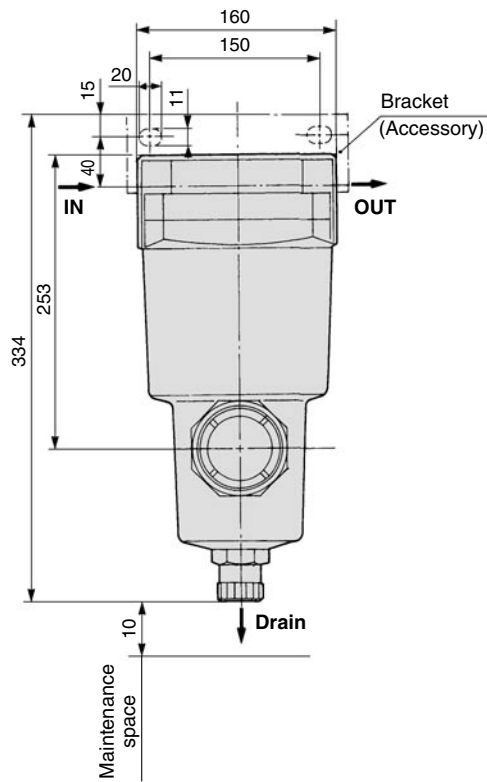
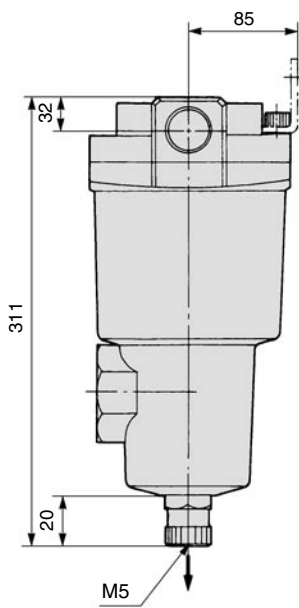
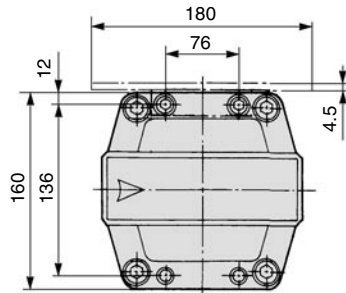


Model	Port size	A	B	C	D	E	F	G	Bracket related dimensions														
									H	I	J	K	T	U	L	M	V	N	O	P	Q	R	S
AMG150C	1/8, 1/4	158	10	99	63	20	63	10	173	56	20	5	6	6	12	6	10	35	54	70	26	4.5	1.6
AMG250C	1/4, 3/8	172	14	113	76	20	76	10	190	66	24	8	6	6	12	6	10	40	66	80	28	5	2
AMG350C	3/8, 1/2	204	18	145	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

(mm)

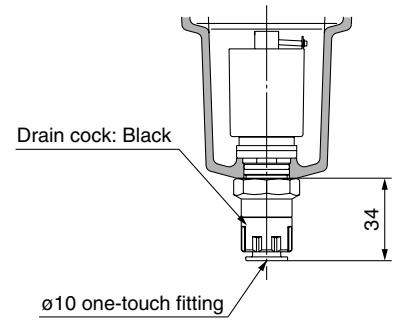
**Dimensions**

**AMG650**



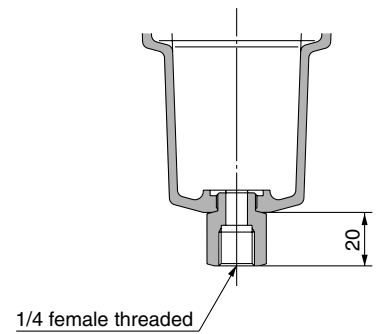
**Auto drain**

**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

