

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/m³ (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.

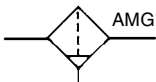
(For details, refer to page 204.)



AMG150C to 550C

AMG650/850

Symbol



Symbol



(Drain cock specifications) (Auto drain specifications)



Made to Order

(For details, refer to page 210.)

Model

Model	AMG150C	AMG250C	AMG350C	AMG450C	AMG550C	AMG650	AMG850
Rated flow (l/min (ANR)) ^{Note)}	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 148) and "Maximum Air flow" (page 149).

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 before handling.

Refer to front matters 42 and 43 for Safety Instructions and pages 6 to 8 for Air Preparation Equipment Precautions.

How to Order



AMG150C to 550C

AMG **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.

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
Nil	—
B	Bracket *2

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

*3 The model with bracket is not available for -X15.

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
Nil	—	—
X15	With IN-OUT flange *3	P.212
X26	N.C., N.O. auto drain, drain piping type	P.213

Option *4

Symbol	Description
Nil	—
F	Rubber material: Fluororubber
H	For medium air pressure (1.6 MPa)
J	Drain guide 1/4 female threaded *5
R	IN-OUT reversal direction
V	Degreasing wash, *6 white vaseline

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

*6 Only body/housing is degreasing washed.

Auto drain *4

Symbol	Description
Nil	Drain cock (Without auto drain)
C	N.C. auto drain
D	N.O. auto drain

*4 Refer to "Drain Exhaust Specifications/Option Combinations".

(Only one drain exhaust method can be selected.)

Drain Exhaust Specifications/Option Combinations

○: All types of drain exhaust specifications are available. (including drain guide, "J" specification)

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

▼: Both N.C. and N.O. auto drain ("C", "D" specification) are not available.

	Nil	F	H	R	V
Nil	○	○	△	○	○
F	○	■	▼	○	▼
H	△	▼	■	△	▼
R	○	○	△	■	○
V	○	▼	▼	○	■

■: Not available

Options

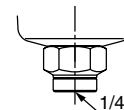
Symbol F: Rubber material: Fluororubber

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
Nil	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
Nil	—
B	Bracket *1 *2

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

*2 The model with bracket is not available for -X15.

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
Nil	—	—
X15	With IN-OUT flange *2	P.212
X26	N.C., N.O. auto drain, drain piping type	P.213
X12	White vaseline	P.213

Option *3

Symbol	Description
Nil	—
J	Drain guide 1/4 female threaded *5
R	IN-OUT reversal direction

*5 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 *3

Symbol	Description
Nil	Drain cock (Without auto drain) *4
D	N.O. auto drain

*3 Refer to "Auto Drain Specifications/Option Combinations".

*4 Body size 850 is equipped with a ball valve (Rc 3/8 female threaded). Mount a piping adapter IDF-AP609 (page 205) to the ball valve if NPT 3/8 female threaded is required.



Note) Refer to "How to Order Bowl Assembly" on page 206.

Auto Drain Specifications/Option Combinations

○ : Available □ : Not available

Auto drain specifications/Option			Auto drain specifications		Option		Applicable model	
			D	J	R	AMG650	AMG850	
Auto drain specifications	N.O. auto drain	D	□	□	○	○	○	
	Drain guide 1/4	J	□	□	○	○	○	
Option	IN-OUT reversal direction	R	○	○	□	○	○	

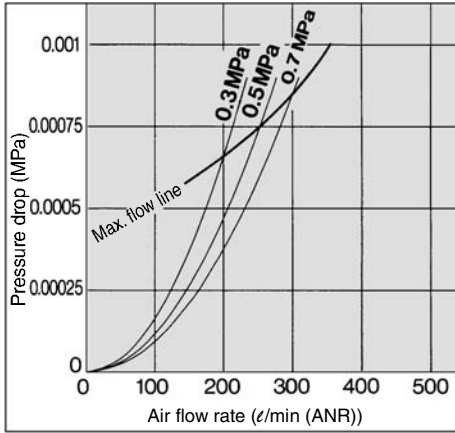
Series AMG

Flow Characteristics (Representative values)

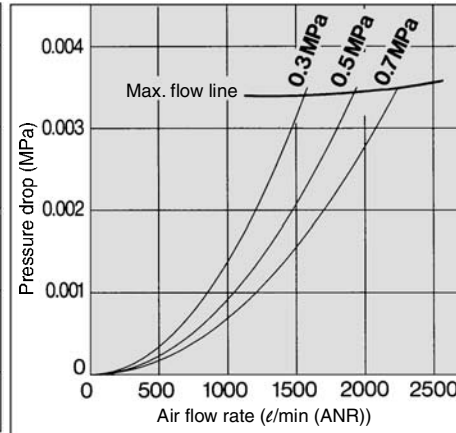


Note) Compressed air over max. flow line in the table below may not meet the specifications of the product.

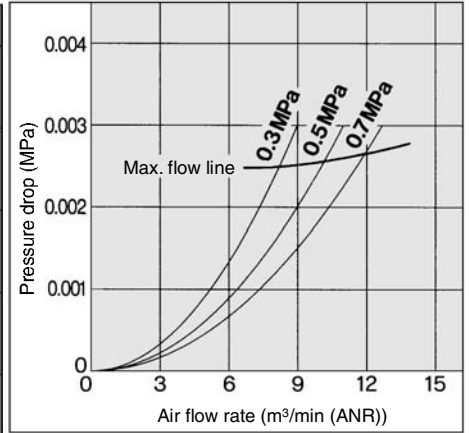
AMG150C



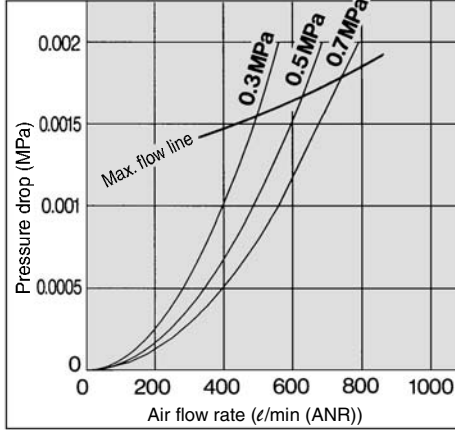
AMG450C



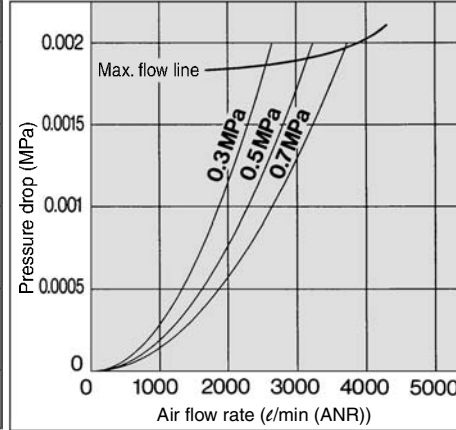
AMG850



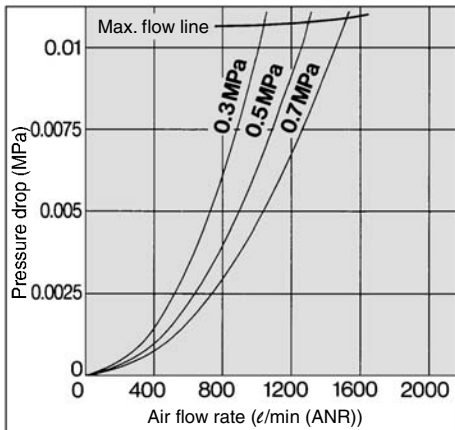
AMG250C



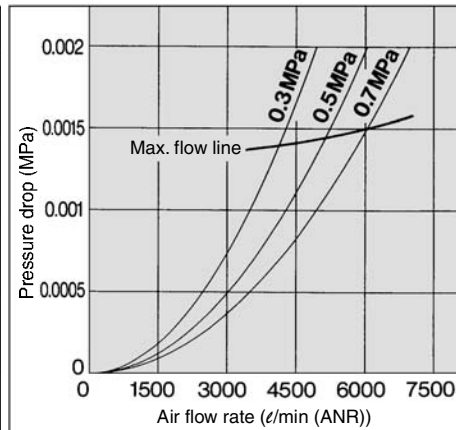
AMG550C



AMG350C

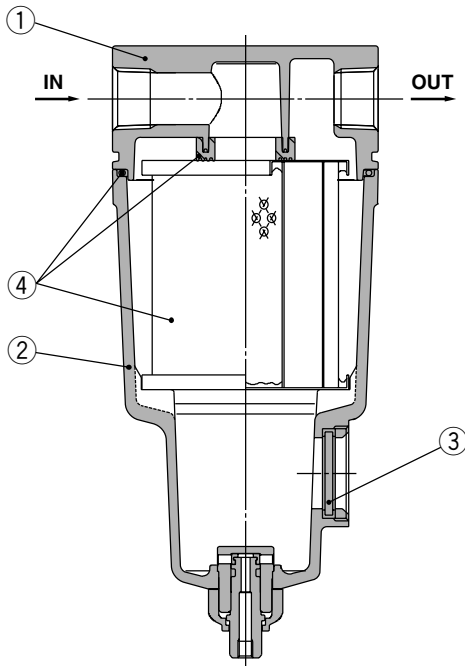


AMG650

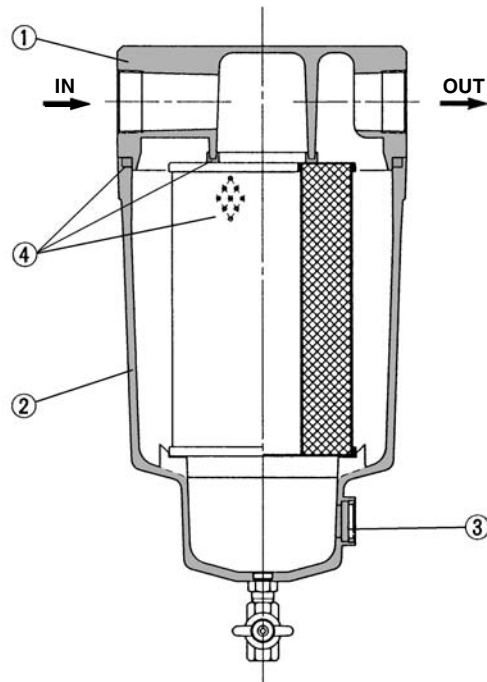


Construction

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 206.



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 150 to 152 for details.

Replacement Parts

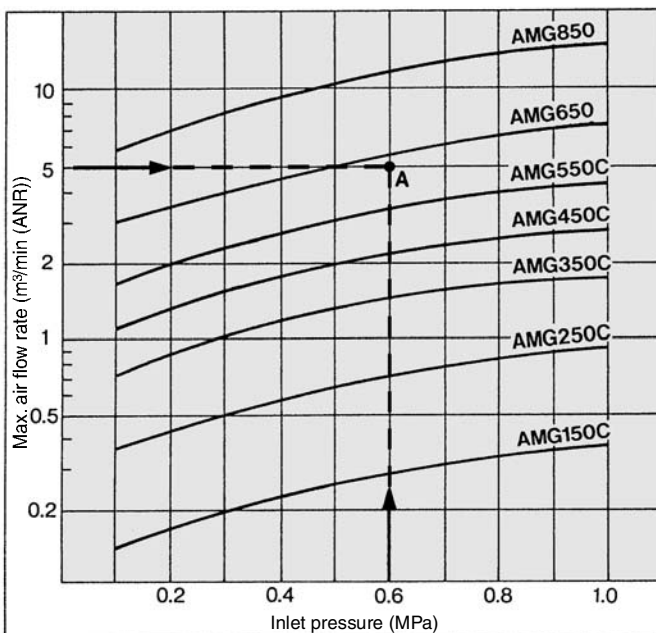
No.	Description	Material	Applicable model	Model						
				AMG150C	AMG250C	AMG350C	AMG450C	AMG550C	AMG650	AMG850
4	Element assembly	Resin, others	Except option F For option F	AMG-EL150 AMG-EL150-F	AMG-EL250 AMG-EL250-F	AMG-EL350 AMG-EL350-F	AMG-EL450 AMG-EL450-F	AMG-EL550 AMG-EL550-F	AMG-EL650	AMG-EL850

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

* Refer to back page 219 for replacement of auto drain.

* Element assemblies for Made to Order (X12, X15, 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.

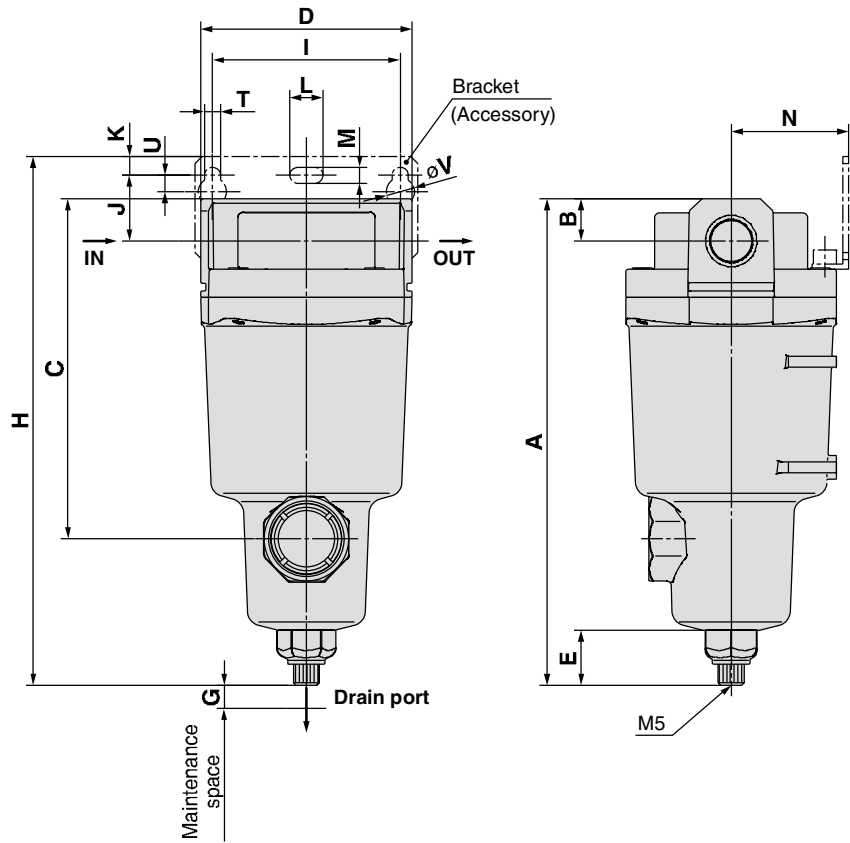
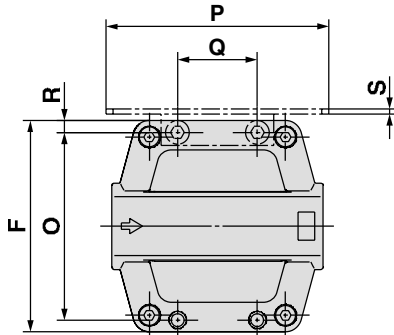


Note) Make sure to select a model that has the max. flow line above the obtained intersecting point. With a model that has the max. flow line below the obtained intersecting point, the flow rate will be exceeded, thus leading to a problem such as being unable to satisfy the specifications.

Series AMG

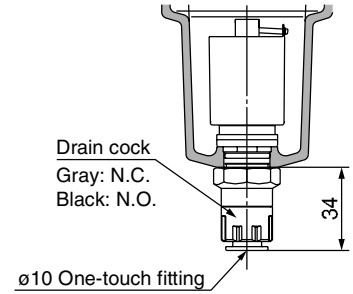
Dimensions

AMG150C to 550C

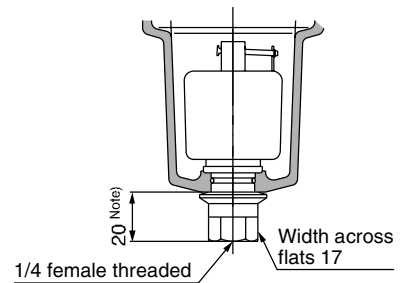


Auto drain

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



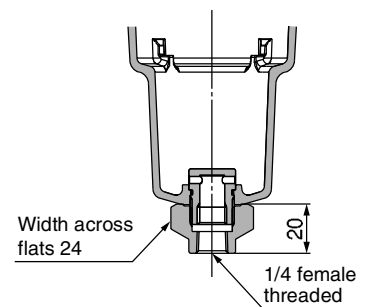
Combination of D: With auto drain (N.O.)
and H: For medium air pressure



Note) 23 for AMG250C.

Option

J: Drain guide 1/4 female threaded

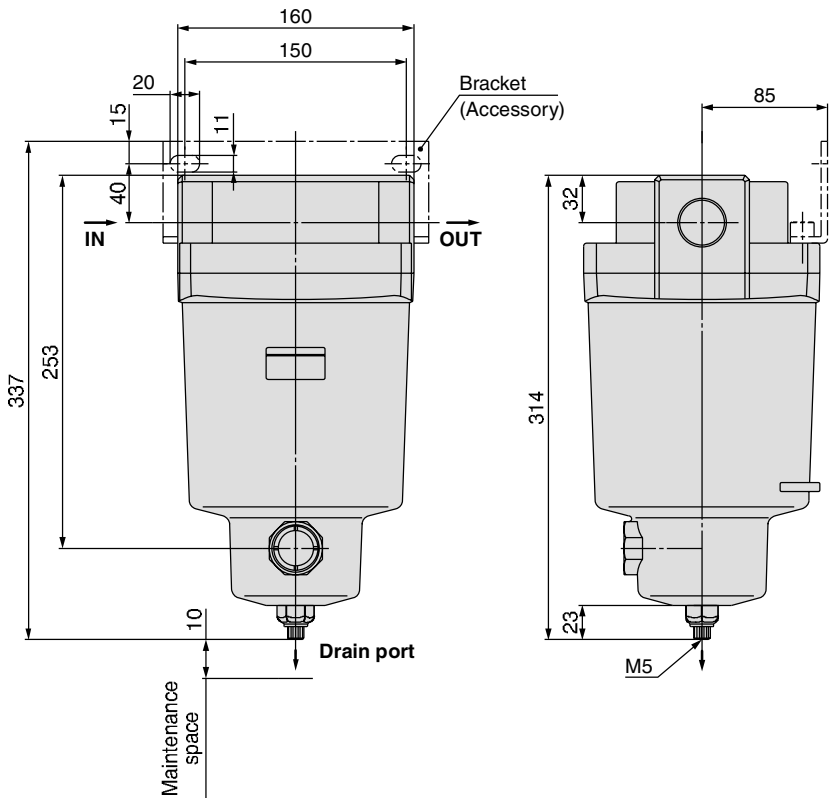
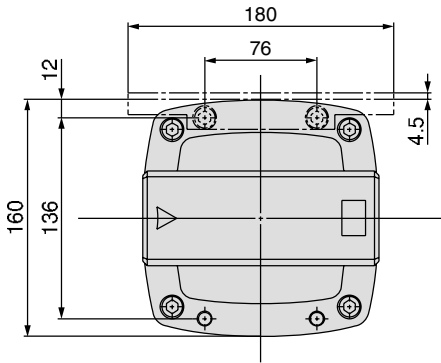


Model	Port size	A	B	C	D	E	F	G	Bracket related dimensions														
									H	I	J	K	T	U	L	M	V	N	O	P	Q	R	S
AMG150C	1/8, 1/4	161	10	99	63	23	63	10	176	56	20	5	6	6	12	6	10	35	54	70	26	4.5	1.6
AMG250C	1/4, 3/8	175	14	113	76	23	76	10	193	66	24	8	6	6	12	6	10	40	66	80	28	5	2
AMG350C	3/8, 1/2	207	18	145	90	23	90	10	225	80	28	8	7	7	14	7	12	50	80	95	34	5	2.3
AMG450C	1/2, 3/4	228	20	166	106	23	106	10	249	90	31	10	9	9	18	9	15	55	88	111	50	9	3.2
AMG550C	3/4, 1	262	24	200	122	23	122	15	281	100	33	10	9	9	18	9	15	65	102	126	60	10	3.2

(mm)

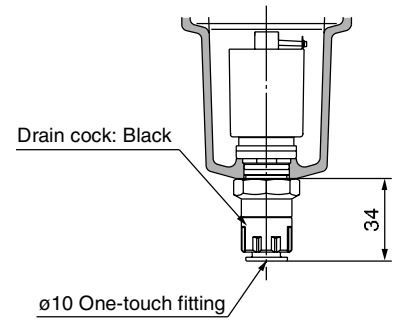
Dimensions

AMG650



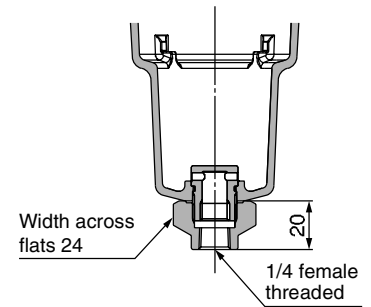
Auto drain

D: With auto drain (N.O.)



Option

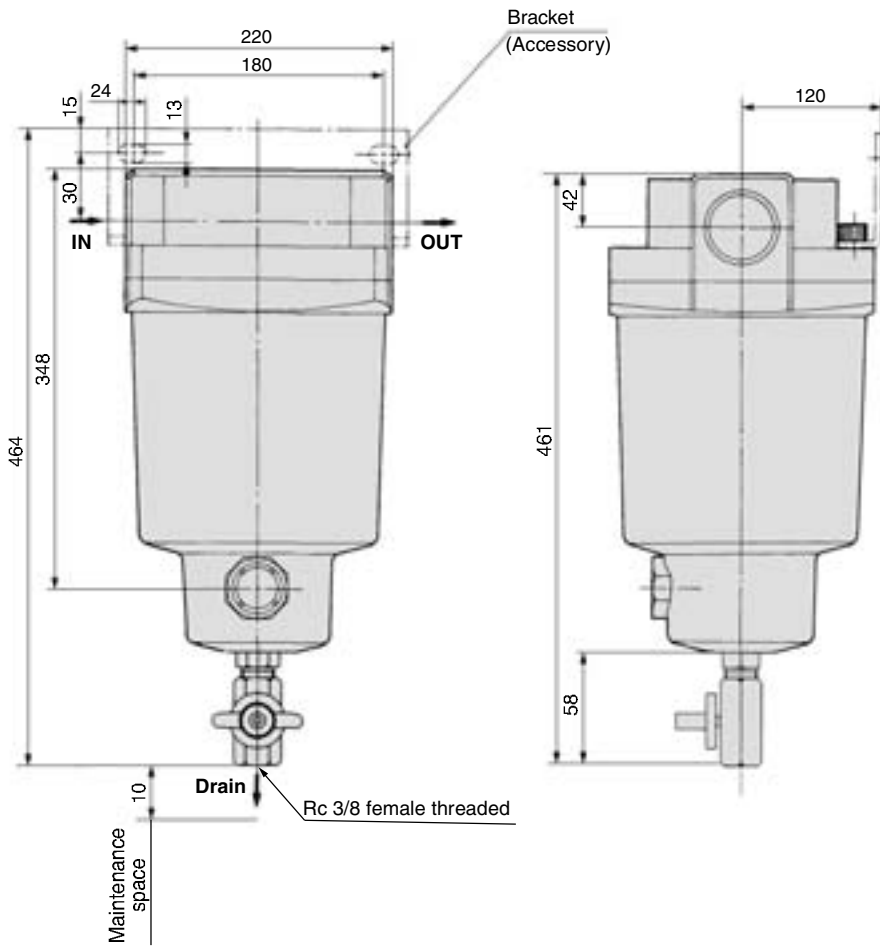
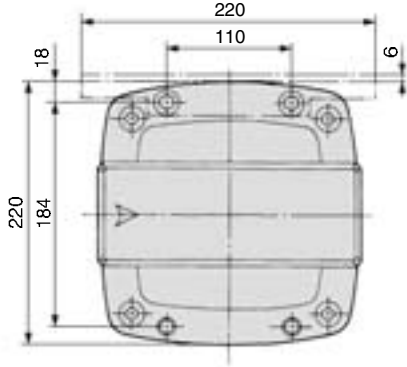
J: Drain guide 1/4 female threaded



Series AMG

Dimensions

AMG850



Auto drain

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

