

# Water Separator AMG Series

RoHS

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 a dedicated element 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 266.)



AMG150C to 550C

AMG650/850

Symbol



(Drain cock specifications) (Auto drain specifications)



Made to Order  
(For details, refer to page 272.)

## Model

Model	AMG150C	AMG250C	AMG350C	AMG450C	AMG550C	AMG650	AMG850
Rated flow (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
Weight (kg)	0.38	0.55	0.9	1.4	2.1	4.2	10.5

Note) Max. flow capacity at 0.7 MPa.

Max. flow capacity varies depending on the operating pressure. Refer to "Flow Rate Characteristics" (page 210) and "Maximum Flow Capacity Line" (page 211).

## 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 replacement period	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 Part No.

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 the products.  
Refer to back page 50 for Safety Instructions and pages 6 to 8 for Air Preparation Equipment Precautions.

HAA  
HAW

AT

IDF  
IDU

IDF  
FS

IDFA

IDFB

IDH

ID

IDG

IDK

AMG

AFF

AM

AMD

AMH

AME

AMF

ZFC

SF

SFD

LLB

AD

GD

## How to Order

### AMG650/850

**AMG** **650** — **10** — — — —

Size

650
850

Thread type

Symbol	Type
<b>NII</b>	Rc
<b>F</b>	G
<b>N</b>	NPT

Port size

Symbol	Port size	Applicable size	
		650	850
<b>10</b>	1	●	—
<b>14</b>	1 1/2	●	●
<b>20</b>	2	—	●

Accessory

Symbol	Description
<b>NII</b>	—
<b>B</b>	Bracket *1

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

**Made to Order**

Symbols are only added at the end for Made to Order. Refer to page 272 and later for the contents of Made to Order, How to Order, and the applicable models.

**Option** \*2

- Multiple options can be selected.
- Refer to the table below for the available combinations.
- Indicate symbols in alphabetical order.

Symbol	Description
<b>NII</b>	—
<b>J</b>	Drain guide 1/4 female threaded *5
<b>R</b>	IN-OUT reversal direction

\*5 Without a valve function

**Auto drain** \*2

Symbol	Description
<b>NII</b>	Without auto drain (With drain cock *3 *4)
<b>D</b>	N.O. (Normally open) Drain port is open when pressure is not applied.

\*2 Refer to the following table for the available combinations of the auto drain specifications and options.

\*3 When the option J is selected, the auto drain and drain cock are not available.

\*4 Body size 850 is equipped with a ball valve (Rc 3/8). Mount a piping adapter IDF-AP609 (page 267) to the ball valve if NPT 3/8 female threaded is required.

### 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>	◎	—	◎	—	◎	◎

## Options

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



Pipe threaded connection for the drain exhaust port

1/4 female threaded

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

Flow direction: Right to left  
(Flow direction of the standard: Left to right)

HAA  
HAW

AT

IDF  
IDU

IDF  
IFS

IDFA

IDFB

IDH

ID

IDG

IDK

**AMG**

AFF

AM

AMD

AMH

AME

AMF

ZFC

SF

SFD

LLB

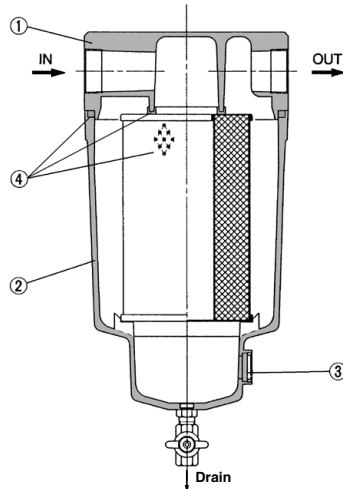
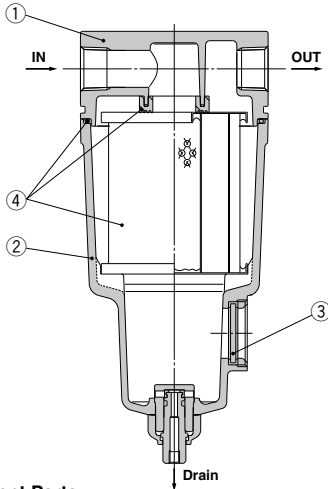
AD □

GD

## Construction

AMG150C to 550C, AMG650

AMG850



### Component Parts

No.	Description	Material	Note
1	Body	Aluminum alloy	Inner/outer surface coating
2	Housing (Case)	Aluminum alloy	
3	Sight glass	Tempered glass	—

Note) The figure shows the drain cock specification.

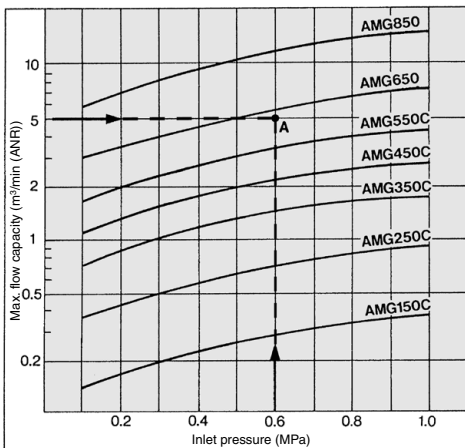
Note) Sight glass is indicated in the figure for easy understanding of component parts. However, it differs from the actual construction. Refer to dimensions on pages 212 to 214 for details.

### 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 page 280 for replacement of auto drain.

## Maximum Flow Capacity Line



## Model Selection

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

(Example) Inlet pressure: 0.6 MPa

Max. flow capacity: 5 m³/min (ANR)

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

Note) Make sure to select a model that has the max. flow capacity line above the obtained intersecting point. With a model that has the max. flow capacity 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.