

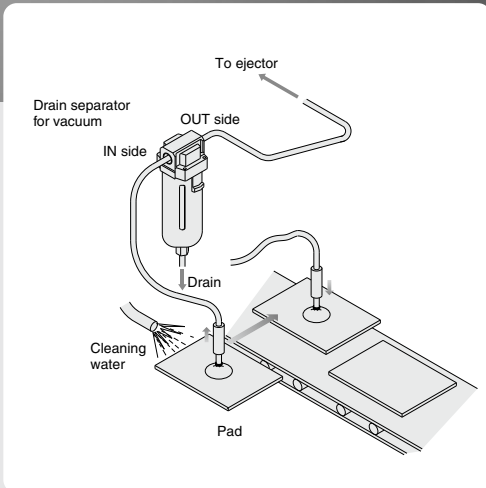
# Drain Separator for Vacuum

## AMJ Series

Removes water droplets from air by simply installing in vacuum lines.  
Prevents malfunction of vacuum pumps and ejectors.



SP
ZCUK
AMJ
AFJ
AMV
ZH -X185
Related Products



# Drain Separator for Vacuum

## AMJ Series

RoHS

Over 90% of water droplets can be removed using a dedicated element.

The provision of a drain cock makes it possible to discharge the drain manually after breaking the vacuum.

Even when the element is saturated with water, there is almost no drop in pressure (increase in resistance).

The element can be replaced with a single touch.



### How to Order

AMJ **30** 00 - **03** - **2** **R**

Size	Thread type
30	Nil Rc
40	F G
50	N NPT

Symbol	Size	Applicable size		
		30	40	50
02	1/4	●		
03	3/8	●	●	
04	1/2		●	
06	3/4			●
10	1			●

#### Accessory

Nil	None
B	Bracket

Bracket is included, (but not assembled).

#### Bowl option

Nil	Polycarbonate bowl
2	Metal bowl
6	Nylon bowl

#### Drain port option

Nil	With drain cock
J	Drain guide (1/4 female thread)*

\*: Without a valve function

#### Flow direction option

Nil	Left to right
R	Right to left

### Model

Model	AMJ3000	AMJ4000	AMJ5000
Recommended flow rate (L/min (ANR))	200	300	500
Port size	1/4, 3/8	3/8, 1/2	3/4, 1
Weight (kg)	0.3	0.6	1.1

### Specifications

Fluid	Air
Operating pressure	-100 kPa to 1.0 MPa
Proof pressure	1.5 MPa
Ambient and fluid temperature	5 to 60°C
Water drop removal ratio	90%
Element replacement period	2 years or when pressure drops to 0.02 MPa

### Accessory Part No.

Applicable model	AMJ3000	AMJ4000	AMJ5000
Bracket assembly (With 2 mounting screws)	AF30P-050AS	AF40P-050AS	AF50P-050AS

## How to Order Bowl Assembly

**AMJ-CA** 30 - 2 A  

Size

Symbol	Applicable model
30	AMJ3000
40	AMJ4000, 5000

Bowl type

Nil	Polycarbonate bowl <sup>(1)</sup>
2	Metal bowl
6	Nylon bowl <sup>(1)</sup>

Note 1) The bowl assembly includes a bowl guard (Material: Steel).

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

Nil	Rc
F	G
N	NPT

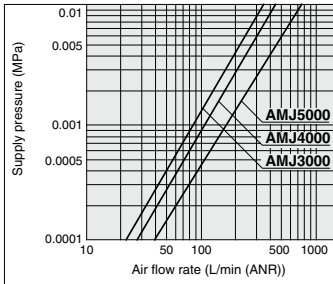
Note 3) Select in line with the thread type on the body.

Drain port

A	Drain cock
J	Drain guide (Rc 1/4) <sup>(2)</sup>

Note 2) Without valve function (It needs drain piping and piping for a stop valve like ball valves, etc.)

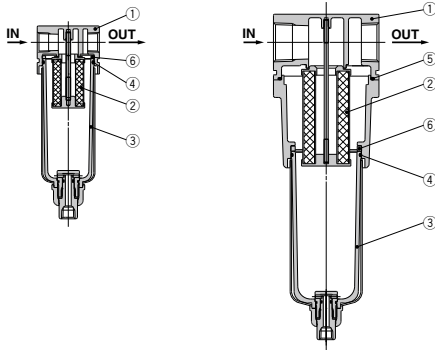
## Flow Rate Characteristics



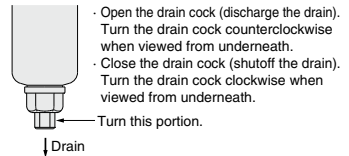
Fluid: Air

Measured pressure: Downstream release to atmosphere

## Construction



### <How to open/close the drain cock>



## Component Parts

No.	Description	Material	Note
1	Body	Aluminum alloy	Platinum silver coated

## Replacement Parts

No.	Description	Material	Part no.		
			AMJ3000	AMJ4000	AMJ5000
2	Element assembly	—	AMJ-EL3000	AMJ-EL4000	AMJ-EL5000
3	Bowl assembly <sup>(Note)</sup>	—	AMJ-CA30-□	AMJ-CA40-□	AMJ-CA40-□
4	O-ring	NBR	C3SFP-260S	C4SFP-260S	C4SFP-260S
5	O-ring	NBR	—	—	111710
6	Spacer	NBR	AMJ-SA001	AMJ-SA002	AMJ-SA003

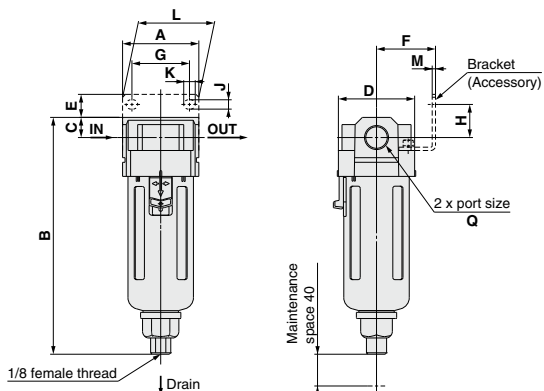
Note) • Refer to the above for "How to Order Bowl Assembly".

• The spacer ⑥ is not included in the bowl assembly.

# AMJ Series

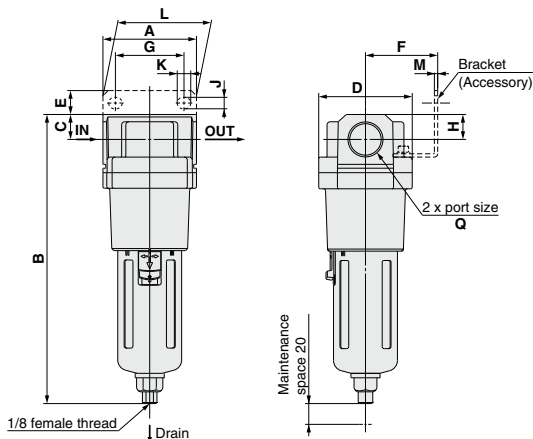
## Dimensions

### AMJ3000, 4000



Note) The figure shows the drain cock specification.

### AMJ5000



Note) The figure shows the drain cock specification.

(mm)

Model	Port size Q	A	B (Note)	C	D	Bracket mounting dimensions								Drain guide R (Note)
						E	F	G	H	J	K	L	M	
AMJ3000	1/4, 3/8	53	165 (166)	14	53	16	41	40	23	6.5	8	53	2.3	158 (159)
AMJ4000	3/8, 1/2	70	199 (202)	18	70	17	50	54	26	8.5	10.5	70	2.3	192 (195)
AMJ5000	3/4, 1	90	278 (280)	24	90	23	70	66	35	11	13	90	3.2	271 (273)

Note) ( ) is the case for metal bowl.



# AMJ Series Specific Product Precautions

Be sure to read this before handling the products.  
Refer to back page 50 for Safety Instructions and pages 49 to 51 for Vacuum Equipment Precautions.

## Caution on Design

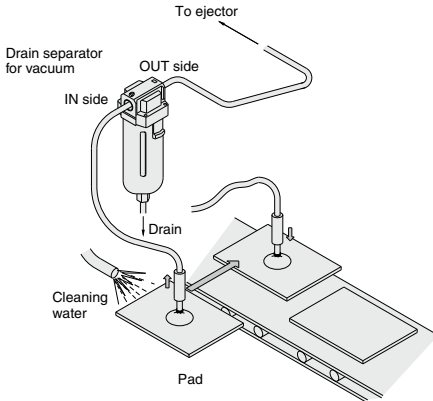
### ⚠ Caution

1. When using with repeating positive pressure and negative pressure: Use at 0.1 MPa or less of positive pressure when the repeating tact is fast.  
The vessel may be hotter depending on the pressure and repeating tact conditions.

## Mounting

### ⚠ Caution

1. Air piping should be thoroughly flushed before mounting.
2. When piping and fittings, etc. are being screwed together, be certain that cutting chips from the pipe threads, sealing material, and other debris do not get inside the piping. Further, when pipe tape is used, leave 1.5 to 2 thread ridges exposed at the end of the pipe.
3. The unit should be mounted vertically.
4. When piping is being installed, connect IN for work side and OUT for ejector or vacuum pump side.



## Operating Environment

### ⚠ Warning

1. Since the case material is polycarbonate, avoid using chemicals such as thinner, carbon tetrachloride, chloroform, aniline, cyclohexan, trichloroethylene, sulfuric acid, lactic acid or water-miscible cutting fluid (alkaline), etc. Operation of the product in an atmosphere containing any of these chemicals should also be avoided.  
A neutral detergent may be used for cleaning the bowl.
2. Avoid use exposed to direct sunlight.

## Maintenance

### ⚠ Caution

1. The element should be replaced after 2 years of use or when the pressure drop reaches 0.02 MPa.  
The spacer and O-ring should also be replaced at the same time that the element is replaced.  
Sometimes when the bowl is removed for a purpose other than replacing the element, the spacer may stick to the bowl and come off. In this case however, it may be returned to its installed position and used again.
2. Drainage should be discharged by the time it reaches the upper limit.  
Furthermore, when drainage is to be discharged or the element replaced, first confirm that all equipment, etc is stopped, and return the interior of the bowl to atmospheric pressure before proceeding.

## Bowl Capacity

AMJ3000	45 cm <sup>3</sup>
AMJ4000, 5000	105 cm <sup>3</sup>

SP

ZCUK

AMJ

AFJ

AMV

ZH  
-X185

Related  
Products