

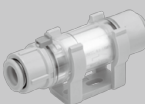


# Air Suction Filter

## ZF Series

Prevent from occurring vacuum equipment trouble due to solid foreign objects.

Series	Features	Port size			Air flow <sup>Note)</sup> [L/min(ANR)]	Filtration ( $\mu$ m)	Page
		Model	Screw-in	Applicable tubing O.D. for One-touch fittings			
<b>ZFA</b> 	<ul style="list-style-type: none"> <li>• Solid foreign objects are collected in the element and do not remain in the case.</li> <li>• Large filter element surface</li> <li>• Adaptable for a manifold application</li> <li>• Cartridge type allows element replacement</li> </ul>	<b>ZFA10</b>	1/8	—	50	30	P.276
		<b>ZFA20</b>	1/4	—	200		
<b>ZFB</b> Universal joint type 	<ul style="list-style-type: none"> <li>• Unrestricted 360° piping tube mounting on the IN side</li> <li>• Easy installation and removal with One-touch fittings</li> <li>• Light and compact molded resin parts</li> <li>• Cartridge type allows element replacement</li> <li>• Easily replaced filter element</li> </ul>	<b>ZFB10</b>	—	$\phi 4$	10	30	P.279
				$\phi 6, \phi 3/16", \phi 1/4"$	20		
		<b>ZFB20</b>	—	$\phi 6, \phi 1/4"$	30		
				$\phi 8$	50		
		<b>ZFB30</b>	—	$\phi 8, \phi 10, \phi 3/8"$	75		
<b>ZFB40</b>	—	$\phi 1/2"$	100				
<b>ZFC</b> In-line type 	<ul style="list-style-type: none"> <li>• IN/OUT straight piping</li> <li>• Easy installation and removal with One-touch fittings</li> <li>• Light and compact molded resin parts</li> <li>• Easily replaced filter element</li> </ul>	<b>ZFC5</b>	—	$\phi 4, \phi 5/32"$	10	5	P.281
				$\phi 6, \phi 1/4"$	20		
		<b>ZFC7</b>	—	$\phi 6, \phi 1/4"$	30		
				$\phi 8, \phi 5/16"$	70		
		$\phi 10, \phi 3/8"$	80				
		$\phi 12$	100				

ZFA  
ZFB  
ZFC

Note) Flow rate when initial pressure drop is 3 kPa or less.



**Vacuum Filter**  
**AFJ Series**

➔ P.779

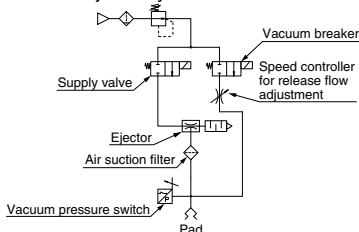


**Suction Filter**  
**ZFC050**

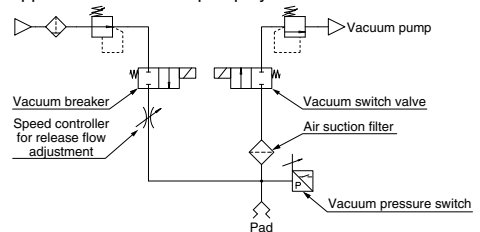
➔ P.272

### Application Example

Application to ejector system



Application to vacuum pump system



# Air Suction Filter

# ZFA Series



**Prevents vacuum equipment trouble due to solid foreign objects**

**Solid foreign objects are collected in the element and do not remain in the case.**

**Max. 10 station manifold is possible.**

**Large filter element surface**  
**Mountable in any direction**

**Cartridge type allows element replacement**

## Model

Model	Port size	Recommended air flow (L/min (ANR)) <sup>Note 1)</sup>	Weight (kg)	Internal capacity (cm <sup>3</sup> )
ZFA100	1/8	50	0.14	30
ZFA200	1/4	200	0.19	49

Note 1) Flow rate when initial pressure drop is 3 kPa or less.

## Specifications

Fluid <sup>Note 1)</sup>	Air, Nitrogen
Operating pressure range	-100 to 0 kPa
Vacuum release pressure	Max. 0.5 MPa (Unable to hold when pressurized)
Operating and ambient temperature range	5 to 60°C
Filtration accuracy	30 μm (Filtration efficiency 95%)
Element replacement differential pressure	20 kPa

Note 1) Do not use the product in an atmosphere and place where there is direct contact with chemicals. It may cause damage to the body. (Alcohol, acetone, etc. also cause damage, so be sure for the product not to be close to them.)

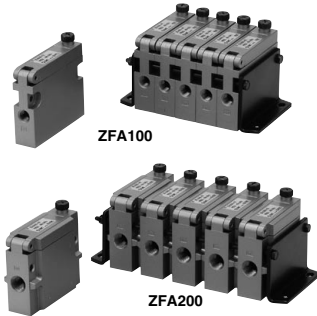
Note 2) Do not use it in a line that is kept pressurized because it could cause the body to break.

## Bracket Set Part No.

Application	ZFA100	ZFA200	Note
For single unit	One side	BP-1H-1A	With Bolt, Nut, Washer
	Both sides	ZZFA2-01	
For manifold (2 to 10 stations) (Both sides)	ZZFA1-[Stations] <sup>Note 1)</sup>	ZZFA2-[Stations] <sup>Note 1)</sup>	

Note 1) Enter a 2-digit number in the stations portion while referring to the example below.  
(Example) For 6 stations → 06

## How to Order (Single unit)



ZFA 100 - 01

Air suction filter

Body type

Symbol	Filtration area (mm <sup>2</sup> )
100	2110
200	4210

Thread type

Symbol	Thread type
Nil	Rc
T	NPTF
F	G

Bracket

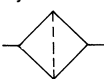
Symbol	Bracket
Nil	None
L	1 pc. on the left
R	1 pc. on the right
LR	With both the left and right sides

\* L or R shows the left or right of the filter IN when viewed from front.

Port size

Symbol	Port size	Applicable model
01	1/8 <sup>B</sup>	ZFA100
02	1/4 <sup>B</sup>	ZFA200

Symbol



## How to Order Manifold (2 to 10 stations)

Indicate both the symbols for air suction filter and bracket part no.

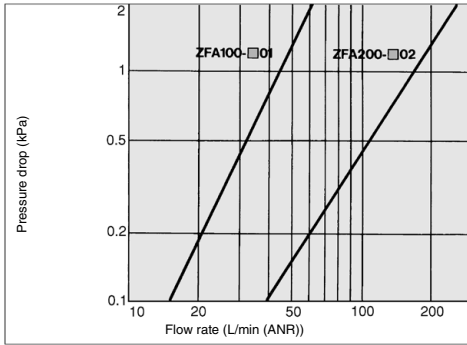
**Example: In case of 6 stations of air suction filter ZFA100-01**

ZZFA1-06 ..... 1 pc. (Brackets for 6 stations)

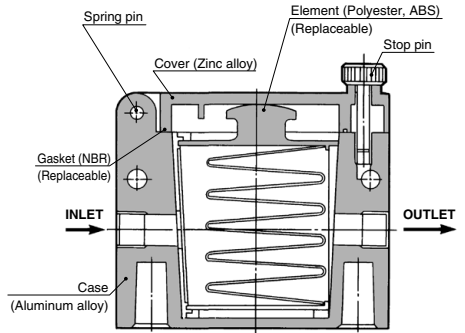
• ZFA100-01 ..... 6 pcs. (Air suction filter)

## Flow Rate Characteristics

Fluid: Air  
 Filtration accuracy: 30 μm  
 Pressure: Downstream side atmospheric release (pressurized)  
 Temperature: Room temperature



## Construction

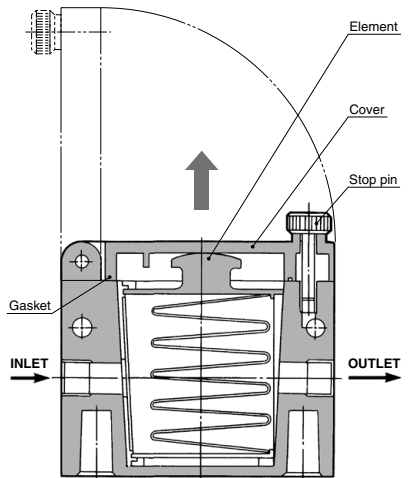


### Replacement Element/Gasket Part No.

Description	Part no.	
	ZFA100	ZFA200
Gasket	AL-204H	AL-205H
Element	EJ001H-030N	EJ101H-030N
Element size		
Element size (mm)	43 x 42 x 12	43 x 40 x 22

## Element Replacement

- 1) Stop operation and reduce the filter's internal pressure to atmosphere.
- 2) Loosen the stop pin and open the cover.
- 3) Hold the knob on the top of the element and take it out.
- 4) Check the gasket for damage, deformation, or swelling. If any fault is found, replace the gasket with a new one.
- 5) Replace the element with a new one in the reverse order. Note that the cover cannot be closed if the element is inserted into the case in incorrect orientation.
- 6) Close the cover and tighten the stop pin firmly.
- 7) After checking that no leakage is found from each part, start the actual operation.



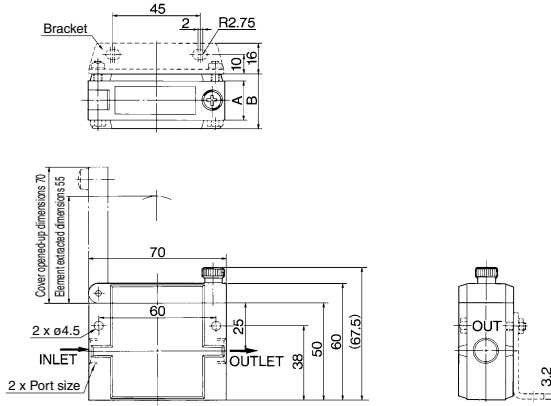
**ZFA**  
**ZFB**  
**ZFC**

# ZFA Series



Dimensions: ZFA  $\frac{100}{200}$  - □ □ □

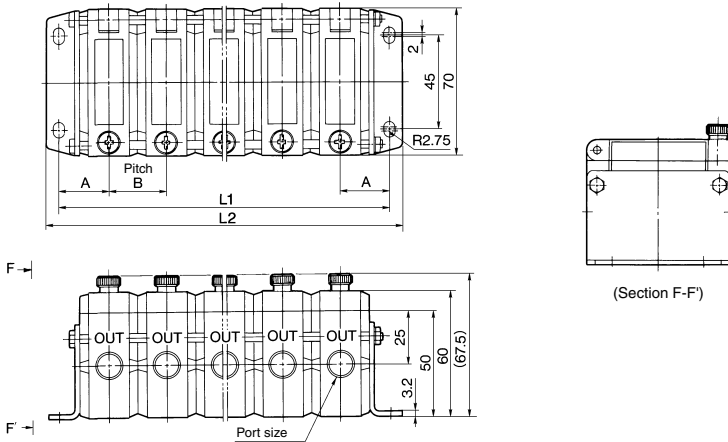
## Single unit



Note) The above diagram is for ZFA200.  
The bracket location shows L side.

Model	Symbol	Port size	A	B
ZFA100		1/8	—	18
ZFA200		1/4	20	28

## Manifold



(The above diagram is for ZFA200)

Model	Symbol	Port size	A	B
ZFA100		1/8	19	18
ZFA200		1/4	24	28

Model	Symbol	Single unit size	Number of manifold stations									
			2	3	4	5	6	7	8	9	10	
ZFA100	L1	38	56	74	92	110	128	148	164	182	200	
	L2	50	68	86	104	122	140	158	176	194	212	
ZFA200	L1	48	76	104	132	160	188	216	244	272	300	
	L2	60	88	116	144	172	200	228	256	284	312	

Note) The left and right brackets are mounted on the air suction filter single unit.