

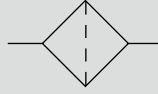
Vacuum filter and regulator

# VFA1000/3000/4000 Series

Removes dust and moisture from air when absorbing air by vacuum pump or ejector.

● Port size: Rc1/8 to Rc1/2

JIS symbol



## Specifications

Model No.	VFA1000		VFA3000		VFA4000	
Working pressure	kPa -100 (≈-15 psi, -1 bar) to 0 (≈0 psi, 0 bar)					
Proof pressure	MPa 0.5 (≈73 psi, 5 bar)					
Ambient / fluid temperatures	°C 5 (41°F) to 50 (122°F)					
Bowl capacity	cm <sup>3</sup> 10		45		80	
Port size	Rc 1/8	Rc 1/4	Rc 1/4	Rc 3/8	Rc 3/8	Rc 1/2
Weight	kg 0.1		0.3		0.5	
Recommended flow rate *1	l/min(ANR) 60		80		100	
			200		250	
					400	

\*1: Flow rate applies where initial pressure loss is 3 kPa or less (at standard element used).

\*2: For standard element, 40 μm of mesh (average) is used in filtration section (material: polyamide), while options include filtration rating 5 μm fiber (material: polypropylene).

## Option weight

\* Add to the weight of the standard accessories. Unit: kg

Code	Bowl material M	Bracket BW
VFA1000		0.1
VFA3000	0.1	0.17
VFA4000	0.1	0.21

## How to order

VFA3000 - 8 - M - B

A Model No.

B Port size

C Option

D Attachment

A Model No.

Code	Content	VFA1000	VFA3000	VFA4000	
<b>B Port size</b>					
6	Rc1/8	●			
8	Rc1/4	●	●		
10	Rc3/8		●	●	
15	Rc1/2			●	
<b>C Option</b>					
Bowl	Blank	Polyamide (nylon)	●	●	●
	M	Aluminum alloy (metal)		●	●
Material	Blank	40 μm Polyamide	●	●	●
	Y5	5 μm Polypropylene	●	●	●
<b>D Attachment</b>					
Blank	None	●	●	●	
B	C type bracket	●	●	●	

## ⚠ Precautions for model No. selection

\*1: Indicate options for bowl material and element in order.

Specifications for rechargeable battery (Catalog No. CC-1226A)

● Structure compatible with rechargeable battery manufacturing process

## Model No. of single bracket

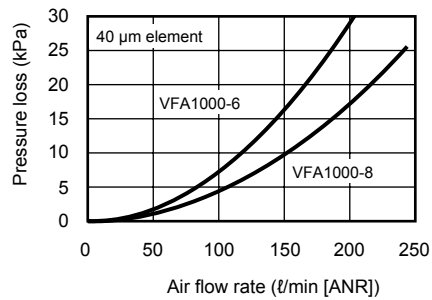
Model No.	Bracket model No.
VFA1000	B120
VFA3000	B320
VFA4000	B420

VFA\*000 - ..... - P4

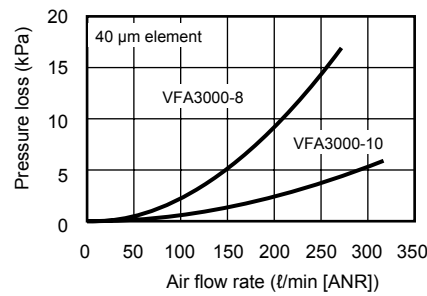
CKD

### Flow characteristics

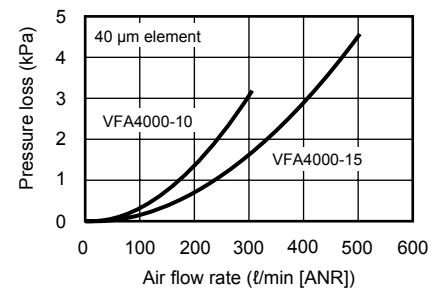
#### ● VFA1000



#### ● VFA3000



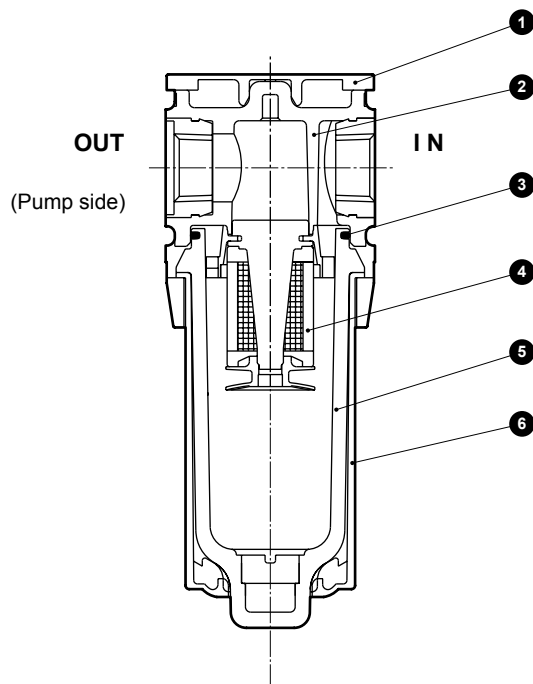
#### ● VFA4000



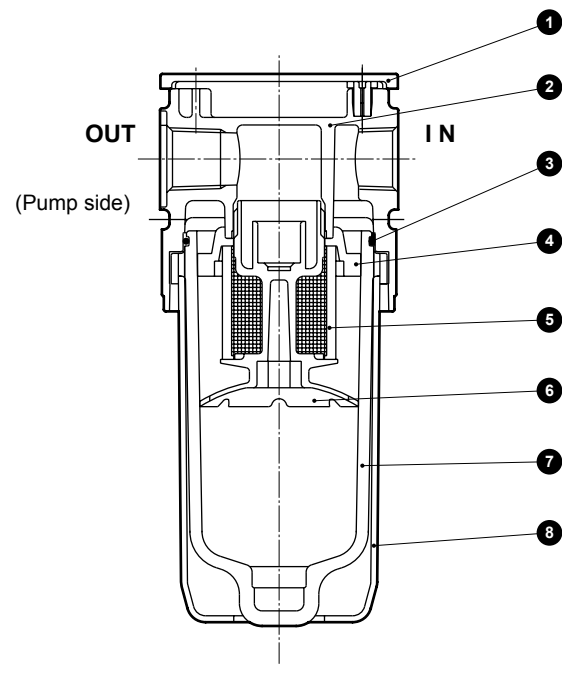
\*1: The flow rate of 5 μm element is 80% of that of 40 μm element.

### Internal structure and parts list

#### ● VFA1000



#### ● VFA3000 ● VFA4000



No.	Part name	Material
1	Plate cover	ABS resin
2	Body assembly	Polyamide resin/steel
3	Packing	Special nitrile rubber
4	Element assembly	Polyamide resin Polyacetal resin
5	Bowl	Polyamide resin
6	Bowl guard	Polyamide resin

No.	Part name	Material
1	Plate cover	ABS resin
2	Body	Aluminum alloy die-casting
3	O-ring	Special nitrile rubber
4	Louver	Polypropylene resin
5	Element	Polyamide resin
6	Baffle	Polyacetal resin
7	Bowl	Polyamide resin
8	Bowl guard	Polyamide resin

### Repair parts list

No./part name	④	④
Model No.	40 μm element assembly	5 μm element assembly
VFA1000	VFA1000-ELEMENT-ASSY	VFA1000-ELEMENT-ASSY-Y5

No./part name	⑤	⑤
Model No.	40 μm element	5 μm element
VFA3000	VFA3000-ELEMENT	VFA3000-ELEMENT-Y5
VFA4000	VFA4000-ELEMENT	VFA4000-ELEMENT-Y5

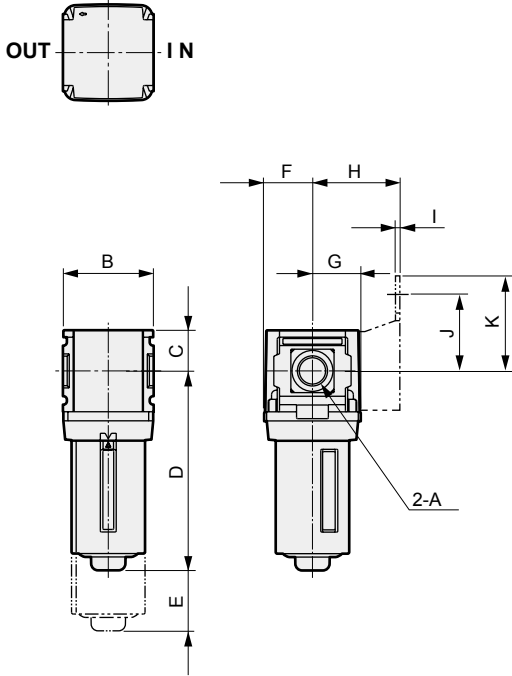
- F.R.L
- F (Filtr)
- R (Reg)
- L (Lub)
- PresSW
- Shutoff
- SlowStart
- FimResistFR
- Oil-ProhR
- MedPresFR
- No Cu/PTFE FRL
- Outdrs FR
- F.R.L (Related)
- CompFRL
- LgFRL
- PrecsR
- VacF/R
- Clean FR
- ElecPneuR
- AirBoost
- SpdContr
- Silncr
- CheckV/other
- Jnt/tube
- AirUnt
- PrecsCompn
- Mech/ElecPresSw
- ContactSW
- AirSens
- PresSW Cool
- AirFloSens/Contr
- WaterRtSens
- TotAirSys (Total Air)
- TotAirSys (Gamma)
- RefrDry
- DesicDry
- HiPolymDry
- MainFiltr
- Dischrg etc
- Ending

## Dimensions



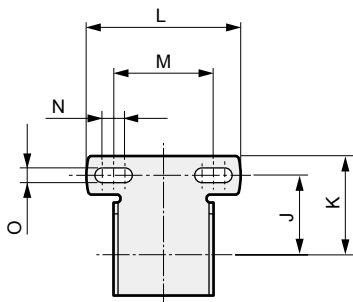
- F.R.L
- F (Filtr)
- R (Reg)
- L (Lub)
- PresSW
- Shutoff
- SlowStart
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- CompFRL
- LgFRL
- PrecsR
- VacF/R**
- Clean FR
- ElecPneuR
- AirBoost
- SpdContr
- Silncr
- CheckV/ other
- Jnt/tube
- AirUnt
- PrecsCompn
- Mech/ ElecPresSw
- ContactSW
- AirSens
- PresSW Cool
- AirFloSens/ Contr
- WaterRtSens
- TotAirSys (Total Air)
- TotAirSys (Gamma)
- RefrDry
- DesicDry
- HiPolymDry
- MainFiltr
- Dischrg etc
- Ending

### ● VFA1000



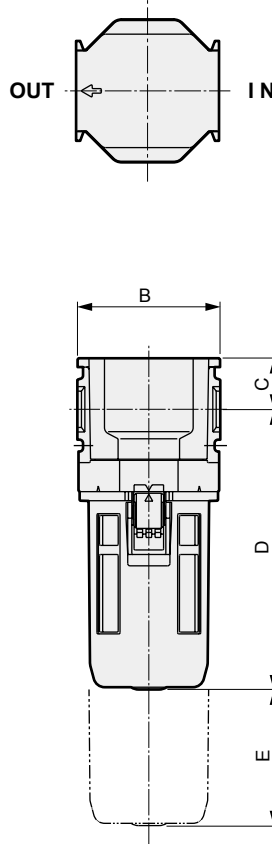
### ● C type bracket (attachment) Model No. B120 (VFA1000)

· Material: Steel  
zinc plated



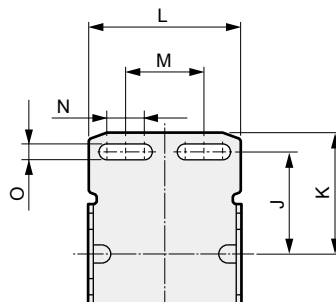
Weight : 0.1kg  
Material : Steel

### ● VFA3000 ● VFA4000



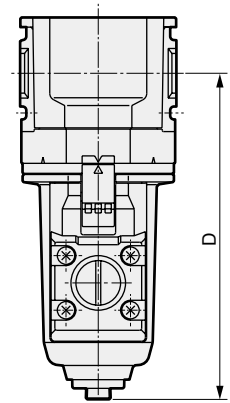
### ● C type bracket (attachment) Model No. B320 (VFA3000) Model No. B420 (VFA4000)

· Material: Steel  
zinc plated



Weight : 0.17 kg (B320)  
0.21 kg (B420)  
Material : Steel

### ● Aluminum alloy bowl (option) (VFA3000/VFA4000 only)



Model No.	D
VFA3000	129
VFA4000	152

Model No.	A	B	C	D	E	F	G	C type bracket dimensions								
								H	I	J	K	L	M	N	O	
VFA1000	-6	Rc1/8	40	18	88	40	21.5	21.5	40	2	35	43.5	68	44	10	6.5
	-8	Rc1/4														
VFA3000	-8	Rc1/4	63	22.5	123.5	60	(34.5)	63	45	2.3	45	53.5	67	34.5	16.5	7
	-10	Rc3/8														
VFA4000	-10	Rc3/8	80	22.5	149	60	(42.5)	79	55	2.3	45	53.5	84	55	14	7
	-15	Rc1/2														