

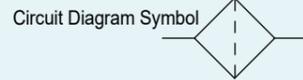


Vacuum Filter

VFA1000, 3000, 4000 Series

Removes dust and moisture sucked in together during air intake of vacuum pumps or ejectors

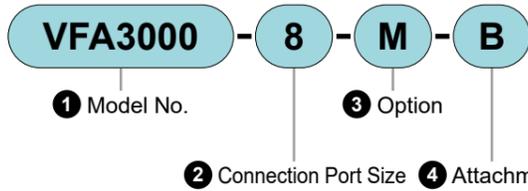
● Connection Port Size: Rc1/8 to Rc1/2



VFA Series

External Dimension Drawings

Model No. Notation



Rechargeable Battery Compatible Specification (Catalog No. CC-1226AA)

● Design compatible with rechargeable battery manufacturing process

VFA□000 - - P4*

*Please inquire for details.

2 Connection Port Size		VFA1000	VFA3000	VFA4000
Code	Content			
6	Rc1/8	●		
8	Rc1/4	●	●	
10	Rc3/8		●	●
15	Rc1/2			●

3 Option		Code	Content
Bowl Material	Blank		Polyamide (Nylon)
	M		Aluminum alloy (Metal) *2
Element	Blank		40 μm Polyamide
	Y5		5 μm Polypropylene

*1: List options in the order of Bowl Material, Element.
*2: For option "M", VFA1000 cannot be selected.

4 Attachment		Code	Content
Blank			None
B			C-Bracket

Bracket Single Item Model No.

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

Specifications

Model No.	VFA1000	VFA3000	VFA4000
Working pressure kPa		-100 to 0	
Proof Pressure MPa		0.5	
Ambient Temperature/Fluid Temperature °C		5 to 50	
Bowl capacity cm ³	10	45	80
Port size Rc	1/8 1/4	1/4 3/8	3/8 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 at initial pressure loss ≤ 3 kPa (when using standard element).

*2: For element, average 40 μm mesh is used in filtration section (material: Polyamide), optional 5 μm Degree of filtration equivalent fiber (material: polypropylene) is used.

Option Weight Table

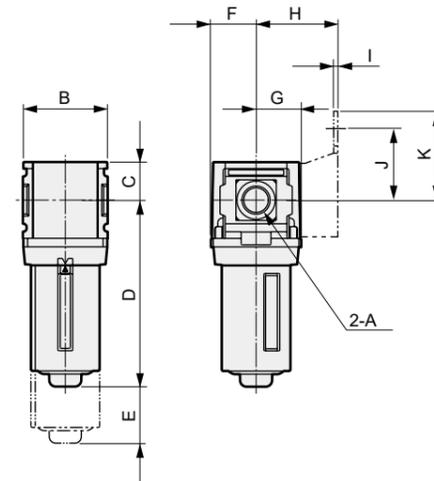
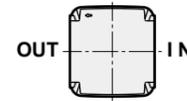
øAdd to the Weight of the standard equipment.

Unit: kg

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

External Dimension Drawings

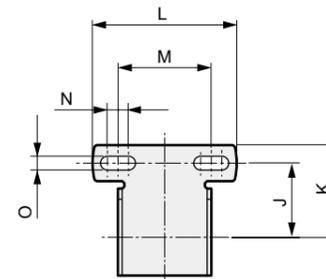
● VFA1000



● C-bracket(attachment)

Model No. B120 (VFA1000)

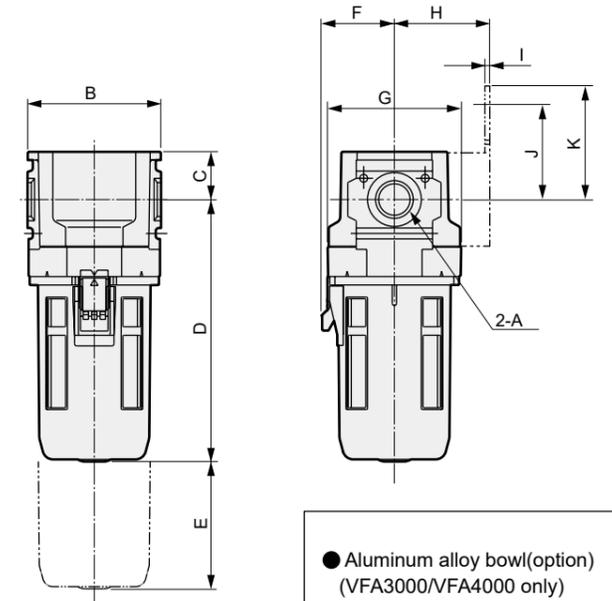
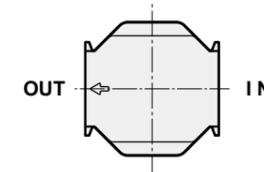
• Material: Steel Zinc Plating Treatment



Weight: 0.1 kg
Material: Steel

● VFA3000

● VFA4000

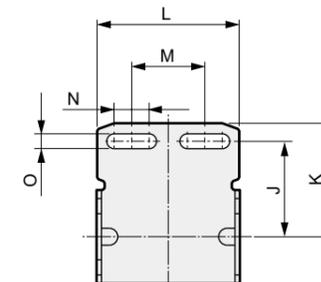


● C-bracket(attachment)

Model No. B320 (VFA3000)

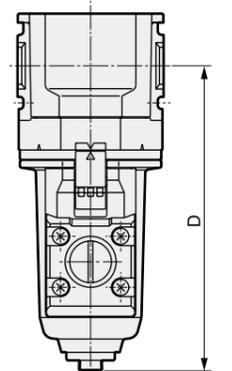
Model No. B420 (VFA4000)

• Material: Steel Zinc Plating Treatment



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

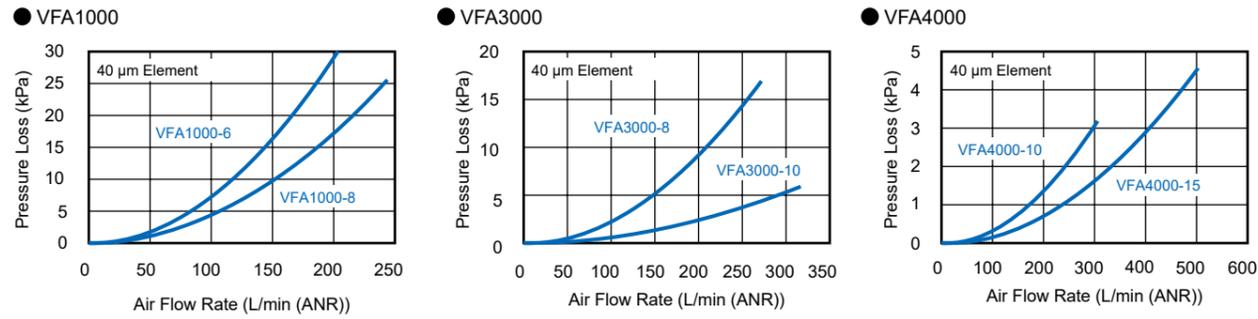
● Aluminum alloy bowl(option)
(VFA3000/VFA4000 only)



Model No.	D
VFA3000	129
VFA4000	152

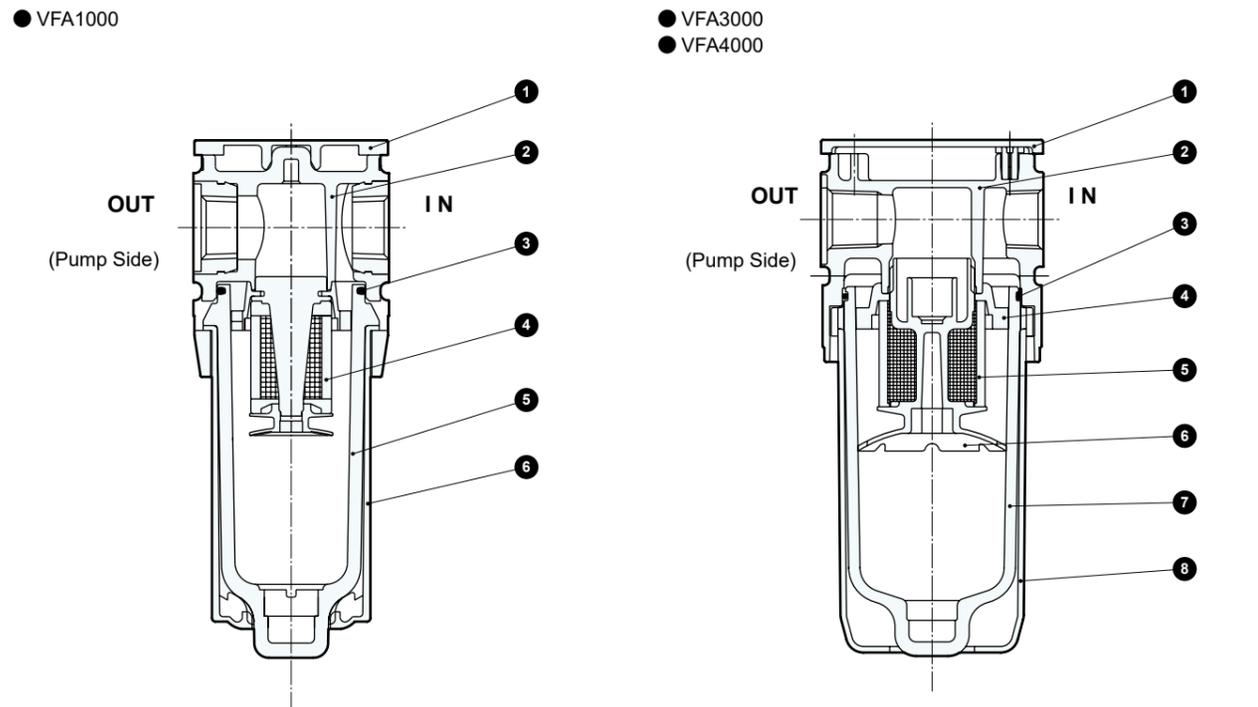
Model No.		A	B	C	D	E	F	G	C-Bracket Dimensions							
									H	I	J	K	L	M	N	O
VFA1000	-6	Rc1/8	40	18	88	40	21.5	21.5	40	2	35	43.5	68	44	10	6.5
	-8	Rc1/4														
VFA3000	-8	Rc1/4	63	22.5	123.5	60	(34.5)	63	45	2.3	45	53.5	67	34.5	16.5	7
	-10	Rc3/8														
VFA4000	-10	Rc3/8	80	22.5	149	60	(42.5)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

Flow Characteristics



*: For the 5 µm element, the flow rate is 80% of the 40 µm element.

Internal Structure Diagram/Materials



Part 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

Part No.	Part Name	Material
1	Plate Cover	ABS Resin
2	Body	Aluminum alloy die-cast
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

MEMO

For maintenance parts, please visit the CKD Equipment Product Site
[\(https://www.ckd.co.jp/kiki/en/\)](https://www.ckd.co.jp/kiki/en/) → "model No." → Maintenance Parts



Vacuum Components

To Use This Product Safely

Be sure to read this before use.

General precautions are Intro 15 and refer to "⚠️ Safety precautions" for detailed precautions for individual series.

Individual Precautions: Vacuum Filter VFA Series

Design / Selection

⚠️ Warning

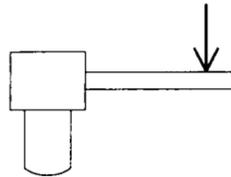
- Use the product within specifications range.
- The product is a vacuum filter. Do not use under pressure except for instantaneous pressurization due to vacuum breaking. (Do not use exclusively for pressurization.)
- Install the product avoiding direct sunlight.
- Do not use this product in an atmosphere containing corrosive gases, chemicals, or sea water, or where the product could come in contact with these, and do not use as a vacuum circuit for these substances.
- When using a polyamide bowl, do not use this product for vacuum circuits that could come in contact with acids, alcohols, carboxylic acids, other organic compounds, screw locking agents, or air containing these substances. The bowl may break, which is dangerous.
- For chemical resistance of the polyamide bowl, refer to "Chemical resistance of plastic bowl" in "Air Preparation Units/Auxiliary Components " (Catalog No.RJ-007AA). If a polyamide bowl cannot be used, use the optional aluminum alloy bowl. (VFA3000/4000 series only)

- Avoid mounting in locations subject to vibration or shock.

■ Piping load torque

Ensure no bending moment due to piping load is applied to the body and piping parts.

	VFA1000 Series	VFA3000/4000 Series
Allowable Bending Moment (N·m)	15	50



Avoid cantilever fixed piping, as excessive force can easily cause damage.

- Each product has an O-ring groove for modular connection on its OUT side. Select piping that can seal with a diameter less than or equal to the O-ring groove diameter.

Series Name	VFA1000	VFA3000/VFA4000
Groove Diameter	ø17.6	ø25.4

MEMO

For precautions regarding mounting, installation, adjustment, operation, and maintenance, please refer to the CKD Equipment Product Site (<https://www.ckd.co.jp/kiki/en/>) → 'model No.' → [Instruction Manual](#)

Vacuum Components

Vacuum Related Components

VSRL

VSECV

VSRVV

VRA2000

VSLF

VSFB, VSFU, VSFJ

FSL

VFA

VSUS

VST

Ending

Vacuum Components

Vacuum Related Components

VSRL

VSECV

VSRVV

VRA2000

VSLF

VSFB, VSFU, VSFJ

FSL

VFA

VSUS

VST

Ending