

INSTRUCTION MANUAL

SELVAX • VACUUM FILTER

VSFB SERIES

- Please read this instruction manual carefully before using this product, particularly the section describing safety.
- Retain this instruction manual with the product for further consultation whenever necessary.

For Safety Use

We have taken various safety measures for this product, but in order to prevent accidents caused by using this product and to use it safely, please observe the following items.

① About the user

It is designed and manufactured as a part for general industrial machinery. Therefore, please handle it by a person who has basic knowledge and experience about pneumatic equipment including materials, piping, electricity, mechanism, etc. related to this product. (ISO 4414 * 1 JIS B 8370 * 2)

② About selection


Since the uses and usages used by each customer are diverse and diverse, we cannot grasp all of them. Therefore, when selecting, please select the product that suits your application and usage.


Please note that if you use a product that does not meet your specifications, not only will you not be able to achieve the required performance, but it may lead to an unexpected accident.


③ How to handle

The handling is described in the text, so please read them carefully and fully understand them before using.

In addition, what is described in the text is displayed by classifying not only the handling method but also the degree of harm caused by mishandling and the urgency of warning into the following three ranks. Please read the text after understanding the meaning of the display.

 **DANGER** : When it is assumed that a dangerous situation of death or serious injury will occur if the product is mishandled, and the urgency (degree of urgency) at the time of the danger is high and limited.

 **WARNING** : Failure to pay attention to warning notices may result in a fatality or serious injury.

 **CAUTION** : Failure to pay attention to warning notices may result in injury or damage to equipment or facilities.

*1) ISO 4414 :Pneumatic fluid power ... Recommendations for the application of equipment to transmission and control systems.

*2) JIS B 8370 : General rule for pneumatic systems

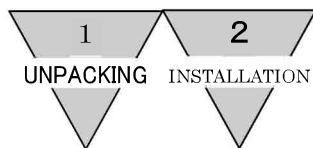
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Manual No. SM-437636-A

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1. UNPACKING



CAUTION :

Bags containing product should be opened only when you are ready to connect the product to the pipes immediately afterward.

- If bags are opened before the product are ready to be connected to the pipes, the entry of foreign matter from the piping ports could cause the product to fail or malfunction.

- 1) Check the model number imprinted on the product to make sure that the product you received is exactly the product you ordered.
- 2) Check the exterior of the product for any damage.

2. INSTALLATION

2.1 Installation environment



WARNING :

- 1) Do not use in an atmosphere of corrosive gas, flammable gas, explosive gas, chemicals, seawater, water vapor or where it adheres. Also, never let it inhale.



CAUTION :

- 1) Please avoid using it in the following environment.
 - When the ambient temperature exceeds the operating temperature range of the product.
 - When the air freezes.
 - A place with vibration or impact.
 - Places where water droplets or cutting oil may splash.
 - When dew condensation occurs due to temperature changes due to high humidity.
 - When sea breeze or seawater splashes.
 - When there is an atmosphere of corrosive gas, liquid and chemicals.
 - A place exposed to direct sunlight.

2.2 Installation method



WARNING :


- 1) When installing the product, do not use the method of supporting it with piping.
 - Install and fix the main body.




CAUTION :

- 1) Do not apply a lateral load to the main body during or after mounting.

2.3 Piping method

	WARNING : 1) Never apply positive pressure for vacuum break. It is not an explosion-proof structure. In addition, since the pressure resistance is low, there is a risk of injury to the human body due to damage to the main body.
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	CAUTION : 1) Check the IN and OUT of the main unit before connecting the piping. The filter function is not satisfactory for reverse connection. 2) Make the vacuum side piping as short as possible and increase the inner diameter. If the piping is long and the inner diameter is small, it may not be possible to secure the required suction flow rate and delay in response time at the time of adsorption and detachment.
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1) About applicable piping tube

Depending on the outer diameter accuracy, wall thickness, and hardness of the piping tube, it may come off and leak. Please use the tube specified by us.

Tube outside diameter precision :


Nylon and soft nylon tubes : $\pm 0.1\text{mm}$ or better


Polyurethane tubes : } $+0.1\text{mm}$

Newurethane tubes : } -0.2mm or better

Before piping, flush the inside of the pipe (air blow) to remove foreign matter and chips inside the pipe.

3. Applicable usage

	WARNING : 1) Since the filter body is made of PC (polycarbonate), avoid using it in the atmosphere of chemicals or in places where it adheres.
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	CAUTION : 1) When attaching the tube to the vacuum filter, do not apply more force than necessary. The inside of the filter may be damaged.
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● Table: Chemical names

Chemical name
All alcohols
Paint thinner
Carbon tetrachloride
Chloroform
Acetic ester
Aniline
Cyclohexane
Trichloroethylene
Sulfuric acid
Lactic acid
Water-soluble cutting oil (alkaline)

* There are other chemicals which cannot be used. Contact the nearest CKD Sales Office for details.

4. MAINTENANCE

4.1 About inspection



WARNING :

- 1) Before performing maintenance, turn off the power, stop the supplied compressed air, and check that there is no residual pressure.
- 2) Perform regular maintenance and inspection of the filter element of the vacuum filter. Clogged elements can slow performance or cause problems



CAUTION :

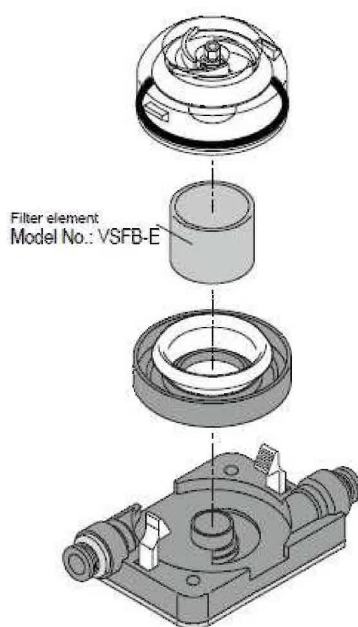
- 1) Perform daily inspections and regular inspections in a planned manner so that maintenance can be performed correctly.
- 2) Before replacing the tube, be sure to stop the air and check that there is no residual pressure.

4.2 About maintenance



CAUTION :

- 1) Refer to the figure below to understand the vacuum filter replacement element well, set the internal pressure of the filter to the atmospheric pressure state, and check the safety before proceeding.



5. PRODUCT SPECIFICATIONS

5.1 How to Order

VSFB-1010

① Vacuum side port size - Pad side port size

Code	Content
① Vacuum side port size - Pad side port size	
66	Push-in fitting ø6 - Push-in fitting ø6
88	Push-in fitting ø8 - Push-in fitting ø8
1010	Push-in fitting ø10 - Push-in fitting ø10
1212	Push-in fitting ø12 - Push-in fitting ø12

● Maintenance part model No.

- Filter element

VSFB-E

5.2 Specifications

Descriptions	VSFB/VSFU/VSFJ
Working fluid	Air
Working pressure kPa	-100 to 0
Filtration rating μm	10
Operating ambient temperature °C	0 to 60 (no freezing)