

Part No.	Part Name	Material
①	Release Ring	Acetal Resin
②	Resin Body A	Polybutylene Terephthalate Resin
③	Cover	Special Polycarbonate Resin
④	Filter Element	Polyvinyl Formal Resin
⑤	Resin Body B	Polybutylene terephthalate
⑥	Guide Ring	Brass, Electroless Nickel Plating
⑦	Lock Claw	Stainless steel
⑧	Elastic Sleeve	Nitrile Rubber
⑨	Tube	-
⑩	O-ring	Nitrile Rubber
⑪	Bracket	Acetal Resin
⑫	Slide Lock	Acetal Resin

Maintenance Parts

- Filter Element (Part No. ④)

Filter Element Model No.	Applicable Model No.	Element Size
VSFU-1L-E	FSL100	ø6 x ø4 x L25
FSL200-E	FSL200	ø11 x ø7 x L22
FSL500-E	FSL500	ø15 x ø11 x L27

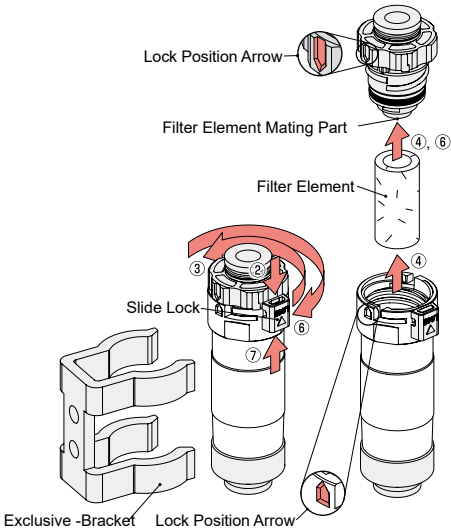
- Bracket (No. ⑪)

Bracket Model No.	Applicable Model No.
FSL100-B	FSL100
VSFU-2-B	FSL200
VSFU-3-B	FSL500

About Usage

1. About Filter Element Replacement Method

- Set the internal pressure of the filter to atmospheric pressure.
- Release the red slide lock. (Opposite direction to the LOCK arrow)
- Rotate the fitting body counterclockwise 180°.
- Remove the rotated fitting body from the filter cover and replace the filter element.
- If necessary, remove dust, etc., adhering inside the filter cover with an air blow, etc.
- Attach the element to the filter element fitting part, insert it into the main body, then rotate the fitting body clockwise until it stops.
- After confirming that the lock position arrow of the fitting body and the lock position arrow of the filter cover are aligned in the tightened state, raise the slide lock(in the LOCK arrow direction) and confirm that it is securely locked.



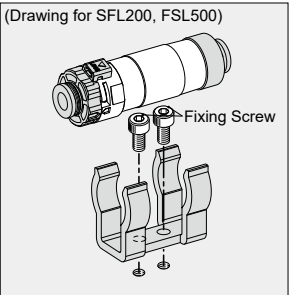
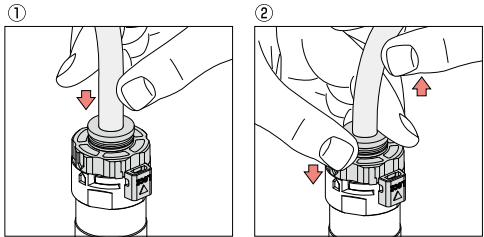
2. About Connection Part Attachment/Detachment Method

1. Tubing Attachment/Detachment Method

- Tube Attachment
The inline filter FSL (filter with push-in fitting) fixes the lock claw just by inserting the tube to the tube end, and the elastic sleeve seals the outer periphery of the tube.
- Tube Detachment
To remove the tube, push the release ring to open the lock claw, and the tube can be pulled out.
Be sure to stop the air before removing.

2. Screw Tightening Method

- Screw Tightening
Using the fixing holes in the exclusive -Bracket, tighten and fix with the following screws.
(Please refer to the external dimension drawing for the pitch of the fixing holes.)
Fixing screw ▶ FSL100:M3 flat head machine screw, FSL200, FSL500:M4 screw



Pneumatic components (F.R.L. unit (Compact))

To Use This Product Safely

Be sure to read this before use.

For general pneumatic components precautions, Intro 27 and detailed precautions for individual series" ⚠ Safety precautions.

Individual Precautions : Inline Filter FSL Series

Design / Selection



Warning

- The filter's clear cover is made of special polycarbonate resin. Do not use in an atmosphere containing chemicals (see below) or in a place where these chemicals could come in contact as there is a risk of damage.

Chemical Substance Name

Chemical Substance Name
All alcohols
Thinner
Carbon tetrachloride
Chloroform
Acetate ester
Aniline
Cyclohexane
Trichloroethylene
Sulfuric Acid
Lactic Acid
Water-soluble cutting fluid (alkaline)

* Some chemicals other than those listed in the cannot be used.
Contact CKD for details.



CAUTION

- Do not use in locations where ultraviolet rays are directly irradiated.
- Note that when using in a circuit where vacuum and vacuum burst air are alternately applied, the dust removed by the element could be discharged by the burst air.