

Process Pump/Wetted Part: Fluoropolymer Series *PAF3000-X68*

**Body
material**

New PFA

**Diaphragm
seal material**

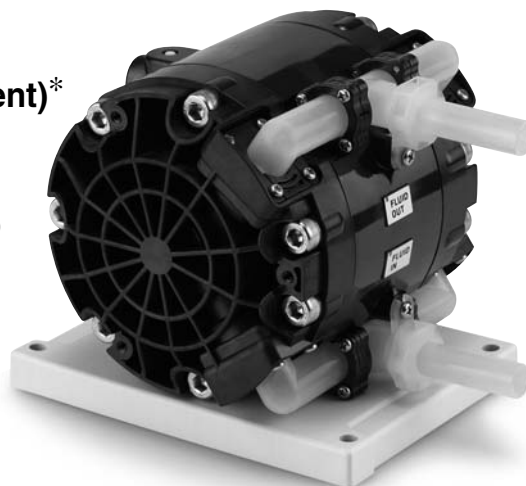
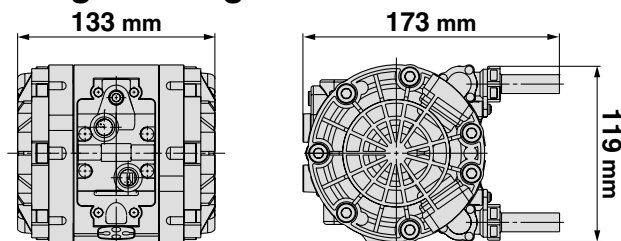
PTFE

- **Compatible with various liquids (pure water, solvent)***

* Tightening bolt, Air switching valve: Stainless steel
Use the PAF series standard products when metal-free pump is necessary for hydrofluoric acid, etc.

- **Lightweight and Compact (PAF3000-X68 without foot)**

Weight: 1.8 kg



- **PPS/PFA dual construction**

Withstand pressure and heat cycle performance have been improved.

- **Connection type: Female thread/Tube extension/With nut (Insert bushing type, Flare type)**

Specifications

Model		PAF3410-X68
Operation method		Automatically operated
Port size	Main fluid: Suction/Discharge port	Rc, NPT, G 3/8" Female thread, 1/2" Tube extension, With nut (Size 4, 5)
	Pilot air: Supply/Exhaust port	Rc, NPT, G 1/4" Female thread
Discharge flow rate		1 to 20 L/min
Average discharge pressure		0 to 0.4 MPa
Pilot air pressure		0.2 to 0.5 MPa (for 0 to 60°C)
Air consumption		230 L/min (ANR) or less
Suction lift	Dry	Up to 1 m (Dry interior of the pump)
	Wet	Up to 4 m (Liquid inside the pump)
Noise		80 dB (A) or less (Option: with silencer, AN200)
Withstand pressure		0.75 MPa
Service life		50 million cycles (for water)
Fluid temperature		0 to 90°C (No freezing)
Ambient temperature		0 to 70°C (No freezing)
Weight (without foot)		1.8 kg
Mounting orientation		Horizontal (mounting on the bottom surface)
Packaging		General environment

* Values in the table are measured at room temperature using fresh water.

Process Pump/Wetted Part: Fluoropolymer Automatically Operated Type (Internal Switching Type) Series *PAF3000-X68*

How to Order

Female thread



PAF3410-□03-□-X68

Thread type Note 2)

Symbol	Type
Nil	Rc
N	NPT
F	G

Port size

Symbol	Port size
03	3/8"

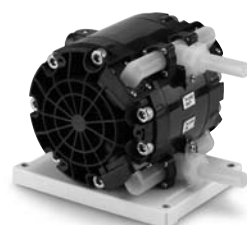
Option

Symbol	Option
Nil	None
B	With foot
N	With silencer

* When multiple options are required, indicate them in alphabetical order.

• Products using stainless steel parts
(Body tightening bolts, switching valves, etc.)

Tube extension



PAF3410-P13□-□-X68

Tubing size

Symbol	Main fluid connection size
13	1/2"

Thread type Note 2)

Symbol	Type
Nil	Rc
N	NPT
F	G

Option

Symbol	Option
Nil	None
B	With foot
N	With silencer

* When multiple options are required, indicate them in alphabetical order.

• Products using stainless steel parts
(Body tightening bolts, switching valves, etc.)

With nut



PAF3410S-1S13□-□-X68

Fitting type

Symbol	Fitting type
1	LQ1
3	LQ3

Fitting size

Symbol	IN side	OUT side	Fitting type	
			LQ1	LQ3
13		4	●	●
1319	4	5	●	—
1913	5	4	●	—
19		5	●	—

Thread type Note 2)

Symbol	Type
Nil	Rc
N	NPT
F	G

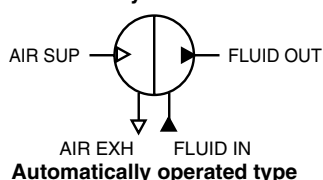
Option

Symbol	Option
Nil	None
B	With foot
N	With silencer

* When multiple options are required, indicate them in alphabetical order.

• Products using stainless steel parts
(Body tightening bolts, switching valves, etc.)

Symbol



* Refer to page 706 in Best Pneumatics No. 7 for applicable fittings.

Note 1) The port size of the pilot port is 1/4".

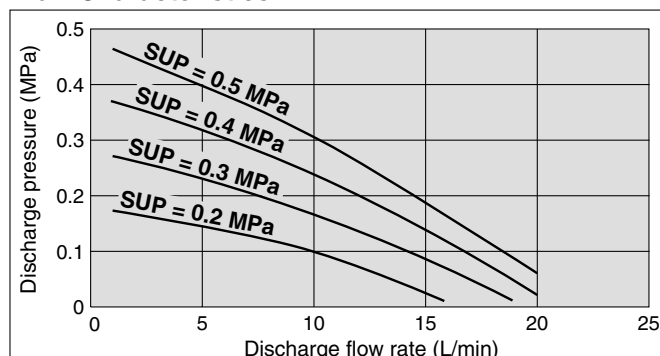
Note 2) The thread type is applied to the pilot port thread and the female thread piping connection.

* Refer to pages 728 and 729 in Best Pneumatics No. 7 for related products.

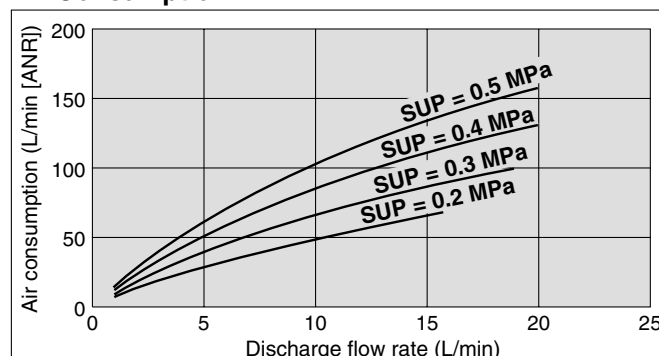
Performance Curve

* SUP: Pilot air pressure

Flow Characteristics

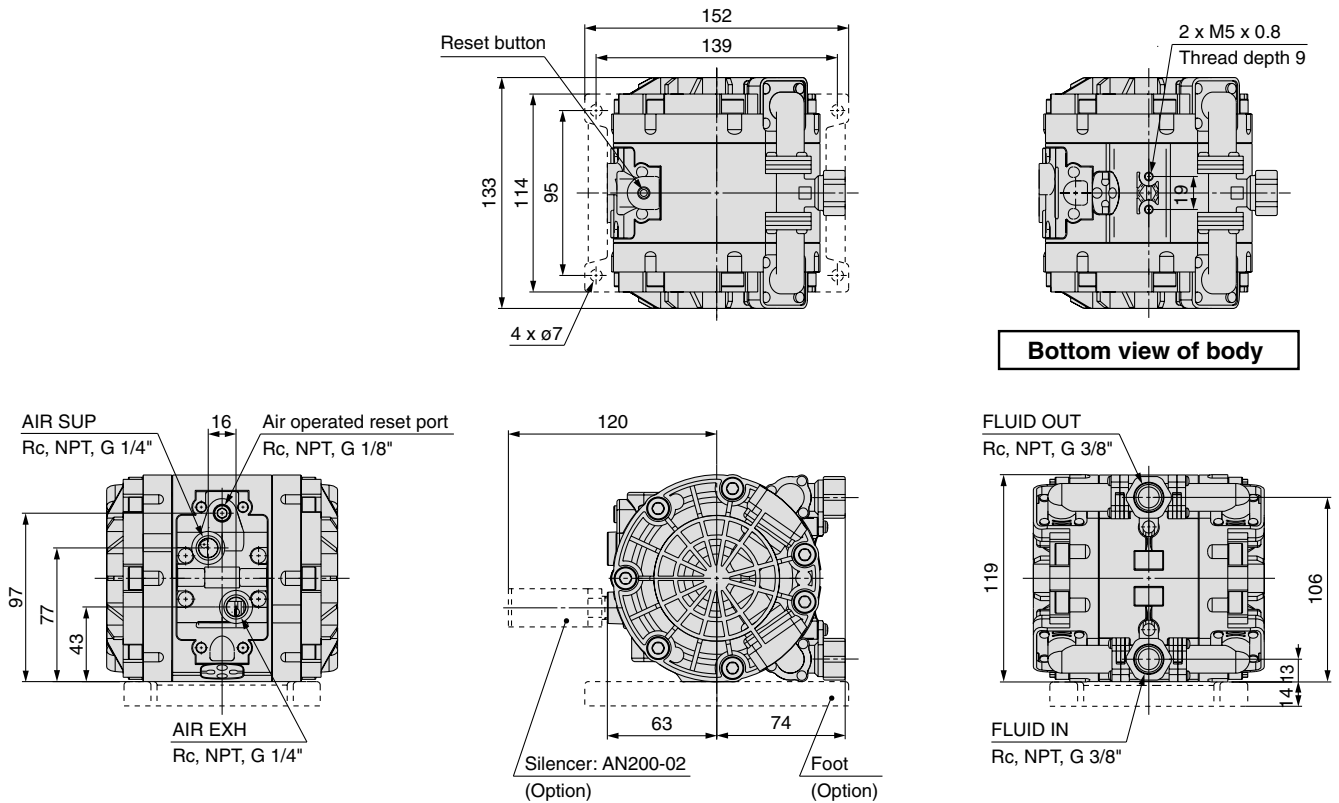


Air Consumption

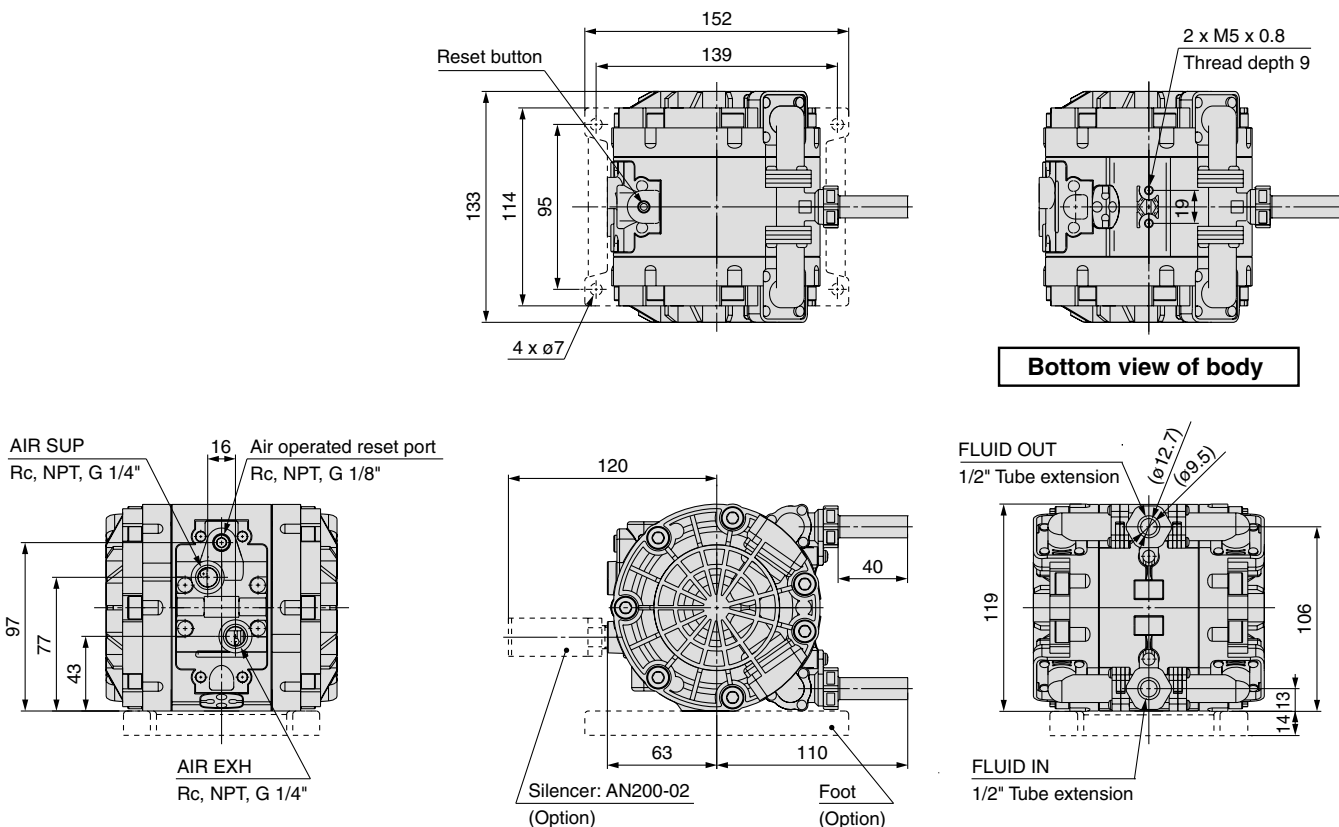


Dimensions: Automatically Operated Type (Series PAF3000)

Female thread: PAF3410-⁰³N03-□-X68
F03



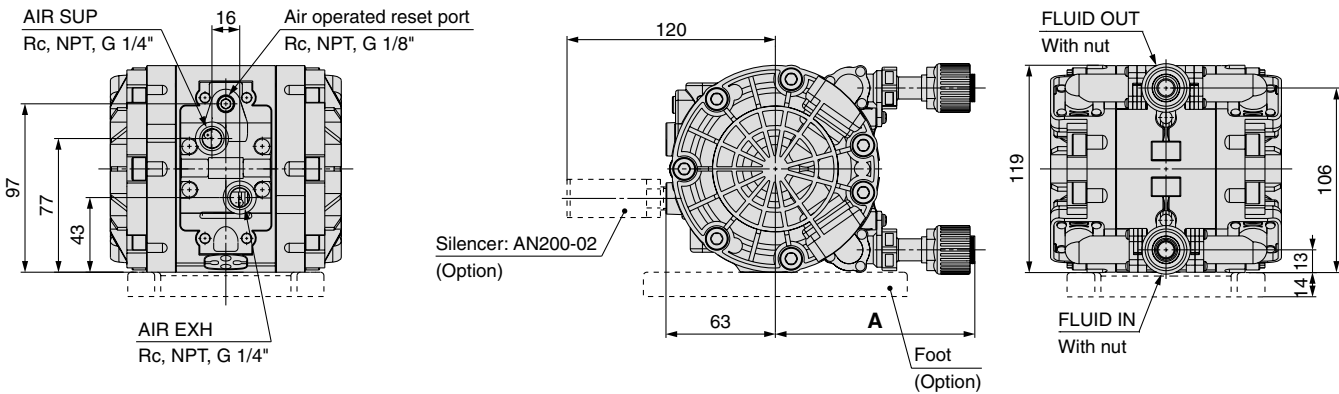
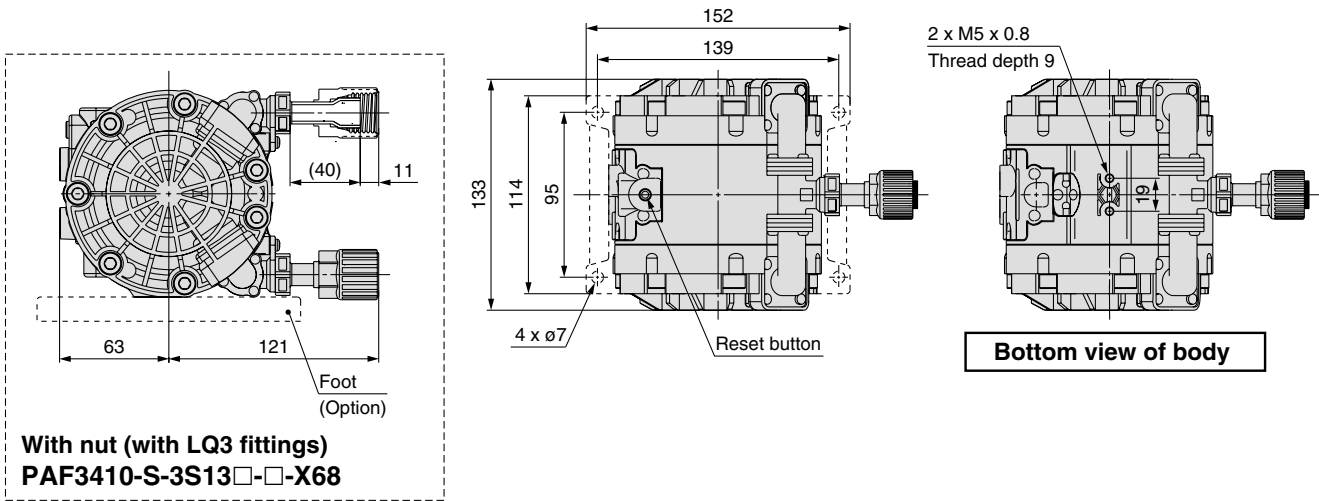
Tube extension: PAF3410-^{P13}P13N-□-X68
P13F



Series PAF3000-X68

Dimensions: Automatically Operated Type (Series PAF3000)

With nut (with LQ1 fittings): PAF3410S-^{1S13}_{1S19}-X68



Tube Size Applicable for Nut Size
(Tube size can be altered, using a reducer even within the same nut size.)

(mm)	
Model	A
PAF3410S-1S13 [□]	115
PAF3410S-1S19 [□]	118

Size	Applicable tubing size
4	10 x 8, 12 x 10, 3/8" x 1/4", 1/2" x 3/8"
5	12 x 10, 19 x 16, 1/2" x 3/8", 3/4" x 5/8"

Applicable Fluids

Material and Fluid Compatibility Check List for Process Pumps

- The data below is prepared based on data provided by the material manufacturers.
- SMC assumes no responsibility for the accuracy of the data or for any damages arising from the data.
- The material and fluid compatibility check list provides reference values as a guide only; therefore SMC does not guarantee the application to our product.

Table symbols ○: Can be used. X: Cannot be used.

Model		PAF3410-X68
Body material		New PFA
Diaphragm material		PTFE
Chemical	Acetone	○ Note 1, 2)
	Ammonium hydroxide	○ Note 2)
	Isobutyl alcohol	○ Note 1, 2)
	Isopropyl alcohol	○ Note 1, 2)
	Hydrochloric acid	X
	Ozone water	○
	Hydrogen peroxide Concentration 5% or less, 50°C or less	○
	Ethyl acetate	X
	Butyl acetate	X
	Nitric acid (except fuming nitric acid) Concentration 10% or less	X
	Pure water	○
	Sodium hydroxide Concentration 50% or less	X
	Super pure water	○
	Toluene	○ Note 1, 2)
	Hydrofluoric acid	X
	Sulfuric acid (except fuming sulfuric acid)	X
	Phosphoric acid Concentration 80% or less	X

Caution

- Select the wetted parts material in accordance with the transfer liquid for determining the model.
 - Do not use fluid which corrode the wetted parts material.
- Do not use the products for medical or food applications.
- The applicability may vary depending on additives. Take note also of additives.
- The applicability may vary depending on impurities. Take note also of impurities.
- Examples of transfer liquids are shown in the table on the left. Since the applicability may vary depending on your operating conditions, be sure to check it by means of experimentation.
- The compatibility shown in the table is when the fluid temperature is within the product specification (90°C or less).

Note 1) Static electricity may be generated. Take measures to prevent static electricity.
Note 2) Fluid may permeate through and affect parts made of other materials.