

Main wetted parts made from **New PFA**
for superior corrosion resistance.

Process Pump
<Fluororesin Type>

Series **PA3000**



With the use of New PFA high corrosion resistance

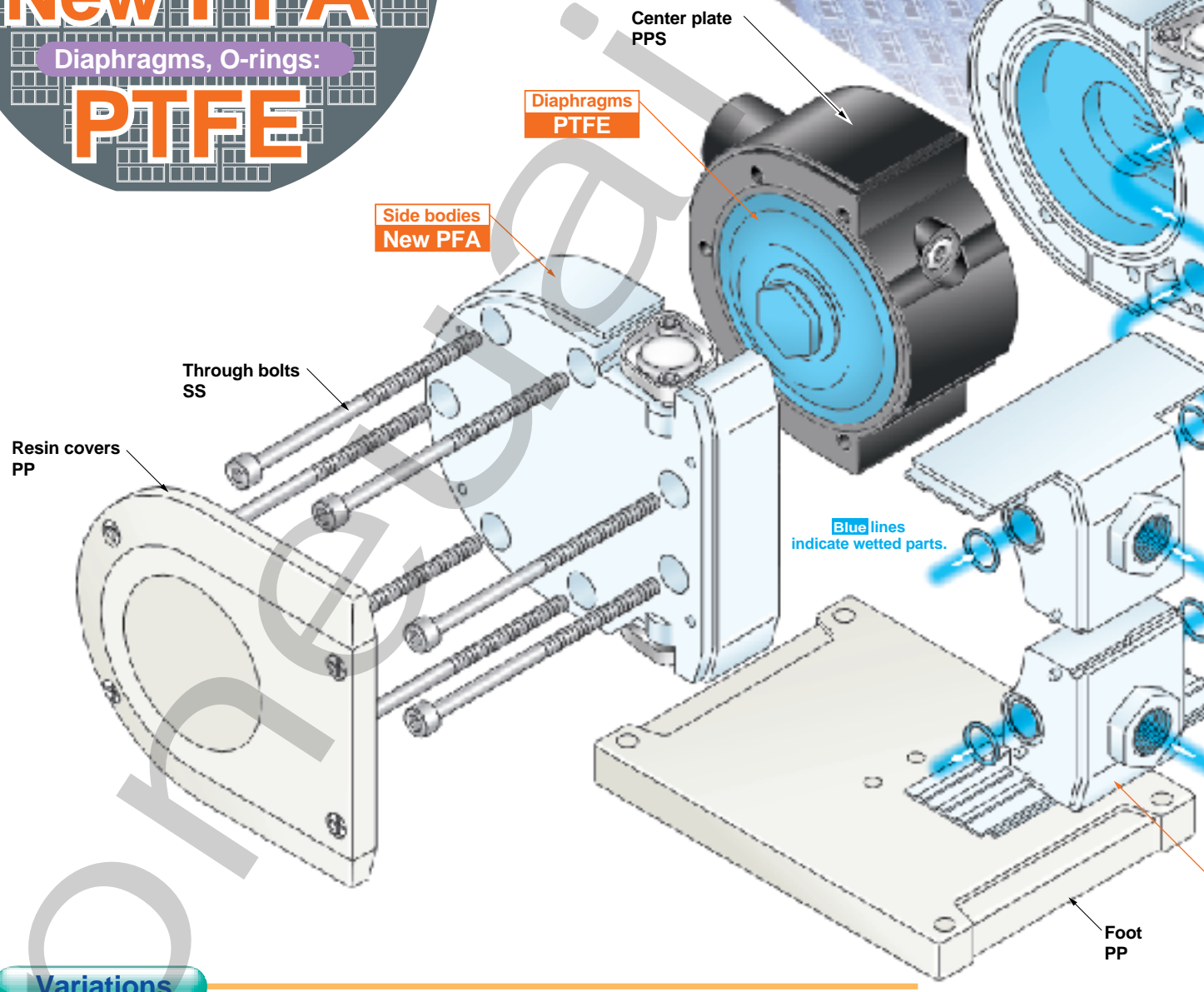
High Corrosion Resistance

Side bodies, Ports:

New PFA

Diaphragms, O-rings:

PTFE



Variations

Model	Body material	Diaphragm material	Assembly environment	Discharge flow rate (l/min)	Option	
Automotive operation	PA3310	New PFA	PTFE	Standard	1 to 13*	• Foot • Silencer
	PAP3310					
Air pilot actuation	PA3313		Clean room	Standard	0.1 to 9	• Foot
	PAP3313					

* With 3/8" inlet/outlet tube: 1 to 12

A for main wetted parts, stance is achieved!

Clean

You can order your process pump assembled in a **Clean room** environment and double-packaged (Order number PAP331m). Side bodies and ports are **molded** to achieve a great reduction in dust generation.

Long service life

Diaphragm are made from **denatured PTFE** for superior resistance and longer service life.

Compact & Light weight (Without foot)



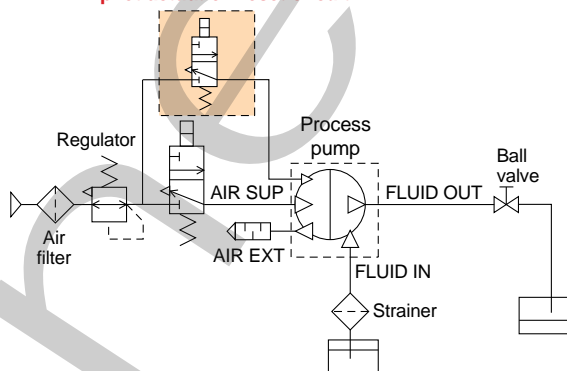
Weight: **2.1 kg**

Air pilot actuation reset is now a standard feature.

When the pump is used in an environment where manual reset is not possible, designing a circuit as the one shown below allows the use of air pressure for reset purposes.

With the use of an air pilot actuation reset circuit, resetting can be done by releasing the air pressure after supplying it to the reset port.

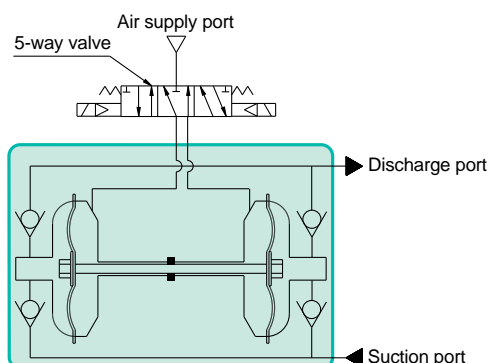
Air pilot actuation reset circuit



Air pilot actuation is standard.

External switching valve control makes constant cycling possible.

- Discharge rate is easily controlled. The flow rate can be easily adjusted by the number of ON/OFF cycles of the external solenoid valve.
- Stable operation is possible in spite of such conditions as a minimal flow rate, low pressure operation, or the entrainment of gasses.
- Can be used for repetitive stopping during operation.



Ports
New PFA

How to Order

PA 3 3 1 0 — 03 —

Assembly environment

Nil	Standard
P	Clean room

Body material

3	Fluororesin
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Diaphragm material

1	PTFE
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Operation type

0	Automatically operated type
3	Air pilot actuation type

Option

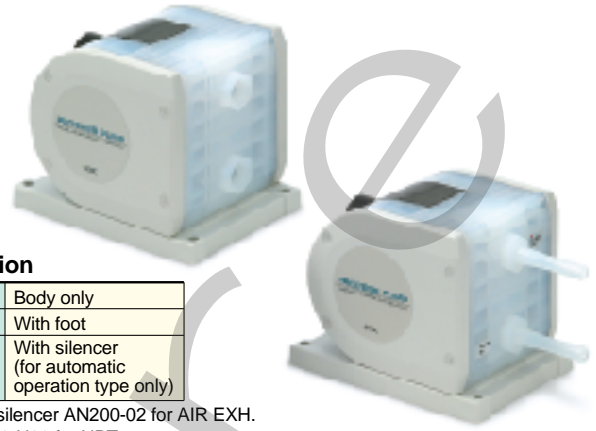
Nil	Body only
B	With foot
N*	With silencer (for automatic operation type only)

* With silencer AN200-02 for AIR EXH. AN200-N02 for NPT.

Port size

	Connection size at main fluid side	Connection size at air side	
03	Rc 3/8	Rc 1/4 thread	PA331 _n (Standard assembly)
F03*	G 3/8	G 1/4 thread	
N03*	NPT 3/8	NPT 1/4 thread	PAP331 _n (Clean-room assembly)
T03*	NPTF 3/8	NPTF 1/4 thread	
P11	3/8" inlet/outlet tube	Rc 1/4 thread	PAP331 _n (Clean-room assembly)
P11F*	3/8" inlet/outlet tube	G 1/4 thread	
P11N*	3/8" inlet/outlet tube	NPT 1/4 thread	
P11T*	3/8" inlet/outlet tube	NPTF 1/4 thread	
P13	1/2" inlet/outlet tube	Rc 1/4 thread	
P13F*	1/2" inlet/outlet tube	G 1/4 thread	
P13N*	1/2" inlet/outlet tube	NPT 1/4 thread	
P13T*	1/2" inlet/outlet tube	NPTF 1/4 thread	

Port sizes marked "*" are optional.



Specifications

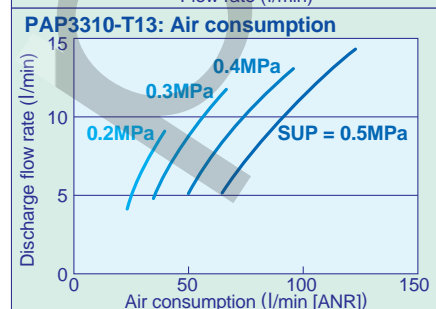
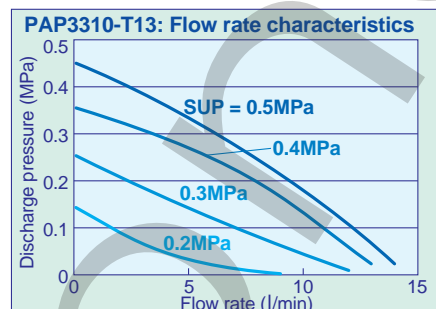
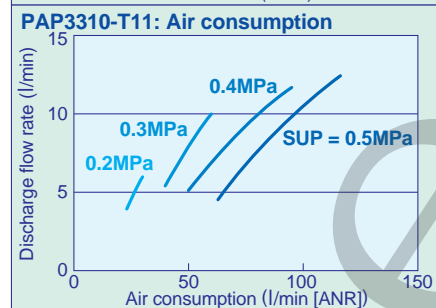
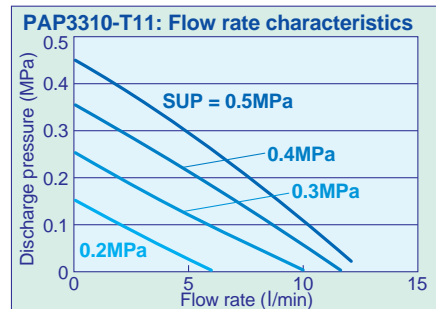
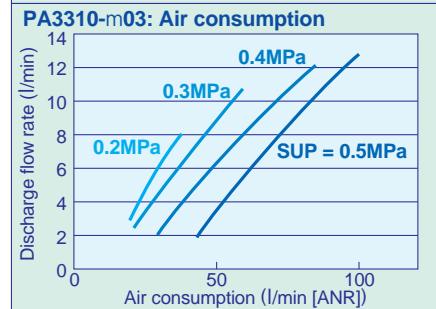
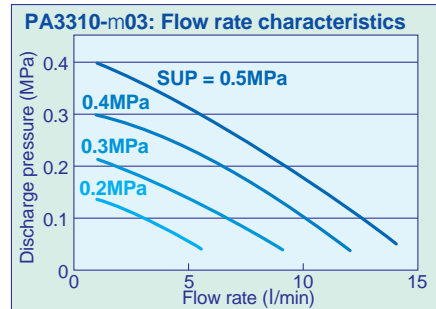
Operation type		Automatically operated type	Air pilot actuation type
Fluid		IPA, DI water, Methyl ethyl ketone, Hypochlorous acid soda	
Port size	Main fluid suction/discharge port	PA	Rc, G, NPT, NPTF 3/8 female thread
		PAP	Rc, G, NPT, NPTF 3/8 female thread, 3/8", 1/2" inlet/outlet tube
	Pilot air suction/discharge port	Rc, G, NPT, NPTF 1/4	
Material	Wetted parts	New PFA	
	Diaphragm	PTFE	
	Check valve	New PFA, PTFE	
Discharge rate		1 to 13l/min ^{Note)}	0.1 to 9l/min
Average discharge pressure		0 to 0.4MPa	
Pilot air consumption		Maximum 140l/min (ANR)	
Suction lifting range	Dry	0.5m	
	Wet	4m	
Fluid temperature		0° to 100°C (with no freezing or heat cycle)	
Ambient temperature		0° to 100°C (with no freezing or heat cycle)	
Pilot air pressure		0.2 to 0.5MPa	
Proof pressure		0.75MPa	
Mounting orientation		Horizontal (with mounting hole on the bottom)	
Weight		2.1kg (without foot)	
Assembling environment	PA: Standard	Assembled and packaged in a standard environment	
	PAP: Clean room	Assembled and double-packaged in clean-room environment	

Note) With 3/8" inlet/outlet tube: 1 to 12l

* The values appearing in the above table are representative of use in a room temperature environment and with tap water.

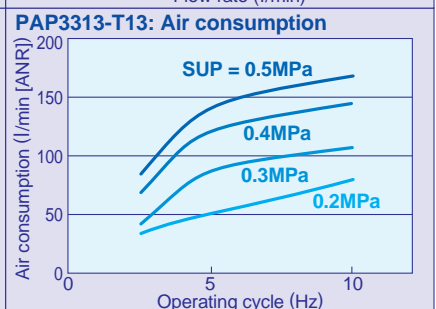
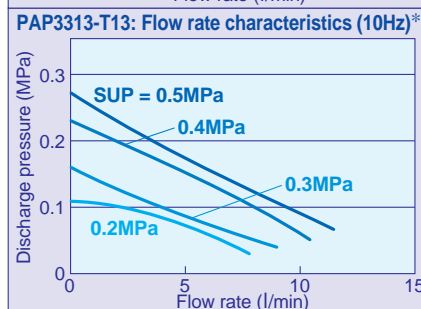
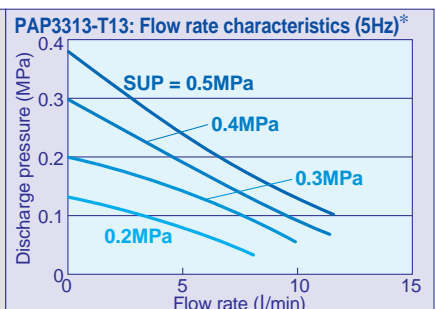
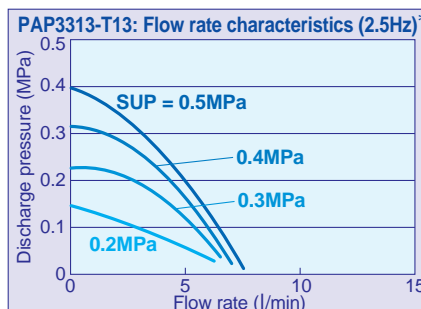
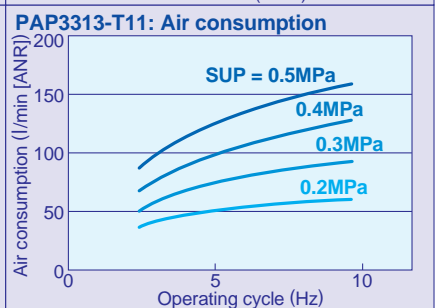
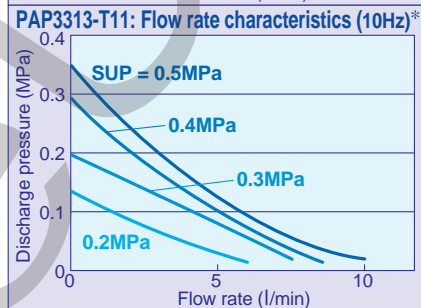
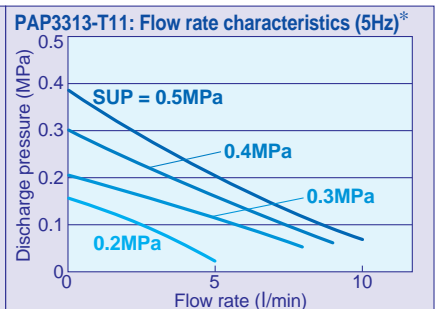
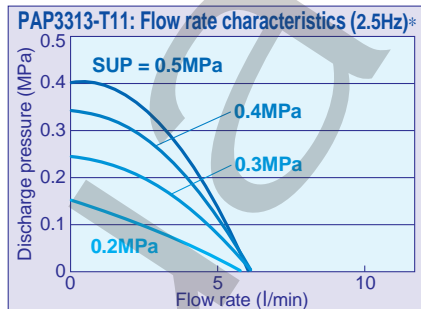
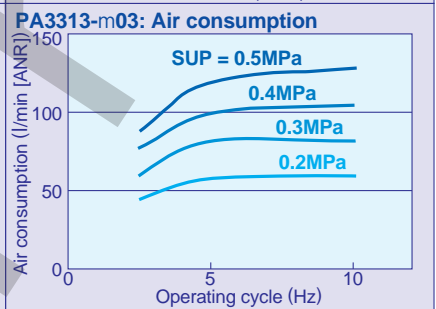
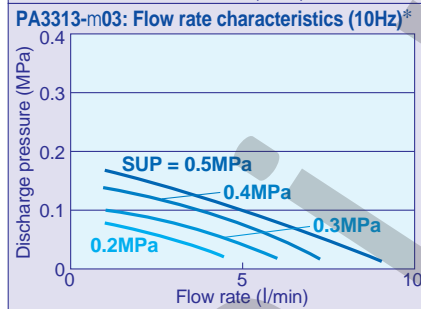
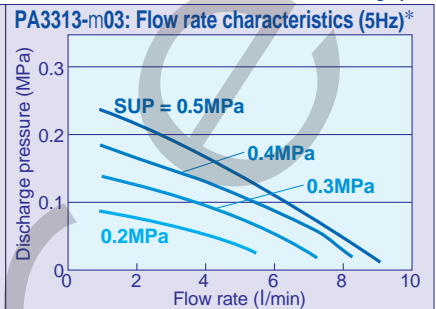
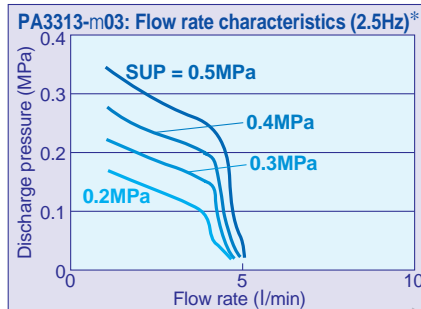
Performance

Automatically operated type



Air pilot actuation type

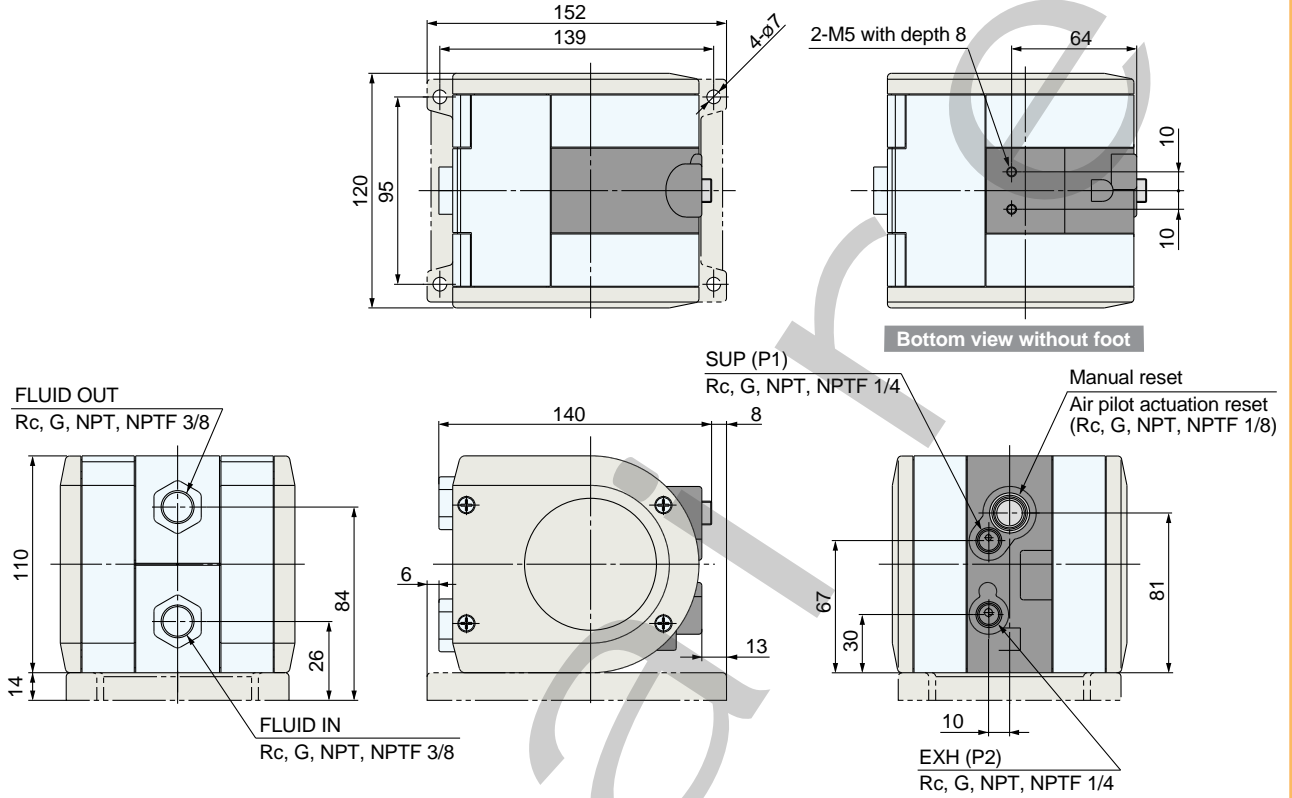
* Solenoid valve switching cycle



Series PA3000

Dimensions

PAm331m-m03



PAP331m- P11m (with tube inlet/outlet) P13m

