

With the use of New PFA high corrosion resistance

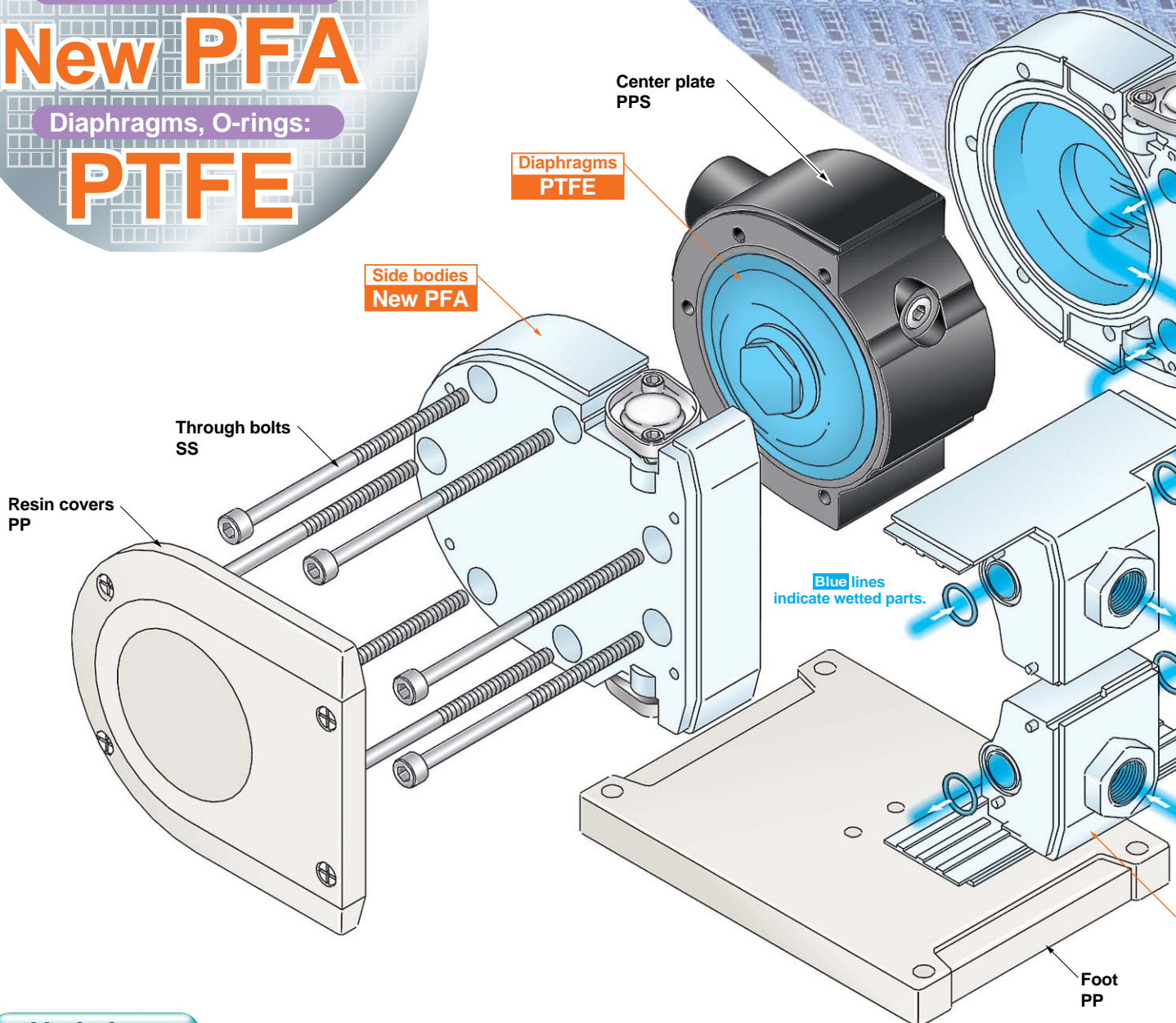
High Corrosion Resistance

Side bodies, Ports:

New PFA

Diaphragms, O-rings:

PTFE

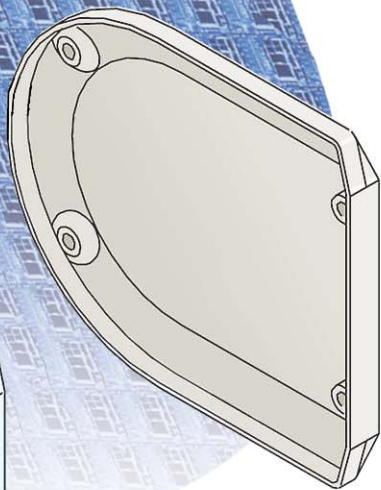


Variations

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			Clean room		
Air pilot actuation	PA3313			Standard	0.1 to 9	• Foot
	PAP3313			Clean room		

* 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 PAP331□). Side bodies and ports are **moulded** to achieve a great reduction in dust generation.

Long service life

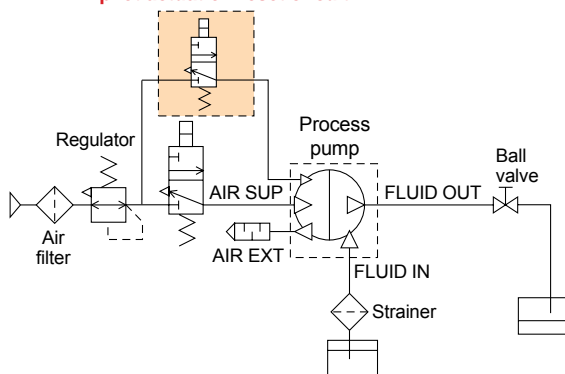
Diaphragm are made from **denatured PTFE** for superior resistance and longer service life.

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



Compact & Light weight (Without foot)

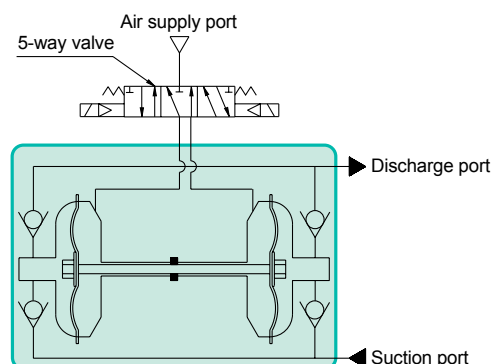


Weight: **2.1 kg**

Air pilot actuation is standard.

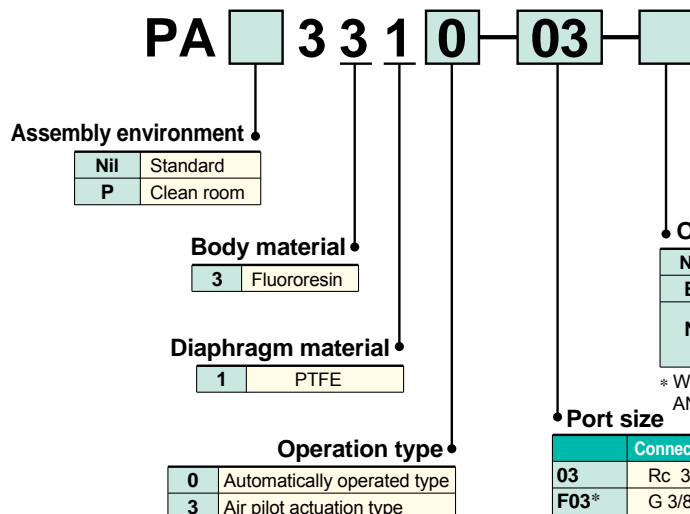
External switching valve control makes constant cycling possible.

- **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



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□ (Standard assembly)
F03*	G 3/8	G 1/4 thread	PAP331□ (Clean-room assembly)
N03*	NPT 3/8	NPT 1/4 thread	
T03*	NPTF 3/8	NPTF 1/4 thread	
P11	3/8" inlet/outlet tube	Rc 1/4 thread	
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	PAP331□ (Clean-room assembly)
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

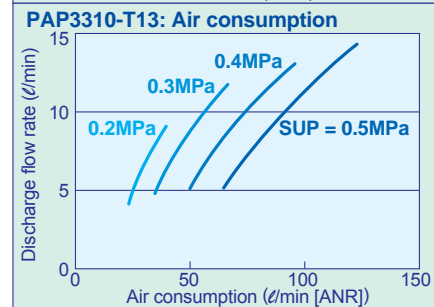
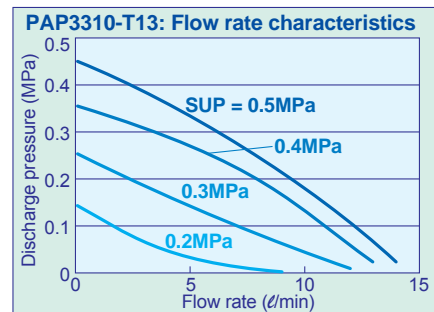
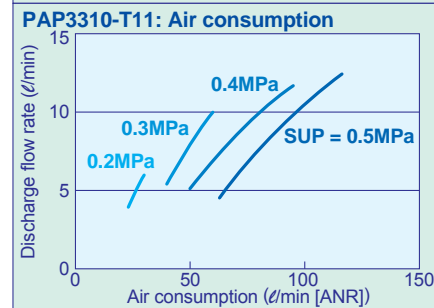
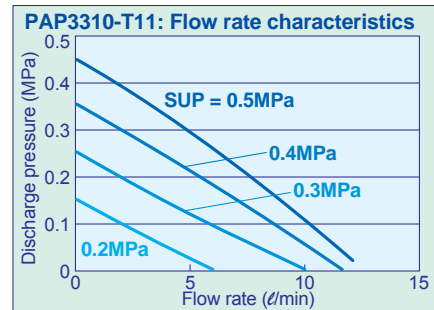
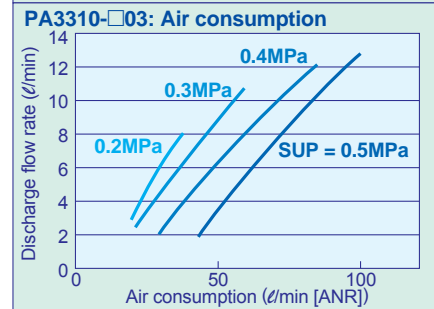
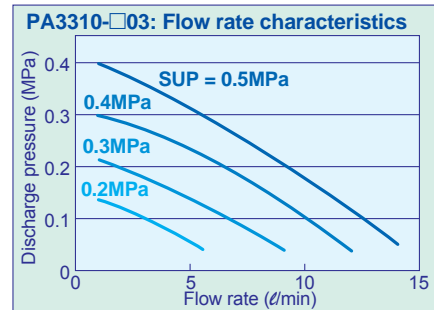
Operation type			Automatically operated type	Air pilot actuation type
Fluid			IPA, DI water, Methyl ethyl ketone, Hypochlorous acid soda	
Port size	Main fluid suction/ discharge port	PA	Rc, G, NPT, NPTF 3/8 female thread	
		PAP	Rc, G, NPT, NPTF 3/8 female thread, 3/8", 1/2" inlet/outlet tube	
	Pilot 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.

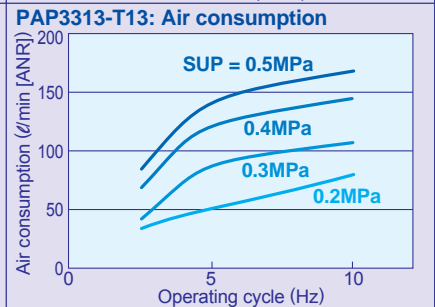
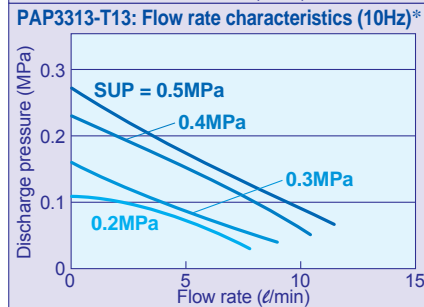
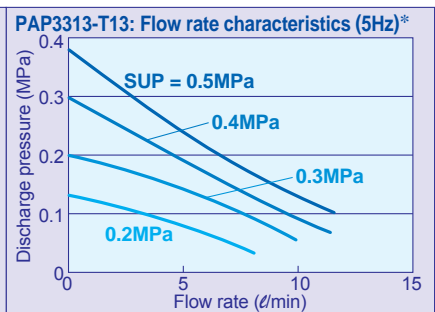
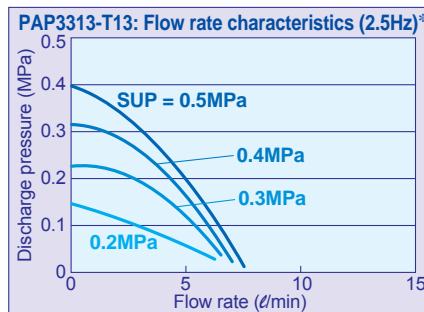
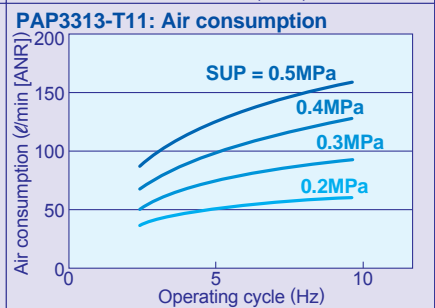
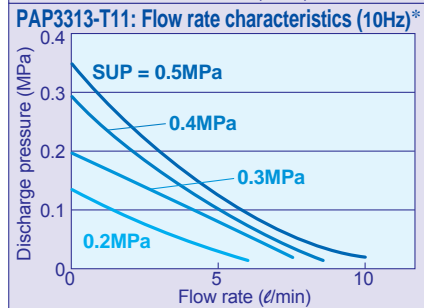
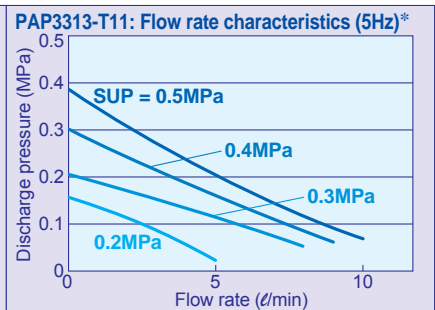
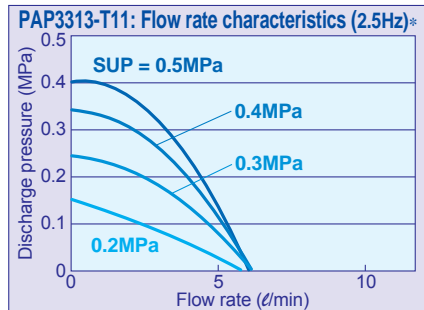
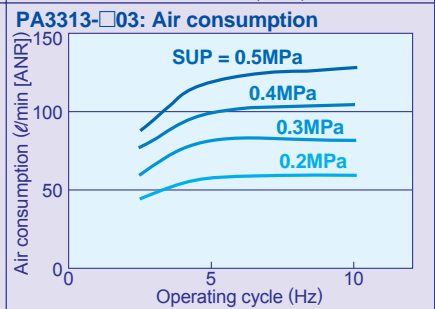
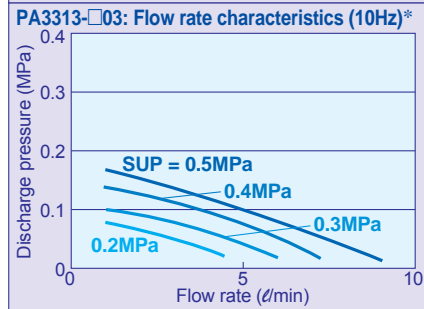
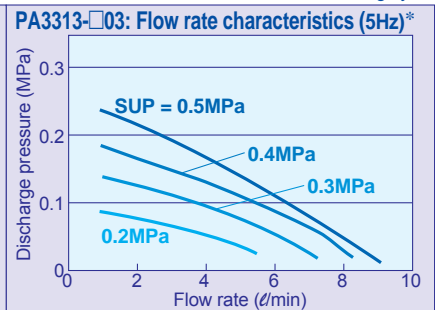
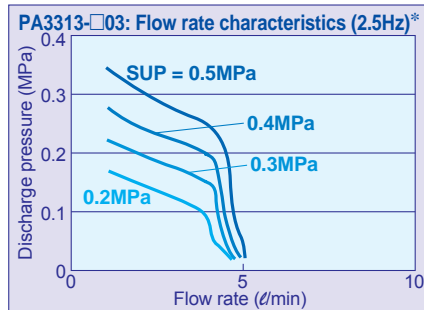
Performance

Automatically operated type

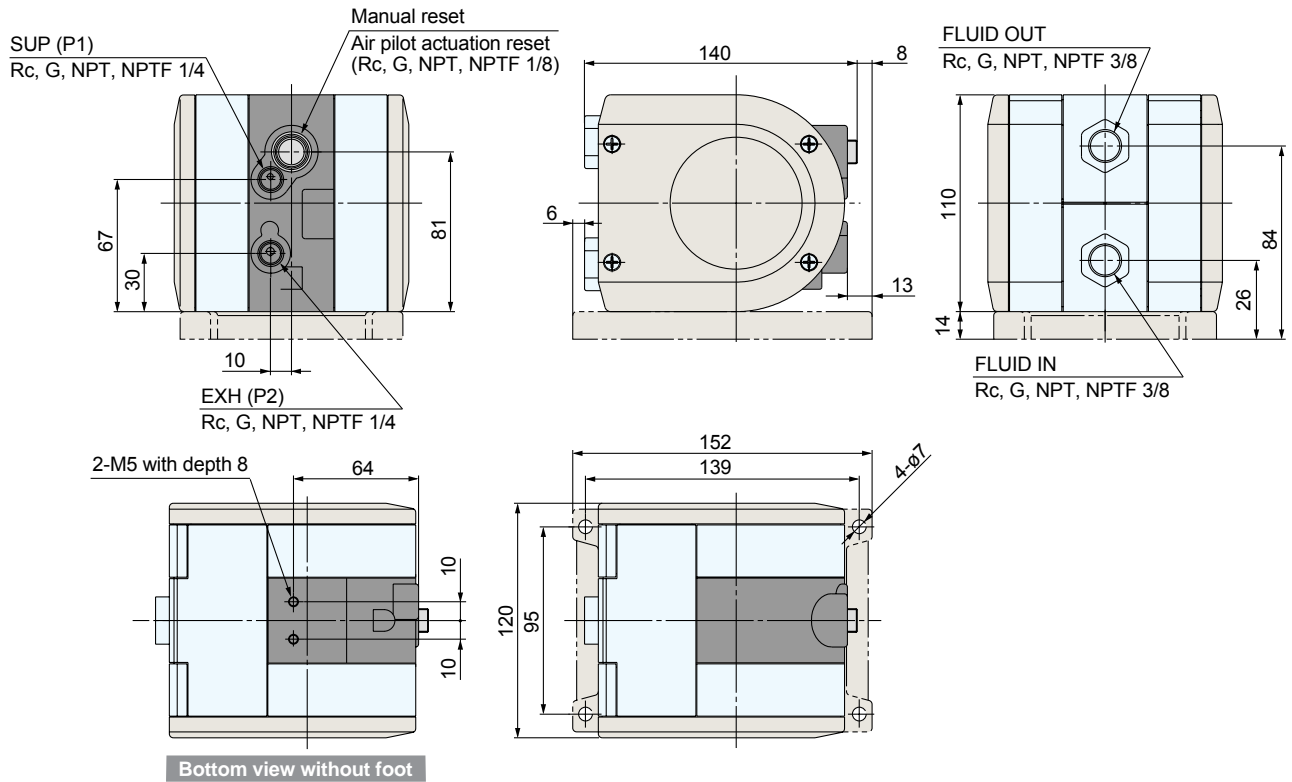


Air pilot actuation type

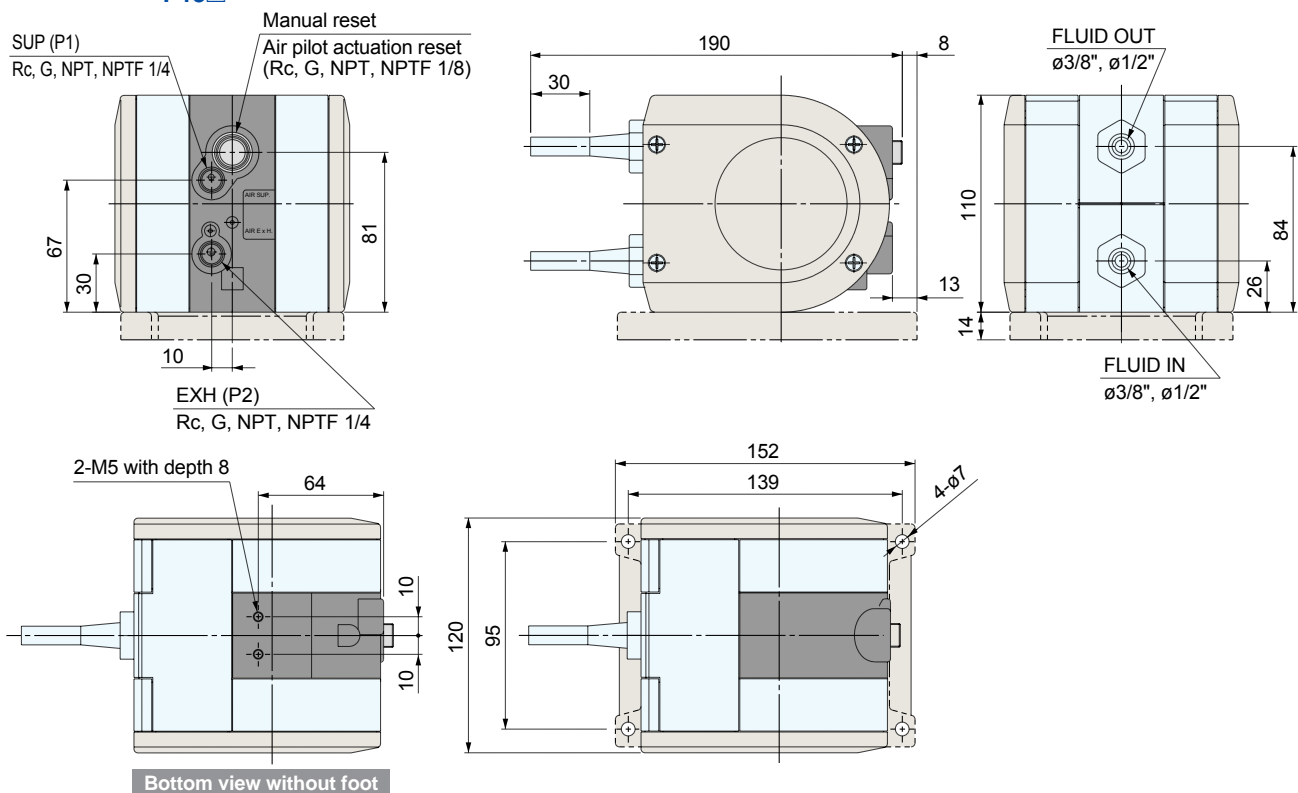
* Solenoid valve switching cycle



PA□331□-□03



PAP331□-P11□ P13□ (with tube inlet/outlet)





P-E00-5A-UK



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

Process Pump
<Fluororesin Type>

Series **PA3000**

