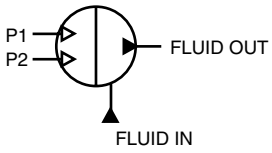
Process Pump
Air Operated Type
(External Switching Type)
Series PA3000/5000

PA3000

PA5000

JIS Symbol



Air operated type

How to Order

PA 3 1 1 3 – □ 03

Body size

3	3/8 standard
5	1/2 standard

Liquid contact body material

1	ADC12 (Aluminum)
2	SCS14 (Stainless steel)

Diaphragm material

1	PTFE

Air operated type

Port size

03	3/8(10A): PA3
04	1/2(15A): PA5
06	3/4(20A): PA5

Thread type

Nil	Rc
T*	NPTF
F*	G
N*	NPT

* T, F, N are options.

Specifications

Model		Air operated type			
		PA3113	**PA3213**	**PA5113**	**PA5213**
Port size	Main fluid suction discharge port	3/8		1/2, 3/4	
	Pilot air supply/ exhaust port	1/4			
Material	Body wetted areas	ADC12	SCS14	ADC12	SCS14
	Diaphragm	PTFE			
	Check valve	PTFE, PFA			
Discharge rate		0.1 to 12 ℓ/min		1 to 24 ℓ/min	
Average discharge pressure		0 to 0.4 MPa			
Pilot air consumption		Max. 150 ℓ/min (ANR)		Max. 250 ℓ/min (ANR)	
Suction lifting range(1)	Dry	Up to 1 m (Interior of pump dry)		Up to 0.5 m (Interior of pump dry)	
	Wet	Up to 6 m (Liquid inside pump)			
Fluid temperature		0 to 60°C (No freezing)			
Ambient temperature		0 to 60°C			
Pilot air pressure		0.1 to 0.5 MPa			
Withstand pressure		0.75 MPa			
Mounting position		Horizontal (with mounting foot at bottom)			
Weight		1.7 kg	2.2 kg	3.5 kg	6.5 kg
Recommended operating cycles		1 to 7 Hz (0.2 to 1 Hz also possible depending on conditions (2))			
Pilot air solenoid valve recommended Cv factor (3)		0.20		0.45	

* Each value of above represents at normal temperatures with fresh water.

Note 1) With cycles at 2 Hz or more

Note 2) After initial suction of liquid operating at 1 to 7 Hz, it can be used with operation at lower cycles. Since a large quantity of liquid will be pumped out, use a suitable throttle in the discharge port if problems occur.

Note 3) With a low number of operating cycles, even a valve with a small Cv factor can be operated.

Recommended Valve

PA3000	VQZ14□0 (Exhaust center)
PA5000	VQZ24□0 (Exhaust center)

Refer to page 17-5-160 for details.