



60×60×25 mm

San Ace 60W 9WPA type

General Specifications

- Material Frame: Plastic (Flammability: UL 94V-0), Impeller: Plastic (Flammability: UL 94V-1)
- Expected life See the table below. (L10 life: 90% survival rate for continuous operation in indoor free air at 60°C, rated voltage)
Expected life at 40°C is for reference only.
- Motor protection function Locked rotor burnout protection, Reverse polarity protection
For details, please refer to p. 608.
- Dielectric strength 50/60 Hz, 500 VAC, for 1 minute (between lead wire conductors and frame)
- Insulation resistance 10 MΩ min. at 500 VDC (between lead wire conductors and frame)
- Sound pressure level (SPL) A-weighted sound pressure level (SPL) at 1 m away from the air inlet.
- Storage temperature -30 to +70°C (Non-condensing)
- Lead wire ⊕Red ⊖Black Sensor Yellow Control Brown
(For models without PWM control, there is no speed control wiring.)
- Mass 110 g
- Ingress protection IP68 For more information on IP rating, refer to p. 617.

Specifications

The models listed below **have ribs and a pulse sensor with PWM control**. For models without ribs, append "1" to the end of model numbers.

Model no.	Rated voltage [V]	Operating voltage range [V]	PWM duty cycle [%]	Rated current [A]	Rated input [W]	Rated speed [min ⁻¹]	Max. airflow [m ³ /min] [CFM]	Max. static pressure [Pa] [inchH ₂ O]	SPL [dB (A)]	Operating temperature [°C]	Expected life [h]
» 9WPA0612P4G001	12	10.8 to 13.2	100	0.93	11.16	12000	1.52 53.7	357 1.44	56	-20 to +70	40000/60°C (70000/40°C)
			20	0.09	1.08	3500	0.43 15.1	30 0.12	22		
» 9WPA0612P4H001		10.2 to 13.8	100	0.17	2.04	5800	0.73 25.8	83 0.33	36		
			20	0.04	0.48	1600	0.2 7	6.3 0.02	10		
» 9WPA0624P4G001	24	21.6 to 26.4	100	0.46	11.04	12000	1.52 53.7	357 1.44	56		
			20	0.05	1.2	3500	0.43 15.1	30 0.12	22		

* PWM frequency is 25 kHz. Models without ratings for 0% PWM duty cycle have zero speed at 0%. When control terminal is open, speed is the same as at 100% duty cycle.

The models listed below **have ribs and a pulse sensor**. For models without ribs, append "1" to the end of model numbers.

Model no.	Rated voltage [V]	Operating voltage range [V]	Rated current [A]	Rated input [W]	Rated speed [min ⁻¹]	Max. airflow [m ³ /min] [CFM]	Max. static pressure [Pa] [inchH ₂ O]	SPL [dB (A)]	Operating temperature [°C]	Expected life [h]
9WPA0612M4001	12	10.2 to 13.8	0.11	1.32	4000	0.51 18	39.7 0.16	26	-20 to +70	40000/60°C (70000/40°C)
9WPA0624S4001	24	21.6 to 26.4	0.17	4.08	7800	0.99 35	151 0.6	43		
9WPA0624M4001		20.4 to 27.6	0.06	1.44	4000	0.51 18	39.7 0.16	26		

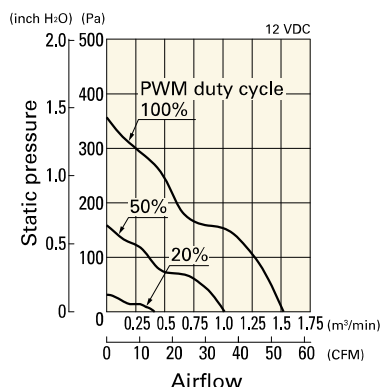
Note 1: Sensor and control options are available for selection. Refer to the table on p. 652.

Note 2: The » mark indicates Short LeadTime Service applicable models. See p. 664 for details.

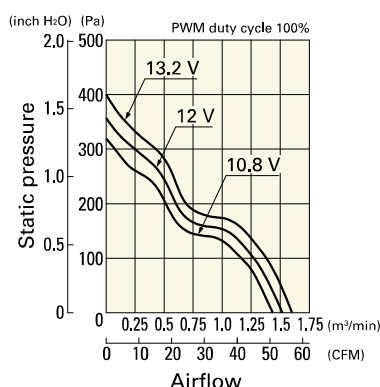
Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

9WPA0612P4G001 With pulse sensor with PWM control

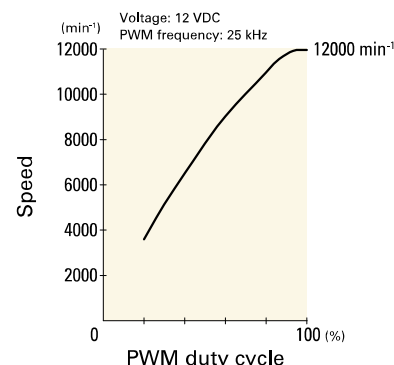
PWM duty cycle



Operating voltage range



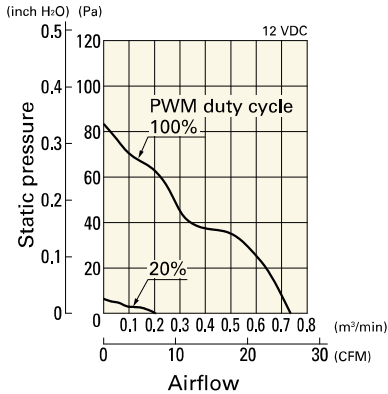
PWM duty - Speed characteristics example



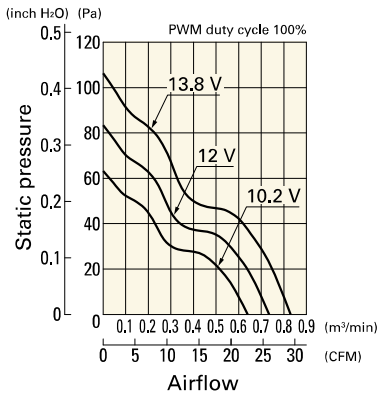
Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

9WPA0612P4H001 With pulse sensor with PWM control

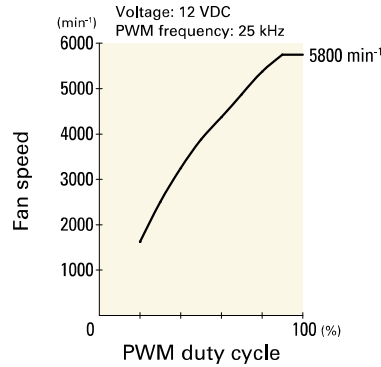
PWM duty cycle



Operating voltage range

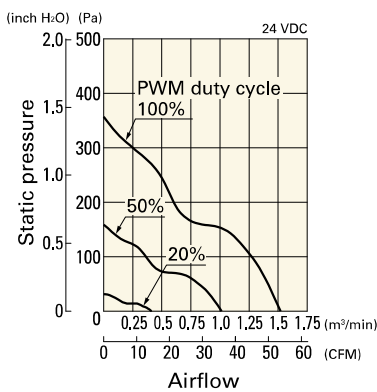


PWM duty - Speed characteristics example

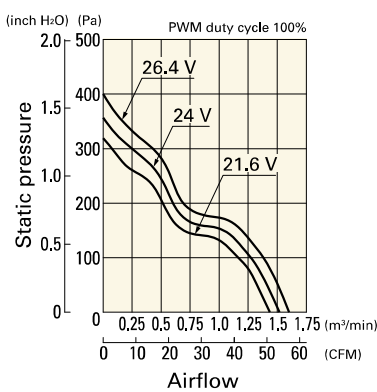


9WPA0624P4G001 With pulse sensor with PWM control

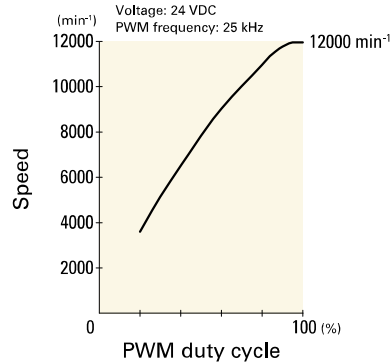
PWM duty cycle



Operating voltage range



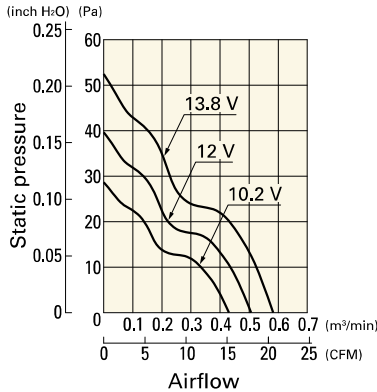
PWM duty - Speed characteristics example



Airflow - Static Pressure Characteristics

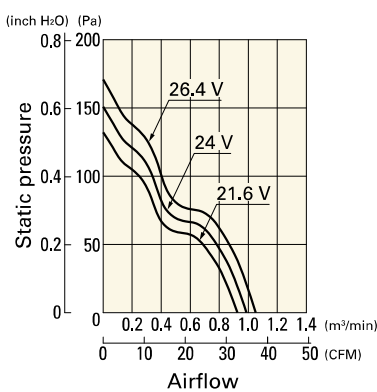
9WPA0612M4001 With pulse sensor

Operating voltage range



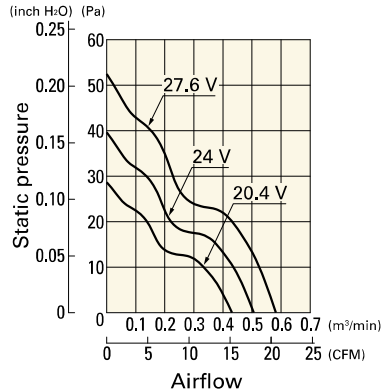
9WPA0624S4001 With pulse sensor

Operating voltage range

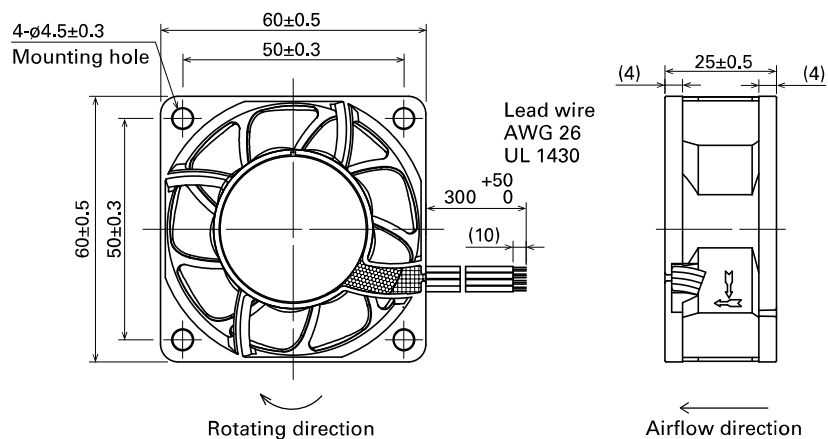


9WPA0624M4001 With pulse sensor

Operating voltage range

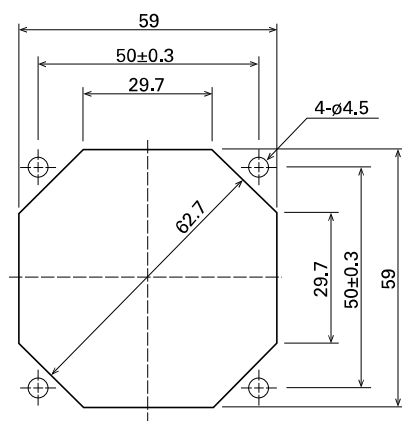


Dimensions (unit: mm) (Ribbed frame with pulse sensor with PWM control)



Reference Dimensions of Mounting Holes and Vent Opening (unit: mm)

Inlet side, Outlet side



Options

Finger guards

page: p. 590

Model no.: 109-139E, 109-139H

Resin finger guards

page: p. 597

Model no.: 109-1003G