



80×80×25 mm

San Ace 80W 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 130 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]
» 9WPA0812P4G001	12	10.8 to 13.2	100	0.71	8.52	8250	2.32 81.9	210 0.84	54	-20 to +70	40000/60°C (70000/40°C)
» 9WPA0812P4S001			20	0.07	0.84	2400	0.67 23.6	18.2 0.073	21		
» 9WPA0824P4G001	24	21.6 to 26.4	100	0.26	3.12	5300	1.49 52.6	86.7 0.35	40		
			20	0.04	0.48	1250	0.35 12.4	4.8 0.019	10		
» 9WPA0824P4G001	24	21.6 to 26.4	100	0.36	8.64	8250	2.32 81.9	210 0.84	54	-20 to +70	40000/60°C (70000/40°C)
			20	0.05	1.2	2400	0.67 23.6	18.2 0.073	21		

* 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]
9WPA0824H4001	24	20.4 to 27.6	0.07	1.68	3500	0.98 34.6	37.8 0.15	29	-20 to +70	40000/60°C (70000/40°C)

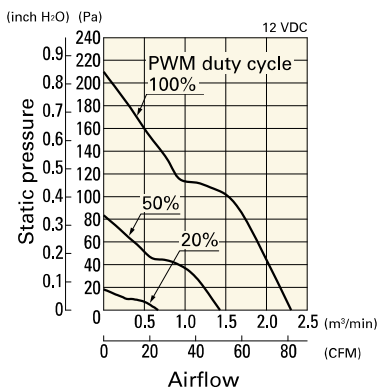
Note 1: Sensor and control options are available for selection. Refer to the table on p. 652.

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

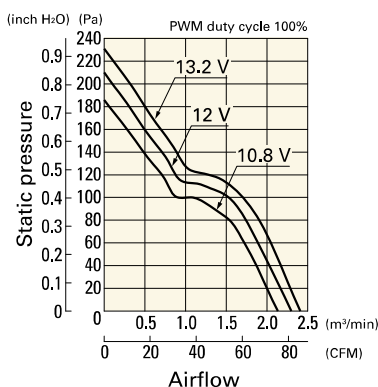
Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

9WPA0812P4G001 With pulse sensor with PWM control

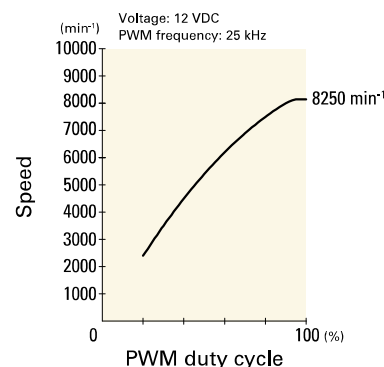
PWM duty cycle



Operating voltage range



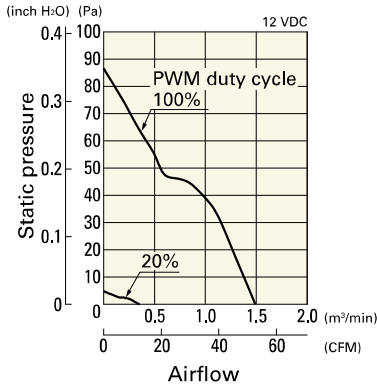
PWM duty - Speed characteristics example



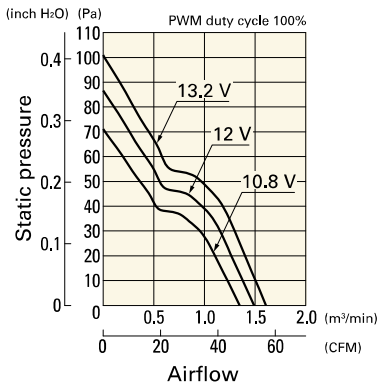
Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

9WPA0812P4S001 With pulse sensor with PWM control

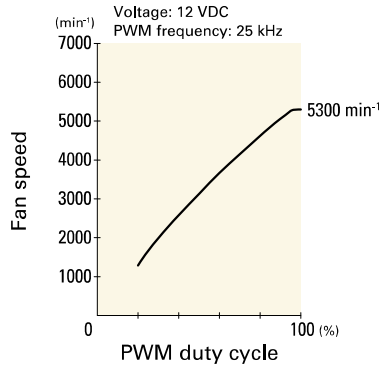
PWM duty cycle



Operating voltage range

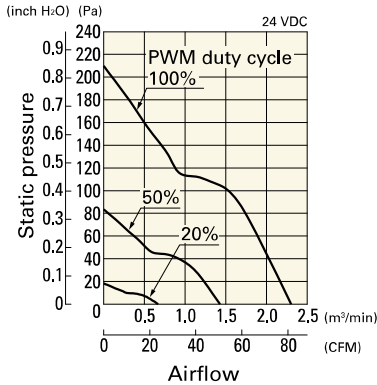


PWM duty - Speed characteristics example

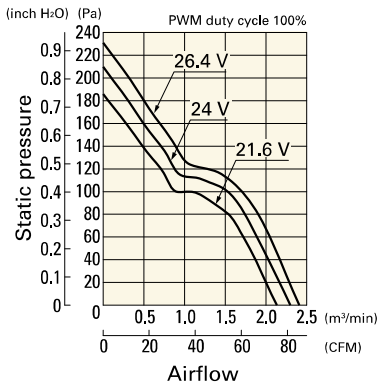


9WPA0824P4G001 With pulse sensor with PWM control

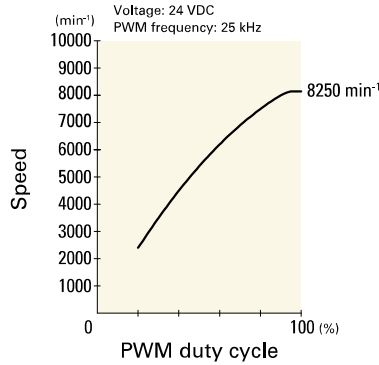
PWM duty cycle



Operating voltage range



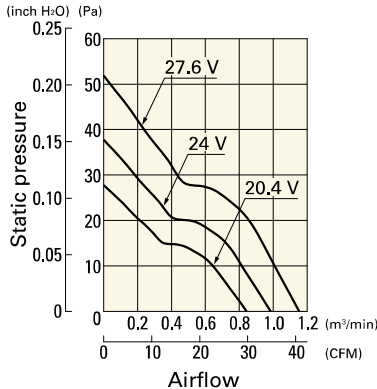
PWM duty - Speed characteristics example



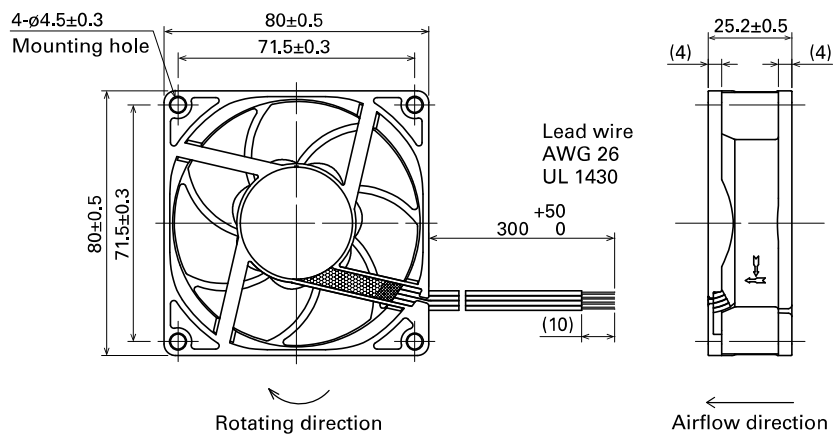
Airflow - Static Pressure Characteristics

9WPA0824H4001 With pulse sensor

Operating voltage range

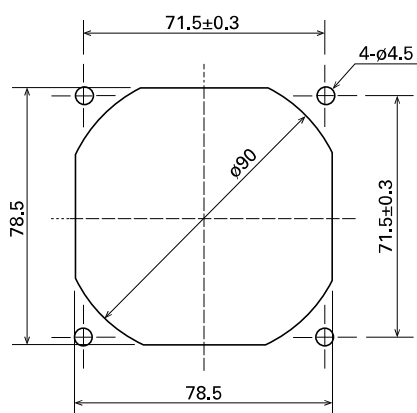


Dimensions (unit: mm) (Ribbed frame with pulse sensor with PWM control)



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

Inlet side, Outlet side



Options

Finger guards

page: p. 590

Model no.: 109-049E, 109-049H

Resin finger guards

page: p. 597

Model no.: 109-1002G