



# 80×80×32 mm

San Ace 80 9GA type Low Power Consumption Fan

## General Specifications

- Material ..... Frame: Plastic (Flammability: UL 94V-0), Impeller: Plastic (Flammability: UL 94V-0)
- Expected life ..... See the table below. (L10 life: 90% survival rate for continuous operation in free air at 60°C, rated voltage)
- Motor protection function ..... Locked rotor burnout protection, Reverse polarity protection  
For details, please refer to p. 529.
- Dielectric strength ..... 50/60 Hz, 500 VAC, for 1 minute (between lead wire conductors and frame)
- Insulation resistance ..... 10 MΩ or more with a 500 VDC megger (between lead wire conductors and frame)
- 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
- Mass ..... 130 g

## Specifications

The models listed below **have ribs and pulse sensors with PWM control function.** 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 <sup>-1</sup> ]	Max. airflow [m <sup>3</sup> /min] [CFM]	Max. static pressure [Pa] [inchH <sub>2</sub> O]	SPL [dB (A)]	Operating temperature [°C]	Expected life [h]
9GA0812P2S001	12	10.2 to 13.8	100	0.83	9.96	9700	2.45 86.5	360 1.45	57	-20 to +70	40000/60°C
			0	0.08	0.96	2800	0.71 25.1	30 0.12	24		
9GA0812P2H001			100	0.59	7.08	8700	2.2 77.7	294 1.18	54		
			0	0.05	0.6	2600	0.66 23.3	26 0.105	21		
9GA0812P2M001		10.2 to 12.6	100	0.35	4.2	6700	1.69 59.6	171 0.68	47	-20 to +55	
			0	0.04	0.48	1400	0.35 12.3	7.5 0.03	10		
9GA0824P2S001	24	20.4 to 27.6	100	0.42	10.1	9700	2.45 86.5	360 1.45	57	-20 to +70	
			0	0.05	1.2	2800	0.71 25.1	30 0.12	24		
9GA0848P2S001	48	40.8 to 55.2	100	0.22	10.56	9700	2.45 86.5	360 1.45	57	-10 to +70	
			0	0.04	1.92	2800	0.71 25.1	30 0.12	24		

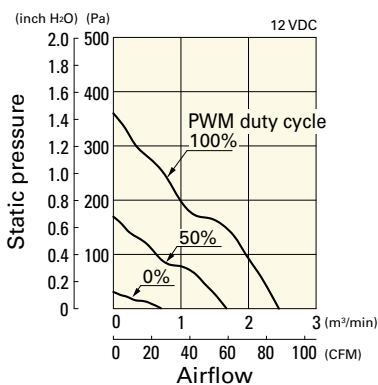
\* PWM frequency: 25 kHz

Other sensor specifications are available as options. Refer to the index (pp. 552 to 553).

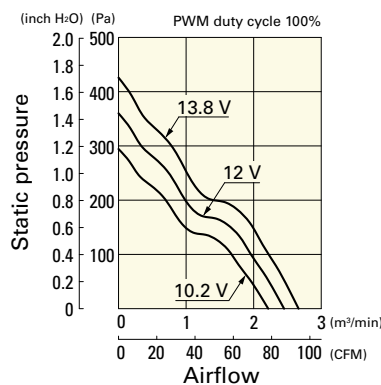
## Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

**9GA0812P2S001** With pulse sensor with PWM control function

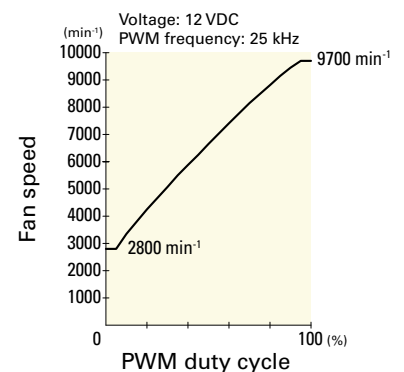
PWM duty cycle



Operating voltage range



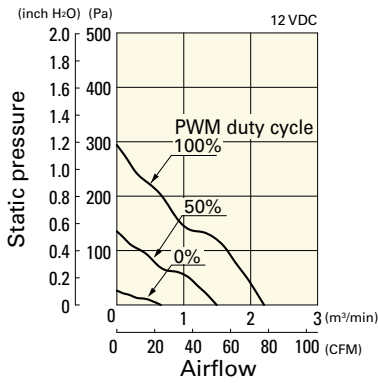
PWM duty - Speed characteristics example



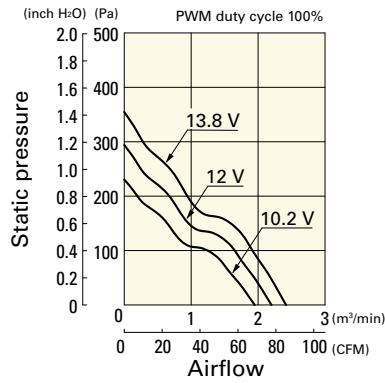
## Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

**9GA0812P2H001** With pulse sensor with PWM control function

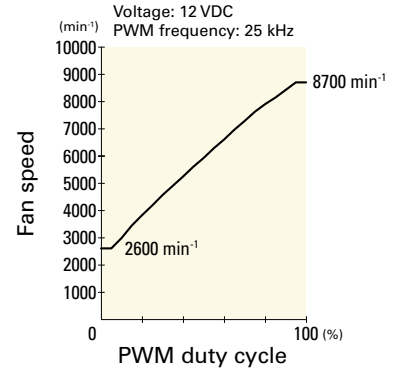
PWM duty cycle



Operating voltage range

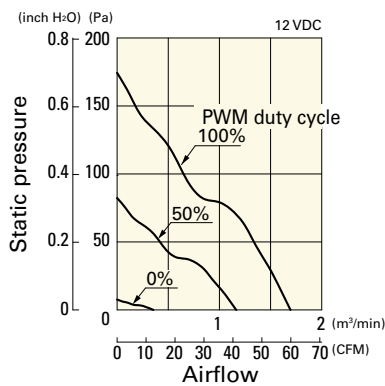


PWM duty - Speed characteristics example

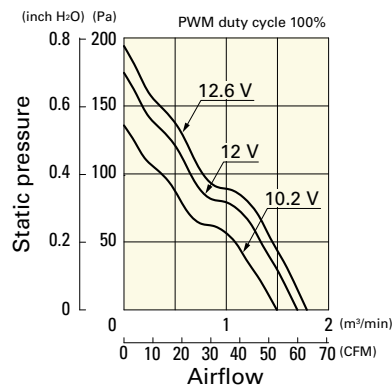


**9GA0812P2M001** With pulse sensor with PWM control function

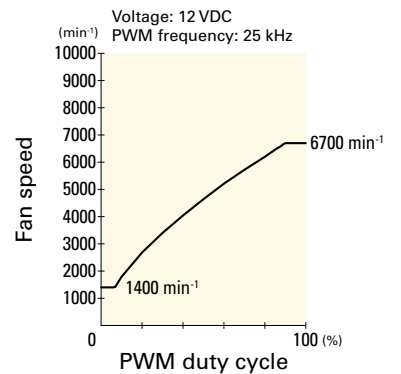
PWM duty cycle



Operating voltage range

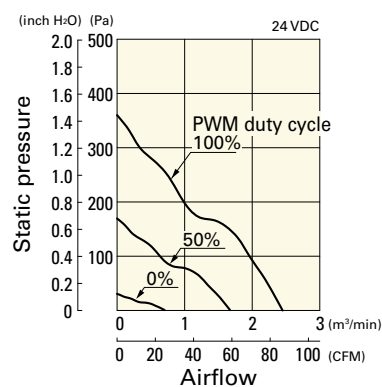


PWM duty - Speed characteristics example

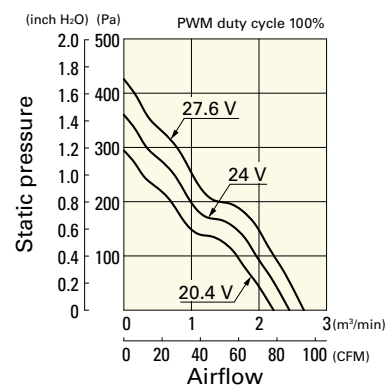


**9GA0824P2S001** With pulse sensor with PWM control function

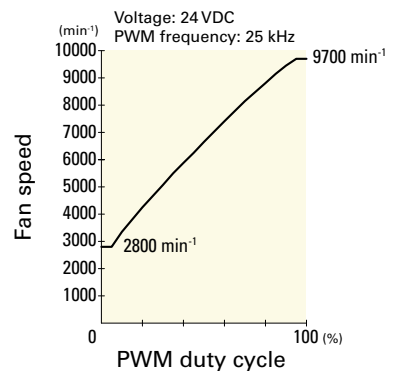
PWM duty cycle



Operating voltage range

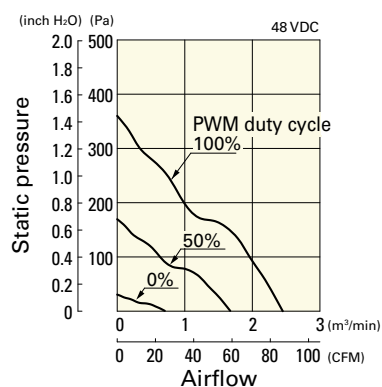


PWM duty - Speed characteristics example

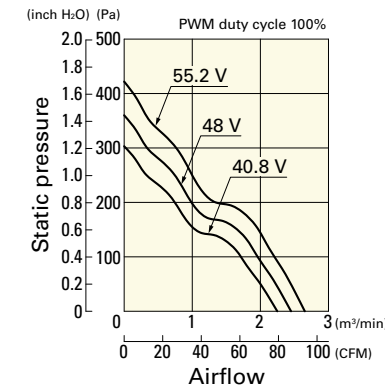


**9GA0848P2S001** With pulse sensor with PWM control function

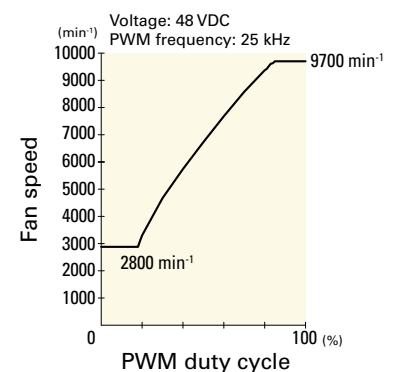
PWM duty cycle



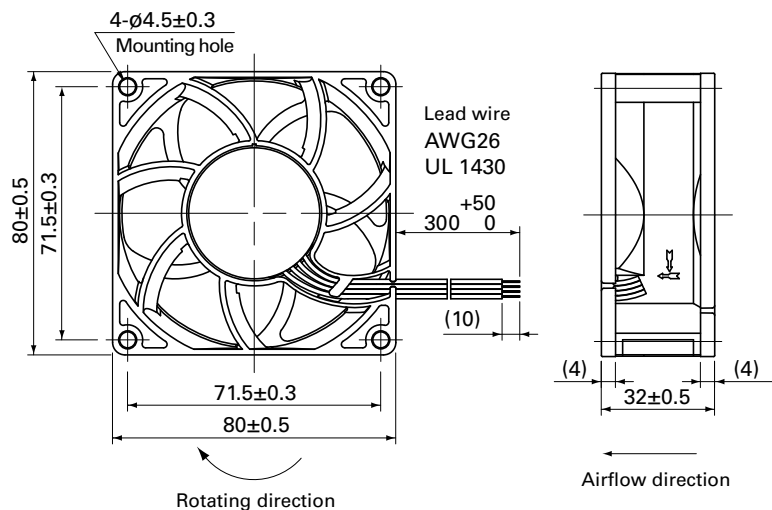
Operating voltage range



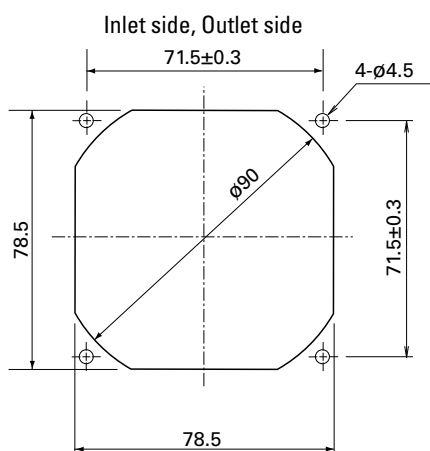
PWM duty - Speed characteristics example



## Dimensions (unit: mm) (With ribs)



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



## Options

### Finger guards

page: p. 513

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

### Resin finger guards

page: p. 520

Model no.: 109-1002G

### Resin filter kits

page: p. 521

Model no.: 109-1002F13 (13PPI), 109-1002F20 (20PPI),  
109-1002F30 (30PPI), 109-1002F40 (40PPI)