



60×60×20 mm

San Ace 60 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)
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. 573.
- 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
(For models without PWM control function, there is no speed control wiring.)
- Mass 70 g

Specifications

The models listed below **have ribs and pulse sensors with PWM control function.**

| 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 ² /min] [CFM] | Max. static pressure [Pa] [inchH ₂ O] | SPL [dB (A)] | Operating temperature [°C] | Expected life [h] |
|---------------|-------------------|-----------------------------|--------------------|-------------------|-----------------|----------------------------------|--|--|--------------|----------------------------|----------------------------|
| 9GA0612P6G001 | 12 | 10.8 to 13.2 | 100 | 0.26 | 3.12 | 6850 | 0.88 31.1 | 125 0.5 | 43 | -20 to +70 | 40000/60°C (70000/40°C) |
| 9GA0612P6S001 | | | 100 | 0.15 | 1.8 | 5500 | 0.7 24.7 | 81 0.33 | 36 | | |
| 9GA0624P6G001 | 24 | 21.6 to 26.4 | 100 | 0.12 | 2.88 | 6850 | 0.88 31.1 | 125 0.5 | 43 | | |
| 9GA0624P6S001 | | | 100 | 0.07 | 1.68 | 5500 | 0.7 24.7 | 81 0.33 | 36 | | |

* PWM input frequency is 25 kHz; models without specifications at 0% PWM duty cycle have zero fan speed at 0%.

The following sensor and control options are available for selection.

Available for all models. **Without sensor**

Differs according to the model. Refer to the table on p. 603. **Pulse sensor** **Lock sensor**

The models listed below **have ribs and pulse sensors.**

| Model no. | Rated voltage [V] | Operating voltage range [V] | Rated current [A] | Rated input [W] | Rated speed [min ⁻¹] | Max. airflow [m ² /min] [CFM] | Max. static pressure [Pa] [inchH ₂ O] | SPL [dB (A)] | Operating temperature [°C] | Expected life [h] |
|--------------|-------------------|-----------------------------|-------------------|-----------------|----------------------------------|--|--|--------------|----------------------------|----------------------------|
| 9GA0612H6001 | 12 | 10.8 to 13.2 | 0.09 | 1.08 | 4100 | 0.52 18.4 | 45 0.18 | 29 | -20 to +70 | 60000/60°C (90000/40°C) |
| 9GA0612M6001 | | | 0.05 | 0.6 | 2700 | 0.34 12.0 | 20 0.08 | 18 | | |
| 9GA0624H6001 | 24 | 21.6 to 26.4 | 0.04 | 0.96 | 4100 | 0.52 18.4 | 45 0.18 | 29 | | |
| 9GA0624M6001 | | | 0.03 | 0.72 | 2700 | 0.34 12.0 | 20 0.08 | 18 | | |

The following sensor and control options are available for selection.

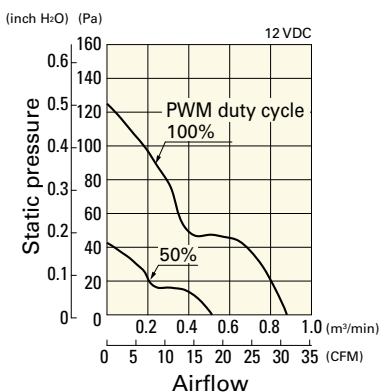
Available for all models. **Without sensor** **Lock sensor**

The mark indicates Short Lead Time Service applicable models. See p. 626 for details.

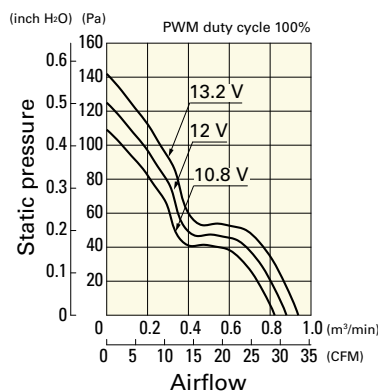
Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

9GA0612P6G001 With pulse sensor with PWM control function

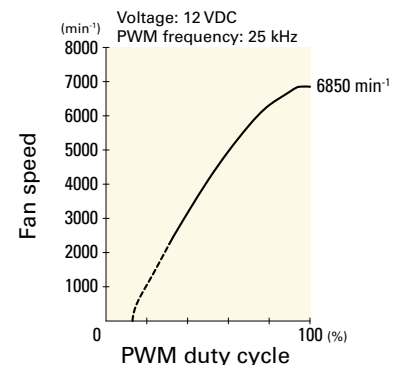
PWM duty cycle



Operating voltage range



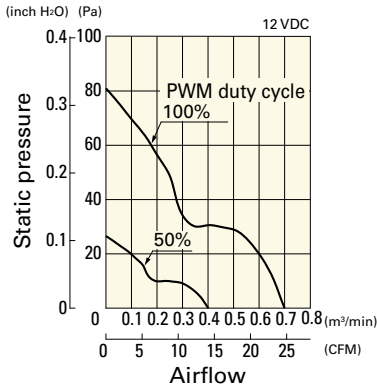
PWM duty - Speed characteristics example



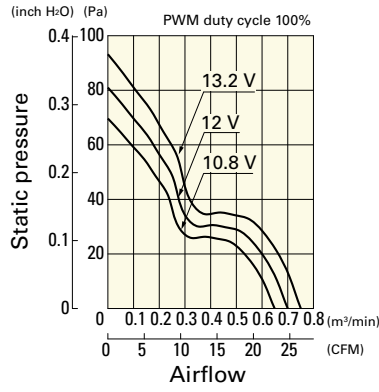
Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

9GA0612P6S001 With pulse sensor with PWM control function

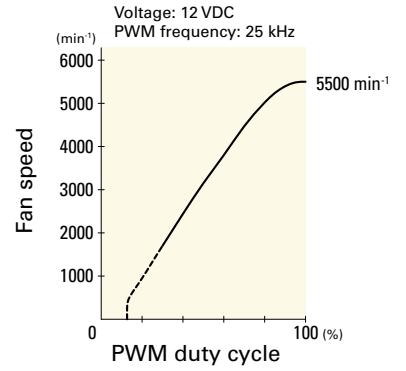
PWM duty cycle



Operating voltage range

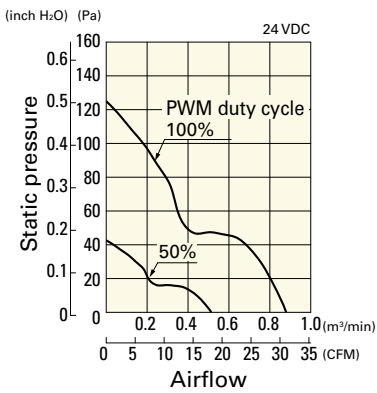


PWM duty - Speed characteristics example

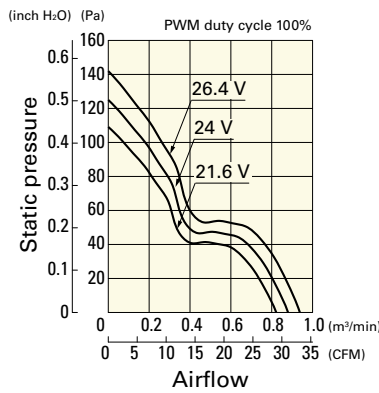


9GA0624P6G001 With pulse sensor with PWM control function

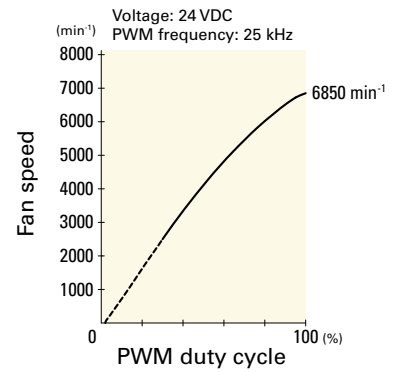
PWM duty cycle



Operating voltage range

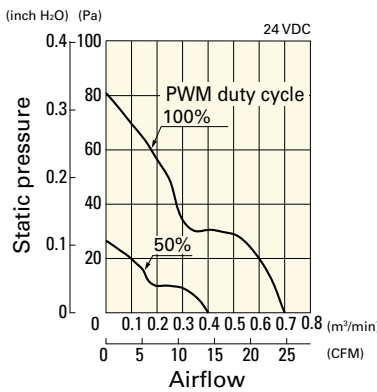


PWM duty - Speed characteristics example

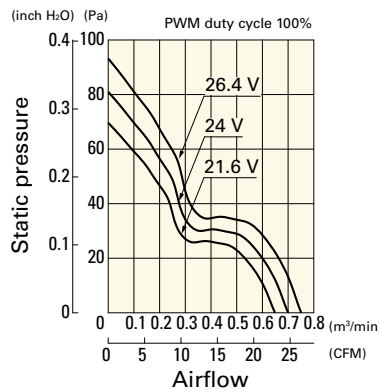


9GA0624P6S001 With pulse sensor with PWM control function

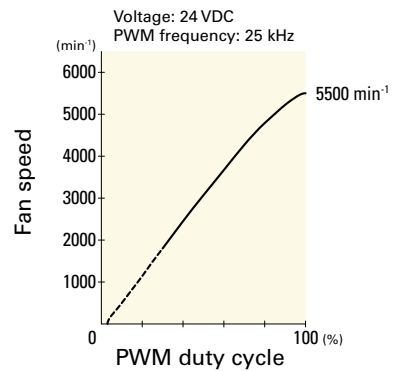
PWM duty cycle



Operating voltage range



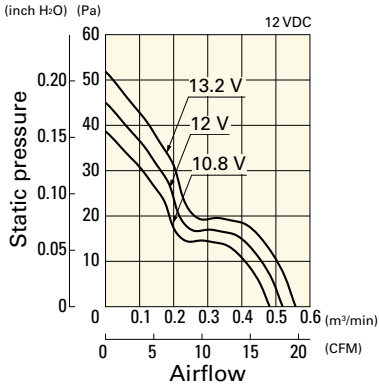
PWM duty - Speed characteristics example



Airflow - Static Pressure Characteristics

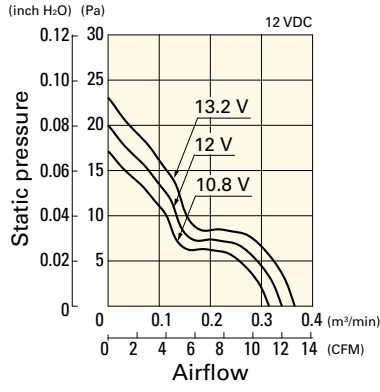
9GA0612H6001 With pulse sensor

Operating voltage range



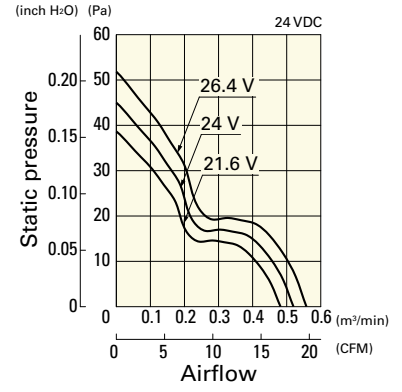
9GA0612M6001 With pulse sensor

Operating voltage range



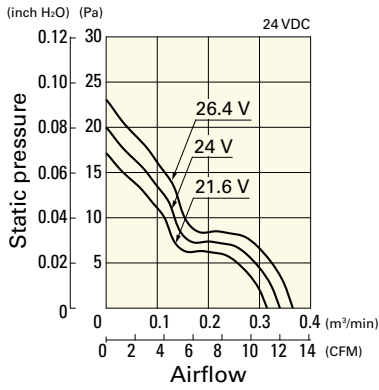
9GA0624H6001 With pulse sensor

Operating voltage range

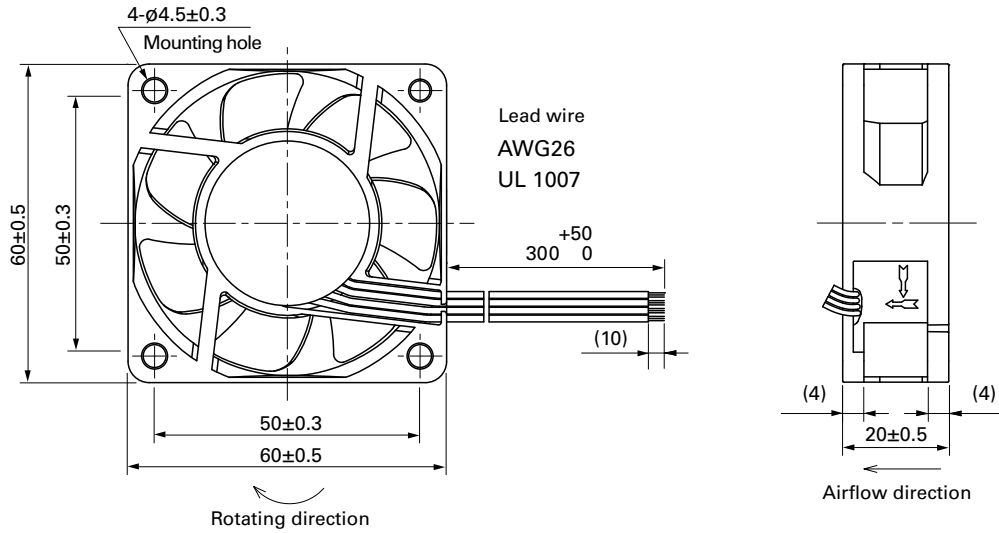


9GA0624M6001 With pulse sensor

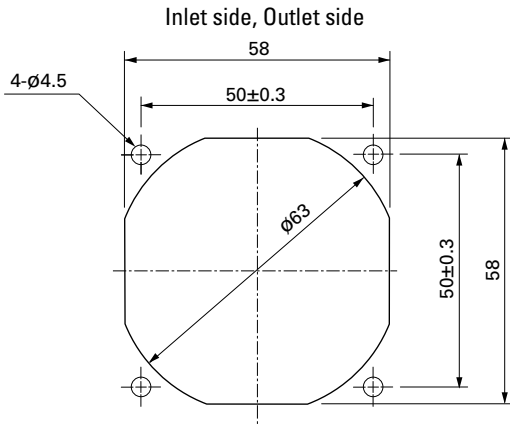
Operating voltage range



Dimensions (unit: mm) (With pulse sensor with PWM control function)



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



Options

Finger guards

page: p. 558

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

Resin finger guards

page: p. 565

Model no.: 109-1003G

Resin filter kits

page: p. 566

Model no.: 109-1003F13 (13PPI), 109-1003F20 (20PPI),
109-1003F30 (30PPI), 109-1003F40 (40PPI)