

40×40×15 mm

San Ace 40 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. 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 ..... 28 g

## Specifications

The models listed below **have ribs and a pulse sensor with PWM control.**

| 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]          |
|------------------------|-------------------|-----------------------------|--------------------|-------------------|-----------------|----------------------------------|------------------------------------------|--------------------------------------------------|--------------|----------------------------|----------------------------|
| <b>9GA0405P7C001</b>   | 5                 | 4.75 to 5.25                | 100                | 0.16              | 0.8             | 8800                             | 0.24 8.5                                 | 86 0.35                                          | 33           | -20 to +70                 | 60000/60°C<br>(90000/40°C) |
| » <b>9GA0412P7G001</b> | 12                | 10.2 to 13.8                | 30                 | 0.03              | 0.15            | 1250                             | 0.03 1.1                                 | 1.7 0.007                                        | 10           |                            | 40000/60°C<br>(70000/40°C) |

\* 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.**

| Model no.             | Rated voltage [V] | Operating voltage range [V] | 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]          |
|-----------------------|-------------------|-----------------------------|-------------------|-----------------|----------------------------------|------------------------------------------|--------------------------------------------------|--------------|----------------------------|----------------------------|
| » <b>9GA0412G7001</b> | 12                | 7 to 13.8                   | 0.17              | 2.04            | 13100                            | 0.36 12.7                                | 192 0.77                                         | 42           | -20 to +70                 | 40000/60°C<br>(70000/40°C) |
| » <b>9GA0412H7001</b> |                   |                             | 0.06              | 0.72            | 7300                             | 0.2 7.1                                  | 59.6 0.24                                        | 28           |                            |                            |
| <b>9GA0412L7001</b>   |                   |                             | 0.04              | 0.48            | 4400                             | 0.11 3.9                                 | 22.7 0.09                                        | 20           |                            |                            |

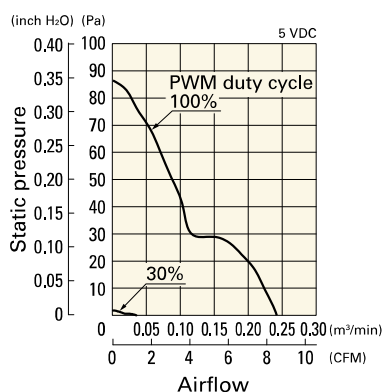
Note 1: Sensor and control options are available for selection. Refer to the table on pp. 637 to 638.

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

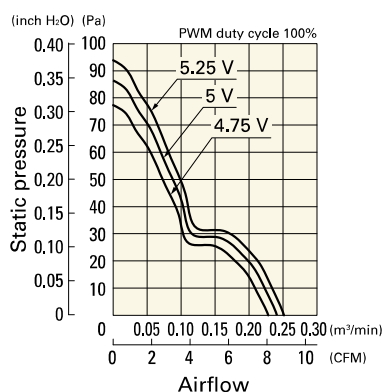
## Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

**9GA0405P7C001** With pulse sensor with PWM control

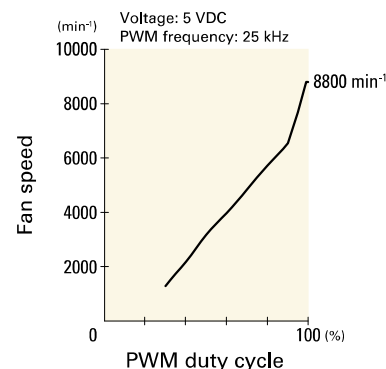
PWM duty cycle



Operating voltage range



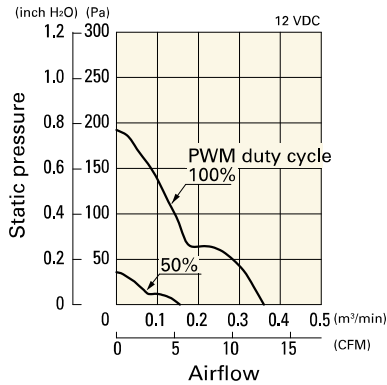
PWM duty - Speed characteristics example



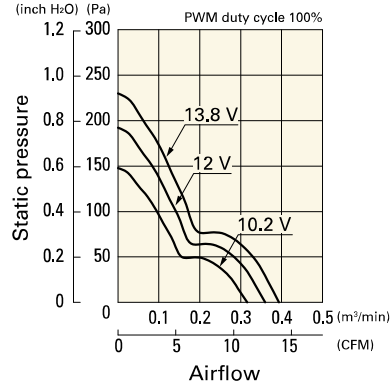
## Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

**9GA0412P7G001** With pulse sensor with PWM control

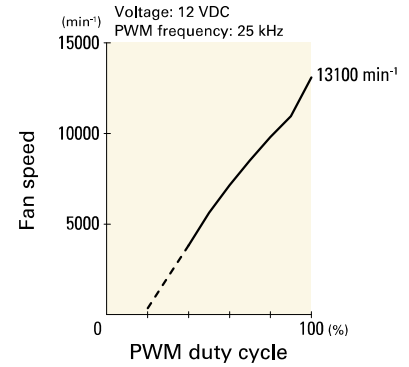
PWM duty cycle



Operating voltage range



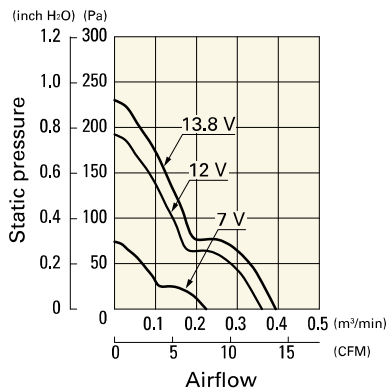
PWM duty - Speed characteristics example



## Airflow - Static Pressure Characteristics

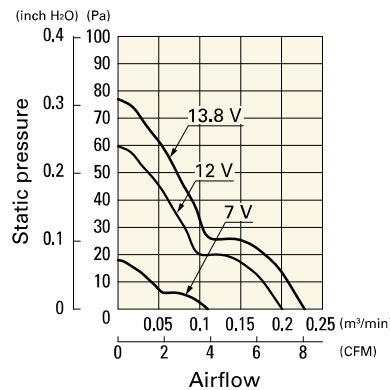
**9GA0412G7001** With pulse sensor

Operating voltage range



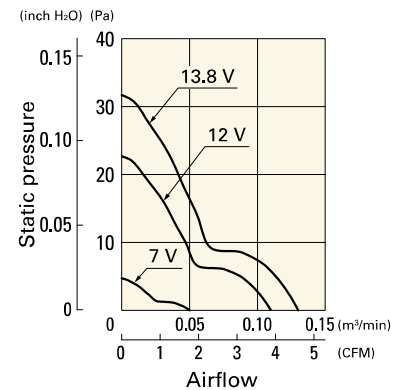
**9GA0412H7001** With pulse sensor

Operating voltage range

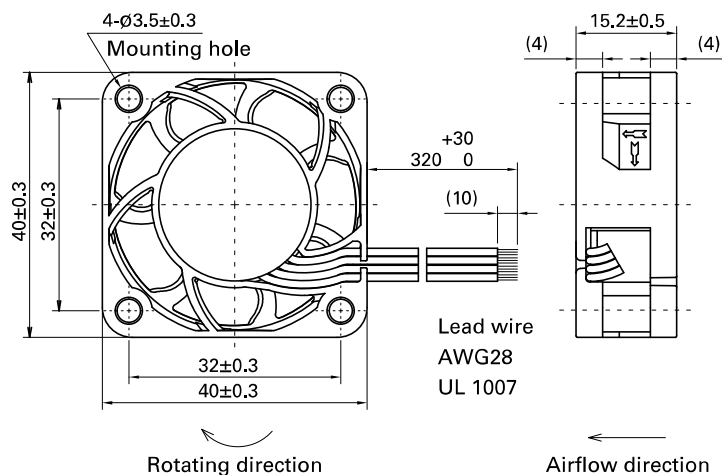


**9GA0412L7001** With pulse sensor

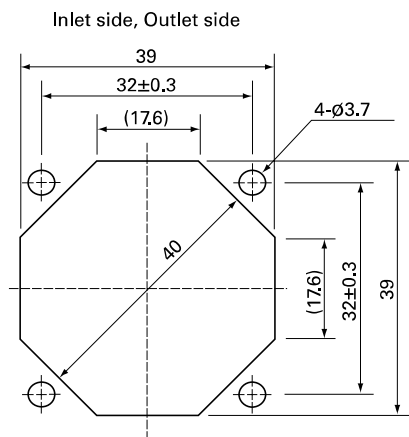
Operating voltage range



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



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



## Options

Finger guards

page: p. 590

Model no.: 109-059, 109-059H