

# 80×80×38 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. 547.
- 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 ..... 160 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]          |
|--------------|-------------------|-----------------------------|---------------------|-------------------|-----------------|----------------------------------|------------------------------------------|--------------------------------------------------|--------------|----------------------------|----------------------------|
| 9GA0812P1G61 | 12                | 10.8 to 13.2                | 100                 | 1.2               | 14.4            | 10500                            | 2.85 100.6                               | 480 1.93                                         | 60           | -20 to +70                 | 40000/60°C<br>(70000/40°C) |
|              |                   |                             | 0                   | 0.04              | 0.48            | 2000                             | 0.51 18.0                                | 28.7 0.11                                        | 21           |                            |                            |
| 9GA0812P1S61 |                   |                             | 100                 | 0.94              | 11.28           | 9550                             | 2.6 91.8                                 | 480 1.93                                         | 59           |                            |                            |
|              |                   |                             | 0                   | 0.1               | 1.2             | 2900                             | 0.74 26.1                                | 60 0.24                                          | 27           |                            |                            |
| 9GA0812P1H61 |                   |                             | 100                 | 0.6               | 7.2             | 8250                             | 2.25 79.4                                | 380 1.53                                         | 55           |                            |                            |
|              |                   |                             | 0                   | 0.08              | 0.96            | 2500                             | 0.64 22.6                                | 45 0.18                                          | 24           |                            |                            |
| 9GA0824P1S61 | 24                | 20.4 to 27.6                | 100                 | 0.47              | 11.28           | 9550                             | 2.6 91.8                                 | 480 1.93                                         | 59           |                            |                            |
|              |                   |                             | 0                   | 0.06              | 1.44            | 2900                             | 0.74 26.1                                | 60 0.24                                          | 27           |                            |                            |
| 9GA0824P1H61 |                   |                             | 100                 | 0.3               | 7.2             | 8250                             | 2.25 79.4                                | 380 1.53                                         | 55           |                            |                            |
|              |                   |                             | 0                   | 0.05              | 1.2             | 2500                             | 0.64 22.6                                | 45 0.18                                          | 24           |                            |                            |
| 9GA0848P1S61 | 48                | 40.8 to 55.2                | 100                 | 0.25              | 12              | 9550                             | 2.6 91.8                                 | 480 1.93                                         | 59           |                            |                            |
|              |                   |                             | 0                   | 0.04              | 1.92            | 2900                             | 0.74 26.1                                | 60 0.24                                          | 27           |                            |                            |

\* PWM frequency: 25 kHz

The following sensor and control options are available for selection.

Differs according to the model. Refer to the table on pp. 571 to 572. **Without sensor** **Pulse sensor** **Lock sensor**

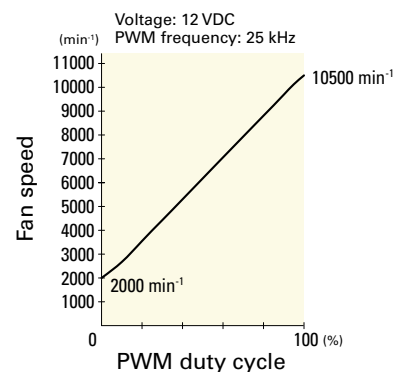
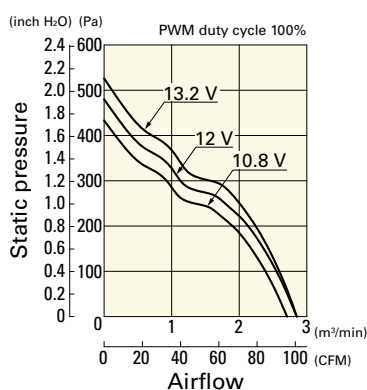
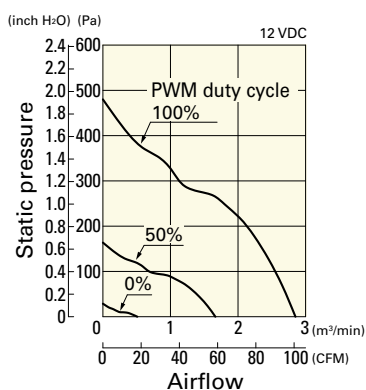
### Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

**9GA0812P1G61** With pulse sensor with PWM control function

PWM duty cycle

Operating voltage range

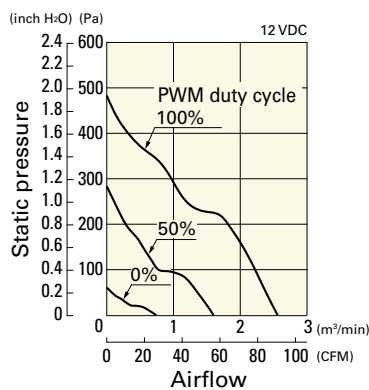
PWM duty - Speed characteristics example



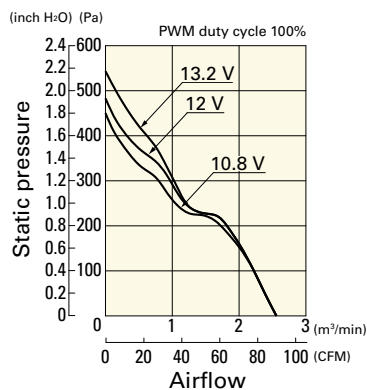
## Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

**9GA0812P1S61** With pulse sensor with PWM control function

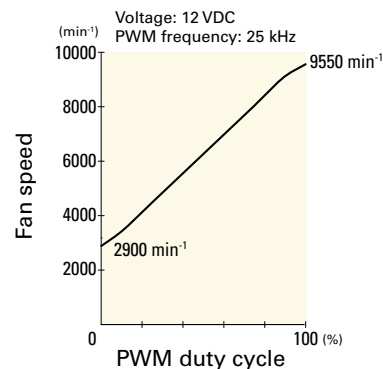
PWM duty cycle



Operating voltage range

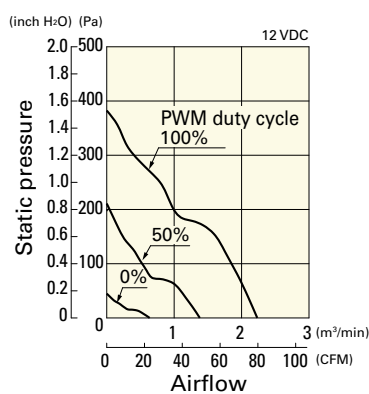


PWM duty - Speed characteristics example

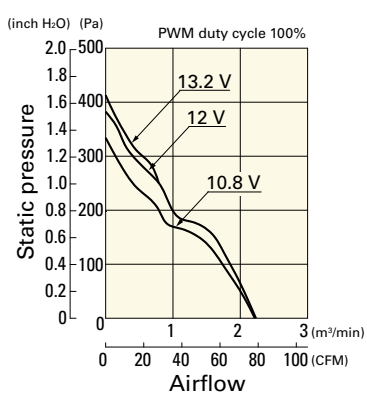


**9GA0812P1H61** With pulse sensor with PWM control function

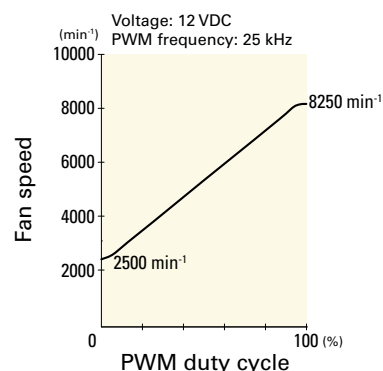
PWM duty cycle



Operating voltage range

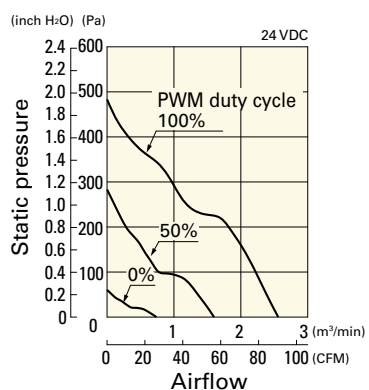


PWM duty - Speed characteristics example

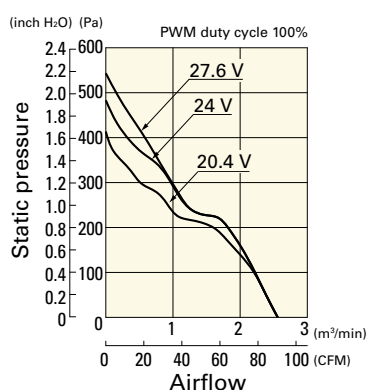


**9GA0824P1S61** With pulse sensor with PWM control function

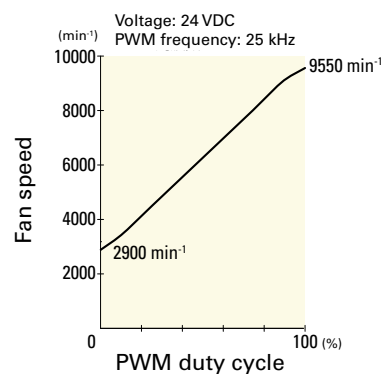
PWM duty cycle



Operating voltage range

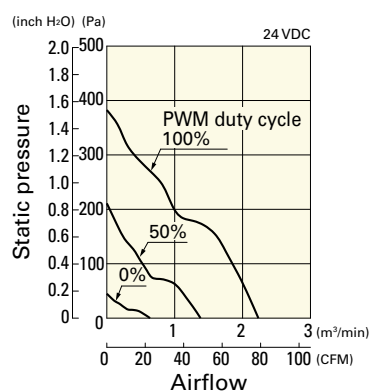


PWM duty - Speed characteristics example

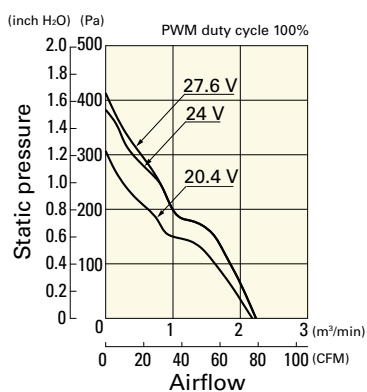


**9GA0824P1H61** With pulse sensor with PWM control function

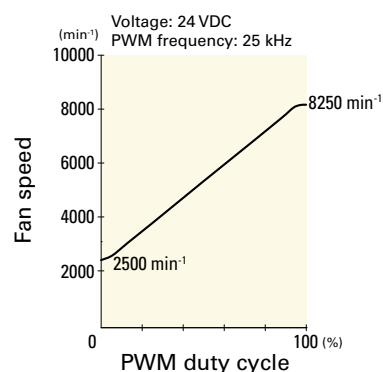
PWM duty cycle



Operating voltage range



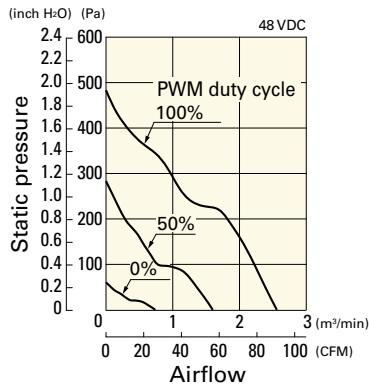
PWM duty - Speed characteristics example



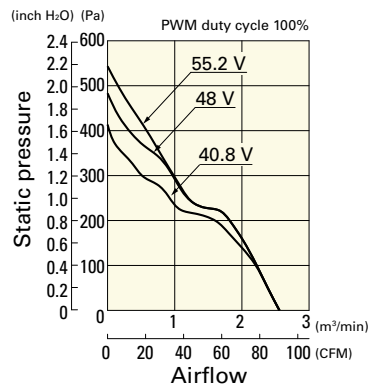
## Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

**9GA0848P1S61** With pulse sensor with PWM control function

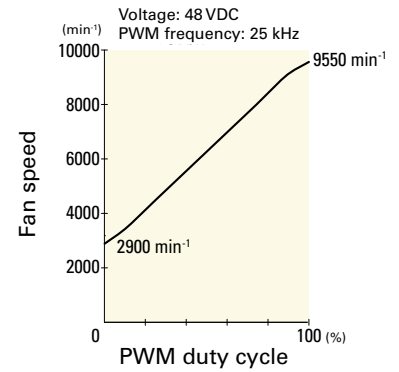
PWM duty cycle



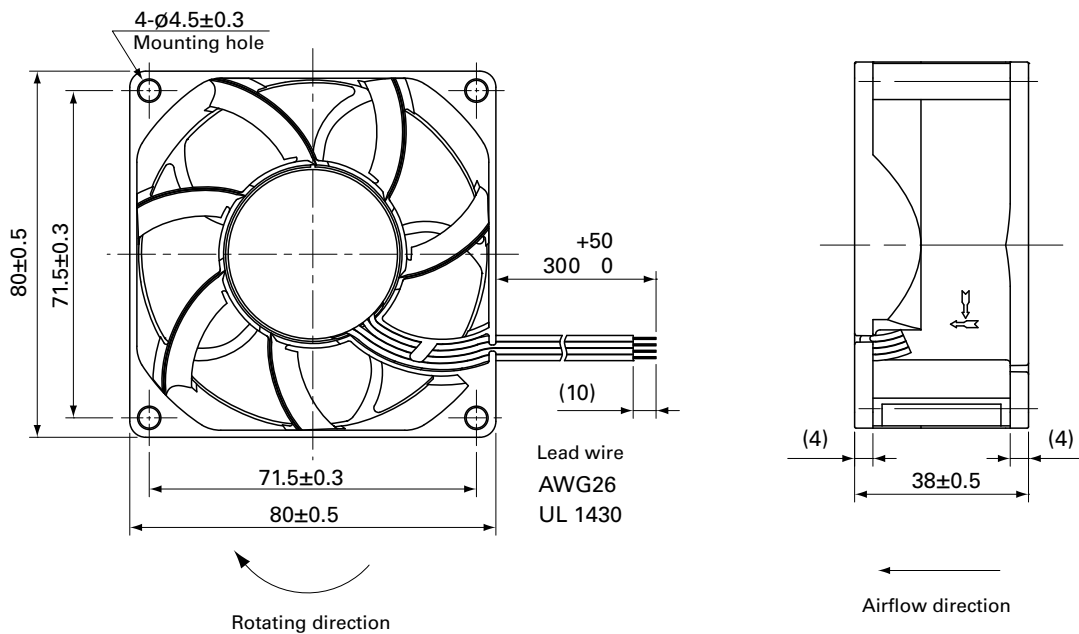
Operating voltage range



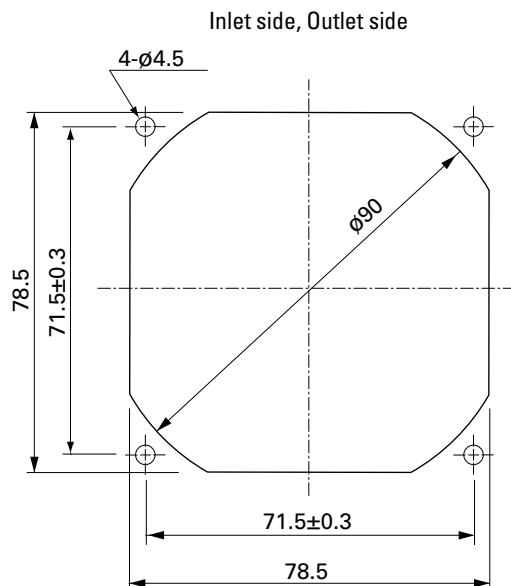
PWM duty - Speed characteristics example



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



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



## Options

### Finger guards

page: p. 532

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

### Resin finger guards

page: p. 539

Model no.: 109-1002G

### Resin filter kits

page: p. 540

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

DC

DC Fan 80 mm sq.

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[9GA0824S161](#) [9GA0812H161](#) [9GA0812H1611](#) [9GA0812H162](#) [9GA0812H1621](#) [9GA0812H1D61](#) [9GA0812S1611](#)  
[9GA0812S162](#) [9GA0812S1621](#) [9GA0812S1D61](#) [9GA0824H161](#) [9GA0824H1611](#) [9GA0824H162](#) [9GA0824H1621](#)  
[9GA0824H1D61](#) [9GA0824S1611](#) [9GA0824S162](#) [9GA0824S1621](#) [9GA0848P1S611](#)