

# 80×80×38 mm

## San Ace 80 9HV type US



### 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 ..... 230 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<br>[V] | Operating voltage range<br>[V] | PWM duty<br>cycle* [%] | Rated current<br>[A] | Rated input<br>[W] | Rated speed<br>[min <sup>-1</sup> ] | Max. airflow<br>[m³/min] [CFM] |       | Max. static pressure<br>[Pa] [inchH <sub>2</sub> O] |      | SPL<br>[dB (A)] | Operating temperature<br>[°C] | Expected life<br>[h]       |
|-----------------|----------------------|--------------------------------|------------------------|----------------------|--------------------|-------------------------------------|--------------------------------|-------|-----------------------------------------------------|------|-----------------|-------------------------------|----------------------------|
| 9HV0812P1G601   | 12                   | 10.8 to 13.2                   | 100                    | 3.4                  | 40.8               | 14900                               | 3.7                            | 130.7 | 1000                                                | 4.0  | 69              | -20 to +70                    | 40000/60°C<br>(70000/40°C) |
|                 |                      |                                | 0                      | 0.25                 | 3                  | 4400                                | 1.06                           | 37.5  | 87.2                                                | 0.35 | 40              |                               |                            |
| 9HV0824P1G003** | 24                   | 21.6 to 26.4                   | 100                    | 1.7                  | 40.8               | 14900                               | 3.7                            | 130.7 | 1000                                                | 4.0  | 69              | -10 to +70                    |                            |
|                 |                      |                                | 0                      | 0.85                 | 40.8               | 14900                               | 3.7                            | 130.7 | 1000                                                | 4.0  | 69              |                               |                            |
| 9HV0848P1G001   | 48                   | 36 to 57                       | 100                    | 0.85                 | 40.8               | 14900                               | 3.7                            | 130.7 | 1000                                                | 4.0  | 69              | -10 to +70                    |                            |
|                 |                      |                                | 0                      | 0.13                 | 6.24               | 4400                                | 1.06                           | 37.5  | 87.2                                                | 0.35 | 40              |                               |                            |

\* PWM frequency: 25 kHz \*\* Fan does not rotate when PWM duty cycle is 0%. Model no. for a ribless frame model is 9HV0824P1G0011.

The following sensor and control options are available for selection.

Differs according to the model. Refer to the table on p. 575. Without sensor Pulse sensor Lock sensor

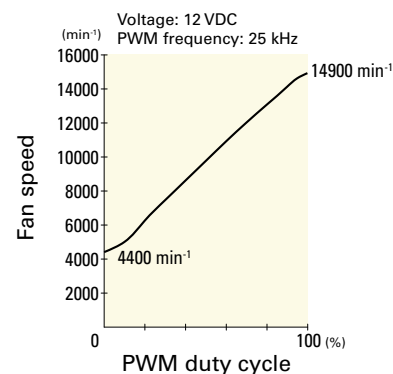
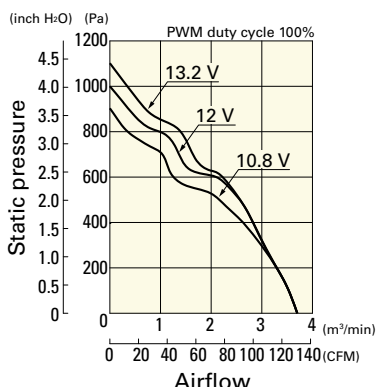
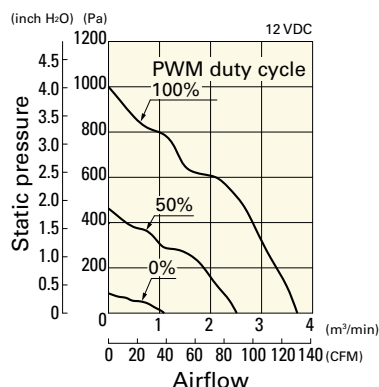
### Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

**9HV0812P1G601** With pulse sensor with PWM control function

PWM duty cycle

Operating voltage range

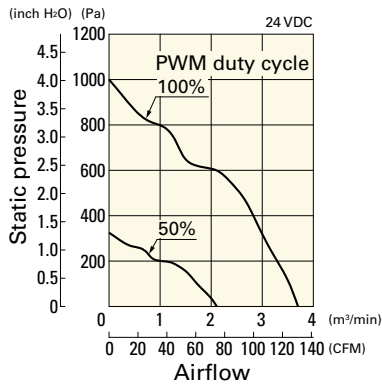
PWM duty - Speed characteristics example



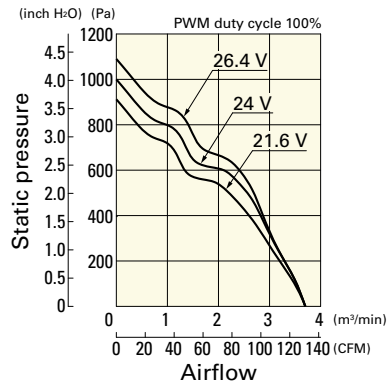
## Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

**9HV0824P1G003** With pulse sensor with PWM control function

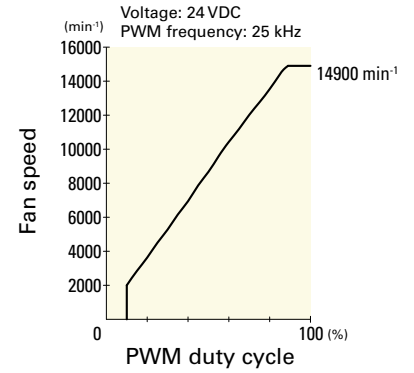
PWM duty cycle



Operating voltage range

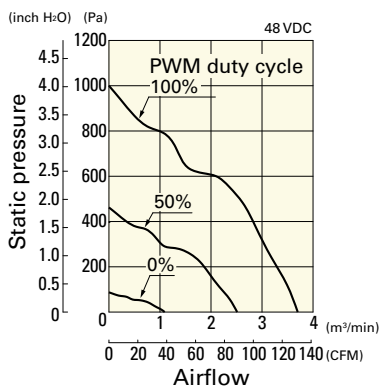


PWM duty - Speed characteristics example

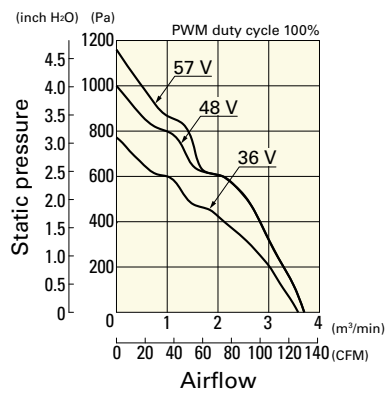


**9HV0848P1G001** With pulse sensor with PWM control function

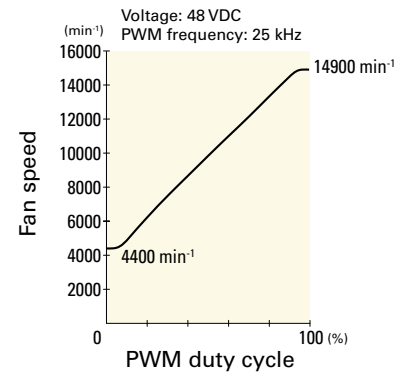
PWM duty cycle



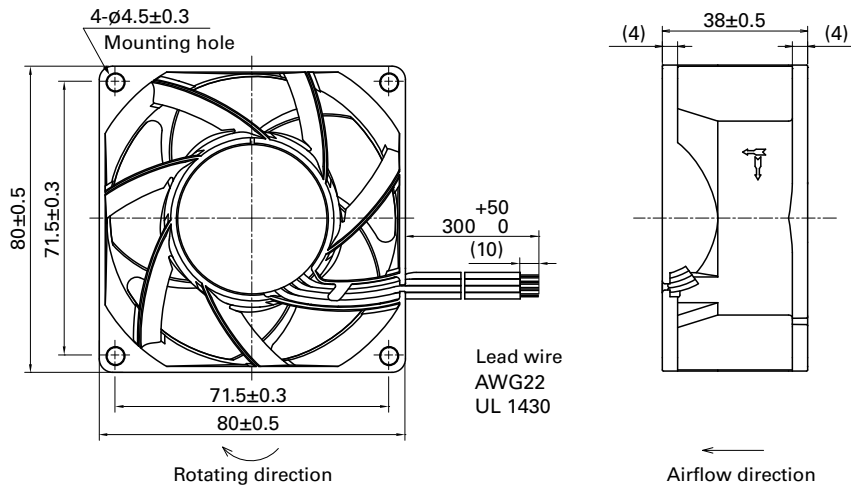
Operating voltage range



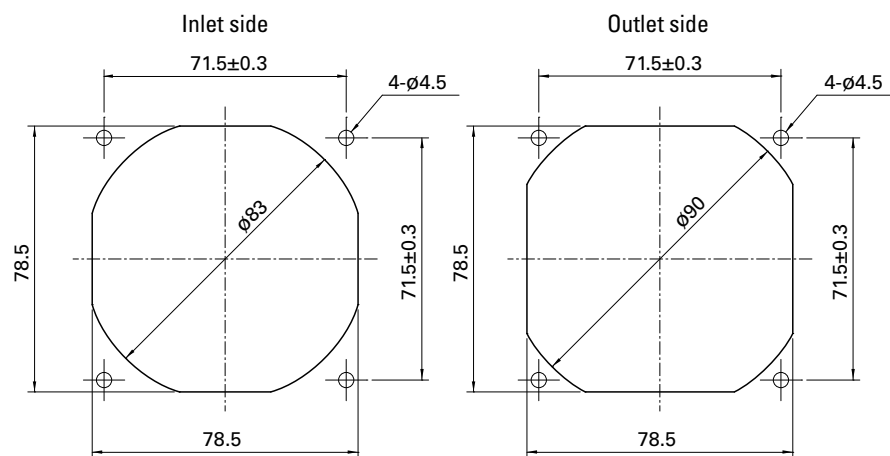
PWM duty - Speed characteristics example



## 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)