



# 80×80×38 mm

San Ace 80 9HVA type

## 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 ..... 220 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]          |
|----------------|-------------------|-----------------------------|---------------------|-------------------|-----------------|----------------------------------|--|--|--------------|----------------------------|----------------------------|
| 9HVA0812P1G001 | 12                | 10.8 to 13.2                | 100                 | 3.5               | 42              | 16100                            | 3.75 132                                 | 1350 5.4   | 73           | -20 to +70                 | 40000/60°C<br>(70000/40°C) |
|                |                   |                             | 20                  | 0.2               | 2.4             | 4200                             | 0.96 33.9                                | 105 0.42   | 44           |                            |                            |

\* PWM frequency: 25 kHz. Fan does not rotate when PWM duty cycle is 0%.

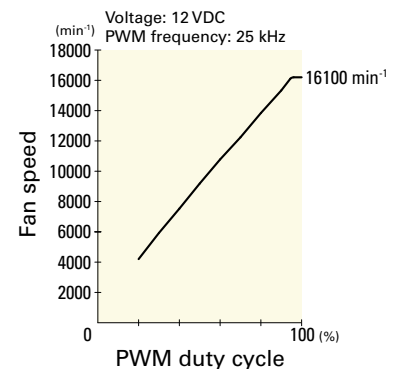
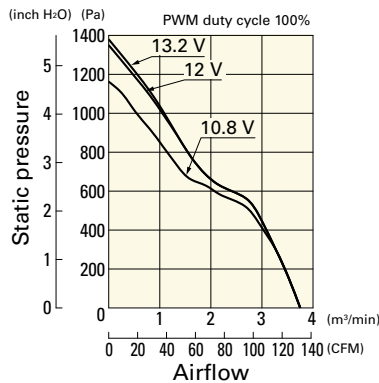
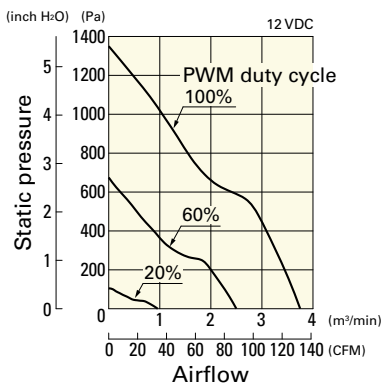
## Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

**9HVA0812P1G001** With pulse sensor with PWM control function

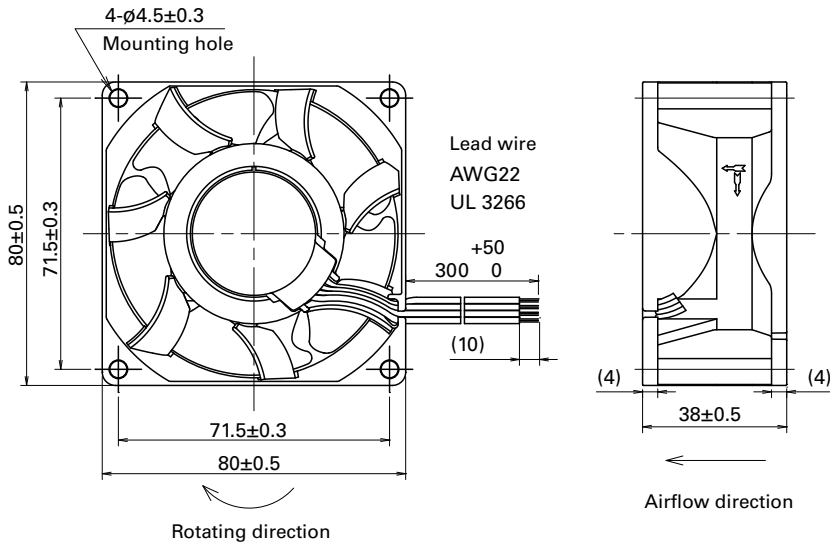
PWM duty cycle

Operating voltage range

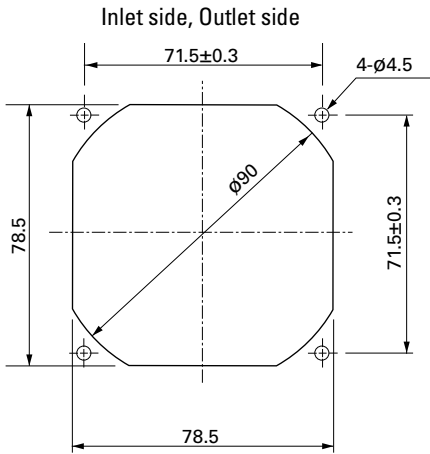
PWM duty - Speed characteristics example



**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)