

# 40×40×28 mm

San Ace 40W 9WL type   US



## General Specifications

- Material ..... Frame: Aluminum (Black coating), Impeller: Plastic (Flammability: UL 94V-0)
- Expected life ..... See the table below. (L10 life: 90% survival rate for continuous operation in indoor 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 ..... 70 g
- Ingress protection ..... IP68

## Specifications

The models listed below **have 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 <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>9WL0412P3J001</b> | 12                | 10.8 to 13.2                | 100                 | 0.52              | 6.24            | 17500                            | 0.63 22.2                                | 400 1.61                                         | 51           | -20 to +70                 | 150000/60°C       |
|                      |                   |                             | 20                  | 0.06              | 0.72            | 3600                             | 0.13 4.6                                 | 16.9 0.07                                        | 20           |                            |                   |
| <b>9WL0412P3G001</b> |                   |                             | 100                 | 0.4               | 4.8             | 15500                            | 0.56 19.7                                | 310 1.24                                         | 47           |                            |                   |
|                      |                   |                             | 20                  | 0.06              | 0.72            | 3300                             | 0.12 4.2                                 | 14.0 0.06                                        | 18           |                            |                   |
| <b>9WL0424P3J001</b> | 24                | 21.6 to 26.4                | 100                 | 0.26              | 6.24            | 17500                            | 0.63 22.2                                | 400 1.61                                         | 51           |                            |                   |
|                      |                   |                             | 20                  | 0.04              | 0.96            | 4000                             | 0.14 5.1                                 | 20.9 0.08                                        | 22           |                            |                   |
| <b>9WL0424P3G001</b> |                   |                             | 100                 | 0.2               | 4.8             | 15500                            | 0.56 19.7                                | 310 1.24                                         | 47           |                            |                   |
|                      |                   |                             | 20                  | 0.04              | 0.96            | 3000                             | 0.11 3.8                                 | 11.6 0.05                                        | 16           |                            |                   |

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

The following sensor and control options are available for selection.

Available for all models. Without sensor Pulse sensor

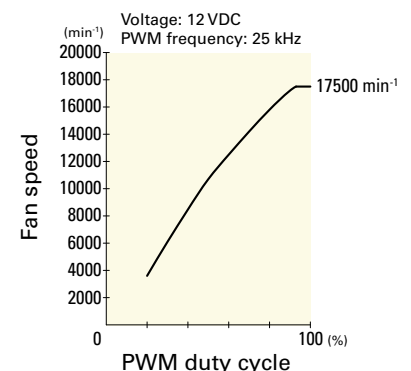
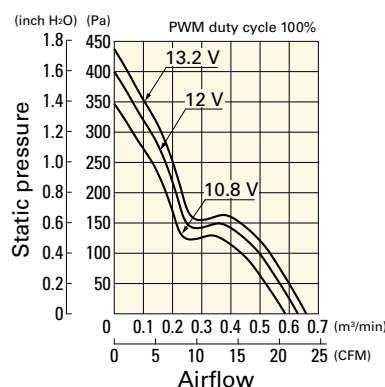
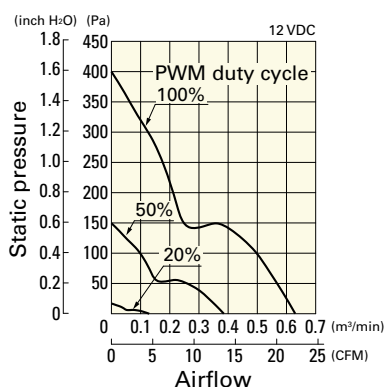
## Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

**9WL0412P3J001** With pulse sensor with PWM control function

PWM duty cycle

Operating voltage range

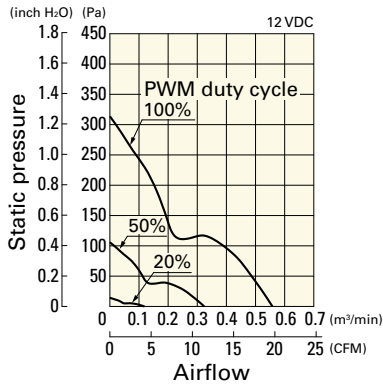
PWM duty - Speed characteristics example



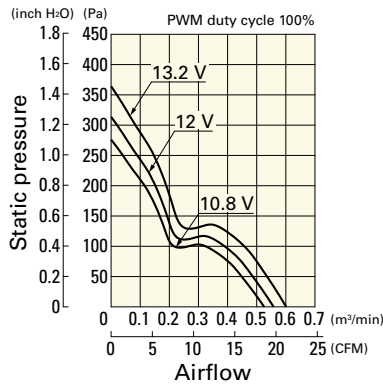
## Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

**9WL0412P3G001** With pulse sensor with PWM control function

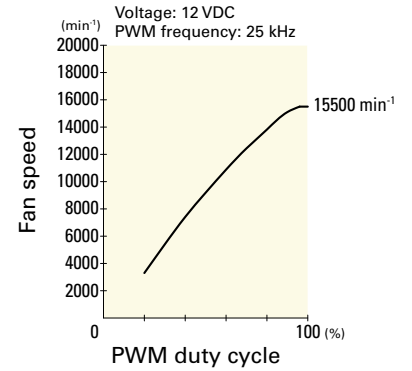
PWM duty cycle



Operating voltage range

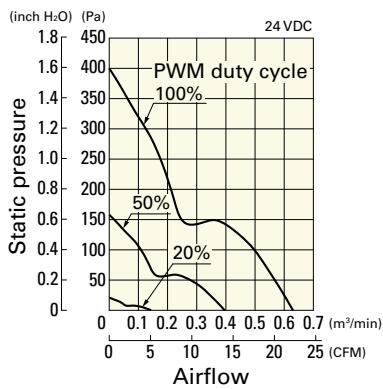


PWM duty - Speed characteristics example

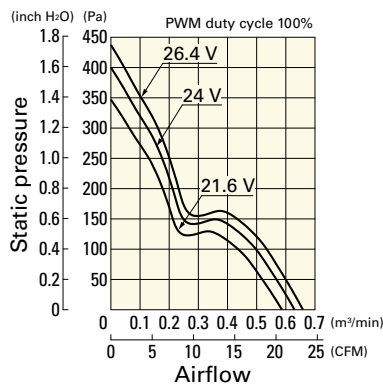


**9WL0424P3J001** With pulse sensor with PWM control function

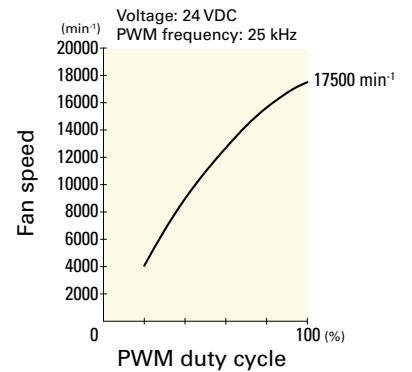
PWM duty cycle



Operating voltage range

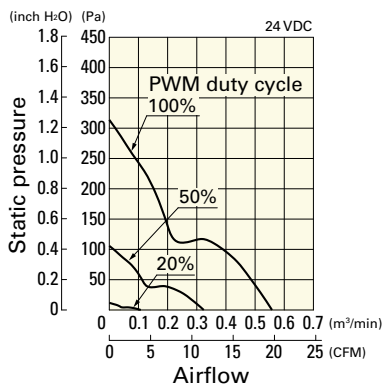


PWM duty - Speed characteristics example

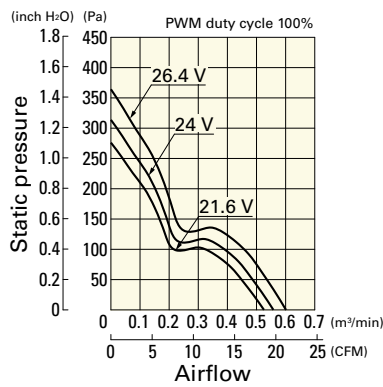


**9WL0424P3G001** With pulse sensor with PWM control function

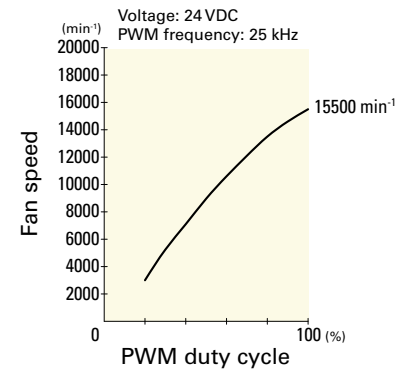
PWM duty cycle



Operating voltage range



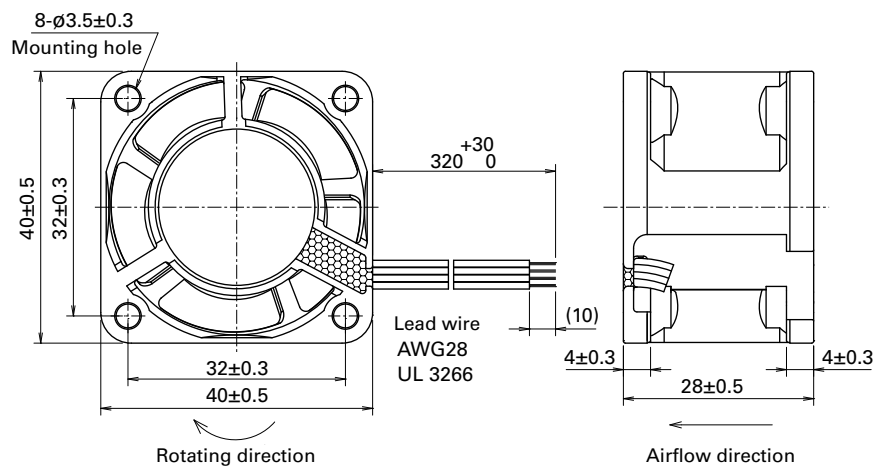
PWM duty - Speed characteristics example



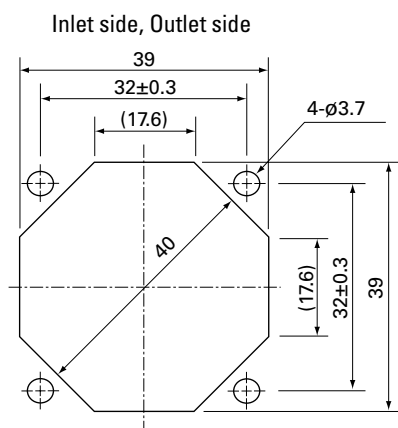
DC

Splash Proof Fan 40 mm sq.

## ■ Dimensions (unit: mm)



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



## ■ Options

### Finger guards

page: p. 532

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