

# 52x52x15 mm

## San Ace 52 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 ..... 40 g

### Specifications

The models listed below **have ribs and 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] |
|---------------|-------------------|-----------------------------|---------------------|-------------------|-----------------|----------------------------------|------------------------------------------|--------------------------------------------------|--------------|----------------------------|-------------------|
| 9GA0512P7G001 | 12                | 10.2 to 13.8                | 100                 | 0.13              | 1.56            | 7800                             | 0.5 17.7                                 | 91.5 0.367                                       | 38           | -20 to +70                 | 40000/60°C        |
| 9GA0512P7A001 |                   |                             |                     | 0.08              | 0.96            | 6300                             | 0.4 14.1                                 | 59 0.237                                         | 32           |                            |                   |
| 9GA0512P7H001 |                   |                             |                     | 0.05              | 0.6             | 4300                             | 0.275 9.7                                | 27.5 0.11                                        | 22           |                            |                   |
| 9GA0512P7M001 |                   |                             |                     | 0.04              | 0.48            | 3400                             | 0.215 7.6                                | 17 0.068                                         | 16           |                            |                   |
| 9GA0524P7G001 | 24                | 20.4 to 27.6                | 100                 | 0.07              | 1.68            | 7800                             | 0.5 17.7                                 | 91.5 0.367                                       | 38           |                            |                   |
| 9GA0524P7A001 |                   |                             |                     | 0.05              | 1.2             | 6300                             | 0.4 14.1                                 | 59.0 0.237                                       | 32           |                            |                   |
| 9GA0524P7H001 |                   |                             |                     | 0.03              | 0.72            | 4300                             | 0.275 9.7                                | 27.5 0.11                                        | 22           |                            |                   |
| 9GA0524P7M001 |                   |                             |                     | 0.02              | 0.48            | 3400                             | 0.215 7.6                                | 17.0 0.068                                       | 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.

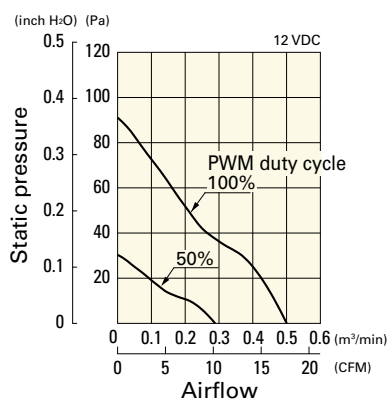
Available for all models. Without sensor Pulse sensor

Differs according to the model. Refer to the table on p. 570. Lock sensor

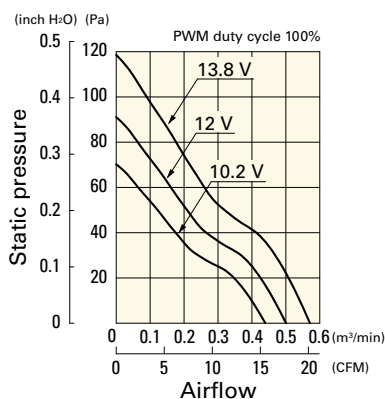
### Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

**9GA0512P7G001** With pulse sensor with PWM control function

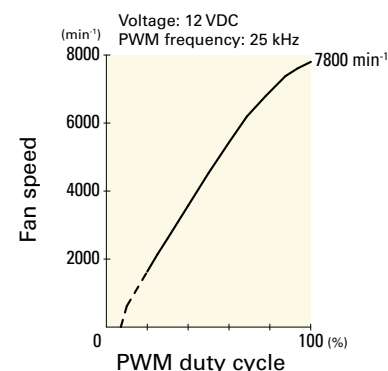
PWM duty cycle



Operating voltage range



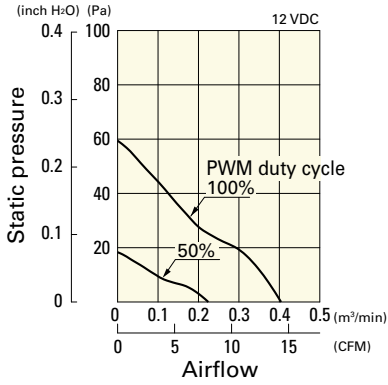
PWM duty - Speed characteristics example



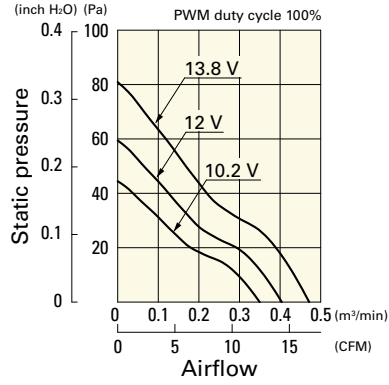
## Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

**9GA0512P7A001** With pulse sensor with PWM control function

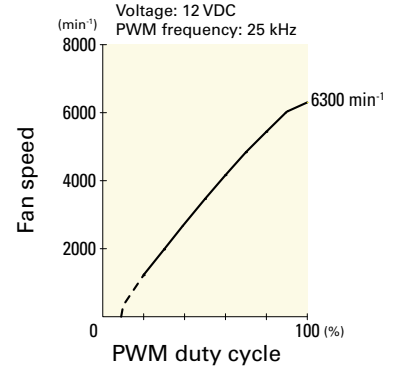
PWM duty cycle



Operating voltage range

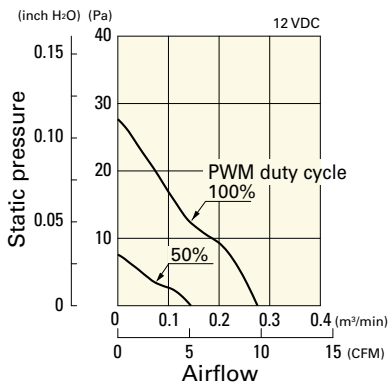


PWM duty - Speed characteristics example

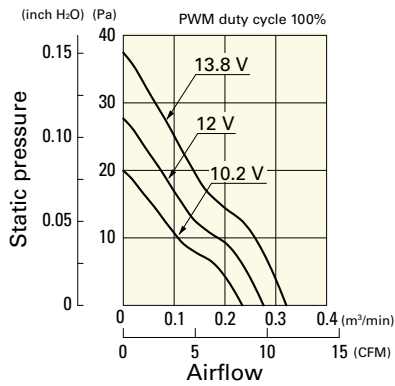


**9GA0512P7H001** With pulse sensor with PWM control function

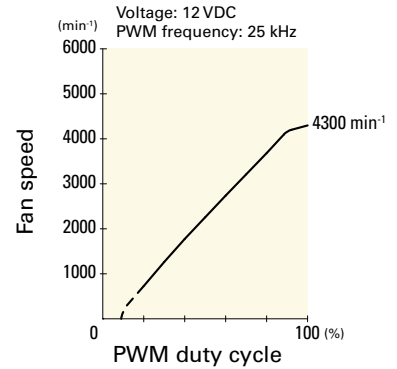
PWM duty cycle



Operating voltage range

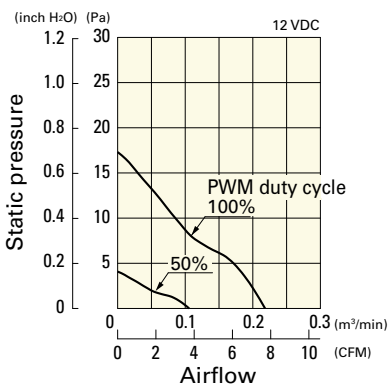


PWM duty - Speed characteristics example

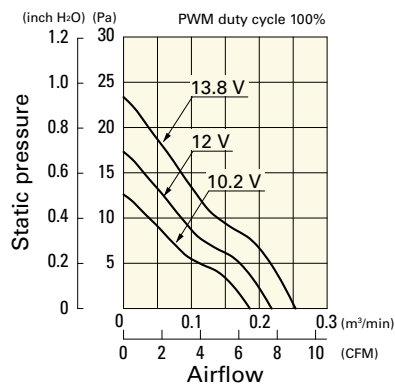


**9GA0512P7M001** With pulse sensor with PWM control function

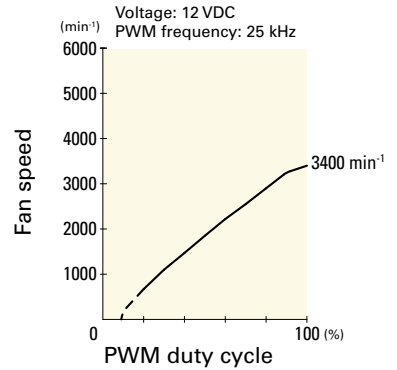
PWM duty cycle



Operating voltage range

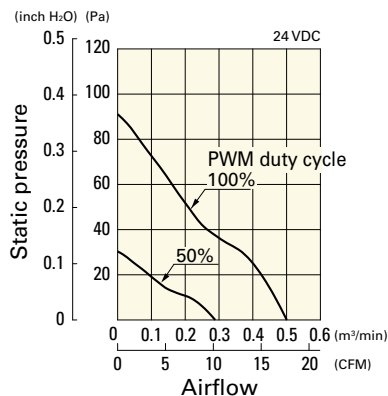


PWM duty - Speed characteristics example

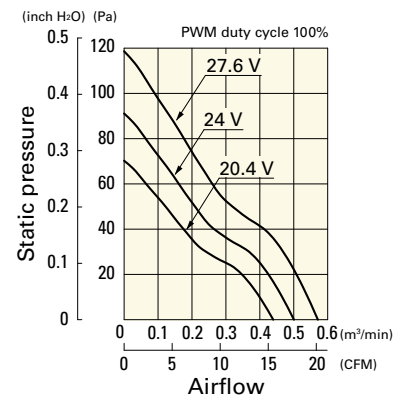


**9GA0524P7G001** With pulse sensor with PWM control function

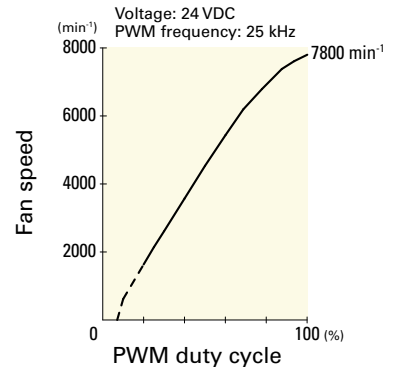
PWM duty cycle



Operating voltage range



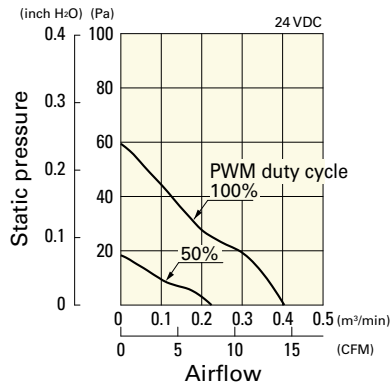
PWM duty - Speed characteristics example



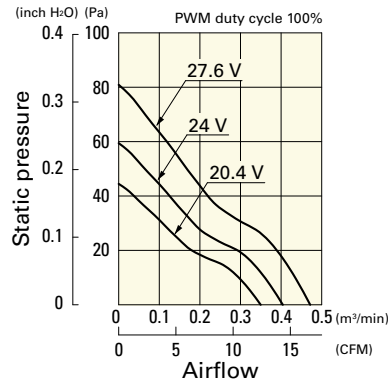
## Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

**9GA0524P7A001** With pulse sensor with PWM control function

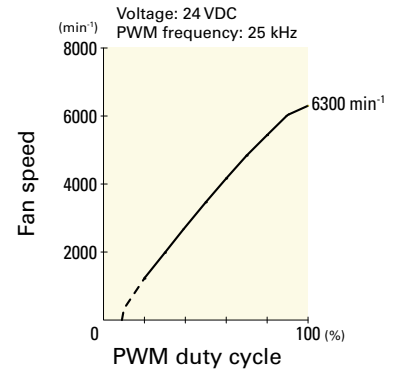
PWM duty cycle



Operating voltage range

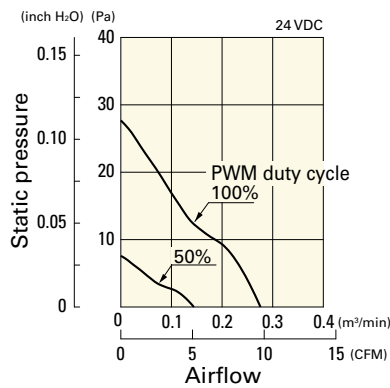


PWM duty - Speed characteristics example

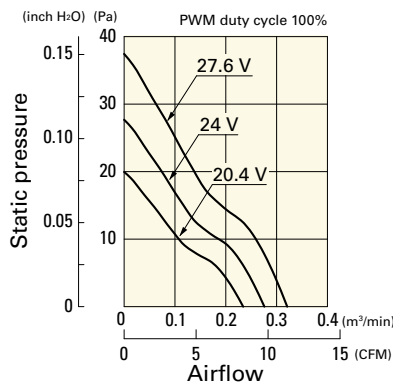


**9GA0524P7H001** With pulse sensor with PWM control function

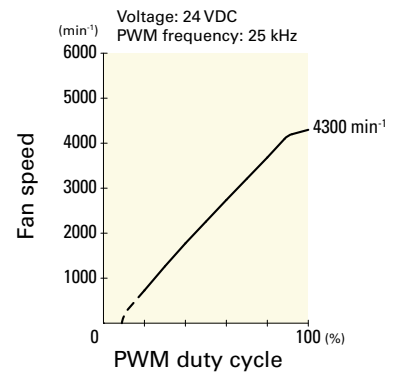
PWM duty cycle



Operating voltage range

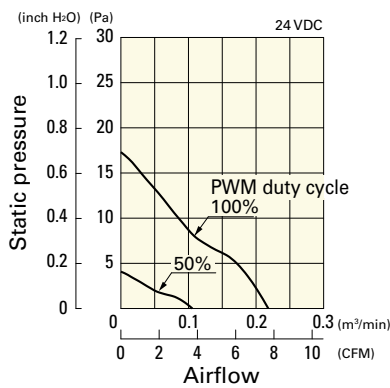


PWM duty - Speed characteristics example

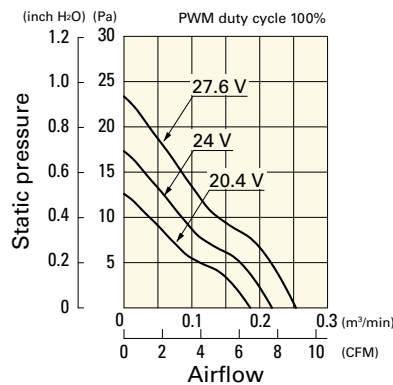


**9GA0524P7M001** With pulse sensor with PWM control function

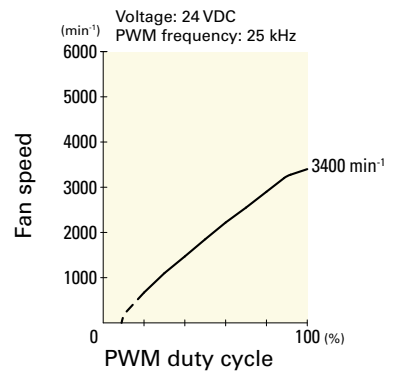
PWM duty cycle



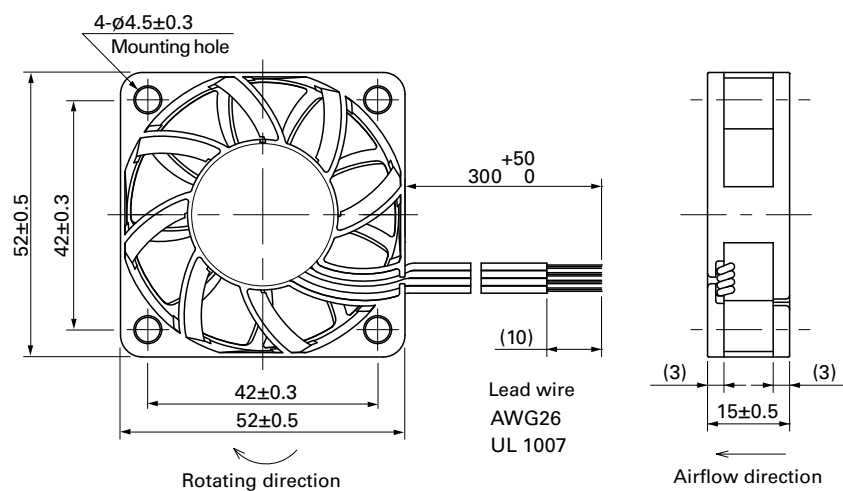
Operating voltage range



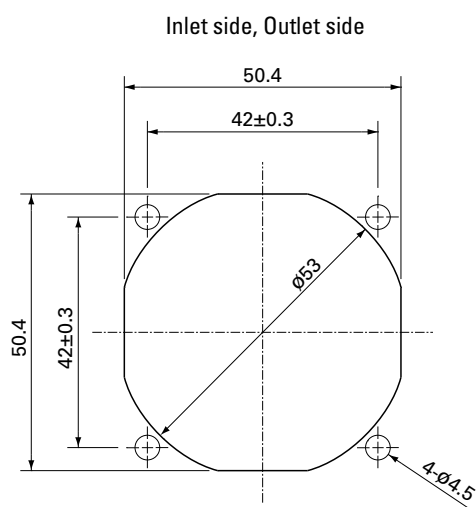
PWM duty - Speed characteristics example



## Dimensions (unit: mm)



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



## Options

Finger guards

page: p. 532

Model no.: 109-149E, 109-149