



# 60×60×76 mm

## San Ace 60L 9CRL type

### General Specifications

- Material ..... Frame: Aluminum, Impeller: Plastic (Flammability: UL 94V-1)
- Expected life ..... See the table below. (L10 life: 90% survival rate for continuous operation in free air at 60°C, rated voltage)  
Expected life at 40°C is for reference only.
- Motor protection function ..... Locked rotor burnout protection, Reverse polarity protection  
For details, please refer to p. 573.
- 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 ..... Inlet ⊕Red ⊖Black (Sensor) Yellow (Control) Brown  
Outlet ⊕Orange ⊖Gray (Sensor) Purple (Control) White
- Mass ..... 300 g

### 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]            |
|----------------|-------------------|-----------------------------|--------------------|-------------------|-----------------|----------------------------------|------------------------------------------|--------------------------------------------------|--------------|----------------------------|------------------------------|
| 9CRL0612P0G001 | 12                | 10.8 to 13.2                | 100                | 2.3               | 27.6            | 16500 13000                      | 2.0 70.6                                 | 1000 4.0                                         | 66           | -20 to +70                 | 130000/60°C<br>(165000/40°C) |
|                |                   |                             | 0                  | 0.22              | 2.7             | 3600 2800                        | 0.43 15.1                                | 47.6 0.19                                        | 32           |                            |                              |

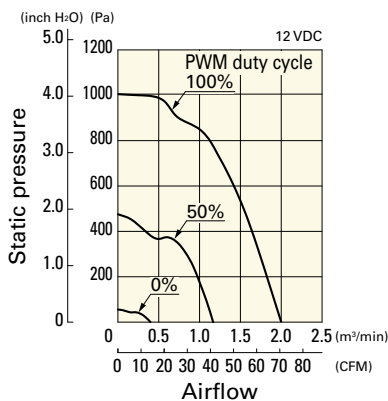
\* PWM input frequency is 25 kHz; models without specifications at 0% PWM duty cycle have zero fan speed at 0%.

The  mark indicates Short Lead Time Service applicable models. See p. 626 for details.

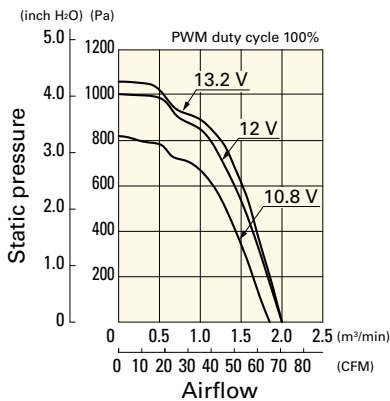
### Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

**9CRL0612P0G001** With pulse sensor with PWM control function

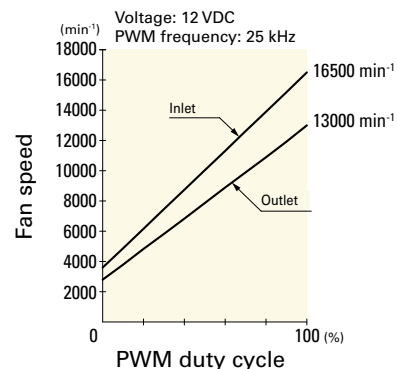
PWM duty cycle



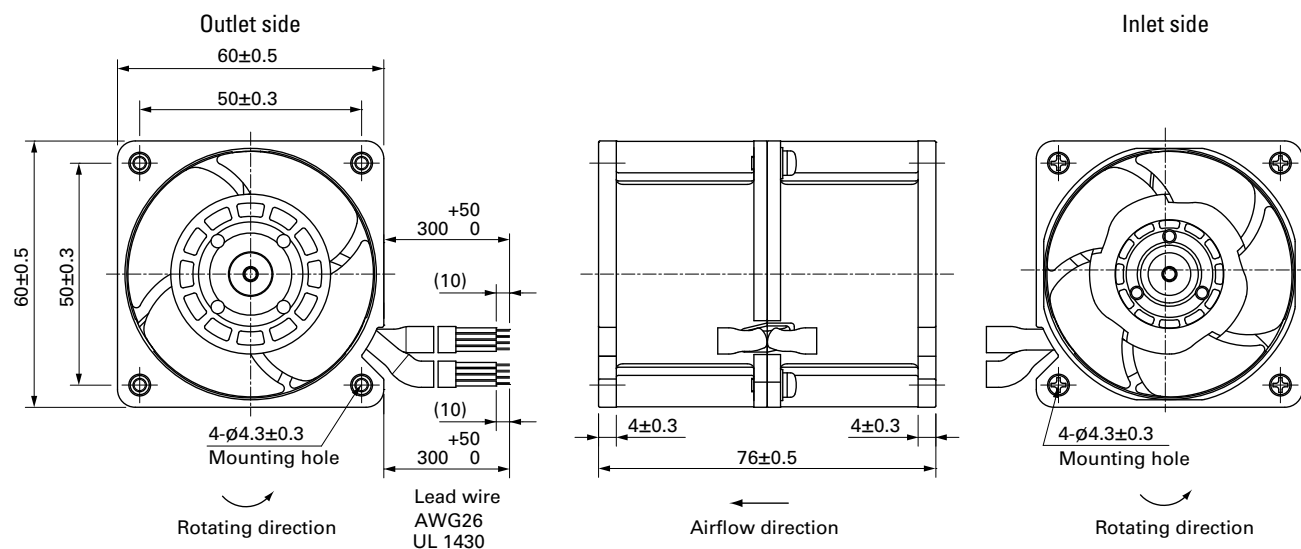
Operating voltage range



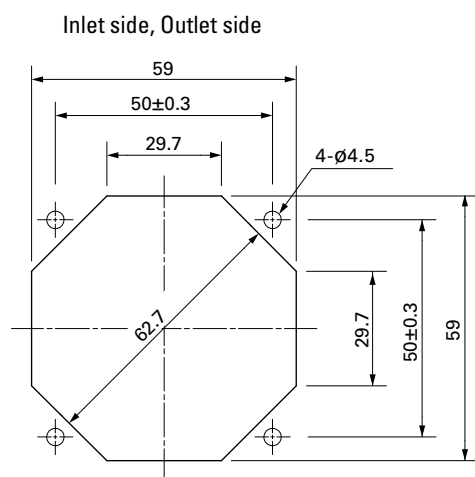
PWM duty - Speed characteristics example



## Dimensions (unit: mm)



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



## Options

### Finger guards

page: p. 558

Model no.: 109-139E, 109-139H

### Resin finger guards

page: p. 565

Model no.: 109-1003G

### Resin filter kits

page: p. 566

Model no.: 109-1003F13 (13PPI), 109-1003F20 (20PPI),  
109-1003F30 (30PPI), 109-1003F40 (40PPI)