



# 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)
- Motor protection function ..... Locked rotor burnout protection, Reverse polarity protection  
For details, please refer to p. 529.
- 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.**

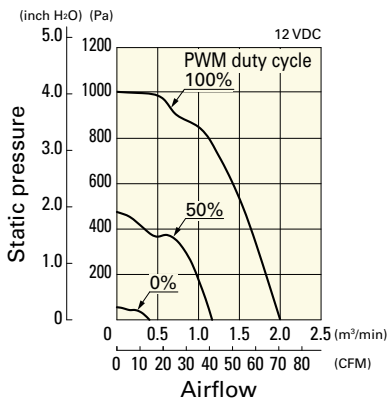
Model no.	Rated voltage [V]	Operating voltage range [V]	PWM duty cycle* [%]	Rated current [A]	Rated input [W]	Rated speed [min <sup>-1</sup> ]		Max. airflow [m <sup>3</sup> /min] [CFM]		Max. static pressure [Pa] [inchH <sub>2</sub> O]		SPL [dB (A)]	Operating temperature [°C]	Expected life [h]
						Inlet	Outlet	Inlet	Outlet	Inlet	Outlet			
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
			0	0.22	2.7	3600	2800	0.43	15.1	47.6	0.19	32		

\* PWM frequency: 25 kHz

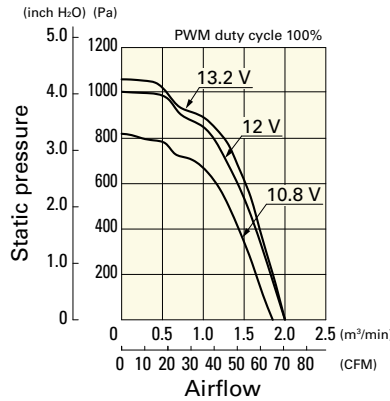
## Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

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

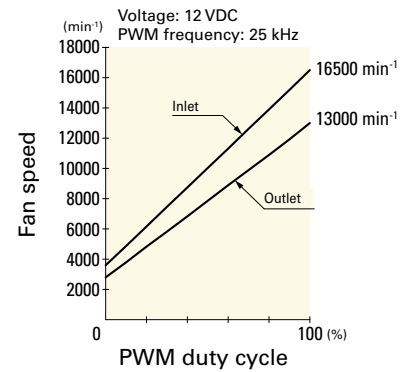
PWM duty cycle



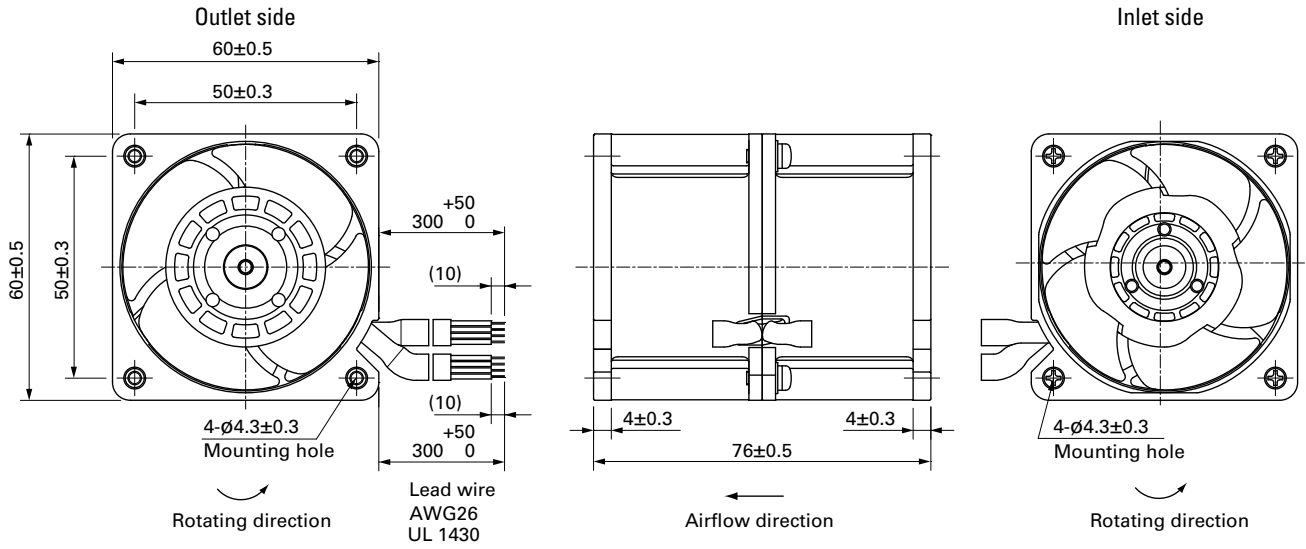
Operating voltage range



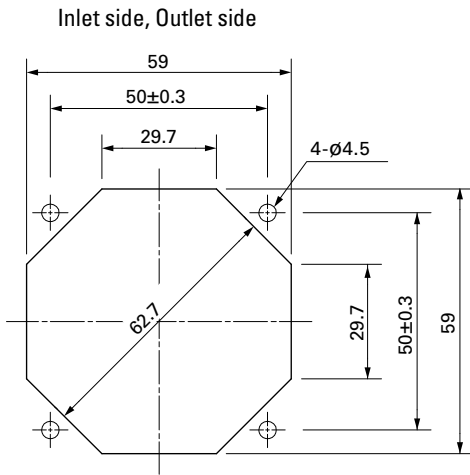
PWM duty - Speed characteristics example



**Dimensions (unit: mm)**



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



**Options**

**Finger guards**

page: p. 513

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

**Resin finger guards**

page: p. 520

Model no.: 109-1003G

**Resin filter kits**

page: p. 521

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