# 60×60×25 mm

# **O**



# San Ace 60 9G type 🛕 📢 us

### 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)

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.

· Sound pressure level (SPL) ...... At 1 m away from the air inlet

· Storage temperature ...... -30 to +70°C (Non-condensing)

 $\cdot \ \mathsf{Lead} \ \mathsf{wire} \ \dots \dots \dots \dots \dots \oplus \mathsf{Red} \ \ominus \mathsf{Black} \ \ \underline{\mathsf{Sensor}} \ \mathsf{Yellow} \ \underline{\mathsf{Control}} \ \mathsf{Brown}$ 

· Mass ...... 90 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 voltag	Rated voltage	Operating voltage range	PWM duty	Rated current	Rated input	Rated speed	Max. airflow		Max. static pressure		SPL	Operating temperature	Expected life
		[V]	[V]	cycle* [%]	[A]	[W]	[min <sup>-1</sup> ]	[m³/min]	[CFM]	[Pa]	[inchH <sub>2</sub> O]	[dB (A)]	[°C]	[h]
<b>3</b>	9G0612P4S001	- 12	10.2 to 13.8	100	0.67	8.04	11000	1.4	49.4	300	1.2	53	-20 to +70	40000/60°C (70000/40°C)
				0	0.07	0.84	3300	0.42	14.8	27	0.11	19		
<b>o</b>	9G0612P4H001			100	0.5	6.0	9500	1.21	42.7	224	0.9	49		
				0	0.06	0.72	2850	0.36	12.7	20.2	0.08	18		
<b> ○</b>	9G0624P4S001	24	20.4 to 27.6	100	0.34	8.16	11000	1.4	49.4	300	1.2	53		
				0	0.04	0.96	3300	0.42	14.8	27	0.11	19		
<b>3</b>	9G0624P4H001			100	0.25	6.0	9500	1.21	42.7	224	0.9	49		
				0	0.04	0.96	2850	0.36	12.7	20.2	0.08	18		
	9G0624P4F001			100	0.17	4.08	7800	1.0	35.3	150	0.6	43		
	9G0024F4F001			20	0.03	0.72	1800	0.23	8.1	8	0.03	14		
<b></b>	9G0648P4S001	48	36 to 72	100	0.18	8.64	11000	1.4	49.4	305	1.22	53		
				0	0.02	0.96	3300	0.42	14.8	27.4	0.11	19		

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

The following sensor and control options are available for selection.

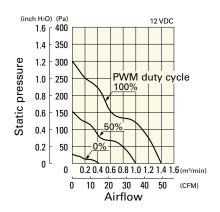
Differs according to the model. Refer to the table on p. 600. Without sensor Pulse sensor Lock sensor

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

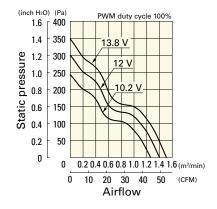
# Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

9G0612P4S001 With pulse sensor with PWM control function

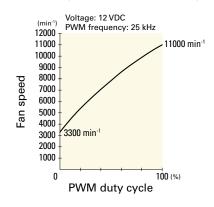
PWM duty cycle



Operating voltage range



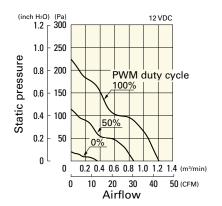
PWM duty - Speed characteristics example



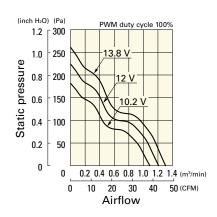
### Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

#### 9G0612P4H001 With pulse sensor with PWM control function

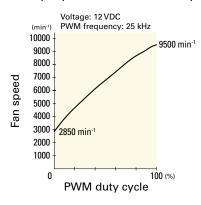
#### PWM duty cycle



#### Operating voltage range

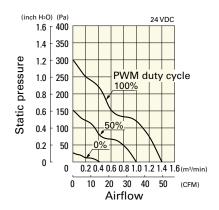


PWM duty - Speed characteristics example

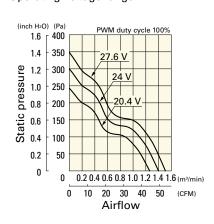


## 9G0624P4S001 With pulse sensor with PWM control function

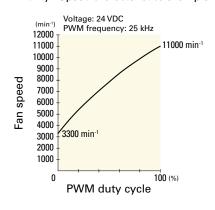
PWM duty cycle



Operating voltage range

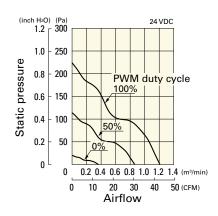


PWM duty - Speed characteristics example

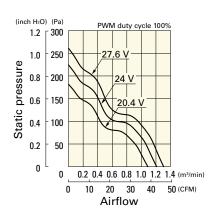


# 9G0624P4H001 With pulse sensor with PWM control function

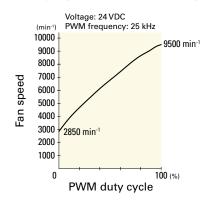
#### PWM duty cycle



Operating voltage range

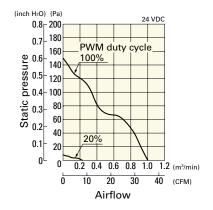


PWM duty - Speed characteristics example

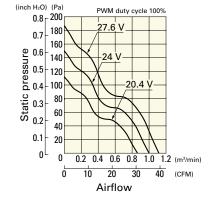


# 9G0624P4F001 With pulse sensor with PWM control function

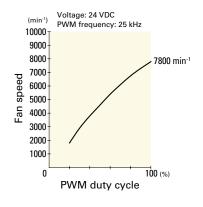
#### PWM duty cycle



Operating voltage range



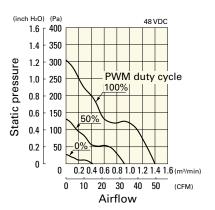
PWM duty - Speed characteristics example



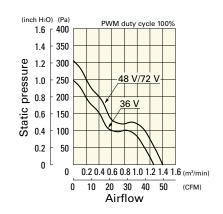
# Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

#### 9G0648P4S001 With pulse sensor with PWM control function

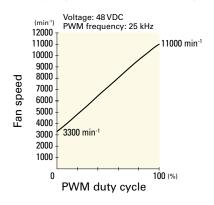
PWM duty cycle



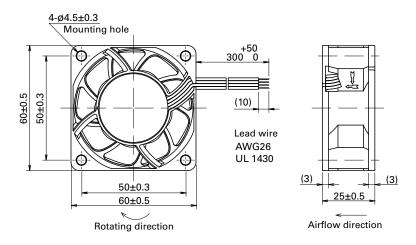
Operating voltage range



PWM duty - Speed characteristics example

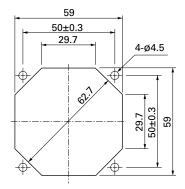


### Dimensions (unit: mm) (With ribs)



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

Inlet side, Outlet side



#### Options

Finger guards page: p. 558

Resin finger guards

Model no.: 109-1003G

page: p. 565

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

Resin filter kits page: p. 566

Model no.: 109-1003F13 (13PPI), 109-1003F20 (20PPI),

109-1003F30 (30PPI), 109-1003F40 (40PPI)