

## Long Life Fan



# 80x80x25 mm

## San Ace 80L 9LG 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. 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 Yellow Brown  
(For models without PWM control function, there is no speed control wiring.)
- Mass ..... 130 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⁻¹]	Max. airflow [m³/min] [CFM]	Max. static pressure [Pa] [inchH₂O]	SPL [dB (A)]	Operating temperature [°C]	Expected life [h]
9LG0812P4J001	12	10.8 to 13.2	100	0.6	7.2	7400	2.07 73.0	177 0.71	49	-20 to +70	180000/60°C
			20	0.06	0.72	1800	0.5 17.6	10.4 0.04	16		
9LG0812P4G001	12	10.8 to 13.2	100	0.3	3.6	5500	1.54 54.3	98 0.39	43	-20 to +70	180000/60°C
			25	0.05	0.6	1400	0.39 13.7	6.3 0.02	14		
9LG0812P4H001	24	21.6 to 26.4	100	0.12	1.44	3700	1.03 36.3	44 0.17	31	-20 to +70	180000/60°C
			25	0.04	0.48	1100	0.3 10.5	3.9 0.01	13		
9LG0824P4J001	24	21.6 to 26.4	100	0.28	6.72	7400	2.07 73.0	177 0.71	49	-20 to +70	180000/60°C
			20	0.05	1.2	2400	0.67 23.6	18.6 0.07	22		
9LG0824P4G001	24	21.6 to 26.4	100	0.14	3.36	5500	1.54 54.3	98 0.39	43	-20 to +70	180000/60°C
			20	0.02	0.48	1200	0.33 11.6	4.6 0.01	13		
9LG0824P4H001	24	21.6 to 26.4	100	0.05	1.2	3700	1.03 36.3	44 0.17	31	-20 to +70	180000/60°C
			30	0.02	0.48	1100	0.3 10.5	3.9 0.01	13		

\* 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.

Differs according to the model. Refer to the table on p. 576.

The models listed below have pulse sensors.

Model no.	Rated voltage [V]	Operating voltage range [V]	Rated current [A]	Rated input [W]	Rated speed [min⁻¹]	Max. airflow [m³/min] [CFM]	Max. static pressure [Pa] [inchH₂O]	SPL [dB (A)]	Operating temperature [°C]	Expected life [h]
9LG0812S4001	12	6 to 13.2	0.17	2.04	4200	1.17 41.3	56 0.22	35	-20 to +70	180000/60°C
			0.1	1.2	3300	0.92 32.5	35 0.14	29		
			0.08	0.96	2900	0.8 28.3	27 0.11	25		
			0.06	0.72	2300	0.64 22.6	17 0.068	22		
9LG0824S4001	24	12 to 26.4	0.07	1.68	4200	1.17 41.3	56 0.22	35	-20 to +70	180000/60°C
			0.045	1.08	3300	0.92 32.5	35 0.14	29		
			0.04	0.96	2900	0.8 28.3	27 0.11	25		
			0.03	0.72	2300	0.64 22.6	17 0.068	22		

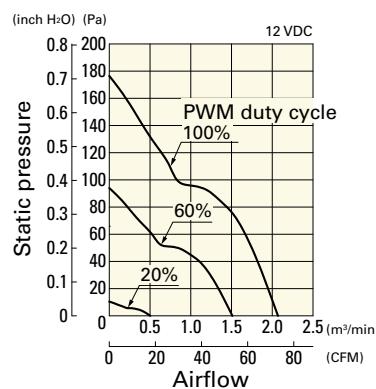
The following sensor and control options are available for selection.

Available for all models.

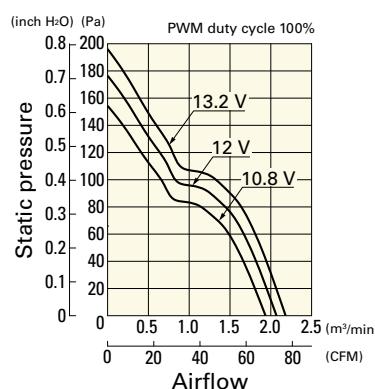
## Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

**9LG0812P4J001** With pulse sensor with PWM control function

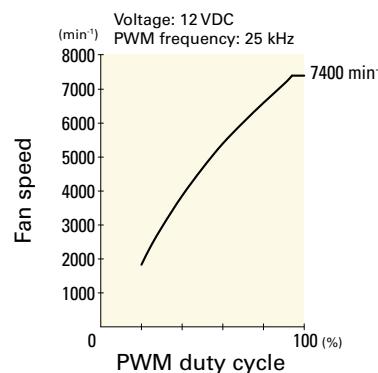
PWM duty cycle



Operating voltage range

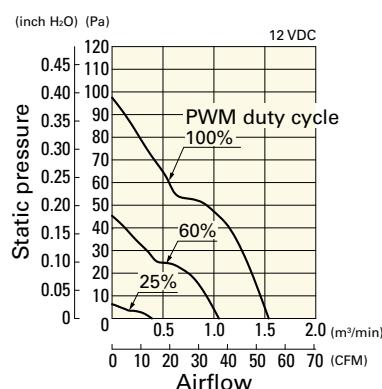


PWM duty - Speed characteristics example

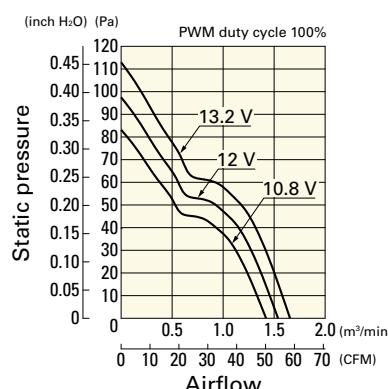


**9LG0812P4G001** With pulse sensor with PWM control function

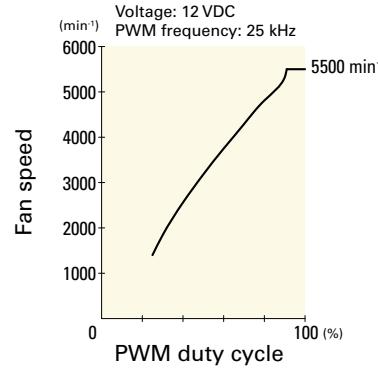
PWM duty cycle



Operating voltage range

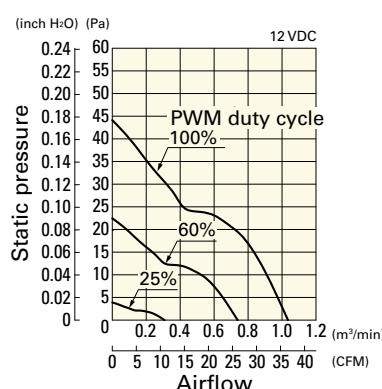


PWM duty - Speed characteristics example

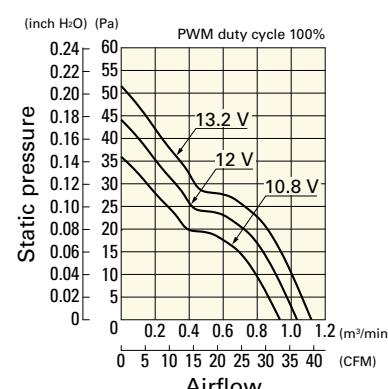


**9LG0812P4H001** With pulse sensor with PWM control function

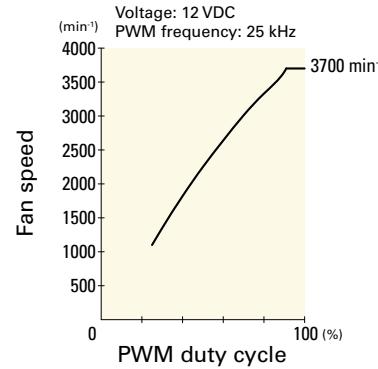
PWM duty cycle



Operating voltage range

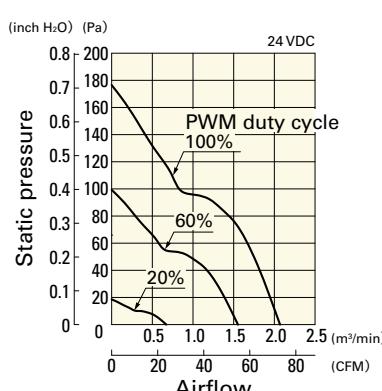


PWM duty - Speed characteristics example

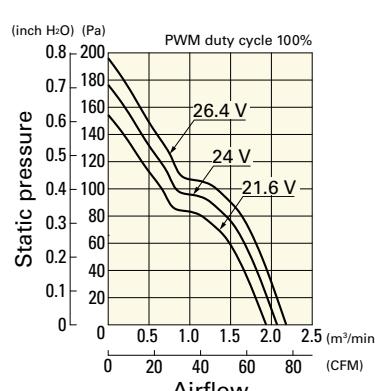


**9LG0824P4J001** With pulse sensor with PWM control function

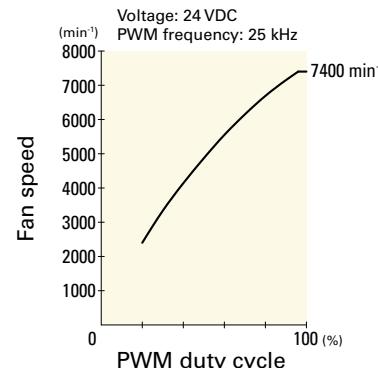
PWM duty cycle



Operating voltage range



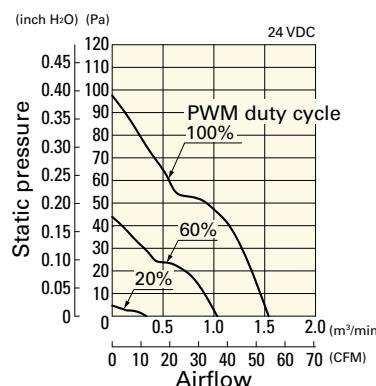
PWM duty - Speed characteristics example



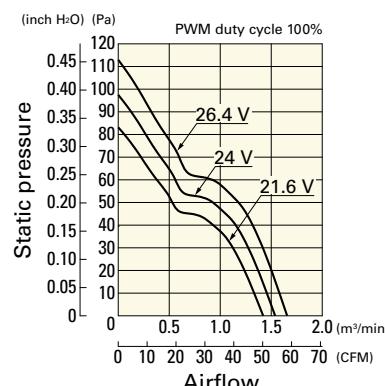
## Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

**9LG0824P4G001** With pulse sensor with PWM control function

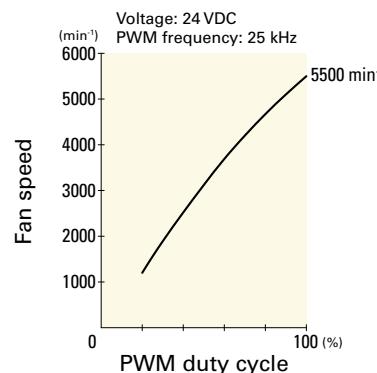
### PWM duty cycle



### Operating voltage range

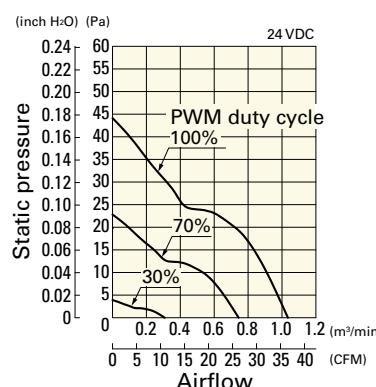


### PWM duty - Speed characteristics example

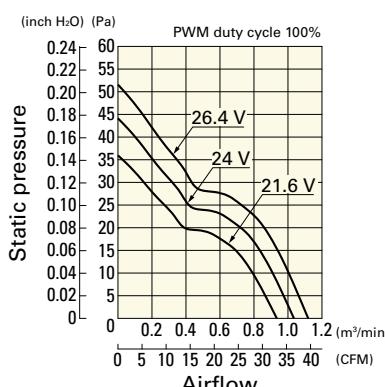


**9LG0824P4H001** With pulse sensor with PWM control function

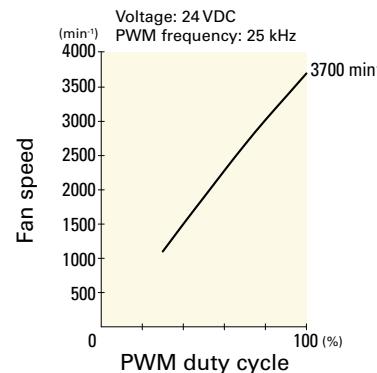
### PWM duty cycle



### Operating voltage range

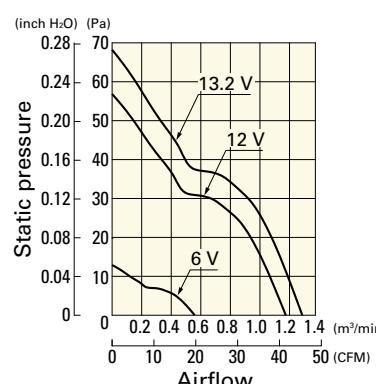


### PWM duty - Speed characteristics example



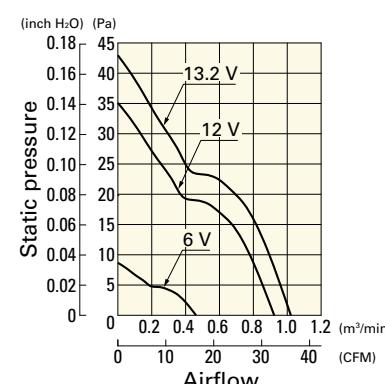
**9LG0812S4001** With pulse sensor

### Operating voltage range



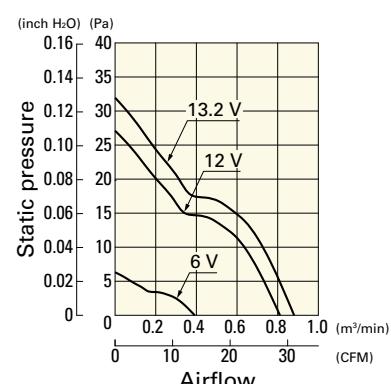
**9LG0812F4001** With pulse sensor

### Operating voltage range



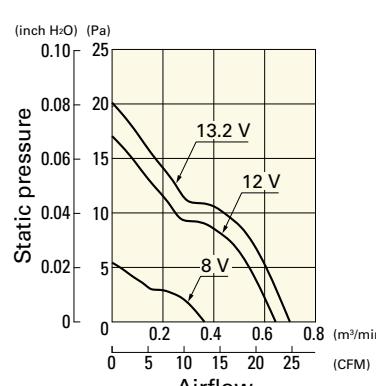
**9LG0812M4001** With pulse sensor

### Operating voltage range



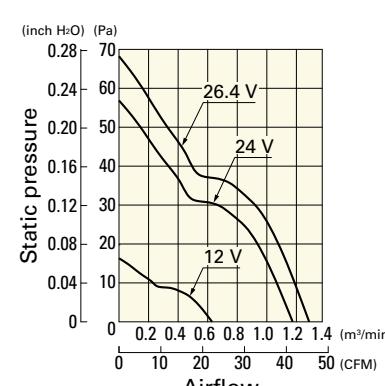
**9LG0812L4001** With pulse sensor

### Operating voltage range



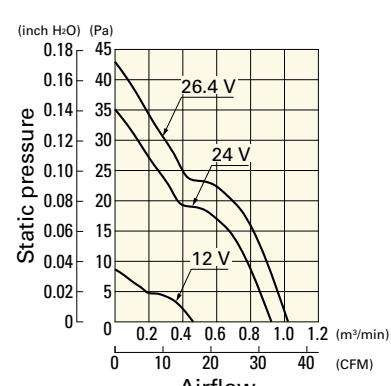
**9LG0824S4001** With pulse sensor

### Operating voltage range



**9LG0824F4001** With pulse sensor

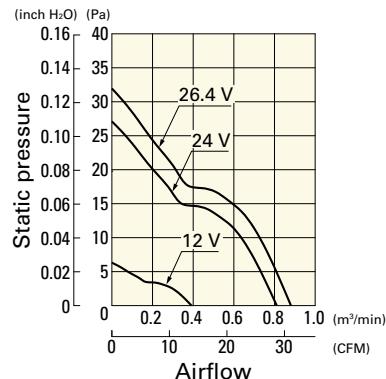
### Operating voltage range



## Airflow - Static Pressure Characteristics

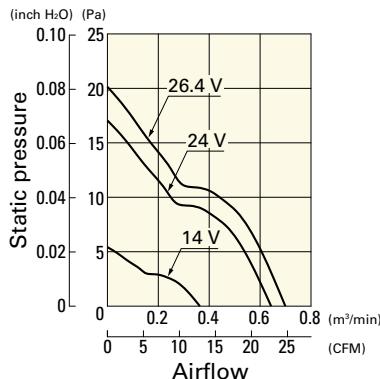
**9LG0824M4001** With pulse sensor

Operating voltage range

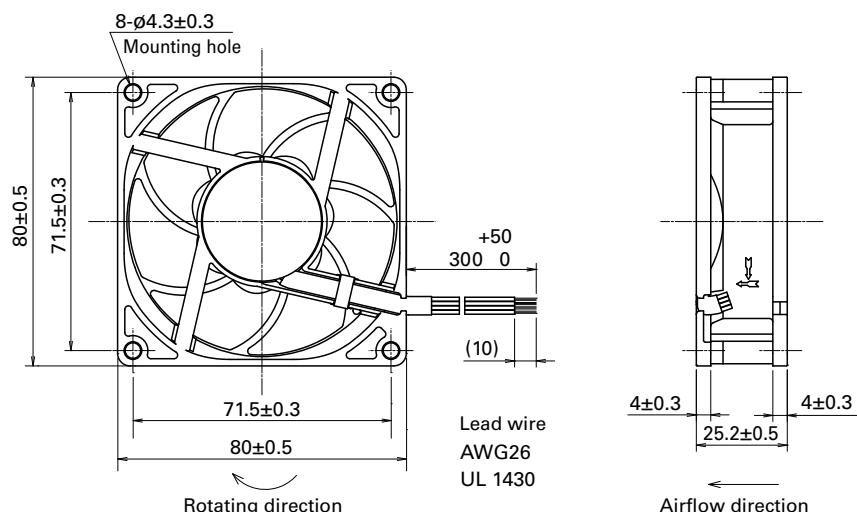


**9LG0824L4001** With pulse sensor

Operating voltage range

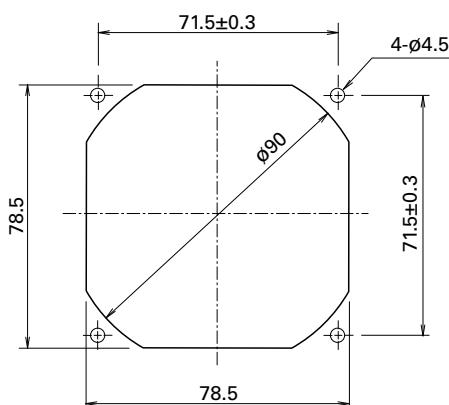


## Dimensions (unit: mm)



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

Inlet side, Outlet side



## Options

Finger guards

page: p. 532

Model no.: 109-049E, 109-049H, 109-049C

Resin finger guards

page: p. 539

Model no.: 109-1002G

Resin filter kits

page: p. 540

Model no.: 109-1002F13 (13PPI), 109-1002F20 (20PPI),  
109-1002F30 (30PPI), 109-1002F40 (40PPI)

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[9LG0824G4002](#) [9LG0824G4D001](#) [9LG0812H4001](#) [9LG0812H4D001](#) [9LG0812H4002](#) [9LG0824H4001](#)  
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