

## Long Life Fan

ECO PRODUCTS



# 120×120×38 mm

San Ace 120L 9LG type △ cULus

## 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 ..... +Red -Black [Sensor] Yellow [Control] Brown
- Mass ..... 420 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] [inch H₂O]	SPL [dB (A)]	Operating temperature [°C]	Expected life [h]
9LG1212P1G001	12	8.0 to 13.8	100	3.2	38.4	6550	7.0 247.1	370 1.48	62	-20 to +70	180000/60°C
			20	0.24	2.88	2000	2.13 75.2	34.4 0.13	36		
9LG1212P1S001	12	8.0 to 13.8	100	2.2	26.4	5600	6.0 211.8	270 1.08	58	-20 to +70	180000/60°C
			20	0.24	2.88	2000	2.13 75.2	34.4 0.13	36		
9LG1212P1H001	12	8.0 to 13.8	100	1.4	16.8	4700	5.0 176.5	190 0.76	54	-20 to +70	180000/60°C
			20	0.24	2.88	2000	2.13 75.2	34.4 0.13	36		
9LG1224P1G001	24	15 to 30	100	1.6	38.4	6550	7.0 247.1	370 1.48	62	-20 to +70	180000/60°C
			20	0.12	2.88	2000	2.13 75.2	34.4 0.13	36		
9LG1224P1S001	24	15 to 30	100	1.1	26.4	5600	6.0 211.8	270 1.08	58	-20 to +70	180000/60°C
			20	0.12	2.88	2000	2.13 75.2	34.4 0.13	36		
9LG1224P1H001	24	15 to 30	100	0.7	16.8	4700	5.0 176.5	190 0.76	54	-20 to +70	180000/60°C
			20	0.12	2.88	2000	2.13 75.2	34.4 0.13	36		
9LG1248P1G001	48	36 to 60	100	0.8	38.4	6550	7.0 247.1	370 1.48	62	-20 to +70	180000/60°C
			20	0.08	3.84	2000	2.13 75.2	34.4 0.13	36		
9LG1248P1S001	48	36 to 60	100	0.55	26.4	5600	6.0 211.8	270 1.08	58	-20 to +70	180000/60°C
			20	0.08	3.84	2000	2.13 75.2	34.4 0.13	36		
9LG1248P1H001	48	36 to 60	100	0.35	16.8	4700	5.0 176.5	190 0.76	54	-20 to +70	180000/60°C
			20	0.08	3.84	2000	2.13 75.2	34.4 0.13	36		

\* PWM frequency: 25 kHz. Fan does not rotate when PWM duty cycle is 0%.

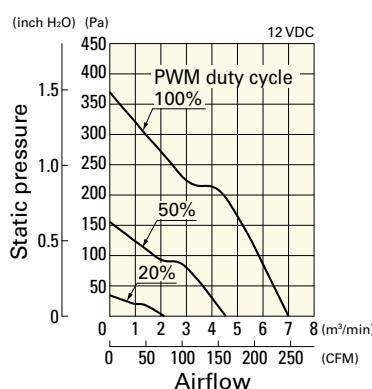
Other sensor specifications are available as options. Refer to the index (pp. 556 to 557).

Long Life Fan 120 mm sq. DC

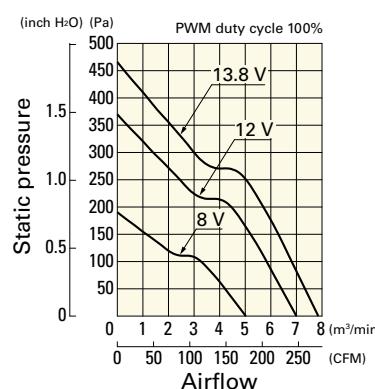
## Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

9LG1212P1G001 With pulse sensor with PWM control function

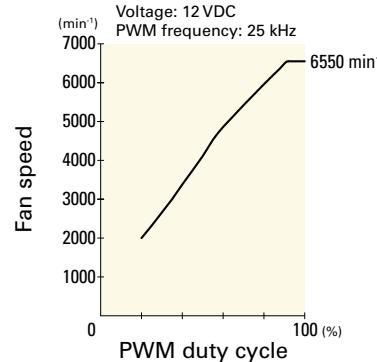
PWM duty cycle



Operating voltage range



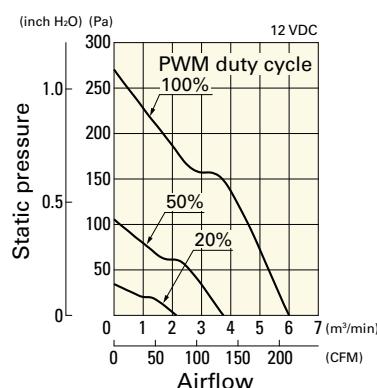
PWM duty - Speed characteristics example



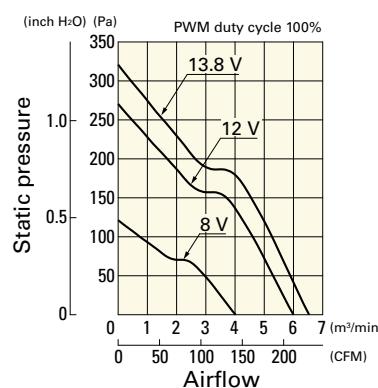
## Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

**9LG1212P1S001** With pulse sensor with PWM control function

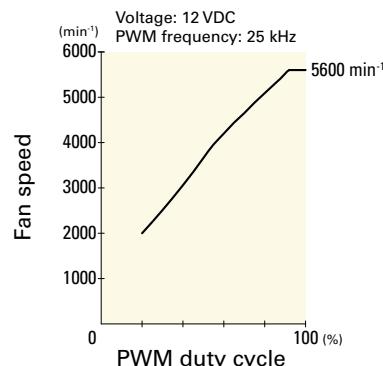
PWM duty cycle



Operating voltage range

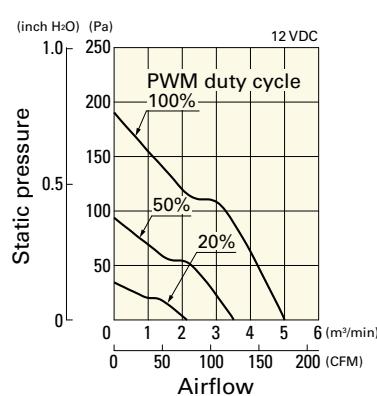


PWM duty - Speed characteristics example

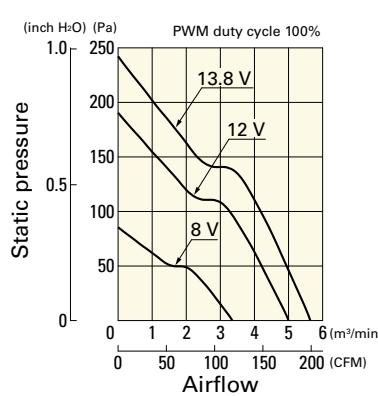


**9LG1212P1H001** With pulse sensor with PWM control function

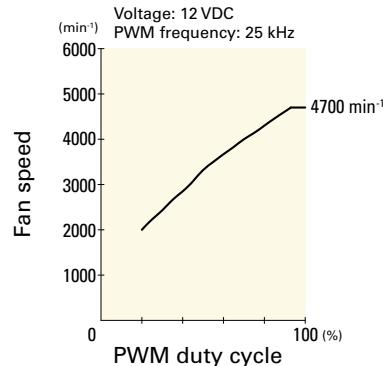
PWM duty cycle



Operating voltage range

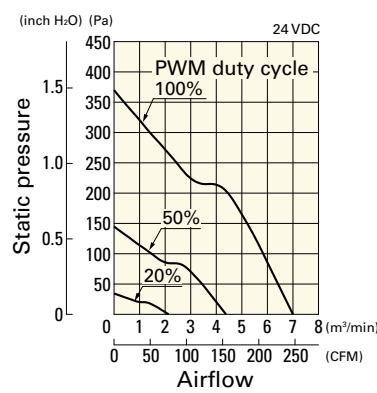


PWM duty - Speed characteristics example

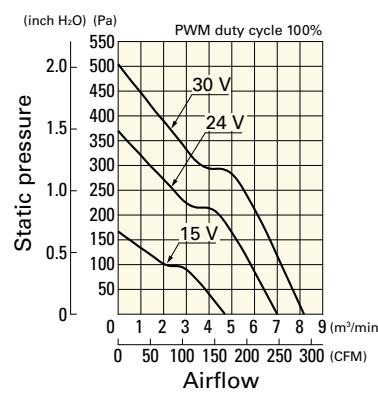


**9LG1224P1G001** With pulse sensor with PWM control function

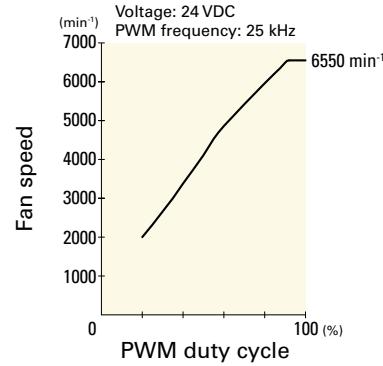
PWM duty cycle



Operating voltage range

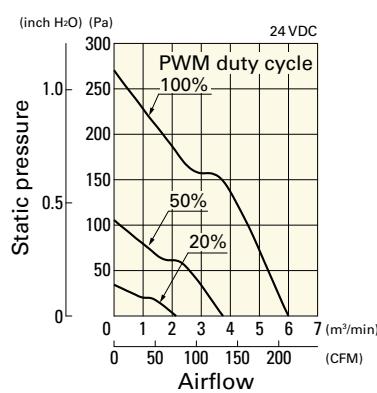


PWM duty - Speed characteristics example

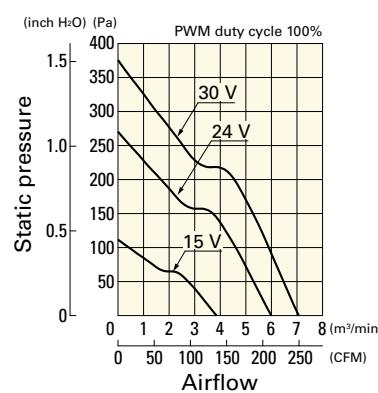


**9LG1224P1S001** With pulse sensor with PWM control function

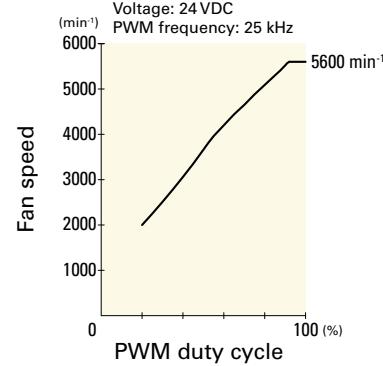
PWM duty cycle



Operating voltage range



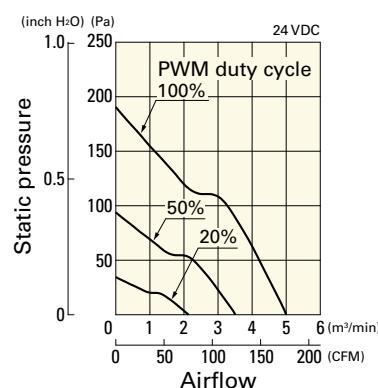
PWM duty - Speed characteristics example



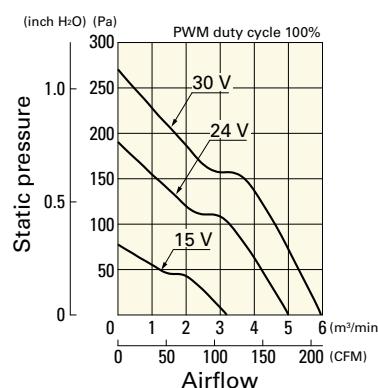
## Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

**9LG1224P1H001** With pulse sensor with PWM control function

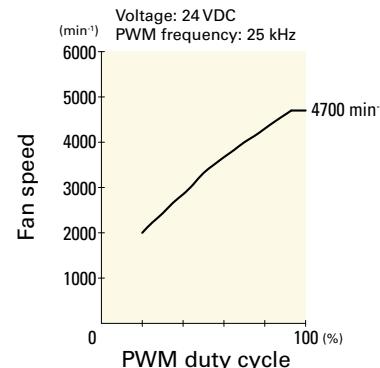
PWM duty cycle



Operating voltage range

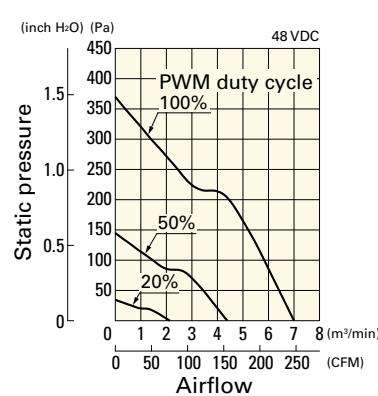


PWM duty - Speed characteristics example

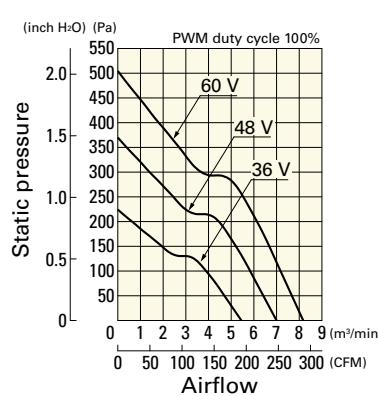


**9LG1248P1G001** With pulse sensor with PWM control function

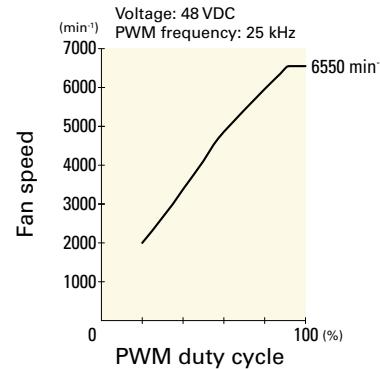
PWM duty cycle



Operating voltage range

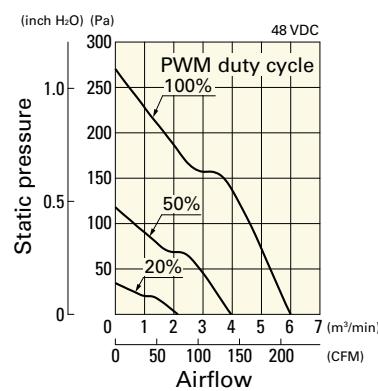


PWM duty - Speed characteristics example

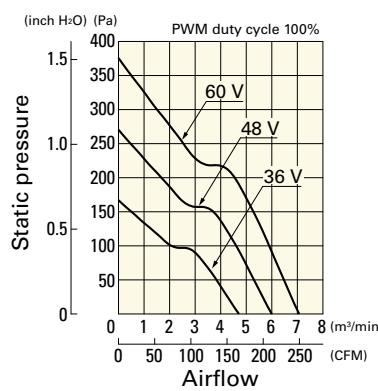


**9LG1248P1S001** With pulse sensor with PWM control function

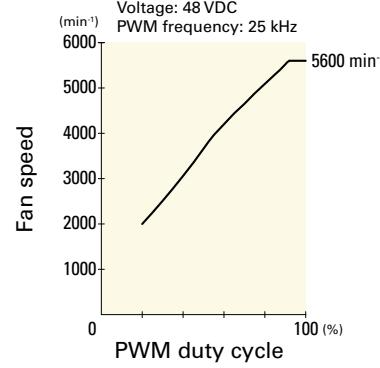
PWM duty cycle



Operating voltage range

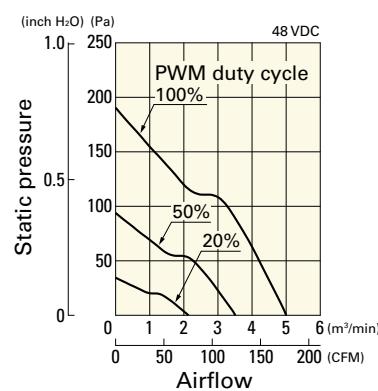


PWM duty - Speed characteristics example

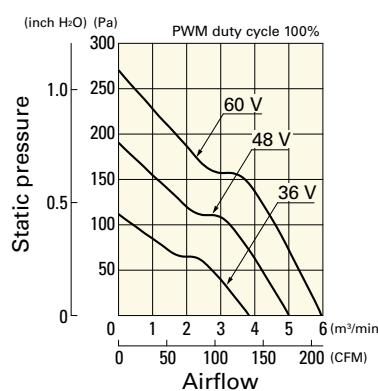


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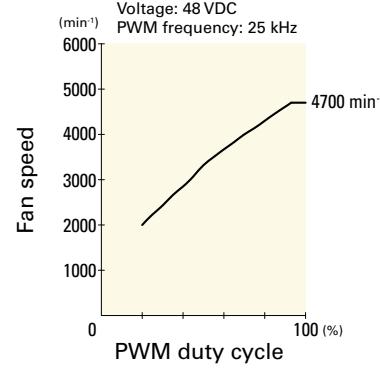
PWM duty cycle



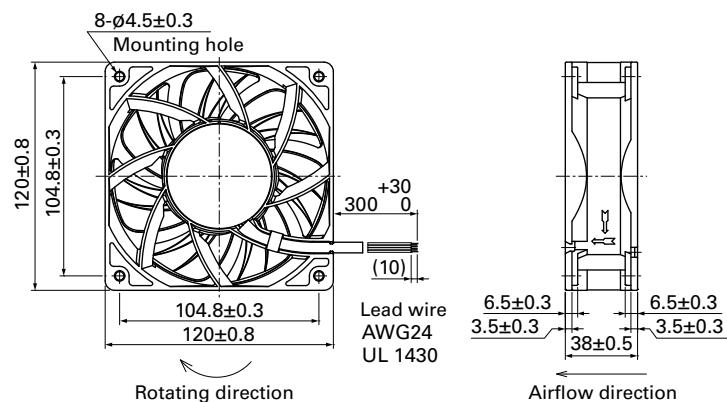
Operating voltage range



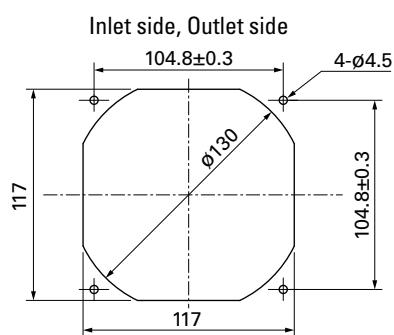
PWM duty - Speed characteristics example



## Dimensions (unit: mm)



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



## Options

### Finger guards

page: p. 514

Model no.: 109-019C, 109-019H, 109-019E, 109-019K

### Resin finger guards

page: p. 520

Model no.: 109-1000G

### Resin filter kits

page: p. 521

Model no.: 109-1000F13 (13PPI), 109-1000F20 (20PPI),  
109-1000F30 (30PPI), 109-1000F40 (40PPI)