



# 140x140x51 mm

San Ace 140L 9LG type

## General Specifications

- Material ..... Frame: Aluminum (Black coating), 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. 580.
- Dielectric strength ..... 50/60 Hz, 500 VAC, for 1 minute (between lead wire conductors and frame)
- Insulation resistance ..... 10 MΩ min. at 500 VDC (between lead wire conductors and frame)
- Sound pressure level (SPL) ..... A-weighted 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  
(For models without PWM control function, there is no speed control wiring.)
- Mass ..... 790 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]		
» 9LG1412P5G001	12	10.2 to 13.8	100	5.16	62	7500	9.0 318	655 2.63	69	-20 to +70	180000/60°C (215000/40°C)		
			20	0.31	3.72	2300	2.75 97	80 0.32	38				
» 9LG1412P5S001			100	1.83	22	5000	6.0 212	295 1.18	57				
			20	0.31	3.72	2300	2.75 97	80 0.32	38				
» 9LG1424P5G001			24	20.4 to 27.6	100	2.58	62	7500	9.0 318			655 2.63	69
					20	0.16	3.84	2300	2.75 97			80 0.32	38
» 9LG1424P5S001	100	0.91			22	5000	6.0 212	295 1.18	57				
	20	0.16			3.84	2300	2.75 97	80 0.32	38				
» 9LG1448P5G001	48	40.8 to 55.2			100	1.29	62	7500	9.0 318			655 2.63	69
					20	0.12	5.76	2300	2.75 97			80 0.32	38
» 9LG1448P5S001			100	0.45	22	5000	6.0 212	295 1.18	57				
			20	0.12	5.76	2300	2.75 97	80 0.32	38				

\* PWM frequency is 25 kHz. Models without ratings for 0% PWM duty cycle have zero speed at 0%. When control terminal is open, speed is the same as at 100% duty cycle.

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 <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]
» 9LG1412A5001	12	10.2 to 13.8	2.61	31.4	5700	6.9 243.8	500 2	61	-20 to +70	180000/60°C (215000/40°C)
» 9LG1412H5001			1	12	4100	4.9 173.1	260 1.04	52		
» 9LG1412M5001			0.43	5.16	2600	3.1 109.5	100 0.4	40		
» 9LG1424A5001	24	20.4 to 27.6	1.21	29.1	5700	6.9 243.8	540 2.17	61		
» 9LG1424H5001			0.55	13.2	4100	4.9 173.1	260 1.04	52		
» 9LG1424M5001			0.23	5.52	2600	3.1 109.5	100 0.4	40		
» 9LG1448A5001	48	40.8 to 55.2	0.66	31.7	5700	6.9 243.8	540 2.17	61		
» 9LG1448H5001			0.31	14.9	4100	4.9 173.1	260 1.04	52		
» 9LG1448M5001			0.15	7.2	2600	3.1 109.5	100 0.4	40		

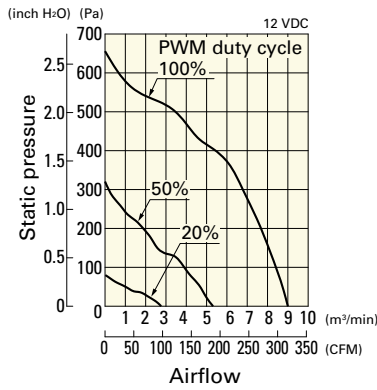
Note 1: Sensor and control options are available for selection. Refer to the table on p. 614.

Note 2: The » mark indicates Short Lead Time Service applicable models. See p. 630 for details.

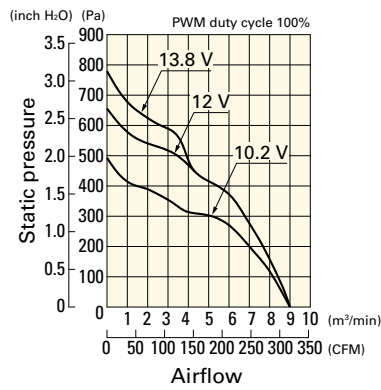
# Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

**9LG1412P5G001** With pulse sensor with PWM control function

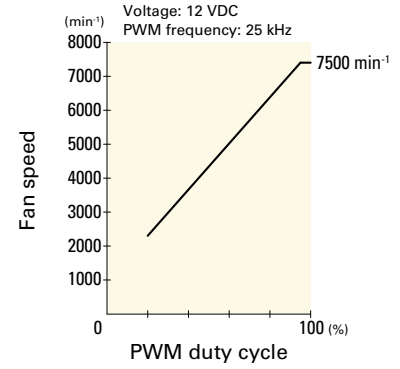
PWM duty cycle



Operating voltage range

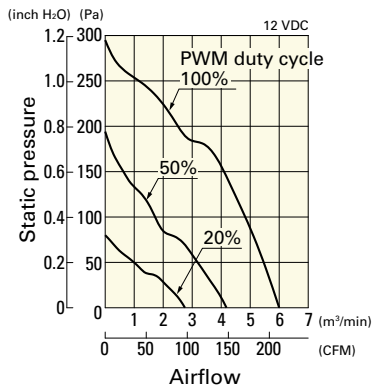


PWM duty - Speed characteristics example

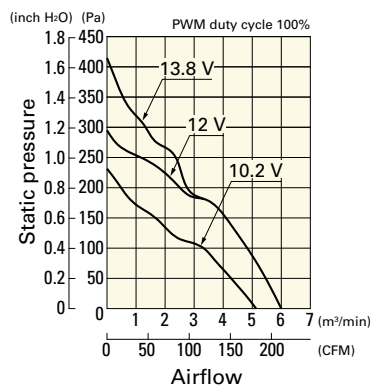


**9LG1412P5S001** With pulse sensor with PWM control function

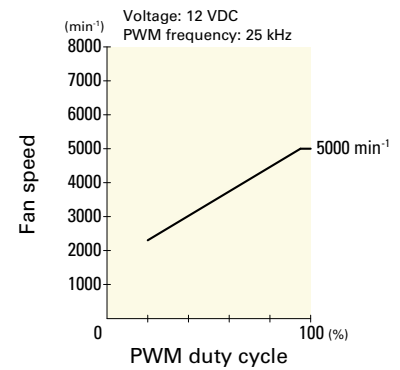
PWM duty cycle



Operating voltage range

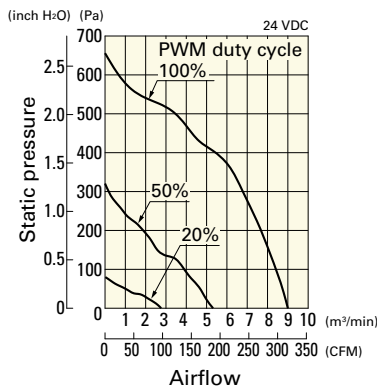


PWM duty - Speed characteristics example

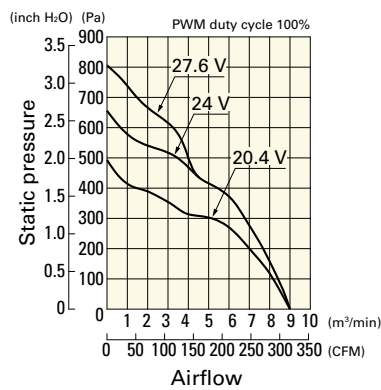


**9LG1424P5G001** With pulse sensor with PWM control function

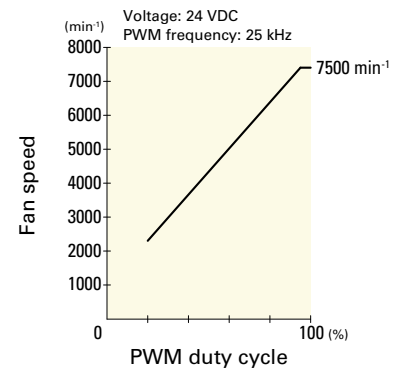
PWM duty cycle



Operating voltage range

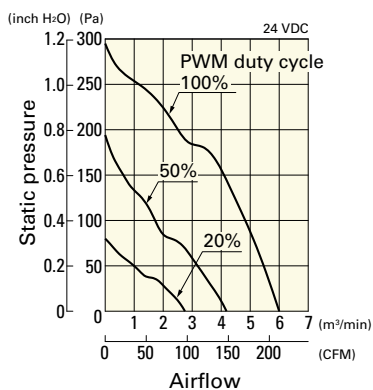


PWM duty - Speed characteristics example

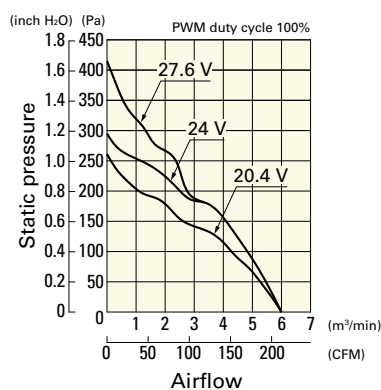


**9LG1424P5S001** With pulse sensor with PWM control function

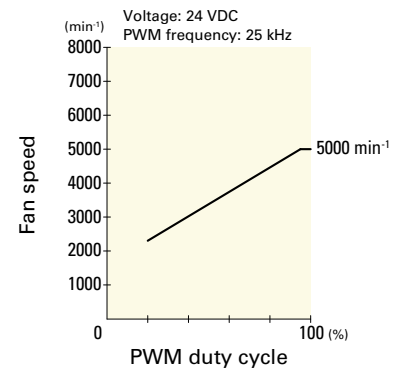
PWM duty cycle



Operating voltage range



PWM duty - Speed characteristics example

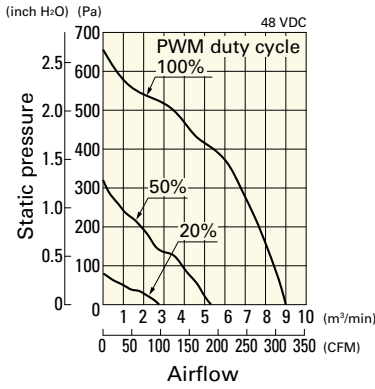


DC Long Life Fan 140 mm sq.

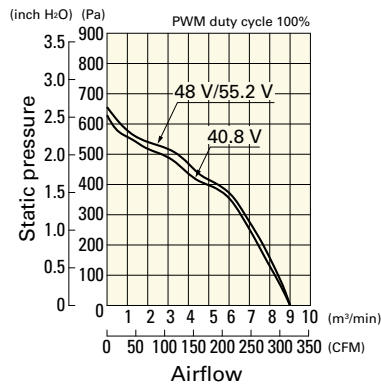
## Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

**9LG1448P5G001** With pulse sensor with PWM control function

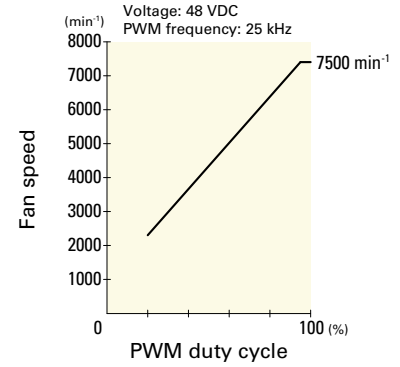
PWM duty cycle



Operating voltage range

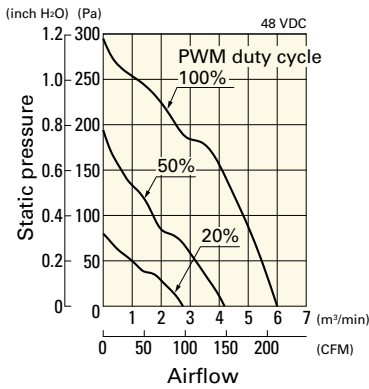


PWM duty - Speed characteristics example

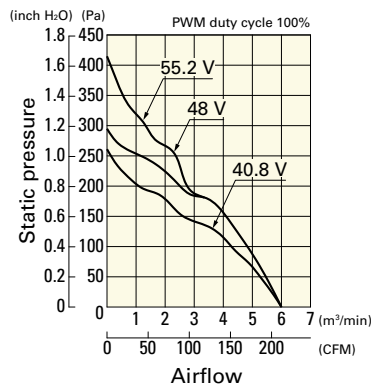


**9LG1448P5S001** With pulse sensor with PWM control function

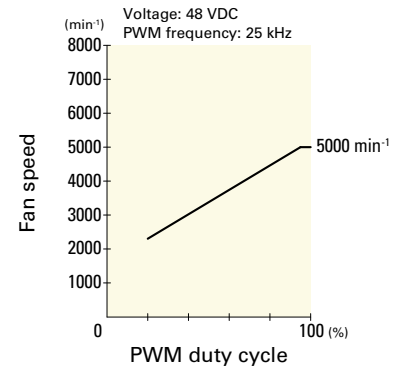
PWM duty cycle



Operating voltage range



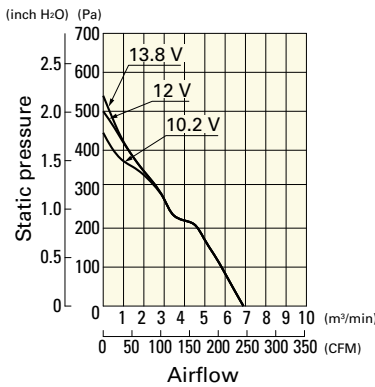
PWM duty - Speed characteristics example



## Airflow - Static Pressure Characteristics

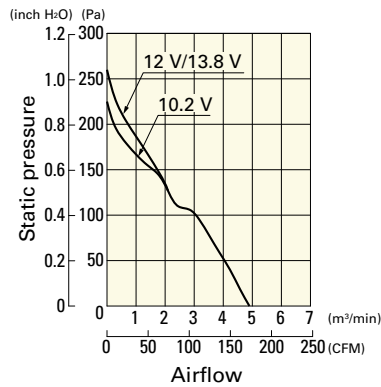
**9LG1412A5001** With pulse sensor

Operating voltage range



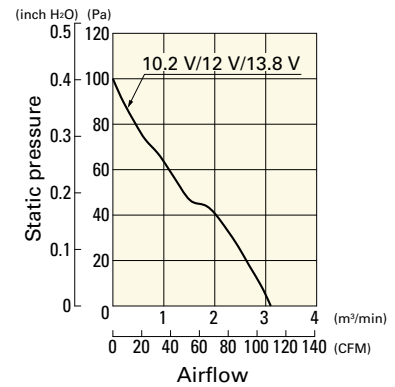
**9LG1412H5001** With pulse sensor

Operating voltage range



**9LG1412M5001** With pulse sensor

Operating voltage range

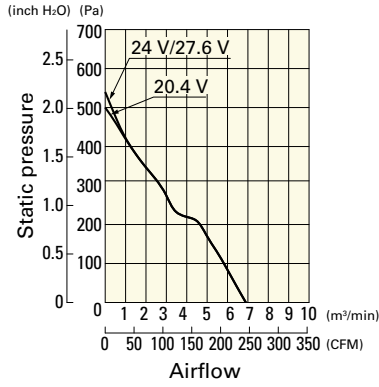


DC  
Long Life Fan 140 mm sq.

## Airflow - Static Pressure Characteristics

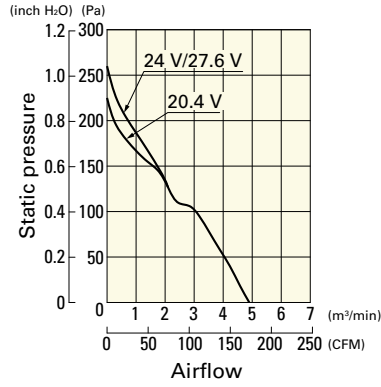
**9LG1424A5001** With pulse sensor

Operating voltage range



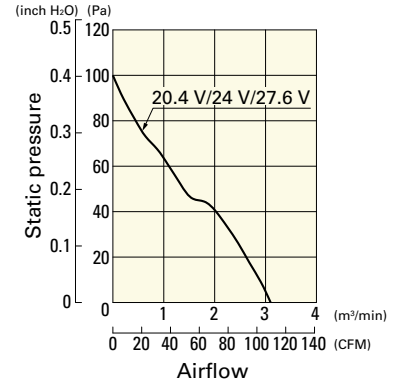
**9LG1424H5001** With pulse sensor

Operating voltage range



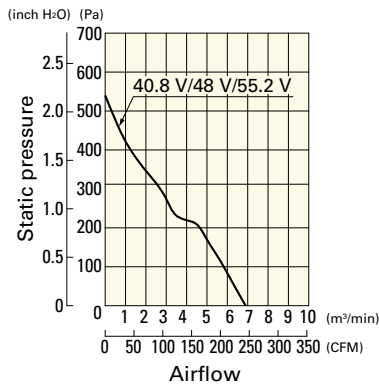
**9LG1424M5001** With pulse sensor

Operating voltage range



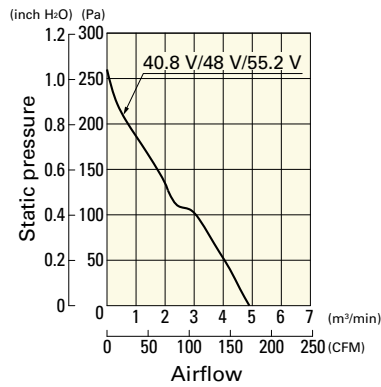
**9LG1448A5001** With pulse sensor

Operating voltage range



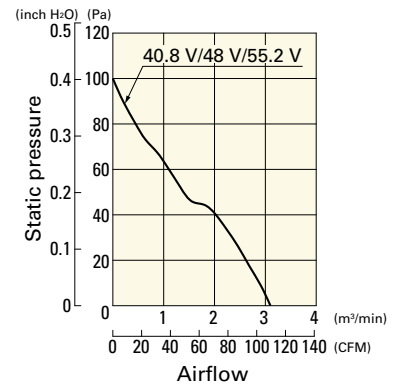
**9LG1448H5001** With pulse sensor

Operating voltage range



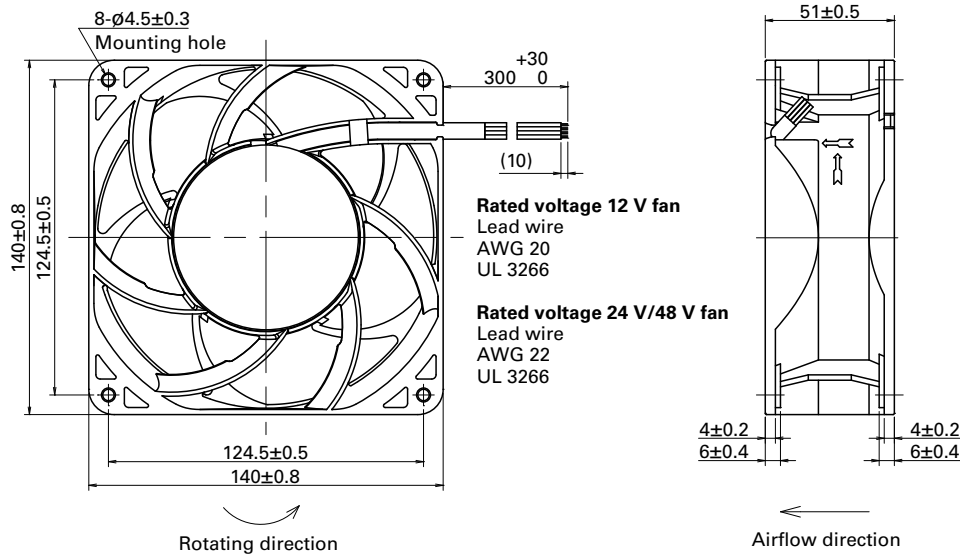
**9LG1448M5001** With pulse sensor

Operating voltage range

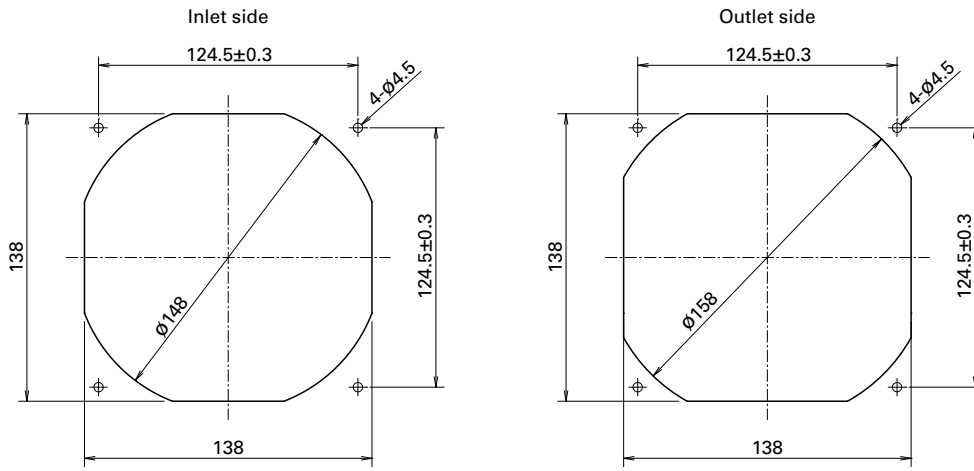


DC Long Life Fan 140 mm sq.

## Dimensions (unit: mm) (With pulse sensor with PWM control function)



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



## Options

Finger guards

page: p. 565

Model no.: 109-719, 109-719H