



120×120×38 mm

San Ace 120L 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) 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. 614.
- 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, there is no speed control wiring.)
- Mass 420 g

Specifications

The models listed below **have a pulse sensor with PWM control.**

Model no.	Rated voltage [V]	Operating voltage range [V]	PWM duty cycle [%]	Rated current [A]	Rated input [W]	Rated speed [min ⁻¹]	Max. airflow [m ³ /min] [CFM]	Max. static pressure [Pa] [inchH ₂ O]	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 (215000/40°C)	
			20	0.24	2.88	2000	2.13 75.2	34.4 0.13	36			
9LG1212P1S001			100	2.2	26.4	5600	6.0 211.8	270 1.08	58			
			20	0.24	2.88	2000	2.13 75.2	34.4 0.13	36			
9LG1212P1H001			100	1.4	16.8	4700	5.0 176.5	190 0.76	54			
			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	0.12	2.88	2000	2.13 75.2	34.4 0.13			36
9LG1224P1S001				100	1.1	26.4	5600	6.0 211.8	270 1.08			58
				20	0.12	2.88	2000	2.13 75.2	34.4 0.13			36
9LG1224P1H001				100	0.7	16.8	4700	5.0 176.5	190 0.76			54
				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	0.08	3.84	2000	2.13 75.2	34.4 0.13	36			
9LG1248P1S001			100	0.55	26.4	5600	6.0 211.8	270 1.08	58			
			20	0.08	3.84	2000	2.13 75.2	34.4 0.13	36			
9LG1248P1H001			100	0.35	16.8	4700	5.0 176.5	190 0.76	54			
			20	0.08	3.84	2000	2.13 75.2	34.4 0.13	36			

* 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 a pulse sensor.**

Model no.	Rated voltage [V]	Operating voltage range [V]	Rated current [A]	Rated input [W]	Rated speed [min ⁻¹]	Max. airflow [m ³ /min] [CFM]	Max. static pressure [Pa] [inchH ₂ O]	SPL [dB (A)]	Operating temperature [°C]	Expected life [h]
9LG1212F1001	12	8 to 13.8	0.39	4.68	2800	3 106	67.6 0.27	39	-20 to +70	180000/60°C (215000/40°C)
9LG1212M1001			0.22	2.64	2100	2.2 77.7	37.9 0.15	33		
9LG1224A1001	24	15 to 30	0.37	8.88	3700	3.9 137.8	117.8 0.47	48		
9LG1224F1001			0.19	4.56	2800	3 106	67.6 0.27	39		
9LG1224M1001	48	36 to 60	0.11	2.64	2100	2.2 77.7	37.9 0.15	33		
9LG1248F1001			0.11	5.28	2800	3 106	67.6 0.27	39		
9LG1248M1001			0.07	3.36	2100	2.2 77.7	37.9 0.15	33		

Note 1: Sensor and control options are available for selection. Refer to the table on p. 648.

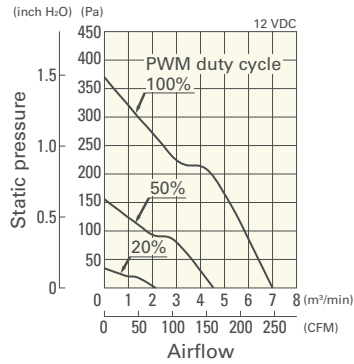
Note 2: The mark indicates Short Lead Time Service applicable models. See p. 668 for details.

DC Long Life Fan 120 mm sq.

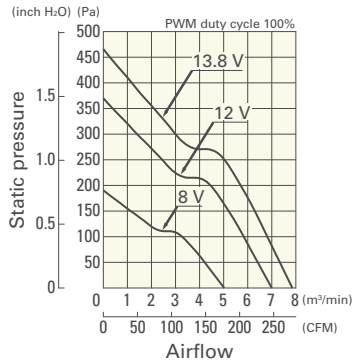
Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

9LG1212P1G001 With pulse sensor with PWM control

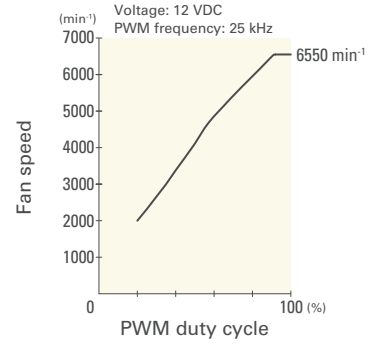
PWM duty cycle



Operating voltage range

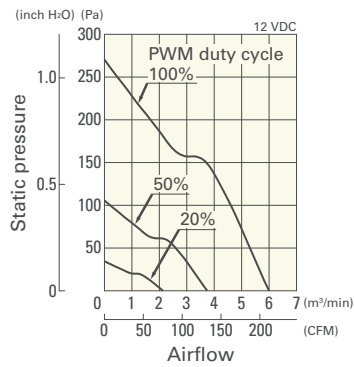


PWM duty - Speed characteristics example

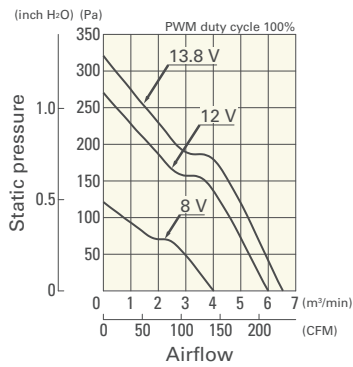


9LG1212P1S001 With pulse sensor with PWM control

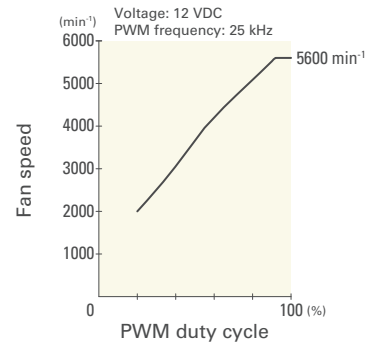
PWM duty cycle



Operating voltage range

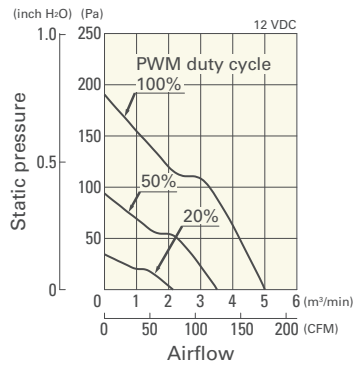


PWM duty - Speed characteristics example

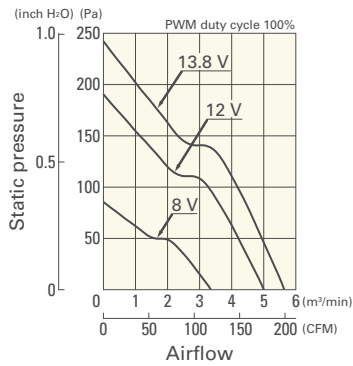


9LG1212P1H001 With pulse sensor with PWM control

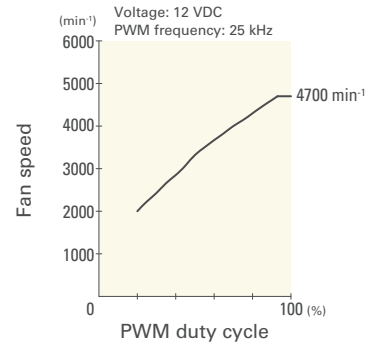
PWM duty cycle



Operating voltage range

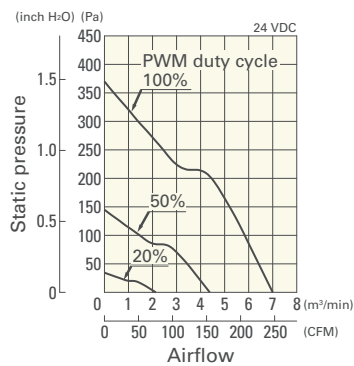


PWM duty - Speed characteristics example

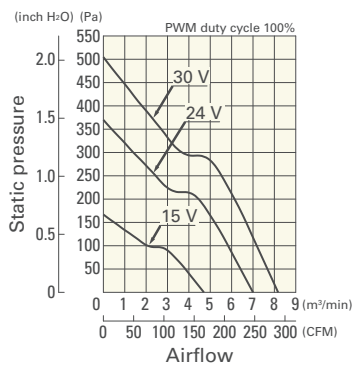


9LG1224P1G001 With pulse sensor with PWM control

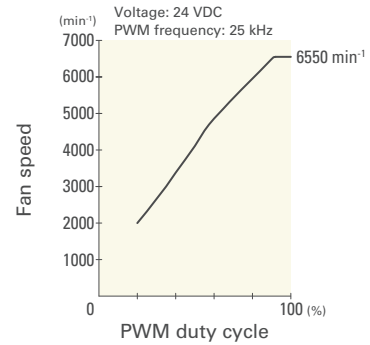
PWM duty cycle



Operating voltage range



PWM duty - Speed characteristics example

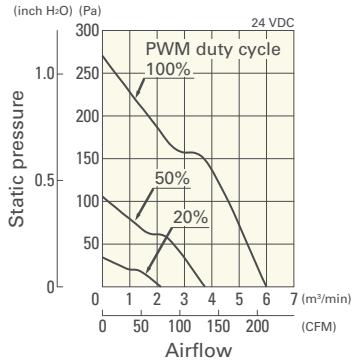


DC
Long Life Fan 120 mm sq.

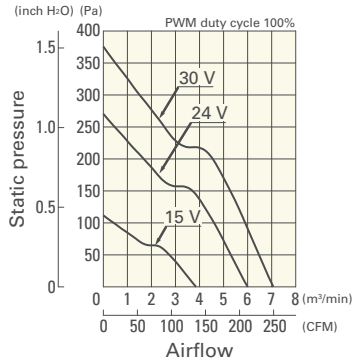
Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

9LG1224P1S001 With pulse sensor with PWM control

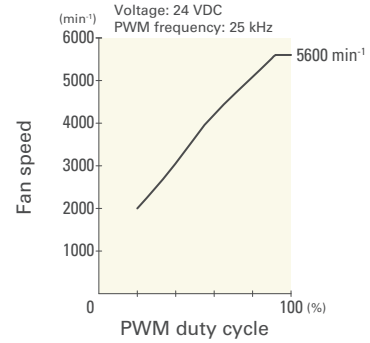
PWM duty cycle



Operating voltage range

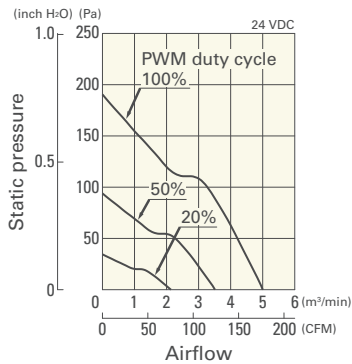


PWM duty - Speed characteristics example

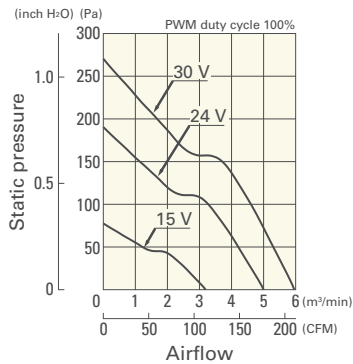


9LG1224P1H001 With pulse sensor with PWM control

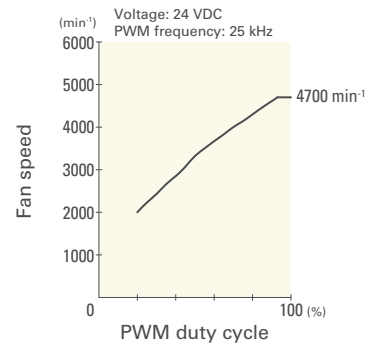
PWM duty cycle



Operating voltage range

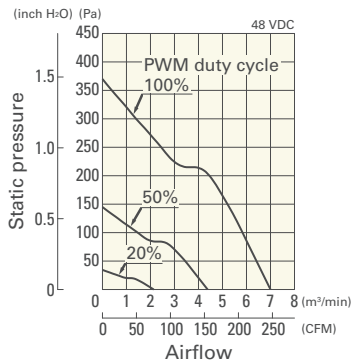


PWM duty - Speed characteristics example

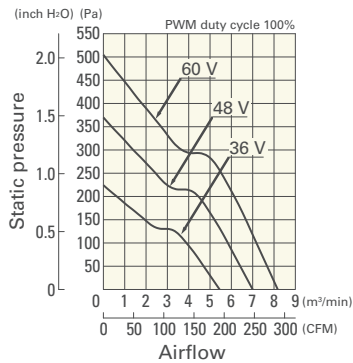


9LG1248P1G001 With pulse sensor with PWM control

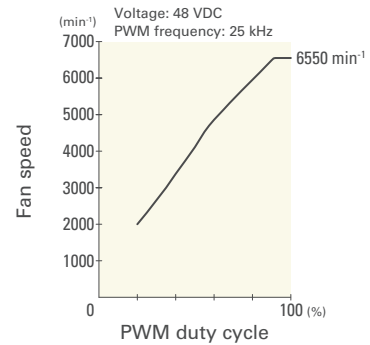
PWM duty cycle



Operating voltage range

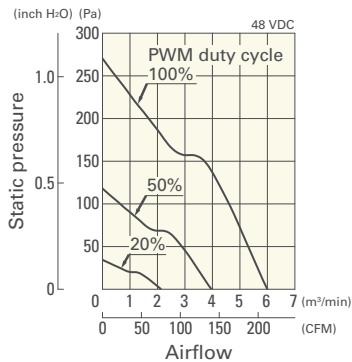


PWM duty - Speed characteristics example

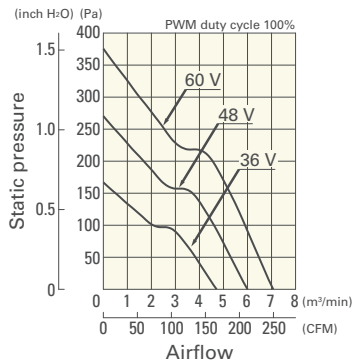


9LG1248P1S001 With pulse sensor with PWM control

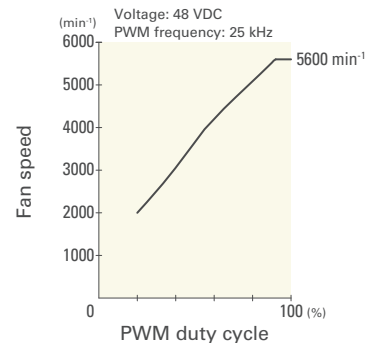
PWM duty cycle



Operating voltage range



PWM duty - Speed characteristics example

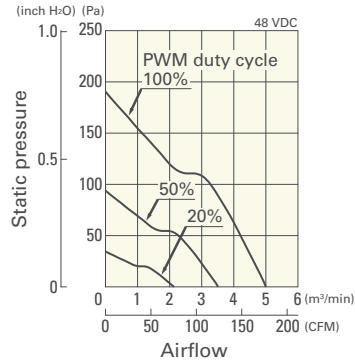


DC
Long Life Fan 120 mm sq.

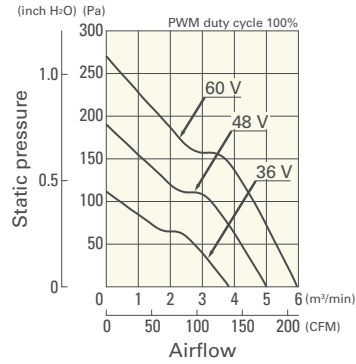
Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

9LG1248P1H001 With pulse sensor with PWM control

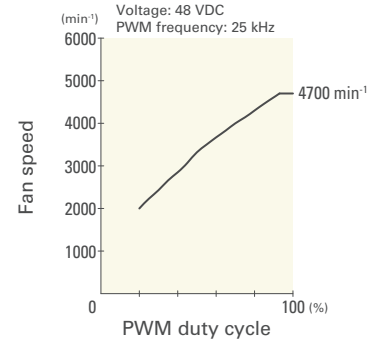
PWM duty cycle



Operating voltage range



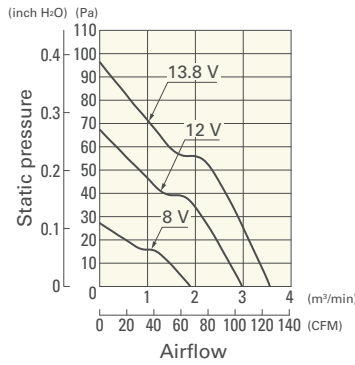
PWM duty - Speed characteristics example



Airflow - Static Pressure Characteristics

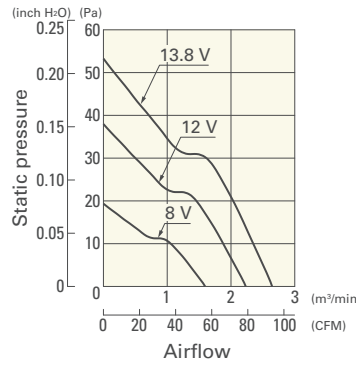
9LG1212F1001 With pulse sensor

Operating voltage range



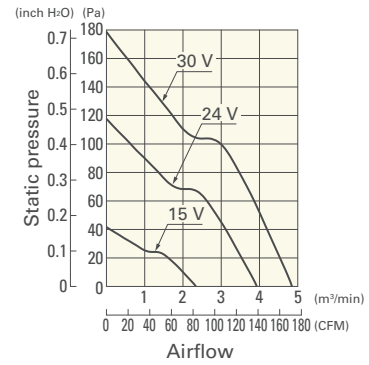
9LG1212M1001 With pulse sensor

Operating voltage range



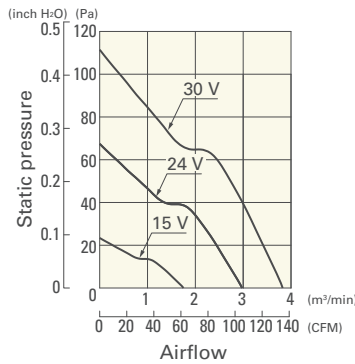
9LG1224A1001 With pulse sensor

Operating voltage range



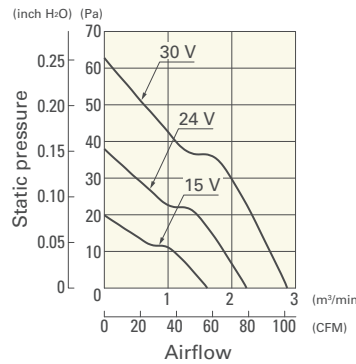
9LG1224F1001 With pulse sensor

Operating voltage range



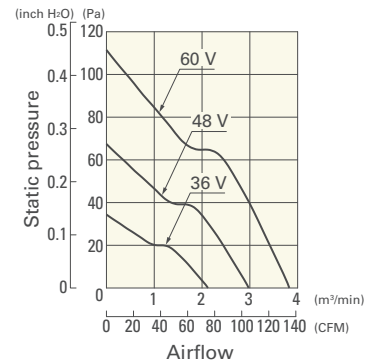
9LG1224M1001 With pulse sensor

Operating voltage range



9LG1248F1001 With pulse sensor

Operating voltage range



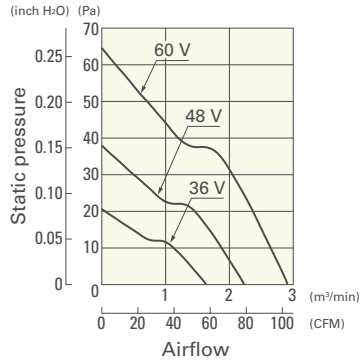
DC

Long Life Fan 120 mm sq.

Airflow - Static Pressure Characteristics

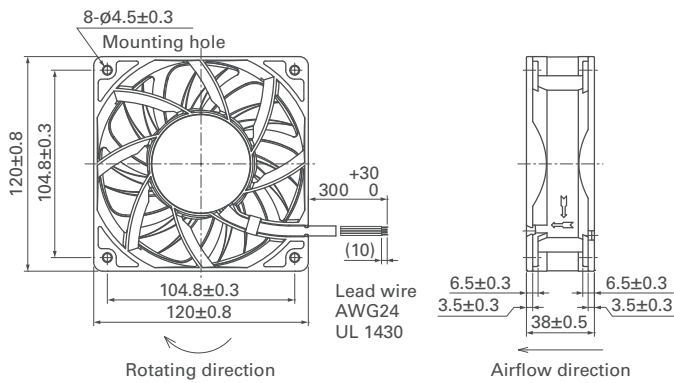
9LG1248M1001 With pulse sensor

Operating voltage range

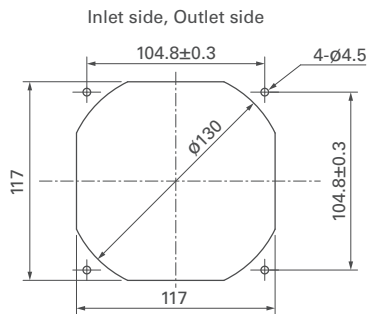


DC
Long Life Fan 120 mm sq.

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



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



Options

Finger guards

page: p. 599

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

Resin finger guards

page: p. 605

Model no.: 109-1000G

Resin filter kits

page: p. 606

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