

60×60×76 mm

San Ace 60L 9CRLB type 



General Specifications

- Material Frame: Aluminum (Black coating), 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. 616.
- 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 Inlet ⊕Red ⊖Black (Sensor) Yellow (Control) Brown
Outlet ⊕Orange ⊖Gray (Sensor) Purple (Control) White
- Mass 280 g

Specifications

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

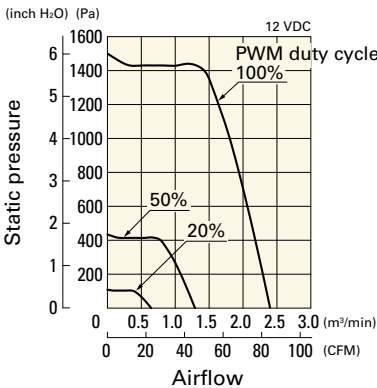
Model no.	Rated voltage [V]	Operating voltage range [V]	PWM duty cycle* [%]	Rated current [A]	Rated input [W]	Rated speed [min ⁻¹]	Max. airflow [m ³ /min] [CFM]	Max. static pressure [Pa] [inchH ₂ O]	SPL [dB (A)]	Operating temperature [°C]	Expected life [h]
9CRLB0612P0G001	12	10.8 to 13.2	100	3.6	43.2	19700 18300	2.4 84.8	1500 6.00	75	-20 to +70	100000/60°C (135000/40°C)
			20	0.28	3.36	5300 4800	0.64 22.6	110 0.44	43		

* 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.

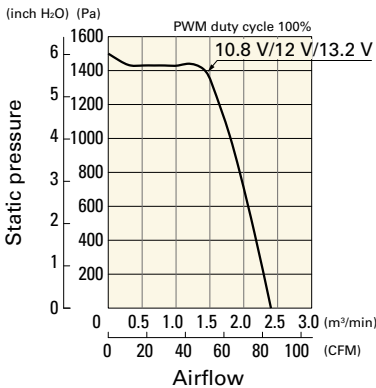
Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

9CRLB0612P0G001 With pulse sensor with PWM control

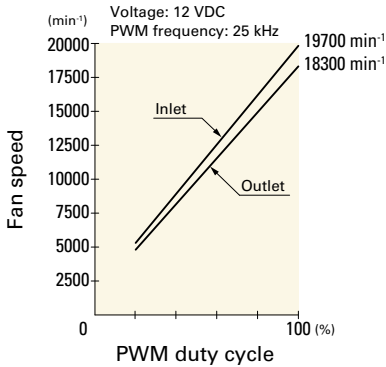
PWM duty cycle

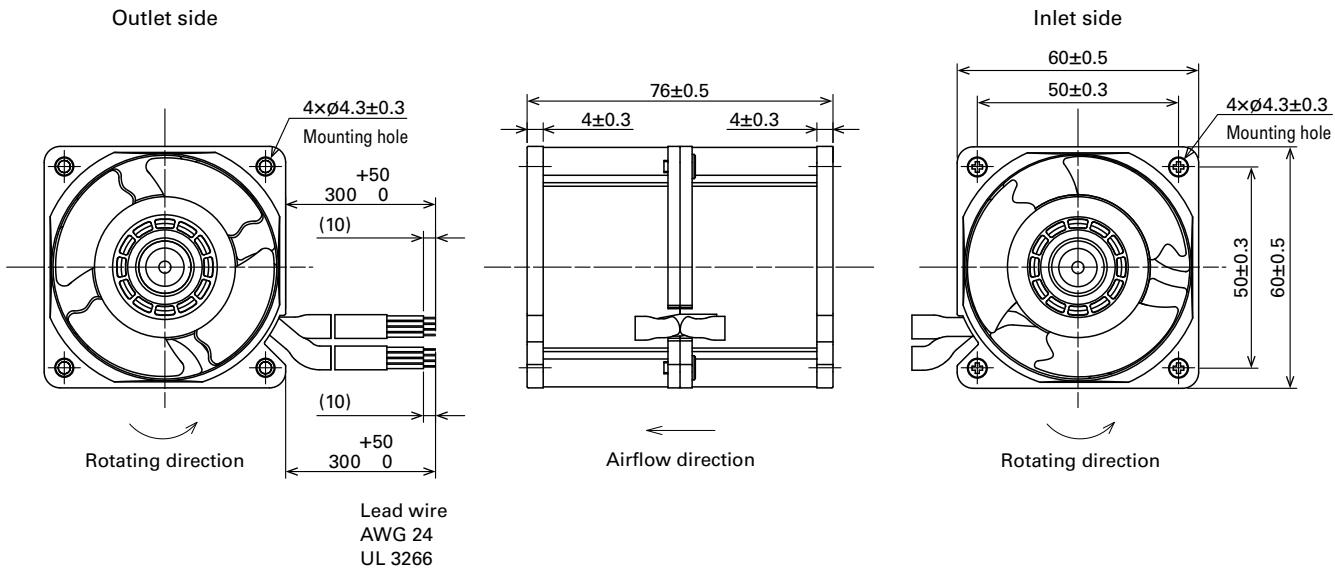


Operating voltage range

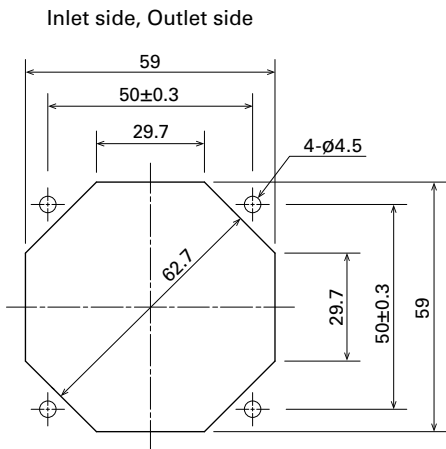


PWM duty - Speed characteristics example





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



■ Options

Finger guards page: p. 598
Model no.: 109-139E, 109-139H

Resin finger guards page: p. 605
Model no.: 109-1003G

Resin filter kits page: p. 606
Model no.: 109-1003F13 (13PPI), 109-1003F20 (20PPI),
109-1003F30 (30PPI), 109-1003F40 (40PPI)

80×80×25 mm

San Ace 80L 9LG type  



DC
Long Life Fan 80 mm sq.

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. 616.
- 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 130 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]
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 (215000/40°C)
			20	0.06	0.72	1800	0.5 17.6	10.4 0.04	16		
9LG0812P4G001			100	0.3	3.6	5500	1.54 54.3	98 0.39	43		
			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		
			25	0.04	0.48	1100	0.3 10.5	3.9 0.01	13		
9LG0824P4J001			100	0.28	6.72	7400	2.07 73.0	177 0.71	49		
			20	0.05	1.2	2400	0.67 23.6	18.6 0.07	22		
9LG0824P4G001			100	0.14	3.36	5500	1.54 54.3	98 0.39	43		
			20	0.02	0.48	1200	0.33 11.6	4.6 0.01	13		
9LG0824P4H001			100	0.05	1.2	3700	1.03 36.3	44 0.17	31		
			30	0.02	0.48	1100	0.3 10.5	3.9 0.01	13		

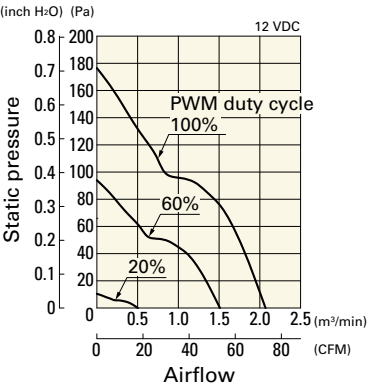
* PWM frequency is 25 kHz. Models without ratings for 0% PWM duty cycle have zero speed at 0%. When control terminal is open, speed is the same as at 100% duty cycle.

The models listed below **have a pulse sensor.**

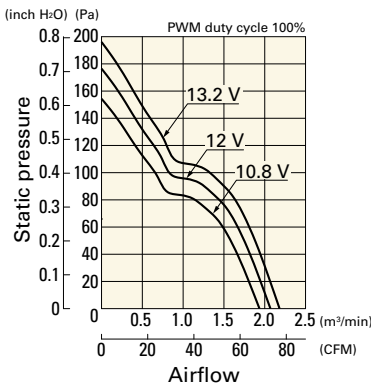
Model no.	Rated voltage [V]	Operating voltage range [V]	Rated current [A]	Rated input [W]	Rated speed [min ⁻¹]	Max. airflow [m ³ /min] [CFM]	Max. static pressure [Pa] [inchH ₂ O]	SPL [dB (A)]	Operating temperature [°C]	Expected life [h]
9LG0812S4001	12	6 to 13.2	0.17	2.04	4200	1.17 41.3	56 0.22	35	-20 to +70	180000/60°C (215000/40°C)
9LG0812F4001			0.1	1.2	3300	0.92 32.5	35 0.14	29		
9LG0812M4001			0.08	0.96	2900	0.8 28.3	27 0.11	25		
9LG0812L4001		8 to 13.2	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		
9LG0824F4001			0.045	1.08	3300	0.92 32.5	35 0.14	29		
9LG0824M4001			0.04	0.96	2900	0.8 28.3	27 0.11	25		
9LG0824L4001		14 to 26.4	0.03	0.72	2300	0.64 22.6	17 0.068	22		

Note: Sensor and control options are available for selection. Refer to the table on p. 653.

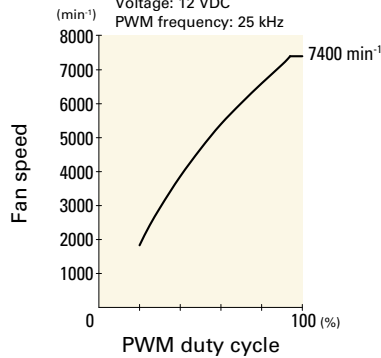
PWM duty cycle



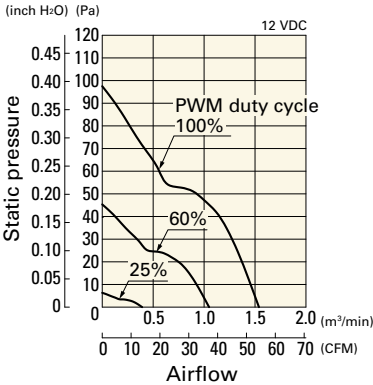
Operating voltage range



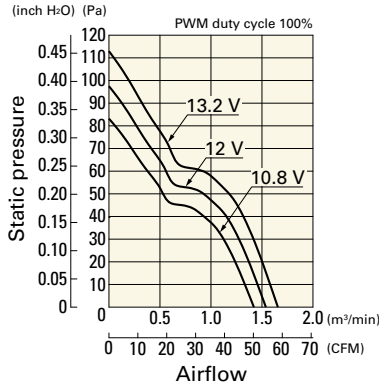
PWM duty - Speed characteristics example



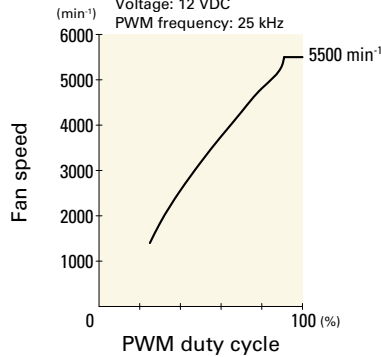
PWM duty cycle



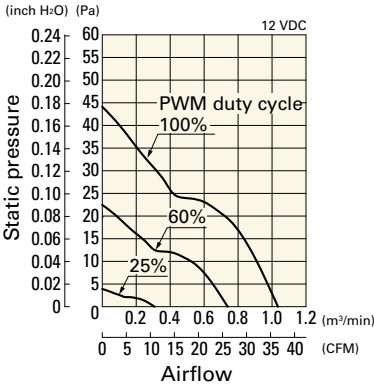
Operating voltage range



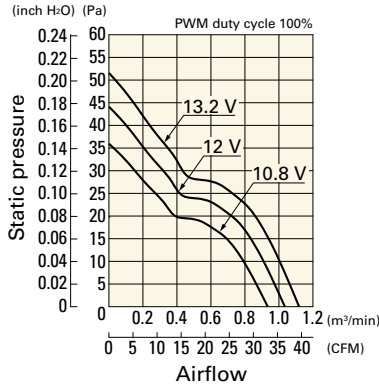
PWM duty - Speed characteristics example



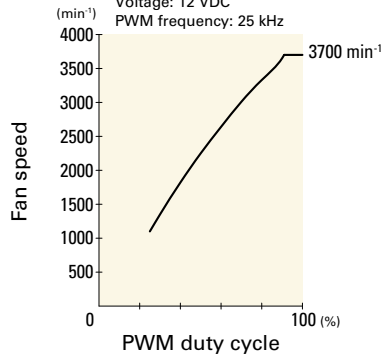
PWM duty cycle



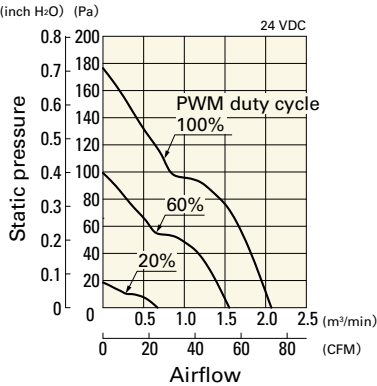
Operating voltage range



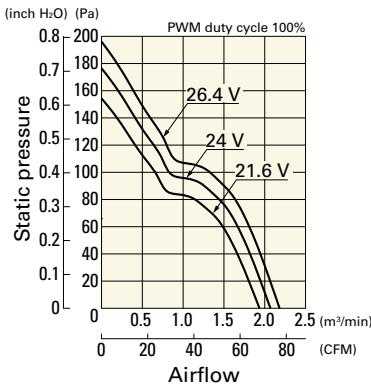
PWM duty - Speed characteristics example



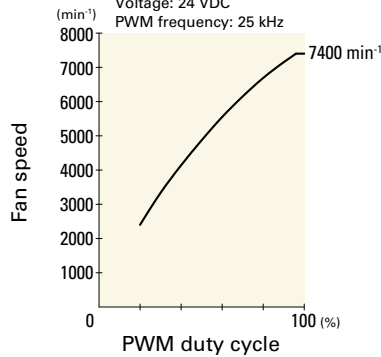
PWM duty cycle



Operating voltage range



PWM duty - Speed characteristics example

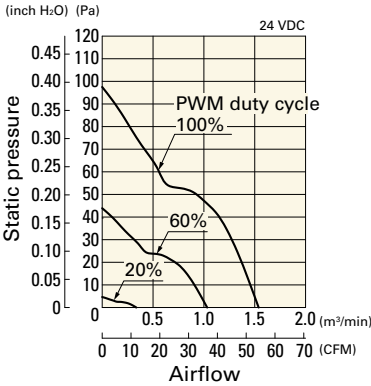


DC

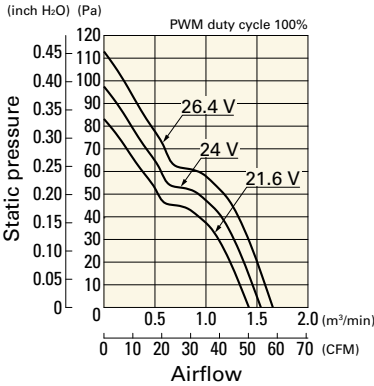
Long Life Fan 80 mm sq.

9LG0824P4G001 With pulse sensor with PWM control

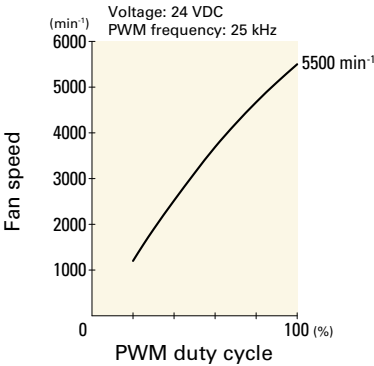
PWM duty cycle



Operating voltage range

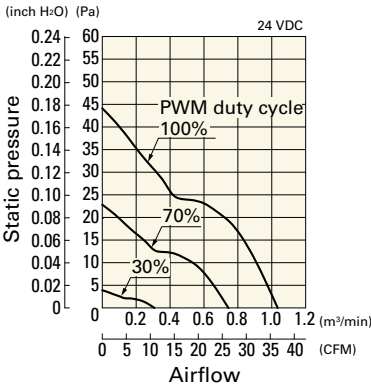


PWM duty - Speed characteristics example

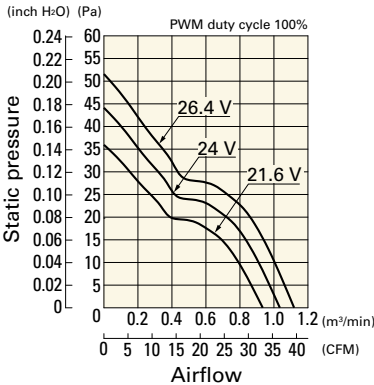


9LG0824P4H001 With pulse sensor with PWM control

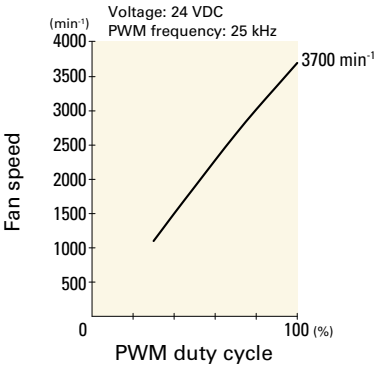
PWM duty cycle



Operating voltage range



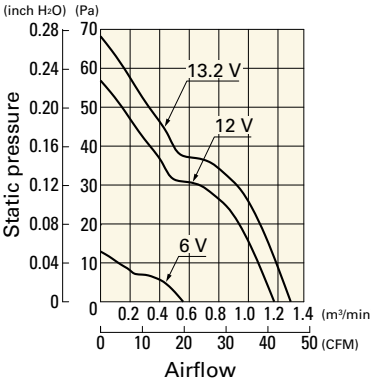
PWM duty - Speed characteristics example



Airflow - Static Pressure Characteristics

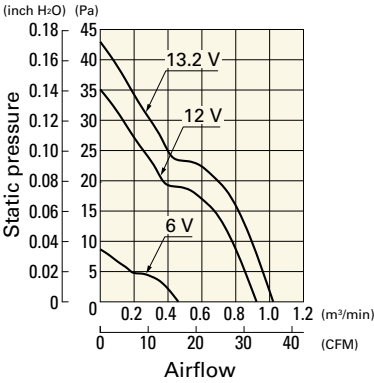
9LG0812S4001 With pulse sensor

Operating voltage range



9LG0812F4001 With pulse sensor

Operating voltage range



9LG0812M4001 With pulse sensor

Operating voltage range

