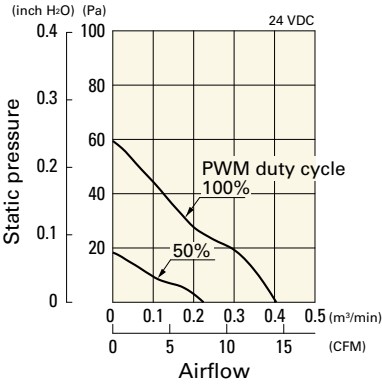
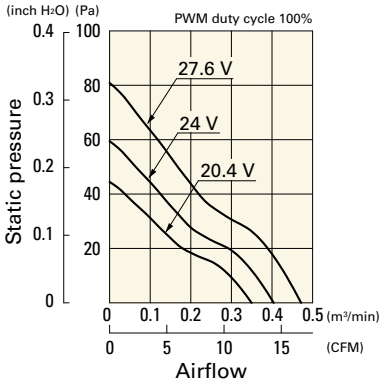


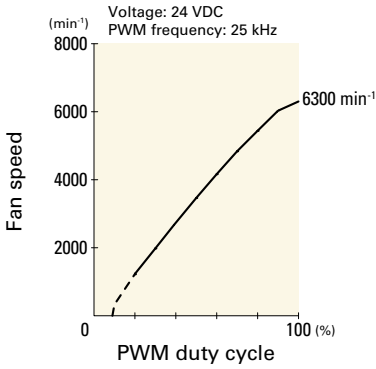
PWM duty cycle



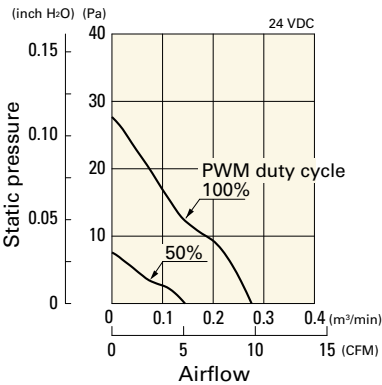
Operating voltage range



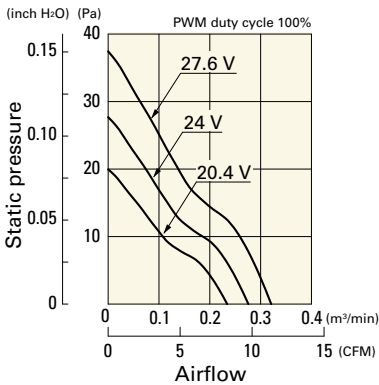
PWM duty - Speed characteristics example



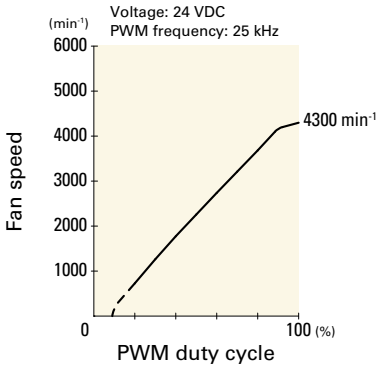
PWM duty cycle



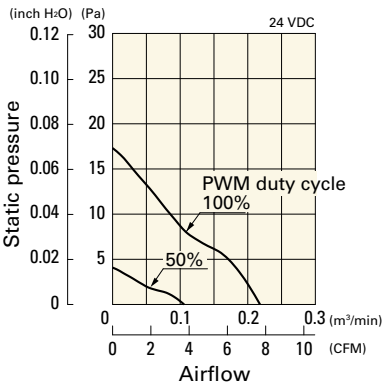
Operating voltage range



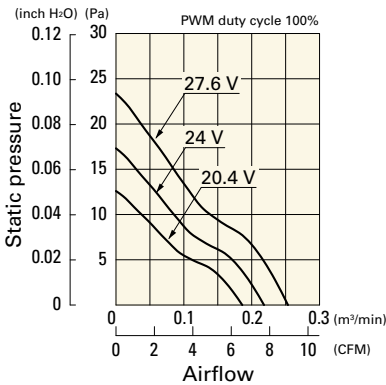
PWM duty - Speed characteristics example



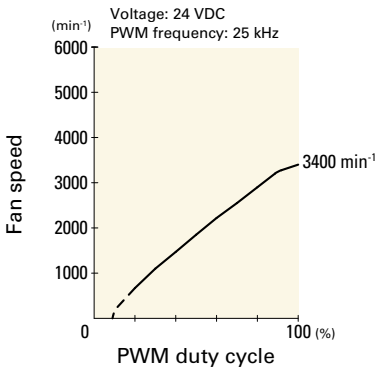
PWM duty cycle

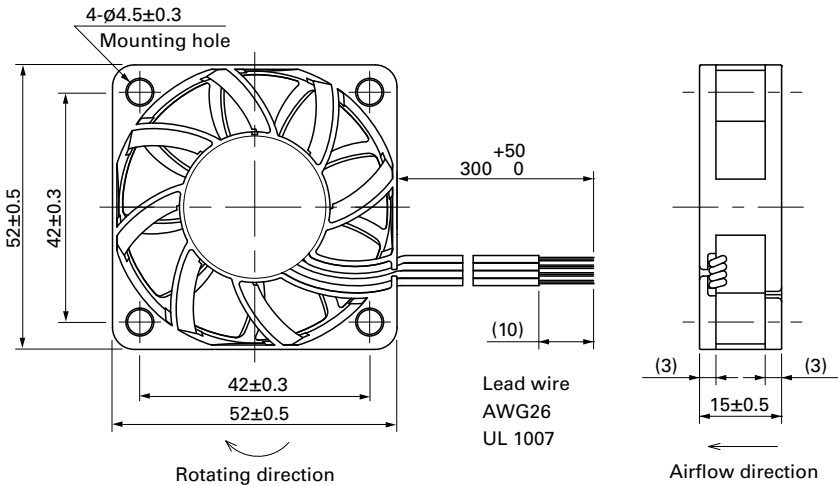


Operating voltage range

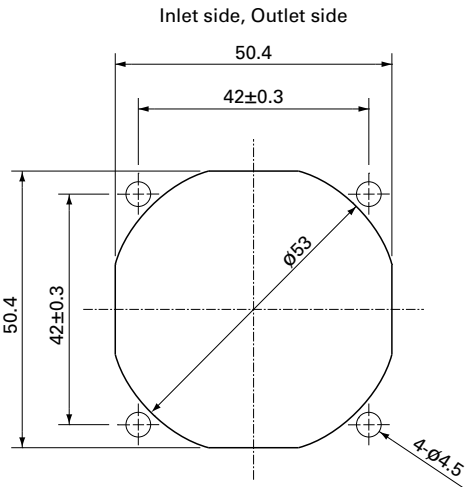


PWM duty - Speed characteristics example





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



Options

Finger guards

page: p. 598

Model no.: 109-1156

60×60×10 mm

San Ace 60 9GA type Low Power Consumption Fan 



DC Fan 60 mm sq.

General Specifications

- Material Frame: Plastic (Flammability: UL 94V-0), 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. 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
- Mass 35 g

Specifications

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

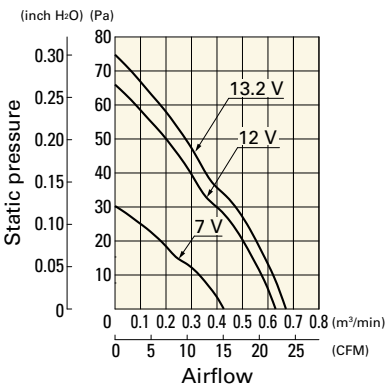
Model no.	Rated voltage [V]	Operating voltage range [V]	Rated current [A]	Rated input [W]	Rated speed [min ⁻¹]	Max. airflow [m ³ /min] [CFM]	Max. static pressure [Pa] [inchH ₂ O]	SPL [dB (A)]	Operating temperature [°C]	Expected life [h]
9GA0612G9001	12	7.0 to 13.2	0.27	3.24	6200	0.62 21.9	66 0.26	43	-20 to +60	40000/60°C (70000/40°C)
9GA0612H9001		7.0 to 13.8	0.14	1.68	5000	0.5 17.6	42.9 0.17	37	-20 to +70	
9GA0612L9001			0.03	0.36	2300	0.23 8.1	9.1 0.037	17	-10 to +70	

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

Airflow - Static Pressure Characteristics

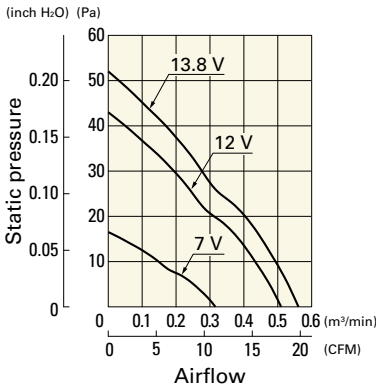
9GA0612G9001 With pulse sensor

Operating voltage range



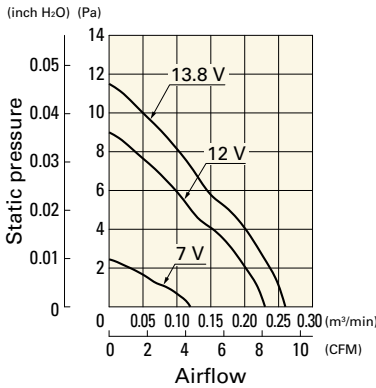
9GA0612H9001 With pulse sensor

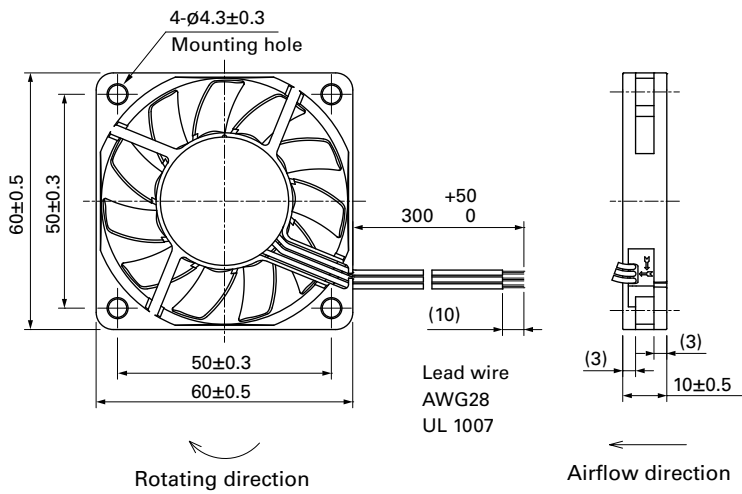
Operating voltage range



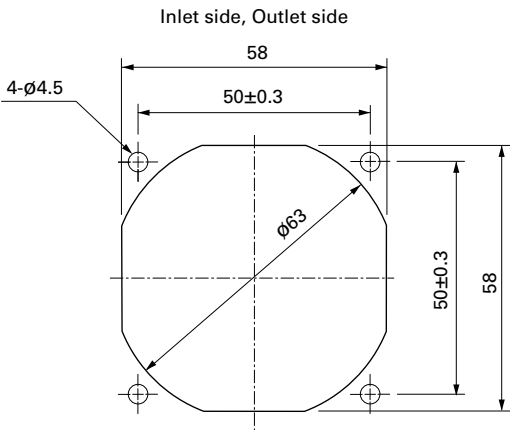
9GA0612L9001 With pulse sensor

Operating voltage range





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)

60×60×15 mm

San Ace 60 9GA type Low Power Consumption Fan 



DC Fan 60 mm sq.

General Specifications

- Material Frame: Plastic (Flammability: UL 94V-0), 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. 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 50 g

Specifications

The models listed below **have ribs and 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]
9GA0612P7G01	12	10.2 to 13.8	100	0.16	1.92	5900	0.68 24.0	80 0.32	38	-20 to +70	40000/60°C (70000/40°C)
			0	0.05	0.6	1500	0.17 6.0	5.2 0.02	10		
9GA0612P7H01			100	0.1	1.2	4900	0.56 19.7	55.6 0.223	34		
			0	0.03	0.36	1300	0.15 5.3	3.9 0.015	8		
9GA0624P7G01	24	20.4 to 27.6	100	0.08	1.92	5900	0.68 24.0	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 ribs and a pulse sensor.**

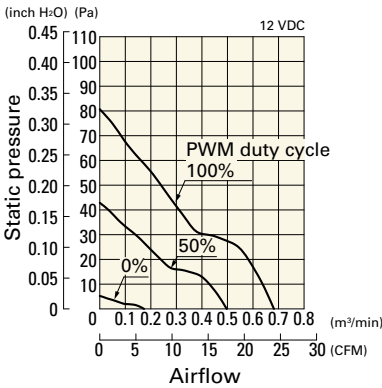
Model no.	Rated voltage [V]	Operating voltage range [V]	Rated current [A]	Rated input [W]	Rated speed [min ⁻¹]	Max. airflow [m ³ /min] [CFM]	Max. static pressure [Pa] [inchH ₂ O]	SPL [dB (A)]	Operating temperature [°C]	Expected life [h]
9GA0612G701	12	6 to 13.8	0.16	1.92	5900	0.68 24	80 0.32	38	-20 to +70	40000/60°C (70000/40°C)
9GA0612H701			0.1	1.2	4900	0.56 19.7	55.6 0.223	34		
9GA0612M701			0.08	0.96	3900	0.45 15.9	35.3 0.142	28		
9GA0612L701			0.03	0.36	2800	0.31 10.9	18 0.072	17		
9GA0612B701	24	10.2 to 13.8	0.025	0.3	2000	0.22 7.8	9.8 0.039	10	-20 to +70	40000/60°C (70000/40°C)
9GA0624M701		12 to 27.6	0.05	1.2	3900	0.45 15.9	35.3 0.142	28		
9GA0624L701		20.4 to 27.6	0.02	0.48	2800	0.31 10.9	18 0.072	17		

Note: Sensor and control options are available for selection. Refer to the table on p. 648 to 649.

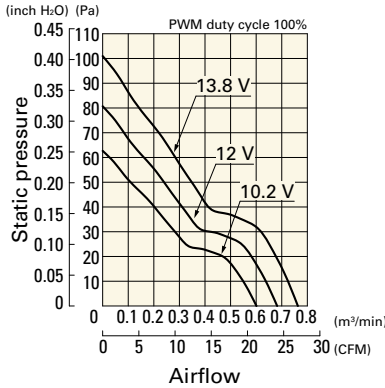
Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

9GA0612P7G01 With pulse sensor with PWM control

PWM duty cycle



Operating voltage range



PWM duty - Speed characteristics example

