

DC Fan**60×60×20 mm****San Ace 60 9GA type Low Power Consumption Fan****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. 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 \oplus Red \ominus Black [Sensor] Yellow [Control] Brown
(For models without PWM control function, there is no speed control wiring.)
- Mass 70 g

Specifications

The models listed below **have ribs and 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] [inchH₂O]	SPL [dB (A)]	Operating temperature [°C]	Expected life [h]
9GA0612P6G001	12	10.8 to 13.2	100	0.26	3.12	6850	0.88	31.1	125	0.5	43
9GA0612P6S001			100	0.15	1.8	5500	0.7	24.7	81	0.33	36
9GA0624P6G001			100	0.12	2.88	6850	0.88	31.1	125	0.5	43
9GA0624P6S001			100	0.07	1.68	5500	0.7	24.7	81	0.33	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 ribs and pulse sensors**.

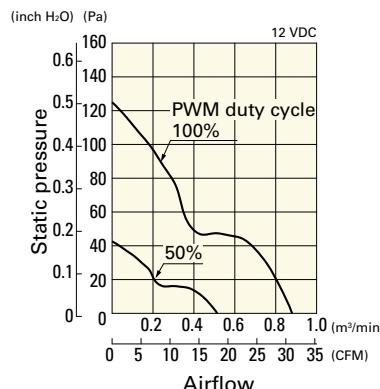
Model no.	Rated voltage [V]	Operating voltage range [V]	Rated current [A]	Rated input [W]	Rated speed [min⁻¹]	Max. airflow [m³/min] [CFM]	Max. static pressure [Pa] [inchH₂O]	SPL [dB (A)]	Operating temperature [°C]	Expected life [h]
9GA0612H6001	12	10.8 to 13.2	0.09	1.08	4100	0.52	18.4	45	0.18	29
9GA0612M6001			0.05	0.6	2700	0.34	12.0	20	0.08	18
9GA0624H6001			0.04	0.96	4100	0.52	18.4	45	0.18	29
9GA0624M6001			0.03	0.72	2700	0.34	12.0	20	0.08	18

Note 1: Sensor and control options are available for selection. Refer to the table on pp. 607 to 608.

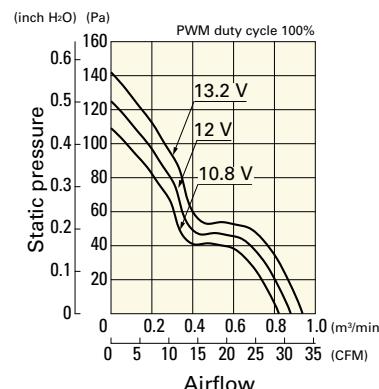
Note 2: The mark indicates Short LeadTime Service applicable models. See p. 630 for details.

Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example**9GA0612P6G001** With pulse sensor with PWM control function

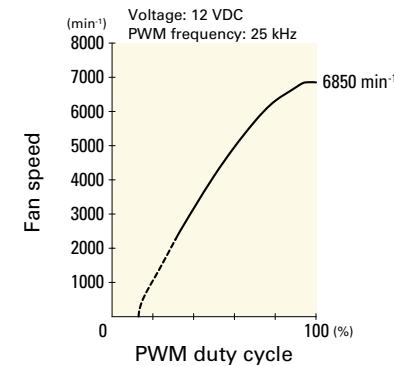
PWM duty cycle



Operating voltage range



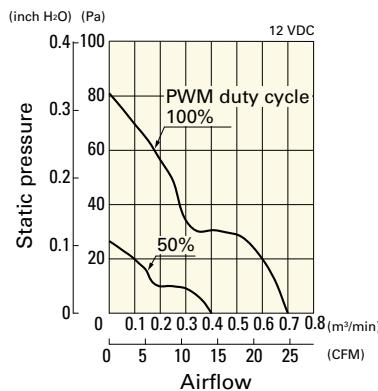
PWM duty - Speed characteristics example



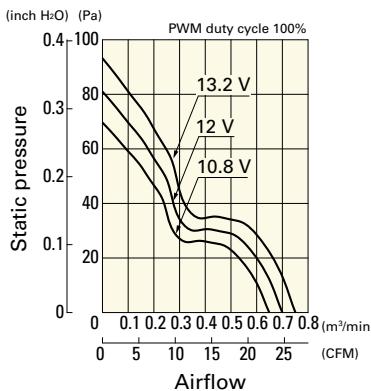
Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

9GA0612P6S001 With pulse sensor with PWM control function

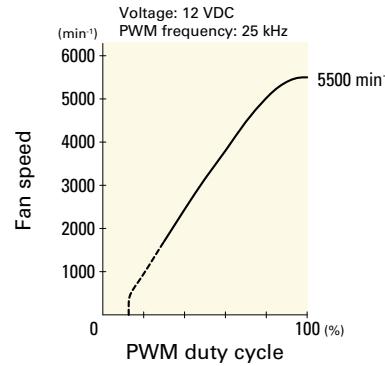
PWM duty cycle



Operating voltage range

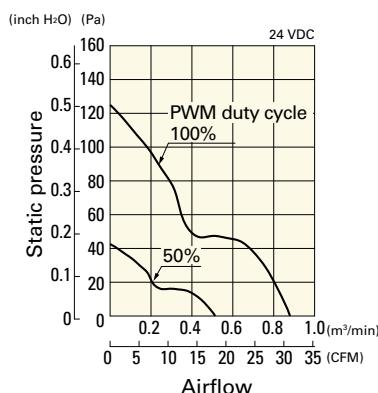


PWM duty - Speed characteristics example

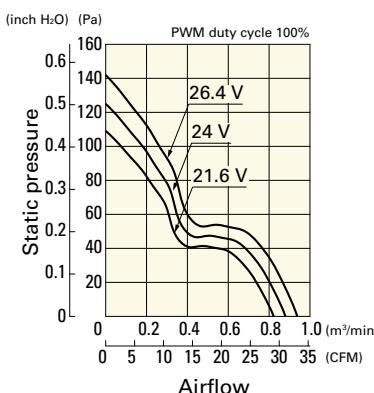


9GA0624P6G001 With pulse sensor with PWM control function

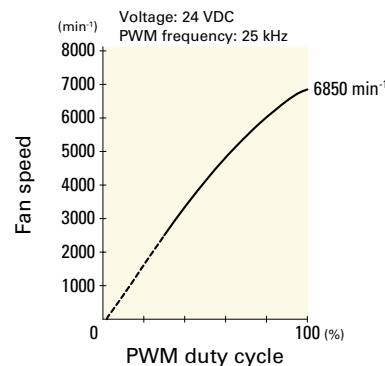
PWM duty cycle



Operating voltage range

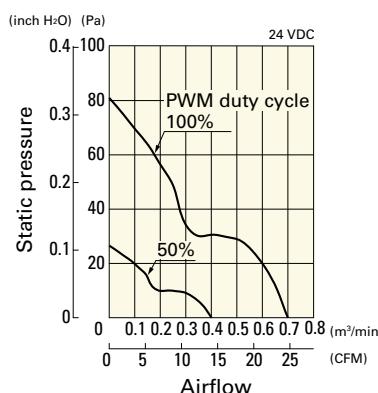


PWM duty - Speed characteristics example

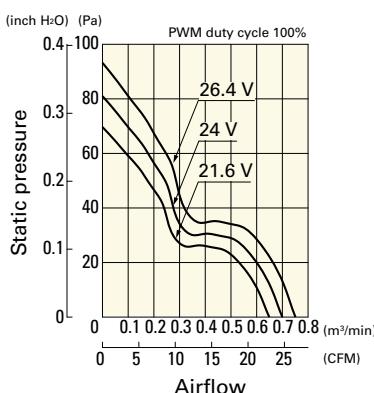


9GA0624P6S001 With pulse sensor with PWM control function

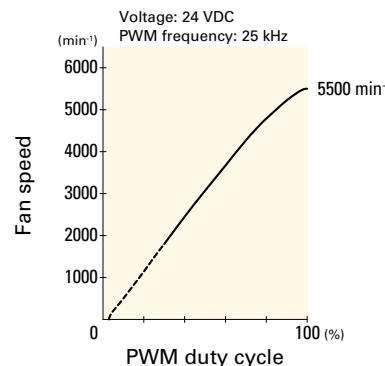
PWM duty cycle



Operating voltage range



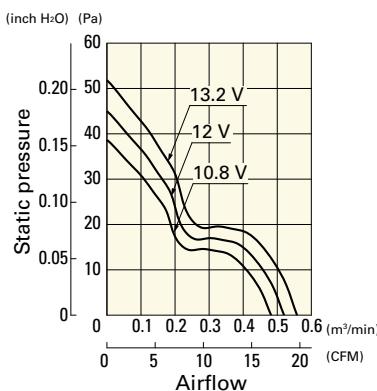
PWM duty - Speed characteristics example



Airflow - Static Pressure Characteristics

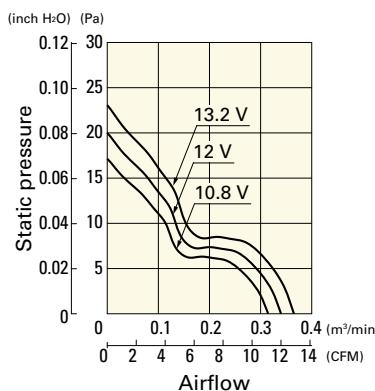
9GA0612H6001 With pulse sensor

Operating voltage range



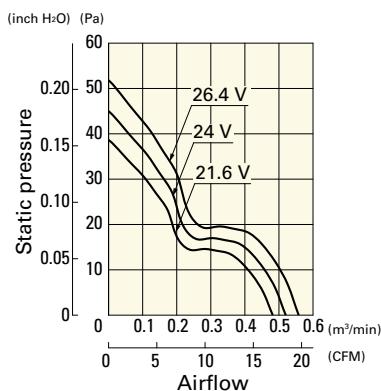
9GA0612M6001 With pulse sensor

Operating voltage range



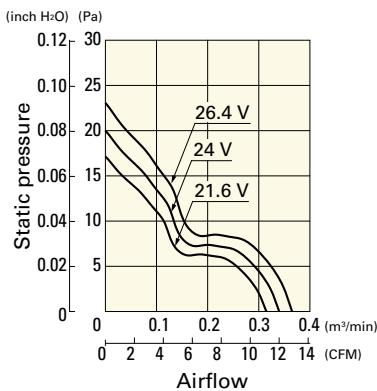
9GA0624H6001 With pulse sensor

Operating voltage range

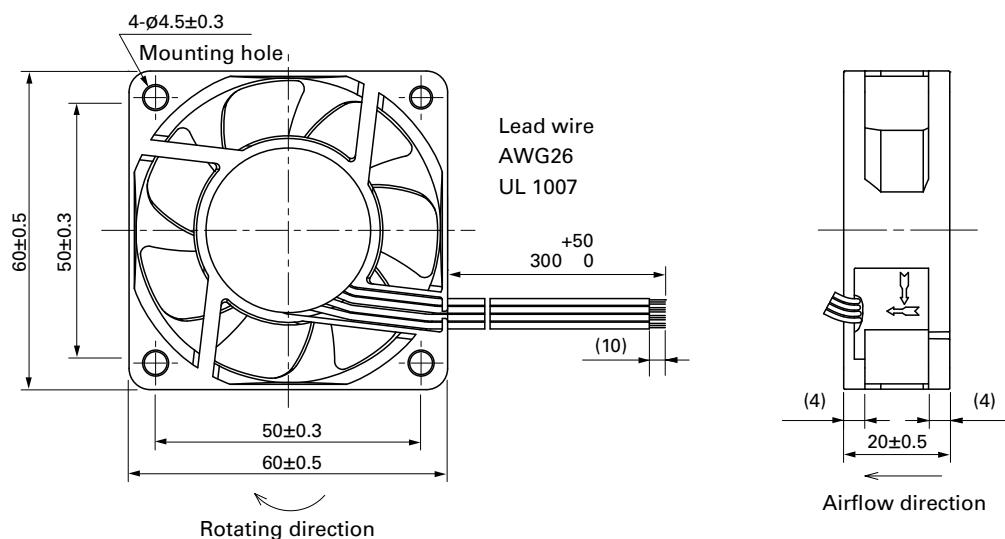


9GA0624M6001 With pulse sensor

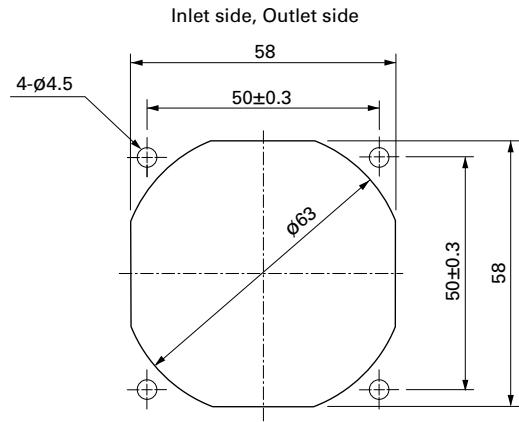
Operating voltage range



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. 564

Model no.: 109-139E, 109-139H

Resin finger guards

page: p. 571

Model no.: 109-1003G

Resin filter kits

page: p. 572

Model no.: 109-1003F13 (13PPI), 109-1003F20 (20PPI),
109-1003F30 (30PPI), 109-1003F40 (40PPI)