

DC Fan

# 38x38x28 mm



**San Ace 38 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. 608.
- 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 ..... 52 g

## Specifications

The models listed below **have ribs and a pulse sensor with PWM control**. For models without ribs, append "1" to the end of model numbers.

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]
9GA0312P3K001	12	10.8 to 13.2	100	0.62	7.4	25000	0.6 21.2	800 3.21	59.0	-20 to +70	40000/60°C (70000/40°C)
			0	0.06	0.7	3000	0.07 2.5	11 0.04	15.0		
9GA0312P3J001			100	0.52	6.2	23500	0.57 20.1	720 2.89	57.5		
			0	0.06	0.7	3000	0.07 2.5	11 0.04	15.0		
9GA0312P3G001			100	0.33	4.0	19000	0.45 15.9	460 1.85	53.0		
			0	0.06	0.7	3000	0.07 2.5	11 0.04	15.0		

\* 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.

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9GA0312E3001	12	10.8 to 13.2	0.18	2.16	14000	0.34 12.0	250 1.0	47	-20 to +70	60000/60°C (90000/40°C)
9GA0312H3001			0.09	1.08	9200	0.22 7.77	108 0.43	37		

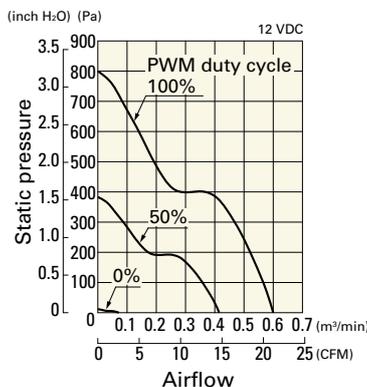
Note 1: Sensor and control options are available for selection. Refer to the table on p. 637.

Note 2: The mark indicates Short LeadTime Service applicable models. See p. 664 for details.

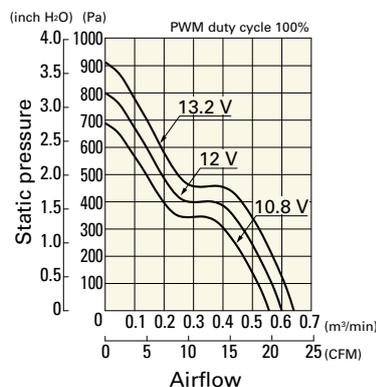
## Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

**9GA0312P3K001** With pulse sensor with PWM control

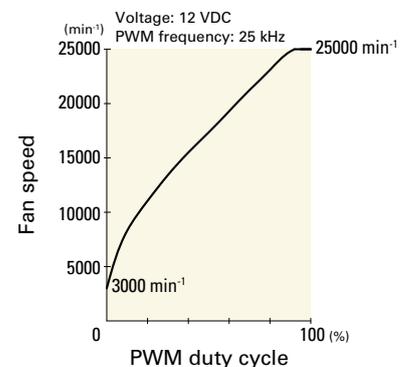
PWM duty cycle



Operating voltage range



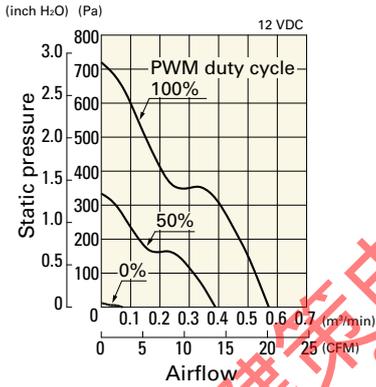
PWM duty - Speed characteristics example



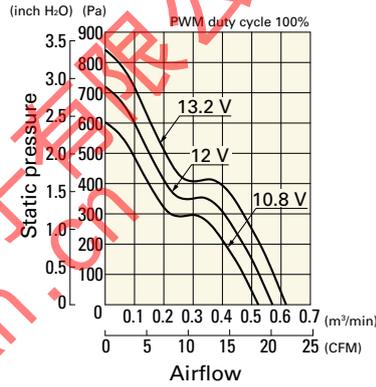
**Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example**

**9GA0312P3J001** With pulse sensor with PWM control

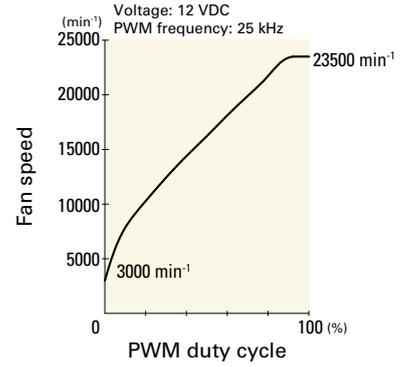
PWM duty cycle



Operating voltage range

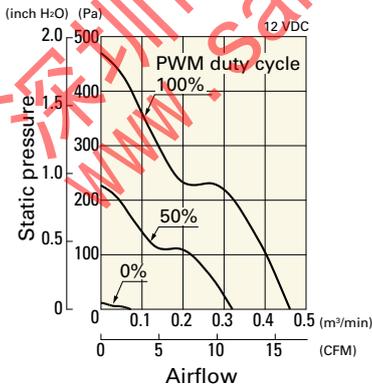


PWM duty - Speed characteristics example

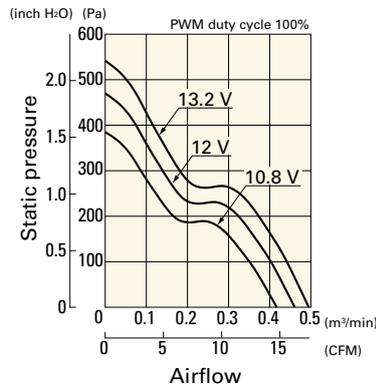


**9GA0312P3G001** With pulse sensor with PWM control

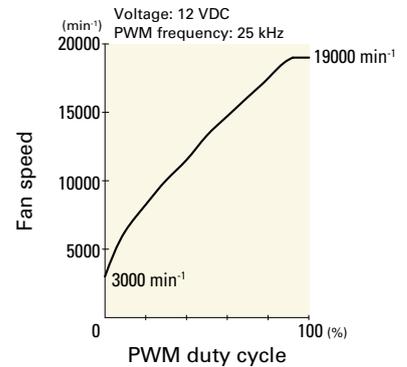
PWM duty cycle



Operating voltage range



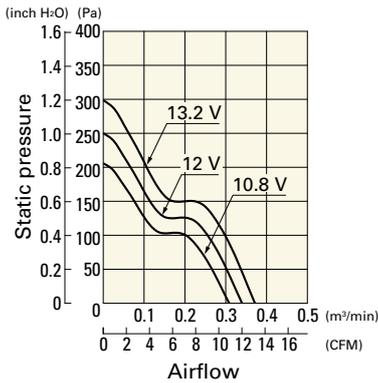
PWM duty - Speed characteristics example



**Airflow - Static Pressure Characteristics**

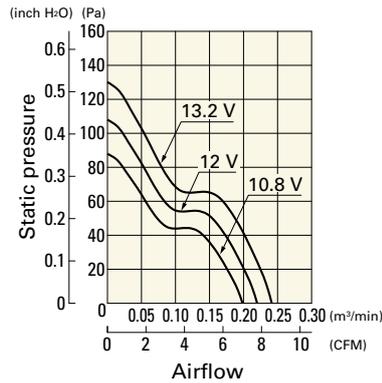
**9GA0312E3001** With pulse sensor

Operating voltage range

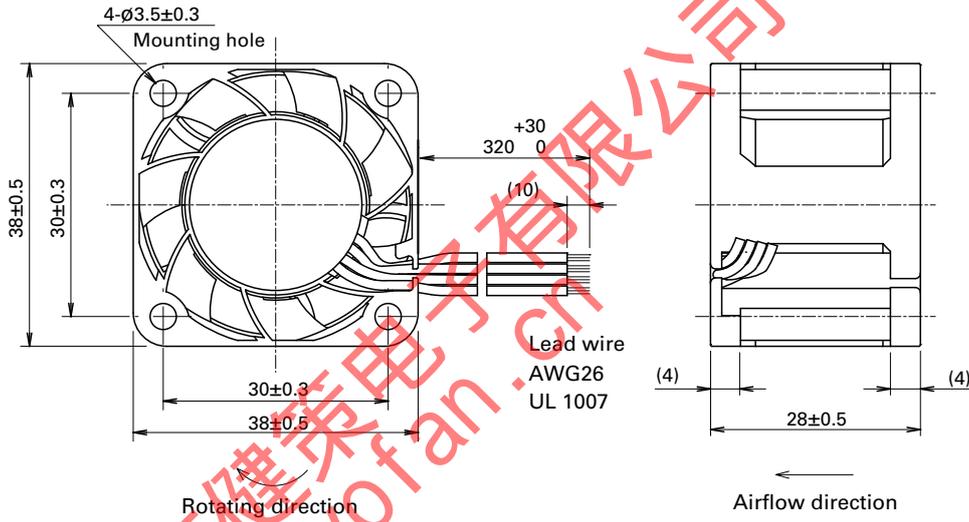


**9GA0312H3001** With pulse sensor

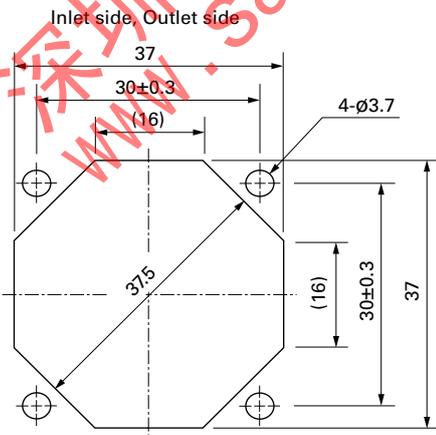
Operating voltage range



**Dimensions (unit: mm)** (Ribbed frame with pulse sensor with PWM control)



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



**Options**

Finger guards

page: p. 590

Model no.: 109-1065