

DC Fan



# 92x92x25 mm

**San Ace 92 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. 599.
- Dielectric strength ..... 50/60 Hz, 500 VAC, for 1 minute (between lead wire conductors and frame)
- Insulation resistance ..... 10 MΩ or more with a 500 VDC megger (between lead wire conductors and frame)
- 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 function, there is no speed control wiring.)
- Mass ..... 125 g

## Specifications

The models listed below **have ribs and pulse sensors with PWM control function.** 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]		
» 9GA0912P4J03	12	10.2 to 13.8	100	0.39	4.68	5000	2.2 77.7	105 0.42	43	-20 to +70	60000/60°C (90000/40°C)		
» 9GA0912P4G03			0	0.06	0.72	1500	0.65 23.3	9.4 0.04	14				
» 9GA0912P4S03			100	0.28	3.36	4400	1.93 68.2	81 0.33	39				
» 9GA0912P4S03			0	0.06	0.72	1500	0.65 23.3	9.4 0.04	14				
» 9GA0924P4J03			24	20.4 to 27.6	100	0.2	2.4	3800	1.67 59.0			60.6 0.24	35
» 9GA0924P4J03					0	0.06	0.72	1500	0.65 23.3			9.4 0.04	14
» 9GA0924P4G03	100	0.15			3.6	4400	1.93 68.2	81 0.33	39				
» 9GA0924P4G03	0	0.04			0.96	1500	0.65 23.3	9.4 0.04	14				
» 9GA0924P4S03	100	0.12			2.88	3800	1.67 59.0	60.6 0.24	35				
» 9GA0924P4S03	0	0.04			0.96	1500	0.65 23.3	9.4 0.04	14				

\* PWM input frequency is 25 kHz; models without specifications at 0% PWM duty cycle have zero fan speed at 0%.

The models listed below **have ribs and pulse sensors.** For models without ribs, append "1" to the end of model numbers.

Model no.	Rated voltage [V]	Operating voltage range [V]	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]
» 9GA0912H401	12	10.2 to 13.8	0.19	2.28	3300	1.45 51.2	45.6 0.18	31	-20 to +70	60000/60°C (90000/40°C)
» 9GA0912W401		7 to 16	0.19	2.28	3300	1.45 51.2	45.6 0.18	31		
» 9GA0912F401		10.2 to 13.8	0.14	1.68	2800	1.23 43.5	32.9 0.13	28		
» 9GA0912M401			0.11	1.32	2400	1.05 37.1	24 0.096	24		
» 9GA0912L401			0.09	1.08	2000	0.87 30.7	16.7 0.067	21		
» 9GA0924H401			24	20.4 to 27.6	0.09	2.16	3300	1.45 51.2		
» 9GA0924W401	12 to 28.8	0.09		2.16	3300	1.45 51.2	45.6 0.18	31		
» 9GA0924F401	16 to 27.6	0.08		1.92	2800	1.23 43.5	32.9 0.13	28		
» 9GA0924M401	14 to 27.6	0.05		1.2	2400	1.05 37.1	24 0.096	24		
» 9GA0924L401		0.03		0.72	2000	0.87 30.7	16.7 0.067	21		

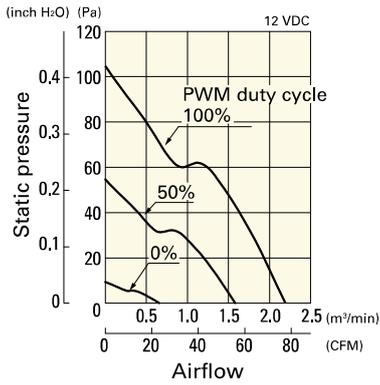
Note 1: Sensor and control options are available for selection. Refer to the table on pp. 630 to 631.

Note 2: The » mark indicates Short LeadTime Service applicable models. See p. 654 for details.

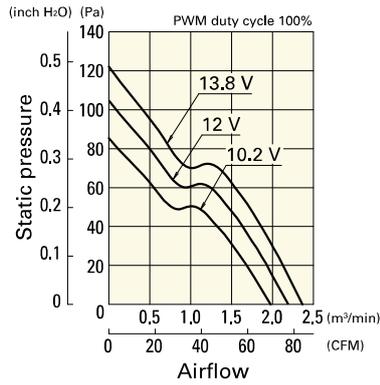
# Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

**9GA0912P4J03** With pulse sensor with PWM control function

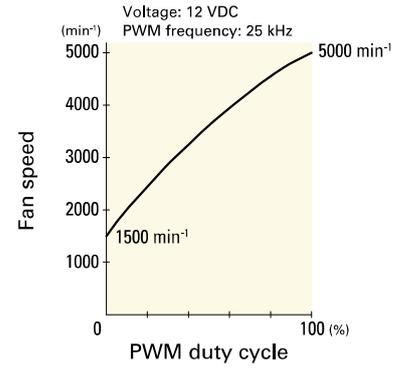
PWM duty cycle



Operating voltage range

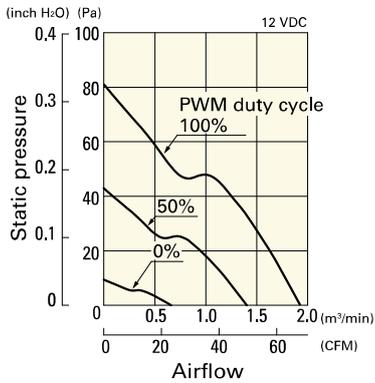


PWM duty - Speed characteristics example

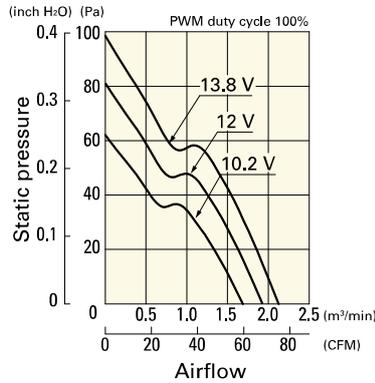


**9GA0912P4G03** With pulse sensor with PWM control function

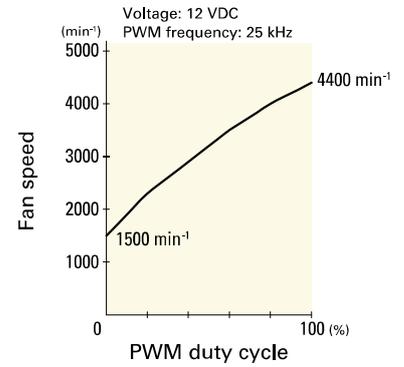
PWM duty cycle



Operating voltage range

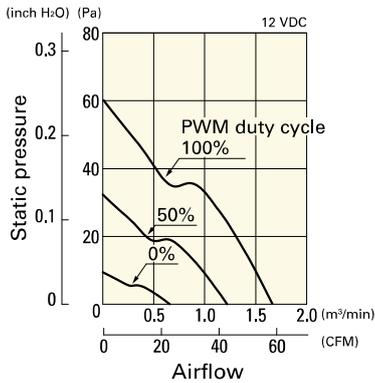


PWM duty - Speed characteristics example

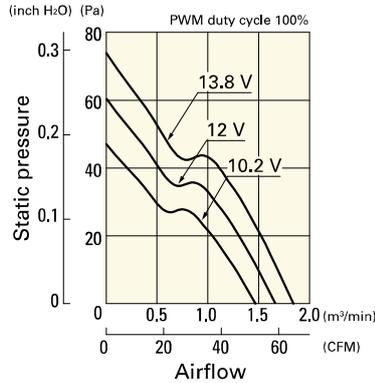


**9GA0912P4S03** With pulse sensor with PWM control function

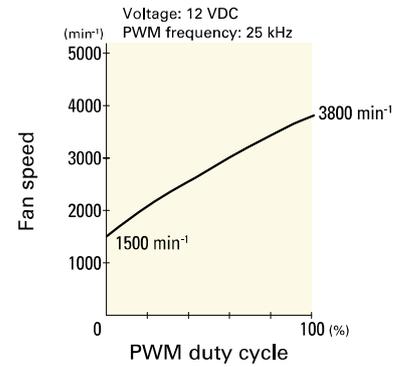
PWM duty cycle



Operating voltage range

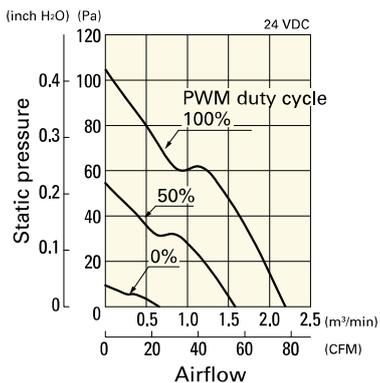


PWM duty - Speed characteristics example

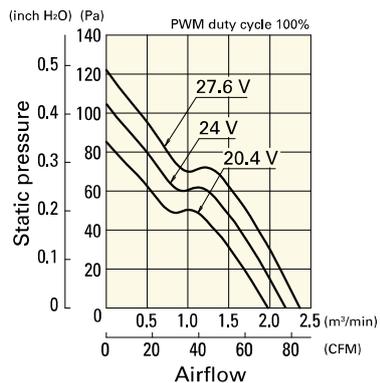


**9GA0924P4J03** With pulse sensor with PWM control function

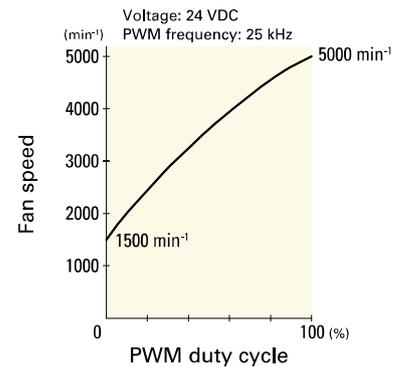
PWM duty cycle



Operating voltage range



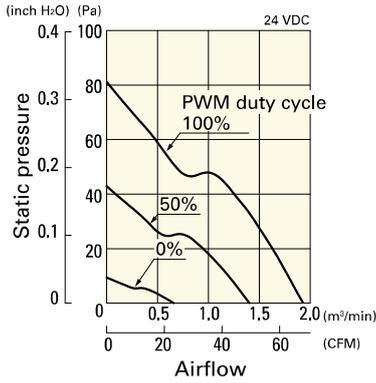
PWM duty - Speed characteristics example



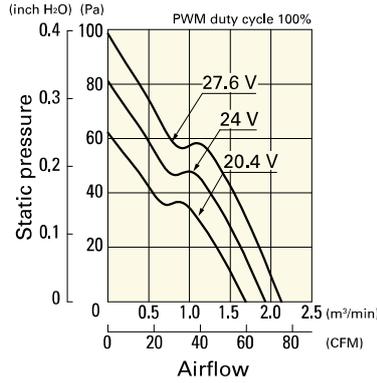
**Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example**

**9GA0924P4G03** With pulse sensor with PWM control function

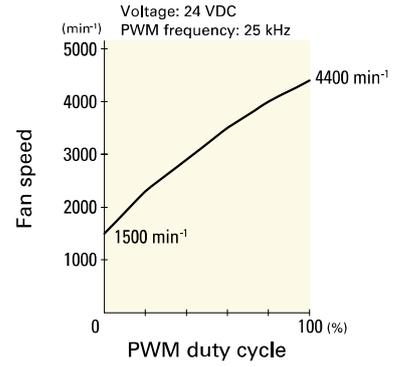
PWM duty cycle



Operating voltage range

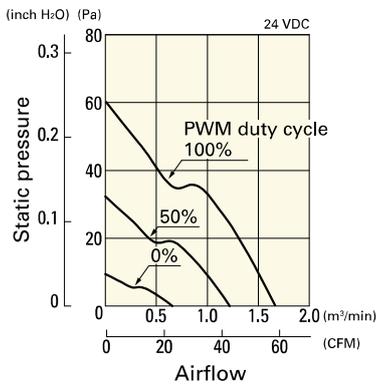


PWM duty - Speed characteristics example

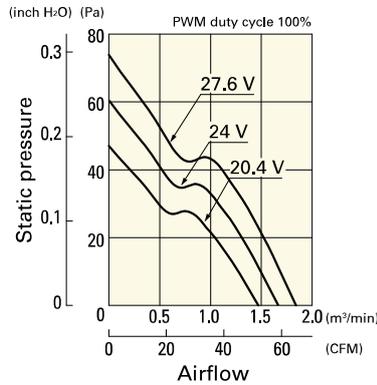


**9GA0924P4S03** With pulse sensor with PWM control function

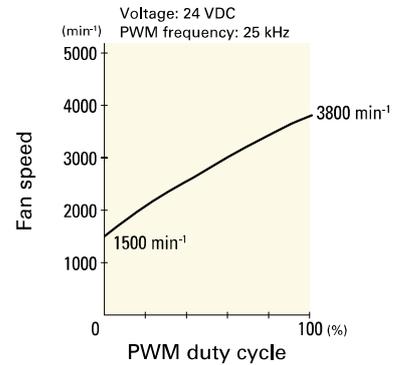
PWM duty cycle



Operating voltage range



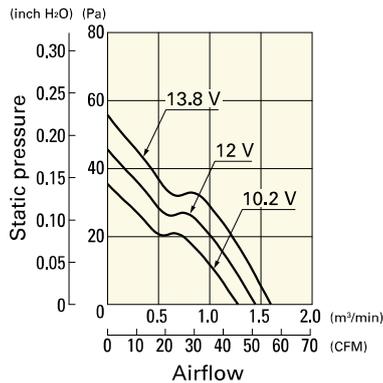
PWM duty - Speed characteristics example



**Airflow - Static Pressure Characteristics**

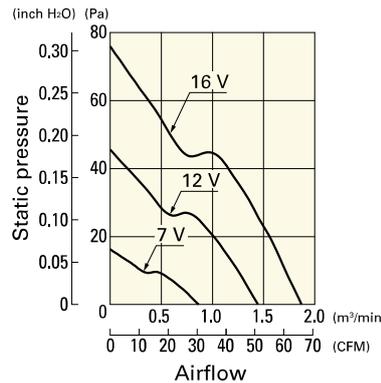
**9GA0912H401** With pulse sensor

Operating voltage range



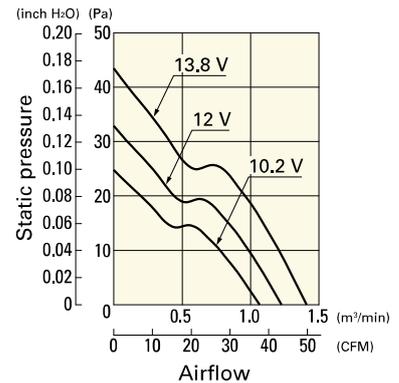
**9GA0912W401** With pulse sensor

Operating voltage range



**9GA0912F401** With pulse sensor

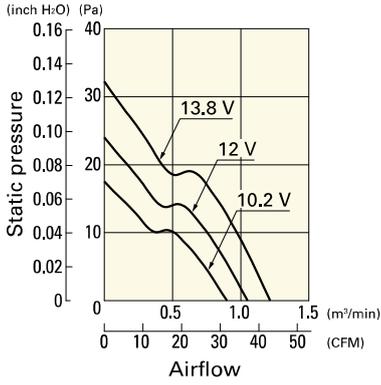
Operating voltage range



**Airflow - Static Pressure Characteristics**

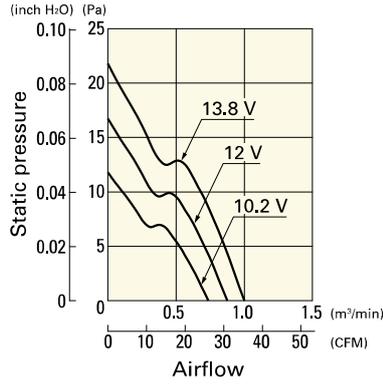
**9GA0912M401** With pulse sensor

Operating voltage range



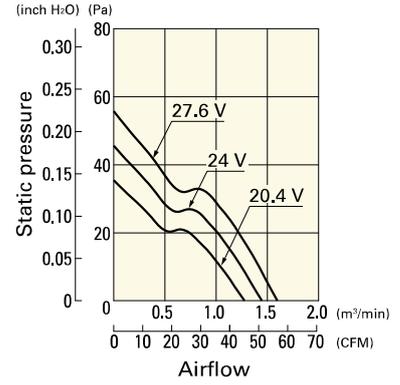
**9GA0912L401** With pulse sensor

Operating voltage range



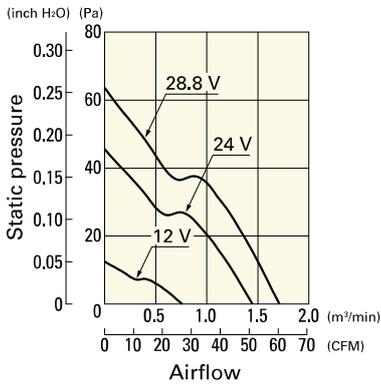
**9GA0924H401** With pulse sensor

Operating voltage range



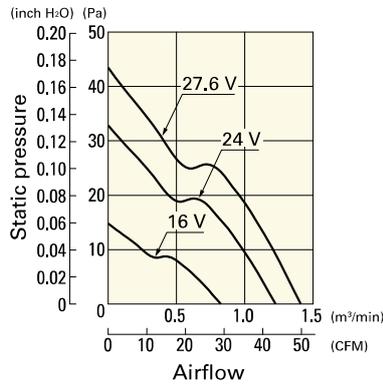
**9GA0924W401** With pulse sensor

Operating voltage range



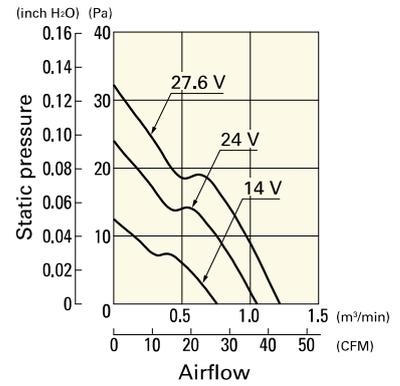
**9GA0924F401** With pulse sensor

Operating voltage range



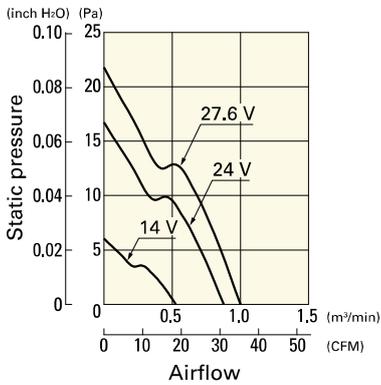
**9GA0924M401** With pulse sensor

Operating voltage range

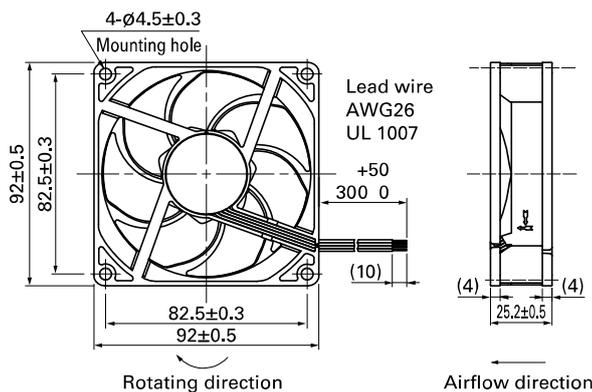


**9GA0924L401** With pulse sensor

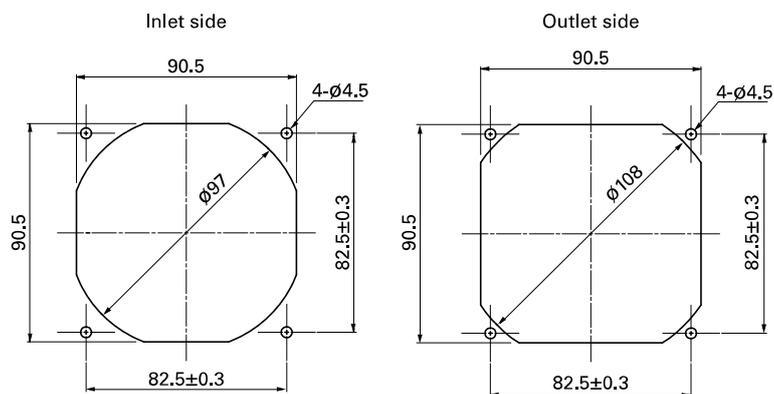
Operating voltage range



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



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



## Options

### Finger guards

page: p. 584

Model no.: 109-099E, 109-099H, 109-099C

### Resin finger guards

page: p. 591

Model no.: 109-1001G

### Resin filter kits

page: p. 592

Model no.: 109-1001F13 (13PPI), 109-1001F20 (20PPI),  
109-1001F30 (30PPI), 109-1001F40 (40PPI)