80×80×32 mm

San Ace 80 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. 573.
- 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 ..... 130 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⁻¹]	Max. airflow [m³/min]	Max. airflow [CFM]	Max. static pressure [Pa]	Max. static pressure [inchH₂O]	SPL [dB (A)]	Operating temperature [˚C]	Expected life [h]
9GA0812P2S001	12	10.2 to 13.8	100	0.83	9.96	9700	2.45	86.5	360	1.45	57	-20 to +70	40000/60˚C (70000/40˚C)
			0	0.08	0.96	2800	0.71	25.1	30	0.12	24		
9GA0812P2H001			100	0.59	7.08	8700	2.2	77.7	294	1.18	54		
			0	0.05	0.6	2600	0.66	23.3	26	0.105	21		
9GA0812P2M001		10.2 to 12.6	100	0.35	4.2	6700	1.69	59.6	171	0.68	47	-20 to +55	
			0	0.04	0.48	1400	0.35	12.3	7.5	0.03	10		
9GA0824P2S001	24	20.4 to 27.6	100	0.42	10.1	9700	2.45	86.5	360	1.45	57	-20 to +70	
			0	0.05	1.2	2800	0.71	25.1	30	0.12	24		
9GA0848P2S001	48	40.8 to 55.2	100	0.22	10.56	9700	2.45	86.5	360	1.45	57	-10 to +70	
			0	0.04	1.92	2800	0.71	25.1	30	0.12	24		

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

The following sensor and control options are available for selection.

Differs according to the model. Refer to the table on pp. 603 to 604. Without sensor Pulse sensor

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⁻¹]	Max. airflow [m³/min]	Max. airflow [CFM]	Max. static pressure [Pa]	Max. static pressure [inchH₂O]	SPL [dB (A)]	Operating temperature [˚C]	Expected life [h]
9GA0812A2001	12	6 to 13.2	0.31	3.72	6000	1.51	53.4	137.7	0.55	44	-20 to +70	40000/60˚C (70000/40˚C)
9GA0812B2001		6 to 13.8	0.13	1.56	4000	1.01	35.7	61.2	0.25	33		
9GA0812L2001		7 to 13.8	0.08	0.96	2600	0.66	23.3	26	0.1	21		
9GA0824A2001	24	12 to 26.4	0.15	3.6	6000	1.51	53.4	137.7	0.55	44		
9GA0824B2001		12 to 27.6	0.08	1.92	4000	1.01	35.7	61.2	0.25	33		
9GA0824L2001		14 to 27.6	0.05	1.2	2600	0.66	23.3	26	0.1	21		

The following sensor and control options are available for selection.

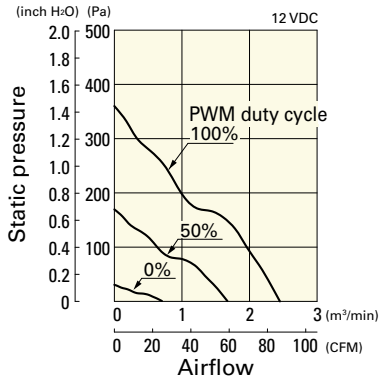
Available for all models. Without sensor Lock sensor

The mark indicates Short Lead Time Service applicable models. See p. 626 for details.

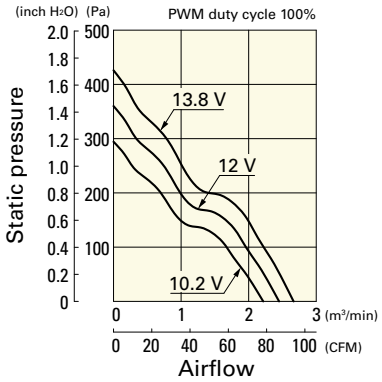
Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

9GA0812P2S001 With pulse sensor with PWM control function

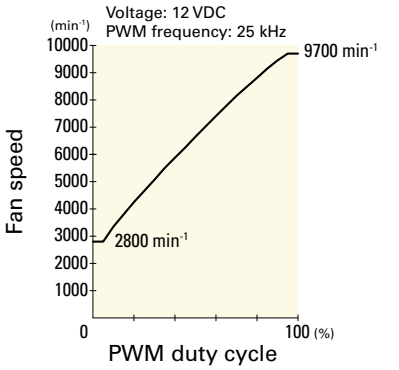
PWM duty cycle



Operating voltage range

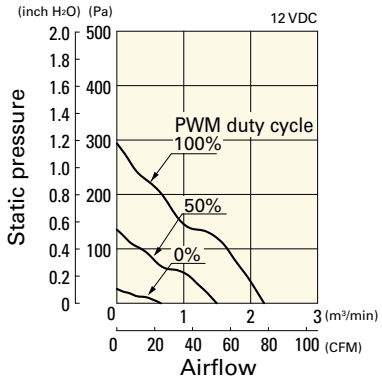


PWM duty - Speed characteristics example

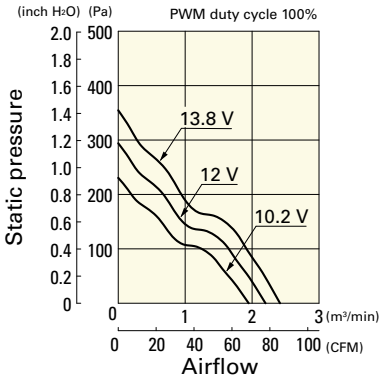


9GA0812P2H001 With pulse sensor with PWM control function

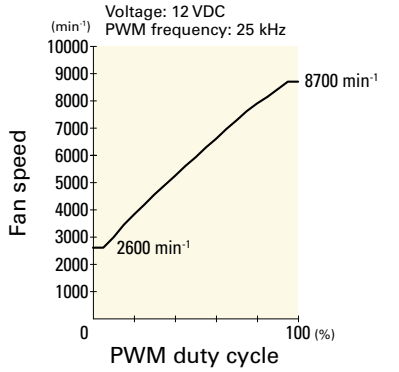
PWM duty cycle



Operating voltage range

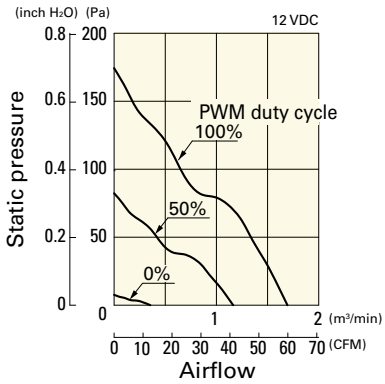


PWM duty - Speed characteristics example

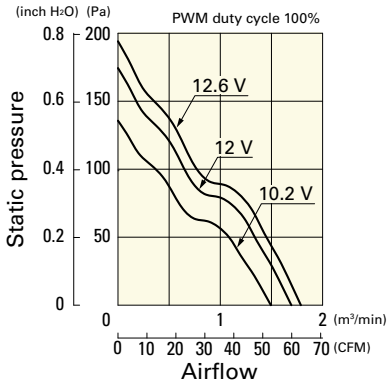


9GA0812P2M001 With pulse sensor with PWM control function

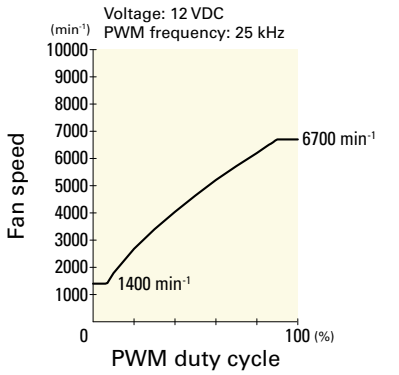
PWM duty cycle



Operating voltage range

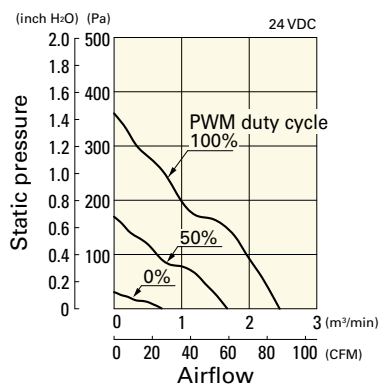


PWM duty - Speed characteristics example

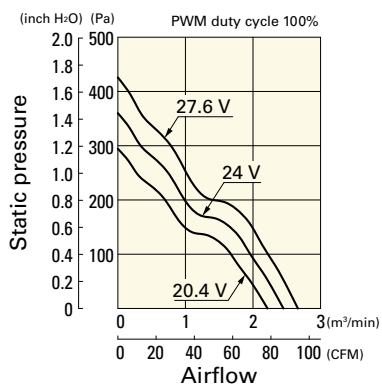


9GA0824P2S001 With pulse sensor with PWM control function

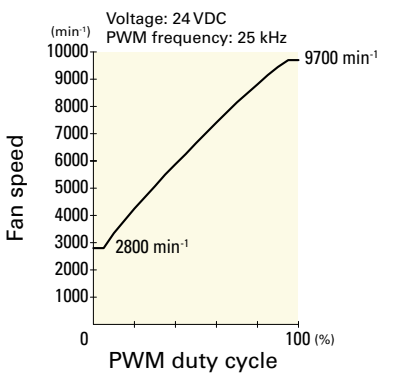
PWM duty cycle



Operating voltage range



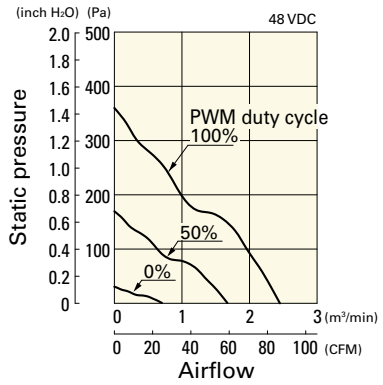
PWM duty - Speed characteristics example



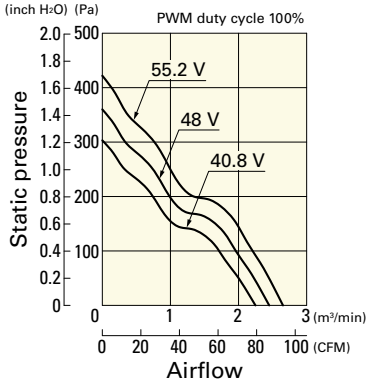
Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

9GA0848P2S001 With pulse sensor with PWM control function

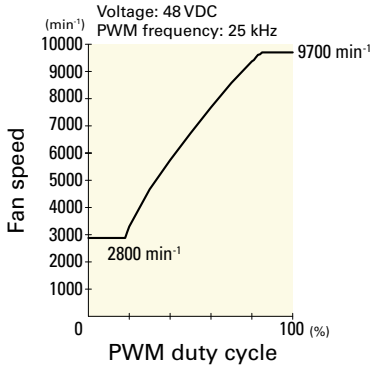
PWM duty cycle



Operating voltage range



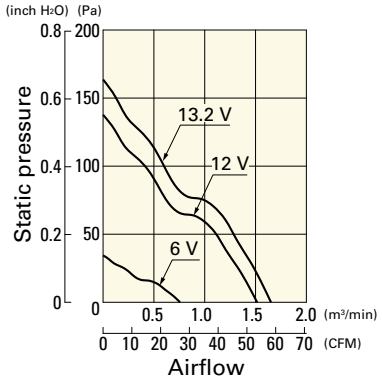
PWM duty - Speed characteristics example



Airflow - Static Pressure Characteristics

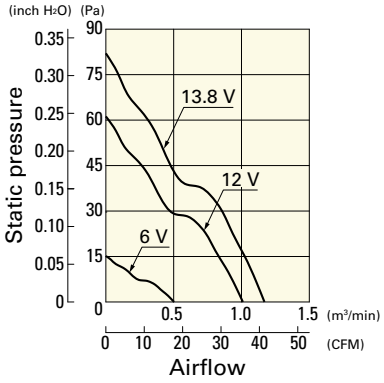
9GA0812A2001 With pulse sensor

Operating voltage range



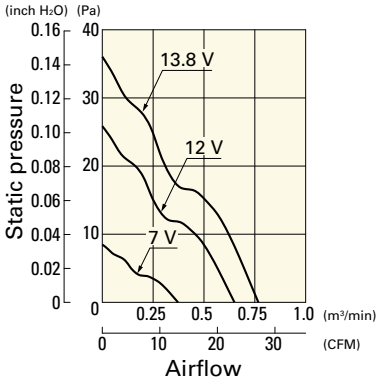
9GA0812B2001 With pulse sensor

Operating voltage range



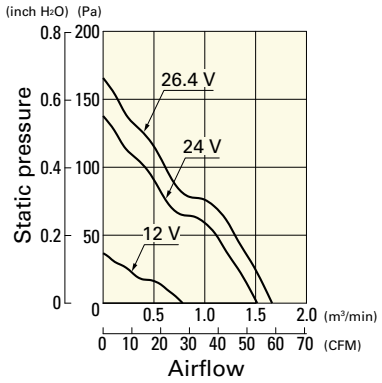
9GA0812L2001 With pulse sensor

Operating voltage range



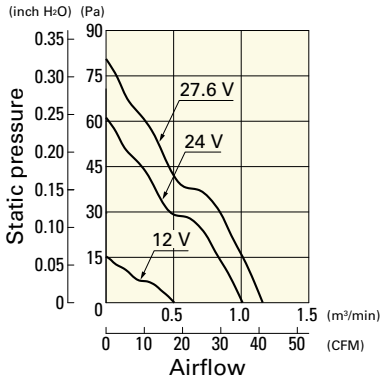
9GA0824A2001 With pulse sensor

Operating voltage range



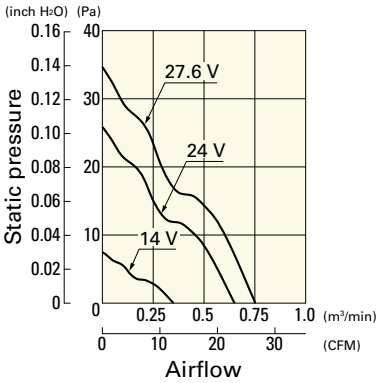
9GA0824B2001 With pulse sensor

Operating voltage range

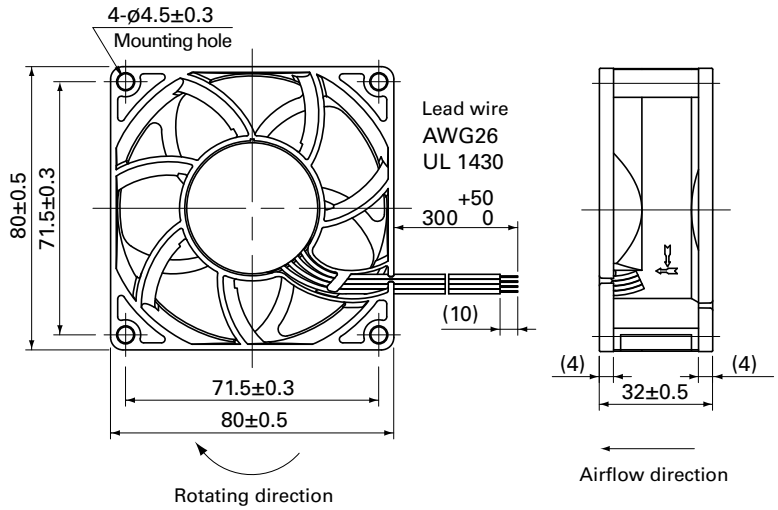


9GA0824L2001 With pulse sensor

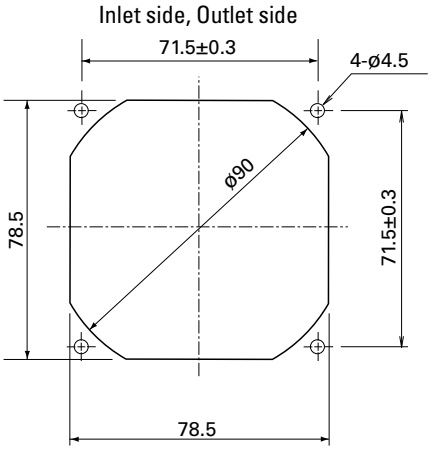
Operating voltage range



Dimensions (unit: mm) (With ribs)



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



Options

Finger guards page: p. 558

Model no.: 109-049E, 109-049H, 109-049C

Resin filter kits page: p. 566

Model no.: 109-1002F13 (13PPI), 109-1002F20 (20PPI),
109-1002F30 (30PPI), 109-1002F40 (40PPI)

Resin finger guards page: p. 565

Model no.: 109-1002G