



80×80×80 mm

San Ace 80 9CRA type

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 Inlet ⊕Red ⊖Black (Sensor) Yellow (Control) Brown
Outlet ⊕Orange ⊖Gray (Sensor) Purple (Control) White
- Mass 450 g

Specifications

The models listed below **have 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]
9CRA0812P8G001	12	10.8 to 13.2	100	5.3	63.6	12000 11300	4.5 158.9	1150 4.62	76	-20 to +70	40000/60°C (70000/40°C)
			0	0.2	2.4	2000 1900	0.74 26.1	31.9 0.13	30		
9CRA0812P8H001			100	3.3	39.6	10000 9400	3.75 133.9	798 3.21	72		
			0	0.2	2.4	2000 1900	0.74 26.1	31.9 0.13	30		
9CRA0824P8G001	24	21.6 to 26.4	100	2.65	63.6	12000 11300	4.5 158.9	1150 4.62	76		
			0	0.09	2.16	2000 1900	0.74 26.1	31.9 0.13	30		
9CRA0848P8G001	48	40.8 to 55.2	100	1.32	63.4	12000 11300	4.5 158.9	1150 4.62	76		
			0	0.29	13.9	5000 4700	1.88 66.2	200 0.8	52		

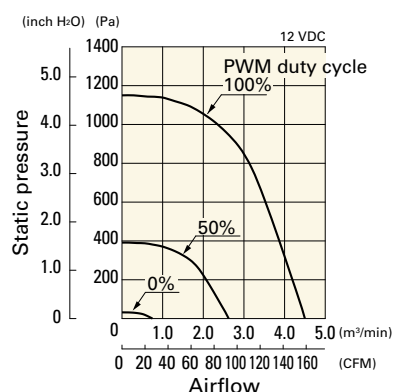
* PWM frequency is 25 kHz. Models without ratings for 0% PWM duty cycle have zero speed at 0%. When control terminal is open, speed is the same as at 100% duty cycle.

Note: Sensor and control options are available for selection. Refer to the table on p. 646.

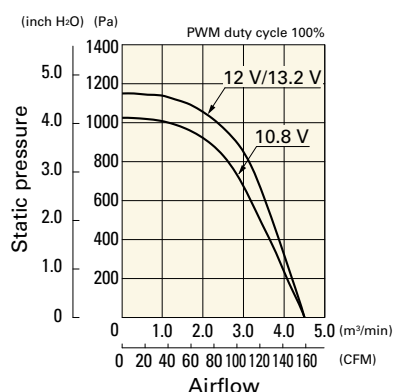
Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

9CRA0812P8G001 With pulse sensor with PWM control

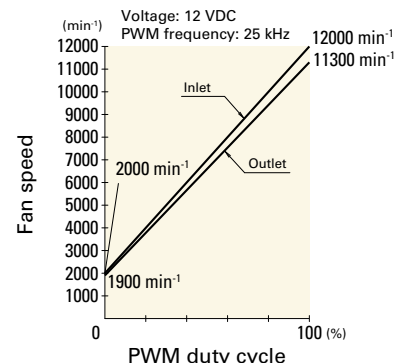
PWM duty cycle



Operating voltage range



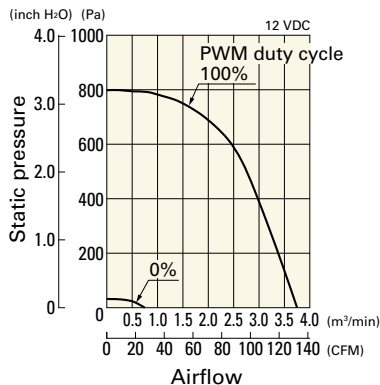
PWM duty - Speed characteristics example



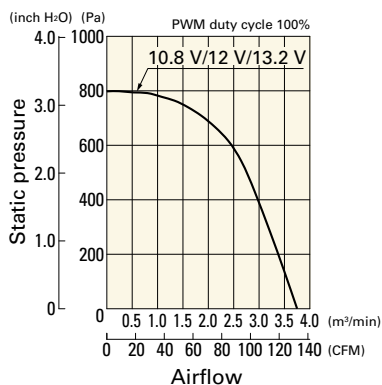
Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

9CRA0812P8H001 With pulse sensor with PWM control

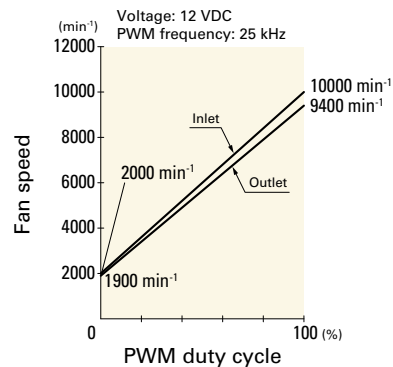
PWM duty cycle



Operating voltage range

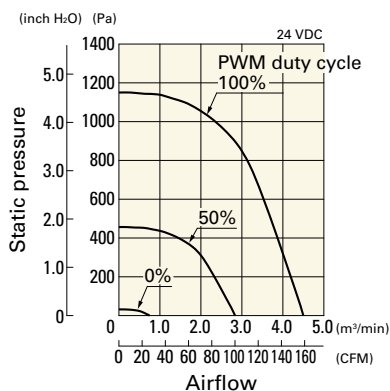


PWM duty - Speed characteristics example

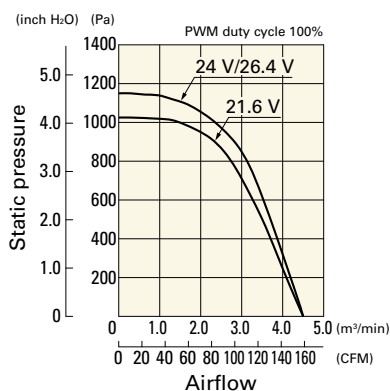


9CRA0824P8G001 With pulse sensor with PWM control

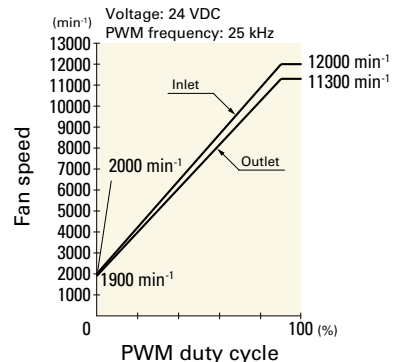
PWM duty cycle



Operating voltage range

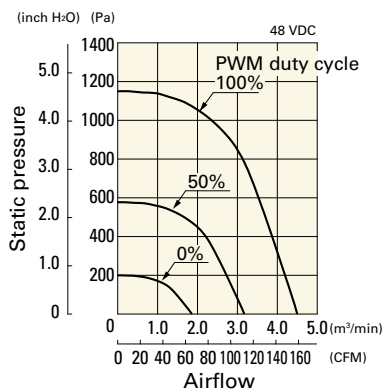


PWM duty - Speed characteristics example

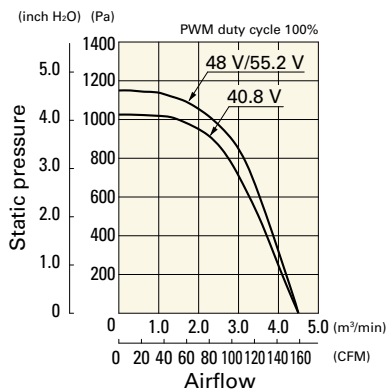


9CRA0848P8G001 With pulse sensor with PWM control

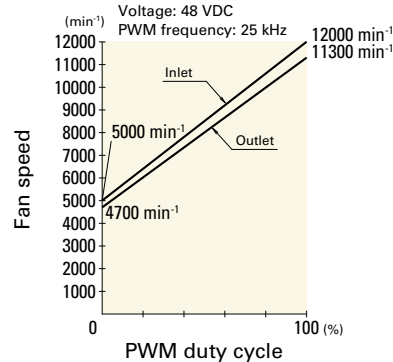
PWM duty cycle



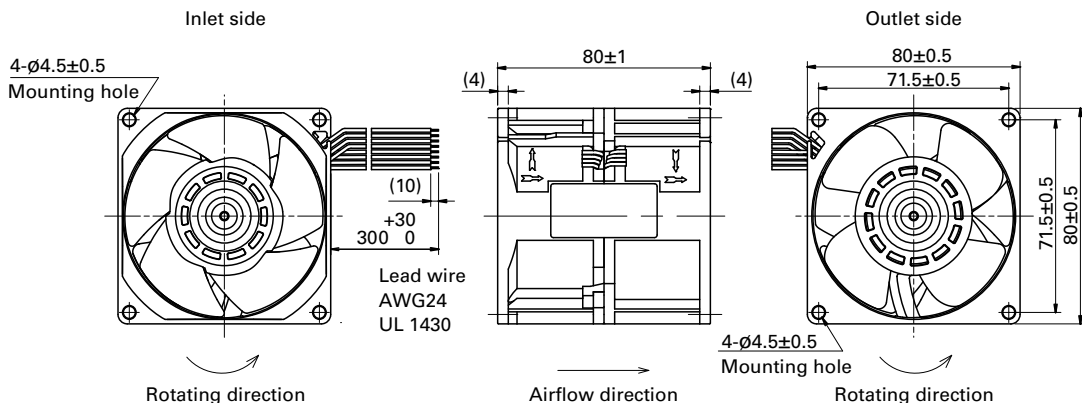
Operating voltage range



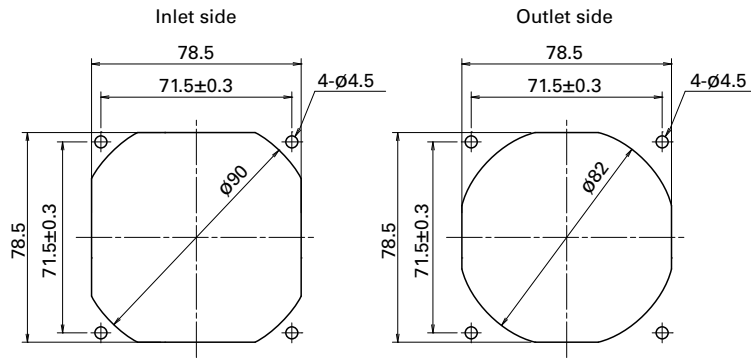
PWM duty - Speed characteristics example



Dimensions (unit: mm)



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



Options

Finger guards

page: p. 598

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

Resin finger guards

page: p. 605

Model no.: 109-1002G

Resin filter kits

page: p. 606

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