

Counter Rotating Fan

40×40×48 mm

San Ace 40 9CRA type



General Specifications

- Material Frame: Plastic (Flammability: UL 94V-0), Impeller: Plastic (Flammability: UL 94V-1)
- 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 Inlet ⊕Red ⊖Black (Sensor) Yellow (Control) Brown
Outlet ⊕Orange ⊖Gray (Sensor) Purple (Control) White
- Mass 80 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]
9CRA0412P4K03	12	10.8 to 13.2	100	1.6	19.2	17500 11700	0.92 32.5	650.0 2.61	64	-20 to +70	40000/60°C (70000/40°C)
			0	0.19	2.28	5250 3510	0.276 9.75	58.5 0.235	33		
9CRA0412P4J03			100	1.2	14.4	16200 10800	0.85 30.0	560.0 2.25	62		
			0	0.15	1.8	4500 3000	0.236 8.33	43.2 0.173	28		
9CRA0412P4G03			100	1.0	12.0	14700 9800	0.77 27.2	460.0 1.85	59		
			0	0.15	1.8	4410 2940	0.231 8.16	41.4 0.166	28		

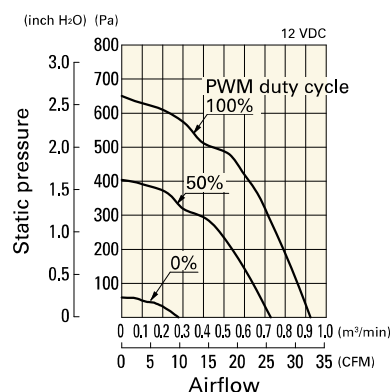
* PWM frequency is 25 kHz. Models without ratings for 0% PWM duty cycle have zero speed at 0%. When control terminal is open, speed is the same as at 100% duty cycle.

Note: Sensor and control options are available for selection. Refer to the table on p. 636.

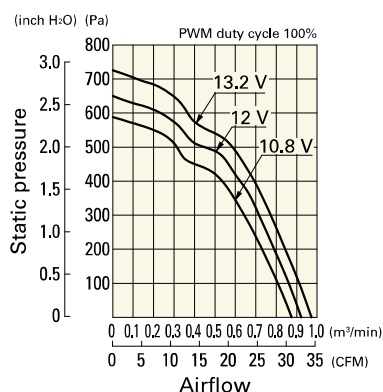
Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

9CRA0412P4K03 With pulse sensor with PWM control

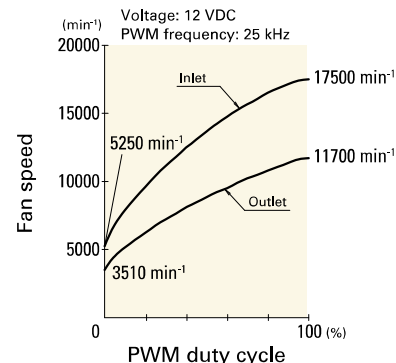
PWM duty cycle



Operating voltage range



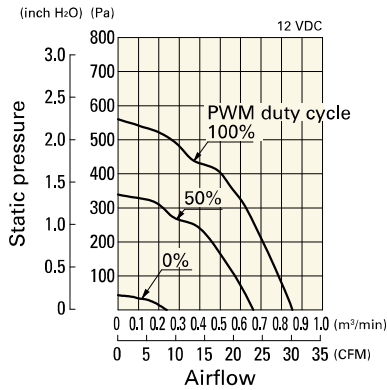
PWM duty - Speed characteristics example



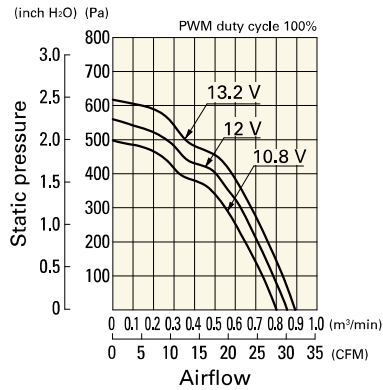
Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

9CRA0412P4J03 With pulse sensor with PWM control

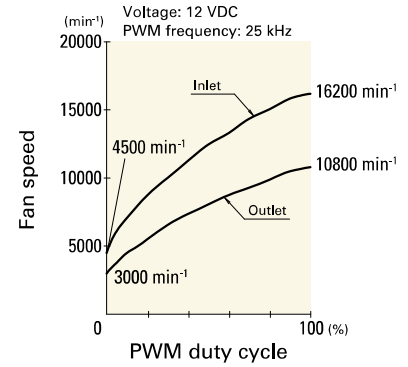
PWM duty cycle



Operating voltage range

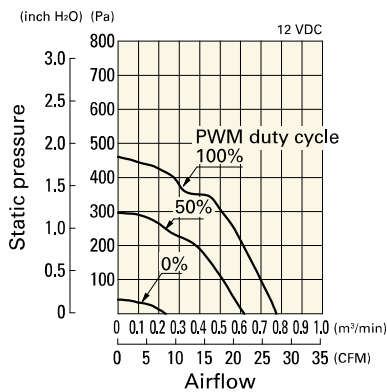


PWM duty - Speed characteristics example

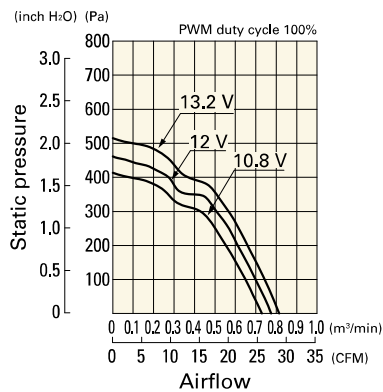


9CRA0412P4G03 With pulse sensor with PWM control

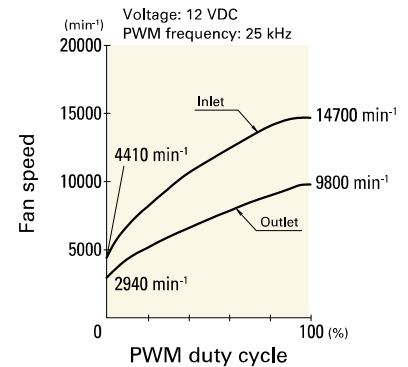
PWM duty cycle



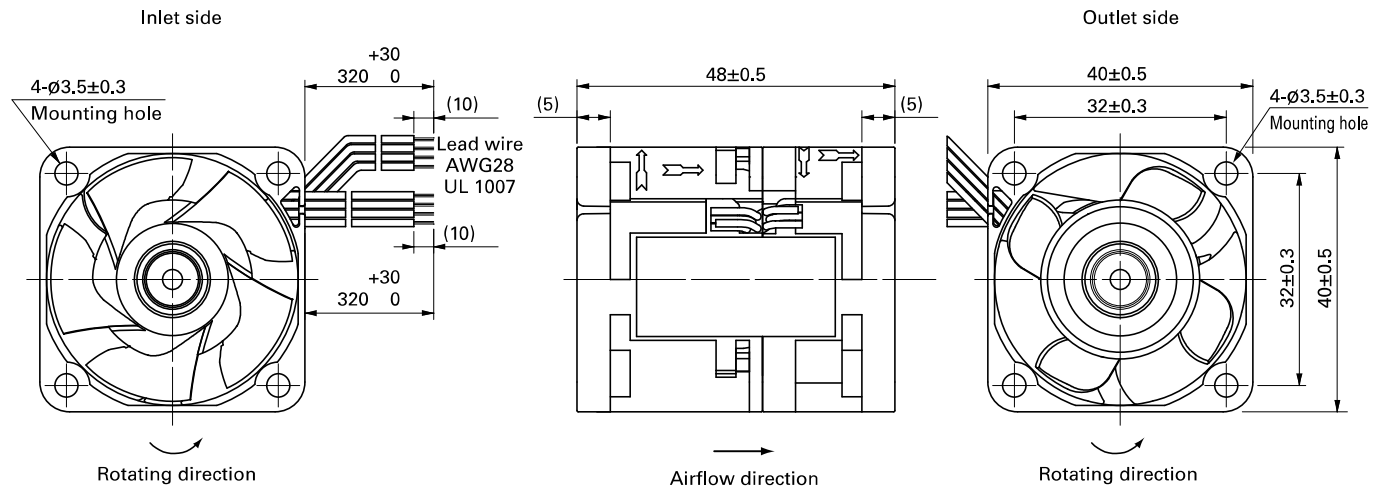
Operating voltage range



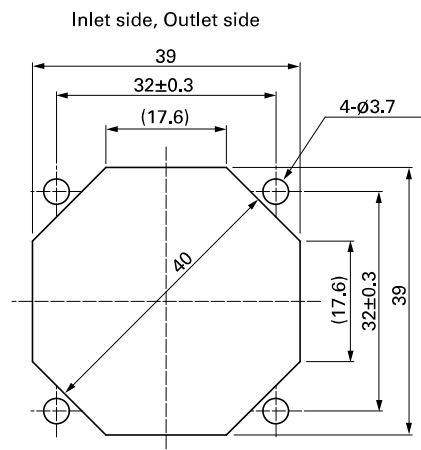
PWM duty - Speed characteristics example



Dimensions (unit: mm)



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



Options

Finger guards

page: p. 590

Model no.: 109-059, 109-059H