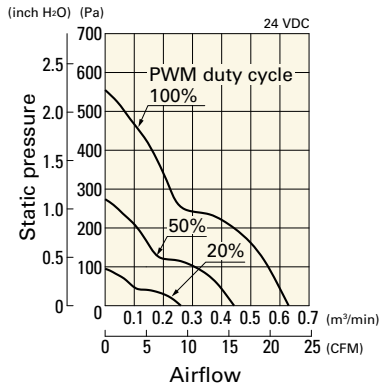
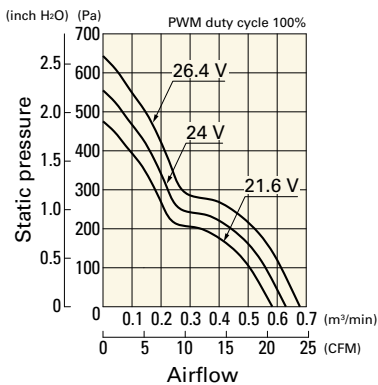


9WPA0424P3G001 With pulse sensor with PWM control

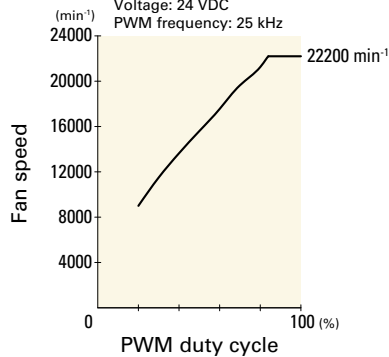
PWM duty cycle



Operating voltage range



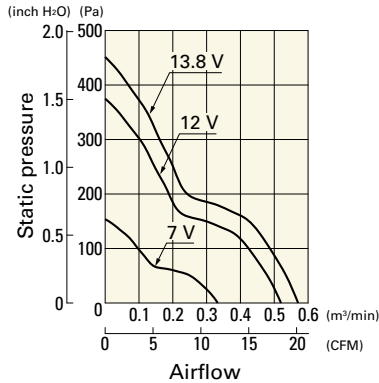
PWM duty - Speed characteristics example



Airflow - Static Pressure Characteristics

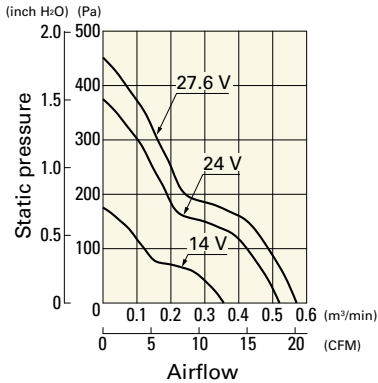
9WPA0412H3001 With pulse sensor

Operating voltage range

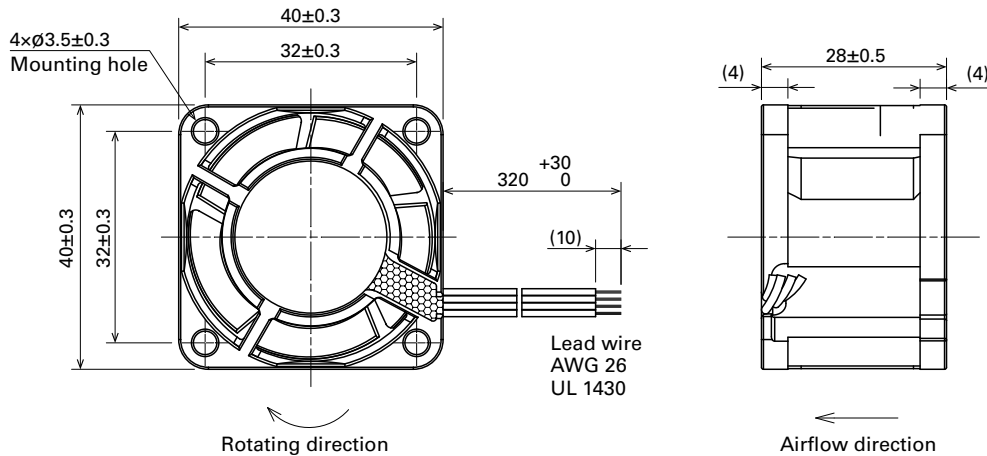


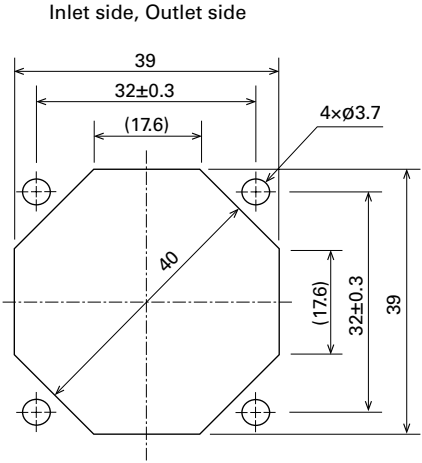
9WPA0424H3001 With pulse sensor

Operating voltage range



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





Options

Finger guards

page: p. 598

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

40x40x28 mm

San Ace 40W 9WL type 

IP68 



General Specifications

- Material Frame: Aluminum (Black coating), Impeller: Plastic (Flammability: UL 94V-0)
- Expected life See the table below. (L10 life: 90% survival rate for continuous operation in indoor 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 ⊕Red ⊖Black ☐Sensor ☒Yellow ☐Control ☐Brown
- Mass 70 g
- Ingress protection IP68 For more information on IP rating, refer to p. 625.

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]
9WL0412P3J001	12	10.8 to 13.2	100	0.52	6.24	17500	0.63 22.2	400 1.61	51	-20 to +70	150000/60°C (185000/40°C)
			20	0.06	0.72	3600	0.13 4.6	16.9 0.07	20		
9WL0412P3G001			100	0.4	4.8	15500	0.56 19.7	310 1.24	47		
			20	0.06	0.72	3300	0.12 4.2	14.0 0.06	18		
9WL0424P3J001	24	21.6 to 26.4	100	0.26	6.24	17500	0.63 22.2	400 1.61	51		
			20	0.04	0.96	4000	0.14 5.1	20.9 0.08	22		
9WL0424P3G001			100	0.2	4.8	15500	0.56 19.7	310 1.24	47		
			20	0.04	0.96	3000	0.11 3.8	11.6 0.05	16		

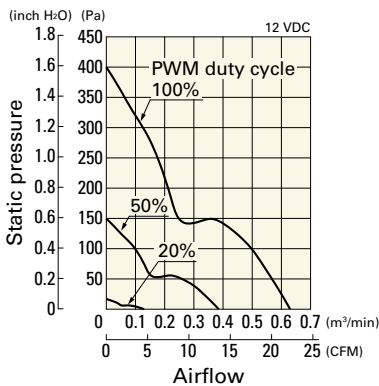
* PWM frequency is 25 kHz. Models without ratings for 0% PWM duty cycle have zero speed at 0%. When control terminal is open, speed is the same as at 100% duty cycle.

Note: Sensor and control options are available for selection. Refer to the table on p. 661.

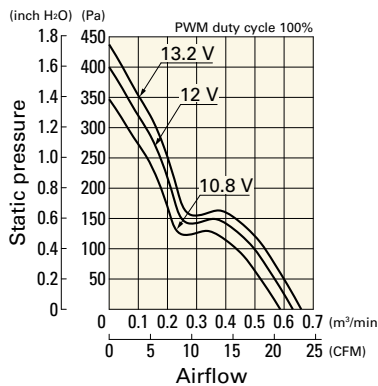
Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

9WL0412P3J001 With pulse sensor with PWM control

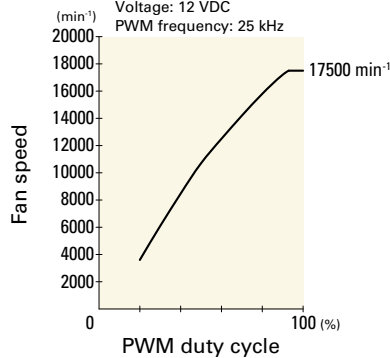
PWM duty cycle



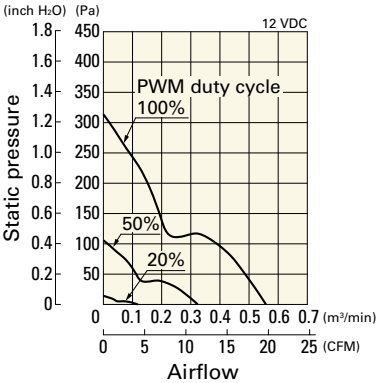
Operating voltage range



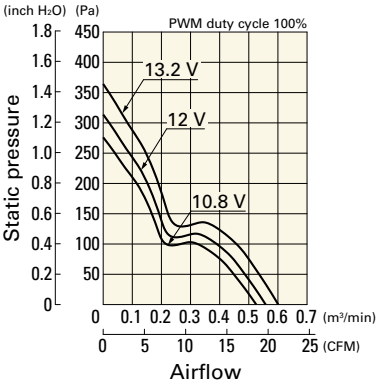
PWM duty - Speed characteristics example



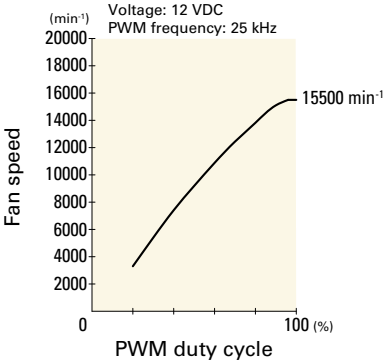
PWM duty cycle



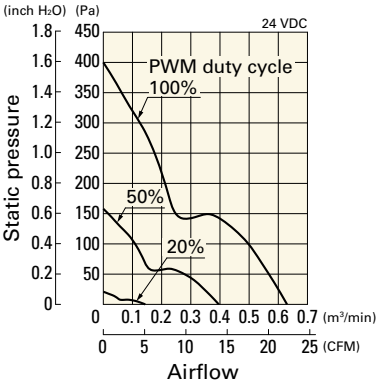
Operating voltage range



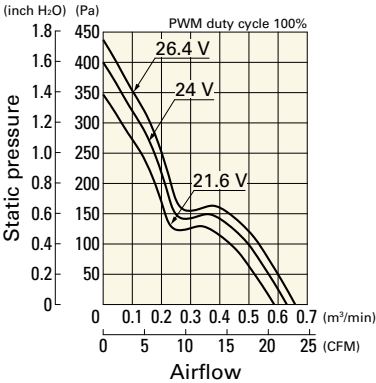
PWM duty - Speed characteristics example



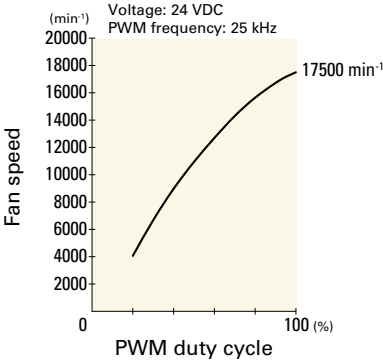
PWM duty cycle



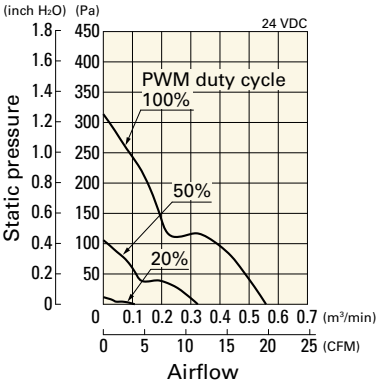
Operating voltage range



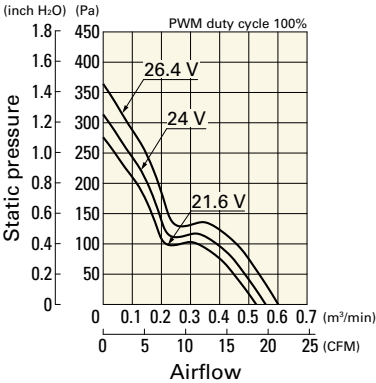
PWM duty - Speed characteristics example



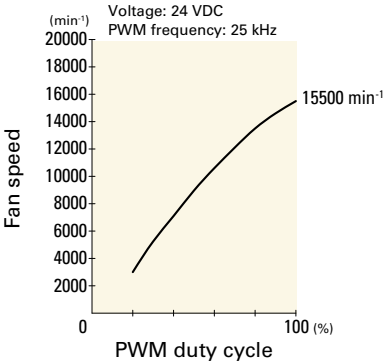
PWM duty cycle

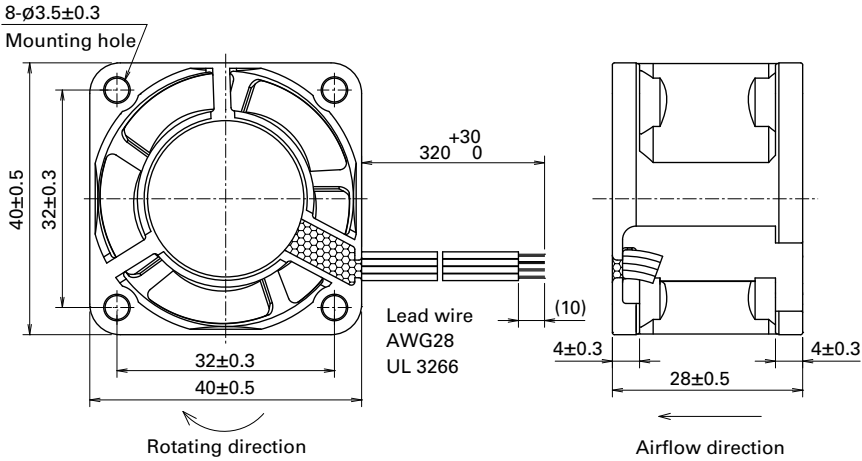


Operating voltage range

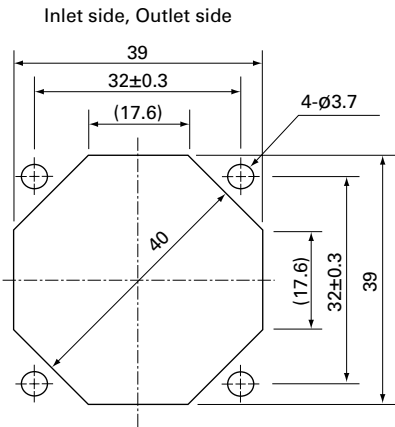


PWM duty - Speed characteristics example





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



Options

Finger guards

page: p. 598

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