



# 40x40x28 mm

San Ace 40W 9WL type   

## 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)
- Motor protection function ..... Locked rotor burnout protection, Reverse polarity protection  
For details, please refer to p. 529.
- 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
- Mass ..... 70 g
- Ingress protection ..... IP68

## Specifications

The models listed below **have pulse sensors with PWM control function.**

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]
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
			20	0.06	0.72	3600	0.13 4.6	16.9 0.07	20		
9WL0412P3G001	12	10.8 to 13.2	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	24	21.6 to 26.4	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: 25 kHz. Fan does not rotate when PWM duty cycle is 0%.

Other sensor specifications are available as options. Refer to the index (p. 559).

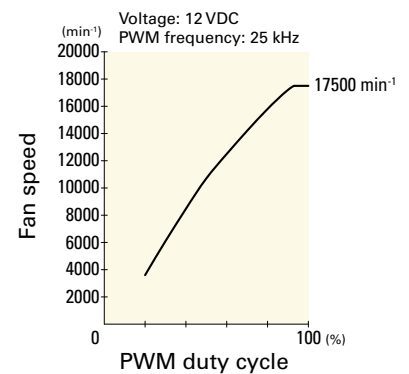
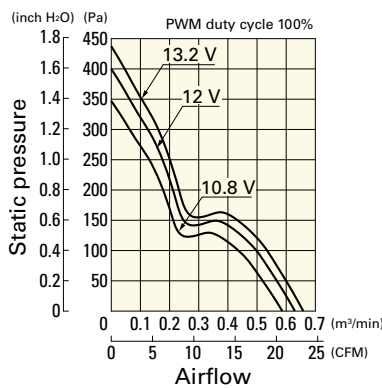
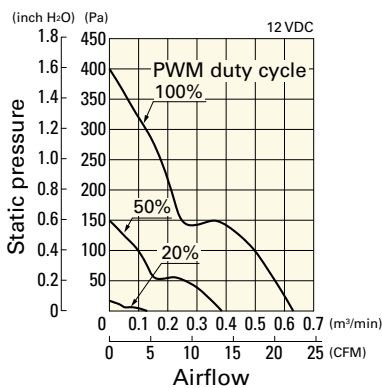
## Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

**9WL0412P3J001** With pulse sensor with PWM control function

PWM duty cycle

Operating voltage range

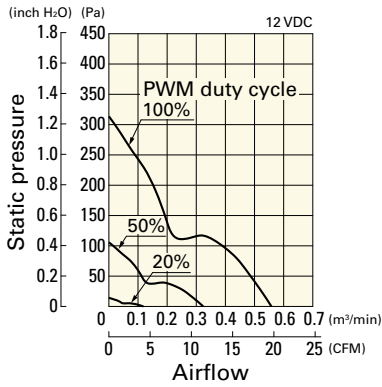
PWM duty - Speed characteristics example



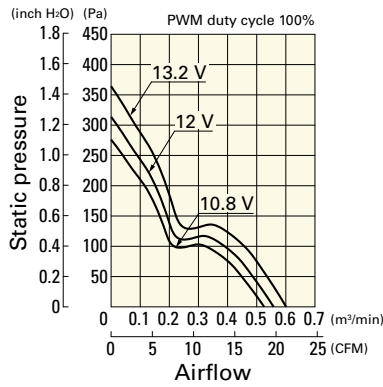
# Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

**9WL0412P3G001** With pulse sensor with PWM control function

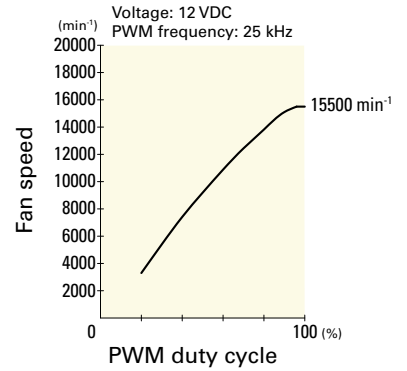
PWM duty cycle



Operating voltage range

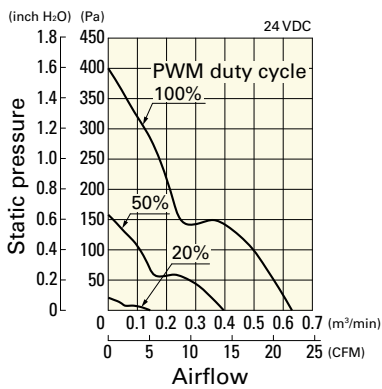


PWM duty - Speed characteristics example

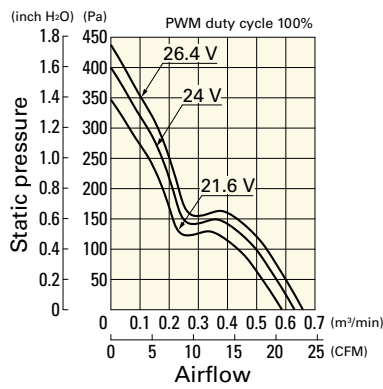


**9WL0424P3J001** With pulse sensor with PWM control function

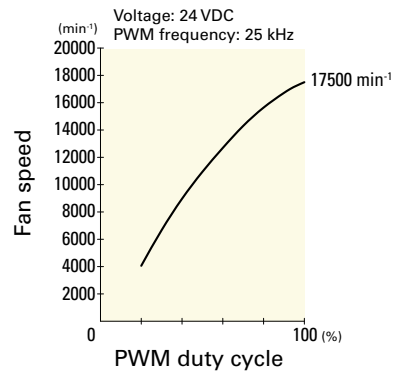
PWM duty cycle



Operating voltage range

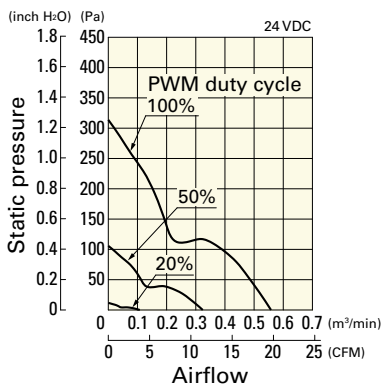


PWM duty - Speed characteristics example

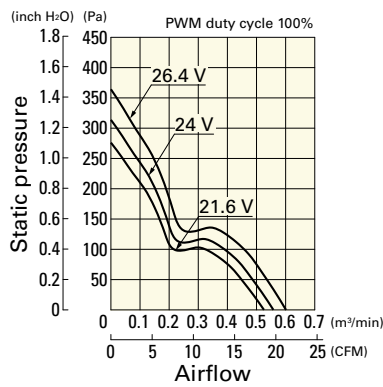


**9WL0424P3G001** With pulse sensor with PWM control function

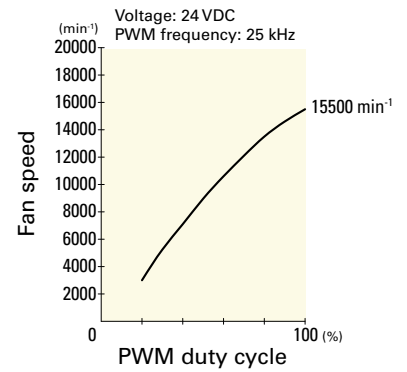
PWM duty cycle



Operating voltage range

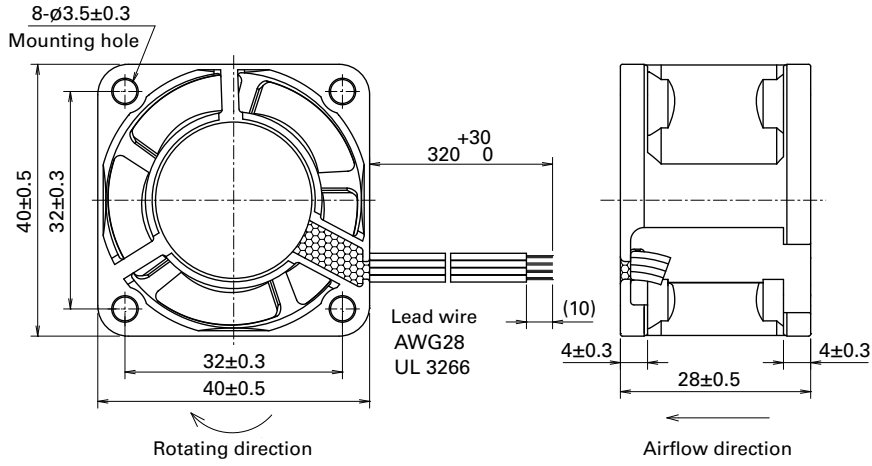


PWM duty - Speed characteristics example

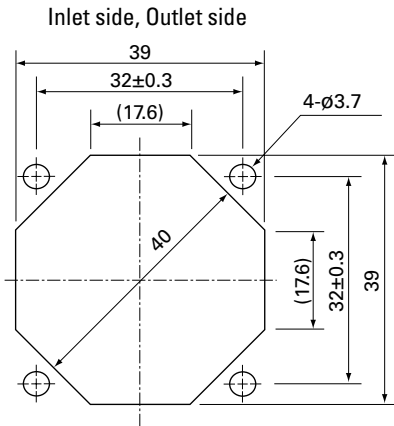


DC  
Splash Proof Fan 40 mm sq.

**Dimensions (unit: mm)**



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



**Options**

Finger guards

page: p. 513

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