




60×60×25 mm

San Ace 60W 9WL type   

DC
Splash Proof Fan 60 mm sq.

General Specifications

- Material Frame: Aluminum (Black coating), Impeller: Plastic (Flammability: UL 94V-1)
- 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. 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 ⊕Red ⊖Black (Sensor) Yellow (Control) Brown
- Mass 120 g
- Ingress protection IP68 For more information on IP rating, refer to p. 617.


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]	
9WL0612P4S001	12	10.8 to 13.2	100	0.67	8.04	11000	1.4 49.4	300 1.204	53	-20 to +70	180000/60°C (215000/40°C)	
			20	0.06	0.72	2900	0.36 12.7	20.8 0.083	20			
9WL0612P4J001			100	0.39	4.68	8650	1.1 38.8	182 0.73	47			
			25	0.04	0.48	2100	0.27 9.5	10.7 0.043	17			
9WL0612P4H001			100	0.17	2.04	6150	0.78 27.5	97 0.389	36			
			25	0.03	0.36	1350	0.17 6.0	4.7 0.018	14			
9WL0624P4S001		24	21.6 to 26.4	100	0.34	8.16	11000	1.4 49.4	300 1.204			53
				20	0.03	0.72	2900	0.36 12.7	20.8 0.083			20
9WL0624P4J001				100	0.19	4.56	8650	1.1 38.8	182 0.73			47
				20	0.02	0.48	2200	0.28 9.8	12.0 0.048			17
9WL0624P4H001				100	0.08	1.92	6150	0.78 27.5	97 0.389			36
				20	0.02	0.48	1300	0.16 5.6	4.3 0.017			14

* 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.

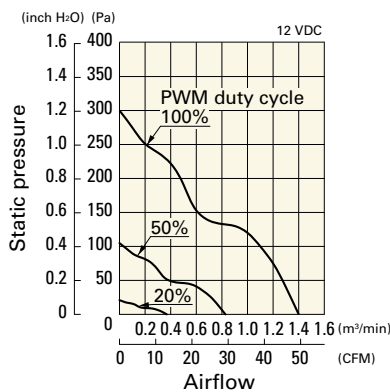
Note 1: Sensor and control options are available for selection. Refer to the table on p. 651.

Note 2: The  mark indicates Short Lead Time Service applicable models. See p. 664 for details.

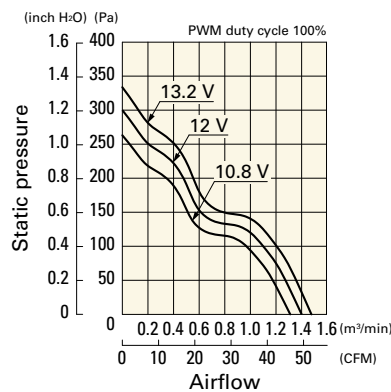
Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

9WL0612P4S001 With pulse sensor with PWM control

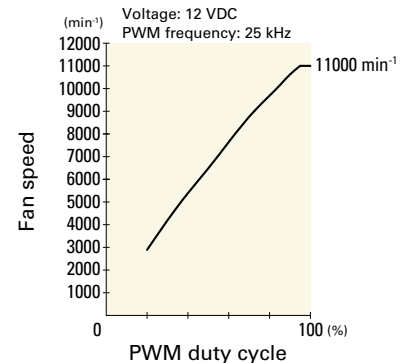
PWM duty cycle



Operating voltage range



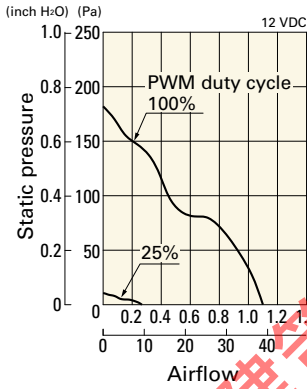
PWM duty - Speed characteristics example



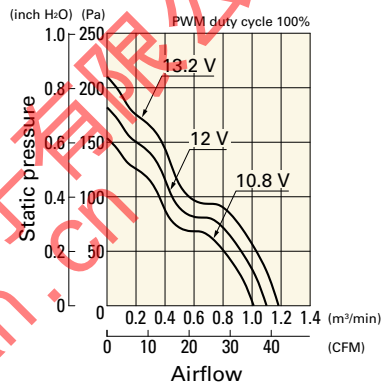
Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

9WL0612P4J001 With pulse sensor with PWM control

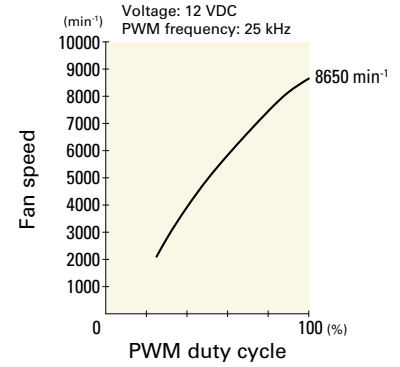
PWM duty cycle



Operating voltage range

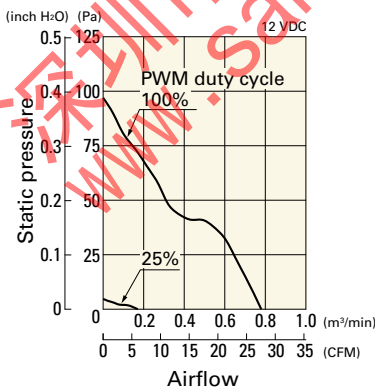


PWM duty - Speed characteristics example

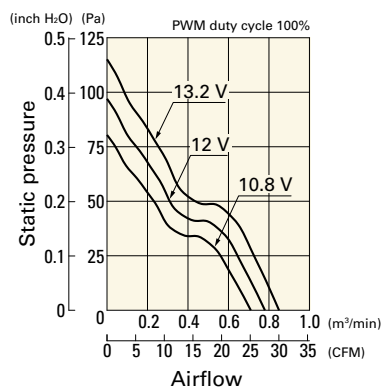


9WL0612P4H001 With pulse sensor with PWM control

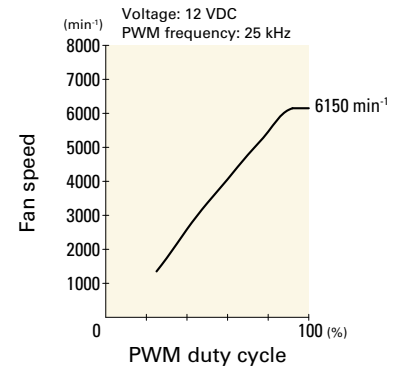
PWM duty cycle



Operating voltage range

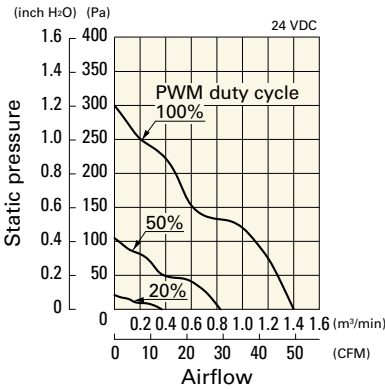


PWM duty - Speed characteristics example

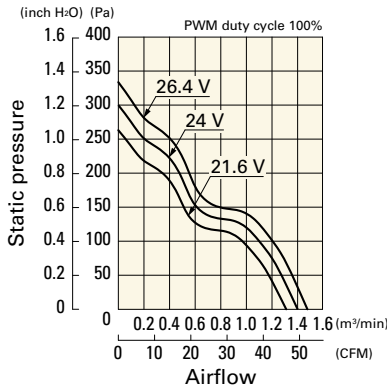


9WL0624P4S001 With pulse sensor with PWM control

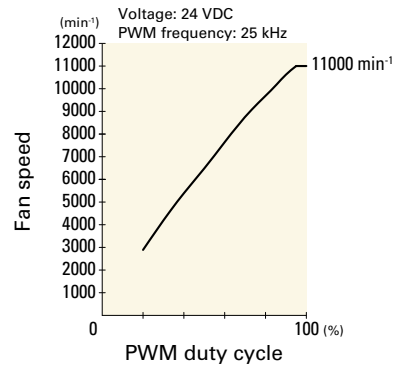
PWM duty cycle



Operating voltage range

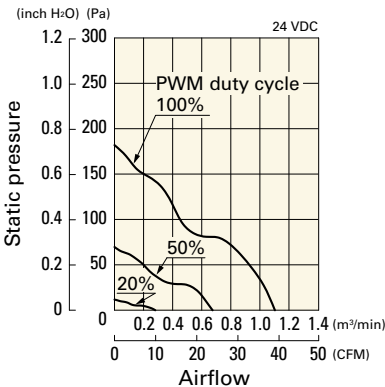


PWM duty - Speed characteristics example

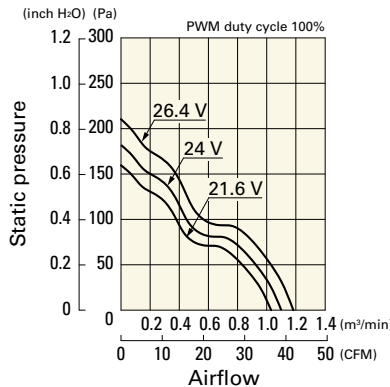


9WL0624P4J001 With pulse sensor with PWM control

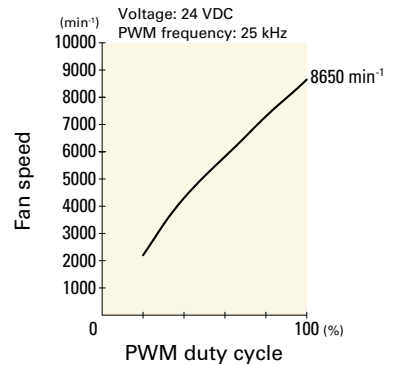
PWM duty cycle



Operating voltage range



PWM duty - Speed characteristics example

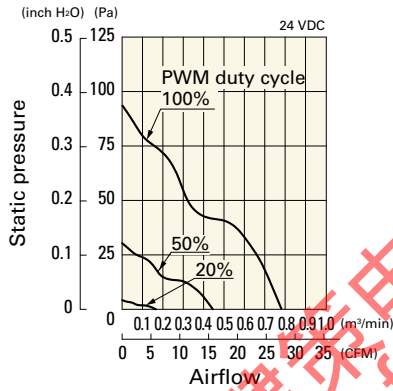


DC
Splash Proof Fan 60 mm sq.

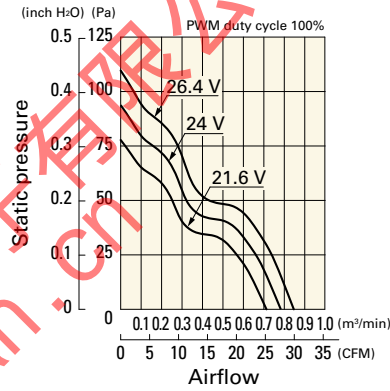
Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

9WL0624P4H001 With pulse sensor with PWM control

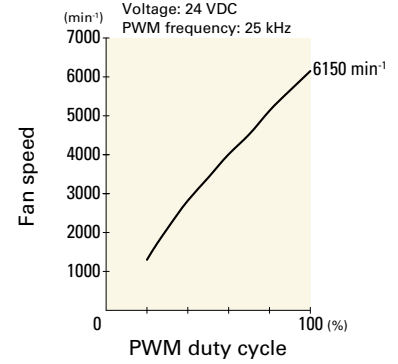
PWM duty cycle



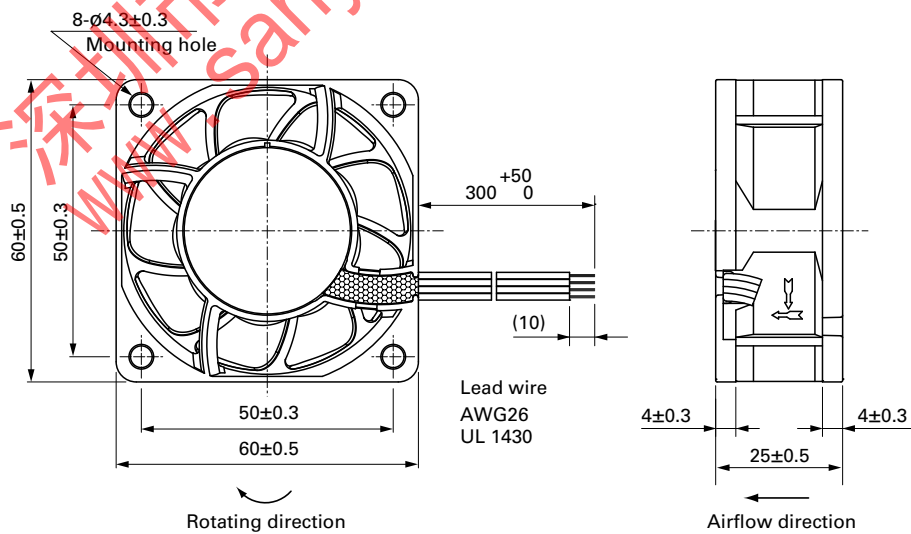
Operating voltage range



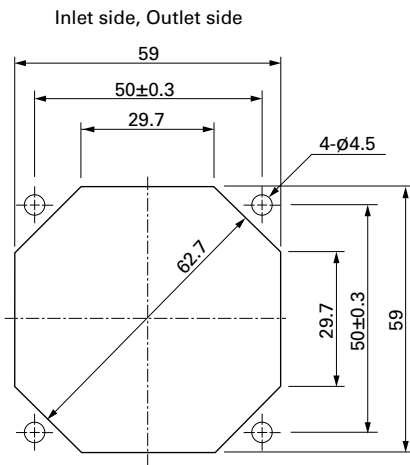
PWM duty - Speed characteristics example



Dimensions (unit: mm)



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



Options

Finger guards

page: p. 590

Model no.: 109-139E, 109-139H

Resin finger guards

page: p. 597

Model no.: 109-1003G