80×80×25 mm

San Ace 80W 9WL type

IP68

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)
- Motor protection function ····· Locked rotor burnout protection, Reverse polarity protection
  For details, please refer to p. 547.
- 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
  (For models without PWM control function, there is no speed control wiring.)
- Mass ····· 150 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⁻¹]	Max. airflow [m³/min]	Max. airflow [CFM]	Max. static pressure [Pa]	Max. static pressure [inchH₂O]	SPL [dB (A)]	Operating temperature [˚C]	Expected life [h]
9WL0812P4J001	12	10.8 to 13.2	100	0.6	7.2	7400	2.07	73.0	177	0.71	49	-20 to +70	180000/60˚C
			20	0.06	0.72	1800	0.5	17.6	10.4	0.04	16		
9WL0812P4G001			100	0.3	3.6	5500	1.54	54.3	98	0.39	43		
			25	0.05	0.6	1400	0.39	13.7	6.3	0.02	14		
9WL0812P4H001			100	0.12	1.44	3700	1.03	36.3	44	0.17	31		
			25	0.04	0.48	1100	0.3	10.5	3.9	0.01	13		
9WL0824P4J001	24	21.6 to 26.4	100	0.28	6.72	7400	2.07	73.0	177	0.71	49		
			20	0.05	1.2	2400	0.67	23.6	18.6	0.07	22		
9WL0824P4G001			100	0.14	3.36	5500	1.54	54.3	98	0.39	43		
			20	0.02	0.48	1200	0.33	11.6	4.6	0.01	13		
9WL0824P4H001			100	0.05	1.2	3700	1.03	36.3	44	0.17	31		
			30	0.02	0.48	1100	0.3	10.5	3.9	0.01	13		

* PWM frequency: 25 kHz. Fan does not rotate when PWM duty cycle is 0%.

The following sensor and control options are available for selection.
Differs according to the model. Refer to the table on p. 579. Without sensor Pulse sensor Lock sensor

The models listed below **have pulse sensors.**

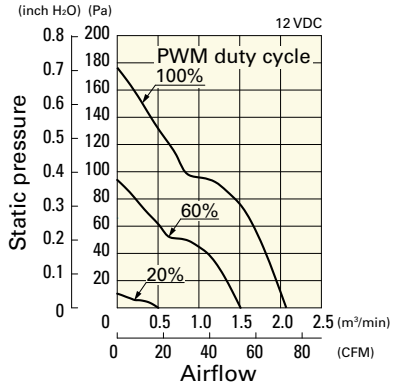
Model no.	Rated voltage [V]	Operating voltage range [V]	Rated current [A]	Rated input [W]	Rated speed [min⁻¹]	Max. airflow [m³/min]	Max. airflow [CFM]	Max. static pressure [Pa]	Max. static pressure [inchH₂O]	SPL [dB (A)]	Operating temperature [˚C]	Expected life [h]
9WL0812L4001	12	8 to 13.2	0.06	0.72	2300	0.64	22.6	17	0.068	22	-20 to +70	180000/60˚C
9WL0824F4001	24	12 to 26.4	0.045	1.08	3300	0.92	32.5	35	0.14	29		

The following sensor and control options are available for selection.
Available for all models. Without sensor

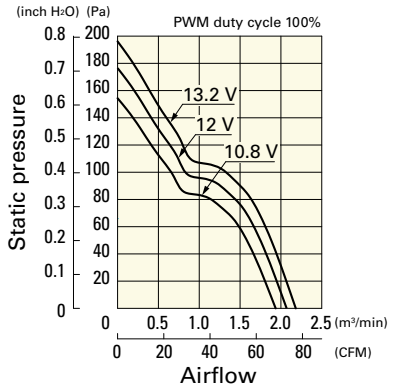
Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

9WL0812P4J001 With pulse sensor with PWM control function

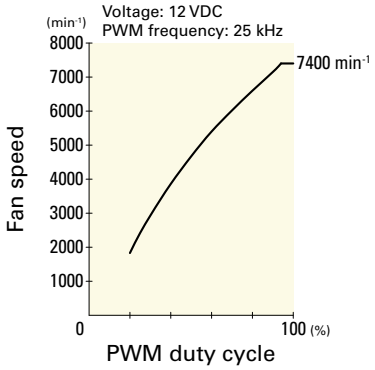
PWM duty cycle



Operating voltage range

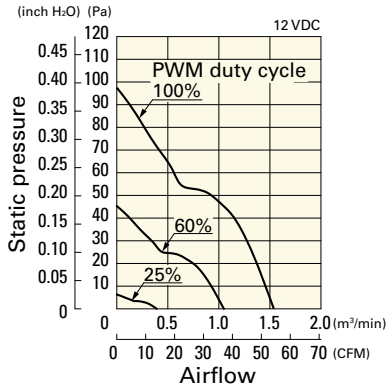


PWM duty - Speed characteristics example

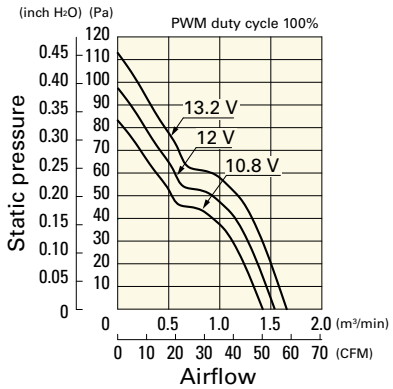


9WL0812P4G001 With pulse sensor with PWM control function

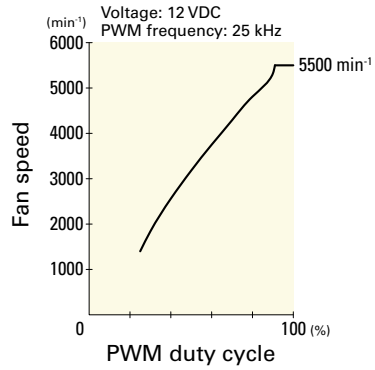
PWM duty cycle



Operating voltage range

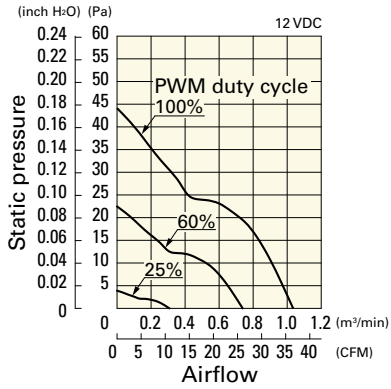


PWM duty - Speed characteristics example

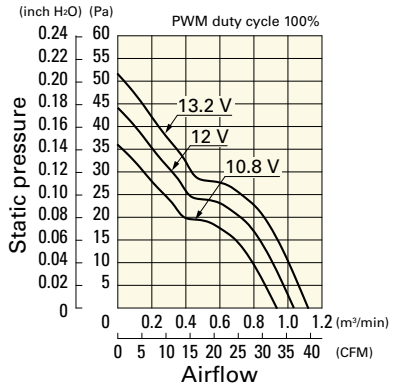


9WL0812P4H001 With pulse sensor with PWM control function

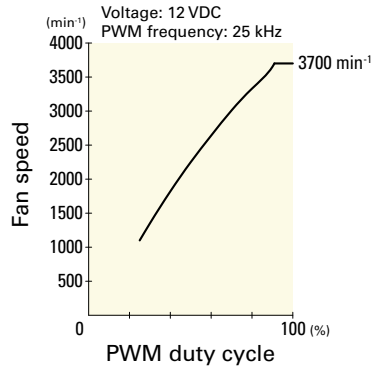
PWM duty cycle



Operating voltage range

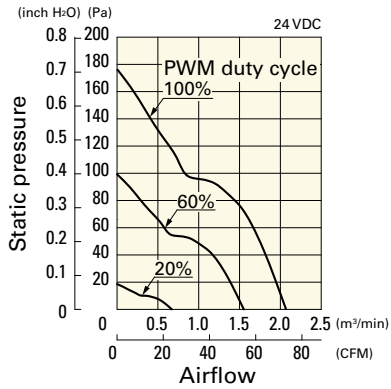


PWM duty - Speed characteristics example

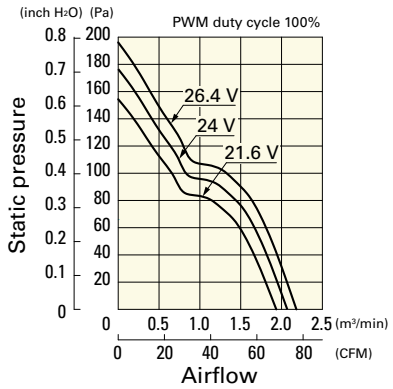


9WL0824P4J001 With pulse sensor with PWM control function

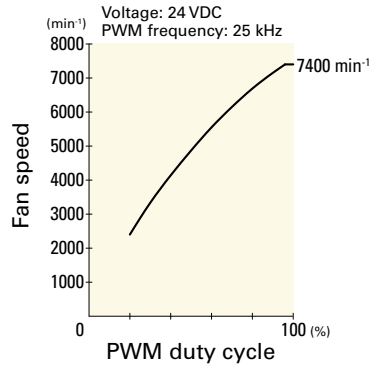
PWM duty cycle



Operating voltage range



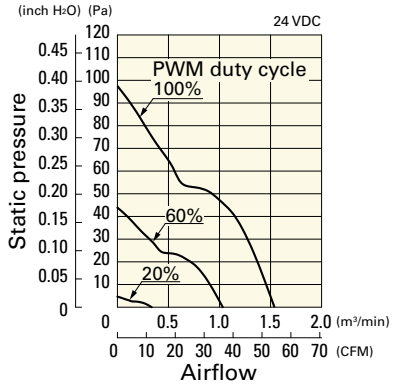
PWM duty - Speed characteristics example



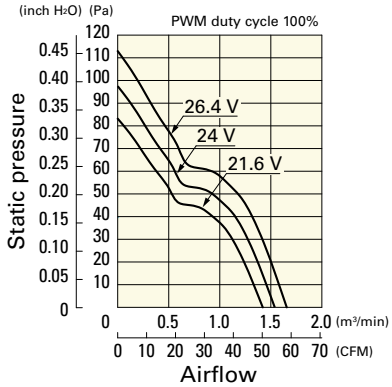
Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

9WL0824P4G001 With pulse sensor with PWM control function

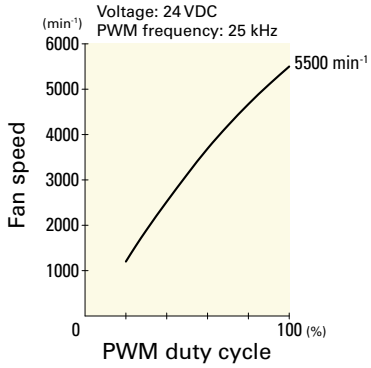
PWM duty cycle



Operating voltage range

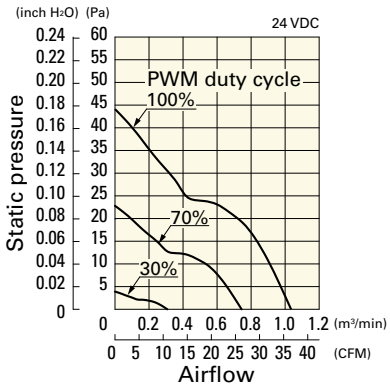


PWM duty - Speed characteristics example

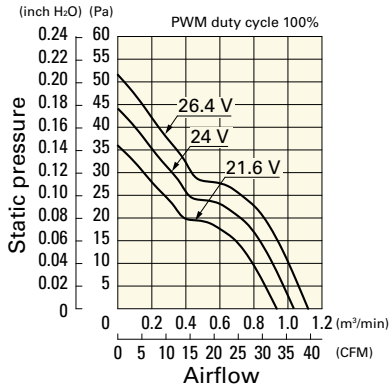


9WL0824P4H001 With pulse sensor with PWM control function

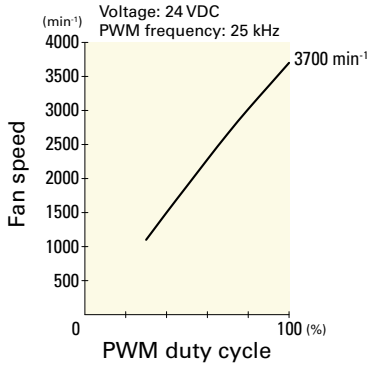
PWM duty cycle



Operating voltage range

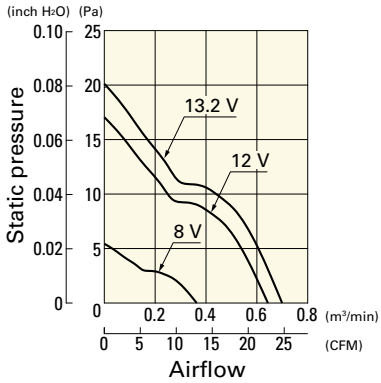


PWM duty - Speed characteristics example



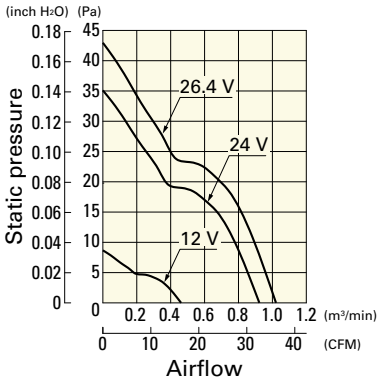
9WL0812L4001 With pulse sensor

Operating voltage range

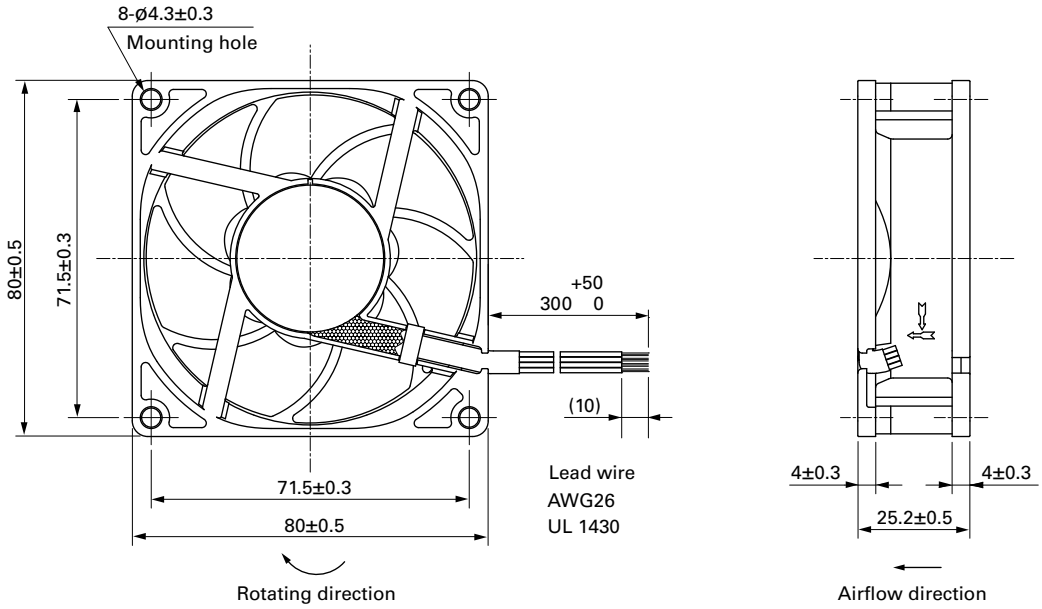


9WL0824F4001 With pulse sensor

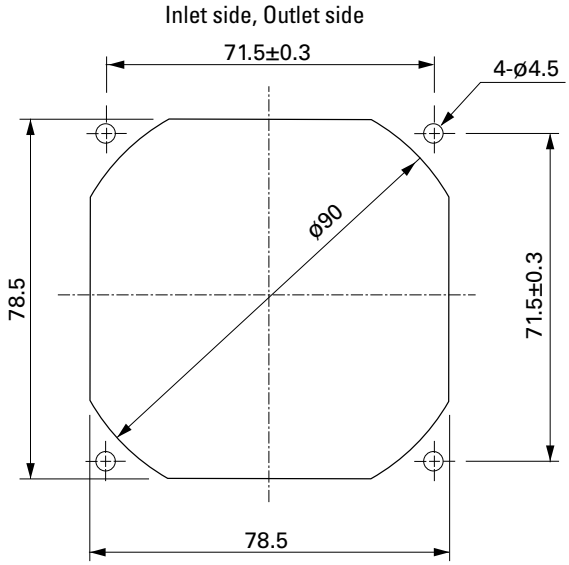
Operating voltage range



Dimensions (unit: mm)



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



Options

Finger guards	page: p. 532
Model no.: 109-049E, 109-049H, 109-049C	

Resin finger guards	page: p. 539
Model no.: 109-1002G	