

DC Fan



120×120×38 mm

San Ace 120 9HV type

General Specifications

- Material Frame: Aluminum, 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. 599.
- 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 460 g

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 [m ³ /min] [CFM]	Max. static pressure [Pa] [inchH ₂ O]	SPL [dB (A)]	Operating temperature [°C]	Expected life [h]
9HV1224P1A001	24	21.6 to 26.4	100	2.4	57.6	9600	7.0 247	950 3.82	71	-20 to +70	40000/60°C (70000/40°C)
			0	0.37	8.88	3800	2.7 95	161 0.65	46		
9HV1248P1G001	48	36 to 60	100	2.0	96	11500	8.3 293	1300 5.22	75		
			0	0.23	11	3800	2.7 95	161 0.65	46		
9HV1248P1H001			100	1.4	67	10000	7.2 254	1050 4.22	72		
			0	0.23	11	3800	2.7 95	161 0.65	46		

* PWM input frequency is 25 kHz; models without specifications at 0% PWM duty cycle have zero fan speed at 0%.

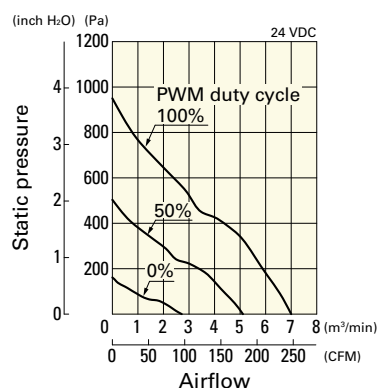
Note 1: Sensor and control options are available for selection. Refer to the table on p. 634.

Note 2: The mark indicates Short Lead Time Service applicable models. See p. 654 for details.

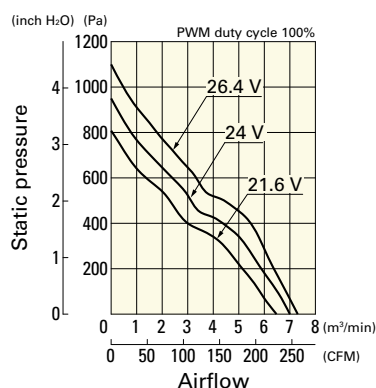
Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

9HV1224P1A001 With pulse sensor with PWM control function

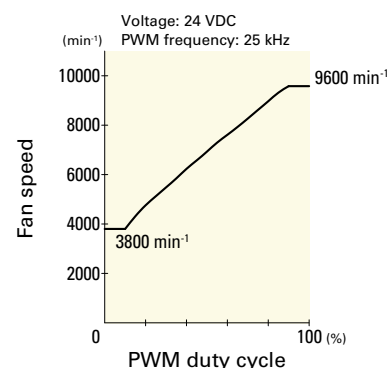
PWM duty cycle



Operating voltage range



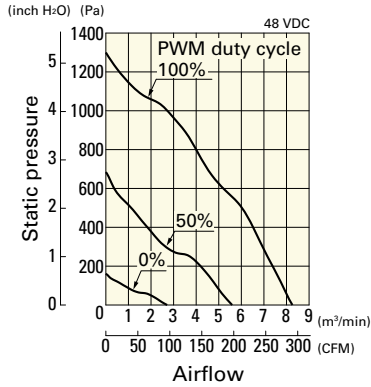
PWM duty - Speed characteristics example



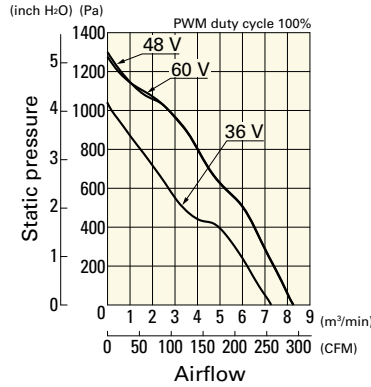
Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

9HV1248P1G001 With pulse sensor with PWM control function

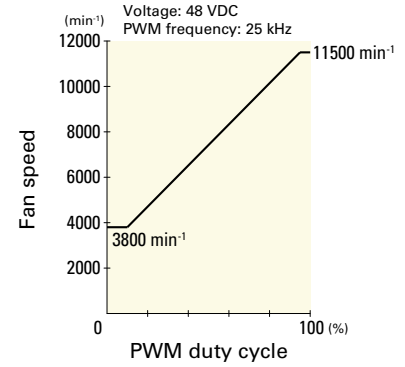
PWM duty cycle



Operating voltage range

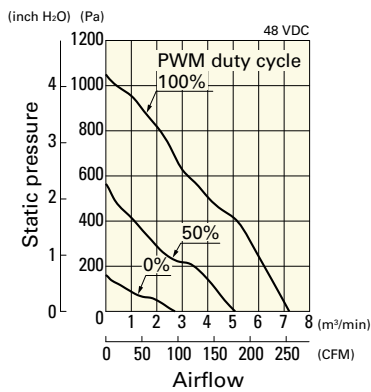


PWM duty - Speed characteristics example

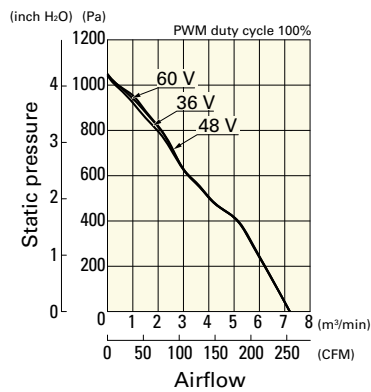


9HV1248P1H001 With pulse sensor with PWM control function

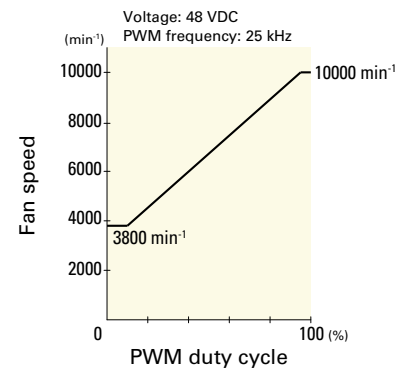
PWM duty cycle



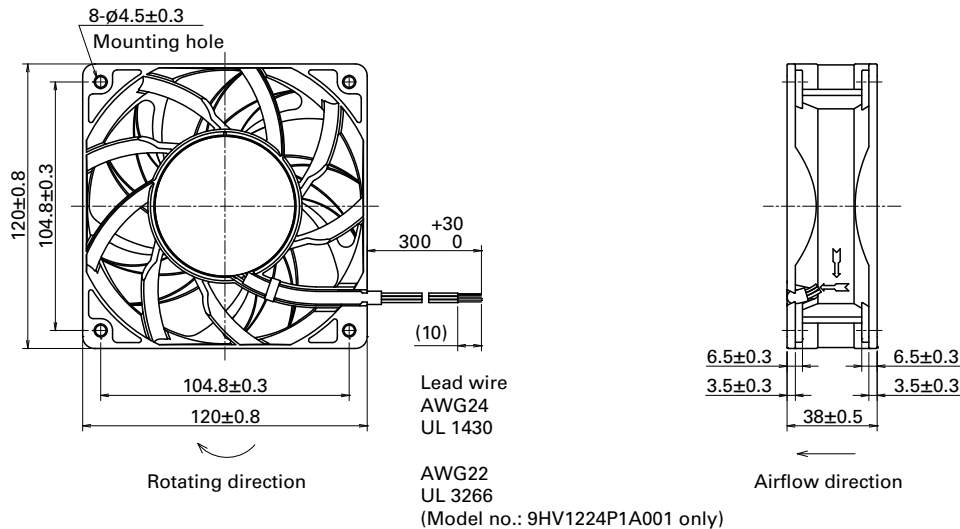
Operating voltage range



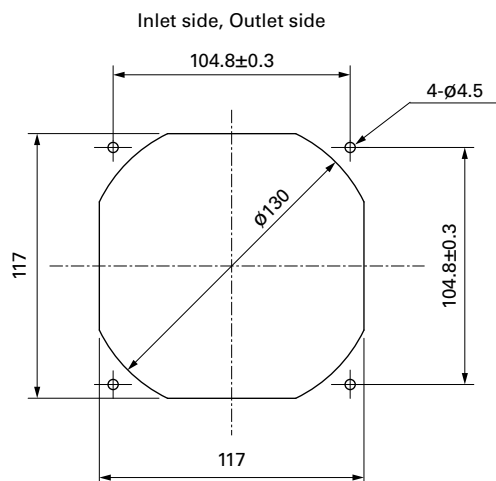
PWM duty - Speed characteristics example



Dimensions (unit: mm)



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



Options

Finger guards

page: p. 585

Model no.: 109-019E, 109-019K, 109-019C, 109-019H

Resin finger guards

page: p. 591

Model no.: 109-1000G

Resin filter kits

page: p. 592

Model no.: 109-1000F13 (13PPI), 109-1000F20 (20PPI),
109-1000F30 (30PPI), 109-1000F40 (40PPI)