# <sup>Ø</sup>150×35 mm





# San Ace 150W 9W1TN type

## General Specifications

· Material ...... Motor case: 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. 580.

· Dielectric strength ....... 50/60 Hz, 500 VAC, for 1 minute (between lead wire conductors and motor case)

· 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)

 $\cdot \ \, \mathsf{Lead} \ \mathsf{wire} \ \, \dots \\ \oplus \mathsf{Red} \ \oplus \mathsf{Black} \ \ \mathsf{\underbrace{\mathsf{Sensor}}} \ \mathsf{Yellow} \ \ \mathsf{\underbrace{\mathsf{Control}}} \ \mathsf{Brown}$ 

· Mass ...... 330 g · Ingress protection ...... IP54

### **Specifications** When the optional inlet nozzle (109-1081) is mounted.

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

Model no.	Rated voltage	Operating voltage range	PWM duty	Rated current	Rated input	Rated speed	Max. airflow		Max. static pressure		SPL	Operating temperature	Expected life
	[V]	[V]	cycle* [%]	[A]	[W]	[min <sup>-1</sup> ]	[m³/min]	[CFM]	[Pa]	[inchH <sub>2</sub> 0]	[dB (A)]	[°C]	[h]
9W1TN48P1H01	48	36.0 to 55.2	100	0.32	15.4	3800	3.83	135	390	1.57	59	-20 to +70	40000/60°C (70000/40°C)

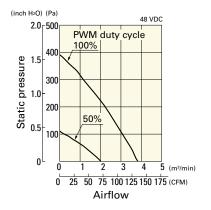
<sup>\*</sup> PWM frequency is 25 kHz. Models without ratings for 0% PWM duty cycle have zero speed at 0%. When control terminal is open, speed is the same as at 100% duty cycle.

Note: Max input is 22 W at rated voltage.

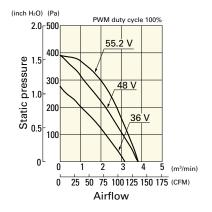
#### Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

## 9W1TN48P1H01 With pulse sensor with PWM control function

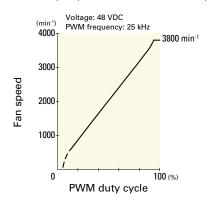
#### PWM duty cycle



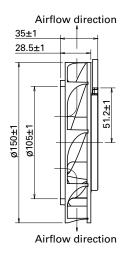
#### Operating voltage range

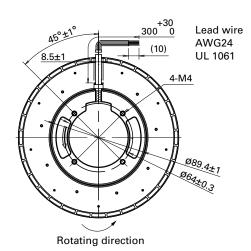


#### PWM duty - Speed characteristics example

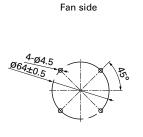


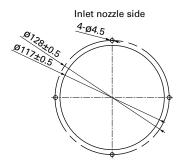
# Dimensions (unit: mm)



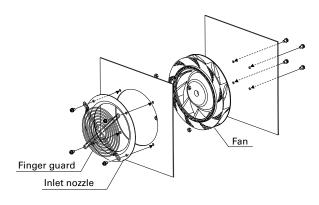


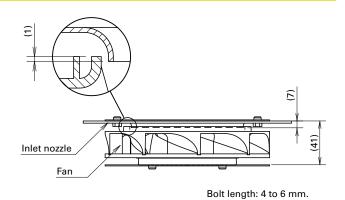
# Reference Dimensions of Mounting Holes and Vent Opening (unit: mm)





# Reference Diagram for Mounting (unit: mm)





# Options

Finger guards

page: p. 565

Inlet nozzle

page: p. 569

Model no.: 109-1104, 109-1104H

Model no.: 109-1081, 109-1081H