

# San Ace C133

## Centrifugal Fan

Centrifugal Fan 133mm

### Features

#### Large air flow and high static pressure

- Maximum air flow : 6.39 m<sup>3</sup>/min
- Maximum static pressure : 395 Pa

#### Energy-saving design

- Power consumption: 26.4 W

#### Low noise

- Sound Pressure Level: 61dB(A)



φ133mm×91mm

### Specifications Note 3)

Model No.	Rated Voltage [V]	Operating Voltage Range [V]	PWM Duty Cycle [%] <small>Note 1,2)</small>	Rated Current [A]	Rated Input [W]	Rated Speed [min <sup>-1</sup> ]	Air Flow		Static Pressure		SPL [dB(A)]	Operating Temperature [°C]	Life Expectancy [h]
							[m <sup>3</sup> /min]	[CFM]	[Pa]	[inchH <sub>2</sub> O]			
9TJ48P0H01	48	36 to 72	100	0.55	26.4	4,150	6.39	225	395	1.59	61	-10 to 70	40,000

Note 1 : PWM Frequency : 25kHz

Note 2 : Fan does not rotate when PWB duty cycle is 0%.

Note 3 : When our inletnozzle [Option (Model : 109-1069)] is mounted.

### Common Specifications

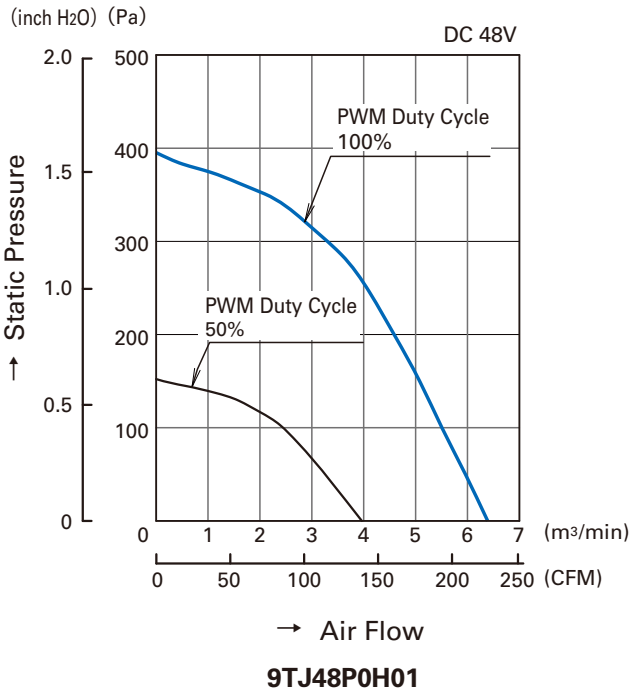
- Material ..... Frame: Aluminum , Impeller: Plastics (Flammability: UL94V-1)
- Life Expectancy ..... Varies for each model  
(L10: Survival rate: 90% at 60°C, rated voltage, and continuously run in a free air state)
- Motor Protection System ..... Current blocking function and Reverse polarity protection
- Dielectric Strength ..... 50/60 Hz, 500VAC, 1 minute (between lead conductor and frame)
- Sound Pressure Level (SPL) ..... Expressed as the value at 1m from air inlet side
- Operating Temperature ..... Varies for each model (Non-condensing)
- Lead Wire ..... ⊕red ⊖black Sensor: yellow Control: brown
- Mass ..... 660g

133mm

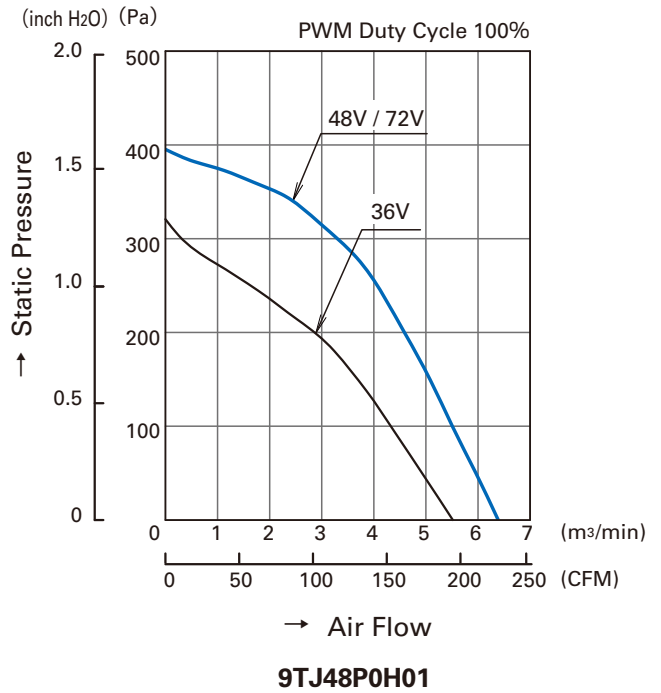
# San Ace C133

## Air Flow and Static Pressure Characteristics

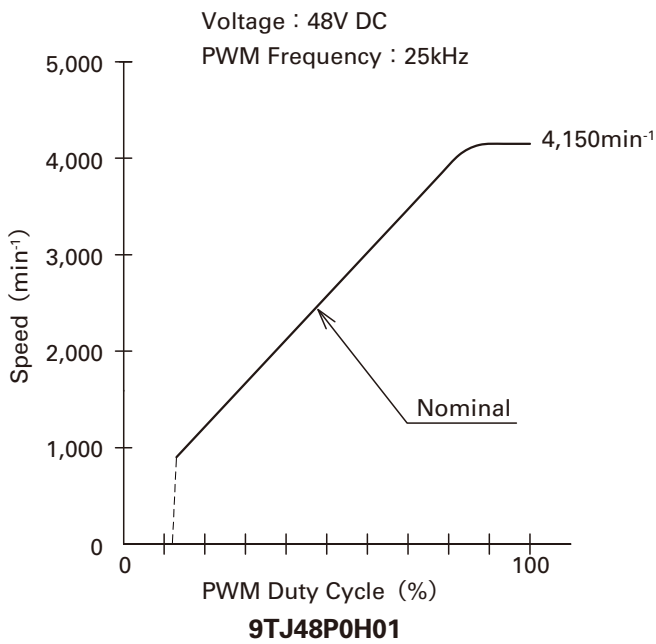
- PWM Duty Cycle



- Operating Voltage Range

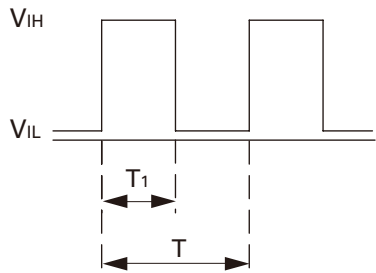


## PWM Duty - Speed Characteristics Example



**PWM Input Signal Example**

Input Signal Wave Form



$V_{IH}=4.75V$  to  $5.25V$

$V_{IL}=0V$  to  $0.4V$

$$\text{PWM Duty Cycle (\%)} = \frac{T_1}{T} \times 100$$

$$\text{PWM Frequency 25 (kHz)} = \frac{1}{T}$$

Source Current : 2mA Max. at control voltage 0V

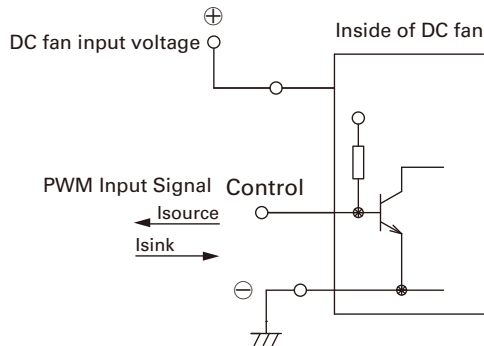
Sink Current : 1mA Max. at control voltage 5.25V

Control Terminal Voltage : 5.25V Max. (Open Circuit)

When the control lead wire is no connecting, the speed is the same speed as at 100% of PWM cycle.

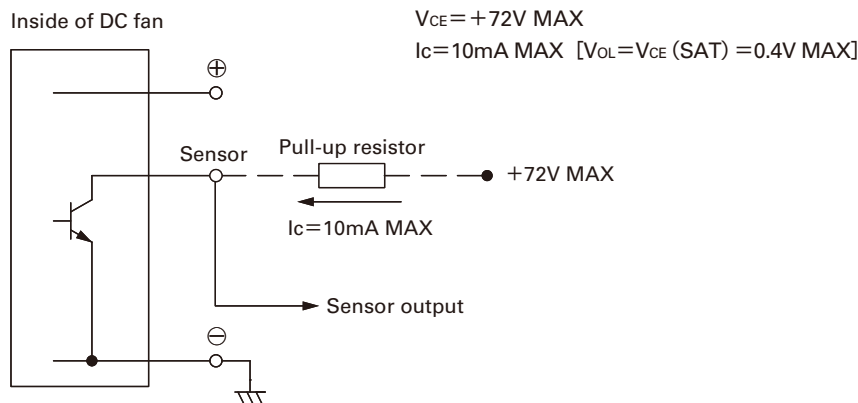
This fan speed should be controlled by PWM input signal of either TTL input or open collector, drain input.

**Connection Schematic**



**Specifications for Pulse Sensors**

Output circuit : Open collector



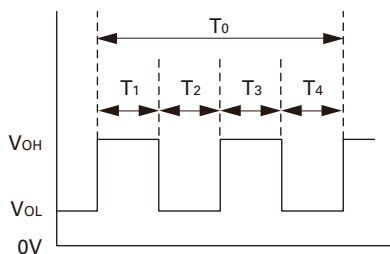
$V_{CE} = +72V$  MAX

$I_c = 10mA$  MAX [ $V_{OL} = V_{CE} (SAT) = 0.4V$  MAX]

Output waveform (Need pull-up resistor)

In case of steady running

(One revolution)



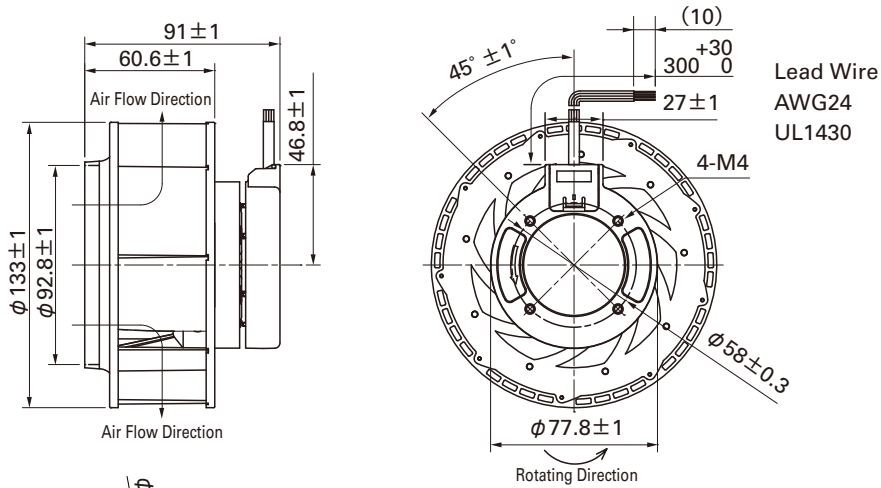
$$T_{1-4} \doteq (1/4) T_0$$

$$T_{1-4} \doteq (1/4) T_0 = 60/4N \text{ (sec)}$$

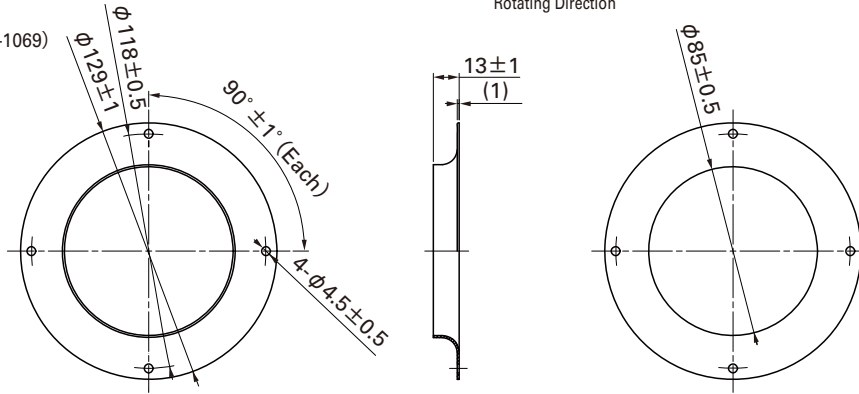
$N = \text{Fan speed (min}^{-1}\text{)}$

**Dimensions (unit : mm)**

Fan



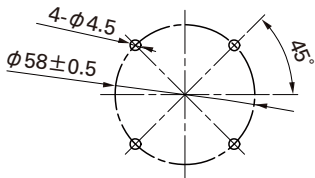
Inlet nozzle  
(Model No. : 109-1069)



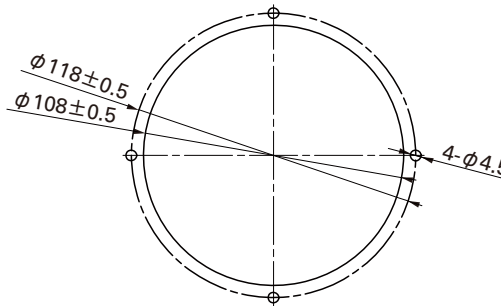
Inletnozzle: Nozzle mounted in fan inlet side to adjust the flow of introduced air

**Reference dimension of mounting holes and vent opening (unit : mm)**

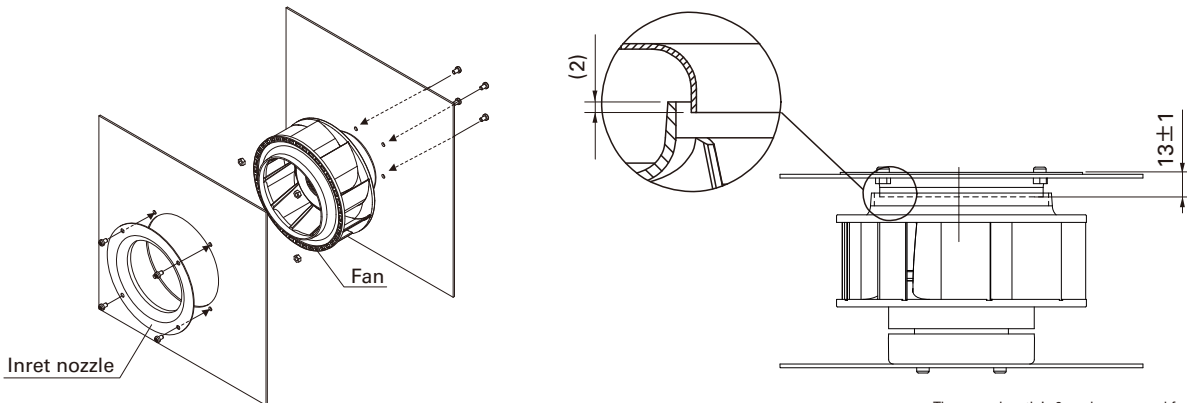
Fan side



Inlet nozzle side



**Reference diagram for mounting (unit : mm)**



The screw length is 6mm less or equal from fan edge side.

**Notice**

- The products shown in the catalog are subject to Japanese Export Control Law. Diversion contrary to the law of exporting country is prohibited.
- To protect against electrolytic corrosion that may occur in locations with strong electromagnetic noise, we provide fans that are unaffected by electrolytic corrosion.