

San Ace 200

DC fan

DC fan 200mm

Features

High Air Flow

Maximum air flow is increased by approx. 1.7times compared with our conventional product*.

High Static Pressure

Maximum static pressure is increased by approx. 1.4times compared with our conventional product*.

*: Our conventional product is φ200 x 70 mm San Ace 200 GV type, Model No. 9EC2048P0J01.



φ200mm × 70mm GV type

Specifications

Model No.	Rated Voltage [V]	Operating Voltage Range [V]	PWM Duty Cycle [%] ^{Note1)}	Rated Current [A]	Rated Input [W]	Rated Speed [min ⁻¹]	Max. Air Flow [m ³ /min] [CFM]	Max. Static Pressure [Pa] [inchH ₂ O]	SPL [dB(A)]	Operating Temperature [°C]	Expected Life [h] ^{Note2)}
9GV2048P0G201	48	36 to 72	100	12.5	600	8,000	31.5 1,112	1,400 5.62	81	-10 to 70°C	40,000/60°C (70,000/40°C)

Note1 : PWM Frequency : 1kHz,
Does not rotate when PWM duty cycle is 0%.

Note2 : Expected life at 40 degreeC ambient is just reference value.

Common Specifications

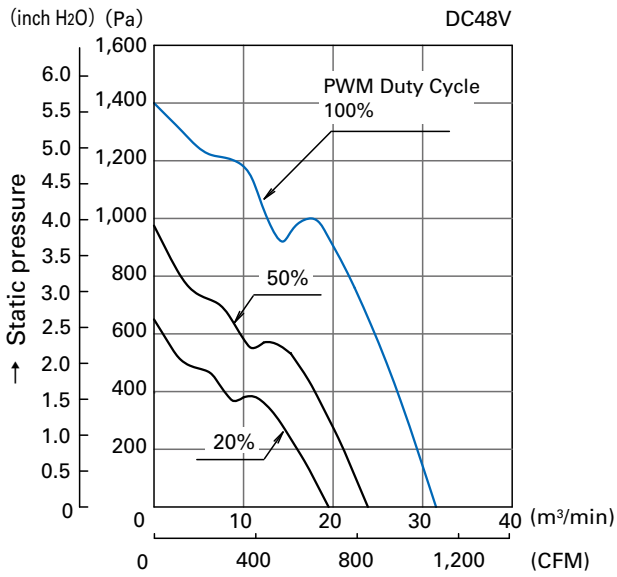
- Material Frame: Aluminum, Impeller: Plastics (Flammability: UL94V-1)
- Expected Life Varies for each model
(L10: Survival rate: 90% at 60°C, rated voltage, and continuously run in a free air state)
- Motor Protection System Current blocking function and Reverse polarity protection
- Dielectric Strength 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)
- Storage Temperature -30°C to +70°C (Non-Condensing)
- Lead Wire ⊕red ⊖black Sensor: yellow Control : brown
- Mass Approx. 1,800g

Do not turn on the fan within 15 seconds after the power off .

200mm

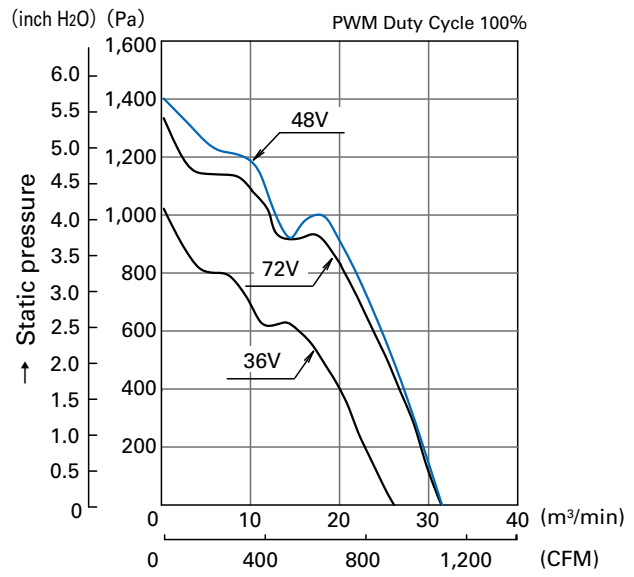
Air Flow - Static Pressure Characteristics

- PWM Duty Cycle



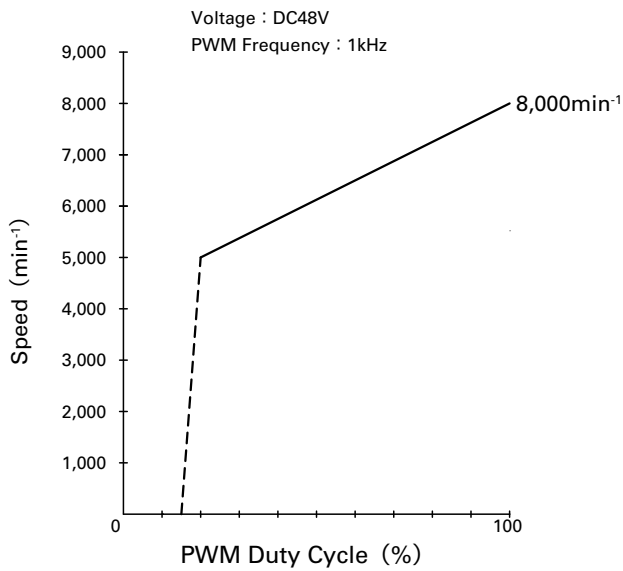
9GV2048P0G201

- Operating Voltage Range



9GV2048P0G201

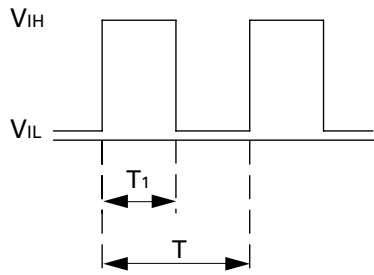
PWM Duty - Speed Characteristics Example



9GV2048P0G201

PWM Input Signal Example

Input Signal Wave Form



$V_{IH}=2.8V$ to $20V$

$V_{IL}=-0.8V$ to $0.4V$

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

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

Source Current (I_{source}) : 1mA Max. at control voltage 0V

Sink Current (I_{sink}) : 1mA Max. at control voltage 20V

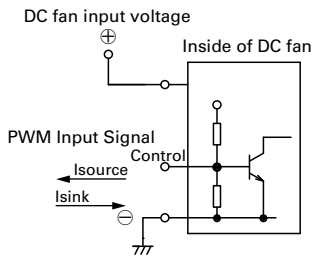
Control Terminal Voltage : 20V Max. (Open Circuit)

When the control lead wire is open,

the fan speed is the same as the one at a PWM duty cycle of 100% .

Either TTL input, open collector or open drain can be used for PWM control input signal.

Connection Schematic

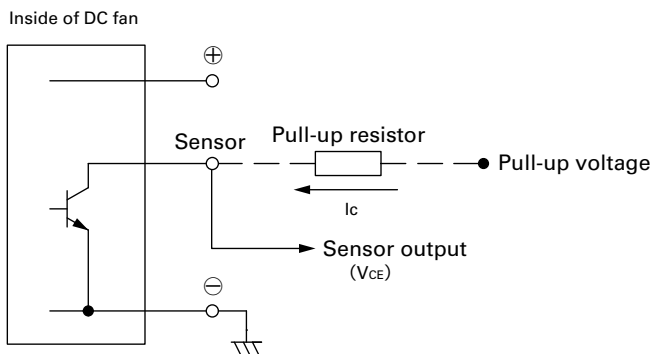


Specifications for Pulse Sensors

Output circuit : Open collector

$V_{CE} = +72V$ MAX.

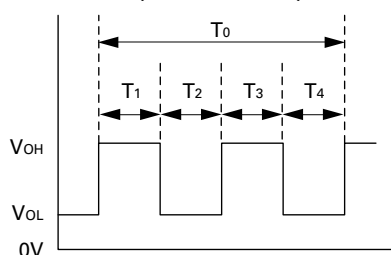
$I_c = 10mA$ MAX. [$V_{OL} = V_{CE} (SAT) = 1V$ MAX.]



Output waveform (Need pull-up resistor)

In case of steady running

(One revolution)

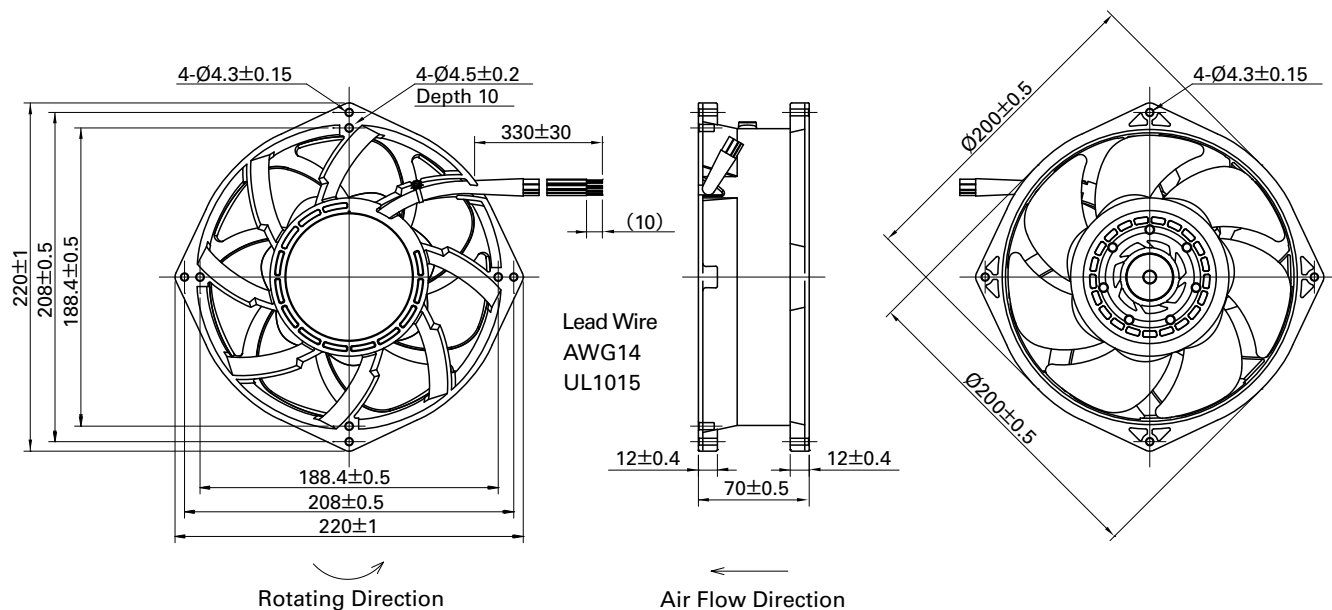


$T_{1\sim 4} \doteq (1/4) T_0$

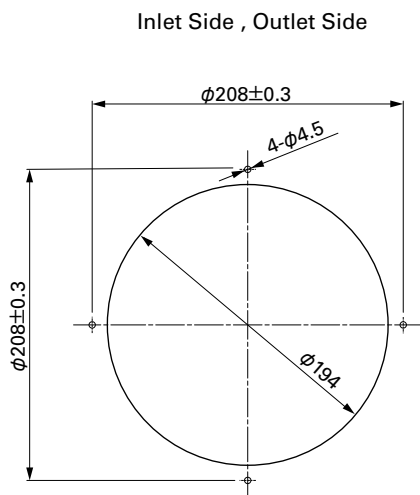
$T_{1\sim 4} \doteq (1/4) T_0 = 60/4N$ (sec)

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

Dimensions (unit : mm)



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



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.

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