

Ø **221x71** mm

**San Ace C221 9TP** 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 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)
- Insulation resistance ..... 10 MΩ min. at 500 VDC (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)
- Lead wire ..... ⊕Red ⊖Black  Sensor Yellow  Control Brown
- Mass ..... 1050 g

**Specifications** When the optional inlet nozzle (109-1135) is mounted.

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 <sup>-1</sup> ]	Max. airflow [m <sup>3</sup> /min] [CFM]	Max. static pressure [Pa] [inchH <sub>2</sub> O]	SPL [dB (A)]	Operating temperature [°C]	Expected life [h]
▶▶ 9TP24P0H001	24	16 to 36	100	3.2	76.8	3050	17.6 622	530 2.13	71	-20 to +70	40000/60°C (70000/40°C)
			15	0.4	9.6	1000	5.75 203	57.4 0.23	53		
▶▶ 9TP48P0G001	48	36 to 72	100	2.75	132	3650	21 742	760 3.05	74	-20 to +60	
			15	0.2	9.6	1000	5.75 203	57.4 0.23	53	-20 to +60	
▶▶ 9TP48P0H001			100	1.6	76.8	3050	17.6 622	530 2.13	71	-20 to +70	
			15	0.2	9.6	1000	5.75 203	57.4 0.23	53		

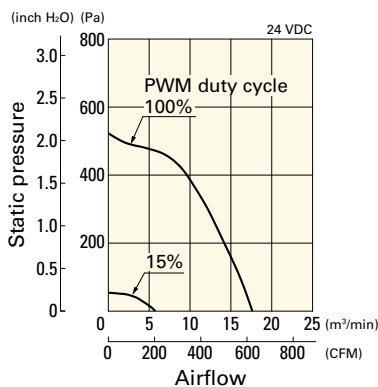
\* PWM frequency is 25 kHz. Models without ratings for 0% PWM duty cycle have zero speed at 0%. When control terminal is open, speed is the same as at 100% duty cycle.

- Note 1: Max input of 9TP48P0G001: 280 W, 9TP24P0H001/9TP48P0H001: 160 W at rated voltage.
- Note 2: Sensor and control options are available for selection. Refer to the table on p. 617.
- Note 3: The ▶▶ mark indicates Short LeadTime Service applicable models. See p. 630 for details.

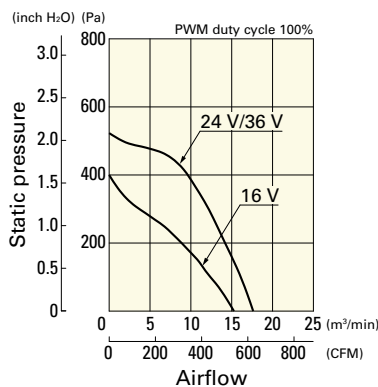
**Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example**

**9TP24P0H001** With pulse sensor with PWM control function

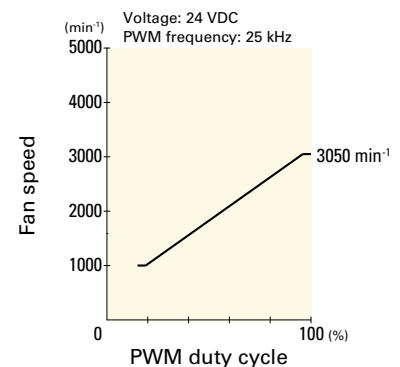
PWM duty cycle



Operating voltage range



PWM duty - Speed characteristics example

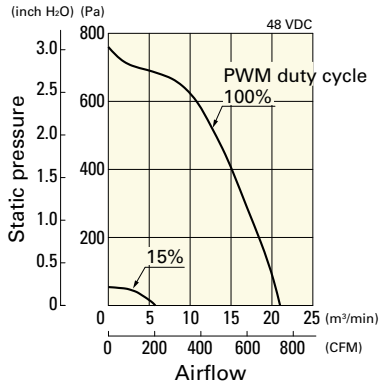


DC  
Centrifugal Fan Ø221 mm

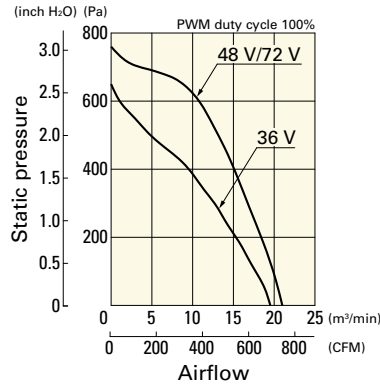
## Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

9TP48P0G001 With pulse sensor with PWM control function

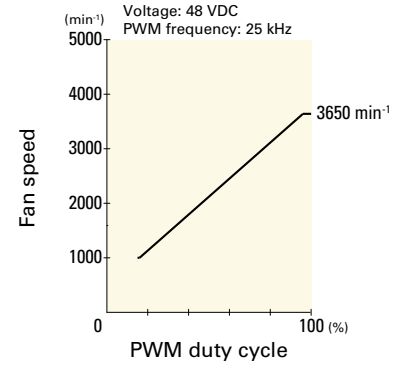
PWM duty cycle



Operating voltage range

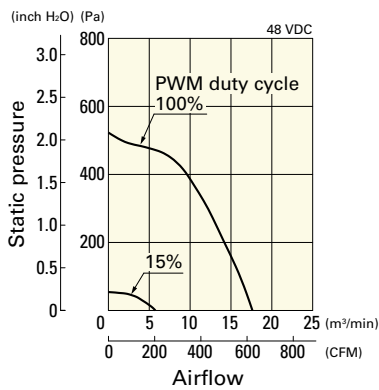


PWM duty - Speed characteristics example

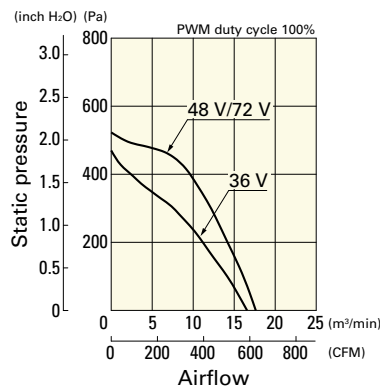


9TP48P0H001 With pulse sensor with PWM control function

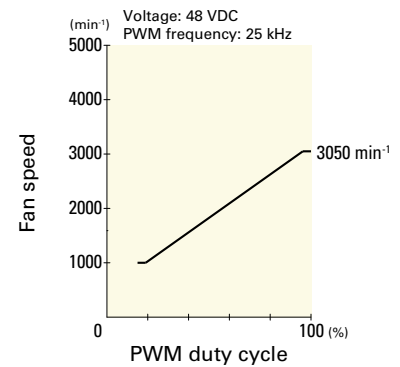
PWM duty cycle



Operating voltage range

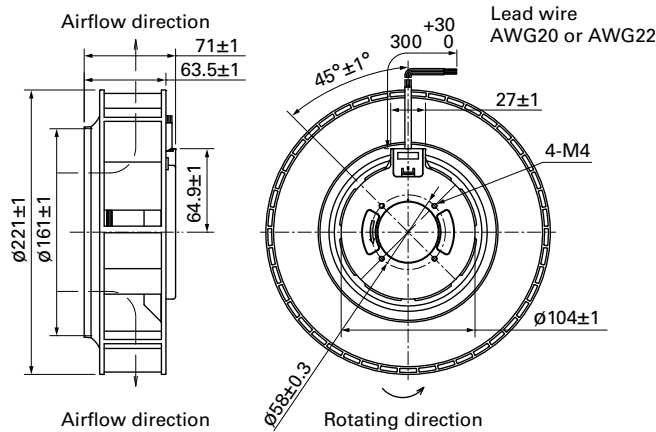


PWM duty - Speed characteristics example

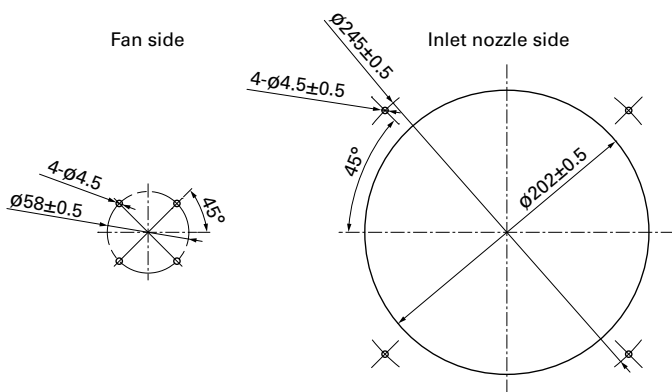


DC Centrifugal Fan  $\varnothing 221$  mm

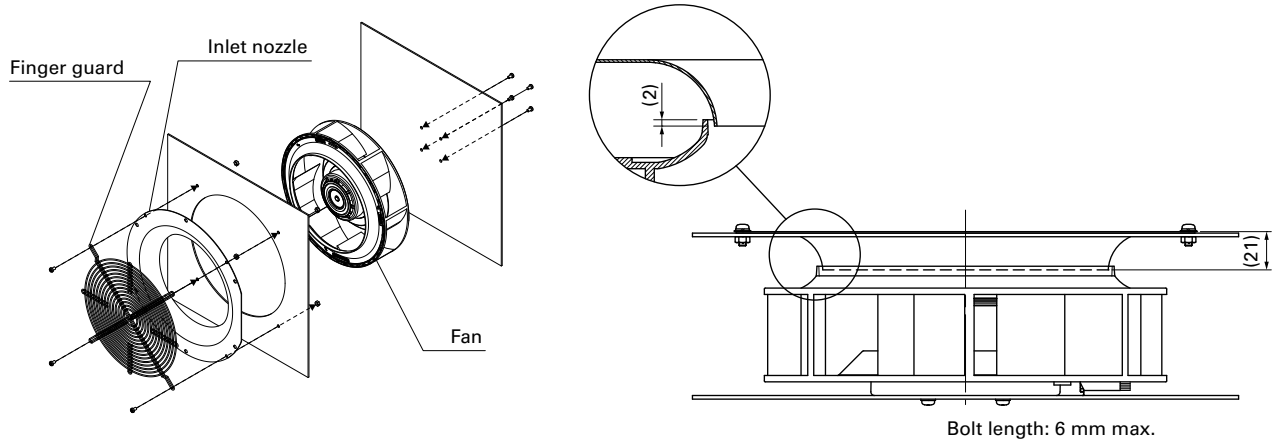
## Dimensions (unit: mm)



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



**Reference Diagram for Mounting (unit: mm)** Bracket-mounted model of this fan is available. For details, refer to pp. 447 to 449.



**Options**

**Finger guards**

page: p. 567

Model no.: 109-1138, 109-1138H

**Inlet nozzle**

page: p. 569

Model no.: 109-1135, 109-1135H