



# ∅221×71 mm

San Ace C221 9T 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)
- Motor protection function ..... Locked rotor burnout protection, Reverse polarity protection  
For details, please refer to p. 547.
- Dielectric strength ..... 50/60 Hz, 500 VAC, for 1 minute (between lead wire conductors and motor case)
- Insulation resistance ..... 10 MΩ or more with a 500 VDC megger (between lead wire conductors and motor case)
- 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	
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: 25 kHz. Fan does not rotate when PWM duty cycle is 0%.  
Max input of 9TP48P0G001: 280 W, 9TP24P0H001/9TP48P0H001: 160 W at rated voltage.

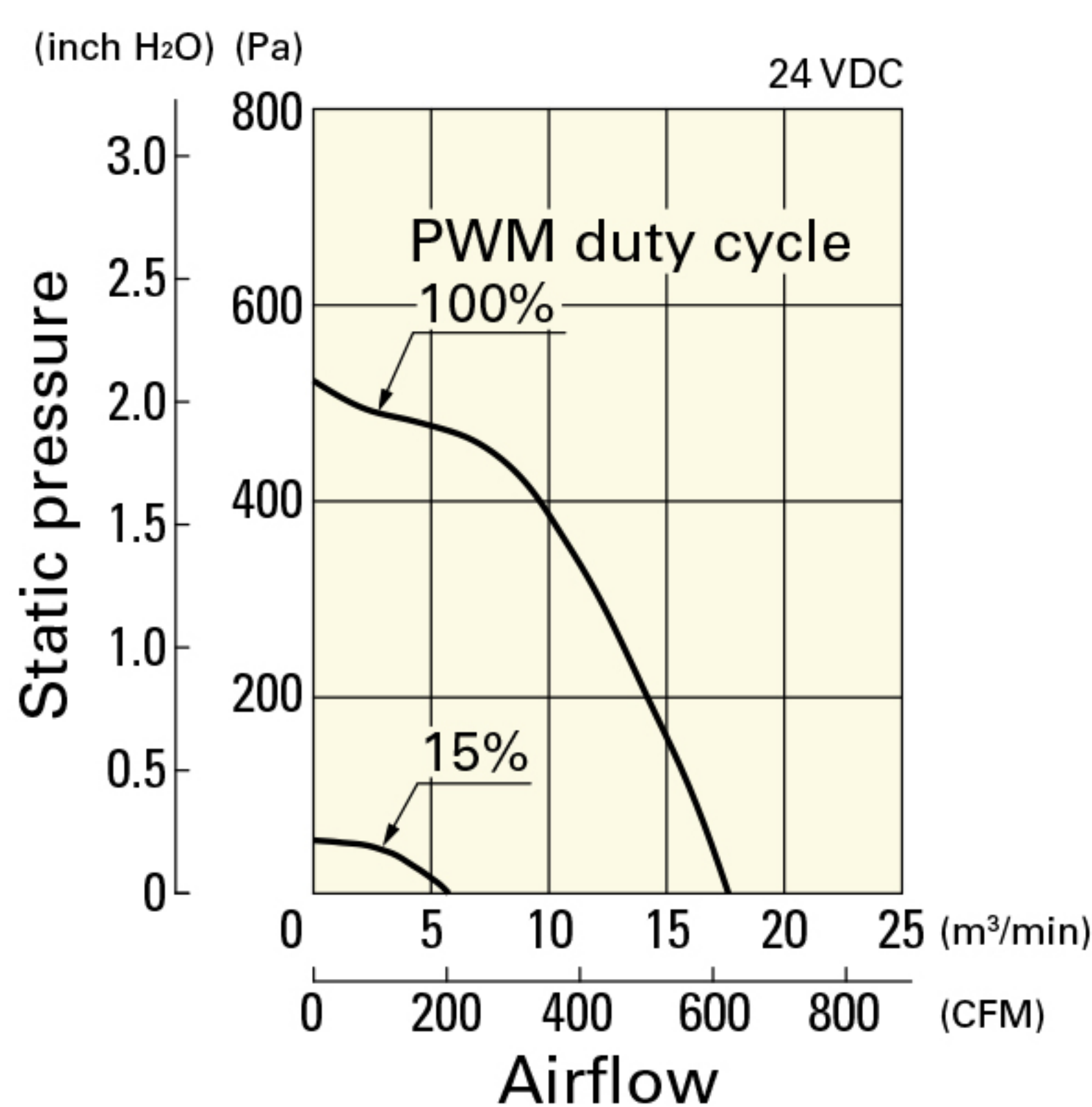
The following sensor and control options are available for selection.

Differs according to the model. Refer to the table on p. 578.  Without sensor

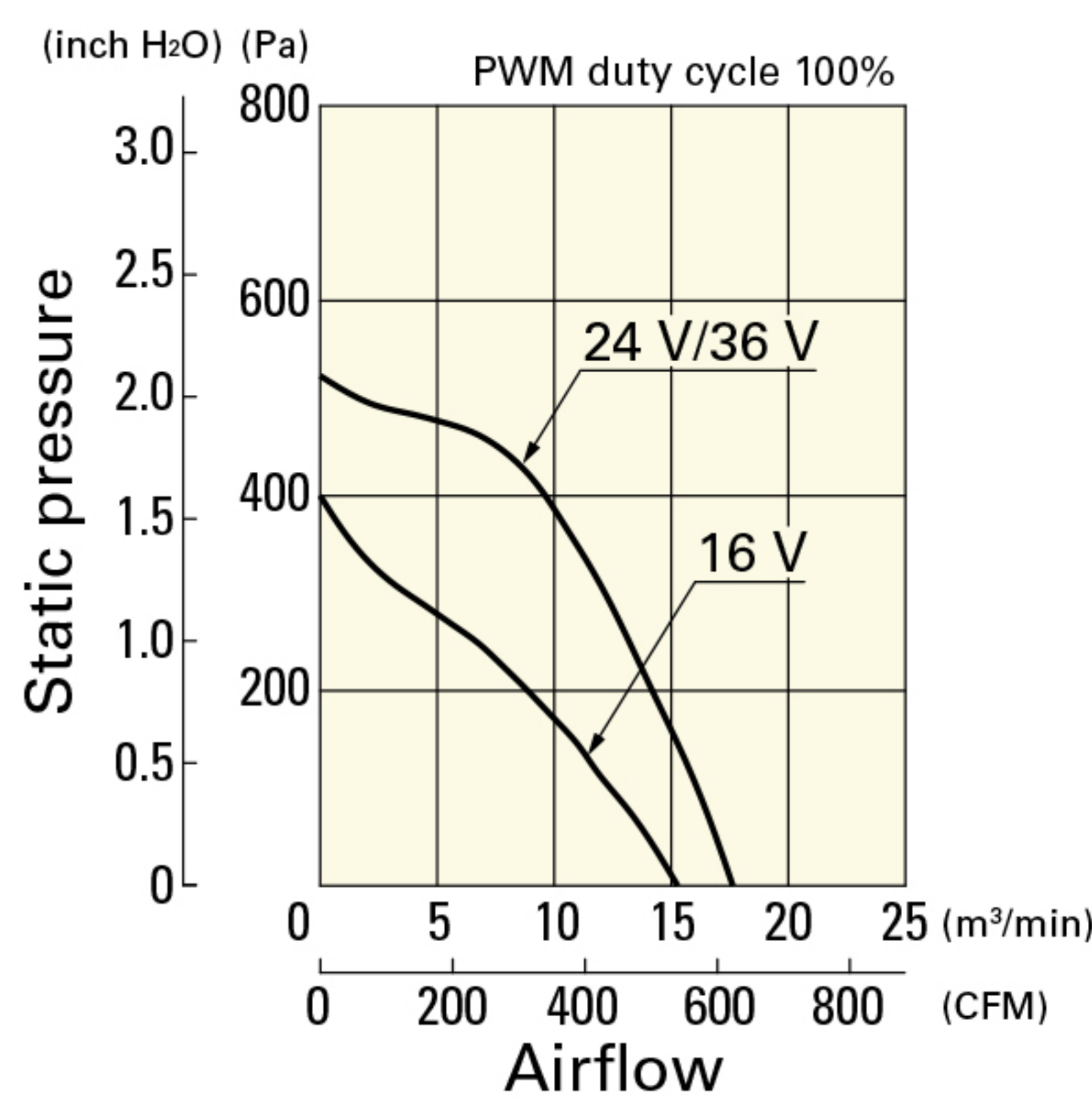
## Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

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

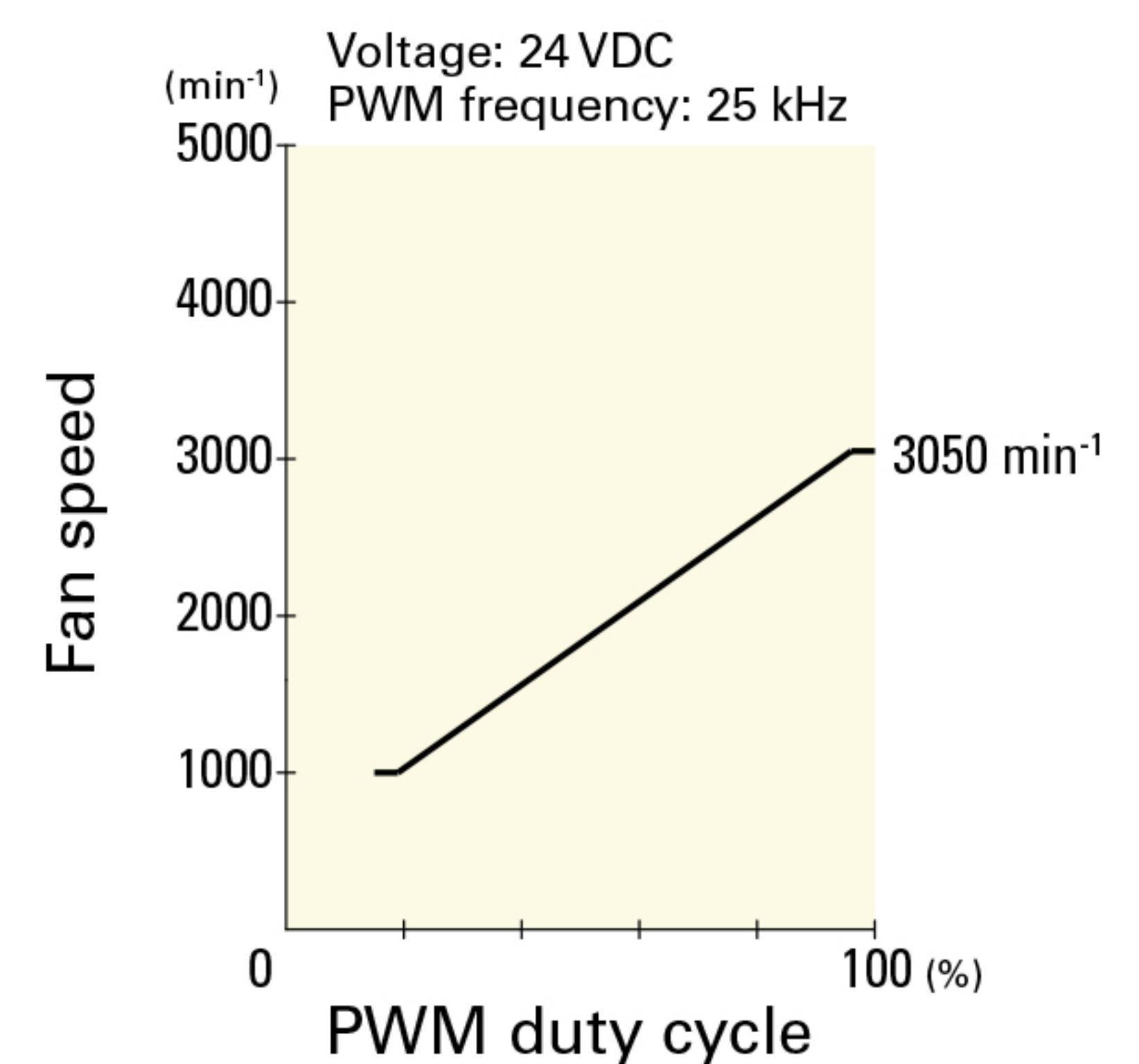
PWM duty cycle



Operating voltage range



PWM duty - Speed characteristics example

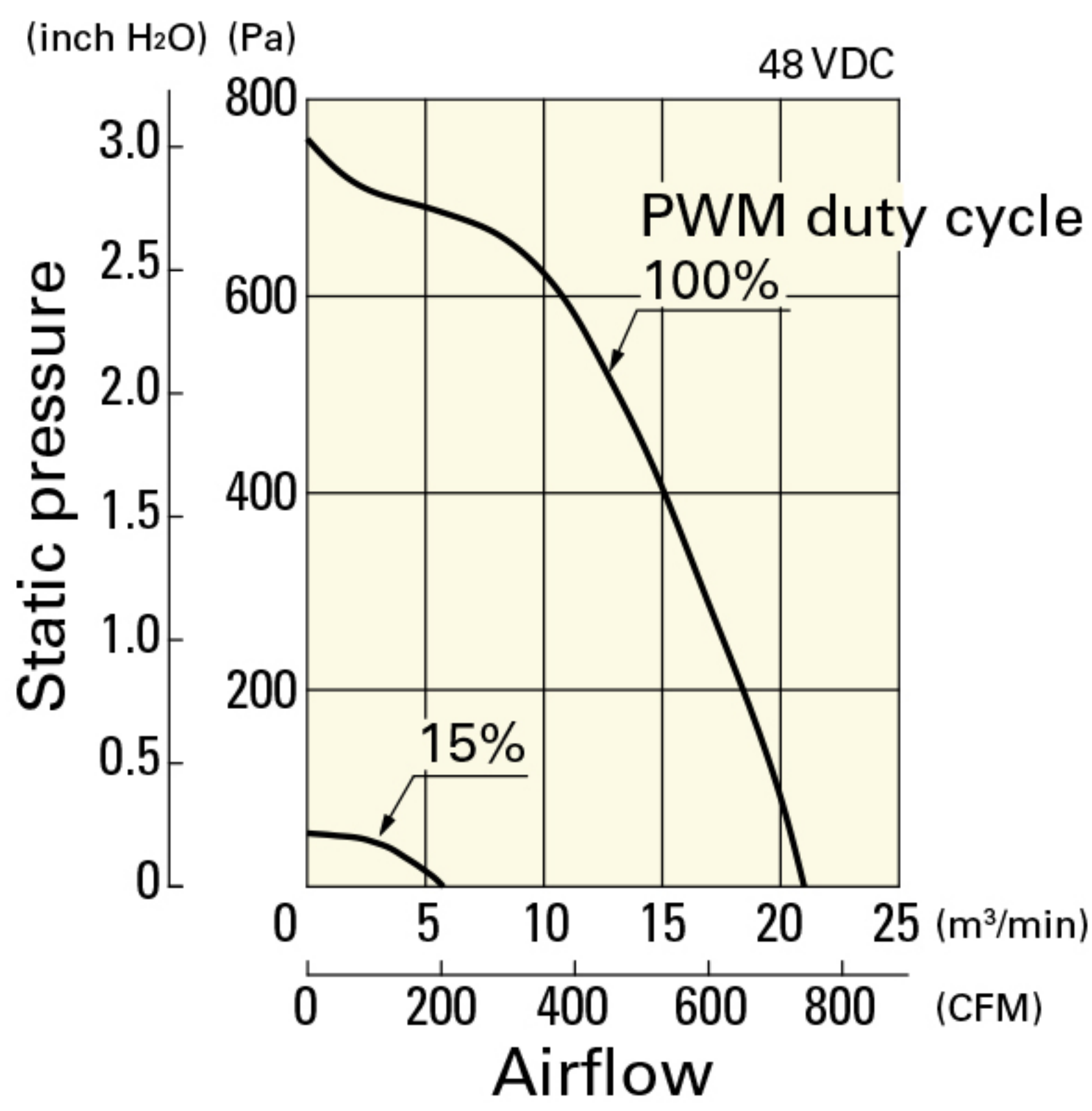




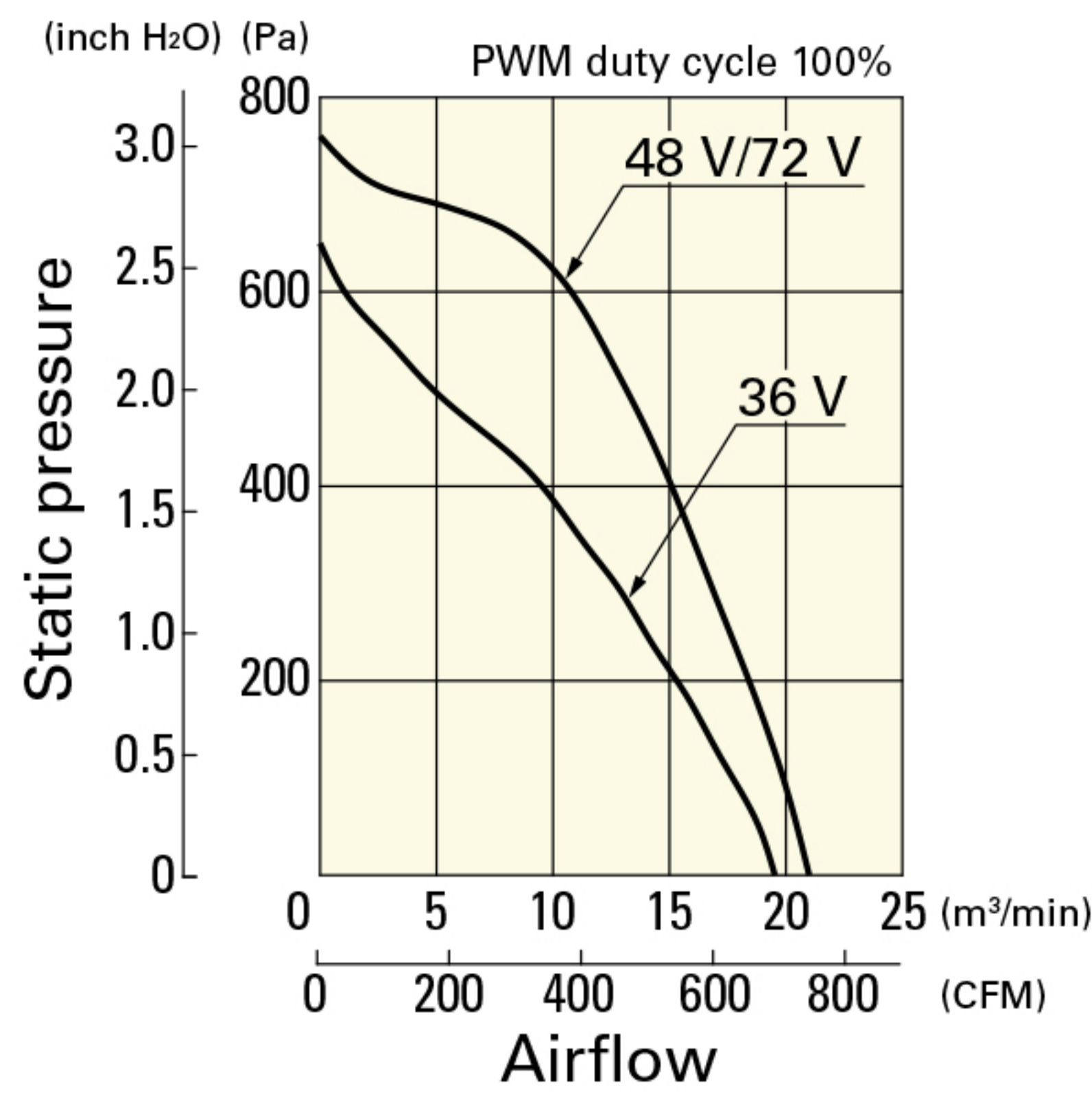
# Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

**9TP48P0G001** With pulse sensor with PWM control function

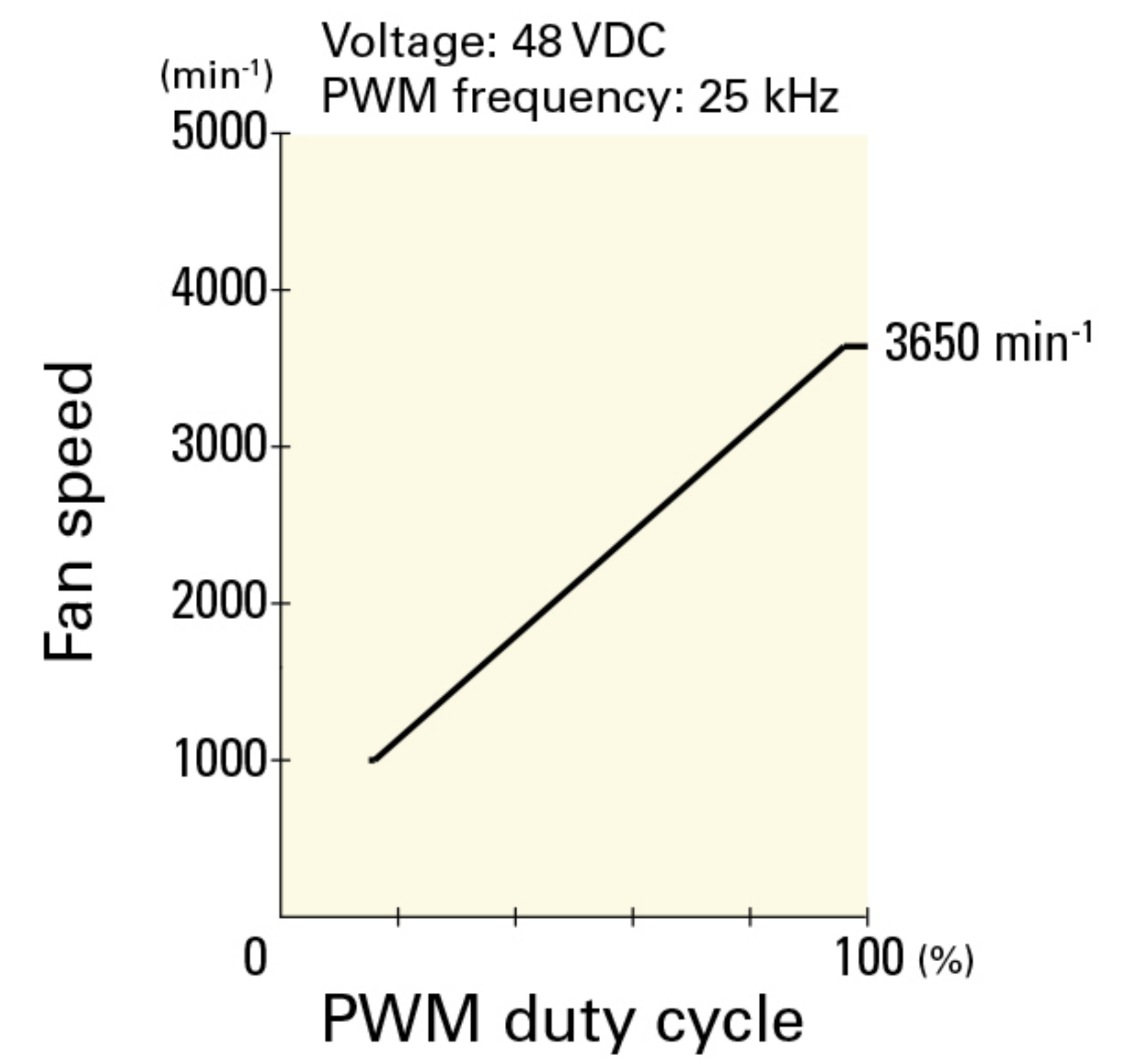
PWM duty cycle



Operating voltage range

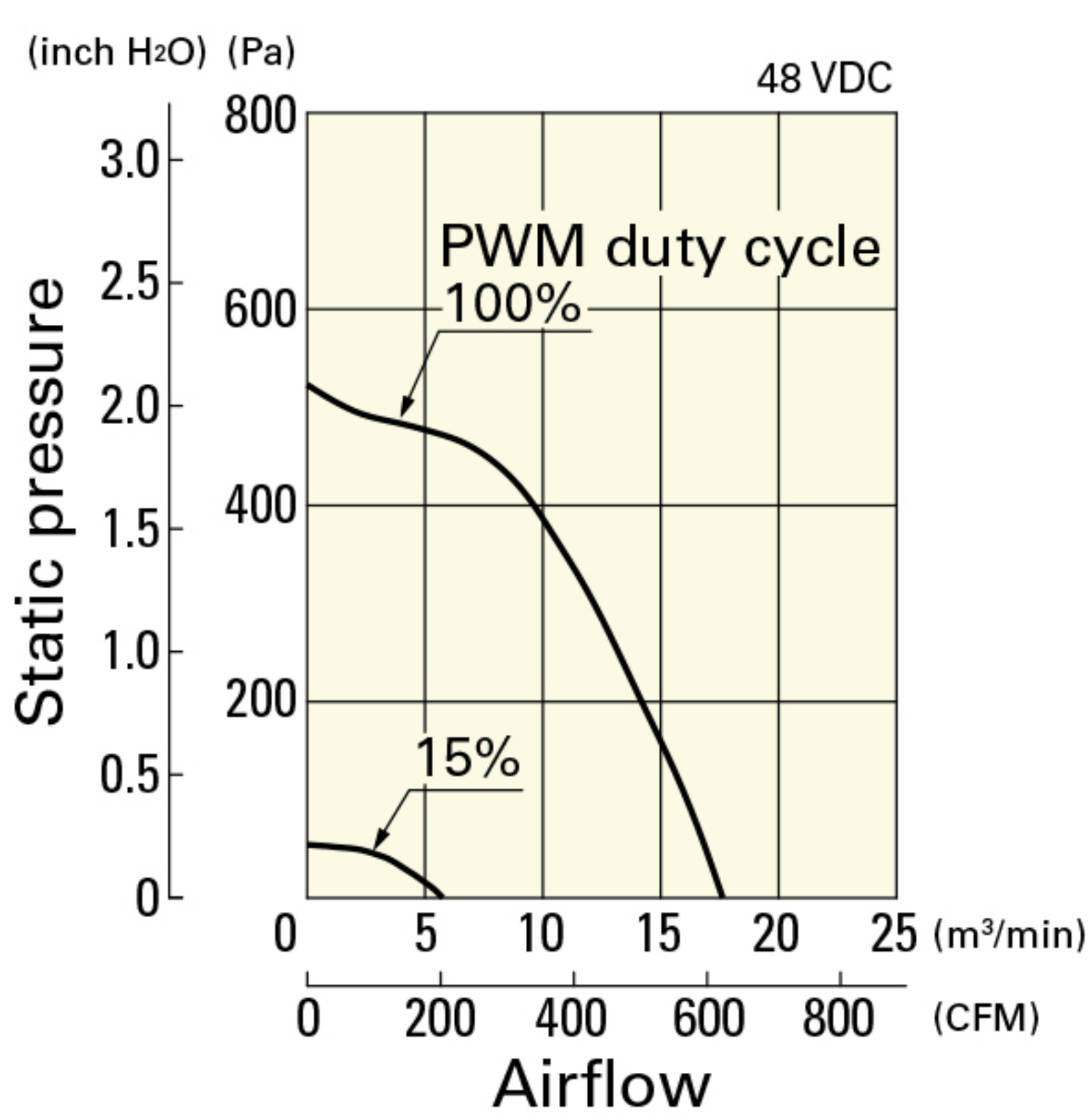


PWM duty - Speed characteristics example

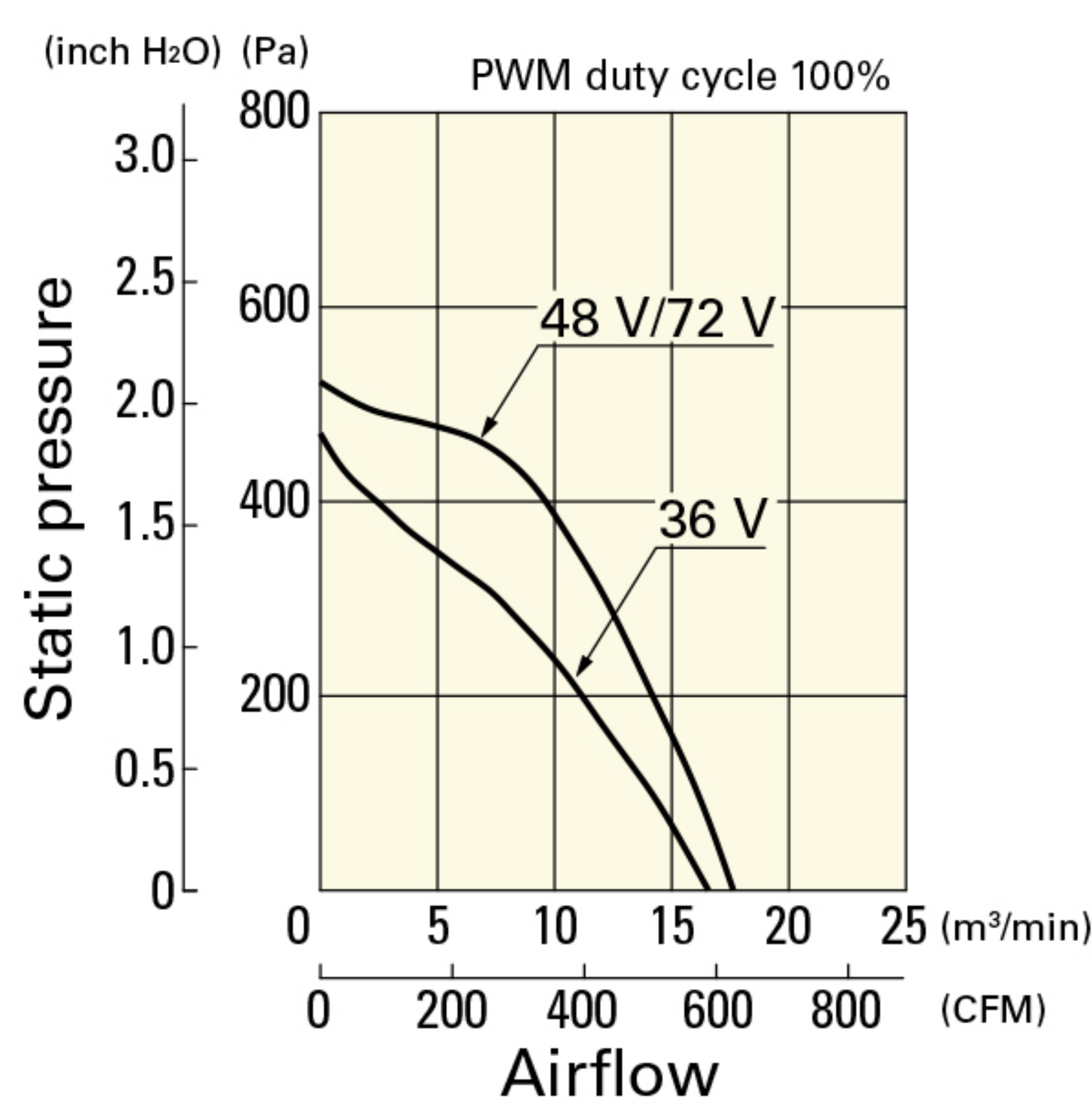


**9TP48P0H001** With pulse sensor with PWM control function

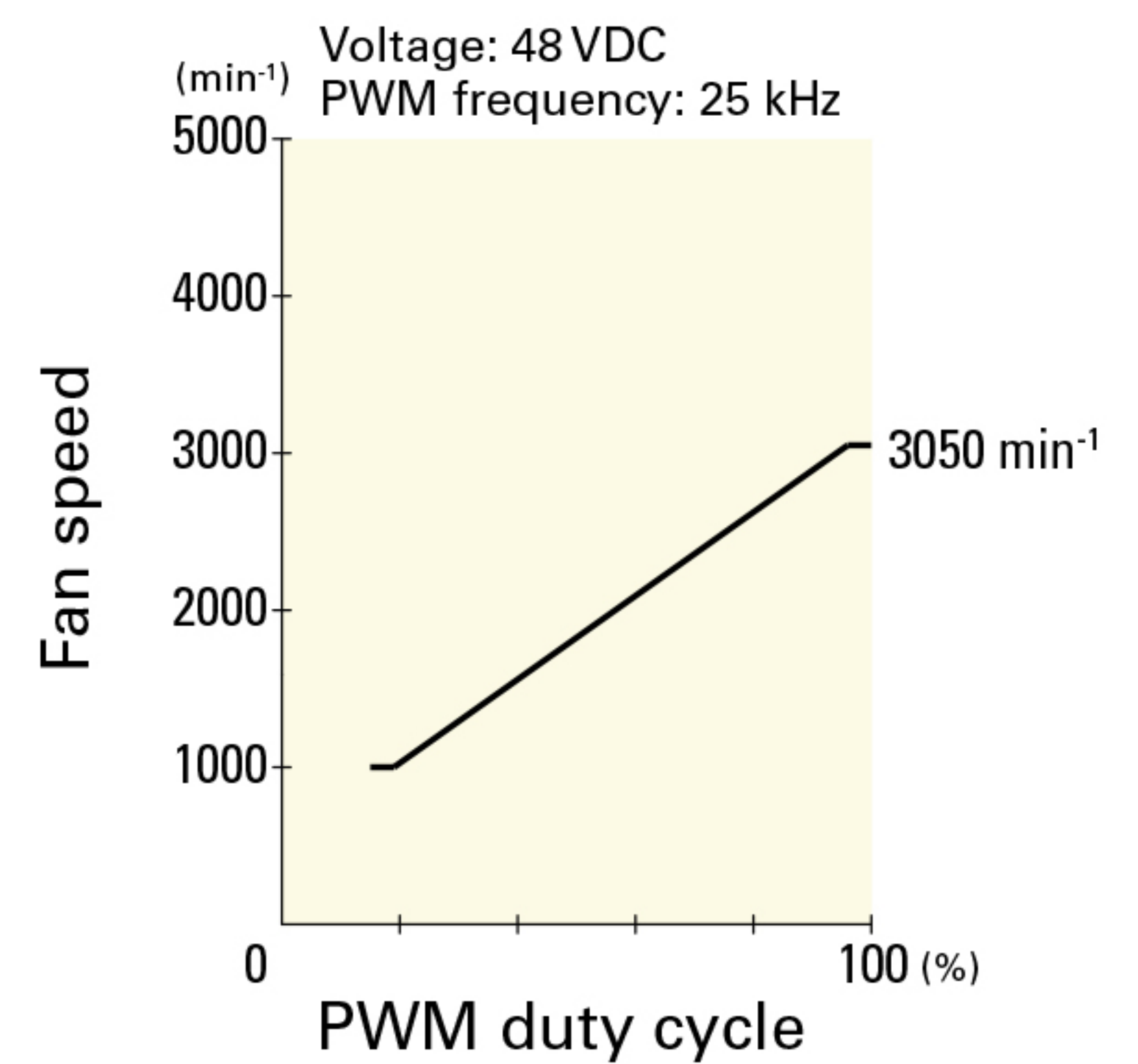
PWM duty cycle



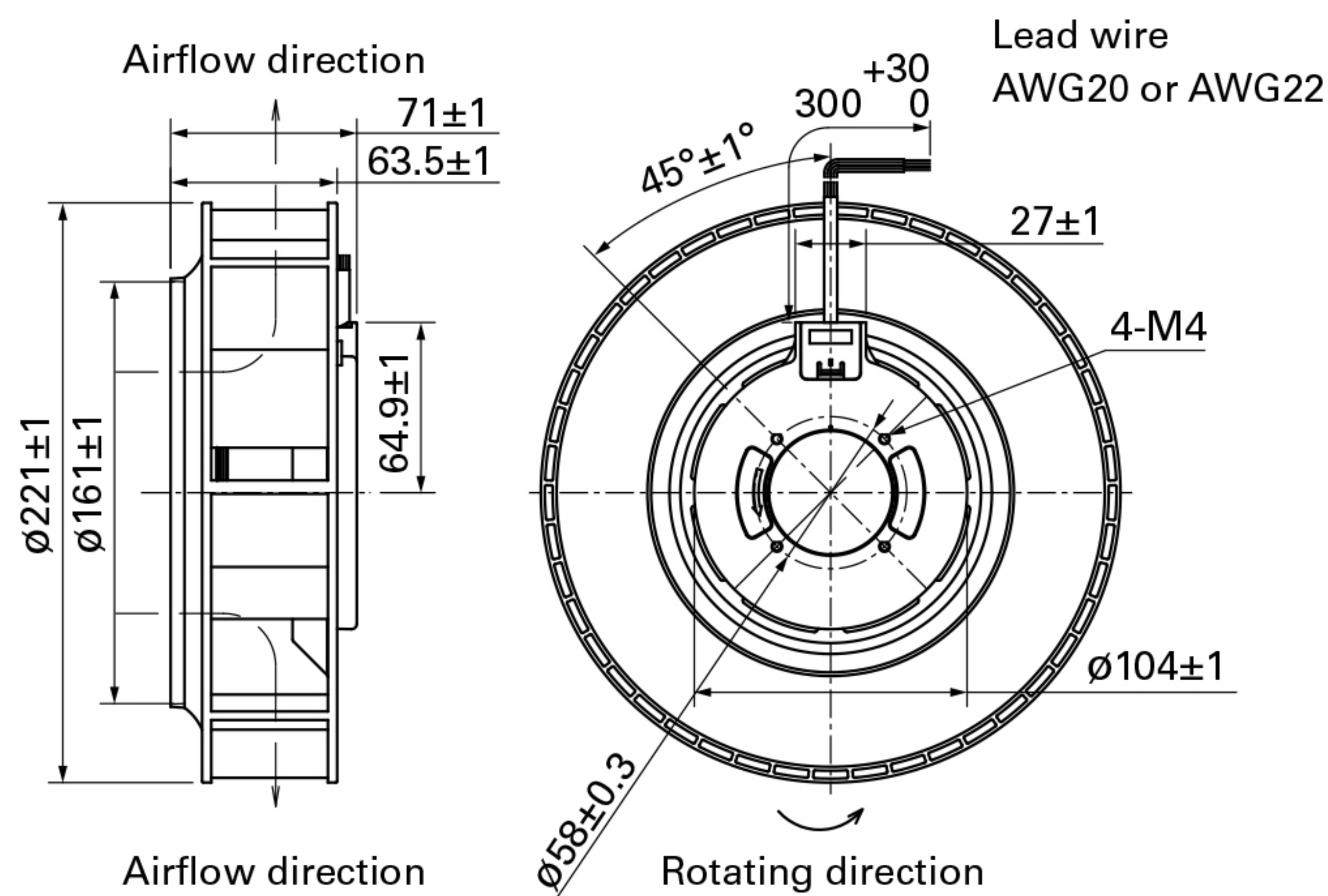
Operating voltage range



PWM duty - Speed characteristics example

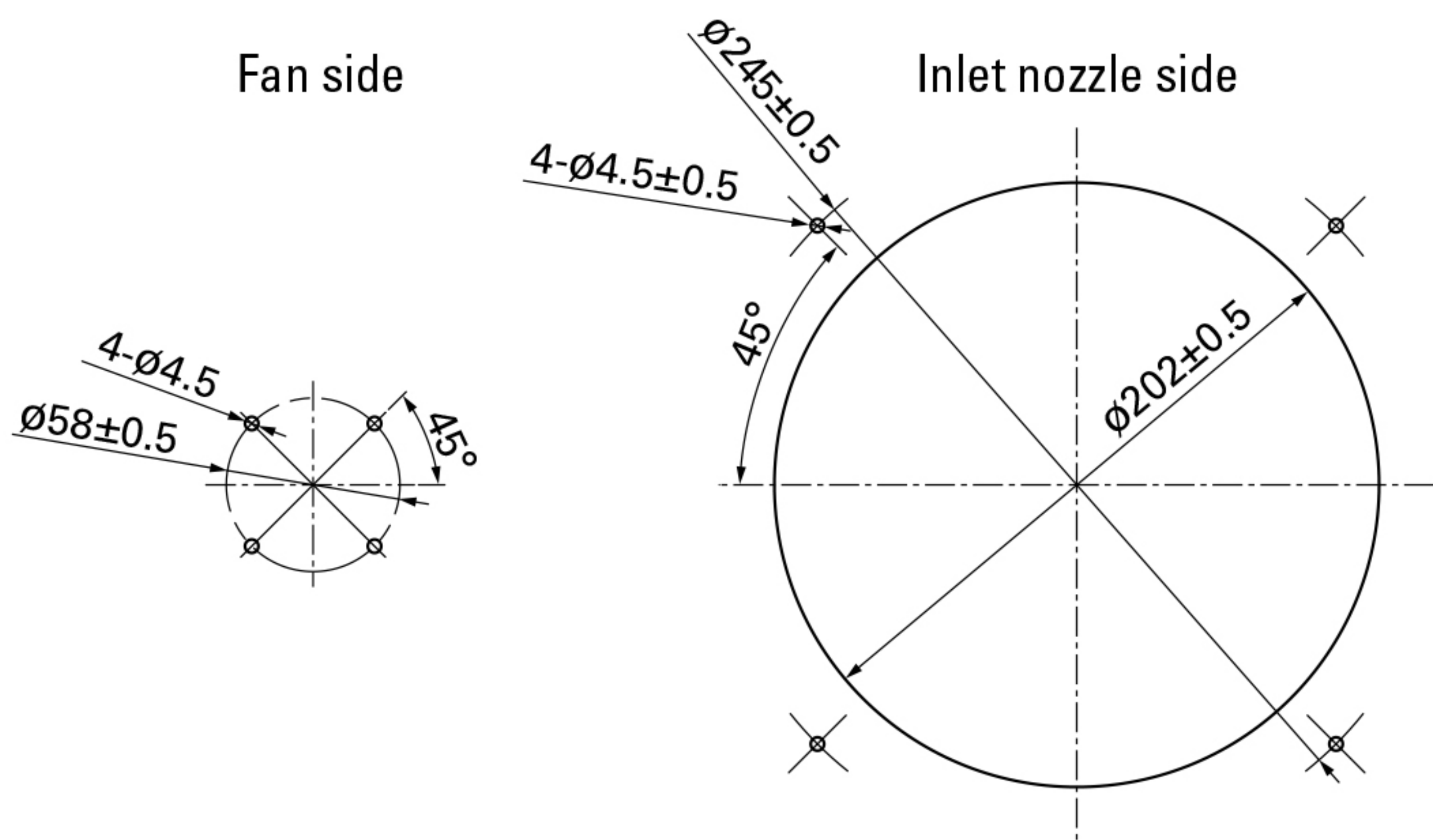


## Dimensions (unit: mm)



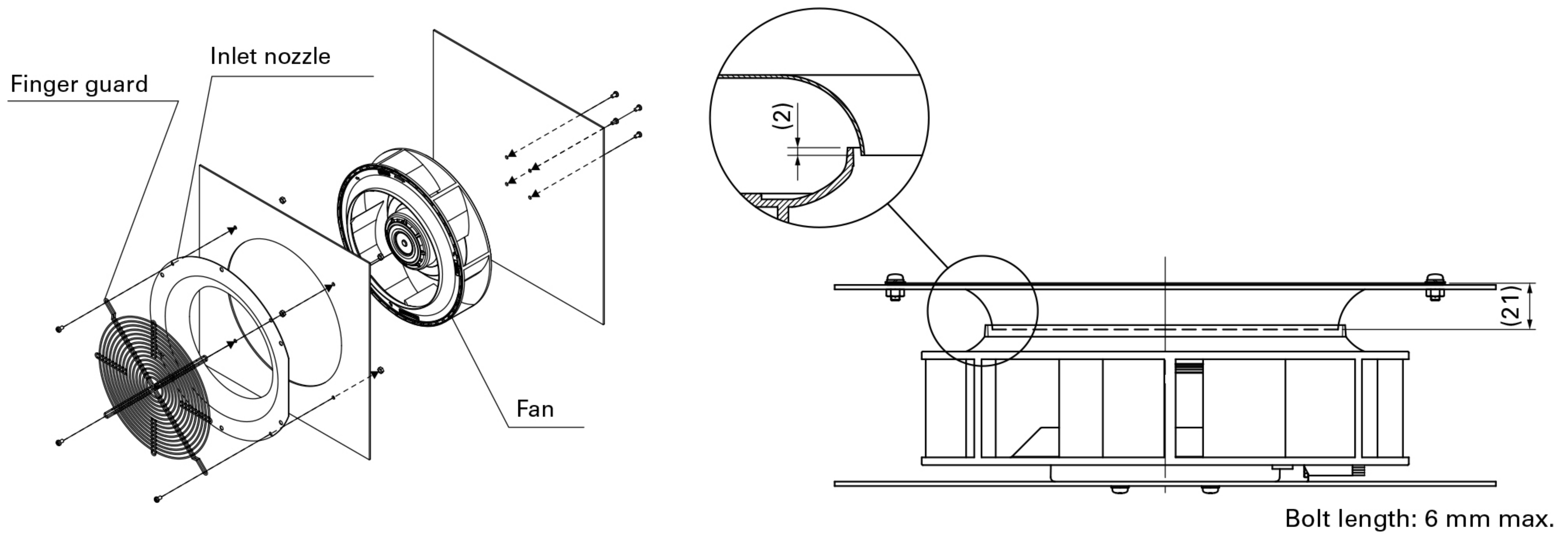


## Reference Dimensions of Mounting Holes and Vent Opening (unit: mm)



## Reference Diagram for Mounting

Bracket-mounted model of this fan is available. For details, refer to pp. 448 to 450.



## Options

Finger guards

page: p. 535

Model no.: 109-1138

Inlet nozzle

page: p. 537

Model no.: 109-1135

DC

Centrifugal Fan  $\varnothing 221$  mm