

San Ace B97 Blower

Blower 97mm

Features

Large air flow and high static pressure

- Maximum airflow : increased by approx. 18 %
- Maximum static pressure : increased by approx. 68 % compared with our conventional product*1.

Energy-Saving Design

- Power consumption: 38.88 W *2

*1: Our conventional product is the DC cooling fan :
97 mm square x 33 mm "San Ace B97" (Model no. : 9BAM12GC2)

*2: It is a specification of model no. 9BMB24P2K01



97mm × 33mm

Specifications

Model No.	Rated Voltage [V]	Operating Voltage Range [V]	PWM duty cycle [%]*	Rated Current [A]	Rated Input [W]	Rated Speed [min ⁻¹]	Air Flow		Static Pressure		SPL [dB(A)]	Operating Temperature [°C]	Life Expectancy [h]
							[m ³ /min]	[CFM]	[Pa]	[inchH ₂ O]			
9BMB12P2K01	12	10.8 to 13.2	100	3.4	40.8	6,850	1.61	56.9	1,280	5.14	66	-10 to +70	40,000
9BMB24P2K01	24	21.6 to 26.4	100	1.62	38.88	6,850	1.61	56.9	1,280	5.14	66		

※PWM Frequency : 25kHz

※Fan does not rotate when PWM duty cycle is 0%.

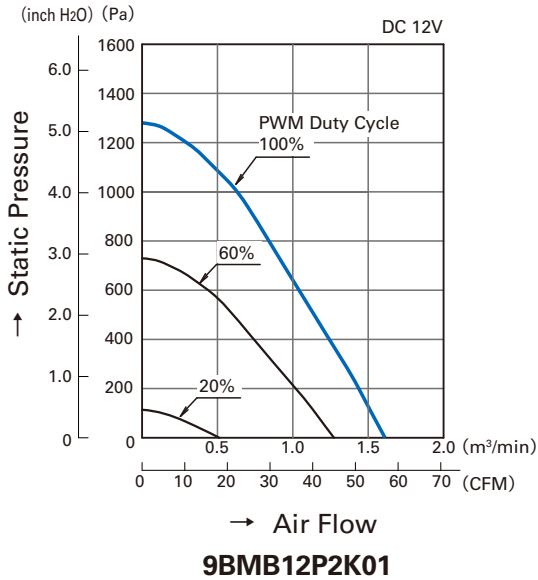
Common Specifications

- Material Frame: Plastics (Flammability: UL94V-0) , 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 190g

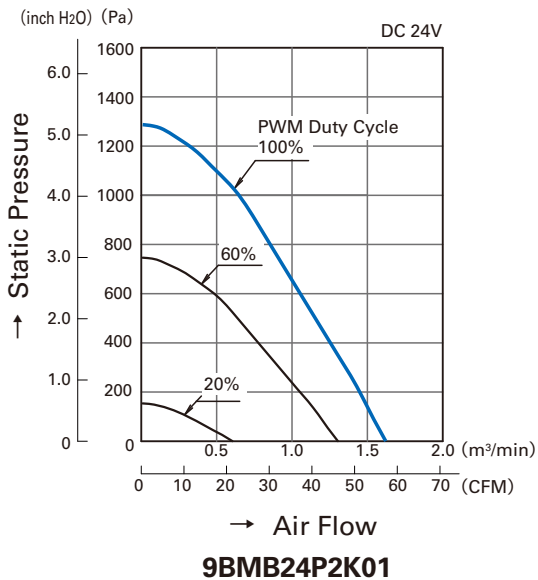
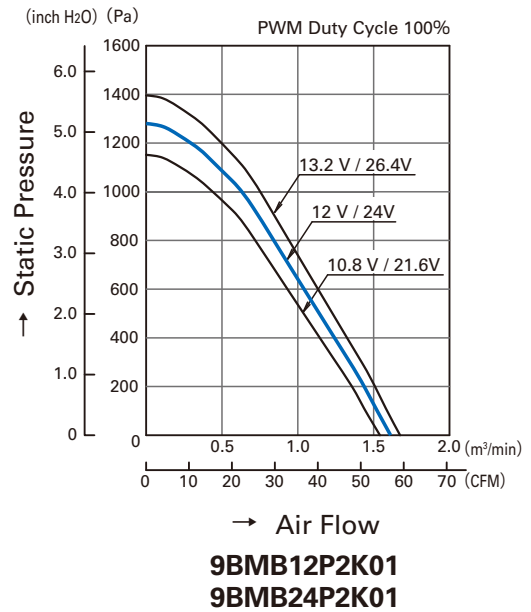
97mm

Air Flow and Static Pressure Characteristics

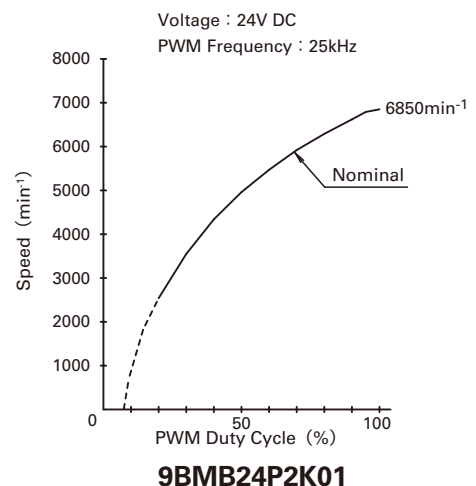
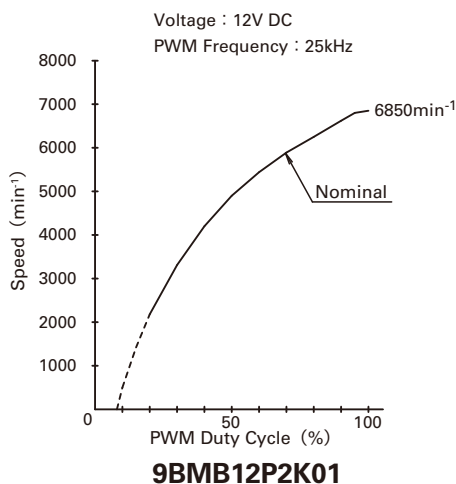
- PWM Duty Cycle



- Operating Voltage Range

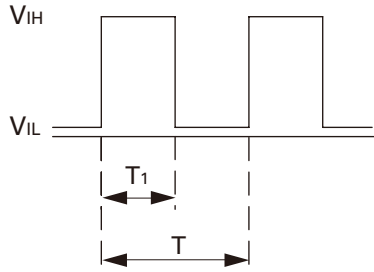


PWM Duty - Speed Characteristics Example



PWM Input Signal Example

Input Signal Wave Form



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

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

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

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

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

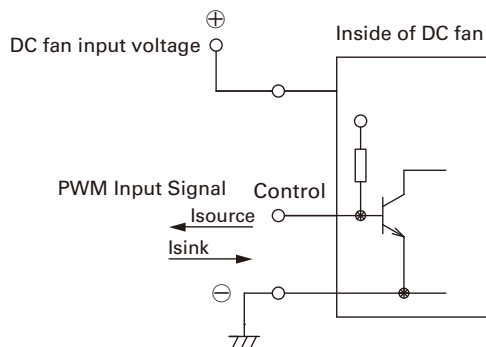
Sink Current (I_{sink}) : 1mA Max. at control voltage 5.25V

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.

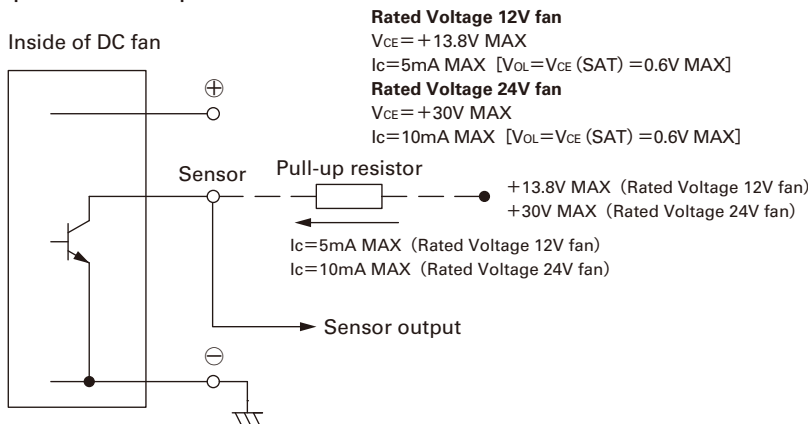
This fan speed should be controlled by PWM input signal of either TTL input or open collector, drain input.

Connection Schematic



Specifications for Pulse Sensors

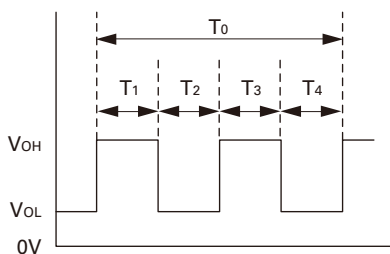
Output circuit : Open collector



Output waveform (Need pull-up resistor)

In case of steady running

(One revolution)

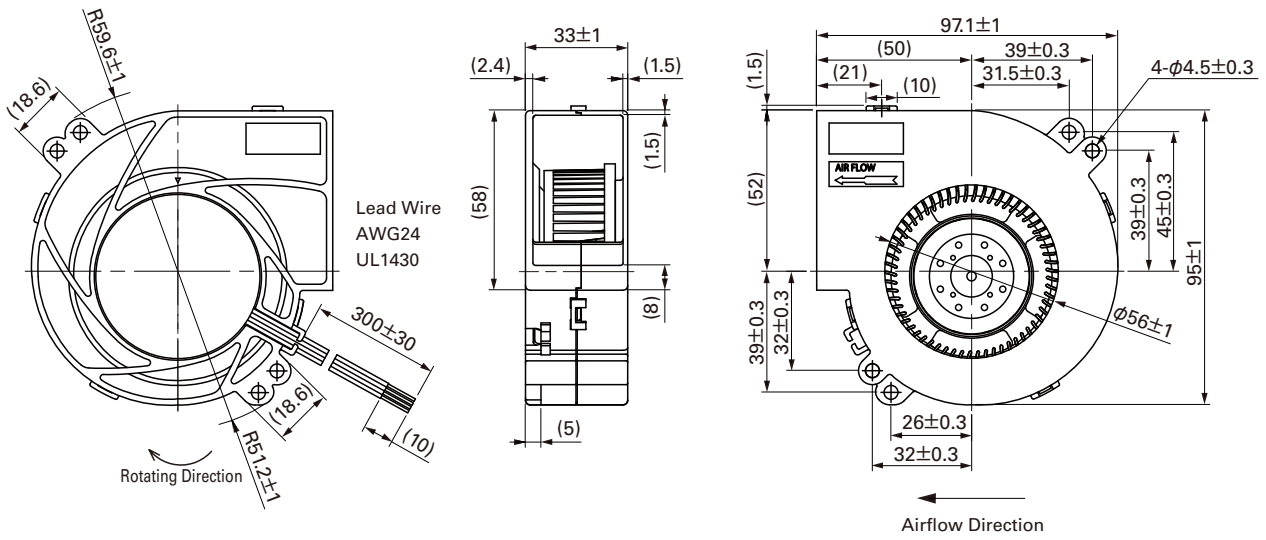


$T_{1\sim 4} \doteq (1/4) T_0$

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

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

Dimensions (unit : mm)



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.