

97×33 mm

San Ace B97 9BMC type



Blower 97 mm

DC

General Specifications

- Material Frame: Plastic (Flammability: UL 94V-0), 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. 616.
- Dielectric strength 50/60 Hz, 500 VAC, for 1 minute (between lead wire conductors and frame)
- Insulation resistance 10 MΩ min. at 500 VDC (between lead wire conductors and frame)
- 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 200 g

Specifications

The models listed below have a pulse sensor with PWM control.

Model no.	Rated voltage [V]	Operating voltage range [V]	PWM duty cycle* [%]	Rated current [A]	Rated input [W]	Rated speed [min ⁻¹]	Max. airflow [m ³ /min] [CFM]	Max. static pressure [Pa] [inchH ₂ O]	SPL [dB (A)]	Operating temperature [°C]	Expected life [h]
9BMC12P2G001	12	10.8 to 13.2	100	6.2	74.4	8200	1.85 65.3	1950 7.83	69	-20 to +70	40000/60°C (70000/40°C)
			20	0.38	4.56	2800	0.58 20.4	121.0 0.48	44		
9BMC24P2G001	24	21.6 to 26.4	100	3.1	74.4	8200	1.85 65.3	1950 7.83	69		
			20	0.19	4.56	2800	0.58 20.4	121.0 0.48	44		

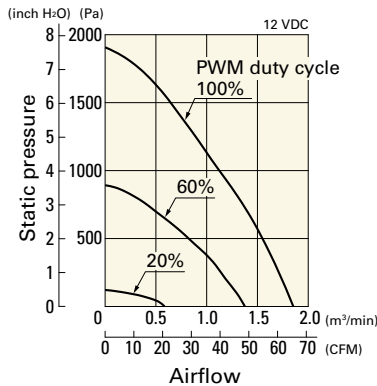
* PWM frequency is 25 kHz. Models without ratings for 0% PWM duty cycle have zero speed at 0%. When control terminal is open, speed is the same as at 100% duty cycle.

Note: Sensor and control options are available for selection. Refer to the table on p. 646.

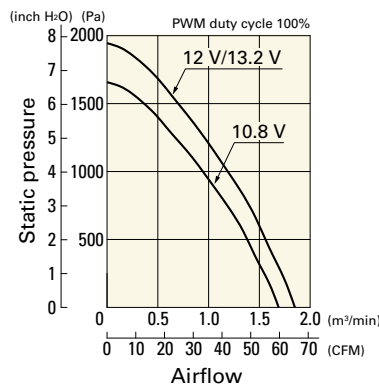
Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

9BMC12P2G001 With pulse sensor with PWM control

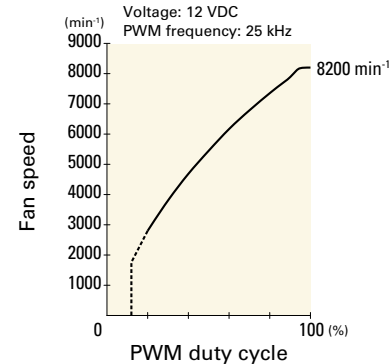
PWM duty cycle



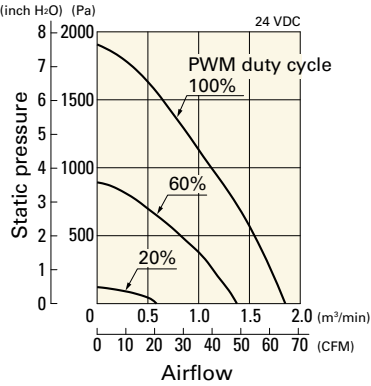
Operating voltage range



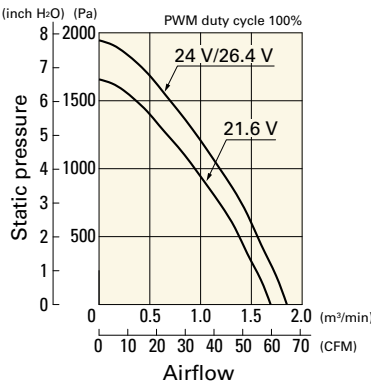
PWM duty - Speed characteristics example



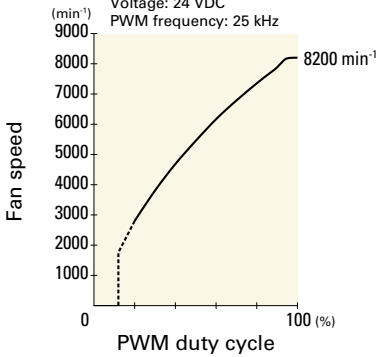
PWM duty cycle



Operating voltage range

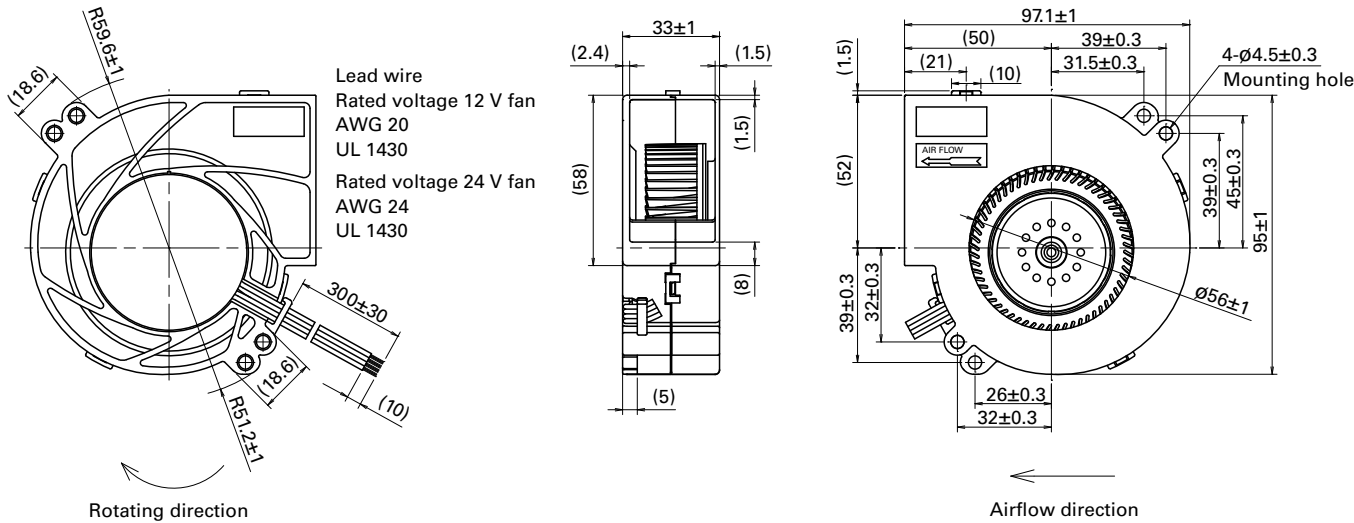


PWM duty - Speed characteristics example



Blower 97 mm DC

Dimensions (unit: mm)



97×33 mm

San Ace B97 9BMB type  



Blower 97 mm
DC

General Specifications

- Material Frame: Plastic (Flammability: UL 94V-0), 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. 616.
- Dielectric strength 50/60 Hz, 500 VAC, for 1 minute (between lead wire conductors and frame)
- Insulation resistance 10 MΩ min. at 500 VDC (between lead wire conductors and frame)
- 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
(For models without PWM control, there is no speed control wiring.)
- Mass 190 g

Specifications

The models listed below **have a pulse sensor with PWM control.**

Model no.	Rated voltage [V]	Operating voltage range [V]	PWM duty cycle* [%]	Rated current [A]	Rated input [W]	Rated speed [min ⁻¹]	Max. airflow [m ³ /min] [CFM]	Max. static pressure [Pa] [inchH ₂ O]	SPL [dB (A)]	Operating temperature [°C]	Expected life [h]
9BMB12P2K01	12	10.8 to 13.2	100	3.4	40.8	6850	1.61 56.8	1280 5.14	66	-20 to +70	40000/60°C (70000/40°C)
9BMB12P2G01			100	1.8	21.6	5750	1.34 47.3	760 3.05	61		
9BMB12P2S01			100	1.4	16.8	5250	1.22 43.1	610 2.45	59		
9BMB12P2H01			100	1.1	13.2	4850	1.11 39.2	490 1.968	57		
9BMB12P2F01			100	0.9	10.8	4500	1.04 36.7	410 1.64	56		
9BMB24P2K01	24	21.6 to 26.4	100	1.62	38.88	6850	1.61 56.8	1280 5.14	66		
9BMB24P2G01			100	0.83	19.92	5750	1.34 47.3	760 3.05	61		
9BMB24P2S01			100	0.7	16.8	5250	1.22 43.1	610 2.45	59		
9BMB24P2H01			100	0.55	13.2	4850	1.11 39.2	490 1.968	57		
9BMB24P2F01			100	0.45	10.8	4500	1.04 36.7	410 1.64	56		

* 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.

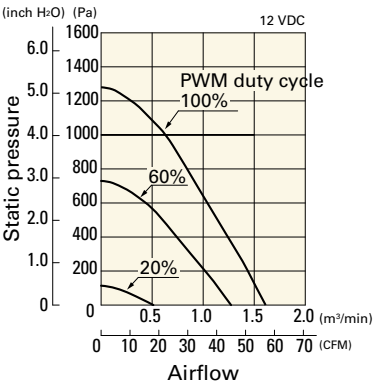
The models listed below **have a pulse sensor.**

Model no.	Rated voltage [V]	Operating voltage range [V]	Rated current [A]	Rated input [W]	Rated speed [min ⁻¹]	Max. airflow [m ³ /min] [CFM]	Max. static pressure [Pa] [inchH ₂ O]	SPL [dB (A)]	Operating temperature [°C]	Expected life [h]
9BMB12K201	12	7 to 13.2	3.4	40.8	6850	1.61 56.8	1280 5.14	66	-20 to +70	40000/60°C (70000/40°C)
9BMB12G201			1.8	21.6	5750	1.34 47.3	760 3.052	61		
9BMB12S201			1.4	16.8	5250	1.22 43.1	610 2.45	59		
9BMB12H201			1.1	13.2	4850	1.11 39.2	490 1.968	57		
9BMB12F201			0.9	10.8	4500	1.04 36.7	410 1.647	56		
9BMB24K201	24	12 to 26.4	1.62	38.88	6850	1.61 56.8	1280 5.14	66		
9BMB24G201			0.83	19.9	5750	1.34 47.3	760 3.052	61		
9BMB24S201			0.7	16.8	5250	1.22 43.1	610 2.45	59		
9BMB24H201			0.55	13.2	4850	1.11 39.2	490 1.968	57		
9BMB24F201			0.45	10.8	4500	1.04 36.7	410 1.647	56		

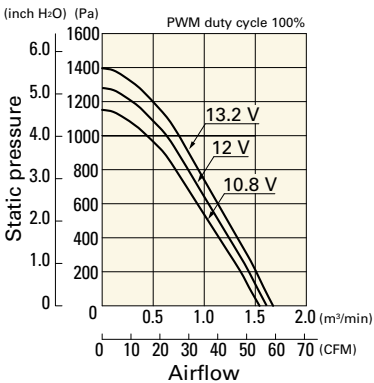
Note: Sensor and control options are available for selection. Refer to the table on p. 646.

9BMB12P2K01 With pulse sensor with PWM control

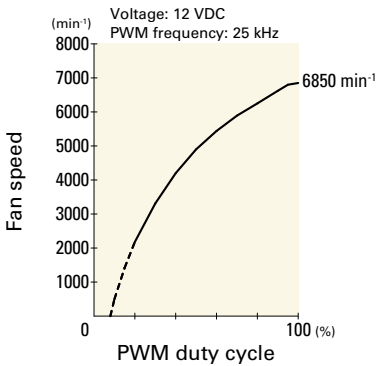
PWM duty cycle



Operating voltage range

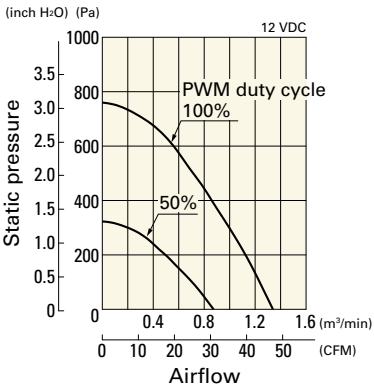


PWM duty - Speed characteristics example

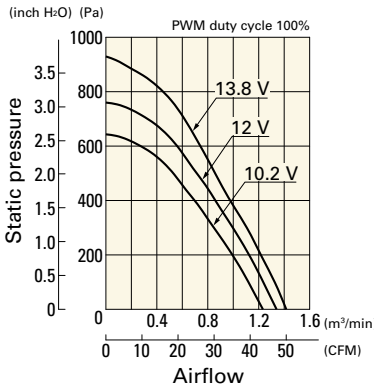


9BMB12P2G01 With pulse sensor with PWM control

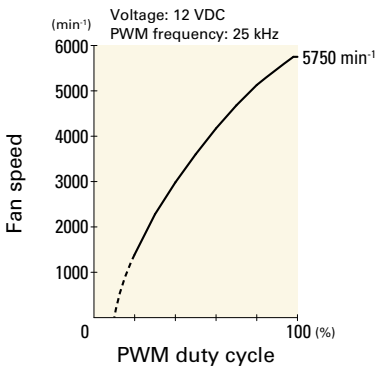
PWM duty cycle



Operating voltage range

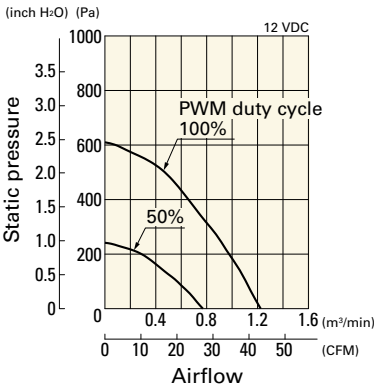


PWM duty - Speed characteristics example

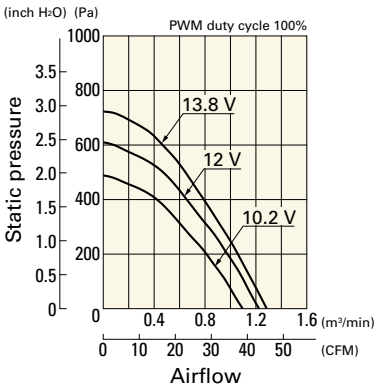


9BMB12P2S01 With pulse sensor with PWM control

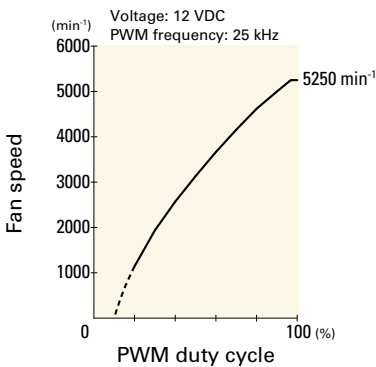
PWM duty cycle



Operating voltage range

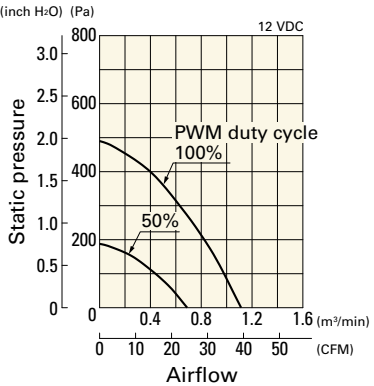


PWM duty - Speed characteristics example

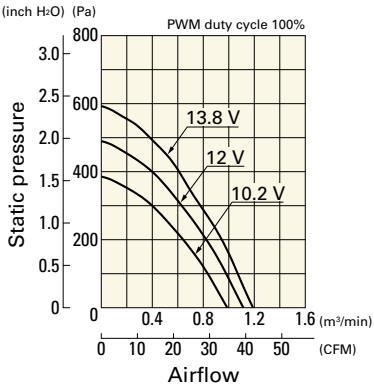


9BMB12P2H01 With pulse sensor with PWM control

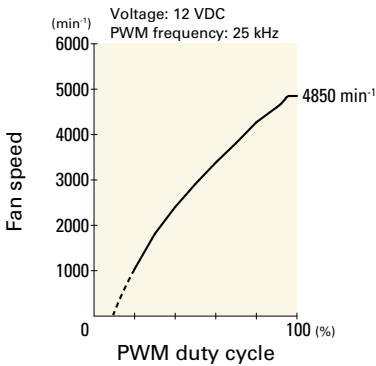
PWM duty cycle



Operating voltage range



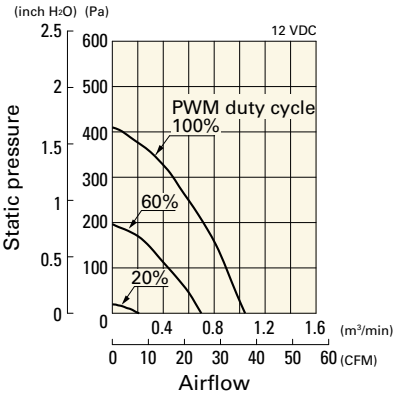
PWM duty - Speed characteristics example



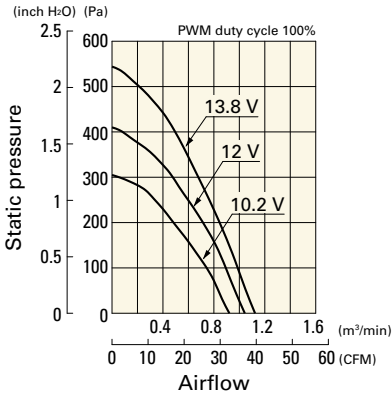
Blower 97 mm DC

9BMB12P2F01 With pulse sensor with PWM control

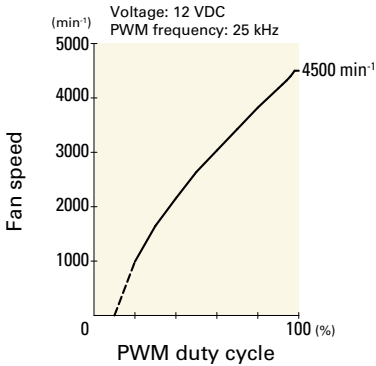
PWM duty cycle



Operating voltage range

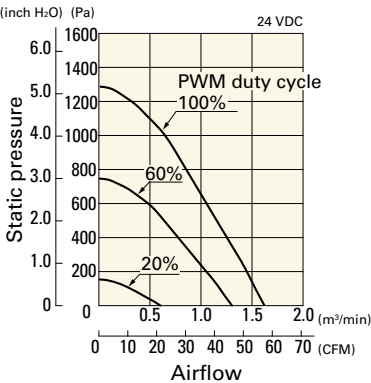


PWM duty - Speed characteristics example

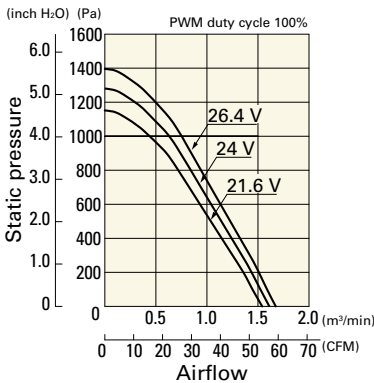


9BMB24P2K01 With pulse sensor with PWM control

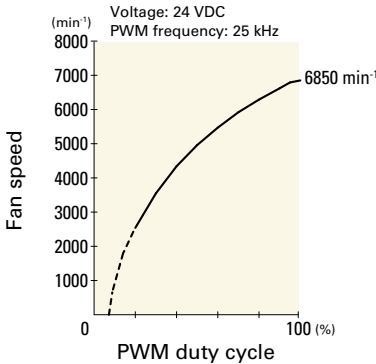
PWM duty cycle



Operating voltage range

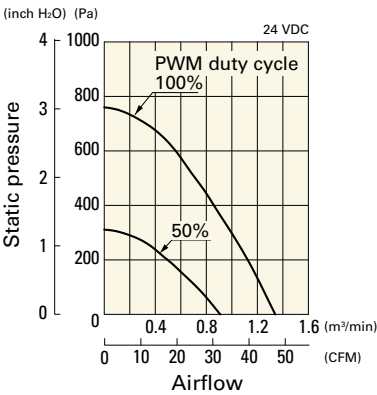


PWM duty - Speed characteristics example

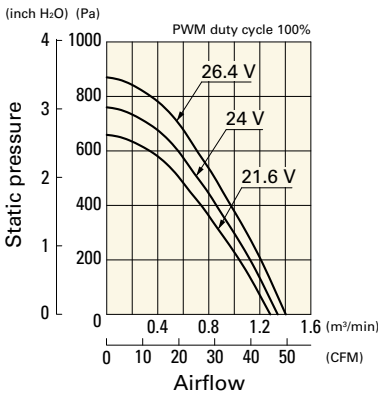


9BMB24P2G01 With pulse sensor with PWM control

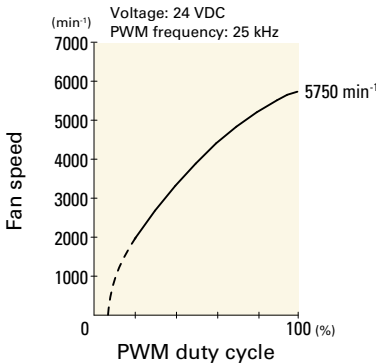
PWM duty cycle



Operating voltage range

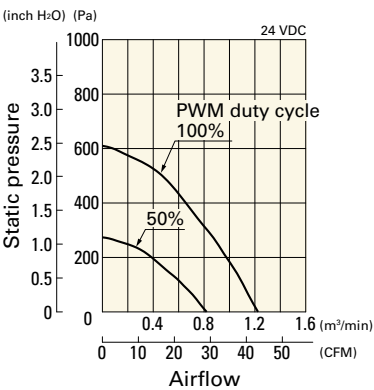


PWM duty - Speed characteristics example

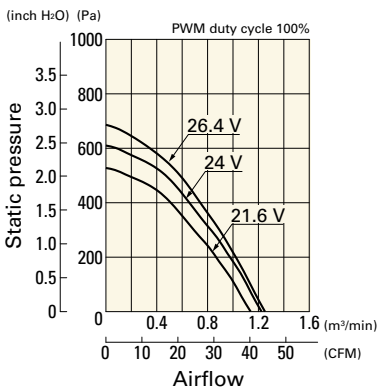


9BMB24P2S01 With pulse sensor with PWM control

PWM duty cycle



Operating voltage range



PWM duty - Speed characteristics example

