

97x33 mm

San Ace B97 9BMB type 

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. 608.
- 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		10.2 to 13.8	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		7 to 13.8	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	21.6 to 26.4	1.62	38.88	6850	1.61	56.8	1280	5.14	66		
» 9BMB24G201		12 to 26.4	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		

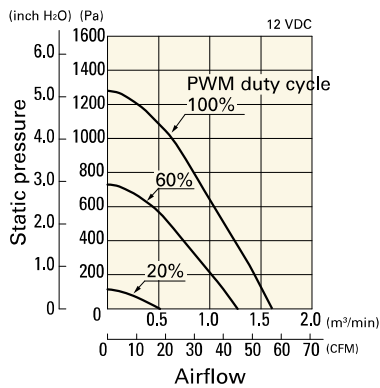
Note 1: Sensor and control options are available for selection. Refer to the table on p. 636.

Note 2: The » mark indicates Short LeadTime Service applicable models. See p. 664 for details.

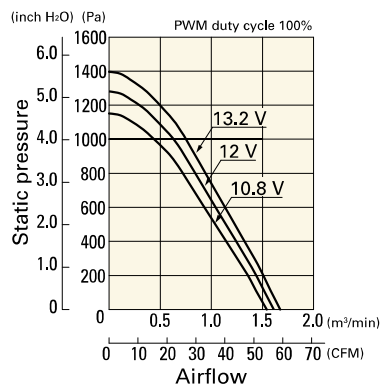
Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

9BMB12P2K01 With pulse sensor with PWM control

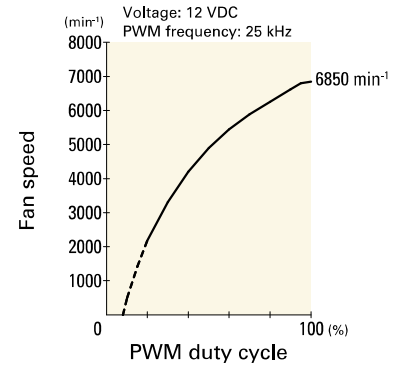
PWM duty cycle



Operating voltage range

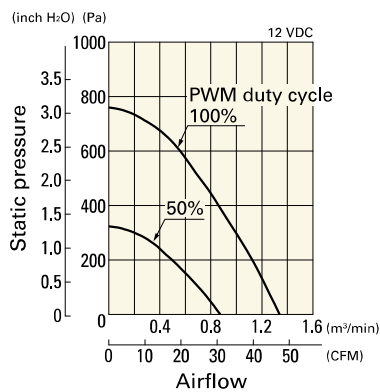


PWM duty - Speed characteristics example

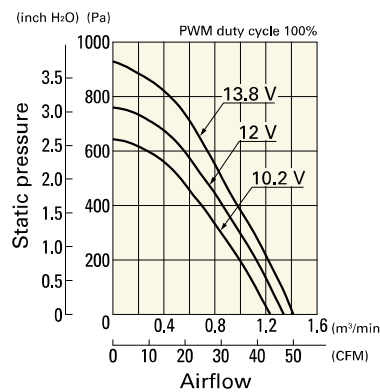


9BMB12P2G01 With pulse sensor with PWM control

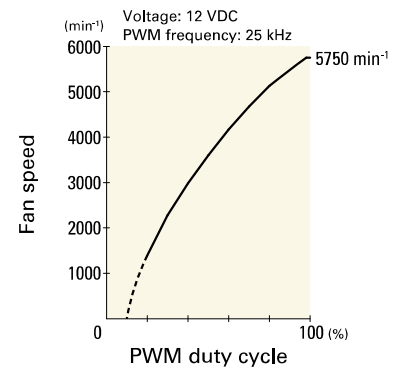
PWM duty cycle



Operating voltage range

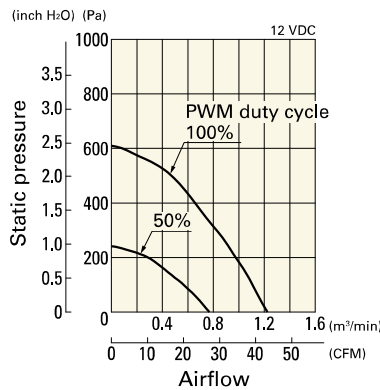


PWM duty - Speed characteristics example

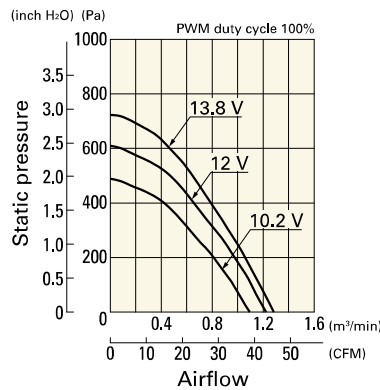


9BMB12P2S01 With pulse sensor with PWM control

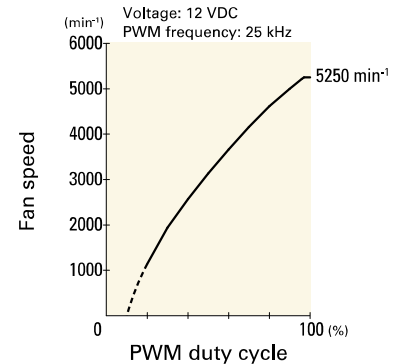
PWM duty cycle



Operating voltage range

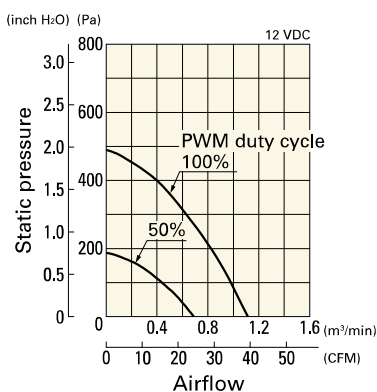


PWM duty - Speed characteristics example

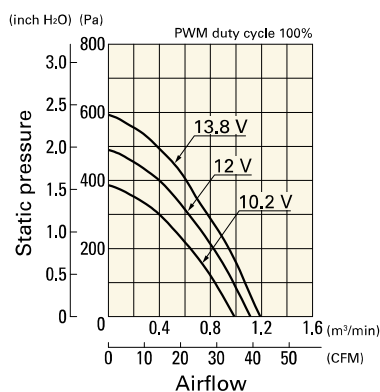


9BMB12P2H01 With pulse sensor with PWM control

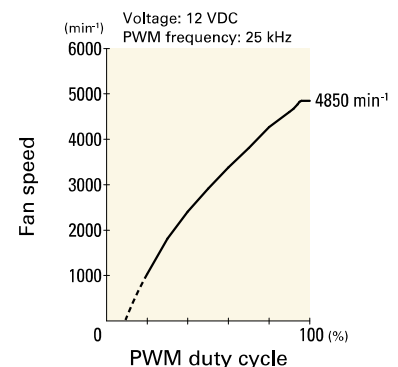
PWM duty cycle



Operating voltage range



PWM duty - Speed characteristics example

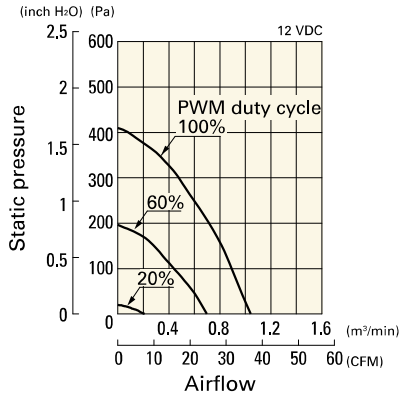


DC
Blower 97 mm

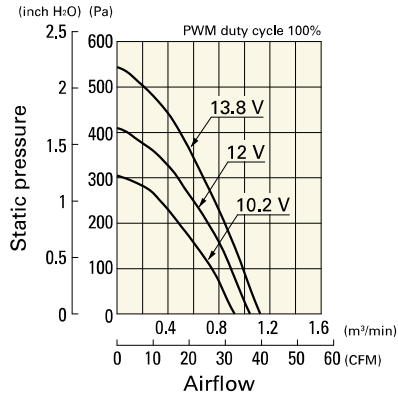
Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

9BMB12P2F01 With pulse sensor with PWM control

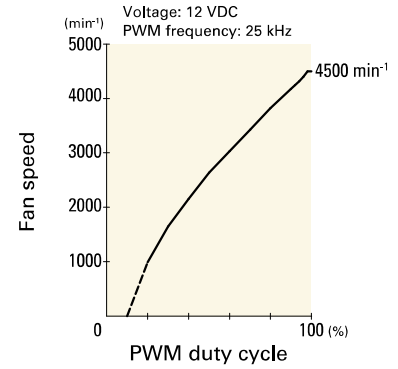
PWM duty cycle



Operating voltage range

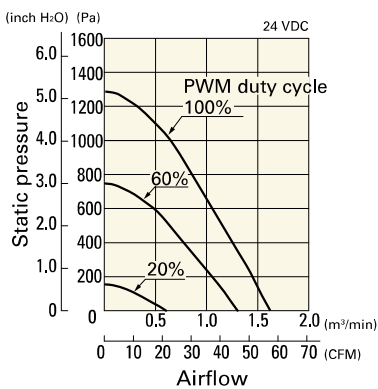


PWM duty - Speed characteristics example

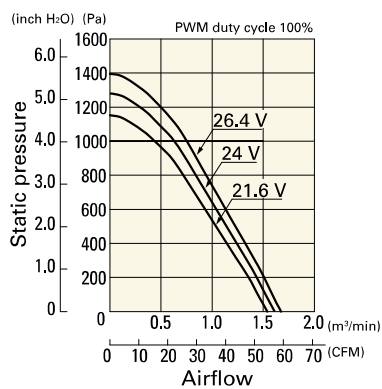


9BMB24P2K01 With pulse sensor with PWM control

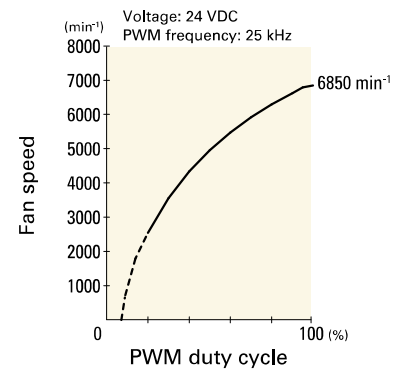
PWM duty cycle



Operating voltage range

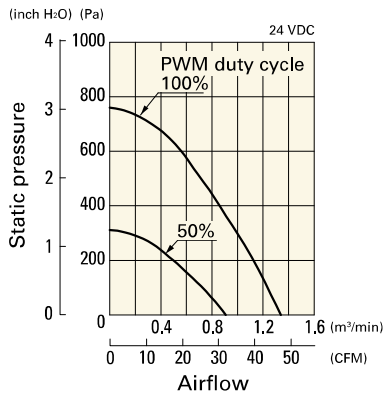


PWM duty - Speed characteristics example

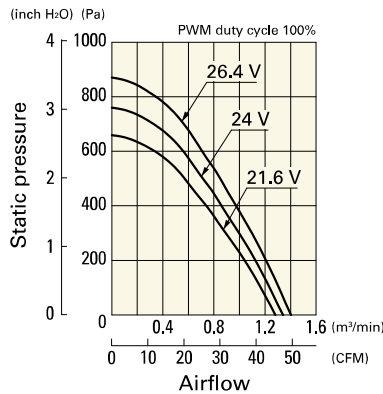


9BMB24P2G01 With pulse sensor with PWM control

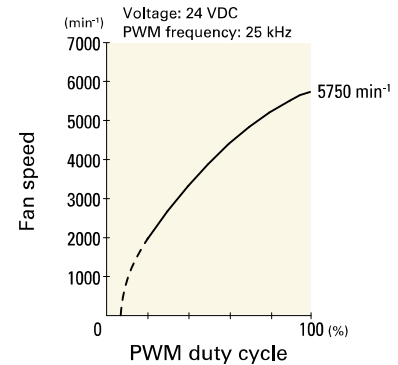
PWM duty cycle



Operating voltage range

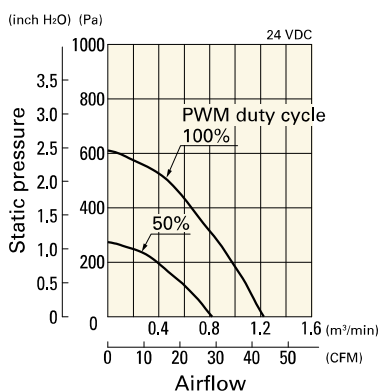


PWM duty - Speed characteristics example

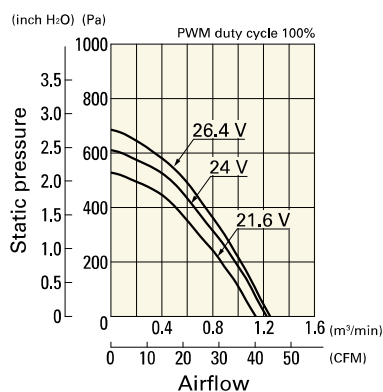


9BMB24P2S01 With pulse sensor with PWM control

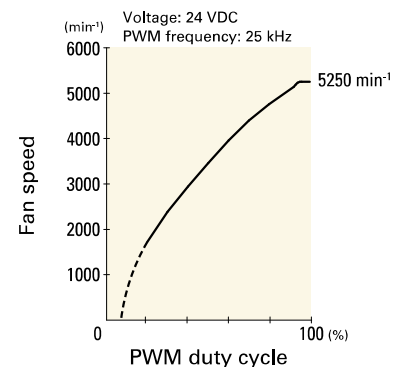
PWM duty cycle



Operating voltage range



PWM duty - Speed characteristics example

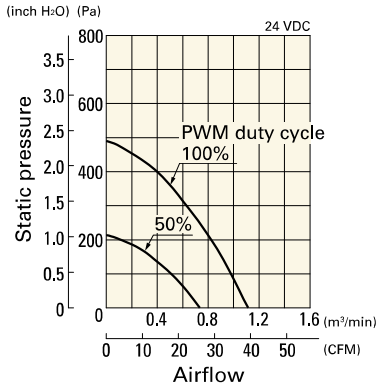


DC
Blower 97 mm

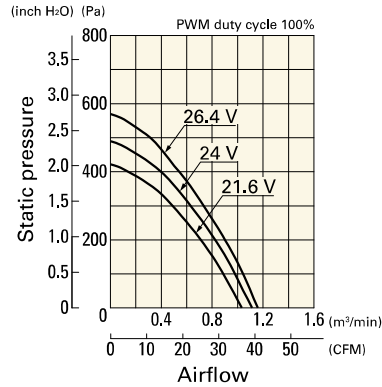
Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

9BMB24P2H01 With pulse sensor with PWM control

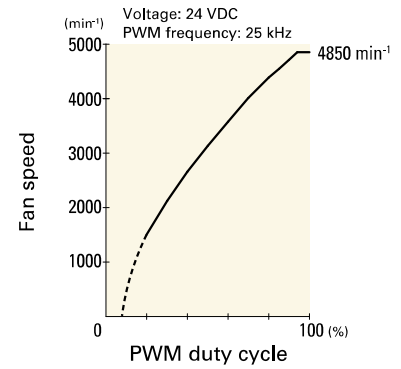
PWM duty cycle



Operating voltage range

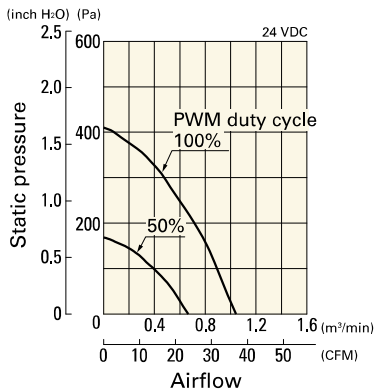


PWM duty - Speed characteristics example

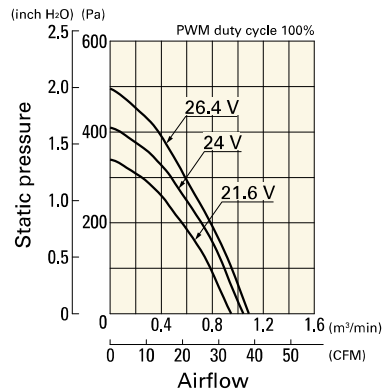


9BMB24P2F01 With pulse sensor with PWM control

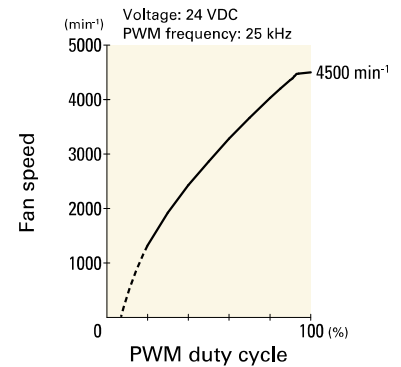
PWM duty cycle



Operating voltage range



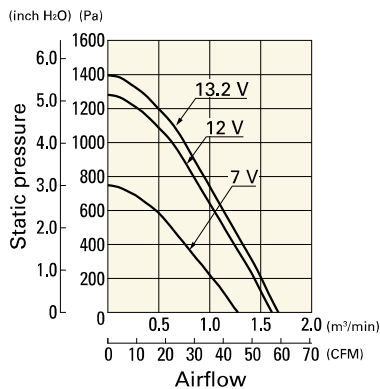
PWM duty - Speed characteristics example



Airflow - Static Pressure Characteristics

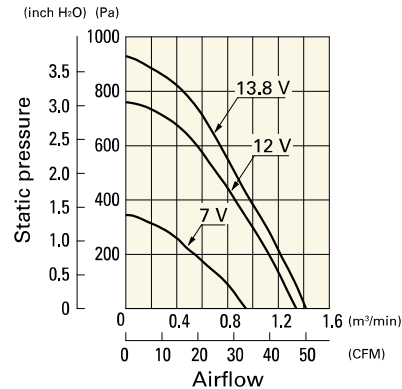
9BMB12K201 With pulse sensor

Operating voltage range



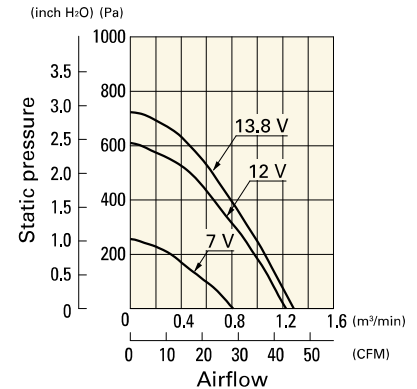
9BMB12G201 With pulse sensor

Operating voltage range



9BMB12S201 With pulse sensor

Operating voltage range

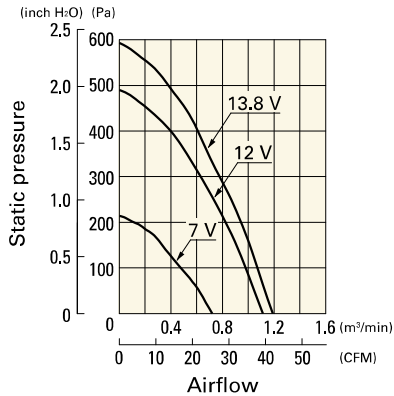


DC
Blower 97 mm

Airflow - Static Pressure Characteristics

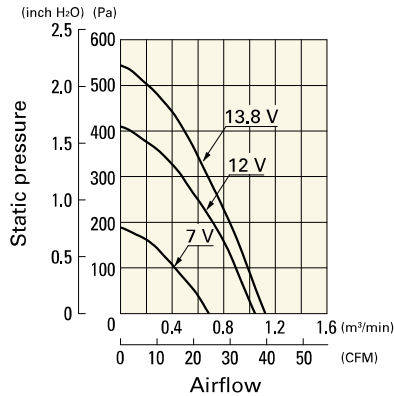
9BMB12H201 With pulse sensor

Operating voltage range



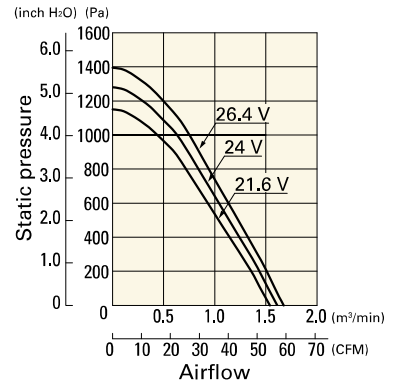
9BMB12F201 With pulse sensor

Operating voltage range



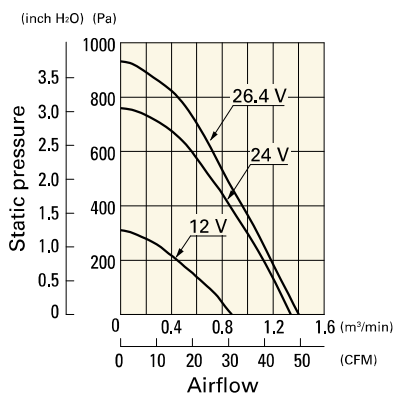
9BMB24K201 With pulse sensor

Operating voltage range



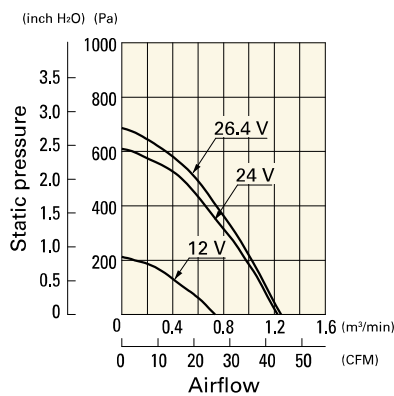
9BMB24G201 With pulse sensor

Operating voltage range



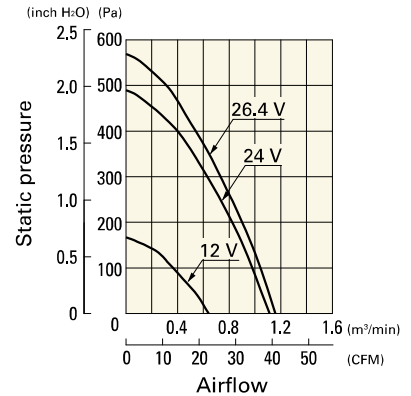
9BMB24S201 With pulse sensor

Operating voltage range



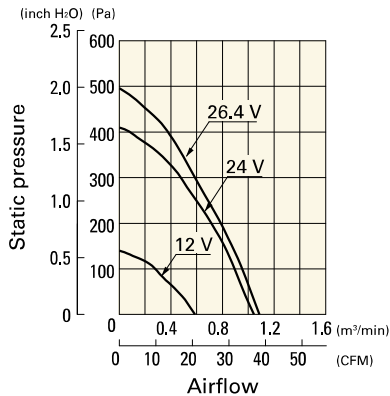
9BMB24H201 With pulse sensor

Operating voltage range



9BMB24F201 With pulse sensor

Operating voltage range



DC
Blower 97 mm

