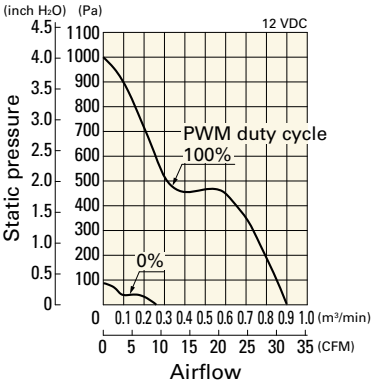
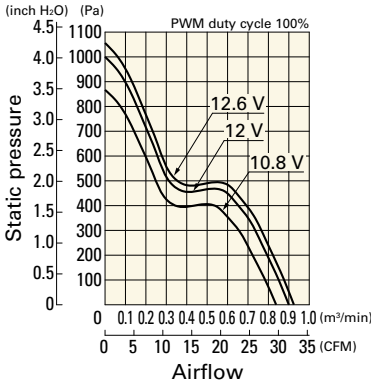


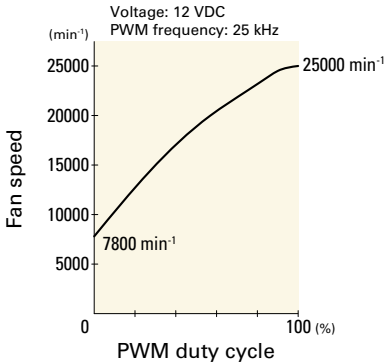
PWM duty cycle



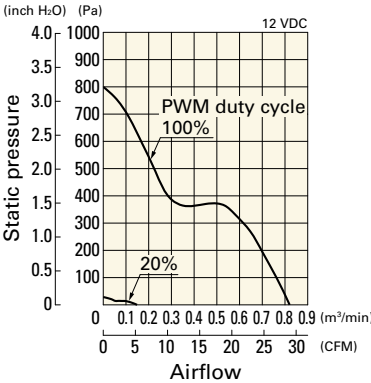
Operating voltage range



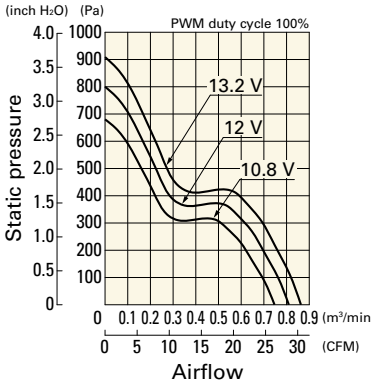
PWM duty - Speed characteristics example



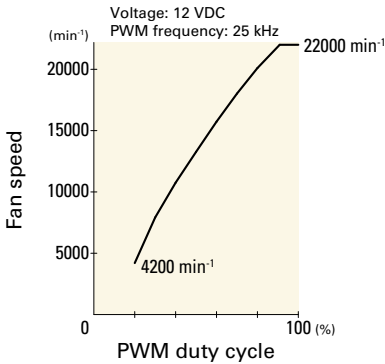
PWM duty cycle



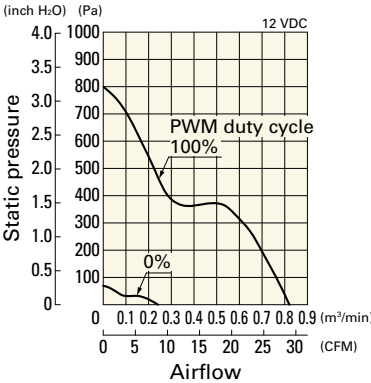
Operating voltage range



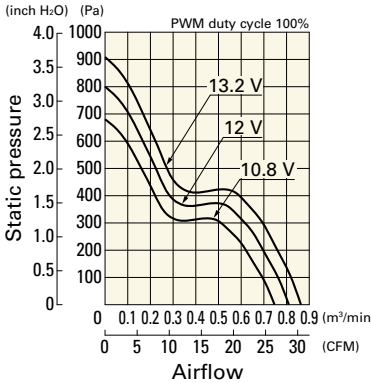
PWM duty - Speed characteristics example



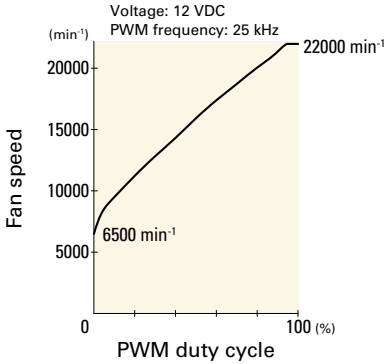
PWM duty cycle

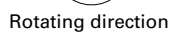


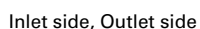
Operating voltage range



PWM duty - Speed characteristics example







page: p. 598

Model no.: 109-059, 109-059H

40x40x28 mm

San Ace 40 9GA type Low Power Consumption Fan 



DC Fan 40 mm sq.

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 53 g

Specifications

The models listed below **have ribs and a pulse sensor with PWM control**. For models without ribs, append "1" to the end of model numbers.

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]
9GA0412P3J01	12	10.8 to 13.2	100	0.49	5.88	18000	0.67 23.7	535 2.15	54	-20 to +70	40000/60°C (70000/40°C)
			0	0.05	0.6	4500	0.16 5.7	33 0.13	22		
9GA0412P3G01			100	0.39	4.68	16500	0.61 21.5	450 1.81	53		
			0	0.05	0.6	4500	0.16 5.7	33 0.13	22		
9GA0412P3H01			100	0.28	3.36	14500	0.54 19.1	347 1.39	50		
			0	0.04	0.48	3500	0.13 4.6	20 0.08	17		
9GA0412P3M01			100	0.21	2.52	12500	0.46 16.2	258 1.04	47		
			0	0.04	0.48	3500	0.13 4.6	20 0.08	17		
9GA0424P3J001	24	21.6 to 26.4	100	0.27	6.48	18000	0.67 23.7	535 2.15	54		
9GA0424P3G001			100	0.22	5.28	16500	0.61 21.5	450 1.81	53		
9GA0424P3H001			100	0.16	3.84	14500	0.54 19.1	347 1.39	50		
9GA0424P3M001			100	0.11	2.64	12500	0.46 16.2	258 1.04	47		

* 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 ribs and a pulse sensor**. For models without ribs, append "1" to the end of model numbers.

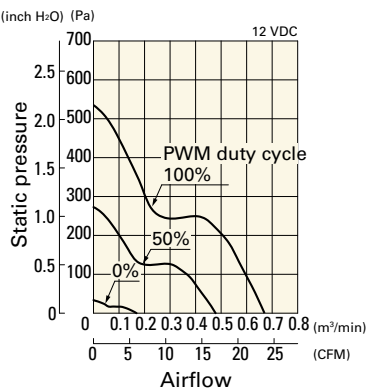
Model no.	Rated voltage [V]	Operating voltage range [V]	Rated current [A]	Rated input [W]	Rated speed [min ⁻¹]	Max. airflow [m ³ /min] [CFM]	Max. static pressure [Pa] [inchH ₂ O]	SPL [dB (A)]	Operating temperature [°C]	Expected life [h]
9GA0412A301	12	10.8 to 13.2	0.13	1.56	10500	0.38 13.4	182 0.73	43	-10 to +70	40000/60°C (70000/40°C)

Note: Sensor and control options are available for selection. Refer to the table on p. 647 to 648.

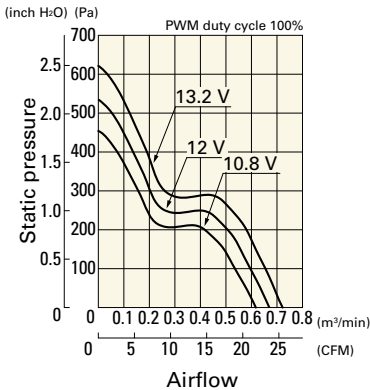
Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

9GA0412P3J01 With pulse sensor with PWM control

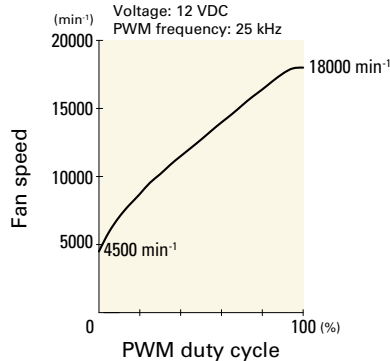
PWM duty cycle



Operating voltage range

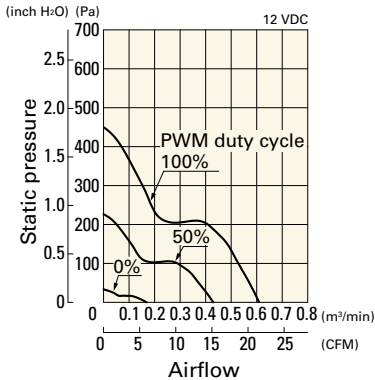


PWM duty - Speed characteristics example

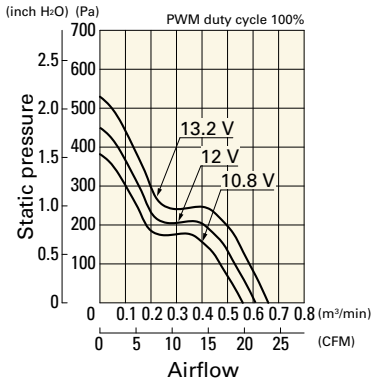


9GA0412P3G01 With pulse sensor with PWM control

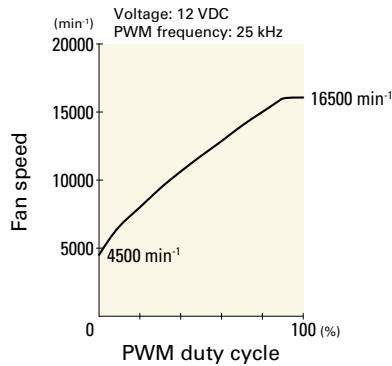
PWM duty cycle



Operating voltage range

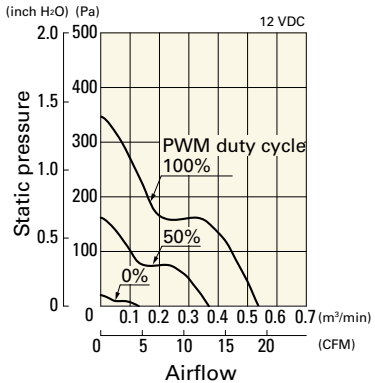


PWM duty - Speed characteristics example

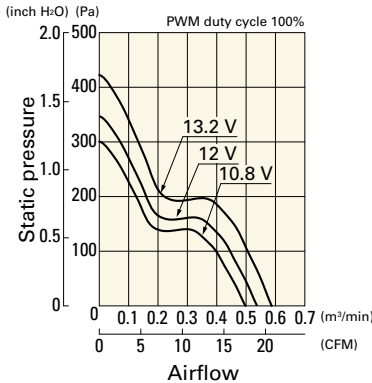


9GA0412P3H01 With pulse sensor with PWM control

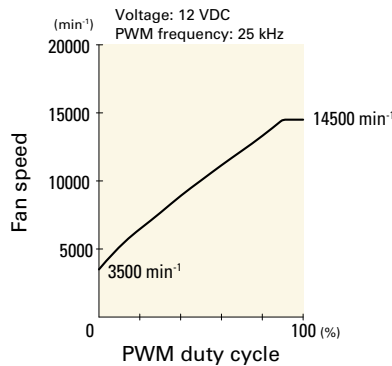
PWM duty cycle



Operating voltage range

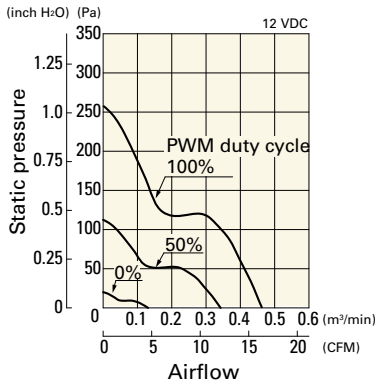


PWM duty - Speed characteristics example

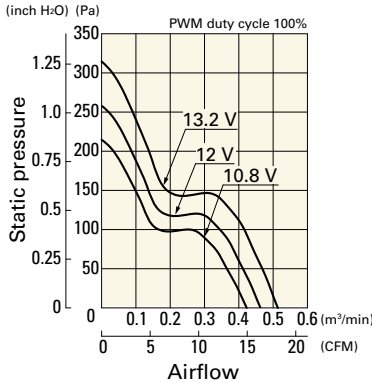


9GA0412P3M01 With pulse sensor with PWM control

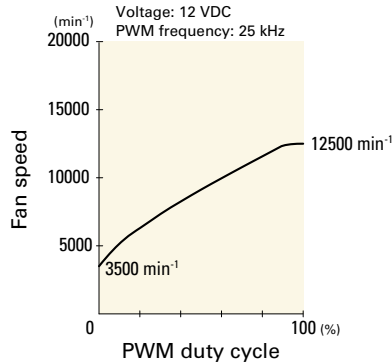
PWM duty cycle



Operating voltage range

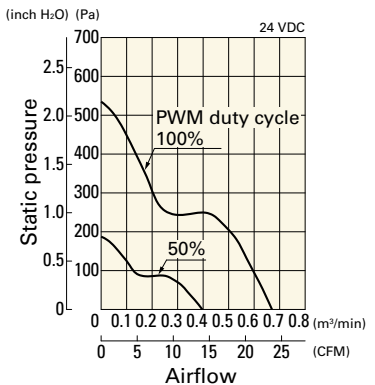


PWM duty - Speed characteristics example

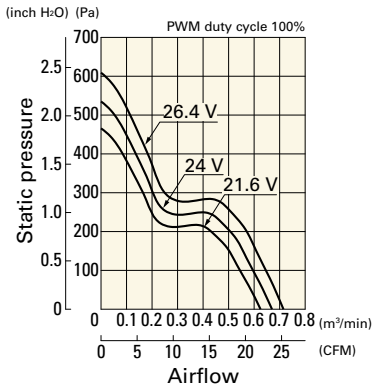


9GA0424P3J001 With pulse sensor with PWM control

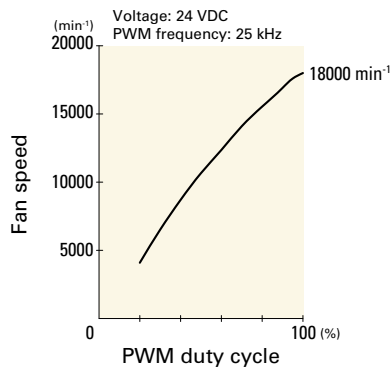
PWM duty cycle



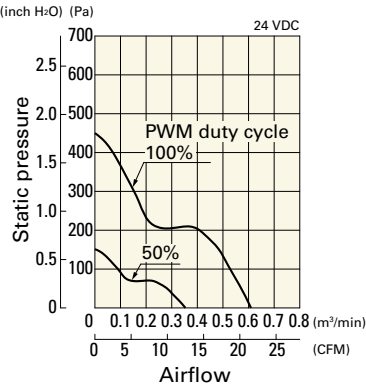
Operating voltage range



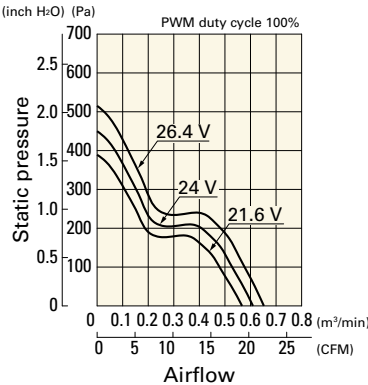
PWM duty - Speed characteristics example



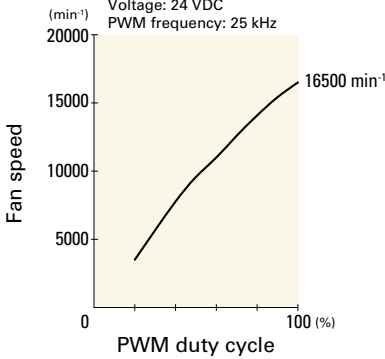
PWM duty cycle



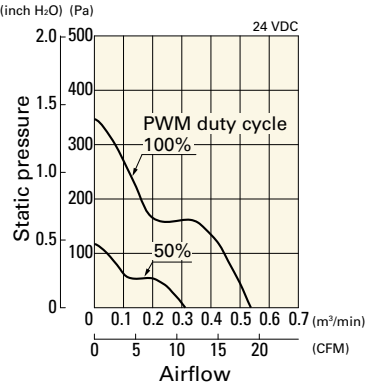
Operating voltage range



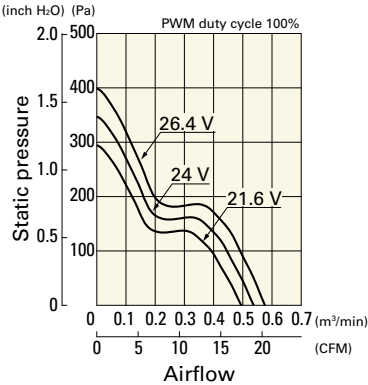
PWM duty - Speed characteristics example



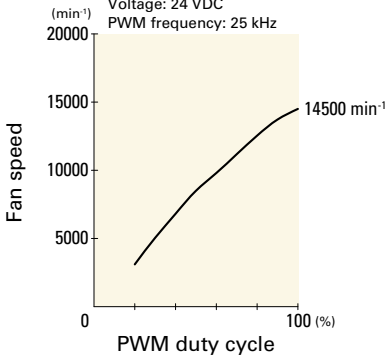
PWM duty cycle



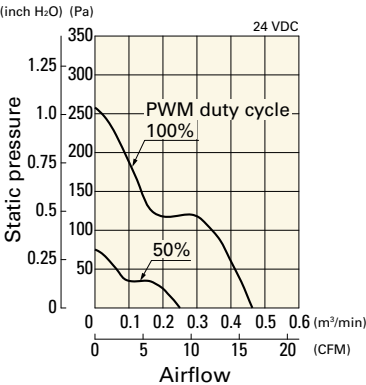
Operating voltage range



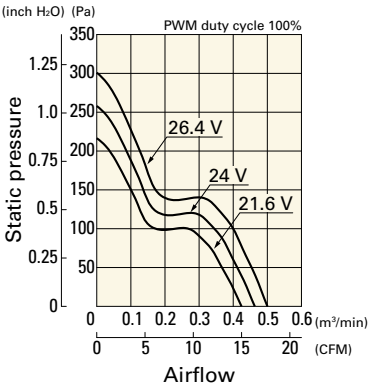
PWM duty - Speed characteristics example



PWM duty cycle



Operating voltage range



PWM duty - Speed characteristics example

