

DC Fan



80x80x38 mm

San Ace 80 9GV type

General Specifications

- Material Frame: Plastic (Flammability: UL 94V-0), Impeller: Plastic (Flammability: UL 94V-1)
- 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 220 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] |
|--------------|-------------------|-----------------------------|--------------------|-------------------|-----------------|----------------------------------|--|--|--------------|----------------------------|----------------------------|
| 9GV0812P1G03 | 12 | 10.8 to 13.2 | 100 | 3.8 | 45.6 | 10200 | 3.9 138.0 | 490.0 1.97 | 65 | -20 to +70 | 40000/60°C (70000/40°C) |
| | | | 0 | 0.32 | 3.84 | 3000 | 1.15 40.6 | 42.4 0.17 | 34 | | |
| 9GV0812P1H03 | 12 | 10.8 to 13.2 | 100 | 3.0 | 36.0 | 9700 | 3.7 131.0 | 440.0 1.77 | 63 | | |
| | | | 0 | 0.2 | 2.4 | 2900 | 1.11 39.2 | 39.0 0.16 | 34 | | |
| 9GV0824P1G03 | 24 | 20.4 to 27.6 | 100 | 1.6 | 38.4 | 10200 | 3.9 138.0 | 490.0 1.97 | 65 | | |
| | | | 0 | 0.3 | 7.2 | 4700 | 1.79 63.2 | 104.0 0.41 | 44 | | |
| 9GV0848P1G03 | 48 | 40.8 to 55.2 | 100 | 0.84 | 40.32 | 10200 | 3.9 138.0 | 490.0 1.97 | 65 | | |
| | | | 0 | 0.15 | 7.2 | 4700 | 1.79 63.2 | 104.0 0.41 | 44 | | |

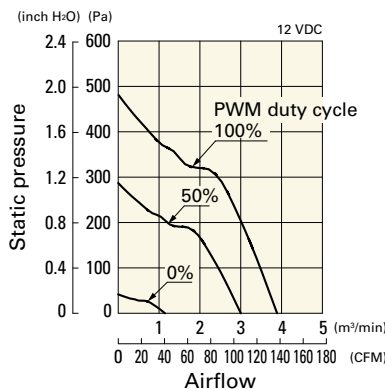
* PWM frequency is 25 kHz. Models without ratings for 0% PWM duty cycle have zero speed at 0%. When control terminal is open, speed is the same as at 100% duty cycle.

Note: Sensor and control options are available for selection. Refer to the table on p. 651.

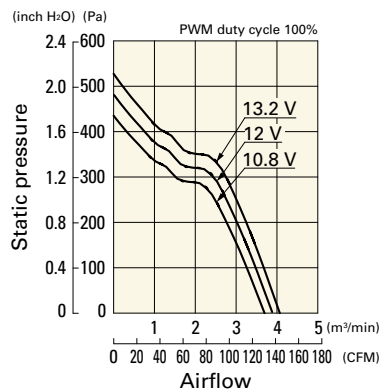
Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

9GV0812P1G03 With pulse sensor with PWM control

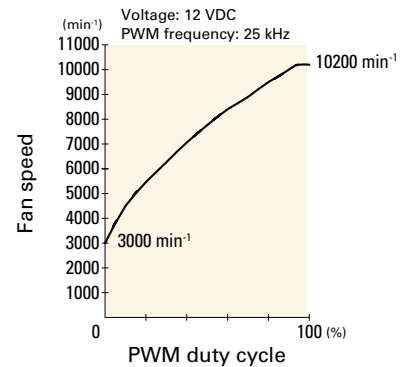
PWM duty cycle



Operating voltage range



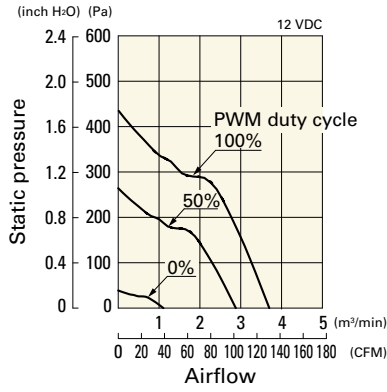
PWM duty - Speed characteristics example



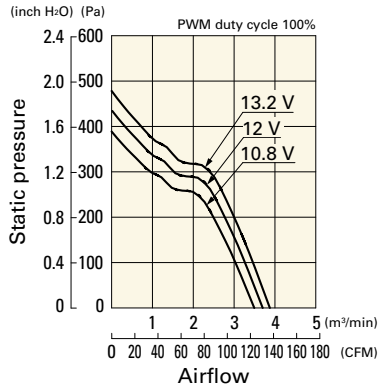
Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

9GV0812P1H03 With pulse sensor with PWM control

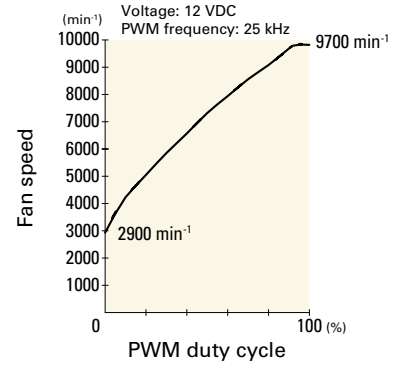
PWM duty cycle



Operating voltage range

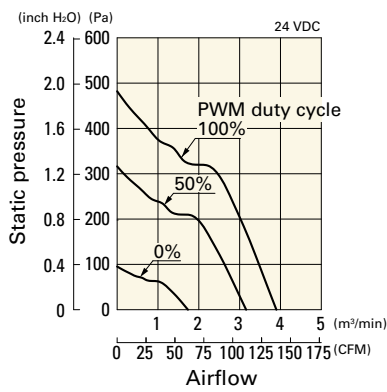


PWM duty - Speed characteristics example

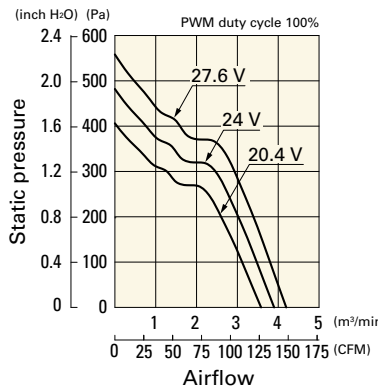


9GV0824P1G03 With pulse sensor with PWM control

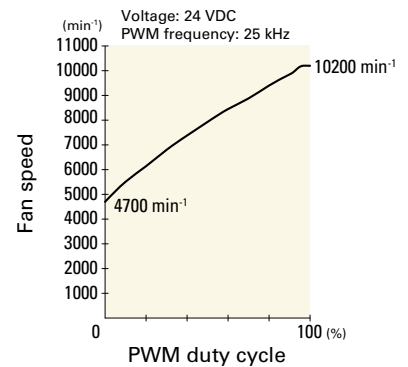
PWM duty cycle



Operating voltage range

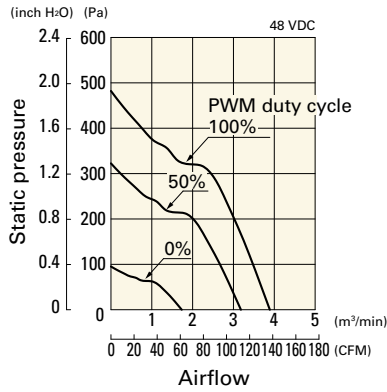


PWM duty - Speed characteristics example

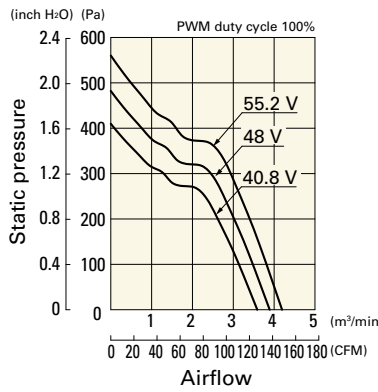


9GV0848P1G03 With pulse sensor with PWM control

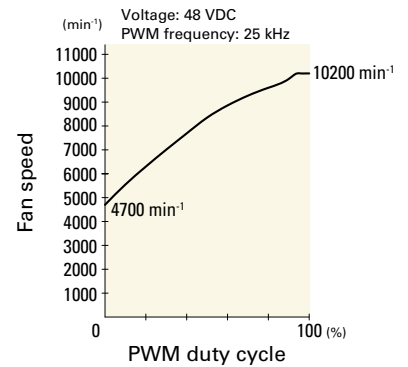
PWM duty cycle



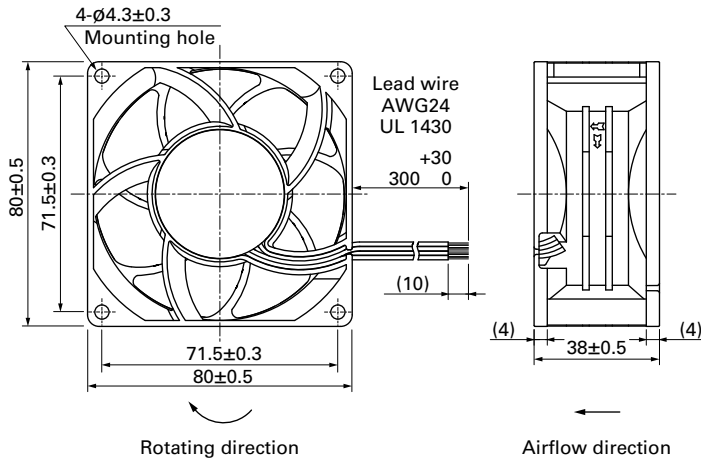
Operating voltage range



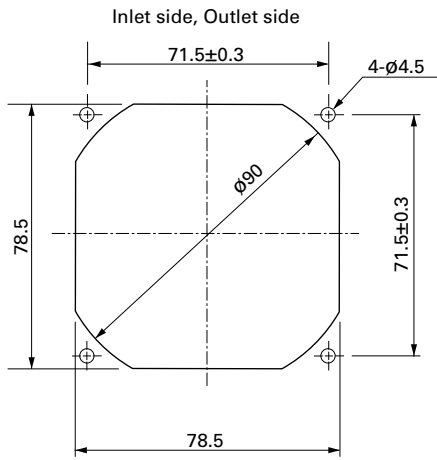
PWM duty - Speed characteristics example



Dimensions (unit: mm) (With ribs)



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



Options

Finger guards page: p. 598
 Model no.: 109-049E, 109-049H

Resin finger guards page: p. 605
 Model no.: 109-1002G

Resin filter kits page: p. 606
 Model no.: 109-1002F13 (13PPI), 109-1002F20 (20PPI),
 109-1002F30 (30PPI), 109-1002F40 (40PPI)