



∅ 100x25 mm

San Ace 100W 9W2TM type 

DC Splash Proof Centrifugal Fan ∅100 mm

General Specifications

- Material Motor case: Aluminum (Black coating), Impeller: Plastic (Flammability: UL 94V-0)
- Expected life See the table below. (L10 life: 90% survival rate for continuous operation in indoor 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. 580.
- Dielectric strength 50/60 Hz, 500 VAC, for 1 minute (between lead wire conductors and motor case)
- Insulation resistance 10 MΩ min. at 500 VDC (between lead wire conductors and motor case)
- 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 190 g
- Ingress protection IP68

Specifications When the optional inlet nozzle (109-1080H) is mounted.

The models listed below **have pulse sensors with PWM control function.**

| 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] |
|---------------|-------------------|-----------------------------|--------------------|-------------------|-----------------|----------------------------------|--|--|--------------|----------------------------|----------------------------|
| 9W2TM24P4G001 | 24 | 18 to 27.6 | 100 | 0.7 | 16.8 | 7400 | 2.03 71.7 | 708 2.84 | 65 | -20 to +70 | 40000/60°C (70000/40°C) |
| | | | 20 | 0.04 | 0.96 | 1500 | 0.39 14 | 30 0.12 | 31 | | |
| 9W2TM24P4H001 | 24 | 18 to 27.6 | 100 | 0.44 | 10.56 | 6400 | 1.77 62.5 | 560 2.25 | 60 | | |
| | | | 20 | 0.04 | 0.96 | 1500 | 0.39 14 | 30 0.12 | 31 | | |
| 9W2TM48P4G001 | 48 | 36 to 60 | 100 | 0.35 | 16.8 | 7400 | 2.03 71.7 | 708 2.84 | 65 | | |
| | | | 20 | 0.04 | 1.92 | 1500 | 0.39 14 | 30 0.12 | 31 | | |
| 9W2TM48P4H001 | 48 | 36 to 60 | 100 | 0.22 | 10.56 | 6400 | 1.77 62.5 | 560 2.25 | 60 | | |
| | | | 20 | 0.04 | 1.92 | 1500 | 0.39 14 | 30 0.12 | 31 | | |

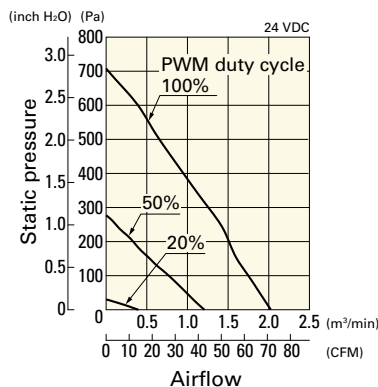
* PWM frequency is 25 kHz. Models without ratings for 0% PWM duty cycle have zero speed at 0%. When control terminal is open, speed is the same as at 100% duty cycle.

Note: Sensor and control options are available for selection. Refer to the table on p. 618.

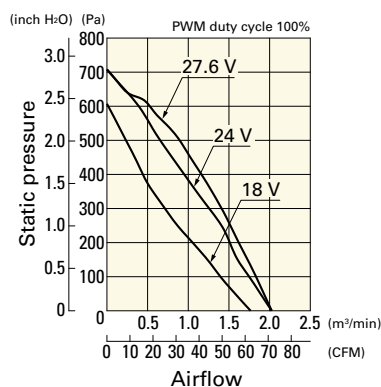
Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

9W2TM24P4G001 With pulse sensor with PWM control function

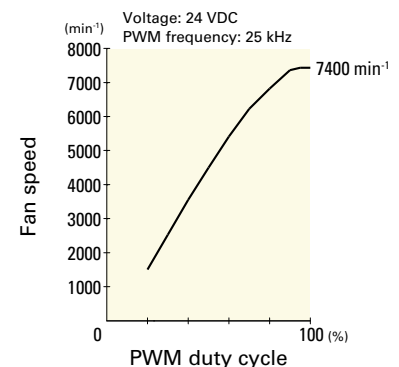
PWM duty cycle



Operating voltage range



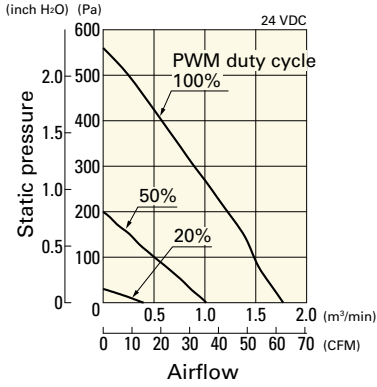
PWM duty - Speed characteristics example



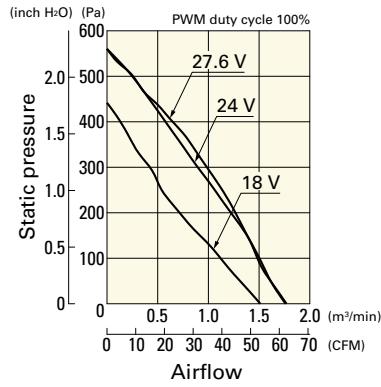
Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

9W2TM24P4H001 With pulse sensor with PWM control function

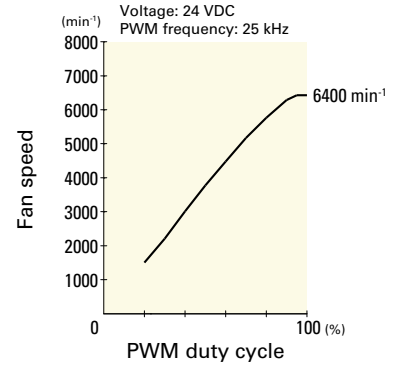
PWM duty cycle



Operating voltage range

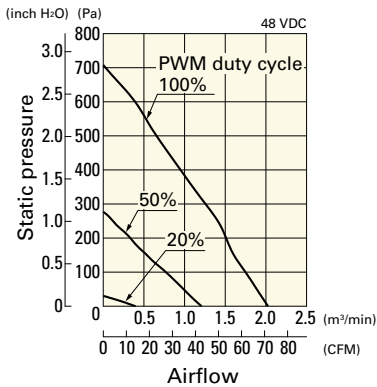


PWM duty - Speed characteristics example

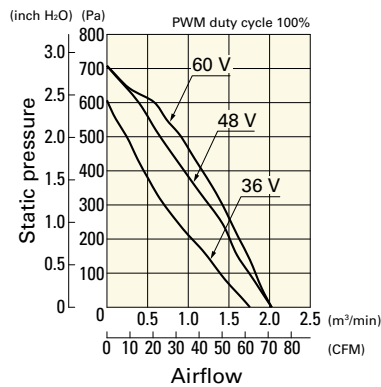


9W2TM48P4G001 With pulse sensor with PWM control function

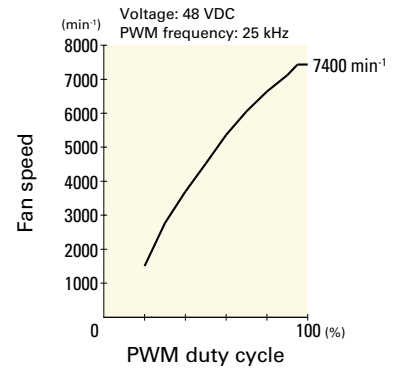
PWM duty cycle



Operating voltage range

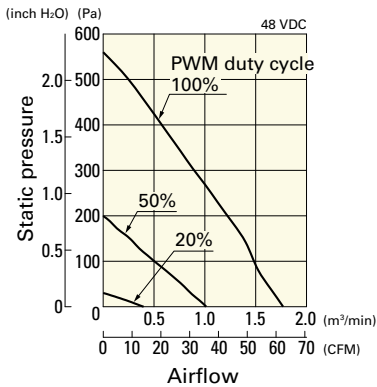


PWM duty - Speed characteristics example

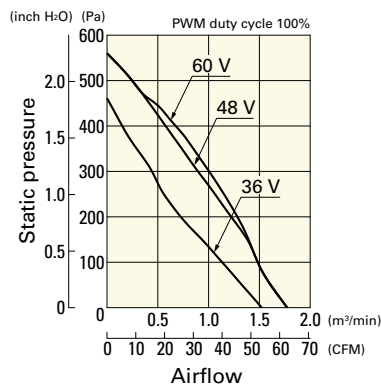


9W2TM48P4H001 With pulse sensor with PWM control function

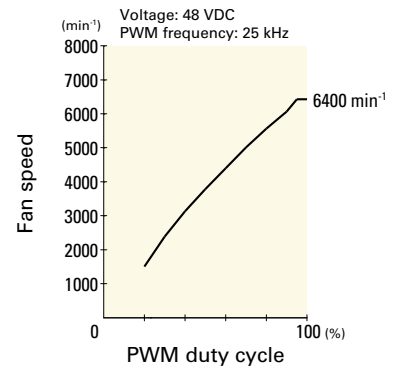
PWM duty cycle



Operating voltage range

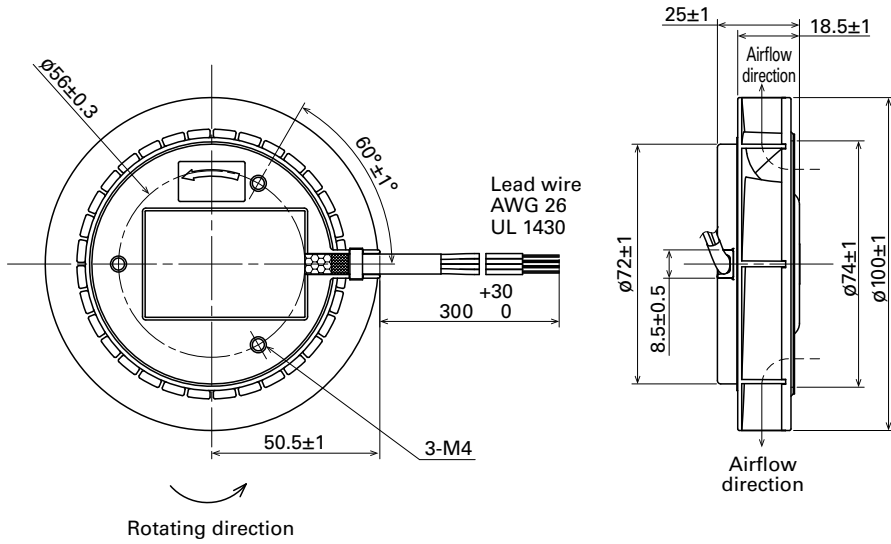


PWM duty - Speed characteristics example

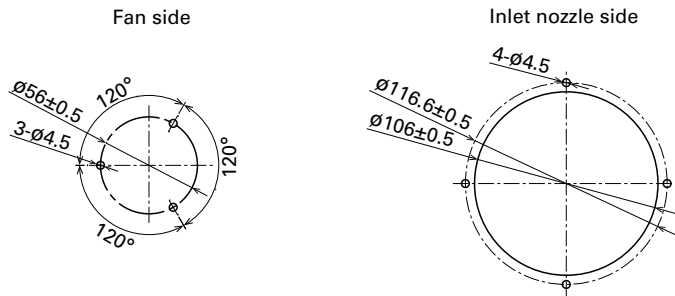


DC
Splash Proof Centrifugal Fan ø100 mm

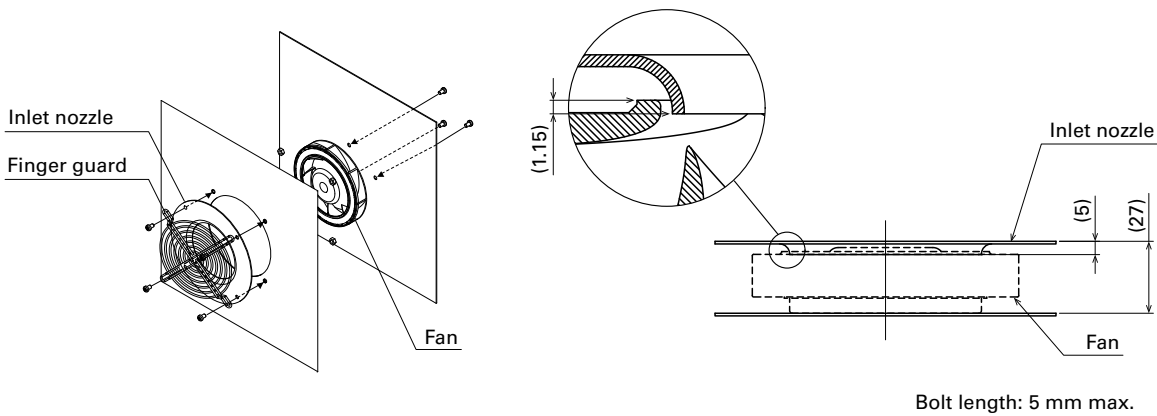
Dimensions (unit: mm)



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



Reference Diagram for Mounting (unit: mm)



Options

Finger guards

page: p. 564

Model no.: 109-099E, 109-099H

Inlet nozzle

page: p. 569

Model no.: 109-1080, 109-1080H