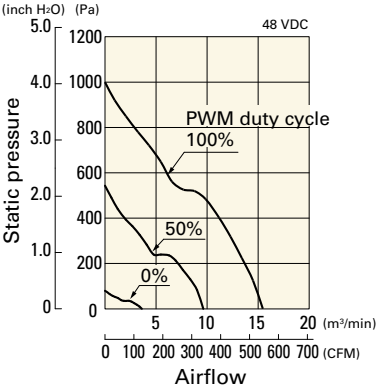
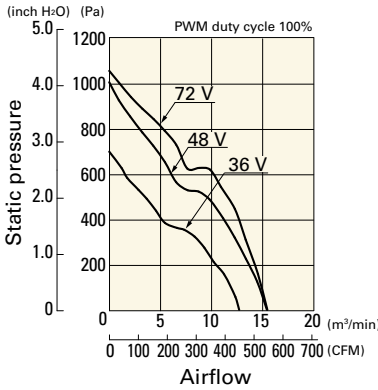


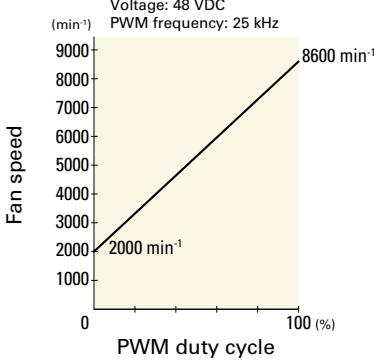
PWM duty cycle



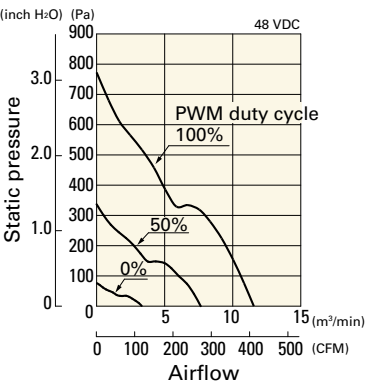
Operating voltage range



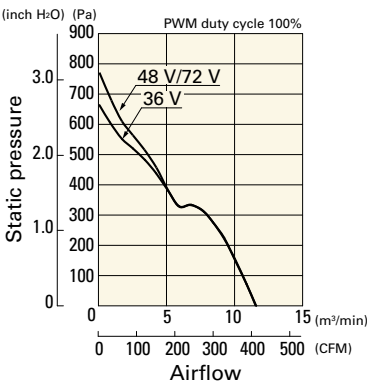
PWM duty - Speed characteristics example



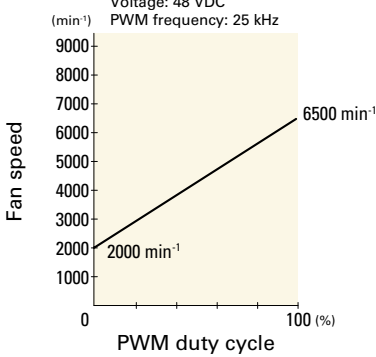
PWM duty cycle



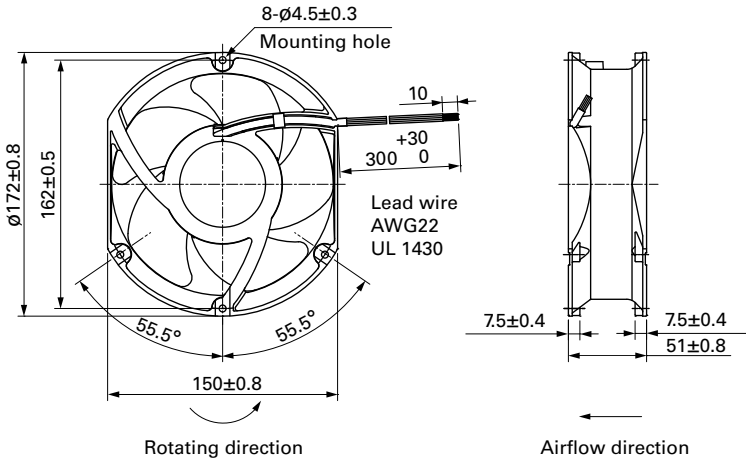
Operating voltage range

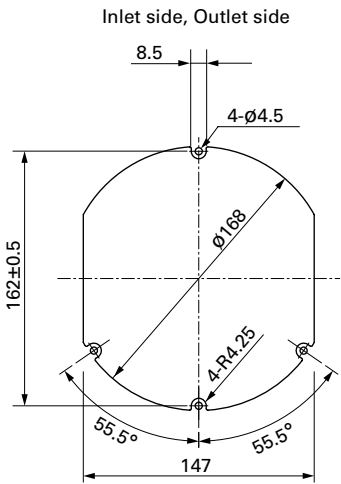


PWM duty - Speed characteristics example



Dimensions (unit: mm)





Options

Finger guards page: p. 600

Model no.: 109-1155, 109-1155H

# Ø172×150×51 mm

San Ace 172 9E type

Sidecut type



DC Fan Ø172 mm

## General Specifications

- Material ..... Frame: Aluminum, 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 or Blue (Sensor) Yellow
- Mass ..... 760 g

## Specifications

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

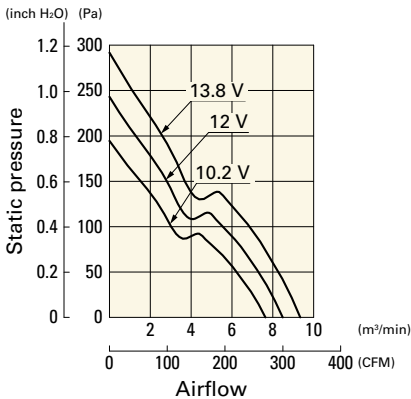
| Model no.    | Rated voltage<br>[V] | Operating voltage range<br>[V] | Rated current<br>[A] | Rated input<br>[W] | Rated speed<br>[min <sup>-1</sup> ] | Max. airflow<br>[m³/min] [CFM] |     | Max. static pressure<br>[Pa] [inchH <sub>2</sub> O] |       | SPL<br>[dB (A)] | Operating temperature<br>[°C] | Expected life<br>[h]       |            |
|--------------|----------------------|--------------------------------|----------------------|--------------------|-------------------------------------|--------------------------------|-----|-----------------------------------------------------|-------|-----------------|-------------------------------|----------------------------|------------|
| 109E5712K501 | 12                   | 10.2 to 13.8                   | 2.9                  | 34.8               | 4100                                | 8.5                            | 300 | 243.0                                               | 0.976 | 60              | -20 to +60                    | 40000/60°C<br>(70000/40°C) |            |
| 109E5712Y501 |                      |                                | 2.3                  | 27.6               | 3800                                | 8                              | 282 | 210                                                 | 0.84  | 60              |                               |                            |            |
| 109E5712H501 |                      |                                | 1.2                  | 14.4               | 3050                                | 6.4                            | 226 | 137.2                                               | 0.551 | 52              |                               |                            |            |
| 109E5712F501 |                      |                                | 0.68                 | 8.16               | 2500                                | 5.1                            | 180 | 95                                                  | 0.38  | 47              |                               |                            |            |
| 109E5712M501 |                      |                                | 0.48                 | 5.76               | 2000                                | 4.2                            | 148 | 67.6                                                | 0.271 | 41              |                               |                            |            |
| 109E5724C501 | 24                   | 20.4 to 27.6                   | 2.3                  | 55.2               | 4800                                | 9.9                            | 350 | 308.0                                               | 1.237 | 66              | -20 to +70                    |                            |            |
| 109E5724K501 |                      |                                | 1.3                  | 31.2               | 4100                                | 8.5                            | 300 | 243.0                                               | 0.976 | 60              |                               |                            |            |
| 109E5724H501 |                      |                                | 0.58                 | 13.92              | 3050                                | 6.4                            | 226 | 137.2                                               | 0.551 | 52              |                               |                            |            |
| 109E5724F501 |                      |                                | 0.35                 | 8.4                | 2500                                | 5.1                            | 180 | 95                                                  | 0.38  | 47              |                               |                            |            |
| 109E5724M501 |                      |                                | 0.2                  | 4.8                | 2000                                | 4.2                            | 148 | 67.6                                                | 0.271 | 41              |                               |                            |            |
| 109E5748C501 | 48                   | 40.8 to 55.2                   | 1.2                  | 57.6               | 4800                                | 9.9                            | 350 | 308.0                                               | 1.237 | 66              | -20 to +60                    |                            |            |
| 109E5748K501 |                      |                                | 0.7                  | 33.6               | 4100                                | 8.5                            | 300 | 243.0                                               | 0.976 | 60              |                               |                            |            |
| 109E5748H501 |                      |                                | 0.28                 | 13.44              | 3050                                | 6.4                            | 226 | 137.2                                               | 0.551 | 52              |                               |                            | -20 to +70 |
| 109E5748F501 |                      |                                | 0.19                 | 9.12               | 2500                                | 5.1                            | 180 | 95                                                  | 0.38  | 47              |                               |                            |            |
| 109E5748M501 |                      |                                | 0.11                 | 5.28               | 2000                                | 4.2                            | 148 | 67.6                                                | 0.271 | 41              |                               |                            |            |

Note: Sensor and control options are available for selection. Refer to the table on p. 644 to 645.

## Airflow - Static Pressure Characteristics

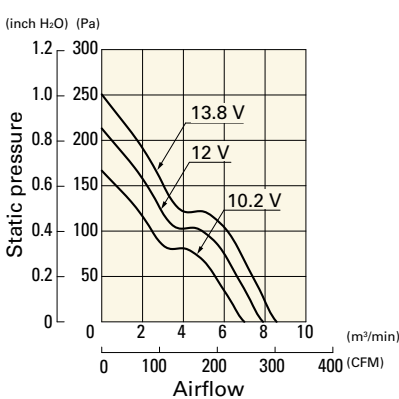
### 109E5712K501 With pulse sensor

Operating voltage range



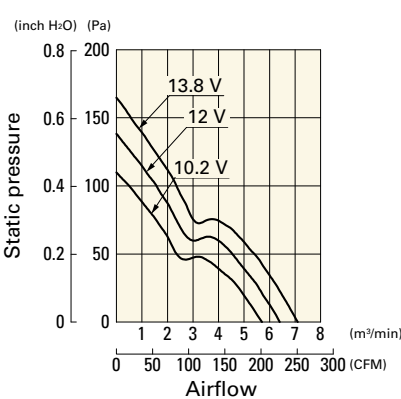
### 109E5712Y501 With pulse sensor

Operating voltage range



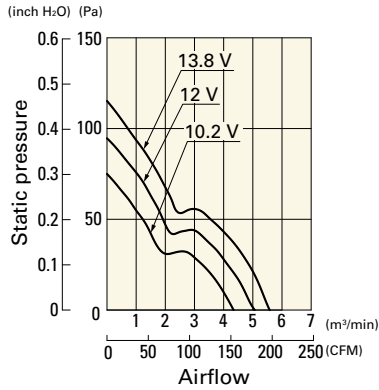
### 109E5712H501 With pulse sensor

Operating voltage range



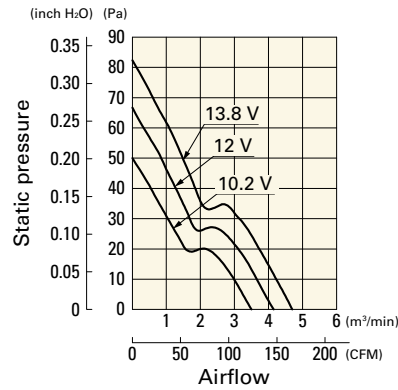
109E5712F501 With pulse sensor

Operating voltage range



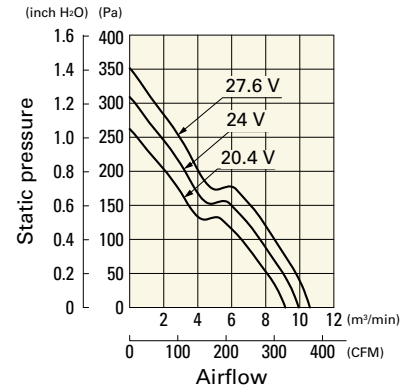
109E5712M501 With pulse sensor

Operating voltage range



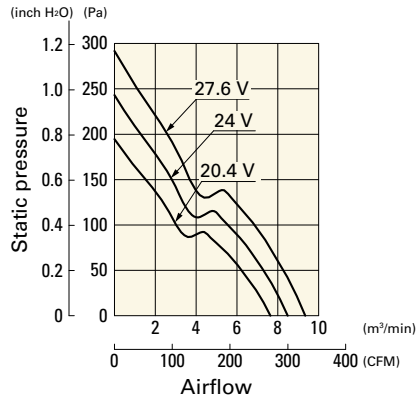
109E5724C501 With pulse sensor

Operating voltage range



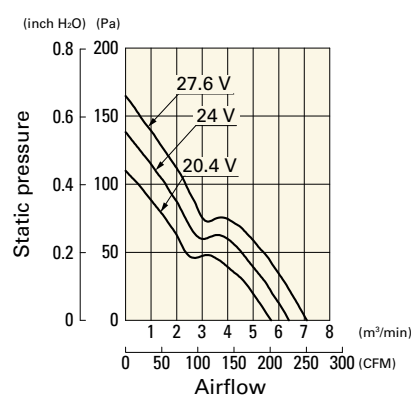
109E5724K501 With pulse sensor

Operating voltage range



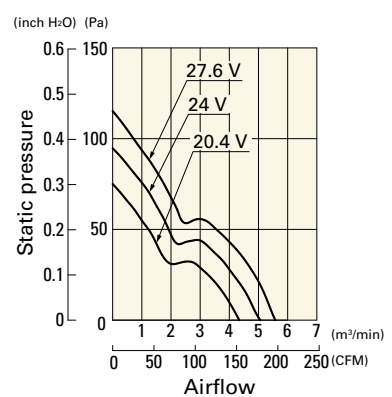
109E5724H501 With pulse sensor

Operating voltage range



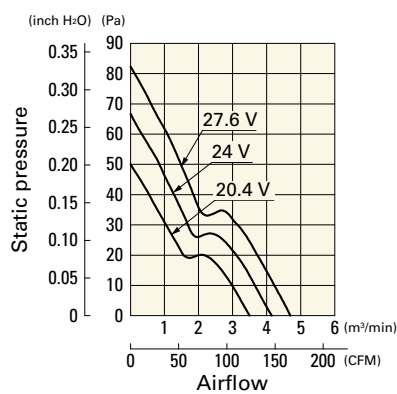
109E5724F501 With pulse sensor

Operating voltage range



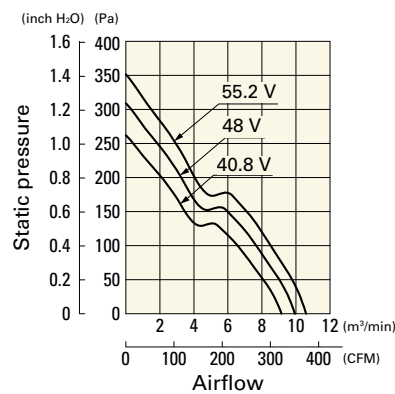
109E5724M501 With pulse sensor

Operating voltage range



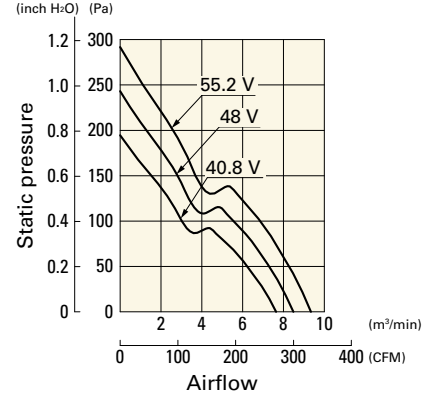
109E5748C501 With pulse sensor

Operating voltage range



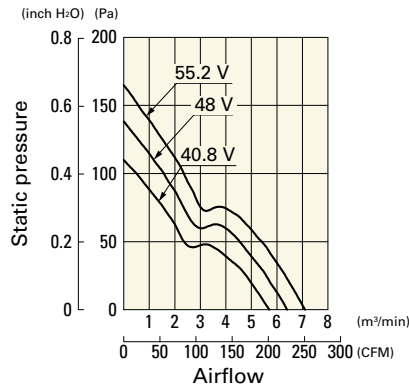
109E5748K501 With pulse sensor

Operating voltage range



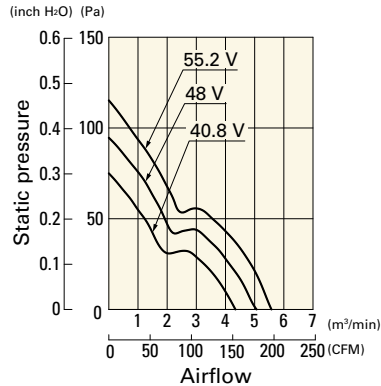
109E5748H501 With pulse sensor

Operating voltage range



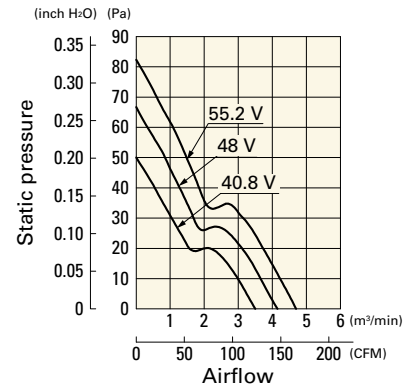
109E5748F501 With pulse sensor

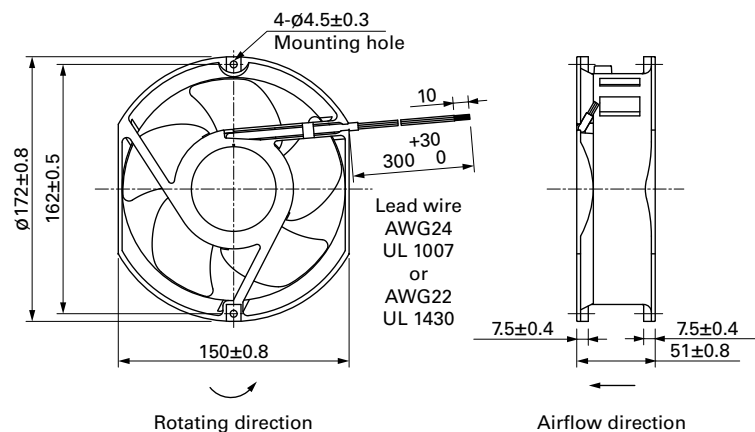
Operating voltage range



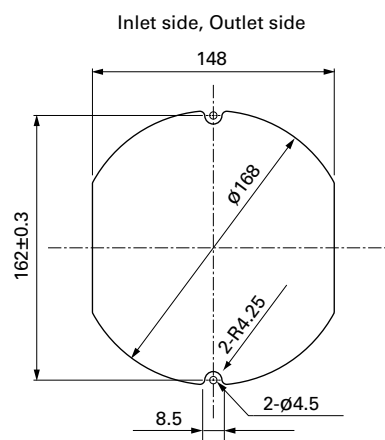
109E5748M501 With pulse sensor

Operating voltage range





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



Options

Finger guards page: p. 600

Model no.: 109-319J, 109-319E, 109-319H