

# 80x80x25 mm

San Ace 80 9R type    Model 109R0812E401 is not certified.



## 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. 599.
- Dielectric strength ..... 50/60 Hz, 500 VAC, for 1 minute (between lead wire conductors and frame)
- Insulation resistance ..... 10 MΩ or more with a 500 VDC megger (between lead wire conductors and frame)
- 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 ..... 110 g

## Specifications

The models listed below **have ribs and pulse sensors**. 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 <sup>-1</sup> ] | Max. airflow [m <sup>3</sup> /min] [CFM] | Max. static pressure [Pa] [inchH <sub>2</sub> O] | SPL [dB (A)] | Operating temperature [°C] | Expected life [h]          |
|-----------------|-------------------|-----------------------------|-------------------|-----------------|----------------------------------|--|--|--------------|----------------------------|----------------------------|
| ▶▶ 109R0805F401 | 5                 | 4.5 to 5.5                  | 0.25              | 1.25            | 2600                             | 0.92 32.5                                | 28.4 0.114                                       | 26           | -20 to +70                 | 60000/60°C<br>(90000/40°C) |
| ▶▶ 109R0805M401 |                   |                             | 0.17              | 0.85            | 2350                             | 0.83 29.3                                | 22.5 0.09  | 23           |                            |                            |
| ▶▶ 109R0812G401 | 12                | 10.8 to 13.2                | 0.37              | 4.44            | 4500                             | 1.5 53.0                                 | 80.4 0.323                                       | 40           | -20 to +60                 | 40000/60°C<br>(70000/40°C) |
| ▶▶ 109R0812E401 |                   |                             | 0.24              | 2.88            | 3700                             | 1.31 46.3                                | 57.8 0.232                                       | 35           |                            |                            |
| ▶▶ 109R0812S401 |                   | 6 to 13.8                   | 0.18              | 2.16            | 3400                             | 1.2 42.4                                 | 48.0 0.193                                       | 34           | -20 to +70                 | 60000/60°C<br>(90000/40°C) |
| ▶▶ 109R0812H401 |                   |                             | 0.13              | 1.56            | 2900                             | 1.03 36.4                                | 35.3 0.142                                       | 29           |                            |                            |
| ▶▶ 109R0812F401 |                   |                             | 0.11              | 1.32            | 2600                             | 0.92 32.5                                | 28.4 0.114                                       | 26           |                            |                            |
| ▶▶ 109R0812M401 |                   |                             | 0.09              | 1.08            | 2350                             | 0.83 29.3                                | 22.5 0.09  | 23           |                            |                            |
| ▶▶ 109R0812L401 | 7 to 13.8         | 0.06                        | 0.72              | 1850            | 0.65 23.0                        | 14.7 0.059                               | 20   |              |                            |                            |
| ▶▶ 109R0824G401 | 24                | 20.4 to 26.4                | 0.2               | 4.8             | 4500                             | 1.5 53.0                                 | 80.4 0.323                                       | 40           | -20 to +60                 | 40000/60°C<br>(70000/40°C) |
| ▶▶ 109R0824S401 |                   |                             | 12 to 27.6        | 0.1             | 2.4                              | 3400                                     | 1.2 42.4   | 48.0 0.193   |                            |                            |
| ▶▶ 109R0824H401 |                   | 0.07                        |                   | 1.68            | 2900                             | 1.03 36.4                                | 35.3 0.142                                       | 29           |                            |                            |
| ▶▶ 109R0824F401 |                   | 0.06                        |                   | 1.44            | 2600                             | 0.92 32.5                                | 28.4 0.114                                       | 26           |                            |                            |
| ▶▶ 109R0824M401 |                   | 0.05                        |                   | 1.2             | 2350                             | 0.83 29.3                                | 22.5 0.09  | 23           |                            |                            |
| ▶▶ 109R0824L401 |                   | 14 to 27.6                  | 0.04              | 0.96            | 1850                             | 0.65 23.0                                | 14.7 0.059                                       | 20           |                            |                            |
| ▶▶ 109R0848K401 | 48                | 40.8 to 55.2                | 0.1               | 4.8             | 4600                             | 1.56 55.1                                | 88.4 0.355                                       | 41           | -20 to +60                 | 40000/60°C<br>(70000/40°C) |
| ▶▶ 109R0848S401 |                   |                             | 0.06              | 2.88            | 3400                             | 1.2 42.4                                 | 48.0 0.193                                       | 34           | -20 to +70                 | 60000/60°C<br>(90000/40°C) |

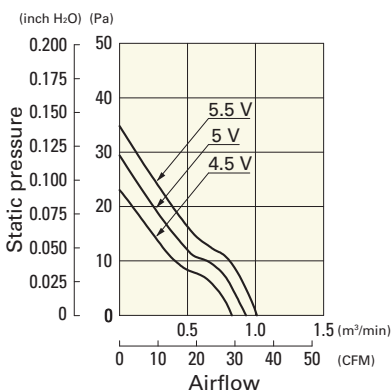
Note 1: Sensor and control options are available for selection. Refer to the table on p. 623.

Note 2: The ▶▶ mark indicates Short LeadTime Service applicable models. See p. 654 for details.

## Airflow - Static Pressure Characteristics

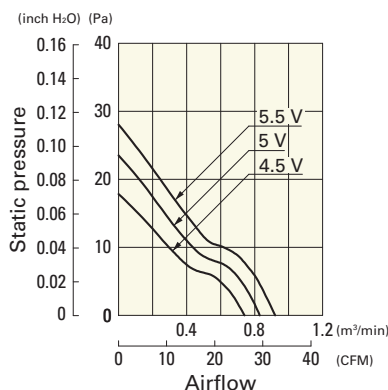
109R0805F401 With pulse sensor

Operating voltage range



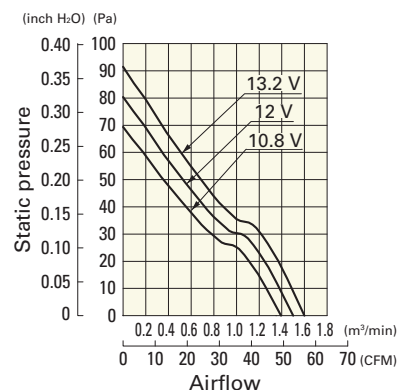
109R0805M401 With pulse sensor

Operating voltage range



109R0812G401 With pulse sensor

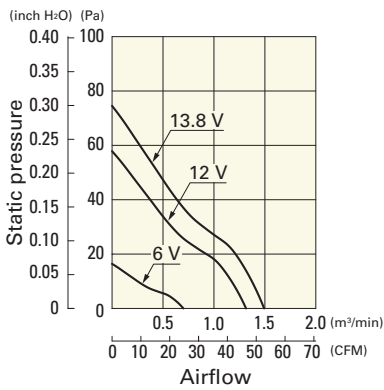
Operating voltage range



**Airflow - Static Pressure Characteristics**

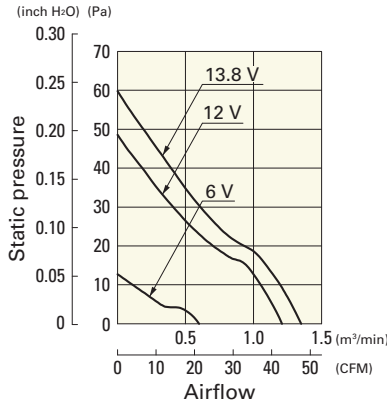
**109R0812E401** With pulse sensor

Operating voltage range



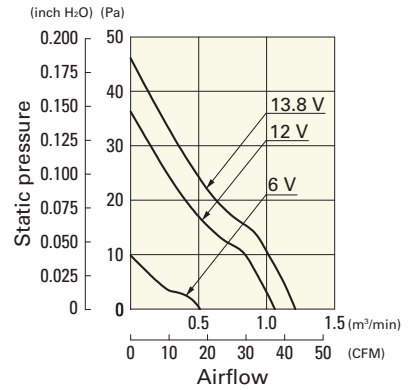
**109R0812S401** With pulse sensor

Operating voltage range



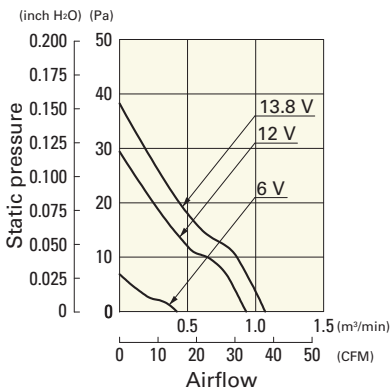
**109R0812H401** With pulse sensor

Operating voltage range



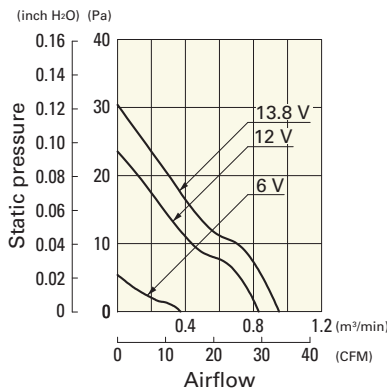
**109R0812F401** With pulse sensor

Operating voltage range



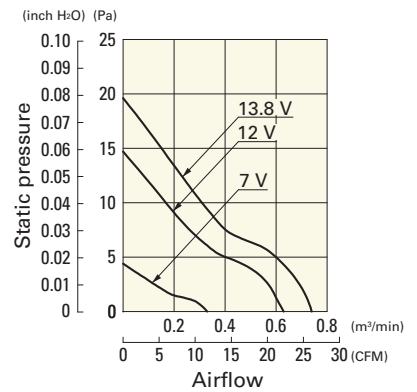
**109R0812M401** With pulse sensor

Operating voltage range



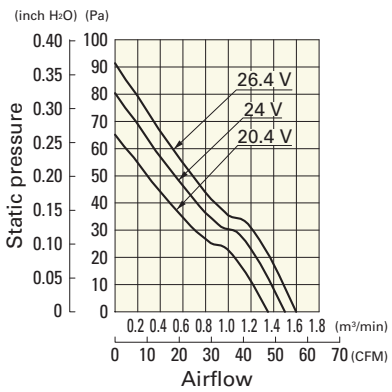
**109R0812L401** With pulse sensor

Operating voltage range



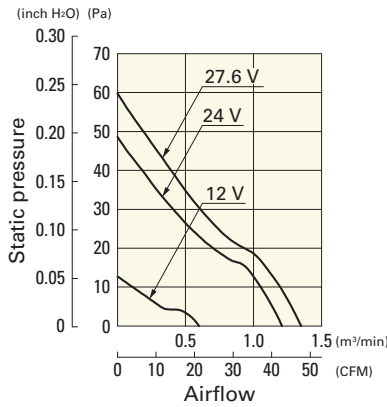
**109R0824G401** With pulse sensor

Operating voltage range



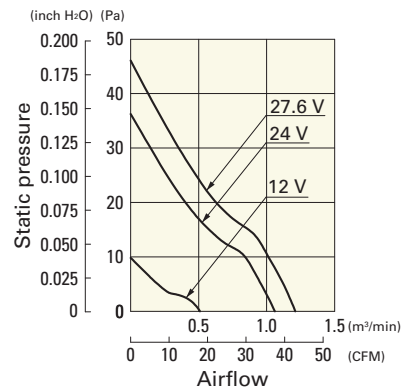
**109R0824S401** With pulse sensor

Operating voltage range



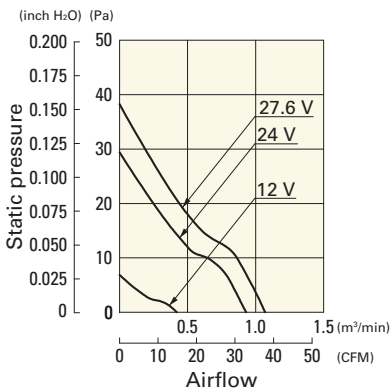
**109R0824H401** With pulse sensor

Operating voltage range



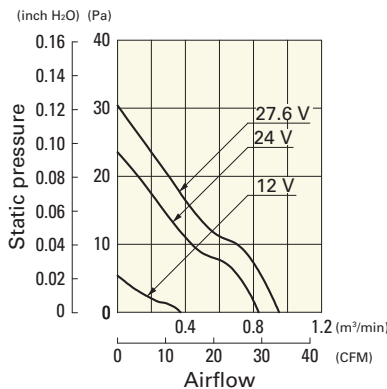
**109R0824F401** With pulse sensor

Operating voltage range



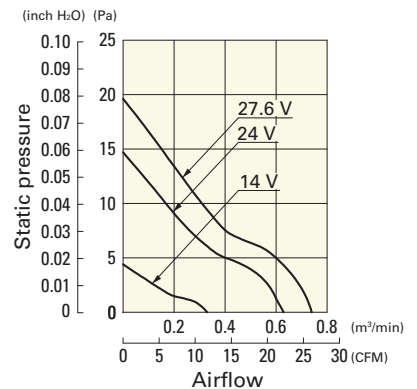
**109R0824M401** With pulse sensor

Operating voltage range



**109R0824L401** With pulse sensor

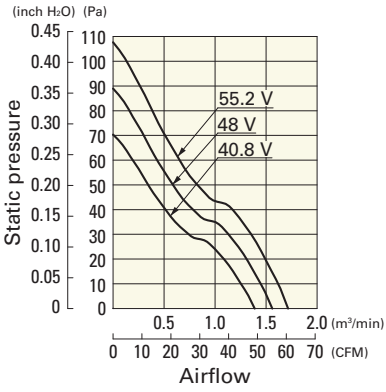
Operating voltage range



**Airflow - Static Pressure Characteristics**

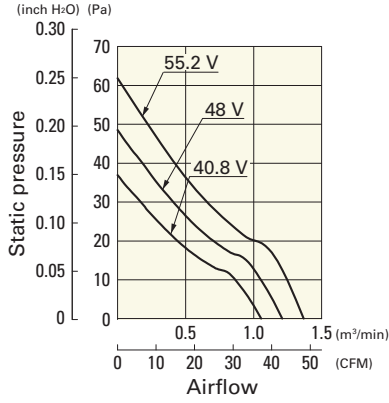
**109R0848K401** With pulse sensor

Operating voltage range

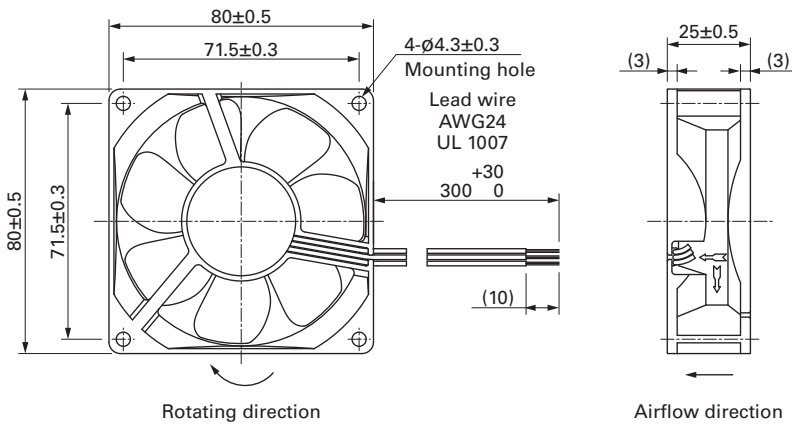


**109R0848S401** With pulse sensor

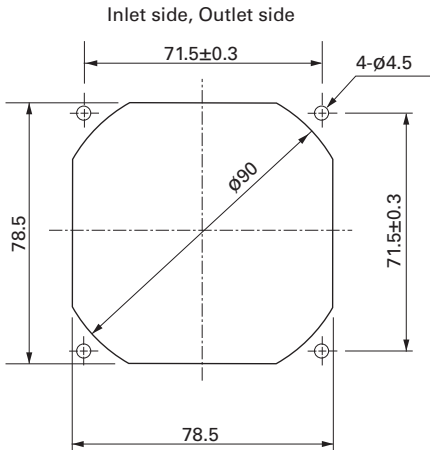
Operating voltage range



**Dimensions (unit: mm) (With ribs)**



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



**Options**

Finger guards

page: p. 584

Model no.: 109-049E, 109-049H, 109-049C

Resin finger guards

page: p. 591

Model no.: 109-1002G

Resin filter kits

page: p. 592

Model no.: 109-1002F13 (13PPI), 109-1002F20 (20PPI),  
109-1002F30 (30PPI), 109-1002F40 (40PPI)