

**60** mm sq.

# San Ace 60L



## General Specifications

- Material ..... Frame: Aluminum,  
Impeller: Plastics (Flammability: UL94V-1)
- Expected Life ..... Refer to specifications (L10:Survival rate:90% at 60°C ,  
rated voltage, and continuously run in a free air state)
- Lead Wire ..... ⊕red ⊖black (Sensor) yellow (Control) brown
- Storage Temperature ..... -30°C to +70°C (Non-condensing)

**60×60×25** mm (Mass : 100g) **9LG type** **High Airflow**

## Specifications

The following nos. **have PWM controls and pulse sensors.**

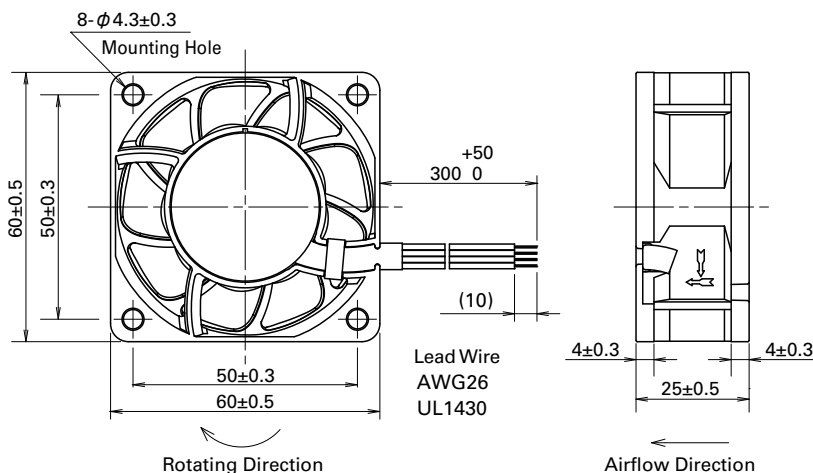
| Model No.     | Rated Voltage [V] | Operating Voltage Range [V] | PWM duty cycle <sup>Note1)</sup> [%] | Rated Current [A] | Rated Input [W] | Rated Speed [min <sup>-1</sup> ] | Max. Airflow [m <sup>3</sup> /min] [CFM] | Max. Static Pressure [Pa] [inchH <sub>2</sub> O] | SPL [dB(A)] | Operating Temperature [°C] | Expected Life [h] |            |    |
|---------------|-------------------|-----------------------------|--------------------------------------|-------------------|-----------------|----------------------------------|--|--|-------------|----------------------------|-------------------|------------|----|
| 9LG0612P4S001 | 12                | 10.8 to 13.2                | 100                                  | 0.67              | 8.04            | 11,000                           | 1.40 49.4                                | 300 1.204  | 53          | -20 to +70                 | 180,000/60°C      |            |    |
|               |                   |                             | 20                                   | 0.06              | 0.72            | 2,900                            | 0.36 12.7                                | 20.8 0.083                                       | 20          |                            |                   |            |    |
| 9LG0612P4J001 |                   |                             | 100                                  | 0.39              | 4.68            | 8,650                            | 1.10 38.8                                | 182 0.730  | 47          |                            |                   |            |    |
|               |                   |                             | 20                                   | 0.03              | 0.36            | 1,150                            | 0.13 4.8                                 | 3.3 0.013  | 14          |                            |                   |            |    |
| 9LG0612P4H001 |                   |                             | 100                                  | 0.17              | 2.04            | 6,150                            | 0.78 27.5                                | 97 0.389   | 35          |                            |                   |            |    |
|               |                   |                             | 20                                   | 0.03              | 0.36            | 1,350                            | 0.17 6.0                                 | 4.7 0.018  | 14          |                            |                   |            |    |
| 9LG0612P4M001 |                   |                             | 100                                  | 0.09              | 1.08            | 4,200                            | 0.53 18.7                                | 45 0.180   | 24          |                            |                   |            |    |
|               |                   |                             | 20                                   | 0.03              | 0.36            | 900                              | 0.11 3.8                                 | 2.0 0.008  | 14          |                            |                   |            |    |
| 9LG0624P4S001 |                   |                             | 24                                   | 21.6 to 26.4      | 100             | 0.34                             | 8.16                                     | 11,000   | 1.40 49.4   |                            |                   | 300 1.204  | 53 |
|               |                   |                             |                                      |                   | 20              | 0.03                             | 0.72                                     | 2,900  | 0.36 12.7   |                            |                   | 20.8 0.083 | 20 |
| 9LG0624P4J001 |                   |                             |                                      |                   | 100             | 0.19                             | 4.56                                     | 8,650  | 1.10 38.8   |                            |                   | 182 0.730  | 47 |
|               |                   |                             |                                      |                   | 20              | 0.02                             | 0.48                                     | 2,200  | 0.28 9.8    |                            |                   | 12.0 0.048 | 17 |
| 9LG0624P4H001 | 100               | 0.08                        |                                      |                   | 1.92            | 6,150                            | 0.78 27.5                                | 97 0.389   | 35          |                            |                   |            |    |
|               | 20                | 0.02                        |                                      |                   | 0.48            | 1,300                            | 0.16 5.6                                 | 4.3 0.017  | 14          |                            |                   |            |    |
| 9LG0624P4M001 | 100               | 0.04                        |                                      |                   | 0.96            | 4,200                            | 0.53 18.7                                | 45 0.180   | 24          |                            |                   |            |    |
|               | 20                | 0.01                        |                                      |                   | 0.24            | 800                              | 0.10 3.5                                 | 1.6 0.006  | 14          |                            |                   |            |    |
| 9LG0648P4S001 | 48                | 36 to 72                    |                                      |                   | 100             | 0.18                             | 8.64                                     | 11,000   | 1.40 49.4   | 305 1.224                  | 53                |            |    |
|               |                   |                             |                                      |                   | 20              | 0.02                             | 0.96                                     | 2,900  | 0.36 12.7   | 20.8 0.083                 | 20                |            |    |
| 9LG0648P4J001 |                   |                             |                                      |                   | 100             | 0.10                             | 4.80                                     | 8,650  | 1.10 38.8   | 182 0.730                  | 47                |            |    |
|               |                   |                             |                                      |                   | 20              | 0.02                             | 0.96                                     | 2,100  | 0.26 9.1    | 10.7 0.042                 | 17                |            |    |
| 9LG0648P4H001 |                   |                             | 100                                  | 0.06              | 2.88            | 6,150                            | 0.78 27.5                                | 97 0.389   | 35          |                            |                   |            |    |
|               |                   |                             | 20                                   | 0.02              | 0.96            | 1,000                            | 0.12 4.2                                 | 2.5 0.010  | 14          |                            |                   |            |    |
| 9LG0648P4M001 |                   |                             | 100                                  | 0.04              | 1.92            | 4,200                            | 0.53 18.7                                | 45 0.180   | 24          |                            |                   |            |    |
|               |                   |                             | 20                                   | 0.02              | 0.96            | 650                              | 0.08 2.8                                 | 1.0 0.004  | 14          |                            |                   |            |    |

Note : Fan does not rotate when PWM duty cycle is 0%.

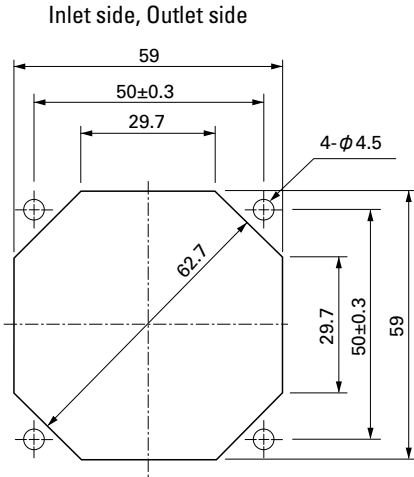
※PWM Frequency : 25kHz

Other sensor specifications are available as options. Please refer to the index (p. 509).

## Dimensions (unit: mm)



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



Options (unit: mm)

Finger Guards

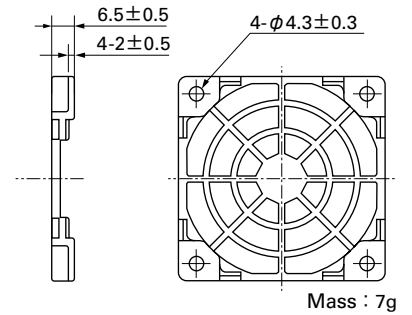
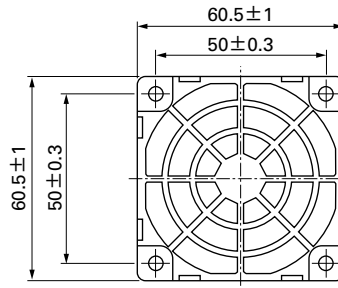
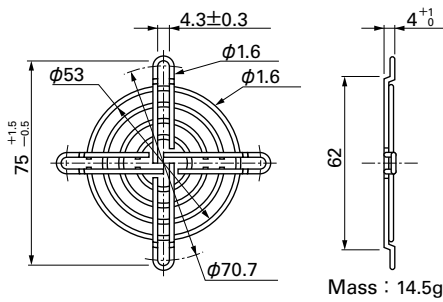
Model : 109-139E Surface treatment : Nickel-chrome plating (silver)  
 : 109-139H : Cation electropainting (black)

Color

Resin Finger Guards

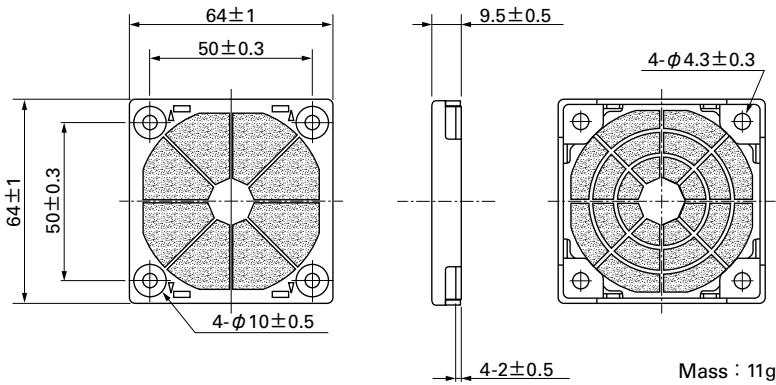
Model : 109-1003G

Inlet side, Outlet side



Resin Filter Kits

Model : 109-1003F13 (13PPI), 109-1003F20 (20PPI)  
 : 109-1003F30 (30PPI), 109-1003F40 (40PPI)



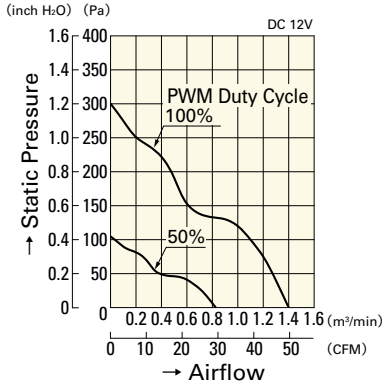
**60**mm sq.

# San Ace 60L

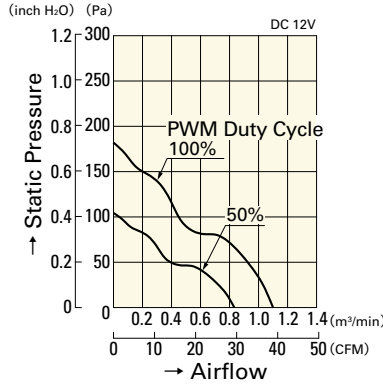
**60×60×25**mm [Mass : 100g]

## Airflow - Static Pressure Characteristics

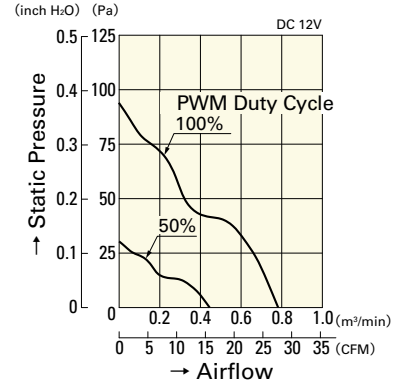
### PWM Duty Cycle



**9LG0612P4S001**

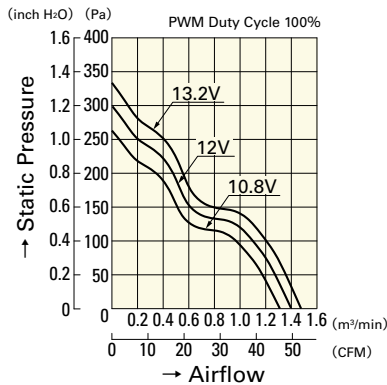


**9LG0612P4J001**

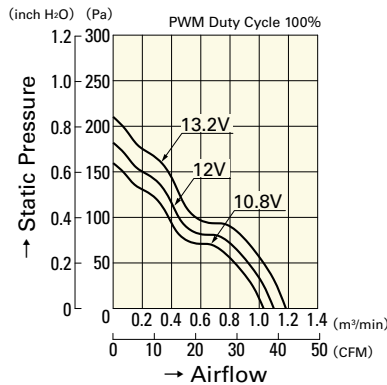


**9LG0612P4H001**

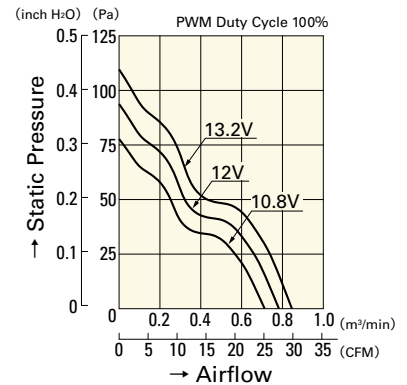
### Operating Voltage Range



**9LG0612P4S001**

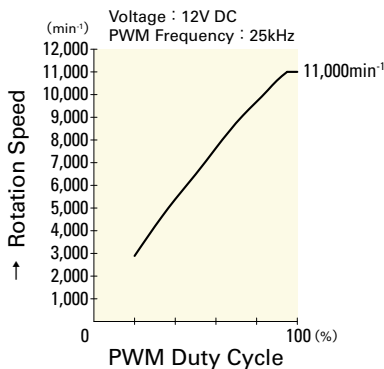


**9LG0612P4J001**

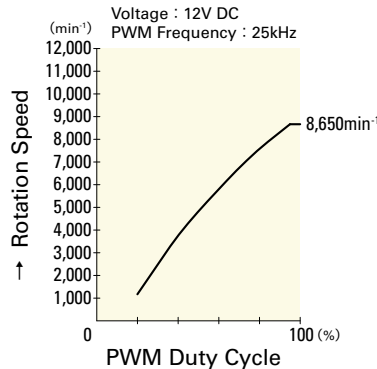


**9LG0612P4H001**

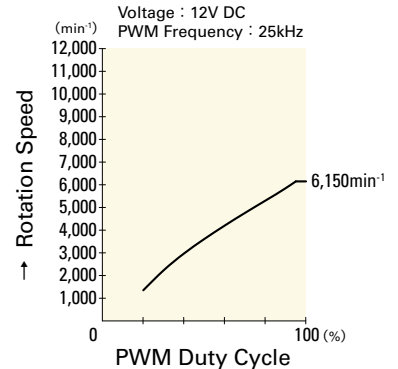
## PWM Duty - Speed Characteristics Example



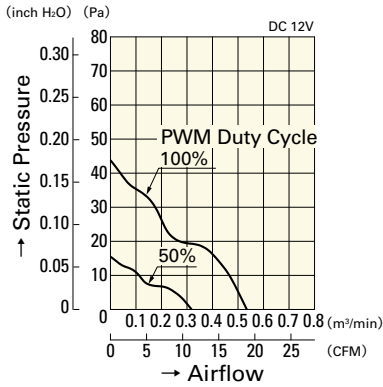
**9LG0612P4S001**



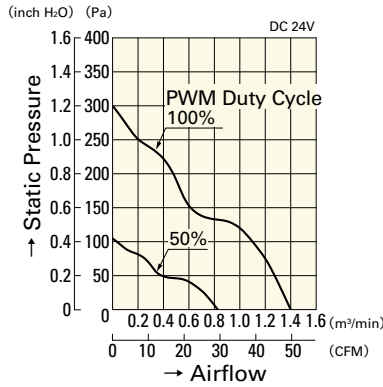
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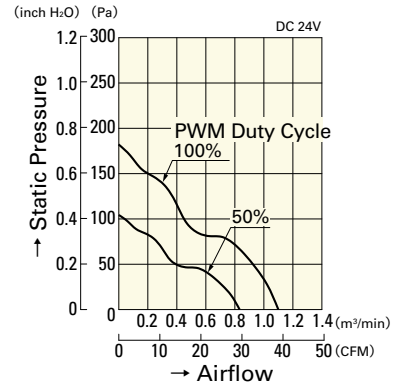
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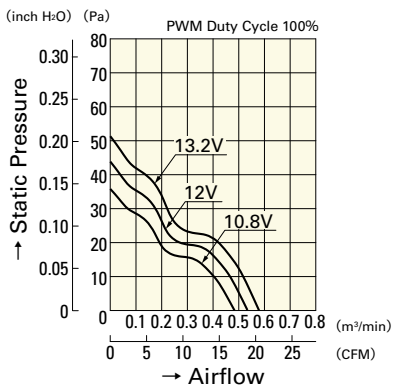
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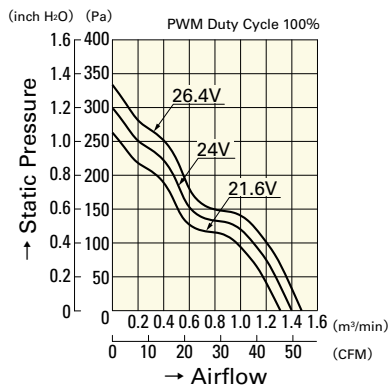
**9LG0624P4S001**



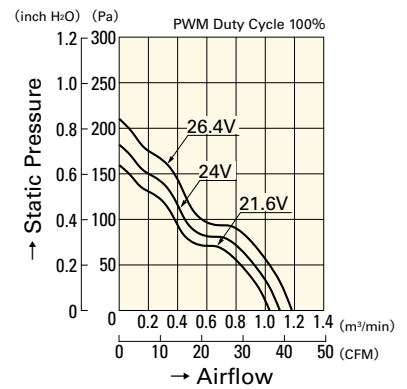
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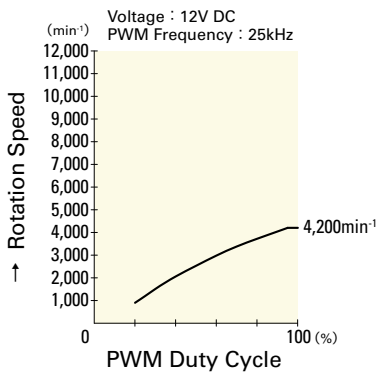
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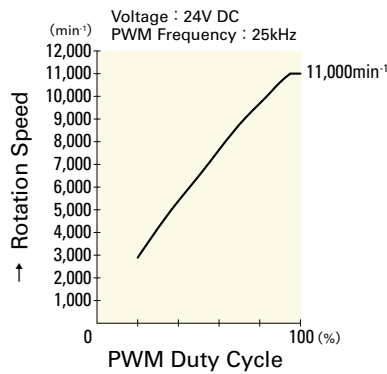
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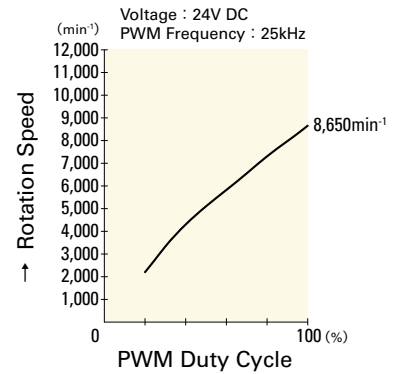
**9LG0624P4J001**



**9LG0612P4M001**



**9LG0624P4S001**



**9LG0624P4J001**

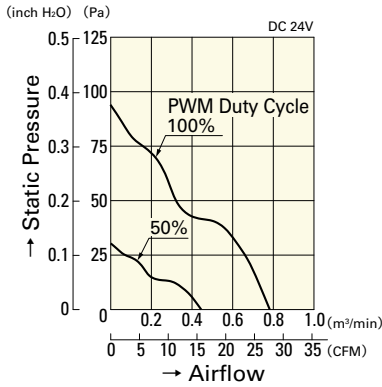
**60**mm sq.

# San Ace 60L

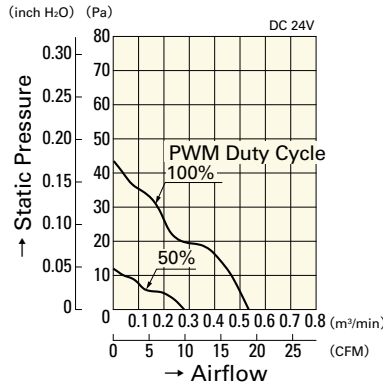
**60×60×25**mm [Mass : 100g]

## Airflow - Static Pressure Characteristics

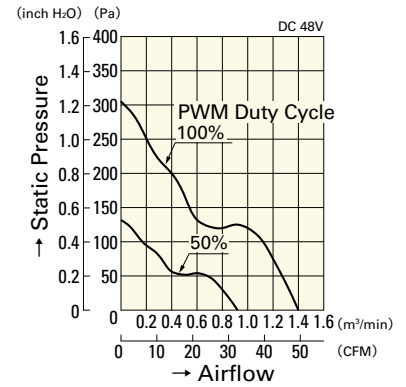
### PWM Duty Cycle



**9LG0624P4H001**

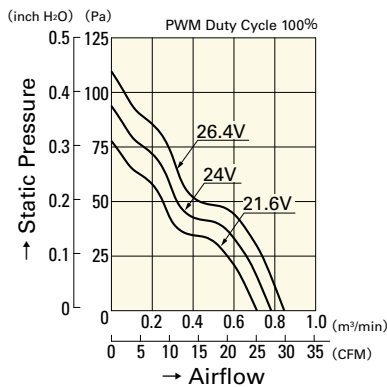


**9LG0624P4M001**

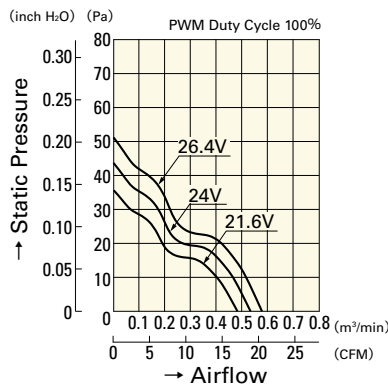


**9LG0648P4S001**

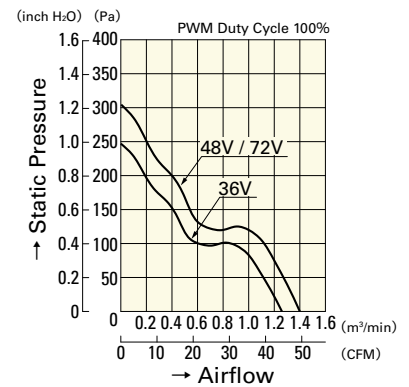
### Operating Voltage Range



**9LG0624P4H001**

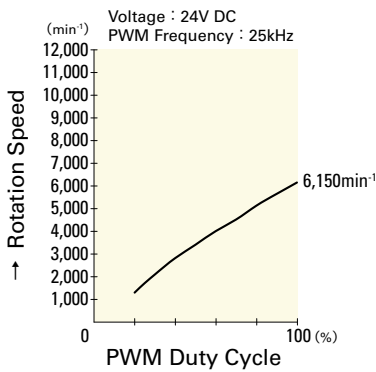


**9LG0624P4M001**

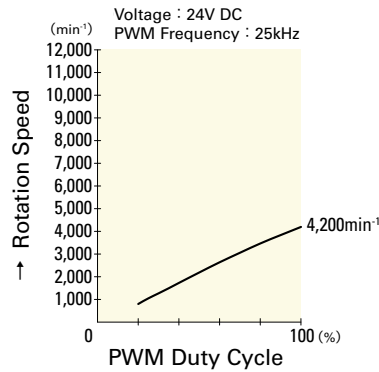


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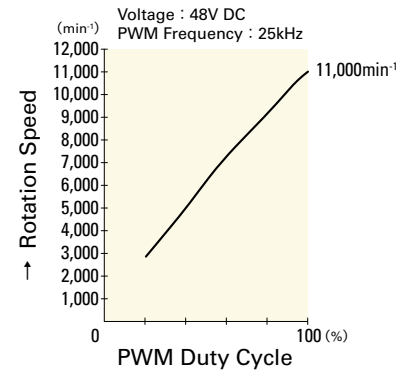
## PWM Duty - Speed Characteristics Example



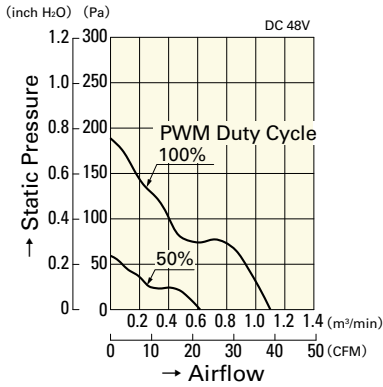
**9LG0624P4H001**



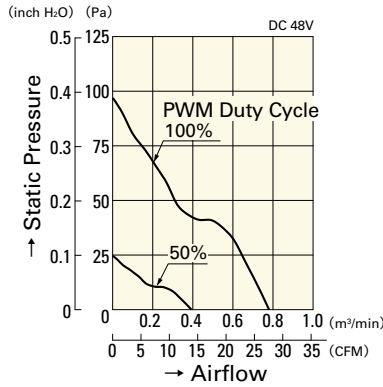
**9LG0624P4M001**



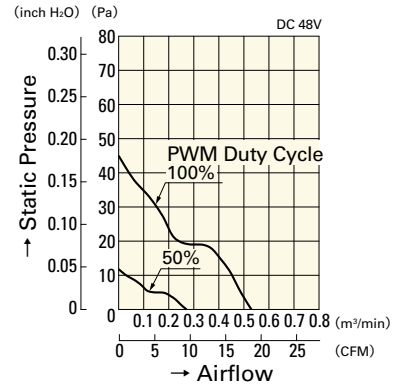
**9LG0648P4S001**



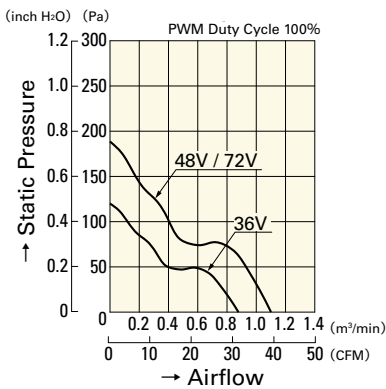
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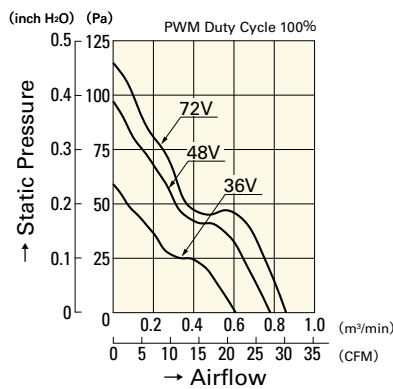
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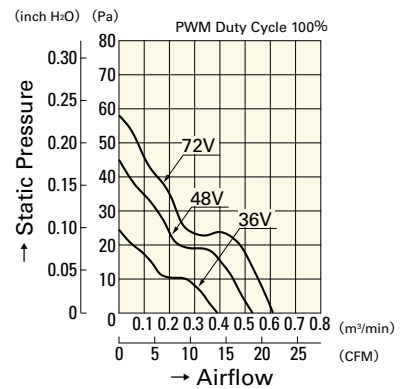
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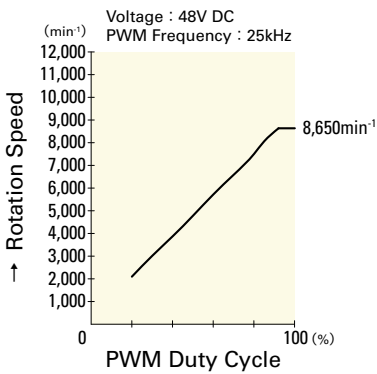
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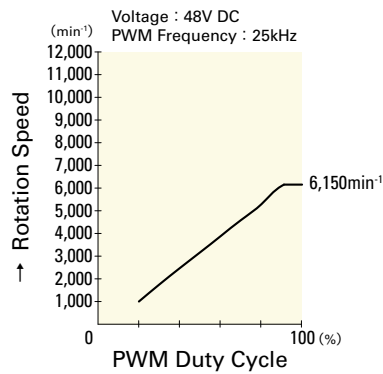
**9LG0648P4H001**



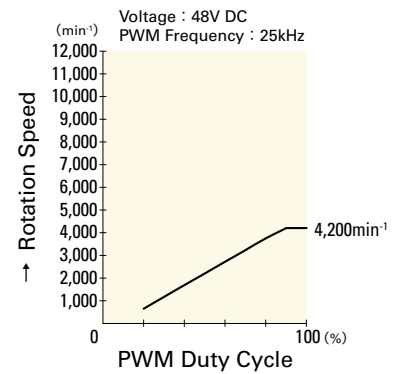
**9LG0648P4M001**



**9LG0648P4J001**



**9LG0648P4H001**



**9LG0648P4M001**