

## General Specifications

### Motor Protection:

Auto Restart/Polarity Protection

**Insulation Resistance:** 10M  $\Omega$  or over with a DC500V Megger

**Dielectric Withstand Voltage:** AC 700V 1s

**Allowable Ambient Temperature Range:**

-10°C ~ +70°C (Operating)

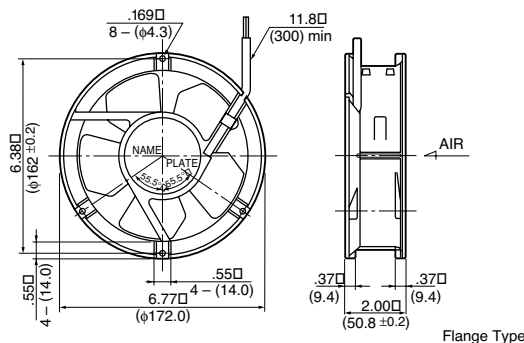
-40°C ~ +70°C (Storage)

(non-condensing environment)

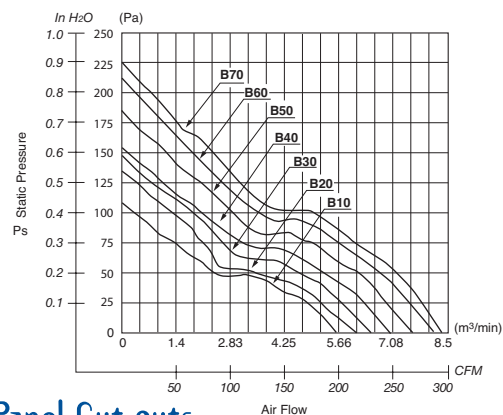
## Outline

Units:  $\frac{\text{inch}}{(\text{mm})}$ 

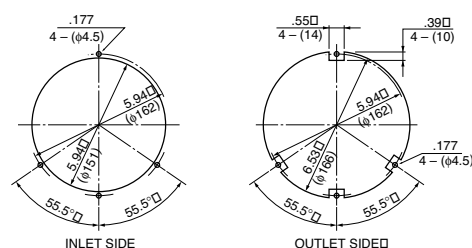
## ROTATION



## Characteristic Curves



## Panel Cut-outs



## Material

Casing : Aluminum (Black)

Impeller : Plastic (Black) 94V-0

Bearing : Ball Bearing

Lead Wire : UL1007, AWG22, +Red, -Black

## Specifications

| MODEL           |  | Rated Voltage | Operating Voltage | Current     | Input Power      | Speed            | Max. Air Flow                     |                  | Max. Static Pressure  |                     | Noise             | Mass              |     |
|-----------------|--|---------------|-------------------|-------------|------------------|------------------|-----------------------------------|------------------|-----------------------|---------------------|-------------------|-------------------|-----|
|                 |  | Product No.   | (V)               | (V)         | (A) <sup>1</sup> | (W) <sup>1</sup> | (min <sup>-1</sup> ) <sup>1</sup> | CFM <sup>1</sup> | (m³/min) <sup>1</sup> | in H <sub>2</sub> O | (Pa) <sup>1</sup> | (dB) <sup>1</sup> | (g) |
| 6820PL-04W-B10- |  | D00           | 12                | 6.0 ~ 18.0  | 0.80             | 9.60             | 2550                              | 180.0            | 5.10                  | .37                 | 92.5              | 50.0              | 830 |
| 6820PL-04W-B20- |  | D00           | 12                | 6.0 ~ 18.0  | 1.00             | 12.00            | 2850                              | 200.0            | 5.66                  | .47                 | 117.5             | 53.0              | 830 |
| 6820PL-04W-B30- |  | D00           | 12                | 6.0 ~ 18.0  | 1.15             | 13.80            | 3150                              | 225.0            | 6.37                  | .56                 | 140.0             | 55.0              | 830 |
| 6820PL-04W-B40- |  | D00           | 12                | 6.0 ~ 18.0  | 1.44             | 17.28            | 3350                              | 240.0            | 6.80                  | .62                 | 155.0             | 58.0              | 830 |
| 6820PL-04W-B50- |  | D00           | 12                | 6.0 ~ 18.0  | 1.60             | 19.20            | 3500                              | 260.0            | 7.36                  | .73                 | 182.75            | 60.3              | 830 |
| 6820PL-05W-B10- |  | D00           | 24                | 12.0 ~ 30.0 | 0.36             | 8.64             | 2550                              | 180.0            | 5.10                  | .37                 | 92.5              | 50.0              | 830 |
| 6820PL-05W-B20- |  | D00           | 24                | 12.0 ~ 30.0 | 0.46             | 11.04            | 2850                              | 200.0            | 5.66                  | .47                 | 117.5             | 53.0              | 830 |
| 6820PL-05W-B30- |  | D00           | 24                | 12.0 ~ 30.0 | 0.55             | 13.20            | 3150                              | 225.0            | 6.37                  | .56                 | 140.0             | 55.0              | 830 |
| 6820PL-05W-B40- |  | D00           | 24                | 12.0 ~ 30.0 | 0.66             | 15.84            | 3350                              | 240.0            | 6.80                  | .62                 | 155.0             | 58.0              | 830 |
| 6820PL-05W-B50- |  | D00           | 24                | 12.0 ~ 30.0 | 0.79             | 18.96            | 3500                              | 260.0            | 7.36                  | .73                 | 182.75            | 60.3              | 830 |
| 6820PL-05W-B60- |  | D00           | 24                | 12.0 ~ 30.0 | 0.88             | 21.12            | 3750                              | 280.0            | 7.93                  | .84                 | 210.5             | 62.5              | 830 |
| 6820PL-05W-B70- |  | D00           | 24                | 12.0 ~ 30.0 | 1.08             | 25.92            | 4000                              | 300.0            | 8.50                  | .90                 | 226.5             | 63.2              | 830 |
| 6820PL-07W-B10- |  | D00           | 48                | 25.0 ~ 60.0 | 0.18             | 8.64             | 2550                              | 180.0            | 5.10                  | .37                 | 92.5              | 50.0              | 830 |
| 6820PL-07W-B20- |  | D00           | 48                | 25.0 ~ 60.0 | 0.23             | 11.04            | 2850                              | 200.0            | 5.66                  | .47                 | 117.5             | 53.0              | 830 |
| 6820PL-07W-B30- |  | D00           | 48                | 25.0 ~ 60.0 | 0.27             | 12.96            | 3150                              | 225.0            | 6.37                  | .56                 | 140.0             | 55.0              | 830 |
| 6820PL-07W-B40- |  | D00           | 48                | 25.0 ~ 60.0 | 0.33             | 15.84            | 3350                              | 240.0            | 6.80                  | .62                 | 155.0             | 58.0              | 830 |
| 6820PL-07W-B50- |  | D00           | 48                | 25.0 ~ 60.0 | 0.40             | 19.20            | 3500                              | 260.0            | 7.36                  | .73                 | 182.75            | 60.3              | 830 |
| 6820PL-07W-B60- |  | D00           | 48                | 25.0 ~ 60.0 | 0.47             | 22.56            | 3750                              | 280.0            | 7.93                  | .84                 | 210.5             | 62.5              | 830 |
| 6820PL-07W-B70- |  | D00           | 48                | 25.0 ~ 60.0 | 0.51             | 24.48            | 4000                              | 300.0            | 8.50                  | .90                 | 226.5             | 63.2              | 830 |

Rotation: Counterclockwise

Airflow Outlet: Air Out Over Struts

\*1: Average Values in Free Air



## PART NUMBERING SYSTEM

[Product Code](#) / [Flange Type/Rib Type](#) / [Tornado Blower Fan Series Part Numbering System](#)

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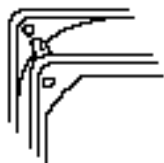
## PRODUCT CODE

**24 10 M L - 04 W - B 10 - P 00**

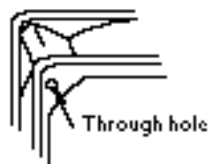
- 00 Standard type
- 01 - 99 Special type:  
Custom feature OR  
Sensor Output  
If 3-lead wire Sensor  
Output fan:  
00: Locked Rotor Alarm  
Signal Standard  
01-49: Locked Rotor Alarm  
Signal Special  
50: Speed Alarm Signal  
Standard  
51-99: Speed Alarm Signal  
Special
- A, L RIB type DC fan††
- D, P FLANGE type DC fan  
(All AC fans are FLANGE type)
- 0 Standard type DC and all AC fans
- 9 Sensor output type - Final suffix  
must be completed to describe type  
of output
- 8 2-speed type
- 7 Temperature detecting  
variable speed type – P60 or PS0
- 6 Temperature detecting variable  
speed/sensor type
- 5 2-speed/sensor type
- 1 < 2 < 3 < 4 < 5 < 6  
Air quantity
- B Ball bearing
- W Lead wire type
- T Terminal type (Faston .110)
- Input  
Voltage  
01:5VDC, 04:12VDC,  
05:24VDC, 07:48VDC,  
12:115VAC, 23:230VAC
- L Brushless type DC
- S Shaded Pole AC
- C Capacitor-run AC
- Series  
P, F, M, N, or K –  
(F is reverse air flow model)
- Frame Thickness  
6 (15), 8 (20), 10 (25),  
12 (30), 15 (38),  
20 (50) — inch/10 (mm)
- Frame Size (Length of Casing Side)  
16 (40), 24 (60), 1 (80),  
36 (92), 47 (119), 59 (150),  
68 (172) — inch/10 (mm)

## FLANGE TYPE / RIB TYPE

FLANGE TYPE



RIB TYPE

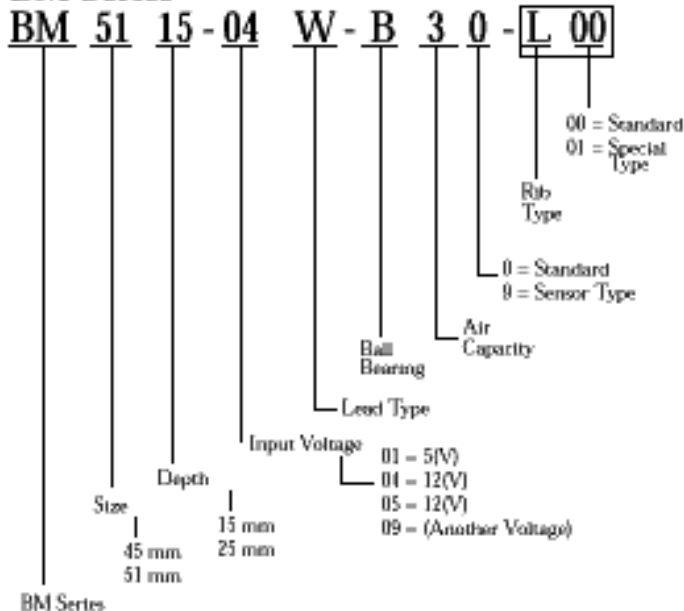


(Note) Set RIB type of FLANGE types according to the mounting method.

RIB type is a non-stock item/may be subject to lead time.

## TORNADO BLOWER FAN SERIES PART NUMBERING SYSTEM

### BM Series



### BG Series

