



Air Cooling Fan

Products Series



Global Operations



| | Greater China | Asia (Except Greater China) | Americas | Europe |
|----------------------|---------------|-----------------------------|----------|--------|
| Sales Offices | 8 | 4 | 9 | 21 |
| Manufacturing Plants | 11 | 3 | 1 | 2 |
| R&D/Engineering Labs | 5 | 5 | 4 | 4 |
| Logistics Hubs | 8 | 8 | 37 | 33 |

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Introduction

Delta is a leading global electronics company offering a broad spectrum of electronic components and equipment including switching power supplies, color monitors, EMI/RFI filters, magnetics, networking components, chip and power inductors, motors, resistor networks, and DC fans. Our strong capabilities in product design, manufacturing, automation and quality assurance make us the preferred supplier to OEM customers and distributors around the world.

For brushless DC fans, Delta's highly experienced design engineers have in-depth knowledge of customer applications and cooling requirements. Advanced engineering equipment such as computerized CNC machines, anechoic chambers and wind tunnels are used to develop high performance, low noise, and cost effective DC fans.

Delta is an ISO-9001 & TS16949 certified manufacturer for brushless DC fans, with ROHS compliance beginning in Q2 2005. We implement strict reliability tests in the design stage and have put into place Statistical Process Controls at each step of the production process. Because of our outstanding performance in quality and reliability, Delta has earned vendor awards from major customers such as Asus, Cisco, Dell, HP, IBM, NCR, NEC, Nortel, Philips, Xerox and others.



Anechoic Chamber for Noise Test



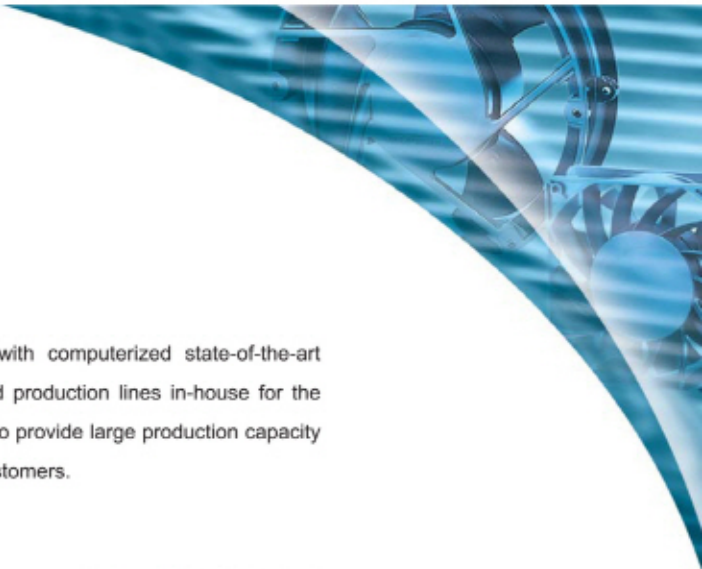
Wind Tunnel



Computerized CNC Machine



Automated Balance Test



Our automation department is highly specialized with computerized state-of-the-art equipment. We build computer integrated automated production lines in-house for the assembly and testing of our DC fans. This allows us to provide large production capacity plus high quality and cost effective products to our customers.

Delta's DC fan manufacturing plants are located in Dongguan, Wujiang (China), Bangkok (Thailand) and Taiwan, with sales offices located globally. Delta maintains a stock of standard models in Taiwan, the U.S.A., Japan, and Europe through our extensive distribution network. Our worldwide manufacturing and customer service enables us to meet customer requirements flexibly and effectively as well as serve domestic companies with international affiliations.



Manufacturing Plant 2 in Taoyuan, Taiwan



Manufacturing Plant in Wujiang, China



Manufacturing Plant in Dongguan, China



Manufacturing Plant in Bangkok, Thailand

Table of Contents

AFB Series

| | |
|--------------------------------------|----|
| AFB 25x25x10 mm Series | 1 |
| AFB 30x30x10 mm Series | 2 |
| AFB 35x35x10 mm Series | 3 |
| AFB 40x40x15 mm Series | 4 |
| AFB 45x45x10 mm Series | 5 |
| AFB 45x45x15 mm Series | 6 |
| AFB 50x50x15 mm Series | 7 |
| AFB 50x50x15 mm Series | 8 |
| AFB 50x50x20 mm Series | 9 |
| AFB 60x60x13 mm Series | 10 |
| AFB 60x60x15 mm Series | 11 |
| AFB 60x60x20 mm Series | 12 |
| AFB 60x60x20 mm Series | 13 |
| AFB 60x60x25.4 mm Series | 14 |
| AFB 60x60x25.4 mm Series | 15 |
| AFB 60x60x38 mm Series | 16 |
| AFB 60x60x38 mm Series | 17 |
| AFB 70x70x13 mm Series | 18 |
| AFB 70x70x15 mm Series | 19 |
| AFB 70x70x20 mm Series | 20 |
| AFB 70x70x25.4 mm Series | 21 |
| AFB 70x70x38 mm Series | 22 |
| AFB 80x80x15 mm Series | 23 |
| AFB 80x80x20 mm Series | 24 |
| AFB 80x80x25.4 mm Series | 25 |
| AFB 80x80x38 mm Series | 26 |
| AFB 92x92x15 mm Series | 27 |
| AFB 92x92x20 mm Series | 28 |
| AFB 92x92x25.4 mm Series | 29 |
| AFB 92x92x25.4 mm Series | 30 |
| AFB 92x92x38 mm Series | 31 |
| AFB 120x120x25.4 mm Series | 32 |
| AFB 120x120x38 mm Series | 33 |
| AFB 120x120x38 mm Series | 34 |
| AFB 172x150x25.4 mm Series | 35 |
| AFB \varnothing 172x25.4 mm Series | 36 |

AHB Series

| | |
|--------------------------------------|----|
| AHB 127x127x38 mm Series | 37 |
| AHB 172x150x25.4 mm Series | 38 |
| AHB 172x150x50.8 mm Series | 39 |
| AHB \varnothing 172x25.4 mm Series | 40 |
| AHB \varnothing 172x50.8 mm Series | 41 |

EFB Series

| | |
|--------------------------------------|----|
| EFB 40x40x10 mm Series | 42 |
| EFB 40x40x20 mm Series | 43 |
| EFB 50x50x10 mm Series | 44 |
| EFB 60x60x10 mm Series | 45 |
| EFB 80x80x15 mm Series | 46 |
| EFB 120x120x32 mm Series | 47 |
| EFB 120x120x38 mm Series | 48 |
| EFB 172x150x50.8 mm Series | 49 |
| EFB \varnothing 172x50.8 mm Series | 50 |

EHB Series

| | |
|--------------------------------------|----|
| EHB 172x150x50.8 mm Series | 51 |
| EHB \varnothing 172x50.8 mm Series | 52 |

FFB Series

| | |
|--------------------------------------|----|
| FFB 38x38x28 mm Series | 53 |
| FFB 40x40x28 mm Series | 54 |
| FFB 60x60x38 mm Series | 55 |
| FFB 80x80x25.4 mm Series | 56 |
| FFB 80x80x38 mm Series | 57 |
| FFB 92x92x25.4 mm Series | 58 |
| FFB 92x92x38 mm Series | 59 |
| FFB 100x100x38 mm Series | 60 |
| FFB 120x120x25.4 mm Series | 61 |
| FFB 120x120x38 mm Series | 62 |
| FFB 120x120x38 mm Series | 63 |
| FFB 127x127x38 mm Series | 64 |
| FFB 140x140x38 mm Series | 65 |
| FFB 140x140x50.8 mm Series | 66 |
| FFB \varnothing 172x50.8 mm Series | 67 |

FHB Series

| | |
|--------------------------------------|----|
| FHB 120x120x38 mm Series | 68 |
| FHB 140x140x38 mm Series | 69 |
| FHB \varnothing 172x50.8 mm Series | 70 |

GFB Series

| | |
|------------------------|----|
| GFB 40x40x48 mm Series | 71 |
| GFB 40x40x56 mm Series | 72 |
| GFB 40x50x32 mm Series | 73 |

| | |
|----------------------------|----|
| GFB 40x50x38 mm Series | 74 |
| GFB 60x60x50.8 mm Series | 75 |
| GFB 80x80x50.8 mm Series | 76 |
| GFB 92x92x50.8 mm Series | 77 |
| GFB 120x120x50.8 mm Series | 78 |
| GFB 120x120x76.2 mm Series | 79 |

LFB Series

| | |
|--------------------------|----|
| LFB 50x50x20 mm Series | 80 |
| LFB 60x60x20 mm Series | 81 |
| LFB 70x70x25.4 mm Series | 82 |

NFB Series

| | |
|----------------------------|----|
| NFB 60x60x25.4 mm Series | 83 |
| NFB 60x60x25.4 mm Series | 84 |
| NFB 80x80x25.4 mm Series | 85 |
| NFB 92x92x25.4 mm Series | 86 |
| NFB 120x120x25.4 mm Series | 87 |

PFB Series

| | |
|--------------------------|----|
| PFB 40x40x28 mm Series | 88 |
| PFB 60x60x38 mm Series | 89 |
| PFB 80x80x38 mm Series | 90 |
| PFB 92x92x38 mm Series | 91 |
| PFB 120x120x38 mm Series | 92 |

QFR Series

| | |
|--------------------------|----|
| QFR 80x80x38 mm Series | 93 |
| QFR 92x92x38 mm Series | 94 |
| QFR 120x120x38 mm Series | 95 |

TFB Series

| | |
|------------------------|----|
| TFB 50x50x32 mm Series | 96 |
|------------------------|----|

BFB Series

| | |
|--------------------------|-----|
| BFB 30x30x10 mm Series | 97 |
| BFB 35x35x10 mm Series | 98 |
| BFB 40x40x10 mm Series | 99 |
| BFB 42x45x19 mm Series | 100 |
| BFB 45x45x10 mm Series | 101 |
| BFB 45x45x20 mm Series | 102 |
| BFB 50x50x10 mm Series | 103 |
| BFB 50x50x20 mm Series | 104 |
| BFB 51x51x15 mm Series | 105 |
| BFB 60x60x15 mm Series | 106 |
| BFB 60x60x25 mm Series | 107 |
| BFB 70x70x20 mm Series | 108 |
| BFB 75x75x25 mm Series | 109 |
| BFB 75x75x30 mm Series | 110 |
| BFB 97x94x33 mm Series | 111 |
| BFB 97x94x33 mm Series | 112 |
| BFB 97x94x33 mm Series | 113 |
| BFB 101x107x25 mm Series | 114 |
| BFB 120x120x32 mm Series | 115 |
| BFB 120x120x32 mm Series | 116 |
| BFB 120x120x32 mm Series | 117 |
| BFB 125x126x34 mm Series | 118 |
| BFB 159x165x40 mm Series | 119 |

BCB Series

| | |
|------------------------|-----|
| BCB 75x80x30 mm Series | 120 |
| BCB 97x94x25 mm Series | 121 |
| BCB 97x94x32 mm Series | 122 |

KFB Series

| | |
|-------------------------------------|-----|
| KFB \varnothing 100x55 mm Series | 123 |
| KFB \varnothing 120x54 mm Series | 124 |
| KFB \varnothing 175x54 mm Series | 125 |
| KFB \varnothing 175x69 mm Series | 126 |
| KFB \varnothing 175x69 mm Series | 127 |
| KFB \varnothing 225x99 mm Series | 128 |
| KFB \varnothing 225x107 mm Series | 129 |
| KFB \varnothing 250x89 mm Series | 130 |

KHB Series

| | |
|------------------------------------|-----|
| KHB \varnothing 100x55 mm Series | 131 |
| KHB \varnothing 120x54 mm Series | 132 |
| KHB \varnothing 175x54 mm Series | 133 |
| KHB \varnothing 175x69 mm Series | 134 |
| KHB \varnothing 175x69 mm Series | 135 |

SFB Series

| | |
|--------------------------|-----|
| SFB 125x38x45 mm Series | 136 |
| SFB 180x38x45 mm Series | 137 |
| SFB 196x109x33 mm Series | 138 |

DC Fan With Minimum Noise

Introductions

- Every model undergoes rigorous aerodynamic analysis and anechoic chamber test to achieve minimum noise under high airflow and air pressure conditions.
- High precision maintenance-free ball bearing system provides superb reliability.
- Frame and fan blade meet UL 94V-0 flammability rating.
- Every model features locked rotor protection and polarity protection, and offers optional frequency generator or rotation detector function.
- All DC fans are 100% balanced to guarantee low vibration and excellent durability.
- Automatic multi-axes winding, surface-mount machine and highly automated assembly lines enable mass production and consistent quality.
- UL, CSA, VDE approved.

Part Number Definition

AFB 12 12 H E - B F 00

1 2 3 4 5 6 7 8

1. SERIES CODE :

AFB,AHB,EFB,EHB,FFB,FHB,GFB,
LFB,NFB,TFB,BFB, KFB,KHB,SFB,

2. FRAME DIMENSION:

02 : 125 x 38 x 45 mm
03 : 30 mm SQUARE
or 180 x 38 x 45 mm
032 : \varnothing 32 x 9 mm
035 : 35 mm SQUARE
04 : 40 mm SQUARE
or 42 x 45 x 19 mm
045 : 45 mm SQUARE
05 : 50 mm SQUARE
or 51 x 51 x 15 mm
06 : 60 mm SQUARE
07 : 70 mm SQUARE
or 75 x 75 x 30 mm
08 : 80 mm SQUARE
09 : 92 mm SQUARE
10 : 97 x 94 x 33
or \varnothing 100 x 46.8 mm
12 : 120 mm SQUARE
or 125 x 126 x 34 mm
or 120 x 120 x 32 mm
13 : 127 mm SQUARE
or \varnothing 133 x 61.5 mm
14 : 140 mm SQUARE
15 : 172 x 150 mm
16 : 159 x 165 x 40 mm
17 : \varnothing 172 mm
or \varnothing 175 x 69.0 mm

3. OPERATION VOLTAGE :

05 : DC 5V
12 : DC 12V
24 : DC 24V
48 : DC 48V

4. SPEED (RPM) :

L : LOW
M : MEDIUM
H : HIGH
HH : EXTRA HIGH
VH : VERY HIGH
SH : SUPER HIGH
EH : EXTERNAL HIGH
GH : GRAND HIGH SPEED
UH : ULTRA HIGH SPEED
DH : DRASTIC HIGH SPEED
XH : EXTREME HIGH SPEED

5. FRAME THICKNESS:

A : 10 mm
C : 13 mm
B : 15 mm
D : 20 mm
(BLANK) : 25.4 mm
N : 28 mm
F : 32 mm
E : 38 mm
or RIGHT SIDE
EXHAUST (INTAKE
VIEW FOR BFB
SERIES)
G : 50.8 mm OR 48mm
S : 55 mm
T : 61.0-71.0 mm
W : 72.0-85.0 mm
U : 86.0-105.0 mm
V : 106.0-125.0 mm

6. FRAME TYPE:

(BLANK) : FLANGE TYPE
B : RIB TYPE (10mm, 13mm, 15mm, 20mm
THICKNESS)
M : METAL FRAME

7. SIGNAL OUTPUT :

F : FREQUENCY GENERATOR OUTPUT
(SPEED SENSOR) OR TACH OUTPUT
R : ROTATION DETECTOR OUTPUT
(FAILURE DETECTOR)

8. SIGNAL OUTPUT VOLTAGE :

00 : VCC (OPEN COLLECTOR)

Telecom Fan Part Number Definition (for T* Series)

| T | D | A | 09 | 48 | B | E |
|---|---|---|----|----|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

- | | | |
|--|------------------------|--|
| 1. *T: TE,ECP, APPLICATION | 4. FRAME DIMENSION | 7. FRAME THICKNESS E: 38 mm G: 50.8mm OR 48 mm |
| 2. FRAME SERIES D: Diagonal Fan F: Stator Blade Fan H: High Efficiency Stator Fan | 5. OPERATION VOLTAGE: | |
| 3. DESIGN CODE: A/B/C..... | 6. SPEED(PWM) A<B<C | |

Fan Tray Part Number Definition

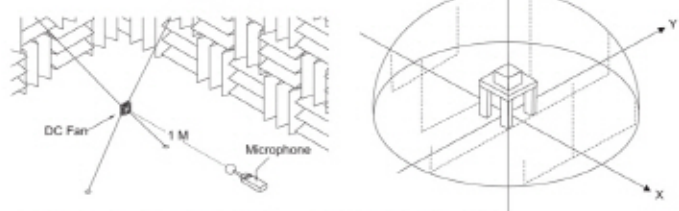
| F | C | A | 01 | 6 | A | A |
|---|---|---|----|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

- | | |
|---|---|
| 1. *FAN COMBINATION | 5. FAN QUANTITY: 02: 2PCS, 04: 4PCS, 06: 6PCS, 09: 9PCS |
| 2. SERIES CODE: C: CONTROLLER (ONLY CONTROLLER) N: FAN ASSEMBLY (ONLY FAN) T: FAN TRAY (FAN + CONTROLLER) | 6. FAN MODEL: A: AFB (12X38 AXIAL FAN) E: EFB (172X150X50.8 AXIAL FAN) K: KFB (175X54 BLOWER) |
| 3. OPERATION VOLTAGE: A: AC POWER D: DC POWER | 7. EDITION: A: FIRST , B: SECOND, C: THREE ... |
| 4. DIMENSION: 01: 1U, 02: 2U, 03:3U, 04:4U... | |

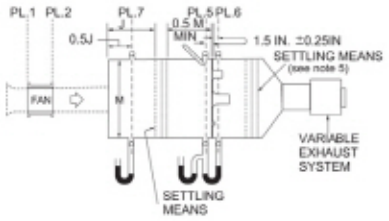
Note

1. NOISE IS MEASURED AT RATED VOLTAGE IN ANECHOIC CHAMBER IN FREE AIR WITH LARSON DAVIS AND WITH MICROPHONE AT A DISTANCE OF ONE METER FROM THE FAN INTAKE. REFER TO ANSI-S12.10 AS SHOWN BELOW:

SEMI ANECHOIC CHAMBER LEVEL
Semi Anechoic Chamber for ISO 7779
Residual Background Noise Level: 15.0 dB (A)
Lowest Cutoff Frequency (Fco): 100 Hz

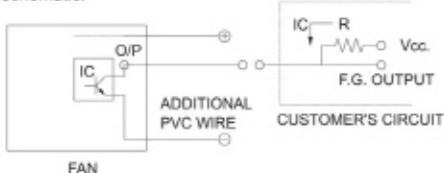


2. THE PERFORMANCE INCLUDING AIR FLOW AND AIR PRESSURE MEASURED AT RATED VOLTAGE IN DOUBLE CHAMBER IS MEASURED ACCORDING TO AMCA 210 STANDARD AS SHOWN BELOW:



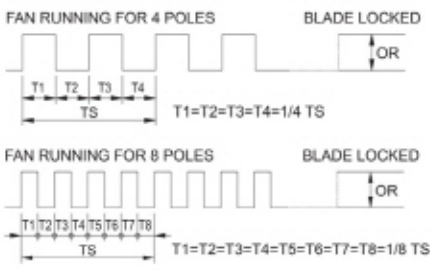
3. FREQUENCY GENERATOR O/P: (F00)

Frequency generator function is activated by an internal IC for customer's application.
Electrical schematic:



CUSTOMER'S CIRCUIT
Vcc = From +5 To +28 VDC (Generally using +12 or +24 VDC)
Ic = 5 mA max.
R = V/I (Output "R" value calculation)

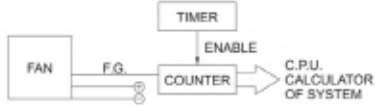
■ SUPPLY A WAVEFORM:



N=R.P.M. (Rotation speed will be different for various models L/M/H/HH/VH/SH)
TS=60/N (Sec)
* Voltage level after blade locked
* 4 POLES OR 8 POLES

■ OUTPUT LEVEL:
High = Vcc±10%
Low = 0-0.5V
Ic = 5 mA max.

■ APPLICATION:

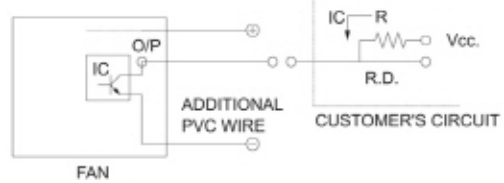


■ FUNCTIONS:

- By means of waveform & customer's design, schematic can reach alarm function, either in the form of buzzing or LED flashing. Adjust rotation speed.
- When power supply output voltage level decreases, it will result in the lowering of fan rotation speed. The irregular situation will be controlled by using F.G. O/P through P/S circuit to increase the output voltage and result in a stable rotation speed.

4. ROTATION DETECTOR O/P (R00)

Rotation detector function is activated by an internal IC for customer's application.
Electrical schematic:



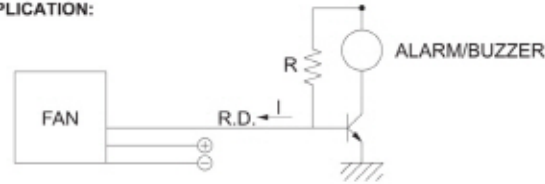
CUSTOMER'S CIRCUIT
Vcc = From +5 To +28 VDC (Generally use +12 or +24 VDC)
Ic = 5 mA max.
R = V/I (Output "R" value calculation)

■ SUPPLY A WAVEFORM:



■ OUTPUT LEVEL:
High = Vcc±10%
Low = 0-0.5V
Ic = 5 mA max.

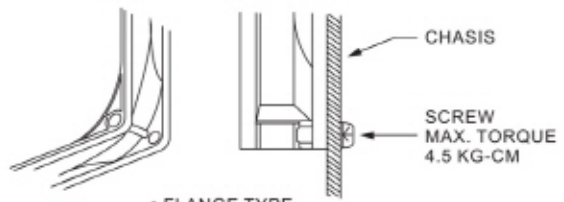
■ APPLICATION:



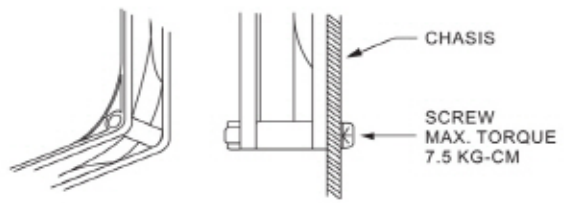
■ FUNCTION:

- By means of waveform & customer's design, schematic can reach alarm function: either in the form of buzzing or LED flashing.

5. FRAME TYPE:



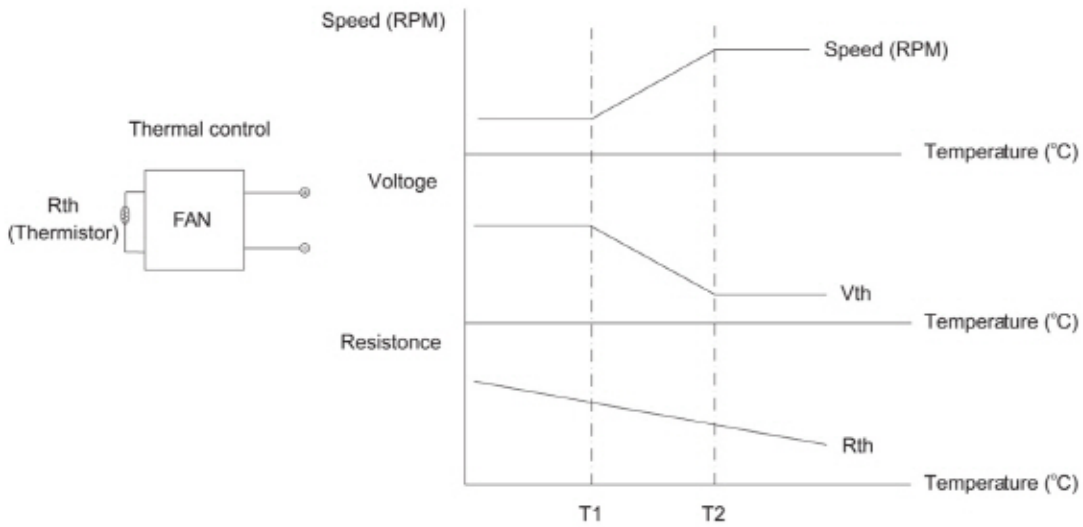
• FLANGE TYPE



• RIB TYPE

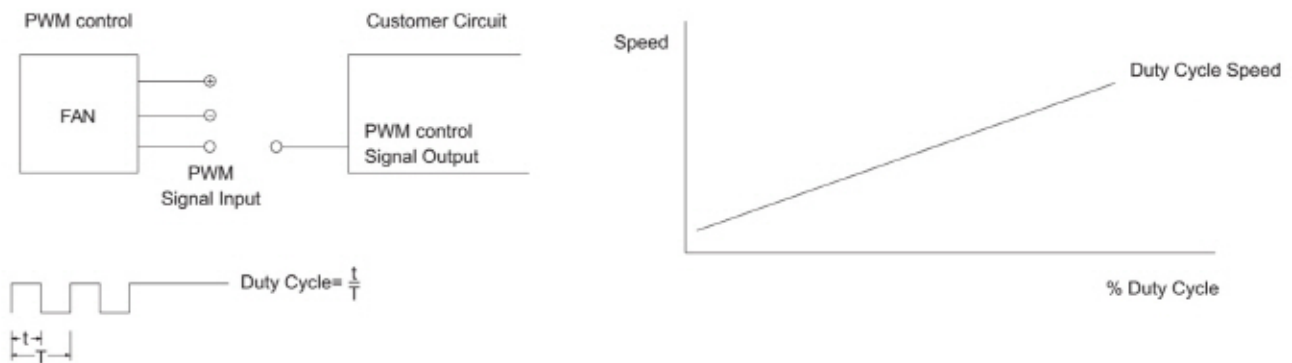
6. TEMPERATURE CONTROL : "SENSFLOW"

With temperature controlled fan, the RPM can be controlled by on board or off board thermistor. The RPM and temperature range is subject to custom request.



7. PWM CONTROL

In PWM speed control, a fixed frequency square wave is applied to the speed control lead wire of the fan. The ratio of the on time vs. the PWM period is proportional to the RPM.



■ PWM INPUT VOLTAGE RANGE:

High level= 2.8 to 20 VDC
Low level= 0 to 0.4 VDC

■ PWM INPUT CURRENT (IPWM) RANGE:

40uA to 20mA

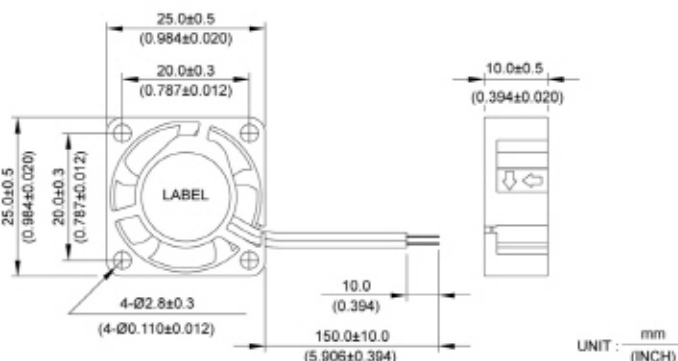
To control signal line of the fan shall be able to accept a 30Hz to 30kHz.
The preferred operating point for the fan is 0%~100% of duty cycle.

New



AFB 25 x 25 x 10 MM SERIES

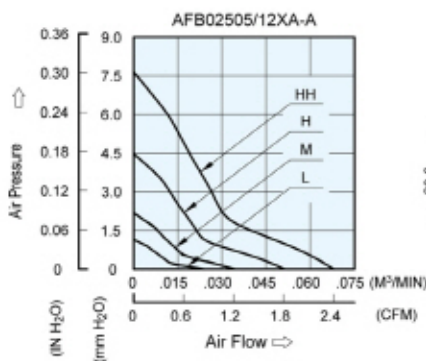
■ DIMENSIONS DRAWING



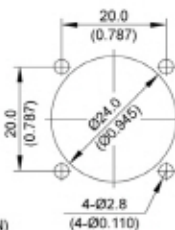
- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1061 AWG #26 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 10.5g (0.37 oz)
- Rib Type Only & One Side Flange

■ P & Q CURVE (AT RATED VOLTAGE)

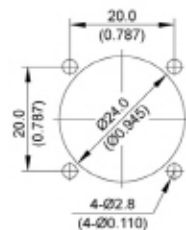
■ MOUNTING PANEL CUTOUT



OUTLET SIDE



INLET SIDE



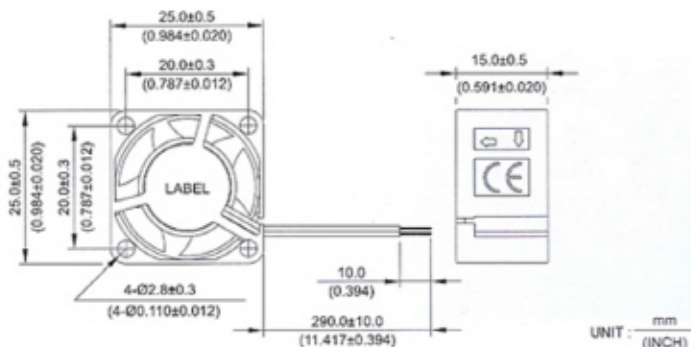
| MODEL | | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|-------------|------|-------------|---------------|-------------------------|---------------|-------------|--------|----------------------|------|----------------------|---------------------|-------|
| PART NO. | REV. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ / min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| AFB02505LA | -A | -R00 / -F00 | 5 | 4.0 to 5.5 | 0.04 | 0.20 | 5000 | 0.024 | 0.85 | 1.15 | 0.045 | 18.0 |
| AFB02505MA | -A | -R00 / -F00 | 5 | 4.0 to 5.5 | 0.06 | 0.30 | 7000 | 0.034 | 1.20 | 2.18 | 0.085 | 20.0 |
| AFB02512MA | -A | -R00 / -F00 | 12 | 9.5 to 13.2 | 0.04 | 0.48 | 10000 | 0.052 | 1.84 | 4.48 | 0.176 | 23.5 |
| AFB02505HA | -A | -R00 / -F00 | 5 | 4.0 to 5.5 | 0.12 | 0.60 | 13000 | 0.068 | 2.40 | 7.65 | 0.300 | 28.0 |
| AFB02512HA | -A | -R00 / -F00 | 12 | 7.0 to 13.2 | 0.06 | 0.72 | | | | | | |
| AFB02505HHA | -A | -R00 / -F00 | 5 | 4.0 to 5.5 | 0.16 | 0.80 | | | | | | |
| AFB02512HHA | -A | -R00 / -F00 | 12 | 7.0 to 13.2 | 0.08 | 0.96 | | | | | | |

- * Function type is optional.
- * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
- * Noise is measured in anechoic chamber in free air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.

New

AFB 25 x 25 x 15 MM SERIES

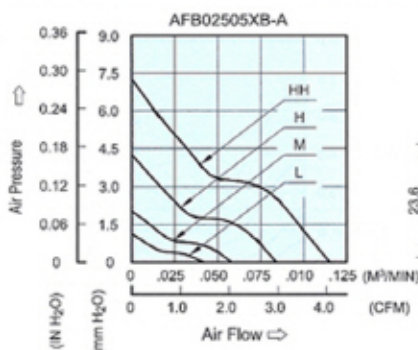
DIMENSIONS DRAWING



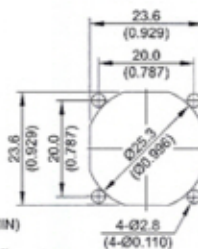
- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires:
UL 1571 AWG #28 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 10g (0.35 oz)
- Rib Type only

P & Q CURVE (AT RATED VOLTAGE)

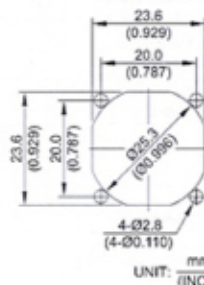
MOUNTING PANEL CUTOUT



OUTLET SIDE



INLET SIDE



| MODEL | | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|-------------|------|-------------|---------------|-------------------------|---------------|-------------|--------|---------------------|------|----------------------|---------------------|-------|
| PART NO. | REV. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| AFB02505LB | -A | -R00 / -F00 | 5 | 4.0 to 6.0 | 0.03 | 0.15 | 5000 | 0.042 | 1.48 | 1.13 | 0.044 | 18.0 |
| AFB02505MB | -A | -R00 / -F00 | 5 | 4.0 to 6.0 | 0.06 | 0.30 | 7000 | 0.058 | 2.05 | 2.04 | 0.080 | 20.0 |
| AFB02505HB | -A | -R00 / -F00 | 5 | 4.0 to 6.0 | 0.08 | 0.40 | 10000 | 0.084 | 2.97 | 4.26 | 0.168 | 24.0 |
| AFB02505HHB | -A | -R00 / -F00 | 5 | 4.0 to 6.0 | 0.14 | 0.70 | 13000 | 0.115 | 4.06 | 7.28 | 0.287 | 29.5 |

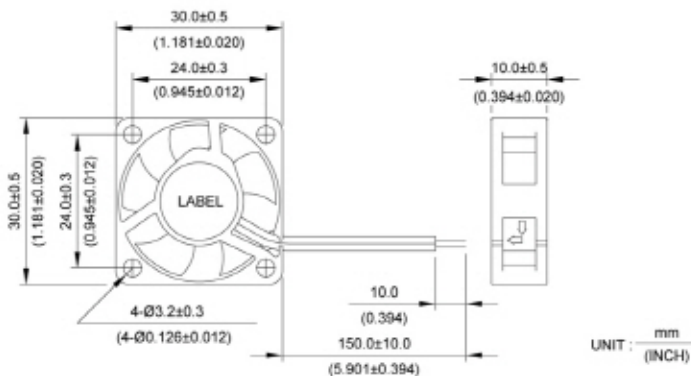
- * Function type is optional.
- * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
- * Noise is measured in anechoic chamber in free air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.

New



AFB 30 x 30 x 10 MM SERIES

■ DIMENSIONS DRAWING

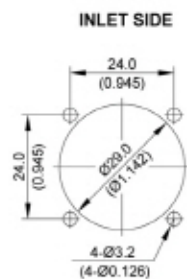
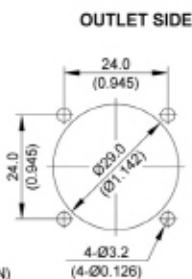
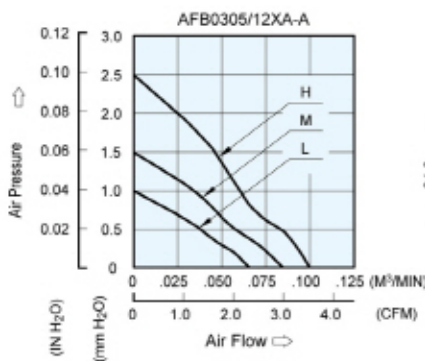


UNIT : $\frac{\text{mm}}{\text{(INCH)}}$

- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1061 AWG #26 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 10.5g (0.37 oz)
- Rib Type Only

■ P & Q CURVE (AT RATED VOLTAGE)

■ MOUNTING PANEL CUTOUT



UNIT : $\frac{\text{mm}}{\text{(INCH)}}$

| MODEL | | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|-----------|------|-------------|---------------|-------------------------|---------------|-------------|--------|---------------------|------|----------------------|---------------------|-------|
| PART NO. | REV. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| AFB0305LA | -A | -R00 / -F00 | 5 | 4.0 to 5.5 | 0.07 | 0.35 | 6000 | 0.067 | 2.37 | 1.00 | 0.040 | 17.5 |
| AFB0312LA | -A | -R00 / -F00 | 12 | 9.5 to 13.8 | 0.05 | 0.60 | | | | | | |
| AFB0305MA | -A | -R00 / -F00 | 5 | 4.0 to 5.5 | 0.09 | 0.45 | 7500 | 0.085 | 3.00 | 1.50 | 0.060 | 20.0 |
| AFB0312MA | -A | -R00 / -F00 | 12 | 9.5 to 13.8 | 0.07 | 0.84 | | | | | | |
| AFB0305HA | -A | -R00 / -F00 | 5 | 4.0 to 5.5 | 0.16 | 0.80 | 9000 | 0.100 | 3.53 | 2.50 | 0.100 | 25.0 |
| AFB0312HA | -A | -R00 / -F00 | 12 | 9.5 to 13.8 | 0.09 | 1.08 | | | | | | |

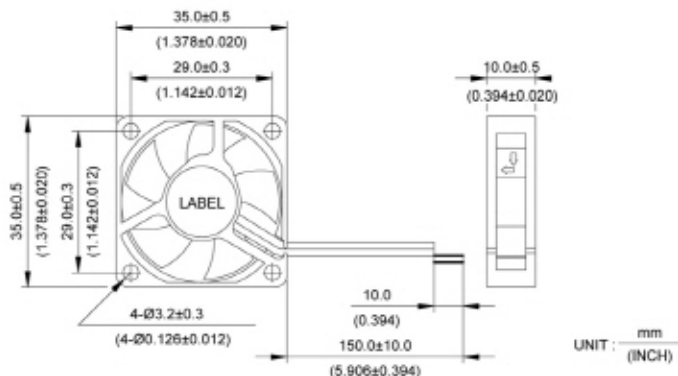
- * Function type is optional.
- * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
- * Noise is measured in anechoic chamber in free air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.

New



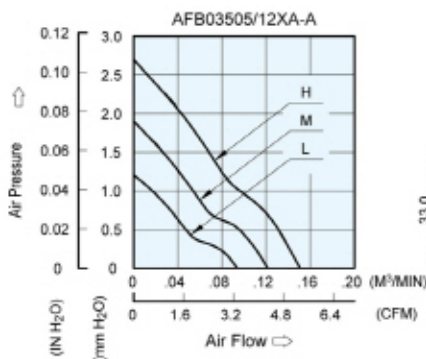
AFB 35 x 35 x 10 MM SERIES

■ DIMENSIONS DRAWING

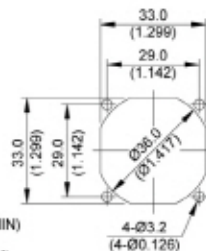


■ P & Q CURVE (AT RATED VOLTAGE)

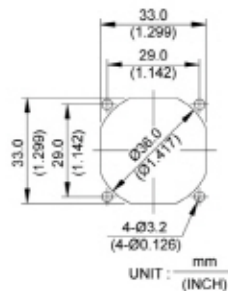
■ MOUNTING PANEL CUTOUT



OUTLET SIDE



INLET SIDE



- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1061 AWG #26 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 10g (0.35 oz)
- Rib Type Only

| MODEL | | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|------|-------------|---------------|-------------------------|---------------|-------------|--------|----------------------|------|----------------------|---------------------|-------|
| PART NO. | REV. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ / min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| AFB03505LA | -A | -R00 / -F00 | 5 | 4.0 to 5.5 | 0.06 | 0.30 | 4500 | 0.095 | 3.36 | 1.21 | 0.048 | 15.0 |
| AFB03512LA | -A | -R00 / -F00 | 12 | 9.5 to 13.8 | 0.04 | 0.48 | | | | | | |
| AFB03505MA | -A | -R00 / -F00 | 5 | 4.0 to 5.5 | 0.10 | 0.50 | 5800 | 0.127 | 4.50 | 1.90 | 0.075 | 18.0 |
| AFB03512MA | -A | -R00 / -F00 | 12 | 9.5 to 13.8 | 0.05 | 0.60 | | | | | | |
| AFB03505HA | -A | -R00 / -F00 | 5 | 4.0 to 5.5 | 0.14 | 0.70 | 7000 | 0.156 | 5.50 | 2.70 | 0.106 | 22.0 |
| AFB03512HA | -A | -R00 / -F00 | 12 | 9.5 to 13.8 | 0.09 | 1.08 | | | | | | |

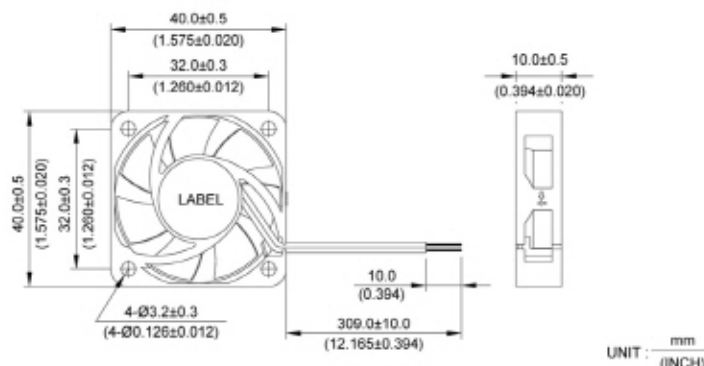
* Function type is optional.
 * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
 * Noise is measured in anechoic chamber in free air, one meter from intake side.
 * All readings are typical values at rated voltage.
 * Specifications are subject to change without notice.

New



AFB 40 x 40 x 10 MM SERIES

■ DIMENSIONS DRAWING

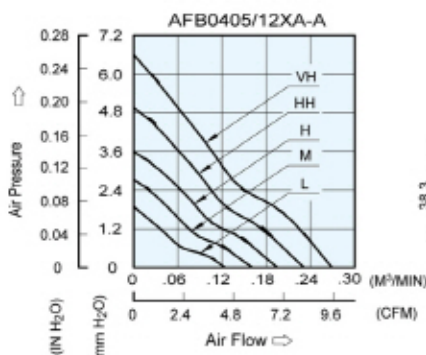


UNIT : $\frac{\text{mm}}{\text{(INCH)}}$

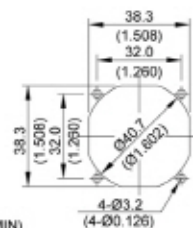
- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1007 AWG #28 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 14.0g (0.49 oz)
- Rib Type Only

■ P & Q CURVE (AT RATED VOLTAGE)

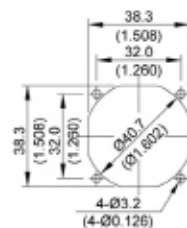
■ MOUNTING PANEL CUTOUT



OUTLET SIDE



INLET SIDE



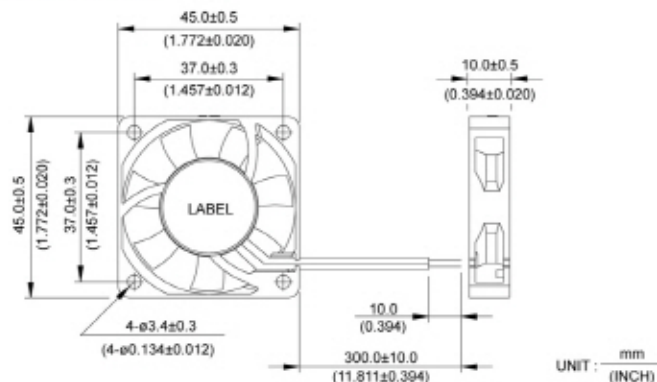
UNIT : $\frac{\text{mm}}{\text{(INCH)}}$

| MODEL | | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|------|-------------|---------------|-------------------------|---------------|-------------|--------|---------------------|------|----------------------|---------------------|-------|
| PART NO. | REV. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| AFB0405LA | -A | -R00 / -F00 | 5 | 4.5 to 5.5 | 0.03 | 0.15 | 4000 | 0.124 | 4.39 | 1.73 | 0.068 | 16.0 |
| AFB0412LA | -A | -R00 / -F00 | 12 | 9.0 to 13.8 | 0.02 | 0.24 | | | | | | |
| AFB0405MA | -A | -R00 / -F00 | 5 | 4.5 to 5.5 | 0.05 | 0.25 | 5000 | 0.161 | 5.67 | 2.65 | 0.104 | 21.5 |
| AFB0412MA | -A | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.03 | 0.36 | | | | | | |
| AFB0405HA | -A | -R00 / -F00 | 5 | 4.5 to 5.5 | 0.07 | 0.35 | 6000 | 0.195 | 6.90 | 3.60 | 0.140 | 27.0 |
| AFB0412HA | -A | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.04 | 0.48 | | | | | | |
| AFB0405HHA | -A | -R00 / -F00 | 5 | 4.5 to 5.5 | 0.09 | 0.45 | 7000 | 0.231 | 8.15 | 4.83 | 0.190 | 31.5 |
| AFB0412HHA | -A | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.05 | 0.60 | | | | | | |
| AFB0405VHA | -A | -R00 / -F00 | 5 | 4.5 to 5.5 | 0.11 | 0.55 | 8000 | 0.269 | 9.50 | 6.42 | 0.253 | 35.5 |
| AFB0412VHA | -A | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.06 | 0.72 | | | | | | |

* Function type is optional.
 * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
 * Noise is measured in anechoic chamber in free air, one meter from intake side.
 * All readings are typical values at rated voltage.
 * Specifications are subject to change without notice.

AFB 45 x 45 x 10 MM SERIES

■ DIMENSIONS DRAWING

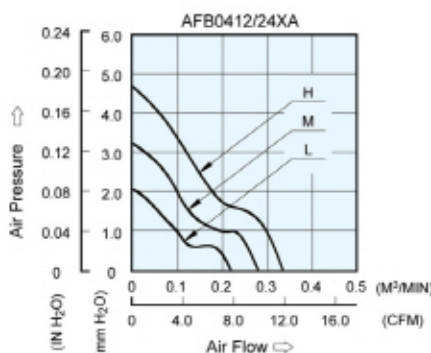


UNIT : mm
(INCH)

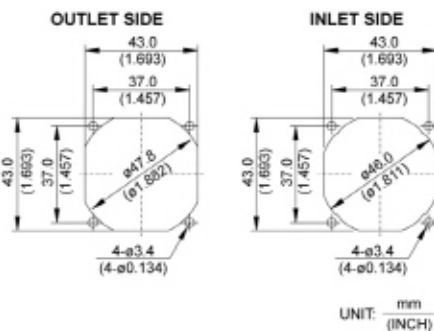


- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1007 AWG #28 OR Equivalent
Red Wire Positive (+)
Black Wire Negative (-)
- Weight : 15.5g (0.55 oz)
- Rib Type Only

■ P & Q CURVE (AT RATED VOLTAGE)



■ MOUNTING PANEL CUTOUT



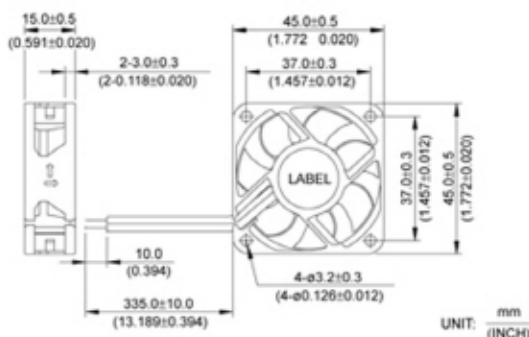
UNIT : mm
(INCH)

| MODEL | | Rated Voltage | Operating Voltage Range | Rated Current | Rated Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|-------------|---------------|-------------------------|---------------|-------------------|--------|---------------------|-------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| AFB04505LA | -R00 / -F00 | 5 | 4.0 to 5.5 | 0.14 | 0.70 | 4000 | 0.218 | 7.70 | 2.05 | 0.081 | 24.5 |
| AFB04512LA | -R00 / -F00 | 12 | 9.0 to 13.8 | 0.08 | 0.96 | | | | | | |
| AFB04505MA | -R00 / -F00 | 5 | 4.0 to 5.5 | 0.20 | 1.00 | 5000 | 0.279 | 9.85 | 3.22 | 0.127 | 30.0 |
| AFB04512MA | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.11 | 1.32 | | | | | | |
| AFB04512HA | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.17 | 2.04 | 6000 | 0.334 | 11.80 | 4.67 | 0.184 | 34.5 |

- * Function type is optional.
- * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
- * Noise is measured in anechoic chamber in free air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.

AFB 45 x 45 x 15 MM SERIES

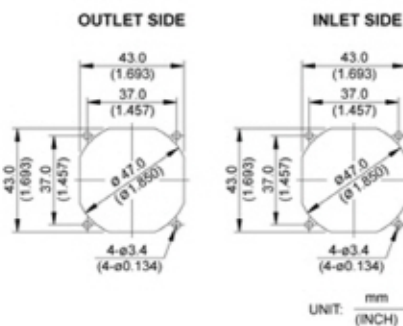
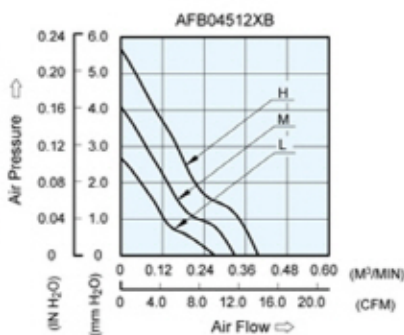
DIMENSIONS DRAWING



- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive (+)
Black Wire Negative (-)
- Weight : 17g (0.60 oz)

P & Q CURVE (AT RATED VOLTAGE)

MOUNTING PANEL CUTOUT

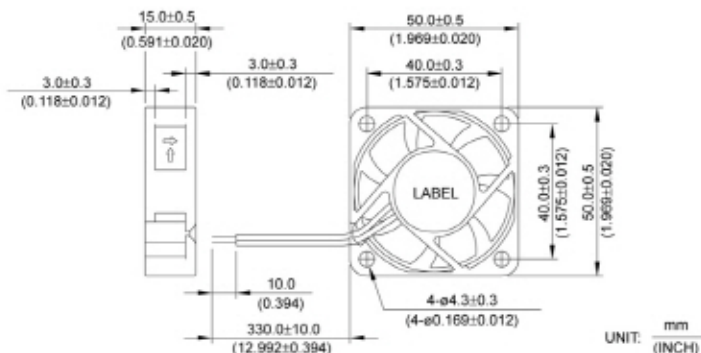


| MODEL | | Rated Voltage | Operating Voltage Range | Rated Current | Rated Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|-------------|---------------|-------------------------|---------------|-------------------|--------|---------------------|-------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| AFB04512LB | -R00 / -F00 | 12 | 5.0 to 13.8 | 0.09 | 1.08 | 4300 | 0.268 | 9.48 | 2.65 | 0.104 | 23.5 |
| AFB04512MB | -R00 / -F00 | 12 | 5.0 to 13.8 | 0.10 | 1.20 | 5300 | 0.328 | 11.59 | 4.07 | 0.160 | 29.0 |
| AFB04512HB | -R00 / -F00 | 12 | 5.0 to 13.8 | 0.14 | 1.68 | 6300 | 0.396 | 14.00 | 5.66 | 0.223 | 33.5 |

* Rib type only
 * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
 * Noise is measured in anechoic chamber in free air, one meter from intake side.
 * All readings are typical values at rated voltage.
 * Specifications are subject to change without notice.

AFB 50 x 50 x 15 MM SERIES

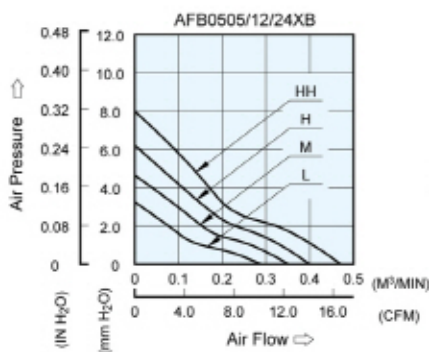
■ DIMENSIONS DRAWING



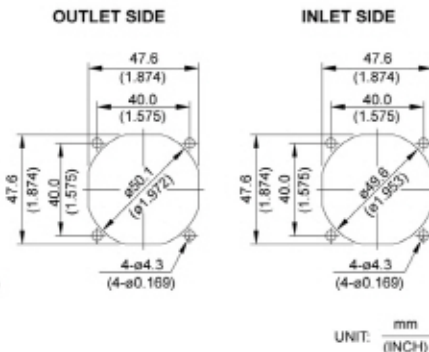
UNIT: mm
(INCH)

- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive (+)
Black Wire Negative (-)
- Weight : 32g (1.13 oz)
- Rib Type Only

■ P & Q CURVE (AT RATED VOLTAGE)



■ MOUNTING PANEL CUTOUT



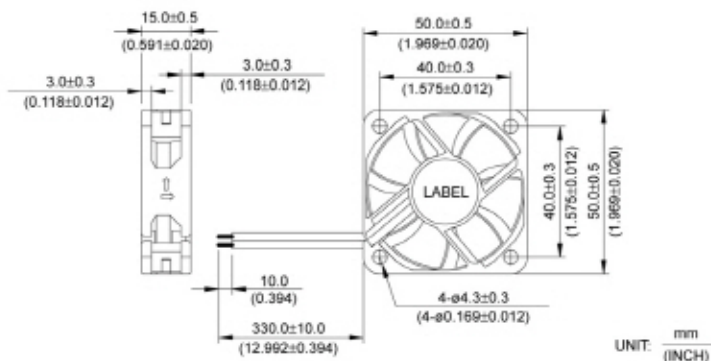
UNIT: mm
(INCH)

| MODEL | | Rated Voltage | Operating Voltage Range | Rated Current | Rated Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|-------------|---------------|-------------------------|---------------|-------------------|--------|---------------------|-------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| AFB0505LB | -R00 / -F00 | 5 | 4.5 to 5.5 | 0.15 | 0.75 | 4000 | 0.280 | 9.89 | 3.20 | 0.126 | 24.0 |
| AFB0512LB | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.06 | 0.72 | | | | | | |
| AFB0524LB | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.05 | 1.20 | | | | | | |
| AFB0505MB | -R00 / -F00 | 5 | 4.5 to 5.5 | 0.22 | 1.10 | 4800 | 0.350 | 12.36 | 4.60 | 0.181 | 28.0 |
| AFB0512MB | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.08 | 0.96 | | | | | | |
| AFB0524MB | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.06 | 1.44 | | | | | | |
| AFB0505HB | -R00 / -F00 | 5 | 4.5 to 5.5 | 0.32 | 1.60 | 5600 | 0.400 | 14.13 | 6.10 | 0.240 | 32.0 |
| AFB0512HB | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.10 | 1.20 | | | | | | |
| AFB0524HB | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.07 | 1.68 | | | | | | |
| AFB0512HHB | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.13 | 1.56 | 6400 | 0.460 | 16.24 | 8.00 | 0.315 | 36.0 |
| AFB0524HHB | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.08 | 1.92 | | | | | | |

* Function type is optional.
 * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
 * Noise is measured in anechoic chamber in free air, one meter from intake side.
 * All readings are typical values at rated voltage.
 * Both of the ball bearing and the 1 ball + 1 sleeve type are available.

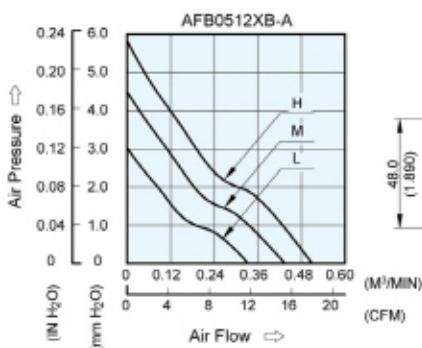
AFB 50 x 50 x 15 MM SERIES

■ DIMENSIONS DRAWING

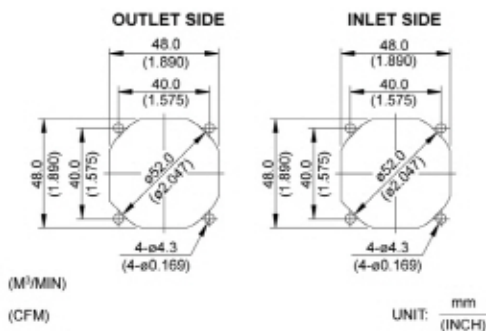


- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive (+)
Black Wire Negative (-)
- Weight : 20g (0.71 oz)

■ P & Q CURVE (AT RATED VOLTAGE)



■ MOUNTING PANEL CUTOUT

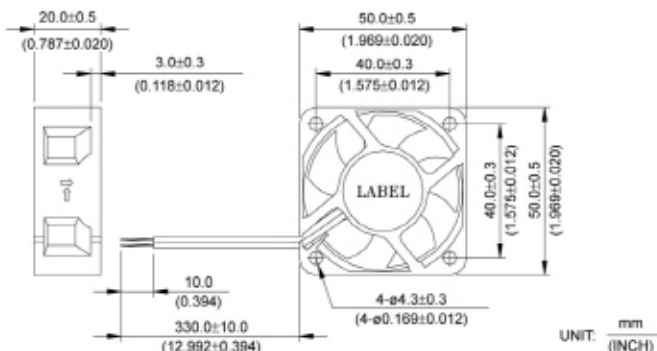


| MODEL | | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|-----------|------|-------------|---------------|-------------------------|---------------|-------------|--------|---------------------|-------|----------------------|---------------------|-------|
| PART NO. | REV. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| AFB0512LB | -A | -R00 / -F00 | 12 | 5.0 to 13.8 | 0.09 | 1.08 | 4300 | 0.330 | 11.67 | 3.03 | 0.119 | 24.0 |
| AFB0512MB | -A | -R00 / -F00 | 12 | 5.0 to 13.8 | 0.10 | 1.20 | 5300 | 0.434 | 15.32 | 4.50 | 0.177 | 30.0 |
| AFB0512HB | -A | -R00 / -F00 | 12 | 5.0 to 13.8 | 0.14 | 1.68 | 6300 | 0.509 | 17.97 | 5.84 | 0.230 | 34.0 |

- * Rib type only
- * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
- * Noise is measured in anechoic chamber in free air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.

AFB 50 x 50 x 20 MM SERIES

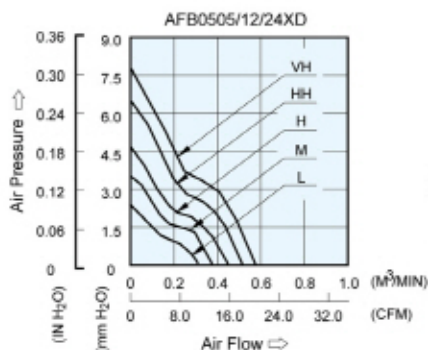
■ DIMENSIONS DRAWING



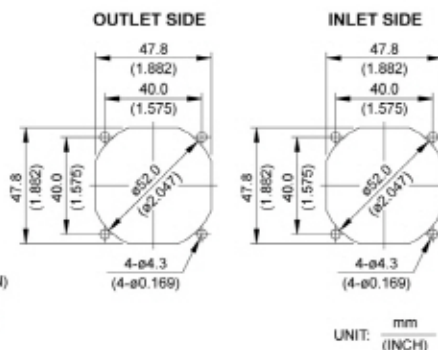
UNIT: mm
(INCH)

- Bearing Type
Two Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive (+)
Black Wire Negative (-)
- Weight : 38g (1.34 oz)
- Rib Type Only

■ P & Q CURVE (AT RATED VOLTAGE)



■ MOUNTING PANEL CUTOUT



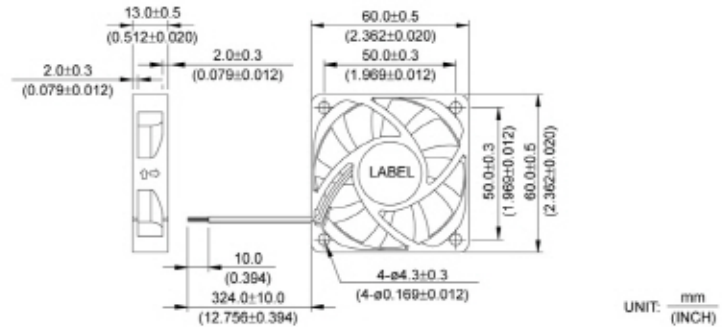
UNIT: mm
(INCH)

| MODEL | | Rated Voltage | Operating Voltage Range | Rated Current | Rated Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|-------------|---------------|-------------------------|---------------|-------------------|--------|---------------------|-------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| AFB0505LD | -R00 / -F00 | 5 | 4.5 to 5.5 | 0.14 | 0.70 | 4000 | 0.311 | 10.98 | 2.42 | 0.095 | 25.0 |
| AFB0512LD | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.06 | 0.72 | | | | | | |
| AFB0524LD | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.05 | 1.20 | | | | | | |
| AFB0505MD | -R00 / -F00 | 5 | 4.5 to 5.5 | 0.20 | 1.00 | 4800 | 0.379 | 13.39 | 3.48 | 0.137 | 28.0 |
| AFB0512MD | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.07 | 0.84 | | | | | | |
| AFB0524MD | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.06 | 1.44 | | | | | | |
| AFB0505HD | -R00 / -F00 | 5 | 4.5 to 5.5 | 0.33 | 1.65 | 5600 | 0.447 | 15.79 | 4.62 | 0.182 | 33.0 |
| AFB0512HD | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.10 | 1.20 | | | | | | |
| AFB0524HD | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.07 | 1.68 | | | | | | |
| AFB0512HHD | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.14 | 1.68 | 6400 | 0.518 | 18.30 | 6.44 | 0.254 | 37.0 |
| AFB0524HHD | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.09 | 2.16 | | | | | | |
| AFB0512VHD | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.16 | 1.92 | 7000 | 0.575 | 20.30 | 7.70 | 0.303 | 40.5 |
| AFB0524VHD | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.10 | 2.40 | | | | | | |

* Function type is optional.
 * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
 * Noise is measured in anechoic chamber in free air, one meter from intake side.
 * All readings are typical values at rated voltage.
 * Specifications are subject to change without notice.

AFB 60 x 60 x 13 MM SERIES

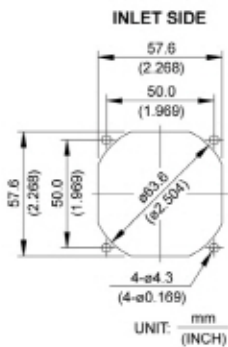
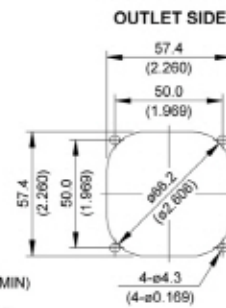
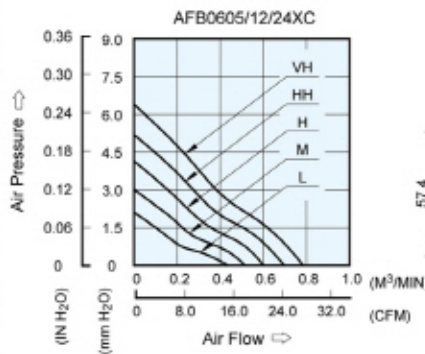
■ DIMENSIONS DRAWING



- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 2468 AWG #28 OR Equivalent
Red Wire Positive (+)
Black Wire Negative (-)
- Weight : 33.5g (1.18 oz)
- Rib Type Only

■ P & Q CURVE (AT RATED VOLTAGE)

■ MOUNTING PANEL CUTOUT

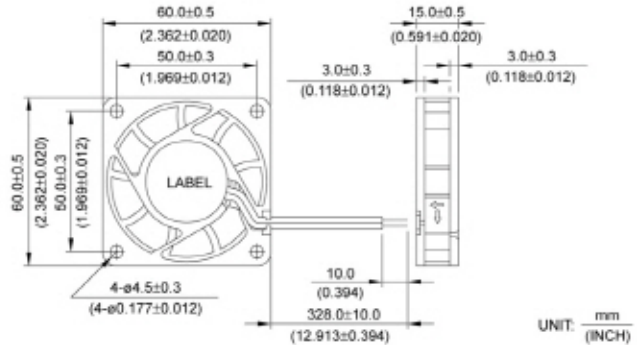


| MODEL | | Rated Voltage | Operating Voltage Range | Rated Current | Rated Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|-------------|---------------|-------------------------|---------------|-------------------|--------|---------------------|-------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| AFB0605LC | -R00 / -F00 | 5 | 4.5 to 5.5 | 0.12 | 0.60 | 3000 | 0.436 | 15.40 | 2.11 | 0.083 | 24.0 |
| AFB0612LC | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.08 | 0.96 | | | | | | |
| AFB0624LC | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.05 | 1.20 | | | | | | |
| AFB0605MC | -R00 / -F00 | 5 | 4.5 to 5.5 | 0.18 | 0.90 | 3600 | 0.514 | 18.15 | 3.02 | 0.119 | 28.0 |
| AFB0612MC | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.11 | 1.32 | | | | | | |
| AFB0624MC | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.06 | 1.44 | | | | | | |
| AFB0605HC | -R00 / -F00 | 5 | 4.5 to 5.5 | 0.29 | 1.45 | 4200 | 0.601 | 21.22 | 4.15 | 0.163 | 31.5 |
| AFB0612HC | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.14 | 1.68 | | | | | | |
| AFB0624HC | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.07 | 1.68 | | | | | | |
| AFB0612HHC | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.20 | 2.40 | 4800 | 0.698 | 24.65 | 5.19 | 0.204 | 35.0 |
| AFB0624HHC | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.09 | 2.16 | | | | | | |
| AFB0612VHC | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.24 | 2.88 | 5400 | 0.785 | 27.72 | 6.41 | 0.252 | 38.0 |
| AFB0624VHC | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.12 | 2.88 | | | | | | |

* Function type is optional.
 * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
 * Noise is measured in anechoic chamber in free air, one meter from intake side.
 * All readings are typical values at rated voltage.
 * Specifications are subject to change without notice.
 * Both of the ball bearing and the 1 ball + 1 Sleeve type are available.

AFB 60 x 60 x 15 MM SERIES

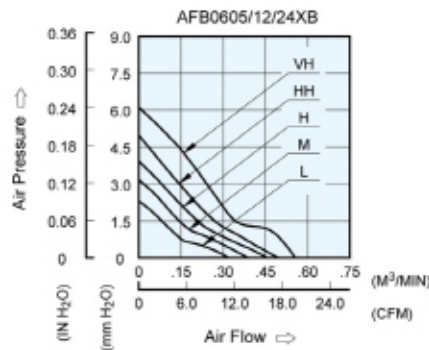
■ DIMENSIONS DRAWING



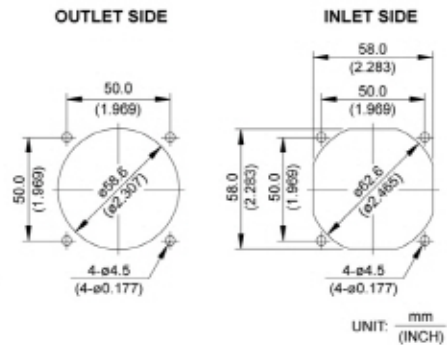
UNIT: mm
(INCH)

- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive (+)
Black Wire Negative (-)
- Weight : 44g (1.55 oz)
- Rib Type Only

■ P & Q CURVE (AT RATED VOLTAGE)



■ MOUNTING PANEL CUTOUT



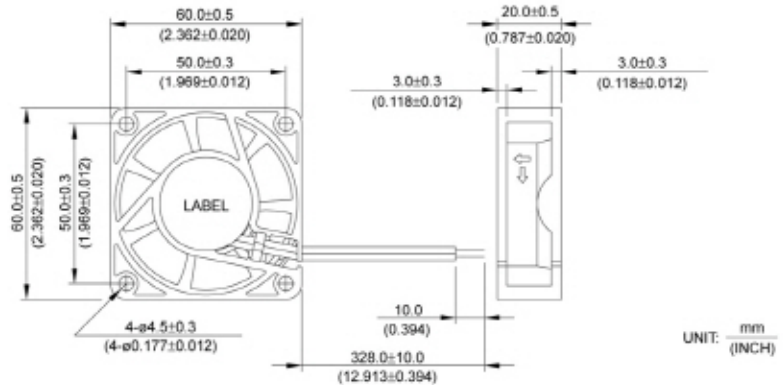
UNIT: mm
(INCH)

| MODEL | | Rated Voltage | Operating Voltage Range | Rated Current | Rated Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|-------------|---------------|-------------------------|---------------|-------------------|--------|---------------------|-------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| AFB0605LB | / -F00 | 5 | 4.0 to 6.0 | 0.13 | 0.65 | 3000 | 0.327 | 11.55 | 2.21 | 0.087 | 24.0 |
| AFB0612LB | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.07 | 0.84 | | | | | | |
| AFB0624LB | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.04 | 0.96 | | | | | | |
| AFB0605MB | / -F00 | 5 | 4.0 to 6.0 | 0.20 | 1.00 | 3500 | 0.381 | 13.45 | 3.01 | 0.119 | 29.0 |
| AFB0612MB | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.08 | 0.96 | | | | | | |
| AFB0624MB | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.06 | 1.44 | | | | | | |
| AFB0605HB | / -F00 | 5 | 4.0 to 6.0 | 0.30 | 1.50 | 4000 | 0.435 | 15.36 | 3.93 | 0.155 | 32.0 |
| AFB0612HB | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.10 | 1.20 | | | | | | |
| AFB0624HB | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.08 | 1.92 | | | | | | |
| AFB0605HHB | / -F00 | 5 | 4.0 to 6.0 | 0.40 | 2.00 | 4500 | 0.490 | 17.30 | 4.97 | 0.195 | 35.0 |
| AFB0612HHB | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.12 | 1.44 | | | | | | |
| AFB0624HHB | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.10 | 2.40 | | | | | | |
| AFB0612VHB | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.16 | 1.92 | 5000 | 0.550 | 19.42 | 6.10 | 0.240 | 37.0 |
| AFB0624VHB | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.11 | 2.64 | | | | | | |

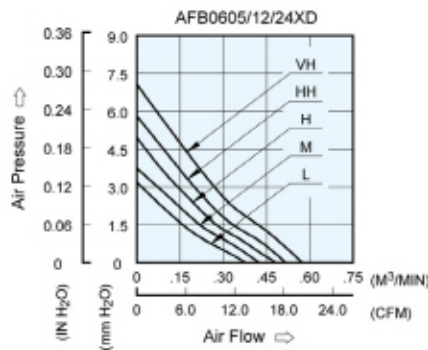
* Function type is optional.
 * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
 * Noise is measured in anechoic chamber in free air, one meter from intake side.
 * All readings are typical values at rated voltage.
 * Specifications are subject to change without notice.
 * Both of the ball bearing and the 1 ball + 1 Sleeve type are available.

AFB 60 x 60 x 20 MM SERIES

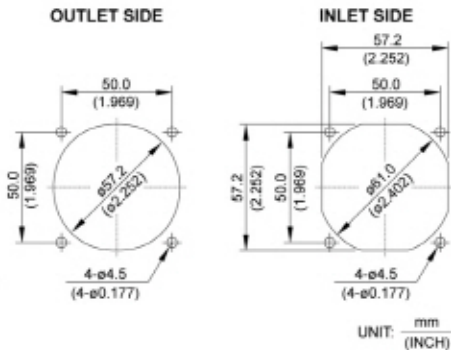
DIMENSIONS DRAWING



P & Q CURVE (AT RATED VOLTAGE)



MOUNTING PANEL CUTOUT



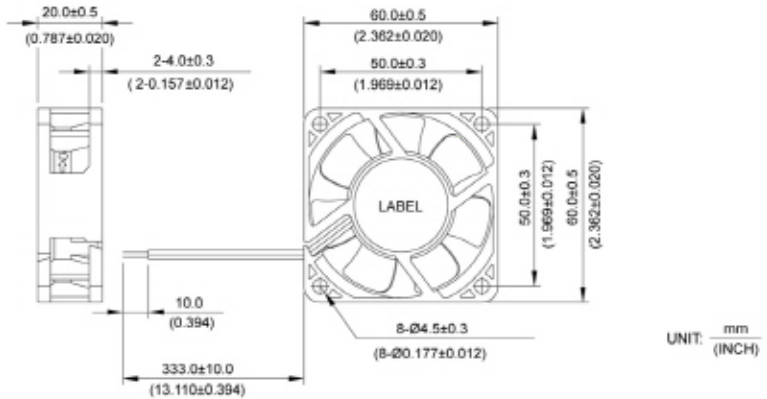
- Bearing Type: Ball Bearings
- Material: Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires : UL 1007 AWG #24 OR Equivalent
Red Wire Positive (+)
Black Wire Negative (-)
- Weight : 62g (2.19 oz)
- Rib Type Only

| MODEL | | Rated Voltage | Operating Voltage Range | Rated Current | Rated Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|-------------|---------------|-------------------------|---------------|-------------------|--------|---------------------|-------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| AFB0605LD | / -F00 | 5 | 4.5 to 5.5 | 0.14 | 0.70 | 3200 | 0.370 | 13.06 | 3.03 | 0.119 | 24.0 |
| AFB0612LD | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.07 | 0.84 | | | | | | |
| AFB0624LD | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.03 | 0.72 | | | | | | |
| AFB0605MD | / -F00 | 5 | 4.5 to 5.5 | 0.19 | 0.95 | 3600 | 0.420 | 14.83 | 3.83 | 0.151 | 26.0 |
| AFB0612MD | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.09 | 1.08 | | | | | | |
| AFB0624MD | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.04 | 0.96 | | | | | | |
| AFB0605HD | / -F00 | 5 | 4.5 to 5.5 | 0.24 | 1.20 | 4000 | 0.470 | 16.60 | 4.80 | 0.189 | 28.0 |
| AFB0612HD | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.11 | 1.32 | | | | | | |
| AFB0624HD | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.05 | 1.20 | | | | | | |
| AFB0605HHD | / -F00 | 5 | 4.5 to 5.5 | 0.33 | 1.65 | 4400 | 0.520 | 18.36 | 5.81 | 0.229 | 31.0 |
| AFB0612HHD | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.15 | 1.80 | | | | | | |
| AFB0624HHD | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.07 | 1.68 | | | | | | |
| AFB0612VHD | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.18 | 2.16 | 4800 | 0.560 | 19.78 | 7.00 | 0.275 | 33.0 |
| AFB0624VHD | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.09 | 2.16 | | | | | | |

* Function type is optional.
 * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
 * Noise is measured in anechoic chamber in free air, one meter from intake side.
 * All readings are typical values at rated voltage.
 * Specifications are subject to change without notice.

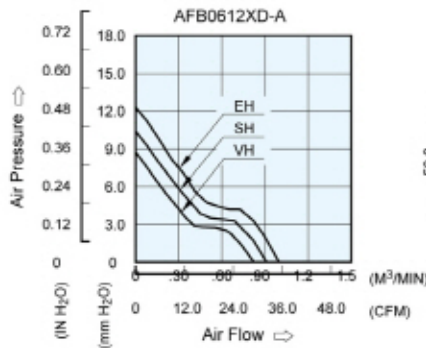
AFB 60 x 60 x 20 MM SERIES

■ DIMENSIONS DRAWING

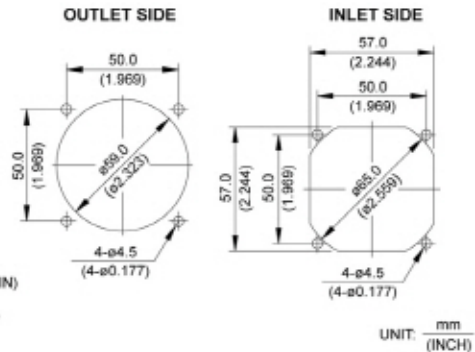


- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive (+)
Black Wire Negative (-)
- Weight : 56g (1.98 oz)

■ P & Q CURVE (AT RATED VOLTAGE)



■ MOUNTING PANEL CUTOUT

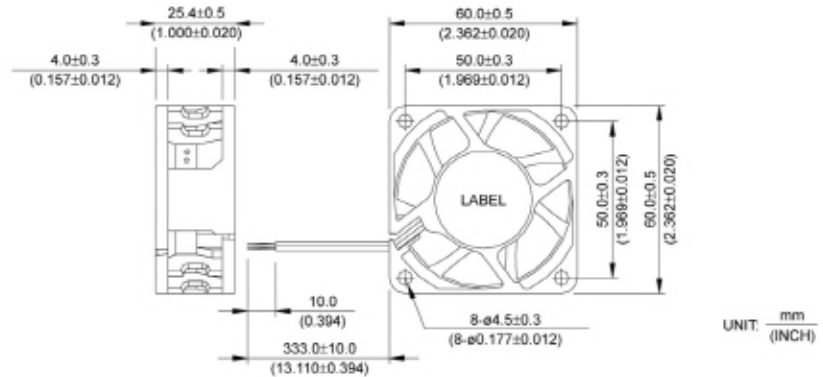


| MODEL | | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|------|-------------|---------------|-------------------------|---------------|-------------|--------|---------------------|-------|----------------------|---------------------|-------|
| PART NO. | REV. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| AFB0612VHD | -A | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.19 | 2.28 | 5400 | 0.823 | 29.06 | 8.72 | 0.343 | 41.0 |
| AFB0612SHD | -A | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.28 | 3.36 | 6000 | 0.911 | 32.17 | 10.41 | 0.410 | 43.0 |
| AFB0612EHD | -A | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.31 | 3.72 | 6600 | 0.997 | 35.21 | 12.29 | 0.484 | 45.0 |

* Function type is optional.
 * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
 * Noise is measured in anechoic chamber in free air, one meter from intake side.
 * All readings are typical values at rated voltage.
 * Specifications are subject to change without notice.

AFB 60 x 60 x 25.4 MM SERIES

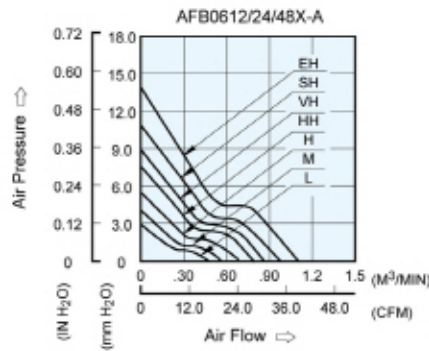
DIMENSIONS DRAWING



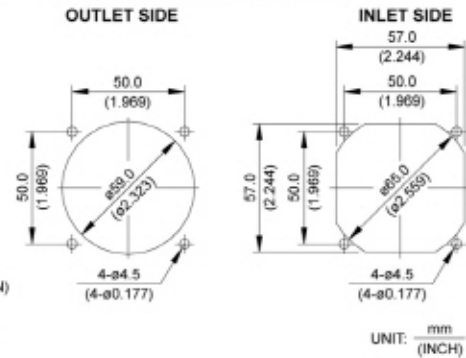
UNIT: mm (INCH)

- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive (+)
Black Wire Negative (-)
- Weight : 80g (2.82 oz)

P & Q CURVE (AT RATED VOLTAGE)



MOUNTING PANEL CUTOUT



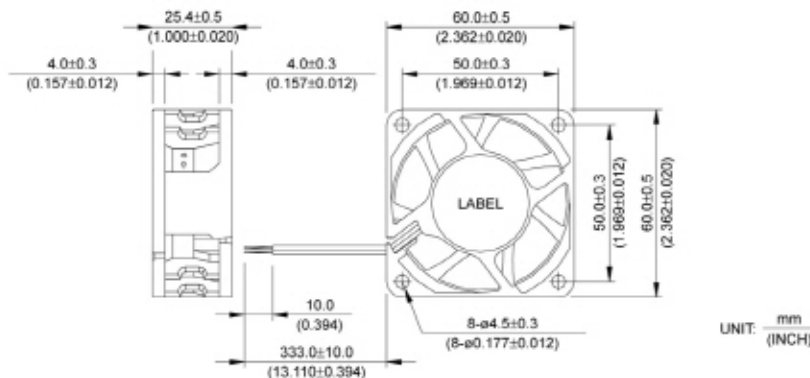
UNIT: mm (INCH)

| MODEL | | | Rated Voltage | Operating Voltage Range | Rated Current | Rated Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|-----------|------|-----------|---------------|-------------------------|---------------|-------------------|--------|----------------------|-------|----------------------|---------------------|-------|
| PART NO. | REV. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ / min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| AFB0612L | -A | R00 / F00 | 12 | 4.0 to 13.8 | 0.08 | 0.96 | 3100 | 0.476 | 16.81 | 2.86 | 0.113 | 26.5 |
| AFB0624L | -A | R00 / F00 | 24 | 14.0 to 27.6 | 0.06 | 1.44 | | | | | | |
| AFB0612M | -A | R00 / F00 | 12 | 4.0 to 13.8 | 0.13 | 1.56 | 3600 | 0.560 | 19.78 | 3.93 | 0.155 | 31.0 |
| AFB0624M | -A | R00 / F00 | 24 | 14.0 to 27.6 | 0.07 | 1.68 | | | | | | |
| AFB0612H | -A | R00 / F00 | 12 | 4.0 to 13.8 | 0.14 | 1.68 | 4250 | 0.662 | 23.38 | 5.35 | 0.211 | 34.0 |
| AFB0624H | -A | R00 / F00 | 24 | 14.0 to 27.6 | 0.09 | 2.16 | | | | | | |
| AFB0612HH | -A | R00 / F00 | 12 | 4.0 to 13.8 | 0.17 | 2.04 | 5000 | 0.780 | 27.55 | 7.47 | 0.294 | 40.0 |
| AFB0624HH | -A | R00 / F00 | 24 | 14.0 to 27.6 | 0.11 | 2.64 | | | | | | |
| AFB0648HH | -A | R00 / F00 | 48 | 20.0 to 56.0 | 0.08 | 3.84 | 5500 | 0.863 | 30.48 | 8.76 | 0.345 | 42.5 |
| AFB0612VH | -A | R00 / F00 | 12 | 4.0 to 13.8 | 0.23 | 2.76 | | | | | | |
| AFB0624VH | -A | R00 / F00 | 24 | 14.0 to 27.6 | 0.14 | 3.36 | 6000 | 0.967 | 34.15 | 10.73 | 0.422 | 44.5 |
| AFB0648VH | -A | R00 / F00 | 48 | 20.0 to 56.0 | 0.09 | 4.32 | | | | | | |
| AFB0612SH | -A | R00 / F00 | 12 | 4.0 to 13.8 | 0.27 | 3.24 | 6800 | 1.086 | 38.35 | 13.81 | 0.544 | 46.5 |
| AFB0624SH | -A | R00 / F00 | 24 | 14.0 to 27.6 | 0.17 | 4.08 | | | | | | |
| AFB0648SH | -A | R00 / F00 | 48 | 20.0 to 56.0 | 0.11 | 5.28 | 6800 | 1.086 | 38.35 | 13.81 | 0.544 | 46.5 |
| AFB0612EH | -A | R00 / F00 | 12 | 4.0 to 13.8 | 0.38 | 4.56 | | | | | | |
| AFB0624EH | -A | R00 / F00 | 24 | 14.0 to 27.6 | 0.24 | 5.76 | 6800 | 1.086 | 38.35 | 13.81 | 0.544 | 46.5 |
| AFB0648EH | -A | R00 / F00 | 48 | 20.0 to 56.0 | 0.14 | 6.72 | | | | | | |

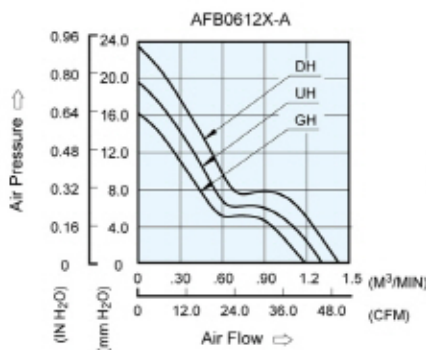
* Function type is optional.
 * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
 * Noise is measured in anechoic chamber in free air, one meter from intake side.
 * All readings are typical values at rated voltage.
 * Specifications are subject to change without notice.

AFB 60 x 60 x 25.4 MM SERIES

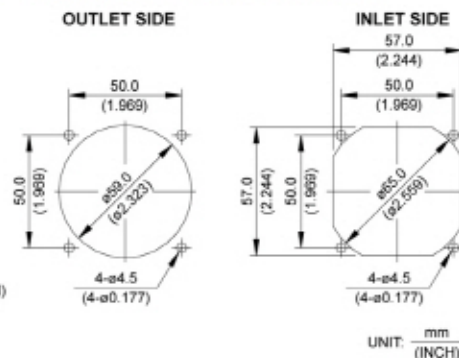
■ DIMENSIONS DRAWING



■ P & Q CURVE (AT RATED VOLTAGE)



■ MOUNTING PANEL CUTOUT



- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1061 AWG #24 OR Equivalent
Red Wire Positive (+)
Black Wire Negative (-)
- Weight : 77g (2.72 oz)

| MODEL | | | Rated Voltage | Operating Voltage Range | Rated Current | Rated Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|-----------|------|-------------|---------------|-------------------------|---------------|-------------------|--------|----------------------|-------|----------------------|---------------------|-------|
| PART NO. | REV. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ / min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| AFB0612GH | -A | -R00 / -F00 | 12 | 7.0 to 13.2 | 0.55 | 6.60 | 7500 | 1.188 | 41.95 | 16.27 | 0.640 | 50.5 |
| AFB0612UH | -A | -R00 / -F00 | 12 | 7.0 to 13.2 | 0.69 | 8.28 | 8200 | 1.307 | 46.16 | 19.66 | 0.774 | 52.5 |
| AFB0612DH | -A | -R00 / -F00 | 12 | 7.0 to 13.2 | 0.84 | 10.08 | 9000 | 1.427 | 50.40 | 23.52 | 0.926 | 55.0 |

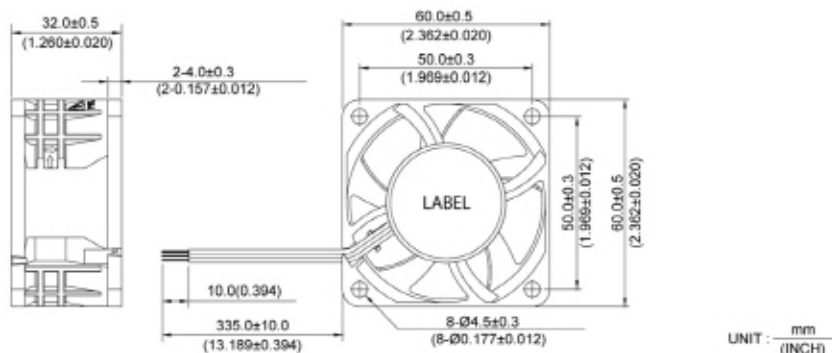
- * Function type is optional.
- * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
- * Noise is measured in anechoic chamber in free air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.

New



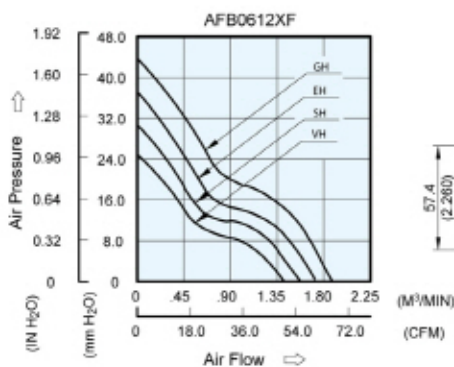
AFB 60 x 60 x 32 MM SERIES

■ DIMENSIONS DRAWING



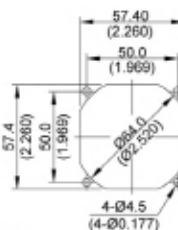
- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 100g (3.52 oz)

■ P & Q CURVE (AT RATED VOLTAGE)

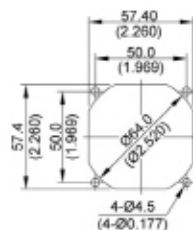


■ MOUNTING PANEL CUTOUT

OUTLET SIDE



INLET SIDE



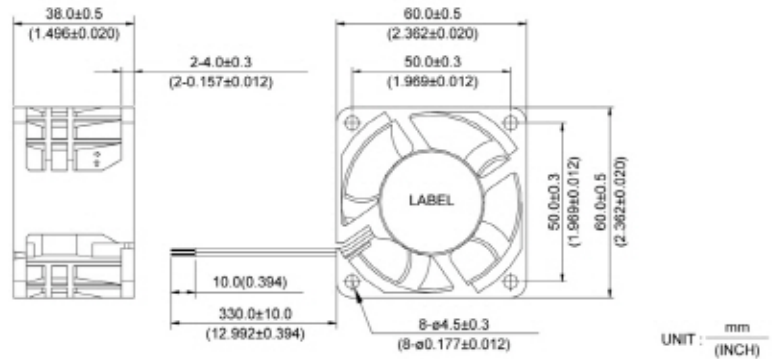
UNIT : $\frac{\text{mm}}{\text{(INCH)}}$

| MODEL | | Rated Voltage | Operating Voltage Range | Rated Current | Rated Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|------------|---------------|-------------------------|---------------|-------------------|--------|---------------------|-------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| AFB0612VHF | R00 / -F00 | 12 | 7.0 to 13.8 | 0.64 | 7.68 | 9000 | 1.378 | 48.65 | 24.27 | 0.956 | 53.0 |
| AFB0612SHF | R00 / -F00 | 12 | 7.0 to 13.8 | 0.83 | 9.96 | 10000 | 1.543 | 54.48 | 30.07 | 1.184 | 56.0 |
| AFB0612EHF | R00 / -F00 | 12 | 7.0 to 13.8 | 1.05 | 12.60 | 11000 | 1.716 | 60.60 | 36.48 | 1.436 | 58.0 |
| AFB0612GHF | R00 / -F00 | 12 | 7.0 to 13.2 | 1.35 | 16.20 | 12000 | 1.877 | 66.30 | 43.07 | 1.696 | 60.5 |

- * Function type is optional.
- * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
- * Noise is measured in anechoic chamber in free air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.

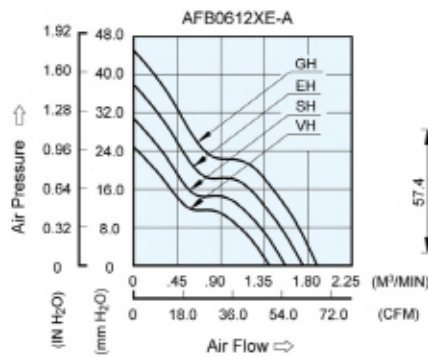
AFB 60 x 60 x 38 MM SERIES

DIMENSIONS DRAWING

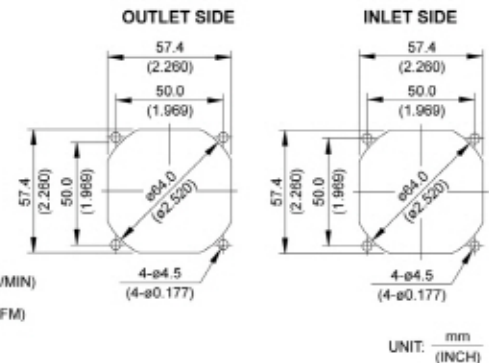


- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive (+)
Black Wire Negative (-)
- Weight : 117g (4.12 oz)

P & Q CURVE (AT RATED VOLTAGE)



MOUNTING PANEL CUTOUT

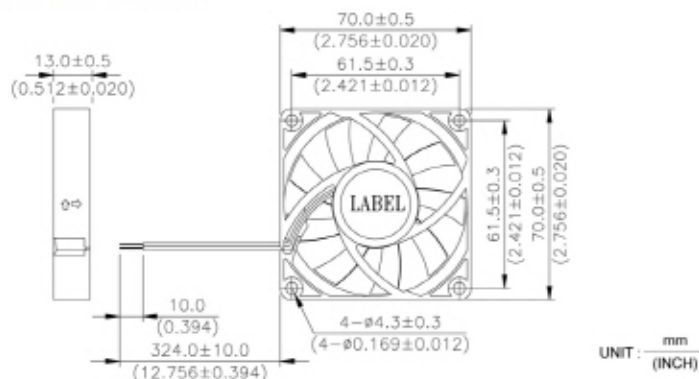


| MODEL | | | Rated Voltage | Operating Voltage Range | Rated Current | Rated Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|------|-------------|---------------|-------------------------|---------------|-------------------|--------|---------------------|-------|----------------------|---------------------|-------|
| PART NO. | REV. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| AFB0612VHE | -A | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.68 | 8.16 | 9000 | 1.403 | 49.54 | 25.00 | 0.984 | 54.0 |
| AFB0612SHE | -A | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.88 | 10.56 | 10000 | 1.566 | 55.29 | 30.92 | 1.217 | 57.0 |
| AFB0612EHE | -A | -R00 / -F00 | 12 | 7.0 to 13.8 | 1.12 | 13.44 | 11000 | 1.748 | 61.72 | 38.00 | 1.496 | 60.0 |
| AFB0612GHE | -A | -R00 / -F00 | 12 | 7.0 to 13.2 | 1.50 | 18.00 | 12000 | 1.890 | 66.75 | 44.17 | 1.739 | 61.5 |

* Function type is optional.
 * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
 * Noise is measured in anechoic chamber in free air, one meter from intake side.
 * All readings are typical values at rated voltage.
 * Specifications are subject to change without notice.

AFB 70 x 70 x 13 MM SERIES

■ DIMENSIONS DRAWING

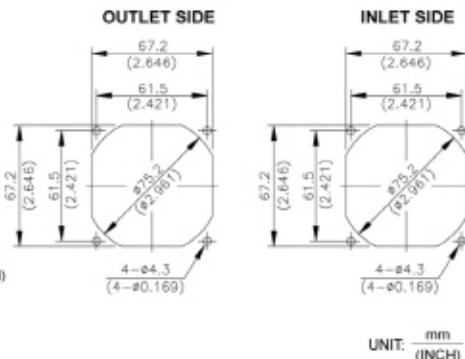
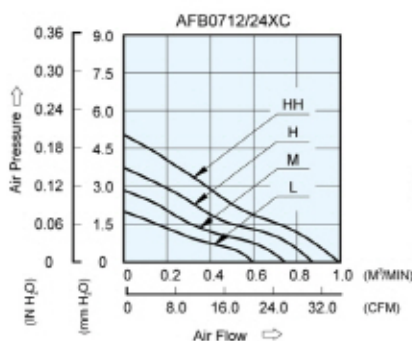


UNIT : mm
(INCH)

- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 2468 AWG #28 OR Equivalent
Red Wire Positive (+)
Black Wire Negative (-)
- Weight : 46g (1.62 oz)
- Rib Type Only

■ P & Q CURVE (AT RATED VOLTAGE)

■ MOUNTING PANEL CUTOUT



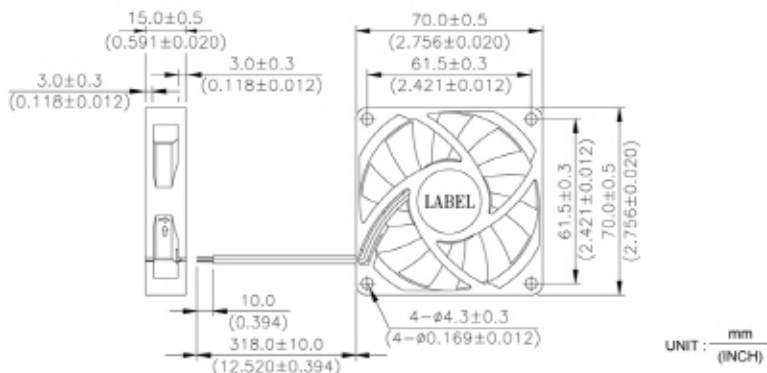
UNIT : mm
(INCH)

| MODEL | | Rated Voltage | Operating Voltage Range | Rated Current | Rated Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|-------------|---------------|-------------------------|---------------|-------------------|--------|---------------------|-------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| AFB0712LC | -R00 / -F00 | 12 | 4.0 to 13.8 | 0.09 | 1.08 | 2800 | 0.600 | 21.19 | 2.01 | 0.079 | 27.0 |
| AFB0724LC | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.07 | 1.68 | | | | | | |
| AFB0712MC | -R00 / -F00 | 12 | 4.0 to 13.8 | 0.16 | 1.92 | 3300 | 0.750 | 26.49 | 2.89 | 0.113 | 31.5 |
| AFB0724MC | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.09 | 2.16 | | | | | | |
| AFB0712HC | -R00 / -F00 | 12 | 4.0 to 13.8 | 0.22 | 2.64 | 3800 | 0.878 | 31.01 | 3.75 | 0.148 | 35.0 |
| AFB0724HC | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.14 | 3.36 | | | | | | |
| AFB0712HHC | -R00 / -F00 | 12 | 4.0 to 13.8 | 0.28 | 3.36 | 4300 | 0.991 | 35.00 | 4.97 | 0.196 | 38.5 |
| AFB0724HHC | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.17 | 4.08 | | | | | | |

- * Function type is optional.
- * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
- * Noise is measured in anechoic chamber in free air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.
- * Both of the ball bearing and the 1 ball + 1 Sleeve type are available.

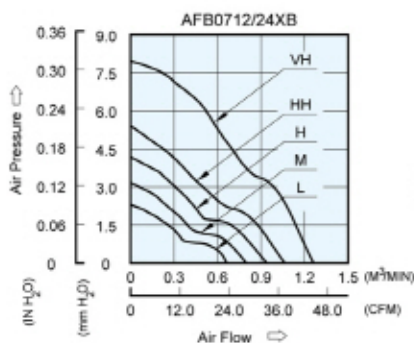
AFB 70 x 70 x 15 MM SERIES

■ DIMENSIONS DRAWING

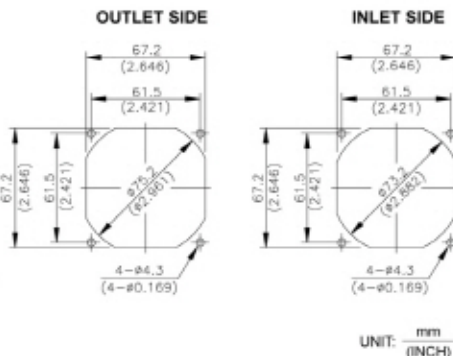


- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive (+)
Black Wire Negative (-)
- Weight : 47g (1.66 oz)
- Rib Type Only

■ P & Q CURVE (AT RATED VOLTAGE)



■ MOUNTING PANEL CUTOUT

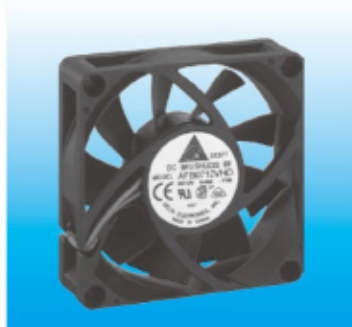
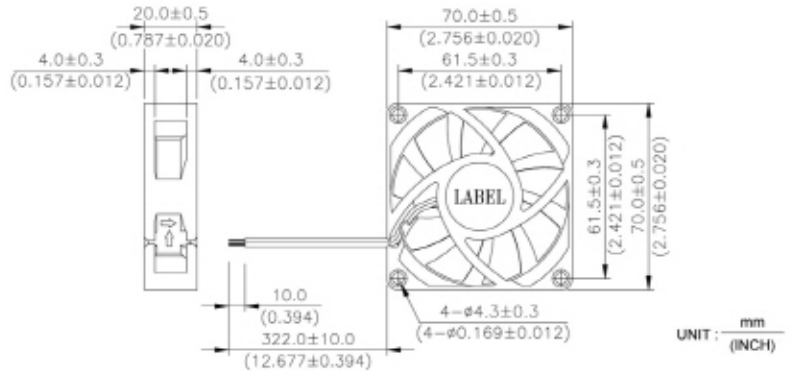


| MODEL | | Rated Voltage | Operating Voltage Range | Rated Current | Rated Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|-------------|---------------|-------------------------|---------------|-------------------|--------|---------------------|-------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDCz | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| AFB0712LB | -R00 / -F00 | 12 | 4.0 to 13.8 | 0.08 | 0.96 | 2800 | 0.662 | 23.38 | 2.27 | 0.089 | 26.5 |
| AFB0724LB | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.06 | 1.44 | | | | | | |
| AFB0712MB | -R00 / -F00 | 12 | 4.0 to 13.8 | 0.14 | 1.68 | 3300 | 0.798 | 28.18 | 3.12 | 0.123 | 31.0 |
| AFB0724MB | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.09 | 2.16 | | | | | | |
| AFB0712HB | -R00 / -F00 | 12 | 4.0 to 13.8 | 0.18 | 2.16 | 3800 | 0.940 | 33.20 | 4.12 | 0.162 | 34.5 |
| AFB0724HB | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.12 | 2.88 | | | | | | |
| AFB0712HHB | -R00 / -F00 | 12 | 4.0 to 13.8 | 0.26 | 3.12 | 4300 | 1.063 | 37.54 | 5.33 | 0.210 | 38.5 |
| AFB0724HHB | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.15 | 3.60 | | | | | | |
| AFB0712VHB | -R00 / -F00 | 12 | 5.0 to 12.6 | 0.37 | 4.44 | 5200 | 1.287 | 45.45 | 7.79 | 0.306 | 44.0 |

- * Function type is optional.
- * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
- * Noise is measured in anechoic chamber in free air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.
- * Both of the ball bearing and the 1 ball + 1 Sleeve type are available.

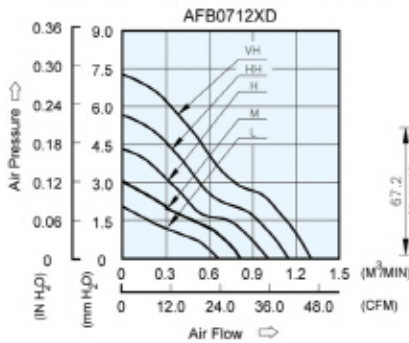
AFB 70 x 70 x 20 MM SERIES

DIMENSIONS DRAWING

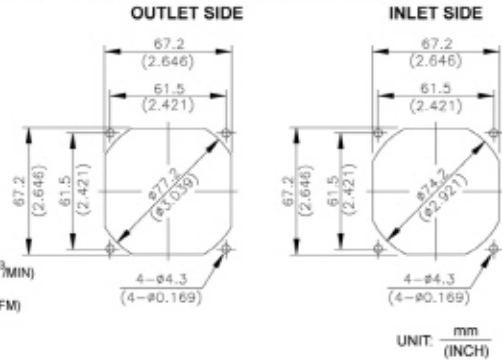


- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive (+)
Black Wire Negative (-)
- Weight : 68g (2.40 oz)
- Rib Type Only

P & Q CURVE (AT RATED VOLTAGE)



MOUNTING PANEL CUTOUT

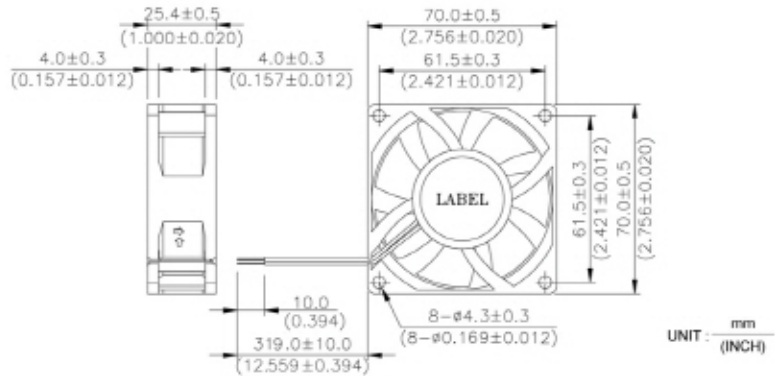


| MODEL | | Rated Voltage | Operating Voltage Range | Rated Current | Rated Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|-------------|---------------|-------------------------|---------------|-------------------|--------|---------------------|-------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDCz | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| AFB0712LD | -R00 / -F00 | 12 | 5.0 to 13.8 | 0.06 | 0.72 | 2600 | 0.682 | 24.08 | 2.01 | 0.079 | 27.0 |
| AFB0712MD | -R00 / -F00 | 12 | 5.0 to 13.8 | 0.11 | 1.32 | 3200 | 0.826 | 29.16 | 2.99 | 0.117 | 32.0 |
| AFB0712HD | -R00 / -F00 | 12 | 5.0 to 13.8 | 0.18 | 2.16 | 3800 | 1.003 | 35.42 | 4.30 | 0.169 | 36.5 |
| AFB0712HHD | -R00 / -F00 | 12 | 5.0 to 13.8 | 0.25 | 3.00 | 4400 | 1.145 | 40.43 | 5.64 | 0.222 | 40.5 |
| AFB0712VHD | -R00 / -F00 | 12 | 5.0 to 13.2 | 0.35 | 4.20 | 5000 | 1.327 | 46.86 | 7.24 | 0.285 | 44.3 |

- * Function type is optional.
- * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
- * Noise is measured in anechoic chamber in free air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.
- * Both of the ball bearing and the 1 ball + 1 Sleeve type are available.

AFB 70 x 70 x 25.4 MM SERIES

DIMENSIONS DRAWING



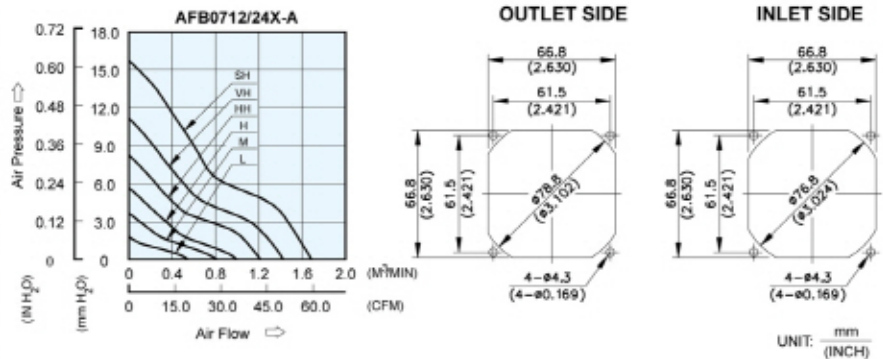
UNIT : mm
(INCH)



- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive (+)
Black Wire Negative (-)
- Weight : 90g (3.17 oz)

P & Q CURVE (AT RATED VOLTAGE)

MOUNTING PANEL CUTOUT



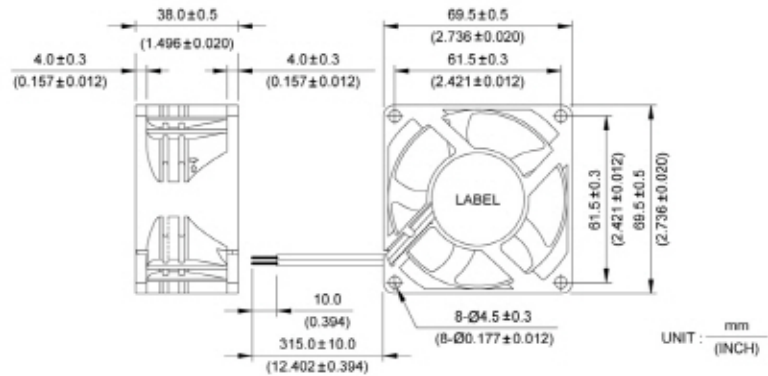
UNIT : mm
(INCH)

| MODEL | | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|-----------|------|-------------|---------------|-------------------------|---------------|-------------|--------|---------------------|-------|----------------------|---------------------|-------|
| PART NO. | REV. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| AFB0712L | -A | -R00 / -F00 | 12 | 5.0 to 13.8 | 0.07 | 0.84 | 2300 | 0.599 | 21.16 | 1.99 | 0.078 | 23.0 |
| AFB0724L | -A | -R00 / -F00 | 24 | 14.0 to 26.4 | 0.06 | 1.44 | | | | | | |
| AFB0712M | -A | -R00 / -F00 | 12 | 5.0 to 13.8 | 0.11 | 1.32 | 3100 | 0.817 | 28.85 | 3.55 | 0.140 | 31.5 |
| AFB0724M | -A | -R00 / -F00 | 24 | 14.0 to 26.4 | 0.09 | 2.16 | | | | | | |
| AFB0712H | -A | -R00 / -F00 | 12 | 5.0 to 13.8 | 0.17 | 2.04 | 3900 | 1.028 | 36.30 | 5.52 | 0.217 | 37.5 |
| AFB0724H | -A | -R00 / -F00 | 24 | 14.0 to 26.4 | 0.13 | 3.12 | | | | | | |
| AFB0712HH | -A | -R00 / -F00 | 12 | 5.0 to 13.8 | 0.31 | 3.72 | 4700 | 1.246 | 44.01 | 7.89 | 0.311 | 44.0 |
| AFB0724HH | -A | -R00 / -F00 | 24 | 14.0 to 26.4 | 0.18 | 4.32 | | | | | | |
| AFB0712VH | -A | -R00 / -F00 | 12 | 5.0 to 12.6 | 0.44 | 5.28 | 5500 | 1.472 | 51.97 | 10.99 | 0.433 | 47.5 |
| AFB0724VH | -A | -R00 / -F00 | 24 | 14.0 to 26.4 | 0.27 | 6.48 | | | | | | |
| AFB0712SH | -AB | -R00 / -F00 | 12 | 5.0 to 13.8 | 0.65 | 7.80 | 6300 | 1.729 | 61.05 | 15.90 | 0.625 | 50.5 |

* Function type is optional.
 * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
 * Noise is measured in anechoic chamber in free air, one meter from intake side.
 * All readings are typical values at rated voltage.
 * Specifications are subject to change without notice.
 * "SH" for rib type only Weight: 104g(3.66OZ).
 * Both of the ball bearing and the 1 ball + 1 Sleeve type are available.

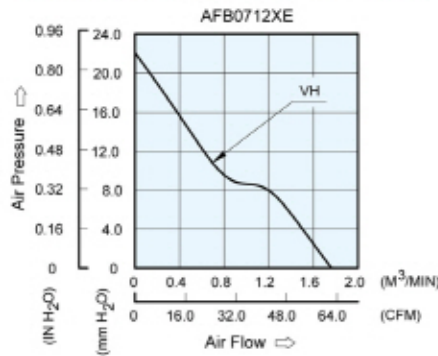
AFB 70 x 70 x 38 MM SERIES

DIMENSIONS DRAWING

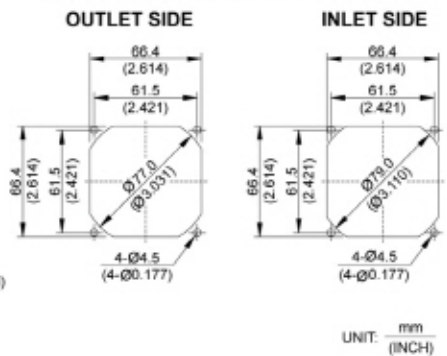


- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive (+)
Black Wire Negative (-)
- Weight : 133g (4.68 oz)

P & Q CURVE (AT RATED VOLTAGE)



MOUNTING PANEL CUTOUT

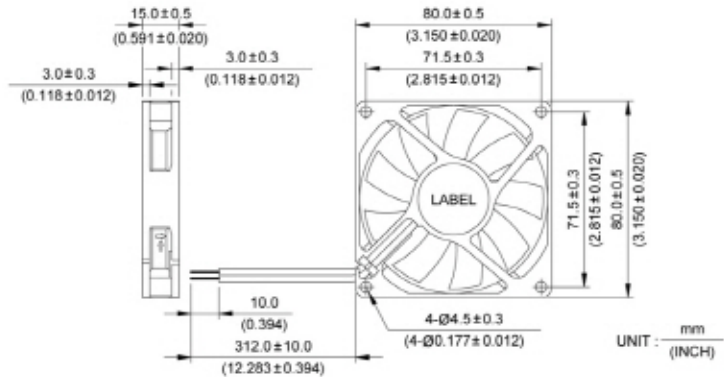


| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|-------------|---------------|-------------------------|---------------|-------------|--------|---------------------|-------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| AFB0712VHE | -R00 / -F00 | 12 | 7.0 to 12.6 | 0.70 | 8.40 | 7000 | 1.762 | 62.25 | 22.09 | 0.870 | 51.0 |

- * Function type is optional.
- * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
- * Noise is measured in anechoic chamber in free air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.

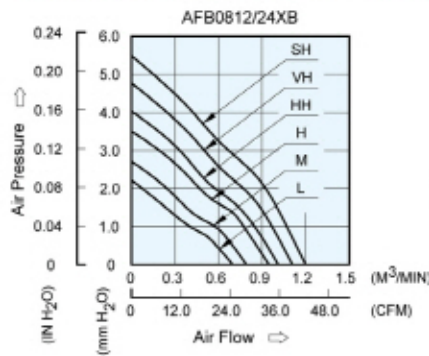
AFB 80 x 80 x 15 MM SERIES

■ DIMENSIONS DRAWING

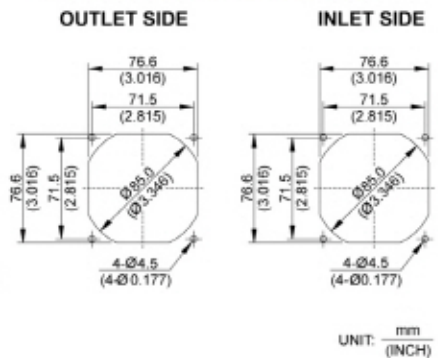


- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive (+)
Black Wire Negative (-)
- Weight : 58g (2.05 oz)
- Rib Type Only

■ P & Q CURVE (AT RATED VOLTAGE)



■ MOUNTING PANEL CUTOUT

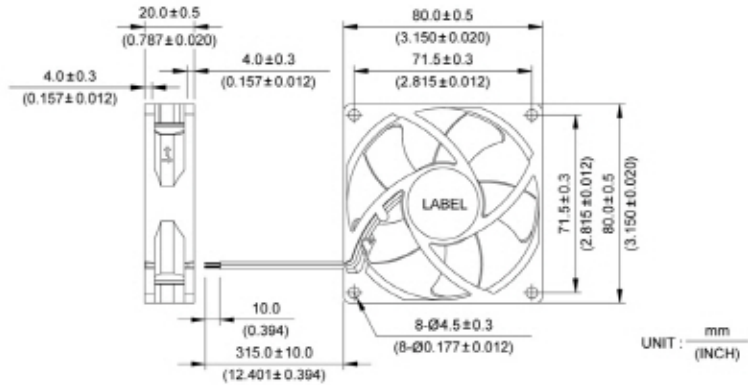


| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|-------------|---------------|-------------------------|---------------|-------------|--------|---------------------|-------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| AFB0812LB | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.09 | 1.08 | 2400 | 0.700 | 24.72 | 2.20 | 0.087 | 27.5 |
| AFB0824LB | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.05 | 1.20 | | | | | | |
| AFB0812MB | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.11 | 1.32 | 2700 | 0.800 | 28.25 | 2.71 | 0.107 | 30.5 |
| AFB0824MB | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.06 | 1.44 | | | | | | |
| AFB0812HB | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.14 | 1.68 | 3100 | 0.950 | 33.55 | 3.50 | 0.138 | 34.0 |
| AFB0824HB | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.08 | 1.92 | | | | | | |
| AFB0812HHB | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.16 | 1.92 | 3400 | 1.010 | 35.67 | 4.03 | 0.159 | 37.0 |
| AFB0824HHB | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.10 | 2.40 | | | | | | |
| AFB0812VHB | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.19 | 2.28 | 3700 | 1.110 | 39.20 | 4.77 | 0.188 | 39.5 |
| AFB0824VHB | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.12 | 2.88 | | | | | | |
| AFB0812SHB | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.27 | 3.24 | 4000 | 1.210 | 42.73 | 5.49 | 0.216 | 42.5 |
| AFB0824SHB | -R00 / -F00 | 24 | 14.0 to 26.0 | 0.17 | 4.08 | | | | | | |

* Function type is optional.
 * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
 * Noise is measured in anechoic chamber in free air, one meter from intake side.
 * All readings are typical values at rated voltage.
 * Specifications are subject to change without notice.

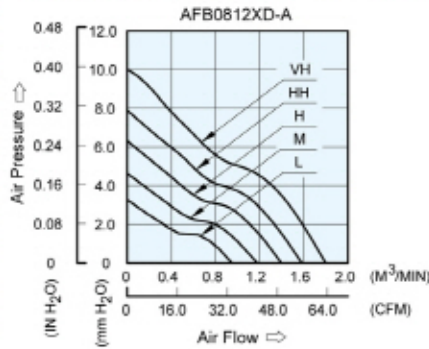
AFB 80 x 80 x 20 MM SERIES

DIMENSIONS DRAWING

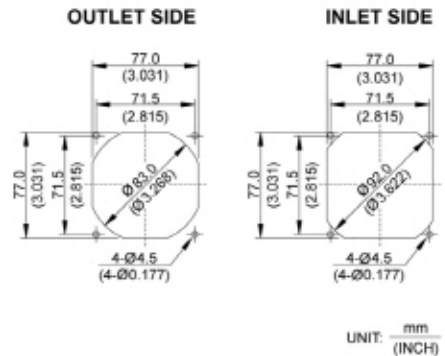


- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive (+)
Black Wire Negative (-)
- Weight : 73g (2.57 oz)

P & Q CURVE (AT RATED VOLTAGE)



MOUNTING PANEL CUTOUT

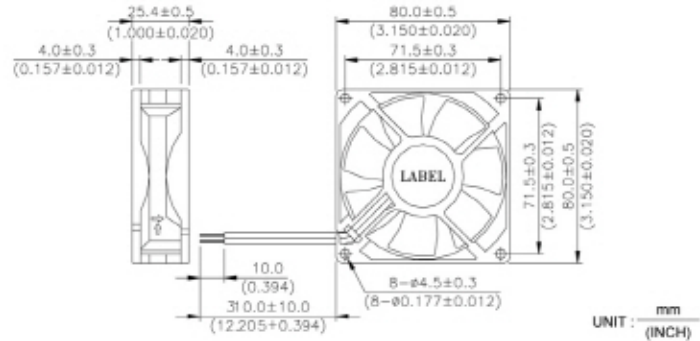


| MODEL | | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|------|-------------|---------------|-------------------------|---------------|-------------|--------|---------------------|-------|----------------------|---------------------|-------|
| PART NO. | REV. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| AFB0812LD | -A | -R00 / -F00 | 12 | 5.0 to 13.8 | 0.12 | 1.44 | 3000 | 0.949 | 33.52 | 3.27 | 0.129 | 30.5 |
| AFB0812MD | -A | -R00 / -F00 | 12 | 5.0 to 13.8 | 0.16 | 1.92 | 3600 | 1.180 | 41.68 | 4.63 | 0.182 | 36.0 |
| AFB0812HD | -A | -R00 / -F00 | 12 | 5.0 to 13.8 | 0.22 | 2.64 | 4200 | 1.397 | 49.34 | 6.33 | 0.249 | 40.0 |
| AFB0812HHD | -A | -R00 / -F00 | 12 | 5.0 to 13.8 | 0.32 | 3.84 | 4800 | 1.582 | 55.87 | 7.90 | 0.311 | 44.0 |
| AFB0812VHD | -A | -R00 / -F00 | 12 | 5.0 to 12.6 | 0.42 | 5.04 | 5400 | 1.799 | 63.54 | 10.02 | 0.394 | 47.5 |

- * Function type is optional.
- * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
- * Noise is measured in anechoic chamber in free air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.
- * Both of the ball bearing and the 1 ball + 1 Sleeve type are available.

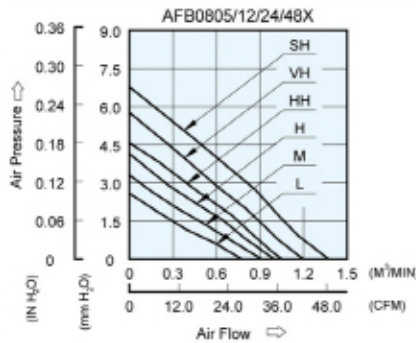
AFB 80 x 80 x 25.4 MM SERIES

DIMENSIONS DRAWING

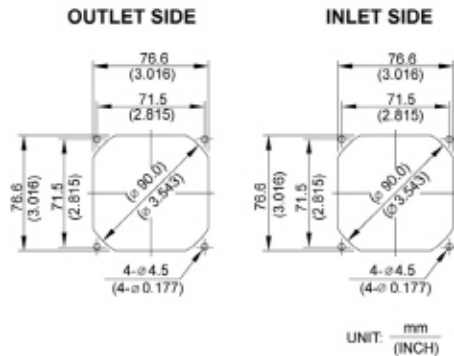


- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive (+)
Black Wire Negative (-)
- Weight : 80g (2.82 oz)

P & Q CURVE (AT RATED VOLTAGE)



MOUNTING PANEL CUTOUT

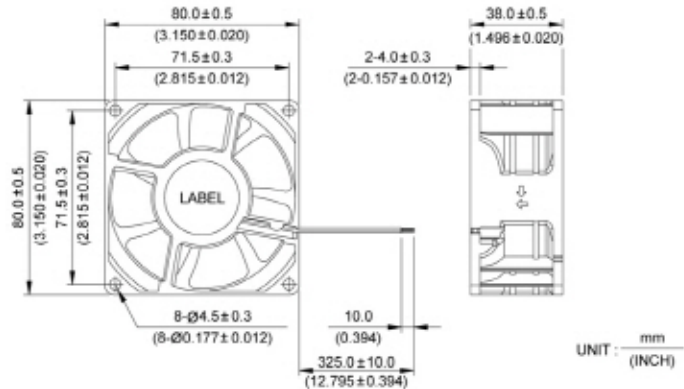


| MODEL | | Rated Voltage | Operating Voltage Range | Rated Current | Rated Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|-----------|-------------|---------------|-------------------------|---------------|-------------------|--------|---------------------|-------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| AFB0805L | / -F00 | 5 | 4.5 to 5.5 | 0.24 | 1.20 | 2400 | 0.790 | 27.90 | 2.59 | 0.102 | 25.0 |
| AFB0812L | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.09 | 1.08 | | | | | | |
| AFB0824L | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.05 | 1.20 | | | | | | |
| AFB0848L | -R00 / -F00 | 48 | 28.0 to 56.0 | 0.05 | 2.40 | 2700 | 0.890 | 31.43 | 3.28 | 0.129 | 28.0 |
| AFB0805M | / -F00 | 5 | 4.5 to 5.5 | 0.33 | 1.65 | | | | | | |
| AFB0812M | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.12 | 1.44 | | | | | | |
| AFB0824M | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.06 | 1.44 | 3000 | 1.000 | 35.31 | 4.04 | 0.159 | 31.0 |
| AFB0848M | -R00 / -F00 | 48 | 28.0 to 56.0 | 0.06 | 2.88 | | | | | | |
| AFB0805H | / -F00 | 5 | 4.5 to 5.5 | 0.43 | 2.15 | | | | | | |
| AFB0812H | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.16 | 1.92 | 3250 | 1.060 | 37.43 | 4.59 | 0.181 | 34.0 |
| AFB0824H | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.07 | 1.68 | | | | | | |
| AFB0848H | -R00 / -F00 | 48 | 28.0 to 56.0 | 0.07 | 3.36 | | | | | | |
| AFB0812HH | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.20 | 2.40 | 3600 | 1.190 | 42.02 | 5.51 | 0.217 | 38.0 |
| AFB0824HH | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.09 | 2.16 | | | | | | |
| AFB0848HH | -R00 / -F00 | 48 | 28.0 to 56.0 | 0.08 | 3.84 | | | | | | |
| AFB0812VH | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.26 | 3.12 | 4000 | 1.320 | 46.62 | 6.78 | 0.267 | 40.0 |
| AFB0824VH | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.14 | 3.36 | | | | | | |
| AFB0812SH | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.34 | 4.08 | | | | | | |
| AFB0824SH | -R00 / -F00 | 24 | 14.0 to 26.0 | 0.16 | 3.84 | | | | | | |

* Function type is optional.
 * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
 * Noise is measured in anechoic chamber in free air, one meter from intake side.
 * All readings are typical values at rated voltage.
 * Specifications are subject to change without notice.

AFB 80 x 80 x 38 MM SERIES

DIMENSIONS DRAWING

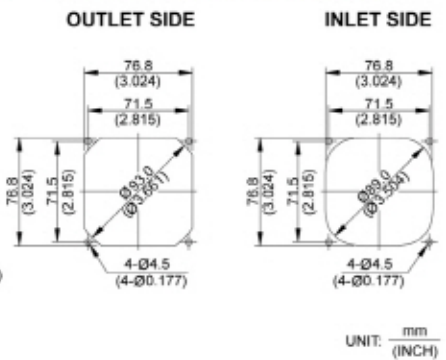
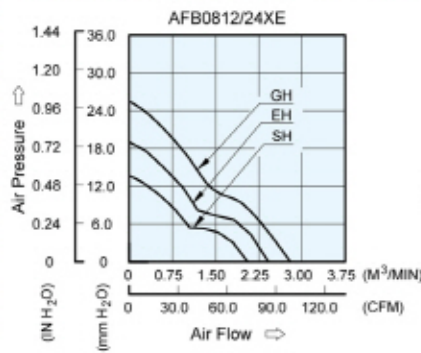


UNIT: $\frac{\text{mm}}{\text{(INCH)}}$

- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive (+)
Black Wire Negative (-)
- Weight : 156g (5.50 oz)

P & Q CURVE (AT RATED VOLTAGE)

MOUNTING PANEL CUTOUT



UNIT: $\frac{\text{mm}}{\text{(INCH)}}$

| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|-------------|---------------|-------------------------|---------------|-------------|--------|---------------------|-------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| AFB0812SHE | -R00 / -F00 | 12 | 6.0 to 13.8 | 0.68 | 8.16 | 5000 | 2.060 | 72.76 | 13.89 | 0.547 | 46.0 |
| AFB0824SHE | -R00 / -F00 | 24 | 14.0 to 26.4 | 0.35 | 8.40 | | | | | | |
| AFB0812EHE | -R00 / -F00 | 12 | 6.0 to 13.8 | 1.00 | 12.00 | 5900 | 2.423 | 85.55 | 19.02 | 0.749 | 50.5 |
| AFB0824EHE | -R00 / -F00 | 24 | 14.0 to 26.4 | 0.50 | 12.00 | | | | | | |
| AFB0812GHE | -R00 / -F00 | 12 | 6.0 to 13.8 | 1.40 | 16.80 | 6800 | 2.804 | 99.01 | 25.54 | 1.006 | 54.0 |
| AFB0824GHE | -R00 / -F00 | 24 | 14.0 to 26.4 | 0.65 | 15.60 | | | | | | |

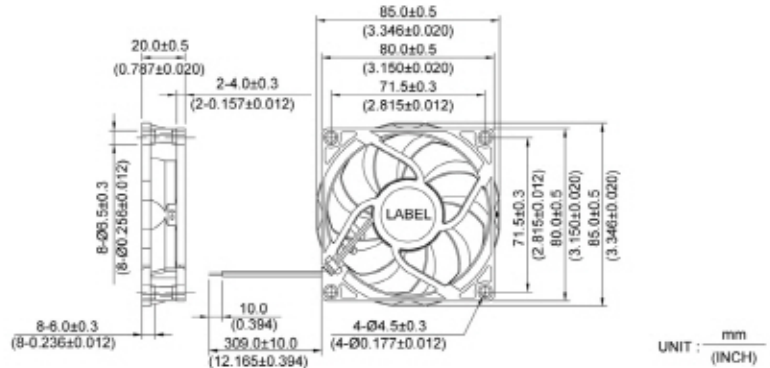
- * Function type is optional.
- * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
- * Noise is measured in anechoic chamber in free air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.

New



AFB 85 x 85 x 20 MM SERIES

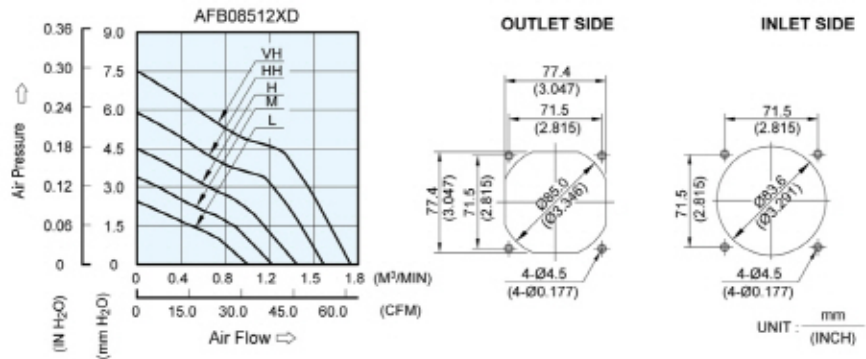
■ DIMENSIONS DRAWING



- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 77g (2.72 oz)

■ P & Q CURVE (AT RATED VOLTAGE)

■ MOUNTING PANEL CUTOUT

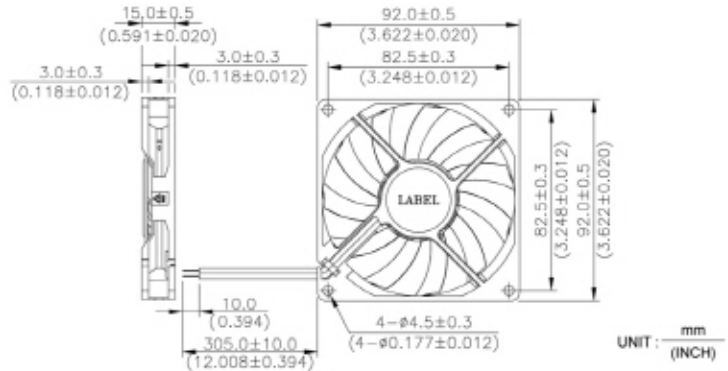


| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|-------------|-------------|---------------|-------------------------|---------------|-------------|--------|---------------------|-------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| AFB08512LD | -R00 / -F00 | 12 | 5.0 to 13.8 | 0.11 | 1.32 | 2800 | 0.903 | 31.89 | 2.50 | 0.096 | 29.5 |
| AFB08512MD | -R00 / -F00 | 12 | 5.0 to 13.8 | 0.16 | 1.92 | 3400 | 1.105 | 39.02 | 3.39 | 0.134 | 34.0 |
| AFB08512HD | -R00 / -F00 | 12 | 5.0 to 13.8 | 0.22 | 2.64 | 4000 | 1.301 | 45.96 | 4.49 | 0.177 | 38.0 |
| AFB08512HHD | -R00 / -F00 | 12 | 5.0 to 13.8 | 0.30 | 3.60 | 4600 | 1.517 | 53.57 | 5.90 | 0.232 | 43.0 |
| AFB08512VHD | -R00 / -F00 | 12 | 5.0 to 12.6 | 0.42 | 5.04 | 5200 | 1.740 | 61.46 | 7.49 | 0.295 | 45.0 |

* Function type is optional.
 * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
 * Noise is measured in anechoic chamber in free air, one meter from intake side.
 * All readings are typical values at rated voltage.
 * Specifications are subject to change without notice.

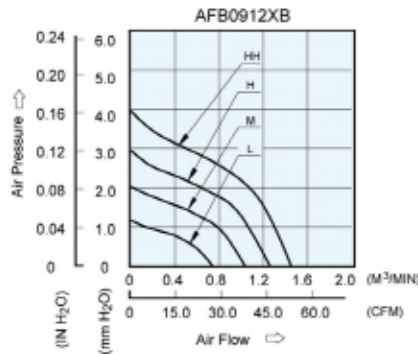
AFB 92 x 92 x 15 MM SERIES

DIMENSIONS DRAWING

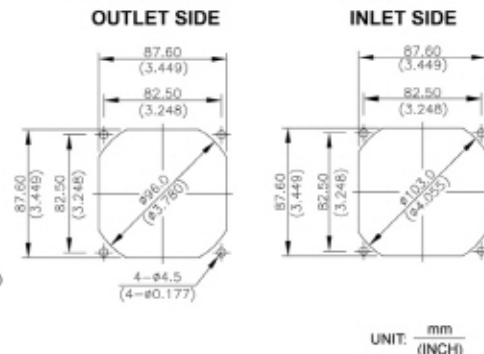


- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 68g (2.39 oz)
- Rib Type Only

P & Q CURVE (AT RATED VOLTAGE)



MOUNTING PANEL CUTOUT

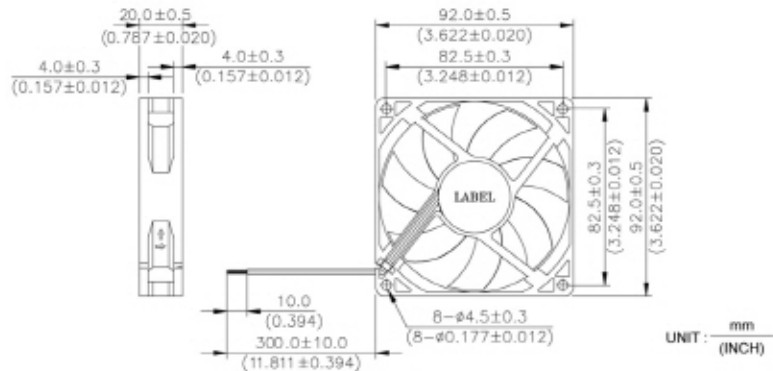


| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|-------------|---------------|-------------------------|---------------|-------------|--------|---------------------|-------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| AFB0912LB | -R00 / -F00 | 12 | 5.0 to 13.8 | 0.10 | 1.20 | 1800 | 0.739 | 26.09 | 1.16 | 0.045 | 25.0 |
| AFB0912MB | -R00 / -F00 | 12 | 5.0 to 13.8 | 0.13 | 1.56 | 2300 | 1.035 | 36.55 | 2.02 | 0.079 | 32.5 |
| AFB0912HB | -R00 / -F00 | 12 | 5.0 to 13.8 | 0.21 | 2.52 | 2800 | 1.260 | 44.49 | 2.95 | 0.116 | 37.5 |
| AFB0912HHB | -R00 / -F00 | 12 | 5.0 to 12.6 | 0.31 | 3.72 | 3300 | 1.453 | 51.53 | 3.96 | 0.156 | 41.5 |

* Function type is optional.
 * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
 * Noise is measured in anechoic chamber in free air, one meter from intake side.
 * All readings are typical values at rated voltage.
 * Specifications are subject to change without notice.

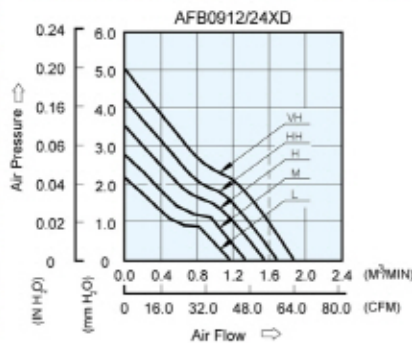
AFB 92 x 92 x 20 MM SERIES

DIMENSIONS DRAWING

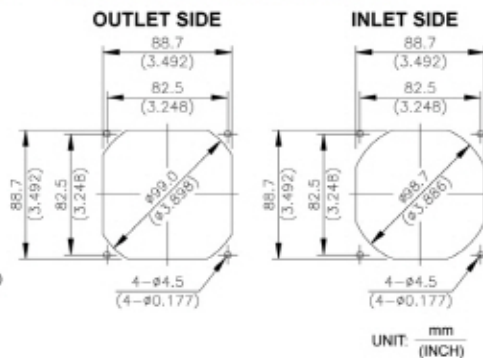


- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive (+)
Black Wire Negative (-)
- Weight : 92g (3.24 oz)

P & Q CURVE (AT RATED VOLTAGE)



MOUNTING PANEL CUTOUT

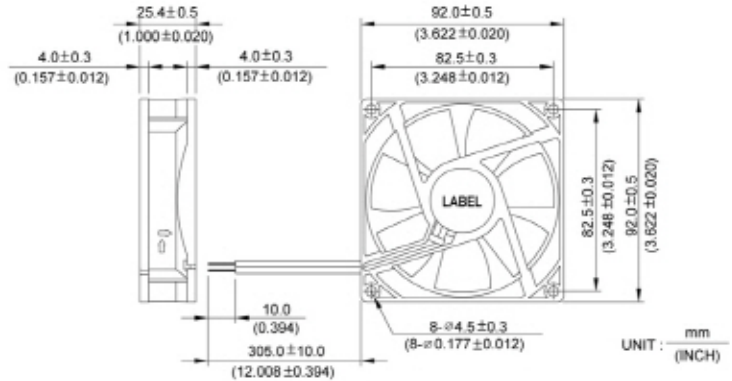


| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|-------------|---------------|-------------------------|---------------|-------------|--------|---------------------|-------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| AFB0912LD | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.08 | 0.96 | 2100 | 1.161 | 41.00 | 2.13 | 0.084 | 28.5 |
| AFB0924LD | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.06 | 1.44 | | | | | | |
| AFB0912MD | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.10 | 1.20 | 2400 | 1.335 | 47.14 | 2.74 | 0.108 | 32.0 |
| AFB0924MD | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.08 | 1.92 | | | | | | |
| AFB0912HD | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.16 | 1.92 | 2700 | 1.546 | 54.60 | 3.51 | 0.138 | 35.0 |
| AFB0924HD | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.10 | 2.40 | | | | | | |
| AFB0912HHD | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.24 | 2.88 | 3000 | 1.686 | 59.54 | 4.22 | 0.166 | 38.0 |
| AFB0924HHD | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.13 | 3.12 | | | | | | |
| AFB0912VHD | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.28 | 3.36 | 3300 | 1.872 | 66.11 | 5.03 | 0.198 | 40.5 |
| AFB0924VHD | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.16 | 3.84 | | | | | | |

* Function type is optional.
 * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
 * Noise is measured in anechoic chamber in free air, one meter from intake side.
 * All readings are typical values at rated voltage.
 * Specifications are subject to change without notice.

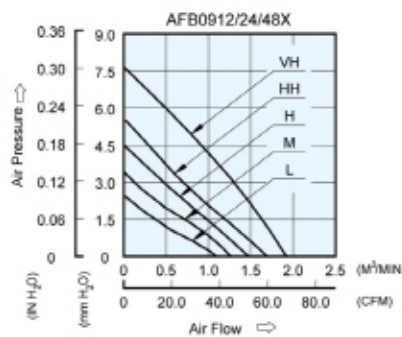
AFB 92 x 92 x 25.4 MM SERIES

DIMENSIONS DRAWING

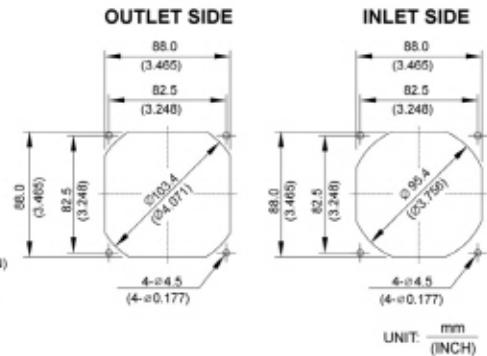


- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive (+)
Black Wire Negative (-)
- Weight : 99g (3.49 oz)

P & Q CURVE (AT RATED VOLTAGE)



MOUNTING PANEL CUTOUT

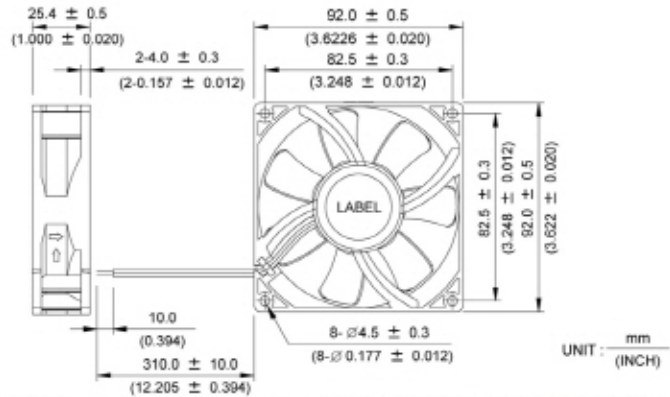


| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|-----------|-------------|---------------|-------------------------|---------------|-------------|--------|---------------------|-------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| AFB0912L | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.07 | 0.84 | 2100 | 1.050 | 37.08 | 2.53 | 0.100 | 25.0 |
| AFB0924L | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.06 | 1.44 | | | | | | |
| AFB0948L | -R00 / -F00 | 48 | 28.0 to 56.0 | 0.05 | 2.40 | | | | | | |
| AFB0912M | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.11 | 1.32 | 2450 | 1.240 | 43.79 | 3.25 | 0.130 | 30.0 |
| AFB0924M | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.08 | 1.92 | | | | | | |
| AFB0948M | -R00 / -F00 | 48 | 28.0 to 56.0 | 0.05 | 2.40 | | | | | | |
| AFB0912H | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.16 | 1.92 | 2850 | 1.450 | 51.21 | 4.50 | 0.177 | 34.0 |
| AFB0924H | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.10 | 2.40 | | | | | | |
| AFB0948H | -R00 / -F00 | 48 | 28.0 to 56.0 | 0.06 | 2.88 | | | | | | |
| AFB0912HH | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.25 | 3.00 | 3200 | 1.640 | 57.92 | 5.62 | 0.221 | 38.0 |
| AFB0924HH | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.13 | 3.12 | | | | | | |
| AFB0948HH | -R00 / -F00 | 48 | 28.0 to 56.0 | 0.08 | 3.84 | | | | | | |
| AFB0912VH | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.40 | 4.80 | 3800 | 1.920 | 67.80 | 7.67 | 0.302 | 45.0 |
| AFB0924VH | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.22 | 5.28 | | | | | | |

* Function type is optional.
 * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
 * Noise is measured in anechoic chamber in free air, one meter from intake side.
 * All readings are typical values at rated voltage.
 * Specifications are subject to change without notice.

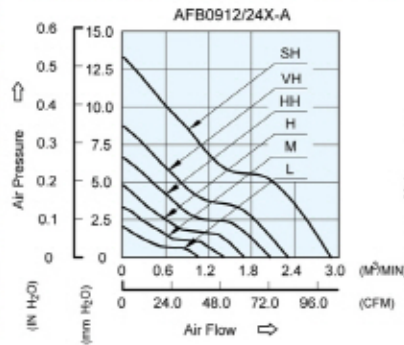
AFB 92 x 92 x 25.4 MM SERIES

DIMENSIONS DRAWING

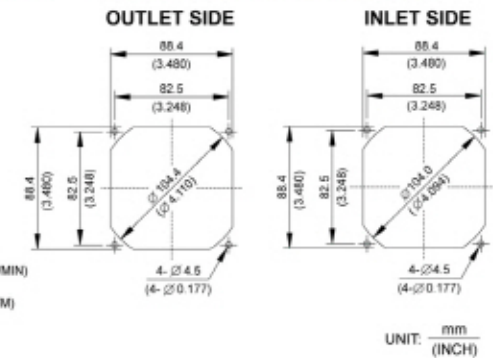


- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive (+)
Black Wire Negative (-)
- Weight : 120g (4.23 oz)

P & Q CURVE (AT RATED VOLTAGE)



MOUNTING PANEL CUTOUT

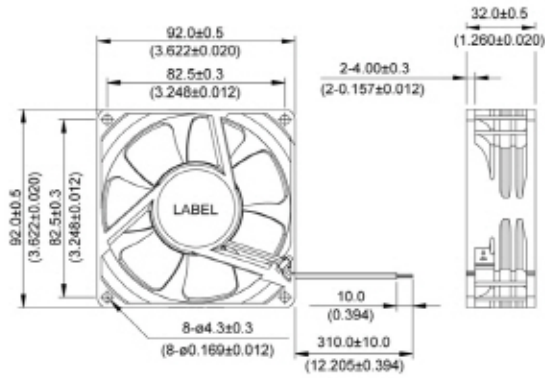


| MODEL | | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|-----------|------|-----------|---------------|-------------------------|---------------|-------------|--------|---------------------|--------|----------------------|---------------------|-------|
| PART NO. | REV. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| AFB0912L | -A | -R00/-F00 | 12 | 5.0 to 13.8 | 0.10 | 1.20 | 1800 | 1.055 | 37.25 | 2.05 | 0.080 | 25.0 |
| AFB0924L | -A | -R00/-F00 | 24 | 14.0 to 26.4 | 0.08 | 1.92 | | | | | | |
| AFB0912M | -A | -R00/-F00 | 12 | 5.0 to 13.8 | 0.12 | 1.44 | 2300 | 1.402 | 49.51 | 3.38 | 0.133 | 31.5 |
| AFB0924M | -A | -R00/-F00 | 24 | 14.0 to 26.4 | 0.10 | 2.40 | | | | | | |
| AFB0912H | -A | -R00/-F00 | 12 | 5.0 to 13.8 | 0.21 | 2.52 | 2800 | 1.696 | 59.89 | 4.86 | 0.191 | 37.0 |
| AFB0924H | -A | -R00/-F00 | 24 | 14.0 to 26.4 | 0.12 | 2.88 | | | | | | |
| AFB0912HH | -A | -R00/-F00 | 12 | 5.0 to 13.8 | 0.32 | 3.84 | 3300 | 2.060 | 72.74 | 6.65 | 0.262 | 42.5 |
| AFB0924HH | -A | -R00/-F00 | 24 | 14.0 to 26.4 | 0.18 | 4.32 | | | | | | |
| AFB0912VH | -A | -R00/-F00 | 12 | 5.0 to 12.6 | 0.40 | 4.80 | 3800 | 2.307 | 81.47 | 8.76 | 0.345 | 46.0 |
| AFB0924VH | -A | -R00/-F00 | 24 | 14.0 to 26.4 | 0.25 | 6.00 | | | | | | |
| AFB0912SH | -A | -R00/-F00 | 12 | 5.0 to 12.6 | 0.75 | 9.00 | 4800 | 2.905 | 102.59 | 13.35 | 0.526 | 53.0 |
| AFB0924SH | -A | -R00/-F00 | 24 | 14.0 to 26.4 | 0.40 | 9.60 | | | | | | |

* Function type is optional.
 * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
 * Noise is measured in anechoic chamber in free air, one meter from intake side.
 * All readings are typical values at rated voltage.
 * Specifications are subject to change without notice.

AFB 92 x 92 x 32 MM SERIES

DIMENSIONS DRAWING

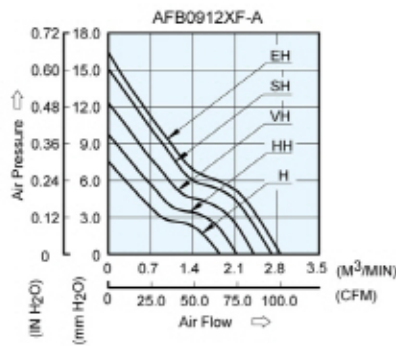


UNIT: $\frac{\text{mm}}{(\text{INCH})}$

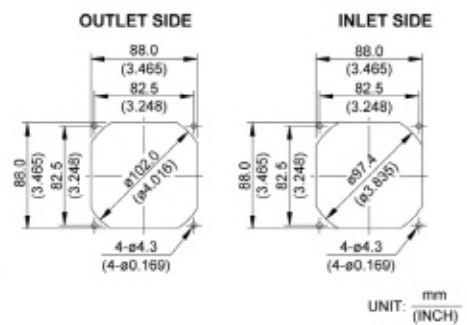


- Bearing Type
Ball Bearings
- Material
Impeller & Pillow : Plastic (UL 94V-0)
- Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 180g (6.35 oz)

P & Q CURVE (AT RATED VOLTAGE)



MOUNTING PANEL CUTOUT



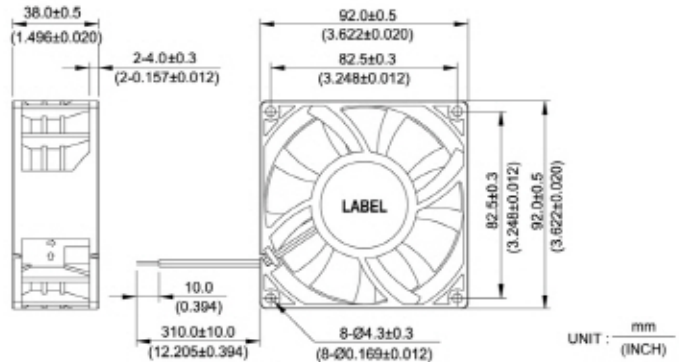
UNIT: $\frac{\text{mm}}{(\text{INCH})}$

| MODEL | | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|------|-----------|---------------|-------------------------|---------------|-------------|--------|---------------------|--------|----------------------|---------------------|-------|
| PART NO. | REV. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| AFB0912HF | -A | -R00/-F00 | 12 | 7.0 to 13.2 | 0.21 | 2.52 | 3300 | 1.857 | 65.60 | 7.58 | 0.298 | 38.0 |
| AFB0912HHF | -A | -R00/-F00 | 12 | 7.0 to 13.2 | 0.28 | 3.36 | 3800 | 2.133 | 75.31 | 9.76 | 0.384 | 43.0 |
| AFB0912VHF | -A | -R00/-F00 | 12 | 7.0 to 13.2 | 0.42 | 5.04 | 4300 | 2.417 | 85.34 | 12.31 | 0.485 | 47.0 |
| AFB0912SHF | -A | -R00/-F00 | 12 | 7.0 to 13.2 | 0.60 | 7.20 | 4800 | 2.714 | 95.83 | 15.10 | 0.594 | 49.0 |
| AFB0912EHF | -A | -R00/-F00 | 12 | 7.0 to 13.2 | 0.66 | 7.92 | 5000 | 2.861 | 101.04 | 16.43 | 0.647 | 50.0 |

- * Function type is optional.
- * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
- * Noise is measured in anechoic chamber in free air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.

AFB 92 x 92 x 38 MM SERIES

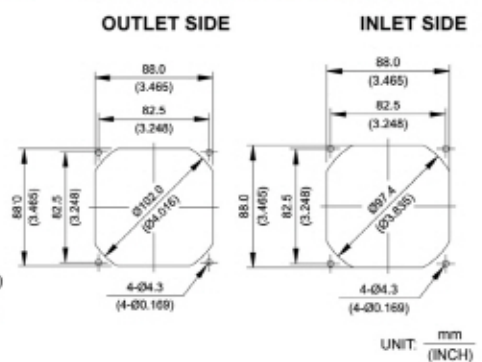
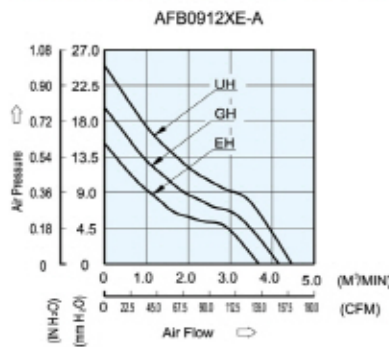
DIMENSIONS DRAWING



- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 245g (8.64 oz)

P & Q CURVE (AT RATED VOLTAGE)

MOUNTING PANEL CUTOUT



| MODEL | | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|------|-------------|---------------|-------------------------|---------------|-------------|--------|---------------------|--------|----------------------|---------------------|-------|
| PART NO. | REV. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| AFB0912EHE | -A | -R00 / -F00 | 12 | 7.0 to 13.8 | 1.40 | 16.80 | 4800 | 3.605 | 127.31 | 16.13 | 0.635 | 56.0 |
| AFB0912GHE | -A | -R00 / -F00 | 12 | 7.0 to 13.8 | 1.85 | 22.20 | 5400 | 4.074 | 143.87 | 20.37 | 0.802 | 60.0 |
| AFB0912UHE | -A | -R00 / -F00 | 12 | 7.0 to 13.2 | 2.50 | 30.00 | 6000 | 4.537 | 160.22 | 25.45 | 1.002 | 63.0 |

* Function type is optional.
 * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
 * Noise is measured in anechoic chamber in free air, one meter from intake side.
 * All readings are typical values at rated voltage.
 * Specifications are subject to change without notice.

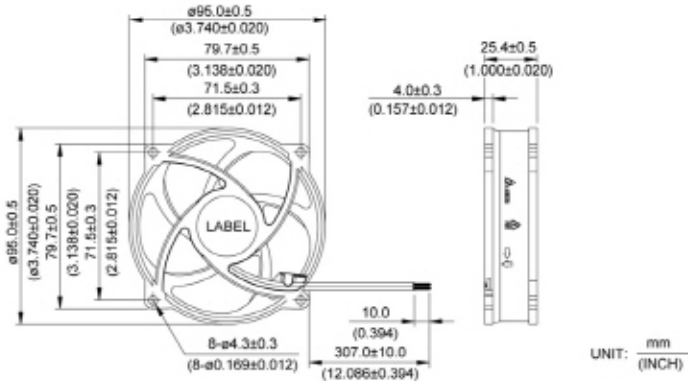
New



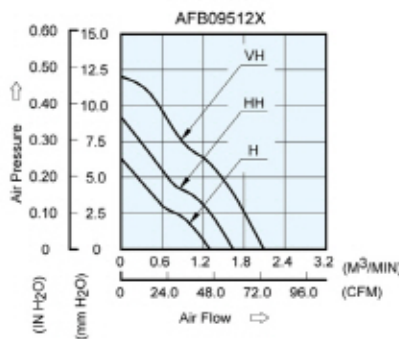
- Bearing Type
Ball Bearings
- Material
Impeller & Pillow : Plastic (UL 94V-0)
- Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 90g (3.17 oz)

AFB $\phi 95 \times 25.4$ MM SERIES

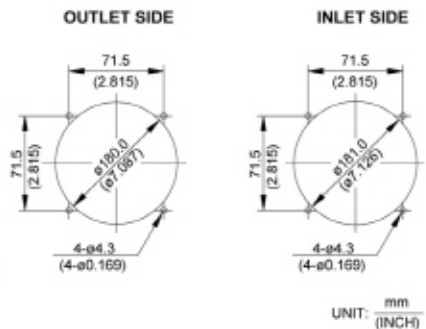
■ DIMENSIONS DRAWING



■ P & Q CURVE (AT RATED VOLTAGE)



■ MOUNTING PANEL CUTOUT

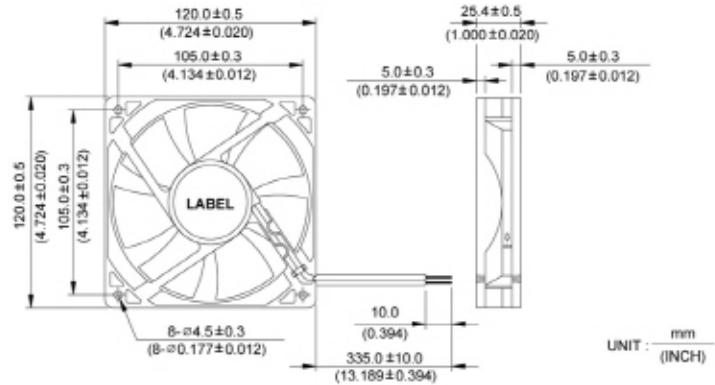


| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|-----------|---------------|-------------------------|---------------|-------------|--------|---------------------|-------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| AFB09512H | -R00/-F00 | 12 | 5.0 to 12.6 | 0.15 | 1.80 | 4100 | 1,387 | 48.98 | 6.34 | 0.250 | 35.0 |
| AFB09512HH | -R00/-F00 | 12 | 5.0 to 12.6 | 0.25 | 3.00 | 5100 | 1,750 | 61.80 | 9.22 | 0.363 | 41.0 |
| AFB09512VH | -R00/-F00 | 12 | 5.0 to 12.6 | 0.39 | 4.68 | 6100 | 2,230 | 78.74 | 12.02 | 0.474 | 47.0 |

- * Function type is optional.
- * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
- * Noise is measured in anechoic chamber in free air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.
- * Both of the ball bearing and the 1 ball + 1 Sleeve type are available.

AFB 120 x 120 x 25.4 MM SERIES

DIMENSIONS DRAWING



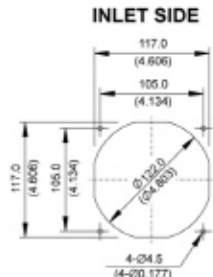
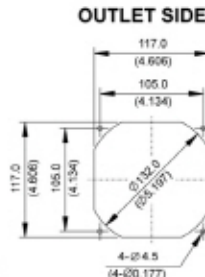
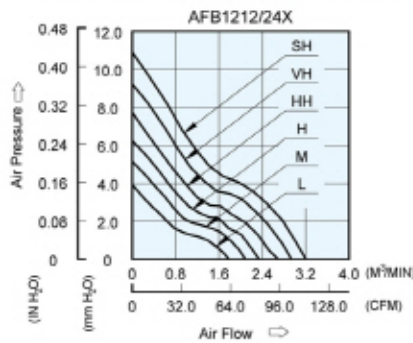
UNIT : mm
(INCH)



- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive (+)
Black Wire Negative (-)
- Weight : 198g (6.98 oz)

P & Q CURVE (AT RATED VOLTAGE)

MOUNTING PANEL CUTOUT



UNIT : mm
(INCH)

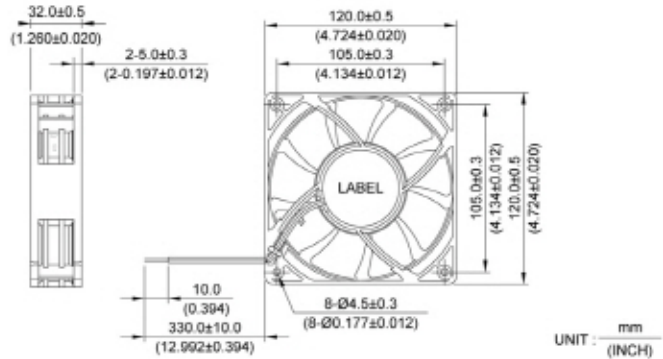
| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|-----------|-------------|---------------|-------------------------|---------------|-------------|--------|---------------------|--------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| AFB1212L | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.14 | 1.68 | 1900 | 1.782 | 62.93 | 3.93 | 0.154 | 32.5 |
| AFB1224L | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.09 | 2.16 | | | | | | |
| AFB1212M | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.18 | 2.16 | 2200 | 2.091 | 73.84 | 5.15 | 0.203 | 35.5 |
| AFB1224M | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.12 | 2.88 | | | | | | |
| AFB1212H | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.23 | 2.76 | 2500 | 2.341 | 82.67 | 6.25 | 0.246 | 38.5 |
| AFB1224H | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.14 | 3.36 | | | | | | |
| AFB1212HH | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.33 | 3.96 | 2800 | 2.694 | 95.14 | 7.73 | 0.304 | 41.5 |
| AFB1224HH | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.18 | 4.32 | | | | | | |
| AFB1212VH | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.40 | 4.80 | 3100 | 2.938 | 103.75 | 9.43 | 0.371 | 44.5 |
| AFB1224VH | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.23 | 5.52 | | | | | | |
| AFB1212SH | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.53 | 6.36 | 3400 | 3.203 | 113.11 | 10.92 | 0.430 | 46.5 |
| AFB1224SH | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.28 | 6.72 | | | | | | |

* Function type is optional.
 * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
 * Noise is measured in anechoic chamber in free air, one meter from intake side.
 * All readings are typical values at rated voltage.
 * Specifications are subject to change without notice.

New

AFB 120 x 120 x 32 MM SERIES

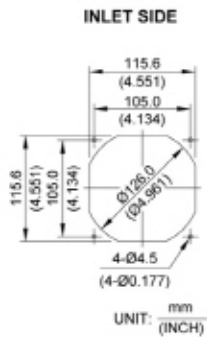
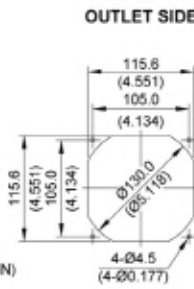
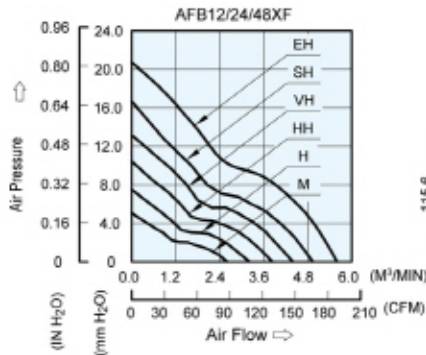
■ DIMENSIONS DRAWING



- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 275g (9.70 oz)

■ P & Q CURVE (AT RATED VOLTAGE)

■ MOUNTING PANEL CUTOUT

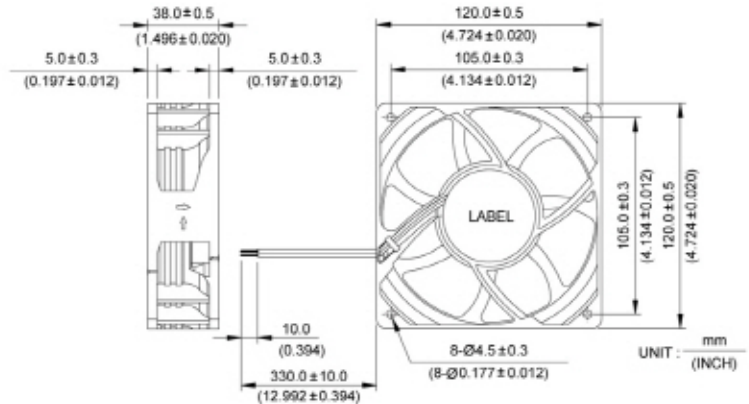


| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|-------------|---------------|-------------------------|---------------|-------------|--------|---------------------|--------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| AFB1212MF | -R00 / -F00 | 12 | 6.0 to 13.8 | 0.30 | 3.60 | 2300 | 2.602 | 91.88 | 5.04 | 0.198 | 39.5 |
| AFB1224MF | -R00 / -F00 | 24 | 14.0 to 28.0 | 0.20 | 4.80 | | | | | | |
| AFB1248MF | -R00 / -F00 | 48 | 24.0 to 56.0 | 0.10 | 4.80 | | | | | | |
| AFB1212HF | -R00 / -F00 | 12 | 6.0 to 13.8 | 0.50 | 6.00 | 2800 | 3.209 | 113.33 | 7.47 | 0.294 | 44.0 |
| AFB1224HF | -R00 / -F00 | 24 | 14.0 to 28.0 | 0.30 | 7.20 | | | | | | |
| AFB1248HF | -R00 / -F00 | 48 | 24.0 to 56.0 | 0.13 | 6.24 | | | | | | |
| AFB1212HHF | -R00 / -F00 | 12 | 6.0 to 13.8 | 0.65 | 7.80 | 3300 | 3.835 | 135.43 | 10.41 | 0.410 | 49.0 |
| AFB1224HHF | -R00 / -F00 | 24 | 14.0 to 28.0 | 0.36 | 8.64 | | | | | | |
| AFB1248HHF | -R00 / -F00 | 48 | 24.0 to 56.0 | 0.21 | 10.08 | | | | | | |
| AFB1212VHF | -R00 / -F00 | 12 | 6.0 to 13.8 | 1.00 | 12.00 | 3800 | 4.394 | 155.18 | 13.14 | 0.517 | 52.5 |
| AFB1224VHF | -R00 / -F00 | 24 | 14.0 to 28.0 | 0.50 | 12.00 | | | | | | |
| AFB1248VHF | -R00 / -F00 | 48 | 24.0 to 56.0 | 0.25 | 12.00 | | | | | | |
| AFB1212SHF | -R00 / -F00 | 12 | 6.0 to 13.8 | 1.35 | 16.20 | 4300 | 4.940 | 174.45 | 16.66 | 0.656 | 56.0 |
| AFB1224SHF | -R00 / -F00 | 24 | 14.0 to 26.4 | 0.70 | 16.80 | | | | | | |
| AFB1248SHF | -R00 / -F00 | 48 | 24.0 to 56.0 | 0.35 | 16.80 | | | | | | |
| AFB1212EHF | -R00 / -F00 | 12 | 6.0 to 12.6 | 1.85 | 22.20 | 4800 | 5.625 | 198.64 | 21.24 | 0.836 | 59.0 |

* Function type is optional.
 * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
 * Noise is measured in anechoic chamber in free air, one meter from in take side.
 * All reading are typical values at rated voltage.
 * Specifications are subject to change without notice.

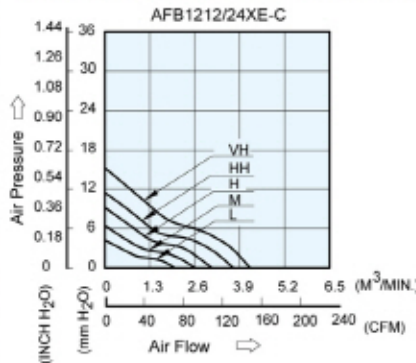
AFB 120 x 120 x 38 MM SERIES

DIMENSIONS DRAWING

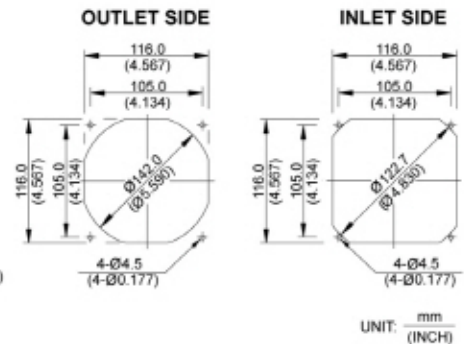


- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive (+)
Black Wire Negative (-)
- Weight : 320g (11.28 oz)

P & Q CURVE (AT RATED VOLTAGE)



MOUNTING PANEL CUTOUT

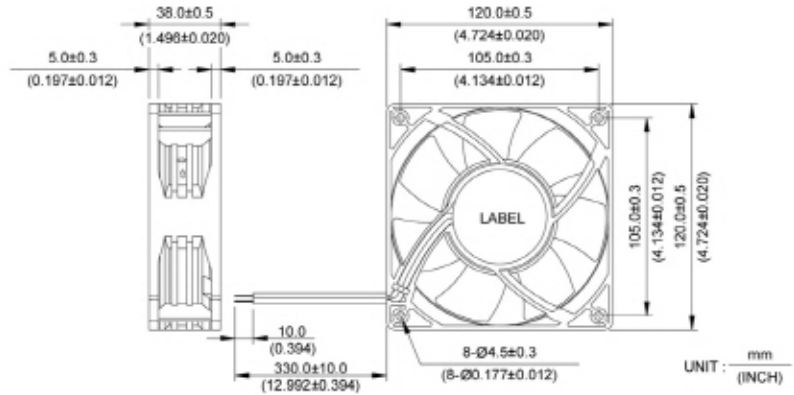


| MODEL | | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|------|-------------|---------------|-------------------------|---------------|-------------|--------|---------------------|--------|----------------------|---------------------|-------|
| PART NO. | REV. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| AFB1212LE | -C | -R00 / -F00 | 12 | 6.0 to 12.8 | 0.14 | 1.68 | 2000 | 2.018 | 71.27 | 4.22 | 0.166 | 32.5 |
| AFB1224LE | -C | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.11 | 2.64 | | | | | | |
| AFB1212ME | -C | -R00 / -F00 | 12 | 6.0 to 12.8 | 0.27 | 3.24 | 2500 | 2.604 | 91.95 | 6.45 | 0.254 | 38.0 |
| AFB1224ME | -C | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.14 | 3.36 | | | | | | |
| AFB1212HE | -C | -R00 / -F00 | 12 | 6.0 to 12.8 | 0.35 | 4.20 | 3000 | 3.092 | 109.17 | 9.22 | 0.363 | 44.0 |
| AFB1224HE | -C | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.20 | 4.80 | | | | | | |
| AFB1212HHE | -C | -R00 / -F00 | 12 | 6.0 to 12.8 | 0.51 | 6.12 | 3500 | 3.704 | 130.80 | 11.48 | 0.452 | 47.0 |
| AFB1224HHE | -C | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.27 | 6.48 | | | | | | |
| AFB1212VHE | -C | -R00 / -F00 | 12 | 6.0 to 12.8 | 0.68 | 8.16 | 4000 | 4.201 | 148.34 | 15.29 | 0.602 | 51.0 |
| AFB1224VHE | -C | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.36 | 8.64 | | | | | | |

* Function type is optional.
 * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
 * Noise is measured in anechoic chamber in free air, one meter from intake side.
 * All readings are typical values at rated voltage.
 * Specifications are subject to change without notice.

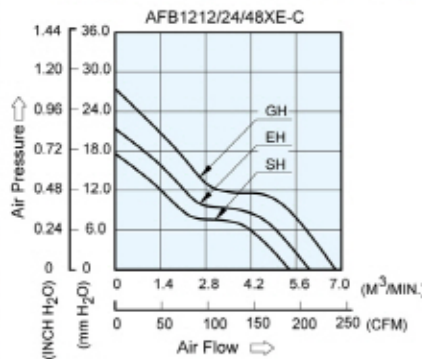
AFB 120 x 120 x 38 MM SERIES

DIMENSIONS DRAWING

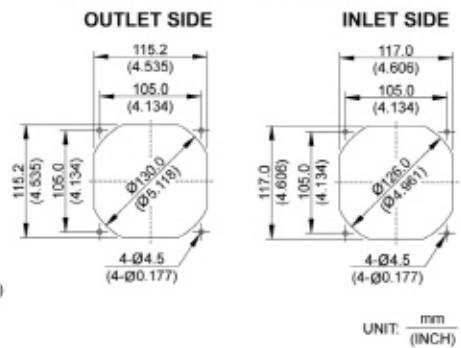


- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive (+)
Black Wire Negative (-)
- Weight : 330g (11.64 oz)

P & Q CURVE (AT RATED VOLTAGE)



MOUNTING PANEL CUTOUT

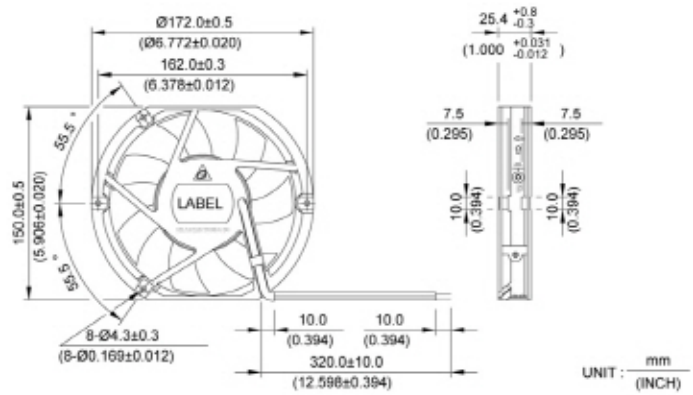


| MODEL | | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|------|-------------|---------------|-------------------------|---------------|-------------|--------|---------------------|--------|----------------------|---------------------|-------|
| PART NO. | REV. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| AFB1212SHE | -C | -R00 / -F00 | 12 | 6.0 to 13.8 | 1.25 | 15.00 | 4100 | 5.394 | 190.48 | 17.64 | 0.694 | 55.5 |
| AFB1224SHE | -C | -R00 / -F00 | 24 | 14.0 to 28.0 | 0.62 | 14.88 | | | | | | |
| AFB1248SHE | -C | -R00 / -F00 | 48 | 24.0 to 56.0 | 0.31 | 14.88 | | | | | | |
| AFB1212EHE | -C | -R00 / -F00 | 12 | 6.0 to 13.8 | 1.80 | 21.60 | 4600 | 6.019 | 212.57 | 21.43 | 0.844 | 58.5 |
| AFB1224EHE | -C | -R00 / -F00 | 24 | 14.0 to 28.0 | 0.85 | 20.40 | | | | | | |
| AFB1248EHE | -C | -R00 / -F00 | 48 | 24.0 to 56.0 | 0.48 | 23.04 | | | | | | |
| AFB1212GHE | -C | -R00 / -F00 | 12 | 6.0 to 12.8 | 2.45 | 29.40 | 5200 | 6.823 | 240.96 | 27.48 | 1.082 | 62.0 |
| AFB1224GHE | -C | -R00 / -F00 | 24 | 14.0 to 28.0 | 1.15 | 27.60 | | | | | | |
| AFB1248GHE | -C | -R00 / -F00 | 48 | 24.0 to 53.0 | 0.60 | 28.80 | | | | | | |

* Function type is optional.
 * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
 * Noise is measured in anechoic chamber in free air, one meter from intake side.
 * All readings are typical values at rated voltage.
 * Specifications are subject to change without notice.

AFB 172 x 150 x 25.4 MM SERIES

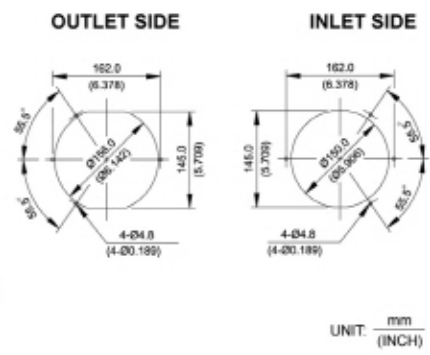
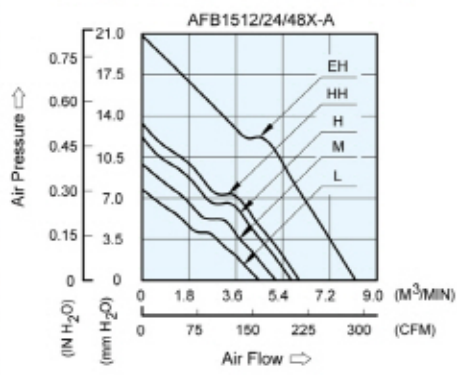
DIMENSIONS DRAWING



- Bearing Type
Ball Bearings
- Material
Impeller: Plastic (UL 94V-0)
Frame: Die-cast Aluminum
- Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive (+)
Black Wire Negative (-)
- Weight : 430g (15.17 oz)

P & Q CURVE (AT RATED VOLTAGE)

MOUNTING PANEL CUTOUT



| MODEL | | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|-----------|------|-------------|---------------|-------------------------|---------------|-------------|--------|---------------------|--------|----------------------|---------------------|-------|
| PART NO. | REV. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| AFB1512L | -A | -R00 / -F00 | 12 | 6.0 to 14.0 | 0.56 | 6.72 | 2400 | 4.553 | 160.77 | 7.75 | 0.305 | 46.0 |
| AFB1524L | -A | -R00 / -F00 | 24 | 12.0 to 30.0 | 0.31 | 7.44 | | | | | | |
| AFB1548L | -A | -R00 / -F00 | 48 | 24.0 to 60.0 | 0.17 | 8.16 | | | | | | |
| AFB1512M | -A | -R00 / -F00 | 12 | 6.0 to 14.0 | 0.76 | 9.12 | 2700 | 5.134 | 181.32 | 9.70 | 0.382 | 49.0 |
| AFB1524M | -A | -R00 / -F00 | 24 | 12.0 to 30.0 | 0.40 | 9.60 | | | | | | |
| AFB1548M | -A | -R00 / -F00 | 48 | 24.0 to 60.0 | 0.22 | 10.56 | | | | | | |
| AFB1512H | -A | -R00 / -F00 | 12 | 6.0 to 14.0 | 0.98 | 11.76 | 3000 | 5.735 | 202.54 | 11.85 | 0.467 | 52.0 |
| AFB1524H | -A | -R00 / -F00 | 24 | 12.0 to 30.0 | 0.50 | 12.00 | | | | | | |
| AFB1548H | -A | -R00 / -F00 | 48 | 24.0 to 60.0 | 0.27 | 12.96 | | | | | | |
| AFB1512HH | -A | -R00 / -F00 | 12 | 6.0 to 14.0 | 1.17 | 14.04 | 3200 | 6.084 | 214.85 | 13.30 | 0.524 | 53.5 |
| AFB1524HH | -A | -R00 / -F00 | 24 | 12.0 to 30.0 | 0.62 | 14.88 | | | | | | |
| AFB1548HH | -A | -R00 / -F00 | 48 | 24.0 to 60.0 | 0.31 | 14.88 | | | | | | |
| AFB1512EH | -A | -R00 / -F00 | 12 | 7.0 to 13.8 | 3.00 | 36.00 | 4300 | 8.230 | 290.64 | 20.85 | 0.821 | 61.5 |
| AFB1524EH | -A | -R00 / -F00 | 24 | 15.8 to 27.6 | 1.60 | 38.40 | | | | | | |

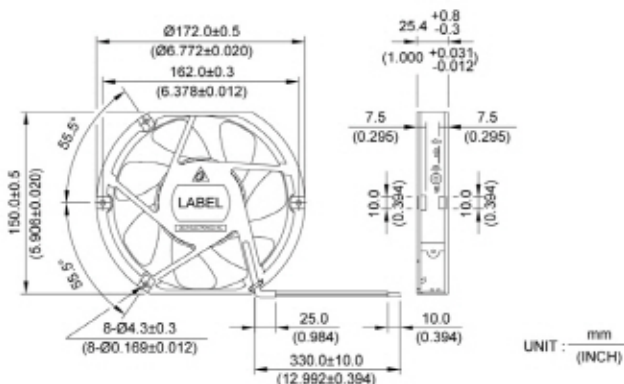
* Function type is optional.
 * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
 * Noise is measured in anechoic chamber in free air, one meter from intake side.
 * All readings are typical values at rated voltage.
 * Specifications are subject to change without notice.

New



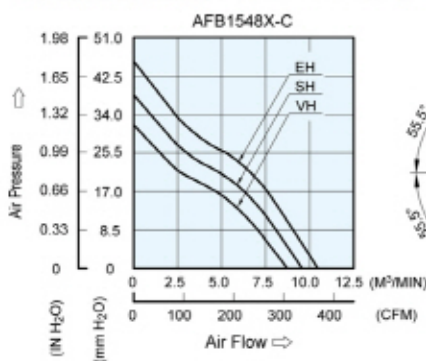
AFB 172 x 150 x 25.4 MM SERIES

DIMENSIONS DRAWING

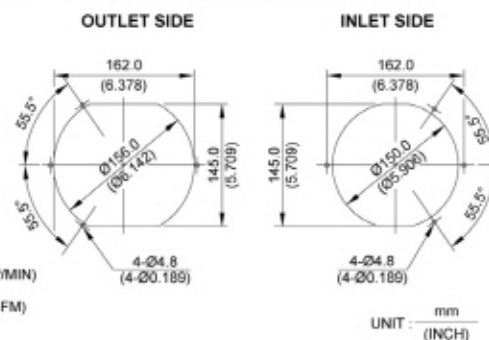


- Bearing Type
Ball Bearings
- Material
Impeller : Plastic (UL 94V-0)
Frame : Die-Cast Aluminum
- Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 435g (28.22 oz)

P & Q CURVE (AT RATED VOLTAGE)



MOUNTING PANEL CUTOUT

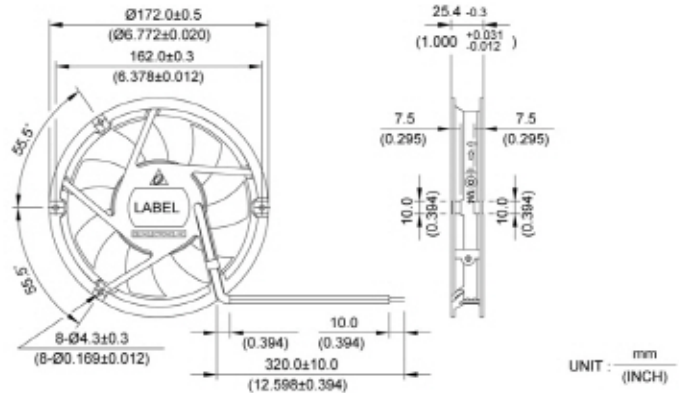


| MODEL | | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|-----------|------|-------------|---------------|-------------------------|---------------|-------------|--------|---------------------|--------|----------------------|---------------------|-------|
| PART NO. | REV. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| AFB1548VH | -C | -R00 / -F00 | 48 | 35.0 to 60.0 | 0.72 | 34.56 | 5000 | 8.700 | 307.24 | 31.82 | 1.253 | 64.5 |
| AFB1548SH | -C | -R00 / -F00 | 48 | 35.0 to 60.0 | 0.92 | 44.16 | 5500 | 9.570 | 337.96 | 38.50 | 1.516 | 67.0 |
| AFB1548EH | -C | -R00 / -F00 | 48 | 35.0 to 60.0 | 1.20 | 57.60 | 6000 | 10.440 | 368.68 | 45.82 | 1.804 | 69.0 |

- * Function type is optional.
- * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
- * Noise is measured in anechoic chamber in free air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.

AFB $\phi 172 \times 25.4$ MM SERIES

DIMENSIONS DRAWING

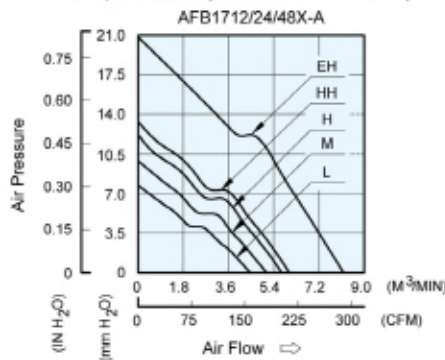


UNIT: mm (INCH)

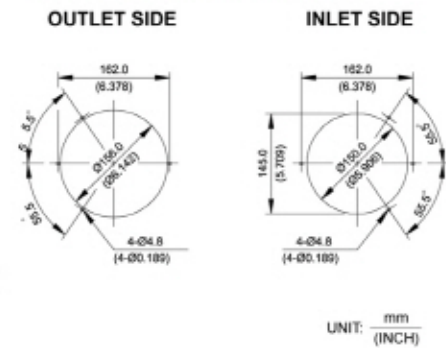


- Bearing Type: Ball Bearings
- Material: Impeller: Plastic (UL 94V-0), Frame: Die-cast Aluminum
- Lead Wires: UL 1007 AWG #24 OR Equivalent, Red Wire Positive (+), Black Wire Negative (-)
- Weight: 450g (15.87 oz)

P & Q CURVE (AT RATED VOLTAGE)



MOUNTING PANEL CUTOUT



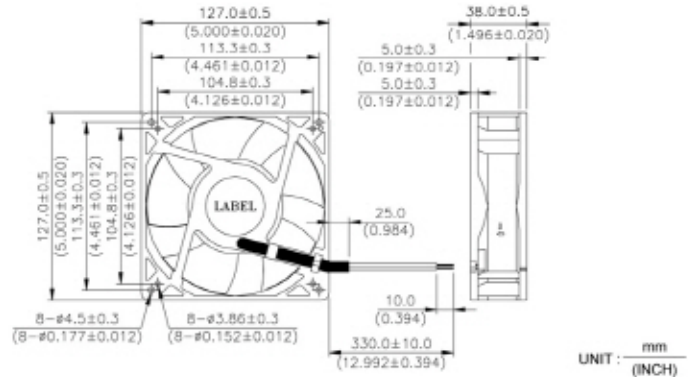
UNIT: mm (INCH)

| MODEL | | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|-----------|------|-------------|---------------|-------------------------|---------------|-------------|--------|---------------------|--------|----------------------|---------------------|-------|
| PART NO. | REV. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| AFB1712L | -A | -R00 / -F00 | 12 | 6.0 to 14.0 | 0.56 | 6.72 | 2400 | 4.553 | 160.77 | 7.75 | 0.305 | 46.0 |
| AFB1724L | -A | -R00 / -F00 | 24 | 12.0 to 30.0 | 0.31 | 7.44 | | | | | | |
| AFB1748L | -A | -R00 / -F00 | 48 | 24.0 to 60.0 | 0.17 | 8.16 | | | | | | |
| AFB1712M | -A | -R00 / -F00 | 12 | 6.0 to 14.0 | 0.76 | 9.12 | 2700 | 5.134 | 181.32 | 9.70 | 0.382 | 49.0 |
| AFB1724M | -A | -R00 / -F00 | 24 | 12.0 to 30.0 | 0.40 | 9.60 | | | | | | |
| AFB1748M | -A | -R00 / -F00 | 48 | 24.0 to 60.0 | 0.22 | 10.56 | | | | | | |
| AFB1712H | -A | -R00 / -F00 | 12 | 6.0 to 14.0 | 0.98 | 11.76 | 3000 | 5.735 | 202.54 | 11.85 | 0.467 | 52.0 |
| AFB1724H | -A | -R00 / -F00 | 24 | 12.0 to 30.0 | 0.50 | 12.00 | | | | | | |
| AFB1748H | -A | -R00 / -F00 | 48 | 24.0 to 60.0 | 0.27 | 12.96 | | | | | | |
| AFB1712HH | -A | -R00 / -F00 | 12 | 6.0 to 14.0 | 1.17 | 14.04 | 3200 | 6.084 | 214.85 | 13.30 | 0.524 | 53.5 |
| AFB1724HH | -A | -R00 / -F00 | 24 | 12.0 to 30.0 | 0.62 | 14.88 | | | | | | |
| AFB1748HH | -A | -R00 / -F00 | 48 | 24.0 to 60.0 | 0.31 | 14.88 | | | | | | |
| AFB1712EH | -A | -R00 / -F00 | 12 | 7.0 to 13.8 | 3.00 | 36.00 | 4300 | 8.230 | 290.64 | 20.85 | 0.821 | 61.5 |
| AFB1724EH | -A | -R00 / -F00 | 24 | 15.8 to 27.6 | 1.60 | 38.40 | | | | | | |

* Function type is optional.
 * The max. air flow and the speed are measured in free air; max. air pressure is measured at zero air flow.
 * Noise is measured in anechoic chamber in free air, one meter from intake side.
 * All readings are typical values at rated voltage.
 * Specifications are subject to change without notice.

AHB 127 x 127 x 38 MM SERIES

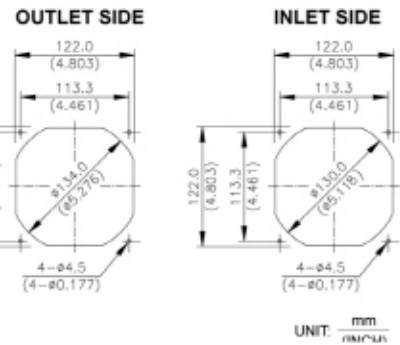
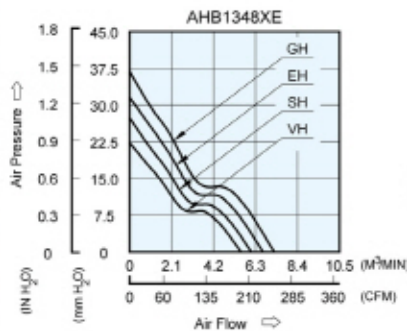
DIMENSIONS DRAWING



- Bearing Type
Ball Bearings
- Material
Impeller : Plastic (UL 94V-0)
Frame : Die-Cast Aluminum
- Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 490g (17.28 oz)

P & Q CURVE (AT RATED VOLTAGE)

MOUNTING PANEL CUTOUT

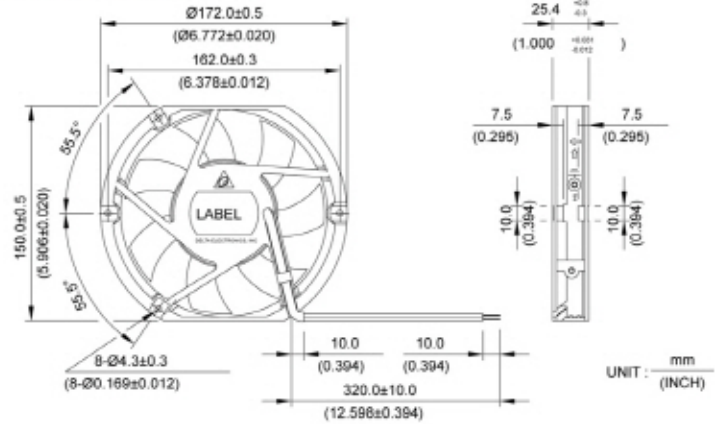


| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|-------------|---------------|-------------------------|---------------|-------------|--------|---------------------|--------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| AHB1348VHE | -R00 / -F00 | 48 | 32.0 to 80.0 | 0.41 | 19.68 | 4300 | 5.573 | 196.82 | 22.39 | 0.881 | 60.5 |
| AHB1348SHE | -R00 / -F00 | 48 | 32.0 to 80.0 | 0.49 | 23.52 | 4700 | 6.091 | 215.12 | 26.79 | 1.055 | 63.0 |
| AHB1348EHE | -R00 / -F00 | 48 | 32.0 to 80.0 | 0.61 | 29.28 | 5100 | 6.660 | 235.20 | 31.41 | 1.237 | 65.0 |
| AHB1348GHE | -R00 / -F00 | 48 | 32.0 to 80.0 | 0.75 | 36.00 | 5500 | 7.243 | 255.77 | 36.77 | 1.448 | 67.0 |

- * Function type is optional.
- * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
- * Noise is measured in anechoic chamber in free air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.

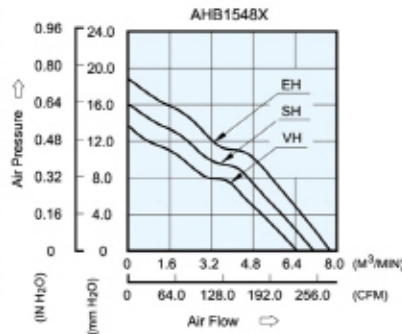
AHB 172 x 150 x 25.4 MM SERIES

DIMENSIONS DRAWING

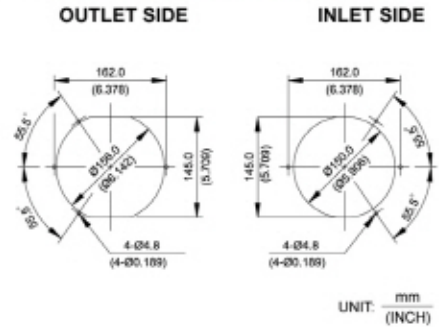


- Bearing Type
Ball Bearings
- Material
Impeller : Plastic (UL 94V-0)
Frame : Die-Cast Aluminum
- Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 430g (15.17 oz)

P & Q CURVE (AT RATED VOLTAGE)



MOUNTING PANEL CUTOUT

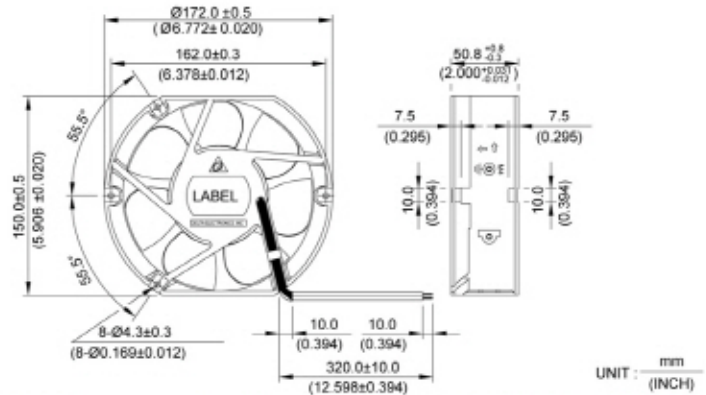


| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|-----------|-------------|---------------|-------------------------|---------------|-------------|--------|---------------------|--------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| AHB1548VH | -R00 / -F00 | 48 | 32.0 to 80.0 | 0.37 | 17.76 | 3400 | 6.408 | 226.31 | 13.62 | 0.536 | 56.0 |
| AHB1548SH | -R00 / -F00 | 48 | 32.0 to 80.0 | 0.43 | 20.64 | 3700 | 7.059 | 249.27 | 16.10 | 0.634 | 59.0 |
| AHB1548EH | -R00 / -F00 | 48 | 32.0 to 80.0 | 0.52 | 24.96 | 4000 | 7.675 | 271.05 | 18.69 | 0.736 | 61.0 |

- * Function type is optional.
- * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
- * Noise is measured in anechoic chamber in free air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.

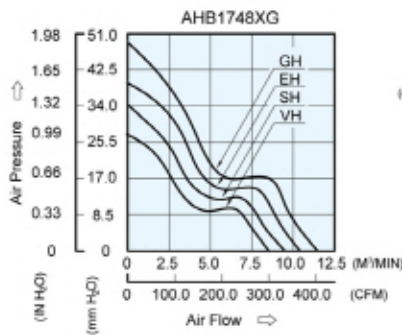
AHB 172 x 150 x 50.8 MM SERIES

DIMENSIONS DRAWING

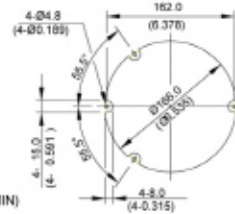


P & Q CURVE (AT RATED VOLTAGE)

MOUNTING PANEL CUTOUT



OUTLET SIDE



INLET SIDE



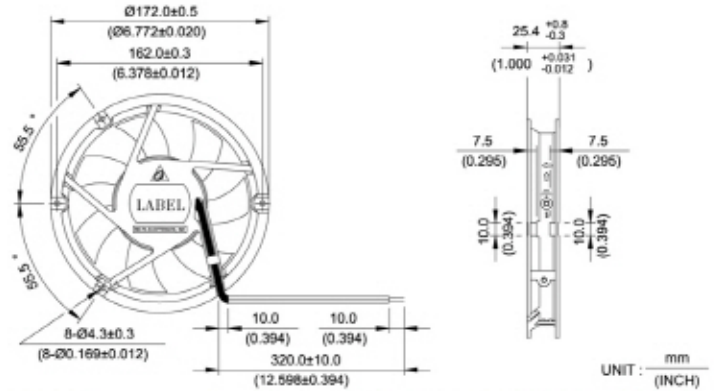
- Bearing Type: Ball Bearings
- Material: Impeller : Plastic (UL 94V-0) Frame : Die-Cast Aluminum
- Lead Wires : UL 1007 AWG #24 OR Equivalent Red Wire Positive(+) Black Wire Negative(-)
- Weight : 800g (28.22 oz)

| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|-------------|---------------|-------------------------|---------------|-------------|--------|---------------------|--------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| AHB1548VHG | -R00 / -F00 | 48 | 32.0 to 80.0 | 0.71 | 34.08 | 4000 | 8.645 | 305.29 | 28.91 | 1.138 | 62.0 |
| AHB1548SHG | -R00 / -F00 | 48 | 32.0 to 80.0 | 0.88 | 42.24 | 4400 | 9.526 | 336.41 | 34.69 | 1.366 | 64.0 |
| AHB1548EHG | -R00 / -F00 | 48 | 32.0 to 80.0 | 1.22 | 58.56 | 4800 | 10.434 | 368.47 | 41.43 | 1.631 | 66.0 |
| AHB1548GHG | -R00 / -F00 | 48 | 32.0 to 80.0 | 1.52 | 72.96 | 5200 | 11.404 | 402.72 | 49.88 | 1.964 | 68.5 |

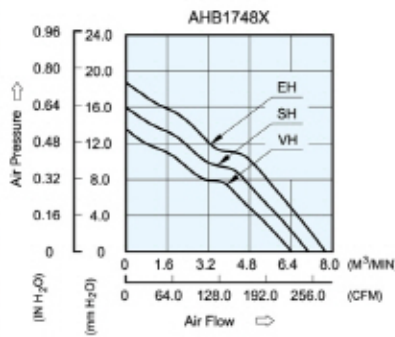
* Function type is optional.
 * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
 * Noise is measured in anechoic chamber in free air, one meter from intake side.
 * All readings are typical values at rated voltage.
 * Specifications are subject to change without notice.

AHB $\phi 172 \times 25.4$ MM SERIES

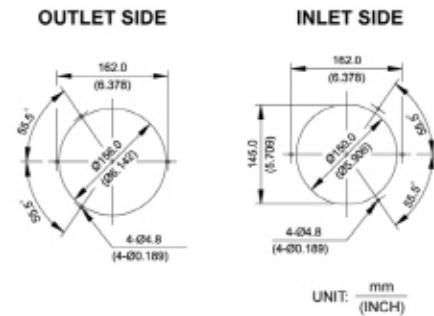
DIMENSIONS DRAWING



P & Q CURVE (AT RATED VOLTAGE)



MOUNTING PANEL CUTOUT



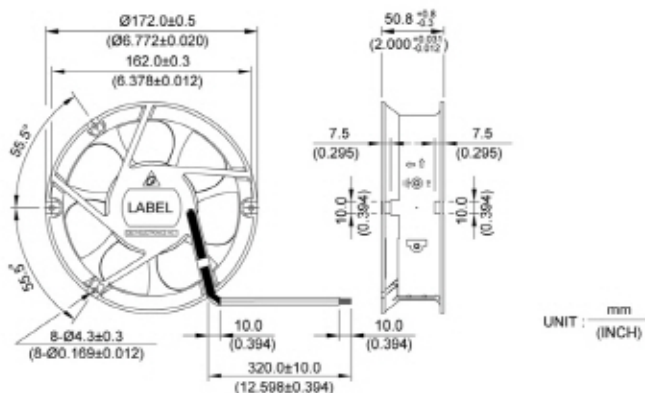
- Bearing Type: Ball Bearings
- Material: Impeller : Plastic (UL 94V-0)
Frame : Die-Cast Aluminum
- Lead Wires : UL 1007 AWG #24 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 450g (15.87 oz)

| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|-----------|-------------|---------------|-------------------------|---------------|-------------|--------|---------------------|--------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| AHB1748VH | -R00 / -F00 | 48 | 32.0 to 80.0 | 0.37 | 17.76 | 3400 | 6.408 | 226.31 | 13.62 | 0.536 | 56.0 |
| AHB1748SH | -R00 / -F00 | 48 | 32.0 to 80.0 | 0.43 | 20.64 | 3700 | 7.059 | 249.27 | 16.10 | 0.634 | 59.0 |
| AHB1748GH | -R00 / -F00 | 48 | 32.0 to 80.0 | 0.52 | 24.96 | 4000 | 7.675 | 271.05 | 18.69 | 0.736 | 61.0 |

* Function type is optional.
 * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
 * Noise is measured in anechoic chamber in free air, one meter from intake side.
 * All readings are typical values at rated voltage.
 * Specifications are subject to change without notice.

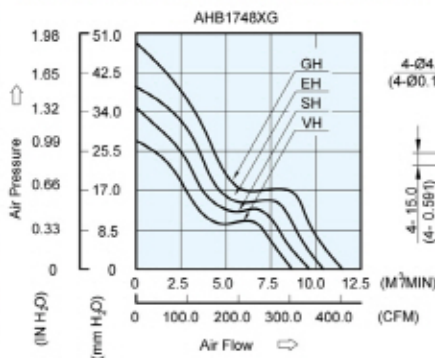
AHB $\varnothing 172 \times 50.8$ MM SERIES

■ DIMENSIONS DRAWING

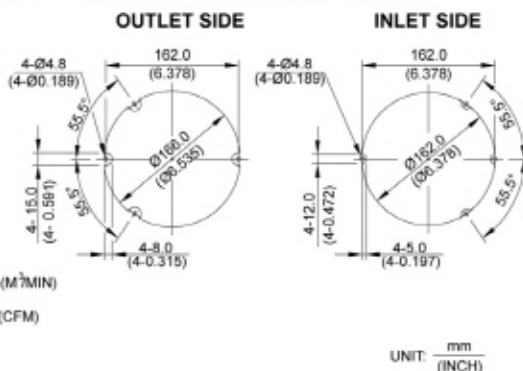


- Bearing Type
Ball Bearings
- Material
Impeller : Plastic (UL 94V-0)
Frame : Die-Cast Aluminum
- Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 820g (28.93 oz)

■ P & Q CURVE (AT RATED VOLTAGE)



■ MOUNTING PANEL CUTOUT



| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|-------------|---------------|-------------------------|---------------|-------------|--------|---------------------|--------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| AHB1748VHG | -R00 / -F00 | 48 | 32.0 to 80.0 | 0.71 | 34.08 | 4000 | 8.760 | 309.37 | 29.75 | 1.171 | 59.5 |
| AHB1748SHG | -R00 / -F00 | 48 | 32.0 to 80.0 | 0.88 | 42.24 | 4400 | 9.773 | 345.13 | 36.34 | 1.431 | 61.5 |
| AHB1748EHG | -R00 / -F00 | 48 | 32.0 to 80.0 | 1.22 | 58.56 | 4800 | 10.636 | 375.62 | 43.24 | 1.702 | 64.0 |
| AHB1748GHG | -R00 / -F00 | 48 | 32.0 to 80.0 | 1.52 | 72.96 | 5200 | 11.564 | 408.39 | 52.02 | 2.048 | 66.5 |

- * Function type is optional.
- * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
- * Noise is measured in anechoic chamber in free air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.

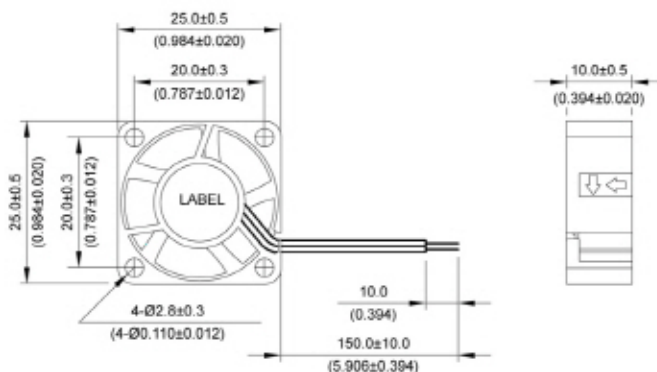
New



- Bearing Type
Sleeve Bearing
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1061 AWG #26 OR Equivalent
Red Wire Positive (+)
Black Wire Negative(-)
- Weight : 7.0g (0.25 oz)
- Rib Type Only

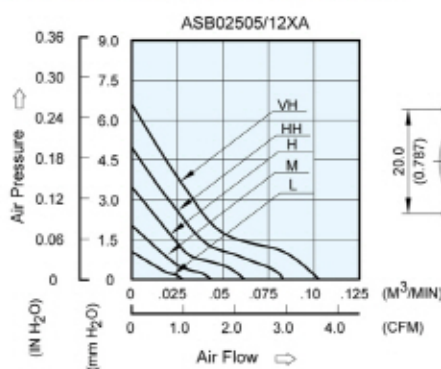
ASB 25 x 25 x 10 MM SERIES

■ DIMENSIONS DRAWING

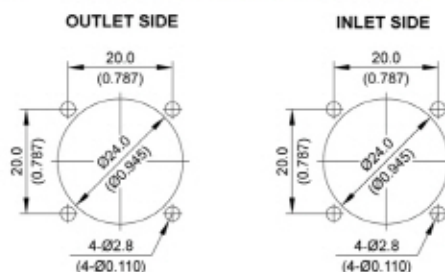


UNIT: mm
(INCH)

■ P & Q CURVE (AT RATED VOLTAGE)



■ MOUNTING PANEL CUTOUT



UNIT: mm
(INCH)

| MODEL | | Rated Voltage | Operating Voltage Range | Rated Current | Rated Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|-------------|-------------|---------------|-------------------------|---------------|-------------------|--------|---------------------|------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| ASB02505LA | -R00 / -F00 | 5 | 4.0 to 6.0 | 0.04 | 0.20 | 5000 | 0.028 | 0.99 | 1.05 | 0.041 | 3.5 |
| ASB02505MA | -R00 / -F00 | 5 | 4.0 to 6.0 | 0.06 | 0.30 | 7000 | 0.044 | 1.55 | 2.04 | 0.080 | 11.0 |
| ASB02512MA | -R00 / -F00 | 12 | 6.5 to 13.8 | 0.04 | 0.48 | | | | | | |
| ASB02505HA | -R00 / -F00 | 5 | 4.0 to 6.0 | 0.09 | 0.45 | 9000 | 0.062 | 2.18 | 3.49 | 0.137 | 18.0 |
| ASB02512HA | -R00 / -F00 | 12 | 6.5 to 13.8 | 0.07 | 0.84 | | | | | | |
| ASB02505HHA | -R00 / -F00 | 5 | 4.0 to 6.0 | 0.18 | 0.90 | 11000 | 0.082 | 2.89 | 4.98 | 0.196 | 25.0 |
| ASB02505VHA | -R00 / -F00 | 5 | 4.0 to 6.0 | 0.22 | 1.10 | 13000 | 0.103 | 3.63 | 6.61 | 0.260 | 28.0 |

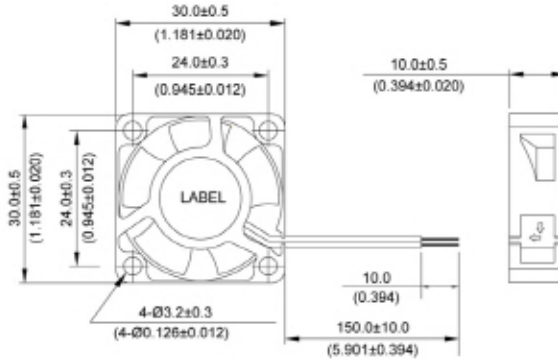
- Function type is optional.
- The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
- Noise is measured in anechoic chamber in free air, one meter from intake side.
- All readings are typical values at rated voltage.
- Specifications are subject to change without notice.

New



ASB 30 x 30 x 10 MM SERIES

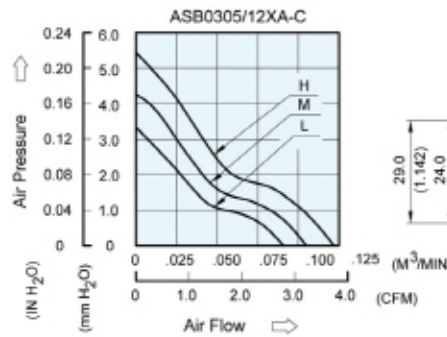
■ DIMENSIONS DRAWING



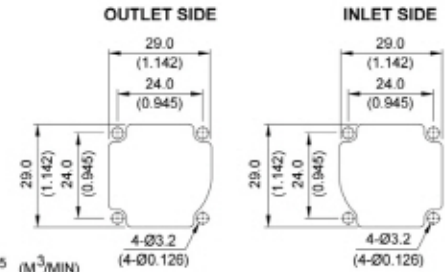
UNIT: $\frac{\text{mm}}{\text{(INCH)}}$

- Bearing Type
Sleeve Bearing
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1061 AWG #26 OR Equivalent
Red Wire Positive (+)
Black Wire Negative(-)
- Weight : 7.4g (0.26 oz)
- Rib Type Only

■ P & Q CURVE (AT RATED VOLTAGE)



■ MOUNTING PANEL CUTOUT



UNIT: $\frac{\text{mm}}{\text{(INCH)}}$

| MODEL | | | Rated Voltage | Operating Voltage Range | Rated Current | Rated Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|-----------|------|-------------|---------------|-------------------------|---------------|-------------------|--------|---------------------|------|----------------------|---------------------|-------|
| PART NO. | REV. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| ASB0305LA | -C | -R00 / -F00 | 5 | 4.5 to 5.5 | 0.10 | 0.50 | 8000 | 0.091 | 3.21 | 3.33 | 0.131 | 21.0 |
| ASB0312LA | -C | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.05 | 0.60 | | | | | | |
| ASB0305MA | -C | -R00 / -F00 | 5 | 4.5 to 5.5 | 0.11 | 0.55 | 9000 | 0.105 | 3.72 | 4.25 | 0.167 | 23.0 |
| ASB0312MA | -C | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.06 | 0.72 | | | | | | |
| ASB0305HA | -C | -R00 / -F00 | 5 | 4.5 to 5.5 | 0.14 | 0.70 | 10500 | 0.122 | 4.30 | 5.44 | 0.214 | 27.0 |
| ASB0312HA | -C | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.07 | 0.84 | | | | | | |

- Function type is optional.
- The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
- Noise is measured in anechoic chamber in free air, one meter from intake side.
- All readings are typical values at rated voltage.
- Specifications are subject to change without notice.

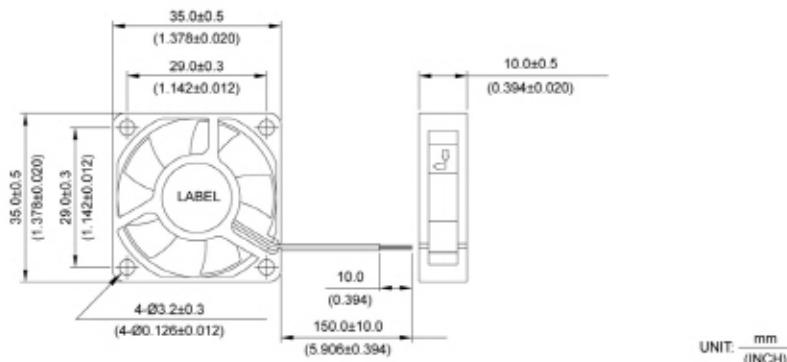
New



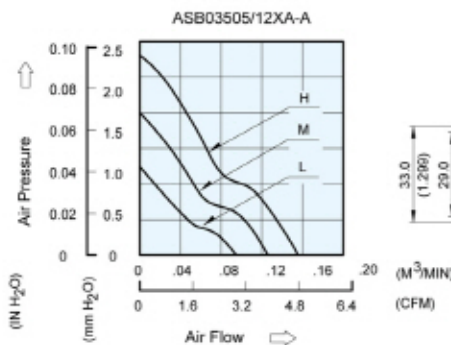
- Bearing Type
Sleeve Bearing
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1061 AWG #26 OR Equivalent
Red Wire Positive (+)
Black Wire Negative(-)
- Weight : 10g (0.35 oz)
- Rib Type Only

ASB 35 x 35 x 10 MM SERIES

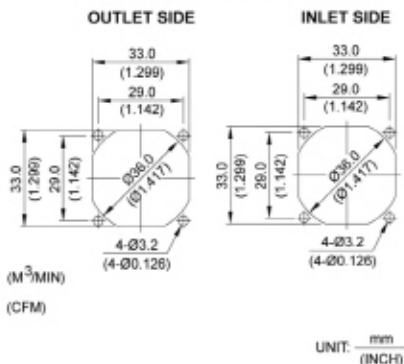
DIMENSIONS DRAWING



P & Q CURVE (AT RATED VOLTAGE)



MOUNTING PANEL CUTOUT



| MODEL | | | Rated Voltage | Operating Voltage Range | Rated Current | Rated Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|------|-------------|---------------|-------------------------|---------------|-------------------|--------|---------------------|------|----------------------|---------------------|-------|
| PART NO. | REV. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| ASB03505LA | -A | -R00 / -F00 | 5 | 4.5 to 5.5 | 0.06 | 0.30 | 4500 | 0.095 | 3.35 | 1.24 | 0.049 | 15.0 |
| ASB03505MA | -A | -R00 / -F00 | 5 | 4.5 to 5.5 | 0.08 | 0.40 | 5800 | 0.127 | 4.50 | 2.00 | 0.079 | 18.5 |
| ASB03512MA | -A | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.05 | 0.60 | | | | | | |
| ASB03505HA | -A | -R00 / -F00 | 5 | 4.5 to 5.5 | 0.10 | 0.50 | 7000 | 0.156 | 5.50 | 2.75 | 0.108 | 22.0 |
| ASB03512HA | -A | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.06 | 0.72 | | | | | | |

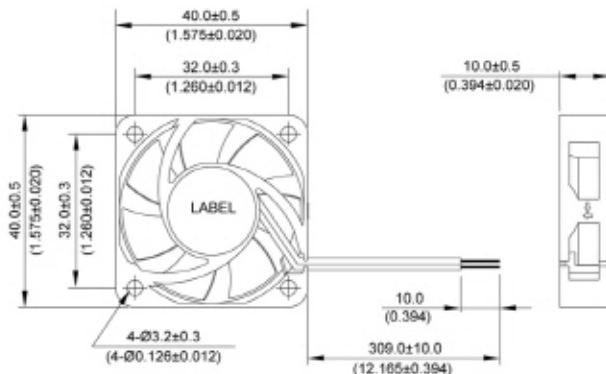
- * Function type is optional.
- * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
- * Noise is measured in anechoic chamber in free air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.

New



ASB 40 x 40 x 10 MM SERIES

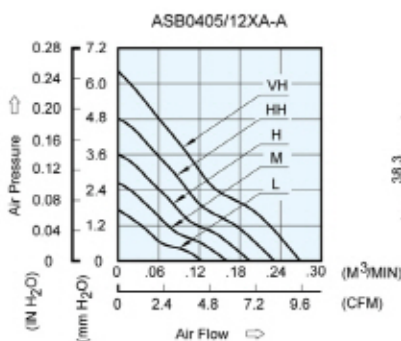
DIMENSIONS DRAWING



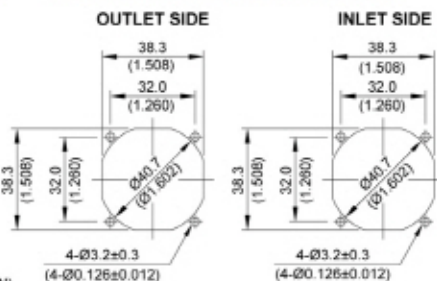
UNIT: mm
(INCH)

- Bearing Type
Sleeve Bearing
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1007 AWG #28 OR Equivalent
Red Wire Positive (+)
Black Wire Negative(-)
- Weight : 13.5g (0.49 oz)
- Rib Type Only

P & Q CURVE (AT RATED VOLTAGE)



MOUNTING PANEL CUTOUT



UNIT: mm
(INCH)

| MODEL | | | Rated Voltage | Operating Voltage Range | Rated Current | Rated Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|------|-------------|---------------|-------------------------|---------------|-------------------|--------|---------------------|------|----------------------|---------------------|-------|
| PART NO. | REV. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| ASB0405LA | -A | -R00 / -F00 | 5 | 4.0 to 5.5 | 0.05 | 0.25 | 4000 | 0.124 | 4.39 | 1.73 | 0.068 | 15.0 |
| ASB0412LA | -A | -R00 / -F00 | 12 | 9.0 to 13.8 | 0.03 | 0.36 | | | | | | |
| ASB0405MA | -A | -R00 / -F00 | 5 | 4.5 to 5.5 | 0.07 | 0.35 | 5000 | 0.161 | 5.67 | 2.65 | 0.104 | 20.5 |
| ASB0412MA | -A | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.04 | 0.48 | | | | | | |
| ASB0405HA | -A | -R00 / -F00 | 5 | 4.5 to 5.5 | 0.10 | 0.50 | 6000 | 0.195 | 6.90 | 3.60 | 0.140 | 26.0 |
| ASB0412HA | -A | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.05 | 0.60 | | | | | | |
| ASB0405HHA | -A | -R00 / -F00 | 5 | 4.5 to 5.5 | 0.13 | 0.65 | 7000 | 0.231 | 8.15 | 4.83 | 0.190 | 29.5 |
| ASB0412HHA | -A | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.06 | 0.72 | | | | | | |
| ASB0405VHA | -A | -R00 / -F00 | 5 | 4.5 to 5.5 | 0.16 | 0.80 | 8000 | 0.269 | 9.50 | 6.42 | 0.253 | 32.5 |
| ASB0412VHA | -A | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.08 | 0.96 | | | | | | |

* Function type is optional.
 * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
 * Noise is measured in anechoic chamber in free air, one meter from intake side.
 * All readings are typical values at rated voltage.
 * Specifications are subject to change without notice.

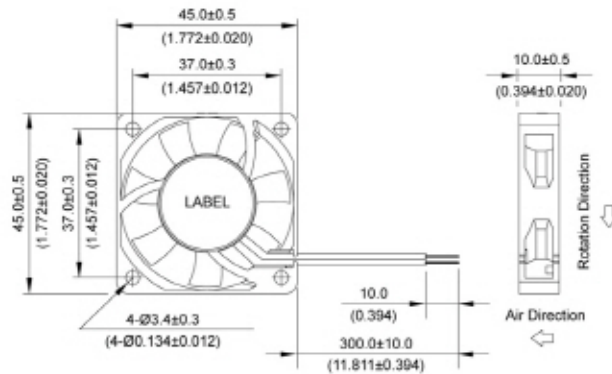
New



- Bearing Type
Sleeve Bearing
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1007 AWG #28 OR Equivalent
Red Wire Positive (+)
Black Wire Negative(-)
- Weight : 15.7g (0.55 oz)
- Rib Type Only

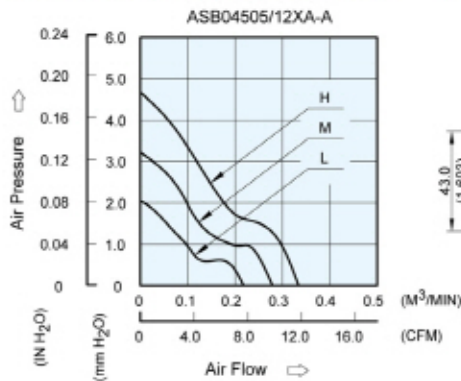
ASB 45 x 45 x 10 MM SERIES

DIMENSIONS DRAWING

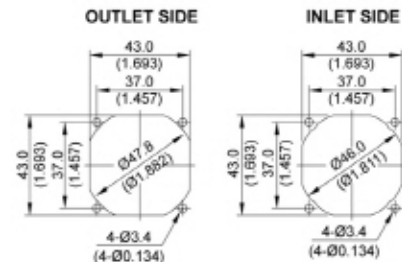


UNIT: mm
(INCH)

P & Q CURVE (AT RATED VOLTAGE)



MOUNTING PANEL CUTOUT



UNIT: mm
(INCH)

| MODEL | | | Rated Voltage | Operating Voltage Range | Rated Current | Rated Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|------|-------------|---------------|-------------------------|---------------|-------------------|--------|----------------------|-------|----------------------|---------------------|-------|
| PART NO. | REV. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ / min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| ASB04505LA | -A | -R00 / -F00 | 5 | 4.0 to 5.5 | 0.11 | 0.55 | 4000 | 0.218 | 7.70 | 2.05 | 0.081 | 24.5 |
| ASB04512LA | -A | -R00 / -F00 | 12 | 9.0 to 13.8 | 0.06 | 0.72 | | | | | | |
| ASB04505MA | -A | -R00 / -F00 | 5 | 4.0 to 5.5 | 0.17 | 0.85 | 5000 | 0.279 | 9.85 | 3.22 | 0.127 | 30.0 |
| ASB04512MA | -A | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.09 | 1.08 | | | | | | |
| ASB04505HA | -A | -R00 / -F00 | 5 | 4.0 to 5.5 | 0.27 | 1.35 | 6000 | 0.334 | 11.80 | 4.67 | 0.184 | 34.5 |
| ASB04512HA | -A | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.12 | 1.44 | | | | | | |

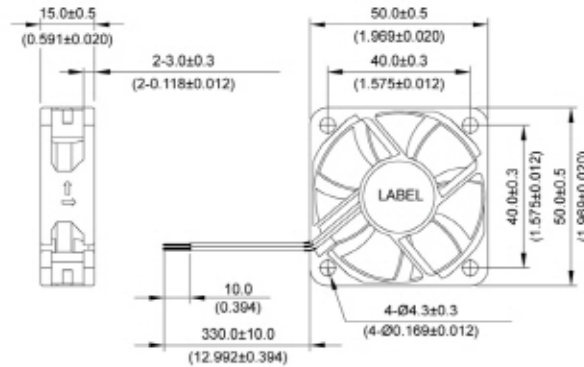
* Function type is optional.
 * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
 * Noise is measured in anechoic chamber in free air, one meter from intake side.
 * All readings are typical values at rated voltage.
 * Specifications are subject to change without notice.

New



AUB 50 x 50 x 15 MM SERIES

■ DIMENSIONS DRAWING

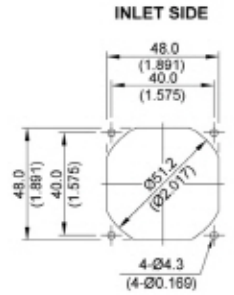
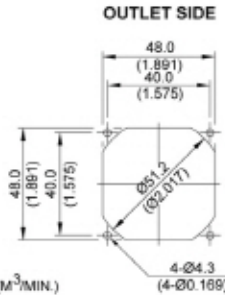
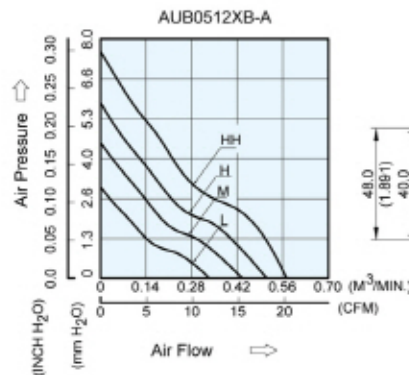


UNIT: mm
(INCH)

- Bearing Type
Superflo Bearing
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1007 AWG #28 OR Equivalent
Red Wire Positive (+)
Black Wire Negative(-)
- Weight : 20g (0.71 oz)
- Rib Type Only

■ P & Q CURVE (AT RATED VOLTAGE)

■ MOUNTING PANEL CUTOUT



UNIT: mm
(INCH)

| MODEL | | | Rated Voltage | Operating Voltage Range | Rated Current | Rated Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|------|-------------|---------------|-------------------------|---------------|-------------------|--------|---------------------|-------|----------------------|---------------------|-------|
| PART NO. | REV. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| AUB0512LB | -A | -R00 / -F00 | 12 | 7.0 to 13.2 | 0.07 | 0.84 | 4300 | 0.330 | 11.67 | 3.03 | 0.119 | 24.0 |
| AUB0512MB | -A | -R00 / -F00 | 12 | 7.0 to 13.2 | 0.10 | 1.20 | 5300 | 0.434 | 15.32 | 4.50 | 0.177 | 30.0 |
| AUB0512HB | -A | -R00 / -F00 | 12 | 7.0 to 13.2 | 0.14 | 1.68 | 6300 | 0.509 | 17.97 | 5.84 | 0.230 | 34.0 |
| AUB0512HBB | -A | -R00 / -F00 | 12 | 7.0 to 13.2 | 0.18 | 2.16 | 7400 | 0.572 | 20.22 | 7.58 | 0.299 | 38.5 |

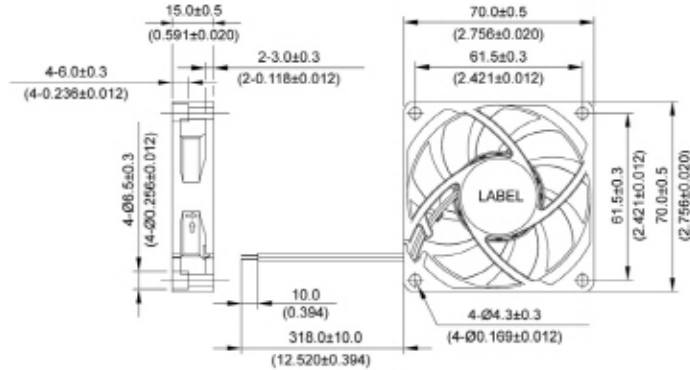
- Function type is optional.
- The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
- Noise is measured in anechoic chamber in free air, one meter from intake side.
- All readings are typical values at rated voltage.
- Specifications are subject to change without notice.

New



AUB 70 x 70 x 15 MM SERIES

■ DIMENSIONS DRAWING

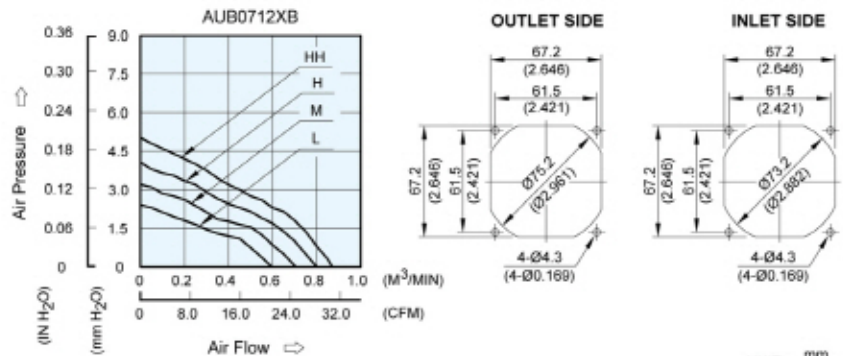


UNIT: mm
(INCH)

- Bearing Type
Superflo Bearing
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive (+)
Black Wire Negative(-)
- Weight : 47g (1.66 oz)
- Rib Type Only

■ P & Q CURVE (AT RATED VOLTAGE)

■ MOUNTING PANEL CUTOUT



UNIT: mm
(INCH)

| MODEL | | Rated Voltage | Operating Voltage Range | Rated Current | Rated Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|-------------|---------------|-------------------------|---------------|-------------------|--------|---------------------|-------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| AUB0712LB | -R00 / -F00 | 12 | 4.0 to 13.2 | 0.07 | 0.84 | 3300 | 0.595 | 21.03 | 2.41 | 0.095 | 29.5 |
| AUB0712MB | -R00 / -F00 | 12 | 4.0 to 13.2 | 0.10 | 1.20 | 3800 | 0.704 | 24.86 | 3.21 | 0.126 | 33.5 |
| AUB0712HB | -R00 / -F00 | 12 | 4.0 to 13.2 | 0.12 | 1.44 | 4300 | 0.799 | 28.22 | 4.07 | 0.160 | 37.5 |
| AUB0712HMB | -R00 / -F00 | 12 | 4.0 to 13.2 | 0.18 | 2.16 | 4800 | 0.870 | 30.69 | 5.02 | 0.198 | 41.0 |

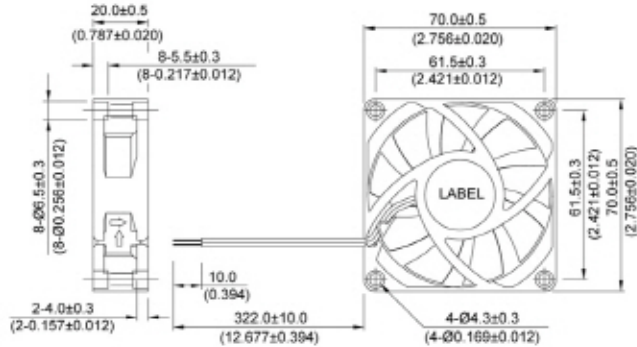
- * Function type is optional.
- * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
- * Noise is measured in anechoic chamber in free air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.

New



AUB 70 x 70 x 20 MM SERIES

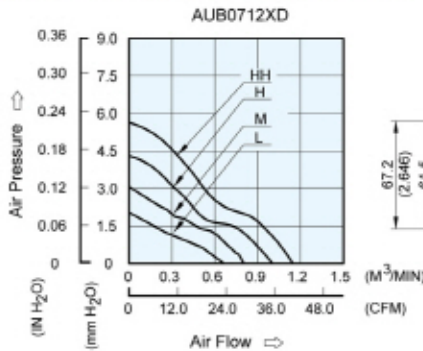
DIMENSIONS DRAWING



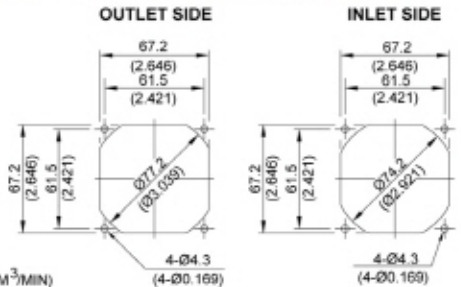
UNIT: mm
(INCH)

- Bearing Type
Superflo Bearing
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive (+)
Black Wire Negative(-)
- Weight : 68g (2.40 oz)
- Rib Type Only

P & Q CURVE (AT RATED VOLTAGE)



MOUNTING PANEL CUTOUT



UNIT: mm
(INCH)

| MODEL | | Rated Voltage | Operating Voltage Range | Rated Current | Rated Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|-------------|---------------|-------------------------|---------------|-------------------|--------|---------------------|-------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| AUB0712LD | -R00 / -F00 | 12 | 5.0 to 13.2 | 0.06 | 0.72 | 2600 | 0.682 | 24.08 | 2.01 | 0.079 | 27.0 |
| AUB0712MD | -R00 / -F00 | 12 | 5.0 to 13.2 | 0.11 | 1.32 | 3200 | 0.826 | 29.16 | 2.99 | 0.117 | 32.0 |
| AUB0712HD | -R00 / -F00 | 12 | 5.0 to 13.2 | 0.17 | 2.04 | 3800 | 1.003 | 35.42 | 4.30 | 0.169 | 36.5 |
| AUB0712HHD | -R00 / -F00 | 12 | 5.0 to 12.6 | 0.22 | 2.64 | 4400 | 1.145 | 40.43 | 5.64 | 0.222 | 40.5 |

- * Function type is optional.
- * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
- * Noise is measured in anechoic chamber in free air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.

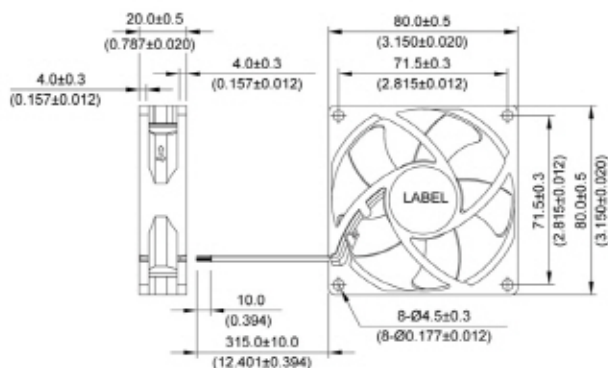
New



- Bearing Type
Superflo Bearing
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive (+)
Black Wire Negative(-)
- Weight : 73g (2.57 oz)

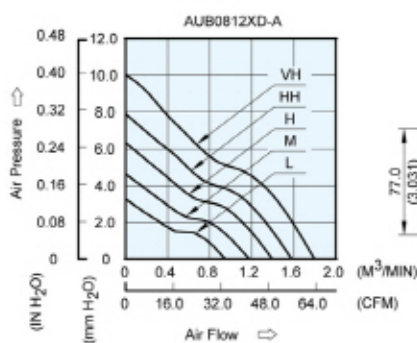
AUB 80 x 80 x 20 MM SERIES

■ DIMENSIONS DRAWING

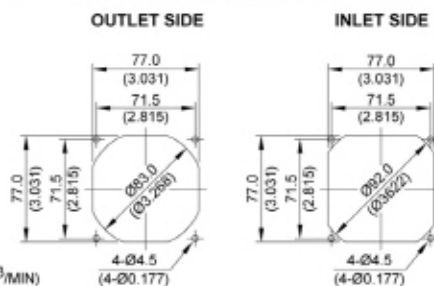


UNIT: mm
(INCH)

■ P & Q CURVE (AT RATED VOLTAGE)



■ MOUNTING PANEL CUTOUT



UNIT: mm
(INCH)

| MODEL | | | Rated Voltage | Operating Voltage Range | Rated Current | Rated Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|------|-------------|---------------|-------------------------|---------------|-------------------|--------|---------------------|-------|----------------------|---------------------|-------|
| PART NO. | REV. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| AUB0812LD | -A | -R00 / -F00 | 12 | 5.0 to 13.8 | 0.12 | 1.44 | 3000 | 0.949 | 33.52 | 3.27 | 0.129 | 30.5 |
| AUB0812MD | -A | -R00 / -F00 | 12 | 5.0 to 13.8 | 0.16 | 1.92 | 3600 | 1.180 | 41.68 | 4.63 | 0.182 | 36.0 |
| AUB0812HD | -A | -R00 / -F00 | 12 | 5.0 to 13.8 | 0.22 | 2.64 | 4200 | 1.397 | 49.34 | 6.33 | 0.249 | 40.0 |
| AUB0812HHD | -A | -R00 / -F00 | 12 | 5.0 to 13.8 | 0.32 | 3.84 | 4800 | 1.582 | 55.87 | 7.90 | 0.311 | 44.0 |
| AUB0812VHD | -A | -R00 / -F00 | 12 | 5.0 to 12.6 | 0.42 | 5.04 | 5400 | 1.799 | 63.54 | 10.02 | 0.394 | 47.5 |

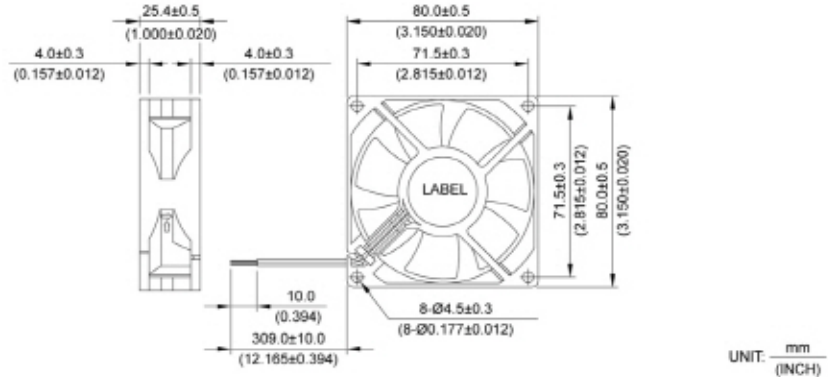
- * Function type is optional.
- * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
- * Noise is measured in anechoic chamber in free air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.

New



AUB 80 x 80 x 25.4 MM SERIES

■ DIMENSIONS DRAWING

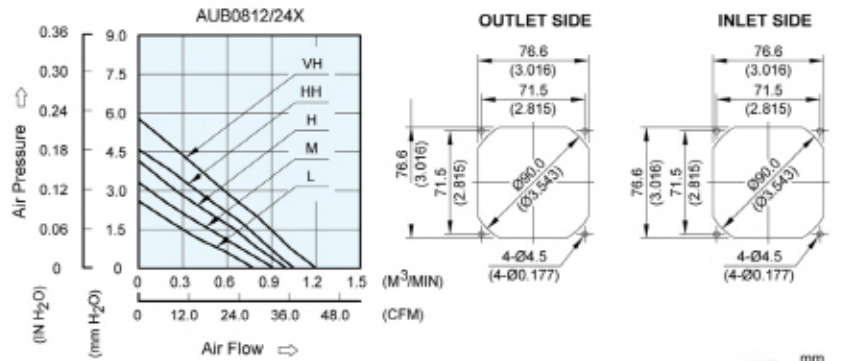


UNIT: mm
(INCH)

- Bearing Type
Superflo Bearing
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive (+)
Black Wire Negative(-)
- Weight : 88g (3.10 oz)

■ P & Q CURVE (AT RATED VOLTAGE)

■ MOUNTING PANEL CUTOUT



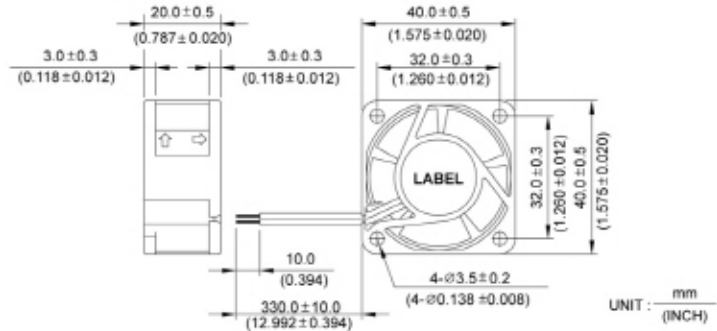
UNIT: mm
(INCH)

| MODEL | | Rated Voltage | Operating Voltage Range | Rated Current | Rated Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|-----------|-------------|---------------|-------------------------|---------------|-------------------|--------|---------------------|-------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| AUB0812L | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.09 | 1.08 | 2400 | 0.790 | 27.90 | 2.59 | 0.102 | 25.0 |
| AUB0824L | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.05 | 1.20 | | | | | | |
| AUB0812M | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.12 | 1.44 | 2700 | 0.890 | 31.43 | 3.28 | 0.129 | 28.0 |
| AUB0824M | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.06 | 1.44 | | | | | | |
| AUB0812H | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.17 | 2.04 | 3000 | 1.000 | 35.31 | 4.04 | 0.159 | 31.0 |
| AUB0824H | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.07 | 1.68 | | | | | | |
| AUB0812HH | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.21 | 2.52 | 3250 | 1.060 | 37.43 | 4.59 | 0.181 | 34.0 |
| AUB0824HH | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.10 | 2.40 | | | | | | |
| AUB0812VH | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.22 | 2.64 | 3600 | 1.190 | 42.02 | 5.51 | 0.217 | 38.0 |
| AUB0824VH | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.11 | 2.64 | | | | | | |

- * Function type is optional.
- * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
- * Noise is measured in anechoic chamber in free air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.

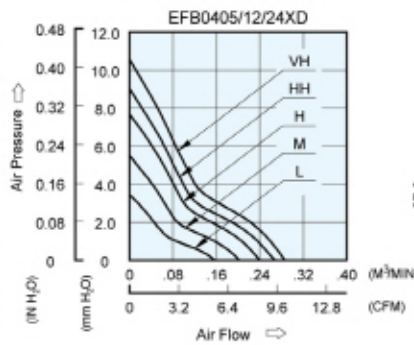
EFB 40 x 40 x 20 MM SERIES

■ DIMENSIONS DRAWING

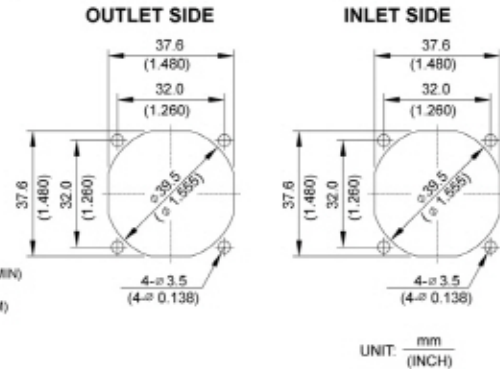


- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive (+)
Black Wire Negative (-)
- Weight : 33g (1.16 oz)
- Rib Type Only

■ P & Q CURVE (AT RATED VOLTAGE)



■ MOUNTING PANEL CUTOUT



| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|-------------|---------------|-------------------------|---------------|-------------|--------|---------------------|-------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| EFB0405LD | -R00 / -F00 | 5 | 4.5 to 5.5 | 0.10 | 0.50 | 5000 | 0.157 | 5.54 | 3.45 | 0.136 | 22.0 |
| EFB0412LD | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.05 | 0.60 | | | | | | |
| EFB0424LD | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.04 | 0.96 | | | | | | |
| EFB0405MD | -R00 / -F00 | 5 | 4.5 to 5.5 | 0.15 | 0.75 | 6300 | 0.203 | 7.17 | 5.54 | 0.218 | 24.0 |
| EFB0412MD | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.06 | 0.72 | | | | | | |
| EFB0424MD | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.05 | 1.20 | | | | | | |
| EFB0405HD | -R00 / -F00 | 5 | 4.5 to 5.5 | 0.25 | 1.25 | 7600 | 0.242 | 8.54 | 7.69 | 0.303 | 28.5 |
| EFB0412HD | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.08 | 0.96 | | | | | | |
| EFB0424HD | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.06 | 1.44 | | | | | | |
| EFB0405HHD | -R00 / -F00 | 5 | 4.5 to 5.5 | 0.30 | 1.50 | 8200 | 0.267 | 9.43 | 9.00 | 0.354 | 30.5 |
| EFB0412HHD | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.10 | 1.20 | | | | | | |
| EFB0424HHD | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.07 | 1.68 | | | | | | |
| EFB0405VHD | -R00 / -F00 | 5 | 4.5 to 5.5 | 0.32 | 1.60 | 9000 | 0.286 | 10.10 | 10.57 | 0.416 | 32.5 |
| EFB0412VHD | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.12 | 1.44 | | | | | | |
| EFB0424VHD | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.09 | 2.16 | | | | | | |

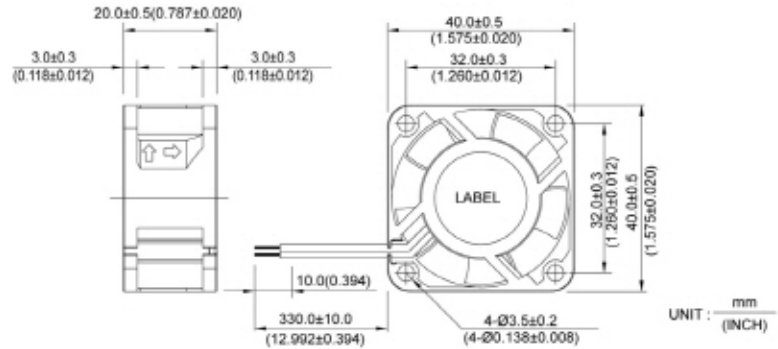
* Function type is optional.
 * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
 * Noise is measured in anechoic chamber in free air, one meter from intake side.
 * All readings are typical values at rated voltage.
 * Specifications are subject to change without notice.

New



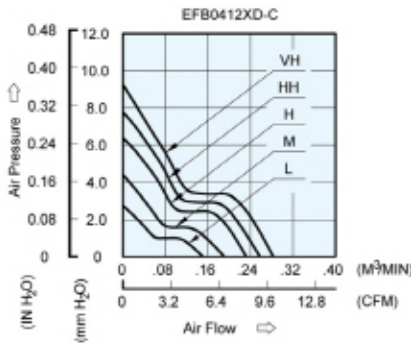
EFB 40 x 40 x 20 MM SERIES

DIMENSIONS DRAWING

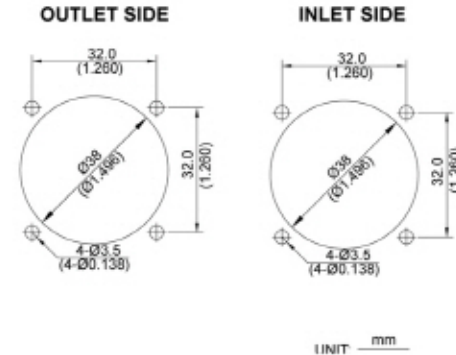


- Bearing Type
Superflo Bearing
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1061 AWG #24 OR Equivalent
Red Wire Positive (+)
Black Wire Negative(-)
- Weight : 33g (1.16 oz)
- Flange Type Only

P & Q CURVE (AT RATED VOLTAGE)



MOUNTING PANEL CUTOUT

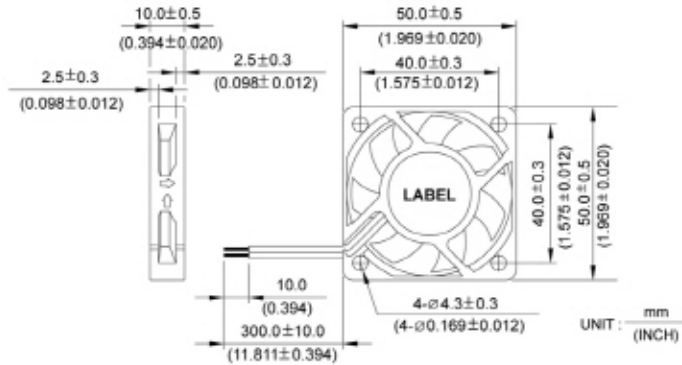


| MODEL | | | Rated Voltage | Operating Voltage Range | Rated Current | Rated Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|------|-------------|---------------|-------------------------|---------------|-------------------|--------|---------------------|------|----------------------|---------------------|-------|
| PART NO. | REV. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| EFB0412LD | -C | -R00 / -F00 | 12 | 7.0 to 13.2 | 0.06 | 0.72 | 5000 | 0.151 | 5.32 | 2.76 | 0.109 | 22.5 |
| EFB0412MD | -C | -R00 / -F00 | 12 | 7.0 to 13.2 | 0.07 | 0.84 | 6300 | 0.191 | 6.74 | 4.42 | 0.174 | 26.0 |
| EFB0412HD | -C | -R00 / -F00 | 12 | 7.0 to 13.2 | 0.11 | 1.32 | 7600 | 0.232 | 8.21 | 6.38 | 0.251 | 31.0 |
| EFB0412HHD | -C | -R00 / -F00 | 12 | 7.0 to 13.2 | 0.12 | 1.44 | 8200 | 0.258 | 9.12 | 7.78 | 0.306 | 33.0 |
| EFB0412VHD | -C | -R00 / -F00 | 12 | 7.0 to 13.2 | 0.14 | 1.68 | 9000 | 0.283 | 9.99 | 9.26 | 0.364 | 35.0 |

- Function type is optional.
- The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
- Noise is measured in anechoic chamber in free air, one meter from intake side.
- All readings are typical values at rated voltage.
- Specifications are subject to change without notice.

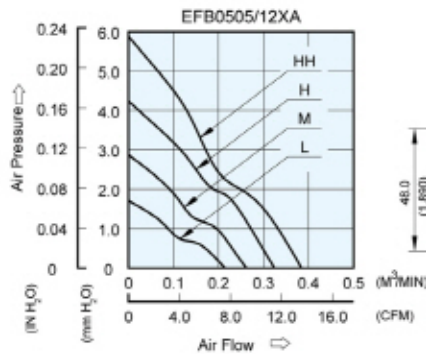
EFB 50 x 50 x 10 MM SERIES

DIMENSIONS DRAWING

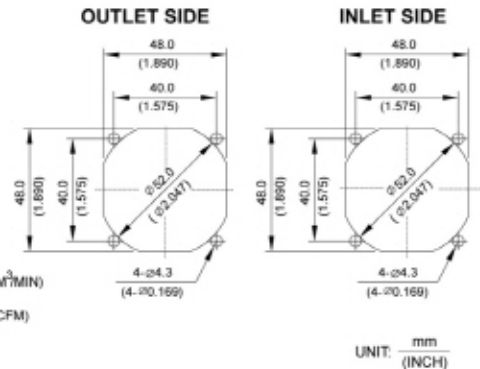


- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 2468 AWG #28 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 25g (0.88 oz)
- Rib Type Only

P & Q CURVE (AT RATED VOLTAGE)



MOUNTING PANEL CUTOUT

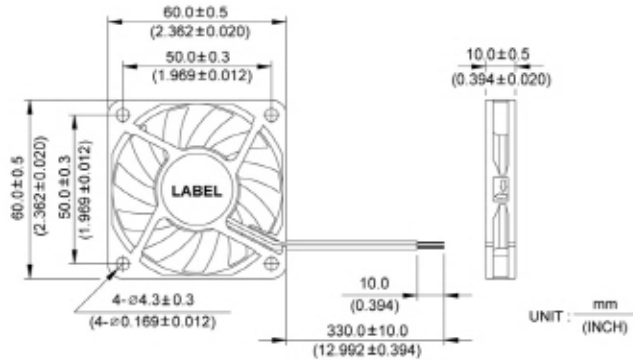


| MODEL | | Rated Voltage | Operating Voltage Range | Rated Current | Rated Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|-------------|---------------|-------------------------|---------------|-------------------|--------|---------------------|-------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDCz | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| EFB0505LA | -R00 / -F00 | 5 | 4.5 to 5.5 | 0.07 | 0.35 | 3500 | 0.212 | 7.50 | 1.72 | 0.068 | 18.0 |
| EFB0512LA | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.05 | 0.60 | | | | | | |
| EFB0505MA | -R00 / -F00 | 5 | 4.5 to 5.5 | 0.13 | 0.65 | 4500 | 0.261 | 9.21 | 2.87 | 0.113 | 25.0 |
| EFB0512MA | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.08 | 0.96 | | | | | | |
| EFB0505HA | -R00 / -F00 | 5 | 4.5 to 5.5 | 0.20 | 1.00 | 5500 | 0.323 | 11.40 | 4.24 | 0.167 | 30.0 |
| EFB0512HA | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.10 | 1.20 | | | | | | |
| EFB0512HHA | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.15 | 1.80 | 6500 | 0.384 | 13.57 | 5.89 | 0.232 | 35.0 |

* Function type is optional.
 * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
 * Noise is measured in anechoic chamber in free air, one meter from intake side.
 * All readings are typical values at rated voltage.
 * Specifications are subject to change without notice.

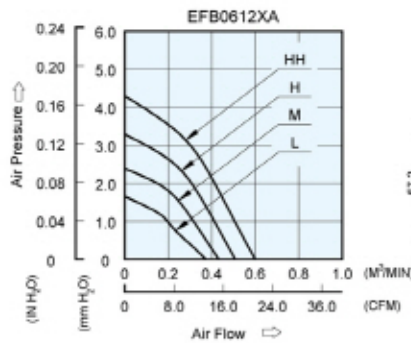
EFB 60 x 60 x 10 MM SERIES

■ DIMENSIONS DRAWING

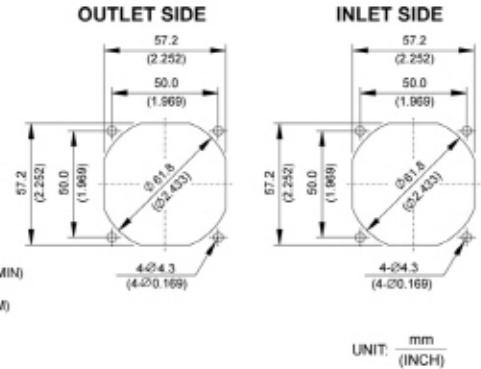


- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 2468 AWG #28 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 28g (0.99 oz)
- Rib Type Only

■ P & Q CURVE (AT RATED VOLTAGE)



■ MOUNTING PANEL CUTOUT

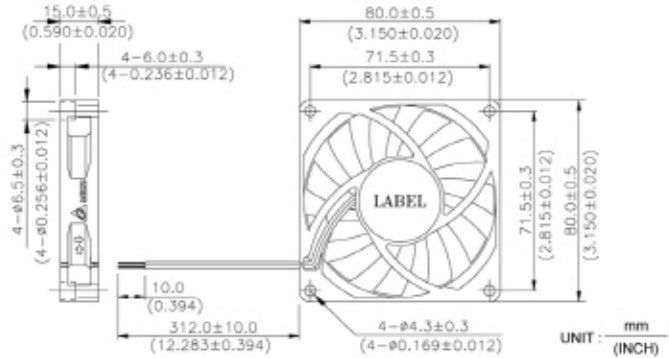


| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|-------------|---------------|-------------------------|---------------|-------------|--------|---------------------|-------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| EFB0612LA | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.07 | 0.84 | 3000 | 0.380 | 13.42 | 1.65 | 0.065 | 24.5 |
| EFB0612MA | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.08 | 0.96 | 3600 | 0.440 | 15.54 | 2.40 | 0.094 | 29.0 |
| EFB0612HA | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.12 | 1.44 | 4200 | 0.510 | 18.01 | 3.35 | 0.132 | 33.0 |
| EFB0612HHA | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.18 | 2.16 | 4800 | 0.600 | 21.19 | 4.30 | 0.169 | 36.5 |

- * Function type is optional.
- * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
- * Noise is measured in anechoic chamber in free air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.

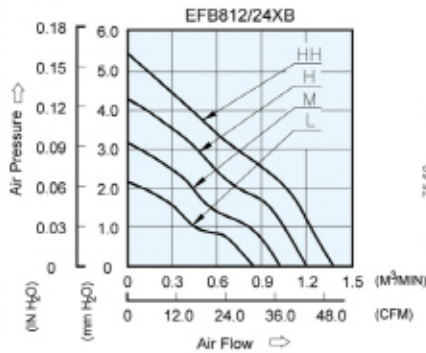
EFB 80 x 80 x 15 MM SERIES

DIMENSIONS DRAWING

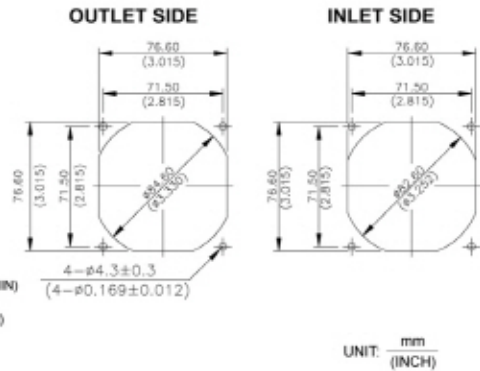


- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 67g (2.36 oz)
- Rib Type Only

P & Q CURVE (AT RATED VOLTAGE)



MOUNTING PANEL CUTOUT

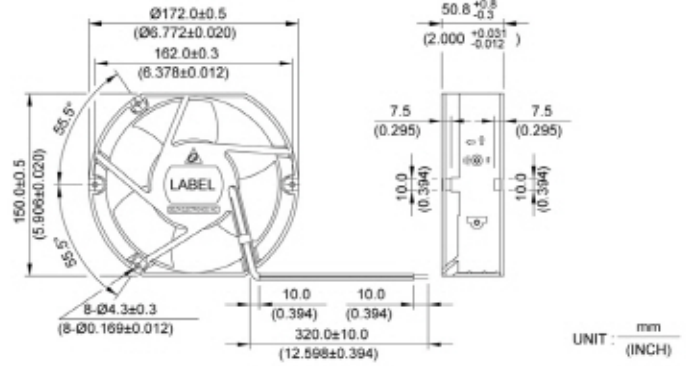


| MODEL | | Rated Voltage | Operating Voltage Range | Rated Current | Rated Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|-------------|---------------|-------------------------|---------------|-------------------|--------|---------------------|-------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDCz | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| EFB0812LB | -R00 / -F00 | 12 | 5.0 to 13.8 | 0.10 | 1.20 | 2300 | 0.839 | 29.62 | 1.71 | 0.067 | 30.0 |
| EFB0824LB | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.08 | 1.92 | | | | | | |
| EFB0812MB | -R00 / -F00 | 12 | 5.0 to 13.8 | 0.13 | 1.56 | 2800 | 1.020 | 36.02 | 2.51 | 0.099 | 33.0 |
| EFB0824MB | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.11 | 2.64 | | | | | | |
| EFB0812HB | -R00 / -F00 | 12 | 5.0 to 13.2 | 0.21 | 2.52 | 3300 | 1.200 | 42.37 | 3.42 | 0.134 | 37.0 |
| EFB0824HB | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.14 | 3.36 | | | | | | |
| EFB0812HHB | -R00 / -F00 | 12 | 5.0 to 13.2 | 0.33 | 3.96 | 3800 | 1.382 | 48.80 | 4.35 | 0.171 | 41.0 |
| EFB0824HHB | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.20 | 4.80 | | | | | | |

* Function type is optional.
 * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
 * Noise is measured in anechoic chamber in free air, one meter from intake side.
 * All readings are typical values at rated voltage.
 * Specifications are subject to change without notice.
 * Both of the ball bearing and the 1 ball + 1 Sleeve type are available.

EFB 172 x 150 x 50.8 MM SERIES

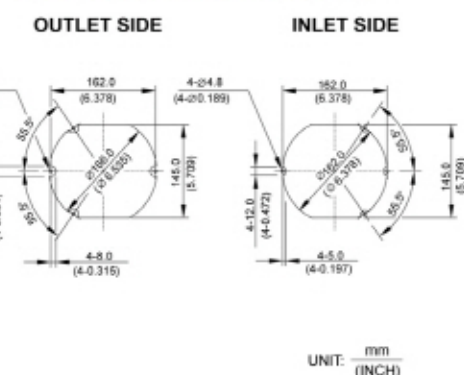
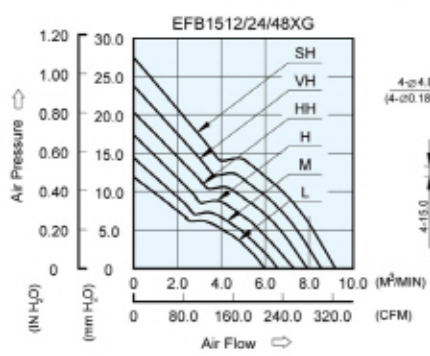
DIMENSIONS DRAWING



- Bearing Type
Ball Bearings
- Material
Impeller : Plastic (UL 94V-0)
Frame : Die-cast Aluminum
- Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive (+)
Black Wire Negative (-)
- Weight : 840g (29.62 oz)

P & Q CURVE (AT RATED VOLTAGE)

MOUNTING PANEL CUTOUT

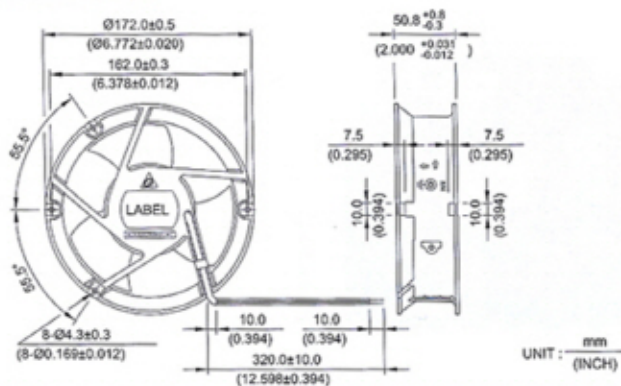


| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|-------------|---------------|-------------------------|---------------|-------------|--------|---------------------|--------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| EFB1512LG | -R00 / -F00 | 12 | 8.0 to 14.0 | 0.79 | 9.48 | 2800 | 5.950 | 210.12 | 11.90 | 0.469 | 50.0 |
| EFB1524LG | -R00 / -F00 | 24 | 12.0 to 28.0 | 0.39 | 9.36 | | | | | | |
| EFB1548LG | -R00 / -F00 | 48 | 24.0 to 60.0 | 0.19 | 9.12 | | | | | | |
| EFB1512MG | -R00 / -F00 | 12 | 8.0 to 14.0 | 0.99 | 11.88 | 3050 | 6.520 | 230.25 | 14.50 | 0.571 | 52.0 |
| EFB1524MG | -R00 / -F00 | 24 | 12.0 to 28.0 | 0.47 | 11.28 | | | | | | |
| EFB1548MG | -R00 / -F00 | 48 | 24.0 to 60.0 | 0.25 | 12.00 | | | | | | |
| EFB1512HG | -R00 / -F00 | 12 | 8.0 to 14.0 | 1.35 | 16.20 | 3350 | 7.130 | 251.79 | 17.49 | 0.689 | 55.0 |
| EFB1524HG | -R00 / -F00 | 24 | 12.0 to 28.0 | 0.56 | 13.44 | | | | | | |
| EFB1548HG | -R00 / -F00 | 48 | 24.0 to 60.0 | 0.31 | 14.88 | | | | | | |
| EFB1512HHG | -R00 / -F00 | 12 | 8.0 to 14.0 | 1.79 | 21.48 | 3700 | 7.920 | 279.69 | 20.30 | 0.800 | 57.5 |
| EFB1524HHG | -R00 / -F00 | 24 | 12.0 to 28.0 | 0.77 | 18.48 | | | | | | |
| EFB1548HHG | -R00 / -F00 | 48 | 24.0 to 60.0 | 0.38 | 18.24 | | | | | | |
| EFB1524VHG | -R00 / -F00 | 24 | 12.0 to 28.0 | 0.97 | 23.28 | 4000 | 8.560 | 302.29 | 23.80 | 0.937 | 60.0 |
| EFB1548VHG | -R00 / -F00 | 48 | 24.0 to 60.0 | 0.49 | 23.52 | | | | | | |
| EFB1524SHG | -R00 / -F00 | 24 | 12.0 to 28.0 | 1.17 | 28.08 | 4300 | 9.203 | 325.00 | 27.50 | 1.083 | 63.0 |

* Function type is optional.
 * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
 * Noise is measured in anechoic chamber in free air, one meter from intake side.
 * All readings are typical values at rated voltage.
 * Specifications are subject to change without notice.

EFB $\phi 172 \times 50.8$ MM SERIES

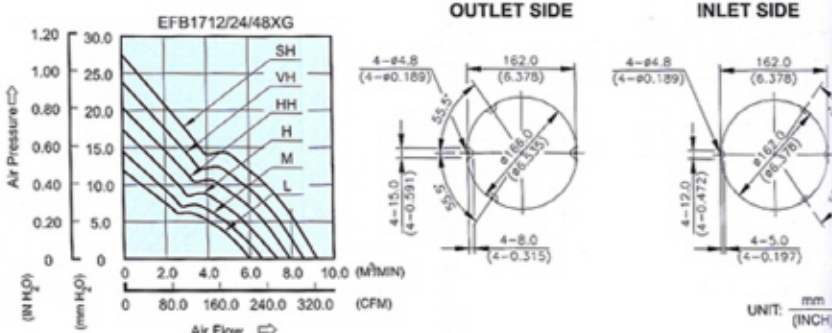
DIMENSIONS DRAWING



- Bearing Type: Ball Bearings
- Material: Impeller : Plastic (UL 94V-0)
Frame: Die-cast Aluminum
- Lead Wires : UL 1007 AWG #24 OR Equivalent
Red Wire Positive (+)
Black Wire Negative (-)
- Weight : 840g (29.62 oz)

P & Q CURVE (AT RATED VOLTAGE)

MOUNTING PANEL CUTOUT

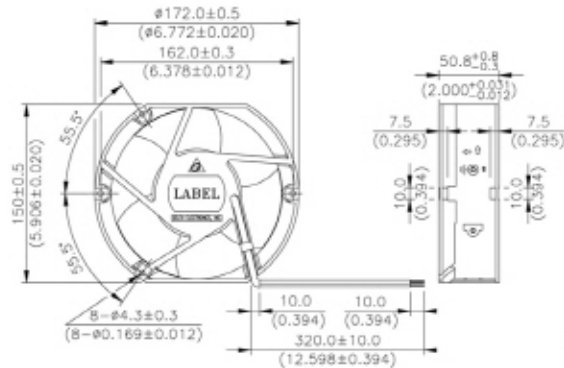


| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|-------------|---------------|-------------------------|---------------|-------------|--------|---------------------|--------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| EFB1712LG | -R00 / -F00 | 12 | 8.0 to 14.0 | 0.79 | 9.48 | 2800 | 5.950 | 210.12 | 11.90 | 0.469 | 48.0 |
| EFB1724LG | -R00 / -F00 | 24 | 12.0 to 28.0 | 0.39 | 9.36 | | | | | | |
| EFB1748LG | -R00 / -F00 | 48 | 24.0 to 60.0 | 0.19 | 9.12 | | | | | | |
| EFB1712MG | -R00 / -F00 | 12 | 8.0 to 14.0 | 0.99 | 11.88 | 3050 | 6.520 | 230.25 | 14.50 | 0.571 | 50.0 |
| EFB1724MG | -R00 / -F00 | 24 | 12.0 to 28.0 | 0.47 | 11.28 | | | | | | |
| EFB1748MG | -R00 / -F00 | 48 | 24.0 to 60.0 | 0.25 | 12.00 | | | | | | |
| EFB1712HG | -R00 / -F00 | 12 | 8.0 to 14.0 | 1.35 | 16.20 | 3350 | 7.130 | 251.79 | 17.49 | 0.689 | 53.0 |
| EFB1724HG | -R00 / -F00 | 24 | 12.0 to 28.0 | 0.56 | 13.44 | | | | | | |
| EFB1748HG | -R00 / -F00 | 48 | 24.0 to 60.0 | 0.31 | 14.88 | | | | | | |
| EFB1712HHG | -R00 / -F00 | 12 | 8.0 to 14.0 | 1.79 | 21.48 | 3700 | 7.920 | 279.69 | 20.30 | 0.800 | 55.0 |
| EFB1724HHG | -R00 / -F00 | 24 | 12.0 to 28.0 | 0.77 | 18.48 | | | | | | |
| EFB1748HHG | -R00 / -F00 | 48 | 24.0 to 60.0 | 0.38 | 18.24 | | | | | | |
| EFB1724VHG | -R00 / -F00 | 24 | 12.0 to 28.0 | 0.97 | 23.28 | 4000 | 8.560 | 302.29 | 23.80 | 0.937 | 57.0 |
| EFB1748VHG | -R00 / -F00 | 48 | 24.0 to 60.0 | 0.49 | 23.52 | | | | | | |
| EFB1724SHG | -R00 / -F00 | 24 | 24.0 to 60.0 | 1.17 | 28.08 | 4300 | 9.203 | 325.00 | 27.50 | 1.083 | 59.0 |

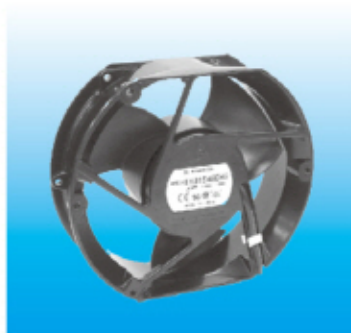
* Function type is optional.
 * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
 * Noise is measured in anechoic chamber in free air, one meter from intake side.
 * All readings are typical values at rated voltage.
 * Specifications are subject to change without notice.

EHB 172 x 150 x 50.8 MM SERIES

DIMENSIONS DRAWING

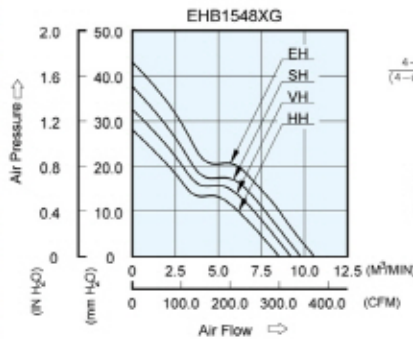


UNIT: $\frac{\text{mm}}{\text{(INCH)}}$



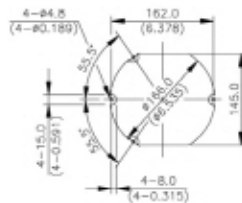
- Bearing Type
Ball Bearings
- Material
Impeller : Plastic (UL 94V-0)
Frame : Die-Cast Aluminum
- Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 800g (28.22 oz)

P & Q CURVE (AT RATED VOLTAGE)

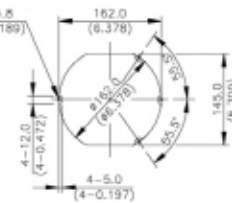


MOUNTING PANEL CUTOUT

OUTLET SIDE



INLET SIDE



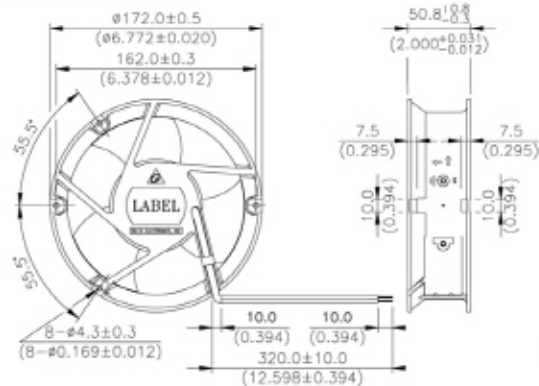
UNIT: $\frac{\text{mm}}{\text{(INCH)}}$

| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|-------------|---------------|-------------------------|---------------|-------------|--------|---------------------|--------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| EHB1548HHG | -R00 / -F00 | 48 | 32.0 to 80.0 | 0.61 | 29.28 | 4300 | 8.565 | 302.47 | 28.33 | 1.115 | 62.5 |
| EHB1548VHG | -R00 / -F00 | 48 | 32.0 to 80.0 | 0.72 | 34.56 | 4600 | 9.235 | 326.13 | 32.87 | 1.294 | 64.5 |
| EHB1548SHG | -R00 / -F00 | 48 | 32.0 to 80.0 | 0.88 | 42.24 | 4900 | 9.828 | 347.08 | 37.89 | 1.492 | 66.5 |
| EHB1548EHG | -R00 / -F00 | 48 | 32.0 to 80.0 | 1.20 | 57.60 | 5200 | 10.608 | 374.62 | 43.27 | 1.703 | 68.5 |

- * Function type is optional.
- * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
- * Noise is measured in anechoic chamber in free air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.

EHB $\phi 172 \times 50.8$ MM SERIES

■ DIMENSIONS DRAWING

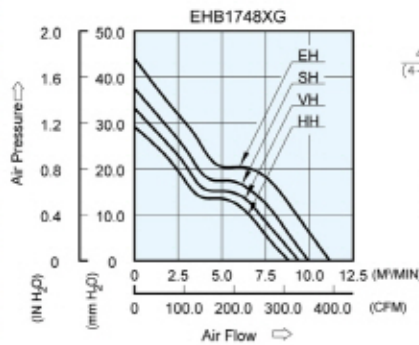


UNIT: mm (INCH)

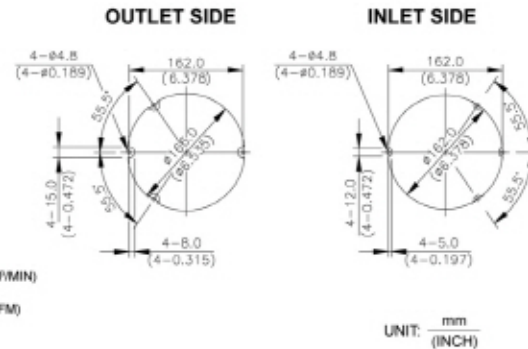


- Bearing Type
Ball Bearings
- Material
Impeller : Plastic (UL 94V-0)
Frame : Die-Cast Aluminum
- Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 820g (28.92 oz)

■ P & Q CURVE (AT RATED VOLTAGE)



■ MOUNTING PANEL CUTOUT



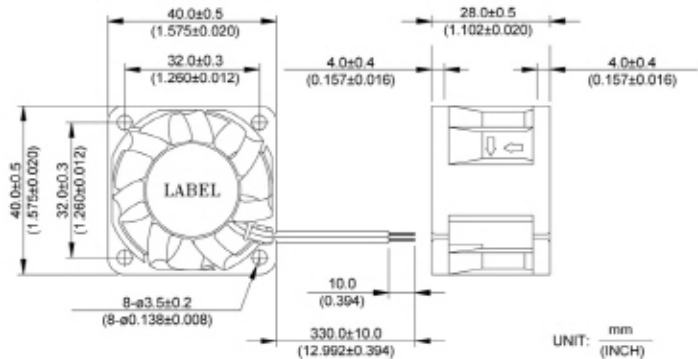
UNIT: mm (INCH)

| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|-------------|---------------|-------------------------|---------------|-------------|--------|---------------------|--------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| EHB1748HHG | -R00 / -F00 | 48 | 32.0 to 80.0 | 0.61 | 29.28 | 4300 | 8.822 | 311.55 | 29.56 | 1.164 | 60.0 |
| EHB1748VHG | -R00 / -F00 | 48 | 32.0 to 80.0 | 0.72 | 34.56 | 4600 | 9.382 | 331.33 | 33.75 | 1.329 | 62.0 |
| EHB1748SHG | -R00 / -F00 | 48 | 32.0 to 80.0 | 0.88 | 42.24 | 4900 | 9.945 | 351.21 | 38.11 | 1.500 | 64.0 |
| EHB1748EHG | -R00 / -F00 | 48 | 32.0 to 80.0 | 1.20 | 57.60 | 5200 | 11.163 | 394.22 | 44.73 | 1.761 | 66.0 |

- * Function type is optional.
- * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
- * Noise is measured in anechoic chamber in free air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.

FFB 40 x 40 x 28 MM SERIES

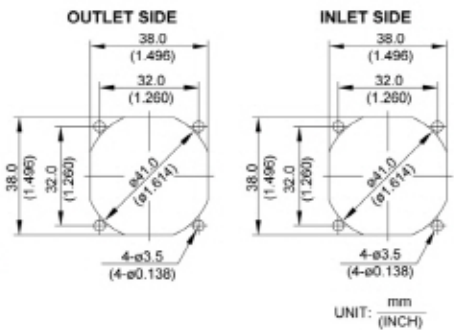
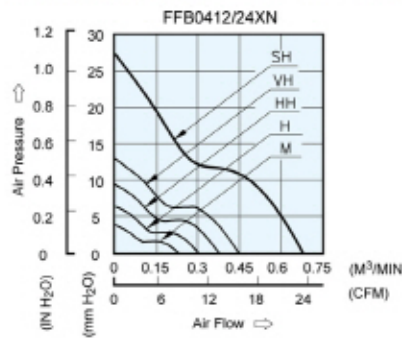
DIMENSIONS DRAWING



- Bearing Type: Ball Bearings
- Material: Impeller & Pillow : Plastic (UL 94V-0)
- Lead Wires : UL 1007 AWG #24 OR Equivalent Red Wire Positive(+) Black Wire Negative(-)
- Weight : 32g (1.13 oz)

P & Q CURVE (AT RATED VOLTAGE)

MOUNTING PANEL CUTOUT

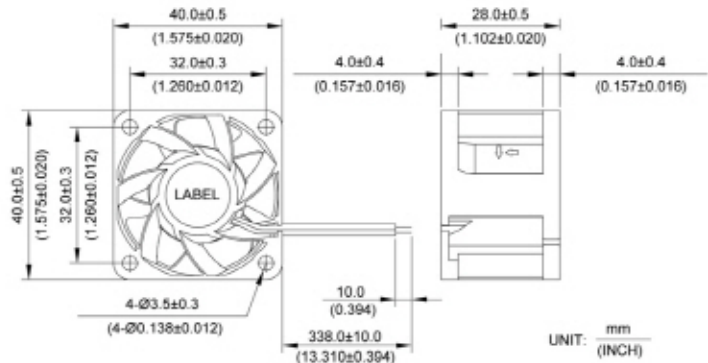


| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|-----------|---------------|-------------------------|---------------|-------------|--------|---------------------|-------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| FFB0412MN | -R00/-F00 | 12 | 4.5 to 13.8 | 0.05 | 0.60 | 5000 | 0.228 | 8.05 | 3.77 | 0.148 | 30.0 |
| FFB0424MN | -R00/-F00 | 24 | 14.0 to 27.6 | 0.04 | 0.96 | | | | | | |
| FFB0412HN | -R00/-F00 | 12 | 4.5 to 13.8 | 0.07 | 0.84 | 6500 | 0.300 | 10.59 | 6.30 | 0.248 | 36.0 |
| FFB0424HN | -R00/-F00 | 24 | 14.0 to 27.6 | 0.06 | 1.44 | | | | | | |
| FFB0412HHN | -R00/-F00 | 12 | 4.5 to 13.8 | 0.11 | 1.32 | 8000 | 0.375 | 13.24 | 9.39 | 0.370 | 41.0 |
| FFB0424HHN | -R00/-F00 | 24 | 14.0 to 27.6 | 0.08 | 1.92 | | | | | | |
| FFB0412VHN | -R00/-F00 | 12 | 4.5 to 13.8 | 0.16 | 1.92 | 9500 | 0.447 | 15.79 | 12.94 | 0.509 | 45.0 |
| FFB0424VHN | -R00/-F00 | 24 | 14.0 to 26.4 | 0.10 | 2.40 | | | | | | |
| FFB0412SHN | -R00/-F00 | 12 | 4.5 to 13.8 | 0.50 | 6.00 | 13000 | 0.680 | 24.00 | 27.30 | 1.075 | 54.5 |

* Function type is optional.
 * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
 * Noise is measured in anechoic chamber in free air, one meter from intake side.
 * All readings are typical values at rated voltage.
 * Specifications are subject to change without notice.

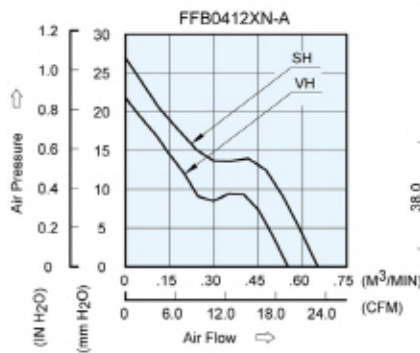
FFB 40 x 40 x 28 MM SERIES

■ DIMENSIONS DRAWING

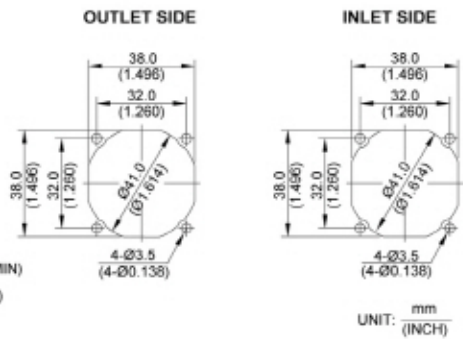


- Bearing Type
Ball Bearings
- Material
Impeller & Pillow : Plastic (UL 94V-0)
- Lead Wires :
UL 1061 AWG #24 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 35g (1.23 oz)

■ P & Q CURVE (AT RATED VOLTAGE)



■ MOUNTING PANEL CUTOUT



| MODEL | | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|------|-----------|---------------|-------------------------|---------------|-------------|--------|---------------------|-------|----------------------|---------------------|-------|
| PART NO. | REV. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| FFB0412VHN | -A | -R00/-F00 | 12 | 4.0 to 12.6 | 0.30 | 3.60 | 11000 | 0.543 | 19.16 | 18.99 | 0.748 | 48.5 |
| FFB0412SHN | -A | -R00/-F00 | 12 | 4.0 to 12.6 | 0.40 | 4.80 | 13000 | 0.653 | 23.05 | 27.07 | 1.066 | 52.5 |

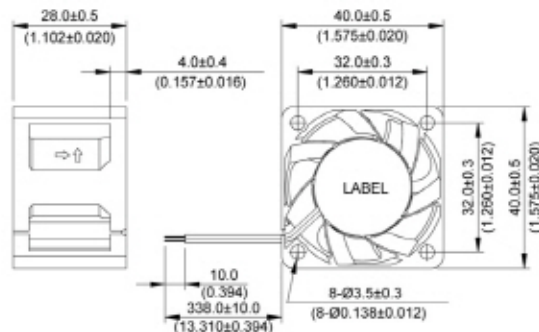
- * Function type is optional.
- * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
- * Noise is measured in anechoic chamber in free air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.

New



FFB 40 x 40 x 28 MM SERIES

■ DIMENSIONS DRAWING

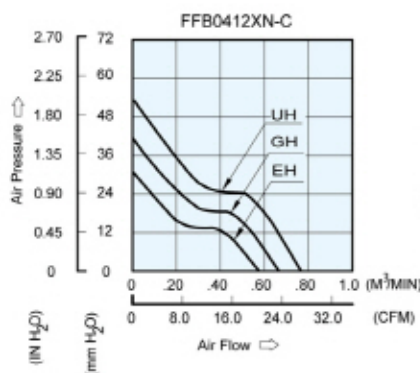


UNIT : $\frac{\text{mm}}{\text{(INCH)}}$

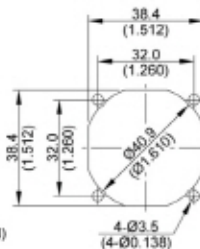
- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1061 AWG #26 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 47g (1.66 oz)

■ P & Q CURVE (AT RATED VOLTAGE)

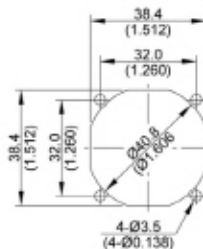
■ MOUNTING PANEL CUTOUT



OUTLET SIDE



INLET SIDE



UNIT : $\frac{\text{mm}}{\text{(INCH)}}$

| MODEL | | | Rated Voltage | Operating Voltage Range | Rated Current | Rated Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|------|-------------|---------------|-------------------------|---------------|-------------------|--------|---------------------|-------|----------------------|---------------------|-------|
| PART NO. | REV. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| FFB0412EHN | -C | -R00 / -F00 | 12 | 5.5 to 13.2 | 0.33 | 3.96 | 14500 | 0.576 | 20.34 | 31.28 | 1.232 | 53.0 |
| FFB0412GHN | -C | -R00 / -F00 | 12 | 5.5 to 13.2 | 0.50 | 6.00 | 16500 | 0.662 | 23.39 | 41.60 | 1.638 | 56.0 |
| FFB0412UHN | -C | -R00 / -F00 | 12 | 5.5 to 13.2 | 0.65 | 7.80 | 18500 | 0.766 | 27.05 | 53.63 | 2.111 | 58.5 |

- * Function type is optional.
- * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
- * Noise is measured in anechoic chamber in free air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.

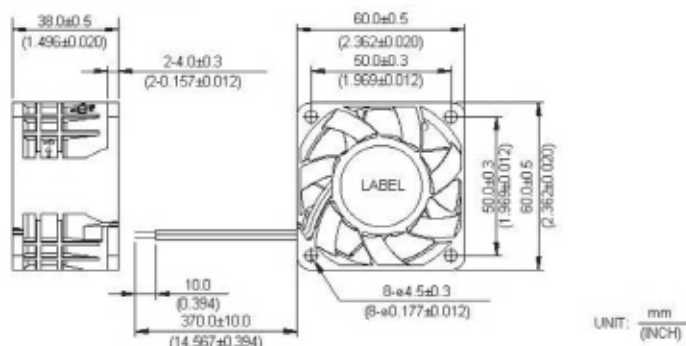
New



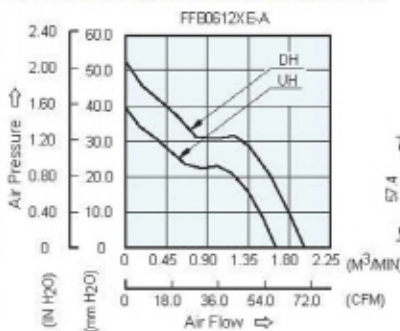
- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1061 AWG #24 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 130g (4.59 oz)

FFB 60 x 60 x 38 MM SERIES

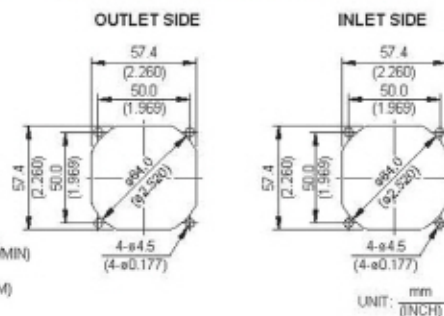
■ DIMENSIONS DRAWING



■ P & Q CURVE (AT RATED VOLTAGE)



■ MOUNTING PANEL CUTOUT

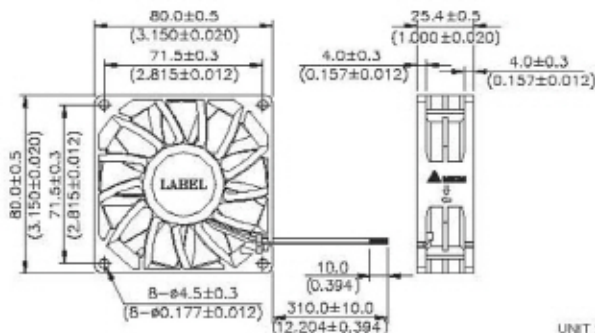


| MODEL | | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|------|-----------|---------------|-------------------------|---------------|-------------|--------|---------------------|-------|----------------------|---------------------|-------|
| PART NO. | REV. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| FFB0612UHE | -A | R00 / F00 | 12 | 7.0 to 13.2 | 0.90 | 10.80 | 11000 | 1.654 | 58.42 | 39.40 | 1.551 | 60.0 |
| FFB0612DHE | -A | R00 / F00 | 12 | 7.0 to 13.2 | 1.50 | 18.00 | 13000 | 1.970 | 69.55 | 52.47 | 2.068 | 64.0 |

- * Function type is optional.
- * The max. air flow and the speed are measured in free air; max. air pressure is measured at zero air flow.
- * Noise is measured in anechoic chamber in free air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.

FFB 80 x 80 x 25.4 MM SERIES

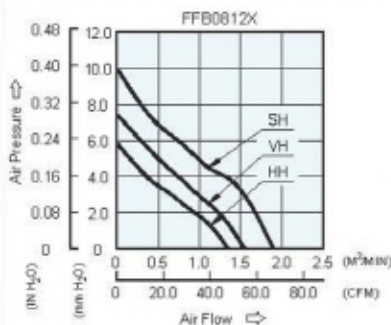
■ DIMENSIONS DRAWING



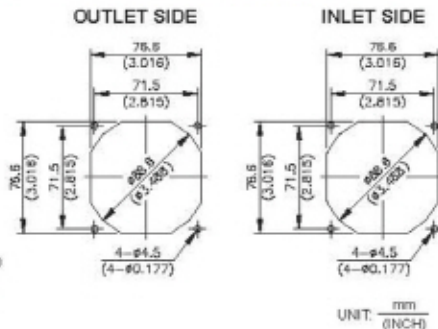
UNIT: $\frac{\text{mm}}{\text{(INCH)}}$

- Bearing Type: Ball Bearings
- Material: Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires : UL 1007 AWG #24 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 115g (4.06 oz)

■ P & Q CURVE (AT RATED VOLTAGE)



■ MOUNTING PANEL CUTOUT



UNIT: $\frac{\text{mm}}{\text{(INCH)}}$

| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|-----------|-------------|---------------|-------------------------|---------------|-------------|--------|---------------------|-------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| FFB0812HH | -R00 / -F00 | 12 | 7.0 to 13.2 | 0.26 | 3.12 | 3500 | 1.339 | 47.22 | 5.81 | 0.229 | 41.7 |
| FFB0812VH | -R00 / -F00 | 12 | 7.0 to 13.2 | 0.34 | 4.08 | 4000 | 1.545 | 54.56 | 7.39 | 0.291 | 45.4 |
| FFB0812SH | -R00 / -F00 | 12 | 7.0 to 13.2 | 0.50 | 6.00 | 4500 | 1.898 | 67.02 | 9.95 | 0.392 | 48.6 |

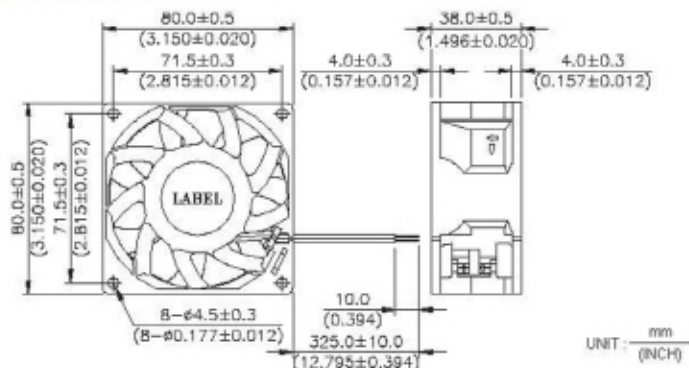
* Function type is optional.
 * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
 * Noise is measured in anechoic chamber in free air, one meter from intake side.
 * All readings are typical values at rated voltage.
 * Specifications are subject to change without notice.

FFB 80 x 80 x 38 MM SERIES

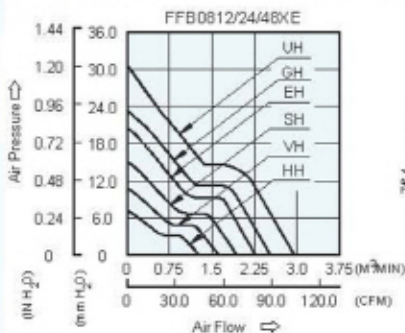
■ DIMENSIONS DRAWING



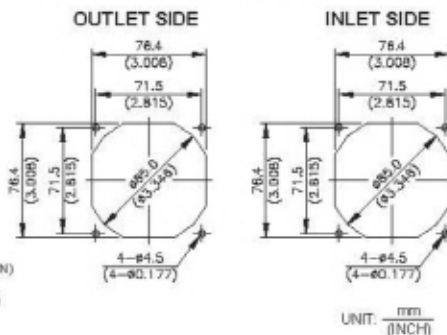
- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive (+)
Black Wire Negative (-)
- Weight : 170g (6.00 oz)



■ P & Q CURVE (AT RATED VOLTAGE)



■ MOUNTING PANEL CUTOUT



| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | Maximum Air Pressure | Noise | | |
|------------|-------------|---------------|-------------------------|---------------|-------------|--------|---------------------|----------------------|--------------------|---------------------|------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| FFB0812HHE | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.20 | 2.40 | 3400 | 1.280 | 45.20 | 7.13 | 0.281 | 39.0 |
| FFB0824HHE | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.15 | 3.60 | | | | | | |
| FFB0848HHE | -R00 / -F00 | 48 | 28.0 to 56.0 | 0.08 | 3.84 | | | | | | |
| FFB0812VHE | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.38 | 4.56 | 4200 | 1.620 | 57.21 | 10.77 | 0.424 | 44.5 |
| FFB0824VHE | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.24 | 5.76 | | | | | | |
| FFB0848VHE | -R00 / -F00 | 48 | 28.0 to 56.0 | 0.11 | 5.28 | | | | | | |
| FFB0812SHE | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.58 | 6.96 | 4900 | 1.940 | 68.51 | 15.01 | 0.591 | 48.5 |
| FFB0824SHE | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.34 | 8.16 | | | | | | |
| FFB0848SHE | -R00 / -F00 | 48 | 28.0 to 56.0 | 0.16 | 7.68 | | | | | | |
| FFB0812EHE | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.90 | 10.80 | 5700 | 2.270 | 80.16 | 20.63 | 0.812 | 52.5 |
| FFB0824EHE | -R00 / -F00 | 24 | 14.0 to 26.4 | 0.50 | 12.00 | | | | | | |
| FFB0812GHE | -R00 / -F00 | 12 | 7.0 to 13.2 | 1.15 | 13.80 | | | | | | |
| FFB0812UHE | -R00 / -F00 | 12 | 7.0 to 13.2 | 1.50 | 18.00 | 7500 | 2.889 | 102.02 | 31.32 | 1.233 | 62.2 |

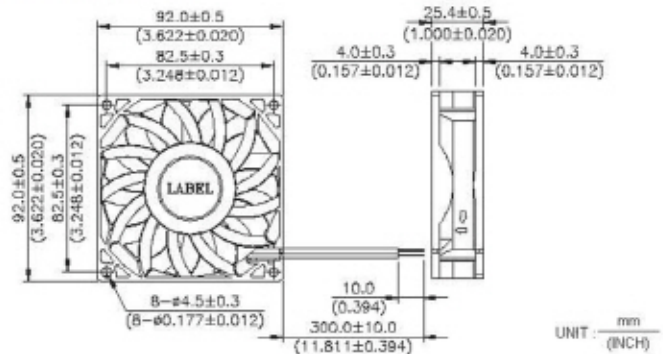
* Function type is optional.
 * The max. air flow and the speed are measured in free air; max. air pressure is measured at zero air flow.
 * Noise is measured in anechoic chamber in free air, one meter from intake side.
 * All readings are typical values at rated voltage.
 * Specifications are subject to change without notice.

FFB 92 x 92 x 25.4 MM SERIES

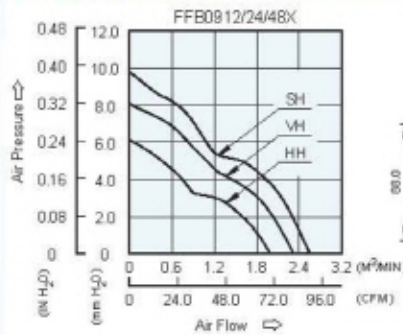
DIMENSIONS DRAWING



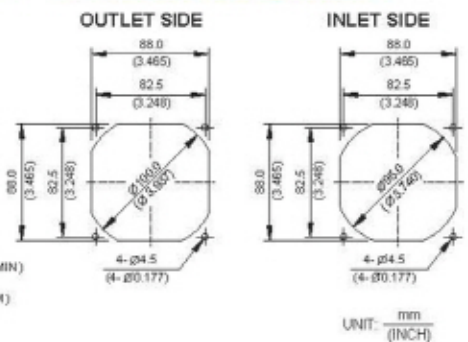
- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive (+)
Black Wire Negative (-)
- Weight : 128g (4.51 oz)



P & Q CURVE (AT RATED VOLTAGE)



MOUNTING PANEL CUTOUT

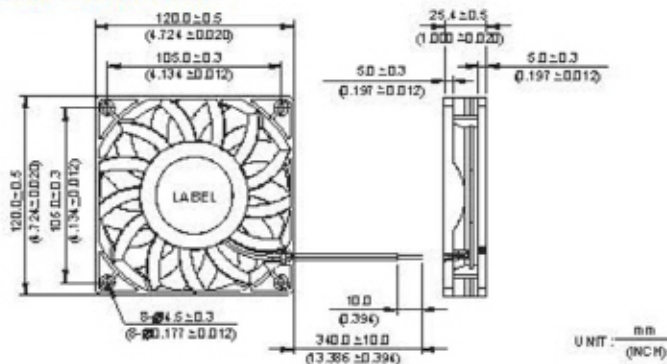


| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|-----------|-------------|---------------|-------------------------|---------------|-------------|--------|---------------------|-------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| FFB0912HH | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.40 | 4.80 | 3200 | 1.988 | 70.21 | 6.14 | 0.242 | 44.1 |
| FFB0924HH | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.24 | 5.76 | | | | | | |
| FFB0948HH | -R00 / -F00 | 48 | 28.0 to 53.0 | 0.14 | 6.72 | | | | | | |
| FFB0912VH | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.60 | 7.20 | 3700 | 2.321 | 81.97 | 8.11 | 0.319 | 48.2 |
| FFB0924VH | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.31 | 7.44 | | | | | | |
| FFB0948VH | -R00 / -F00 | 48 | 28.0 to 53.0 | 0.17 | 8.16 | | | | | | |
| FFB0912SH | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.69 | 8.28 | 4100 | 2.550 | 90.05 | 10.06 | 0.396 | 50.0 |

* Function type is optional.
 * The max. air flow and the speed are measured in free air, max. air pressure is measured at zero air flow.
 * Noise is measured in anechoic chamber in free air, one meter from intake side.
 * All readings are typical values at rated voltage.
 * Specifications are subject to change without notice.

FFB 120 x 120 x 25.4 MM SERIES

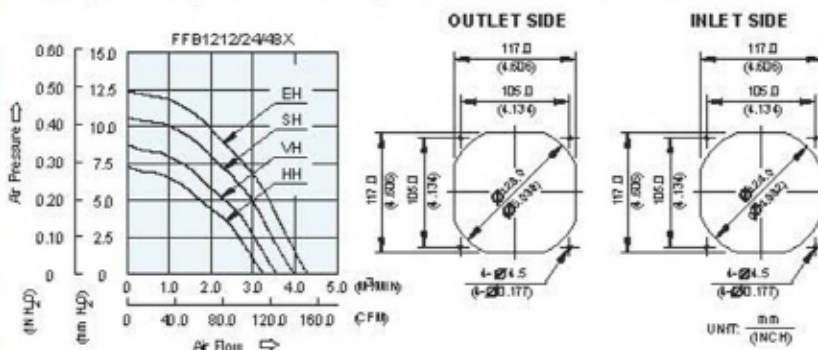
■ DIMENSIONS DRAWING



- Bearing Type: Ball Bearings
- Material: Impeller & Frame : Plastic (UL 94 V-0)
- Lead Wires : UL 1007 AWG #24 OR Equivalent
Red Wire Positive (+)
Black Wire Negative (-)
- Weight : 205g (7.23 oz)

■ P & Q CURVE (AT RATED VOLTAGE)

■ MOUNTING PANEL CUTOUT

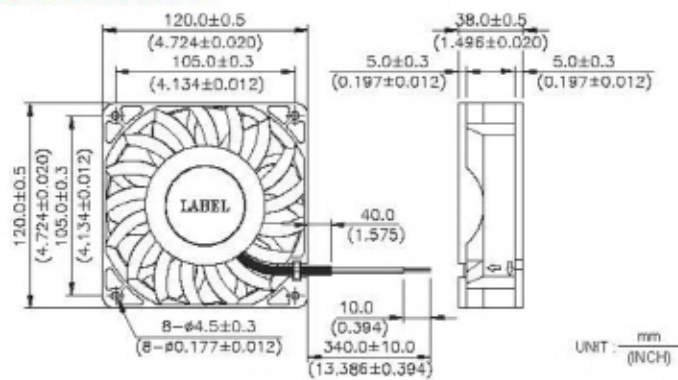


| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | Maximum Air Pressure | Noise | | |
|-----------|-------------|---------------|-------------------------|---------------|-------------|--------|---------------------|----------------------|--------------------|---------------------|------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| FFB1212HH | -R00 / -F00 | 12 | 7.0 to 13.2 | 0.65 | 7.80 | 3100 | 3.249 | 114.73 | 7.32 | 0.288 | 49.7 |
| FFB1224HH | -R00 / -F00 | 24 | 14.0 to 26.4 | 0.28 | 6.72 | | | | | | |
| FFB1248HH | -R00 / -F00 | 48 | 28.0 to 56.0 | 0.14 | 6.72 | 3400 | 3.592 | 126.85 | 8.29 | 0.326 | 51.9 |
| FFB1212VH | -R00 / -F00 | 12 | 7.0 to 13.2 | 0.79 | 9.48 | | | | | | |
| FFB1224VH | -R00 / -F00 | 24 | 14.0 to 26.4 | 0.37 | 8.88 | 3700 | 3.969 | 140.16 | 10.64 | 0.419 | 54.3 |
| FFB1248VH | -R00 / -F00 | 48 | 28.0 to 56.0 | 0.18 | 8.64 | | | | | | |
| FFB1212SH | -R00 / -F00 | 12 | 7.0 to 13.2 | 1.03 | 12.36 | 4000 | 4.257 | 150.33 | 12.43 | 0.489 | 56.4 |
| FFB1224SH | -R00 / -F00 | 24 | 14.0 to 26.4 | 0.52 | 12.48 | | | | | | |
| FFB1248SH | -R00 / -F00 | 48 | 28.0 to 53.0 | 0.25 | 12.00 | | | | | | |
| FFB1212EH | -R00 / -F00 | 12 | 7.0 to 13.2 | 1.45 | 17.40 | | | | | | |
| FFB1224EH | -R00 / -F00 | 24 | 14.0 to 26.4 | 0.63 | 15.12 | | | | | | |
| FFB1248EH | -R00 / -F00 | 48 | 28.0 to 53.0 | 0.32 | 15.36 | | | | | | |

* P factor type is optional.
 * The max. air flow and the speed are measured in free air; max. air pressure is measured at zero air flow.
 * Noise is measured in a semi-anechoic chamber in free air, one meter from intake side.
 * All readings are typical values at rated voltage.
 * Specifications are subject to change without notice.

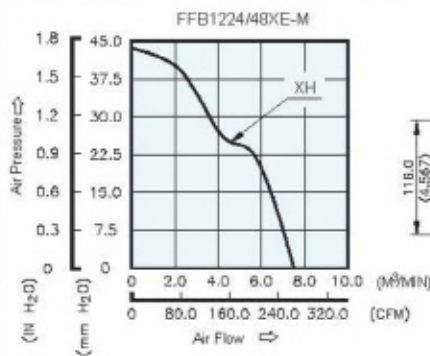
FFB 120 x 120 x 38 MM SERIES

DIMENSIONS DRAWING

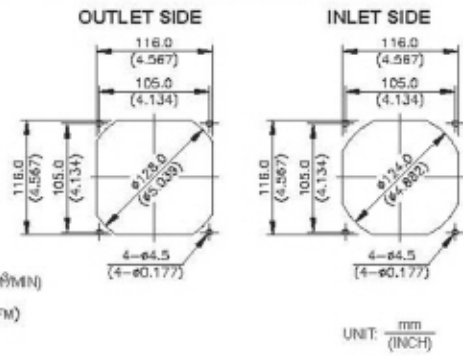


- Bearing Type: Ball Bearings
- Material: Impeller: Plastic (UL 94V-0), Frame: Die-cast Aluminum
- Lead Wires: UL 1007 AWG #22 OR Equivalent, Red Wire Positive(+), Black Wire Negative(-)
- Weight: 470g (16.58 oz)

P & Q CURVE (AT RATED VOLTAGE)



MOUNTING PANEL CUTOUT



| MODEL | | | Rated Voltage | Operating Voltage Range | Rated Current | Rated Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|------|-------------|---------------|-------------------------|---------------|-------------------|--------|---------------------|--------|----------------------|---------------------|-------|
| PART NO. | REV. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| FFB1224XHE | -M | -R00 / -F00 | 24 | 14.0 to 26.4 | 3.25 | 78.00 | 6300 | 7.493 | 264.62 | 43.31 | 1.705 | 73.5 |
| FFB1248XHE | -M | -R00 / -F00 | 48 | 28.0 to 54.0 | 1.65 | 79.20 | | | | | | |

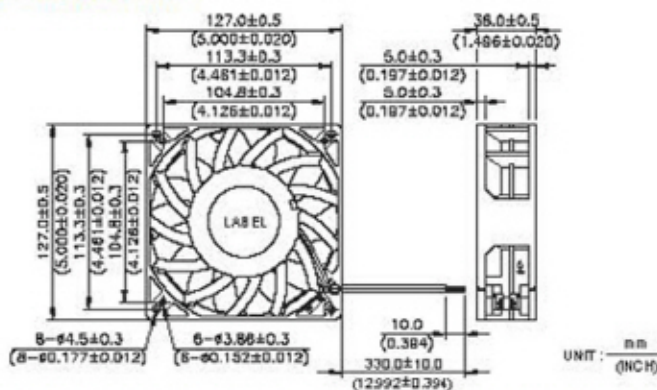
* Function type is optional.
 * The max. air flow and the speed are measured in free air; max. air pressure is measured at zero air flow.
 * Noise is measured in anechoic chamber in free air, one meter from intake side.
 * All readings are typical values at rated voltage.
 * Specifications are subject to change without notice.

FFB 127 x 127 x 38 MM SERIES

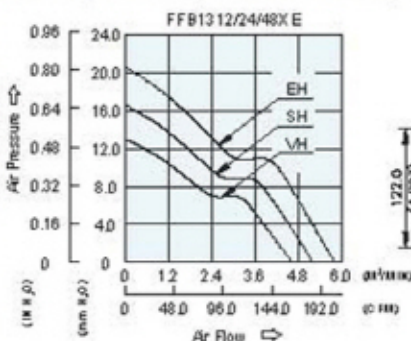
DIMENSIONS DRAWING



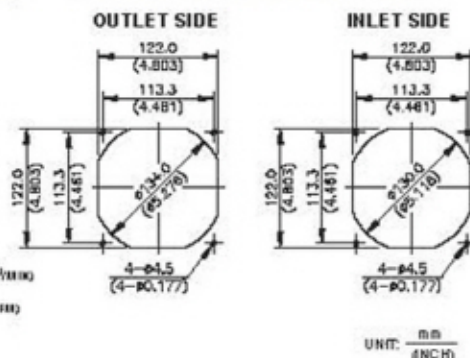
- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94 V-0)
- Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive (+)
Black Wire Negative (-)
- Weight : 470g (16.58 oz)



P & Q CURVE (AT RATED VOLTAGE)



MOUNTING PANEL CUTOUT



| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|-------------|---------------|-------------------------|---------------|-------------|--------|---------------------|--------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| FFB1312VHE | -R00 / -F00 | 12 | 7.0 to 13.2 | 1.32 | 15.84 | 3050 | 4.531 | 160.01 | 12.80 | 0.504 | 53.0 |
| FFB1324VHE | -R00 / -F00 | 24 | 14.0 to 26.4 | 0.60 | 14.40 | | | | | | |
| FFB1348VHE | -R00 / -F00 | 48 | 28.0 to 53.0 | 0.33 | 15.84 | | | | | | |
| FFB1312SHE | -R00 / -F00 | 12 | 7.0 to 13.2 | 1.85 | 22.20 | 3450 | 5.097 | 180.00 | 16.30 | 0.642 | 56.5 |
| FFB1324SHE | -R00 / -F00 | 24 | 14.0 to 26.4 | 0.84 | 20.16 | | | | | | |
| FFB1348SHE | -R00 / -F00 | 48 | 28.0 to 53.0 | 0.45 | 21.60 | | | | | | |
| FFB1312EHE | -R00 / -F00 | 12 | 8.5 to 13.2 | 2.74 | 32.88 | 3850 | 5.664 | 200.02 | 20.30 | 0.799 | 59.5 |
| FFB1324EHE | -R00 / -F00 | 24 | 14.0 to 26.4 | 1.20 | 28.80 | | | | | | |
| FFB1348EHE | -R00 / -F00 | 48 | 28.0 to 53.0 | 0.67 | 32.16 | | | | | | |

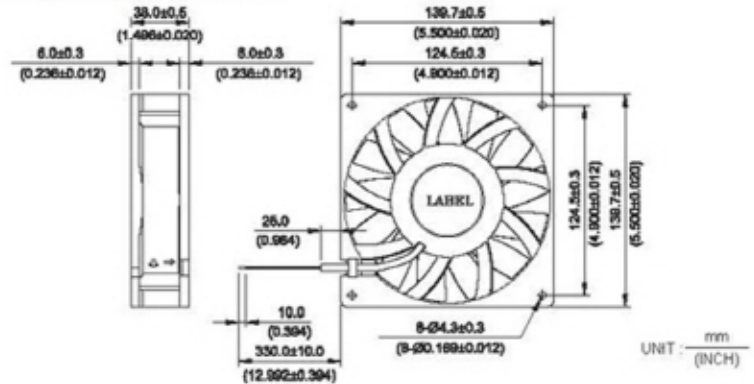
* Fan type is optional.
 * The max. air flow and the speed are measured in free air; max. air pressure is measured at zero air flow.
 * Noise is measured in anechoic chamber in free air, one meter from intake side.
 * All readings are typical values at rated voltage.
 * Specifications are subject to change without notice.

FFB 140 x 140 x 38 MM SERIES

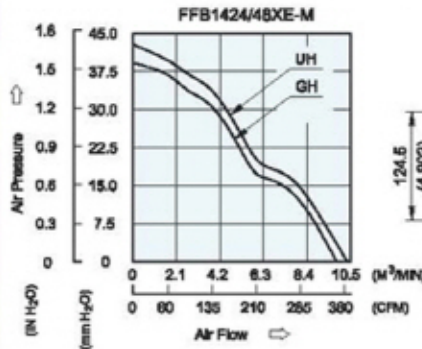
■ DIMENSIONS DRAWING



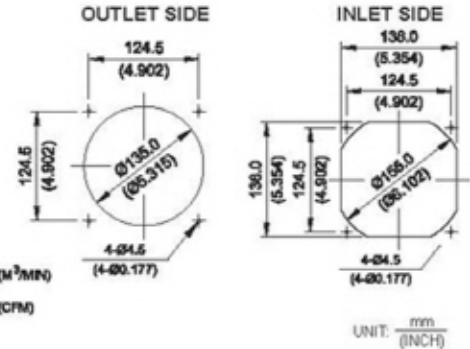
- Bearing Type
Ball Bearings
- Material
Impeller : Plastic (UL 94V-0)
Frame : Die-cast Aluminum
- Lead Wires :
UL 1430 AWG #22 OR Equivalent
Red Wire Positive (+)
Black Wire Negative (-)
- Weight : 650g (22.93 oz)



■ P & Q CURVE (AT RATED VOLTAGE)



■ MOUNTING PANEL CUTOUT

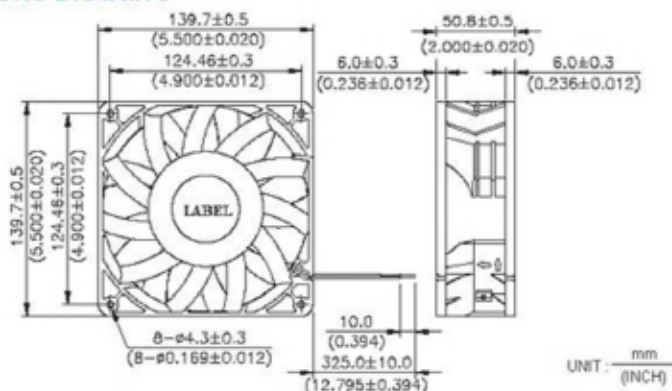


| MODEL | | | Rated Voltage | Operating Voltage Range | Rated Current | Rated Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|------|-------------|---------------|-------------------------|---------------|-------------------|--------|---------------------|--------|----------------------|---------------------|-------|
| PART NO. | REV. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ² /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| FFB1424GHE | -M | -R00 / -F00 | 24 | 14.0 to 26.4 | 2.98 | 71.52 | 5250 | 9.827 | 347.04 | 38.16 | 1.502 | 73.0 |
| FFB1448GHE | -M | -R00 / -F00 | 48 | 36.0 to 53.0 | 1.50 | 72.00 | | | | | | |
| FFB1424UHE | -M | -R00 / -F00 | 24 | 14.0 to 26.4 | 3.35 | 80.40 | 5500 | 10.410 | 367.62 | 41.75 | 1.644 | 74.0 |
| FFB1448UHE | -M | -R00 / -F00 | 48 | 36.0 to 53.0 | 1.80 | 86.40 | | | | | | |

* Function type is optional.
 * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
 * Noise is measured in anechoic chamber in free air, one meter from intake side.
 * All readings are typical values at rated voltage.
 * Specifications are subject to change without notice.

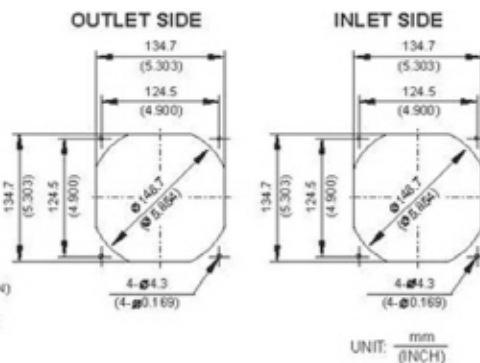
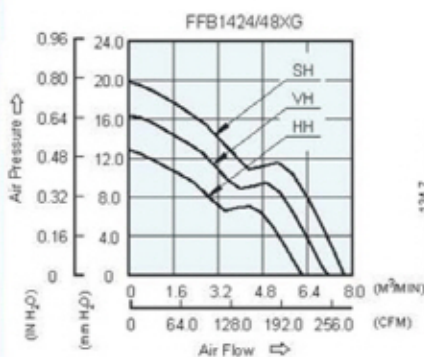
FFB 140 x 140 x 50.8 MM SERIES

■ DIMENSIONS DRAWING



■ P & Q CURVE (AT RATED VOLTAGE)

■ MOUNTING PANEL CUTOUT



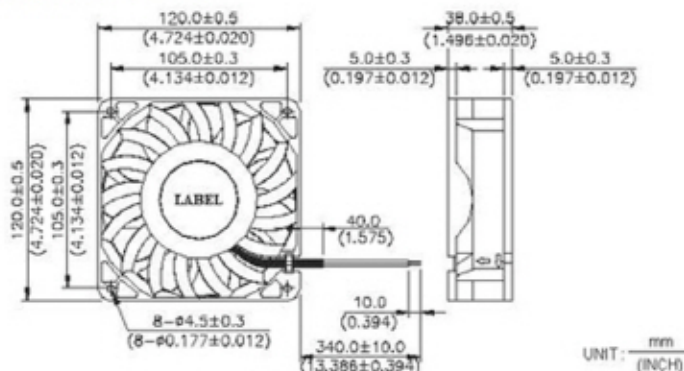
- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1430 AWG #22 OR Equivalent
Red Wire Positive (+)
Black Wire Negative (-)
- Weight : 670g (23.63 oz)

| MODEL | | Rated Voltage | Operating Voltage Range | Rated Current | Rated Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|-------------|---------------|-------------------------|---------------|-------------------|--------|---------------------|--------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| FFB1424HHG | -R00 / -F00 | 24 | 14.0 to 26.4 | 0.71 | 17.04 | 2800 | 6.222 | 219.73 | 12.84 | 0.506 | 54.5 |
| FFB1448HHG | -R00 / -F00 | 48 | 28.0 to 53.0 | 0.36 | 17.28 | | | | | | |
| FFB1424VHG | -R00 / -F00 | 24 | 14.0 to 26.4 | 0.91 | 21.84 | 3200 | 7.139 | 252.11 | 16.36 | 0.644 | 58.5 |
| FFB1448VHG | -R00 / -F00 | 48 | 28.0 to 53.0 | 0.50 | 24.00 | | | | | | |
| FFB1424SHG | -R00 / -F00 | 24 | 14.0 to 26.4 | 1.53 | 36.72 | 3600 | 7.733 | 273.09 | 19.84 | 0.781 | 61.7 |
| FFB1448SHG | -R00 / -F00 | 48 | 28.0 to 53.0 | 0.77 | 36.96 | | | | | | |

* Function type is optional.
 * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
 * Noise is measured in anechoic chamber in free air, one meter from intake side.
 * All readings are typical values at rated voltage.
 * Specifications are subject to change without notice.

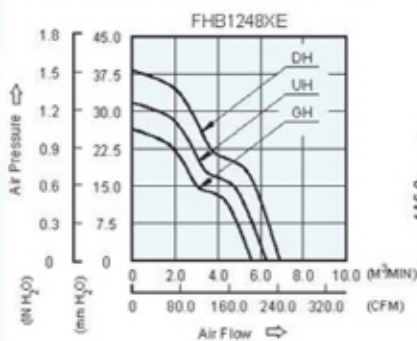
FHB 120 x 120 x 38 MM SERIES

DIMENSIONS DRAWING

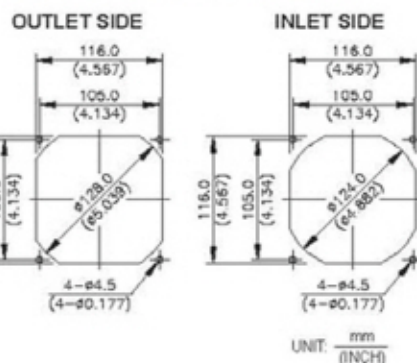


- Bearing Type
Ball Bearings
- Material
Impeller : Plastic (UL 94V-0)
Frame : Die-cast Aluminum
- Lead Wires :
UL 1007 AWG #22 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 470g (16.58 oz)

P & Q CURVE (AT RATED VOLTAGE)



MOUNTING PANEL CUTOUT

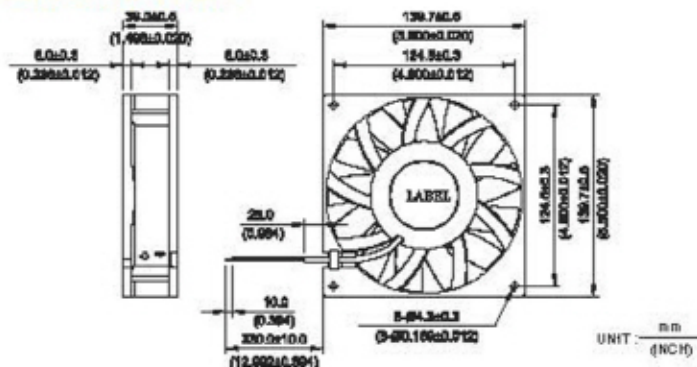


| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|-------------|---------------|-------------------------|---------------|-------------|--------|---------------------|--------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| FHB1248GHE | -R00 / -F00 | 48 | 32.0 to 80.0 | 0.78 | 37.44 | 4800 | 5.671 | 200.28 | 25.92 | 1.020 | 67.0 |
| FHB1248UHE | -R00 / -F00 | 48 | 32.0 to 80.0 | 0.91 | 43.68 | 5300 | 6.321 | 223.22 | 31.51 | 1.241 | 68.0 |
| FHB1248DHE | -R00 / -F00 | 48 | 32.0 to 80.0 | 1.28 | 61.44 | 5800 | 6.961 | 245.83 | 38.16 | 1.502 | 71.5 |

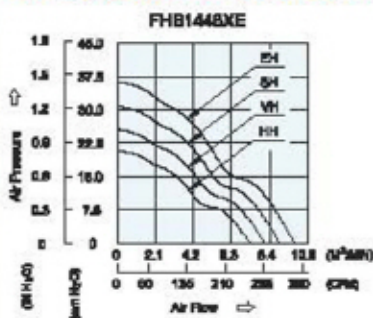
* Function type is optional.
 * The max. air flow and the speed are measured in free air; max. air pressure is measured at zero air flow.
 * Noise is measured in anechoic chamber in free air, one meter from intake side.
 * All readings are typical values at rated voltage.
 * Specifications are subject to change without notice.

FHB 140 x 140 x 38 MM SERIES

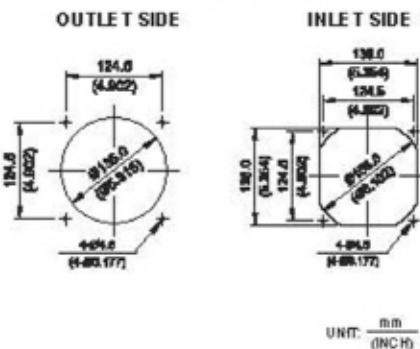
DIMENSIONS DRAWING



P & Q CURVE (AT RATED VOLTAGE)



MOUNTING PANEL CUTOUT



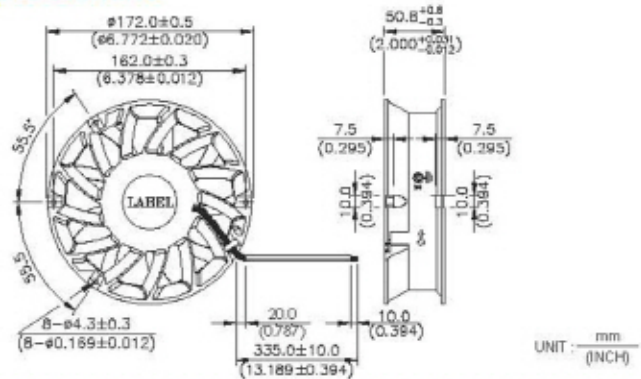
- Bearing Type: Ball Bearings
- Material: ImPELLer : Plastic (UL 94V-0)
Frame : Die-cast Aluminum
- Lead Wires: UL 1430 AWG #22 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 600g (22.93 oz)

| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|-------------|---------------|-------------------------|---------------|-------------|--------|---------------------|--------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| FHB1448HHE | -R00 / -F00 | 48 | 32.0 to 80.0 | 0.66 | 31.68 | 3800 | 7.358 | 259.85 | 20.88 | 0.822 | 63.5 |
| FHB1448VHE | -R00 / -F00 | 48 | 32.0 to 80.0 | 0.83 | 39.84 | 4200 | 8.162 | 288.24 | 25.64 | 1.009 | 67.5 |
| FHB1448SHE | -R00 / -F00 | 48 | 32.0 to 80.0 | 1.09 | 52.32 | 4600 | 8.972 | 316.84 | 30.67 | 1.208 | 69.5 |
| FHB1448EHE | -R00 / -F00 | 48 | 32.0 to 80.0 | 1.36 | 65.28 | 5000 | 9.807 | 346.34 | 36.43 | 1.434 | 71.0 |

- * Fraction type is optional.
- * The max. air flow and the speed are measured in free air; max. air pressure is measured at zero air flow.
- * Noise is measured in anechoic chamber in free air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.

FHB $\phi 172 \times 50.8$ MM SERIES

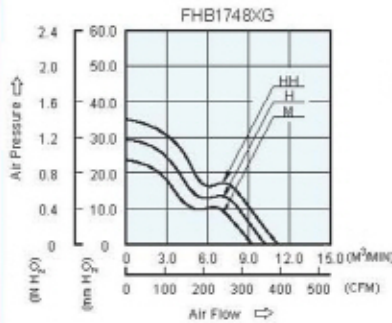
DIMENSIONS DRAWING



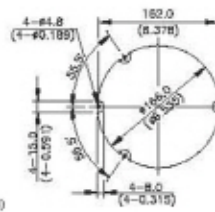
- Bearing Type
Ball Bearings
- Material
Impeller : Plastic (UL 94V-0)
Frame : Die-cast Aluminum
- Lead Wires :
UL 1430 AWG #22 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 920g (32.45 oz)

P & Q CURVE (AT RATED VOLTAGE)

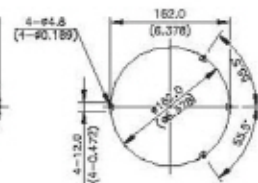
MOUNTING PANEL CUTOUT



OUTLET SIDE



INLET SIDE



| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|-------------|---------------|-------------------------|---------------|-------------|--------|---------------------|--------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| FHB1748MG | -R00 / -F00 | 48 | 32.0 to 80.0 | 0.83 | 39.84 | 3600 | 9.281 | 327.76 | 23.89 | 0.941 | 67.0 |
| FHB1748HG | -R00 / -F00 | 48 | 32.0 to 80.0 | 1.08 | 51.84 | 4000 | 10.217 | 360.82 | 29.45 | 1.159 | 69.5 |
| FHB1748HHG | -R00 / -F00 | 48 | 32.0 to 80.0 | 1.60 | 76.80 | 4400 | 10.994 | 388.25 | 35.44 | 1.395 | 71.5 |

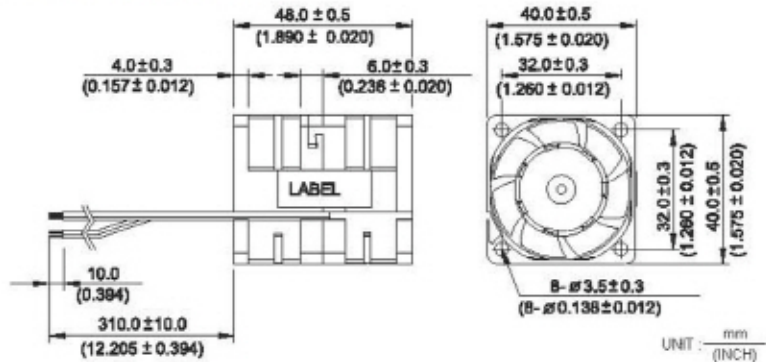
- * Function type is optional.
- * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
- * Noise is measured in anechoic chamber in free air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.

GFB 40 x 40 x 48 MM SERIES

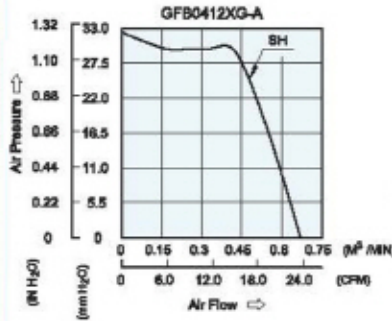
DIMENSIONS DRAWING



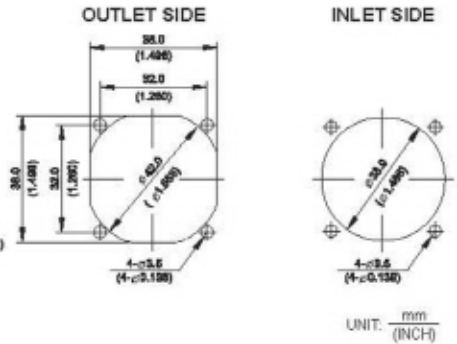
- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1061 AWG #26 OR Equivalent
Red And Orange Wire Positive (+)
Black And Brown Wire Negative (-)
- Weight : 21g (0.74 oz)



P & Q CURVE (AT RATED VOLTAGE)



MOUNTING PANEL CUTOUT



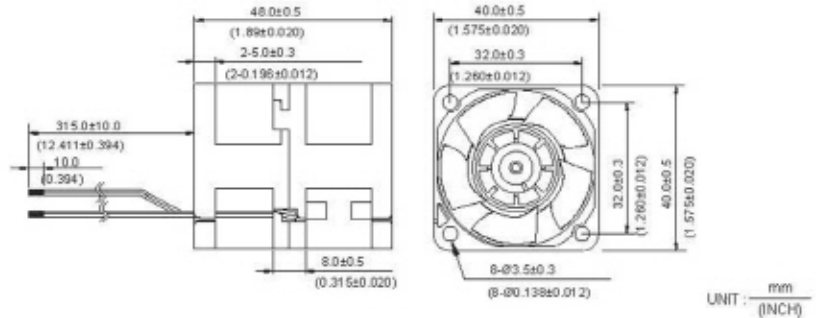
| MODEL | | | Rated Voltage | Operating Voltage Range | Rated Current | Rated Input Power | Speed (Front/Rear) | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|-----------|------|-------------|---------------|-------------------------|---------------|-------------------|--------------------|---------------------|-------|----------------------|---------------------|-------|
| PART NO. | REV. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| GFB0412HG | -A | -R00 / -F00 | 12 | 4.0 to 13.2 | 1.10 | 13.20 | 12800/10200 | 0.670 | 23.66 | 32.31 | 1.27 | 59.0 |

- * Function type is optional.
- * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow
- * Noise is measured in anechoic chamber in free air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.

New

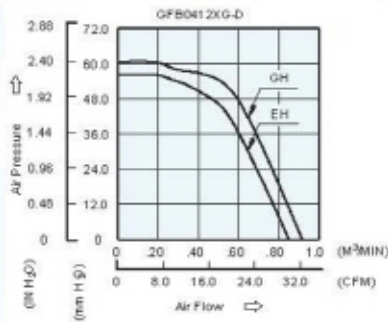
GFB 40 x 40 x 48 MM SERIES

DIMENSIONS DRAWING

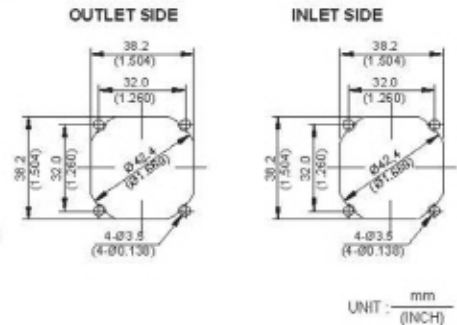


- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1061 AWG #26 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 75g (2.65 oz)

P & Q CURVE (AT RATED VOLTAGE)



MOUNTING PANEL CUTOUT



| MODEL | | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed (Front / Rear) | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|------|-----------|---------------|-------------------------|---------------|-------------|----------------------|---------------------|-------|----------------------|---------------------|-------|
| PART NO. | REV. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| GFB0412EHG | -D | -R00V-F00 | 12 | 10.8 to 12.6 | 1.20 | 14.40 | 14400/13300 | 0.85 | 29.97 | 56.19 | 2.212 | 63.4 |
| GFB0412GHG | -D | -R00V-F00 | 12 | 10.8 to 12.6 | 1.40 | 16.80 | 15150/14300 | 0.92 | 32.35 | 60.50 | 2.382 | 64.4 |

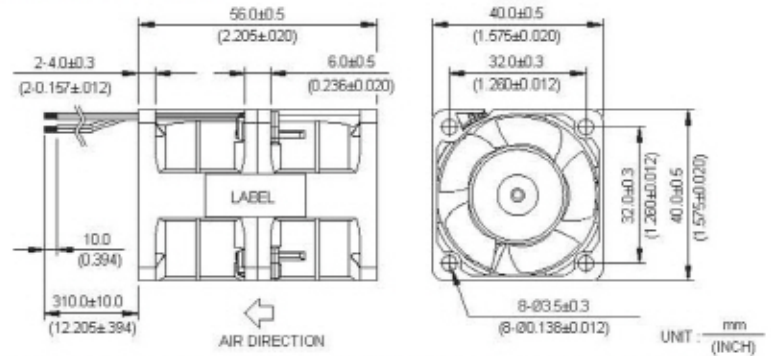
- * Function type is optional.
- * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
- * Noise is measured in anechoic chamber in free air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.

GFB 40 x 40 x 56 MM SERIES

DIMENSIONS DRAWING

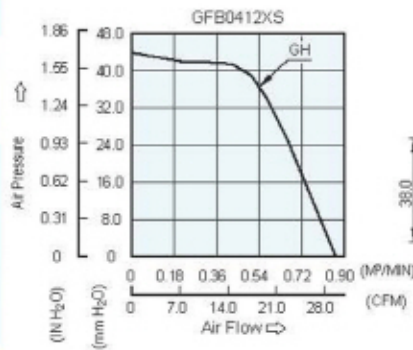


- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1061 AWG #28 OR Equivalent
Red And Orange Wire Positive(+)
Black And Brown Wire Negative(-)
- Weight : 90g (3.17 oz)

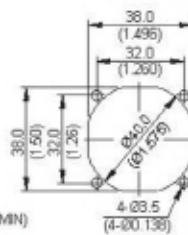


P & Q CURVE (AT RATED VOLTAGE)

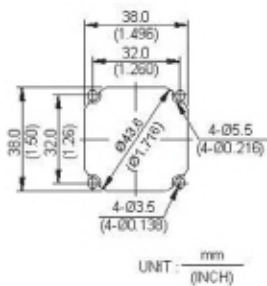
MOUNTING PANEL CUTOUT



OUTLET SIDE



INLET SIDE



| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed (Front / Rear) | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|-------------|---------------|-------------------------|---------------|-------------|----------------------|----------------------|-------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ / min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| GFB0412GHS | -R00 / -F00 | 12 | 5.5 to 13.2 | 1.00 | 12.00 | 15300 / 11300 | 0.864 | 30.50 | 43.83 | 1.726 | 61.0 |

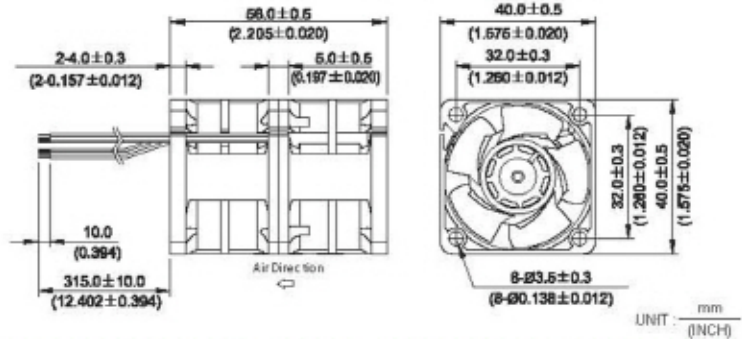
- * Function type is optional.
- * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow
- * Noise is measured in anechoic chamber in free air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.

GFB 40 x 40 x 56 MM SERIES

DIMENSIONS DRAWING

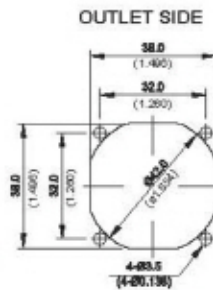
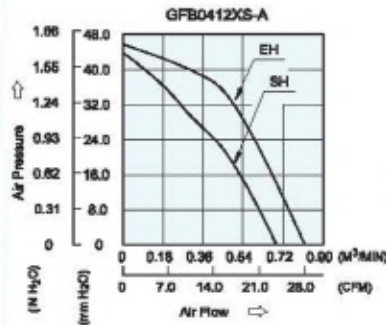


- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1061 AWG #26 OR Equivalent
Red And Orange Wire Positive (+)
Black And Brown Wire Negative (-)
- Weight : 84g (2.96 oz)



P & Q CURVE (AT RATED VOLTAGE)

MOUNTING PANEL CUTOUT



| MODEL | | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed (Front / Rear) | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|------|-----------|---------------|-------------------------|---------------|-------------|----------------------|---------------------|-------|----------------------|---------------------|-------|
| PART NO. | REV. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| GFB0412SHS | -A | -R00V-F00 | 12 | 7.0 to 13.2 | 1.02 | 12.24 | 16200 / 7800 | 0.659 | 23.29 | 44.41 | 1.748 | 58.5 |
| GFB0412EHS | -A | -R00V-F00 | 12 | 7.0 to 13.2 | 1.40 | 16.80 | 16200/12000 | 0.762 | 26.92 | 45.76 | 1.802 | 62.5 |

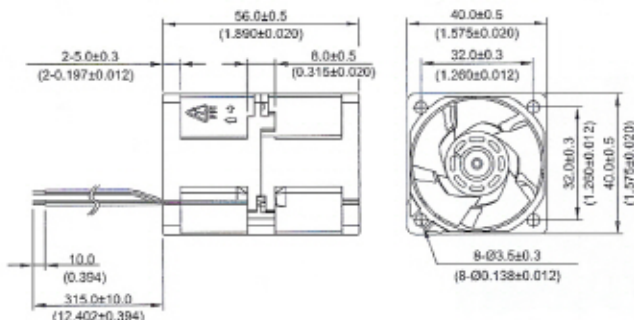
- * Function type is optional.
- * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
- * Noise is measured in anechoic chamber in free air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.

New



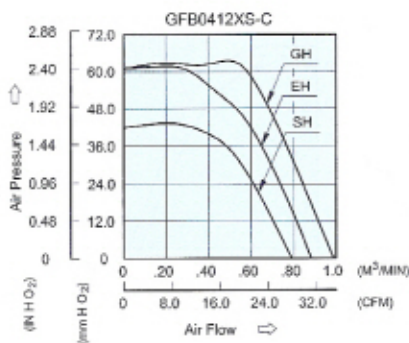
GFB 40 x 40 x 56 MM SERIES

DIMENSIONS DRAWING

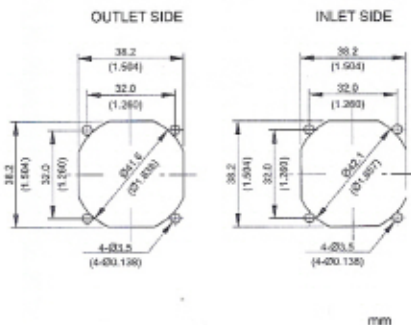


UNIT: mm / (INCH)

P & Q CURVE (AT RATED VOLTAGE)



MOUNTING PANEL CUTOUT



- Bearing Type: Ball Bearings
- Material: Impeller & Pillow : Plastic (UL 94V-0)
- Lead Wires : UL 1061 AWG #26 OR Equivalent Red And Orange Wire Positive(+) Black And Brown Wire Negative(-)
- Weight : 84g (2.70 oz)

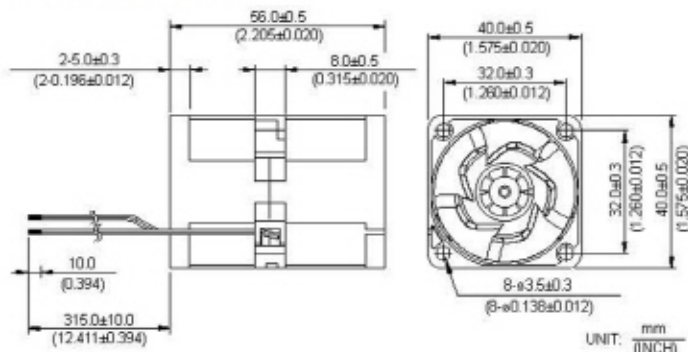
| MODEL | | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed (Front/Rear) | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|------|-----------|---------------|-------------------------|---------------|-------------|--------------------|---------------------|-------|----------------------|---------------------|-------|
| PART NO. | REV. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| GFB0412SHS | -C | -R00/-F00 | 12 | 10.8 to 12.6 | 1.00 | 12.00 | 13900/12000 | 0.790 | 27.90 | 41.87 | 1.649 | 62.5 |
| GFB0412EHS | -C | -R00/-F00 | 12 | 10.8 to 12.6 | 1.35 | 16.20 | 16100/12400 | 0.883 | 31.18 | 56.93 | 2.241 | 64.0 |
| GFB0412GHS | -C | -R00/-F00 | 12 | 10.8 to 12.6 | 1.78 | 21.36 | 16100/17100 | 0.988 | 34.89 | 60.88 | 2.397 | 66.5 |

- * Function type is optional.
- * The max. air flow and the speed are measured in free air; max. air pressure is measured at zero air flow.
- * Noise is measured in anechoic chamber in free air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.

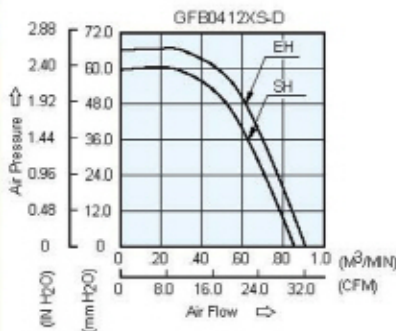
New

GFB 40 x 40 x 56 MM SERIES

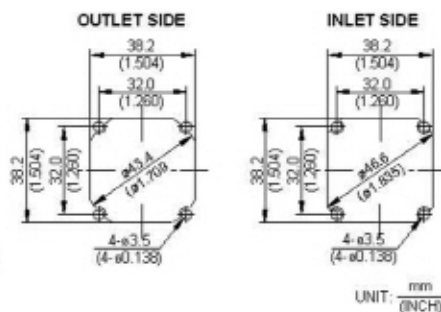
DIMENSIONS DRAWING



P & Q CURVE (AT RATED VOLTAGE)



MOUNTING PANEL CUTOUT



- Bearing Type: Ball Bearings
- Material: Impeller & Pillow : Plastic (UL 94V-0)
- Lead Wires : UL 1061 AWG #26 OR Equivalent Red And Orange Wire Positive (+) Black And Brown Wire Negative (-)
- Weight : 83g (2.93 oz)

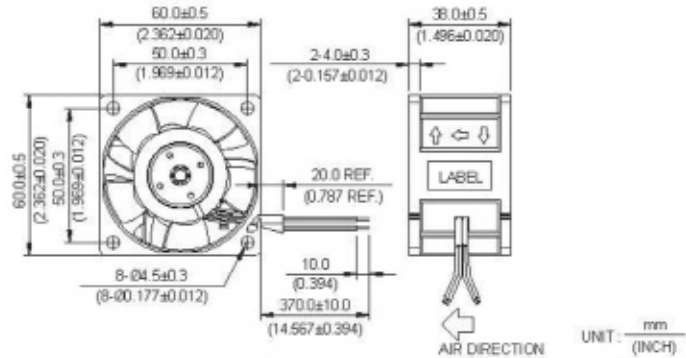
| MODEL | | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed (Front/Rear) | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|------|-----------|---------------|-------------------------|---------------|-------------|--------------------|---------------------|-------|----------------------|---------------------|-------|
| PART NO. | REV. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| GFB0412SHS | -D | -R00/-F00 | 12 | 10.8 to 12.6 | 1.10 | 13.20 | 15000/14300 | 0.856 | 30.23 | 59.55 | 2.344 | 63.0 |
| GFB0412EHS | -D | -R00/-F00 | 12 | 10.8 to 12.6 | 1.30 | 15.60 | 16000/15400 | 0.911 | 32.18 | 66.82 | 2.631 | 64.5 |

* Function type is optional.
 * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
 * Noise is measured in anechoic chamber in free air, one meter from intake side.
 * All readings are typical values at rated voltage.
 * Specifications are subject to change without notice.

New

GFB 60 x 60 x 38 MM SERIES

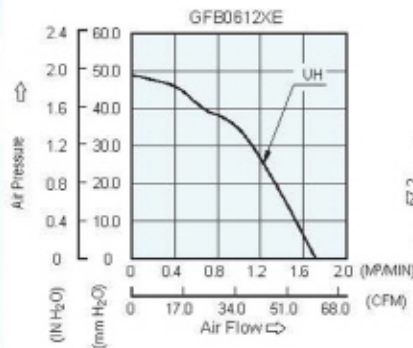
DIMENSIONS DRAWING



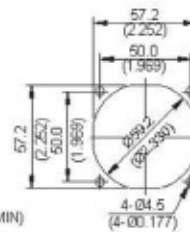
- Bearing Type: Ball Bearings
- Material: Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires : UL 1061 AWG #24 OR Equivalent
Red And Orange Wire Positive(+)
Black And Brown Wire Negative(-)
- Weight : 140g (4.94 oz)

P & Q CURVE (AT RATED VOLTAGE)

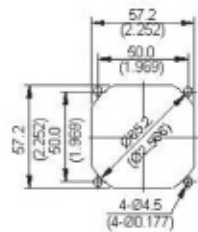
MOUNTING PANEL CUTOUT



OUTLET SIDE



INLET SIDE



UNIT: mm (INCH)

| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed (Front / Rear) | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|-------------|---------------|-------------------------|---------------|-------------|----------------------|----------------------|-------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ / min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| GFB0612UHE | -R00 / -F00 | 12 | 7.0 to 13.2 | 1.60 | 19.20 | 13000 / 10900 | 1.756 | 62.01 | 52.77 | 2.078 | 68.0 |

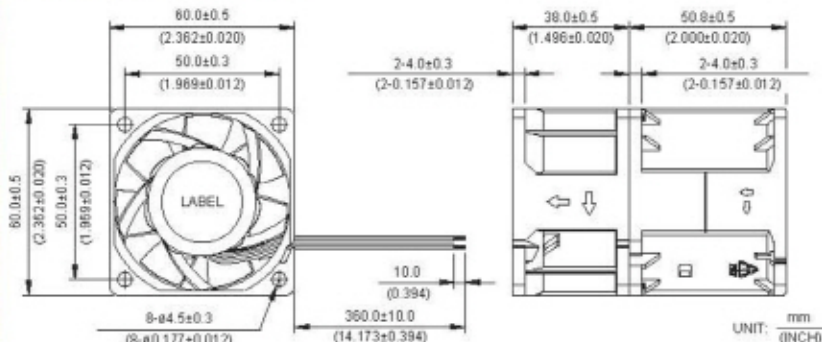
- * Function type is optional.
- * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow
- * Noise is measured in anechoic chamber in free air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.

New

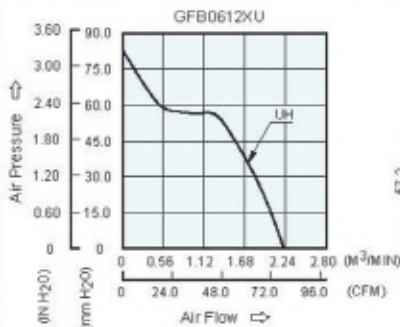


GFB 60 x 60 x 89 MM SERIES

DIMENSIONS DRAWING

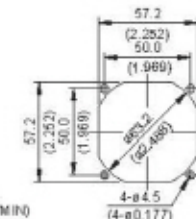


P & Q CURVE (AT RATED VOLTAGE)

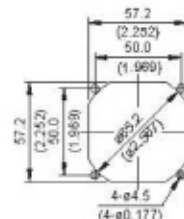


MOUNTING PANEL CUTOUT

OUTLET SIDE



INLET SIDE



UNIT: mm (INCH)

| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed (Front/Rear) | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|-------------|---------------|-------------------------|---------------|-------------|--------------------|---------------------|-------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| GFB0612UHU | -R00 / -F00 | 12 | 7.0 to 13.2 | 3.00 | 36.00 | 12200/12450 | 2.078 | 78.37 | 90.21 | 3.351 | 69.6 |

* Function type is optional.

* The max. air flow and the speed are measured in free air; max. air pressure is measured at zero air flow.

* Noise is measured in anechoic chamber in free air, one meter from intake side.

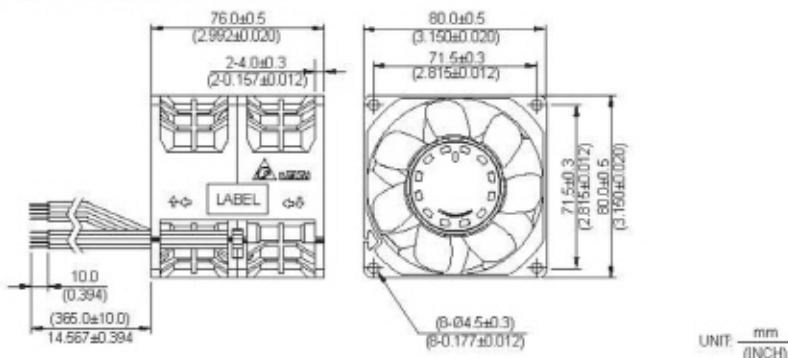
* All readings are typical values at rated voltage.

* Specifications are subject to change without notice.

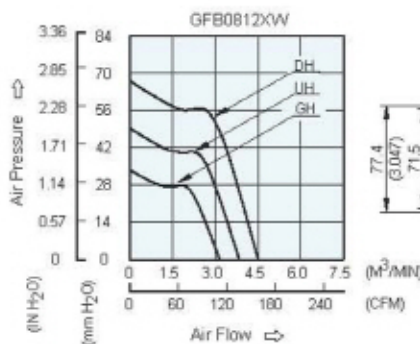
New

GFB 80 x 80 x 76 MM SERIES

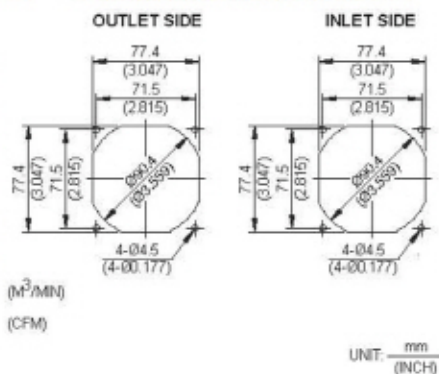
■ DIMENSIONS DRAWING



■ P & Q CURVE (AT RATED VOLTAGE)



■ MOUNTING PANEL CUTOUT



- Bearing Type: Ball Bearings
- Material: Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires : UL 1007 AWG #24 OR Equivalent
Red And Orange Wire Positive (+)
Black And Brown Wire Negative(-)
- Weight : 386g (13.62 oz)

| MODEL | | Rated Voltage | Operating Voltage Range | Rated Current | Rated Input Power | Speed (Front/Rear) | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|-------------|---------------|-------------------------|---------------|-------------------|--------------------|---------------------|--------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| GFB0812GHW | -R00 / -F00 | 12 | 7.0 to 13.2 | 1.96 | 23.52 | 6500/6800 | 3.150 | 111.24 | 33.69 | 1.326 | 67.0 |
| GFB0812UHW | -R00 / -F00 | 12 | 7.0 to 13.2 | 3.24 | 38.88 | 7800/8200 | 3.839 | 135.57 | 49.26 | 1.940 | 72.0 |
| GFB0812DHW | -R00 / -F00 | 12 | 7.0 to 13.2 | 5.50 | 66.00 | 9200/9600 | 4.540 | 160.33 | 66.32 | 2.610 | 75.2 |

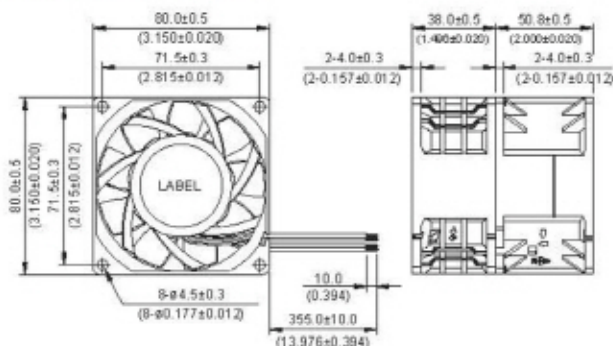
- * Function type is optional.
- * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
- * Noise is measured in anechoic chamber in free air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.

New



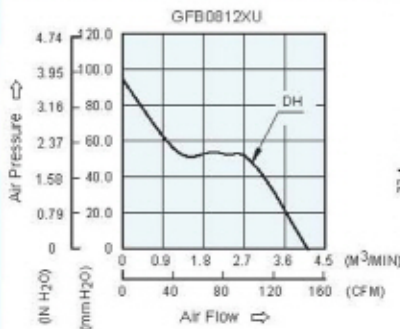
GFB 80 x 80 x 89 MM SERIES

■ DIMENSIONS DRAWING

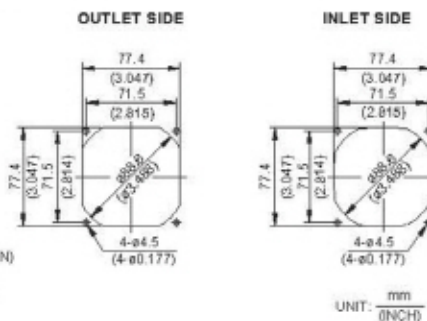


UNIT: $\frac{\text{mm}}{\text{(INCH)}}$

■ P & Q CURVE (AT RATED VOLTAGE)



■ MOUNTING PANEL CUTOUT



UNIT: $\frac{\text{mm}}{\text{(INCH)}}$

| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed (Front/Rear) | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|-------------|---------------|-------------------------|---------------|-------------|--------------------|---------------------|--------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mm H ₂ O | IN H ₂ O | dB-A |
| GFB0812DHU | -R00 / -F00 | 12 | 7.0 to 13.2 | 4.90 | 58.80 | 9200/9480 | 4.093 | 144.58 | 96.54 | 3.800 | 73.5 |

* Function type is optional.

* The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.

* Noise is measured in anechoic chamber in free air, one meter from intake side.

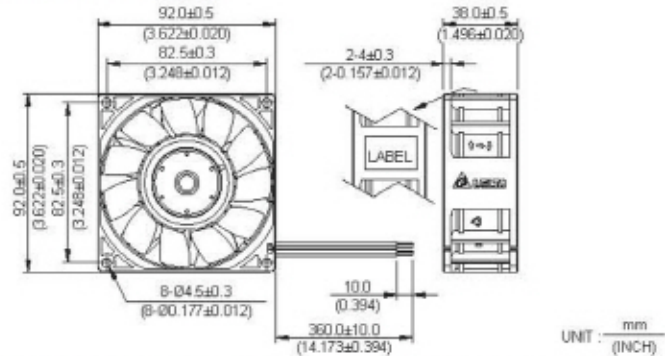
* All readings are typical values at rated voltage.

* Specifications are subject to change without notice.

New

GFB 92 x 92 x 38 MM SERIES

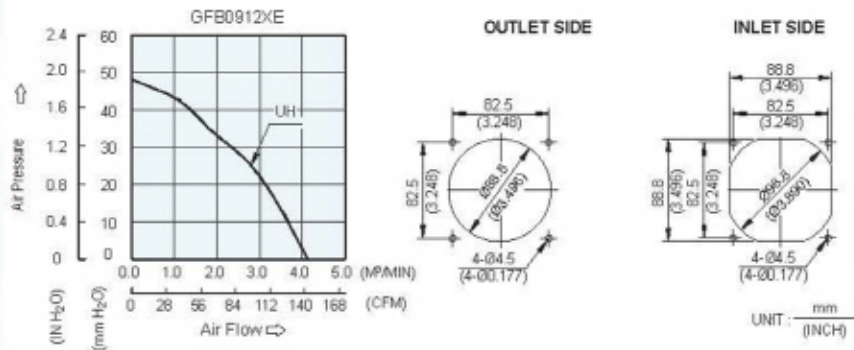
DIMENSIONS DRAWING



- Bearing Type: Ball Bearings
- Material: Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires : UL 1061 AWG #24 OR Equivalent Red And Orange Wire Positive(+) Black And Brown Wire Negative(-)
- Weight : 232g (8.18 oz)

P & Q CURVE (AT RATED VOLTAGE)

MOUNTING PANEL CUTOUT



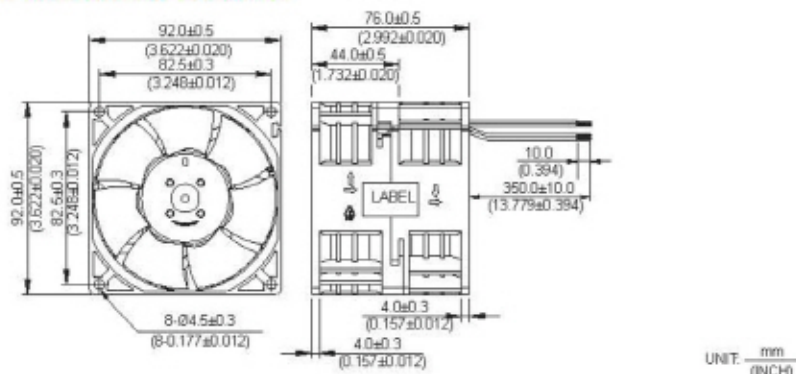
| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed (Front/Rear) | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|-----------|---------------|-------------------------|---------------|-------------|--------------------|---------------------|--------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| GFB0912UHE | -R00/-F00 | 12 | 8.0 to 13.2 | 2.60 | 31.20 | 8300 / 7500 | 4.129 | 145.80 | 48.12 | 1.894 | 74.3 |

- * Function type is optional.
- * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow
- * Noise is measured in anechoic chamber in free air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.

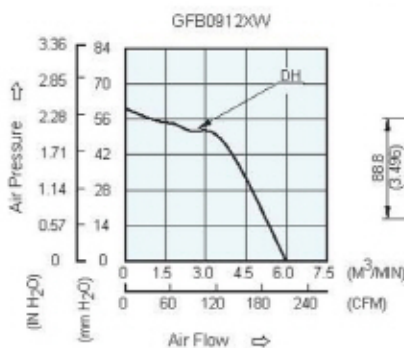
New

GFB 92 x 92 x 76 MM SERIES

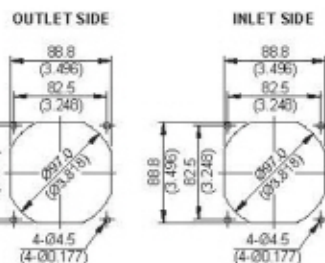
■ DIMENSIONS DRAWING



■ P & Q CURVE (AT RATED VOLTAGE)



■ MOUNTING PANEL CUTOUT



- * Bearing Type
Ball Bearings
- * Material
Impeller & Frame : Plastic (UL 94V-0)
- * Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red And Orange Wire Positive (+)
Black And Brown Wire Negative(-)
- * Weight : 410g (14.46 oz)

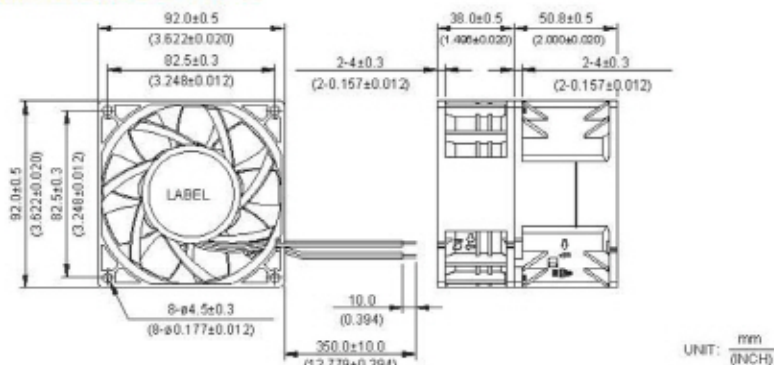
| MODEL | | Rated Voltage | Operating Voltage Range | Rated Current | Rated Input Power | Speed (Front/Rear) | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|-------------|---------------|-------------------------|---------------|-------------------|--------------------|---------------------|--------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| GFB0912DHW | -R00 / -F00 | 12 | 7.0 to 13.2 | 5.50 | 66.00 | 8250/7400 | 5.950 | 210.11 | 60.12 | 2.367 | 75.0 |

- * Function type is optional.
- * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
- * Noise is measured in anechoic chamber in free air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.

New

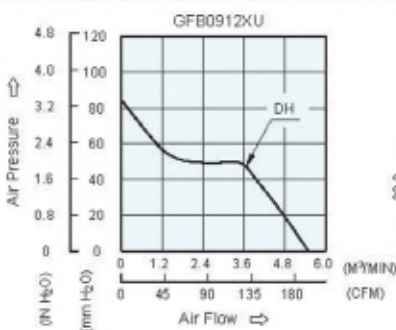
GFB 92 x 92 x 89 MM SERIES

DIMENSIONS DRAWING

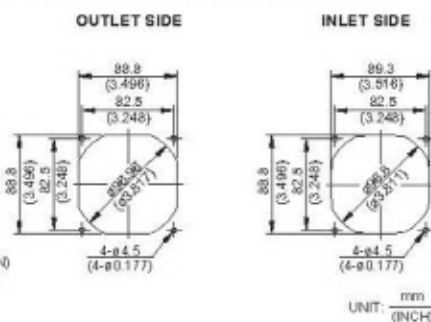


- Bearing Type: Ball Bearings
- Material: Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires : UL 1061 AWG #24 OR Equivalent
Red And Orange Wire Positive (+)
Black And Brown Wire Negative(-)
- Weight : 535g (18.87 oz)

P & Q CURVE (AT RATED VOLTAGE)



MOUNTING PANEL CUTOUT



| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed (Front/Rear) | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|-------------|---------------|-------------------------|---------------|-------------|--------------------|---------------------|--------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| GFB0912DHU | -R00 / -F00 | 12 | 7.0 to 13.2 | 5.50 | 66.00 | 8000/8000 | 5.490 | 193.87 | 85.19 | 3.354 | 73.4 |

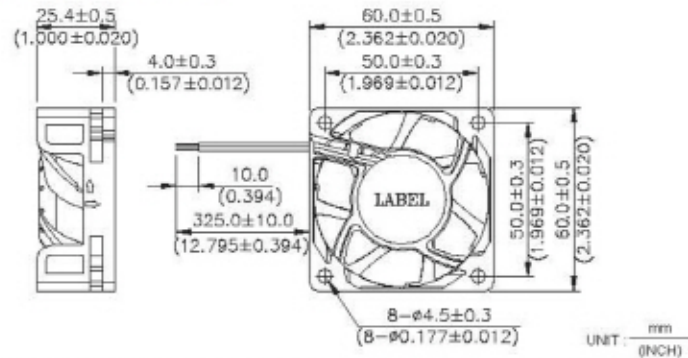
- * Function type is optional.
- * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow
- * Noise is measured in anechoic chamber in free air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.

NFB 60 x 60 x 25.4 MM SERIES

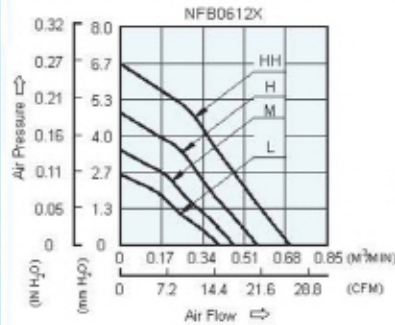
DIMENSIONS DRAWING



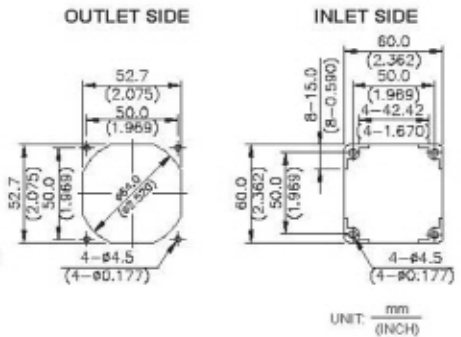
- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 67g (2.36 oz)



P & Q CURVE (AT RATED VOLTAGE)



MOUNTING PANEL CUTOUT

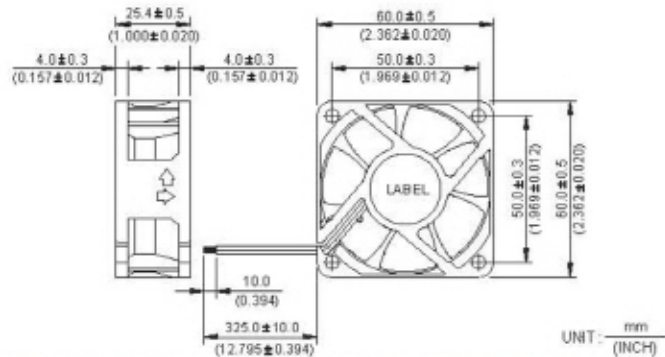


| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|-----------|-------------|---------------|-------------------------|---------------|-------------|--------|---------------------|-------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| NFB0612L | -R00 / -F00 | 12 | 4.0 to 13.8 | 0.07 | 0.84 | 3100 | 0.427 | 15.08 | 2.58 | 0.101 | 26.4 |
| NFB0612M | -R00 / -F00 | 12 | 4.0 to 13.8 | 0.09 | 1.08 | 3600 | 0.493 | 17.41 | 3.48 | 0.137 | 31.3 |
| NFB0612H | -R00 / -F00 | 12 | 4.0 to 13.8 | 0.13 | 1.56 | 4250 | 0.594 | 20.98 | 4.89 | 0.192 | 35.1 |
| NFB0612HH | -R00 / -F00 | 12 | 4.0 to 13.8 | 0.18 | 2.16 | 5000 | 0.705 | 24.90 | 6.66 | 0.262 | 40.7 |

- * Function type is optional.
- * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
- * Noise is measured in anechoic chamber in free air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.

NFB 60 x 60 x 25.4 MM SERIES

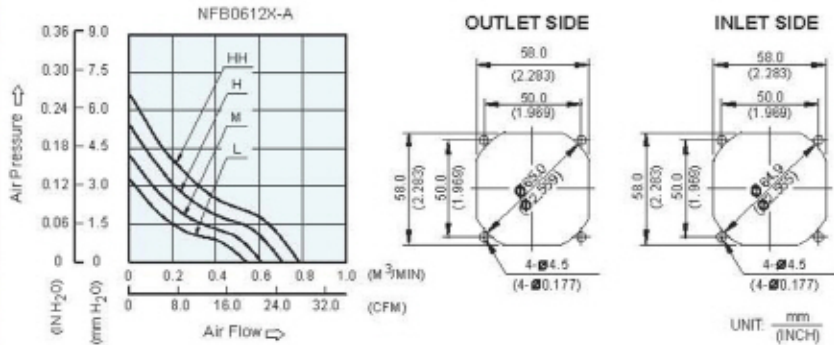
DIMENSIONS DRAWING



- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1430 AWG #26 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 50g (1.76 oz)

P & Q CURVE (AT RATED VOLTAGE)

MOUNTING PANEL CUTOUT

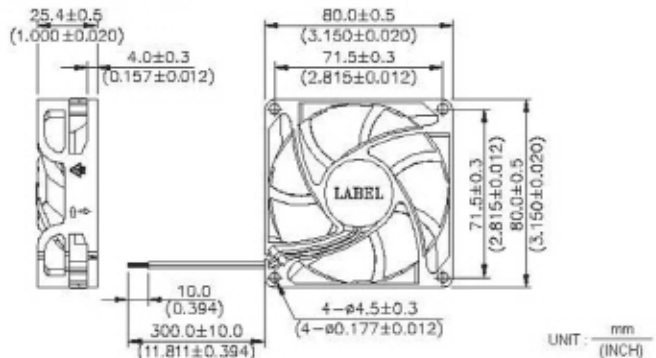


| MODEL | | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|-----------|------|-------------|---------------|-------------------------|---------------|-------------|--------|---------------------|-------|----------------------|---------------------|-------|
| PART NO. | REV. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| NFB0612L | -A | -R00 / -F00 | 12 | 5.5 to 13.8 | 0.07 | 0.84 | 3200 | 0.542 | 19.13 | 3.27 | 0.129 | 25.0 |
| NFB0612M | -A | -R00 / -F00 | 12 | 5.5 to 13.8 | 0.09 | 1.08 | 3700 | 0.612 | 21.61 | 4.24 | 0.167 | 29.0 |
| NFB0612H | -A | -R00 / -F00 | 12 | 5.5 to 13.8 | 0.11 | 1.32 | 4200 | 0.708 | 25.02 | 5.48 | 0.215 | 32.0 |
| NFB0612HH | -A | -R00 / -F00 | 12 | 5.5 to 13.8 | 0.15 | 1.80 | 4700 | 0.787 | 27.79 | 6.66 | 0.262 | 36.0 |

- * Function type is optional.
- * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
- * Noise is measured in anechoic chamber in free air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.

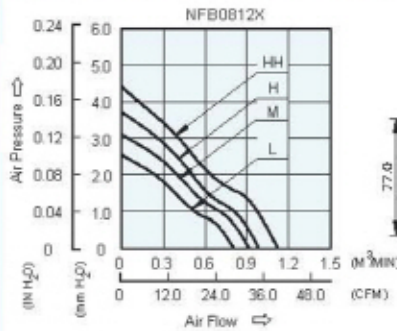
NFB 80 x 80 x 25.4 MM SERIES

DIMENSIONS DRAWING

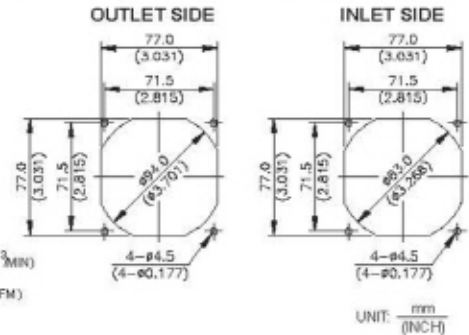


- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 80g (2.82 oz)

P & Q CURVE (AT RATED VOLTAGE)



MOUNTING PANEL CUTOUT



| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|-----------|-------------|---------------|-------------------------|---------------|-------------|--------|---------------------|-------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| NFB0812L | -R00 / -F00 | 12 | 4.0 to 13.8 | 0.08 | 0.96 | 2400 | 0.803 | 28.36 | 2.54 | 0.100 | 27.3 |
| NFB0812M | -R00 / -F00 | 12 | 4.0 to 13.8 | 0.10 | 1.20 | 2700 | 0.914 | 32.28 | 3.09 | 0.122 | 30.7 |
| NFB0812H | -R00 / -F00 | 12 | 4.0 to 13.8 | 0.11 | 1.32 | 3000 | 0.984 | 34.76 | 3.70 | 0.146 | 34.4 |
| NFB0812HH | -R00 / -F00 | 12 | 4.0 to 13.8 | 0.16 | 1.92 | 3200 | 1.120 | 39.55 | 4.40 | 0.173 | 35.7 |

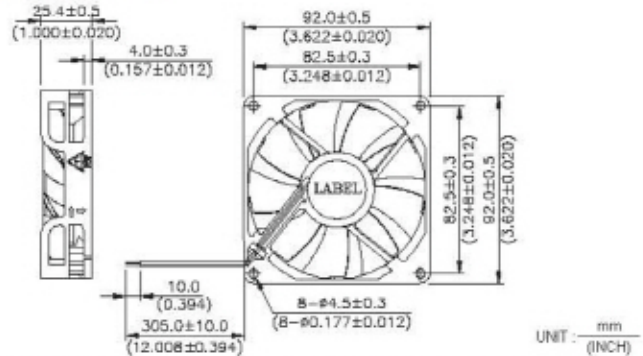
- * Function type is optional.
- * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
- * Noise is measured in anechoic chamber in free air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.

NFB 92 x 92 x 25.4 MM SERIES

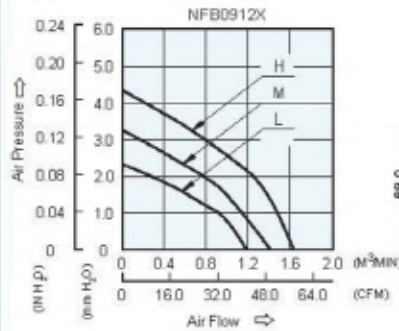
DIMENSIONS DRAWING



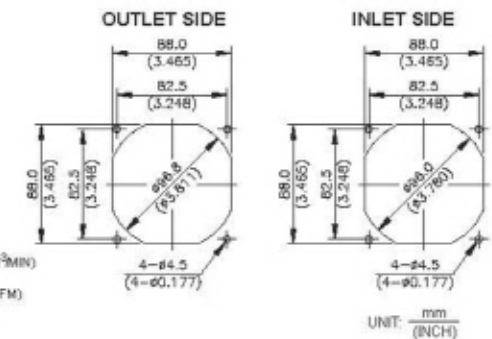
- Bearing Type
Ball Bearings
- Material
Impeller & Frame: Plastic (UL 94V-0)
- Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 110g (3.88 oz)



P & Q CURVE (AT RATED VOLTAGE)



MOUNTING PANEL CUTOUT



| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|----------|-------------|---------------|-------------------------|---------------|-------------|--------|---------------------|-------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| NFB0912L | -R00 / -F00 | 12 | 4.0 to 13.8 | 0.14 | 1.68 | 2100 | 1.190 | 42.02 | 2.33 | 0.092 | 29.1 |
| NFB0912M | -R00 / -F00 | 12 | 4.0 to 13.8 | 0.19 | 2.28 | 2450 | 1.413 | 49.90 | 3.26 | 0.128 | 36.0 |
| NFB0912H | -R00 / -F00 | 12 | 4.0 to 13.8 | 0.34 | 4.08 | 2850 | 1.640 | 57.92 | 4.35 | 0.171 | 38.6 |

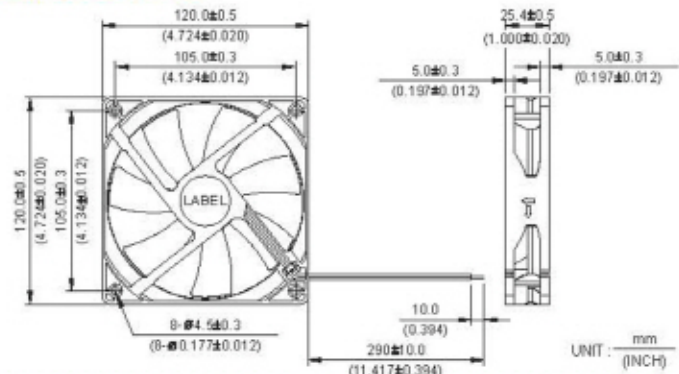
- * Function type is optional.
- * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
- * Noise is measured in anechoic chamber in free air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.

NFB 120 x 120 x 25.4 MM SERIES

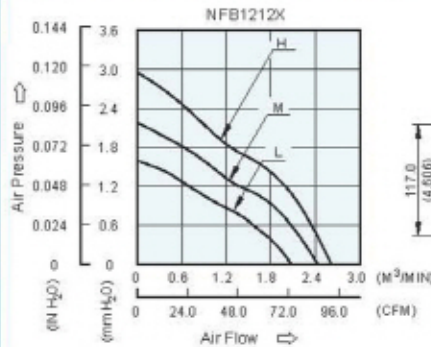
DIMENSIONS DRAWING



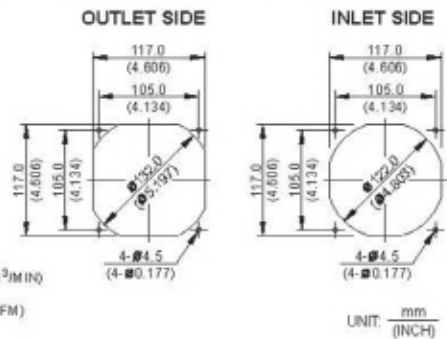
- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1430 AWG #26 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 141g (4.97 oz)



P & Q CURVE (AT RATED VOLTAGE)



MOUNTING PANEL CUTOUT



| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | Maximum Air Pressure | Noise | | |
|----------|-------------|---------------|-------------------------|---------------|-------------|--------|---------------------|----------------------|--------------------|---------------------|------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| NFB1212L | -R00 / -F00 | 12 | 5.0 to 13.8 | 0.18 | 2.16 | 1400 | 2.038 | 72.80 | 1.59 | 0.062 | 30.0 |
| NFB1212M | -R00 / -F00 | 12 | 5.0 to 13.8 | 0.26 | 3.12 | 1700 | 2.436 | 86.01 | 2.18 | 0.086 | 34.0 |
| NFB1212H | -R00 / -F00 | 12 | 5.0 to 13.8 | 0.34 | 4.08 | 2000 | 2.619 | 92.48 | 2.95 | 0.116 | 38.5 |

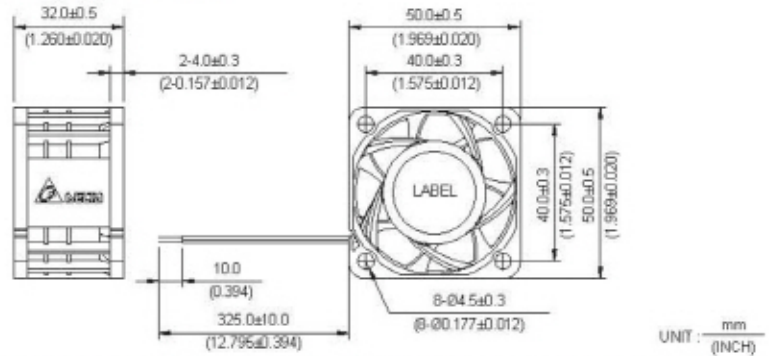
* Function type is optional.
 * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
 * Noise is measured in anechoic chamber in free air, one meter from intake side.
 * All readings are typical values at rated voltage.
 * Specifications are subject to change without notice.

New



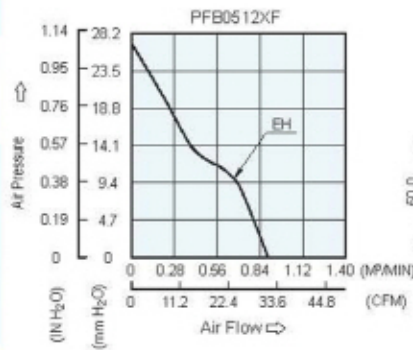
PFB 50 x 50 x 32 MM SERIES

■ DIMENSIONS DRAWING

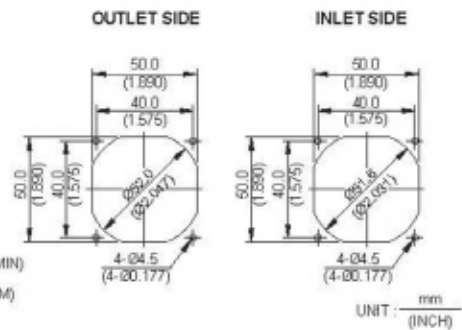


- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1061 AWG #26 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 58g (3.39oz)

■ P & Q CURVE (AT RATED VOLTAGE)



■ MOUNTING PANEL CUTOUT

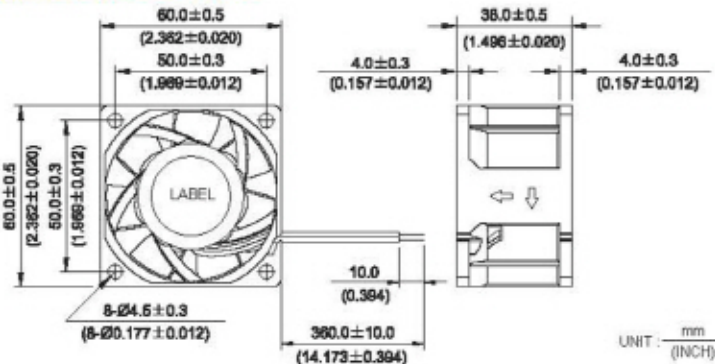


| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|-------------|---------------|-------------------------|---------------|-------------|--------|---------------------|-------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| PFB0512EHF | -R00 / -F00 | 12 | 5.0 to 13.2 | 0.54 | 6.48 | 10000 | 0.894 | 31.55 | 26.71 | 1.051 | 51.2 |

- * Function type is optional.
- * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
- * Noise is measured in anechoic chamber in free air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.

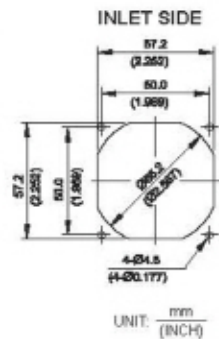
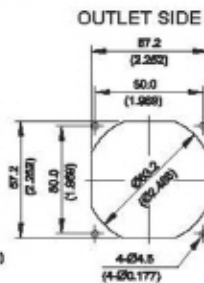
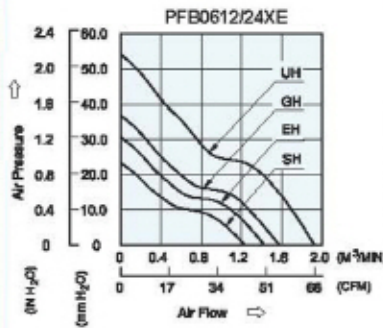
PFB 60 x 60 x 38 MM SERIES

DIMENSIONS DRAWING



P & Q CURVE (AT RATED VOLTAGE)

MOUNTING PANEL CUTOUT



- Bearing Type
Ball Bearings
- Material
Impeller & Frame: Plastic (UL 94V-0)
- Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 130g (4.59 oz)

| MODEL | | Rated Voltage | Operating Voltage Range | Rated Current | Rated Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|-------------|---------------|-------------------------|---------------|-------------------|--------|---------------------|-------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDCz | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| PFB0612SHE | -R00 / -F00 | 12 | 7.0 to 13.2 | 0.48 | 5.76 | 8000 | 1.234 | 43.57 | 23.32 | 0.918 | 50.5 |
| PFB0624SHE | -R00 / -F00 | 24 | 14.0 to 26.4 | 0.28 | 6.72 | | | | | | |
| PFB0612EHE | -R00 / -F00 | 12 | 7.0 to 13.2 | 0.63 | 7.56 | 9000 | 1.428 | 50.43 | 30.56 | 1.203 | 54.0 |
| PFB0624EHE | -R00 / -F00 | 24 | 14.0 to 26.4 | 0.36 | 8.64 | | | | | | |
| PFB0612GHE | -R00 / -F00 | 12 | 7.0 to 13.2 | 0.85 | 10.20 | 10000 | 1.575 | 55.62 | 36.68 | 1.444 | 57.5 |
| PFB0624GHE | -R00 / -F00 | 24 | 14.0 to 26.4 | 0.48 | 11.52 | | | | | | |
| PFB0612UHE | -R00 / -F00 | 12 | 7.0 to 13.2 | 1.40 | 16.80 | 12000 | 1.922 | 67.85 | 54.10 | 2.129 | 61.5 |

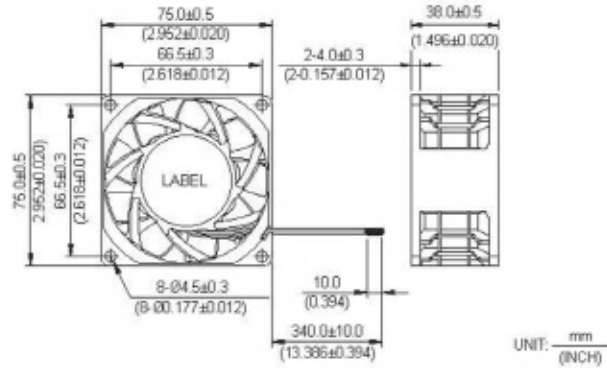
- * Function type is optional.
- * The max. air flow and the speed are measured in free air; max. air pressure is measured at zero air flow.
- * Noise is measured in anechoic chamber in free air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.

New



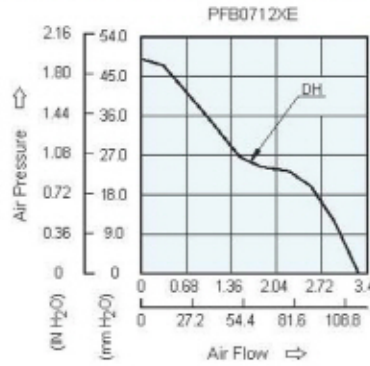
PFB 75 x 75 x 38 MM SERIES

■ DIMENSIONS DRAWING

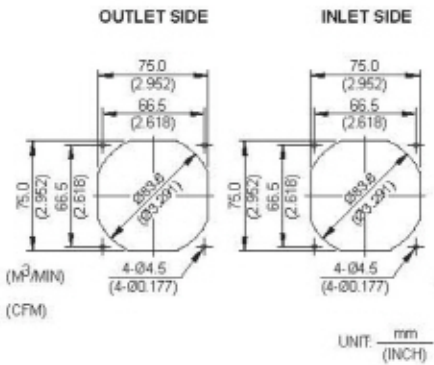


- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive (+)
Black Wire Negative(-)
- Weight : 190g (6.70 oz)

■ P & Q CURVE (AT RATED VOLTAGE)



■ MOUNTING PANEL CUTOUT

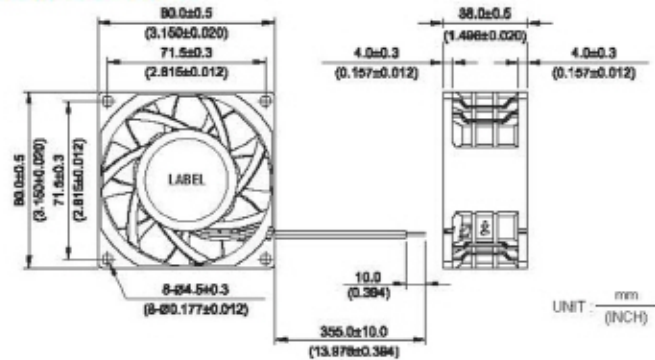


| MODEL | | Rated Voltage | Operating Voltage Range | Rated Current | Rated Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|-----------|---------------|-------------------------|---------------|-------------------|--------|---------------------|--------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| PFB0712DHE | -R00/-F00 | 12 | 7.0 to 13.2 | 3.00 | 36.00 | 10300 | 3.270 | 115.73 | 48.96 | 1.928 | 67.5 |

- * Function type is optional.
- * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow
- * Noise is measured in anechoic chamber in free air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.

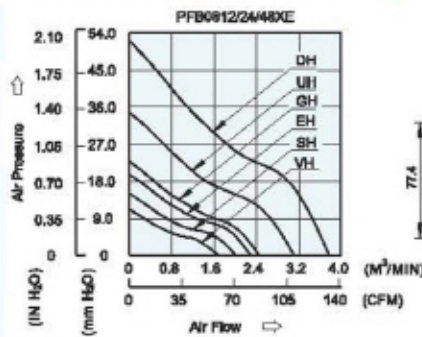
PFB 80 x 80 x 38 MM SERIES

DIMENSIONS DRAWING

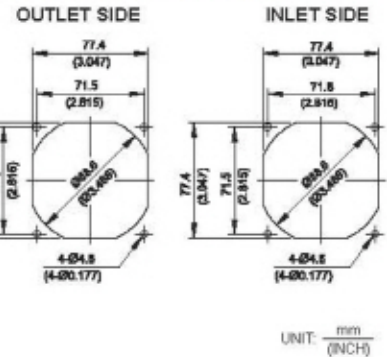


- Bearing Type
Ball Bearings
- Material
Impeller & Frame: Plastic (UL 94V-0)
- Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 200g (7.05 oz)

P & Q CURVE (AT RATED VOLTAGE)



MOUNTING PANEL CUTOUT

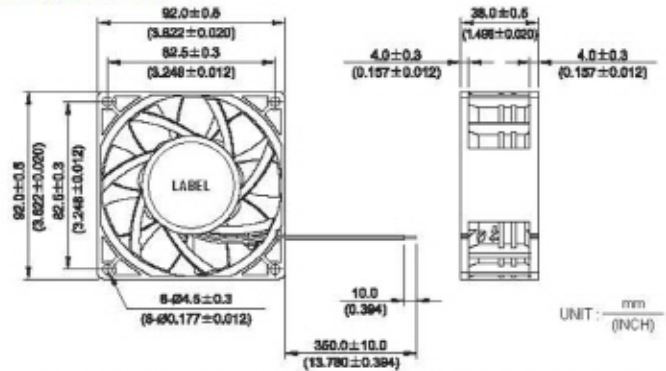


| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|-------------|---------------|-------------------------|---------------|-------------|--------|---------------------|--------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| PFB0812VHE | -R00 / -F00 | 12 | 7.0 to 13.2 | 0.39 | 4.68 | 4200 | 1.649 | 58.23 | 10.70 | 0.421 | 45.1 |
| PFB0812SHE | -R00 / -F00 | 12 | 7.0 to 13.2 | 0.51 | 6.12 | 4900 | 1.967 | 69.49 | 14.53 | 0.571 | 49.3 |
| PFB0812EHE | -R00 / -F00 | 12 | 7.0 to 13.2 | 0.72 | 8.64 | 5600 | 2.243 | 79.23 | 19.50 | 0.767 | 53.0 |
| PFB0824EHE | -R00 / -F00 | 24 | 14.0 to 26.4 | 0.36 | 8.64 | | | | | | |
| PFB0848EHE | -R00 / -F00 | 48 | 28.0 to 56.0 | 0.23 | 11.04 | 6100 | 2.448 | 86.44 | 22.80 | 0.898 | 55.5 |
| PFB0812GHE | -R00 / -F00 | 12 | 7.0 to 13.2 | 0.85 | 10.20 | | | | | | |
| PFB0824GHE | -R00 / -F00 | 24 | 14.0 to 26.4 | 0.45 | 10.80 | 7500 | 3.038 | 107.30 | 34.75 | 1.368 | 61.0 |
| PFB0848GHE | -R00 / -F00 | 48 | 28.0 to 56.0 | 0.27 | 12.96 | | | | | | |
| PFB0812UHE | -R00 / -F00 | 12 | 7.0 to 13.2 | 1.55 | 18.60 | 9000 | 3.754 | 132.56 | 51.57 | 2.030 | 65.0 |
| PFB0824UHE | -R00 / -F00 | 24 | 14.0 to 26.4 | 0.77 | 18.48 | | | | | | |
| PFB0848UHE | -R00 / -F00 | 48 | 28.0 to 56.0 | 0.42 | 20.16 | | | | | | |
| PFB0812DHE | -R00 / -F00 | 12 | 7.0 to 13.2 | 2.75 | 33.00 | | | | | | |
| PFB0824DHE | -R00 / -F00 | 24 | 14.0 to 26.4 | 1.35 | 32.40 | | | | | | |

* Function type is optional.
 * The max. air flow and the speed are measured in free air; max. air pressure is measured at zero air flow.
 * Noise is measured in anechoic chamber in free air, one meter from intake side.
 * All readings are typical values at rated voltage.
 * Specifications are subject to change without notice.

PFB 92 x 92 x 38 MM SERIES

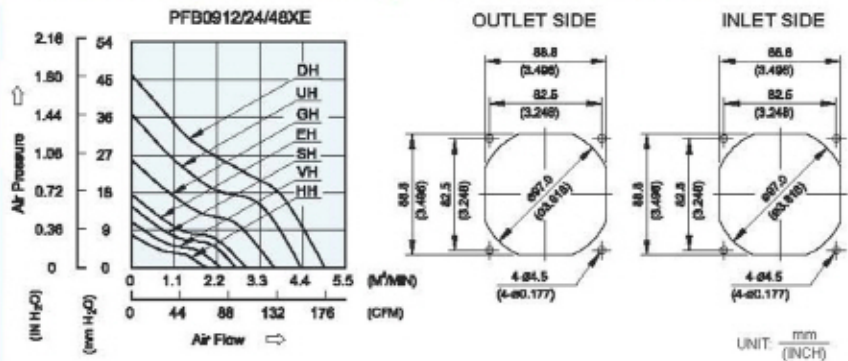
DIMENSIONS DRAWING



- Bearing Type: Ball Bearings
- Material: Impeller & Frame: Plastic (UL 94V-0)
- Lead Wires: UL 1007 AWG #24 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight: 250g (8.82 oz)

P & Q CURVE (AT RATED VOLTAGE)

MOUNTING PANEL CUTOUT



| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|-------------|---------------|-------------------------|---------------|-------------|--------|----------------------|--------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ / min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| PFB0912HHE | -R00 / -F00 | 12 | 7.0 to 13.2 | 0.33 | 3.96 | 3200 | 1.933 | 68.26 | 7.76 | 0.305 | 43.5 |
| PFB0912VHE | -R00 / -F00 | 12 | 7.0 to 13.2 | 0.38 | 4.56 | 3800 | 2.287 | 80.77 | 10.88 | 0.428 | 46.2 |
| PFB0912SHE | -R00 / -F00 | 12 | 7.0 to 13.2 | 0.55 | 6.60 | 4400 | 2.668 | 94.22 | 14.67 | 0.578 | 51.7 |
| PFB0912EHE | -R00 / -F00 | 12 | 7.0 to 13.2 | 0.68 | 8.16 | 4800 | 2.936 | 103.67 | 17.56 | 0.691 | 54.0 |
| PFB0924EHE | -R00 / -F00 | 24 | 14.0 to 26.4 | 0.33 | 7.92 | | | | | | |
| PFB0948EHE | -R00 / -F00 | 48 | 28.0 to 56.0 | 0.21 | 10.08 | 6000 | 3.662 | 129.31 | 25.78 | 1.015 | 60.5 |
| PFB0912GHE | -R00 / -F00 | 12 | 7.0 to 13.2 | 1.22 | 14.64 | | | | | | |
| PFB0924GHE | -R00 / -F00 | 24 | 14.0 to 26.4 | 0.83 | 15.12 | 7000 | 4.347 | 153.52 | 36.79 | 1.449 | 64.0 |
| PFB0948GHE | -R00 / -F00 | 48 | 28.0 to 56.0 | 0.36 | 16.80 | | | | | | |
| PFB0912UHE | -R00 / -F00 | 12 | 7.0 to 13.2 | 1.96 | 23.52 | 8000 | 4.957 | 175.03 | 46.21 | 1.819 | 66.5 |
| PFB0924UHE | -R00 / -F00 | 24 | 14.0 to 26.4 | 1.02 | 24.48 | | | | | | |
| PFB0948UHE | -R00 / -F00 | 48 | 28.0 to 56.0 | 0.60 | 28.80 | | | | | | |
| PFB0912DHE | -R00 / -F00 | 12 | 7.0 to 13.2 | 3.10 | 37.20 | | | | | | |
| PFB0924DHE | -R00 / -F00 | 24 | 14.0 to 26.4 | 1.45 | 34.80 | | | | | | |

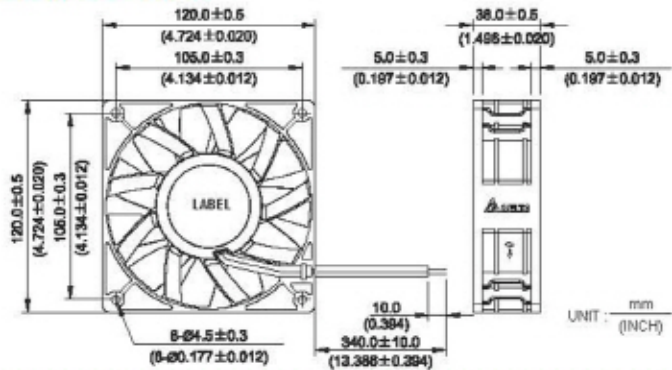
* Function type is optional.
 * The max. air flow and the speed are measured in free air; max. air pressure is measured at zero air flow.
 * Noise is measured in anechoic chamber in free air, one meter from intake side.
 * All readings are typical values at rated voltage.
 * Specifications are subject to change without notice.

PFB 120 x 120 x 38 MM SERIES

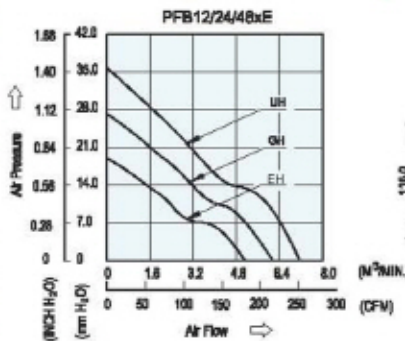
DIMENSIONS DRAWING



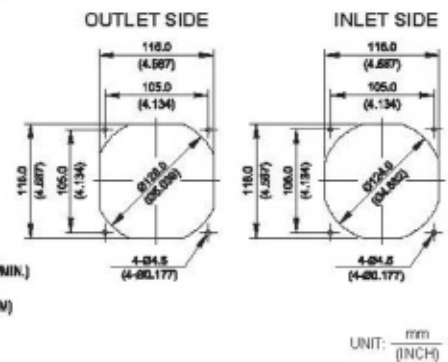
- Bearing Type
Ball Bearings
- Material
Impeller & Frame: Plastic (UL 94V-0)
- Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 380g (13.40 oz)



P & Q CURVE (AT RATED VOLTAGE)



MOUNTING PANEL CUTOUT



| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|-------------|---------------|-------------------------|---------------|-------------|--------|----------------------|--------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ / min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| PFB1212EHE | -R00 / -F00 | 12 | 8.0 to 13.2 | 1.60 | 19.20 | 4000 | 5.133 | 181.27 | 19.08 | 0.751 | 59.0 |
| PFB1224EHE | -R00 / -F00 | 24 | 14.0 to 26.5 | 0.90 | 21.60 | | | | | | |
| PFB1248EHE | -R00 / -F00 | 48 | 30.0 to 56.0 | 0.45 | 21.60 | | | | | | |
| PFB1212GHE | -R00 / -F00 | 12 | 8.0 to 13.2 | 2.70 | 32.40 | 4800 | 6.167 | 217.79 | 27.31 | 1.075 | 64.0 |
| PFB1224GHE | -R00 / -F00 | 24 | 14.0 to 26.5 | 1.35 | 32.40 | | | | | | |
| PFB1248GHE | -R00 / -F00 | 48 | 30.0 to 56.0 | 0.68 | 32.64 | | | | | | |
| PFB1212UHE | -R00 / -F00 | 12 | 8.0 to 13.2 | 4.00 | 48.00 | 5500 | 7.160 | 252.85 | 35.88 | 1.412 | 66.5 |
| PFB1224UHE | -R00 / -F00 | 24 | 14.0 to 26.5 | 2.00 | 48.00 | | | | | | |
| PFB1248UHE | -R00 / -F00 | 48 | 30.0 to 56.0 | 1.00 | 48.00 | | | | | | |

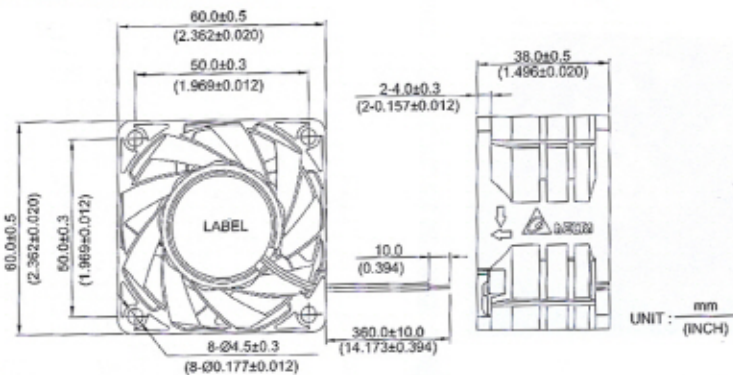
* Function type is optional.
 * The max. air flow and the speed are measured in free air; max. air pressure is measured at zero air flow.
 * Noise is measured in anechoic chamber in free air, one meter from intake side.
 * All readings are typical values at rated voltage.
 * Specifications are subject to change without notice.

New



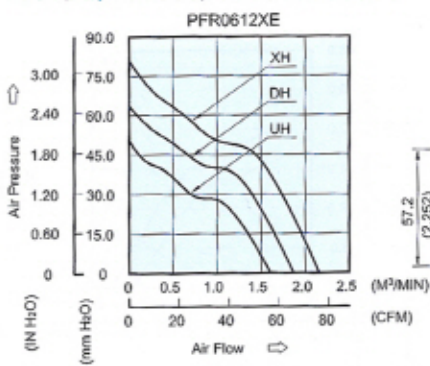
PFR 60 x 60 x 38 MM SERIES

DIMENSIONS DRAWING

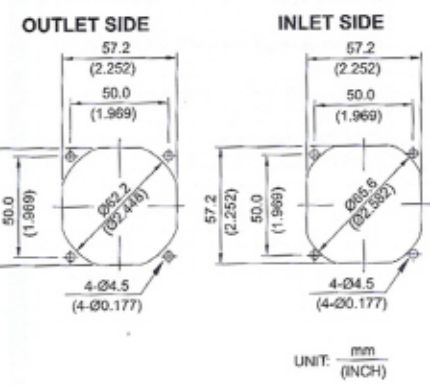


- Bearing Type
Ball Bearings
- Material
Impeller & Frame: Plastic (UL 94V-0)
- Lead Wires :
UL 1061 AWG #22 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 130g (4.59 oz)

P & Q CURVE (AT RATED VOLTAGE)



MOUNTING PANEL CUTOUT



| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|-------------|---------------|-------------------------|---------------|-------------|--------|---------------------|-------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| PFR0612UHE | -R00 / -F00 | 12 | 7.0 to 13.2 | 1.00 | 12.00 | 12500 | 1.606 | 56.70 | 50.27 | 1.979 | 60.2 |
| PFR0612DHE | -R00 / -F00 | 12 | 7.0 to 13.2 | 1.60 | 19.20 | 14500 | 1.868 | 65.95 | 63.56 | 2.502 | 63.3 |
| PFR0612XHE | -R00 / -F00 | 12 | 7.0 to 13.2 | 2.30 | 27.60 | 16500 | 2.157 | 76.16 | 80.90 | 3.185 | 67.7 |

* Function type is optional.
 * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
 * Noise is measured in anechoic chamber in free air, one meter from intake side.
 * All readings are typical values at rated voltage.
 * Specifications are subject to change without notice.

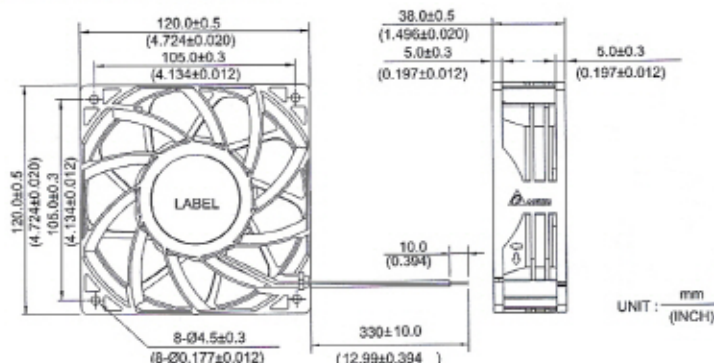
New



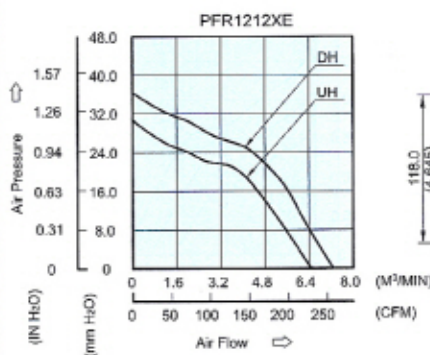
- Bearing Type
Ball Bearings
- Material
Impeller & Frame: Plastic (UL 94V-0)
- Lead Wires :
UL 1430 AWG #22 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 410g (14.46 oz)

PFR 120 x 120 x 38 MM SERIES

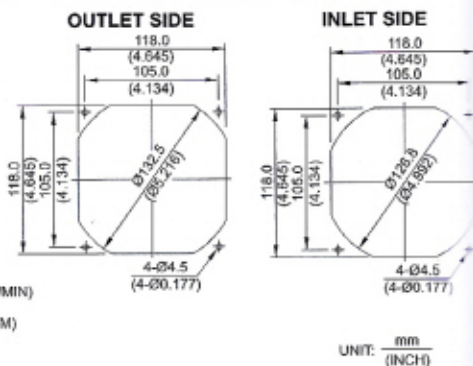
■ DIMENSIONS DRAWING



■ P & Q CURVE (AT RATED VOLTAGE)



■ MOUNTING PANEL CUTOUT



| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|-------------|---------------|-------------------------|---------------|-------------|--------|---------------------|--------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| PFR1212UHE | -R00 / -F00 | 12 | 8.0 to 13.2 | 2.70 | 32.40 | 6600 | 6.475 | 228.65 | 30.63 | 1.206 | 65.5 |
| PFR1212DHE | -R00 / -F00 | 12 | 8.0 to 13.2 | 3.70 | 44.40 | 7400 | 7.202 | 254.34 | 36.51 | 1.438 | 68.5 |

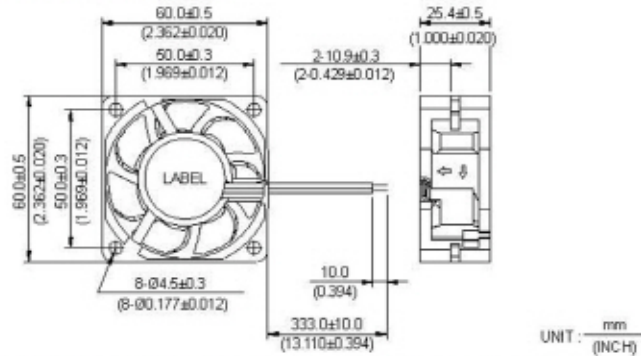
- * Function type is optional.
- * The max. air flow and the speed are measured in free air; max. air pressure is measured at zero air flow.
- * Noise is measured in anechoic chamber in free air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.

New



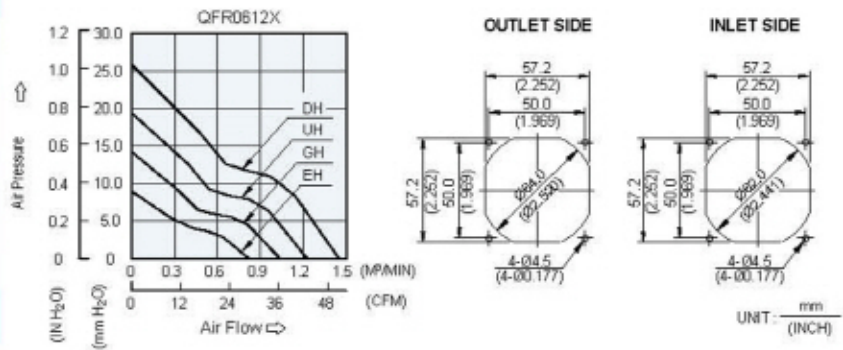
QFR 60 x 60 x 25.4 MM SERIES

DIMENSIONS DRAWING



P & Q CURVE (AT RATED VOLTAGE)

MOUNTING PANEL CUTOUT



- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1061 AWG #24 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 90g (3.17 oz)

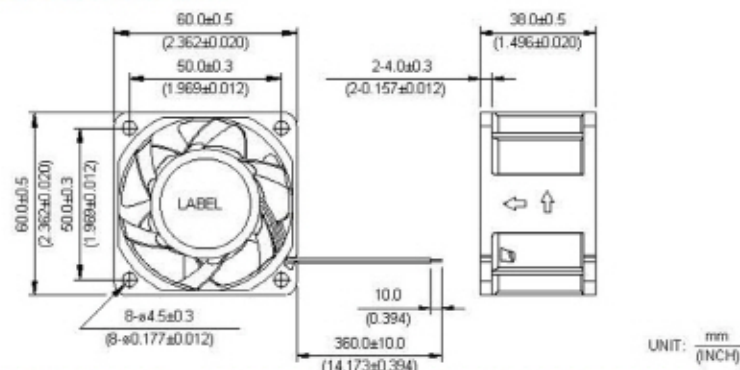
| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|-------------|-------------|---------------|-------------------------|---------------|-------------|--------|---------------------|-------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| QFR0612EH-B | -R00 / -F00 | 12 | 7.0 to 13.2 | 0.20 | 2.40 | 6000 | 0.818 | 28.89 | 8.96 | 0.353 | 39.0 |
| QFR0612GH-B | -R00 / -F00 | 12 | 7.0 to 13.2 | 0.30 | 3.60 | 7600 | 1.036 | 36.59 | 14.18 | 0.558 | 44.7 |
| QFR0612UH-B | -R00 / -F00 | 12 | 7.0 to 13.2 | 0.47 | 5.64 | 9000 | 1.226 | 43.30 | 19.37 | 0.763 | 49.7 |
| QFR0612DH-B | -R00 / -F00 | 12 | 7.0 to 13.2 | 0.75 | 9.00 | 10600 | 1.449 | 51.17 | 25.80 | 1.016 | 54.5 |

- * Function type is optional.
- * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
- * Noise is measured in anechoic chamber in free air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.

New

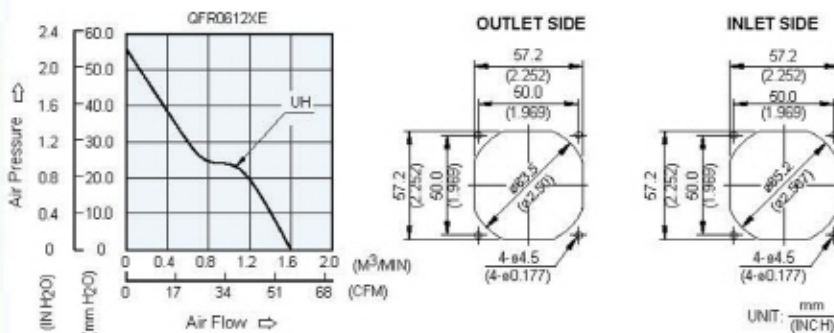
QFR 60 x 60 x 38 MM SERIES

DIMENSIONS DRAWING



P & Q CURVE (AT RATED VOLTAGE)

MOUNTING PANEL CUTOUT



- Bearing Type: Ball Bearings
- Material: Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
 - UL 1007 AWG #24 OR Equivalent
 - Red Wire Positive (+)
 - Black Wire Negative(-)
- Weight : 130g (4.59 oz)

| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|-------------|---------------|-------------------------|---------------|-------------|--------|---------------------|-------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| QFR0612UHE | -R00 / -F00 | 12 | 7.0 to 13.2 | 1.10 | 13.20 | 13000 | 1.599 | 56.45 | 55.73 | 2.194 | 61.5 |

- * Function type is optional.
- * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
- * Noise is measured in anechoic chamber in free air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.

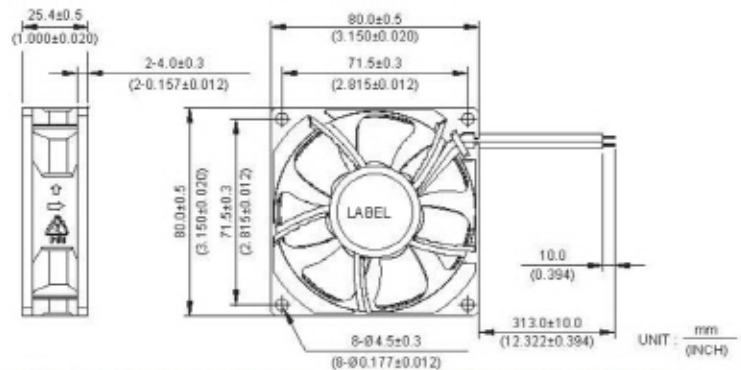
New



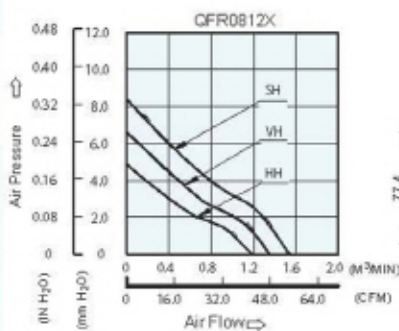
- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 88 g (3.10 oz)

QFR 80 x 80 x 25.4 MM SERIES

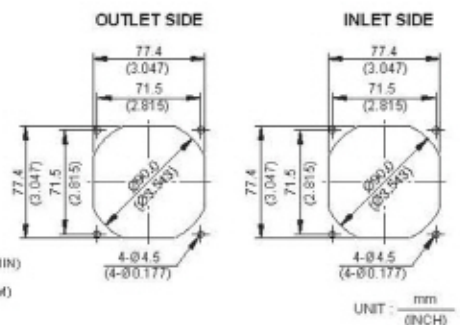
■ DIMENSIONS DRAWING



■ P & Q CURVE (AT RATED VOLTAGE)



■ MOUNTING PANEL CUTOUT

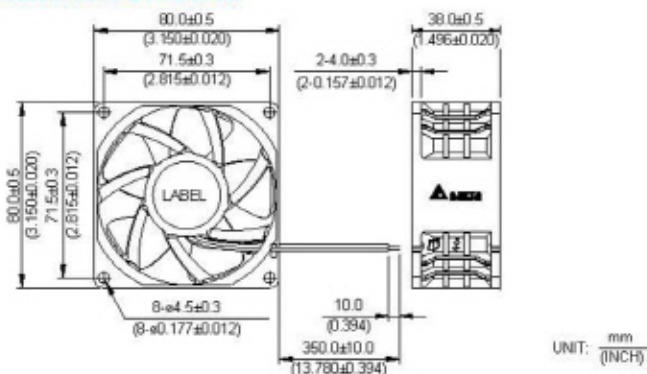


| MODEL | | Rated Voltage | Operating Voltage Range | Rated Current | Rated Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|-----------|-------------|---------------|-------------------------|---------------|-------------------|--------|---------------------|-------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| QFR0812HH | -R00 / -F00 | 12 | 5.0 to 13.2 | 0.16 | 1.92 | 3300 | 1.175 | 41.50 | 4.81 | 0.189 | 36.4 |
| QFR0812VH | -R00 / -F00 | 12 | 5.0 to 13.2 | 0.21 | 2.52 | 3800 | 1.354 | 47.80 | 6.40 | 0.251 | 39.5 |
| QFR0812SH | -R00 / -F00 | 12 | 5.0 to 13.2 | 0.33 | 3.96 | 4300 | 1.545 | 54.57 | 8.40 | 0.331 | 41.2 |

- * Function type is optional.
- * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
- * Noise is measured in anechoic chamber in free air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.

QFR 80 x 80 x 38 MM SERIES

DIMENSIONS DRAWING

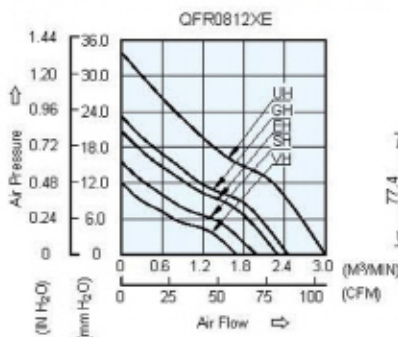


UNIT: mm
(INCH)

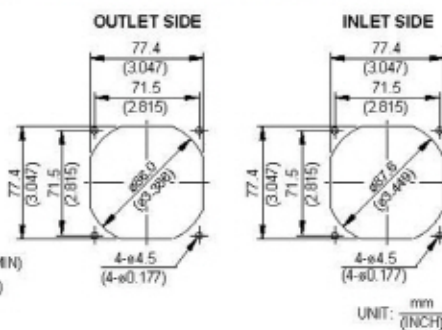


- Bearing Type
Ball Bearings
- Material
Impeller & Pillow : Plastic (UL 94V-0)
- Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 160g (5.64 oz)

P & Q CURVE (AT RATED VOLTAGE)



MOUNTING PANEL CUTOUT



| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|----------|---------------|-------------------------|---------------|-------------|--------|---------------------|--------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| QFR0812VHE | -R00-F00 | 12 | 7.0 to 13.2 | 0.29 | 3.48 | 5200 | 1.688 | 59.62 | 12.08 | 0.476 | 44.4 |
| QFR0812SHE | -R00-F00 | 12 | 7.0 to 13.2 | 0.40 | 4.80 | 5900 | 1.907 | 67.35 | 15.04 | 0.592 | 48.4 |
| QFR0812EHE | -R00-F00 | 12 | 7.0 to 13.2 | 0.47 | 5.64 | 6800 | 2.214 | 78.17 | 19.80 | 0.780 | 52.8 |
| QFR0812GHE | -R00-F00 | 12 | 7.0 to 13.2 | 0.72 | 8.64 | 7500 | 2.445 | 86.36 | 23.76 | 0.935 | 55.4 |
| QFR0812UHE | -R00-F00 | 12 | 7.0 to 13.2 | 1.15 | 13.80 | 9000 | 2.979 | 105.21 | 33.91 | 1.335 | 60.0 |

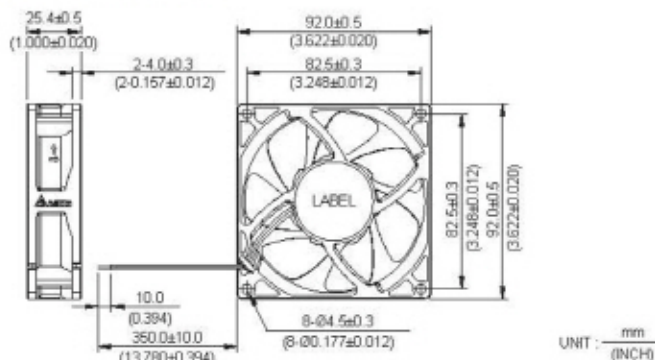
- * Function type is optional.
- * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
- * Noise is measured in anechoic chamber in free air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.

QFR 92 x 92 x 25.4 MM SERIES

■ DIMENSIONS DRAWING



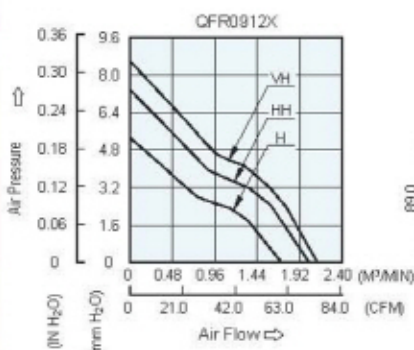
- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1061 AWG #24 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 110g (3.860 oz)



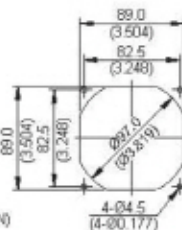
UNIT : $\frac{\text{mm}}{\text{(INCH)}}$

■ P & Q CURVE (AT RATED VOLTAGE)

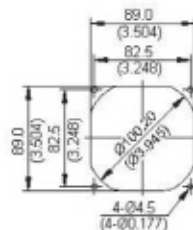
■ MOUNTING PANEL CUTOUT



OUTLET SIDE



INLET SIDE



UNIT : $\frac{\text{mm}}{\text{(INCH)}}$

| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|-----------|-------------|---------------|-------------------------|---------------|-------------|--------|----------------------|-------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ / min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| QFR0912H | -R00 / -F00 | 12 | 5.0 to 13.2 | 0.22 | 2.64 | 3200 | 1.712 | 60.47 | 5.34 | 0.210 | 37.0 |
| QFR0912HH | -R00 / -F00 | 12 | 5.0 to 13.2 | 0.31 | 3.72 | 3800 | 2.024 | 71.49 | 7.39 | 0.291 | 42.2 |
| QFR0912VH | -R00 / -F00 | 12 | 10.8 to 13.2 | 0.40 | 4.80 | 4200 | 2.117 | 74.78 | 8.62 | 0.339 | 45.0 |

* Function type is optional.
 * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
 * Noise is measured in anechoic chamber in free air, one meter from intake side.
 * All readings are typical values at rated voltage.
 * Specifications are subject to change without notice.

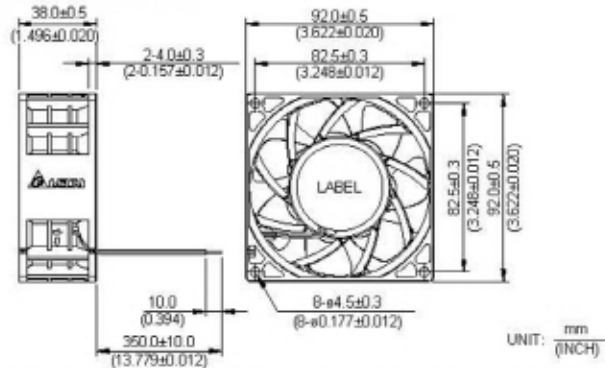
New



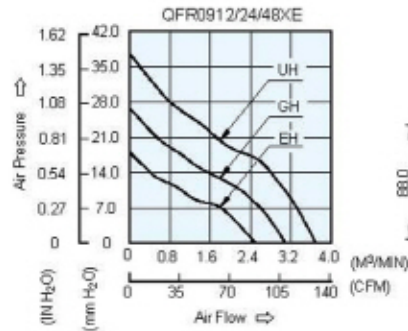
- Bearing Type
Ball Bearings
- Material
Impeller & Pillow : Plastic (UL 94V-0)
- Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 195g (6.88 oz)

QFR 92 x 92 x 38 MM SERIES

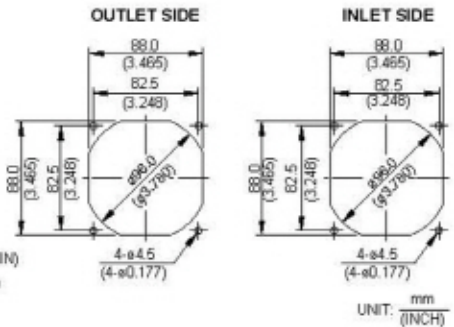
■ DIMENSIONS DRAWING



■ P & Q CURVE (AT RATED VOLTAGE)



■ MOUNTING PANEL CUTOUT

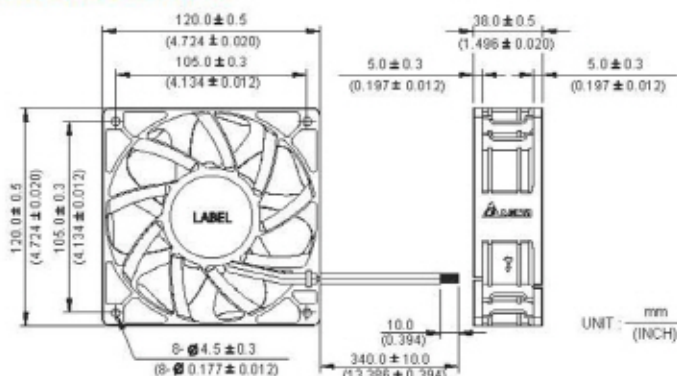


| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|-----------|---------------|-------------------------|---------------|-------------|--------|---------------------|--------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| QFR0912EHE | -R00/-F00 | 12 | 8.0 to 13.2 | 0.60 | 7.20 | 5700 | 2.507 | 88.53 | 18.06 | 0.711 | 51.7 |
| QFR0924EHE | -R00/-F00 | 24 | 16.0 to 26.4 | 0.30 | 7.20 | | | | | | |
| QFR0948EHE | -R00/-F00 | 48 | 33.0 to 52.8 | 0.15 | 7.20 | | | | | | |
| QFR0912GHE | -R00/-F00 | 12 | 8.0 to 13.2 | 0.95 | 11.40 | 7000 | 3.097 | 109.38 | 26.82 | 1.056 | 57.0 |
| QFR0924GHE | -R00/-F00 | 24 | 16.0 to 26.4 | 0.50 | 12.00 | | | | | | |
| QFR0948GHE | -R00/-F00 | 48 | 33.0 to 52.8 | 0.25 | 12.00 | | | | | | |
| QFR0912UHE | -R00/-F00 | 12 | 8.0 to 13.2 | 1.60 | 19.20 | 8300 | 3.731 | 131.76 | 37.35 | 1.466 | 62.0 |
| QFR0924UHE | -R00/-F00 | 24 | 16.0 to 26.4 | 0.80 | 19.20 | | | | | | |
| QFR0948UHE | -R00/-F00 | 48 | 33.0 to 52.8 | 0.40 | 19.20 | | | | | | |

* Function type is optional.
 * The max. air flow and the speed are measured in free air; max. air pressure is measured at zero air flow.
 * Noise is measured in anechoic chamber in free air, one meter from intake side.
 * All readings are typical values at rated voltage.
 * Specifications are subject to change without notice.

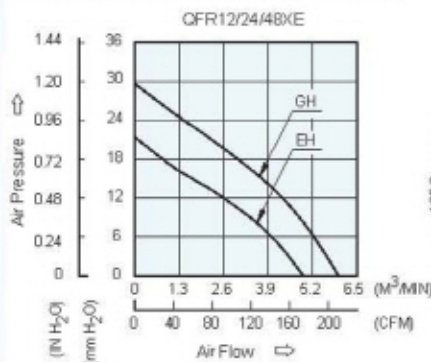
QFR 120 x 120 x 38 MM SERIES

■ DIMENSIONS DRAWING

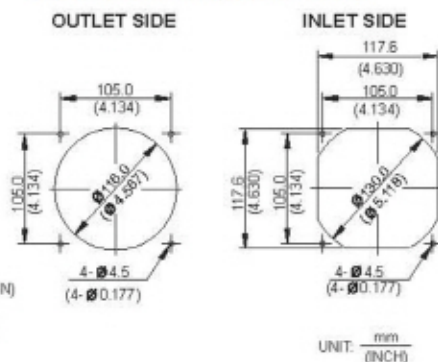


- Bearing Type: Ball Bearings
- Material: Impeller & Pillow : Plastic (UL 94V-0)
- Lead Wires : UL 1430 AWG #22 OR Equivalent
- Red Wire Positive(+)
- Black Wire Negative(-)
- Weight : 330g (11.64 oz)

■ P & Q CURVE (AT RATED VOLTAGE)



■ MOUNTING PANEL CUTOUT



| MODEL | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | Maximum Air Pressure | Noise | | | |
|------------|---------------|-------------------------|---------------|-------------|-------|------------------|----------------------|--------|--------------------|---------------------|------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| QFR1212EHE | -R00V-F00 | 12 | 8.0 to 13.2 | 1.00 | 12.00 | 5000 | 4.922 | 173.83 | 21.43 | 0.844 | 59.0 |
| QFR1224EHE | -R00V-F00 | 24 | 16.0 to 26.4 | 0.50 | 12.00 | | | | | | |
| QFR1248EHE | -R00V-F00 | 48 | 33.0 to 52.8 | 0.26 | 12.48 | | | | | | |
| QFR1212GHE | -R00V-F00 | 12 | 8.0 to 13.2 | 1.80 | 21.60 | 6000 | 5.957 | 210.38 | 29.18 | 1.170 | 64.0 |
| QFR1224GHE | -R00V-F00 | 24 | 16.0 to 26.4 | 0.94 | 22.56 | | | | | | |
| QFR1248GHE | -R00V-F00 | 48 | 33.0 to 52.8 | 0.50 | 24.00 | | | | | | |

* Function type is optional.
 * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
 * Noise is measured in anechoic chamber in free air, one meter from intake side.
 * All readings are typical values at rated voltage.
 * Specifications are subject to change without notice.

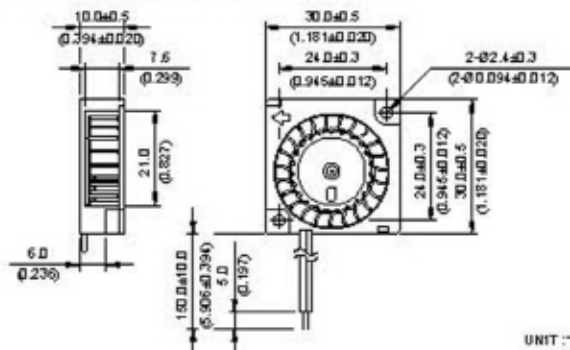
New



- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1571 AWG #28 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 10g (0.35 oz)

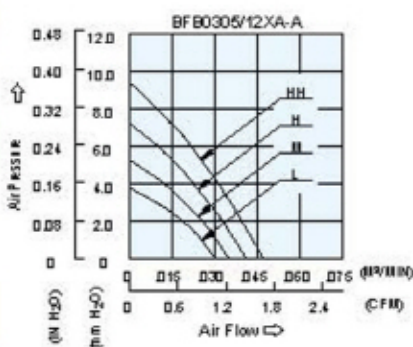
BFB 30 x 30 x 10 MM SERIES

■ DIMENSIONS DRAWING



UNIT : $\frac{mm}{(INCH)}$

■ P & Q CURVE (AT RATED VOLTAGE)



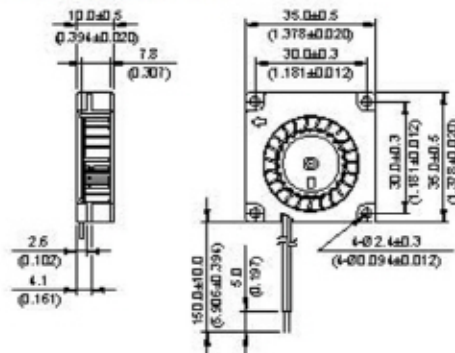
| MODEL | | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | Maximum Air Pressure | Noise | | |
|------------|------|-------------|---------------|-------------------------|---------------|-------------|--------|---------------------|----------------------|--------------------|---------------------|------|
| PART NO. | REV. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| BFB0305LA | -A | -R00 / -F00 | 5 | 4.0 to 5.5 | 0.06 | 0.30 | 5500 | 0.030 | 1.06 | 3.66 | 0.144 | 24.0 |
| BFB0312LA | -A | -R00 / -F00 | 12 | 7.0 to 13.2 | 0.04 | 0.48 | | | | | | |
| BFB0305MA | -A | -R00 / -F00 | 5 | 4.0 to 5.5 | 0.08 | 0.40 | 6500 | 0.035 | 1.24 | 5.23 | 0.206 | 26.0 |
| BFB0312MA | -A | -R00 / -F00 | 12 | 7.0 to 13.2 | 0.05 | 0.60 | | | | | | |
| BFB0305HA | -A | -R00 / -F00 | 5 | 4.0 to 5.5 | 0.11 | 0.55 | 7500 | 0.041 | 1.45 | 7.24 | 0.285 | 29.0 |
| BFB0312HA | -A | -R00 / -F00 | 12 | 7.0 to 13.2 | 0.06 | 0.72 | | | | | | |
| BFB0305HHA | -A | -R00 / -F00 | 5 | 4.0 to 5.5 | 0.15 | 0.75 | 8500 | 0.047 | 1.66 | 9.40 | 0.370 | 31.0 |
| BFB0312HHA | -A | -R00 / -F00 | 12 | 7.0 to 13.2 | 0.08 | 0.96 | | | | | | |

- * Fan type is optional.
- * The max. air flow and the speed are measured in free air; max. air pressure is measured at zero air flow.
- * Noise is measured in anechoic chamber in free air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.

New

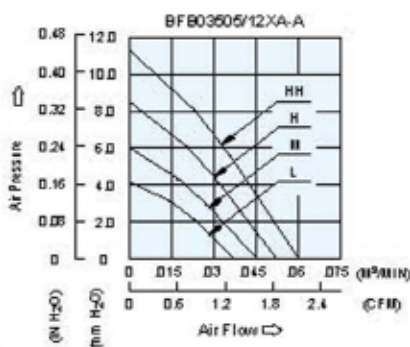
BFB 35 x 35 x 10 MM SERIES

■ DIMENSIONS DRAWING



UNIT: $\frac{\text{mm}}{(\text{INCH})}$

■ P & Q CURVE (AT RATED VOLTAGE)



- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1571 AWG #28 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 11g (0.39 oz)

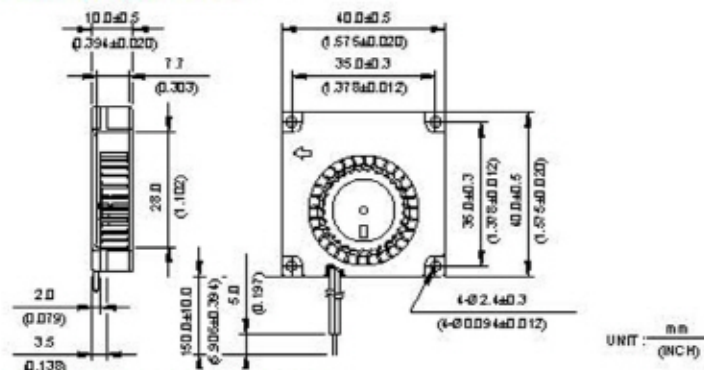
| MODEL | | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|-------------|------|-------------|---------------|-------------------------|---------------|-------------|--------|---------------------|------|----------------------|---------------------|-------|
| PART NO. | REV. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| BFB03505LA | -A | -R00 / -F00 | 5 | 4.0 to 5.5 | 0.05 | 0.25 | 5500 | 0.038 | 1.34 | 4.14 | 0.163 | 24.0 |
| BFB03512LA | -A | -R00 / -F00 | 12 | 7.0 to 13.2 | 0.04 | 0.48 | | | | | | |
| BFB03505MA | -A | -R00 / -F00 | 5 | 4.0 to 5.5 | 0.08 | 0.40 | 6500 | 0.045 | 1.59 | 6.00 | 0.236 | 26.0 |
| BFB03512MA | -A | -R00 / -F00 | 12 | 7.0 to 13.2 | 0.05 | 0.60 | | | | | | |
| BFB03505HA | -A | -R00 / -F00 | 5 | 4.0 to 5.5 | 0.11 | 0.55 | 7500 | 0.052 | 1.84 | 8.50 | 0.335 | 29.0 |
| BFB03512HA | -A | -R00 / -F00 | 12 | 7.0 to 13.2 | 0.06 | 0.72 | | | | | | |
| BFB03505HHA | -A | -R00 / -F00 | 5 | 4.0 to 5.5 | 0.15 | 0.75 | 8500 | 0.060 | 2.12 | 11.25 | 0.443 | 31.0 |
| BFB03512HHA | -A | -R00 / -F00 | 12 | 7.0 to 13.2 | 0.08 | 0.96 | | | | | | |

- Friction type is optional.
- The max. air flow and the speed are measured in free air; max. air pressure is measured at zero air flow.
- Noise is measured in anechoic chamber in free air, use meter from the table side.
- All readings are typical values at rated voltage.
- Specifications are subject to change without notice.

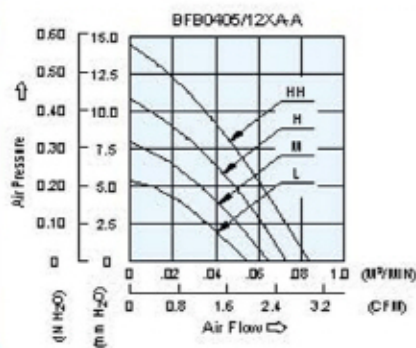
New

BFB 40 x 40 x 10 MM SERIES

■ DIMENSIONS DRAWING



■ P & Q CURVE (AT RATED VOLTAGE)



- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1571 AWG #28 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 12g (0.42 oz)

| MODEL | | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|------|-------------|---------------|-------------------------|---------------|-------------|--------|---------------------|------|----------------------|---------------------|-------|
| PART NO. | REV. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ² /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| BFB0405LA | -A | -R00 / -F00 | 5 | 4.0 to 5.5 | 0.06 | 0.30 | 5500 | 0.055 | 1.94 | 5.37 | 0.211 | 28.0 |
| BFB0412LA | -A | -R00 / -F00 | 12 | 7.0 to 13.2 | 0.04 | 0.48 | | | | | | |
| BFB0405MA | -A | -R00 / -F00 | 5 | 4.0 to 5.5 | 0.08 | 0.40 | 6500 | 0.065 | 2.30 | 7.93 | 0.312 | 29.5 |
| BFB0412MA | -A | -R00 / -F00 | 12 | 7.0 to 13.2 | 0.05 | 0.60 | | | | | | |
| BFB0405HA | -A | -R00 / -F00 | 5 | 4.0 to 5.5 | 0.11 | 0.55 | 7500 | 0.074 | 2.61 | 10.85 | 0.427 | 32.5 |
| BFB0412HA | -A | -R00 / -F00 | 12 | 7.0 to 13.2 | 0.06 | 0.72 | | | | | | |
| BFB0405HHA | -A | -R00 / -F00 | 5 | 4.0 to 5.5 | 0.16 | 0.80 | 8500 | 0.085 | 3.00 | 14.33 | 0.564 | 34.5 |
| BFB0412HHA | -A | -R00 / -F00 | 12 | 7.0 to 13.2 | 0.08 | 0.96 | | | | | | |

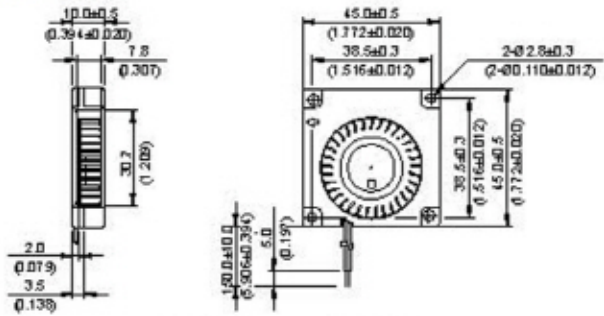
- Friction type is optional.
- The max. air flow and the speed are measured in free air; max. air pressure is measured at zero air flow.
- Noise is measured in aechoic chamber in free air, one meter from intake side.
- All readings are typical values at rated voltage.
- Specifications are subject to change without notice.

New

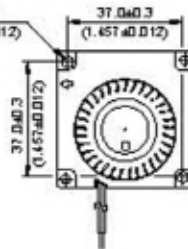
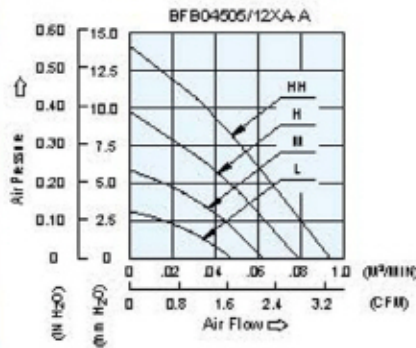


BFB 45 x 45 x 10 MM SERIES

DIMENSIONS DRAWING



P & Q CURVE (AT RATED VOLTAGE)



UNIT : mm (INCH)

- Bearing Type: Ball Bearings
- Material: Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires : UL 1571 AWG #28 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 13g (0.46 oz)

| MODEL | | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|-------------|------|-------------|---------------|-------------------------|---------------|-------------|--------|---------------------|------|----------------------|---------------------|-------|
| PART NO. | REV. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| BFB04505LA | -A | -R00 / -F00 | 5 | 4.0 to 5.5 | 0.05 | 0.25 | 3500 | 0.047 | 1.66 | 3.11 | 0.122 | 21.5 |
| BFB04512LA | -A | -R00 / -F00 | 12 | 7.0 to 13.2 | 0.04 | 0.48 | | | | | | |
| BFB04505MA | -A | -R00 / -F00 | 5 | 4.0 to 5.5 | 0.07 | 0.35 | 4500 | 0.061 | 2.15 | 5.78 | 0.228 | 27.0 |
| BFB04512MA | -A | -R00 / -F00 | 12 | 7.0 to 13.2 | 0.05 | 0.60 | | | | | | |
| BFB04505HA | -A | -R00 / -F00 | 5 | 4.0 to 5.5 | 0.11 | 0.55 | 5500 | 0.078 | 2.75 | 9.72 | 0.383 | 30.5 |
| BFB04512HA | -A | -R00 / -F00 | 12 | 7.0 to 13.2 | 0.06 | 0.72 | | | | | | |
| BFB04505HHA | -A | -R00 / -F00 | 5 | 4.0 to 5.5 | 0.16 | 0.80 | 6500 | 0.093 | 3.28 | 14.09 | 0.555 | 35.5 |
| BFB04512HHA | -A | -R00 / -F00 | 12 | 7.0 to 13.2 | 0.08 | 0.96 | | | | | | |

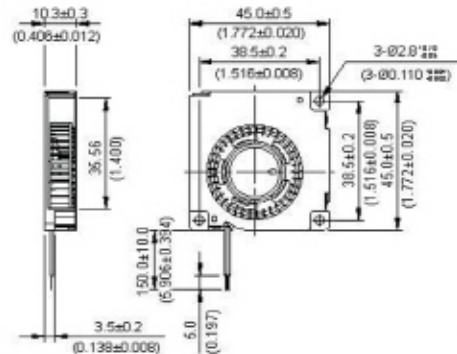
* Product type is optional.
 * The max. air flow and the speed are measured in free air; max. air pressure is measured at zero air flow.
 * Noise is measured in anechoic chamber in free air, one meter from intake side.
 * All readings are typical values at rated voltage.
 * Specifications are subject to change without notice.

New



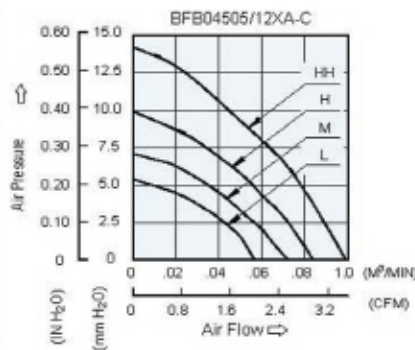
BFB 45 x 45 x 10 MM SERIES

■ DIMENSIONS DRAWING



UNIT : $\frac{\text{mm}}{(\text{INCH})}$

■ P & Q CURVE (AT RATED VOLTAGE)



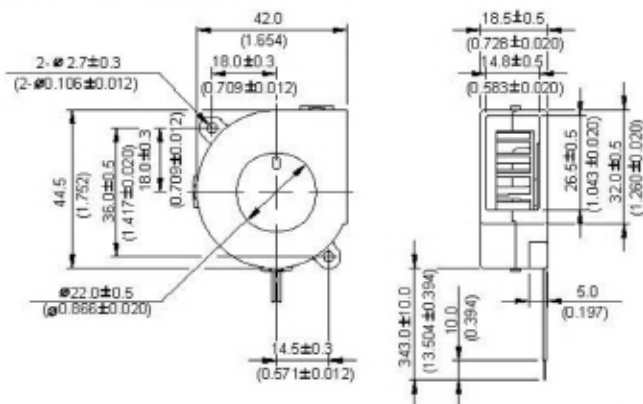
- Bearing Type
Ball Bearings
- Material
Impeller & Pillow : Plastic (UL 94V-0)
- Lead Wires :
UL 1571 AWG #28 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 18.1g (0.64 oz)

| MODEL | | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|-------------|------|-----------|---------------|-------------------------|---------------|-------------|--------|---------------------|------|----------------------|---------------------|-------|
| PART NO. | REV. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| BFB04505LA | -C | -R00/-F00 | 5 | 4.0 to 5.5 | 0.08 | 0.40 | 3900 | 0.057 | 1.99 | 5.38 | 0.212 | 21.5 |
| BFB04512LA | -C | -R00/-F00 | 12 | 5.0 to 13.2 | 0.05 | 0.60 | | | | | | |
| BFB04505MA | -C | -R00/-F00 | 5 | 4.0 to 5.5 | 0.12 | 0.60 | 4500 | 0.072 | 2.55 | 7.09 | 0.279 | 27.0 |
| BFB04512MA | -C | -R00/-F00 | 12 | 5.0 to 13.2 | 0.06 | 0.72 | | | | | | |
| BFB04505HA | -C | -R00/-F00 | 5 | 4.0 to 5.5 | 0.16 | 0.80 | 5150 | 0.084 | 2.96 | 9.93 | 0.391 | 30.5 |
| BFB04512HA | -C | -R00/-F00 | 12 | 5.0 to 13.2 | 0.08 | 0.96 | | | | | | |
| BFB04505HHA | -C | -R00/-F00 | 5 | 4.0 to 5.5 | 0.25 | 1.25 | 5900 | 0.099 | 3.49 | 14.22 | 0.560 | 35.5 |
| BFB04512HHA | -C | -R00/-F00 | 12 | 5.0 to 13.2 | 0.13 | 1.56 | | | | | | |

- * Function type is optional.
- * The max. air flow and the speed are measured in free air; max. air pressure is measured at zero air flow.
- * Noise is measured in anechoic chamber in free air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.

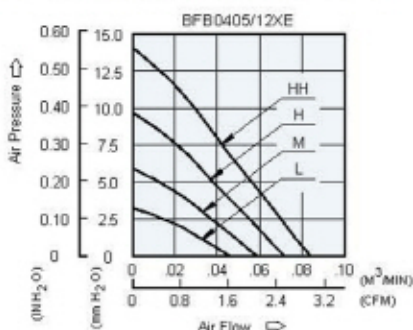
BFB 42 x 45 x 19 MM SERIES

DIMENSIONS DRAWING



- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1061 AWG #26 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 22g (0.78 oz)

P & Q CURVE (AT RATED VOLTAGE)



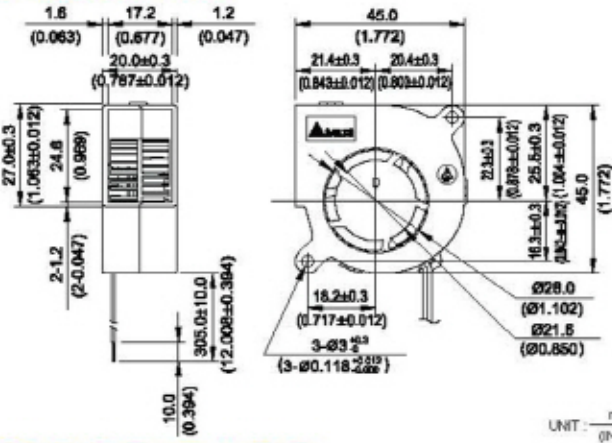
UNIT : $\frac{\text{mm}}{\text{(INCH)}}$

| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | Maximum Air Pressure | Noise | | |
|------------|-------------|---------------|-------------------------|---------------|-------------|--------|----------------------|----------------------|--------------------|---------------------|------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ / min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| BFB0405LE | -R00 / -F00 | 5 | 4.0 to 5.5 | 0.06 | 0.30 | 3500 | 0.046 | 1.62 | 3.23 | 0.127 | 26.0 |
| BFB0412LE | -R00 / -F00 | 12 | 10.0 to 13.8 | 0.04 | 0.48 | 3500 | 0.046 | 1.62 | 3.23 | 0.127 | 26.0 |
| BFB0405ME | -R00 / -F00 | 5 | 4.0 to 5.5 | 0.13 | 0.65 | 4500 | 0.059 | 2.08 | 5.92 | 0.233 | 30.0 |
| BFB0412ME | -R00 / -F00 | 12 | 10.0 to 13.8 | 0.05 | 0.60 | 4500 | 0.059 | 2.08 | 5.92 | 0.233 | 30.0 |
| BFB0405HE | -R00 / -F00 | 5 | 4.0 to 5.5 | 0.22 | 1.10 | 5500 | 0.072 | 2.54 | 9.72 | 0.383 | 35.5 |
| BFB0412HE | -R00 / -F00 | 12 | 10.0 to 13.8 | 0.07 | 0.84 | 5500 | 0.072 | 2.54 | 9.72 | 0.383 | 35.5 |
| BFB0412HHE | -R00 / -F00 | 12 | 10.0 to 13.8 | 0.11 | 1.32 | 6500 | 0.084 | 2.97 | 14.15 | 0.557 | 39.5 |

- * Function type is optional
- * The max. air flow and the speed are measured in free air; max. air pressure is measured at zero air flow.
- * Noise is measured in anechoic chamber in free air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.

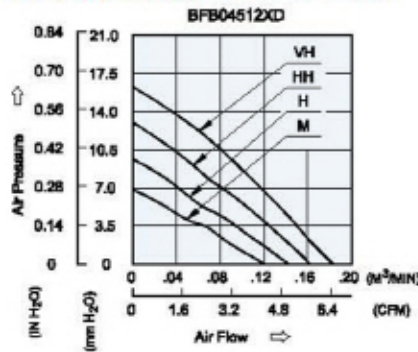
BFB 45 x 45 x 20 MM SERIES

DIMENSIONS DRAWING



- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1571 AWG #28 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 17g (0.60 oz)

P & Q CURVE (AT RATED VOLTAGE)



| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|-------------|-------------|---------------|-------------------------|---------------|-------------|--------|---------------------|------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| BFB04512MD | -R00 / -F00 | 12 | 5.0 to 13.8 | 0.07 | 0.84 | 3300 | 0.120 | 4.24 | 6.83 | 0.269 | 21.0 |
| BFB04512HD | -R00 / -F00 | 12 | 5.0 to 13.8 | 0.10 | 1.20 | 3800 | 0.139 | 4.91 | 9.29 | 0.366 | 24.5 |
| BFB04512HHD | -R00 / -F00 | 12 | 5.0 to 13.8 | 0.13 | 1.56 | 4200 | 0.161 | 5.68 | 12.95 | 0.510 | 28.0 |
| BFB04512VHD | -R00 / -F00 | 12 | 5.0 to 13.8 | 0.15 | 1.80 | 4500 | 0.170 | 6.01 | 14.15 | 0.557 | 30.5 |

* Function type is optional.
 * The max. air flow and the speed are measured in free air; max. air pressure is measured at zero air flow.
 * Noise is measured in anechoic chamber in free air, one meter from intake side.
 * All readings are typical values at rated voltage.
 * Specifications are subject to change without notice.

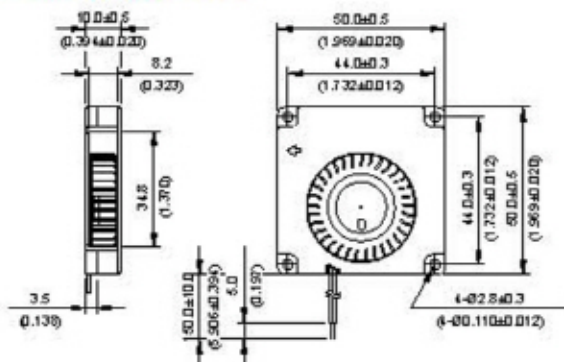
New



- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V0)
- Lead Wires :
UL 1571 AWG #28 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 16.5g (0.58 oz)

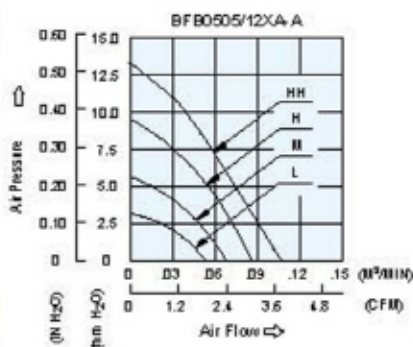
BFB 50 x 50 x 10 MM SERIES

■ DIMENSIONS DRAWING



UNIT : mm
(INCH)

■ P & Q CURVE (AT RATED VOLTAGE)



| MODEL | | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | Maximum Air Pressure | Noise | | |
|------------|------|------------|---------------|-------------------------|---------------|-------------|--------|---------------------|----------------------|--------------------|---------------------|------|
| PART NO. | REV. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| BFB0505LA | -A | -R00 / F00 | 5 | 4.0 to 5.5 | 0.05 | 0.25 | 3500 | 0.053 | 1.87 | 3.18 | 0.125 | 22.5 |
| BFB0512LA | -A | -R00 / F00 | 12 | 7.0 to 13.2 | 0.04 | 0.48 | | | | | | |
| BFB0505MA | -A | -R00 / F00 | 5 | 4.0 to 5.5 | 0.07 | 0.35 | 4500 | 0.068 | 2.40 | 5.64 | 0.222 | 28.0 |
| BFB0512MA | -A | -R00 / F00 | 12 | 7.0 to 13.2 | 0.05 | 0.60 | | | | | | |
| BFB0505HA | -A | -R00 / F00 | 5 | 4.0 to 5.5 | 0.12 | 0.60 | 5500 | 0.086 | 3.04 | 9.47 | 0.373 | 32.5 |
| BFB0512HA | -A | -R00 / F00 | 12 | 7.0 to 13.2 | 0.08 | 0.96 | | | | | | |
| BFB0505HHA | -A | -R00 / F00 | 5 | 4.0 to 5.5 | 0.16 | 0.80 | 6500 | 0.110 | 3.88 | 13.43 | 0.529 | 37.5 |
| BFB0512HHA | -A | -R00 / F00 | 12 | 7.0 to 13.2 | 0.09 | 1.08 | | | | | | |

- Fan type is optional.
- The max. air flow and the speed are measured in free air; max. air pressure is measured at zero air flow.
- Noise is measured in acoustic chamber in free air, one meter from intake side.
- All readings are typical values at rated voltage.
- Specifications are subject to change without notice.

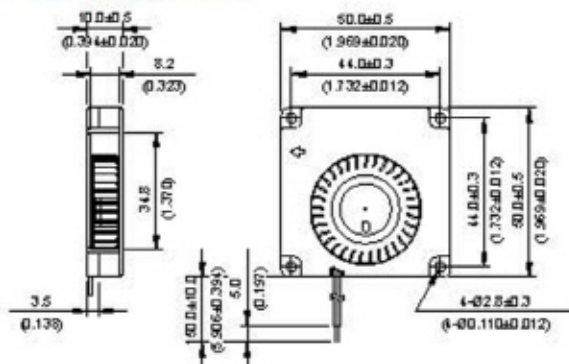
New



- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1571 AWG #28 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 16.5g (0.58 oz)

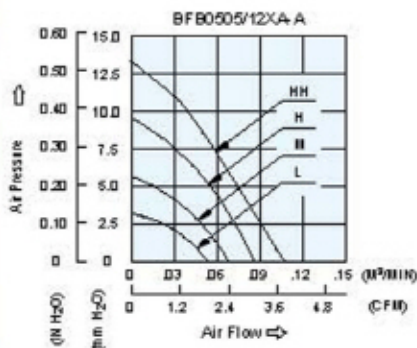
BFB 50 x 50 x 10 MM SERIES

DIMENSIONS DRAWING



UNIT : $\frac{\text{mm}}{(\text{INCH})}$

P & Q CURVE (AT RATED VOLTAGE)



| MODEL | | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|------|-------------|---------------|-------------------------|---------------|-------------|--------|---------------------|------|----------------------|---------------------|-------|
| PART NO. | REV. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ² /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| BFB0505LA | -A | -R00 / -F00 | 5 | 4.0 to 5.5 | 0.05 | 0.25 | 3500 | 0.053 | 1.87 | 3.18 | 0.125 | 22.5 |
| BFB0512LA | -A | -R00 / -F00 | 12 | 7.0 to 13.2 | 0.04 | 0.48 | | | | | | |
| BFB0505MA | -A | -R00 / -F00 | 5 | 4.0 to 5.5 | 0.07 | 0.35 | 4500 | 0.068 | 2.40 | 5.64 | 0.222 | 28.0 |
| BFB0512MA | -A | -R00 / -F00 | 12 | 7.0 to 13.2 | 0.05 | 0.60 | | | | | | |
| BFB0505HA | -A | -R00 / -F00 | 5 | 4.0 to 5.5 | 0.12 | 0.60 | 5500 | 0.086 | 3.04 | 9.47 | 0.373 | 32.5 |
| BFB0512HA | -A | -R00 / -F00 | 12 | 7.0 to 13.2 | 0.08 | 0.96 | | | | | | |
| BFB0505HHA | -A | -R00 / -F00 | 5 | 4.0 to 5.5 | 0.16 | 0.80 | 6500 | 0.110 | 3.88 | 13.43 | 0.529 | 37.5 |
| BFB0512HHA | -A | -R00 / -F00 | 12 | 7.0 to 13.2 | 0.09 | 1.08 | | | | | | |

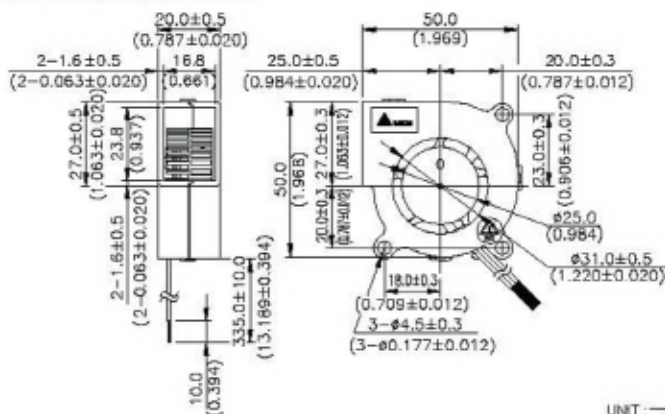
- * Fan type is optional.
- * The max. air flow and the speed are measured in free air; max. air pressure is measured at zero air flow.
- * Noise is measured in a cyclic chamber in the air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.

BFB 50 x 50 x 20 MM SERIES

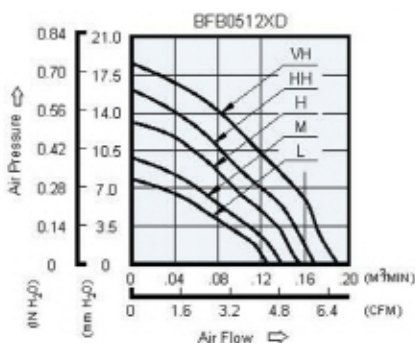
■ DIMENSIONS DRAWING



- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1061 AWG #26 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 35g (1.23 oz)



■ P & Q CURVE (AT RATED VOLTAGE)

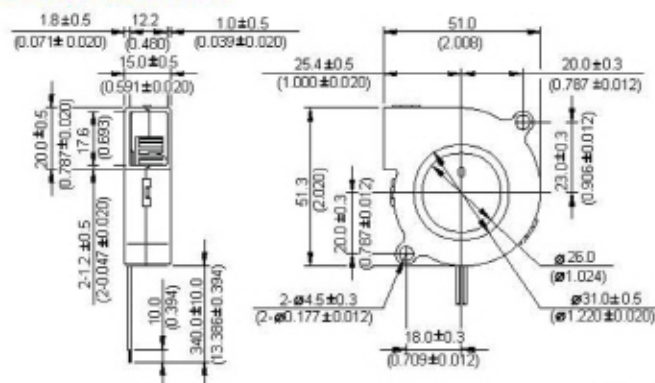


| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|-------------|---------------|-------------------------|---------------|-------------|--------|---------------------|------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| BFB0512LD | -R00 / -F00 | 12 | 5.0 to 13.8 | 0.12 | 1.44 | 3700 | 0.126 | 4.45 | 7.85 | 0.309 | 28.0 |
| BFB0512MD | -R00 / -F00 | 12 | 5.0 to 13.8 | 0.13 | 1.56 | 4100 | 0.139 | 4.91 | 9.82 | 0.387 | 31.0 |
| BFB0512HD | -R00 / -F00 | 12 | 5.0 to 13.8 | 0.14 | 1.68 | 4500 | 0.156 | 5.51 | 13.12 | 0.517 | 33.8 |
| BFB0512HHD | -R00 / -F00 | 12 | 5.0 to 13.8 | 0.16 | 1.92 | 4900 | 0.165 | 5.83 | 16.15 | 0.636 | 36.5 |
| BFB0512VHD | -R00 / -F00 | 12 | 5.0 to 13.8 | 0.23 | 2.76 | 5300 | 0.191 | 6.75 | 18.60 | 0.732 | 38.5 |

- * Function type is optional.
- * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
- * Noise is measured in anechoic chamber in free air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.

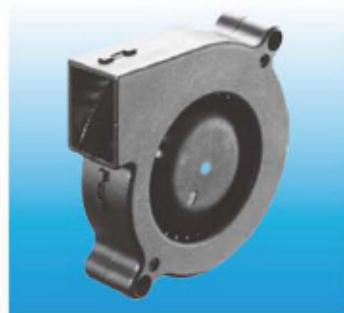
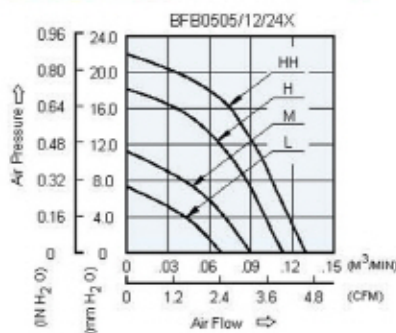
BFB 51 x 51 x 15 MM SERIES

■ DIMENSIONS DRAWING



UNIT: $\frac{\text{mm}}{\text{INCH}}$

■ P & Q CURVE (AT RATED VOLTAGE)



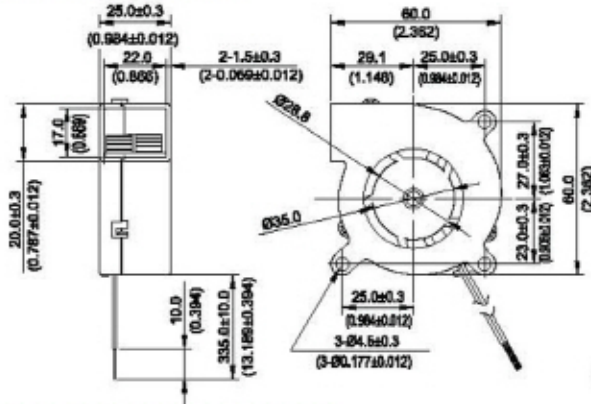
- Bearing Type
Ball Bearings
- Material
Impeller & Pillow : Plastic (UL 94V-0)
- Lead Wires :
UL 1061 AWG #26 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 28g (0.99 oz)

| MODEL | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | Maximum Air Pressure | Noise | | | |
|-----------|---------------|-------------------------|---------------|-------------|-------|------------------|----------------------|-------|--------------------|---------------------|------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| BFB0505L | -R00/F00 | 5 | 4.0 to 5.5 | 0.14 | 0.70 | 3500 | 0.070 | 2.47 | 7.00 | 0.276 | 26.5 |
| BFB0512L | -R00/F00 | 12 | 10.0 to 13.8 | 0.07 | 0.84 | | | | | | |
| BFB0524L | -R00/F00 | 24 | 14.0 to 27.6 | 0.05 | 1.20 | | | | | | |
| BFB0505M | -R00/F00 | 5 | 4.0 to 5.5 | 0.33 | 1.65 | 4500 | 0.090 | 3.18 | 11.00 | 0.433 | 32.5 |
| BFB0512M | -R00/F00 | 12 | 10.0 to 13.8 | 0.10 | 1.20 | | | | | | |
| BFB0524M | -R00/F00 | 24 | 14.0 to 27.6 | 0.07 | 1.68 | | | | | | |
| BFB0512H | -R00/F00 | 12 | 10.0 to 13.8 | 0.16 | 1.92 | 5500 | 0.110 | 3.88 | 18.00 | 0.709 | 38.0 |
| BFB0524H | -R00/F00 | 24 | 14.0 to 27.6 | 0.09 | 2.16 | | | | | | |
| BFB0512HH | -R00/F00 | 12 | 10.0 to 13.8 | 0.21 | 2.52 | 6500 | 0.130 | 4.59 | 22.00 | 0.866 | 45.0 |
| BFB0524HH | -R00/F00 | 24 | 14.0 to 27.6 | 0.11 | 2.64 | | | | | | |

- * Function type is optional.
- * The max. air flow and the speed are measured in free air; max. air pressure is measured at zero air flow.
- * Noise is measured in anechoic chamber in free air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.

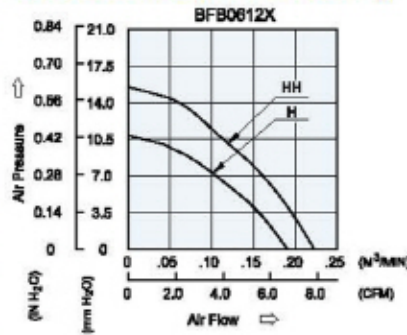
BFB 60 x 60 x 25 MM SERIES

DIMENSIONS DRAWING



- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1430 AWG #26 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 51.0g (1.80 oz)

P & Q CURVE (AT RATED VOLTAGE)

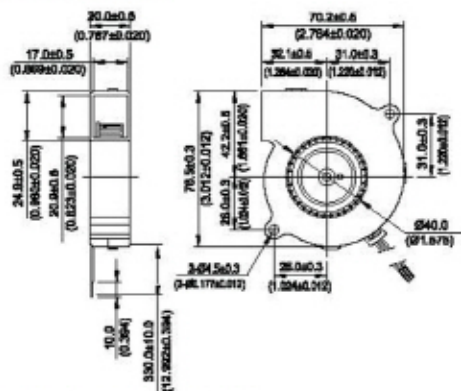


| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|-----------|-------------|---------------|-------------------------|---------------|-------------|--------|---------------------|------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| BFB0612H | -R00 / -F00 | 12 | 5.0 to 13.8 | 0.18 | 2.16 | 3200 | 0.190 | 6.71 | 10.86 | 0.428 | 34.0 |
| BFB0612HH | -R00 / -F00 | 12 | 5.0 to 13.8 | 0.24 | 2.88 | 3700 | 0.223 | 7.88 | 15.49 | 0.610 | 39.0 |

* Function type is optional.
 * The max. air flow and the speed are measured in free air; max. air pressure is measured at zero air flow.
 * Noise is measured in anechoic chamber in free air, one meter from intake side.
 * All readings are typical values at rated voltage.
 * Specifications are subject to change without notice.

BFB 76 x 70 x 20 MM SERIES

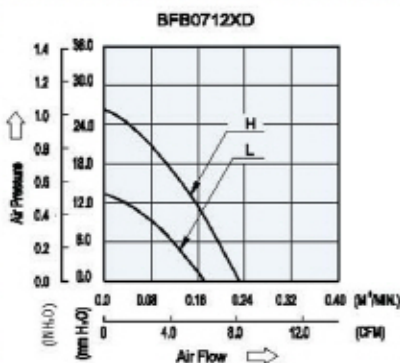
DIMENSIONS DRAWING



UNIT: mm (INCH)

- Bearing Type: Ball Bearings
- Material: Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires : UL 1007 AWG #24 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 58g (2.05 oz)

P & Q CURVE (AT RATED VOLTAGE)

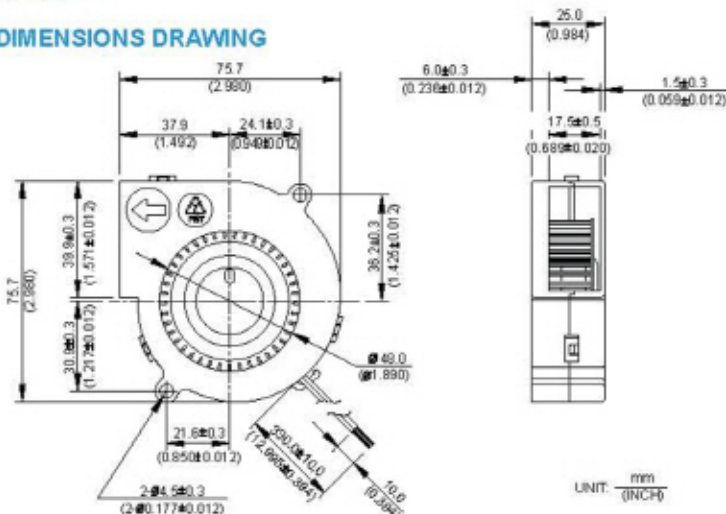


| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|-----------|-------------|---------------|-------------------------|---------------|-------------|--------|---------------------|------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| BFB0712LD | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.13 | 1.56 | 2800 | 0.172 | 6.07 | 13.36 | 0.562 | 32.5 |
| BFB0712HD | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.31 | 3.72 | 4000 | 0.231 | 8.52 | 26.27 | 1.034 | 42.0 |

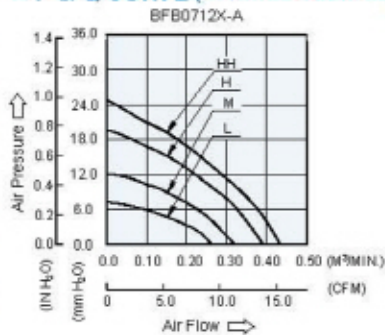
- * Function type is optional.
- * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
- * Noise is measured in anechoic chamber in free air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.

BFB 75 x 75 x 25 MM SERIES

DIMENSIONS DRAWING



P & Q CURVE (AT RATED VOLTAGE)



- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 90.0g (3.17 oz)

| MODEL | | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | Maximum Air Pressure | Noise | | |
|-----------|------|----------|---------------|-------------------------|---------------|-------------|--------|---------------------|----------------------|--------------------|---------------------|------|
| PART NO. | REV. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| BFB0712L | -A | -F00 | 12 | 7.0 to 13.8 | 0.10 | 1.20 | 2800 | 0.262 | 9.26 | 7.26 | 0.286 | 39.0 |
| BFB0712M | -A | -F00 | 12 | 7.0 to 13.8 | 0.16 | 1.92 | 3400 | 0.320 | 11.31 | 12.14 | 0.478 | 43.0 |
| BFB0712H | -A | -F00 | 12 | 7.0 to 13.8 | 0.27 | 3.24 | 4000 | 0.392 | 13.84 | 19.64 | 0.773 | 48.0 |
| BFB0712HH | -A | F00 | 12 | 5.5 to 13.8 | 0.34 | 4.08 | 4400 | 0.434 | 15.33 | 24.82 | 0.977 | 51.0 |

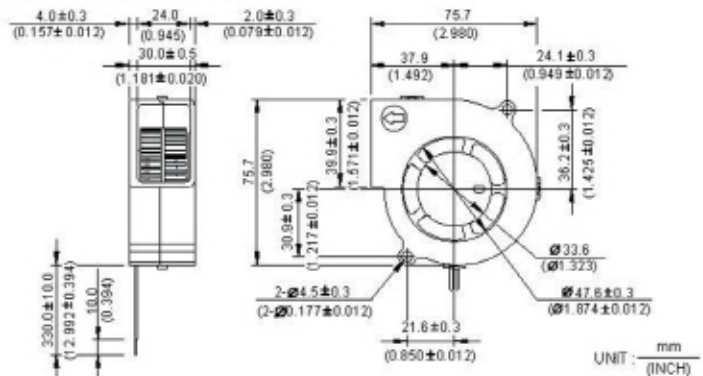
- * Function type is optional.
- * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
- * Noise is measured in anechoic chamber in free air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.

BFB 75 x 75 x 30 MM SERIES

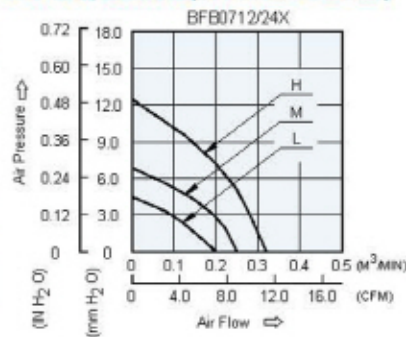
DIMENSIONS DRAWING



- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 95g (3.35 oz)



P & Q CURVE (AT RATED VOLTAGE)

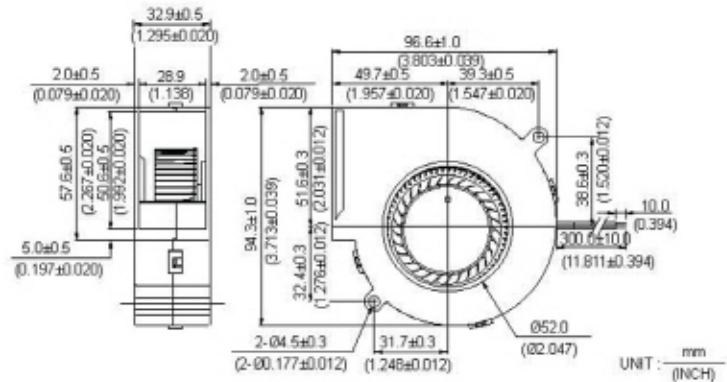
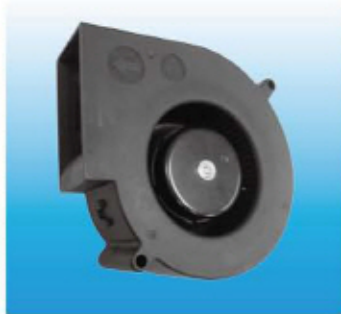


| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|----------|-------------|---------------|-------------------------|---------------|-------------|--------|---------------------|-------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| BFB0712L | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.06 | 0.72 | 1900 | 0.198 | 7.00 | 4.00 | 0.157 | 26.0 |
| BFB0724L | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.05 | 1.20 | | | | | | |
| BFB0712M | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.13 | 1.56 | 2350 | 0.255 | 9.00 | 6.80 | 0.268 | 32.0 |
| BFB0724M | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.07 | 1.68 | | | | | | |
| BFB0712H | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.22 | 2.64 | 2900 | 0.320 | 11.30 | 12.20 | 0.480 | 38.0 |
| BFB0724H | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.12 | 2.88 | | | | | | |

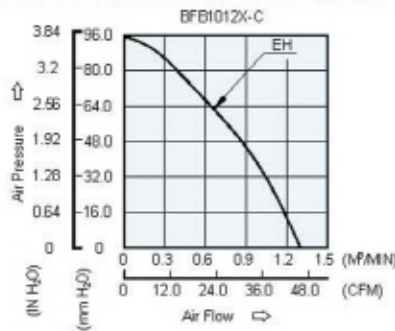
- * Function type is optional.
- * The max. air flow and the speed are measured in free air; max. air pressure is measured at zero air flow.
- * Noise is measured in anechoic chamber in free air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.

BFB 97 x 94 x 33 MM SERIES

DIMENSIONS DRAWING



P & Q CURVE (AT RATED VOLTAGE)



- Bearing Type: Ball Bearings
- Material: Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires : UL 1007 AWG #24 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 180g (6.35 oz)

| MODEL | | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | Maximum Air Pressure | Noise | | |
|-----------|------|-----------|---------------|-------------------------|---------------|-------------|--------|---------------------|----------------------|--------------------|---------------------|------|
| PART NO. | REV. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| BFB1012EH | -C | -R00/-F00 | 12 | 7.0 to 12.6 | 1.97 | 23.64 | 5800 | 1.288 | 45.49 | 93.83 | 3.694 | 62.0 |

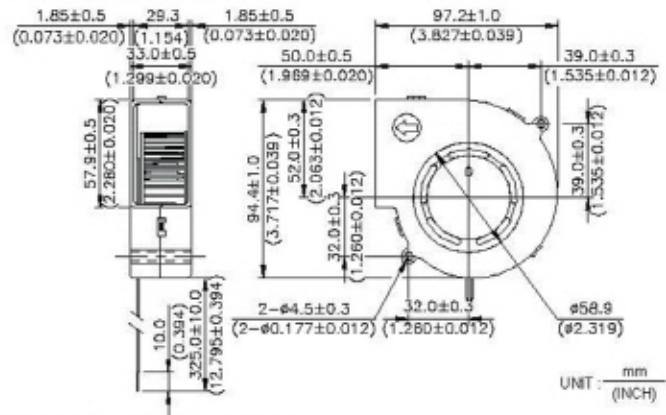
* Function type is optional.
 * The max. air flow and the speed are measured in free air; max. air pressure is measured at zero air flow.
 * Noise is measured in anechoic chamber in free air, one meter from intake side.
 * All readings are typical values at rated voltage.
 * Specifications are subject to change without notice.

BFB 97 x 94 x 33 MM SERIES

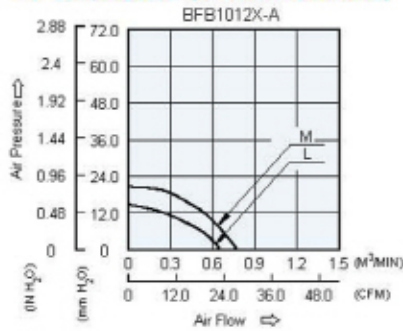
■ DIMENSIONS DRAWING



- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 166g (5.85 oz)



■ P & Q CURVE (AT RATED VOLTAGE)



| MODEL | | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | Maximum Air Pressure | Noise | | |
|----------|------|----------|---------------|-------------------------|---------------|-------------|--------|---------------------|----------------------|--------------------|---------------------|------|
| PART NO. | REV. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| BFB1012L | -A | R00/F00 | 12 | 4.0 to 13.2 | 0.37 | 4.44 | 2700 | 0.656 | 23.17 | 14.85 | 0.585 | 49.5 |
| BFB1012M | -A | R00/F00 | 12 | 4.0 to 13.2 | 0.55 | 6.60 | 3200 | 0.777 | 27.44 | 22.68 | 0.893 | 52.5 |

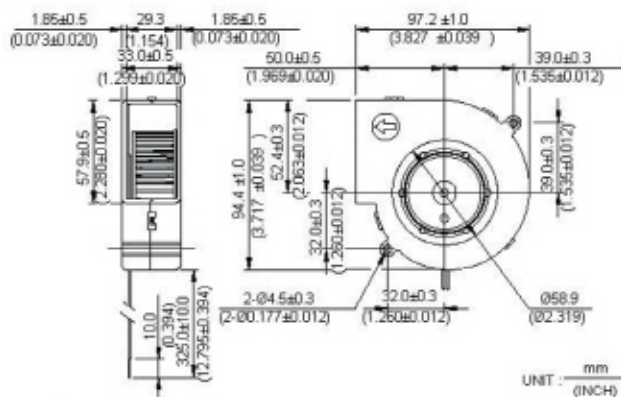
* Function type is optional.
 * The max. air flow and the speed are measured in free air; max. air pressure is measured at zero air flow.
 * Noise is measured in anechoic chamber in free air, one meter from intake side.
 * All readings are typical values at rated voltage.
 * Specifications are subject to change without notice.

BFB 97 x 94 x 33 MM SERIES

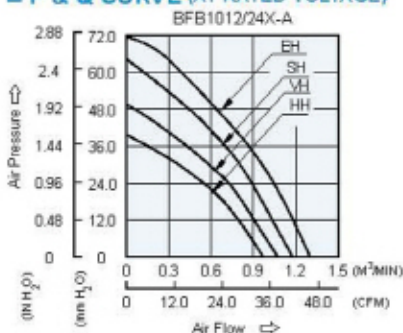
■ DIMENSIONS DRAWING



- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 180g (6.35 oz)



■ P & Q CURVE (AT RATED VOLTAGE)



| MODEL | | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|-----------|------|----------|---------------|-------------------------|---------------|-------------|--------|---------------------|-------|----------------------|---------------------|-------|
| PART NO. | REV. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| BFB1012HH | -A | R00/F00 | 12 | 7.0 to 13.2 | 1.25 | 15.00 | 4000 | 0.971 | 34.28 | 39.70 | 1.564 | 57.0 |
| BFB1012VH | -A | R00/F00 | 12 | 7.0 to 13.2 | 1.50 | 18.00 | 4500 | 1.075 | 37.97 | 49.58 | 1.952 | 60.0 |
| BFB1012SH | -A | R00/F00 | 12 | 7.0 to 12.6 | 2.00 | 24.00 | 5000 | 1.179 | 41.65 | 64.23 | 2.529 | 63.0 |
| BFB1012EH | -A | R00/F00 | 12 | 7.0 to 12.6 | 2.45 | 29.40 | 5300 | 1.302 | 46.00 | 71.48 | 2.814 | 64.0 |

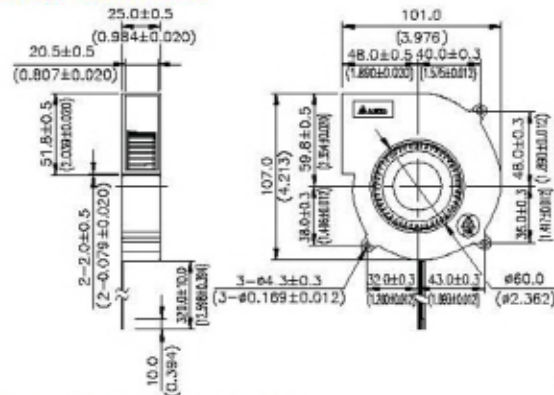
- * Function type is optional.
- * The max. air flow and the speed are measured in free air; max. air pressure is measured at zero air flow.
- * Noise is measured in anechoic chamber in free air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.

BFB 101 x 107 x 25 MM SERIES

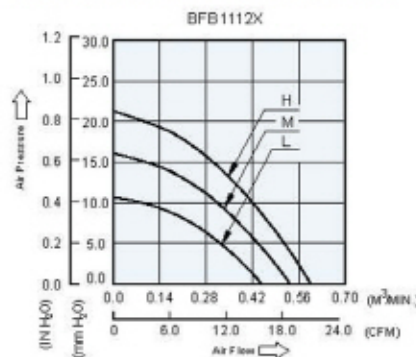
DIMENSIONS DRAWING



- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 140g (4.94 oz)



P & Q CURVE (AT RATED VOLTAGE)



| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|----------|-------------|---------------|-------------------------|---------------|-------------|--------|---------------------|-------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| BFB1112L | -R00 / -F00 | 12 | 4.0 to 13.8 | 0.19 | 2.28 | 2400 | 0.447 | 15.79 | 10.65 | 0.413 | 41.0 |
| BFB1112M | -R00 / -F00 | 12 | 4.0 to 13.8 | 0.30 | 3.60 | 2800 | 0.533 | 18.82 | 16.09 | 0.633 | 45.0 |
| BFB1112H | -R00 / -F00 | 12 | 4.0 to 13.2 | 0.51 | 6.12 | 3150 | 0.595 | 21.02 | 21.31 | 0.839 | 49.0 |

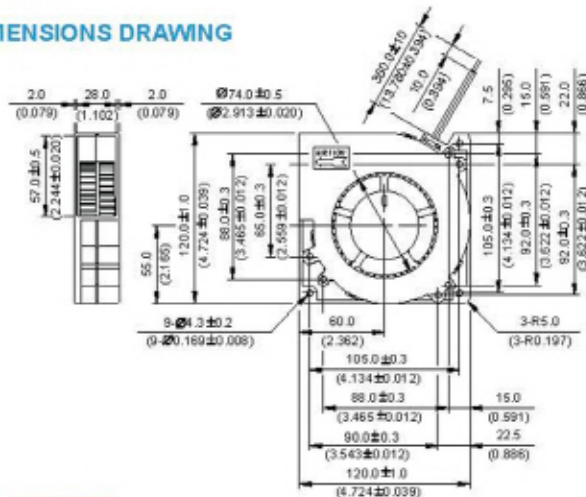
- * Function type is optional.
- * The max. air flow and the speed are measured in free air; max. air pressure is measured at zero air flow.
- * Noise is measured in anechoic chamber in free air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.

BFB 120 x 120 x 32 MM SERIES

■ DIMENSIONS DRAWING

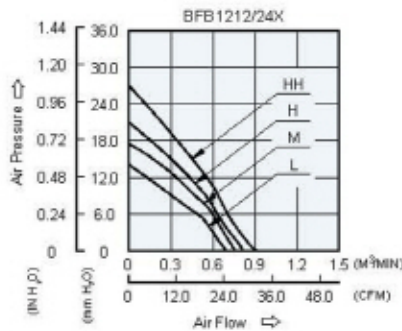


- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 230g (8.11 oz)



UNIT : $\frac{\text{mm}}{(\text{INCH})}$

■ P & Q CURVE (AT RATED VOLTAGE)



| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|-----------|-------------|---------------|-------------------------|---------------|-------------|--------|---------------------|-------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| BFB1212L | -R00 / -F00 | 12 | 4.0 to 13.8 | 0.40 | 4.80 | 2100 | 0.699 | 24.70 | 14.00 | 0.551 | 47.0 |
| BFB1224L | -R00 / -F00 | 24 | 7.0 to 27.6 | 0.24 | 5.76 | | | | | | |
| BFB1212M | -R00 / -F00 | 12 | 4.0 to 13.8 | 0.58 | 6.96 | 2300 | 0.760 | 26.85 | 17.50 | 0.689 | 48.5 |
| BFB1224M | -R00 / -F00 | 24 | 7.0 to 27.6 | 0.28 | 6.72 | | | | | | |
| BFB1212H | -R00 / -F00 | 12 | 4.0 to 13.8 | 0.82 | 9.84 | 2500 | 0.821 | 29.00 | 21.00 | 0.827 | 51.0 |
| BFB1224H | -R00 / -F00 | 24 | 7.0 to 27.6 | 0.35 | 8.40 | | | | | | |
| BFB1212HH | -R00 / -F00 | 12 | 4.0 to 13.8 | 1.10 | 13.20 | 2800 | 0.920 | 32.49 | 27.00 | 1.063 | 54.0 |

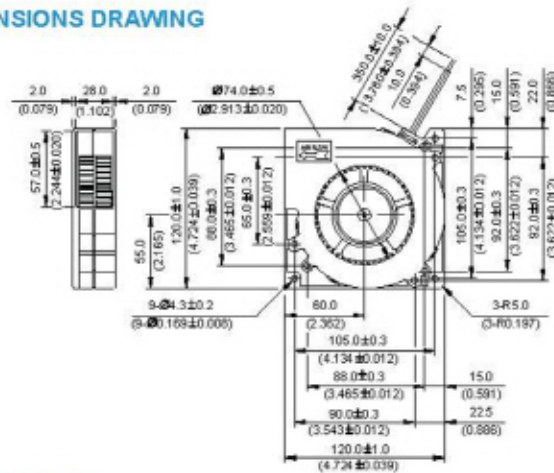
* Function type is optional.
 * The max. air flow and the speed are measured in free air; max. air pressure is measured at zero air flow.
 * Noise is measured in anechoic chamber in free air, one meter from intake side.
 * All readings are typical values at rated voltage.
 * Specifications are subject to change without notice.

BFB 120 x 120 x 32 MM SERIES

DIMENSIONS DRAWING

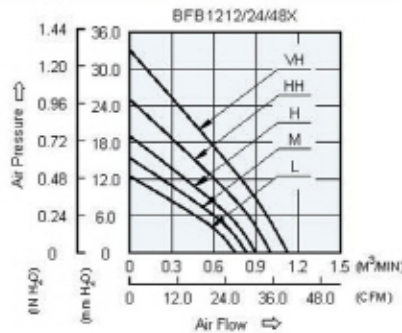


- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 230g (8.11 oz)



UNIT : $\frac{\text{mm}}{\text{(INCH)}}$

P & Q CURVE (AT RATED VOLTAGE)



| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|-----------|-------------|---------------|-------------------------|---------------|-------------|--------|---------------------|-------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| BFB1248L | -R00 / -F00 | 48 | 28.0 to 56.0 | 0.09 | 4.32 | 2100 | 0.750 | 26.49 | 12.50 | 0.492 | 47.0 |
| BFB1248M | -R00 / -F00 | 48 | 28.0 to 56.0 | 0.12 | 5.76 | 2300 | 0.830 | 29.31 | 15.50 | 0.610 | 48.5 |
| BFB1248H | -R00 / -F00 | 48 | 28.0 to 56.0 | 0.15 | 7.20 | 2500 | 0.890 | 31.43 | 19.00 | 0.748 | 51.0 |
| BFB1224HH | -R00 / -F00 | 24 | 7.0 to 27.6 | 0.54 | 12.96 | 2800 | 1.000 | 35.31 | 25.00 | 0.984 | 54.0 |
| BFB1248HH | -R00 / -F00 | 48 | 28.0 to 56.0 | 0.22 | 10.56 | | | | | | |
| BFB1212VH | -R00 / -F00 | 12 | 4.0 to 13.8 | 1.25 | 15.00 | 3100 | 1.120 | 39.55 | 33.00 | 1.299 | 56.5 |
| BFB1224VH | -R00 / -F00 | 24 | 7.0 to 27.6 | 0.60 | 14.40 | | | | | | |

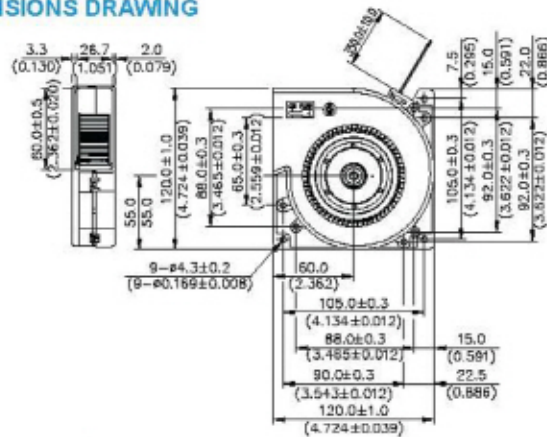
* Function type is optional.
 * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
 * Noise is measured in anechoic chamber in free air, one meter from intake side.
 * All readings are typical values at rated voltage.
 * Specifications are subject to change without notice.

BFB 120 x 120 x 32 MM SERIES

DIMENSIONS DRAWING

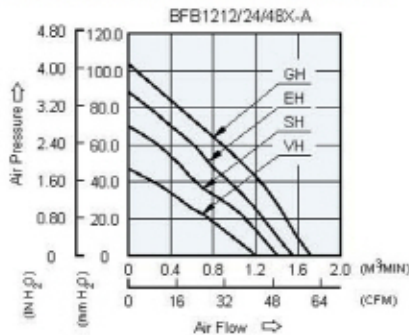


- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1430 AWG #22 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 295.0g (10.40 oz)



UNIT : mm
(INCH)

P & Q CURVE (AT RATED VOLTAGE)



| MODEL | | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|-----------|------|-----------|---------------|-------------------------|---------------|-------------|--------|---------------------|-------|----------------------|---------------------|-------|
| PART NO. | REV. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ² /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| BFB1212VH | -A | R00 / F00 | 12 | 5.5 to 13.8 | 1.47 | 17.64 | 3100 | 1.203 | 42.47 | 46.94 | 1.848 | 57.0 |
| BFB1224VH | -A | R00 / F00 | 24 | 14.0 to 27.6 | 0.70 | 16.80 | | | | | | |
| BFB1248VH | -A | R00 / F00 | 48 | 24.0 to 56.0 | 0.37 | 17.39 | | | | | | |
| BFB1212SH | -A | R00 / F00 | 12 | 5.5 to 13.0 | 1.75 | 21.00 | 3600 | 1.406 | 49.67 | 69.95 | 2.754 | 59.5 |
| BFB1224SH | -A | R00 / F00 | 24 | 14.0 to 27.6 | 0.90 | 21.60 | | | | | | |
| BFB1248SH | -A | R00 / F00 | 48 | 24.0 to 56.0 | 0.49 | 23.52 | | | | | | |
| BFB1212EH | -A | R00 / F00 | 12 | 5.5 to 13.0 | 2.37 | 28.44 | 4000 | 1.553 | 54.85 | 88.51 | 3.485 | 62.0 |
| BFB1224EH | -A | R00 / F00 | 24 | 14.0 to 27.6 | 1.12 | 26.88 | | | | | | |
| BFB1248EH | -A | R00 / F00 | 48 | 24.0 to 56.0 | 0.61 | 29.28 | | | | | | |
| BFB1212GH | -A | R00 / F00 | 12 | 5.5 to 13.2 | 3.30 | 39.60 | 4400 | 1.710 | 60.39 | 104.00 | 4.094 | 65.0 |
| BFB1224GH | -A | R00 / F00 | 24 | 14.0 to 27.6 | 1.60 | 38.40 | | | | | | |
| BFB1248GH | -A | R00 / F00 | 48 | 24.0 to 53.0 | 0.80 | 38.40 | | | | | | |

* Function type is optional.

* The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.

* Noise is measured in anechoic chamber in free air, one meter from intake side.

* All readings are typical values at rated voltage.

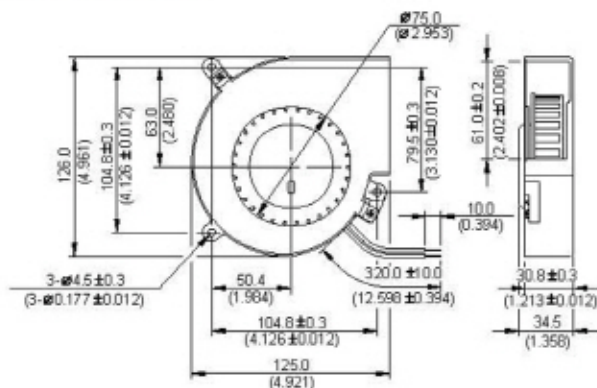
* Specifications are subject to change without notice.

BFB 125 x 126 x 34 MM SERIES

DIMENSIONS DRAWING

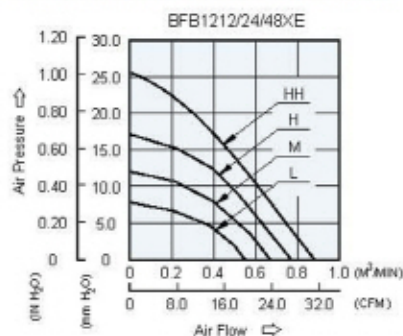


- Bearing Type
Ball Bearings
- Material
Impeller : Plastic (UL 94V-0)
Frame: Plastic (UL 94V-0) & SECC
- Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 325g (11.46 oz)



UNIT : mm
(INCH)

P & Q CURVE (AT RATED VOLTAGE)



| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|-------------|---------------|-------------------------|---------------|-------------|--------|---------------------|-------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| BFB1212LE | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.24 | 2.88 | 1700 | 0.550 | 19.42 | 7.77 | 0.306 | 42.0 |
| BFB1224LE | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.13 | 3.12 | | | | | | |
| BFB1248LE | -R00 / -F00 | 48 | 38.0 to 56.0 | 0.08 | 3.84 | | | | | | |
| BFB1212ME | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.42 | 5.04 | 2000 | 0.670 | 23.66 | 12.00 | 0.472 | 46.0 |
| BFB1224ME | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.23 | 5.52 | | | | | | |
| BFB1248ME | -R00 / -F00 | 48 | 38.0 to 56.0 | 0.12 | 5.76 | | | | | | |
| BFB1212HE | -R00 / -F00 | 12 | 7.0 to 13.8 | 0.68 | 8.16 | 2300 | 0.770 | 27.19 | 17.80 | 0.701 | 51.5 |
| BFB1224HE | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.34 | 8.16 | | | | | | |
| BFB1248HE | -R00 / -F00 | 48 | 38.0 to 56.0 | 0.17 | 8.16 | | | | | | |
| BFB1212HHE | -R00 / -F00 | 12 | 7.0 to 13.8 | 1.06 | 12.70 | 2650 | 0.870 | 30.72 | 25.20 | 0.992 | 55.0 |
| BFB1224HHE | -R00 / -F00 | 24 | 14.0 to 27.6 | 0.60 | 14.40 | | | | | | |

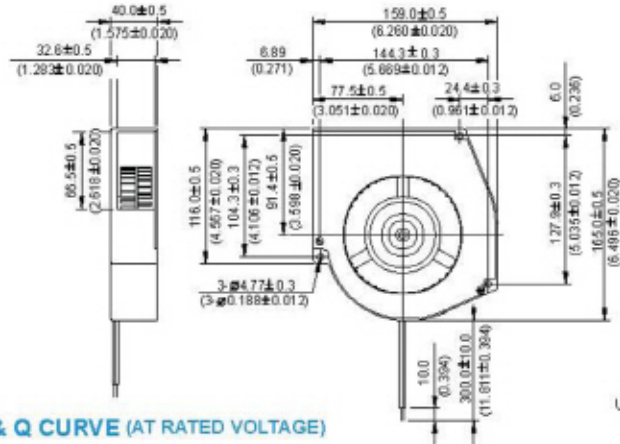
* Function type is optional.
 * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
 * Noise is measured in anechoic chamber in free air, one meter from intake side.
 * All readings are typical values at rated voltage.
 * Specifications are subject to change without notice.

BFB 159 x 165 x 40 MM SERIES

DIMENSIONS DRAWING

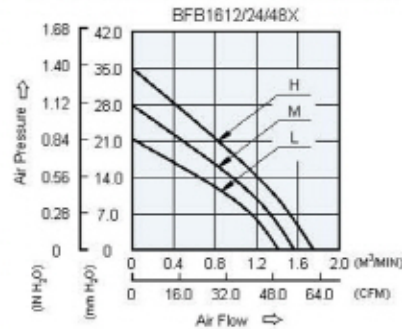


- Bearing Type: Ball Bearings
- Material: Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires : UL 1007 AWG #24 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 588g (20.74 oz)



UNIT: mm
(INCH)

P & Q CURVE (AT RATED VOLTAGE)

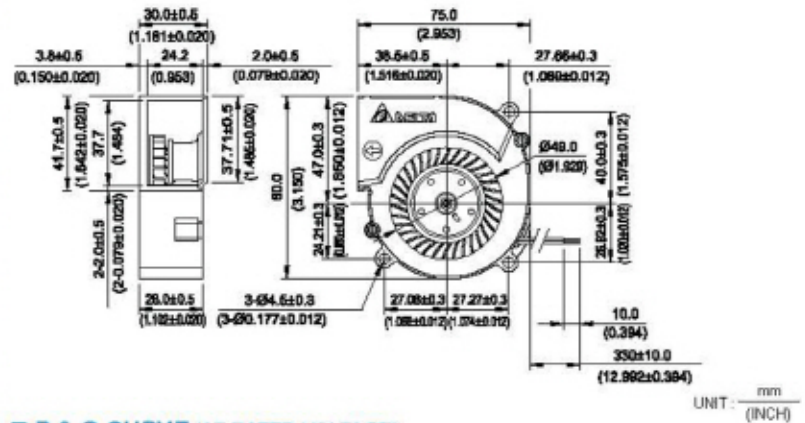


| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|----------|-------------|---------------|-------------------------|---------------|-------------|--------|---------------------|-------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| BFB1612L | -R00 / -F00 | 12 | 7.0 to 13.2 | 0.80 | 9.80 | 1800 | 1.410 | 49.79 | 21.50 | 0.846 | 51.5 |
| BFB1624L | -R00 / -F00 | 24 | 14.0 to 26.4 | 0.40 | 9.80 | | | | | | |
| BFB1648L | -R00 / -F00 | 48 | 28.0 to 56.0 | 0.22 | 10.56 | | | | | | |
| BFB1612M | -R00 / -F00 | 12 | 7.0 to 13.2 | 1.10 | 13.20 | 2000 | 1.560 | 55.09 | 28.00 | 1.102 | 54.5 |
| BFB1624M | -R00 / -F00 | 24 | 14.0 to 26.4 | 0.56 | 13.44 | | | | | | |
| BFB1648M | -R00 / -F00 | 48 | 28.0 to 56.0 | 0.28 | 13.44 | | | | | | |
| BFB1612H | -R00 / -F00 | 12 | 7.0 to 13.2 | 1.43 | 17.16 | 2200 | 1.750 | 61.80 | 35.00 | 1.378 | 56.5 |
| BFB1624H | -R00 / -F00 | 24 | 14.0 to 26.4 | 0.74 | 17.16 | | | | | | |

- * Function type is optional.
- * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
- * Noise is measured in anechoic chamber in free air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.

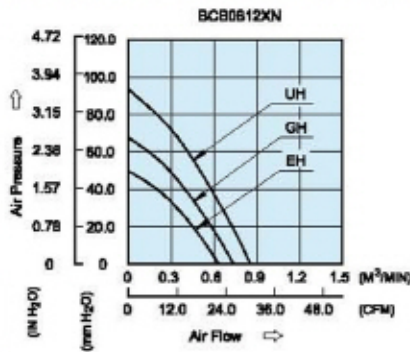
BCB 75 x 80 x 30 MM SERIES

DIMENSIONS DRAWING



- * Bearing Type
Ball Bearings
- * Material
Impeller & Frame : Plastic (UL 94V-0)
- * Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- * Weight : 140g (4.94 oz)

P & Q CURVE (AT RATED VOLTAGE)

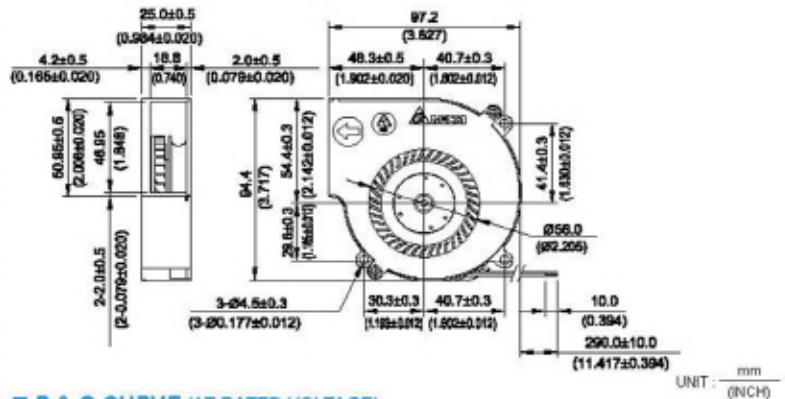


| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|-------------|---------------|-------------------------|---------------|-------------|--------|---------------------|-------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| BCB0812EHN | -R00 / -F00 | 12 | 6.0 to 13.2 | 1.00 | 12.00 | 8200 | 0.632 | 22.32 | 49.54 | 1.950 | 64.0 |
| BCB0812GHN | -R00 / -F00 | 12 | 6.0 to 13.2 | 1.45 | 17.40 | 9500 | 0.736 | 25.99 | 67.64 | 2.663 | 67.8 |
| BCB0812UHN | -R00 / -F00 | 12 | 6.0 to 13.2 | 2.30 | 27.60 | 10800 | 0.854 | 30.16 | 93.35 | 3.675 | 69.3 |

- * Function type is optional.
- * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
- * Noise is measured in anechoic chamber in free air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.

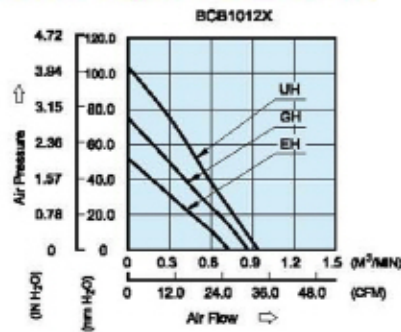
BCB 97 x 94 x 25 MM SERIES

DIMENSIONS DRAWING



- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 176g (6.21 oz)

P & Q CURVE (AT RATED VOLTAGE)

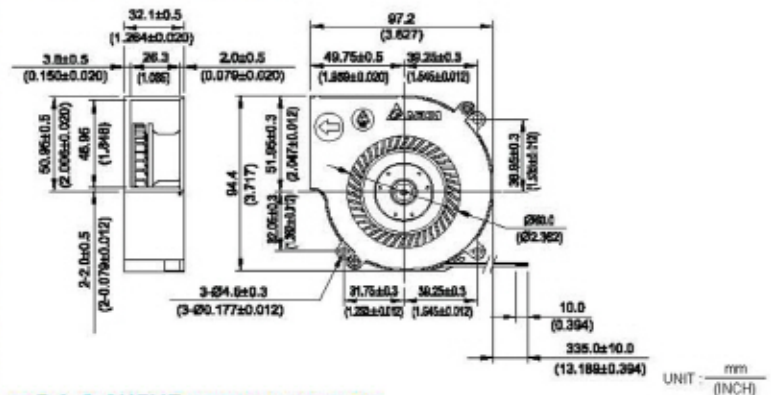


| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|-----------|-------------|---------------|-------------------------|---------------|-------------|--------|---------------------|-------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| BCB1012EH | -R00 / -F00 | 12 | 6.0 to 13.2 | 1.30 | 15.60 | 6700 | 0.730 | 25.78 | 51.77 | 2.038 | 63.9 |
| BCB1012GH | -R00 / -F00 | 12 | 6.0 to 13.2 | 2.20 | 26.40 | 8000 | 0.867 | 30.62 | 74.71 | 2.941 | 67.3 |
| BCB1012UH | -R00 / -F00 | 12 | 6.0 to 13.2 | 3.20 | 38.40 | 9300 | 1.000 | 35.31 | 102.95 | 4.053 | 67.8 |

* Function type is optional.
 * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
 * Noise is measured in anechoic chamber in free air, one meter from intake side.
 * All readings are typical values at rated voltage.
 * Specifications are subject to change without notice.

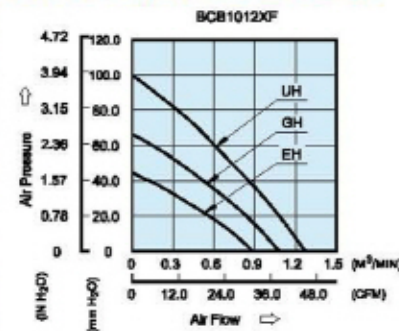
BCB 97 x 94 x 32 MM SERIES

DIMENSIONS DRAWING



- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 216g (7.62 oz)

P & Q CURVE (AT RATED VOLTAGE)



| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|-------------|---------------|-------------------------|---------------|-------------|--------|---------------------|-------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| BCB1012EHF | -R00 / -F00 | 12 | 6.0 to 13.2 | 1.40 | 16.80 | 6700 | 0.889 | 31.39 | 44.43 | 1.749 | 64.0 |
| BCB1012GHF | -R00 / -F00 | 12 | 6.0 to 13.2 | 2.45 | 29.40 | 8000 | 1.081 | 38.18 | 66.58 | 2.621 | 67.4 |
| BCB1012UHF | -R00 / -F00 | 12 | 6.0 to 13.2 | 3.65 | 43.80 | 9300 | 1.273 | 44.96 | 100.01 | 3.937 | 69.4 |

* Function type is optional.
 * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
 * Noise is measured in anechoic chamber in free air, one meter from intake side.
 * All readings are typical values at rated voltage.
 * Specifications are subject to change without notice.

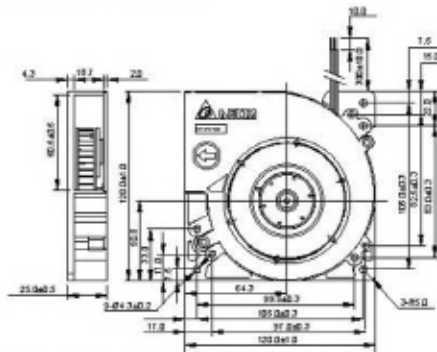
New



- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive (+)
Black Wire Negative(-)
- Weight : 255g (8.99 oz)

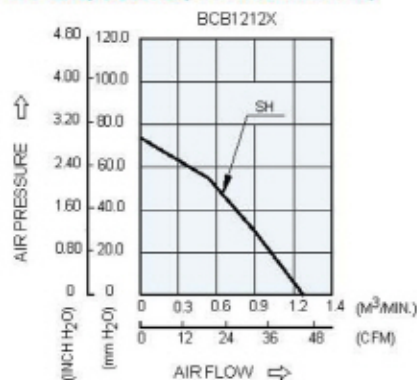
BCB 120 x 120 x 25 MM SERIES

■ DIMENSIONS DRAWING



UNIT: $\frac{\text{mm}}{(\text{INCH})}$

■ P & Q CURVE (AT RATED VOLTAGE)

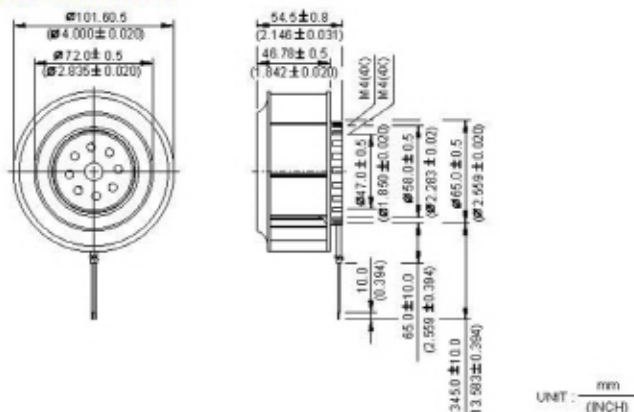


| MODEL | | Rated Voltage | Operating Voltage Range | Rated Current | Rated Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------------|-------------|---------------|-------------------------|---------------|-------------------|--------|---------------------|-------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| BCB1212SH | -R00 / -F00 | 12 | 7.5 to 13.2 | 2.68 | 32.16 | 5300 | 1.240 | 43.97 | 71.57 | 2.817 | 67.0 |

* Function type is optional.
 * The max. air flow and the speed are measured in free air; max. air pressure is measured at zero air flow.
 * Noise is measured in anechoic chamber in free air, one meter from intake side.
 * All readings are typical values at rated voltage.
 * Specifications are subject to change without notice.

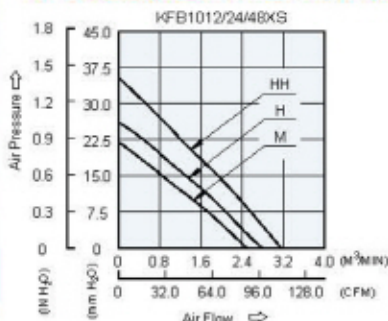
KFB $\varnothing 100 \times 55$ MM SERIES

■ DIMENSIONS DRAWING

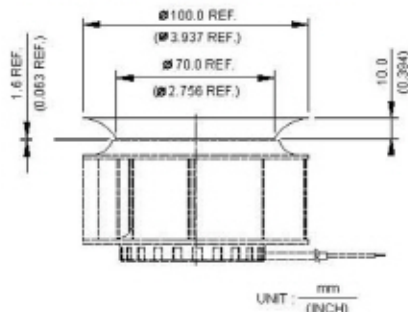


- Bearing Type
Ball Bearings
- Material
Pillow : Die-Cast Aluminum
Impeller : Plastic (UL 94V-0)
- Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 485g (17.11 oz)

■ P & Q CURVE (AT RATED VOLTAGE)



■ MOUNTING PANEL CUTOUT

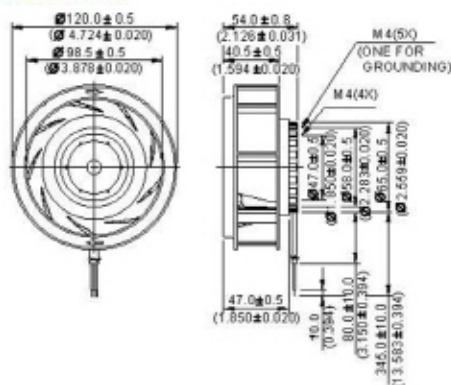


| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | Maximum Air Pressure | Noise | | |
|------------|-------------|---------------|-------------------------|---------------|-------------|--------|---------------------|----------------------|---------------------|---------------------|------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mm H ₂ O | IN H ₂ O | dB-A |
| KFB1012MS | -R00 / -F00 | 12 | 8.0 to 13.2 | 0.88 | 10.56 | 4500 | 2.550 | 90.04 | 22.05 | 0.868 | 56.4 |
| KFB1024MS | -R00 / -F00 | 24 | 14.0 to 26.4 | 0.45 | 10.80 | | | | | | |
| KFB1048MS | -R00 / -F00 | 48 | 32.0 to 56.0 | 0.23 | 11.04 | | | | | | |
| KFB1012HS | -R00 / -F00 | 12 | 8.0 to 13.2 | 1.45 | 17.40 | 5100 | 2.846 | 100.50 | 27.20 | 1.071 | 59.0 |
| KFB1024HS | -R00 / -F00 | 24 | 14.0 to 26.4 | 0.72 | 17.28 | | | | | | |
| KFB1048HS | -R00 / -F00 | 48 | 32.0 to 56.0 | 0.35 | 16.80 | | | | | | |
| KFB1012HHS | -R00 / -F00 | 12 | 8.0 to 13.2 | 1.85 | 22.20 | 5700 | 3.160 | 111.60 | 35.38 | 1.393 | 62.0 |
| KFB1024HHS | -R00 / -F00 | 24 | 14.0 to 26.4 | 0.87 | 20.88 | | | | | | |
| KFB1048HHS | -R00 / -F00 | 48 | 32.0 to 56.0 | 0.43 | 20.64 | | | | | | |

* Function type is optional.
 * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow
 * Noise is measured in anechoic chamber in free air, one meter from intake side.
 * All readings are typical values at rated voltage.
 * Specifications are subject to change without notice.

KFB $\phi 120 \times 54$ MM SERIES

■ DIMENSIONS DRAWING

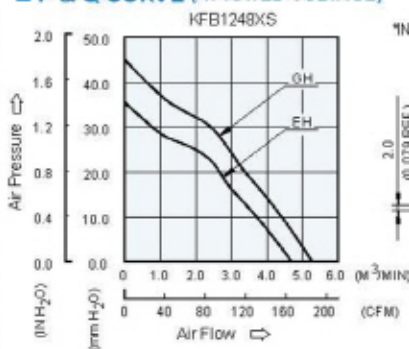


UNIT: $\frac{\text{mm}}{\text{(INCH)}}$

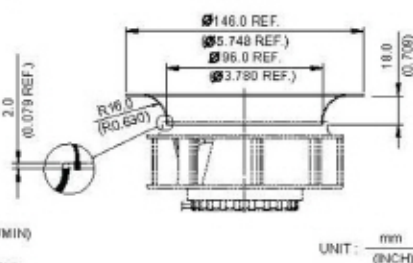
- Bearing Type
Ball Bearings
- Material
Impeller : Plastic (UL 94V-0)
Pillow : Die-Cast Aluminum
- Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 330g (11.64 oz)

■ P & Q CURVE (AT RATED VOLTAGE)

■ MOUNTING PANEL CUTOUT



*INLET RING:



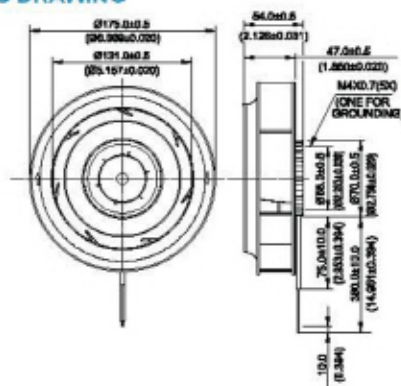
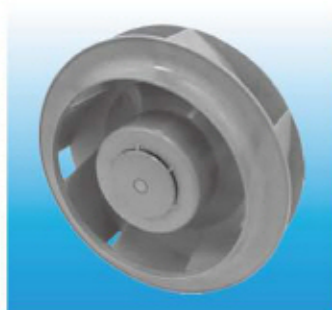
UNIT: $\frac{\text{mm}}{\text{(INCH)}}$

| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|-------------|---------------|-------------------------|---------------|-------------|--------|---------------------|--------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| KFB1248EHS | -R00 / -F00 | 48 | 28.0 to 60.0 | 0.50 | 24.00 | 4100 | 4.690 | 165.50 | 35.50 | 1.400 | 61.0 |
| KFB1248GHS | -R00 / -F00 | 48 | 28.0 to 60.0 | 0.63 | 30.24 | 4600 | 5.270 | 186.00 | 45.00 | 1.770 | 64.0 |

- * Function type is optional.
- * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
- * Noise is measured in anechoic chamber in free air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.

KFB $\phi 175 \times 54$ MM SERIES

■ DIMENSIONS DRAWING

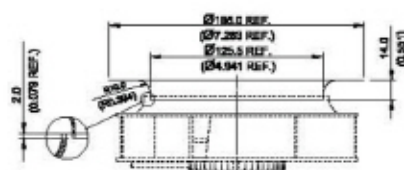
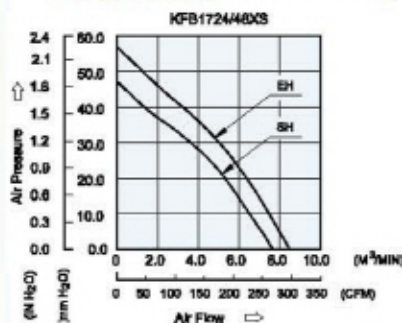


UNIT : $\frac{\text{mm}}{\text{(INCH)}}$

- Bearing Type
Ball Bearings
- Material
Impeller : Plastic (UL 94V-0)
Pillow : Die-Cast Aluminum
- Lead Wires :
UL 1430 AWG #22 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 620g (21.87 oz)

■ P & Q CURVE (AT RATED VOLTAGE)

■ MOUNTING PANEL CUTOUT



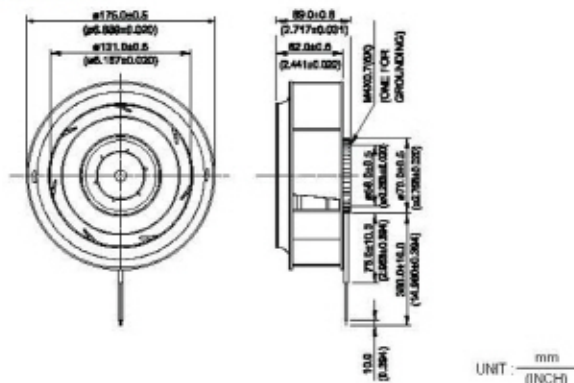
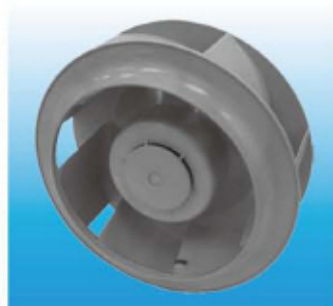
UNIT : $\frac{\text{mm}}{\text{(INCH)}}$

| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|-------------|---------------|-------------------------|---------------|-------------|--------|---------------------|--------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| KFB1724SHS | -R00 / -F00 | 24 | 14.0 to 30.0 | 1.65 | 39.60 | 3800 | 7.584 | 267.84 | 47.21 | 1.859 | 71.0 |
| KFB1748SHS | -R00 / -F00 | 48 | 28.0 to 60.0 | 0.80 | 38.40 | | | | | | |
| KFB1724EHS | -R00 / -F00 | 24 | 14.0 to 27.6 | 2.30 | 55.20 | 4200 | 8.421 | 297.39 | 56.96 | 2.361 | 73.5 |
| KFB1748EHS | -R00 / -F00 | 48 | 28.0 to 60.0 | 1.15 | 55.20 | | | | | | |

- * Function type is optional.
- * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
- * Noise is measured in anechoic chamber in free air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.

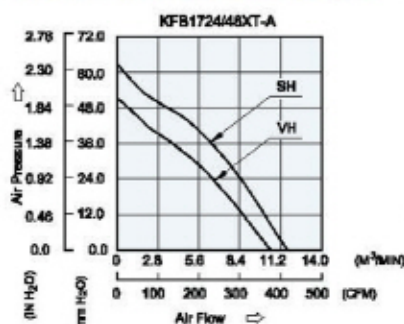
KFB $\phi 175 \times 69$ MM SERIES

■ DIMENSIONS DRAWING

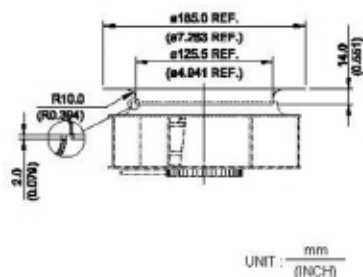


- Bearing Type
Ball Bearings
- Material
Impeller: Plastic (UL 94V-0)
Pillow: Die-Cast Aluminum
- Lead Wires:
UL 1430 AWG #22 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight: 670g (23.62 oz)

■ P & Q CURVE (AT RATED VOLTAGE)



■ MOUNTING PANEL CUTOUT

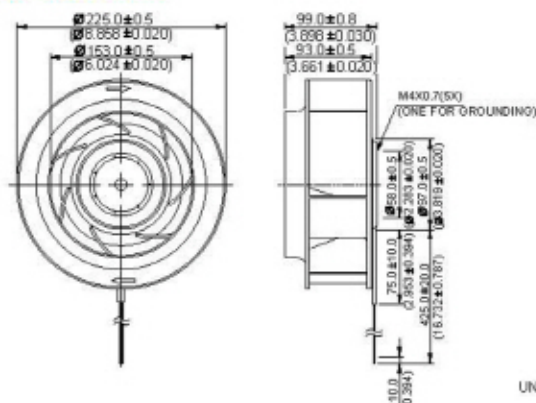
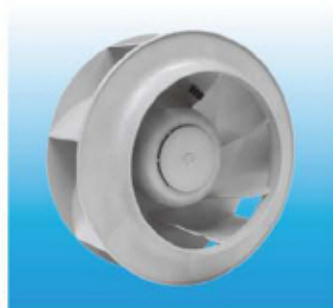


| MODEL | | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|------|-----------|---------------|-------------------------|---------------|-------------|--------|---------------------|--------|----------------------|---------------------|-------|
| PART NO. | REV. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| KFB1724VHT | -A | -R00/-F00 | 24 | 14.0 to 27.6 | 2.27 | 54.48 | 3600 | 10.609 | 374.67 | 49.88 | 1.964 | 70.0 |
| KFB1748VHT | -A | -R00/-F00 | 48 | 28.0 to 60.0 | 1.13 | 54.24 | | | | | | |
| KFB1724SHT | -A | -R00/-F00 | 24 | 14.0 to 27.6 | 3.14 | 75.36 | 4000 | 11.688 | 412.78 | 61.03 | 2.403 | 73.0 |
| KFB1748SHT | -A | -R00/-F00 | 48 | 28.0 to 53.0 | 1.45 | 69.60 | | | | | | |

- * Function type is optional.
- * The max. air flow and the speed are measured in free air, max. air pressure is measured at zero air flow.
- * Noise is measured in anechoic chamber in free air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.

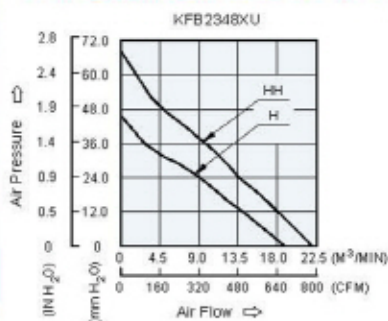
KFB $\varnothing 225 \times 99$ MM SERIES

■ DIMENSIONS DRAWING

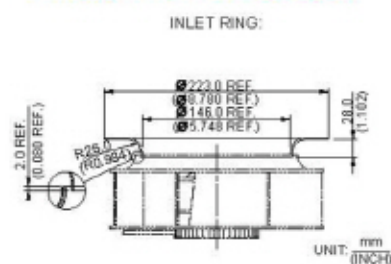


- Bearing Type
Ball Bearings
- Material
Impeller : Plastic (UL 94V-0)
Pillow : Die-Cast Aluminum
- Lead Wires :
UL 1430 AWG #22 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 1120g (39.50 oz)

■ P & Q CURVE (AT RATED VOLTAGE)



■ MOUNTING PANEL CUTOUT



| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|-------------|---------------|-------------------------|---------------|-------------|--------|---------------------|--------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| KFB2348HU | -R00 / -F00 | 48 | 28.0 to 60.0 | 1.45 | 69.60 | 2300 | 18.720 | 661.00 | 48.00 | 1.810 | 69.0 |
| KFB2348HHU | -R00 / -F00 | 48 | 28.0 to 60.0 | 2.30 | 110.40 | 2700 | 21.850 | 771.50 | 68.50 | 2.700 | 73.5 |

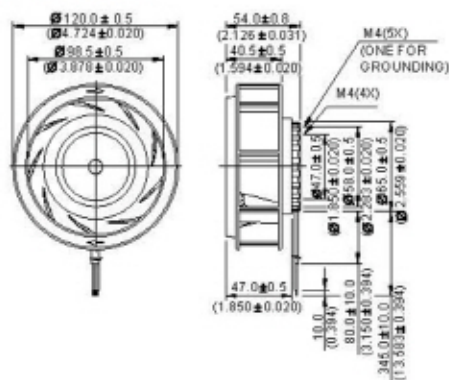
- * Function type is optional.
- * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
- * Noise is measured in anechoic chamber in free air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.

KHB · $\phi 120 \times 54$ MM SERIES

■ DIMENSIONS DRAWING

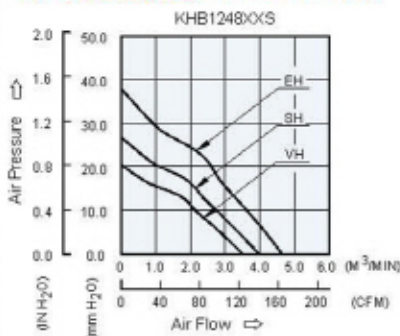


- Bearing Type
Ball Bearings
- Material
Impeller : Plastic (UL 94V-0)
Pillow : Die-Cast Aluminum
- Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 330g (11.64 oz)

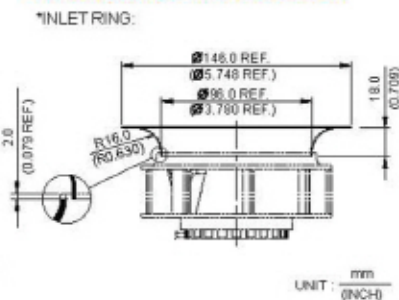


UNIT : $\frac{\text{mm}}{\text{(INCH)}}$

■ P & Q CURVE (AT RATED VOLTAGE)



■ MOUNTING PANEL CUTOUT



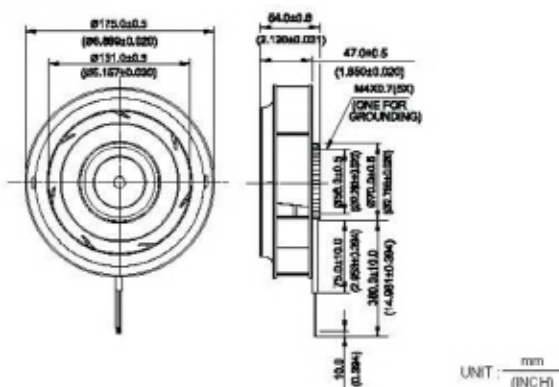
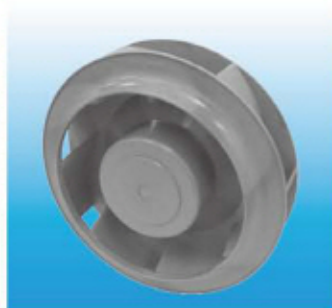
UNIT : $\frac{\text{mm}}{\text{(INCH)}}$

| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|-------------|---------------|-------------------------|---------------|-------------|--------|---------------------|--------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| KHB1248VHS | -R00 / -F00 | 48 | 32.0 to 80.0 | 0.27 | 12.96 | 3100 | 3.520 | 124.30 | 20.60 | 0.810 | 53.5 |
| KHB1248SHS | -R00 / -F00 | 48 | 32.0 to 80.0 | 0.35 | 16.80 | 3500 | 4.000 | 141.30 | 27.00 | 1.070 | 57.5 |
| KHB1248EHS | -R00 / -F00 | 48 | 32.0 to 80.0 | 0.47 | 22.56 | 4100 | 4.680 | 165.30 | 38.20 | 1.500 | 61.5 |

* Function type is optional.
 * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
 * Noise is measured in anechoic chamber in free air, one meter from intake side.
 * All readings are typical values at rated voltage.
 * Specifications are subject to change without notice.

KHB- ϕ 175 x 54 MM SERIES

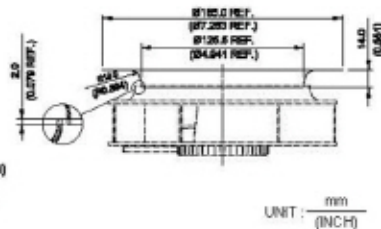
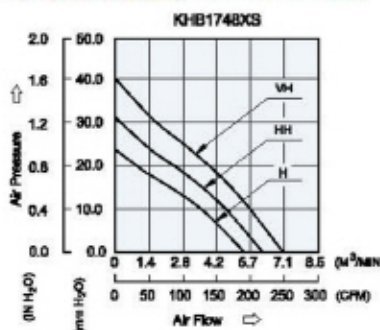
DIMENSIONS DRAWING



- Bearing Type: Ball Bearings
- Material: Impeller: Plastic (UL 94V-0); Pillow: Die-Cast Aluminum
- Lead Wires: UL 1430 AWG #22 OR Equivalent; Red Wire Positive(+); Black Wire Negative(-)
- Weight: 620g (21.87 oz)

P & Q CURVE (AT RATED VOLTAGE)

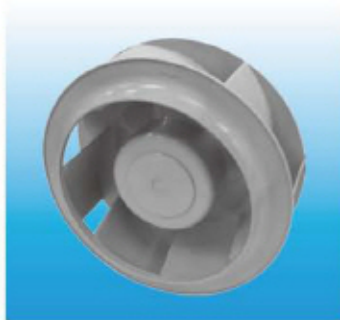
MOUNTING PANEL CUTOUT



| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------|-------------|---------------|-------------------------|---------------|-------------|--------|---------------------|--------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| KHB1748HS | -R00 / -F00 | 48 | 32.0 to 80.0 | 0.44 | 21.12 | 2700 | 5.360 | 189.28 | 24.03 | 0.946 | 62.5 |
| KHB1748HHS | -R00 / -F00 | 48 | 32.0 to 80.0 | 0.54 | 25.92 | 3100 | 6.161 | 217.59 | 31.58 | 1.243 | 66.0 |
| KHB1748VHS | -R00 / -F00 | 48 | 32.0 to 80.0 | 0.65 | 31.20 | 3500 | 7.008 | 247.47 | 40.67 | 1.601 | 69.0 |

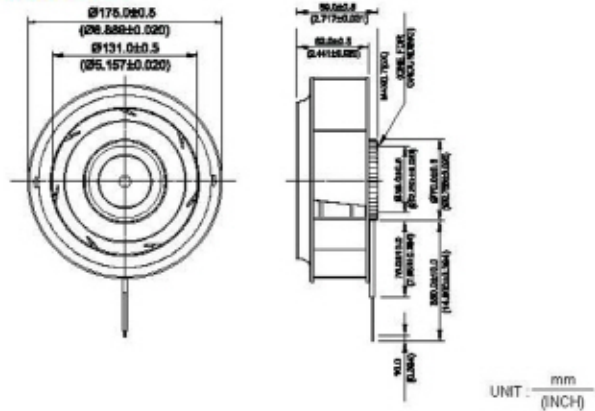
* Function type is optional.
 * The max. air flow and the speed are measured in free air; max. air pressure is measured at zero air flow.
 * Noise is measured in anechoic chamber in free air, one meter from intake side.
 * All readings are typical values at rated voltage.
 * Specifications are subject to change without notice.

KHB $\phi 175 \times 69$ MM SERIES

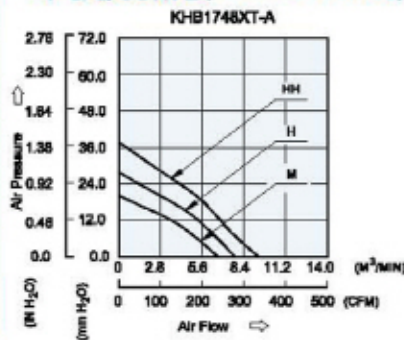


- Bearing Type
Ball Bearings
- Material
Impeller : Plastic (UL 94V-0)
Pillow : Die-Cast Aluminum
- Lead Wires :
UL 1430 AWG #22 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 670g (23.63 oz)

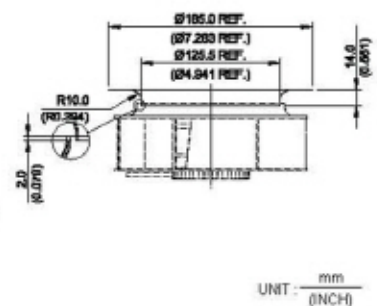
DIMENSIONS DRAWING



P & Q CURVE (AT RATED VOLTAGE)



MOUNTING PANEL CUTOUT



| MODEL | | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | Maximum Air Pressure | Noise | | |
|------------|------|-------------|---------------|-------------------------|---------------|-------------|--------|---------------------|----------------------|--------------------|---------------------|------|
| PART NO. | REV. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| KHB1748MT | -A | -R00 / -F00 | 48 | 32.0 to 80.0 | 0.36 | 17.28 | 2300 | 6.642 | 234.55 | 21.26 | 0.837 | 59.0 |
| KHB1748HT | -A | -R00 / -F00 | 48 | 32.0 to 80.0 | 0.57 | 27.36 | 2700 | 7.899 | 278.95 | 30.20 | 1.189 | 63.5 |
| KHB1748HHT | -A | -R00 / -F00 | 48 | 32.0 to 80.0 | 0.73 | 35.04 | 3100 | 9.500 | 335.50 | 36.77 | 1.448 | 66.0 |

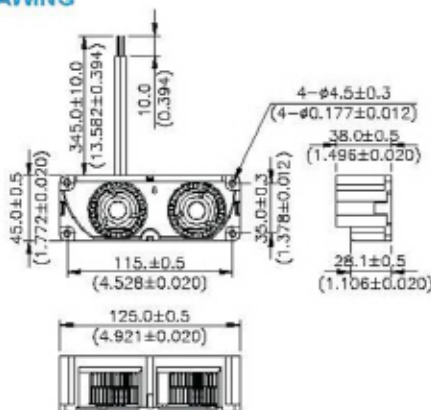
* Function type is optional.
 * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
 * Noise is measured in anechoic chamber in free air, one meter from intake side.
 * All readings are typical values at rated voltage.
 * Specifications are subject to change without notice.

SFB 125 x 38 x 45 MM SERIES

DIMENSIONS DRAWING

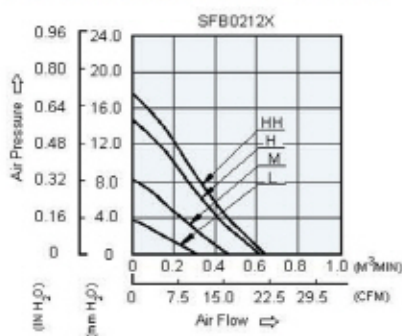


- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 110g (3.88 oz)

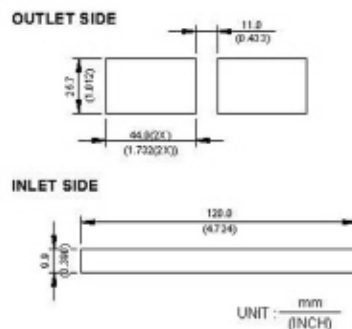


UNIT : $\frac{\text{mm}}{\text{(INCH)}}$

P & Q CURVE (AT RATED VOLTAGE)



MOUNTING PANEL CUTOUT



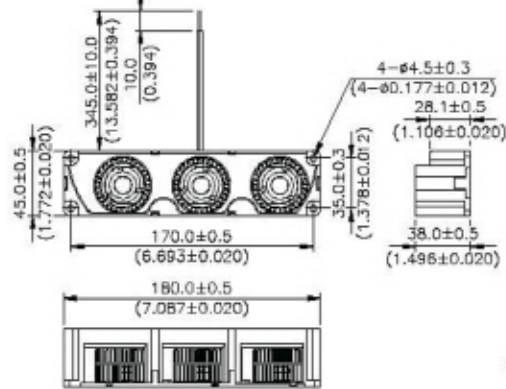
UNIT : $\frac{\text{mm}}{\text{(INCH)}}$

| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | Maximum Air Pressure | Noise | | |
|-----------|-------------|---------------|-------------------------|---------------|-------------|--------|---------------------|----------------------|--------------------|---------------------|------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| SFB0212L | -R00 / -F00 | 12 | 5.5 to 13.8 | 0.22 | 2.64 | 3600 | 0.312 | 11.02 | 3.79 | 0.149 | 33.0 |
| SFB0212M | -R00 / -F00 | 12 | 5.5 to 13.8 | 0.36 | 4.32 | 5000 | 0.462 | 16.32 | 8.24 | 0.324 | 44.5 |
| SFB0212H | -R00 / -F00 | 12 | 5.5 to 13.8 | 0.42 | 5.04 | 6400 | 0.614 | 21.68 | 14.78 | 0.582 | 48.0 |
| SFB0212HH | -R00 / -F00 | 12 | 5.5 to 13.8 | 0.62 | 7.44 | 7000 | 0.655 | 23.13 | 16.32 | 0.643 | 52.0 |

- * Function type is optional.
- * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
- * Noise is measured in anechoic chamber in free air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.

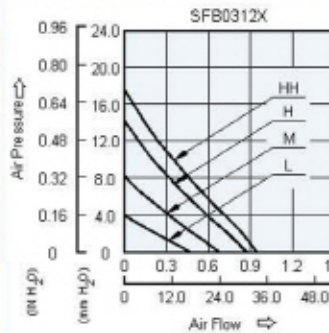
SFB 180 x 38 x 45 MM SERIES

DIMENSIONS DRAWING

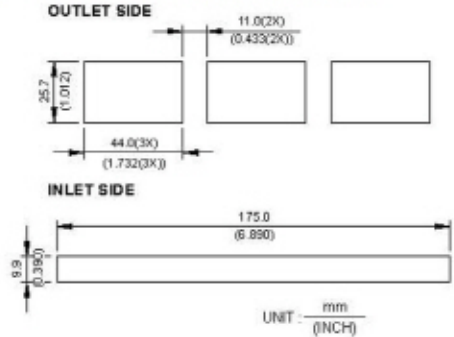


UNIT : $\frac{\text{mm}}{\text{(INCH)}}$

P & Q CURVE (AT RATED VOLTAGE)



MOUNTING PANEL CUTOUT



UNIT : $\frac{\text{mm}}{\text{(INCH)}}$

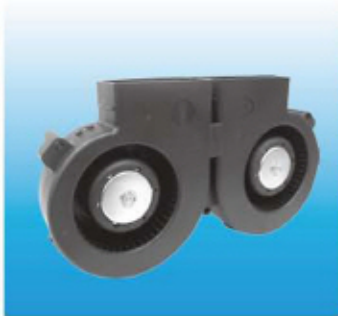
- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 150g (5.29 oz)

| MODEL | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | Maximum Air Pressure | Noise | | | |
|-----------|---------------|-------------------------|---------------|-------------|-------|------------------|----------------------|-------|--------------------|---------------------|------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| SFB0312L | -R00 / -F00 | 12 | 5.5 to 13.8 | 0.35 | 4.20 | 3600 | 0.467 | 16.49 | 3.95 | 0.156 | 37.0 |
| SFB0312M | -R00 / -F00 | 12 | 5.5 to 13.8 | 0.55 | 6.60 | 5000 | 0.676 | 23.87 | 8.25 | 0.325 | 46.5 |
| SFB0312H | -R00 / -F00 | 12 | 5.5 to 13.8 | 0.63 | 7.56 | 6400 | 0.873 | 30.83 | 14.19 | 0.559 | 50.0 |
| SFB0312HH | -R00 / -F00 | 12 | 5.5 to 13.8 | 0.93 | 11.16 | 7000 | 0.968 | 34.18 | 17.00 | 0.669 | 53.0 |

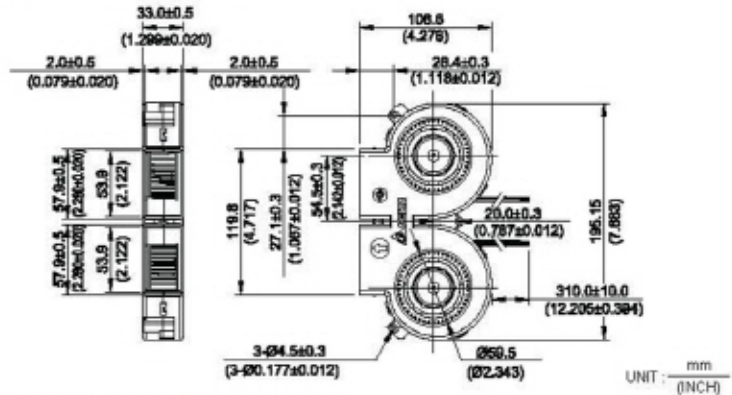
* Function type is optional.
 * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
 * Noise is measured in anechoic chamber in free air, one meter from intake side.
 * All readings are typical values at rated voltage.
 * Specifications are subject to change without notice.

SFB 196 x 109 x 33 MM SERIES

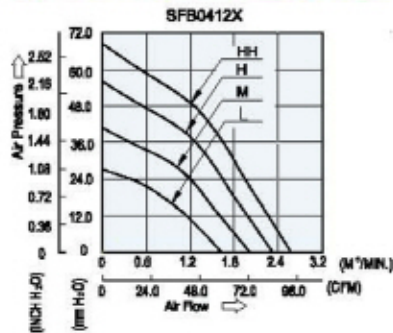
■ DIMENSIONS DRAWING



- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 385g (13.58 oz)



■ P & Q CURVE (AT RATED VOLTAGE)



| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|-----------|-------------|---------------|-------------------------|---------------|-------------|--------|---------------------|-------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| SFB0412L | -R00 / -F00 | 12 | 7.0 to 13.2 | 1.40 | 16.80 | 3300 | 1.610 | 56.85 | 27.06 | 0.893 | 57.5 |
| SFB0412M | -R00 / -F00 | 12 | 7.0 to 13.2 | 2.10 | 25.20 | 4000 | 2.012 | 71.07 | 40.85 | 1.608 | 61.5 |
| SFB0412H | -R00 / -F00 | 12 | 7.0 to 13.2 | 3.10 | 37.20 | 4600 | 2.325 | 82.12 | 56.08 | 2.208 | 64.5 |
| SFB0412HH | -R00 / -F00 | 12 | 7.0 to 12.6 | 4.60 | 55.20 | 5300 | 2.577 | 90.99 | 68.43 | 2.694 | 67.0 |

- * Function type is optional.
- * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
- * Noise is measured in anechoic chamber in free air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.

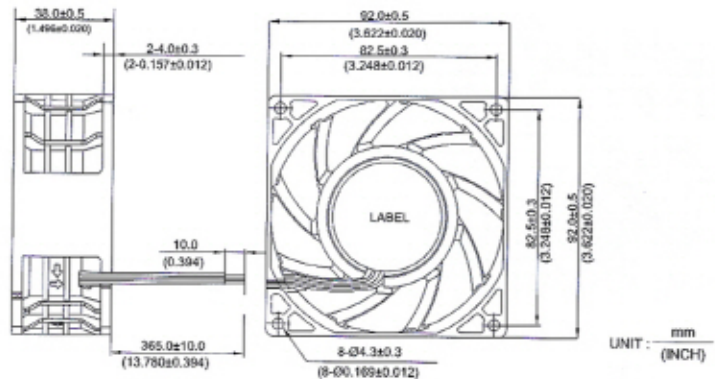
New



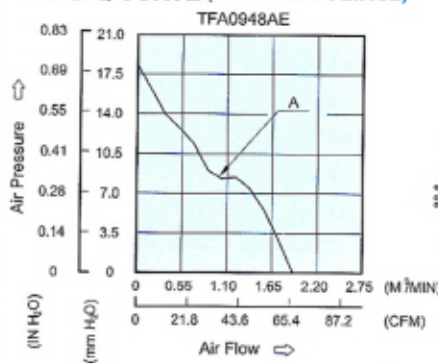
- Bearing Type
Ball Bearings
- Material
Impeller & Frame : Plastic (UL 94V-0)
- Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
UL 1007 AWG #24 OR Equivalent
Blue Wire Positive(F00)
Yellow Wire Negative(PWM)
- Weight : 210g (7.40 oz)

TFA 92 x 92 x 38 MM SERIES

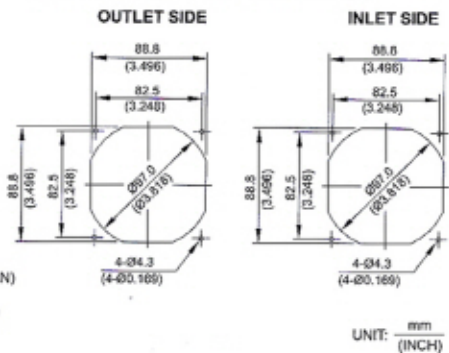
■ DIMENSIONS DRAWING



■ P & Q CURVE (AT RATED VOLTAGE)



■ MOUNTING PANEL CUTOUT



| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|-----------|-----------|---------------|-------------------------|---------------|-------------|--------|---------------------|-------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| TFA0948AE | PWM & F00 | 48 | 28.0 to 62.0 | 0.12 | 5.76 | 5000 | 1.899 | 67.07 | 18.30 | 0.720 | 49.8 |

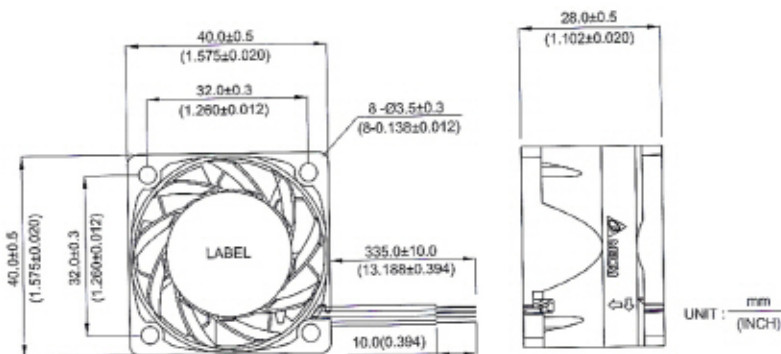
- * Function type is optional.
- * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
- * Noise is measured in anechoic chamber in free air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.

New



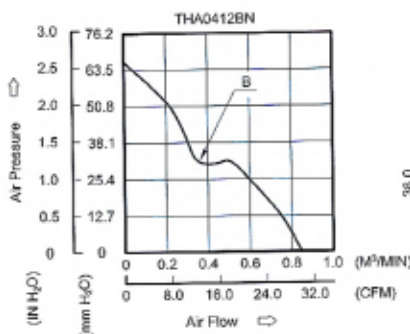
THA 40 x 40 x 28 MM SERIES

■ DIMENSIONS DRAWING

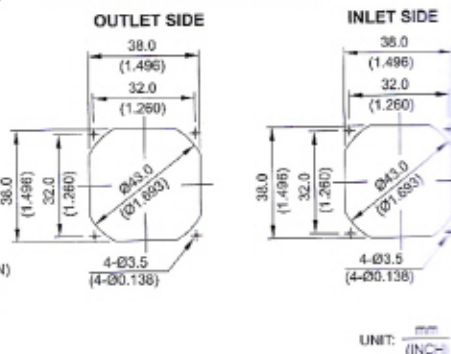


- Bearing Type
Ball Bearings
- Material
Impeller : Plastic (UL 94V-0)
Frame : Die-cast Aluminum
- Lead Wires :
UL 1061 AWG #26 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
UL 1061 AWG #26 OR Equivalent
Blue Wire (F00)
Yellow Wire (PWM)
- Weight : 75g (4.237 oz)

■ P & Q CURVE (AT RATED VOLTAGE)



■ MOUNTING PANEL CUTOUT



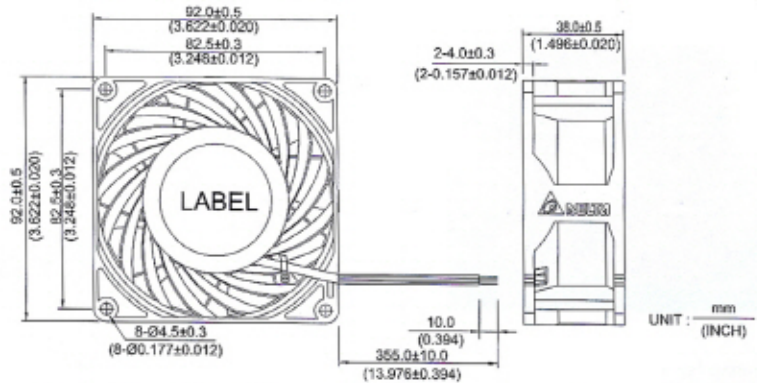
| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|-----------|-----------|---------------|-------------------------|---------------|-------------|--------|---------------------|-------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| THA0412BN | PWM / F00 | 12 | 7 to 13.2 | 1.10 | 13.20 | 19000 | 0.836 | 29.52 | 61.06 | 2.404 | 59.0 |

- * Function type is optional.
- * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
- * Noise is measured in anechoic chamber in free air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.

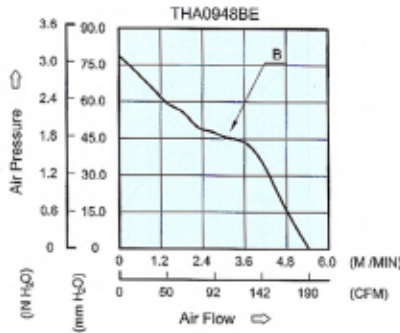
New

THA 92 x 92 x 38 MM SERIES

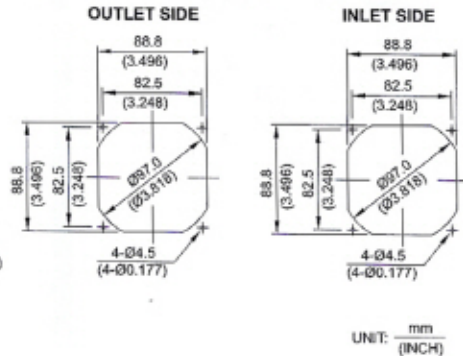
DIMENSIONS DRAWING



P & Q CURVE (AT RATED VOLTAGE)



MOUNTING PANEL CUTOUT



- Bearing Type
Ball Bearings
- Material
Impeller : Plastic (UL 94V-0)
Frame : Die-cast Aluminum
- Lead Wires :
UL 1061 AWG #22 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
UL 1061 AWG #26 OR Equivalent
Blue Wire (F00)
Yellow Wire (PWM)
- Weight : 300g (16.95 oz)

| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|-----------|-----------|---------------|-------------------------|---------------|-------------|--------|----------------------|--------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ / min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| THA0948BE | PWM / F00 | 48 | 30.0 to 60.0 | 1.40 | 67.20 | 9500 | 5.370 | 189.67 | 76.85 | 3.020 | 71.0 |

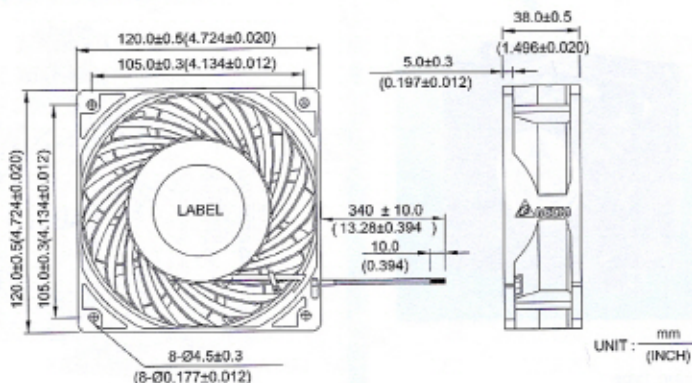
- * Function type is optional.
- * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
- * Noise is measured in anechoic chamber in free air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.

New



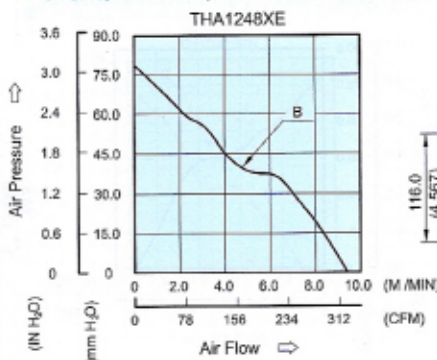
THA 120 x 120 x 38 MM SERIES

■ DIMENSIONS DRAWING

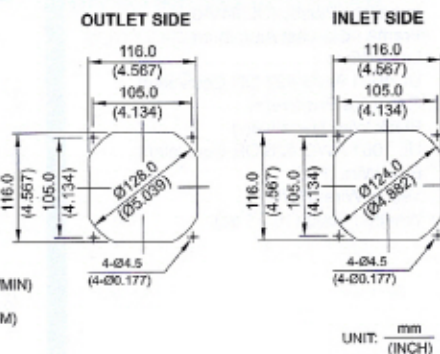


- Bearing Type
Ball Bearings
- Material
Impeller : Plastic (UL 94V-0)
Frame : Die-cast Aluminum
- Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
Blue Wire (F00)
Yellow Wire (PWM)
- Weight : 500g (28.25 oz)

■ P & Q CURVE (AT RATED VOLTAGE)



■ MOUNTING PANEL CUTOUT



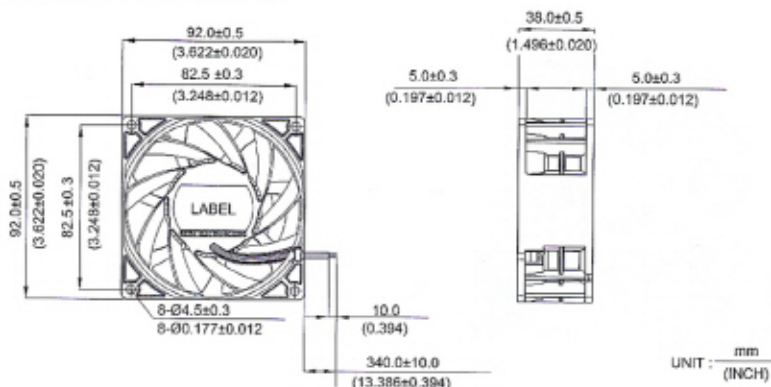
| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|-----------|-----------|---------------|-------------------------|---------------|-------------|--------|---------------------|--------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| THA1248BE | PWM & F00 | 48 | 36 to 60.0 | 2.07 | 99.3 | 7600 | 9.010 | 318.00 | 78.50 | 3.090 | 72.0 |

- * Function type is optional.
- * The max. air flow and the speed are measured in free air; max. air pressure is measured at zero air flow.
- * Noise is measured in anechoic chamber in free air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.

New

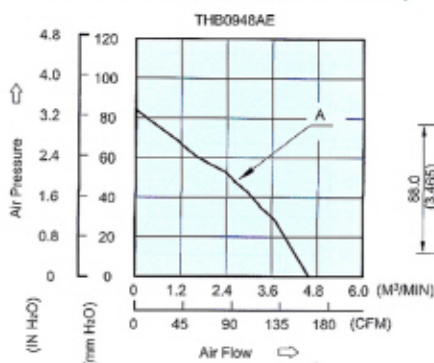
THB 92 x 92 x 38 MM SERIES

■ DIMENSIONS DRAWING

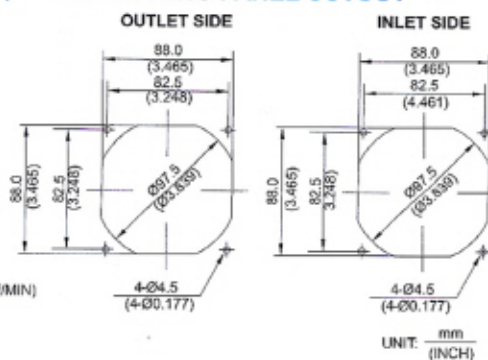


- Bearing Type
Ball Bearings
- Material
Impeller : Plastic (UL 94V-0)
Frame : Die-cast Aluminum
- Lead Wires :
UL 1061 AWG #24 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 225g (7.933 oz)

■ P & Q CURVE (AT RATED VOLTAGE)



■ MOUNTING PANEL CUTOUT



| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|-----------|-------------|---------------|-------------------------|---------------|-------------|--------|---------------------|--------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| THB0948AE | -R00 / -F00 | 48 | 36.0 to 60.0 | 0.76 | 36.50 | 13000 | 4.602 | 162.50 | 78.46 | 3.089 | 72.5 |

- * Function type is optional.
- * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
- * Noise is measured in anechoic chamber in free air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.

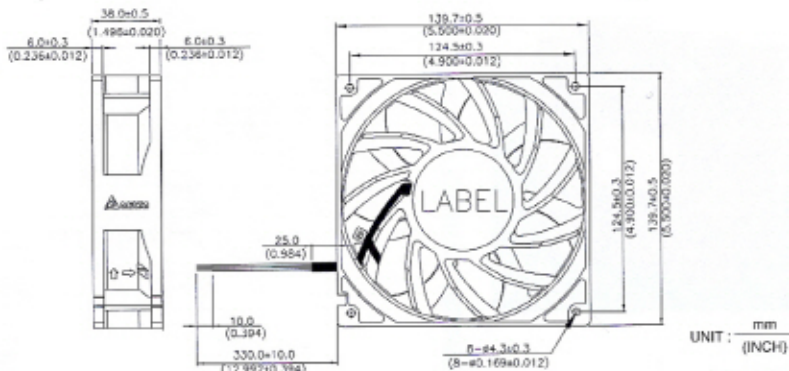
New



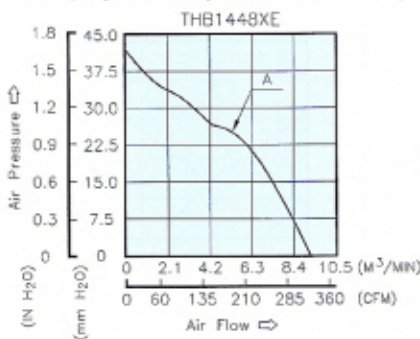
- Bearing Type
Ball Bearings
- Material
Impeller : Plastic (UL 94V-0)
Frame : Die-cast Aluminum
- Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 590g (20.81 oz)

THB 140 x 140 x 38 MM SERIES

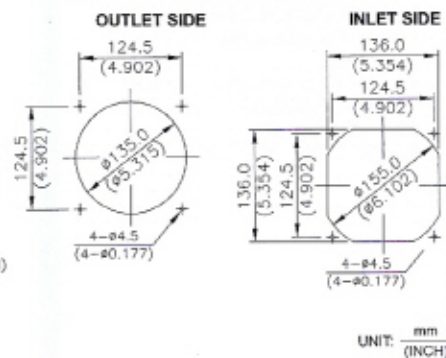
■ DIMENSIONS DRAWING



■ P & Q CURVE (AT RATED VOLTAGE)



■ MOUNTING PANEL CUTOUT



| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|-----------|-----------|---------------|-------------------------|---------------|-------------|--------|---------------------|--------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| THB1448AE | PWM & F00 | 48 | 30.0 to 60.0 | 1.10 | 52.80 | 6100 | 9,230 | 325.90 | 41.85 | 1,340 | 66.8 |

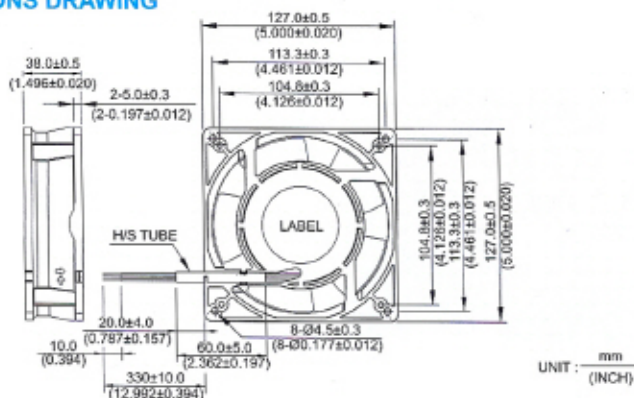
- * Function type is optional.
- * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
- * Noise is measured in anechoic chamber in free air, one motor from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.

New



TDA 127 x 127 x 38 MM SERIES

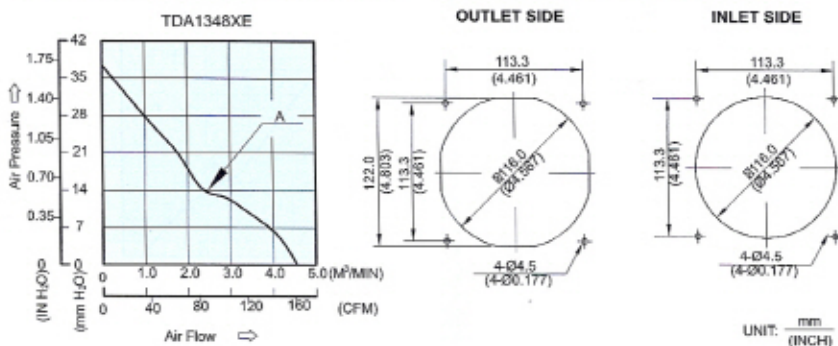
■ DIMENSIONS DRAWING



- Bearing Type
Ball Bearings
- Material
Impeller : Plastic (UL 94V-0)
Frame : Die-cast Aluminum
- Lead Wires :
UL 1061 AWG #24 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 350g (12.34 oz)

■ P & Q CURVE (AT RATED VOLTAGE)

■ MOUNTING PANEL CUTOUT



| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|-----------|-----------|---------------|-------------------------|---------------|-------------|--------|---------------------|--------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| TDA1348AE | PWM & F00 | 48 | 36.0 to 60.0 | 0.40 | 19.20 | 5300 | 4.530 | 160.00 | 37.00 | 1.311 | 60.5 |

* Function type is optional.

* The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.

* Noise is measured in anechoic chamber in free air, one meter from intake side.

* All readings are typical values at rated voltage.

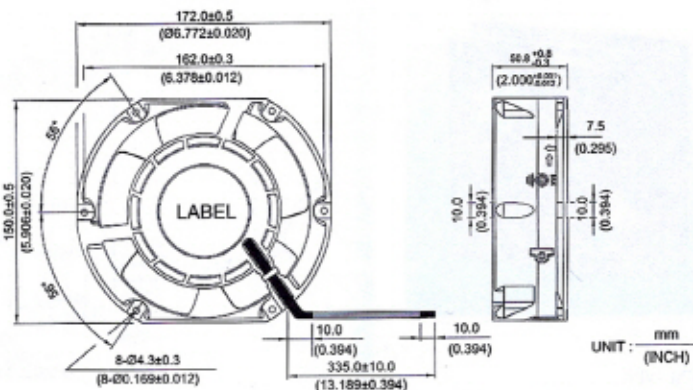
* Specifications are subject to change without notice.

New



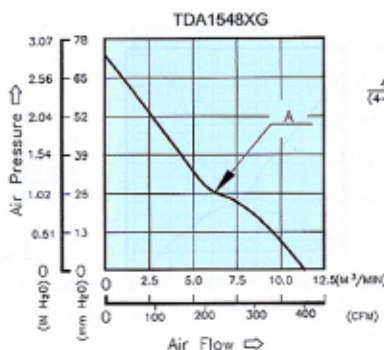
TDA 150 x 172 x 50.8 MM SERIES

DIMENSIONS DRAWING

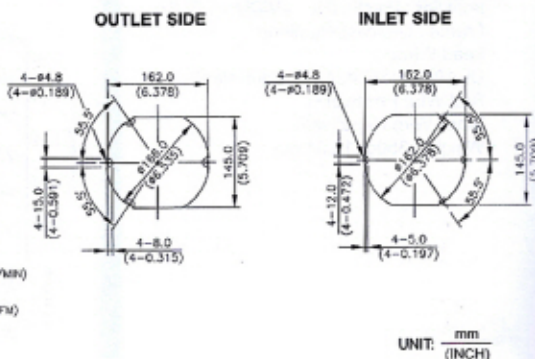


- Bearing Type
Ball Bearings
- Material
Impeller : Plastic (UL 94V-0)
Frame : Die-cast Aluminum
- Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
- Weight : 770g (27.15 oz)

P & Q CURVE (AT RATED VOLTAGE)



MOUNTING PANEL CUTOUT



| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|-----------|-----------|---------------|-------------------------|---------------|-------------|--------|---------------------|--------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mm H ₂ O | IN H ₂ O | dB-A |
| TDA1548AG | PWM & F00 | 48 | 30.0 to 60.0 | 1.85 | 93.74 | 5400 | 11.387 | 402.10 | 72.49 | 2.854 | 73.3 |

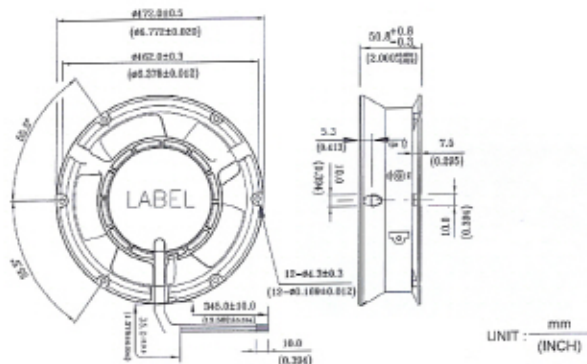
- * Function type is optional.
- * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
- * Noise is measured in anechoic chamber in free air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.

New



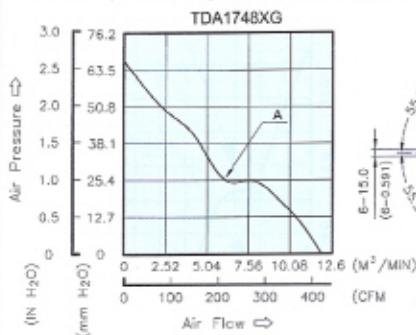
TDA $\phi 172 \times 50.8$ MM SERIES

DIMENSIONS DRAWING

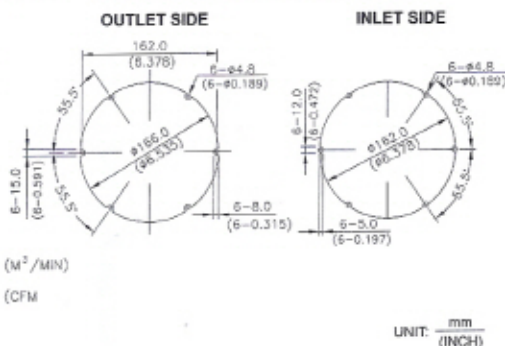


- Bearing Type
Ball Bearings
- Material
Impeller : Plastic (UL 94V-0)
Frame : Die-cast Aluminum
- Lead Wires :
UL 1007 AWG #24 OR Equivalent
Red Wire Positive(+)
Black Wire Negative(-)
Blue Wire (F00)
Yellow Wire (PWM)
- Weight : 800g (28.25 oz)

P & Q CURVE (AT RATED VOLTAGE)



MOUNTING PANEL CUTOUT



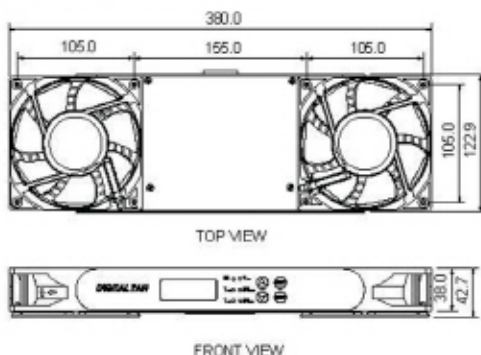
| MODEL | | Rated Voltage | Operating Voltage Range | Input Current | Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|-----------|-----------|---------------|-------------------------|---------------|-------------|--------|---------------------|--------|----------------------|---------------------|-------|
| PART NO. | FUNCTION | VDC | VDC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| TDA1748AG | PWM & F00 | 48 | 30.0 to 60.0 | 1.85 | 88.80 | 5400 | 11.720 | 413.00 | 71.80 | 2.820 | 71.0 |

- * Function type is optional.
- * The max. air flow and the speed are measured in free air; max. air pressure is measured at zero air flow.
- * Noise is measured in anechoic chamber in free air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.

New

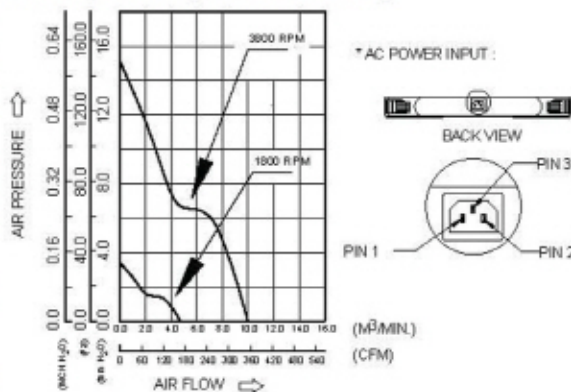
FTA 380 x 123 x 43 MM SERIES

■ DIMENSIONS DRAWING

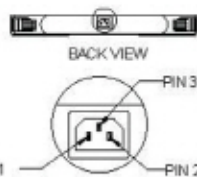


UNIT: $\frac{\text{mm}}{\text{(INCH)}}$

■ P & Q CURVE (AT RATED VOLTAGE)



* AC POWER INPUT :



| FTA0102AA PIN ASSIGNMENT | |
|---------------------------------|-----------|
| BACKPLANE SOCKET C14 SK-1015 | |
| PIN 1 | LINE(L) |
| PIN 2 | NATURE(N) |
| PIN 3 | GROUND(⊕) |

- * Bearing Type
Ball Bearings
- * FAN Material
Impeller & Frame : Plastic (UL 94V-0)
- * FAN TRAY CASE Material : SPCC
- * Weight : 1500g (53.95 oz)
- * Horizontal Mount For Bottom Up Cooling
- * Real-Time Temperature Display
- * FAN Fault & Over Temperature Alarm
- * Air Flow Redundancy
- * Temperature / Fan Speed Setting

| MODEL | Rated Voltage | Operating Voltage Range | Rated Current | Rated Input Power | Speed | Maximum Air Flow | | Maximum Air Pressure | | Noise |
|------------------|---------------|-------------------------|---------------|-------------------|-----------|---------------------|--------|----------------------|---------------------|-------|
| PART NO. | AC | AC | Amp | Watt | R.P.M. | m ³ /min | CFM | mmH ₂ O | IN H ₂ O | dB-A |
| FTA0102AA | 110 or 220 | 100 to 240 | 0.65 | 65.00 | 1800/3800 | 9.84 | 335.00 | 14.20 | 0.56 | 63.0 |

- * Function type is optional.
- * The max. air flow and the speed are measured in free air ; max. air pressure is measured at zero air flow.
- * Noise is measured in anechoic chamber in free air, one meter from intake side.
- * All readings are typical values at rated voltage.
- * Specifications are subject to change without notice.



www.deltaww.com

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DONGGUAN, GUANGDONG,
PEOPLE'S REPUBLIC OF CHINA
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FAX: 86-769-8663-1588

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FAX : 81-3-5733-1211

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SINGAPORE 417841
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FAX : 65-744-9288

**DELTA ELECTRONICS (THAILAND)
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AMPHUR BANGPAKONG, CHACHOENGSAO
24180, THAILAND
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FAX : 66-38-522-477

DELTA PRODUCTS CORPORATION

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4405 CUSHING PARKWAY,
FREMONT, CA 94538,
U.S.A.
TEL : 1-510-868-5100
FAX : 1-510-868-0680

PORTLAND OFFICE
15125 SW HOLL PARKWAY,
SUITE K, BEAVERTON, OR 97006,
U.S.A.
TEL : 1-503-533-8444
FAX : 1-503-533-0204

LOS ANGELES OFFICE
927 CANADA COURT,
CITY OF INDUSTRY, CA 91748,
U.S.A.
TEL : 1-826-581-8888
FAX : 1-826-581-2188

HOUSTON OFFICE
8270 WILLOWPLACE NORTH,
SUITE 150, HOUSTON, TX 77070,
U.S.A.
TEL : 1-281-477-8400
FAX : 1-281-477-8438

SAN DIEGO OFFICE
17150 VIA DEL CAMPO #303,
SAN DIEGO, CA 92127,
U.S.A.
TEL : 1-858-676-8282
FAX : 1-858-676-0338

RALEIGH OFFICE
P.O. BOX 12173,
5101 DAVIS DRIVE,
RESEARCH TRIANGLE PARK, NC 27708
U.S.A.
TEL : 1-919-767-3800
FAX : 1-919-767-8080

BOSTON OFFICE
175 CABOT STREET, SUITE #310,
LOWELL, MA 01854,
U.S.A.
TEL : 1-978-656-3883
FAX : 1-978-656-3884

AUSTIN OFFICE
575 ROUND ROCK WEST DRIVE,
BUILDING K, SUITE#410,
ROUNDROCK, TX 78681,
U.S.A.
TEL : 1-512-671-7749
FAX : 1-512-671-7726

DAKOTA OFFICE
3500 SOUTH LAKEPORT STREET, #H,
SIOUX CITY, IA 51106,
U.S.A.
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