

HE YUAN YONGJIA CO.,LTD.

河源湧嘉实业有限公司

SAMPLE APPROVAL SHEET

Customer Name: _____

Customer P/N.: N01-310920022R **Rev.:** 1

Huntkey M/N.: AB3010H12 **Rev.:** 1
_____ -A001

Sample Deliver Date: 2017-03-31

<< Customer Sign Back >>

Approved By	Checked By	Prepared By

Please sign back your signature if our production have been approved

<< Huntkey Signature >>

Approved By	Checked By	Prepared By
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YONGJIA M/N.: AB3010H12

Date. : 2017-03-31

M/N Rev.	Date	Change Item	Remark
1	2017-03-31	Start	

1. Scope

This specification provides the information of Huntkey DC brushless fan with it's mechanical, electrical and reliability characteristics. Please use and storage this DC fan under our suggested condition.

1-1. Operational Condition: -10~70°C and 35~85%[RH]

1-2. Storage Condition: -40~75°C and 35~85%[RH]

2. Fan Characteristics

No.	Items	Specification	Remark
2-1	Rated Voltage	12.0 VDC	
2-2	Operation Voltage	7.0~13.8 VDC	
2-3	Start Voltage	7.0 VDC	
2-4	Consuming Current	0.09A (0.15A max.)	
2-5	Consuming Power	1.08W (1.8W max.)	
2-6	Rated Speed	9000R.P.M.±15%	
2-7	Maximum Air Flow	0.10 m ³ /min (0.085min.) 3.53 CFM (3.0min.)	Details in Section 4
2-8	Maximum Static Pressure	4.57 mmH ₂ O (3.30min.) 0.18 inH ₂ O (0.130min.)	Details in Section 4 Measured at Q=0
2-9	Acoustic Noise	25.0dB(A) (32.0max.)	
2-10	Life Expectance	70,000 hours at 25 °C	
2-11	Insulation Resistance	10 MΩ min. at 500 VDC	Measure between frame and terminal
2-12	Dielectric Strength	5 mA max. at 500 VAC 60 Hz and 1 minute	Measure between frame and terminal
2-13	Insulation Level	UL Class A	
2-14	Auto Restart	YES	
2-15	Rotation Direction	Counter-Clockwise	

Notes:

A. Environment condition:

Temperature: 25 °C

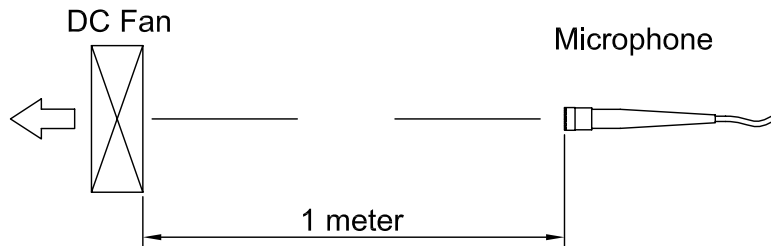
Humidity: 65%[RH]

Atmosphere: 1 atm

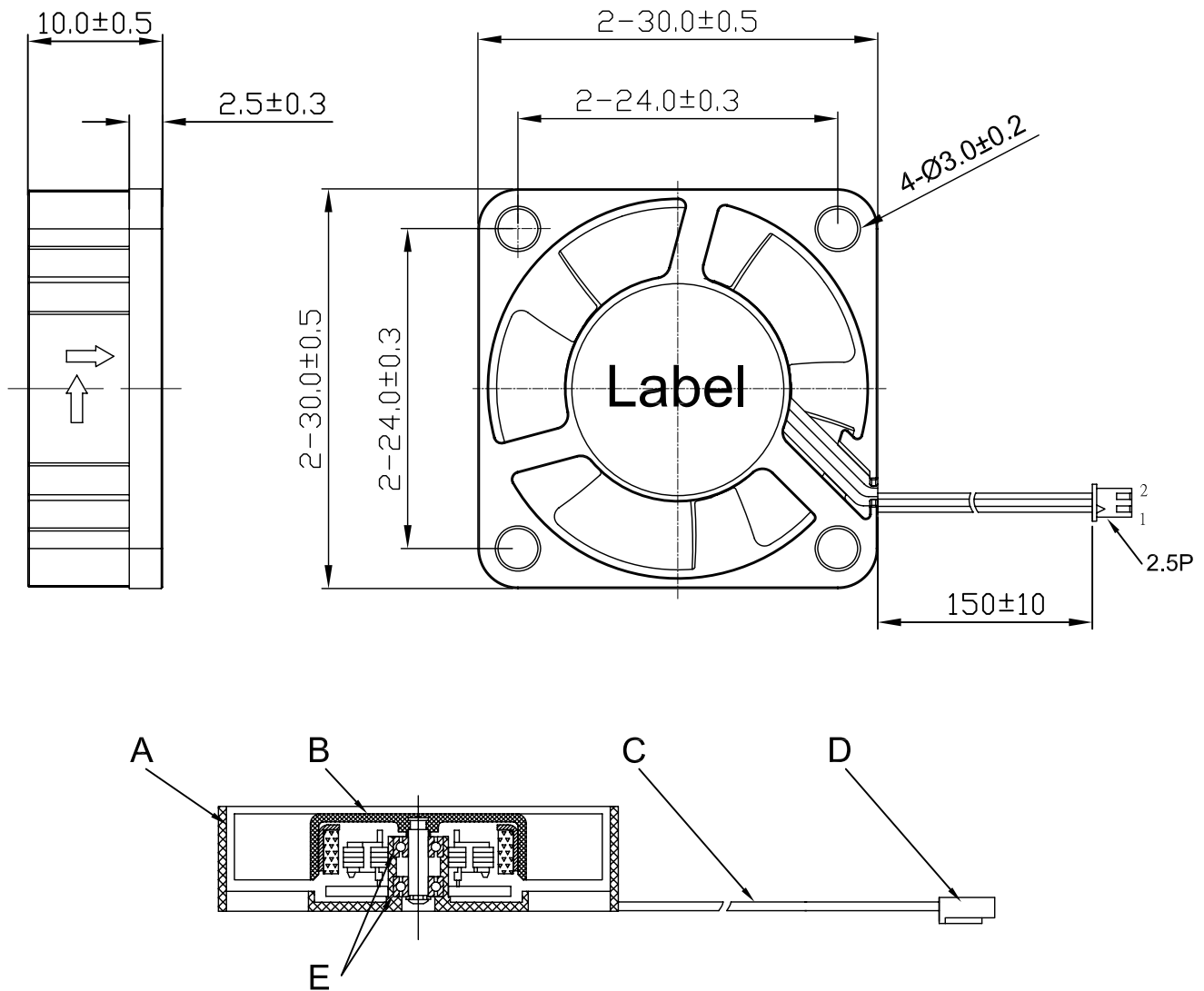
B. Noise is measured at rated test condition in semi-anechoic chamber in free air with microphone at a distance of 1 meter apart from the axis of fan at intake side

C. Chamber background noise level < 16.0dB(A)

Chamber cut-off frequency: 100Hz



3. Mechanical Drawing



Note:

- A. Frame : PBT, UL 94V-0 Black
- B. Impeller : PBT, UL 94V-0 Black
- C. Lead Wire : UL1061 AWG#24
- D. Housing : 2.5P White
- E. Bearing Type : Two Ball Bearing
- F. This product is RoHS compliant.

Label Drawing

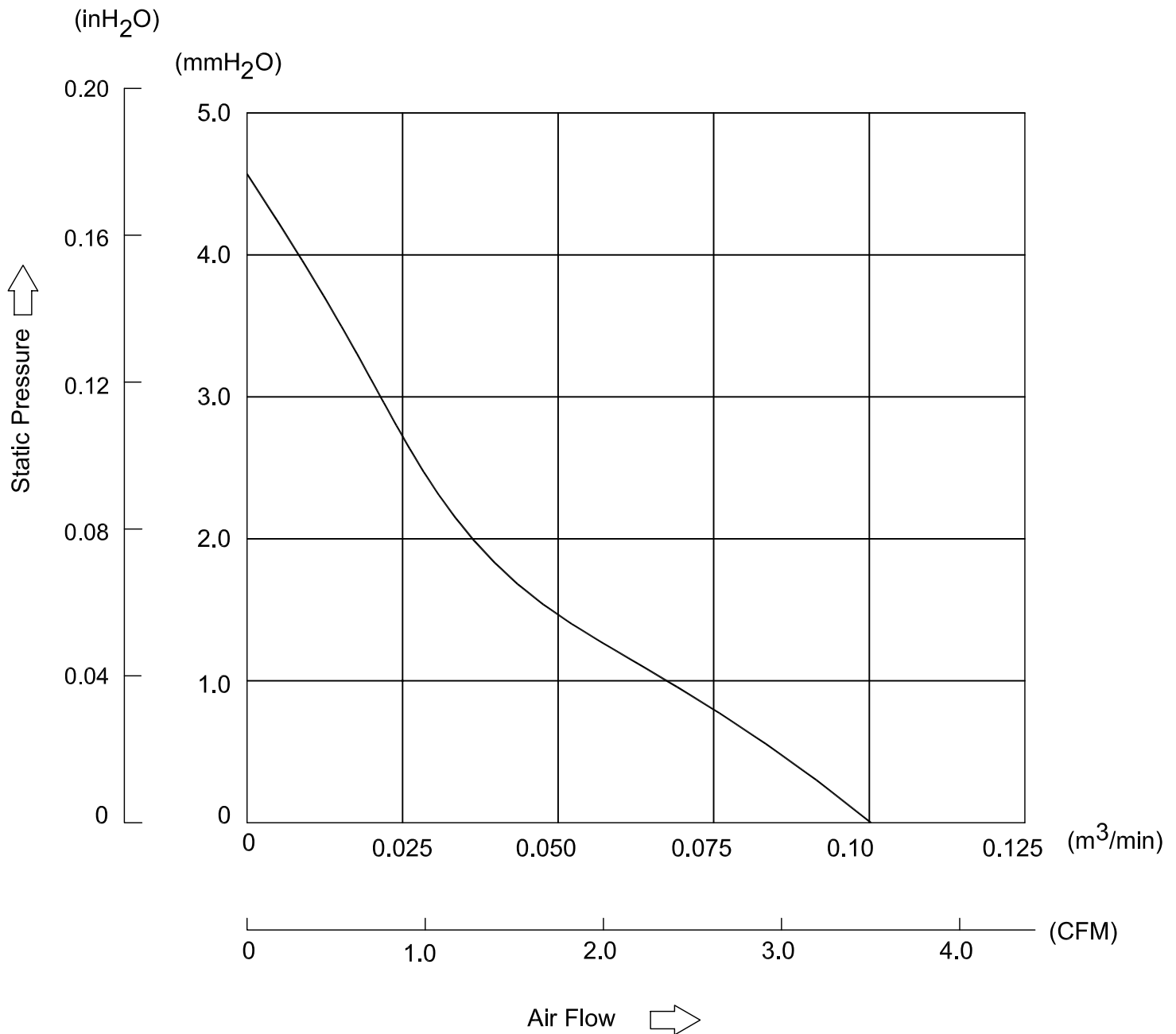


Pin Assignmant

No.	Signal	Color
1	(+)	Red
2	(-)	Black

4. Performance Curve

The following PQ curve are measured by equipment adapted double chamber base on ACMA210 standard under rated test condition

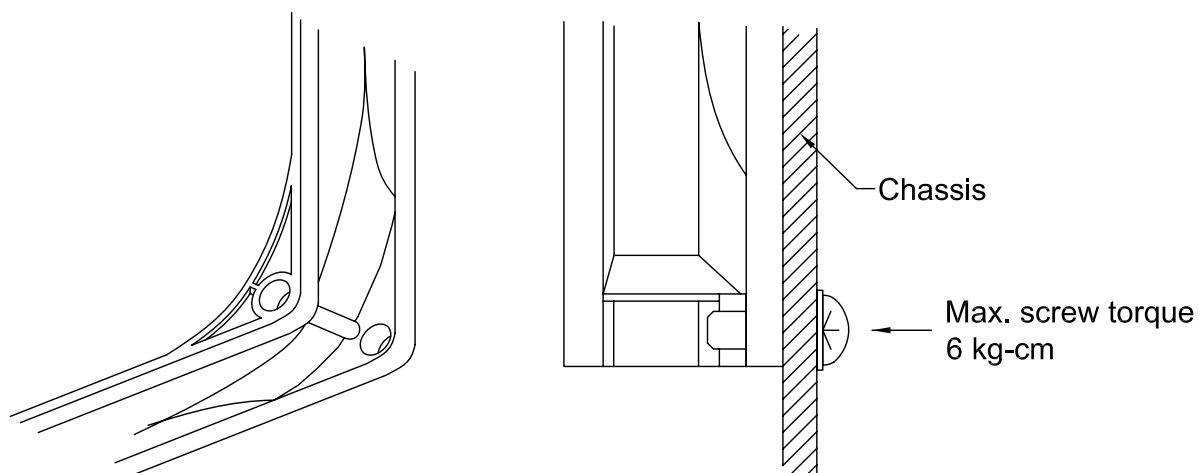


Appendix

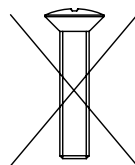
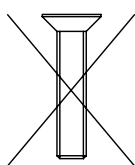
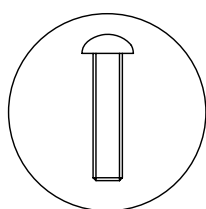
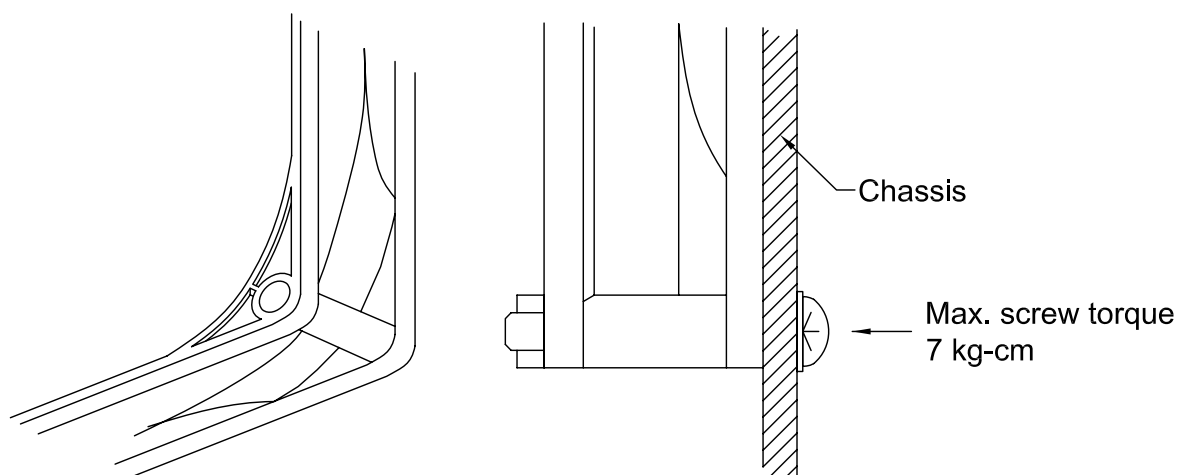
- A. Huntkey will not guarantee the performance of the products if the application condition falls outside the parameters set forth in the specification.
- B. A written request should be submitted to Huntkey prior to approval if deviation from this specification is required.
- C. Please exercise caution when handling fans. Damage may be caused when pressure is applied to the impeller, if the fans are handled by the lead wires, or if the fans are hard-dropped to the production floor.
- D. Except as pertains to some special designs, there is no guarantee that the products will be free from any such safety problems or failures as caused by the introduction of powder, droplets of water or encroachment of insect into the hub.
- E. The above-mentioned conditions are representative of some unique examples and viewed as the first point of reference prior to all other information.
- F. It is very important to establish the correct polarity before connecting the fan to the power source. Positive (+) and Negative (-). Damage may be caused to the fans if reverse connection with no polarity protection, as there is no foolproof method to protect against such error.
- G. Huntkey fans are not suitable where any corrosive fluids are introduced to their environment.
- H. Please ensure all fans are stored according to the storage temperature limits specified. Do not store fans in a high humidity environment. We highly recommend performance testing is conducted before shipping, if the fans have been stored over 6 months.
- I. Not all fans are provided with the Lock Rotor Protection feature. If you impair the rotation of the impeller for the fans that do not have this function, the performance of those fans will lead to failure.
- J. Please be cautious when mounting the fan. Incorrect mounting of fans may cause excess resonance, vibration and subsequent noise.
- K. It is important to consider safety when testing the fans. A suitable fan guard should be fitted to the fan to guard against any potential for personal injury.
- L. Except where specifically stated, all tests are carried out at relative (ambient) temperature and humidity conditions of 25°C, 65%. The test value is only for fan performance itself.
- M. Be certain to connect an "over 4.7μF" capacitor to the fan externally when the application calls for using multiple fans in parallel, to avoid any unstable power.

Suggested Screw Torque

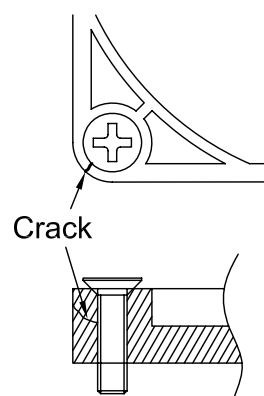
A. Flange Frame



B. Rib Frame



Please don't use taper screw above, it might cause crack on frame



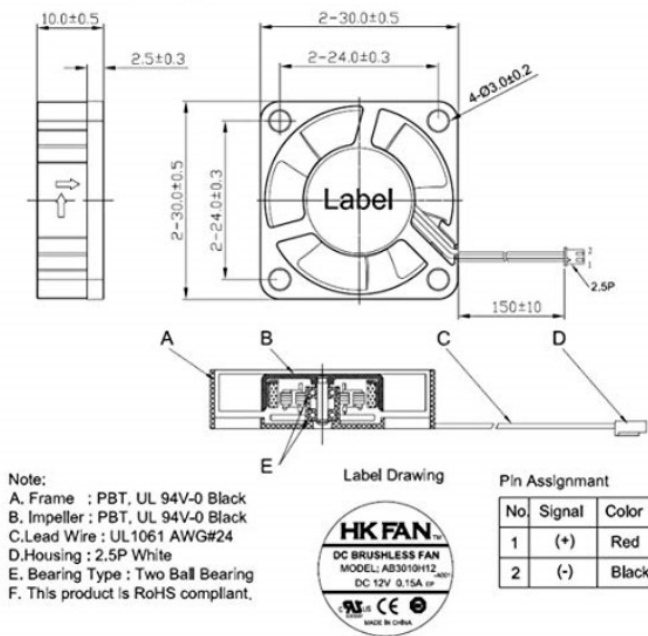
3cm 12 V 0.15 A 滚珠轴承无刷直流散热风扇 2pin AB3010H12, UL TuV

- 包装清单 2 x 直流无刷散热风扇
- 轴承类型滚珠轴承转速 9000 RPM 空气流量 3.53 CFM
- 连接器 2 端子连接器 2pin-ph2.5
- 直流无刷散热风扇额定电压 DC 12 V 电流 0.09 A
- UL TUV 认证认证。

• 30 mm X 30 mm X 10 mm



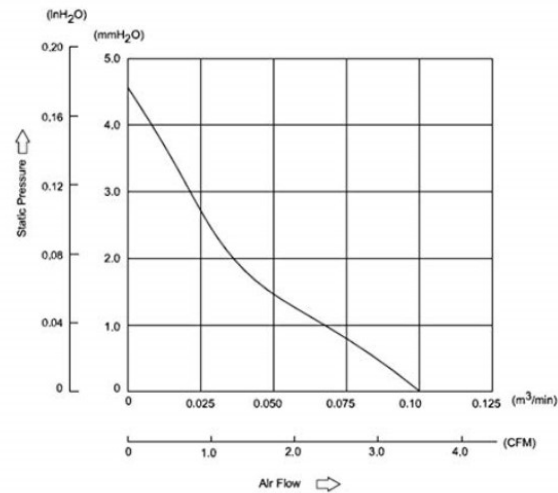
3. Mechanical Drawing



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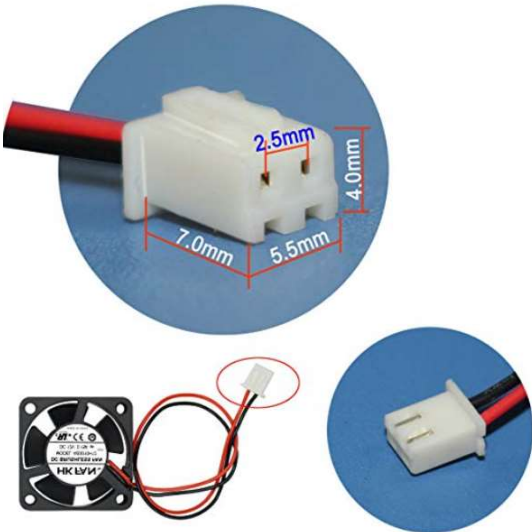
4. Performance Curve

The following PQ curve are measured by equipment adapted double chamber base on ACMA210 standard under rated test condition

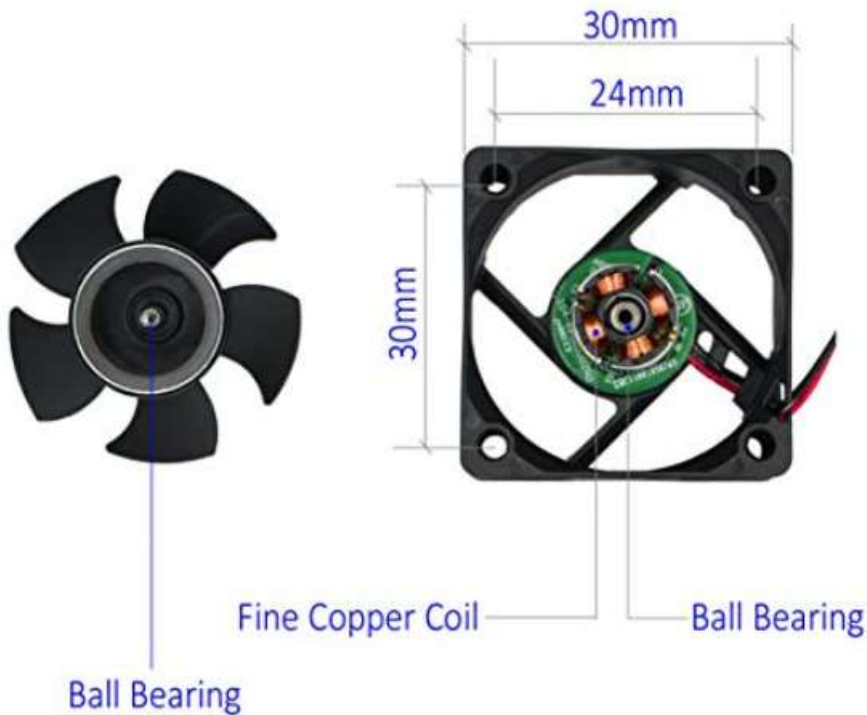


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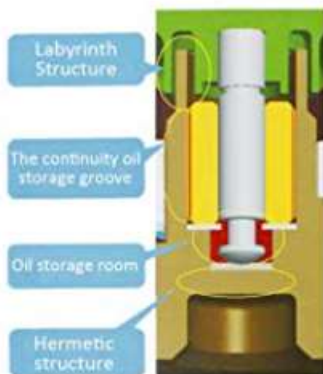
Inner Construction Diagram



HK FAN SFB System Advantage-Long Life

Fan bearing system life depends on lubricant to supply lubricate, when lubricant wears out, bearing will die. HK Fan provides a long life bearing system -SFB system

Sealed Fluid Bearing System



Because of surface tension and capacity phenomenon of liquid, traditional fan's lubricant easy to escape from the bearing system to outside.

HK FAN SFB system's advantage as below:

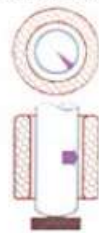
1. The oil storage room can supply more lubricant for bearing working.
2. The continuity oil storage groove can balance the air pressure between the oil storage room with the outside surroundings, so that the system can reduce the chance of lubricant's movement.
3. Hermetic and labyrinth structure can reduce the chance of lubricant escape from the bearing system

HK FAN SFB System Advantage- High Rotation Precision

Because of SFB system's special design, HK FAN can running more stable than traditioanal fan.



Traditional Sleeve Bearing System



HK SFB Bearing System

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