



Bearings

Ball Bearings are generally considered to be the highest quality bearing option for fans. Under normal operating conditions you can expect 90% of a given group of ball bearing fans to still be operating within specifications after 8 years of continuous use. In addition, ball bearings have the highest temperature ratings (-70C ~ +80C) available. It is a common belief that ball bearing fans are noisier than other bearing alternatives but in our testing we have not found this to be the case and make no noise distinction on our specification sheets between ball bearing vs. other bearing types. Please be aware that some manufacturers utilize a single ball bearing as opposed to the more common Dual Ball Bearing in order to cut costs. Not all are up front about this practice and the fans have a shorter life expectancy. Verify that what you are getting is a Dual Ball Bearing should you choose to purchase your fans elsewhere.

Sleeve bearing fans are a less expensive and less robust alternative to Ball Bearing fans. You can expect 90% of your sleeve bearing fans to be operating within specifications after 3 - 4 years of continuous use. Sleeve-type fans should only be mounted vertically (Air stream parallel to the ground). Mounting them in other orientations can cause the bearing lubricant to leak out and will cause premature failure.

Sealed Sleeve Bearing - Several manufacturers including ORION FANS have added this type to their list of bearing options. Essentially this is a standard Sleeve Bearing with an oil collection cup that catches the lubricant as it exits the bearing and recirculates it back into the fan thereby extending the fan life. It is slightly more expensive than a standard sleeve and slightly less expensive than a ball bearing and has a life expectancy somewhere between the two.