

skf bearing 6206/c4 what does the c/4 mean

The SKF numbering system is a standardized method of identifying individual bearings. The first two digits indicate the bore size (in millimetres), while the third digit indicates the number of balls or rollers, and the fourth digit indicates the radial clearance or internal clearance. For example, a bearing with a 6206 designation has a diameter of 62 mm and has 6 balls or rollers and 6 mm radial clearance.

In addition to this standard numbering system, there are also some special designations that are used to identify particular types of bearings:

C4 – A flanged deep groove ball bearing with a cylindrical outer ring and an inner ring with 4 cut-outs for additional lubrication. It can accommodate higher speeds than normal deep groove ball bearings due to its special geometry.

This is a deep groove ball bearing.

This SKF 6206-2RS bearing is a single row angular contact ball bearing. It has a flanged outer ring with two grease grooves, the inner ring is fixed in the housing and the outer ring can be rotated with an axial load acting on the shaft. The bearings are made of chrome steel, which has good hardness and wear resistance. It is quite suitable for high-speed rotation and dynamic applications.

The Blake and the SCR design is used in this bearing, which has been developed to meet the needs of demanding applications and environments. The lubricant is situated on the external sides of the raceway in order to maintain a high load capacity at high speeds.

The inner ring has seven radial internal ribs that give it strength and prevent deformation under load. The raceways are shaped so that they can support high loads without causing permanent deformation or premature wear-out of the rolling elements. The outer ring has an additional ribbed profile to improve rigidity and reduce vibration under load.

The suffix C4 means that the bearing has tolerance class 4.

The tolerance class defines how much a bearing can deviate from its nominal size. It is expressed in decimal values as a multiple of the bore diameter. For example, if a bearing has a bore diameter of 25 mm (1 inch), then the tolerance class is 4 times this value, or 100000 μm (0.0001 inch). A lower number indicates a more precise tolerance class; for example, tolerance class 10 = 0.00001 inch.

Tolerance class 4 is a higher level of precision than tolerance class 3, and it is also a more expensive grade.

The difference between tolerance classes 3 and 4 is that in class 3, the maximum permissible deviation of the inner diameter (ID) is 0.025 mm, while in class 4 it is 0.02 mm.

Tolerance class 4 for bearings is better than tolerance class 2.

The higher the number, the more accuracy of the bearing.

Tolerance class 2 is the lowest tolerance class and is only used when bearings are used in applications that are not critical. Tolerance class 2 bearings can only be used in applications where the misalignment of shaft and housing is not critical.

Tolerance class 4 is the highest tolerance class and it is

used when bearings are used in applications that are very critical. Tolerances are very tight, so they may need to use special tools and techniques during assembly to achieve the correct fit between shaft and housing.

This means that the bearing should have less axial clearance.

The axial clearance is the distance between the outer ring of the bearing and its inner ring, or the inner ring of a two-piece bearing. This is measured in thousandths of an inch or millimeters. The amount of axial clearance depends on how much friction you want in your system, as well as how much heat you are willing to tolerate in your bearings.

A bearing that has less axial clearance is called a tight bearing. A tight bearing will have a longer life, but it also means that it will be more expensive to manufacture. A tight bearing will have less play and vibration, but this comes at the cost of increased friction and wear. This increased friction minimizes the speed capability of the bearing.

In general, bearings with greater axial clearance are less expensive to manufacture and can operate at higher speeds, but they do not last as long as tight bearings.

The difference is about 50% lower clearance than class 2.

SKF bearings are available in two classes: Class 2 and Class 3. The difference between the two is about 50% lower clearance than class 2. SKF bearing 6206/C3 is a high performance radial bearing with a C3 clearance, which is a low-friction seal that significantly reduces the need for lubrication.

[SKF bearing 6206/C4](#) is an extremely quiet, non-contact radial

rolling element bearing that uses an integrated seal to reduce friction and noise levels. The bearing has an open inner ring without seals, allowing it to be used in applications where space is limited or in cases where it is easier to service if necessary.

The suffix on this bearing means it has less axial clearance than most of the same type of bearings.

This type of bearing is a radial ball bearing. It has a spherical outer race, allowing the inner ring to glide smoothly with little resistance. The outer race is tapered to increase its size at the bottom by about 0.020 inch (50 microns). This allows for better load carrying capacity than a straight sided bearing.

The suffix on this bearing means it has less axial clearance than most of the same type of bearings. This helps reduce play between the shaft and housing in applications where high shaft speeds are not required. It is an excellent choice when there is some side loading or vibration present in an application.

The suffix "C4" refers to the lubrication. In this case, C means the bearing has a grease fill, or other form of internal grease, and 4 indicates the amount of grease. Thus, a 6206 / C4 bearing is an FA-class bearing with 0.004in of high vacuum grease fill and sealed ball bearings.