

# What is the bearing number

Bearing number is a unique identifier for the bearing. It consists of a prefix and a suffix.

The prefix is made up of one to four letters and digits. The first letter represents the country where the bearing was manufactured. The second letter represents the manufacturer's code, and is always an "H". The third letter represents the type of bearing, e.g., tapered roller bearings (T), spherical roller bearings (RS) or cylindrical roller bearings (RZ). The fourth letter indicates the nominal diameter of the inner ring in millimeters (mm).

The suffix consists of two digits. The first digit indicates the size tolerance of radial clearance, while the second digit indicates clearance axial play or preload on thrust side in thousandths of millimeters per 10 mm outer ring width.

## Bearing number consists of basic number and supplementary code.

### Basic Number

The basic number is a unique identifier for all bearings produced by a specific manufacturer. It can be represented by a combination of numbers, letters and/or symbols. The basic number is used to identify the manufacturer and the type of bearing. The basic number of SKF bearings can be found on the identification plate (usually located on the inner ring).

### Supplementary Code

The supplementary code gives additional information about special features of the bearing design and performance criteria that may differ from those stated in standard documents for general use bearings. These codes are not required by international standards but may be requested by customers for particular applications.

## **The bearing number is used to identify the bearing size.**

For example, a 6203 bearing, which is an angular contact ball bearing with a 60mm outer diameter and 20mm inner diameter, has a 6203 designation.

Bearing number designations consist of two parts: the first digit represents the bore diameter in millimeters, and the second digit represents the outside diameter in millimeters. The bore is measured from one side of the inner ring to the other side of the outer ring; it does not include its width (see Figure 1). The outside diameter includes both rings and their widths (see Figure 2).

In addition to these basic categories, there are other types of bearings such as tapered roller bearings or spherical roller bearings that have special names rather than letter codes. These

types also have standard numbers assigned to them according to their specifications.

## **The first number describes the bearing series, and the rest of the numbers describe various aspects of that series.**

The bearing series is defined by its geometry, and it does not change with respect to its material or application.

The second number represents the radial internal clearance (or fit), which indicates how much clearance there is between the inner race and outer ring of the bearing. A zero in front of this number means there is no clearance between these two surfaces.

The third number represents the axial internal clearance, which refers to how much space exists between a ball or roller bearing's inner ring and outer ring. This space allows parts to slide over one another without binding up or causing friction during operation. The more space there is here, the less friction there will be during use — but it also means there's more room for dirt particles to get inside your bearings as well!

The fourth number indicates how much preload should be applied to each ball or roller bearing. This value can range anywhere from 0-9 pounds per square inch (psi). Preload is basically an amount of pressure that's applied before you start using your equipment so that all parts are aligned correctly during use.

## **Each bearing has its own number.**

The numbers on the bearing are important because they are used to order the correct bearings for your application.

The numbers on the outside of the bearing are called identification numbers, or simply IDs. The IDs can be read from one side of the bearing to another, from left to right when viewed from the outer diameter end of the bearing.

On most bearings, there are two sets of IDs: one for metric and one for SAE (inch). Some bearings only have one set of IDs; these are usually metric only. The first digit in each set is always a letter — “A” for inch or “M” for metric. The second digit indicates how many balls there are in the ball cage (or races if it's a roller bearing), while the third and fourth digits indicate different features of the bearing that don't change based on size or material (e.g., sealed).

## **Bearing numbers are used to identify a specific bearing type.**

Bearings are used in a wide variety of applications, from automobiles and motorcycles to industrial equipment, helicopters and airplanes. The bearings that are needed in these

applications can be found in several different types of materials. Most bearings are made from steel alloys, but ceramic and other materials are also used.

Bearing numbers are used to identify a specific bearing type. Each manufacturer has its own set of numbers for identifying the type and size of bearings it makes. These numbers can be difficult to decipher because each one is unique to the manufacturer. However, there are some similarities between manufacturers' numbering systems that allow them to be grouped together into general classes.

## **The relevant information can be known according to the bearing number.**

Bearing numbers are used on every bearing to identify them. They are printed on the outer ring of each bearing and are made up of two letters followed by four numbers. The first letter indicates the manufacturer, while the second letter indicates the kind of bearing (open, sealed). The first two numbers indicate the series, while the last two numbers indicate the size of the bearing in millimeters.

Each manufacturer has his own system of numbering, but all systems have a certain amount in common. For example, if you have a SKF bearing with no suffixes, it means that this is a tapered roller bearing with an inner ring diameter of 20mm and outer ring diameter of 30mm.

A bearing number is a notation assigned by the inventor of a mechanical component to that component which consists of a series of numbers, usually separated by dashes, which define various features of the component.