

# what does vsp stand for in a bearing part number skf?

VSP stands for “Vibration Stress Proof” and is a marking used by SKF.

The VSP marking is used on high-speed bearings that are designed to run at speeds up to 100,000 RPM.

[SKF Bearings](#) with this marking can be used in applications where vibration is present. The additional design features allow the bearings to handle higher levels of vibration without failing prematurely or causing damage to other components in the system.

## **VSP stands for bearing specification.**

The VSP code is used to identify a specific bearing part number.

The VSP code consists of the following three digits:

**1st digit:** The first digit in the VSP code identifies the manufacturer of the bearing (e.g., SKF, FAG, INA, etc.). It can be any number between 0 and 9; 0 indicates that no information is available about this manufacturer.

**2nd digit:** The second digit in the VSP code identifies the product group within a manufacturer’s range of products (e.g., Cylindrical roller bearings). It can be any number between 1 and 9; 1 indicates that no information is available about this product group within a manufacturer’s range of products.

**3rd digit:** The third digit in the VSP code identifies a particular type of bearing within a product group (e.g.,

Single row deep groove ball bearings). It can be any number between 1 and 9; 1 indicates that no information is available about this type of bearing within a manufacturer's range of products.

**The VSP suffix is a common designator for the standard SKF cylindrical roller bearing with an optimized internal design. This design provides an outstanding service life and low friction. The bearings typically contain an annular groove in the outer ring and three lubrication holes to facilitate relubrication.**

The VSP design features a wide inner ring shoulder and a small contact angle between the inner ring shoulder and outer ring face. These features provide superior load carrying capacity, good shaft support and reduced operating temperature. The high precision machining of both rings ensures excellent concentricity and alignment between the inner ring and outer ring. The VSP suffix is available in inch sizes 000 through 4-1/2", metric sizes 1 through 38 mm and inch/metric half sizes 000 through 1-3/4".

The VSP suffix was introduced in the 1970s by SKF as a new designation for its standard bearings. It replaced the earlier designation TK (tube type) and AT (open type), which were no longer considered sufficiently descriptive of their intended applications.

The VSP suffix indicates that the bearing has been optimized for use in applications that require high operating speeds and/or heavy radial loads. The new design is characterized by a number of features that help ensure good performance at high speeds.

## **VSP means very high speed and performance.**

VSP is an SKF trade name and stands for Very High Speed Performance. It is a specification used to describe bearings intended for use in applications where high speeds, light loads, or both are required. VSP bearings can also be used in applications where moderate loads are present at low speeds, but where high reliability is required. For example, bearings with VSP ratings may be used in pumps that run continuously at low speeds but must withstand heavy pressure surges during start-up and shutdown.

VSP bearings can also be used in other applications that require very little load at extremely high speeds.

The VSP in a SKF bearing part number is a guarantee that the ball bearings have been tested at speeds of up to 8,000 rpm. This means that you can use them for high-speed applications. VSP has become the standard abbreviation for Very High Speed Performance. This is a guarantee from SKF that the bearing has been tested at speeds of up to 8,000 rpm.

## **VSP stands for Very Special Part. This means that the bearing is made to a special specification. If a**

**customer makes a recurring order for the same bearing, it will have the same part number but not necessarily be made to the same specification.**

The first digit of the VSP indicates the material used to make the rolling element. For example, if it is an aluminum bearing, then "V5" would be stamped on its label. An "R" indicates that it is made of chrome steel. A "G" means that it is made of stainless steel. The second and third digits indicate other characteristics of the rolling elements such as their hardness and size.

**For example, if a customer was to place an order for more than 1 of the same bearing they would all be given consecutive serial numbers (1, 2, 3 etc.). But they would all still have the exact same part number with only 1 of them being made to the original specification. The others could be made with slightly different tolerances or even different materials.**

This is useful in many situations such as when you need to make sure that the bearings you are using will be able to withstand heavy loads without breaking. You could order a

batch of bearings that are designed for this purpose and then test them before using them in your machinery. If any of them fail under pressure then you can reject those specific units and ask for replacements until you get one that works correctly. This will allow you to get exactly what you need when it comes to your equipment's maintenance needs and save you time and money in the long term by reducing the likelihood of accidents occurring due to faulty parts being used on site.

## **When you see VSP in a part number it will be marked to show it is special.**

VSP stands for "Vinal Premium." This means that the part has been selected by the manufacturer as being of the highest quality, and meets or exceeds all of the requirements for a given application. There are no restrictions on using these parts in your application, however you may find that they are more expensive than other equivalent products.

A VSP part will have one of these markings:

VSP – The part meets or exceeds all of the requirements for a given application. It can be used with confidence knowing that it will perform its intended function under any conditions.

VSP is an acronym that stands for "Vendor Specific Part". That is to say, the bearing listed in this vsp part number is specific to a vendor. These numbers are often used when you need to select a specifically branded bearing instead of a standard option.