ntn bearing what does cy stand for

NTN bearings are a world leader in the design and manufacture of bearings for a wide variety of applications. NTN is committed to providing quality products that meet customers' needs.

NTN products include needle roller bearings, angular contact ball bearings, Cylindrical roller bearings, thrust ball bearings, self aligning ball bearings, spherical roller bearings, cylindrical roller thrust bearings, tapered roller thrust bearings, knife edge ball bearing and many other types of rolling bearings.

NTN also offers an extensive range of industrial products including air compressors, electric motors and generators, construction machinery parts and mining equipment parts.

The term cy is used by some manufacturers to stand for the English word "center," as in center-to-center. The number following cy indicates the number of inches from one side of the bearing to the other.

CY is an acronym for Cylindrical Roller Bearing.

CY is a type of cylindrical roller bearing, and is used as a bearing in high-speed rotating machinery. It has a cylindrical outer ring, with its inner ring and rollers arranged in a spherical shape.

CY is a high-precision cylindrical roller bearing with high load capacity, high speed and long life. The inner ring and the outer ring have been designed to have the same diameter; therefore, it can be used to replace other bearings such as

spherical roller bearings, tapered roller bearings and other cylindrical bearings.

Cylindrical Roller Bearings are a type of rolling element bearing. They consist of a shaft-mounted outer ring with multiple rows of cylindrical rollers or bearings in the housing cage, separated by a number of spacers. The rollers are guided by cage and spacer surfaces. Cylindrical roller bearings have high radial load carrying capacity, but low axial load carrying capacity. They are applied in many areas such as automobile engines, gearboxes, milling machines, etc.

CY = Cylindrical roller bearing with doubled outer raceway shoulders, for high radial loads.

CY bearings are designed for high radial loads. These bearings feature an inner ring with a flange and two outer rings, all of which are made of steel and have a cylindrical bore. The outer rings have a shoulder on the outside diameter to support the shaft. The shoulder is extended onto the inner ring to provide additional support for the shaft in this area. This design is often used in applications where large axial forces are applied to the bearing.

CY bearings can be used in pairs or as single units, depending on the application requirements. They can also be combined with other types of bearing if required (e.g., C3).

CY bearing are used primarily for thrust roller bearings and also used for cylindrical roller

bearings.

The CY bearing has a cylindrical outer ring, which contains a number of rolling elements or balls, one or more raceways on the outer ring and a cage (inner ring). The outer ring raceway is designed with a greater number of grooves than the inner ring raceway to accommodate more rolling elements.

The CY bearing has two main types: single row and double row. Single row CY bearings have only one row of rolling elements while double row CY bearings have two rows of rolling elements.

CY bearings are used in applications where high radial loads exist but low thrust loads.

The CY series of roller bearings is designed for heavy-duty applications. The inner ring has a ribbed or grooved surface to provide positive locking with the outer ring during dynamic loading conditions.

CY bearings may be ordered in various configurations, including single row, double row and four-point contact. These cylindrical roller bearings have an inner ring that is split into two halves that are pressed together during assembly.

The grease lubrication system allows the bearing to operate at higher speeds and temperatures than other types of rolling element bearings. These bearings are suited for applications where high radial loads exist but low thrust loads do not.

“C” stands for contact angle.

Contact angle is an important parameter in the selection of bearings.

Contact angles of more than 30° are considered to be good, whereas those less than 10° are poor. The smaller the contact angle, the greater will be the lubricating effect and therefore longer life expectancy.

The contact angle is determined by the surface structure of the bearing material and its surface roughness, which affects the hydrodynamic properties of the bearing oil film.

The degree of roughness (Ra) is expressed in micrometres (µm).The smaller this value is, the better will be the lubricating effect.

“Y” stands for the angle at which the outer ring contacts the inner ring.

This angle is usually 90 degrees, but it can be different depending on the application.

The angle at which the outer ring contacts the inner ring determines how much contact area there is between both rings. The larger this contact area is, the better lubrication and heat transfer will be between both rings.

CY bearings have a higher load capacity than single direction thrust ball bearings and also have a lower friction coefficient than double direction thrust ball bearings.

That “C” and “Y”‘s mean contact angles, with the numbers after them representing degrees.

The CY bearing is a miniature deep groove ball bearing that has an oil lubricated design. The “C” in CY stands for contact angle, and this means that the bearings have an oil film on

both sides of the raceway. The “Y” in CY stands for a cylindrical bore shape. These bearings are normally mounted on shafts with 120º C or less and can carry radial loads of up to 1,000 lbs.

The contact angle of each side is different according to the models of CY bearings. Generally speaking, it is 45 degrees or 90 degrees. For example: 45 degree contact angle CY11(11)_C5-10 means one side has 45 degree contact angle; 90 degree contact angle CY13(13)_C4-16 means both sides have 90 degree contact angle.

The CY is used as a standard prefix to denote a cylindrical roller bearing, while when a suffix letter is marked with an accent, it indicates the number of groove pairs in the bearing.