Deep groove ball bearing

Product overview

The basic type of deep groove ball bearing consists of an outer ring, an inner ring, a set of steel balls and a set of cages. There are two types of deep groove ball bearing, single row and double row, deep groove ball structure is also divided into sealed and open two structures, open refers to the bearing does not have a sealed structure, sealed deep groove ball is divided into dust seal and oil seal. The dust seal cover material is steel plate stamping, which only plays a simple role in preventing dust from entering the bearing raceway. The oil-proof type is a contact oil seal, which can effectively prevent the leakage of grease in the bearing.

Application field

Gearbox

Instrument And Meter

High Speed Motor

Household Appliance

Internal Combustion Engine

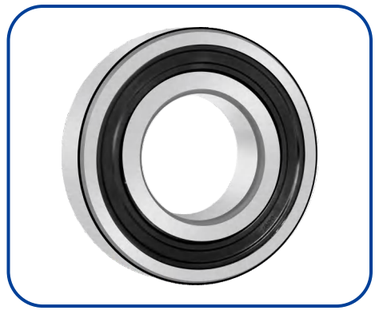
Traffic Vehicle

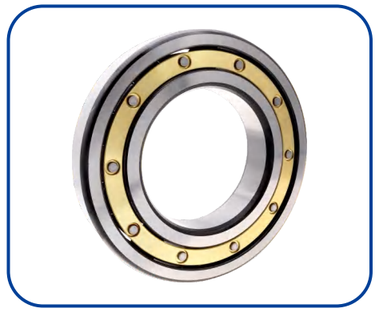
Agricultural Machinery

Construction Machinery

Construction Machinery

Roller Skates





Spherical roller bearings

Product overview

The self-aligning roller bearing has a double row of rollers, the outer ring has a common spherical raceway, the inner ring has two raceways, and is inclined to an Angle relative to the bearing axis. This clever structure makes it have automatic aligning performance, so it is not easy to be affected by the Angle of shaft and bearing box seat on the error or shaft bending, and is suitable for installation error or shaft deflection caused by Angle error occasions. In addition to the radial load, the bearing can also bear the axial load of bidirectional action.

Application field

Paper making machinery

Reduction gear

Railroad car axles

Rolling mill gear box

Rolling mill roll

crusher

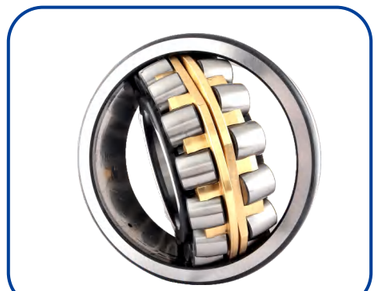
Vibrating screen

Printing machinery

Woodworking machinery

Reduction gear

Vertical aligning bearing with seat



Tapered roller bearings

Product overview

Tapered roller bearings bear the combined radial and axial loads mainly by radial loads. The larger the contact Angle of tapered roller bearings is, the larger the axial loads they can bear. Tapered roller bearing is a separate type of bearing, its inner component and outer ring can be installed separately, and the radial and axial clearance of the bearing can be adjusted during installation and use. Tapered roller bearings generally use steel plate stamped cages, and steel plate welded cages or steel pillar solid cages are used when the size is larger.

Application field

Medium and large motor

Rolling stock

Machine tool spindle

Internal combustion engine

dynamo

Gas turbine

Reduction box

Rolling mill

Vibrating screen

Lifting and transporting machinery

Cylindrical roller bearings

Product overview

The internal structure of cylindrical roller bearings adopts rollers arranged in parallel, and there is a spacer or isolation block between the rollers, which can prevent the tilt of the rollers or the friction between the rollers, effectively preventing the increase of rotating torque. The roller and raceway of cylindrical roller bearings are linear contact bearings, which have large load capacity and mainly bear radial load. The friction between the rolling element and the rim of the ring is small, which is suitable for high-speed rotation.

Application field

Paper making machinery

Reduction gear

Railroad car axles

Rolling mill gear box

Rolling mill roll

crusher

Vibrating screen

Printing machinery

Woodworking machinery

Reduction gear

Vertical aligning bearing with seat

Full roller bearing Double row cylindrical roller bearings

Product overview

Full loaded cylindrical roller bearings are designed to withstand heavy loads. Compared with the traditional belt cage bearing, it has a very high load capacity, small radial cross-section, saving space, but the speed is low. When the bearing is in continuous operation, it must bear a certain minimum load to avoid wear caused by insufficient lubrication and high-speed operation.

Application field

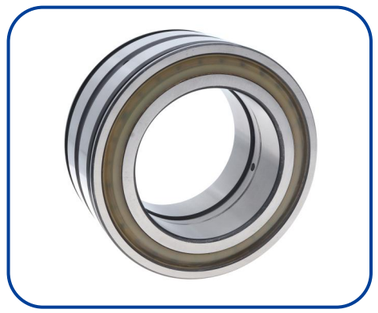
Metallurgical equipment
Mining equipment
dynamo
Petroleum machinery
Iron and steel machinery

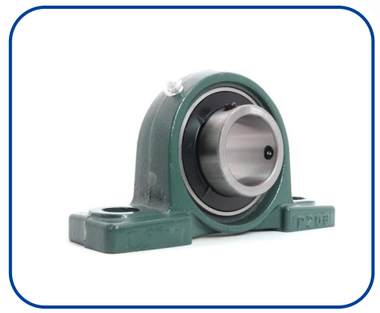
Product overview

Double-row cylindrical roller bearings have the structural characteristics of two inner rings, two outer rings and two rows of rollers, which can withstand radial and axial loads, and have high rigidity and load capacity.

Application field

Machine tool
Mill stand
Plastic roller
Grinding machine
Large gear box





Pillow block ball bearing

Product overview

The outer spherical ball bearing is actually a variant of the deep groove ball bearing, which is characterized by the spherical surface of the outer diameter of the outer ring, and can be matched into the corresponding concave sphere of the bearing seat to play the role of aligning. The outer spherical bearing is mainly used to bear the radial and axial combined load based on the radial load, and it is generally not suitable to bear the axial load alone. Outer spherical bearing with seat is a bearing unit which combines outer spherical bearing with bearing seat. Most of the outer spherical bearings are made of spherical outer diameter, and are installed together with the bearing seat with a spherical inner hole, and the structure is diverse, and the versatility and interchangeability are good.

Application field

Industrial machinery
Mining machinery
Metallurgical field
Agricultural machinery
Textile machinery
Food processing machinery
Printing machinery

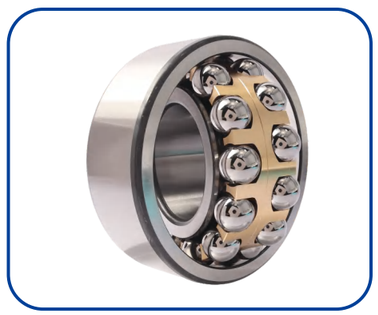
Aligning ball bearings

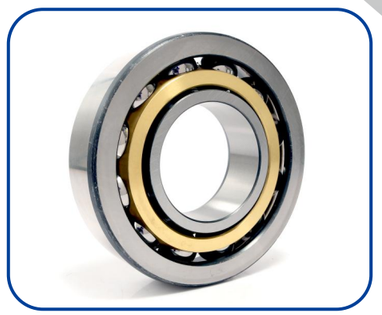
Product overview

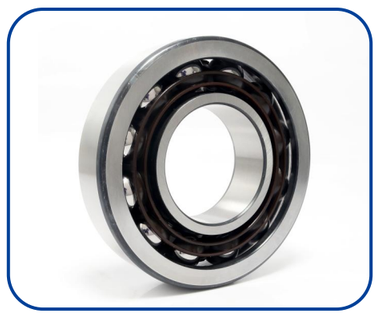
Self-aligning ball bearing is a double row bearing with a spherical outer ring raceway.The inner ring, ball and cage can rotate freely around the bearing center, which has the centrality.The aligning ability can compensate the alignment error, shaft deformation and bearing block deformation.Self-aligning ball bearings are suitable for transmission bearings where the shaft and upper shell are difficult to center and the shaft is easy to flex.

Application field

Rolling mill
Continuous casting machine
Heat treatment equipment
crusher
Sieving machine
conveyor
Wind turbine







Angular contact ball bearing

Product overview

The characteristic of angular contact bearing is that it can bear both radial load and single axial load. The larger the contact Angle, the larger the axial load, and the smaller the contact Angle, the smaller the axial load. Conversely, the smaller the contact Angle, the greater the ability to bear radial loads, and the more suitable for high-speed applications. According to different working conditions, it can be combined in a variety of ways to obtain different radial and axial load capacity, and meet the requirements of high speed and diameter, and high axial stiffness.
Angular contact ball bearing accuracy class includes dimensional tolerance and rotation accuracy. From low to high accuracy IS expressed as PO(ordinary), P6(P6X), P5, P4, P2, in addition, P3, P7, P9 are also used in European and American brands to indicate accuracy levels, P3 is equivalent to P6 of ISO and IS standards, P7 is equivalent to P4 and P9 is equivalent to P2

Application field

Machine tool spindle
High-frequency motor
Gas turbine
Centrifugal separator
Differential pinion shaft
Booster pump
Drilling platform

Angular contact ball bearing

Product overview

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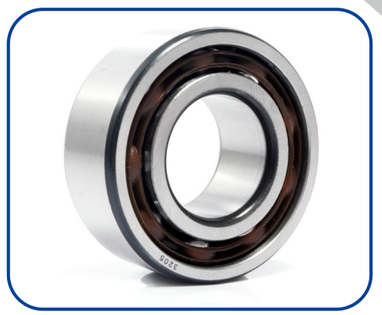
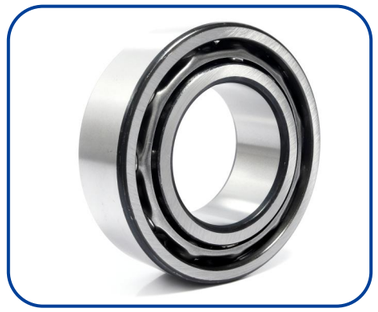
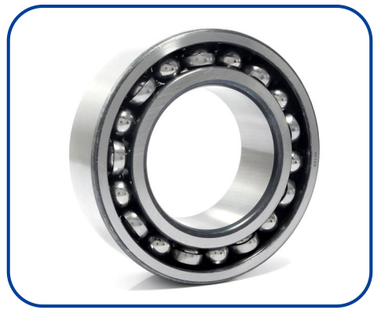
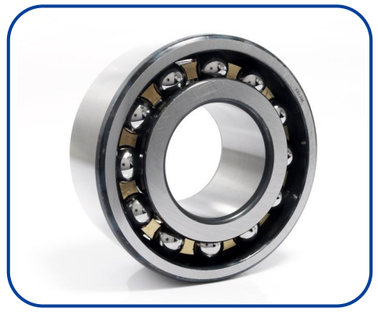
Application field

Machine tool spindle
High-frequency motor
Gas turbine
Centrifugal separator
Differential pinion shaft
Booster pump
Drilling platform









Double row angular contact ball bearing

Product overview

Double row angular contact ball bearings can bear large radial loads, mainly radial and axial combined loads and torque loads, limiting the axial displacement of both sides of the shaft. The inclinability between the inner and outer rings of the double-row angular contact ball bearing is limited in the parts mainly used to limit the two-way axial displacement of the shaft and the housing. The allowable inclination Angle depends on the internal clearance of the bearing, the bearing size, the internal design and the force and moment acting on the bearing, and the maximum allowable inclination Angle should ensure that no excessive additional stress is generated in the bearing. If the inclination Angle between the inner and outer rings of the bearing exists, the life of the bearing will be affected, and the running accuracy of the bearing will be reduced, and the running noise will be increased. Double row angular contact ball bearings generally use nylon cages or brass solid cages.

Application field

Machine building
Automobile
aerospace
electricity
Petrochemical industry
Metallurgical machinery
Paper printing

Thrust ball bearing

Product overview

The thrust ball bearing is a separate type bearing consisting of a shaft ring, a seat ring, a ball and a cage assembly. This kind of bearing can only bear axial load, not radial load.

Two-way thrust ball bearings are also separate bearings, consisting of two grooved shaft rings, two seat rings and two balls and cage assemblies. This bearing can withstand axial loads in both directions, but not radial loads.

Application field

Crane hook
Instant water pump
Immediate centrifuge
Low speed reducer
clutch
Gear shifter
retarder

Thrust roller bearings

Product overview

Thrust roller bearing is a kind of rolling bearing used to bear axial load, which has high bearing capacity and rigidity. Thrust roller bearings can be divided into different types, including thrust cylindrical roller bearings, thrust aligning roller bearings and thrust tapered roller bearings.
Thrust cylindrical roller bearing. This bearing can withstand heavy loads and vibration loads and is often used in combination to form high-stiffness bearing configurations. They usually consist of thrust cylindrical roller and cage assembly, shaft ring and seat ring.
Thrust aligning roller bearing. This bearing has aligning performance, can reduce the impact of installation error, mainly used in the need to bear axial load occasions.
Tapered roller thrust bearing. This bearing can withstand very large axial loads and impact loads and is suitable for applications requiring unidirectional or bidirectional axial loads.

Application field

Automobile steering mechanism
Machine tool spindle
Oil drilling rig
Rolling mill
Wind power generation equipment
Rolling bearing support
Aircraft turbine engine
Ship propulsion system

Automotive hub bearing

Product overview

Automobile hub bearing is the main part of automobile grease lubrication, which plays the role of balance and stability and adjustment of clearance in the engine, so that the car runs more smoothly. Automobile hub bearing is also one of the important parts of the automobile, the main role is to load and provide accurate guidance for the rotation of the hub, both bear axial load and bear radial load. Automobile hub bearing is usually composed of inner ring, outer ring, rolling body, cage, sealing ring and other parts, is a compound bearing. Traditional automobile wheel bearings are composed of two sets of tapered roller bearings or ball bearings. With the development of technology, hub bearing units have been developed on the basis of standard angular contact ball bearings and tapered roller bearings. It has the advantages of good assembly performance, omission of clearance adjustment, light weight, compact structure, large load capacity, pre-loading of grease for sealing bearings, omission of external hub seal and exemption from maintenance, etc., and has been widely used in cars, and there is a trend of gradual expansion of application in trucks.
An automotive hub unit is an integral hub device that integrates bearings, seals, sensors and other related components
. It is usually composed of outer bearings, inner bearings, wheel hubs, sealing rings and other components, and is installed on the wheels of the vehicle to support and rotate the wheels.

Rod end joint bearing

Product overview

Joint bearing is a special structure of the plain bearing, the structure is simpler than the rolling bearing, is mainly composed of an outer sphere of the inner ring and an inner sphere of the outer ring, can withstand a larger load. According to its different types and structures, it can withstand radial load, axial load or radial and axial combined load. Generally used for low speed swing movement (that is, angular movement), because the sliding surface is spherical, it can also be tilted in a certain Angle range (that is, aligning movement), when the supporting shaft and the shaft shell hole are not concentric, it can still work normally.
Rod end joint bearing. Rod end joint bearing is a kind of joint bearing, which is combined with rod end or hole and bearing unit to become rod end joint bearing.

Application field

Engineering hydraulic cylinder
Forging machine
Construction machinery
Automation equipment
Shock absorbers for cars
Hydraulic machinery

Linear guide slide block

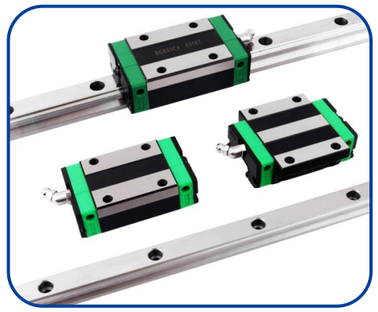
Product overview

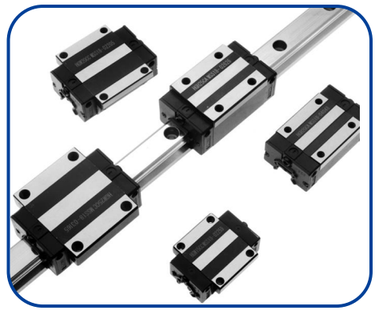
Linear guide slide is a kind of high-precision, high-stability moving parts widely used in various mechanical transmission systems, also known as linear guide, linear guide or linear slide.

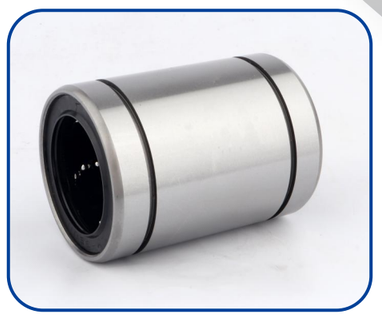
The linear guide block is mainly composed of a slide block and a guide rail, of which the slide block is an indispensable part of the linear guide rail, and its role is to achieve rapid, high-precision and stable linear motion of the linear guide rail. The fixed element mainly provides the direction for the movement of the linear guide rail, and its cross section structure is quite complex, and the groove shape and number need to be determined according to the specific mechanical equipment processing requirements.

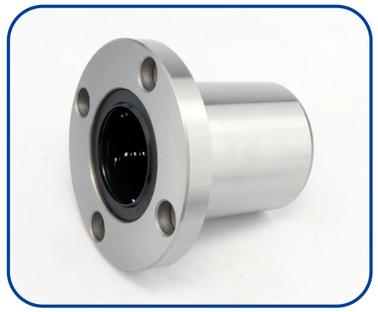
Application field

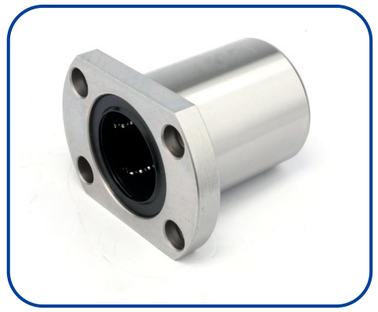
Machine building
Automated production line
aerospace
Precision instrument
Electronic equipment
Medical device
Logistics equipment

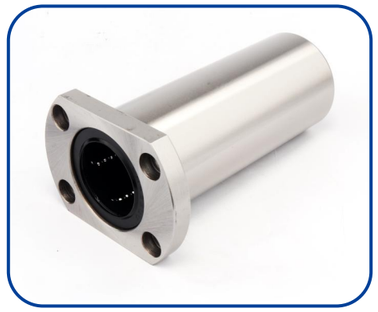












Linear bearing

Product overview

Linear bearing is a linear motion system for use with an infinite stroke and a cylindrical shaft. Its working principle is to achieve a more efficient movement with low friction resistance through the rolling of the steel ball. Because the bearing ball is in contact with the bearing jacket, the steel ball rolls with the least friction resistance, so the linear bearing has the characteristics of small friction, relatively stable, does not change with the bearing speed, and can obtain a smooth linear movement with high sensitivity and high precision.

Linear bearings can be roughly divided into straight-through bearings, flanged linear bearings and bearing bearings according to the shape type. Among them, the flange type linear bearing integrates the linear bearing with the support, which has a compact structure and is easy to accurately and simply assemble to the mechanism when using.

Application field

Precision machine tool
Textile machinery
Food packaging machinery
Printing machinery
Measuring instrument
Automatic recorder
Three-dimensional measuring device

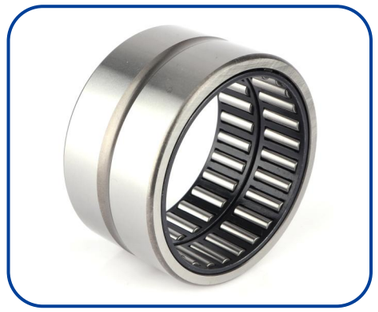
Needle roller bearing

Product overview

Needle roller bearings are roller bearings with cylindrical rollers, relative to their diameter, the roller is both thin and long, so it is also called needle rolling. Needle roller bearing has high load bearing capacity and compact radial structure, which is suitable for supporting structures with limited radial mounting size. According to the different occasions, bearings without inner rings or needle roller and cage assemblies can be selected, and the journal surface and shell hole surface matched with the bearing are directly used as the inner and outer rolling surfaces of the bearing. Needle roller bearings can bear radial loads only.

Application field

Construction machinery
Machine tool
motorcycle
Printing machinery
Feed machinery
Agricultural machinery
Numerical control equipment
Transmission line



Ceramic bearing
Stainless steel bearing

Product overview

Ceramic bearings are bearings made of ceramic materials, usually using alumina (Al_2O_3), silicon nitride (Si_3N_4) and other high performance ceramic materials. Ceramic bearings have many advantages, such as high hardness, high wear resistance, low friction coefficient, good chemical stability, high temperature stability and so on. Therefore, ceramic bearings are especially suitable for high speed, high precision, high temperature, corrosion resistance and other harsh environment of mechanical equipment, such as aviation, aerospace, navigation, petroleum, chemical and other fields.
Stainless steel bearings are made of stainless steel materials, with corrosion resistance, high temperature resistance and other characteristics. Stainless steel bearings are suitable for mechanical equipment working in harsh environments such as humidity and corrosion, such as chemical machinery, shipbuilding, medical equipment and other fields. In addition, stainless steel bearings also have high mechanical strength and load capacity, so they are also suitable for food processing, pharmaceutical machinery and other fields. Stainless steel bearings relative to ceramic bearings, the cost is lower, the manufacturing process is more mature, so in some precision and speed requirements are not high occasions, stainless steel bearings are also a good choice.