

可供型号范围

Available Model Range

1、单列调心滚子轴承

20204 TVP - 20252 MB

20304 TVP - 20330 MB

1. Single row spherical roller bearing

20204 TVP to 20252 MB

20304 TVP to 20330 MB

2、双列调心滚子轴承

21304 E1 TVP - 21322 E1 TVP

22205 E1 - 22264 MB

22308 E1 - 22356 MB

23022 E1 TVP - 230/1250 MB

23120 E1 TVP - 231/1000 MB

23220 E1 M - 232/800 MB

23320 MA - 23338 MB

23936 MB - 239/1180 MB

24024 E1 - 240/1120 MB

24122 E1 - 241/1000 MB

2. Double row spherical roller bearing

21304 E1 TVP to 21322 E1 TVP

22205 E1 to 22264 MB

22308 E1 to 22356 MB

23022 E1 TVP to 230/1250 MB

23120 E1 TVP to 231/1000 MB

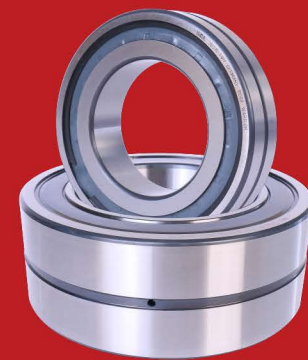
23220 E1 M to 232/800 MB

23320 MA to 23338 MB

23936 MB to 239/1180 MB

24024 E1 to 240/1120 MB

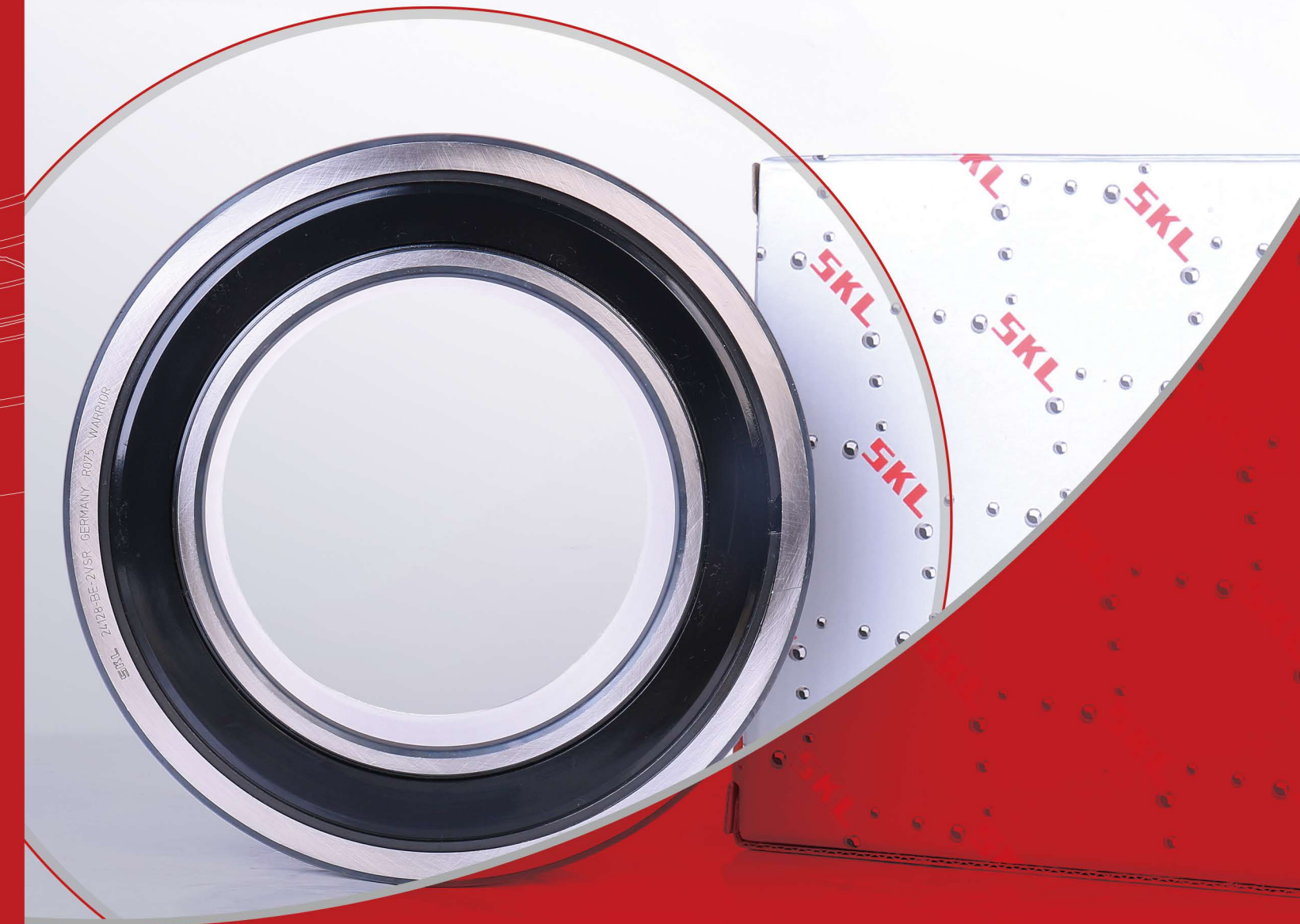
24122 E1 to 241/1000 MB



免维护长寿命调心滚子轴承

MAINTENANCE-FREE

LONG LIFE SPHERICAL ROLLER BEARING



冶金



矿山机械



流体机械



材料装卸



工业齿轮箱



铁路



能源



应用领域

Application Field

冶金、矿山机械、流体机械、材料装卸、工业齿轮箱、铁路和能源等应用领域，特别适用于有振动、环境恶劣的操作工况。

Applications such as metallurgy, mining machinery, fluid machinery, material handling, industrial gearboxes, railways and energy are particularly suitable for operating conditions with vibration and harsh environments.

原理

Principle

在轴承的两侧安装有钢骨架的防尘盖或者带钢骨架的接触式丁腈橡胶密封圈，经过大量的实验室和现场试验，其密封性能的可靠性和有效性得到充分验证，真正做到免维护；配合内部加强型设计、外圈引导方式，特别适用于振动场合。

A steel frame dust cover or a steel framed contact nitrile rubber seal ring is installed on both sides of the bearing. After extensive laboratory and field tests, the reliability and effectiveness of the sealing performance are fully verified; Reinforced design and outer ring guiding mode, especially suitable for vibration occasions.

特性

Characteristic

免维护长寿命调心滚子轴承是单列或双列不可分离轴承，包括有球面滚道的实体外圈、实体内圈、带保持架的鼓形滚子、密封装置。内圈有圆柱孔或圆锥孔，对称的鼓形滚子在外圈球面滚道里可以自由调位。因此，可以补偿轴的弯曲以及配合面的不对中。

大部分尺寸的调心滚子轴承采用加强型内部设计。这些轴承具有更好运动学性能和优化的滚道表面，并由高性能材料制成，在相同工作条件下，轴承的基本额定动载荷和基本额定寿命显著提高。配合性能可靠的密封装置，具有防水、防潮、防污染、润滑优良、永远可靠、终身免维护、高可靠性、高承载力等优点，特别适用于恶劣的操作环境、强振动和高冲击场合。

Maintenance-free long life Spherical roller bearing are single or double row non-detachable bearings, including a solid outer ring with a spherical raceway, a solid inner ring, a drum roller with a cage, and a sealing device. The inner ring has a cylindrical hole or a tapered hole, and the symmetrical drum-shaped roller can be freely adjusted in the outer spherical rolling path. Therefore, it is possible to compensate for the bending of the shaft and the misalignment of the mating faces.

Most sizes of spherical roller bearings feature a reinforced interior design. These bearings have better kinematics and optimized raceway surfaces and are made of high performance materials that provide a significant increase in the basic dynamic load rating and basic rating life of the bearings under the same operating conditions. With reliable sealing device, it has the advantages of waterproof, moisture-proof, anti-pollution, excellent lubrication, permanent reliability, lifetime maintenance-free, high reliability and high bearing capacity. It is especially suitable for harsh operating environments, strong vibration and high impact applications.

设计及变型

Design and Variant

2Z-轴承两侧带钢骨架防尘盖

RSR-轴承一侧带钢骨架的接触式、丁腈橡胶材质密封圈

2RSR-轴承两侧带钢骨架的接触式、丁腈橡胶材质密封圈

E1-加强型设计

K-圆锥孔，1: 12

K30-圆锥孔，1: 30

T41A-适合振动载荷，直径公差带变窄，内部径向游隙 C4

T41D-适合振动载荷，直径公差带变窄，内部径向游隙 C4，内孔具有薄铬层

2Z-bearing steel frame dust cover on both sides

Contact type, nitrile rubber seal ring with steel frame on one side of RSR-bearing

2RSR-contacted, nitrile rubber seal ring with steel frame on both sides of bearing

E1-reinforced design

K-conical hole, 1:12

K30-conical hole, 1:30

T41A - suitable for vibration loads, narrowed tolerance zone, internal radial clearance C4

T41D - suitable for vibration loads, narrowing of the tolerance zone, internal radial clearance C4, inner ferrule with thin chrome

尺寸标准

Size Standard

基本尺寸符合DIN 616

Basic dimensions to DIN 616

公差等级

Tolerance Level

公差等级符合DIN 620，默认普通级，可根据客户要求提供符合P6、P5公差等级的调心滚子轴承

Tolerance class according to DIN 620, default common level, can be provided according to customer requirements to meet the P6, P5 tolerance class of spherical roller bearings

径向游隙

Radial Clearance

符合DIN 620-4，默认CN组，可根据客户要求提供其它游隙组别

DIN 620-4, default CN group, other clearance groups available upon request

保持架

Cage

玻璃纤维增强PA66保持架，滚动体引导（型号后缀TVP）

机削黄铜保持架，滚动体引导（型号后缀M）

机削黄铜保持架，外圈引导（型号后缀MA）

机削黄铜保持架，内圈引导（型号后缀MB）

如需要不同样式的保持架，请订货时说明。

Glass fiber reinforced PA66 cage, rolling element guide (model suffix TVP)

Machined brass cage, rolling element guide (model suffix M)

Machined brass cage, outer ring guide (model suffix MA)

Machined brass cage, inner ring guide (model suffix MB)

If you need a different style of cage, please specify when ordering.

温度限制

Temperature Limit

允许温度可受以下因素限制：

- 1、轴承套圈和滚动体的尺寸稳定性至少可达150℃
- 2、钢质或黄铜保持架的工作温度与轴承套圈和滚动体的工作温度相同；PA66保持架、丁腈橡胶密封圈最高工作温度为120℃。
- 3、润滑剂

Allowable temperatures are limited by the following factors:

1. the bearing ring and rolling element dimensional stability of at least 150 ° C
2. The working temperature of the steel or brass cage is the same as that of the bearing ring and the rolling element; the maximum operating temperature of the PA66 cage and the nitrile rubber seal is 120 ° C.
3. lubricant