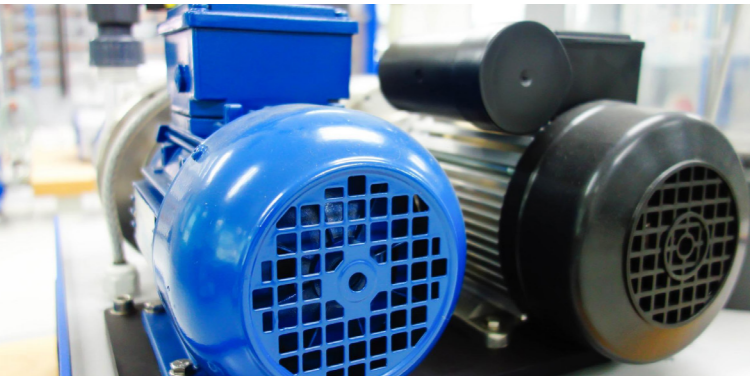


KINEX BEARINGS

Bearings for Electric Motors

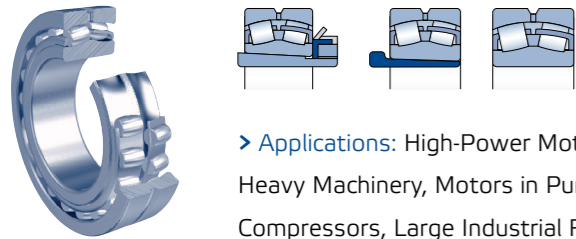
BEARINGS FOR ELECTRIC MOTORS

Precision and Reliability for Smooth Motor Operation



Electric motors are vital to numerous industries, powering equipment from HVAC systems to heavy machinery. Bearings in electric motors need to provide smooth rotation, minimize friction, and support varying load capacities. Different types of bearings are chosen based on the motor's speed, load requirements, and operating conditions. Here's an overview of the most commonly used bearings in electric motors and their specific applications.

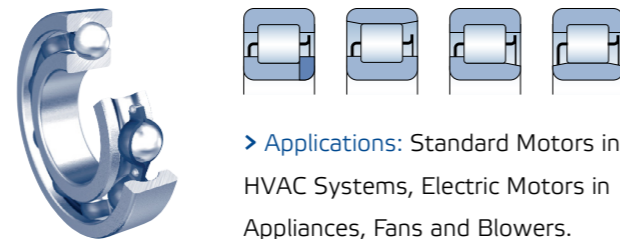
Double - Row Spherical Roller Bearings



> **Applications:** High-Power Motors in Heavy Machinery, Motors in Pumps and Compressors, Large Industrial Fans.

Spherical roller bearings are ideal for high-power electric motors used in heavy-duty applications, where misalignments can occur due to shaft deflection or heavy loads. In pumps, compressors, and industrial fans, these bearings handle both radial and axial loads, delivering high durability and stability. Spherical roller bearings provide reliable performance even in motors with high torque and vibration, making them ideal for rugged industrial environments.

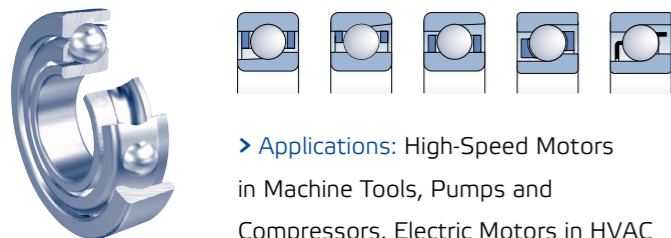
Single Row Deep Groove Ball Bearings



> **Applications:** Standard Motors in HVAC Systems, Electric Motors in Appliances, Fans and Blowers.

Deep groove ball bearings are widely used in small to medium-sized electric motors, including those in HVAC systems, household appliances, fans, and blowers. Their design allows them to handle both radial and light axial loads, providing low friction and high-speed performance. These bearings offer a balance of efficiency, durability, and low noise, making them ideal for quieter applications where reliability is key.

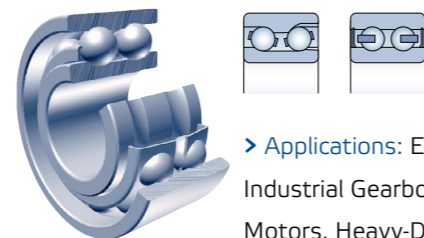
Single Row Angular Contact Ball Bearings



> **Applications:** High-Speed Motors in Machine Tools, Pumps and Compressors, Electric Motors in HVAC Systems, Spindles in High-Performance Drills and Grinders, Robotic Motors.

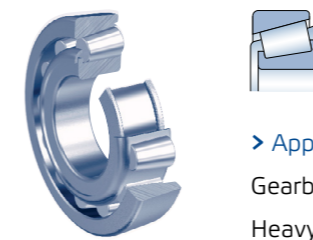
Single-row angular contact ball bearings are designed to handle high axial loads in one direction, as well as radial loads, making them ideal for high-speed applications where load direction is predictable. They are commonly used in electric motors where single-direction axial load handling and high-speed performance are required. Double-row angular contact ball bearings are essentially two single-row bearings combined back-to-back, allowing them to handle higher radial loads and axial loads in both directions. They provide more stability than single-row bearings, making them ideal for applications where bidirectional axial load capacity and compact design are essential.

Double Row Angular Contact Ball Bearings



> **Applications:** Electric Motors in Industrial Gearboxes, Conveyor Drive Motors, Heavy-Duty Electric Motors in Construction Equipment, Vertical Motors in Fans and Blowers.

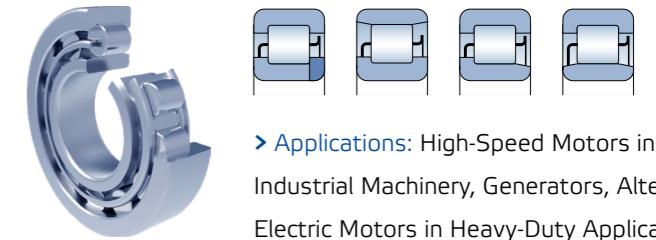
Single Row Tapered Roller Bearings



> **Applications:** Large Electric Motors in Gearboxes, Drive Motors for Conveyors, Heavy-Duty Machinery Motors.

Tapered roller bearings are commonly used in motors subjected to combined radial and axial loads, such as those found in gearboxes and conveyor systems. Their tapered design enables them to carry high axial and radial loads simultaneously, offering excellent stability and precise alignment. These bearings are perfect for motors in high-load applications where vibration and directional force can affect performance.

Single Row Cylindrical Roller Bearings



> **Applications:** High-Speed Motors in Industrial Machinery, Generators, Alternators, Electric Motors in Heavy-Duty Applications.

Cylindrical roller bearings are used in motors that require high-speed rotation and support for heavy radial loads, such as those in industrial machinery and alternators. Their design allows for low friction at high speeds, making them suitable for continuous operation. These bearings help maintain operational consistency, especially in motors that run continuously under heavy loads.

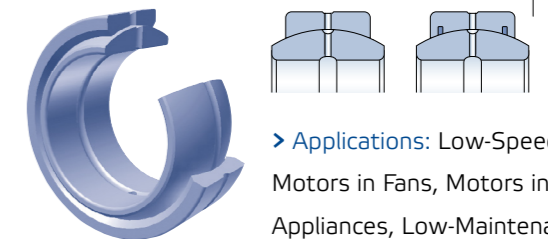
Thrust Ball Bearings



> **Applications:** Vertical Motors with High Axial Loads, Motors in Compressors and Pumps, Specialized High-Load Vertical Shaft Motors.

Thrust ball bearings are used in vertical motors where significant axial loads are present, such as compressors and pumps. These bearings are designed to handle axial forces in one direction, offering stability and smooth operation in applications with vertical shafts and heavy thrust.

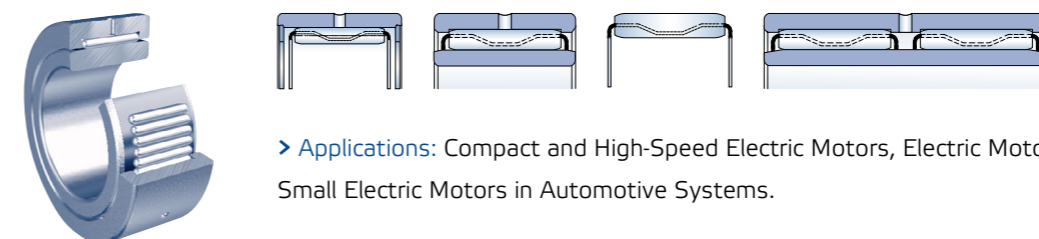
Spherical Plain Radial Bearings



> **Applications:** Low-Speed Electric Motors in Fans, Motors in Household Appliances, Low-Maintenance Motors in HVAC Systems.

Plain bearings are commonly used in low-speed electric motors, such as those in fans, household appliances, and HVAC systems. They are simple and cost-effective, requiring minimal maintenance and performing well in low-speed, low-load applications.

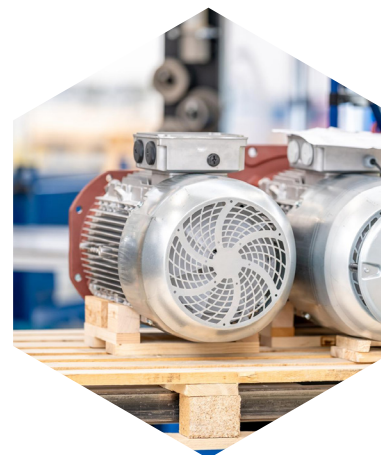
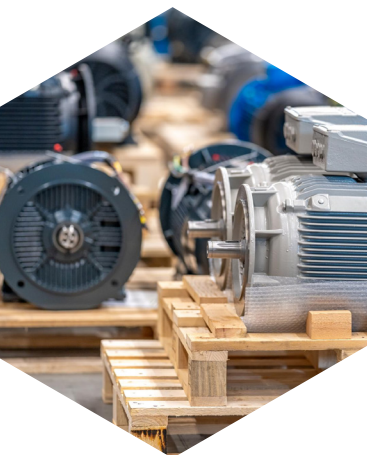
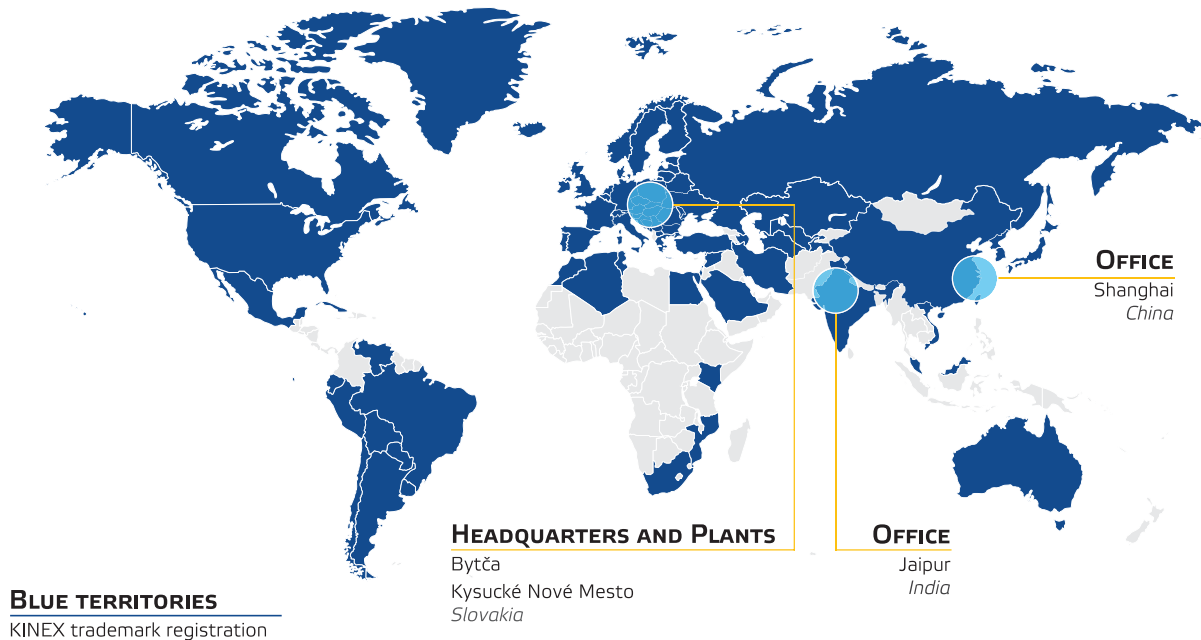
Needle Roller Bearings



> **Applications:** Compact and High-Speed Electric Motors, Electric Motors in Lightweight Power Tools, Small Electric Motors in Automotive Systems.

Needle roller bearings are ideal for compact electric motors with high-speed requirements, such as those found in power tools and automotive systems. Their slim profile allows for reduced weight and space, while their high load-carrying capacity provides durability even in compact applications. These bearings are perfect for light motors where space is limited but durability is essential.

YOUR PARTNER FOR INDUSTRY



> Contact

KINEX BEARINGS, a.s.
1.mája 71/36
014 83 Bytča
Slovakia
+421 41 5556 620
marketing@kinexbearings.sk
www.kinex.sk

