

# Solid Race Needle Roller Bearings and Cam Followers

# Koyo®

## Ball, Needle & Roller Bearings

### Solid Performance in High Stress Applications

Customers in the Packaging and Material Handling markets rely on Koyo Needle Roller Bearings for a wide assortment of heavy duty bearings that can stand up to the stresses of challenging operating environments. For applications where high stresses, high temperatures, and extreme shaft housing misalignment are common, Koyo has the solution - Koyo Heavy Duty Needle Bearings and Track Rollers.

Heavy duty needle bearings provide maximum load capacity and shock resistance with a relatively small radial cross section. These bearings can be used with or without a machined and ground inner ring, depending on the suitability of the shaft as a raceway surface.

### Typical Applications for Heavy Duty Needle Bearings and Cam Followers

#### General Industrial Equipment

- Drive Units/Motors
- Textile Machines (Weaving)
- Machine Tool Spindle

#### Material Handling Equipment

- Conveyor Belt Systems
- Fork Lift Trucks

#### Packaging Equipment

- Filling Machines
- Labeling Machines
- Sealing Machines



Koyo Heavy Duty Needle Bearings provide ideal solutions for applications that require high load carrying capability in small cross sectional areas. Koyo Track Rollers provide smooth operation of telescopic masts in fork lift trucks and many heavy lift applications.

### Additional Features and Benefits:

- *Controlled contour rollers and precision profiles on raceways reduce end stresses*
- *Through-hardened steel material is easily heat stabilized for high temperature applications*
- *Special raceway profiles help overcome shaft / housing misalignment and resulting damage*
- *Many options are available, including flanges, undercuts, holes, special seals, and application-specific greases*

## Caged Bearings

Size Range:

5 mm – 335 mm (0.197 in. – 13.189 in.)

Caged bearings offer integrated features for locating / retention, anti-rotation and lubrication. Additional features may be specified by the customer to suit their application needs



Caged Bearing



Full Complement bearing

## Full Complement Bearings

Size Range:

5 mm – 335 mm (0.197 in. – 13.189 in.)

Full complement bearings accommodate higher capacity at lower speeds compared to caged roller designs. This design is commonly used in vehicle and outboard engines or accessories.

## Track Rollers

Yoke-Type Size Range:

10 mm – 300 mm (0.394 in. – 11.816 in.)

Stud-Type Size Range:

10 mm – 130 mm (0.394 in. – 5.118 in.)

Track rollers, or cam followers, are characterized by thick-walled outer rings that run directly on a track. This permits high load-carrying capability while minimizing distortion and bending stresses. These bearings are available in two basic designs. The yoke-type track roller features an inner ring for straddle mounting in a yoke. The stud-type track roller features an integral stud for cantilever mounting.



Yoke-Type



Stud-Type

A screwdriver slot or hexagonal wrench socket in the head of the stud facilitates mounting. Sealed designs with internal thrust washers help extend service life under conditions of infrequent re-lubrication.

### Features

Cylindrical or Crowned Outer Ring

Full Complement or Caged

High-grade, High-Temp, and/or Stainless Steel

# Koyo®

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Our sales and service engineers are available to assist with product design needs, maintenance recommendations, and technical support.

To learn more, contact your sales representative or visit us online at:

[www.JTEKT-NA.com](http://www.JTEKT-NA.com)

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