

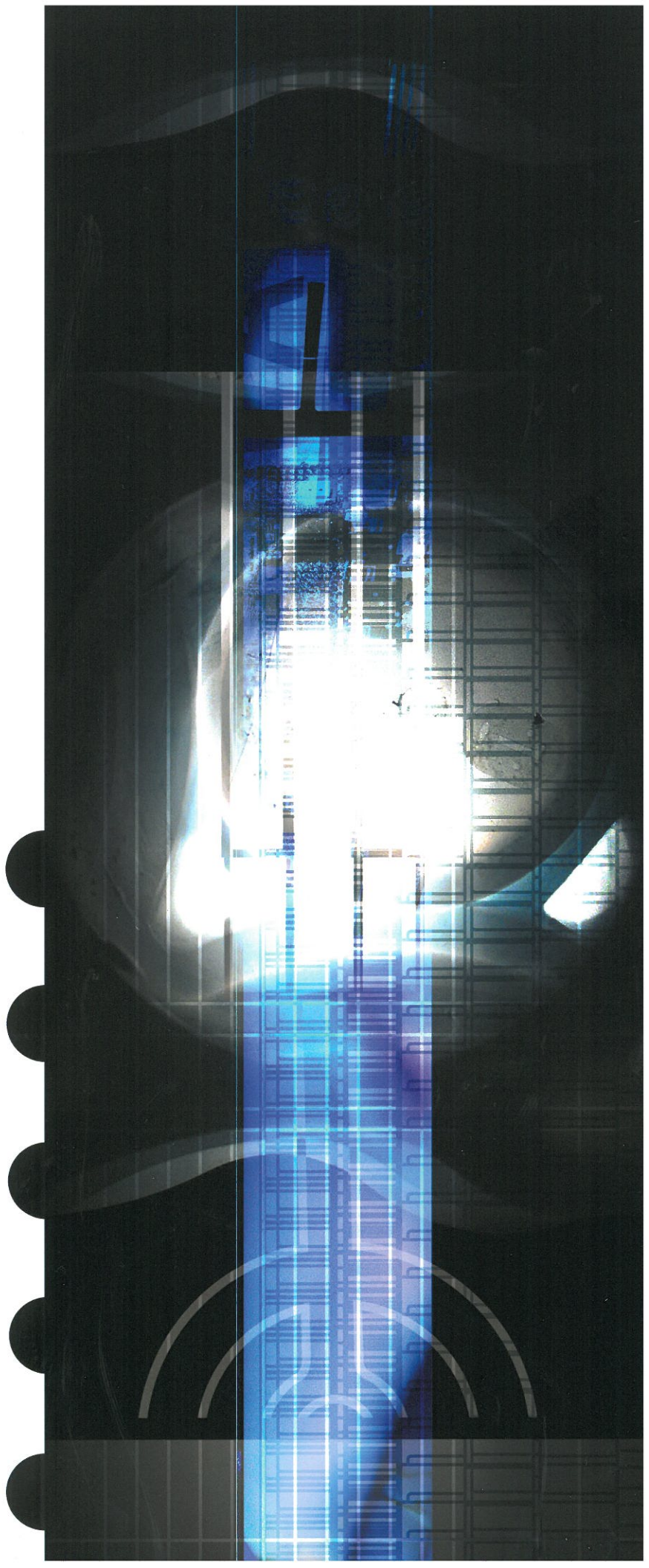
*Koyo is part of the Toyota group
and supplies bearings for the
popular Lexus series.*

*Lexus counts on Koyo bearings for
its precision machines. So can you.*

Koyo®

*Electric
Motor
Repair*

JTEKT
Group



Koyo...for all your Electric Motor Repair needs.

At Koyo, our focus has been on rounding out our line of quality EMR bearings. The result? A world-class line of bearings with the features you need and quality you can trust... Koyo value at its best.

Hybrid-Ceramic "3NC" Ball Bearings

Eliminate electric arcing



Bearing Applications

- variable frequency drives
- high speed motors
- conductive environments
- pumps
- DC controller motors
- inverter duty motors

Ceramic vs. Steel Balls

Hybrid-Ceramic Balls

- lighter
- less slip of rolling elements
- low temperature increase
- improved rigidity
- longer grease service life
- allow 30 - 50% improvement in speed
- double shielded and filled with Exxon Polyrex[®] EM Grease

Features & Benefits

Ceramic Balls Replace Steel Balls to Insulate the Bearings & Interrupt the Flow of Current

- non-magnetic & non-conductive
- elimination of electric arcing or fluting for extended bearing life
- dimensionally interchangeable with current bearings
- superior corrosion resistant balls
- increased speeds (up to 50% higher than steel ball bearings) resulting from ceramic balls being 60% lighter than steel balls
- improved cost efficiency through reduced downtime, maintenance and replacement
- Eliminates the need for insulated sleeves

Standard Single Shielded Bearings

Eliminate grease compatibility issue



Bearing Applications

- all electric motors

Features & Benefits

- standard radial ball bearing with single shielded, double shielded or unshielded
- with single shielded and unshielded bearings, users can lubricate the bearing with proper grease for the operating environment and prevent grease incompatibility



Cylindrical Roller Bearings

Designed for optimum performance

Bearing Applications

- compressor motors
- crusher duty motors
- motors with excessive overhung loads

Features & Benefits

- machined bronze retainer for reduced vibration, quieter operation and higher operating speeds
- high radial load capacity to accommodate heavy radial loads and impact loading
- separable inner ring or outer ring to simplify mounting and dismounting
- "NU" and "N" Type (Free Side bearings) available to adjust for shaft's axial movements relative to the housing position
- "NJ" Type available to carry axial load in one direction
- "R" Type available for increased load carrying capacity

Angular Contact Ball Bearings

Increased thrust load capabilities

Bearing Applications

- vertical applications
- thrust applications
- high speed spindles
- turbo molecular pumps



Features & Benefits

- machined bronze retainer to offer more strength than pressed brass or steel for higher operating speeds
- universally ground to give equal load sharing or Duplex Monitoring Back-to-Back (DB); Face-to-Face (DF); and Tandem (DT)
- Duplex DB - intended for rigid radial support only with the outer rings floated in the housing
- Duplex DF - intended for combined loads with thrust form either direction
- Duplex DT - intended for very heavy thrust loads in one direction
 - Superfinished Raceways - For reduced noise, vibration and quieter operation
 - ABEC 5 & 7 available for up to 50% higher speeds
- Available with ceramic balls for 30 - 50% higher speeds

"N" Series (29000) Spherical Thrust Bearings

Superfinished rollers and raceways achieve higher speeds with a reduction in noise

Bearing Applications

- deep well pump motors
- high thrust applications

Features & Benefits

- Superfinished for:
 - reduced noise • less vibration
 - higher speeds • quieter operation
- Bronze retainer for:
 - reduced vibration • quieter operation
 - higher operating speeds
 - longer service life under poor lubricating conditions



"RD" Type (Extremely Light Contact) Sealed Ball Bearings

Superior performance through a dynamic seal design and low operating torque

Bearing Applications

Most electric motors, including, but not limited to:

- reduction motors
- fan motors
- propeller shaft centers
- electromagnetic clutches
- high efficiency motors
- washdown motors



Features & Benefits

- Mandrel Reinforced Synthetic Rubber Seal
- outer lip flexibility for reduced friction torque, lower operating temperature and longer bearing life
- inner lip seal prevents grease leakage and directs grease towards the bearing for better lubrication
- labyrinth design offers optimum seal to resist penetration of contaminating elements
- lower starting and running torques reduce operating costs compared to all RS type bearings

Now featuring RDT
for large size ball bearings.

*Whether manufactured in USA or Japan,
Koyo...Bringing world-class quality bearings
to a whole new level...Yours.*

Contact your authorized Koyo Bearing Distributor for more information.

Koyo®

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