1. Bearings

1-1 General Bearings

**Large size ball & roller bearings**  
(CAT.NO.B2002E)

This catalog provides information on various large size ball and roller bearings for purposes such as steel making equipment, equipment for wind-power generation, civil engineering and construction machinery, and other large industrial machineries. It contains large size bearings with bore diameter of 100 mm or more.

**Needle roller bearings**  
(CAT.NO.B2020E)

More useful catalog of needle roller bearings as the Koyo brand.

**The products published to the catalog**

- Radial needle roller and cage assemblies
- Drawn cup needle roller bearings
- Drawn cup roller clutches
- Heavy-duty needle roller bearings
- Track rollers
- Thrust bearings, assemblies, washers
- Combined needle roller bearings
- Needle rollers, accessories

**Inch series tapered roller bearings**  
(CAT.NO.B2009E)

This is the special catalog for tapered roller bearings containing frequently used series in addition to the products included in the "Ball & Roller Bearings" catalog (CAT.NO.B2001E), for improvement in the contents and easier reference.

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**Ceramic bearings and EXSEV bearings**  
(CAT.NO.B2004E)

Suitable for use in special environments, such as clean room, vacuum, high-temperature, or chemical. Available in sizes of 4 mm to 40 mm bearing bore.

**EXSEV product guidebook**  
(CAT.NO.B1005E)

This is a summarized version of CERAMIC BEARINGS AND EXSEV BEARINGS FOR EXTREME SPECIAL ENVIRONMENTS (CAT. NO.B2004E). Please utilize this guidebook when selecting bearings.

**Slim series deep groove ball bearings**  
(CAT.NO.B2014E)

Line up of the slim and small size ball bearings. Support a miniaturization and lightweight of the device. Useful for OA equipments.
Introduction of pamphlets and catalogs

**JHS series spherical roller bearings**
(CAT.NO.B1008E)

This pamphlet is based on the overview of “JHS Series” Spherical Roller Bearings and will show you that JTEKT has utilized advanced designs and processing technologies in the development of the new materials. This pamphlet will also show you the introduction of “JHS Series”, and the bearing features and structures of JHS Series Spherical Roller Bearings.

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**1-2 Products for Steel Production Equipment**

**High-performance product series for steel production/rolling equipment**
(CAT.NO.B1001E)

In this pamphlet, we will introduce high-performance products (bearings, drive shafts, and oil seals) that contribute to stable operations of steel production equipment. This pamphlet contains two parts: an overall introduction and product introduction.

**Products to be introduced include the following**
- Bearings for roll necks
- Drive shafts for rolling mills
- Bearings for backing shafts of cluster mills
- Products for continuous casting machines

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**Bearings and related products for continuous casting machines**
(CAT.NO.B2011E)

Products line up for Continuous casting machines. Bearings, HSC bearing units, oil seals, and oil / air lubrication systems.

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**Cylindrical roller bearings for multi-roll mill backup rolls**
(CAT.NO.B2012E)

Special designed bearings for multi-roll mill backup rolls. The outer ring is made of special material and is heat-treated for surface hardness to ensure impact resistance, and thus reliability. In addition, JHS210 bearings meet the needs of our customers for long service lives. This catalog provides information on the handling of the bearings (key points for the disassembling and inspecting of the bearings) as well as actual examples of bearing failures and countermeasures.

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**Roll neck bearings for rolling mill**
(CAT.NO.B2013E)

This bearing is used for rolling mill roll necks. This catalog includes data about countermeasures for damages particular to this application as well as dimensions tables.

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**JHS series hyper coupling**
(CAT.NO.B1010E)

The hyper coupling is a torque limiter (cut-off device) that protects drive systems for heavy loads. This catalog will show you operating principles, features of the products, examples of the applications, and the product lineup.
1-3 General Industrial equipment

Precision ball & roller bearings for machine tools
(CAT.NO.B2005E)
This catalog includes high precision products such as cylindrical roller bearings and angular contact ball bearings, that are used for spindles of machine tools, and support bearing for precision ball screws. This catalog gives technical descriptions including references for handling of bearings such as the guideline for selection of bearing, example of bearing installation, and example of bearing failures.

Drive shafts for industry
(CAT.NO.B2008E)
A drive shaft connects a drive shaft and driven shaft that are not aligned on the same axis, and transfers running torque smoothly. This catalog shows drive shafts for industry and construction machines other than agricultural machines.

Product information for agricultural and construction equipment
(CAT.NO.B1009E)
This catalog is introducing the function needed to an agricultural machine and a construction machine, our technology and goods.
· Optimum design technologies (High performance tapered roller bearing)
· Heat treatment technologies (KE bearing, SH bearing)
· Analysis technologies, Surface reforming technology
· JHS Series Spherical Roller Bearings
· Propeller shaft for construction machinery, Oil seal, Hydraulic Components

Ball bearing units
(CAT.NO.B2007E)
This catalog has information about ball bearing units. Technical descriptions, selection of ball bearing units, and dimensional tables of units, such as pillow block type, take-up type, cartridge type, and ball bearing for units, are included in this catalog. Stainless-series and "compact" series are also included in this catalog.

Traction drive unit
(CAT.NO.B1011E)
A Traction Drive Unit has been conceived from bearing core technologies. A reducer with a minimal rotation irregularity is suitable for high-accuracy feeding, which is unachievable by using gears.

Oil seals & o-rings
(CAT.NO.R2001E)
This catalog includes oil seals, o-rings and back up rings. Includes dimensional tables, technical explanations and handling information.
2. Automotive Components

Electric power steering systems  
(CAT.NO.S1001E)
Explains electric power steering system mechanisms.  
Introduces our product lineup and product characteristics.

TORSEN  
(CAT.NO.D1001E)
TORSEN function and construction.  
TORSEN product line.  
Installation of TORSEN improves handling and safety.

ITCC active on-demand AWD system  
(CAT.NO.D1002E)
Introducing the "ITCC" active on-demand AWD system.  
Information on the ITCC structure, performance, and characteristics.

The 3rd generation ball hub units  
(CAT.NO.B1004E)
Introduces the main characteristics and design of the 3rd generation ball type hub units.  
Features JTEKT’s recommended hub unit numbers.

Tapered roller bearings for axle drive pinions  
(CAT.NO.B1006E)
Introducing tapered roller bearings for axle drive pinions.  
Technology for torque reduction and longer service life, examination and evaluation methods, and recommended series bearing numbers.

3. Sensors

Immersion-type water level meters TD series  
(CAT.NO.E2014)
Product series, which are suitable to measurement and management of water level in plants of sewers and water supplies, rivers, flood gates, waterways, and wells, are shown in this catalog.  
Major advantages are compact body, high accuracy, and built-in lightning-strike protection circuit.
Products introduction of JTEKT

Bearing Products

- Hub units
- Clutch release bearings
- KE bearings
- Roll neck bearings for rolling mill (Steel production/rolling equipment)
- Water pump bearings
- Bearings for rocker arms
- Bearings for wind turbine generator
- Ceramic & EXSEV bearings
- CPA bearings
- LFT III bearings
- Bearings for railway rolling stock axle journals
- Drive shafts
Automotive Components

- Bearings for machine tools
- Bearings for aircraft/aerospace
- Electric pumps for idle-stop system
- Pump for CVT
- Linear solenoid valve for AT and CVT
- Damper pulleys
- Steering systems
- TORSEN LSD
- Intelligent torque controlled coupling (ITCC)
- Drive shafts (CVJ)
- Water level meters
- Pressure sensors/Transducers

Sensors
Products introduction of JTEKT

**Machine tools**

- **Grinders**
  - Grinding center TG4
  - Cam shaft grinder GC20Mi
  - Cylindrical grinder e300G

- **Machining Centers**
  - Horizontal spindle machining center FH630SX-i
  - Vertical spindle machining center FV2090S

**Mechatronics**

- **Programmable controller**
  - TOYPUC®-PC10G
  - TOYPUC®-Plus

- **Direct circuit monitor**
  - TOYPUC®-PC10G

- **Small safety PLC TOYPUC®-PCS-J**
Products introduction in Japan Group Companies

Koyo Machine Industries Co., Ltd.
- Centerless grinding machine
- Surface grinding machine
- Fully automatic assembly inspection system
- Precision spindle unit
- Drive shaft
- Ball screws
- Indexing chuck
- Intermediate shafts

Product categories:
- Ball screws
- Indexing chuck
- Intermediate shafts

Toyooki Kogyo Co., Ltd.
- Energy-saving hydraulic equipment
- Inspection and testing machine
- Reduce wiring 4-pin connector solenoid valve
- Toyopac motion

Product categories:
- Small pack
- TOYPAC"ECO"
- High performance straightening machine
- Automotive components

Koyo Sealing Techno Co., Ltd.
- Oil seals of various types
- O-rings of various types
- Functional parts of various types
- Bonded piston seals for AT and CVT

Product categories:
- Oil seals of various types
- O-rings of various types
- Functional parts of various types

CNK Co., Ltd.
- Loader
- DLC coating equipment
- Round eddy-current coolant system
- Heat treatment equipment

Product categories:
- Loader
- DLC coating equipment
- Round eddy-current coolant system

D 15
D 16
Products introduction in Japan Group Companies

Koyo Thermo Systems Co., Ltd.

- Vacuum heat treatment furnace
- Non-frame KCF carburizing and quenching furnaces
- Vertical diffusion systems
- Electronic device for continuous furnace
- High temperature clean oven
- Experimental small electric furnace

Koyo Electronics Industries Co., Ltd.

- Rotary encoders
- Programmable controllers
- HMI
- Proximity switch

HOUKO Co., Ltd

- General purpose cylindrical grinders G32 series
- CNC cylindrical grinders GE3/GL3S series
- Production type Cylindrical grinders GL4E series
- CNC large cylindrical grinders GE6 series

Toyoda Van Moppes Ltd.

- Cam profile grinding vitrified wheel
- Two-sided surface grinding, centerless grinding wheel
- Rotary dressers
- Diamond centers