

TIMKEN



TIMKEN® ANGULAR CONTACT BALL BEARING CATALOG

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INTRODUCTION • HOW TO USE THIS CATALOG

TIMKEN® ANGULAR CONTACT BALL BEARINGS**ALL-AROUND RELIABILITY**

Designed for reliable performance in pump, compressor, electric motor and many other industrial applications, our angular contact ball bearings are able to handle high speeds and both radial and axial loading. These bearings follow ISO standards and are dimensionally interchangeable with competitor metric products.

MORE CHOICES

We have added 250-new part numbers to our growing portfolio of single-row and double-row products. Now, you have more options from a dependable supplier known for quality and performance.

PRODUCT FEATURES

- Enhanced raceway finish
- Quiet running
- High-speed capabilities
- Robust seals
- Premium Mobil Polyrex™ EM lubricants

GET THE MOST OUT OF YOUR OPERATIONS

Every Timken angular contact ball bearing is backed by premium customer service, leveraging our global sales and distribution network. It is also supported by the knowledge of our industry-leading experts. They are ready to assist you with product design, application knowledge and field engineering support – anything you need to help improve uptime and maximize equipment performance.

**HOW TO USE THIS CATALOG**

We designed this catalog to help you find the Timken bearings best suited to your equipment needs and specifications.

This publication contains dimensions, tolerances and load ratings, as well as engineering sections describing fitting practices for shafts and housings, internal clearances and other bearing features. For more information, please use the Timken Engineering Manual (order no. 10424). It provides valuable assistance in the initial consideration of the type and characteristics of the bearings that may best suit your particular needs.

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SHELF LIFE AND STORAGE

SHELF LIFE AND STORAGE OF GREASE-LUBRICATED BEARINGS AND COMPONENTS

To help you get the most value from our products, Timken provides guidelines for the shelf life of grease-lubricated ball and roller bearings, components and assemblies. Shelf life information is based on Timken and industry test data and experience.

SHELF LIFE

Shelf life should be distinguished from lubricated bearing component design life as follows:

Shelf life of the grease-lubricated bearing/component represents the period of time prior to use or installation.

The shelf life is a portion of the anticipated aggregate design life. It is impossible to accurately predict design life due to variations in lubricant bleed rates, oil migration, operating conditions, installation conditions, temperature, humidity and extended storage.

TIMKEN IS NOT RESPONSIBLE FOR THE SHELF LIFE OF ANY BEARING/COMPONENT LUBRICATED BY ANOTHER PARTY.

European REACH compliance

Timken lubricants, greases and similar products sold in stand alone containers or delivery systems are subject to the European REACH (Registration, Evaluation, Authorization and Restriction of Chemicals) directive. For import into the European Union, Timken can sell and provide only those lubricants and greases that are registered with ECHA (European Chemicals Agency). For further information, please contact your Timken engineer.

STORAGE

Timken suggests the following storage guidelines for our finished products (bearings, components and assemblies, referred to as "products"):

- Unless directed otherwise by Timken, products should be kept in their original packaging until they are ready to be placed into service.
- Do not remove or alter any labels or stencil markings on the packaging.

- Products should be stored in such a way that the packaging is not pierced, crushed or otherwise damaged.
- After a product is removed from its packaging, it should be placed into service as soon as possible.
- When removing a product that is not individually packaged from a bulk pack container, the container should be resealed immediately after the product is removed.
- Do not use product that has exceeded its shelf life as defined in the Timken shelf life guidelines statement.
- The storage area temperature should be maintained between 0° C (32° F) and 40° C (104° F); temperature fluctuations should be minimized.
- The relative humidity should be maintained below 60 percent and the surfaces should be dry.
- The storage area should be kept free from airborne contaminants such as, but not limited to, dust, dirt, harmful vapors, etc.
- The storage area should be isolated from undue vibration.
- Extreme conditions of any kind should be avoided.

Due to the fact that Timken is not familiar with your particular storage conditions, we strongly suggest following these guidelines. However, you may be required by circumstances or applicable government requirements to adhere to stricter storage requirements.

Most bearing components typically ship protected with a corrosion-preventive compound that is not a lubricant. These components may be used in oil-lubricated applications without removal of the corrosion-preventive compound. When using some specialized grease lubrications, we advise you to remove the corrosion-preventive compound before packing the bearing components with suitable grease.

Be careful in selecting lubrication, however, since different lubricants are often incompatible.

When you receive a bearing shipment, do not remove products from their packaging until they are ready for mounting so they do not become corroded or contaminated.

Store bearings and bearing housings in an appropriate atmosphere so they remain protected for the intended period.

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WARNINGS



WARNING

Failure to observe the following warnings could create a risk of death or serious injury.

Proper maintenance and handling practices are critical. Always follow installation instructions and maintain proper lubrication.

Tensile stresses can be very high in tightly fitted bearing components. Attempting to remove such components by cutting the inner ring may result in a sudden shattering of the component, causing fragments of metal to be forcefully expelled. Always use properly guarded presses or bearing pullers to remove bearings from shafts, and always use suitable personal protective equipment, including safety glasses.

CAUTION

Failure to follow these cautions may result in property damage.

The products cataloged are application-specific. Any use in applications other than those intended could lead to equipment failure or to reduced equipment life.

Use of improper bearing fits may cause damage to equipment.

Do not use damaged bearings. The use of a damaged bearing can result in equipment damage.

DISCLAIMER

This catalog is provided solely to give you analysis tools and data to assist you in your product selection. Product performance is affected by many factors beyond the control of Timken. Therefore, the suitability and feasibility of all product selection must be validated by you.

Timken products are sold subject to Timken's terms and conditions of sale, including its limited warranty and remedy, which may be found at <http://www.timken.com/termsandconditionsofsale>. Please consult with your Timken sales engineer for more information and assistance.

Every reasonable effort has been made to ensure the accuracy of the information in this writing, but no liability is accepted for errors, omissions or for any other reason.

COMPLIANCE

To view the complete engineering catalog, please visit www.timken.com. To order the catalog, please contact your Timken sales engineer and request a copy of the Timken Engineering Manual (order number 10424). For further information, please contact your Timken sales engineer.

The Timken Company products shown in this catalog may be directly or indirectly subject to a number of regulatory standards and directives originating from authorities in the USA, European Union and around the world including: REACH (EC 1907/2006, RoHS (2011/65/EU), ATEX (94/9/EC), 'CE' MARKING (93/68/EEC), CONFLICT MINERALS (Section 1502 of the Dodd-Frank Wall Street Reform and Consumer Protection Act).

For any questions or concerns regarding the compliancy or applicability of Timken products to these or other unspecified standards, please contact your Timken sales engineer or customer services representative.

Updates are made periodically to this catalog. Visit www.timken.com for the most recent version of the Timken® Angular Contact Ball Bearing Catalog.

