

IBC



EXAD the optimum performance formula
the optimum performance formula

Longer, Higher, Better ...



- Longer service life
- Higher speeds
- Better running characteristics

By optimizing design, materials, and manufacturing process, substantial improvements in service life, functional safety, load capacity, and running characteristics have been achieved, while simultaneously reducing friction and thus lowering heat generation. Higher dynamic load capacity is another characteristic of **EXAD** products.

The product range of IBC rolling bearings includes various innovative solution principles that ensure reliable floating, journal, and thrust bearing functions. One solution is the **EXAD** cylindrical rolling bearing.



IBC produces cylindrical rolling bearings in various styles, dimension series, and sizes, the majority of which are single-row cylindrical rolling bearings with cages. The ability of styles N and NU to support high radial loads and permit axial displacement makes them predestined as floating bearings, such as are used in pumps and compressors. Styles NUP, NJ, and HJ are used as thrust bearings.

A wide variety of solutions are needed to cover the full range of technical applications in machine design. More precise machine element designs are absolutely necessary for economic reasons. Only an extensive assortment of angular contact ball bearings can meet these requirements for high speeds, load bearing capacity, precise running accuracy, rigidity, and combined radial and axial loads with low heat generation and friction.

Single-row EXAD 40° angular contact ball bearings support radial loads as well as high axial loads in one direction. They are braced against a second angular contact ball bearing in most applications. The universal design has a suffix of UA, UB, UL, or UO and is suitable for use in matching sets in an X, O, or tandem arrangement, or in any desired arrangement. Many applications, such as transmissions, gearmotors, blowers, fans, pumps, textile and printing machinery have combined radial and axial loads that require zero-clearance shaft guidance.



The IBC product range offers extensive solutions for low-friction ballscrew support with easy assembly.

In addition to **single-row EXAD 60° axial angular contact ball bearings** from the BS series as a single bearing or in sets, IBC produces **double-row EXAD 60° axial angular contact ball bearings** from the BSD series for installation in housings, and the BSDF series with a flanged design.

Single-row EXAD 60° axial angular contact ball bearings from the BS series support combined loads, primarily in a single axial direction. The large contact angle allows high axial loads with extremely high axial rigidity. For universal ground bearings, arrangements are very flexible. They can be used individually or as bearing sets assembled at the factory, in any desired set combination. As bearing sets, they have a common marking on the outer rings of the entire bearing set.



BS bearings are also used in flange (BSBU) and pillow block (BSPB) bearings at the factory, and in customer-specific units. Such units can also contain a motor flange. For predominantly single-sided loads on vertical axes, they are also available with asymmetrical bearings.

Their easy assembly, long service life without maintenance, options for permanent lubrication or oil circulation with low energy consumption are persuasive features. Other customer benefits include highly accurate positioning and safe operation under high ball-screw accelerations and speeds. To further increase the speed, ceramic rolling elements or bearing races coated with ATCoat are available. In addition to the open 60° axial angular contact ball bearing, the range also includes dual-sided sealed designs. They ensure high operational reliability even in difficult environments.

The **double-row 60° EXAD axial angular contact ball bearings** in the BSD and BSDF bearing series are easy and uncomplicated to install and require low maintenance, making them economical to use. They provide the user with a high-precision, stable, low-friction, and rigid bearing for ballscrew spindles, thus helping to optimize the overall machine tool system.

The BSDF version allows the rolling bearing to be bolted directly to the mounting frame or in a radial locating hole, without any additional housing components. A circumferential extraction slot makes removal from a locating hole easy.

Another feature is lubrication points that are sealed by removable set screws.

The BSD and BSDF series of rolling bearings are sealed on both sides as standard and are greased with a high-performance lubricant with lubricity that lasts for the lifetime of the bearing in most applications. For applications with very low speeds, special coatings are also available to support lubrication.



EXAD the optimum performance formula

Consistently meets the need for longer service life, higher speeds, and better running characteristics.

With optimized manufacturing processes for material production, especially heat treatment, IBC rolling bearings of this generation impress users with their performance. All industrial applications can be improved with respect to functionality, economic efficiency, and reliability while simultaneously reducing friction.

Discover the advantages of **EXAD** in combination with effective material utilization and energy savings. Technology and economic efficiency meet in an optimal combination.

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