





FOR TEXTILE INDUSTRY



The Textile Industry is primarily related with the design, production and distribution of yarn, cloth and clothing. With the development in total populace bringing about expanding interest for the dress and the regularly changing style, innovation requesting new apparel materials, there has been an uncommon change during the time spent fabric making from conventional weaving to most present day and complex plants. These factories require bearings with long service life, heavy load bearing efficiency and high rotation speed with low noise level for smooth performance and to help producing good quality clothes.



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Textile machines are required to run at speeds which are regularly increased, and should be simple to maintain and economical to run. These requirements impose specific solutions, where the following parameters have to be optimized:



Mounting and maintenance conditions

Working precision

Machine service life

Loading Capacity

Lubrication possibilities offered to the client

Noise

Protection against aggressive environments

Weight





Thanks to our **Belgo**® Bearings, we provide a comprehensive range of precision products for the reliable and cost-effective support of rotary and linear motion for the manufacturers of textile machinery.

In this perspective, **Belgo**® Bearings are widely used by textile equipment manufacturers in spinning, printing, finishing, coating and drying applications. Non-woven applications include web forming, bonding and finishing. Our mounted bearings are commonly found in textile manufacturing facilities. We both manufacture our standard and special design **Belgo**® Bearings and widely preferred as:

The benefits of our **Belgo**® Bearings: low amplitude, low noise, and long service life, excellent sealing performance and very low friction.

We manufacture a wide range of Bottom Roller Bearing for supporting bottom rollers in Ring spinning frames and Speed frames of textile industry Bottom Roller Bearings conform to International Standards Holders (locating caps) for these bearings are made suitable for various sizes of roller.





SINGLE ROW ANGULAR CONTACT BALL BEARINGS

Belgo® single - row angular contact ball bearings accommodate axial loads in one direction with high thrust capacity. Due to having one high and one low shoulder and non - separable design, they are able resist against high loadings. In order to obtain high speed performance from the bearing, some of them are specifically mounted in pair type with the universal matching in BCB suffix.

Belgo® single - row angular ball bearings are available in many series and versions:

7000 / 7200 / 7300

A: contact angle of 25 degrees.

B: contact angle of 40 degrees (standard version)

C: contact angle of 15 degrees

SINGLE ROW DEEP GROOVE BALL BEARINGS

As this type of bearings are known the most popular ones in ball bearing applications, our **Belgo**® single - row deep groove ball bearings are also available in a wide range e.g. open or capped (with seals or shields) By having deep and uninterrupted raceway grooves, this type of bearings accommodate radial loads and axial loads in both directions.

Belgo[®] single - row bearings are available in many series and versions:

N: with snap ring groove

NR: with locating snap ring

ZZ: Shielded with two metals

RSRS: Sealed with two rubbers

Z: Shielded with one metal

RS: Sealed with one rubber



DOUBLE ROW ANGULAR CONTACT BEARINGS

Belgo® double - row angular contact ball bearings can take radial and axial loads in both directions. These bearings are able to accommodate tilting moments both single and double row angular contact ball bearings are mainly used in agriculture, utilities, chemical, general machinery fields.

Belgo[®] double - row angular ball bearings are available in many series and versions:

3200 / 3300

A: contact angle of 25 degrees

B: contact angle of 40 degrees (standard version)

C: contact angle of 15 degrees



In addition to our main Belgo Bearing Types for Textile industry, we also manufacture and the following bearings:



SELF-ALIGNING BALL BEARINGS

The characteristics feature of **Belgo**[®] self - aligning ball bearings is to have less friction than other type of rolling bearings. They are generally used for the applications which require high speedrotations.

Belgo® self - aligning ball bearings are available in many series and versions:

E.g: 1200 / 1300 / 2200 / 2300 Open: Basic design (standard version)

RSRS: Sealed

K: Tapered bore - (1:12)

K/RSRS: both tapered bore and sealed



SPHERICAL ROLLER BEARINGS

Spherical roller bearings which are self-aligning and consist of two rows of rollers common two inner ring raceway and a common sphered outer ring raceway that provides to be used for high loads in extreme severe applications. This type of bearings can accommodate radial and axial loads in both directions. **Belgo**® spherical roller bearings are manufactured with the latest available technology so that they can easily handle contamination, high temperatures, shocks, misalignment at the time of high radial loads even at high speeds.

Belgo® spherical roller bearings are available in many series and versions (from 25 mm bore up to 1800 mm bore): Manufacturing All the **Belgo®** spherical roller bearings are manufactured according to ISO & DIN standard with 3 lubrication holes on the outer ring as a standard lubrication groove (W33). Due to this advanced feature, the lubricant flows between the roller paths via a single lubrication fitting. The diameters of spherical roller bearings are indicated in ISO 15.

Also, **Belgo**® spherical roller bearings can be manufactured in tailored - made which are larger clearances than standard C3, C4, C5 or smaller clearances than C2 upon our customers' requests. In terms of their bore, they could have either cylindrical or tapered bore (1:30 - suffix K30 for 240 and 241 series and 1:12 - suffix K for other series). Bearing Material limitations Standard spherical roller bearings with an outside diameter above 240 mm are stabilized up to +200°C (392°F).

Small sized bearings are able to be operated up to +120°C (250°F). According to the DIN standard 623, the operating temperature list is indicated as here below:

213 / 222 / 223 / 230 / 231 / 232 / 239 / 240 / 241

- C: Symmetrical rollers, flangeless inner ring, a non integral guide ring and a floating rib with pressed metal cage
- CA: Symmetrical rollers and retaining ribs with one piece brass cage
- MA: Retaining flanges guided on the inner ring and two piece machined brass cage guided on the other ring
- MAC4F80: A special design for vibration applications with machined brass cage on the outer ring
 - MB: Retaining flanges guided on the inner ring central fixed rib with two piece machined brass cage

Our Belgo® Spherical Roller Bearings could operate in different temperatures from 150°C up to 350°C

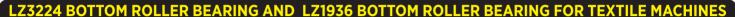


WATER PUMP BEARINGS

Belgo® Water Pump Bearings are kindly used into the textile and printing machinery, engineering equipment, motorcycles, electro-motive tools and so on.

These type of **Belgo**® Bearingsconsist of double of rowbearings and mainly exists two types design a) Ball to ball: with two rows of balls b) Ballto roller: with one row balls, and one row roller.

The kind water pump bearings is the most important part of the water pump. Because of high speed of revolution, normally it reaches 100000rpm/min, it requires the high load ability of the bearing



Bottom Roller Bearing Used for supporting bottom roller in ring spinning frames & speed frames of textile industries. Our **Belgo**® Bearings comply with the international quality norms which ensures accurate running

The rollers of these bearings are of spherical shape, and the spherical raceway surface of the housing washer is self-aligned.



These bearings are featured by the extremely big axial load carrying capacity and meanwhile they can also take certain radial load. Oil lubrication is commonly used while working. Applications of these bearings can be also found in hydroelectric generators, vertical motors, propeller axle of vessels, tower cranes and squeezing presses.



Belgo® Bottom roller bearings are needle roller bearings that support the bottom rollers (fluted rollers) on fine spinning machines, roving frames or drawing frames.

Belgo® Bearing arrangements of the bottom rollers in the drafting system in spinning frames and roving frames require uniform running in order to guarantee the highest quality yarn. Our Bottom Roller Bearings are precision needle roller bearings which excel through their high load carrying capacity and extremely accurate radial and side face run-out.



Thanks to our Belgo® Bottom Roller bearings, you could have maintenance free which means that a few routine checks mentioned below will however assist in detecting any malfunction.

- 1. When the machinery is running, an industrial stethoscope may be used to monitor bearing noise.
- 2. Follow Lubrication routine of renewing (good quality) our Belgo® Lithium based grease every 4 to 6 months.



