

# BEARINGS

HIGH-SPEED ROTOR SPINDLES
& TEXTILE BEARINGS

PRECISION ENGINEERING FOR OPEN-END SPINNING EFFICIENCY

Belgo



**BELGO INDUSTRY | Engineered in Belgium** 

#### **GO FOR REVOLUTIONARY ENGINEERING!**

Global Production With 15+ Years Of Expertise

## A GLOBAL COMMITMENT TO QUALITY

Belgo Bearings, based in Belgium, operates with over 15 years of industry expertise. Our products are engineered and manufactured according to stringent ISO and DIN quality standards across our global production centers.

From raw material selection to final testing, our advanced technology and expert engineering team ensure superior quality, minimizing maintenance and maximizing operational uptime.









- \* **Reliability:** Built on a foundation of high-quality products and service.
- \* **Efficiency**: Optimized for competitive lead times and reduced purchasing costs.
- \* Expertise: Specialist knowledge in design, material



GO for REVOLUTIONARY ENGINEERING

www.belgo-bearings.com www.belgo-industry.com

#### GLOBAL REACH, STRATEGIC PRESENCE



Headquartered in the heart of Europe (Brussels, Belgium), Belgo Industry operates through a strategic network of production and distribution hubs across Switzerland, the Czech Republic, and South Korea.

This global footprint allows us to combine European engineering precision with rapid logistical capabilities, ensuring that our partners worldwide receive critical components with minimal lead times.

#### STATE-OF-THE-ART MANUFACTURING

Quality is not just inspected; it is engineered. Our production facilities are equipped with advanced CNC technology and operated by highly skilled specialists dedicated to perfection.

From raw material selection to final grinding, every Belgo bearing undergoes rigorous quality control protocols to meet the demanding tolerances required by modern textile machinery. We don't just build bearings; we engineer reliability.





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## HIGH-PERFORMANCE ROTOR CUPS

Optimized Surface Geometries & Diamond Coating Technology

#### **Spinning Components**

Yarn quality is defined where the fiber meets the rotor groove.

Belgo Rotor Cups are manufactured with ultra-precise tolerances to ensure smooth fiber flow and optimal twist insertion.

#### Nomenclature System

Nomenclature SystemDesign Note: Create a simple visual breakdown like:

[B]-[T]-[34]-[DN]

B: Belgo Series

T: Groove Profile (T, Z, U)

**34:** Cup Diameter (mm)

**DN:** Coating Type



#### **Adapter Series**

Visual Breakdown:

[B]-[C5]-[33]-[DN]

**B:** Belgo Series

C5: Adapter Type

(Machine Specific)

33: Cup Diameter (mm)

**DN:** Coating Type



COMPATIBLE WITH SAURER BD, RIETER BT/R, AND TAITAN TQF SERIES.

#### Surface Technologies (Coatings)

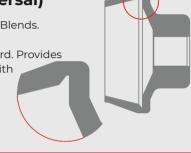
Туре	Code	Application		
Diamond <b>D</b>		Extreme hardness for abrasive fibers (Polyester, Recycled).		
Diamond-Nickel	DN	Balanced corrosion resistance with smooth surface finish.		
Anodized	E	Cost-effective solution for standard cotton applications.		

#### Groove Geometries & Application

1- T-PROFILE (Universal)

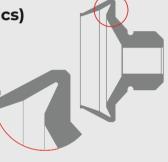
\*Application: Cotton, Viscose, Blends.

\*Benefit: The industry standard. Provides a balanced yarn structure with high strength



#### 2- Z-PROFILE (Synthetics)

- \* Application: 100% Man-Made Fibers (MMF), Acrylic.
- \* Benefit: Narrow groove design increases spinning stability for slippery synthetic fibers.



#### 3- U-PROFILE (Coarse/Bulk)

\*Application: Denim, Coarse Counts (Ne < 10)

\*Benefit: Wide groove allows better dust removal and creates



## COMPLETE ROTOR ASSEMBLIES

Precision Balanced & Ready-to-Install Solutions for OF Frames

**Balancing Standard**: All complete rotor assemblies are dynamically balanced according

to ISO 1940-1 (Grade G 2.5). This ensures

- Reduced noise levels.
- \*Extended bearing life.
- \*Consistent yarn quality at peak speeds.

Custom configurations available upon request.

#### **Plug & Play Systems**

#### Compatible with SAURER

Engineered for Saurer BD 3XX, 4XX, BD 6/7/8 & Autocoro Series. Supplied as dynamically balanced sets to ensure vibration-free running up to 105,000 RPM.



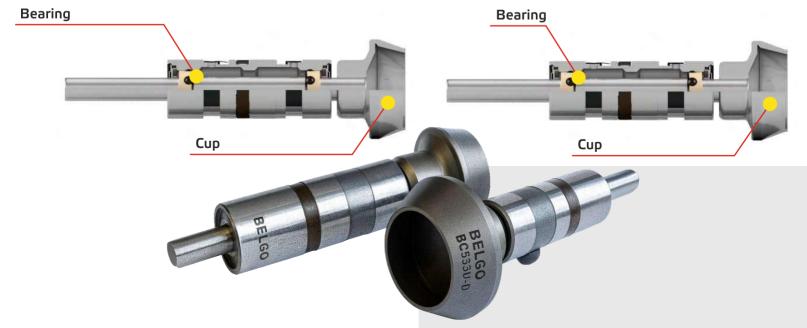
Bearing Unit	Speed Range (RPM)	Compatible Belgo Cup Types
B-73-1-22	25,000 - 45,000	B-Z66-DN / B-T66-DN
B-73-1-22	40,000 - 60,000	B-Z54-DN / B-T50-DN
B-T004	55,000 - 75,000	B-T46-DN / B-T43-DN
B-T010	75,000 - 105,000	B-T34-DN / B-T34-D
B-T100	105,000 - 110,000	B-T34-DN (High Speed)

#### Compatible with RIETER

Engineered for Rieter BT 923, R 923, R35, R36 & R37 Series. Features the specific "C-Type" adapter interface for precise fitment and stability.



Bearing Unit	Speed Range (RPM)	Compatible Belgo Cup Types
B-73-1-52	40,000 - 60,000	B-C254 U-D / B-S254 U-D
B-T013	60,000 - 75,000	B-C341 U-D / B-S341 T-D
B-T013	75,000 - 95,000	B-C536 U-D / B-S536 U-D
B-72-11	80,000 - 105,000	B-C533 U-D / B-S533 Tr-D



## SPECIALIZED ROTOR ASSEMBLIES

Solutions for Asian OEM Frames & Legacy Machines

Balancing Standard:All complete rotor assemblies are dynamically balanced according

- to ISO 1940-1 (Grade G 2.5). This ensures
- <sup>•</sup> Reduced noise levels.
- \*Extended bearing life.
- \*Consistent yarn quality at peak speeds.

Custom configurations available upon request.

#### **Specific Applications**

#### Compatible with TAITAN & RIFA

Engineered for Taitan TQF (368/568/K-80) and Rifa (RS51/RS30) Series. High-stability bearing units designed for speeds up to 105.000 RPM



#### Compatible with LEGACY MACHINES

Application: Maintenance solutions for BD 200 (RCE/RN/SN) and BD A 10/20 Series. Designed to extend the operational life of legacy spinning lines.

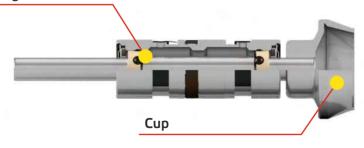


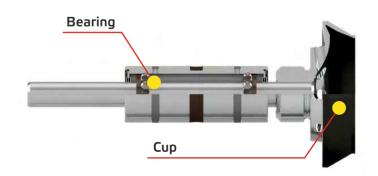
Bearing Unit	Speed Range (RPM)	Compatible Belgo Cup Types
B-73-1-22	25k - 45k	B-Z66-DN / B-T66-DN
В-Т004	55k - 75k	B-T46-DN / B-L54-DN
B-T010	75k - 105k	B-T34-DN / B-T34-DNTI
B-T100	105k - 110k	B-T34-DN (High Speed)

Note: Titanium coating options (DNTI) available for extreme wear conditions.

Bearing Unit	Speed Range (RPM)	Compatible Belgo Cup Types
B-73-1-22	25,000 – 45,000	B-E66 (Butterfly Vented)
B-73-1-22	40,000 – 60,000	B-E54 (Vented)
B-73-1-31	60,000 – 80,000	B-E40 (Vented)
B-72-6	70,000 – 90,000	B-E36 (Vented)

#### Bearing





Important: These rotor cups feature ventilation holes to match the airflow dynamics of older generation spin boxes.

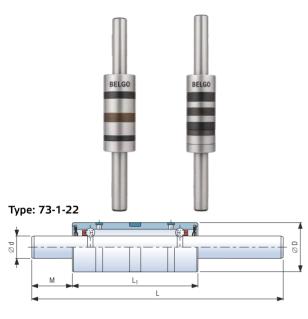
Legacy Support:Belgo Industry is committed to supporting older machine generations with premium spare parts, ensuring your established production lines remain profitable.

## SPECIALIZED ROTOR ASSEMBLIES

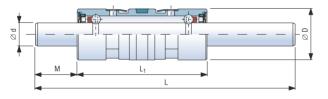
Solutions for Asian OFM Frames & Legacy Machines

#### **Specific Applications**

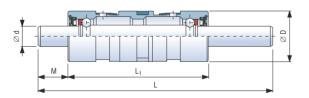
#### **Asian OEM Compatible**



Type: T 004



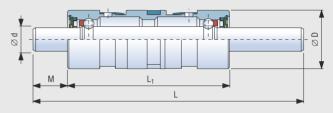
Type: 72-6



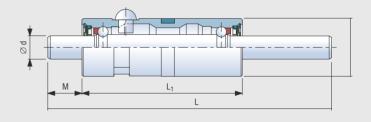
#### **Legacy Machine Compatible**



Type: T 010



**¥**ype: T 013



#### SPECIALIZED COMPATIBILITY MATRIX

M	achine Type	OEM Model Ref.	Bearing Unit	Speed Limit	Compatible Cup Type	Note
	Asian OEM	Taitan TQF / Rifa RS	B-73-1-22	45,000	B-Z66-DN / B-T66-DN	STD
	Asian OEM	Taitan TQF / Rifa RS	B-T004	75,000	B-T46-DN / B-L54-DN	-
	Asian OEM	Taitan TQF / Rifa RS	B-T010	105,000	B-T34-DN/B-T34-DNTI	High Speed
	Legacy	BD 200 RCE/RN/SN	B-73-1-22	45,000	B-E66 (Ventilated)	Air Cooled
	Legacy	BD SD / D1 / D2	B-73-1-22	60,000	B-E54 (Ventilated)	-
	Legacy	BD A 10/20	B-73-1-31	80,000	B-E40 (Ventilated)	Short Shaft
	Legacy	BT 902 / 903	B-72-6	90,000	B-E36 (Ventilated)	-

## OPENING ROLLER & PRESS PULLEY BEARINGS

High-Performance Components for Fiber Preparation & Yarn Tension

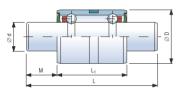
#### **Auxiliary Spinning Parts**

#### **Opening Roller Bearings**

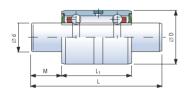
High-speed combing units with advanced sealing (KK-Type)



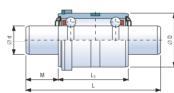
Type: 76-3, 76-3KK



Type: 76-3-7, 76-3-7KK



Type: T 763, 76-3-16, 76-3-17





#### **Press & Tension Pulleys**

Precise yarn guiding and belt tensioning solutions.



#### SPECIALIZED COMPATIBILITY MATRIX

Category	Belgo Type	Dimensions (d x D x L)	Speed Limit	Feature	Sealing
Opening Roller	B-76-3	16 × 30 × 73 mm	25,000 RPM	Standard	Open
Opening Roller	B-76-3KK	16 × 30 × 73 mm	25,000 RPM	Dust Proof	Metal Shield
Opening Roller	B-76-3-7	16 × 30 × 73 mm	25,000 RPM	Relubrication	Open
Opening Roller	B-T763	16 × 30 × 73 mm	30,000 RPM	High Speed	Metal Shield
Press Pulley	B-73-1-28	10 × 28 × 50.5 mm	15,000 RPM	Yarn Delivery	No
Press Pulley	B-73-1-49	10 × 28 × 54.5 mm	15,000 RPM	Extended Profile	No
Belt Tension	B-76-3-1	16 × 30 × 96 mm	10,000 RPM	Belt Tensioner	No

Technical Highlight:Our Opening Roller Bearings are designed to withstand the high centrifugal forces of the combing process.

The specialized "KK" Metal Shield technology prevents fiber accumulation inside the bearing, preventing seizure and extending maintenance intervals.

## RESILIENT MOUNTING ELEMENTS

Vibration Damping Solutions for Rotor Bearing Housings

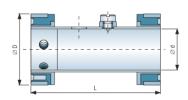
#### **Anti-Vibration Series**

#### **High-Elasticity Mountings**

Precision-ground steel sleeves with vulcanized elastomer inserts.

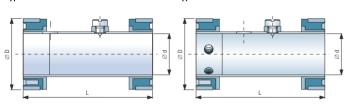


**¥**ype: 83-18-6, 83-18-10



**¥**ype: 83-18-4

**¥**ype: 83-18-100





#### **Selection & Compatibility Matrix**

Belgo Ref.	Shaft Housing (ød)	Outer Diα (øD)	Length (L)	Speed Limit	Compatible Machine Models
B-83-18-6	22 mm	38 mm	69 mm	115,000	Rieter: BT 923, R 923, R35, R36, R37
B-83-18-10	22 mm	38 mm	69 mm	115,000	Rieter: BT 923, R 923, R35, R36, R37
B-83-18-4	22 mm	38 mm	70 mm	90,000	Saurer: BD 3/4/7 & Asian OEM: Taitan, Rifa, Jingwei
B-83-18-100	22 mm	38 mm	69 mm	105,000	Saurer: BD 3/4/7 & Asian OEM: Taitan, Rifa, Jingwei

Why Replace? Resilient mountings absorb high-frequency vibrations generated by rotors spinning at speeds over 100,000 RPM. Worn-out mountings lead to bearing overheating and yarn irregularity (CV%). We recommend replacing mountings with every new rotor bearing installation.



#### **About Us**

BELGO INDUSTRY BV is specialized in manufacturing high-quality industrial products for the needs of industrial applications.

Thanks to our advanced technology and specialization in industrial products, we provide high-quality solutions at affordable prices with optimized lead times.

We ensure you top-quality service for your industrial applications. You can always count on our expert advice and flexible service.

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